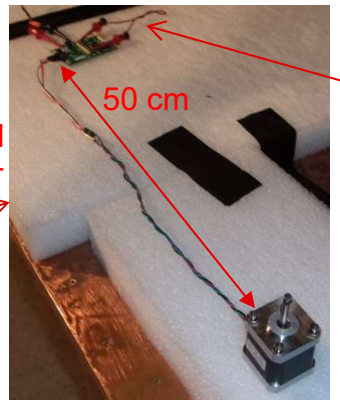
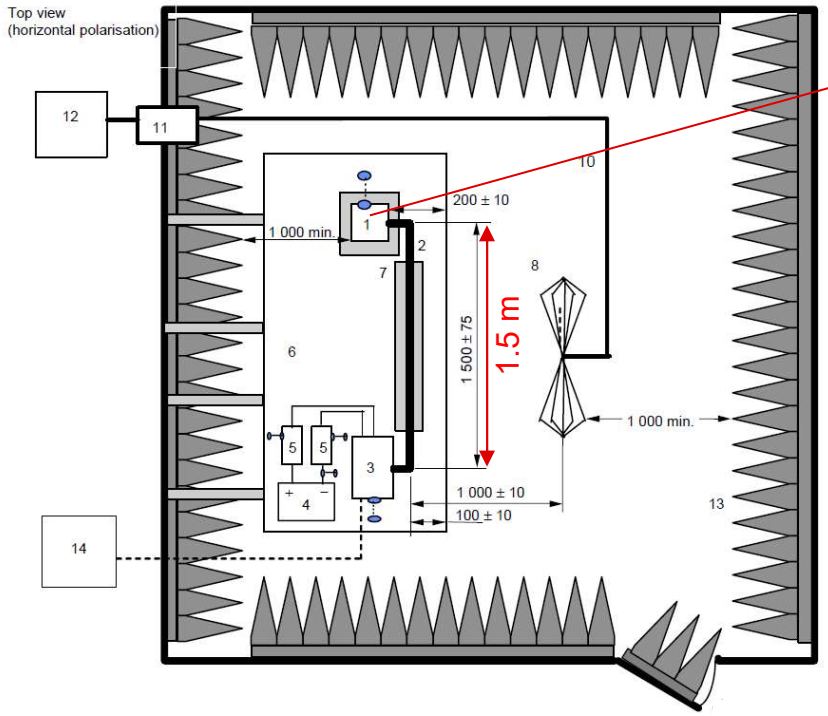
DRV8889-Q1 CISPR-25

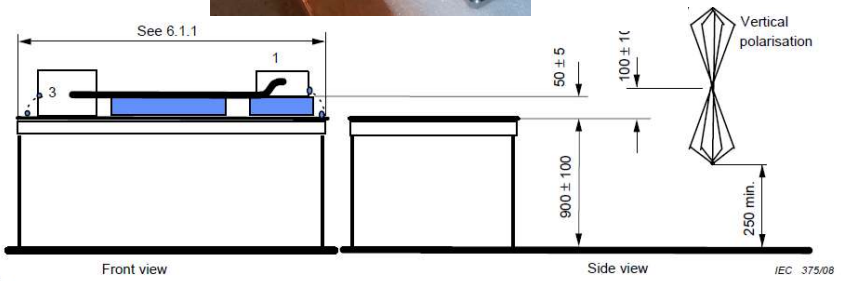
Test Setup, CISPR-25

DRV8889-Q1EVM and stepper motor under test



This jumper wire was removed for the following test data





Key

1 EUT (grounded locally if required in test plan)
2 Test harness
3 Load simulator (placement and ground connection according to 6.4.2.5)
4 Power supply (location optional)
5 Artificial network (AN)
6 Ground plane (bonded to shielded enclosure)
7 Low relative permittivity support ($\varepsilon_r \leq 1{,}4$)
8 Biconical antenna
10 High-quality coaxial cable e.g. double-shielded (50 Ω)
11 Bulkhead connector
12 Measuring instrument
13 RF absorber material
14 Stimulation and monitoring system

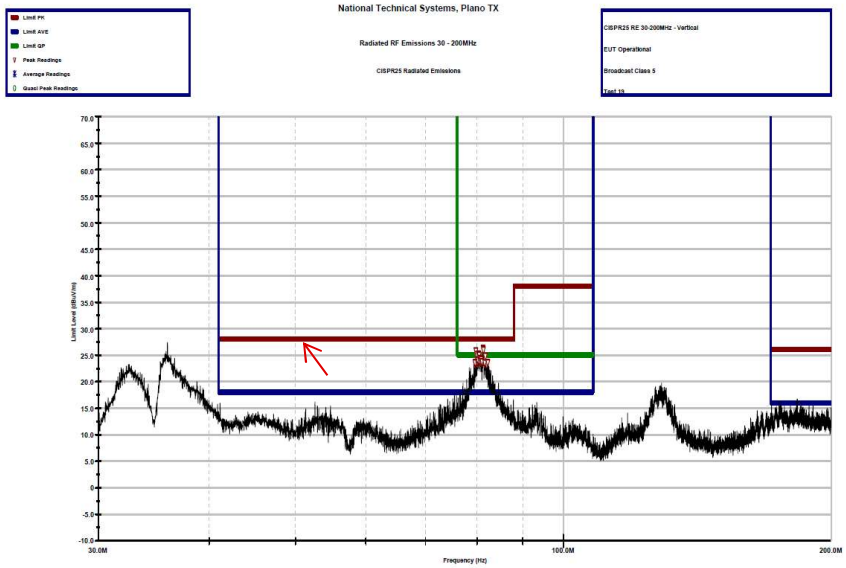
Figure 13 – Example of test set-up – biconical antenna

