

Texas Instruments

ENGINEERING EMC TEST REPORT FOR

Serializer, Model: DS90UB951-Q1
Deserializer, Model: DS90UB958-Q1

Tested to The Following Standards:
CISPR 25(2008) and ISO 11452-4 (2011)
in accordance with Customer Specification

Report No.: 102255-5

Date of issue: May 7, 2019

We strive to create long-term, trust based relationships by providing sound, adaptive, customer first testing services. We embrace each of our customers' unique EMC challenges, not as an interruption to set processes, but rather as the reason we are in business.

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ADMINISTRATIVE INFORMATION

Test Report Information

REPORT PREPARED FOR:

Texas Instruments
2900 Semiconductor Drive
Santa Clara CA 95051

Representative: Michael Leister
Customer Reference Number: 4513713117

DATE OF EQUIPMENT RECEIPT:

DATE(S) OF TESTING:

REPORT PREPARED BY:

Terri Rayle
CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

Project Number: 102255

April 18, 2019

April 18-22, 2019

Report Authorization

The test data contained in this report documents the observed testing parameters pertaining to and are relevant for only the equipment provided by the client, tested in the agreed upon operational mode(s) and configuration(s) as identified herein. Compliance assessment remains the client's responsibility. This report may not be used to claim product endorsement by A2LA or any government agencies. This test report has been authorized for release under quality control from CKC Laboratories, Inc.

A handwritten signature in black ink that reads 'Steve Behm'. The signature is written in a cursive style and is positioned above a horizontal line.

Steve Behm
Director of Quality Assurance & Engineering Services
CKC Laboratories, Inc.

Test Facility Information



Our laboratories are configured to effectively test a wide variety of product types. CKC utilizes first class test equipment, anechoic chambers, data acquisition and information services to create accurate, repeatable and affordable test results.

TEST LOCATION(S):
CKC Laboratories, Inc.
22116 23rd Drive S.E., Suite A
Canyon Park, Bothell, WA 98021

Software Versions

CKC Laboratories Proprietary Software	Version
EMITest Emissions	5.03.12
EMITest Immunity	5.03.10

Site Registration & Accreditation Information

Location	*NIST CB #	FCC	JAPAN
Canyon Park, Bothell, WA	US0081	US1022	A-0148

*CKC's list of NIST designated countries can be found at: <https://standards.gov/cabs/designations.html>

SUMMARY OF RESULTS

Standard / Specification: CISPR 25 (2008) in accordance with Customer Specification

Test Procedure	Description	Modifications	Results
6.4	Radiated Emissions – ALSE Method	NA	Pass

NA = Not Applicable

Standard / Specification: ISO 11452-4 (2011) in accordance with Customer Specification

Test Procedure	Description	Modifications	Results
ISO 11452-4	Bulk Current Injection (BCI)	NA	Pass

NA = Not Applicable

ISO/IEC 17025 Decision Rule

The declaration of pass or fail herein is based upon assessment to the specification(s) listed above, including where applicable, assessment of measurement uncertainties. For performance related tests, equipment was monitored for specified criteria identified in that section of testing.

Modifications During Testing

This list is a summary of the modifications made to the equipment during testing.

Summary of Conditions
No modifications were made during testing.

Modifications listed above must be incorporated into all production units.

Conditions During Testing

This list is a summary of the conditions noted to the equipment during testing.

Summary of Conditions
EUT Configuration: Line Rate: 4.85Gbps Back channel rate: 10Mbps Clock Mode: Non-synchronous REFCLK: 60.625MHz

DEVICE UNDER TEST (DUT)

During testing, numerous configurations may have been utilized. The configurations listed below support compliance to the standard(s) listed in the Summary of Results section.

Configuration A

Equipment Tested:

Device	Manufacturer	Model #	S/N
Serializer	Texas Instruments	DS90UB951-Q1	NA
Deserializer	Texas Instruments	DS90UB958-Q1	NA

Support Equipment:

Device	Manufacturer	Model #	S/N
None			

CISPR 25

Radiated Emissions

Test Setup/Conditions			
Test Location:	Canyon Park C3	Test Engineer:	M. Atkinson
Test Procedure:	Customer Specification based on CISPR 25 (2008)	Test Date(s):	4/22/2019
Test Spec Limit:	CISPR 25 (2008) Table 9 and 10, Peak and Average Limits for Radiated Disturbances – ALSE Class 5 (0.15-2500MHz) Additional testing requested by the manufacturer: 2.5-3GHz at 44 dBuV/m Peak and 24 dBuV/m Average using 100kHz RBW 3-6GHz at 44 dBuV/m Peak and 24 dBuV/m Average using 9kHz RBW		

Additional Test Equipment					
Asset #	Description	Manufacturer	Model	Cal Date	Cal Due
02861	5uH LISN	Solar	9117-5-TS-50-N	1/24/2018	1/24/2020
00589	5uH LISN	Solar	6338-5-TS-50N	9/27/2017	9/27/2019
P06027	Feed Through Capacitor	Solar	6512-106R	1/16/2018	1/16/2020
03504	Feed Through Capacitor	Solar	6512-106R	3/25/2019	3/25/2021

Ambient Scans – Radiated Emissions				
Polarity	Mode	Frequency Range (MHz)	Results	Sequence #s (Mobile, Broadcast, GPS)
Vertical (only single polarity for Rod Antenna range)	Ambient	0.15-30MHz	Ambient Complete	52, 53
Vertical	Ambient	30-200MHz	Ambient Complete	50, 51
Horizontal	Ambient	30-200MHz	Ambient Complete	48, 49
Vertical	Ambient	200-1000MHz	Ambient Complete	27, 28
Horizontal	Ambient	200-1000MHz	Ambient Complete	29, 30
Vertical	Ambient	1000-3000MHz	Ambient Complete	1, 2, 3
Horizontal	Ambient	1000-3000MHz	Ambient Complete	4, 5, 6
Vertical	Ambient	3000-6000MHz	Ambient Complete	25
Horizontal	Ambient	3000-6000MHz	Ambient Complete	26

Test Results – Radiated Emissions				
Configuration: 1				
Polarity	Mode	Frequency Range (MHz)	Results	Sequence #
Vertical (only single polarity for Rod Antenna range)	Operating	0.15-30MHz	Pass	54, 55
Vertical	Operating	30-200MHz	Pass	40, 41
Horizontal	Operating	30-200MHz	Pass	44, 47
Vertical	Operating	200-1000MHz	Pass	38, 39
Horizontal	Operating	200-1000MHz	Pass	36, 37
Vertical (left side)	Operating	1000-3000MHz	Pass	10, 11, 12
Horizontal (left side)	Operating	1000-3000MHz	Pass	7, 8, 9
Vertical (right side)	Operating	1000-3000MHz	Pass	13, 14, 15
Horizontal (right side)	Operating	1000-3000MHz	Pass	18, 19, 20
Vertical (left side)	Operating	3000-6000MHz	Pass	23
Horizontal (left side)	Operating	3000-6000MHz	Pass	24
Vertical (right side)	Operating	3000-6000MHz	Pass	22
Horizontal (right side)	Operating	3000-6000MHz	Pass	21

Test Setup / Conditions / Data

Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 15:51:31
 Tested By: Michael Atkinson Sequence#: 52
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa,

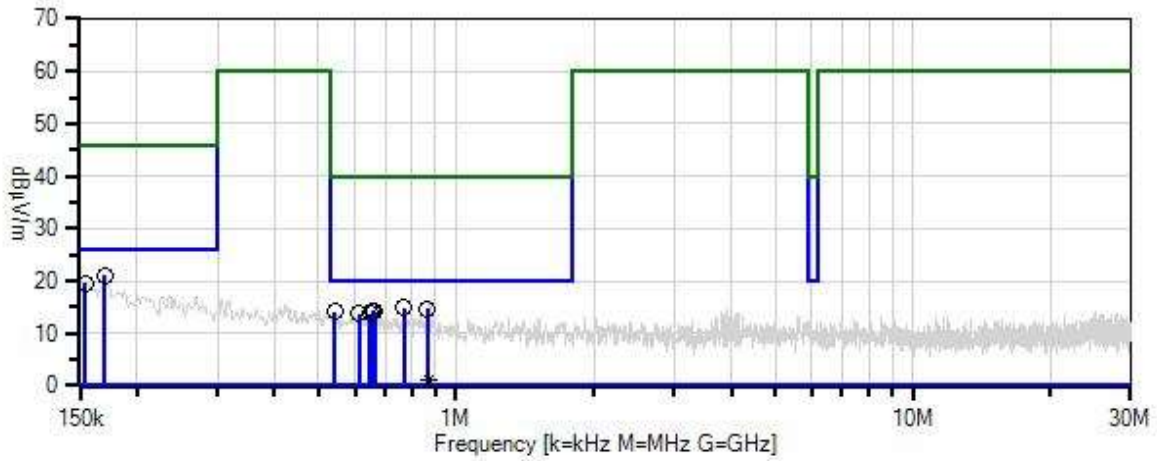
 Method: CISPR 25 (2008)

 Frequency and Antenna Position: 0.15-30MHz, center only

Setup: Ambient Scan

 Serializer unit is on the left.
 Deserializer unit is on the right.

Texas Instruments W/O#: 102255 Sequence#: 52 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak Test Distance: 1 Meter Vert



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN02371	Rod Antenna	3301B	6/22/2018	6/22/2020

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	875.751k	0.1	+0.0	+0.2	+1.0		+0.0	1.3	20.0	-18.7	Vert
	Ave										
^	875.750k	15.2	+0.0	+0.2	+1.0		+0.0	16.4	40.0	-23.6	Vert
3	170.360k	19.9	+0.0	+0.2	+0.9		+0.0	21.0	46.0	-25.0	Vert
4	769.578k	13.6	+0.0	+0.2	+1.0		+0.0	14.8	40.0	-25.2	Vert
5	863.388k	13.5	+0.0	+0.2	+1.0		+0.0	14.7	40.0	-25.3	Vert
6	656.134k	13.1	+0.0	+0.2	+1.0		+0.0	14.3	40.0	-25.7	Vert
7	663.406k	12.9	+0.0	+0.2	+1.0		+0.0	14.1	40.0	-25.9	Vert
8	542.690k	13.0	+0.0	+0.2	+0.9		+0.0	14.1	40.0	-25.9	Vert
9	647.407k	12.6	+0.0	+0.2	+1.0		+0.0	13.8	40.0	-26.2	Vert
10	611.774k	12.5	+0.0	+0.2	+1.0		+0.0	13.7	40.0	-26.3	Vert
11	154.362k	18.4	+0.0	+0.2	+0.9		+0.0	19.5	46.0	-26.5	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 15:52:48
 Tested By: Michael Atkinson Sequence#: 53
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa,

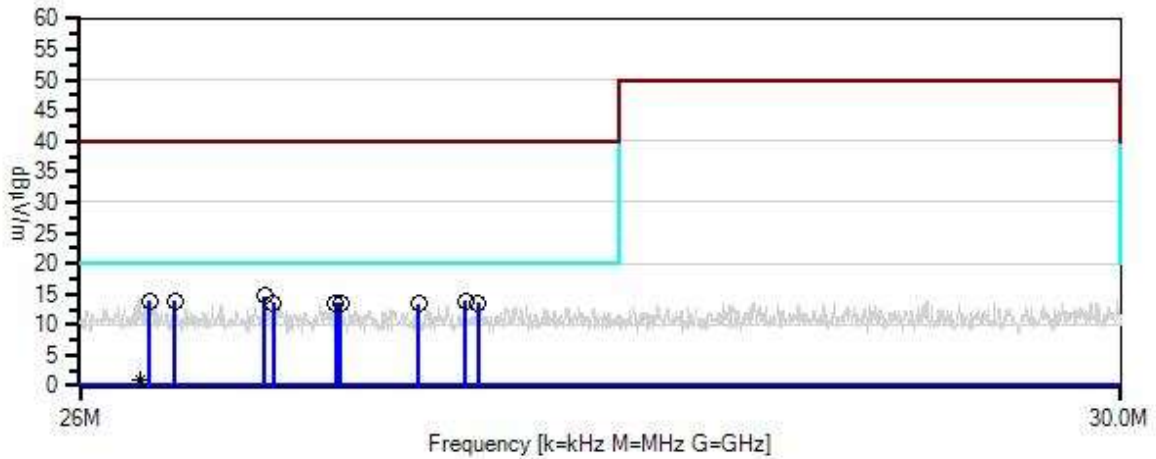
 Method: CISPR 25 (2008)

 Frequency and Antenna Position: 0.15-30MHz, center only

Setup: Ambient Scan

 Serializer unit is on the left.
 Deserializer unit is on the right.

Texas Instruments W/O#: 102255 Sequence#: 53 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak Test Distance: 1 Meter Vert



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN02371	Rod Antenna	3301B	6/22/2018	6/22/2020

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	26.215M	-4.2	+0.1	+0.3	+4.8		+0.0	1.0	20.0	-19.0	Vert
	Ave										
^	26.215M	9.4	+0.1	+0.3	+4.8		+0.0	14.6	40.0	-25.4	Vert
3	26.668M	9.3	+0.1	+0.3	+4.9		+0.0	14.6	40.0	-25.4	Vert
4	27.417M	8.4	+0.1	+0.3	+5.1		+0.0	13.9	40.0	-26.1	Vert
5	26.342M	8.7	+0.1	+0.3	+4.8		+0.0	13.9	40.0	-26.1	Vert
6	26.252M	8.6	+0.1	+0.3	+4.8		+0.0	13.8	40.0	-26.2	Vert
7	27.463M	8.0	+0.1	+0.3	+5.1		+0.0	13.5	40.0	-26.5	Vert
8	26.931M	8.2	+0.1	+0.3	+4.9		+0.0	13.5	40.0	-26.5	Vert
9	26.948M	8.2	+0.1	+0.3	+4.9		+0.0	13.5	40.0	-26.5	Vert
10	26.700M	8.2	+0.1	+0.3	+4.9		+0.0	13.5	40.0	-26.5	Vert
11	27.240M	8.0	+0.1	+0.3	+5.0		+0.0	13.4	40.0	-26.6	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 15:38:49
 Tested By: Michael Atkinson Sequence#: 50
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa,

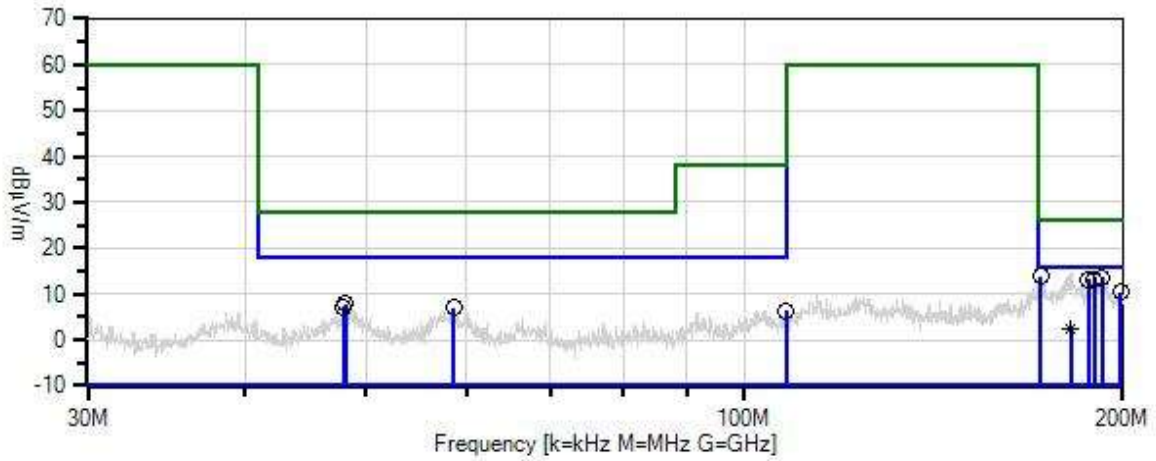
 Method: CISPR 25 (2008)

 Frequency and Antenna Position: 30-200MHz, center only

Setup: Ambient Scan

 Serializer unit is on the left.
 Deserializer unit is on the right.

Texas Instruments W/D#: 102255 Sequence#: 50 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak Test Distance: 1 Meter Vert



- Sweep Data
 - Readings
 - Peak Readings
 - × QP Readings
 - * Average Readings
 - ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Ave
 - 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03683	Bicon Antenna- ARP958 (dB/m)	3104C	4/4/2018	4/4/2020
T4	AN03183	Preamp	AU-1565-N-H	6/12/2017	6/12/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	172.067M	54.1	+0.2	+0.6	+17.7	-58.8	+0.0	13.8	26.0	-12.2	Vert
2	192.408M	52.9	+0.2	+0.7	+18.7	-58.8	+0.0	13.7	26.0	-12.3	Vert
3	187.627M	51.7	+0.2	+0.7	+19.4	-58.8	+0.0	13.2	26.0	-12.8	Vert
4	189.689M	52.1	+0.2	+0.7	+18.9	-58.8	+0.0	13.1	26.0	-12.9	Vert
5	181.909M	41.0	+0.2	+0.6	+19.2	-58.8	+0.0	2.2	16.0	-13.8	Vert
	Ave										
^	181.909M	53.6	+0.2	+0.6	+19.2	-58.8	+0.0	14.8	26.0	-11.2	Vert
7	198.969M	50.2	+0.2	+0.7	+18.1	-58.8	+0.0	10.4	26.0	-15.6	Vert
8	48.100M	53.7	+0.1	+0.4	+12.5	-58.9	+0.0	7.8	28.0	-20.2	Vert
9	47.915M	53.1	+0.1	+0.4	+12.5	-58.9	+0.0	7.2	28.0	-20.8	Vert
10	58.703M	53.3	+0.1	+0.4	+12.0	-58.8	+0.0	7.0	28.0	-21.0	Vert
11	107.859M	51.3	+0.1	+0.5	+13.3	-58.8	+0.0	6.4	38.0	-31.6	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 15:40:19
 Tested By: Michael Atkinson Sequence#: 51
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa,

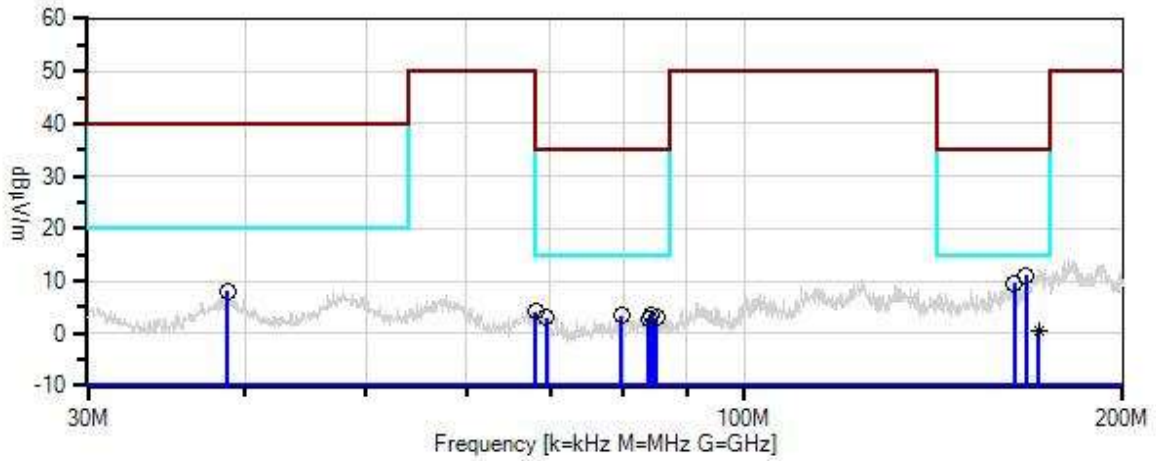
 Method: CISPR 25 (2008)

 Frequency and Antenna Position: 30-200MHz, center only

Setup: Ambient Scan

 Serializer unit is on the left.
 Deserializer unit is on the right.

Texas Instruments W/O#: 102255 Sequence#: 51 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak Test Distance: 1 Meter Vert



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03683	Bicon Antenna- ARP958 (dB/m)	3104C	4/4/2018	4/4/2020
T4	AN03183	Preamp	AU-1565-N-H	6/12/2017	6/12/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	171.505M Ave	40.9	+0.2	+0.6	+17.6	-58.8	+0.0	0.5	15.0	-14.5	Vert
^	171.505M	52.6	+0.2	+0.6	+17.6	-58.8	+0.0	12.2	35.0	-22.8	Vert
3	167.287M	52.8	+0.2	+0.6	+16.2	-58.8	+0.0	11.0	35.0	-24.0	Vert
4	163.912M	52.4	+0.2	+0.6	+15.1	-58.8	+0.0	9.5	35.0	-25.5	Vert
5	68.216M	53.1	+0.1	+0.4	+9.3	-58.8	+0.0	4.1	35.0	-30.9	Vert
6	84.352M	53.0	+0.1	+0.5	+8.8	-58.9	+0.0	3.5	35.0	-31.5	Vert
7	79.770M	53.7	+0.1	+0.5	+7.9	-58.8	+0.0	3.4	35.0	-31.6	Vert
8	69.511M	52.6	+0.1	+0.4	+8.8	-58.8	+0.0	3.1	35.0	-31.9	Vert
9	38.759M	54.9	+0.1	+0.3	+11.7	-58.9	+0.0	8.1	40.0	-31.9	Vert
10	85.099M	52.4	+0.1	+0.5	+8.9	-58.9	+0.0	3.0	35.0	-32.0	Vert
11	83.904M	52.5	+0.1	+0.5	+8.7	-58.9	+0.0	2.9	35.0	-32.1	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 15:35:03
 Tested By: Michael Atkinson Sequence#: 48
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa,

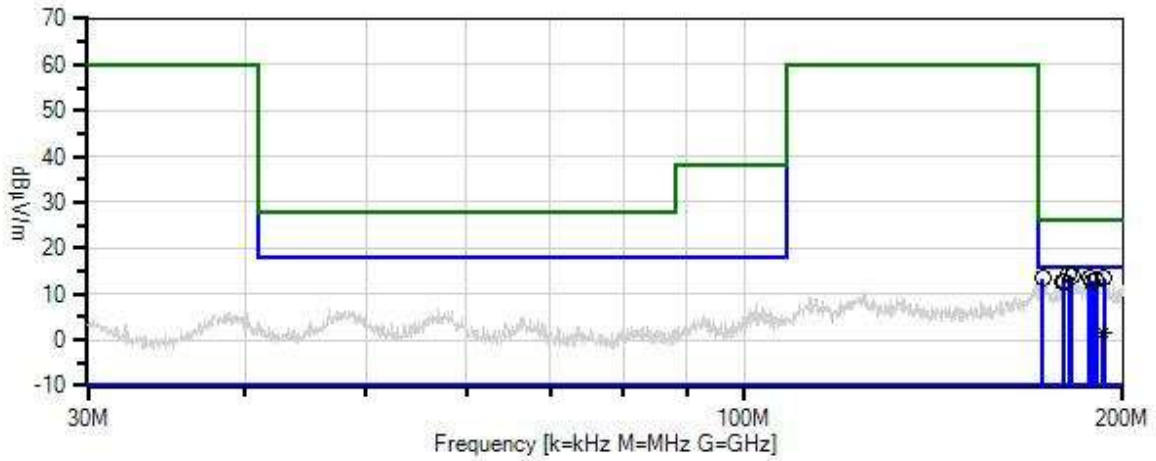
 Method: CISPR 25 (2008)

 Frequency and Antenna Position: 30-200MHz, center only

Setup: Ambient Scan

 Serializer unit is on the left.
 Deserializer unit is on the right.

Texas Instruments WD#: 102255 Sequence#: 48 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak Test Distance: 1 Meter Horiz



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03683	Bicon Antenna- ARP958 (dB/m)	3104C	4/4/2018	4/4/2020
T4	AN03183	Preamp	AU-1565-N-H	6/12/2017	6/12/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	180.972M	52.9	+0.2	+0.6	+19.3	-58.8	+0.0	14.2	26.0	-11.8	Horiz
2	182.097M	52.6	+0.2	+0.6	+19.2	-58.8	+0.0	13.8	26.0	-12.2	Horiz
3	188.096M	52.2	+0.2	+0.7	+19.4	-58.8	+0.0	13.7	26.0	-12.3	Horiz
4	193.064M	52.7	+0.2	+0.7	+18.6	-58.8	+0.0	13.4	26.0	-12.6	Horiz
5	172.630M	53.5	+0.2	+0.6	+17.9	-58.8	+0.0	13.4	26.0	-12.6	Horiz
6	190.439M	52.0	+0.2	+0.7	+18.8	-58.8	+0.0	12.9	26.0	-13.1	Horiz
7	179.097M	51.6	+0.2	+0.6	+19.1	-58.8	+0.0	12.7	26.0	-13.3	Horiz
8	179.378M	51.6	+0.2	+0.6	+19.1	-58.8	+0.0	12.7	26.0	-13.3	Horiz
9	189.127M	51.5	+0.2	+0.7	+19.1	-58.8	+0.0	12.7	26.0	-13.3	Horiz
10	192.689M	40.8	+0.2	+0.7	+18.7	-58.8	+0.0	1.6	16.0	-14.4	Horiz
	Ave										
^	192.689M	54.3	+0.2	+0.7	+18.7	-58.8	+0.0	15.1	26.0	-10.9	Horiz



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 15:36:02
 Tested By: Michael Atkinson Sequence#: 49
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa,

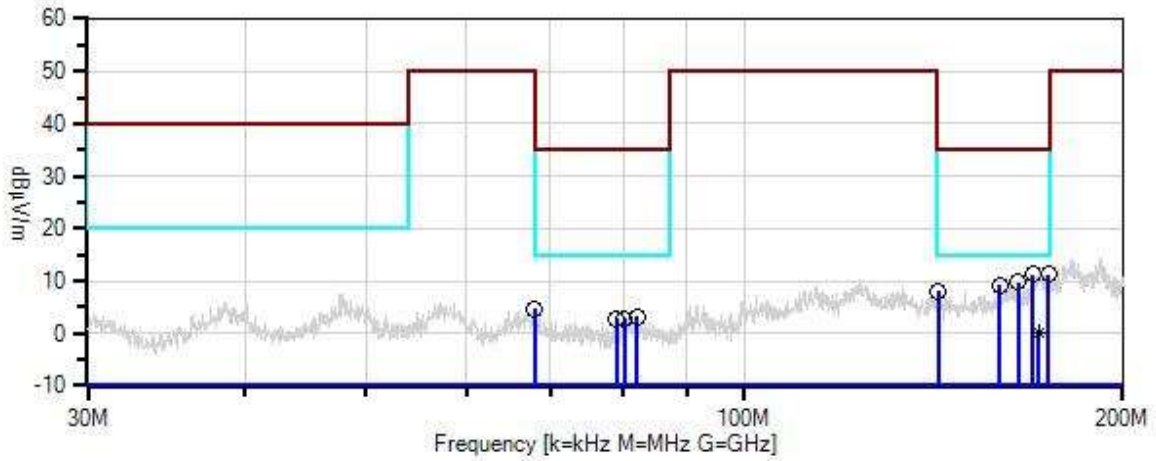
 Method: CISPR 25 (2008)

 Frequency and Antenna Position: 30-200MHz, center only

Setup: Ambient Scan

 Serializer unit is on the left.
 Deserializer unit is on the right.

