

FCC / ISED CANADA TEST REPORT

Project Number : EA1908C-042
Test Report Number : TR-W1910-005
Type of Equipment : G-Series Site Equipment
FCC ID. : ABZ89FC5810B
IC ID : 109AB-5810B
Model Name : GTR 8000
Multiple Model Name : N/A
Applicant : Motorola Solutions Inc.
Address : 1301 East Algonquin Road, Schaumburg, IL 60196
Manufacturer : Motorola Solutions Malaysia Sdn. Bhd.
Address : 12A, Medan Bayan Lepas, Bayan Lepas Technoplex, 11900
Bayan Lepas, Pulau Pinang
Regulation : FCC Part 90 and ISED Canada RSS-119 Issue 12
Total page of Report : 78 Pages
Date of Receipt : 2019-08-05
Date of Issue : October 18, 2019
Test Result : PASS

This test report only contains the result of a single test of the sample supplied for the examination.
It is not a generally valid assessment of the features of the respective products of the mass-production.

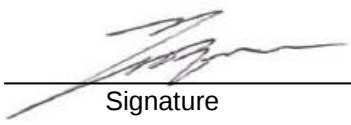
Prepared by Chu, Woo-Sik / Senior Engineer


Signature

2019-10-18

Date

Reviewed by Choi, Young-min / Technical Manager


Signature

2019-10-18

Date

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Release Control Record

Issue Report No.	Issued Date	Details/Revisions
TR-W1910-005	2019-10-18	Initial Release

1. TEST SUMMARY

1.1 Regulations and results

The sample submitted for evaluation (Referred to below as the EUT) has been tested in accordance with the following regulations or standards.

Agency	APPLICABLE Part	APPLICABLE SECTION	TEST DESCRIPTION	RESULTS
FCC	Part 90	Part 90.210	Field Strength of Spurious radiation	PASS
ISED Canada	RSS-119	RAA-119 Clause 5.8.9.2	Field Strength of Spurious radiation	PASS

1.2 Test Methodology

The tests mentioned in clause 1.1 in this test report were performed according to FCC CFR 47 Part 2, ANSI C63.26: 2015.

1.3 Additions, deviations, exclusions from standards

No additions, deviations or exclusions have been made from standard.

1.4 Purpose of the test

To determine whether the equipment under test fulfills the requirements of the regulation stated in Section 1.1 and 1.2.

1.5 Test Facility

The measurement facilities are located at 135-60 Gyeongchung-daero, Gonjam-eup, Gwangju-si, Gyeonggi-do 12813, Korea. Our test facilities are accredited as a Conformity Assessment Body (CAB) by the FCC and ISCED Canada, designated by the RRA (National Radio Research Agency), and accredited by KOLAS (Korea Laboratory Accreditation Scheme) in Korea and approved by TUV Rheinland, TUV SÜD and Korean Register of Shipping according to the requirement of ISO/IEC 17025.

Laboratory Qualification	Registration No.	Mark
FCC	KR0160	
ISED Canada	12721A	
RRA	KR0160	 National Radio Research Agency
TUV Rheinland	UA 50314109-0002	 TÜVRheinland® Precisely Right.
TUV SÜD	CARAT 094465 0004 Rev.00	
Korean Agency for Technology and Standards	KT733	
KOREAN REGISTER OF SHIPPING	PCT40841-TL001	

Remark. This report is not related to KOLAS accreditation and relevant regulation.

2. EUT (Equipment Under Test) INFORMATION

2.1 General Description

The EUT, G-Series Site Equipment is from conventional to trunking, single repeater to multisite, FDMA to TDMA, and available in multiple frequency bands, the GTR 8000 offers design flexibility and investment protection in a high performance package. The product specification described herein was obtained from product data sheet or user's manual.

Antenna Connector	TX	N Female	
	RX	Standard: BNC Female,. Optional Preselector: N female	
Modulation		C4FM, LSM, H-DQPSK, FM, FSK, 4-level FM Widepulse Astro, HPD	
Channel Spacing		12.5 kHz, 25 kHz	
Frequency Stability		100 ppb/2 yr or External Reference	
Transmitter	Operating Frequency		851~870 MHz
	Power Output		2 ~ 100 W
	Electronic Bandwidth		Full Bandwidth
	Modulation Fidelity		5 %
	Intermodulation Attenuation		80 dB
	Spurious and Harmonic Emissions Attenuation		90 dB
	Analog Audio Distortion		< 2 % @ 1 000 Hz
Emission Designator		8K70D1E, 8K70D1D, 8K70D1W, 8K10F1E, 8K10F1D, 8K10F1W, 10K0F1E, 10K0F1D, 10K0F1W, 9K80D7E, 9K80D7D, 9K80D7W, 17K7D7D, 16K0F1D, 16K0F3E, 11K0F3E, 14K0F1D, 14K0F3E, 21K7D7E, 21K7D7D, 21K7D7W	
Receiver	Operating Frequency		806~ 825 MHz
	Analog Sensitivity		12.5 kHz Ch.: - 118 dBm, 25 kHz Ch.: - 117 dBm
	Intermodulation Rejection		85 dB
	Spurious and Image Response Rejection		85 dB
	Analog Audio Distortion		3 % or 5 % (Adjustable)
	Intermediate Freq.		First: 73.35 MHz, Second: 2.16 MHz
Electrical Rating		AC: (90 - 264) VAC (47 - 63) HZ, DC: (43.2 - 60) V	

2.2 Additional Model

None

3. TEST CONDITION

3.1 Equipment Used During Test

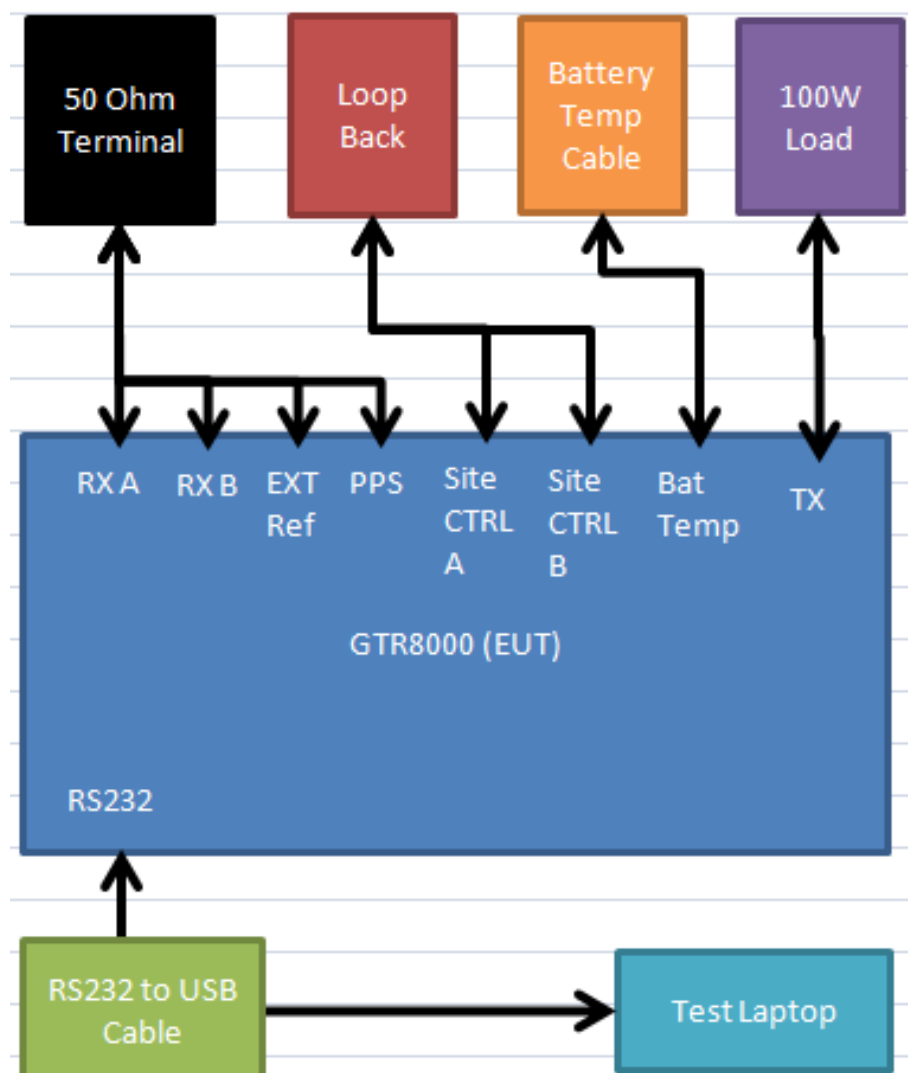
The following peripheral devices and/or interface cables were connected during the measurement:

Description	Model No.	Serial No.	Manufacturer.
G-Series Site Equipment (EUT)	GTR 8000	R001PP0001	Motorola
Notebook PC	HSTNN-F10C	5CB2242D3R	HP
AC/DC Adapter for Notebook PC	HSTNN-CA24	F122461344002920	Chicony Power Technology (SUZHOU) Co., Ltd.
Keyboard	DK-3100 USB	N/A	N/A
Mouse	AA-SM7PCP	N/A	Acrox Technologies
30 dB Attenuator	49-30-43-LIM	NH248	Aeroflex
Load	L22	N/A	Revex
RS 232 to USB	U232-P9	N/A	Konig

3.2 Cable Description

Ports Name	Shielded (Y/N)	Ferrite Bead (Y/N)	Length (m)	Connected to
AC IN	N	N	1.5	AC Mains
Tx	Y	N	1.5	100 W Load
Bat Temp	N	N	1.5	Battery Temp Cable
Site CTRL A	N	N	1.5	SITE CTRL B
RX A	N	N	N/A	50 Ohms Terminal
RX B	N	N	N/A	50 Ohms Terminal
EXT Ref	N	N	N/A	50 Ohms Terminal
PPS	N	N	N/A	50 Ohms Terminal
Ground	N	N	1.5	Ground plane

3.3 System Block Diagram



3.4 Mode of operation during the test

For finding worse case configuration and operating mode, preliminary testing was performed and radiated emission and conducted emission were performed with the EUT set to transmit at the channel with the high and Low RF output power condition as following table according to applicant's requirement.

For radiated and conducted emissions were performed as following test plan, but DC mode for conducted emissions were not measured.