30 MHz - 200 MHz

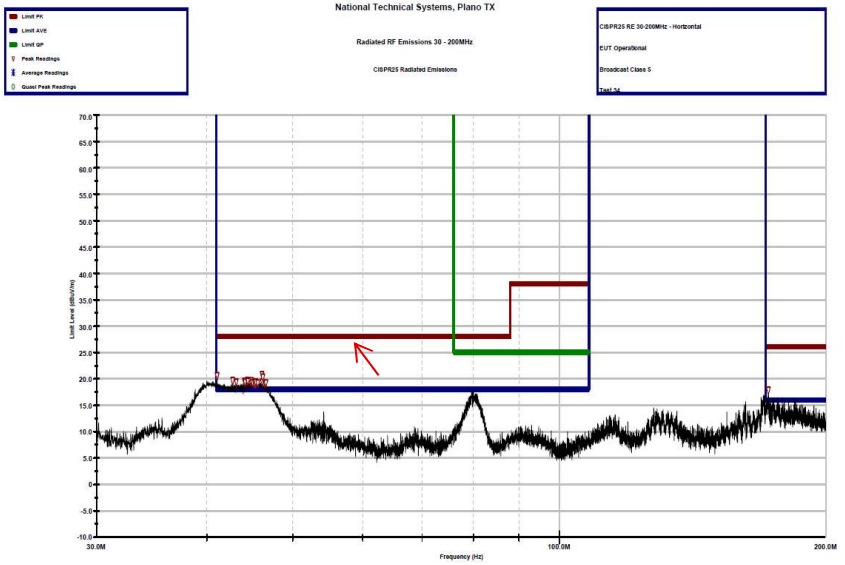
TOFF	Slew Rate	Microstepping	Decay Mode	Driving condition	Instructions
32 us	50 V/us	Full Stepping	Dynamic Decay	1000 PPS, IFS = 1 A	* Motor on OUT pins * VM = 12 V

The red line is the CISPR-25 limit for this test condition since the data is taken as a peak scan

Vertical



Horizontal

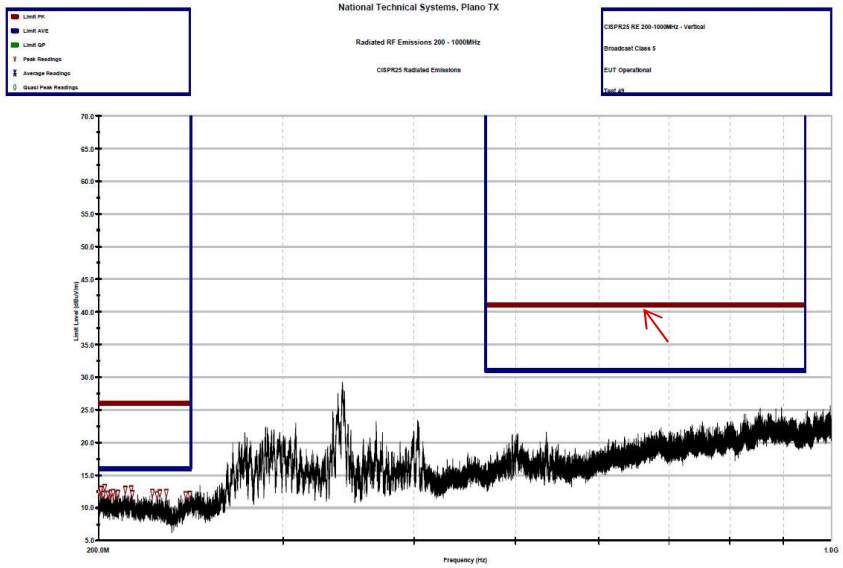


200 MHz - 1000 MHz

TOFF	Slew Rate	Microstepping	Decay Mode	Driving condition	Instructions
32 us	50 V/us	Full Stepping	Dynamic Decay	1000 PPS, IFS = 1 A	* Motor on OUT pins * VM = 12 V

The red line is the CISPR-25 limit for this test condition since the data is taken as a peak scan

Vertical



Horizontal