Texas Instruments WD#: 102255 Sequence#: 49 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak Test Distance: 1 Meter Horiz



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03683	Bicon Antenna- ARP958 (dB/m)	3104C	4/4/2018	4/4/2020
T4	AN03183	Preamp	AU-1565-N-H	6/12/2017	6/12/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	171.411M	40.7	+0.2	+0.6	+17.5	-58.8	+0.0	0.2	15.0	-14.8	Horiz
	Ave										
^	171.411M	52.1	+0.2	+0.6	+17.5	-58.8	+0.0	11.6	35.0	-23.4	Horiz
3	174.317M	50.9	+0.2	+0.6	+18.3	-58.8	+0.0	11.2	35.0	-23.8	Horiz
4	169.536M	52.2	+0.2	+0.6	+17.0	-58.8	+0.0	11.2	35.0	-23.8	Horiz
5	164.943M	52.4	+0.2	+0.6	+15.4	-58.8	+0.0	9.8	35.0	-25.2	Horiz
6	159.601M	53.4	+0.2	+0.6	+13.8	-58.8	+0.0	9.2	35.0	-25.8	Horiz
7	142.635M	53.4	+0.2	+0.6	+12.7	-58.8	+0.0	8.1	35.0	-26.9	Horiz
8	68.066M	53.5	+0.1	+0.4	+9.4	-58.8	+0.0	4.6	35.0	-30.4	Horiz
9	82.161M	53.1	+0.1	+0.5	+8.3	-58.8	+0.0	3.2	35.0	-31.8	Horiz
10	80.268M	53.0	+0.1	+0.5	+8.0	-58.8	+0.0	2.8	35.0	-32.2	Horiz
11	79.123M	53.2	+0.1	+0.5	+7.8	-58.8	+0.0	2.8	35.0	-32.2	Horiz



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 13:13:10
 Tested By: Michael Atkinson Sequence#: 27
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

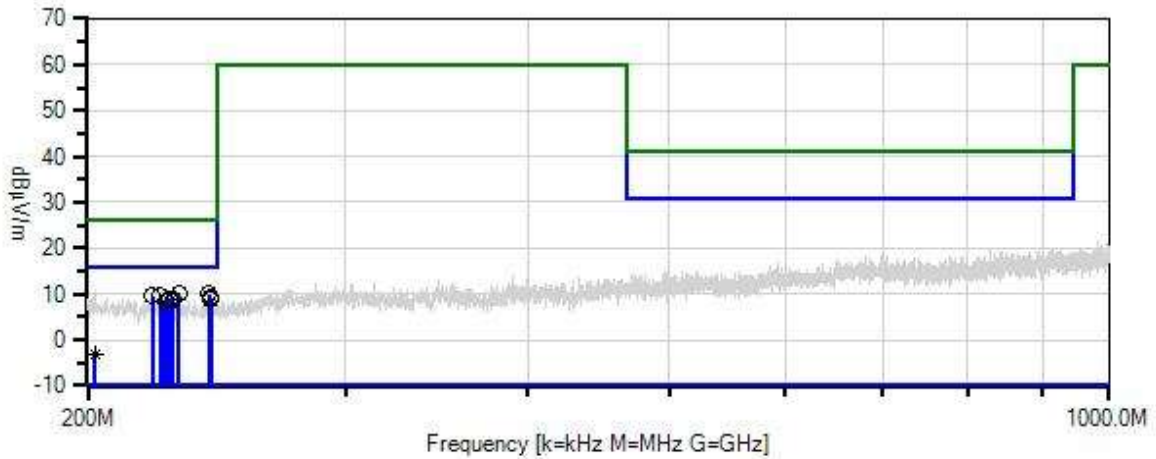
 Frequency and Antenna Position: 200-1000MHz, center only

Setup: Ambient Scan

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments W/O#: 102255 Sequence#: 27 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak Test Distance: 1 Meter Vert



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN00147	Log Periodic Antenna-SAE ARP958 (dB)	3146	2/8/2019	2/8/2021

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	242.242M	59.4	+0.2	+0.8	-64.1	+13.8	+0.0	10.1	26.0	-15.9	Vert
2	230.731M	59.1	+0.2	+0.7	-63.9	+13.9	+0.0	10.0	26.0	-16.0	Vert
3	221.421M	58.5	+0.2	+0.7	-63.8	+14.0	+0.0	9.6	26.0	-16.4	Vert
4	224.224M	58.4	+0.2	+0.7	-63.8	+14.0	+0.0	9.5	26.0	-16.5	Vert
5	242.543M	58.7	+0.2	+0.8	-64.1	+13.8	+0.0	9.4	26.0	-16.6	Vert
6	227.227M	58.0	+0.2	+0.7	-63.9	+14.0	+0.0	9.0	26.0	-17.0	Vert
7	228.729M	57.9	+0.2	+0.7	-63.9	+14.0	+0.0	8.9	26.0	-17.1	Vert
8	243.043M	58.1	+0.2	+0.8	-64.1	+13.8	+0.0	8.8	26.0	-17.2	Vert
9	226.026M	57.3	+0.2	+0.7	-63.9	+14.0	+0.0	8.3	26.0	-17.7	Vert
10	202.202M	45.6	+0.2	+0.7	-63.4	+13.8	+0.0	-3.1	16.0	-19.1	Vert
	Ave										
^	202.202M	59.3	+0.2	+0.7	-63.4	+13.8	+0.0	10.6	26.0	-15.4	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 13:14:17
 Tested By: Michael Atkinson Sequence#: 28
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

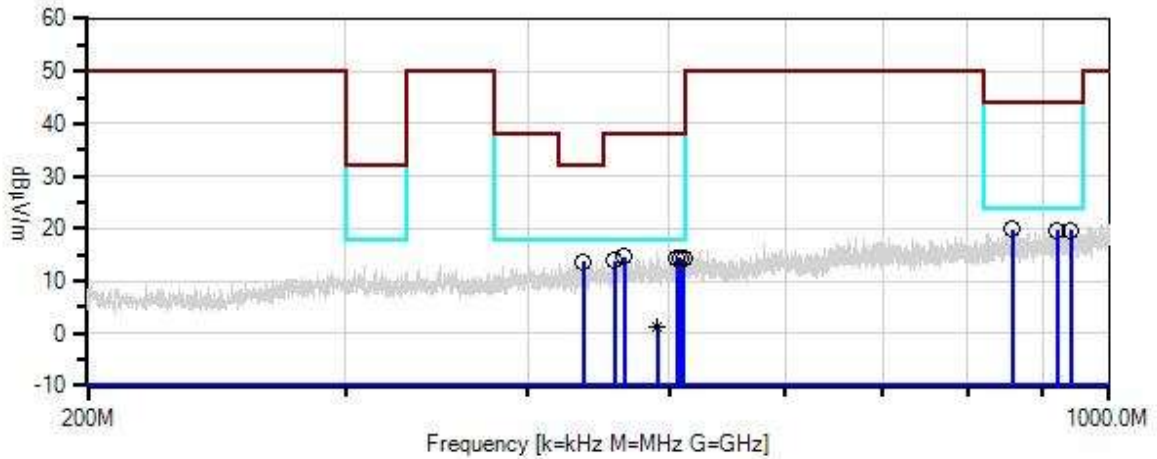
 Frequency and Antenna Position: 200-1000MHz, center only

Setup: Ambient Scan

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments W/O#: 102255 Sequence#: 28 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak Test Distance: 1 Meter Vert



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN00147	Log Periodic Antenna-SAE ARP958 (dB)	3146	2/8/2019	2/8/2021

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	490.891M	46.5	+0.3	+1.1	-65.3	+18.7	+0.0	1.3	18.0	-16.7	Vert
	Ave										
^	490.891M	60.7	+0.3	+1.1	-65.3	+18.7	+0.0	15.5	38.0	-22.5	Vert
3	436.636M	60.0	+0.2	+1.0	-65.1	+17.6	+0.0	13.7	32.0	-18.3	Vert
4	465.465M	60.1	+0.3	+1.1	-65.2	+18.4	+0.0	14.7	38.0	-23.3	Vert
5	508.208M	59.4	+0.3	+1.2	-65.4	+19.0	+0.0	14.5	38.0	-23.5	Vert
6	505.705M	59.2	+0.3	+1.2	-65.4	+18.9	+0.0	14.2	38.0	-23.8	Vert
7	511.611M	59.0	+0.3	+1.2	-65.4	+19.1	+0.0	14.2	38.0	-23.8	Vert
8	458.458M	59.6	+0.2	+1.1	-65.2	+18.2	+0.0	13.9	38.0	-24.1	Vert
9	857.957M	60.3	+0.3	+1.5	-65.5	+23.2	+0.0	19.8	44.0	-24.2	Vert
10	920.461M	59.8	+0.4	+1.6	-65.4	+23.3	+0.0	19.7	44.0	-24.3	Vert
11	941.711M	59.3	+0.4	+1.6	-65.4	+23.7	+0.0	19.6	44.0	-24.4	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 13:18:46
 Tested By: Michael Atkinson Sequence#: 29
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

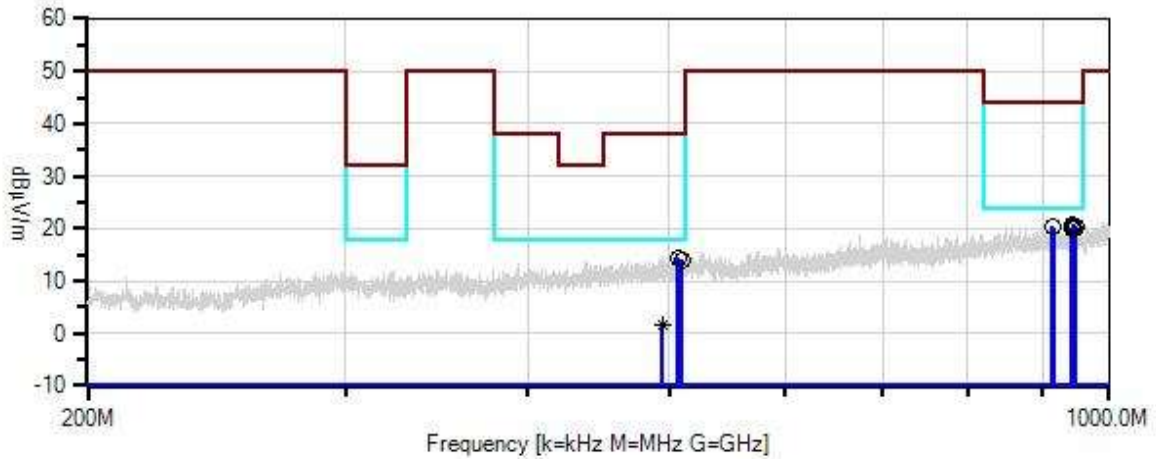
 Frequency and Antenna Position: 200-1000MHz, center only

Setup: Ambient Scan

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments WD#: 102255 Sequence#: 29 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak Test Distance: 1 Meter Horiz



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN00147	Log Periodic Antenna-SAE ARP958 (dB)	3146	2/8/2019	2/8/2021

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	494.294M	46.6	+0.3	+1.2	-65.3	+18.7	+0.0	1.5	18.0	-16.5	Horiz
	Ave										
^	494.294M	60.0	+0.3	+1.2	-65.3	+18.7	+0.0	14.9	38.0	-23.1	Horiz
3	944.293M	60.5	+0.4	+1.6	-65.4	+23.7	+0.0	20.8	44.0	-23.2	Horiz
4	914.106M	60.6	+0.4	+1.6	-65.4	+23.3	+0.0	20.5	44.0	-23.5	Horiz
5	948.662M	60.0	+0.4	+1.6	-65.4	+23.9	+0.0	20.5	44.0	-23.5	Horiz
6	506.706M	59.5	+0.3	+1.2	-65.4	+18.9	+0.0	14.5	38.0	-23.5	Horiz
7	942.505M	59.9	+0.4	+1.6	-65.4	+23.7	+0.0	20.2	44.0	-23.8	Horiz
8	915.794M	60.3	+0.4	+1.6	-65.4	+23.3	+0.0	20.2	44.0	-23.8	Horiz
9	946.477M	59.7	+0.4	+1.6	-65.4	+23.8	+0.0	20.1	44.0	-23.9	Horiz
10	510.210M	59.0	+0.3	+1.2	-65.4	+19.0	+0.0	14.1	38.0	-23.9	Horiz
11	944.591M	59.6	+0.4	+1.6	-65.4	+23.8	+0.0	20.0	44.0	-24.0	Horiz



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 13:21:38
 Tested By: Michael Atkinson Sequence#: 30
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

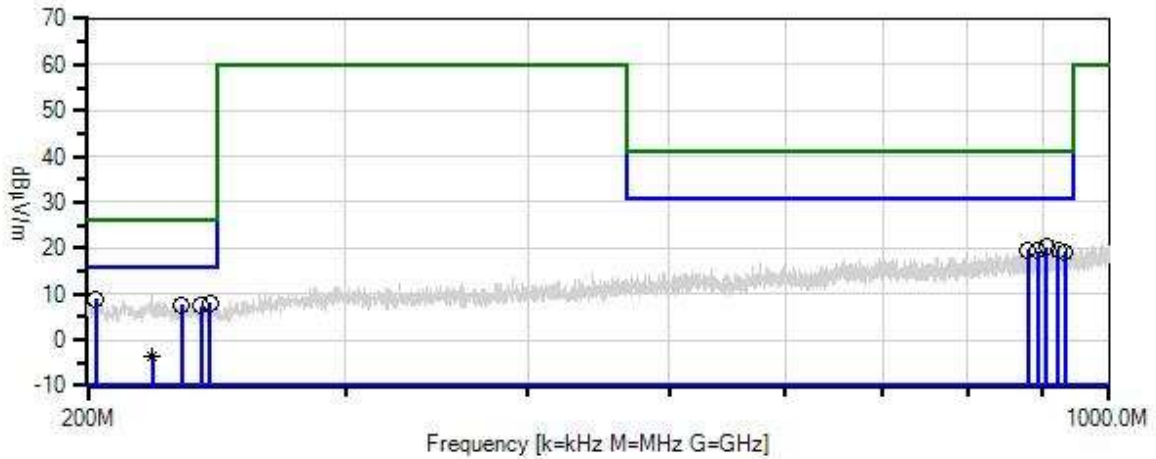
 Frequency and Antenna Position: 200-1000MHz, center only

Setup: Ambient Scan

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments WD#: 102255 Sequence#: 30 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak Test Distance: 1 Meter Horiz



- Sweep Data
 - Readings
 - Peak Readings
 - × QP Readings
 - * Average Readings
 - ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Ave
 - 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN00147	Log Periodic Antenna-SAE ARP958 (dB)	3146	2/8/2019	2/8/2021

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	202.603M	57.6	+0.2	+0.7	-63.4	+13.8	+0.0	8.9	26.0	-17.1	Horiz
2	242.442M	57.3	+0.2	+0.8	-64.1	+13.8	+0.0	8.0	26.0	-18.0	Horiz
3	232.032M	56.7	+0.2	+0.8	-64.0	+13.9	+0.0	7.6	26.0	-18.4	Horiz
4	239.039M	56.7	+0.2	+0.8	-64.1	+13.8	+0.0	7.4	26.0	-18.6	Horiz
5	221.522M Ave	45.3	+0.2	+0.7	-63.8	+14.0	+0.0	-3.6	16.0	-19.6	Horiz
^	221.522M	59.0	+0.2	+0.7	-63.8	+14.0	+0.0	10.1	26.0	-15.9	Horiz
7	905.864M	60.6	+0.3	+1.5	-65.5	+23.4	+0.0	20.3	41.0	-20.7	Horiz
8	922.546M	59.9	+0.4	+1.6	-65.4	+23.2	+0.0	19.7	41.0	-21.3	Horiz
9	879.979M	60.0	+0.3	+1.5	-65.5	+23.3	+0.0	19.6	41.0	-21.4	Horiz
10	892.892M	59.7	+0.3	+1.5	-65.5	+23.4	+0.0	19.4	41.0	-21.6	Horiz
11	931.880M	59.1	+0.4	+1.6	-65.4	+23.4	+0.0	19.1	41.0	-21.9	Horiz



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 09:45:06
 Tested By: Michael Atkinson Sequence#: 1
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

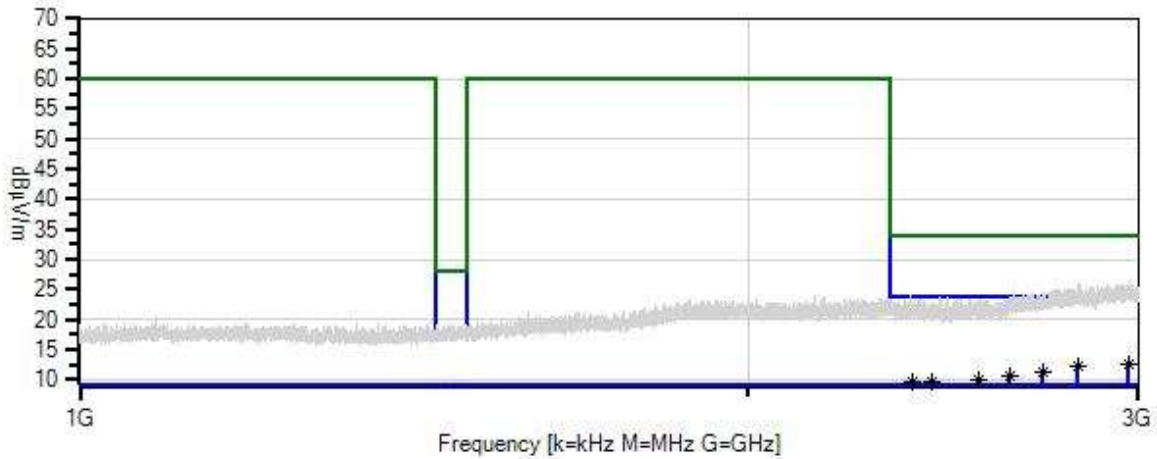
 Frequency and Antenna Position: 1-3GHz, left

Setup: Ambient Scan

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments W/O#: 102255 Sequence#: 1 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak Test Distance: 1 Meter Vert



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	2969.024M Ave	39.0	+0.6	+3.0	-61.0	+30.9	+0.0	12.5	24.0	-11.5	Vert
^	2969.024M	52.9	+0.6	+3.0	-61.0	+30.9	+0.0	26.4	34.0	-7.6	Vert
3	2817.217M Ave	39.3	+0.5	+2.9	-61.2	+30.6	+0.0	12.1	24.0	-11.9	Vert
^	2817.217M	53.1	+0.5	+2.9	-61.2	+30.6	+0.0	25.9	34.0	-8.1	Vert
5	1490.784M Ave	42.0	+0.4	+2.2	-64.1	+25.6	+0.0	6.1	18.0	-11.9	Vert
^	1490.784M	56.3	+0.4	+2.2	-64.1	+25.6	+0.0	20.4	28.0	-7.6	Vert
7	1454.256M Ave	41.9	+0.4	+2.1	-64.2	+25.6	+0.0	5.8	18.0	-12.2	Vert
^	1454.256M	55.5	+0.4	+2.1	-64.2	+25.6	+0.0	19.4	28.0	-8.6	Vert
9	1468.608M Ave	41.7	+0.4	+2.2	-64.2	+25.6	+0.0	5.7	18.0	-12.3	Vert
^	1468.608M	55.3	+0.4	+2.2	-64.2	+25.6	+0.0	19.3	28.0	-8.7	Vert
11	2716.480M Ave	38.9	+0.5	+2.9	-61.3	+30.3	+0.0	11.3	24.0	-12.7	Vert
^	2716.480M	52.8	+0.5	+2.9	-61.3	+30.3	+0.0	25.2	34.0	-8.8	Vert
13	2622.400M Ave	38.5	+0.5	+2.9	-61.3	+30.0	+0.0	10.6	24.0	-13.4	Vert
^	2622.400M	51.5	+0.5	+2.9	-61.3	+30.0	+0.0	23.6	34.0	-10.4	Vert

15	2540.320M Ave	38.3	+0.4	+2.8	-61.4	+29.8	+0.0	9.9	24.0	-14.1	Vert
^	2540.320M	52.2	+0.4	+2.8	-61.4	+29.8	+0.0	23.8	34.0	-10.2	Vert
17	2371.840M Ave	38.6	+0.4	+2.8	-61.5	+29.5	+0.0	9.8	24.0	-14.2	Vert
^	2371.840M	52.5	+0.4	+2.8	-61.5	+29.5	+0.0	23.7	34.0	-10.3	Vert
19	2423.200M Ave	38.4	+0.4	+2.8	-61.5	+29.6	+0.0	9.7	24.0	-14.3	Vert
^	2423.200M	52.5	+0.4	+2.8	-61.5	+29.6	+0.0	23.8	34.0	-10.2	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - GPS L1 Civil - Ave**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 09:48:54
 Tested By: Michael Atkinson Sequence#: 2
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

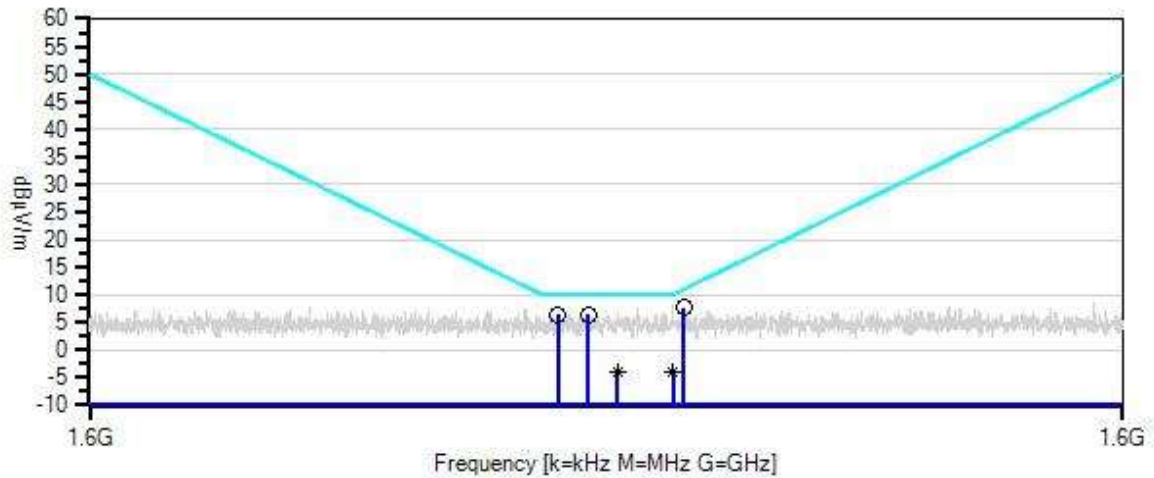
 Frequency and Antenna Position: 1-3GHz, left

Setup: Ambient Scan

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments WO#: 102255 Sequence#: 2 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - GPS L1 Civil - Ave Test Distance: 1 Meter Vert



- Sweep Data
- Readings
- Peak Readings
- * QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - GPS L1 Civil - Ave

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	1576.602M	42.9	+0.4	+2.2	-63.8	+26.0	+0.0	7.7	11.0	-3.3	Vert
2	1574.655M	41.7	+0.4	+2.2	-63.8	+26.0	+0.0	6.5	10.0	-3.5	Vert
3	1575.125M	41.6	+0.4	+2.2	-63.8	+26.0	+0.0	6.4	10.0	-3.6	Vert
4	1575.567M Ave	31.1	+0.4	+2.2	-63.8	+26.0	+0.0	-4.1	10.0	-14.1	Vert
^	1575.567M	41.9	+0.4	+2.2	-63.8	+26.0	+0.0	6.7	10.0	-3.3	Vert
6	1576.437M Ave	31.1	+0.4	+2.2	-63.8	+26.0	+0.0	-4.1	10.1	-14.2	Vert
^	1576.437M	43.5	+0.4	+2.2	-63.8	+26.0	+0.0	8.3	10.1	-1.8	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 10:09:10
 Tested By: Michael Atkinson Sequence#: 3
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