Band	Test Mode	Input Voltage	Test Freq. (MHz)	Tx Power	Channel Spacing (kHz)
851 -870 MHz	Mode #1	AC 120 V	851.0125	Max	25 (Analog Voice (FM))
	Mode #2		851.0125	Max	12.5 (C4FM)
	Mode #3		851.0125	Max	12.5 (H-DQPSK)
	Mode #4		851.0125	Low	25 (Analog Voice (FM))
	Mode #5		851.0125	Low	12.5 (C4FM)
	Mode #6		851.0125	Low	12.5 (H-DQPSK)
	Mode #7		860.0125	Max	25 (Analog Voice (FM))
	Mode #8		860.0125	Max	12.5 (C4FM)
	Mode #9		860.0125	Max	12.5 (H-DQPSK)
	Mode #10		860.0125	Low	25 (Analog Voice (FM))
	Mode #11		860.0125	Low	12.5 (C4FM)
	Mode #12		860.0125	Low	12.5 (H-DQPSK)
	Mode #13		868.8875	Max	25 (Analog Voice (FM))
	Mode #14		868.8875	Max	12.5 (C4FM)
	Mode #15		868.8875	Max	12.5 (H-DQPSK)
	Mode #16		868.8875	Low	25 (Analog Voice (FM))
	Mode #17		868.8875	Low	12.5 (C4FM)
	Mode #18		868.8875	Low	12.5 (H-DQPSK)
	Mode #19	DC 48 V	860.0125	Max	25 (Analog Voice (FM))
	Mode #20		860.0125	Max	12.5 (C4FM)
	Mode #21		860.0125	Max	12.5 (H-DQPSK)

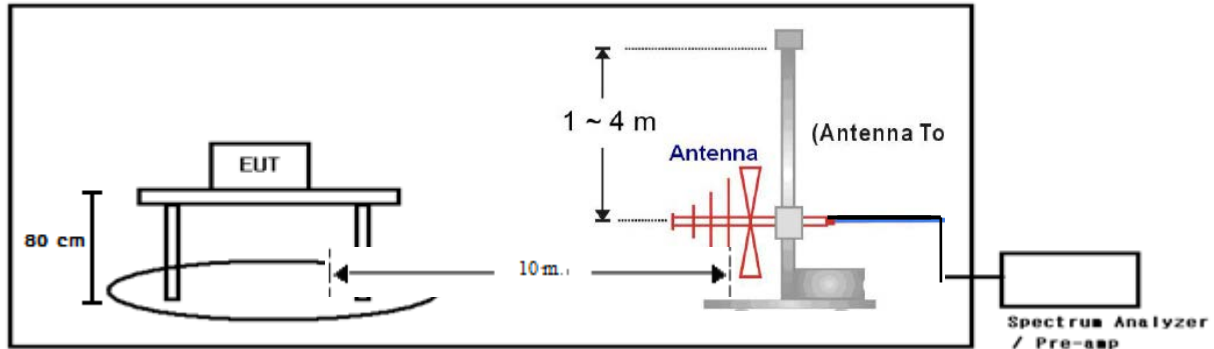
3.5 Test Report Configuration

The EUT has Transmitting and Receiving functions, and this report is only covering 800 MHz band transmitter portion in accordance with FCC part 90 and RSS-119 requirements.

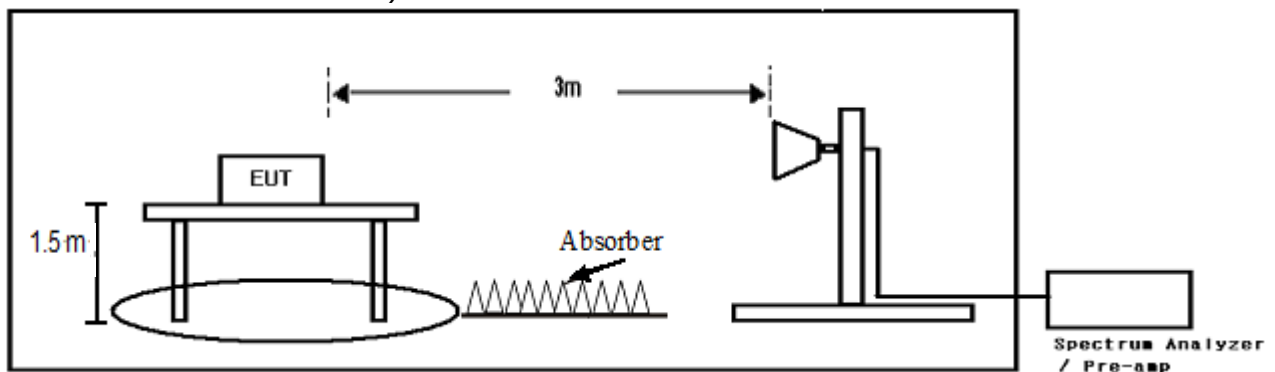
The test report for receiver portion is issued separately due to different rule section and authorization procedure.

3.6 Test Setup Drawing

(Radiated Test below 1 GHz)



(Radiated Test above 1 GHz)



3.7 EUT Modifications

Following modifications were implemented on the EUT for fixing the problem caused by EMC testing and the product will have all of the modifications incorporated into the product when manufactured and placed on the market.

- None.

4. TEST RESULT

4.1 Radiated Spurious Emissions

4.1.1 Method of Measurement

The radiated emissions measurements were on 3 m / 10 m semi-anechoic chamber. The EUT and other support equipment were placed on a non-conductive table 80 cm above the ground plane. The interconnecting cables from outside test site were inserted into ferrite clamps at the point where the cables reach the turntable. The frequency spectrum from 30 MHz to tenth harmonic of the highest fundamental frequency or to 40 GHz was scanned and emission levels maximized at each frequency recorded. The system was rotated 360°, and the antenna was varied in height between 1.0 m and 4.0 m in order to determine the maximum emission levels. This procedure was performed for both horizontal and vertical polarization of the receiving antenna.

The maximum radiated emission was recorded and used as reference for the effective radiated power measurement. The EUT was then replaced by a tuned dipole antenna or Horn antenna and was oriented for vertical polarization and then the length of dipole antenna was adjusted to correspond to the frequency of the transmitter. The substitution antenna was connected to a signal generator with a coaxial cable. The receiving antenna height was raised and lowered again through the specified range of height until maximum signal level is detected by the measuring receiver. The signal to the substitution antenna was adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the EUT radiated power measured, corrected for the change of input attenuation setting of the measuring receiver. The signal generator level was recorded and corrected by the power loss in the cable between the signal generator and substitution antenna and further corrected for the gain of the dipole antenna or horn antenna used relative to an ideal tuned dipole antenna. The measurement was repeated with the test antenna and the substitution antenna oriented for horizontal polarization. The measure of the effective radiated power is the larger of the two levels recorded.

For measurement below 1 GHz, the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

The spectrum from 30 MHz to tenth harmonic of the highest fundamental frequency or to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

Used Software for measurement is manufactured by TSJ.

For Substitution method

EUT is mounted on a non-conducted table height of 1.5 meter above ground plane. During the exploratory measurement, turn table and antenna height was varied to find the maximum emission level. Record the field strength level of test receiver. Replace the EUT with dipole/Horn antenna that is connected to a calibrated signal generator. Increase the signal generator output power until the field strength receiver's level is equal to the previous exploratory measurement. The signal generator level with antenna gain, cable loss are the resulting ERP or EIRP

4.1.2 Sample Calculation for radiated measurement

Example of Field strength level

At 78.50 MHz

Limit = 40.0 dBuV/m

Result = Receiver reading value + Antenna Factor + Cable Loss - Pre-amplifier gain = 37.0 dBuV/m

Margin = Limit - Result = 40 - 37.0 = 3.0

so the EUT has 3.0 dB margin at 78.50 MHz

Example of Substitution method

ERP / EIRP = Substitute level (SG output) + Antenna gain - Cable loss

4.1.3 Measurement Uncertainty

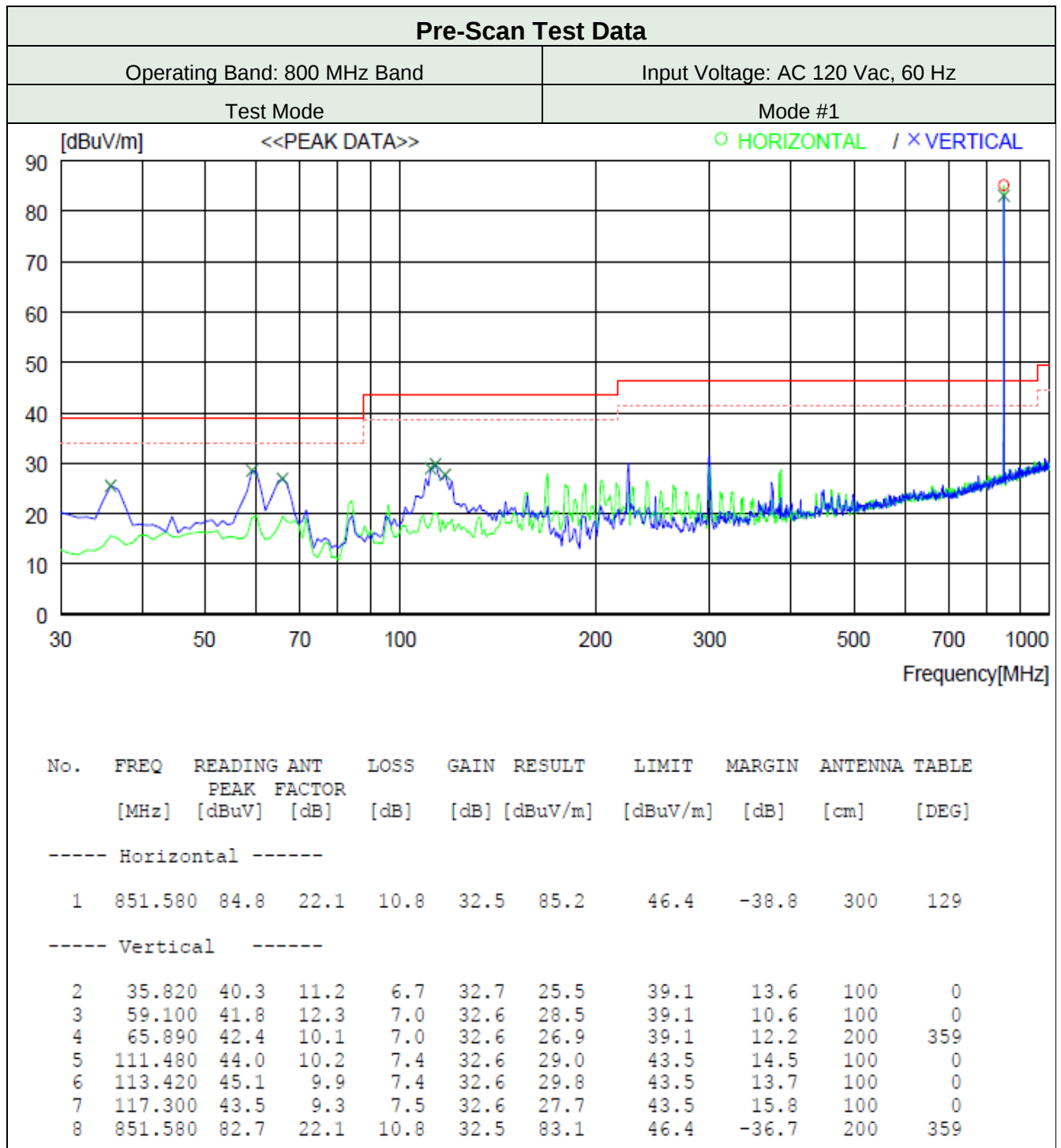
Measurement uncertainties were not taken into account and following uncertainty levels have been estimated for tests performed on the apparatus. The measurement uncertainties are given with at least 95 % confidence.