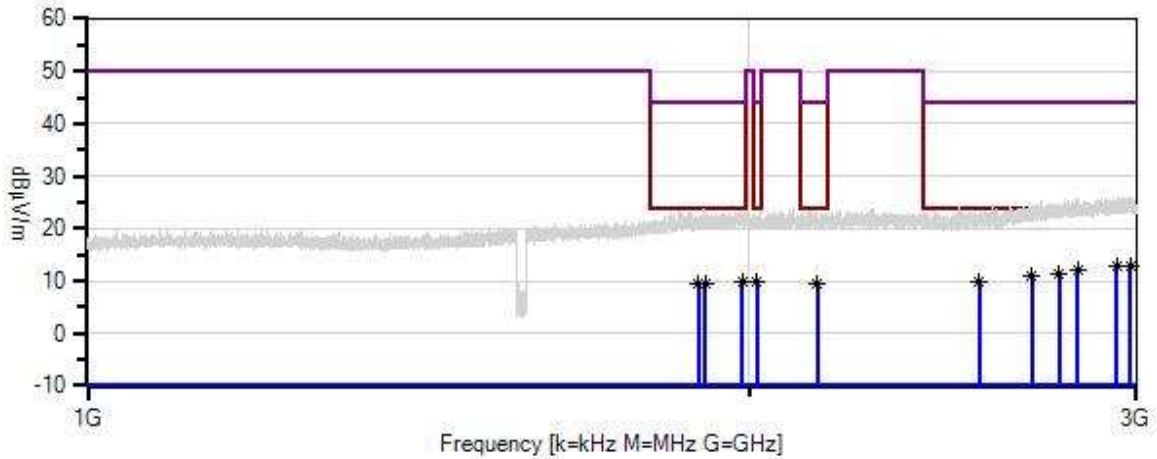
 Frequency and Antenna Position: 1-3GHz, left

Setup: Ambient Scan

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments W/O#: 102255 Sequence#: 3 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak Test Distance: 1 Meter Vert



Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	2981.375M Ave	39.2	+0.6	+3.0	-61.0	+31.0	+0.0	12.8	24.0	-11.2	Vert
^	2981.375M	52.5	+0.6	+3.0	-61.0	+31.0	+0.0	26.1	44.0	-17.9	Vert
3	2937.551M Ave	39.3	+0.6	+3.0	-61.1	+30.9	+0.0	12.7	24.0	-11.3	Vert
^	2937.551M	52.3	+0.6	+3.0	-61.1	+30.9	+0.0	25.7	44.0	-18.3	Vert
5	2821.400M Ave	39.2	+0.5	+2.9	-61.2	+30.6	+0.0	12.0	24.0	-12.0	Vert
^	2821.400M	53.0	+0.5	+2.9	-61.2	+30.6	+0.0	25.8	44.0	-18.2	Vert
7	2766.200M Ave	39.0	+0.5	+2.9	-61.3	+30.4	+0.0	11.5	24.0	-12.5	Vert
^	2766.200M	52.3	+0.5	+2.9	-61.3	+30.4	+0.0	24.8	44.0	-19.2	Vert
9	2688.300M Ave	38.7	+0.5	+2.9	-61.3	+30.2	+0.0	11.0	24.0	-13.0	Vert
^	2688.300M	51.5	+0.5	+2.9	-61.3	+30.2	+0.0	23.8	44.0	-20.2	Vert
11	1986.000M Ave	41.1	+0.3	+2.5	-62.6	+28.6	+0.0	9.9	24.0	-14.1	Vert
^	1986.000M	54.7	+0.3	+2.5	-62.6	+28.6	+0.0	23.5	44.0	-20.5	Vert
13	2544.000M Ave	38.3	+0.4	+2.8	-61.4	+29.8	+0.0	9.9	24.0	-14.1	Vert
^	2544.000M	52.4	+0.4	+2.8	-61.4	+29.8	+0.0	24.0	44.0	-20.0	Vert

15	2014.770M Ave	40.8	+0.3	+2.5	-62.5	+28.7	+0.0	9.8	24.0	-14.2	Vert
^	2014.770M	55.2	+0.3	+2.5	-62.5	+28.7	+0.0	24.2	44.0	-19.8	Vert
17	2146.720M Ave	39.6	+0.4	+2.6	-62.0	+29.0	+0.0	9.6	24.0	-14.4	Vert
^	2146.720M	53.0	+0.4	+2.6	-62.0	+29.0	+0.0	23.0	44.0	-21.0	Vert
19	1909.000M Ave	41.6	+0.4	+2.4	-62.8	+28.0	+0.0	9.6	24.0	-14.4	Vert
^	1909.000M	54.8	+0.4	+2.4	-62.8	+28.0	+0.0	22.8	44.0	-21.2	Vert
21	1896.000M Ave	41.7	+0.4	+2.4	-62.9	+27.9	+0.0	9.5	24.0	-14.5	Vert
^	1896.000M	54.5	+0.4	+2.4	-62.9	+27.9	+0.0	22.3	44.0	-21.7	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 10:18:16
 Tested By: Michael Atkinson Sequence#: 4
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

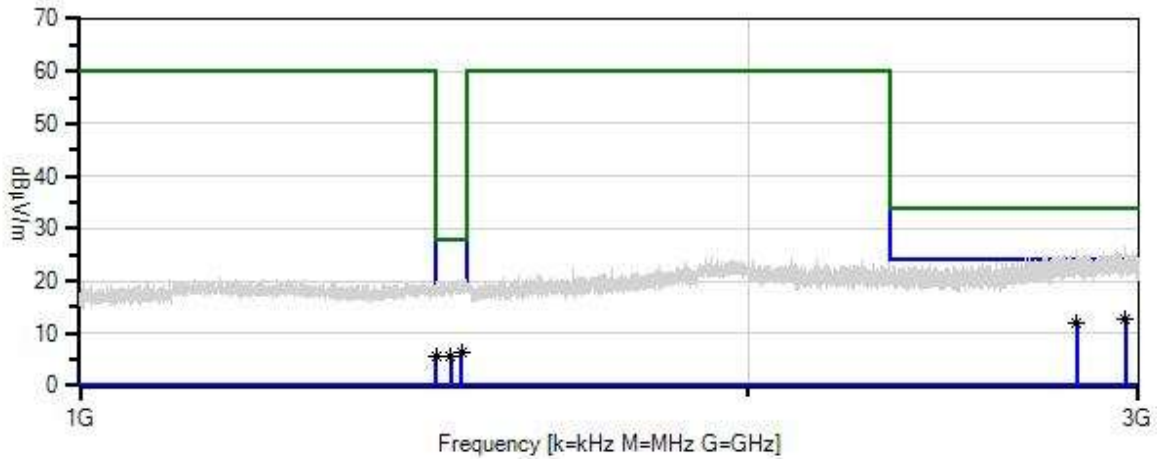
 Frequency and Antenna Position: 1-3GHz, left

Setup: Ambient Scan

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments WD#: 102255 Sequence#: 4 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak Test Distance: 1 Meter Horiz



Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	1486.686M Ave	42.1	+0.4	+2.2	-64.1	+25.6	+0.0	6.2	18.0	-11.8	Horiz
^	1486.686M	56.3	+0.4	+2.2	-64.1	+25.6	+0.0	20.4	28.0	-7.6	Horiz
3	2814.114M Ave	39.4	+0.5	+2.9	-61.2	+30.5	+0.0	12.1	24.0	-11.9	Horiz
^	2814.114M	53.2	+0.5	+2.9	-61.2	+30.5	+0.0	25.9	34.0	-8.1	Horiz
5	1469.169M Ave	41.8	+0.4	+2.2	-64.2	+25.6	+0.0	5.8	18.0	-12.2	Horiz
^	1469.169M	56.1	+0.4	+2.2	-64.2	+25.6	+0.0	20.1	28.0	-7.9	Horiz
7	1447.447M Ave	41.9	+0.4	+2.1	-64.2	+25.6	+0.0	5.8	18.0	-12.2	Horiz
^	1447.447M	56.2	+0.4	+2.1	-64.2	+25.6	+0.0	20.1	28.0	-7.9	Horiz
9	2958.068M Ave	39.1	+0.6	+3.0	-61.0	+30.9	+0.0	12.6	34.0	-21.4	Horiz
^	2958.068M	53.3	+0.6	+3.0	-61.0	+30.9	+0.0	26.8	34.0	-7.2	Horiz



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - GPS L1 Civil - Ave**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 10:20:47
 Tested By: Michael Atkinson Sequence#: 5
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

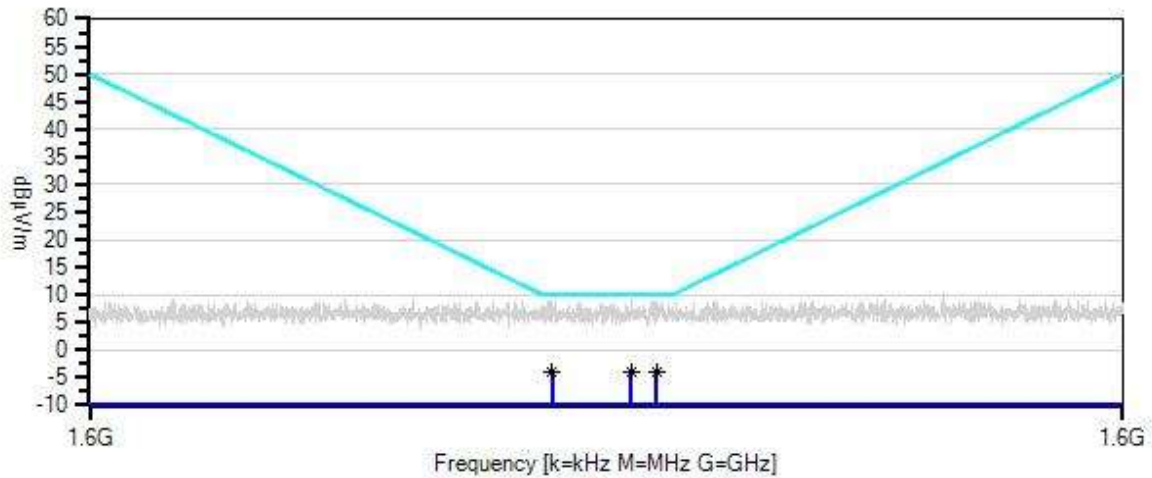
 Frequency and Antenna Position: 1-3GHz, left

Setup: Ambient Scan

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments WO#: 102255 Sequence#: 5 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - GPS L1 Civil - Ave Test Distance: 1 Meter Horiz



- Sweep Data
 - Readings
 - Peak Readings
 - × QP Readings
 - * Average Readings
 - ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - GPS L1 Civil - Ave

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	1576.170M Ave	31.1	+0.4	+2.2	-63.8	+26.0	+0.0	-4.1	10.0	-14.1	Horiz
^	1576.170M	44.3	+0.4	+2.2	-63.8	+26.0	+0.0	9.1	10.0	-0.9	Horiz
3	1575.786M Ave	31.1	+0.4	+2.2	-63.8	+26.0	+0.0	-4.1	10.0	-14.1	Horiz
^	1575.786M	44.6	+0.4	+2.2	-63.8	+26.0	+0.0	9.4	10.0	-0.6	Horiz
5	1574.565M Ave	31.1	+0.4	+2.2	-63.8	+26.0	+0.0	-4.1	10.0	-14.1	Horiz
^	1574.565M	44.3	+0.4	+2.2	-63.8	+26.0	+0.0	9.1	10.0	-0.9	Horiz



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 10:26:20
 Tested By: Michael Atkinson Sequence#: 6
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

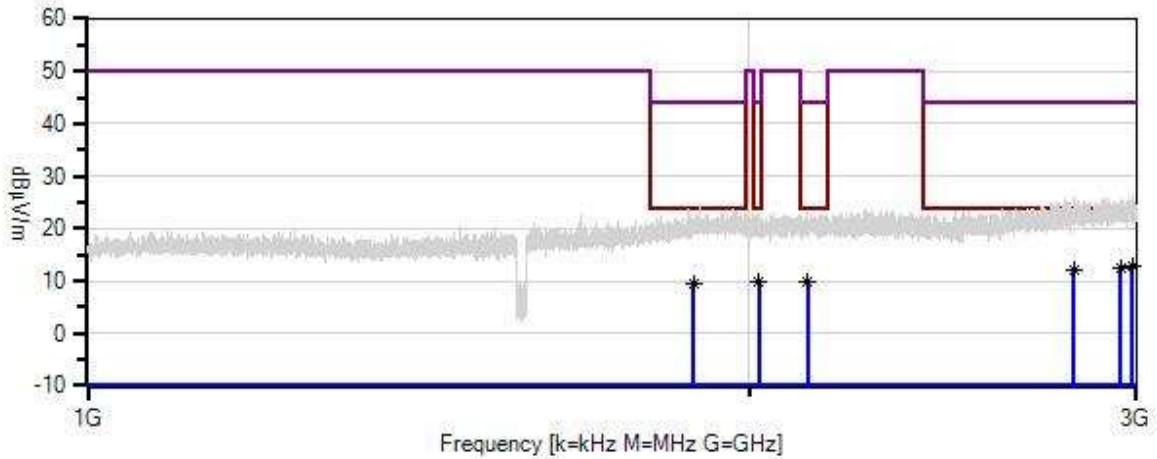
 Frequency and Antenna Position: 1-3GHz, left

Setup: Ambient Scan

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments WD#: 102255 Sequence#: 6 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak Test Distance: 1 Meter Horiz



- Sweep Data
- Readings
- Peak Readings
- x QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	2986.156M Ave	39.2	+0.6	+3.0	-61.0	+31.0	+0.0	12.8	24.0	-11.2	Horiz
^	2986.156M	53.0	+0.6	+3.0	-61.0	+31.0	+0.0	26.6	44.0	-17.4	Horiz
3	2948.905M Ave	38.9	+0.6	+3.0	-61.1	+30.9	+0.0	12.3	24.0	-11.7	Horiz
^	2948.905M	52.5	+0.6	+3.0	-61.1	+30.9	+0.0	25.9	44.0	-18.1	Horiz
5	2810.210M Ave	39.3	+0.5	+2.9	-61.2	+30.5	+0.0	12.0	24.0	-12.0	Horiz
^	2810.210M	53.1	+0.5	+2.9	-61.2	+30.5	+0.0	25.8	44.0	-18.2	Horiz
7	2125.408M Ave	39.9	+0.4	+2.6	-62.1	+29.0	+0.0	9.8	24.0	-14.2	Horiz
^	2125.408M	54.0	+0.4	+2.6	-62.1	+29.0	+0.0	23.9	44.0	-20.1	Horiz
9	2020.455M Ave	40.7	+0.3	+2.5	-62.5	+28.7	+0.0	9.7	24.0	-14.3	Horiz
^	2020.455M	53.8	+0.3	+2.5	-62.5	+28.7	+0.0	22.8	44.0	-21.2	Horiz
11	1885.980M Ave	41.7	+0.4	+2.4	-62.9	+27.9	+0.0	9.5	24.0	-14.5	Horiz
^	1885.980M	55.6	+0.4	+2.4	-62.9	+27.9	+0.0	23.4	44.0	-20.6	Horiz



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 12:54:55
 Tested By: Michael Atkinson Sequence#: 25
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

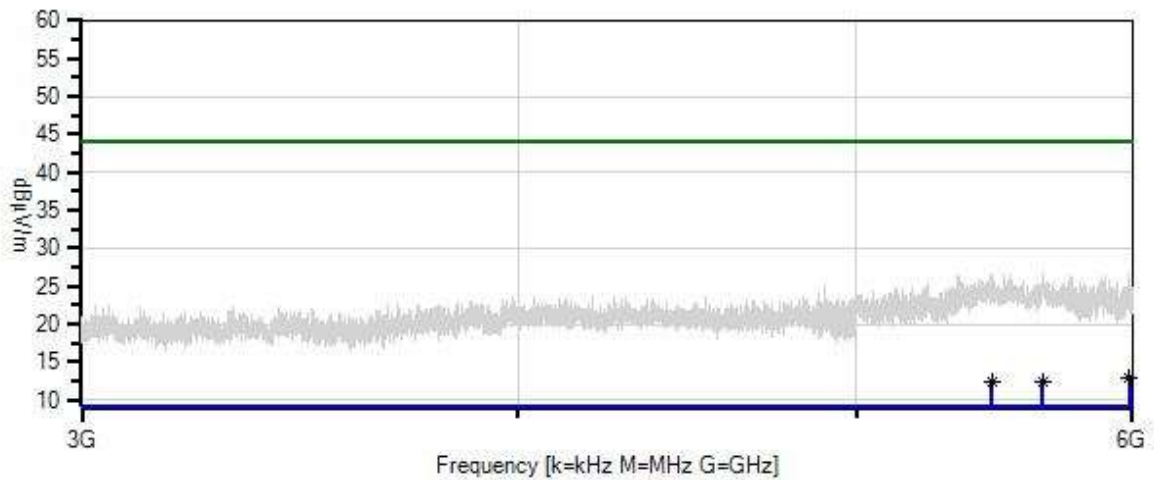
 Frequency and Antenna Position: 3-6GHz, left

Setup: Ambient Scan

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments WD#: 102255 Sequence#: 25 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak Test Distance: 1 Meter Horiz



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019
T4	ANP06503	Cable	32026-29801- 29801-36	3/13/2018	3/13/2020
T5	AN03540	Preamp	83017A	3/25/2019	3/25/2021

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dB μ V	T5 dB	dB	dB	dB	Table	dB μ V/m	dB μ V/m	dB	Ant
1	5986.405M	3.4	+0.7 -33.6	+4.7	+35.7	+1.9	+0.0	12.8	24.0	-11.2	Horiz
^	5986.405M	17.3	+0.7 -33.6	+4.7	+35.7	+1.9	+0.0	26.7	44.0	-17.3	Horiz
3	5653.105M	3.4	+0.7 -33.5	+4.4	+35.6	+1.8	+0.0	12.4	24.0	-11.6	Horiz
^	5653.105M	17.7	+0.7 -33.5	+4.4	+35.6	+1.8	+0.0	26.7	44.0	-17.3	Horiz
5	5467.716M	3.4	+0.7 -33.4	+4.3	+35.5	+1.8	+0.0	12.3	24.0	-11.7	Horiz
^	5467.716M	17.8	+0.7 -33.4	+4.3	+35.5	+1.8	+0.0	26.7	44.0	-17.3	Horiz



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 13:00:30
 Tested By: Michael Atkinson Sequence#: 26
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

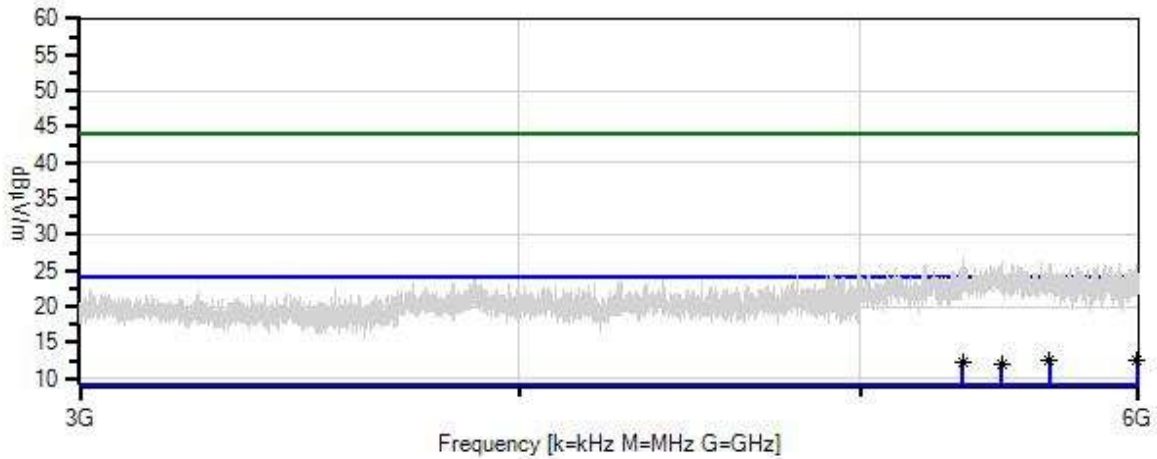
 Frequency and Antenna Position: 3-6GHz, left

Setup: Ambient Scan

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments W/O#: 102255 Sequence#: 26 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak Test Distance: 1 Meter Vert



- Sweep Data
 - Readings
 - Peak Readings
 - × QP Readings
 - * Average Readings
 - ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave
 - 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019
T4	ANP06503	Cable	32026-29801- 29801-36	3/13/2018	3/13/2020
T5	AN03540	Preamp	83017A	3/25/2019	3/25/2021

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	5659.644M Ave	3.6	+0.7 -33.5	+4.4	+35.6	+1.8	+0.0	12.6	24.0	-11.4	Vert
^	5659.644M	17.1	+0.7 -33.5	+4.4	+35.6	+1.8	+0.0	26.1	44.0	-17.9	Vert
3	5994.613M Ave	3.1	+0.7 -33.6	+4.7	+35.7	+1.9	+0.0	12.5	24.0	-11.5	Vert
^	5994.613M	16.7	+0.7 -33.6	+4.7	+35.7	+1.9	+0.0	26.1	44.0	-17.9	Vert
5	5347.742M Ave	3.8	+0.6 -33.3	+4.2	+35.3	+1.7	+0.0	12.3	24.0	-11.7	Vert
^	5347.742M	18.2	+0.6 -33.3	+4.2	+35.3	+1.7	+0.0	26.7	44.0	-17.3	Vert
7	5486.563M Ave	3.0	+0.7 -33.4	+4.3	+35.5	+1.8	+0.0	11.9	24.0	-12.1	Vert
^	5486.563M	17.4	+0.7 -33.4	+4.3	+35.5	+1.8	+0.0	26.3	44.0	-17.7	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 15:58:55
 Tested By: Michael Atkinson Sequence#: 54
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa,

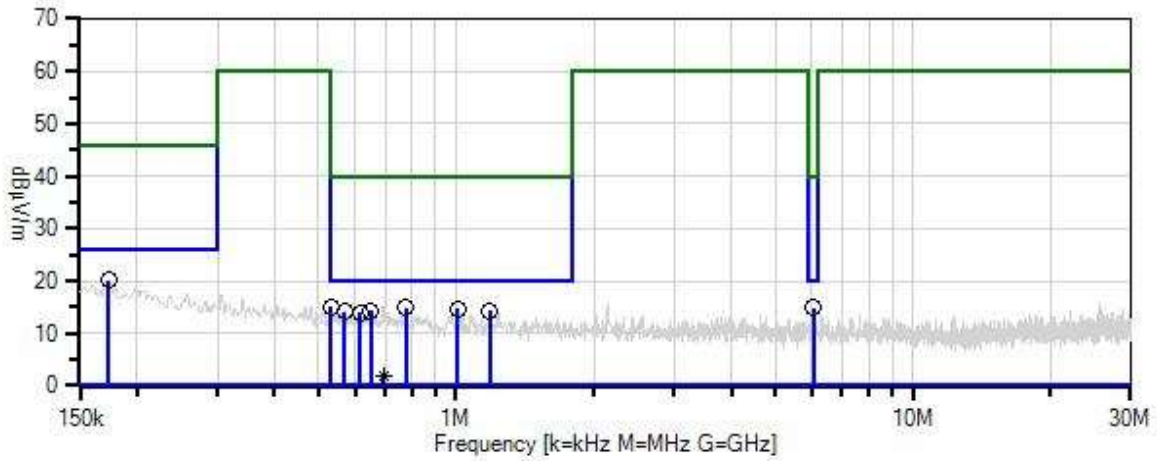
 Method: CISPR 25 (2008)

 Frequency and Antenna Position: 0.15-30MHz, center only

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

Texas Instruments W/O#: 102255 Sequence#: 54 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak Test Distance: 1 Meter Vert



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN02371	Rod Antenna	3301B	6/22/2018	6/22/2020

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	692.496k	0.6	+0.0	+0.2	+1.0		+0.0	1.8	20.0	-18.2	Vert
	Ave										
^	692.495k	14.3	+0.0	+0.2	+1.0		+0.0	15.5	40.0	-24.5	Vert
3	531.783k	14.0	+0.0	+0.2	+0.9		+0.0	15.1	40.0	-24.9	Vert
4	6.058M	12.8	+0.0	+0.3	+1.8		+0.0	14.9	40.0	-25.1	Vert
5	774.669k	13.7	+0.0	+0.2	+1.0		+0.0	14.9	40.0	-25.1	Vert
6	1.009M	13.3	+0.0	+0.2	+1.1		+0.0	14.6	40.0	-25.4	Vert
7	1.183M	13.1	+0.0	+0.2	+1.1		+0.0	14.4	40.0	-25.6	Vert
8	650.317k	13.2	+0.0	+0.2	+1.0		+0.0	14.4	40.0	-25.6	Vert
9	569.597k	13.1	+0.0	+0.2	+0.9		+0.0	14.2	40.0	-25.8	Vert
10	173.270k	19.1	+0.0	+0.2	+0.9		+0.0	20.2	46.0	-25.8	Vert
11	616.866k	12.8	+0.0	+0.2	+1.0		+0.0	14.0	40.0	-26.0	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 16:00:02
 Tested By: Michael Atkinson Sequence#: 55
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa,

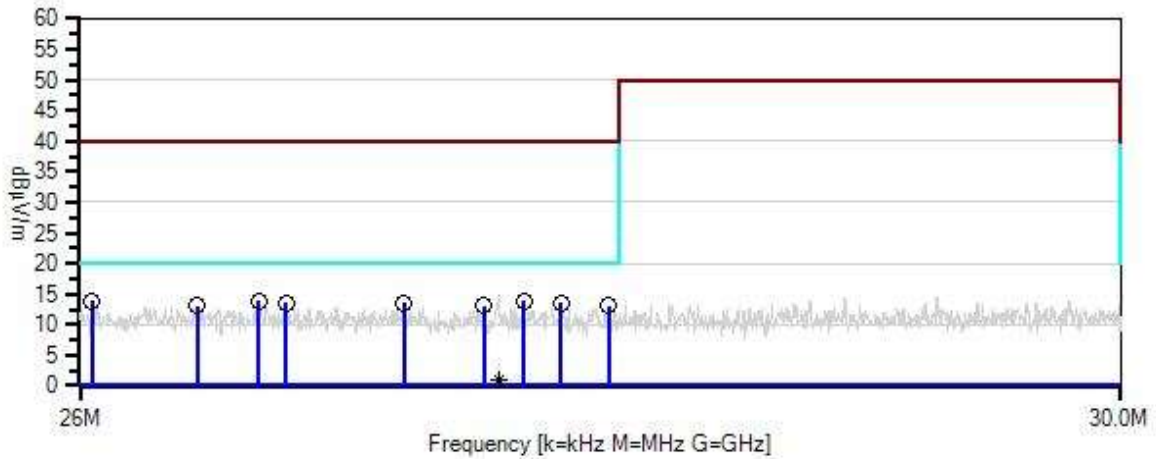
 Method: CISPR 25 (2008)

 Frequency and Antenna Position: 0.15-30MHz, center only

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

Texas Instruments W/O#: 102255 Sequence#: 55 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave Test Distance: 1 Meter Vert



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN02371	Rod Antenna	3301B	6/22/2018	6/22/2020

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	26.042M	8.7	+0.1	+0.3	+4.7		+0.0	13.8	20.0	-6.2	Vert
2	26.648M	8.5	+0.1	+0.3	+4.9		+0.0	13.8	20.0	-6.2	Vert
3	27.638M	8.3	+0.1	+0.3	+5.1		+0.0	13.8	20.0	-6.2	Vert
4	27.779M	8.0	+0.1	+0.3	+5.1		+0.0	13.5	20.0	-6.5	Vert
5	27.185M	8.1	+0.1	+0.3	+5.0		+0.0	13.5	20.0	-6.5	Vert
6	26.746M	8.2	+0.1	+0.3	+4.9		+0.0	13.5	20.0	-6.5	Vert
7	26.424M	7.9	+0.1	+0.3	+4.8		+0.0	13.1	20.0	-6.9	Vert
8	27.960M	7.5	+0.1	+0.3	+5.2		+0.0	13.1	20.0	-6.9	Vert
9	27.485M	7.5	+0.1	+0.3	+5.1		+0.0	13.0	20.0	-7.0	Vert
10	27.541M	-4.4	+0.1	+0.3	+5.1		+0.0	1.1	20.0	-18.9	Vert
	Ave										
^	27.541M	9.4	+0.1	+0.3	+5.1		+0.0	14.9	20.0	-5.1	Vert

Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 15:08:26
 Tested By: Michael Atkinson Sequence#: 40
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa,

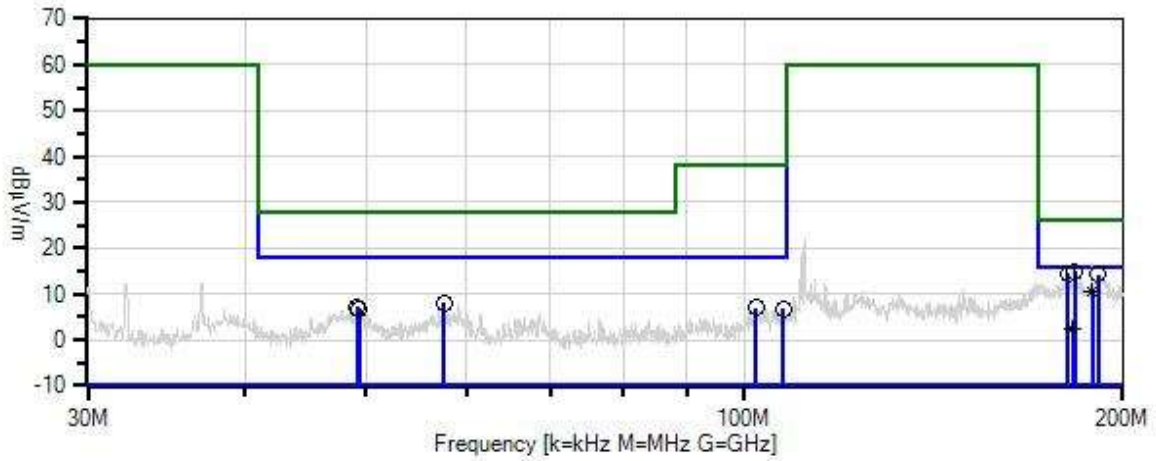
 Method: CISPR 25 (2008)

 Frequency and Antenna Position: 30-200MHz, center only

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

Texas Instruments W/D#: 102255 Sequence#: 40 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak Test Distance: 1 Meter Vert



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03683	Bicon Antenna- ARP958 (dB/m)	3104C	4/4/2018	4/4/2020
T4	AN03183	Preamp	AU-1565-N-H	6/12/2017	6/12/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	188.910M	49.4	+0.2	+0.7	+19.1	-58.8	+0.0	10.6	16.0	-5.4	Vert
	Ave										
^	188.939M	55.9	+0.2	+0.7	+19.1	-58.8	+0.0	17.1	26.0	-8.9	Vert
3	183.222M	53.8	+0.2	+0.6	+19.2	-58.8	+0.0	15.0	26.0	-11.0	Vert
4	180.785M	53.1	+0.2	+0.6	+19.3	-58.8	+0.0	14.4	26.0	-11.6	Vert
5	191.095M	53.4	+0.2	+0.7	+18.7	-58.8	+0.0	14.2	26.0	-11.8	Vert
6	182.378M	41.0	+0.2	+0.6	+19.2	-58.8	+0.0	2.2	16.0	-13.8	Vert
	Ave										
^	182.378M	54.2	+0.2	+0.6	+19.2	-58.8	+0.0	15.4	26.0	-10.6	Vert
8	57.657M	54.3	+0.1	+0.4	+12.1	-58.8	+0.0	8.1	28.0	-19.9	Vert
9	49.132M	53.1	+0.1	+0.4	+12.5	-58.9	+0.0	7.2	28.0	-20.8	Vert
10	49.370M	52.6	+0.1	+0.4	+12.5	-58.9	+0.0	6.7	28.0	-21.3	Vert
11	102.033M	53.2	+0.1	+0.5	+11.9	-58.8	+0.0	6.9	38.0	-31.1	Vert
12	107.297M	51.7	+0.1	+0.5	+13.2	-58.8	+0.0	6.7	38.0	-31.3	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 15:09:31
 Tested By: Michael Atkinson Sequence#: 41
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa,

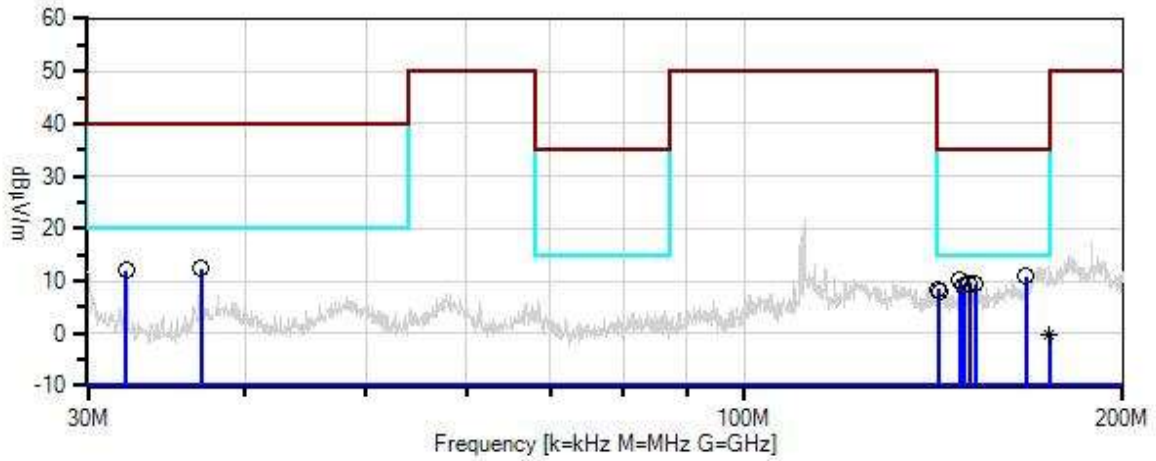
 Method: CISPR 25 (2008)

 Frequency and Antenna Position: 30-200MHz, center only

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

Texas Instruments W/O#: 102255 Sequence#: 41 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak Test Distance: 1 Meter Vert



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03683	Bicon Antenna- ARP958 (dB/m)	3104C	4/4/2018	4/4/2020
T4	AN03183	Preamp	AU-1565-N-H	6/12/2017	6/12/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	174.786M	39.2	+0.2	+0.6	+18.4	-58.8	+0.0	-0.4	15.0	-15.4	Vert
	Ave										
^	174.786M	52.5	+0.2	+0.6	+18.4	-58.8	+0.0	12.9	35.0	-22.1	Vert
3	167.568M	52.5	+0.2	+0.6	+16.3	-58.8	+0.0	10.8	35.0	-24.2	Vert
4	148.165M	55.8	+0.2	+0.6	+12.5	-58.8	+0.0	10.3	35.0	-24.7	Vert
5	150.883M	55.0	+0.2	+0.6	+12.6	-58.8	+0.0	9.6	35.0	-25.4	Vert
6	152.477M	54.7	+0.2	+0.6	+12.7	-58.8	+0.0	9.4	35.0	-25.6	Vert
7	149.290M	54.5	+0.2	+0.6	+12.5	-58.8	+0.0	9.0	35.0	-26.0	Vert
8	142.541M	53.7	+0.2	+0.6	+12.7	-58.8	+0.0	8.4	35.0	-26.6	Vert
9	142.916M	53.2	+0.2	+0.6	+12.7	-58.8	+0.0	7.9	35.0	-27.1	Vert
10	36.933M	59.5	+0.1	+0.3	+11.4	-59.0	+0.0	12.3	40.0	-27.7	Vert
11	32.196M	60.1	+0.1	+0.3	+10.4	-58.9	+0.0	12.0	40.0	-28.0	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 15:19:18
 Tested By: Michael Atkinson Sequence#: 44
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa,

 Method: CISPR 25 (2008)

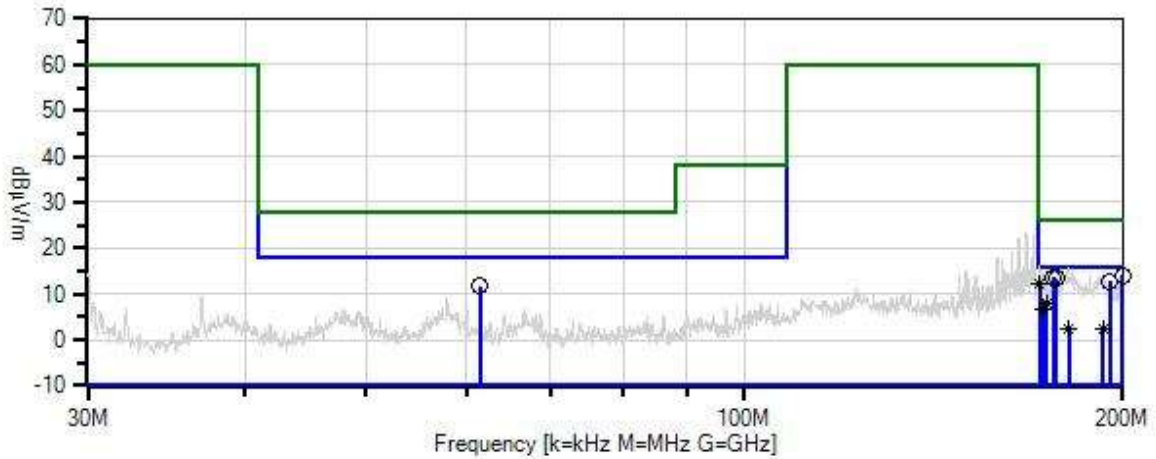
 Frequency and Antenna Position: 30-200MHz, center only

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Ground strap on deserializer case to table ground.

Texas Instruments WD#: 102255 Sequence#: 44 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak Test Distance: 1 Meter Horiz



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03683	Bicon Antenna- ARP958 (dB/m)	3104C	4/4/2018	4/4/2020
T4	AN03183	Preamp	AU-1565-N-H	6/12/2017	6/12/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	171.747M Ave	52.7	+0.2	+0.6	+17.6	-58.8	+0.0	12.3	16.0	-3.7	Horiz
^	171.786M	56.8	+0.2	+0.6	+17.6	-58.8	+0.0	16.4	26.0	-9.6	Horiz
3	173.900M Ave	47.6	+0.2	+0.6	+18.3	-58.8	+0.0	7.9	16.0	-8.1	Horiz
^	173.942M	54.7	+0.2	+0.6	+18.3	-58.8	+0.0	15.0	26.0	-11.0	Horiz
5	172.443M Ave	47.0	+0.2	+0.6	+17.8	-58.8	+0.0	6.8	16.0	-9.2	Horiz
^	172.536M	54.8	+0.2	+0.6	+17.9	-58.8	+0.0	14.7	26.0	-11.3	Horiz
7	199.719M	53.9	+0.2	+0.7	+18.1	-58.8	+0.0	14.1	26.0	-11.9	Horiz
8	176.004M	53.0	+0.2	+0.6	+18.7	-58.8	+0.0	13.7	26.0	-12.3	Horiz
9	177.035M	52.5	+0.2	+0.6	+19.0	-58.8	+0.0	13.5	26.0	-12.5	Horiz
10	195.407M	52.2	+0.2	+0.7	+18.4	-58.8	+0.0	12.7	26.0	-13.3	Horiz
11	192.876M Ave	41.9	+0.2	+0.7	+18.6	-58.8	+0.0	2.6	16.0	-13.4	Horiz
^	192.876M	54.4	+0.2	+0.7	+18.6	-58.8	+0.0	15.1	26.0	-10.9	Horiz
13	180.972M Ave	41.1	+0.2	+0.6	+19.3	-58.8	+0.0	2.4	16.0	-13.6	Horiz
^	180.972M	54.3	+0.2	+0.6	+19.3	-58.8	+0.0	15.6	26.0	-10.4	Horiz
15	61.592M	58.7	+0.1	+0.4	+11.4	-58.8	+0.0	11.8	28.0	-16.2	Horiz



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 15:30:46
 Tested By: Michael Atkinson Sequence#: 47
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa,

 Method: CISPR 25 (2008)

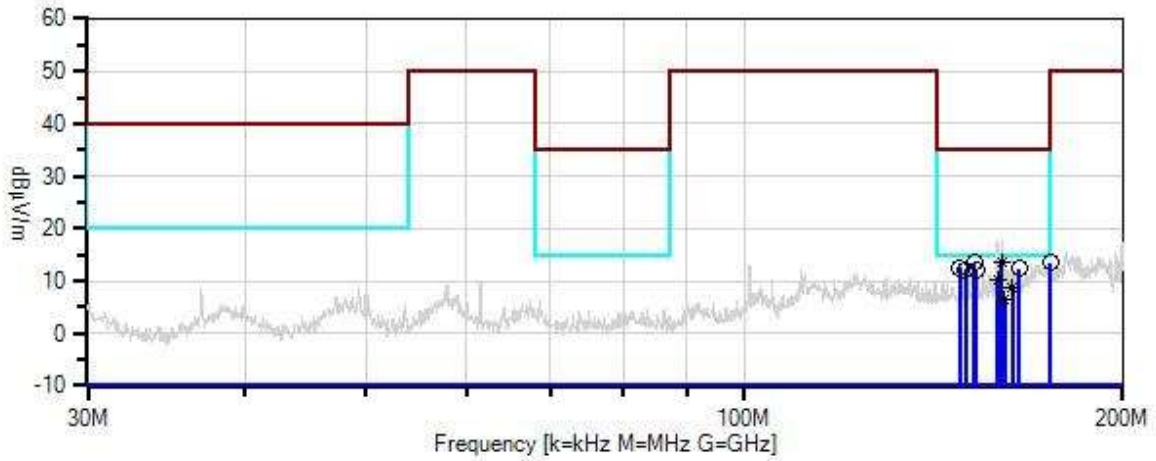
 Frequency and Antenna Position: 30-200MHz, center only

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Ground strap on serializer case to table ground.

Texas Instruments WD#: 102255 Sequence#: 47 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak Test Distance: 1 Meter Horiz



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03683	Bicon Antenna- ARP958 (dB/m)	3104C	4/4/2018	4/4/2020
T4	AN03183	Preamp	AU-1565-N-H	6/12/2017	6/12/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	160.121M Ave	57.5	+0.2	+0.6	+13.9	-58.8	+0.0	13.4	15.0	-1.6	Horiz
^	160.163M	61.8	+0.2	+0.6	+13.9	-58.8	+0.0	17.7	35.0	-17.3	Horiz
3	158.859M Ave	54.8	+0.2	+0.6	+13.6	-58.8	+0.0	10.4	15.0	-4.6	Horiz
^	158.851M	61.8	+0.2	+0.6	+13.6	-58.8	+0.0	17.4	35.0	-17.6	Horiz
5	163.156M Ave	52.0	+0.2	+0.6	+14.8	-58.8	+0.0	8.8	15.0	-6.2	Horiz
^	163.162M	57.6	+0.2	+0.6	+14.8	-58.8	+0.0	14.4	35.0	-20.6	Horiz
7	161.007M Ave	50.4	+0.2	+0.6	+14.2	-58.8	+0.0	6.6	15.0	-8.4	Horiz
^	161.007M	57.4	+0.2	+0.6	+14.2	-58.8	+0.0	13.6	35.0	-21.4	Horiz
9	174.973M	53.0	+0.2	+0.6	+18.4	-58.8	+0.0	13.4	35.0	-21.6	Horiz
10	152.383M	58.7	+0.2	+0.6	+12.7	-58.8	+0.0	13.4	35.0	-21.6	Horiz
11	148.165M	58.0	+0.2	+0.6	+12.5	-58.8	+0.0	12.5	35.0	-22.5	Horiz
12	165.225M	54.8	+0.2	+0.6	+15.5	-58.8	+0.0	12.3	35.0	-22.7	Horiz
13	149.946M	57.7	+0.2	+0.6	+12.5	-58.8	+0.0	12.2	35.0	-22.8	Horiz
14	152.758M	57.3	+0.2	+0.6	+12.7	-58.8	+0.0	12.0	35.0	-23.0	Horiz

Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 14:48:59
 Tested By: Michael Atkinson Sequence#: 36
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa,

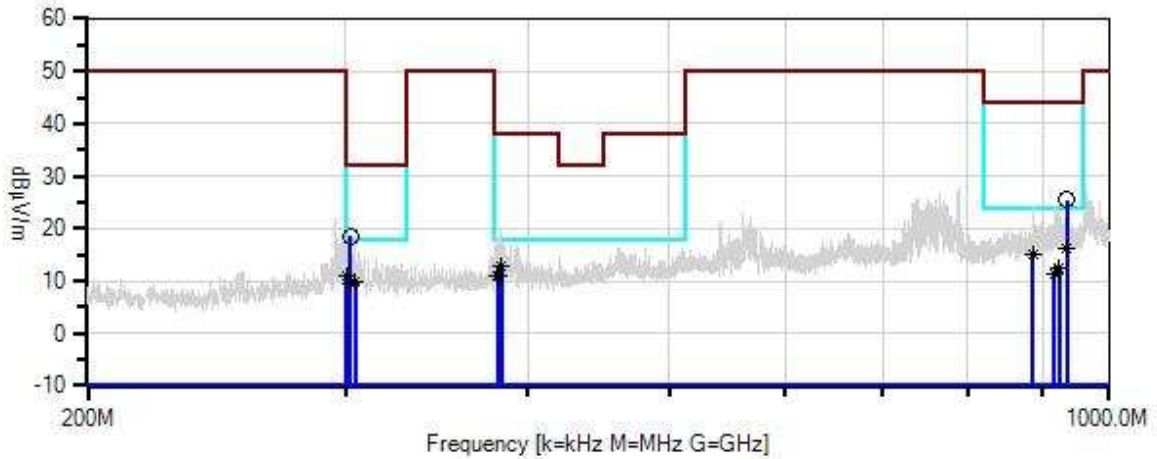
 Method: CISPR 25 (2008)

 Frequency and Antenna Position: 200-1000MHz, center only

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

Texas Instruments WD#: 102255 Sequence#: 36 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak Test Distance: 1 Meter Horiz



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN00147	Log Periodic Antenna-SAE ARP958 (dB)	3146	2/8/2019	2/8/2021

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	383.984M	60.0	+0.2	+1.0	-65.0	+16.7	+0.0	12.9	18.0	-5.1	Horiz
	Ave										
^	383.984M	67.1	+0.2	+1.0	-65.0	+16.7	+0.0	20.0	38.0	-18.0	Horiz
3	382.017M	58.3	+0.2	+1.0	-65.0	+16.6	+0.0	11.1	18.0	-6.9	Horiz
	Ave										
^	381.982M	65.9	+0.2	+1.0	-65.0	+16.6	+0.0	18.7	38.0	-19.3	Horiz
5	300.511M	57.4	+0.2	+0.9	-64.7	+17.1	+0.0	10.9	18.0	-7.1	Horiz
	Ave										
^	300.601M	65.5	+0.2	+0.9	-64.7	+17.1	+0.0	19.0	32.0	-13.0	Horiz
7	381.281M	58.0	+0.2	+1.0	-65.0	+16.6	+0.0	10.8	18.0	-7.2	Horiz
	Ave										
^	381.281M	65.5	+0.2	+1.0	-65.0	+16.6	+0.0	18.3	38.0	-19.7	Horiz
9	936.082M	56.2	+0.4	+1.6	-65.4	+23.5	+0.0	16.3	24.0	-7.7	Horiz
	Ave										
10	304.766M	56.5	+0.2	+0.9	-64.7	+16.9	+0.0	9.8	18.0	-8.2	Horiz
	Ave										
^	304.705M	65.3	+0.2	+0.9	-64.7	+16.9	+0.0	18.6	32.0	-13.4	Horiz
12	302.713M	56.1	+0.2	+0.9	-64.7	+17.0	+0.0	9.5	18.0	-8.5	Horiz
	Ave										
13	886.886M	55.2	+0.3	+1.5	-65.5	+23.4	+0.0	14.9	24.0	-9.1	Horiz
	Ave										
^	886.886M	64.6	+0.3	+1.5	-65.5	+23.4	+0.0	24.3	44.0	-19.7	Horiz

15	924.333M	52.8	+0.4	+1.6	-65.4	+23.2	+0.0	12.6	24.0	-11.4	Horiz
	Ave										
^	924.333M	63.2	+0.4	+1.6	-65.4	+23.2	+0.0	23.0	44.0	-21.0	Horiz
17	917.283M	51.6	+0.4	+1.6	-65.4	+23.3	+0.0	11.5	24.0	-12.5	Horiz
	Ave										
^	917.283M	64.1	+0.4	+1.6	-65.4	+23.3	+0.0	24.0	44.0	-20.0	Horiz
19	302.402M	65.2	+0.2	+0.9	-64.7	+17.0	+0.0	18.6	32.0	-13.4	Horiz
20	935.952M	65.4	+0.4	+1.6	-65.4	+23.5	+0.0	25.5	44.0	-18.5	Horiz



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 14:50:21
 Tested By: Michael Atkinson Sequence#: 37
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa,

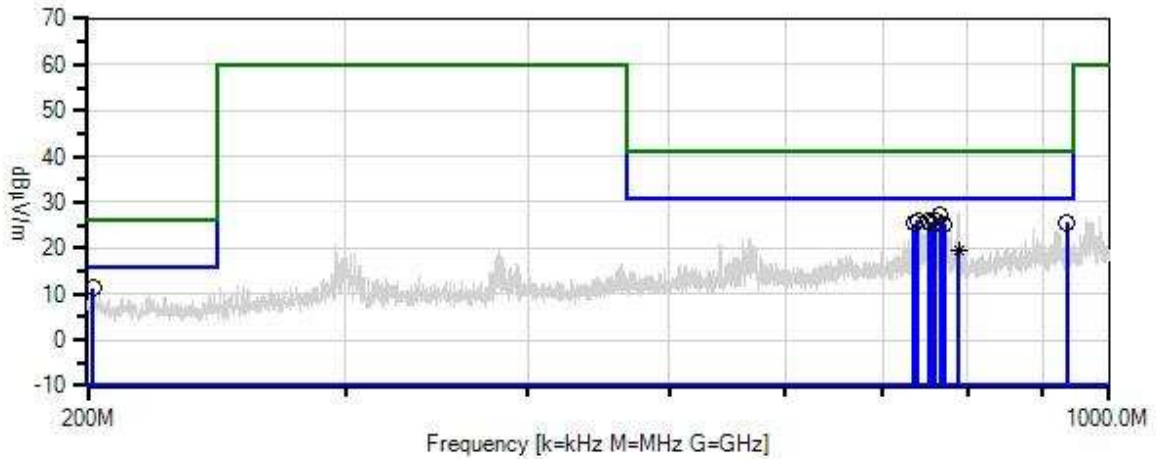
 Method: CISPR 25 (2008)

 Frequency and Antenna Position: 200-1000MHz, center only

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

Texas Instruments WD#: 102255 Sequence#: 37 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak Test Distance: 1 Meter Horiz



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN00147	Log Periodic Antenna-SAE ARP958 (dB)	3146	2/8/2019	2/8/2021

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	788.288M Ave	61.4	+0.3	+1.5	-65.5	+22.0	+0.0	19.7	31.0	-11.3	Horiz
^	788.288M	69.4	+0.3	+1.5	-65.5	+22.0	+0.0	27.7	41.0	-13.3	Horiz
3	765.765M	69.3	+0.3	+1.4	-65.5	+21.8	+0.0	27.3	41.0	-13.7	Horiz
4	201.702M	60.0	+0.2	+0.7	-63.4	+13.8	+0.0	11.3	26.0	-14.7	Horiz
5	739.139M	68.3	+0.3	+1.4	-65.5	+21.6	+0.0	26.1	41.0	-14.9	Horiz
6	760.160M	68.0	+0.3	+1.4	-65.5	+21.7	+0.0	25.9	41.0	-15.1	Horiz
7	751.651M	68.1	+0.3	+1.4	-65.5	+21.6	+0.0	25.9	41.0	-15.1	Horiz
8	935.952M	65.5	+0.4	+1.6	-65.4	+23.5	+0.0	25.6	41.0	-15.4	Horiz
9	754.954M	67.7	+0.3	+1.4	-65.5	+21.7	+0.0	25.6	41.0	-15.4	Horiz
10	734.534M	67.6	+0.3	+1.4	-65.5	+21.5	+0.0	25.3	41.0	-15.7	Horiz
11	770.770M	67.1	+0.3	+1.4	-65.5	+21.8	+0.0	25.1	41.0	-15.9	Horiz