Frequency Range	Uncertainty	Frequency Range	Uncertainty
9 kHz ~ 30 MHz	± 3.2 dB	30 MHz ~ 1 GHz	± 3.8 dB
1 GHz ~ 18 GHz	± 4.9 dB	18 GHz ~ 40 GHz	± 5.1 dB

4.1.4 Test Data

Date of Test	2019-08.07 ~ 2019.08.09		Temperature	(23.7 ~ 24.4) °C
			Relative humidity	(53.8 ~ 54.6) % R.H.
Test Result	PASS		Tested By	Im, Jin-young
Frequency range	Resolution Bandwidth	Video Bandwidth	Detector Mode	Measurement distance
Below 1 000 MHz	100 kHz or 120 kHz	300 kHz	Peak or Q.P.	10 m
Above 1 000 MHz	1 MHz	1 MHz or 10 Hz	Peak or Average	3 m

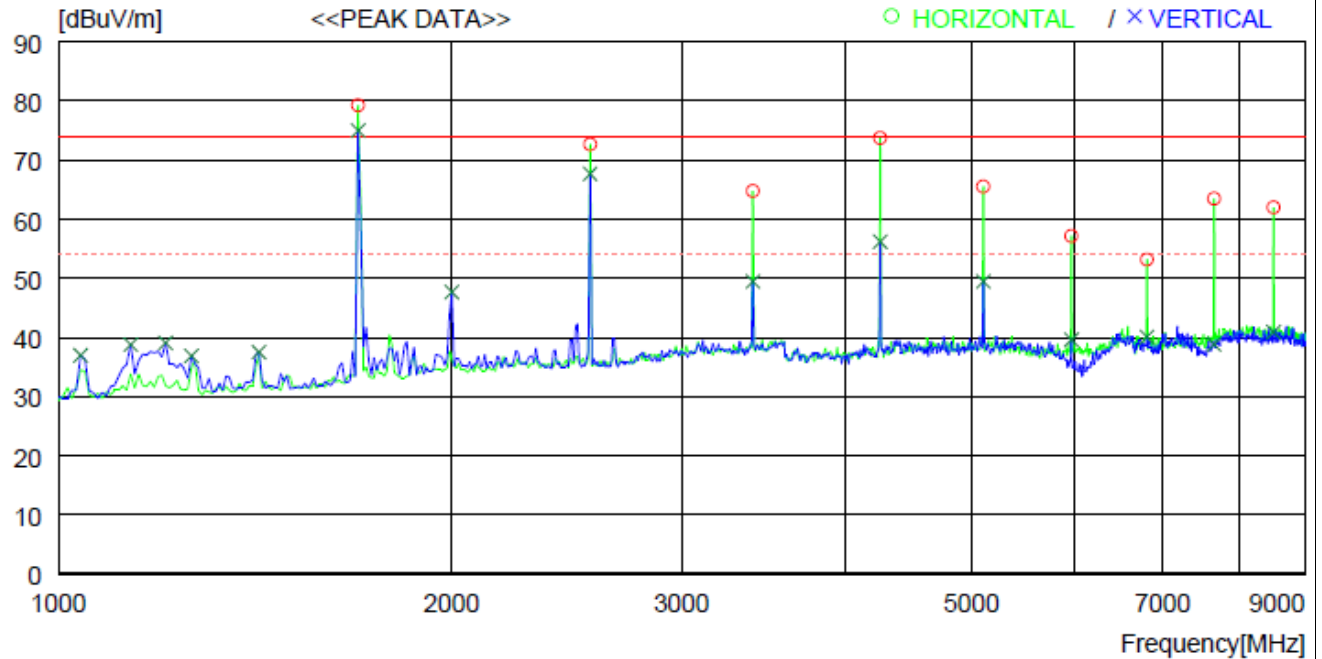
Radiated Spurious Emissions Test Data



Pre-Scan Test Data

Test Mode

Mode #1



No.	FREQ [MHz]	READING [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1696.000	85.5	26.6	6.8	39.6	79.3	74.0	-5.3	100	3
2	2552.000	74.8	28.9	8.5	39.5	72.7	74.0	1.3	100	359
3	3400.000	63.2	31.3	10.0	39.7	64.8	74.0	9.2	100	359
4	4256.000	69.7	32.9	11.1	39.9	73.8	74.0	.2	100	359
5	5104.000	59.4	33.9	12.1	39.9	65.5	74.0	8.5	100	7
6	5960.000	49.9	34.2	12.8	39.7	57.2	74.0	16.8	100	359
7	6808.000	43.9	34.9	13.9	39.5	53.2	74.0	20.8	100	359
8	7664.000	53.1	35.4	14.5	39.5	63.5	74.0	10.5	100	359
9	8512.000	50.3	36.0	15.1	39.4	62.0	74.0	12	100	7
----- Vertical -----										
10	1040.000	47.2	24.3	5.3	39.8	37.0	74.0	37	100	271
11	1136.000	48.4	24.6	5.6	39.8	38.8	74.0	35.2	100	194
12	1208.000	48.4	24.8	5.7	39.8	39.1	74.0	34.9	100	179
13	1264.000	45.9	24.9	5.9	39.8	36.9	74.0	37.1	100	0
14	1424.000	45.7	25.3	6.3	39.8	37.5	74.0	36.5	100	62
15	1696.000	81.2	26.6	6.8	39.6	75.0	74.0	-1	100	0
16	2000.000	51.4	28.2	7.5	39.4	47.7	74.0	26.3	100	0
17	2552.000	69.8	28.9	8.5	39.5	67.7	74.0	6.3	100	0
18	3400.000	47.9	31.3	10.0	39.7	49.5	74.0	24.5	100	202
19	4256.000	52.1	32.9	11.1	39.9	56.2	74.0	17.8	100	202

Substitution Measurement Test Data								
Test Mode					Mode #1			
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
113.42	V	55.1	-51.90	0.27	-0.72	-57.75	-13.0	44.75
1696.00	H	85.5	- 25.42	2.01	8.46	-18.97		5.97
2552.00	H	74.8	- 33.4	2.51	9.87	-26.04		13.04
3400.00	H	63.2	- 42.71	2.89	10.06	-35.54		22.54
4256.00	H	69.7	- 34.71	3.25	10.85	-27.11		14.11
5104.00	H	59.4	- 42.82	3.64	10.96	-35.50		22.5
5960.00	H	49.9	-50.69	3.90	11.41	-43.18		30.18
6808.00	H	43.9	-59.63	4.18	11.61	-52.20		39.2
7664.00	H	53.10	-44.62	4.61	11.63	-37.60		24.6
8512.00	H	50.30	-45.90	5.23	12.14	-38.99		25.99

Note

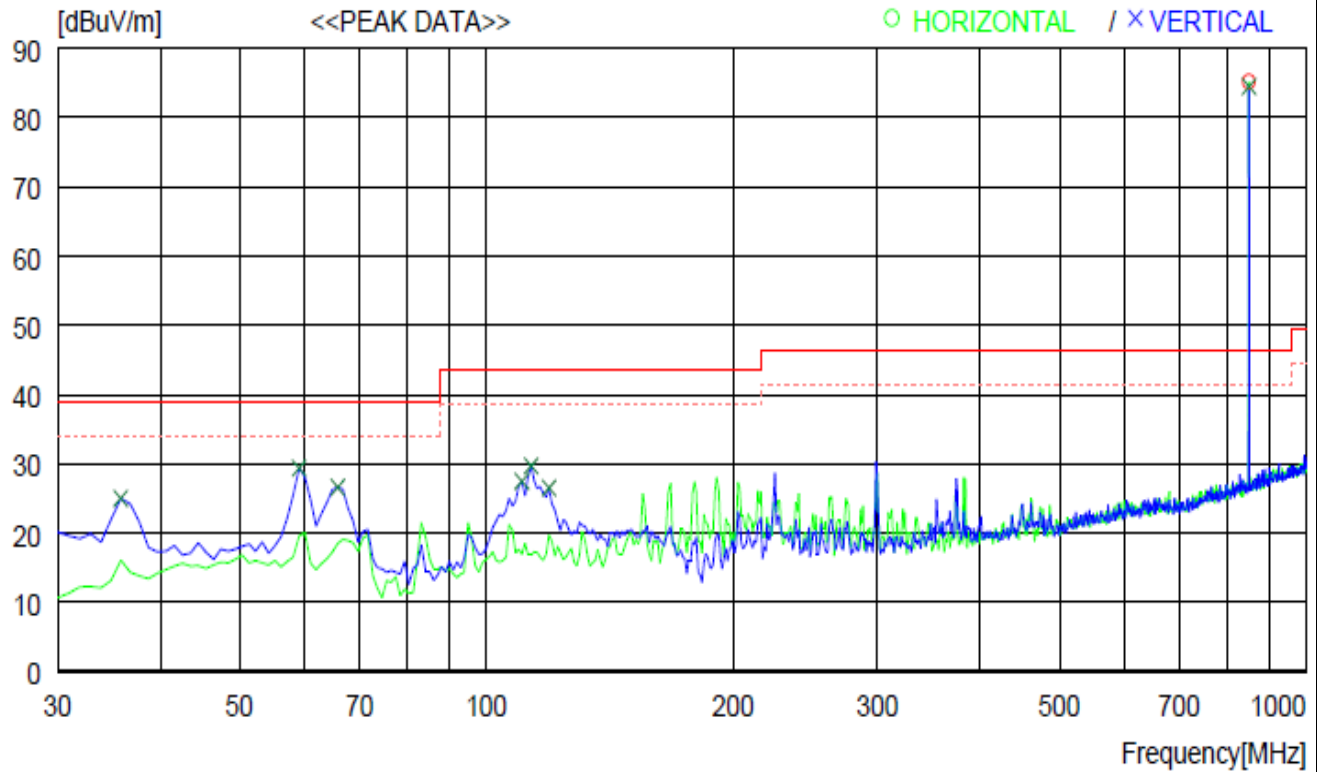
1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans is used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Pre-Scan Test Data