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 14:53:22
 Tested By: Michael Atkinson Sequence#: 38
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa,

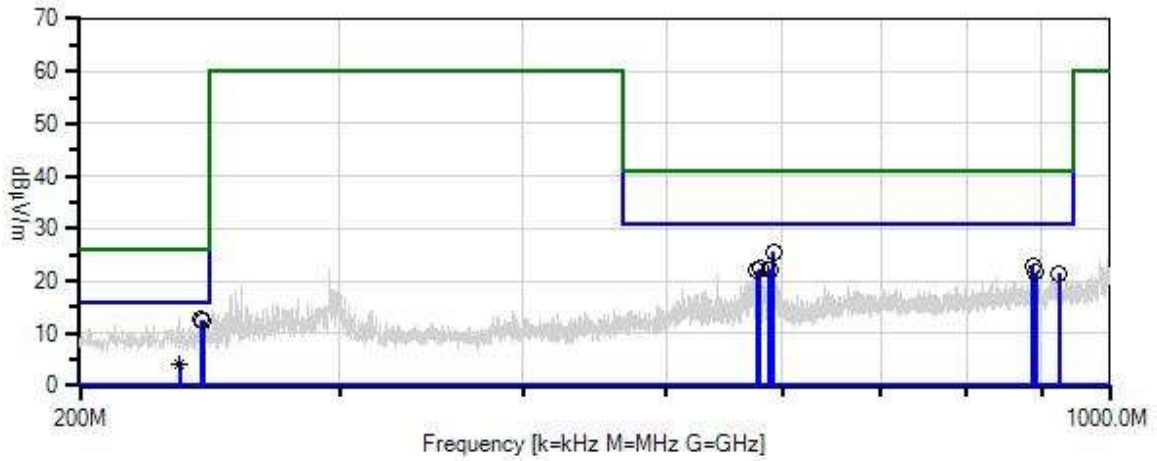
 Method: CISPR 25 (2008)

 Frequency and Antenna Position: 200-1000MHz, center only

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

Texas Instruments W/O#: 102255 Sequence#: 38 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak Test Distance: 1 Meter Vert



- Sweep Data
 - Readings
 - Peak Readings
 - × QP Readings
 - * Average Readings
 - ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Ave
 - 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN00147	Log Periodic Antenna-SAE ARP958 (dB)	3146	2/8/2019	2/8/2021

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	233.834M	53.4	+0.2	+0.8	-64.0	+13.9	+0.0	4.3	16.0	-11.7	Vert
	Ave										
^	233.834M	62.3	+0.2	+0.8	-64.0	+13.9	+0.0	13.2	26.0	-12.8	Vert
3	241.742M	61.9	+0.2	+0.8	-64.1	+13.8	+0.0	12.6	26.0	-13.4	Vert
4	242.442M	61.7	+0.2	+0.8	-64.1	+13.8	+0.0	12.4	26.0	-13.6	Vert
5	591.191M	69.6	+0.3	+1.3	-65.5	+19.9	+0.0	25.6	41.0	-15.4	Vert
6	886.786M	63.3	+0.3	+1.5	-65.5	+23.4	+0.0	23.0	41.0	-18.0	Vert
7	578.778M	66.6	+0.3	+1.2	-65.4	+19.7	+0.0	22.4	41.0	-18.6	Vert
8	587.687M	66.1	+0.3	+1.3	-65.5	+19.9	+0.0	22.1	41.0	-18.9	Vert
9	576.676M	66.2	+0.3	+1.2	-65.4	+19.7	+0.0	22.0	41.0	-19.0	Vert
10	891.591M	61.9	+0.3	+1.5	-65.5	+23.4	+0.0	21.6	41.0	-19.4	Vert
11	924.234M	61.6	+0.4	+1.6	-65.4	+23.2	+0.0	21.4	41.0	-19.6	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 14:56:08
 Tested By: Michael Atkinson Sequence#: 39
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa,

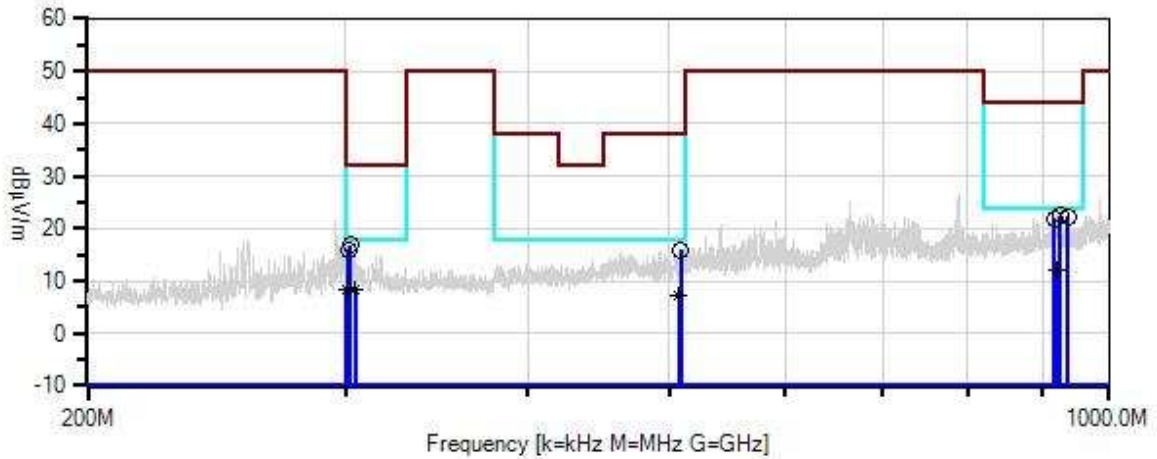
 Method: CISPR 25 (2008)

 Frequency and Antenna Position: 200-1000MHz, center only

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

Texas Instruments WO#: 102255 Sequence#: 39 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave Test Distance: 1 Meter Vert



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN00147	Log Periodic Antenna-SAE ARP958 (dB)	3146	2/8/2019	2/8/2021

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	302.502M	63.4	+0.2	+0.9	-64.7	+17.0	+0.0	16.8	18.0	-1.2	Vert
2	925.128M	62.6	+0.4	+1.6	-65.4	+23.2	+0.0	22.4	24.0	-1.6	Vert
3	936.150M	62.2	+0.4	+1.6	-65.4	+23.5	+0.0	22.3	24.0	-1.7	Vert
4	301.401M	62.6	+0.2	+0.9	-64.7	+17.0	+0.0	16.0	18.0	-2.0	Vert
5	509.309M	60.9	+0.3	+1.2	-65.4	+19.0	+0.0	16.0	18.0	-2.0	Vert
6	917.184M	62.1	+0.4	+1.6	-65.4	+23.3	+0.0	22.0	24.0	-2.0	Vert
7	304.763M	54.9	+0.2	+0.9	-64.7	+16.9	+0.0	8.2	18.0	-9.8	Vert
	Ave										
^	304.805M	64.0	+0.2	+0.9	-64.7	+16.9	+0.0	17.3	18.0	-0.7	Vert
9	300.540M	54.7	+0.2	+0.9	-64.7	+17.1	+0.0	8.2	18.0	-9.8	Vert
	Ave										
^	300.601M	63.8	+0.2	+0.9	-64.7	+17.1	+0.0	17.3	18.0	-0.7	Vert
11	507.908M	52.2	+0.3	+1.2	-65.4	+19.0	+0.0	7.3	18.0	-10.7	Vert
	Ave										
^	507.908M	61.2	+0.3	+1.2	-65.4	+19.0	+0.0	16.3	18.0	-1.7	Vert
13	921.759M	52.1	+0.4	+1.6	-65.4	+23.2	+0.0	11.9	24.0	-12.1	Vert
	Ave										
^	921.752M	62.8	+0.4	+1.6	-65.4	+23.2	+0.0	22.6	24.0	-1.4	Vert

Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Ave**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 10:46:28
 Tested By: Michael Atkinson Sequence#: 7
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

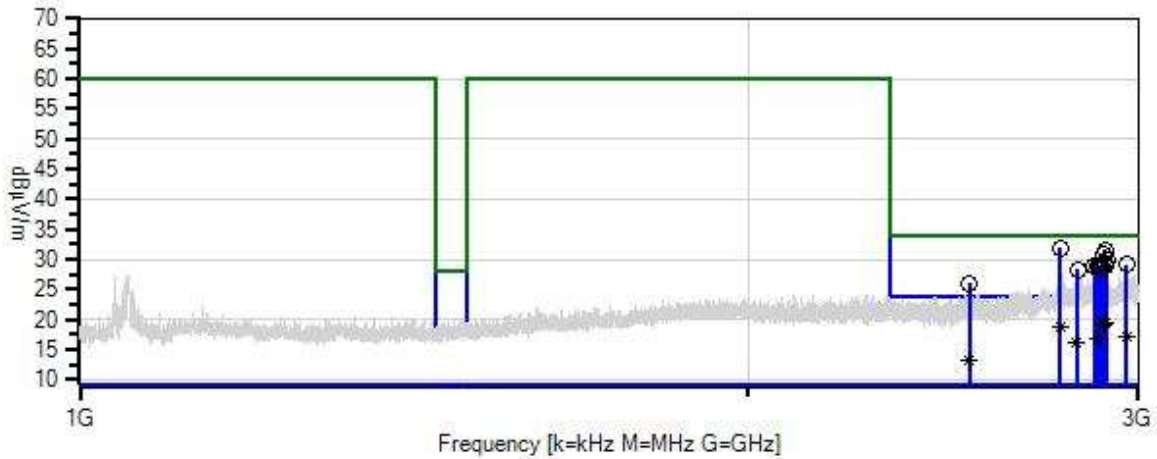
 Frequency and Antenna Position: 1-3GHz, left

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments W/O#: 102255 Sequence#: 7 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Ave Test Distance: 1 Meter Horiz



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	2766.466M	59.4	+0.5	+2.9	-61.3	+30.4	+0.0	31.9	34.0	-2.1	Horiz
2	2897.898M	58.3	+0.6	+3.0	-61.1	+30.8	+0.0	31.6	34.0	-2.4	Horiz
3	2894.594M	57.7	+0.6	+3.0	-61.1	+30.7	+0.0	30.9	34.0	-3.1	Horiz
4	2901.994M	56.6	+0.6	+3.0	-61.1	+30.8	+0.0	29.9	34.0	-4.1	Horiz
5	2898.273M Ave	46.0	+0.6	+3.0	-61.1	+30.8	+0.0	19.3	24.0	-4.7	Horiz
6	2895.795M	56.0	+0.6	+3.0	-61.1	+30.7	+0.0	29.2	34.0	-4.8	Horiz
7	2962.650M	55.7	+0.6	+3.0	-61.0	+30.9	+0.0	29.2	34.0	-4.8	Horiz
8	2894.149M Ave	45.9	+0.6	+3.0	-61.1	+30.7	+0.0	19.1	24.0	-4.9	Horiz
9	2875.876M	55.8	+0.6	+3.0	-61.1	+30.7	+0.0	29.0	34.0	-5.0	Horiz
10	2880.580M	55.8	+0.6	+3.0	-61.1	+30.7	+0.0	29.0	34.0	-5.0	Horiz
11	2880.280M	55.8	+0.6	+3.0	-61.1	+30.7	+0.0	29.0	34.0	-5.0	Horiz
12	2887.888M	55.7	+0.6	+3.0	-61.1	+30.7	+0.0	28.9	34.0	-5.1	Horiz
13	2865.265M	56.0	+0.5	+2.9	-61.2	+30.7	+0.0	28.9	34.0	-5.1	Horiz
14	2901.197M	55.6	+0.6	+3.0	-61.1	+30.8	+0.0	28.9	34.0	-5.1	Horiz
15	2900.500M	55.6	+0.6	+3.0	-61.1	+30.8	+0.0	28.9	34.0	-5.1	Horiz
16	2900.200M	55.6	+0.6	+3.0	-61.1	+30.8	+0.0	28.9	34.0	-5.1	Horiz
17	2886.887M	55.5	+0.6	+3.0	-61.1	+30.7	+0.0	28.7	34.0	-5.3	Horiz
18	2765.007M Ave	46.2	+0.5	+2.9	-61.3	+30.4	+0.0	18.7	24.0	-5.3	Horiz

19	2814.900M	55.7	+0.5	+2.9	-61.2	+30.5	+0.0	28.4	34.0	-5.6	Horiz
20	2962.824M Ave	43.8	+0.6	+3.0	-61.0	+30.9	+0.0	17.3	24.0	-6.7	Horiz
21	2876.712M Ave	43.5	+0.6	+3.0	-61.1	+30.7	+0.0	16.7	24.0	-7.3	Horiz
22	2814.450M Ave	43.6	+0.5	+2.9	-61.2	+30.5	+0.0	16.3	24.0	-7.7	Horiz
23	2516.800M	54.6	+0.4	+2.8	-61.4	+29.7	+0.0	26.1	34.0	-7.9	Horiz
24	2517.290M Ave	41.8	+0.4	+2.8	-61.4	+29.7	+0.0	13.3	24.0	-10.7	Horiz
25	1488.670M Ave	42.0	+0.4	+2.2	-64.1	+25.6	+0.0	6.1	18.0	-11.9	Horiz
^	1488.670M	55.3	+0.4	+2.2	-64.1	+25.6	+0.0	19.4	28.0	-8.6	Horiz
27	1470.340M Ave	41.8	+0.4	+2.2	-64.2	+25.6	+0.0	5.8	18.0	-12.2	Horiz
^	1470.340M	55.2	+0.4	+2.2	-64.2	+25.6	+0.0	19.2	28.0	-8.8	Horiz
29	1456.460M Ave	41.8	+0.4	+2.2	-64.2	+25.6	+0.0	5.8	18.0	-12.2	Horiz
^	1456.460M	56.0	+0.4	+2.2	-64.2	+25.6	+0.0	20.0	28.0	-8.0	Horiz



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - GPS L1 Civil - Ave**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 10:50:37
 Tested By: Michael Atkinson Sequence#: 8
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

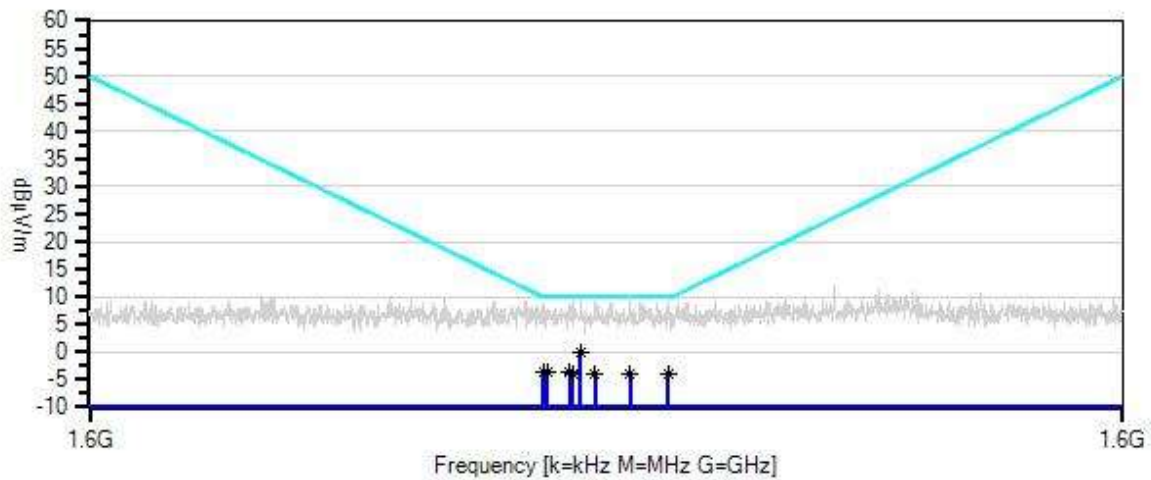
 Frequency and Antenna Position: 1-3GHz, left

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments WO#: 102255 Sequence#: 8 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - GPS L1 Civil - Ave Test Distance: 1 Meter Horiz



- Sweep Data
 - Readings
 - Peak Readings
 - * QP Readings
 - * Average Readings
 - ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - GPS L1 Civil - Ave

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	1575.007M Ave	35.3	+0.4	+2.2	-63.8	+26.0	+0.0	0.1	10.0	-9.9	Horiz
^	1575.007M	44.6	+0.4	+2.2	-63.8	+26.0	+0.0	9.4	10.0	-0.6	Horiz
3	1574.421M Ave	31.5	+0.4	+2.2	-63.8	+26.0	+0.0	-3.7	10.0	-13.7	Horiz
4	1574.837M Ave	31.5	+0.4	+2.2	-63.8	+26.0	+0.0	-3.7	10.0	-13.7	Horiz
5	1574.485M Ave	31.5	+0.4	+2.2	-63.8	+26.0	+0.0	-3.7	10.0	-13.7	Horiz
^	1574.421M	43.9	+0.4	+2.2	-63.8	+26.0	+0.0	8.7	10.0	-1.3	Horiz
^	1574.485M	43.0	+0.4	+2.2	-63.8	+26.0	+0.0	7.8	10.0	-2.2	Horiz
8	1574.874M Ave	31.4	+0.4	+2.2	-63.8	+26.0	+0.0	-3.8	10.0	-13.8	Horiz
^	1574.874M	44.5	+0.4	+2.2	-63.8	+26.0	+0.0	9.3	10.0	-0.7	Horiz
^	1574.837M	43.9	+0.4	+2.2	-63.8	+26.0	+0.0	8.7	10.0	-1.3	Horiz
11	1575.231M Ave	31.4	+0.4	+2.2	-63.8	+26.0	+0.0	-3.8	10.0	-13.8	Horiz
^	1575.231M	44.7	+0.4	+2.2	-63.8	+26.0	+0.0	9.5	10.0	-0.5	Horiz
13	1576.351M Ave	31.3	+0.4	+2.2	-63.8	+26.0	+0.0	-3.9	10.0	-13.9	Horiz
^	1576.351M	44.4	+0.4	+2.2	-63.8	+26.0	+0.0	9.2	10.0	-0.8	Horiz
15	1575.765M Ave	31.2	+0.4	+2.2	-63.8	+26.0	+0.0	-4.0	10.0	-14.0	Horiz
^	1575.765M	45.4	+0.4	+2.2	-63.8	+26.0	+0.0	10.2	10.0	+0.2	Horiz



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 10:59:53
 Tested By: Michael Atkinson Sequence#: 9
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

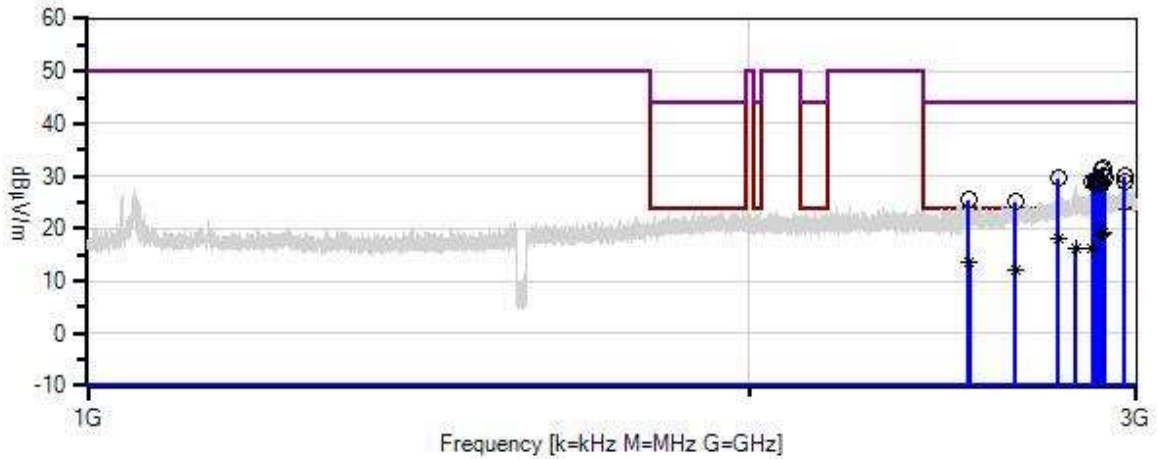
 Frequency and Antenna Position: 1-3GHz, left

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments WD#: 102255 Sequence#: 9 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak Test Distance: 1 Meter Horiz



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	2897.718M Ave	45.8	+0.6	+3.0	-61.1	+30.8	+0.0	19.1	24.0	-4.9	Horiz
2	2892.984M Ave	45.8	+0.6	+3.0	-61.1	+30.7	+0.0	19.0	24.0	-5.0	Horiz
3	2763.764M Ave	45.7	+0.5	+2.9	-61.3	+30.4	+0.0	18.2	24.0	-5.8	Horiz
^	2763.764M	58.3	+0.5	+2.9	-61.3	+30.4	+0.0	30.8	44.0	-13.2	Horiz
5	2813.669M Ave	43.6	+0.5	+2.9	-61.2	+30.5	+0.0	16.3	24.0	-7.7	Horiz
^	2813.711M	56.1	+0.5	+2.9	-61.2	+30.5	+0.0	28.8	44.0	-15.2	Horiz
7	2862.514M Ave	43.2	+0.5	+2.9	-61.2	+30.7	+0.0	16.1	24.0	-7.9	Horiz
8	2517.424M Ave	41.9	+0.4	+2.8	-61.4	+29.7	+0.0	13.4	24.0	-10.6	Horiz
9	2643.186M Ave	40.0	+0.5	+2.9	-61.3	+30.1	+0.0	12.2	24.0	-11.8	Horiz
10	2897.597M	58.4	+0.6	+3.0	-61.1	+30.8	+0.0	31.7	44.0	-12.3	Horiz
11	2893.293M	58.1	+0.6	+3.0	-61.1	+30.7	+0.0	31.3	44.0	-12.7	Horiz
12	2960.857M	56.5	+0.6	+3.0	-61.0	+30.9	+0.0	30.0	44.0	-14.0	Horiz
13	2894.895M	56.7	+0.6	+3.0	-61.1	+30.7	+0.0	29.9	44.0	-14.1	Horiz
14	2901.396M	56.4	+0.6	+3.0	-61.1	+30.8	+0.0	29.7	44.0	-14.3	Horiz
15	2762.863M	57.1	+0.5	+2.9	-61.3	+30.4	+0.0	29.6	44.0	-14.4	Horiz
16	2875.375M	56.0	+0.6	+3.0	-61.1	+30.7	+0.0	29.2	44.0	-14.8	Horiz
17	2862.662M	56.2	+0.5	+2.9	-61.2	+30.7	+0.0	29.1	44.0	-14.9	Horiz
18	2893.894M	55.8	+0.6	+3.0	-61.1	+30.7	+0.0	29.0	44.0	-15.0	Horiz

19	2962.550M	55.4	+0.6	+3.0	-61.0	+30.9	+0.0	28.9	44.0	-15.1	Horiz
20	2886.586M	55.6	+0.6	+3.0	-61.1	+30.7	+0.0	28.8	44.0	-15.2	Horiz
21	2879.779M	55.6	+0.6	+3.0	-61.1	+30.7	+0.0	28.8	44.0	-15.2	Horiz
22	2874.875M	55.5	+0.6	+3.0	-61.1	+30.7	+0.0	28.7	44.0	-15.3	Horiz
23	2890.690M	55.2	+0.6	+3.0	-61.1	+30.7	+0.0	28.4	44.0	-15.6	Horiz
24	2516.000M	53.9	+0.4	+2.8	-61.4	+29.7	+0.0	25.4	44.0	-18.6	Horiz
25	2643.000M	52.8	+0.5	+2.9	-61.3	+30.1	+0.0	25.0	44.0	-19.0	Horiz



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 11:08:47
 Tested By: Michael Atkinson Sequence#: 10
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

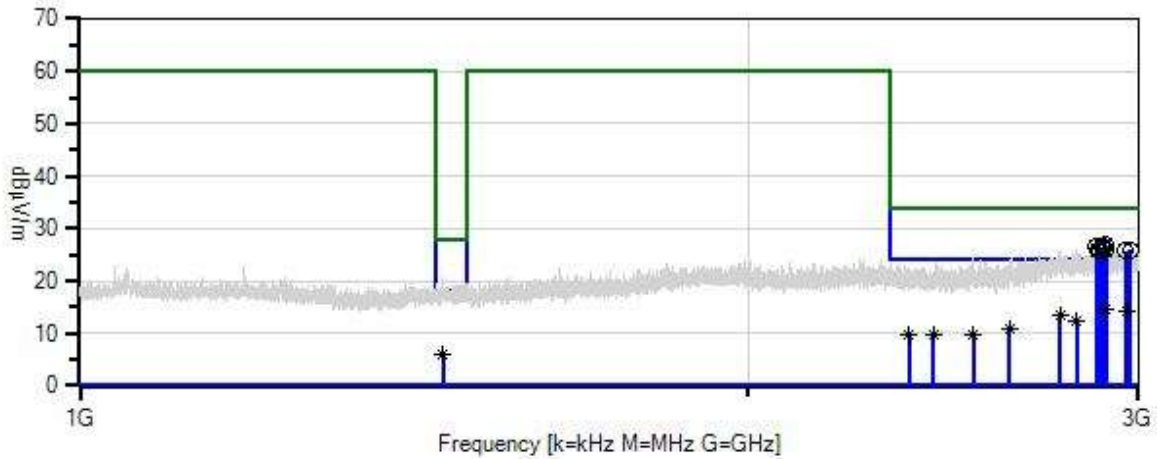
 Frequency and Antenna Position: 1-3GHz, left

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments W/O#: 102255 Sequence#: 10 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak Test Distance: 1 Meter Vert



- Sweep Data
 - Readings
 - Peak Readings
 - × QP Readings
 - * Average Readings
 - ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Ave
 - 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	2899.099M	53.5	+0.6	+3.0	-61.1	+30.8	+0.0	26.8	34.0	-7.2	Vert
2	2872.072M	53.6	+0.5	+2.9	-61.2	+30.7	+0.0	26.5	34.0	-7.5	Vert
3	2889.589M	53.2	+0.6	+3.0	-61.1	+30.7	+0.0	26.4	34.0	-7.6	Vert
4	2892.492M	53.2	+0.6	+3.0	-61.1	+30.7	+0.0	26.4	34.0	-7.6	Vert
5	2892.993M	53.0	+0.6	+3.0	-61.1	+30.7	+0.0	26.2	34.0	-7.8	Vert
6	2875.275M	52.8	+0.6	+3.0	-61.1	+30.7	+0.0	26.0	34.0	-8.0	Vert
7	2883.683M	52.8	+0.6	+3.0	-61.1	+30.7	+0.0	26.0	34.0	-8.0	Vert
8	2973.706M	52.5	+0.6	+3.0	-61.0	+30.9	+0.0	26.0	34.0	-8.0	Vert
9	2895.695M	52.7	+0.6	+3.0	-61.1	+30.7	+0.0	25.9	34.0	-8.1	Vert
10	2960.060M	52.3	+0.6	+3.0	-61.0	+30.9	+0.0	25.8	34.0	-8.2	Vert
11	2900.300M	52.5	+0.6	+3.0	-61.1	+30.8	+0.0	25.8	34.0	-8.2	Vert
12	2896.897M	41.4	+0.6	+3.0	-61.1	+30.8	+0.0	14.7	24.0	-9.3	Vert
	Ave										
^	2896.897M	53.6	+0.6	+3.0	-61.1	+30.8	+0.0	26.9	34.0	-7.1	Vert
14	2961.156M	40.9	+0.6	+3.0	-61.0	+30.9	+0.0	14.4	24.0	-9.6	Vert
	Ave										
^	2961.156M	52.5	+0.6	+3.0	-61.0	+30.9	+0.0	26.0	34.0	-8.0	Vert

16	2764.500M Ave	41.1	+0.5	+2.9	-61.3	+30.4	+0.0	13.6	24.0	-10.4	Vert
^	2764.500M	53.9	+0.5	+2.9	-61.3	+30.4	+0.0	26.4	34.0	-7.6	Vert
18	2813.814M Ave	39.6	+0.5	+2.9	-61.2	+30.5	+0.0	12.3	24.0	-11.7	Vert
^	2813.814M	53.2	+0.5	+2.9	-61.2	+30.5	+0.0	25.9	34.0	-8.1	Vert
20	1457.958M Ave	41.9	+0.4	+2.2	-64.2	+25.6	+0.0	5.9	18.0	-12.1	Vert
^	1457.958M	56.8	+0.4	+2.2	-64.2	+25.6	+0.0	20.8	28.0	-7.2	Vert
22	2622.500M Ave	38.6	+0.5	+2.9	-61.3	+30.0	+0.0	10.7	24.0	-13.3	Vert
^	2622.500M	52.8	+0.5	+2.9	-61.3	+30.0	+0.0	24.9	34.0	-9.1	Vert
24	2527.000M Ave	38.3	+0.4	+2.8	-61.4	+29.8	+0.0	9.9	24.0	-14.1	Vert
^	2527.000M	52.3	+0.4	+2.8	-61.4	+29.8	+0.0	23.9	34.0	-10.1	Vert
26	2365.180M Ave	38.7	+0.4	+2.7	-61.5	+29.5	+0.0	9.8	24.0	-14.2	Vert
^	2365.180M	53.2	+0.4	+2.7	-61.5	+29.5	+0.0	24.3	34.0	-9.7	Vert
28	2425.660M Ave	38.4	+0.4	+2.8	-61.5	+29.6	+0.0	9.7	24.0	-14.3	Vert
^	2425.660M	52.7	+0.4	+2.8	-61.5	+29.6	+0.0	24.0	34.0	-10.0	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - GPS L1 Civil - Ave**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 11:10:42
 Tested By: Michael Atkinson Sequence#: 11
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

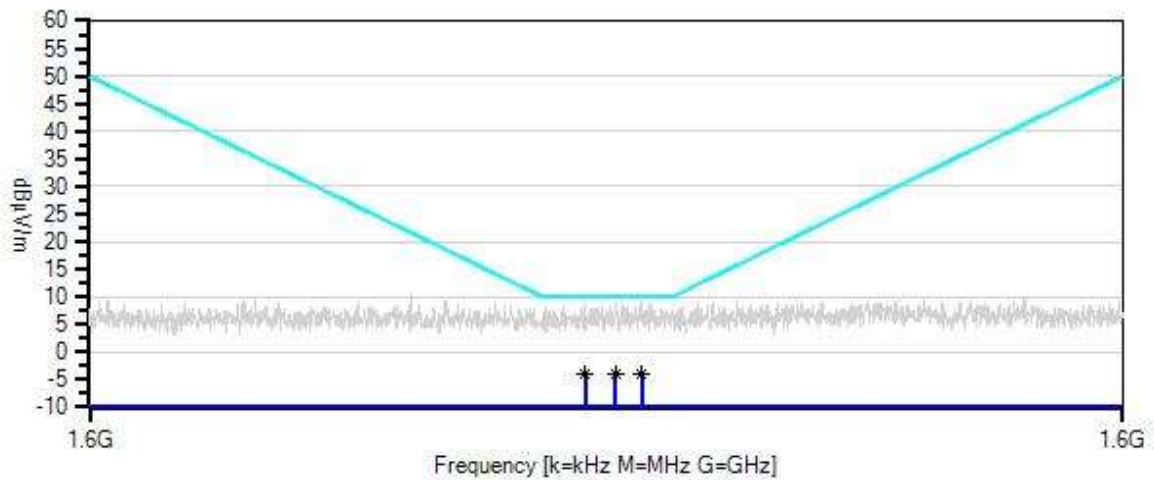
 Frequency and Antenna Position: 1-3GHz, left

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments WO#: 102255 Sequence#: 11 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - GPS L1 Civil - Ave Test Distance: 1 Meter Vert



- Sweep Data
 - Readings
 - Peak Readings
 - × QP Readings
 - * Average Readings
 - ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - GPS L1 Civil - Ave

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	1575.946M Ave	31.2	+0.4	+2.2	-63.8	+26.0	+0.0	-4.0	10.0	-14.0	Vert
^	1575.946M	44.3	+0.4	+2.2	-63.8	+26.0	+0.0	9.1	10.0	-0.9	Vert
3	1575.071M Ave	31.2	+0.4	+2.2	-63.8	+26.0	+0.0	-4.0	10.0	-14.0	Vert
^	1575.071M	44.2	+0.4	+2.2	-63.8	+26.0	+0.0	9.0	10.0	-1.0	Vert
5	1575.546M Ave	31.1	+0.4	+2.2	-63.8	+26.0	+0.0	-4.1	10.0	-14.1	Vert
^	1575.546M	44.2	+0.4	+2.2	-63.8	+26.0	+0.0	9.0	10.0	-1.0	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 11:15:57
 Tested By: Michael Atkinson Sequence#: 12
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

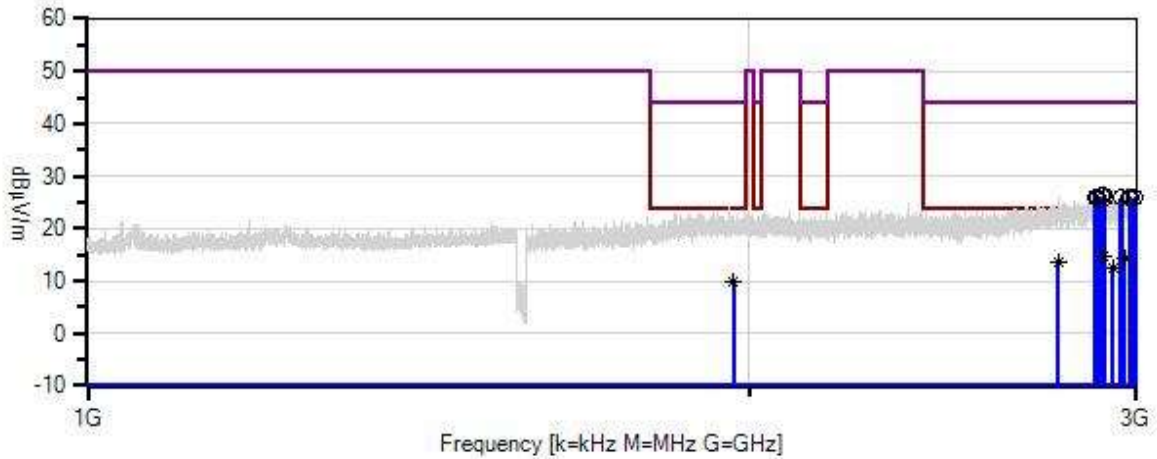
 Frequency and Antenna Position: 1-3GHz, left

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments W/O#: 102255 Sequence#: 12 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak Test Distance: 1 Meter Vert



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	2895.896M Ave	41.4	+0.6	+3.0	-61.1	+30.7	+0.0	14.6	24.0	-9.4	Vert
^	2895.896M	55.0	+0.6	+3.0	-61.1	+30.7	+0.0	28.2	44.0	-15.8	Vert
3	2960.558M Ave	40.8	+0.6	+3.0	-61.0	+30.9	+0.0	14.3	24.0	-9.7	Vert
^	2960.558M	52.6	+0.6	+3.0	-61.0	+30.9	+0.0	26.1	44.0	-17.9	Vert
5	2764.564M Ave	41.2	+0.5	+2.9	-61.3	+30.4	+0.0	13.7	24.0	-10.3	Vert
^	2764.564M	53.4	+0.5	+2.9	-61.3	+30.4	+0.0	25.9	44.0	-18.1	Vert
7	2927.292M Ave	39.2	+0.6	+3.0	-61.1	+30.8	+0.0	12.5	24.0	-11.5	Vert
^	2927.292M	53.0	+0.6	+3.0	-61.1	+30.8	+0.0	26.3	44.0	-17.7	Vert
9	1966.920M Ave	41.4	+0.3	+2.5	-62.7	+28.5	+0.0	10.0	24.0	-14.0	Vert
^	1966.920M	56.7	+0.3	+2.5	-62.7	+28.5	+0.0	25.3	44.0	-18.7	Vert
11	2895.495M	53.0	+0.6	+3.0	-61.1	+30.7	+0.0	26.2	44.0	-17.8	Vert
12	2893.093M	53.0	+0.6	+3.0	-61.1	+30.7	+0.0	26.2	44.0	-17.8	Vert
13	2977.590M	52.6	+0.6	+3.0	-61.0	+30.9	+0.0	26.1	44.0	-17.9	Vert
14	2995.618M	52.5	+0.6	+3.0	-61.0	+31.0	+0.0	26.1	44.0	-17.9	Vert

15	2996.414M	52.4	+0.6	+3.0	-61.0	+31.0	+0.0	26.0	44.0	-18.0	Vert
16	2882.382M	52.8	+0.6	+3.0	-61.1	+30.7	+0.0	26.0	44.0	-18.0	Vert
17	2901.595M	52.7	+0.6	+3.0	-61.1	+30.8	+0.0	26.0	44.0	-18.0	Vert
18	2871.371M	53.0	+0.5	+2.9	-61.2	+30.7	+0.0	25.9	44.0	-18.1	Vert
19	2952.790M	52.5	+0.6	+3.0	-61.1	+30.9	+0.0	25.9	44.0	-18.1	Vert
20	2984.562M	52.3	+0.6	+3.0	-61.0	+31.0	+0.0	25.9	44.0	-18.1	Vert
21	2948.706M	52.4	+0.6	+3.0	-61.1	+30.9	+0.0	25.8	44.0	-18.2	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 11:23:50
 Tested By: Michael Atkinson Sequence#: 13
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

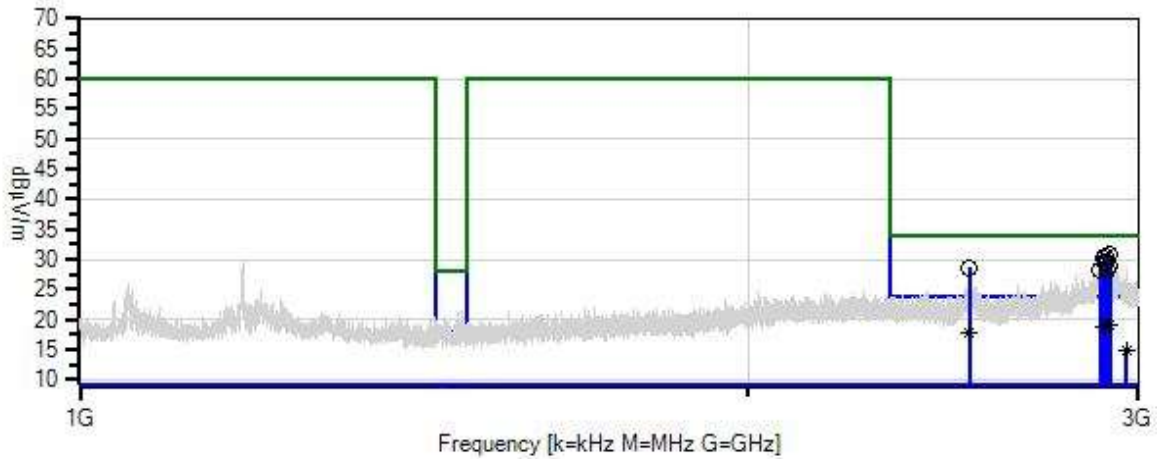
 Frequency and Antenna Position: 1-3GHz, right

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments W/O#: 102255 Sequence#: 13 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak Test Distance: 1 Meter Vert



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	2912.452M	57.4	+0.6	+3.0	-61.1	+30.8	+0.0	30.7	34.0	-3.3	Vert
2	2896.796M	57.2	+0.6	+3.0	-61.1	+30.8	+0.0	30.5	34.0	-3.5	Vert
3	2900.000M	57.1	+0.6	+3.0	-61.1	+30.8	+0.0	30.4	34.0	-3.6	Vert
4	2894.794M	56.9	+0.6	+3.0	-61.1	+30.7	+0.0	30.1	34.0	-3.9	Vert
5	2893.693M	56.9	+0.6	+3.0	-61.1	+30.7	+0.0	30.1	34.0	-3.9	Vert
6	2900.599M	56.2	+0.6	+3.0	-61.1	+30.8	+0.0	29.5	34.0	-4.5	Vert
7	2900.998M	55.9	+0.6	+3.0	-61.1	+30.8	+0.0	29.2	34.0	-4.8	Vert
8	2911.690M Ave	45.9	+0.6	+3.0	-61.1	+30.8	+0.0	19.2	24.0	-4.8	Vert
^	2911.655M	57.7	+0.6	+3.0	-61.1	+30.8	+0.0	31.0	34.0	-3.0	Vert
10	2892.411M Ave	45.6	+0.6	+3.0	-61.1	+30.7	+0.0	18.8	24.0	-5.2	Vert
^	2892.392M	57.9	+0.6	+3.0	-61.1	+30.7	+0.0	31.1	34.0	-2.9	Vert
12	2909.862M	55.5	+0.6	+3.0	-61.1	+30.8	+0.0	28.8	34.0	-5.2	Vert
13	2517.718M	57.1	+0.4	+2.8	-61.4	+29.8	+0.0	28.7	34.0	-5.3	Vert
14	2883.783M	55.2	+0.6	+3.0	-61.1	+30.7	+0.0	28.4	34.0	-5.6	Vert
15	2882.782M	55.1	+0.6	+3.0	-61.1	+30.7	+0.0	28.3	34.0	-5.7	Vert

16	2906.675M	55.0	+0.6	+3.0	-61.1	+30.8	+0.0	28.3	34.0	-5.7	Vert
17	2516.627M Ave	46.2	+0.4	+2.8	-61.4	+29.7	+0.0	17.7	24.0	-6.3	Vert
18	2961.355M Ave	41.5	+0.6	+3.0	-61.0	+30.9	+0.0	15.0	24.0	-9.0	Vert
^	2961.355M	55.0	+0.6	+3.0	-61.0	+30.9	+0.0	28.5	34.0	-5.5	Vert
20	1461.120M Ave	43.2	+0.4	+2.2	-64.2	+25.6	+0.0	7.2	18.0	-10.8	Vert
^	1461.120M	57.2	+0.4	+2.2	-64.2	+25.6	+0.0	21.2	28.0	-6.8	Vert
22	1454.640M Ave	43.1	+0.4	+2.1	-64.2	+25.6	+0.0	7.0	18.0	-11.0	Vert
^	1454.640M	56.7	+0.4	+2.1	-64.2	+25.6	+0.0	20.6	28.0	-7.4	Vert
24	1484.640M Ave	42.7	+0.4	+2.2	-64.1	+25.6	+0.0	6.8	18.0	-11.2	Vert
^	1484.640M	56.8	+0.4	+2.2	-64.1	+25.6	+0.0	20.9	28.0	-7.1	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - GPS L1 Civil - Ave**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 11:26:20
 Tested By: Michael Atkinson Sequence#: 14
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

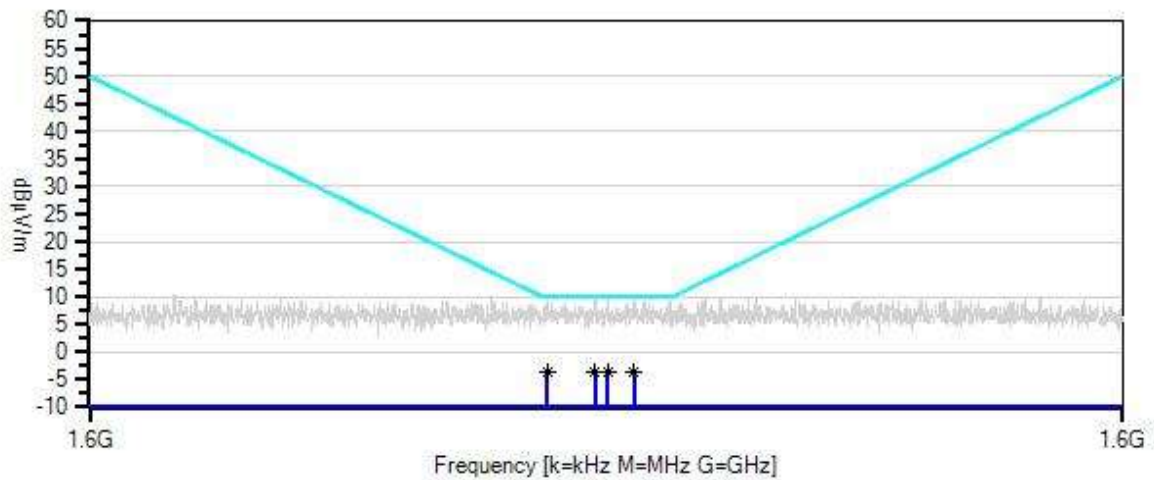
 Frequency and Antenna Position: 1-3GHz, right

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments WO#: 102255 Sequence#: 14 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - GPS L1 Civil - Ave Test Distance: 1 Meter Vert



- Sweep Data
 - Readings
 - Peak Readings
 - × QP Readings
 - * Average Readings
 - ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - GPS L1 Civil - Ave

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	1575.829M Ave	31.7	+0.4	+2.2	-63.8	+26.0	+0.0	-3.5	10.0	-13.5	Vert
^	1575.829M	44.7	+0.4	+2.2	-63.8	+26.0	+0.0	9.5	10.0	-0.5	Vert
3	1574.485M Ave	31.7	+0.4	+2.2	-63.8	+26.0	+0.0	-3.5	10.0	-13.5	Vert
^	1574.485M	44.4	+0.4	+2.2	-63.8	+26.0	+0.0	9.2	10.0	-0.8	Vert
5	1575.231M Ave	31.7	+0.4	+2.2	-63.8	+26.0	+0.0	-3.5	10.0	-13.5	Vert
^	1575.231M	45.2	+0.4	+2.2	-63.8	+26.0	+0.0	10.0	10.0	+0.0	Vert
7	1575.418M Ave	31.6	+0.4	+2.2	-63.8	+26.0	+0.0	-3.6	10.0	-13.6	Vert
^	1575.418M	44.7	+0.4	+2.2	-63.8	+26.0	+0.0	9.5	10.0	-0.5	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 11:29:50
 Tested By: Michael Atkinson Sequence#: 15
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

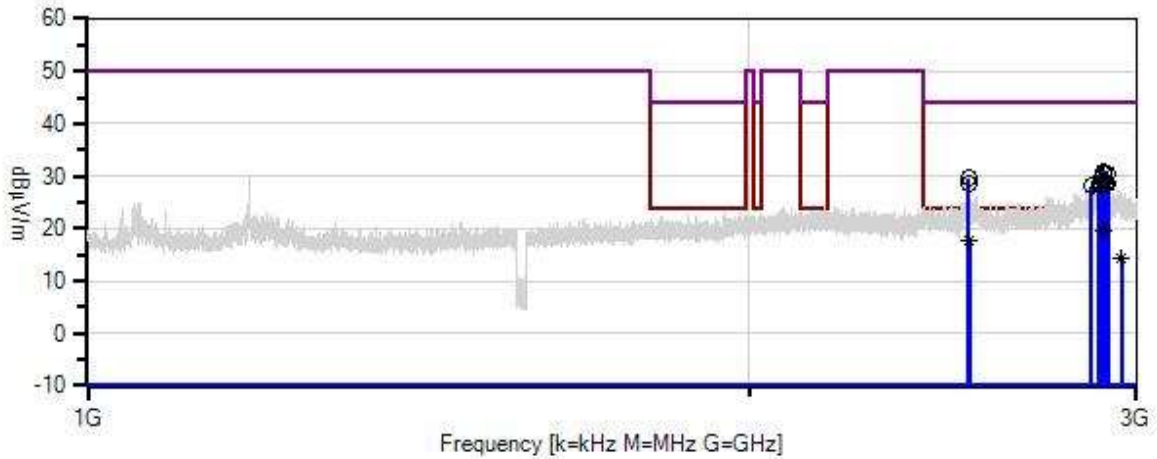
 Frequency and Antenna Position: 1-3GHz, right

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments W/O#: 102255 Sequence#: 15 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak Test Distance: 1 Meter Vert



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	2896.997M Ave	46.1	+0.6	+3.0	-61.1	+30.8	+0.0	19.4	24.0	-4.6	Vert
^	2896.997M	57.8	+0.6	+3.0	-61.1	+30.8	+0.0	31.1	44.0	-12.9	Vert
3	2517.004M Ave	46.1	+0.4	+2.8	-61.4	+29.7	+0.0	17.6	24.0	-6.4	Vert
4	2952.500M Ave	41.0	+0.6	+3.0	-61.1	+30.9	+0.0	14.4	24.0	-9.6	Vert
^	2952.500M	53.4	+0.6	+3.0	-61.1	+30.9	+0.0	26.8	44.0	-17.2	Vert
6	2895.595M	57.7	+0.6	+3.0	-61.1	+30.7	+0.0	30.9	44.0	-13.1	Vert
7	2912.053M	57.1	+0.6	+3.0	-61.1	+30.8	+0.0	30.4	44.0	-13.6	Vert
8	2895.395M	57.2	+0.6	+3.0	-61.1	+30.7	+0.0	30.4	44.0	-13.6	Vert
9	2891.591M	56.3	+0.6	+3.0	-61.1	+30.7	+0.0	29.5	44.0	-14.5	Vert
10	2892.492M	56.3	+0.6	+3.0	-61.1	+30.7	+0.0	29.5	44.0	-14.5	Vert
11	2516.517M	58.0	+0.4	+2.8	-61.4	+29.7	+0.0	29.5	44.0	-14.5	Vert
12	2899.900M	55.6	+0.6	+3.0	-61.1	+30.8	+0.0	28.9	44.0	-15.1	Vert
13	2901.296M	55.4	+0.6	+3.0	-61.1	+30.8	+0.0	28.7	44.0	-15.3	Vert

14	2515.616M	57.1	+0.4	+2.8	-61.4	+29.7	+0.0	28.6	44.0	-15.4	Vert
15	2889.789M	55.4	+0.6	+3.0	-61.1	+30.7	+0.0	28.6	44.0	-15.4	Vert
16	2910.758M	55.2	+0.6	+3.0	-61.1	+30.8	+0.0	28.5	44.0	-15.5	Vert
17	2885.685M	55.2	+0.6	+3.0	-61.1	+30.7	+0.0	28.4	44.0	-15.6	Vert
18	2862.162M	55.2	+0.5	+2.9	-61.2	+30.7	+0.0	28.1	44.0	-15.9	Vert
19	2886.987M	54.8	+0.6	+3.0	-61.1	+30.7	+0.0	28.0	44.0	-16.0	Vert



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 11:47:14
 Tested By: Michael Atkinson Sequence#: 18
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

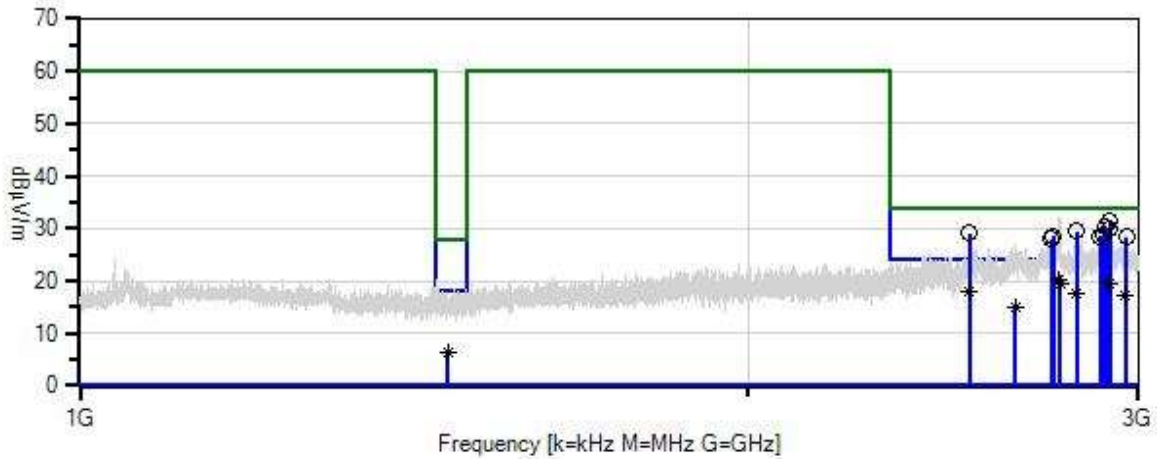
 Frequency and Antenna Position: 1-3GHz, right