Test Mode

Mode #2

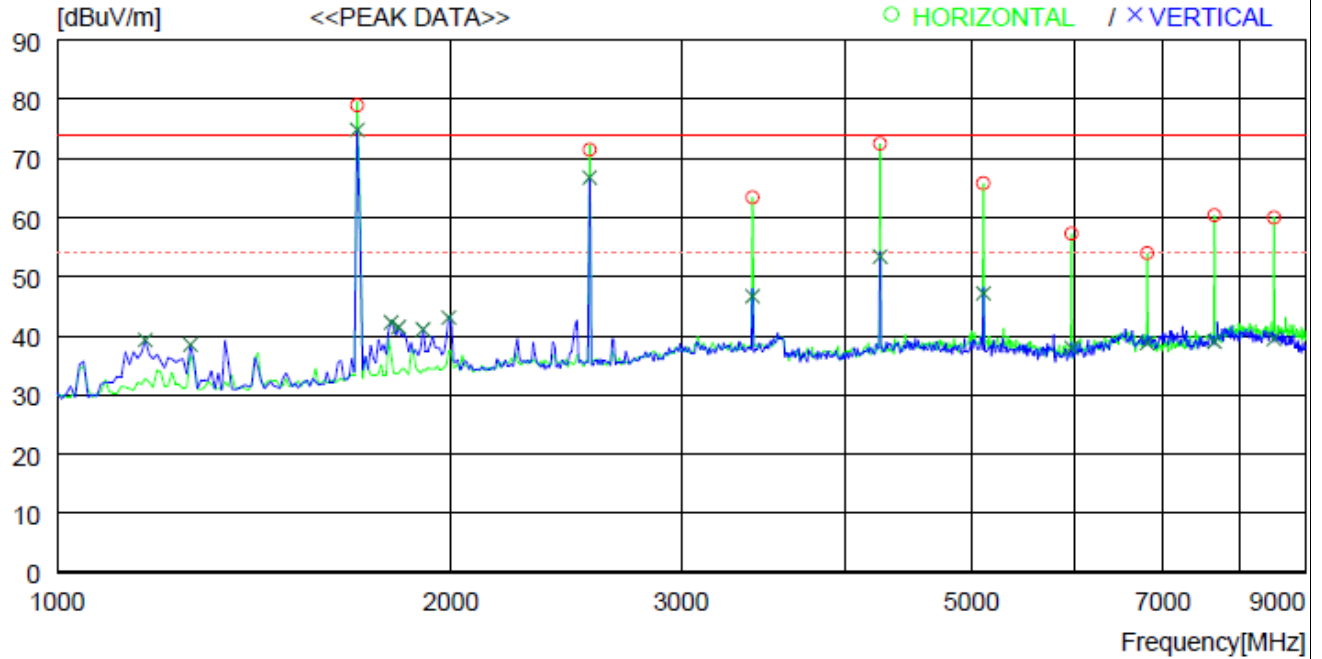


No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	851.580	84.8	22.1	10.8	32.5	85.2	46.4	-38.8	300	359
----- Vertical -----										
2	35.820	39.8	11.2	6.7	32.7	25.0	39.1	14.1	100	0
3	59.100	42.7	12.3	7.0	32.6	29.4	39.1	9.7	100	38
4	65.890	42.1	10.1	7.0	32.6	26.6	39.1	12.5	100	0
5	110.510	42.4	10.3	7.4	32.6	27.5	43.5	16	200	122
6	113.420	45.0	9.9	7.4	32.6	29.7	43.5	13.8	100	0
7	119.240	42.6	9.0	7.5	32.6	26.5	43.5	17	100	0
8	851.580	84.1	22.1	10.8	32.5	84.5	46.4	-38.1	200	359

Pre-Scan Test Data

Test Mode

Mode #2



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1696.000	85.9	26.6	6.3	39.8	79.0	74.0	-5	100	7
2	2552.000	74.5	28.9	7.5	39.4	71.5	74.0	2.5	100	7
3	3400.000	61.8	31.3	10.0	39.7	63.4	74.0	10.6	100	359
4	4256.000	68.4	32.9	11.1	39.9	72.5	74.0	1.5	100	2
5	5104.000	59.7	33.9	12.1	39.9	65.8	74.0	8.2	100	359
6	5960.000	50.0	34.2	12.8	39.7	57.3	74.0	16.7	100	359
7	6808.000	44.7	34.9	13.9	39.5	54.0	74.0	20	100	359
8	7664.000	50.0	35.4	14.5	39.5	60.4	74.0	13.6	100	359
9	8512.000	48.3	36.0	15.1	39.4	60.0	74.0	14	100	359
----- Vertical -----										
10	1168.000	48.8	24.7	5.6	39.8	39.3	74.0	34.7	100	0
11	1264.000	47.5	24.9	5.9	39.8	38.5	74.0	35.5	100	0
12	1696.000	81.1	26.6	6.8	39.6	74.9	74.0	-9	100	192
13	1800.000	48.0	27.1	6.8	39.6	42.3	74.0	31.7	100	303
14	1824.000	46.7	27.3	7.0	39.5	41.5	74.0	32.5	100	0
15	1904.000	45.8	27.7	7.1	39.5	41.1	74.0	32.9	100	333
16	1992.000	47.1	28.2	7.3	39.5	43.1	74.0	30.9	100	0
17	2552.000	68.9	28.9	8.5	39.5	66.8	74.0	7.2	100	199
18	3400.000	46.4	31.3	8.5	39.5	46.7	74.0	27.3	100	0
19	4256.000	50.2	32.9	10.0	39.7	53.4	74.0	20.6	100	0

Substitution Measurement Test Data								
Test Mode					Mode #2			
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
113.42	V	55.0	-56.87	0.27	-0.72	-57.86	-13.0	44.86
1696.00	H	85.90	-25.03	2.01	8.46	-18.58		5.58
2552.00	H	74.50	-33.71	2.51	9.87	-26.35		13.35
3400.00	H	61.80	-44.20	2.89	10.06	-37.03		24.03
4256.00	H	68.40	-36.01	3.25	10.85	-28.41		15.41
5104.00	H	59.70	-42.50	3.64	10.96	-35.18		22.18
5960.00	H	50.00	-50.58	3.90	11.41	-43.07		30.07
6808.00	H	44.70	-58.52	4.18	11.61	-51.09		38.09
7664.00	H	50.00	-48.04	4.61	11.63	-41.02		28.02
8512.00	H	48.30	-47.79	5.23	12.14	-40.88		27.88

Note

1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall is used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Pre-Scan Test Data

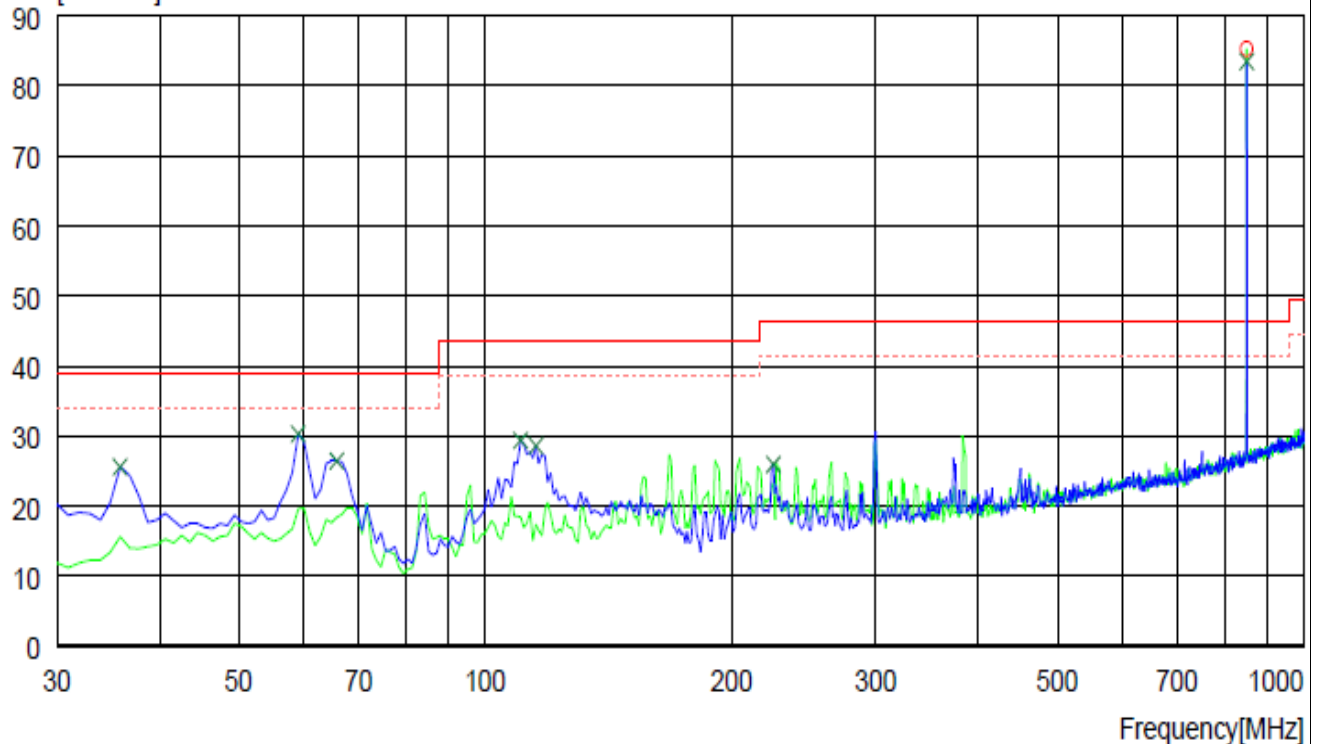
Test Mode

Mode #3

[dBuV/m]