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments WD#: 102255 Sequence#: 18 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak Test Distance: 1 Meter Horiz



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Broadcast - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Helix	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	2910.460M	58.1	+0.6	+3.0	-61.1	+30.8	+0.0	31.4	34.0	-2.6	Horiz
2	2763.533M Ave	47.8	+0.5	+2.9	-61.3	+30.4	+0.0	20.3	24.0	-3.7	Horiz
^	2763.463M	59.7	+0.5	+2.9	-61.3	+30.4	+0.0	32.2	34.0	-1.8	Horiz
4	2897.697M	57.0	+0.6	+3.0	-61.1	+30.8	+0.0	30.3	34.0	-3.7	Horiz
5	2900.400M	57.0	+0.6	+3.0	-61.1	+30.8	+0.0	30.3	34.0	-3.7	Horiz
6	2912.750M	56.7	+0.6	+3.0	-61.1	+30.8	+0.0	30.0	34.0	-4.0	Horiz
7	2911.854M Ave	46.2	+0.6	+3.0	-61.1	+30.8	+0.0	19.5	24.0	-4.5	Horiz
^	2911.854M	58.4	+0.6	+3.0	-61.1	+30.8	+0.0	31.7	34.0	-2.3	Horiz
9	2764.264M Ave	46.9	+0.5	+2.9	-61.3	+30.4	+0.0	19.4	24.0	-4.6	Horiz
^	2764.264M	59.6	+0.5	+2.9	-61.3	+30.4	+0.0	32.1	34.0	-1.9	Horiz
11	2812.712M	56.7	+0.5	+2.9	-61.2	+30.5	+0.0	29.4	34.0	-4.6	Horiz
12	2518.118M	57.5	+0.4	+2.8	-61.4	+29.8	+0.0	29.1	34.0	-4.9	Horiz
13	2893.293M	55.5	+0.6	+3.0	-61.1	+30.7	+0.0	28.7	34.0	-5.3	Horiz
14	2883.783M	55.4	+0.6	+3.0	-61.1	+30.7	+0.0	28.6	34.0	-5.4	Horiz
15	2746.847M	56.1	+0.5	+2.9	-61.3	+30.4	+0.0	28.6	34.0	-5.4	Horiz
16	2961.754M	54.9	+0.6	+3.0	-61.0	+30.9	+0.0	28.4	34.0	-5.6	Horiz
17	2516.443M Ave	46.6	+0.4	+2.8	-61.4	+29.7	+0.0	18.1	24.0	-5.9	Horiz
18	2740.941M	55.5	+0.5	+2.9	-61.3	+30.4	+0.0	28.0	34.0	-6.0	Horiz

19	2813.426M Ave	45.0	+0.5	+2.9	-61.2	+30.5	+0.0	17.7	24.0	-6.3	Horiz
20	2960.758M Ave	43.9	+0.6	+3.0	-61.0	+30.9	+0.0	17.4	24.0	-6.6	Horiz
^	2960.758M	55.4	+0.6	+3.0	-61.0	+30.9	+0.0	28.9	34.0	-5.1	Horiz
22	2640.200M Ave	42.6	+0.5	+2.9	-61.3	+30.1	+0.0	14.8	24.0	-9.2	Horiz
^	2640.200M	54.9	+0.5	+2.9	-61.3	+30.1	+0.0	27.1	24.0	+3.1	Horiz
24	1465.152M Ave	42.2	+0.4	+2.2	-64.2	+25.6	+0.0	6.2	18.0	-11.8	Horiz
^	1465.152M	54.9	+0.4	+2.2	-64.2	+25.6	+0.0	18.9	18.0	+0.9	Horiz



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - GPS L1 Civil - Ave**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 11:48:56
 Tested By: Michael Atkinson Sequence#: 19
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

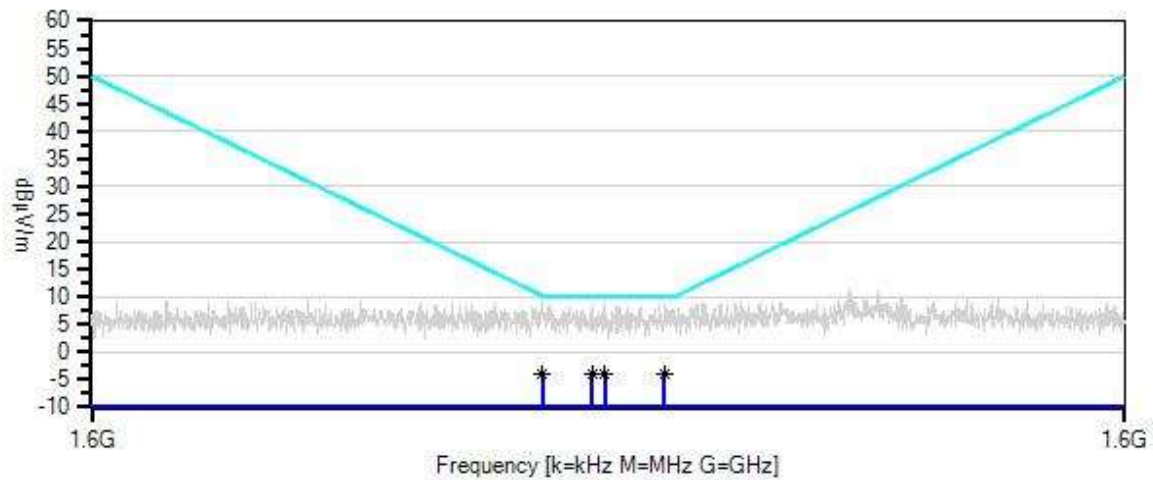
 Frequency and Antenna Position: 1-3GHz, right

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments WO#: 102255 Sequence#: 19 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - GPS L1 Civil - Ave Test Distance: 1 Meter Horiz



- Sweep Data
 - Readings
 - Peak Readings
 - × QP Readings
 - * Average Readings
 - ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - GPS L1 Civil - Ave

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	1576.271M Ave	31.3	+0.4	+2.2	-63.8	+26.0	+0.0	-3.9	10.0	-13.9	Horiz
^	1576.271M	44.2	+0.4	+2.2	-63.8	+26.0	+0.0	9.0	10.0	-1.0	Horiz
3	1575.349M Ave	31.3	+0.4	+2.2	-63.8	+26.0	+0.0	-3.9	10.0	-13.9	Horiz
^	1575.349M	44.1	+0.4	+2.2	-63.8	+26.0	+0.0	8.9	10.0	-1.1	Horiz
5	1575.151M Ave	31.2	+0.4	+2.2	-63.8	+26.0	+0.0	-4.0	10.0	-14.0	Horiz
^	1575.151M	43.9	+0.4	+2.2	-63.8	+26.0	+0.0	8.7	10.0	-1.3	Horiz
7	1574.383M Ave	31.4	+0.4	+2.2	-63.8	+26.0	+0.0	-3.8	10.2	-14.0	Horiz
^	1574.383M	44.6	+0.4	+2.2	-63.8	+26.0	+0.0	9.4	10.2	-0.8	Horiz



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 11:55:13
 Tested By: Michael Atkinson Sequence#: 20
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

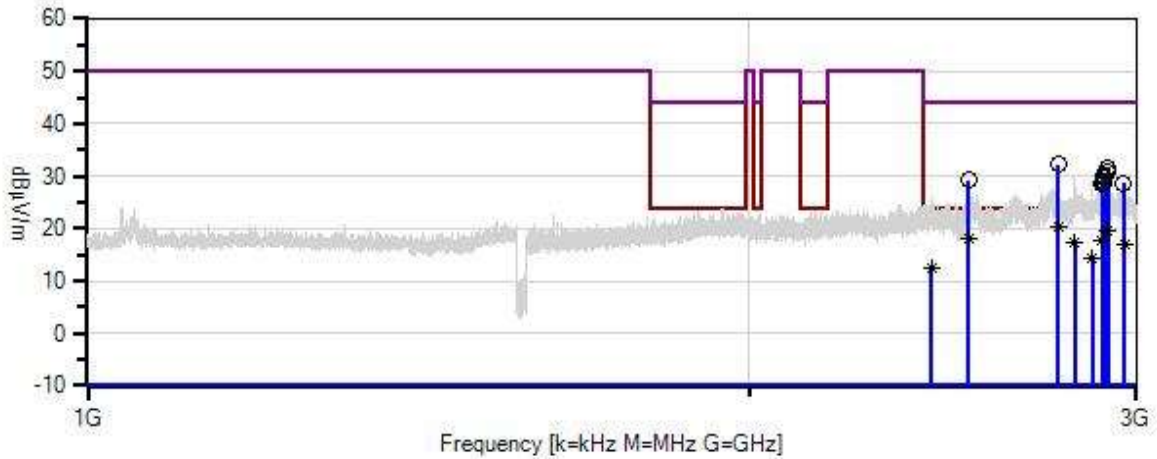
 Frequency and Antenna Position: 1-3GHz, right

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments WD#: 102255 Sequence#: 20 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak Test Distance: 1 Meter Horiz



Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN03689	Preamp	BZ22- 00100300- 080858-202020	4/19/2018	4/19/2020
T4	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	2763.600M Ave	47.7	+0.5	+2.9	-61.3	+30.4	+0.0	20.2	24.0	-3.8	Horiz
2	2911.717M Ave	46.3	+0.6	+3.0	-61.1	+30.8	+0.0	19.6	24.0	-4.4	Horiz
3	2516.753M Ave	46.6	+0.4	+2.8	-61.4	+29.7	+0.0	18.1	24.0	-5.9	Horiz
4	2892.492M Ave	44.6	+0.6	+3.0	-61.1	+30.7	+0.0	17.8	24.0	-6.2	Horiz
^	2892.492M	55.8	+0.6	+3.0	-61.1	+30.7	+0.0	29.0	44.0	-15.0	Horiz
6	2812.913M Ave	44.7	+0.5	+2.9	-61.2	+30.5	+0.0	17.4	24.0	-6.6	Horiz
^	2812.913M	57.5	+0.5	+2.9	-61.2	+30.5	+0.0	30.2	44.0	-13.8	Horiz
8	2961.185M Ave	43.5	+0.6	+3.0	-61.0	+30.9	+0.0	17.0	24.0	-7.0	Horiz
9	2862.462M Ave	41.4	+0.5	+2.9	-61.2	+30.7	+0.0	14.3	24.0	-9.7	Horiz
^	2862.462M	56.0	+0.5	+2.9	-61.2	+30.7	+0.0	28.9	44.0	-15.1	Horiz
11	2419.000M Ave	41.3	+0.4	+2.8	-61.5	+29.6	+0.0	12.6	24.0	-11.4	Horiz
^	2419.000M	54.4	+0.4	+2.8	-61.5	+29.6	+0.0	25.7	44.0	-18.3	Horiz
13	2763.463M	59.7	+0.5	+2.9	-61.3	+30.4	+0.0	32.2	44.0	-11.8	Horiz
14	2911.356M	58.4	+0.6	+3.0	-61.1	+30.8	+0.0	31.7	44.0	-12.3	Horiz
15	2910.559M	57.5	+0.6	+3.0	-61.1	+30.8	+0.0	30.8	44.0	-13.2	Horiz
16	2896.897M	56.7	+0.6	+3.0	-61.1	+30.8	+0.0	30.0	44.0	-14.0	Horiz
17	2895.295M	56.3	+0.6	+3.0	-61.1	+30.7	+0.0	29.5	44.0	-14.5	Horiz
18	2516.316M	57.8	+0.4	+2.8	-61.4	+29.7	+0.0	29.3	44.0	-14.7	Horiz

19	2515.516M	57.7	+0.4	+2.8	-61.4	+29.7	+0.0	29.2	44.0	-14.8	Horiz
20	2897.797M	55.8	+0.6	+3.0	-61.1	+30.8	+0.0	29.1	44.0	-14.9	Horiz
21	2898.098M	55.5	+0.6	+3.0	-61.1	+30.8	+0.0	28.8	44.0	-15.2	Horiz
22	2892.792M	55.5	+0.6	+3.0	-61.1	+30.7	+0.0	28.7	44.0	-15.3	Horiz
23	2960.160M	55.2	+0.6	+3.0	-61.0	+30.9	+0.0	28.7	44.0	-15.3	Horiz
24	2899.699M	55.3	+0.6	+3.0	-61.1	+30.8	+0.0	28.6	44.0	-15.4	Horiz



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 12:37:25
 Tested By: Michael Atkinson Sequence#: 23
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

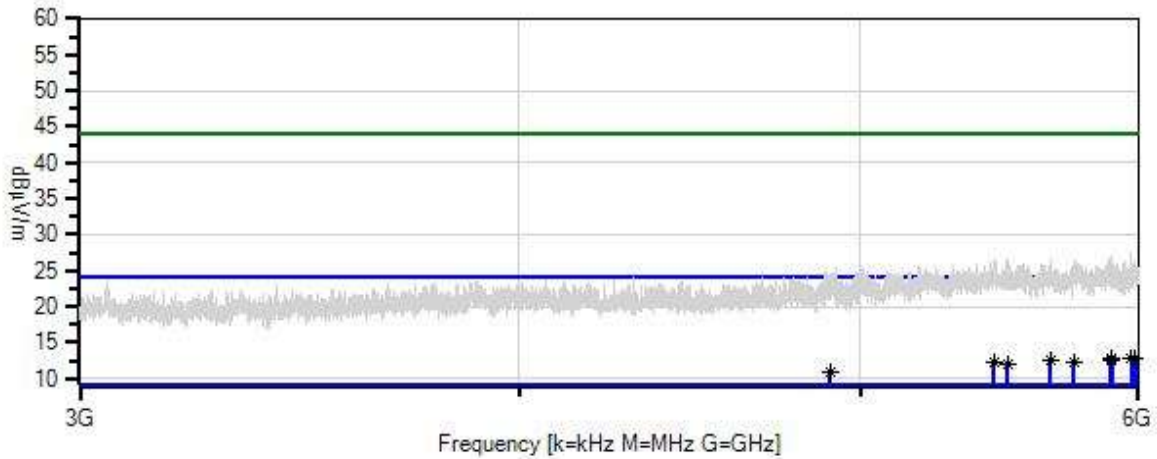
 Frequency and Antenna Position: 3-6GHz, left

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments W/O#: 102255 Sequence#: 23 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak Test Distance: 1 Meter Vert



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019
T4	ANP06503	Cable	32026-29801- 29801-36	3/13/2018	3/13/2020
T5	AN03540	Preamp	83017A	3/25/2019	3/25/2021

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	5985.636M Ave	3.5	+0.7 -33.6	+4.7	+35.7	+1.9	+0.0	12.9	24.0	-11.1	Vert
^	5985.636M	16.8	+0.7 -33.6	+4.7	+35.7	+1.9	+0.0	26.2	44.0	-17.8	Vert
3	5892.780M Ave	3.5	+0.7 -33.6	+4.6	+35.7	+1.9	+0.0	12.8	24.0	-11.2	Vert
^	5892.780M	17.8	+0.7 -33.6	+4.6	+35.7	+1.9	+0.0	27.1	44.0	-16.9	Vert
5	5973.067M Ave	3.4	+0.7 -33.6	+4.7	+35.7	+1.9	+0.0	12.8	24.0	-11.2	Vert
^	5973.067M	18.3	+0.7 -33.6	+4.7	+35.7	+1.9	+0.0	27.7	44.0	-16.3	Vert
7	5663.105M Ave	3.6	+0.7 -33.5	+4.4	+35.6	+1.8	+0.0	12.6	24.0	-11.4	Vert
^	5663.105M	17.5	+0.7 -33.5	+4.4	+35.6	+1.8	+0.0	26.5	44.0	-17.5	Vert
9	5895.345M Ave	3.2	+0.7 -33.6	+4.6	+35.7	+1.9	+0.0	12.5	24.0	-11.5	Vert
^	5895.345M	17.0	+0.7 -33.6	+4.6	+35.7	+1.9	+0.0	26.3	44.0	-17.7	Vert
11	5751.444M Ave	3.5	+0.7 -33.6	+4.4	+35.6	+1.8	+0.0	12.4	24.0	-11.6	Vert
^	5751.444M	17.7	+0.7 -33.6	+4.4	+35.6	+1.8	+0.0	26.6	44.0	-17.4	Vert
13	5458.100M Ave	3.5	+0.7 -33.4	+4.3	+35.4	+1.8	+0.0	12.3	24.0	-11.7	Vert
^	5458.100M	17.6	+0.7 -33.4	+4.3	+35.4	+1.8	+0.0	26.4	44.0	-17.6	Vert
15	5505.025M Ave	3.1	+0.7 -33.4	+4.3	+35.5	+1.8	+0.0	12.0	24.0	-12.0	Vert
^	5505.025M	17.8	+0.7 -33.4	+4.3	+35.5	+1.8	+0.0	26.7	44.0	-17.3	Vert
17	4902.060M Ave	3.9	+0.5 -33.4	+4.0	+34.3	+1.6	+0.0	10.9	24.0	-13.1	Vert
^	4902.060M	16.8	+0.5 -33.4	+4.0	+34.3	+1.6	+0.0	23.8	44.0	-20.2	Vert

Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 12:48:23
 Tested By: Michael Atkinson Sequence#: 24
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

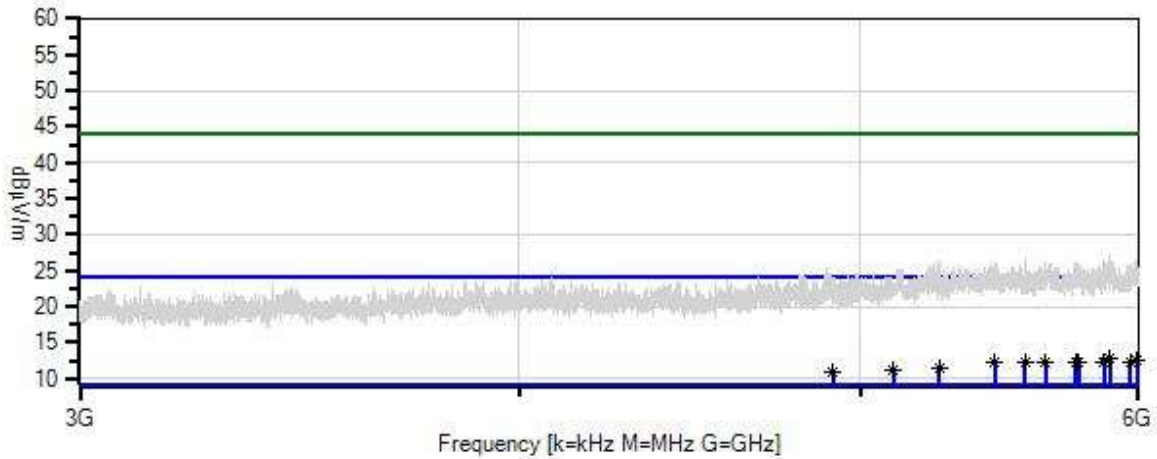
 Frequency and Antenna Position: 3-6GHz, left

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments WD#: 102255 Sequence#: 24 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak Test Distance: 1 Meter Horiz



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019
T4	ANP06503	Cable	32026-29801- 29801-36	3/13/2018	3/13/2020
T5	AN03540	Preamp	83017A	3/25/2019	3/25/2021

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	5888.932M Ave	3.4	+0.7 -33.6	+4.6	+35.7	+1.9	+0.0	12.7	24.0	-11.3	Horiz
^	5888.932M	18.1	+0.7 -33.6	+4.6	+35.7	+1.9	+0.0	27.4	44.0	-16.6	Horiz
3	5993.331M Ave	3.1	+0.7 -33.6	+4.7	+35.7	+1.9	+0.0	12.5	24.0	-11.5	Horiz
^	5993.331M	17.1	+0.7 -33.6	+4.7	+35.7	+1.9	+0.0	26.5	44.0	-17.5	Horiz
5	5643.874M Ave	3.3	+0.7 -33.5	+4.4	+35.6	+1.8	+0.0	12.3	24.0	-11.7	Horiz
^	5643.874M	17.3	+0.7 -33.5	+4.4	+35.6	+1.8	+0.0	26.3	44.0	-17.7	Horiz
7	5864.307M Ave	3.3	+0.7 -33.6	+4.5	+35.6	+1.8	+0.0	12.3	24.0	-11.7	Horiz
^	5864.307M	17.4	+0.7 -33.6	+4.5	+35.6	+1.8	+0.0	26.4	44.0	-17.6	Horiz
9	5758.369M Ave	3.4	+0.7 -33.6	+4.4	+35.6	+1.8	+0.0	12.3	24.0	-11.7	Horiz
^	5758.369M	17.3	+0.7 -33.6	+4.4	+35.6	+1.8	+0.0	26.2	44.0	-17.8	Horiz
11	5569.257M Ave	3.5	+0.7 -33.5	+4.3	+35.5	+1.8	+0.0	12.3	24.0	-11.7	Horiz
^	5569.257M	17.9	+0.7 -33.5	+4.3	+35.5	+1.8	+0.0	26.7	44.0	-17.3	Horiz
13	5770.425M Ave	3.4	+0.7 -33.6	+4.4	+35.6	+1.8	+0.0	12.3	24.0	-11.7	Horiz
^	5770.425M	17.2	+0.7 -33.6	+4.4	+35.6	+1.8	+0.0	26.1	44.0	-17.9	Horiz
15	5967.167M Ave	2.8	+0.7 -33.6	+4.7	+35.7	+1.9	+0.0	12.2	24.0	-11.8	Horiz
^	5967.167M	16.7	+0.7 -33.6	+4.7	+35.7	+1.9	+0.0	26.1	44.0	-17.9	Horiz
17	5462.331M Ave	3.4	+0.7 -33.4	+4.3	+35.4	+1.8	+0.0	12.2	24.0	-11.8	Horiz

^	5462.331M	17.5	+0.7 -33.4	+4.3	+35.4	+1.8	+0.0	26.3	44.0	-17.7	Horiz
19	5264.485M Ave	3.2	+0.5 -33.3	+4.2	+35.1	+1.7	+0.0	11.4	24.0	-12.6	Horiz
^	5264.485M	18.2	+0.5 -33.3	+4.2	+35.1	+1.7	+0.0	26.4	44.0	-17.6	Horiz
21	5109.600M Ave	3.4	+0.5 -33.4	+4.1	+34.9	+1.6	+0.0	11.1	24.0	-12.9	Horiz
^	5109.600M	17.5	+0.5 -33.4	+4.1	+34.9	+1.6	+0.0	25.2	44.0	-18.8	Horiz
23	4912.000M Ave	3.8	+0.5 -33.4	+4.0	+34.4	+1.6	+0.0	10.9	24.0	-13.1	Horiz
^	4912.000M	18.3	+0.5 -33.4	+4.0	+34.4	+1.6	+0.0	25.4	44.0	-18.6	Horiz



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 12:14:53
 Tested By: Michael Atkinson Sequence#: 21
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

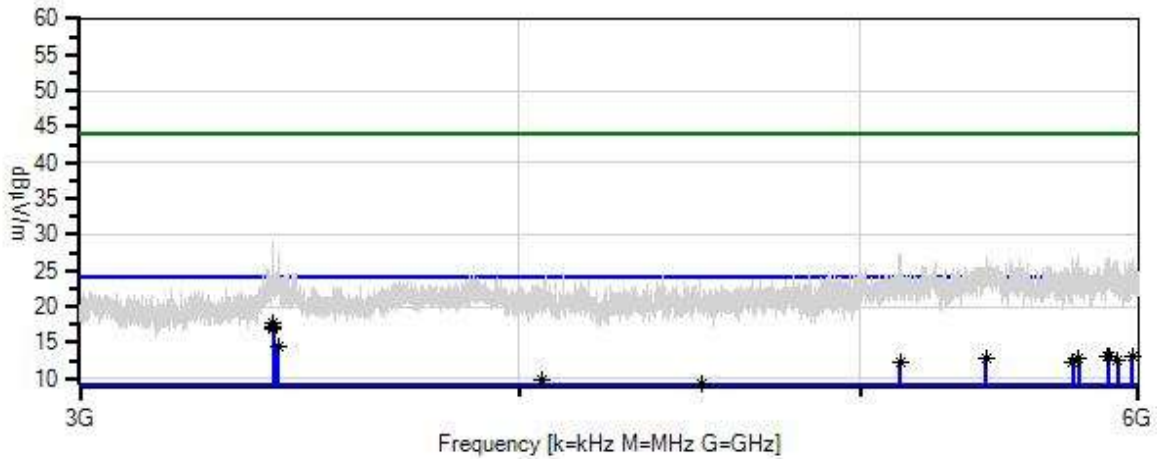
 Frequency and Antenna Position: 3-6GHz, right

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments W/O#: 102255 Sequence#: 21 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave Test Distance: 1 Meter Horiz



- Sweep Data
 - Readings
 - Peak Readings
 - × QP Readings
 - * Average Readings
 - ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave
 - 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019
T4	ANP06503	Cable	32026-29801- 29801-36	3/13/2018	3/13/2020
T5	AN03540	Preamp	83017A	3/25/2019	3/25/2021