<<PEAK DATA>>

○ HORIZONTAL / × VERTICAL

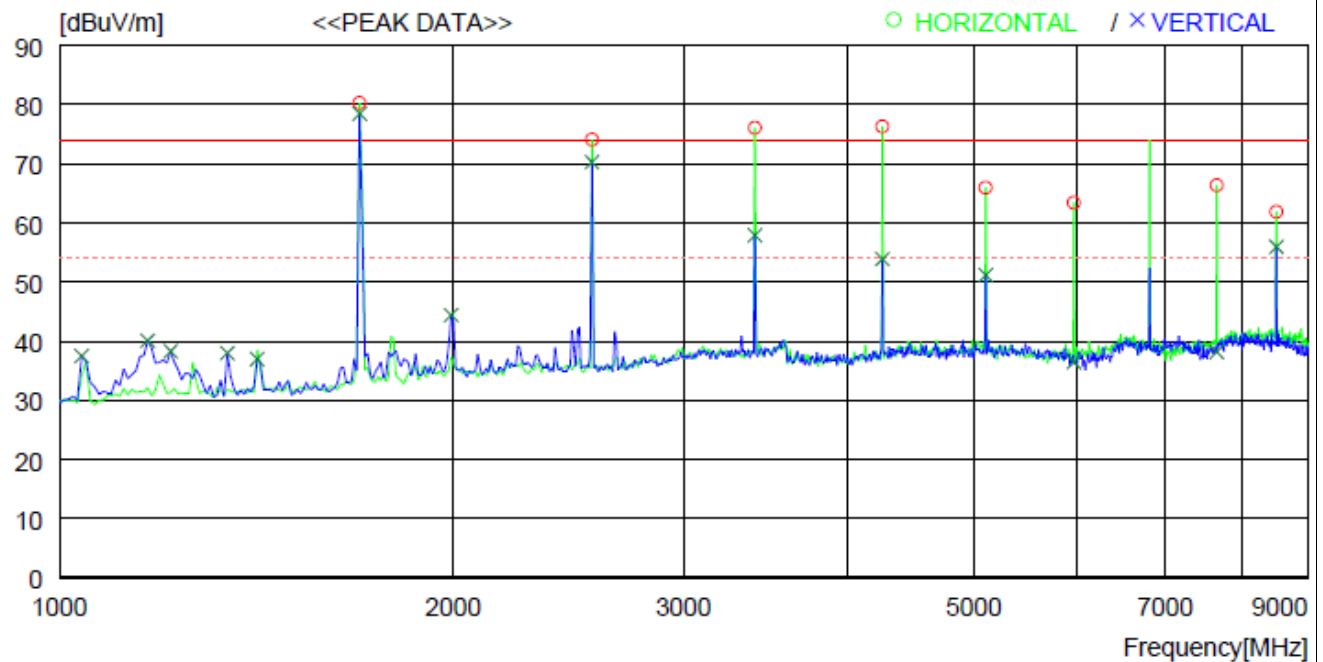


No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	851.580	84.9	22.1	10.8	32.5	85.3	46.4	-38.9	300	129
----- Vertical -----										
2	35.820	40.4	11.2	6.7	32.7	25.6	39.1	13.5	100	0
3	59.100	43.6	12.3	7.0	32.6	30.3	39.1	8.8	100	0
4	65.890	41.9	10.1	7.0	32.6	26.4	39.1	12.7	200	359
5	110.510	44.3	10.3	7.4	32.6	29.4	43.5	14.1	200	158
6	115.360	44.2	9.6	7.4	32.6	28.6	43.5	14.9	100	0
7	224.970	38.3	12.1	8.1	32.6	25.9	46.4	20.5	100	146
8	851.580	83.1	22.1	10.8	32.5	83.5	46.4	-37.1	200	151

Pre-Scan Test Data

Test Mode

Mode #3



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1696.000	86.5	26.6	6.8	39.6	80.3	74.0	-6.3	100	359
2	2552.000	76.2	28.9	8.5	39.5	74.1	74.0	-1.1	100	13
3	3400.000	74.5	31.3	10.0	39.7	76.1	74.0	-2.1	100	3
4	4256.000	72.2	32.9	11.1	39.9	76.3	74.0	-2.3	100	359
5	5104.000	59.9	33.9	12.1	39.9	66.0	74.0	8	100	359
6	5960.000	56.1	34.2	12.8	39.7	63.4	74.0	10.6	100	359
7	7664.000	56.0	35.4	14.5	39.5	66.4	74.0	7.6	100	359
8	8512.000	50.2	36.0	15.1	39.4	61.9	74.0	12.1	100	359
----- Vertical -----										
9	1040.000	47.7	24.3	5.3	39.8	37.5	74.0	36.5	100	0
10	1168.000	49.6	24.7	5.6	39.8	40.1	74.0	33.9	100	203
11	1216.000	47.6	24.8	5.7	39.8	38.3	74.0	35.7	100	218
12	1344.000	46.6	25.1	6.1	39.8	38.0	74.0	36	100	279
13	1416.000	45.2	25.3	6.3	39.8	37.0	74.0	37	100	347
14	1696.000	84.7	26.6	6.8	39.6	78.5	74.0	-4.5	100	0
15	1992.000	48.1	28.2	7.5	39.4	44.4	74.0	29.6	100	1
16	2552.000	72.4	28.9	8.5	39.5	70.3	74.0	3.7	100	196
17	3400.000	56.3	31.3	10.0	39.7	57.9	74.0	16.1	100	196
18	4256.000	49.8	32.9	11.1	39.9	53.9	74.0	20.1	100	12
19	5104.000	45.1	33.9	12.1	39.9	51.2	74.0	22.8	100	0

Substitution Measurement Test Data								
Test Mode					Mode #3			
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
59.1	V	53.60	-59.85	0.20	-1.70	-61.75	-13.0	48.75
110.51	V	54.30	-57.50	0.27	-0.70	-58.47		45.47
1696.00	H	86.50	-24.44	2.01	8.46	-17.99		4.99
2552.00	H	76.20	-31.99	2.51	9.87	-24.63		11.63
3400.00	H	74.50	-31.15	2.89	10.06	-23.98		10.98
4256.00	H	72.20	-32.20	3.25	10.85	-24.60		11.6
5104.00	H	59.90	-42.29	3.64	10.96	-34.97		21.97
5960.00	H	56.10	-44.45	3.90	11.41	-36.94		23.94
7664.00	H	56.00	-41.41	4.61	11.63	-34.39		21.39
8512.00	H	50.20	-46.00	5.23	12.14	-39.09		26.09

Note

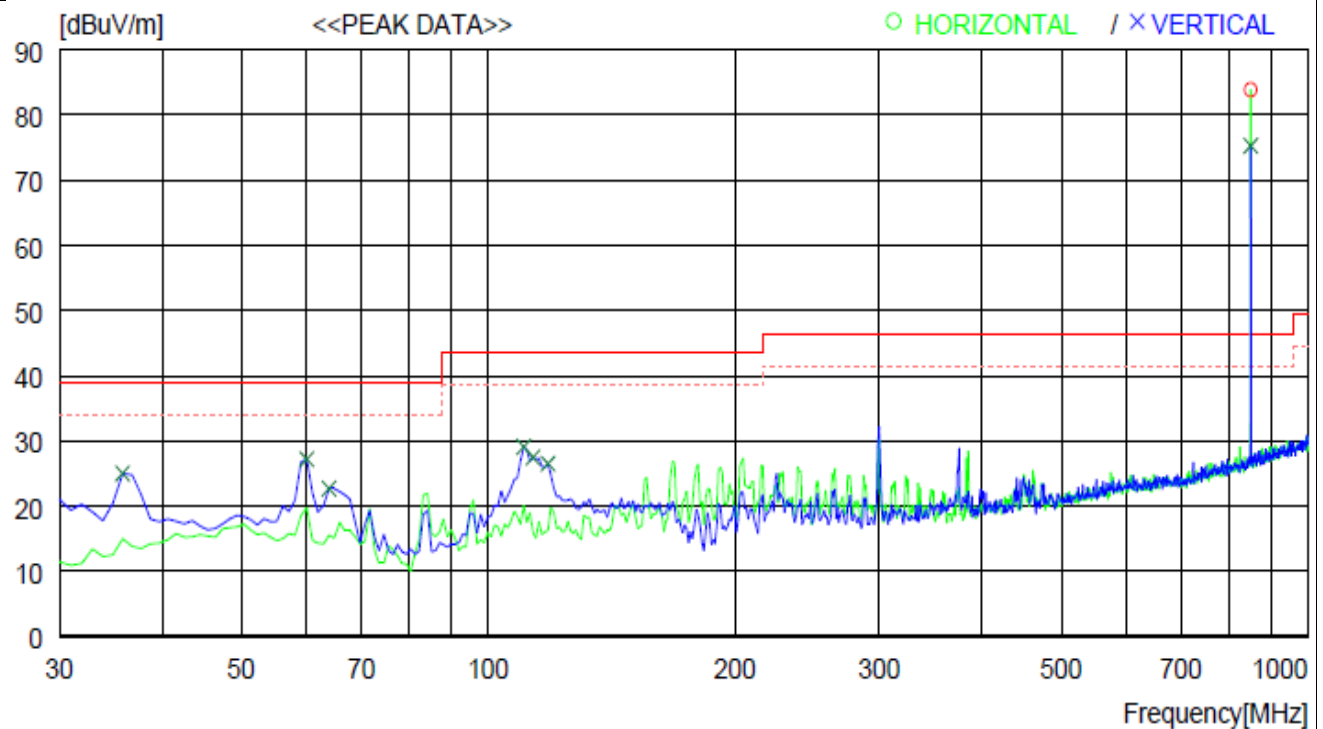
1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall is used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Pre-Scan Test Data

Test Mode

Mode #4

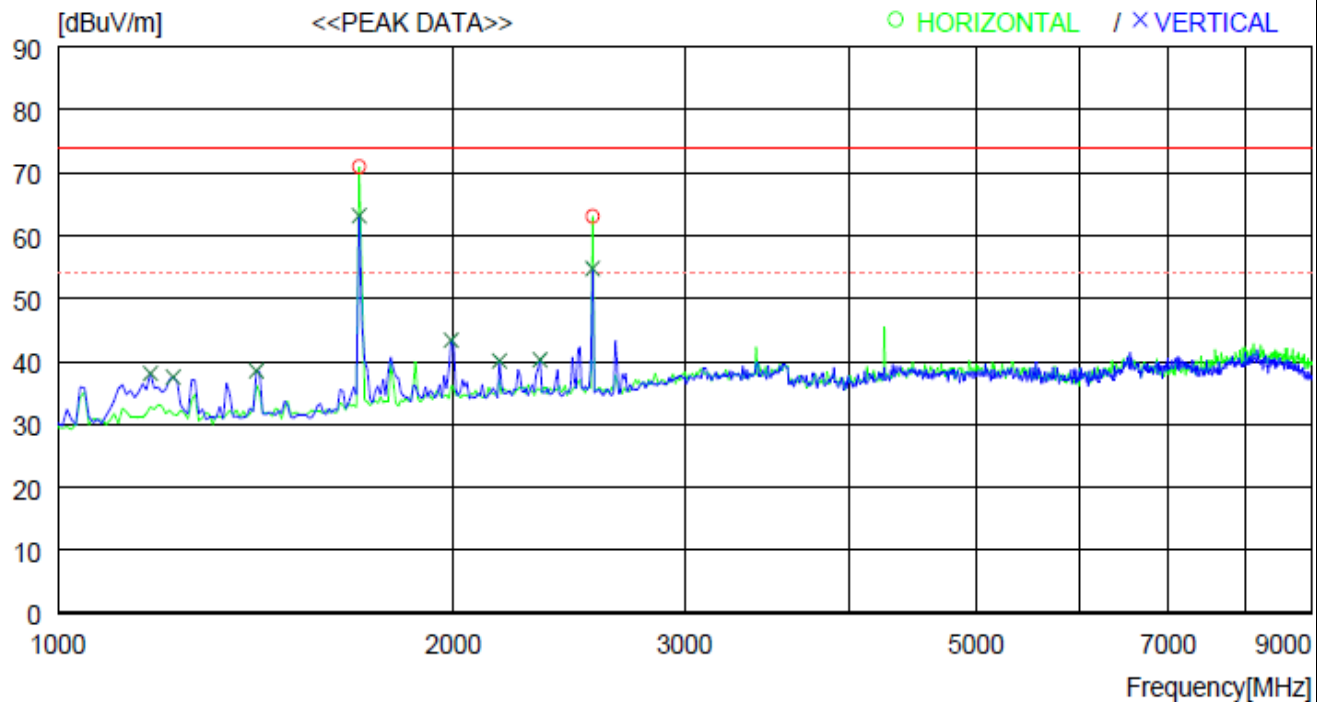


No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	851.580	83.5	22.1	10.8	32.5	83.9	46.4	-37.5	300	139
----- Vertical -----										
2	35.820	39.8	11.2	6.7	32.7	25.0	39.1	14.1	100	0
3	60.070	40.8	12.0	7.0	32.6	27.2	39.1	11.9	100	277
4	63.950	37.6	10.7	7.0	32.6	22.7	39.1	16.4	200	358
5	110.510	44.0	10.3	7.4	32.6	29.1	43.5	14.4	100	151
6	113.420	42.8	9.9	7.4	32.6	27.5	43.5	16	100	0
7	118.270	42.5	9.1	7.5	32.6	26.5	43.5	17	100	0
8	851.580	74.9	22.1	10.8	32.5	75.3	46.4	-28.9	200	359

Pre-Scan Test Data

Test Mode

Mode #4



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1696.000	77.2	26.6	6.8	39.6	71.0	74.0	3	100	2
2	2552.000	65.2	28.9	8.5	39.5	63.1	74.0	10.9	100	2
----- Vertical -----										
3	1176.000	47.6	24.7	5.6	39.8	38.1	74.0	35.9	100	0
4	1224.000	46.7	24.8	5.8	39.8	37.5	74.0	36.5	100	0
5	1416.000	46.7	25.3	6.3	39.8	38.5	74.0	35.5	100	0
6	1696.000	69.4	26.6	6.8	39.6	63.2	74.0	10.8	100	195
7	1992.000	47.1	28.2	7.5	39.4	43.4	74.0	30.6	100	3
8	2168.000	43.3	28.4	7.8	39.4	40.1	74.0	33.9	100	354
9	2328.000	43.2	28.5	8.1	39.5	40.3	74.0	33.7	100	0
10	2552.000	56.9	28.9	8.5	39.5	54.8	74.0	19.2	100	195

Substitution Measurement Test Data								
Test Mode					Mode #4			
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
1696.00	H	77.20	-33.68	2.01	8.46	-27.23	-13.0	14.23
2552.00	H	65.20	-43.18	2.51	9.87	-35.82		22.82

Note

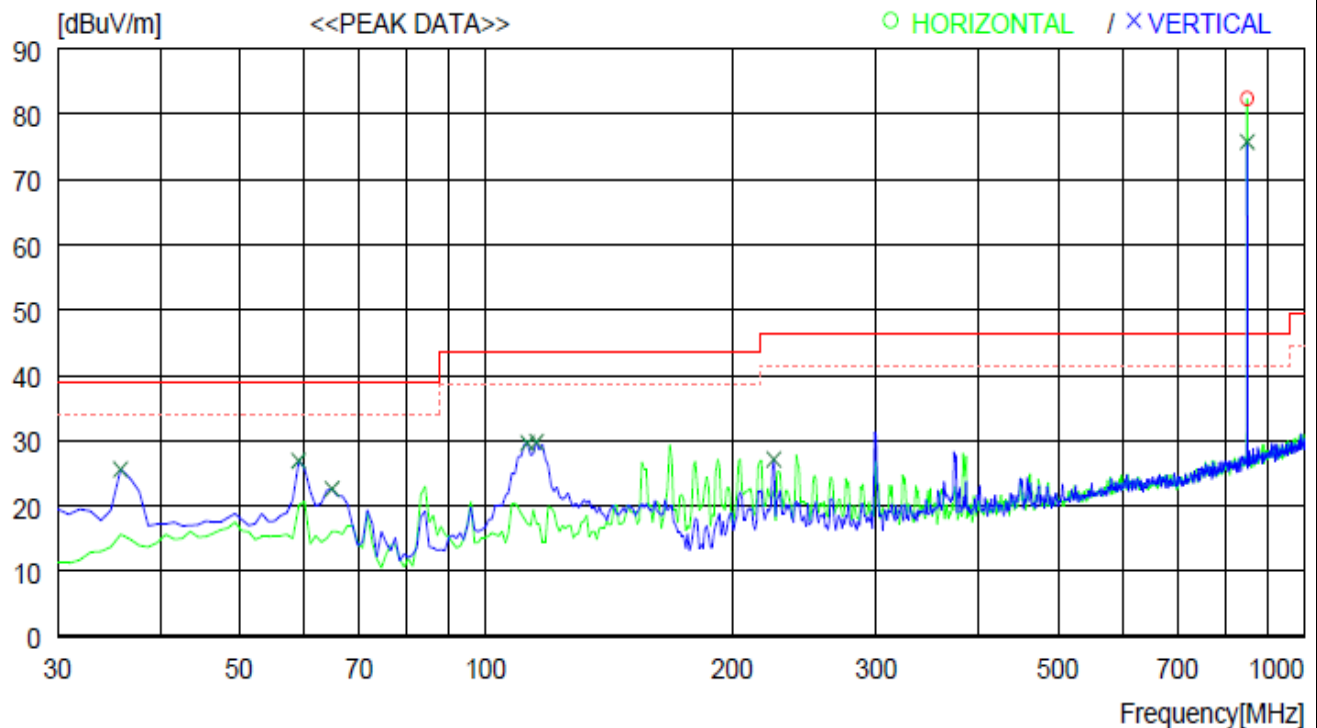
1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall is used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Pre-Scan Test Data

Test Mode

Mode #4



No.	FREQ [MHz]	READING [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	851.580	82.0	22.1	10.8	32.5	82.4	46.4	-36	300	135
----- Vertical -----										
2	35.820	40.4	11.2	6.7	32.7	25.6	39.1	13.5	100	271
3	59.100	40.2	12.3	7.0	32.6	26.9	39.1	12.2	100	0
4	64.920	37.8	10.4	7.0	32.6	22.6	39.1	16.5	200	321
5	112.450	44.8	10.0	7.4	32.6	29.6	43.5	13.9	100	0
6	115.360	45.4	9.6	7.4	32.6	29.8	43.5	13.7	100	139
7	224.970	39.5	12.1	8.1	32.6	27.1	46.4	19.3	100	0
8	851.580	75.4	22.1	10.8	32.5	75.8	46.4	-29.4	200	359

Pre-Scan Test Data

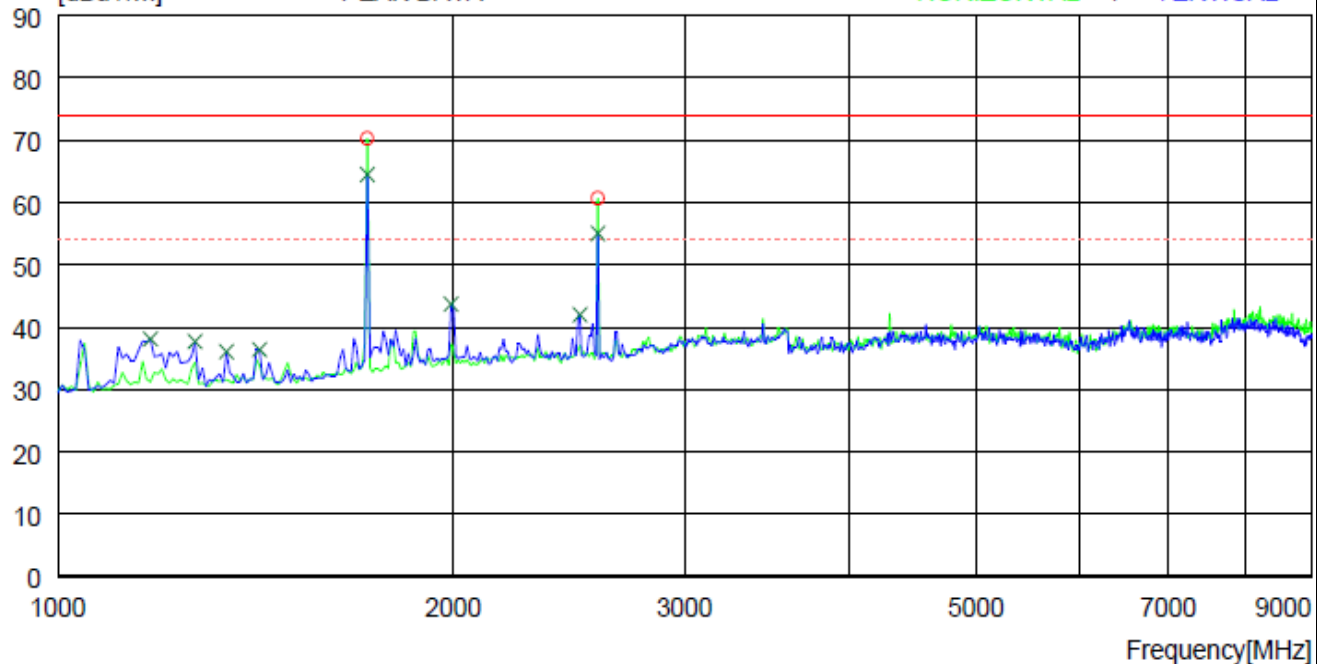
Test Mode

Mode #5

[dBuV/m]