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	3404.829M Ave	14.9	+0.4 -33.8	+3.4	+31.4	+1.3	+0.0	17.6	24.0	-6.4	Horiz
2	3404.829M Ave	14.4	+0.4 -33.8	+3.4	+31.4	+1.3	+0.0	17.1	24.0	-6.9	Horiz
3	3404.556M Ave	14.3	+0.4 -33.8	+3.4	+31.4	+1.3	+0.0	17.0	24.0	-7.0	Horiz
^	3404.556M	26.3	+0.4 -33.8	+3.4	+31.4	+1.3	+0.0	29.0	24.0	+5.0	Horiz
5	3417.017M Ave	11.7	+0.4 -33.8	+3.4	+31.4	+1.3	+0.0	14.4	24.0	-9.6	Horiz
^	3417.017M	24.8	+0.4 -33.8	+3.4	+31.4	+1.3	+0.0	27.5	24.0	+3.5	Horiz
7	5975.888M Ave	3.8	+0.7 -33.6	+4.7	+35.7	+1.9	+0.0	13.2	24.0	-10.8	Horiz
^	5975.888M	17.4	+0.7 -33.6	+4.7	+35.7	+1.9	+0.0	26.8	24.0	+2.8	Horiz
9	5879.698M Ave	3.9	+0.7 -33.6	+4.6	+35.7	+1.9	+0.0	13.2	24.0	-10.8	Horiz
^	5879.698M	17.4	+0.7 -33.6	+4.6	+35.7	+1.9	+0.0	26.7	24.0	+2.7	Horiz
11	5885.854M Ave	3.7	+0.7 -33.6	+4.6	+35.7	+1.9	+0.0	13.0	24.0	-11.0	Horiz
^	5885.854M	17.5	+0.7 -33.6	+4.6	+35.7	+1.9	+0.0	26.8	24.0	+2.8	Horiz
13	5430.792M Ave	4.2	+0.6 -33.4	+4.3	+35.4	+1.8	+0.0	12.9	24.0	-11.1	Horiz
^	5430.792M	18.2	+0.6 -33.4	+4.3	+35.4	+1.8	+0.0	26.9	24.0	+2.9	Horiz

15	5767.347M Ave	4.0	+0.7 -33.6	+4.4	+35.6	+1.8	+0.0	12.9	24.0	-11.1	Horiz
^	5767.347M	18.0	+0.7 -33.6	+4.4	+35.6	+1.8	+0.0	26.9	24.0	+2.9	Horiz
17	5918.687M Ave	3.3	+0.7 -33.6	+4.6	+35.7	+1.9	+0.0	12.6	24.0	-11.4	Horiz
^	5918.687M	17.2	+0.7 -33.6	+4.6	+35.7	+1.9	+0.0	26.5	24.0	+2.5	Horiz
19	5747.339M Ave	3.5	+0.7 -33.6	+4.4	+35.6	+1.8	+0.0	12.4	24.0	-11.6	Horiz
^	5747.339M	17.8	+0.7 -33.6	+4.4	+35.6	+1.8	+0.0	26.7	24.0	+2.7	Horiz
21	5131.704M Ave	4.6	+0.5 -33.4	+4.1	+34.9	+1.7	+0.0	12.4	24.0	-11.6	Horiz
^	5131.704M	19.6	+0.5 -33.4	+4.1	+34.9	+1.7	+0.0	27.4	24.0	+3.4	Horiz
23	4057.600M Ave	4.9	+0.5 -33.5	+3.7	+32.8	+1.4	+0.0	9.8	24.0	-14.2	Horiz
^	4057.600M	19.5	+0.5 -33.5	+3.7	+32.8	+1.4	+0.0	24.4	24.0	+0.4	Horiz
25	4509.800M Ave	4.3	+0.5 -33.4	+3.8	+32.7	+1.5	+0.0	9.4	24.0	-14.6	Horiz
^	4509.800M	20.3	+0.5 -33.4	+3.8	+32.7	+1.5	+0.0	25.4	24.0	+1.4	Horiz



Test Location: CKC Laboratories • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • 1-800-500-4EMC (4362)
 Customer: **Texas Instruments**
 Specification: **CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak**
 Work Order #: **102255** Date: 4/22/2019
 Test Type: **Radiated Scan** Time: 12:25:44
 Tested By: Michael Atkinson Sequence#: 22
 Software: EMITest 5.03.12

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 1			

Support Equipment:

Device	Manufacturer	Model #	S/N
Configuration 1			

Test Conditions / Notes:

Temperature: 19-21°C
 Humidity: 35-40%
 Pressure: 103-103.5kPa

 Method: CISPR 25 (2008)

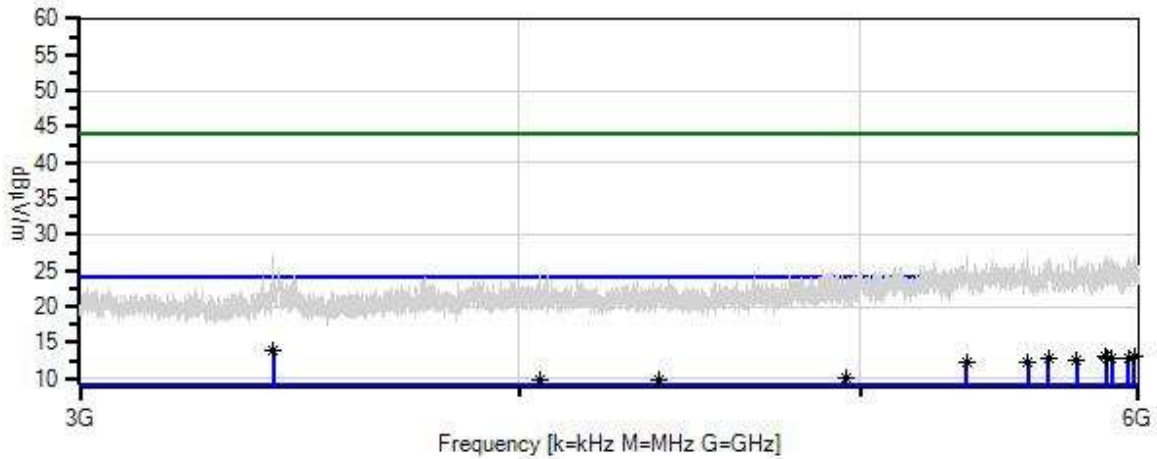
 Frequency and Antenna Position: 3-6GHz, right

 Setup: Operating

 Serializer unit is on the left.
 Deserializer unit is on the right.

 Coax cable (LEONI 462) on front of test bench.

Texas Instruments W/O#: 102255 Sequence#: 22 Date: 4/22/2019
 CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak Test Distance: 1 Meter Vert



- Sweep Data
- Readings
- Peak Readings
- × QP Readings
- * Average Readings
- ▼ Ambient
- Software Version: 5.03.12
- 1 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Ave
- 2 - CISPR 25 Section 6.4 - Class 5 Radiated Disturbances - Mobile - Peak

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02872	Spectrum Analyzer	E4440A	11/3/2017	11/3/2019
T1	ANP06540	Cable	Heliac	10/30/2017	10/30/2019
T2	ANP05305	Cable	ETSI-50T	10/24/2017	10/24/2019
T3	AN02374	Horn Antenna- ARP958 Calibration	RGA-60	7/21/2017	7/21/2019
T4	ANP06503	Cable	32026-29801- 29801-36	3/13/2018	3/13/2020
T5	AN03540	Preamp	83017A	3/25/2019	3/25/2021

Measurement Data:

Reading listed by margin.

Test Distance: 1 Meter

#	Freq MHz	Rdng dB μ V	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	3405.248M Ave	11.2	+0.4 -33.8	+3.4	+31.4	+1.3	+0.0	13.9	24.0	-10.1	Vert
^	3405.248M	24.6	+0.4 -33.8	+3.4	+31.4	+1.3	+0.0	27.3	44.0	-16.7	Vert
3	5874.567M Ave	3.7	+0.7 -33.6	+4.6	+35.7	+1.9	+0.0	13.0	24.0	-11.0	Vert
^	5874.567M	17.5	+0.7 -33.6	+4.6	+35.7	+1.9	+0.0	26.8	44.0	-17.2	Vert
5	5983.840M Ave	3.6	+0.7 -33.6	+4.7	+35.7	+1.9	+0.0	13.0	24.0	-11.0	Vert
^	5983.840M	17.7	+0.7 -33.6	+4.7	+35.7	+1.9	+0.0	27.1	44.0	-16.9	Vert
7	5894.832M Ave	3.6	+0.7 -33.6	+4.6	+35.7	+1.9	+0.0	12.9	24.0	-11.1	Vert
^	5894.832M	17.4	+0.7 -33.6	+4.6	+35.7	+1.9	+0.0	26.7	44.0	-17.3	Vert
9	5877.133M Ave	3.6	+0.7 -33.6	+4.6	+35.7	+1.9	+0.0	12.9	24.0	-11.1	Vert
^	5877.133M	17.7	+0.7 -33.6	+4.6	+35.7	+1.9	+0.0	27.0	44.0	-17.0	Vert
11	5656.567M Ave	3.8	+0.7 -33.5	+4.4	+35.6	+1.8	+0.0	12.8	24.0	-11.2	Vert
^	5656.567M	17.9	+0.7 -33.5	+4.4	+35.6	+1.8	+0.0	26.9	44.0	-17.1	Vert
13	5959.472M Ave	3.3	+0.7 -33.6	+4.7	+35.7	+1.9	+0.0	12.7	24.0	-11.3	Vert
^	5959.472M	17.4	+0.7 -33.6	+4.7	+35.7	+1.9	+0.0	26.8	44.0	-17.2	Vert

15	5761.191M Ave	3.7	+0.7 -33.6	+4.4	+35.6	+1.8	+0.0	12.6	24.0	-11.4	Vert
^	5761.191M	18.1	+0.7 -33.6	+4.4	+35.6	+1.8	+0.0	27.0	44.0	-17.0	Vert
17	5580.796M Ave	3.6	+0.7 -33.5	+4.3	+35.5	+1.8	+0.0	12.4	24.0	-11.6	Vert
^	5580.796M	18.4	+0.7 -33.5	+4.3	+35.5	+1.8	+0.0	27.2	44.0	-16.8	Vert
19	5361.944M Ave	3.9	+0.6 -33.3	+4.2	+35.3	+1.7	+0.0	12.4	24.0	-11.6	Vert
^	5361.944M	18.5	+0.6 -33.3	+4.2	+35.3	+1.7	+0.0	27.0	44.0	-17.0	Vert
21	4951.800M Ave	3.1	+0.5 -33.5	+4.0	+34.5	+1.6	+0.0	10.2	24.0	-13.8	Vert
^	4951.800M	18.1	+0.5 -33.5	+4.0	+34.5	+1.6	+0.0	25.2	44.0	-18.8	Vert
23	4381.100M Ave	4.8	+0.5 -33.5	+3.8	+32.7	+1.5	+0.0	9.8	24.0	-14.2	Vert
^	4381.100M	20.3	+0.5 -33.5	+3.8	+32.7	+1.5	+0.0	25.3	44.0	-18.7	Vert
25	4054.800M Ave	4.8	+0.5 -33.5	+3.7	+32.8	+1.4	+0.0	9.7	24.0	-14.3	Vert
^	4054.800M	19.1	+0.5 -33.5	+3.7	+32.8	+1.4	+0.0	24.0	44.0	-20.0	Vert

Test Setup Photo(s)



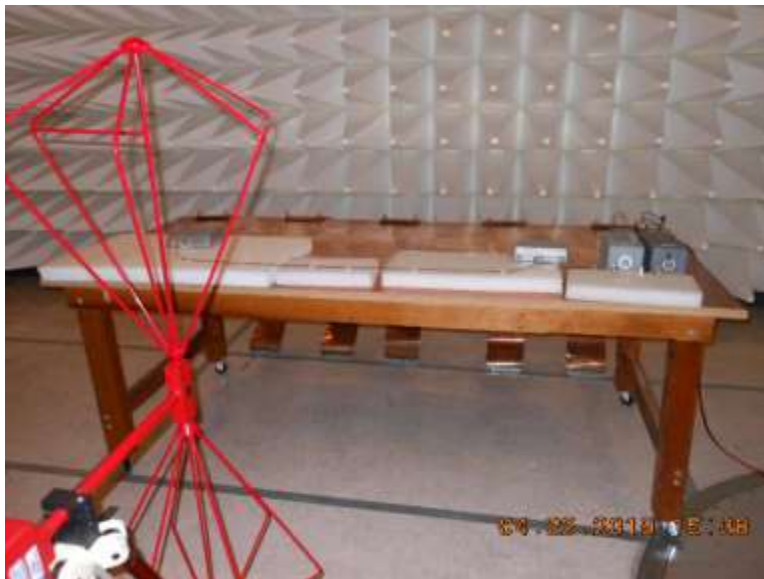
Ambient, Rod Antenna, 0.15-30MHz, Vertical Polarization



Center Only, Rod Antenna, 0.15-30MHz, Vertical Polarization



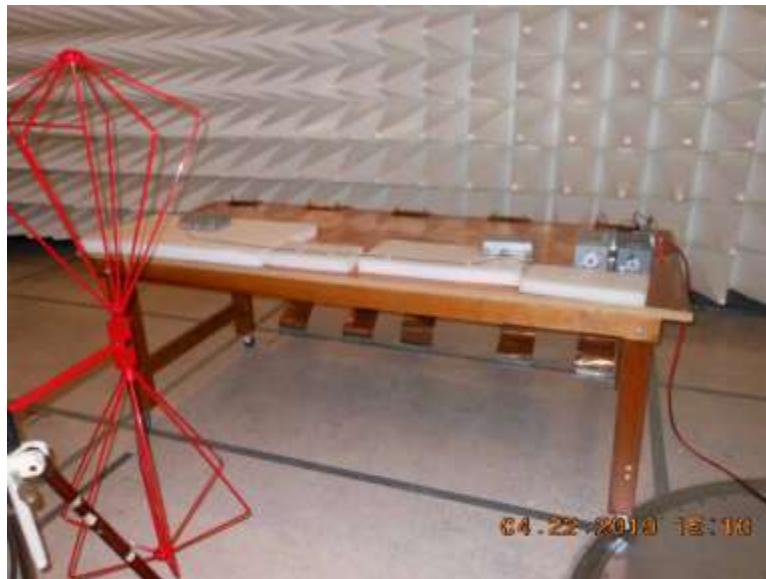
Ambient, Bicon Antenna, 30-200MHz, Horizontal Polarization



Ambient, Bicon Antenna, 30-200MHz, Vertical Polarization



Center Only, Bicon Antenna, 30-200MHz, Horizontal Polarization



Center Only, Bicon Antenna, 30-200MHz, Vertical Polarization



Ambient, Log Antenna, 200-1000GHz, Horizontal Polarization



Ambient, Log Antenna, 200-1000GHz, Vertical Polarization



Center Only, Log Antenna, 200-1000GHz, Horizontal Polarization



Center Only, Log Antenna, 200-1000GHz, Vertical Polarization



Ambient, HF Horn Antenna, 1-3GHz, Horizontal Polarization



Ambient, HF Horn Antenna, 1-3GHz, Vertical Polarization



Left Side, HF Horn Antenna, 1-3GHz, Horizontal Polarization



Left Side, HF Horn Antenna, 1-3GHz, Vertical Polarization



Right Side, HF Horn Antenna, 1-3GHz, Horizontal Polarization



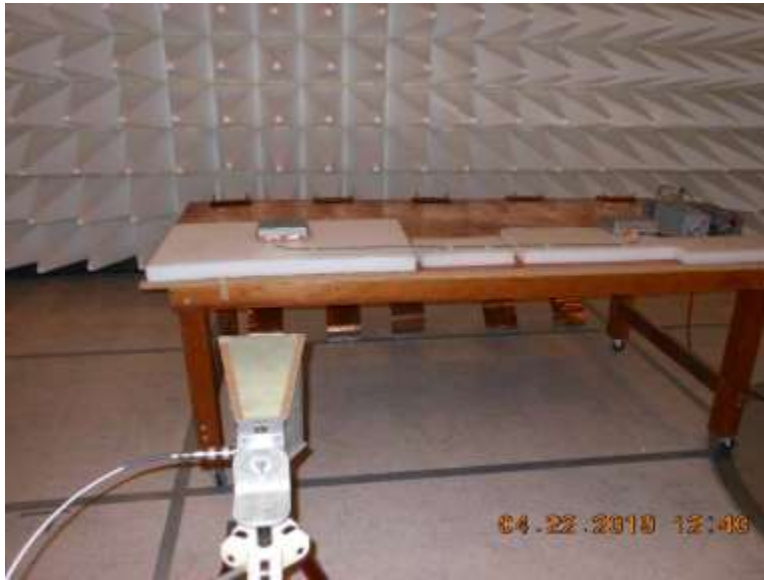
Right Side, HF Horn Antenna, 1-3GHz, Vertical Polarization



Ambient, HF Horn Antenna, 3-6GHz, Horizontal Polarization



Ambient, HF Horn Antenna, 3-6GHz, Vertical Polarization



Left Side, HF Horn Antenna, 3-6GHz, Horizontal Polarization



Left Side, HF Horn Antenna, 3-6GHz, Vertical Polarization



Right Side, HF Horn Antenna, 3-6GHz, Horizontal Polarization



Right Side, HF Horn Antenna, 3-6GHz, Vertical Polarization

ISO 11452 IMMUNITY

Performance Criteria

Designation	Definition
Pass	No change in lock pin status.
Fail	Loss of lock indicated by error events.

Immunity Setup and Monitoring

Equipment Setup: The EUT are a component. The EUTs are powered by a DC power supply which is remotely located. The wire harness is setup manufacturer specification based on ISO 11452-4 (2011). 1 x serializer devices are located on the right side of the table, 1 x Deserializer is on the left side of the table, the interconnect coax cables are Dacar 462. The EUTs were in the following configuration:

Line Rate: 4.85Gbps
 Back channel rate: 10Mbps
 Clock Mode: Non-synchronous
 REFCLK: 60.625MHz

Monitoring: The EUT system is monitored in real time verifying the output of a lock status pin via a video camera.

ISO 11452-4 Bulk Current Injection

Test Setup/Conditions

Test Location:	Canyon Park Mil-3	Test Engineer:	S. Pittsford
Test Method:	Customer Specification based on ISO 11452-4 (2011)	Test Date(s):	4/18/2019
Test Level:	1-400MHz, 200mA		
Declarations:	CW and AM (1kHz 80% depth)		
Configuration:	A		

Test Equipment

Asset #	Description	Manufacturer	Model	Cal Date	Cal Due
00902A	Calibration Fixture, Current probe	FCC	FCC-BCICF-1	9/1/2017	9/1/2019
01447	Amplifier, RF Power	Amplifier Research	100A100	1/16/2019	1/16/2021
00893A	Amplifier	Amplifier Research	50W1000B	5/12/2017	5/12/2019
02352	RF Generator	Marconi	2022D	1/8/2019	1/8/2021
01863	RF Load	Bird	8135	6/12/2018	6/12/2020
01571	Bulk Injection Probe	FCC	F-130-1	2/22/2018	2/22/2020
03437	5uH LISN	Solar	9117-5-TS-50-N	1/25/2018	1/25/2020
03439	5uH LISN	Solar	9117-5-TS-50-N	1/25/2018	1/25/2020
P06517	Cable	Andrews	Heliac	5/1/2018	5/1/2020
01628	Spectrum Analyzer	Agilent	8593E	10/15/2018	10/15/2020
03621	Directional Coupler	Werlatone	C6277-13	4/18/2018	4/18/2020
03698	Spectrum Analyzer	Agilent	E4404B	6/25/2018	6/25/2020
P07495	Attenuator	Pasternack	PE7389-3	9/26/2018	9/26/2020
P07496	Attenuator	Pasternack	PE7389-20	9/26/2018	9/26/2020
P07484	Cable	Andrews	FSJ1	8/27/2018	8/27/2020

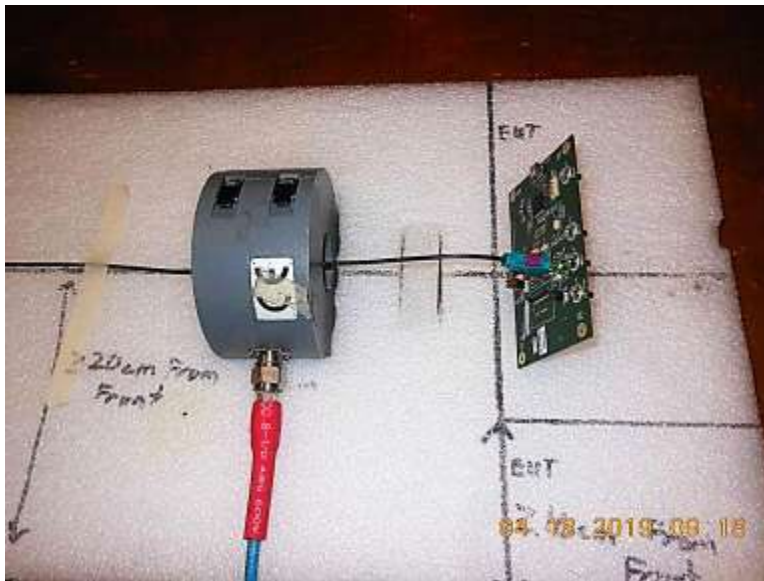
Dwell Time and Step Sizes		
Frequency (MHz)	Step Size (MHz)	Dwell Time (Seconds)
1 to 10	1	2
10 to 200	5	2
200 to 400	10	2

Test Results						
Configuration: A						
Notes: AM = 80% depth, 1kHz sine						
Mode	Frequency Range (MHz)	Modulations	Distances (cm)	Level	Observation	Result
Non-synchronous Clocking	1-400	CW	15, 45, 75	200mA	No events observed	Pass
Non-synchronous Clocking	1-400	AM	15, 45, 75	200mA	No events observed	Pass

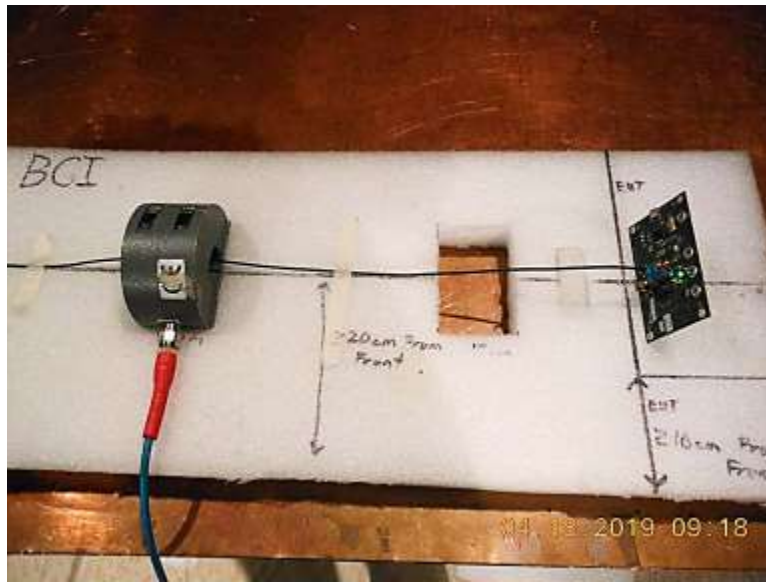
Test Setup Photos



Overall Test Setup



15cm



45cm



75cm

SUPPLEMENTAL INFORMATION

Measurement Uncertainty

Uncertainty Value	Parameter
4.73 dB	Radiated Emissions
3.34 dB	Mains Conducted Emissions
3.30 dB	Disturbance Power

Uncertainties reported are worst case for all CKC Laboratories’ sites and represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2.

Emissions Test Details

TESTING PARAMETERS

Unless otherwise indicated, the following configuration parameters are used for equipment setup: The test harness was routed consistent with the requirements of the standard, dependent upon the test being executed. All interface cables associated with normal operation, as specified by the manufacturer, were connected to the available ports of the test unit. Cables were of the type and length specified in the individual requirements.

The equipment under test (EUT) and load simulator were set up over a ground plane in a manner consistent with the standard, as shown in the setup photographs. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables.

The emissions data was taken with a spectrum analyzer or receiver. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the table below. The corrected data was then compared to the applicable emission limits. Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in dBμV/m, the spectrum analyzer reading in dBμV was corrected by using the following formula. This reading was then compared to the applicable specification limit. Individual measurements were compared with the displayed limit value in the margin column. The margin was calculated based on subtracting the limit value from the corrected measurement value; a positive margin represents a measurement exceeding the limit, while a negative margin represents a measurement less than the limit.

SAMPLE CALCULATIONS		
	Meter reading	(dBμV)
+	Antenna Factor	(dB/m)
+	Cable Loss	(dB)
-	Distance Correction	(dB)
-	Preamplifier Gain	(dB)
=	Corrected Reading	(dBμV/m)

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed were used to collect the emissions data. A spectrum analyzer or receiver was used for all measurements. Unless otherwise specified, the following table shows the measuring equipment bandwidth settings that were used in designated frequency bands. For testing emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used. Some standards allow for bandwidths to be reduced in order to meet noise floor requirements. In this case, the bandwidth used is disclosed on the data sheets.

MEASURING EQUIPMENT BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz
CONDUCTED EMISSIONS	30 MHz	108MHz	120kHz
RADIATED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1000 MHz	>1 GHz	1 MHz

SPECTRUM ANALYZER/RECEIVER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the emissions tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "positive peak" detector mode. Whenever a "quasi-peak" or "average" reading was recorded, the measurement was annotated with a "QP" or an "Ave" on the appropriate rows of the data sheets. In cases where quasi-peak or average limits were employed and data exists for multiple measurement types for the same frequency then the peak measurement was retained in the report for reference, however the numbering for the affected row was removed and an arrow or caret ("^") was placed in the far left-hand column indicating that the row above takes precedence for comparison to the limit. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

Peak

In this mode, the spectrum analyzer or receiver recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature called "peak hold," the measurement device had the ability to measure intermittent or low duty cycle transient emission peak levels. In this mode the measuring device made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

Quasi-peak measurements were taken using the quasi-peak detector when the true peak values exceeded or were within 2 dB of a quasi-peak specification limit. Additional QP measurements may have been taken at the discretion of the operator.

Average

Average measurements were taken using the average detector when the true peak values exceeded or were within 2 dB of an average specification limit. Additional average measurements may have been taken at the discretion of the operator. All average measurements are performed using video bandwidth averaging. To make these measurements, the test engineer reduces the video bandwidth on the measuring device until the modulation of the signal is filtered out. At this point, the measuring device is set into the linear mode and the scan time is reduced.