<<PEAK DATA>>

○ HORIZONTAL / × VERTICAL



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1720.000	76.3	26.7	6.9	39.6	70.3	74.0	3.7	100	7
2	2576.000	62.6	29.0	8.6	39.5	60.7	74.0	13.3	100	359
----- Vertical -----										
3	1176.000	47.6	24.7	5.6	39.8	38.1	74.0	35.9	100	0
4	1272.000	46.7	24.9	5.9	39.8	37.7	74.0	36.3	100	285
5	1344.000	44.7	25.1	6.1	39.8	36.1	74.0	37.9	100	262
6	1424.000	44.6	25.3	6.3	39.8	36.4	74.0	37.6	100	0
7	1720.000	70.5	26.7	6.9	39.6	64.5	74.0	9.5	100	0
8	1992.000	47.4	28.2	7.5	39.4	43.7	74.0	30.3	100	0
9	2496.000	44.4	28.7	8.4	39.5	42.0	74.0	32	100	146
10	2576.000	57.0	29.0	8.6	39.5	55.1	74.0	18.9	100	0

Substitution Measurement Test Data								
Test Mode					Mode #5			
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
1720.00	H	76.30	-34.40	2.02	8.44	-27.98	-13.0	14.98
2576.00	H	62.60	-45.87	2.52	9.86	-38.53		25.53

Note

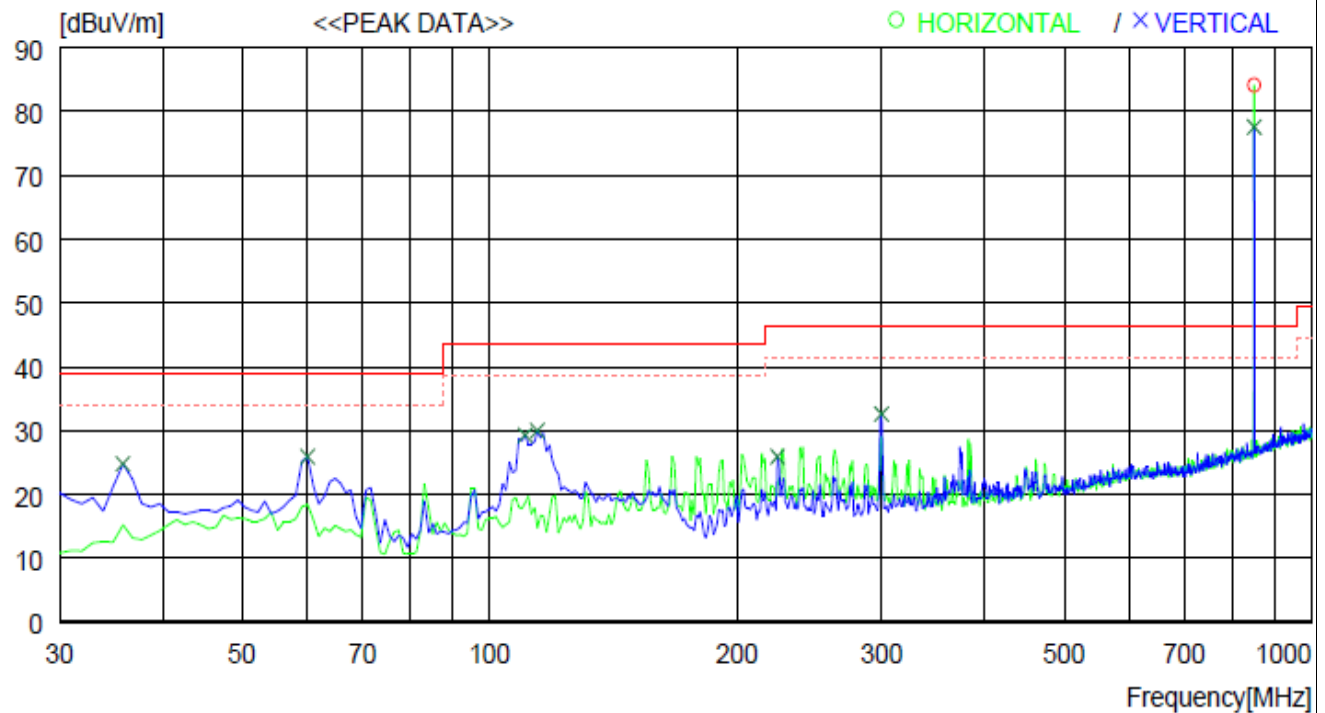
1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall is used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Pre-Scan Test Data

Test Mode

Mode #6

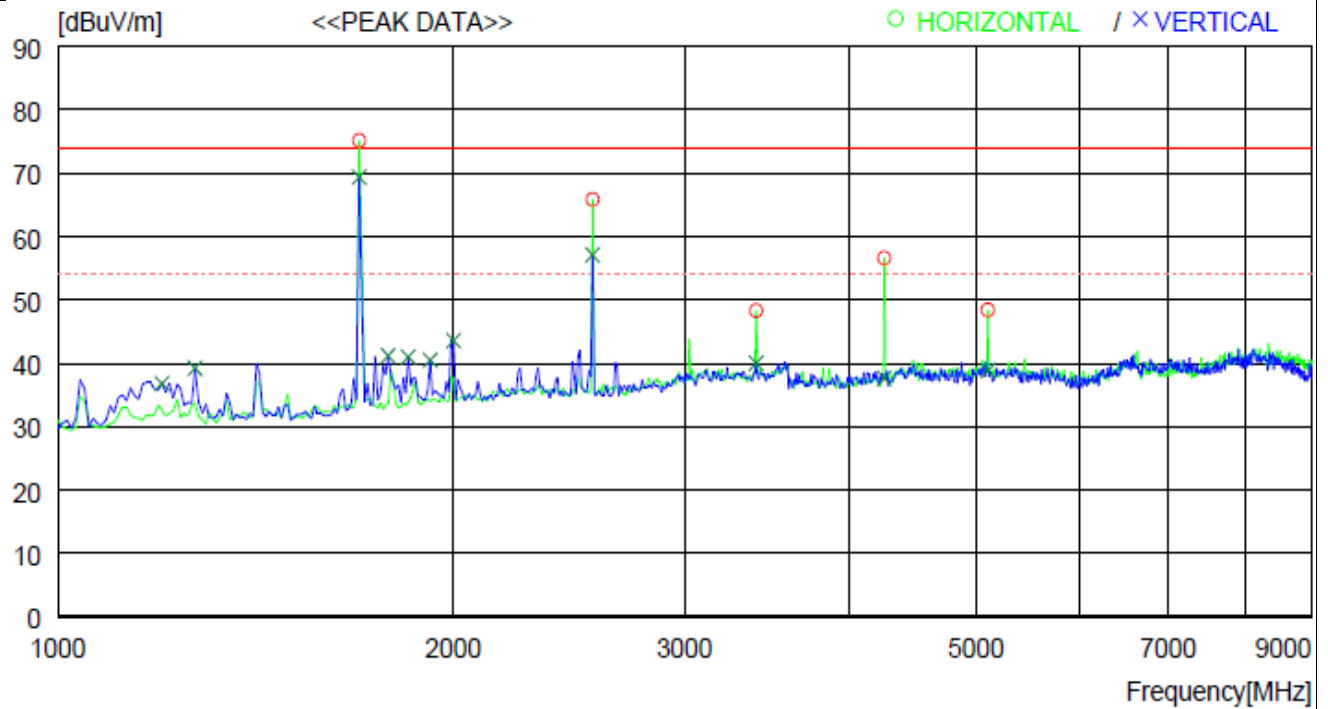


No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	851.580	83.8	22.1	10.8	32.5	84.2	46.4	-37.8	300	359
----- Vertical -----										
2	35.820	39.6	11.2	6.7	32.7	24.8	39.1	14.3	100	353
3	60.070	39.5	12.0	7.0	32.6	25.9	39.1	13.2	100	272
4	110.510	44.2	10.3	7.4	32.6	29.3	43.5	14.2	200	20
5	114.390	45.5	9.7	7.4	32.6	30.0	43.5	13.5	100	0
6	224.000	38.3	12.1	8.1	32.6	25.9	46.4	20.5	100	0
7	299.660	43.2	13.4	8.6	32.6	32.6	46.4	13.8	100	178
8	851.580	77.2	22.1	10.8	32.5	77.6	46.4	-31.2	200	128

Pre-Scan Test Data

Test Mode

Mode #6



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1696.000	81.4	26.6	6.8	39.6	75.2	74.0	-1.2	100	359
2	2552.000	68.0	28.9	8.5	39.5	65.9	74.0	8.1	100	359
3	3400.000	46.7	31.3	10.0	39.7	48.3	74.0	25.7	100	359
4	4256.000	52.5	32.9	11.1	39.9	56.6	74.0	17.4	100	7
5	5104.000	42.3	33.9	12.1	39.9	48.4	74.0	25.6	100	359
----- Vertical -----										
6	1200.000	46.2	24.7	5.7	39.8	36.8	74.0	37.2	100	0
7	1272.000	48.2	24.9	5.9	39.8	39.2	74.0	34.8	100	295
8	1696.000	75.6	26.6	6.8	39.6	69.4	74.0	4.6	100	202
9	1784.000	46.8	27.0	7.0	39.6	41.2	74.0	32.8	100	256
10	1848.000	46.0	27.4	7.1	39.5	41.0	74.0	33	100	0
11	1920.000	44.9	27.8	7.3	39.5	40.5	74.0	33.5	100	0
12	2000.000	47.3	28.2	7.5	39.4	43.6	74.0	30.4	100	0
13	2552.000	59.2	28.9	8.5	39.5	57.1	74.0	16.9	100	0
14	3400.000	38.4	31.3	10.0	39.7	40.0	74.0	34	100	5
15	4256.000	33.5	32.9	11.1	39.9	37.6	74.0	36.4	100	0
16	5104.000	32.8	33.9	12.1	39.9	38.9	74.0	35.1	100	0

Substitution Measurement Test Data								
Test Mode					Mode #6			
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
1696.00	H	81.40	-29.46	2.01	8.46	-23.01	-13.0	10.01
2552.00	H	68.00	-40.26	2.51	9.87	-32.90		19.9
3400.00	H	46.70	-62.62	2.89	10.06	-55.45		42.45
4256.00	H	52.50	-52.29	3.25	10.85	-44.69		31.69
5104.00	H	42.30	-64.35	3.64	10.96	-57.03		44.03

Note

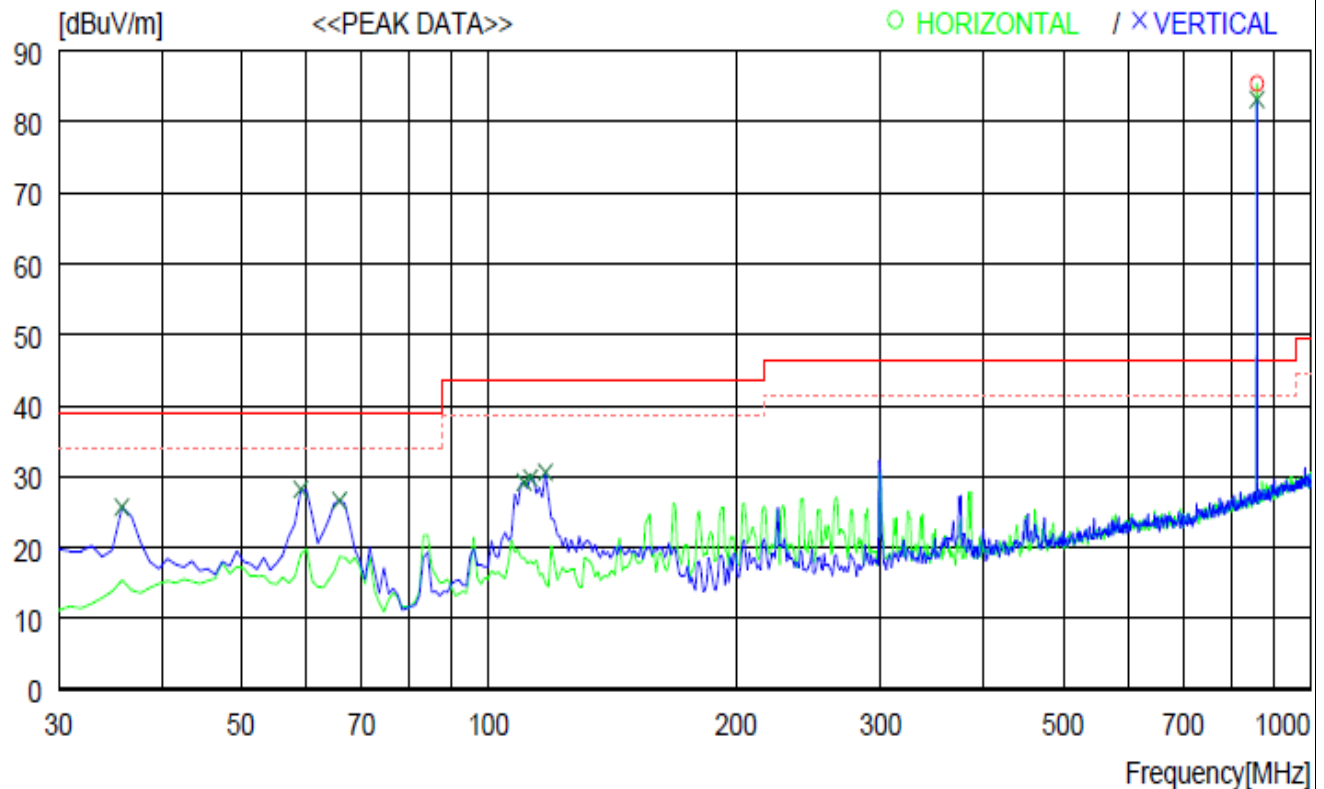
1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall is used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Pre-Scan Test Data

Test Mode

Mode #7

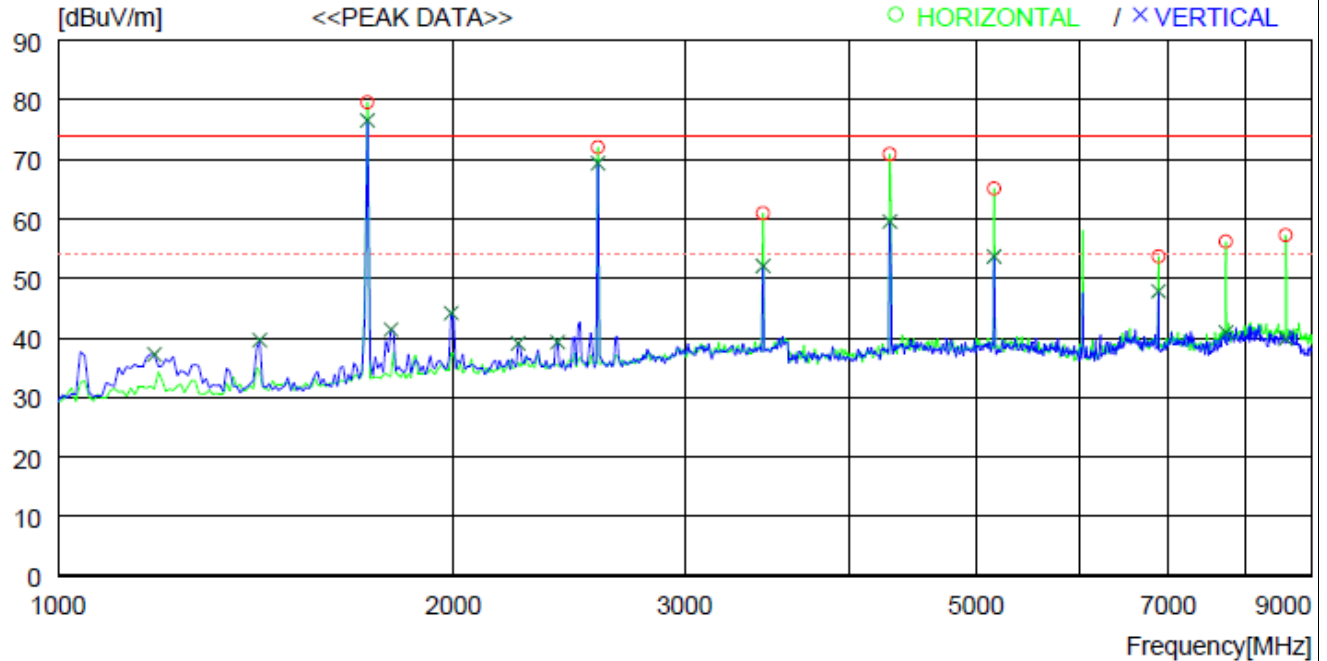


No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	860.310	84.8	22.2	10.8	32.4	85.4	46.4	-39	300	121
----- Vertical -----										
2	35.820	40.5	11.2	6.7	32.7	25.7	39.1	13.4	200	291
3	59.100	41.5	12.3	7.0	32.6	28.2	39.1	10.9	100	0
4	65.890	42.1	10.1	7.0	32.6	26.6	39.1	12.5	200	359
5	110.510	44.1	10.3	7.4	32.6	29.2	43.5	14.3	100	162
6	112.450	45.0	10.0	7.4	32.6	29.8	43.5	13.7	100	138
7	117.300	46.4	9.3	7.5	32.6	30.6	43.5	12.9	200	7
8	860.310	82.6	22.2	10.8	32.4	83.2	46.4	-36.8	200	322

Pre-Scan Test Data

Test Mode

Mode #7



No.	FREQ [MHz]	READING [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1720.000	85.6	26.7	6.9	39.6	79.6	74.0	-5.6	100	6
2	2576.000	74.0	29.0	8.6	39.5	72.1	74.0	1.9	100	6
3	3440.000	59.3	31.4	10.0	39.7	61.0	74.0	13	100	2
4	4296.000	66.6	32.9	11.3	39.9	70.9	74.0	3.1	100	2
5	5160.000	59.0	33.9	12.1	39.9	65.1	74.0	8.9	100	2
6	6880.000	44.2	34.9	14.1	39.5	53.7	74.0	20.3	100	359
7	7744.000	45.6	35.4	14.7	39.5	56.2	74.0	17.8	100	6
8	8600.000	45.7	36.0	15.1	39.5	57.3	74.0	16.7	100	6
----- Vertical -----										
9	1184.000	46.6	24.7	5.7	39.8	37.2	74.0	36.8	100	211
10	1424.000	47.8	25.3	6.3	39.8	39.6	74.0	34.4	100	325
11	1720.000	82.6	26.7	6.9	39.6	76.6	74.0	-2.6	100	0
12	1792.000	46.8	27.1	7.0	39.5	41.4	74.0	32.6	100	0
13	1992.000	47.9	28.2	7.5	39.4	44.2	74.0	29.8	100	0
14	2240.000	42.2	28.5	7.9	39.5	39.1	74.0	34.9	100	286
15	2400.000	41.9	28.6	8.3	39.5	39.3	74.0	34.7	100	54
16	2576.000	71.3	29.0	8.6	39.5	69.4	74.0	4.6	100	0
17	3440.000	50.4	31.4	10.0	39.7	52.1	74.0	21.9	100	194
18	4296.000	55.3	32.9	11.3	39.9	59.6	74.0	14.4	100	194
19	5160.000	47.6	33.9	12.1	39.9	53.7	74.0	20.3	100	0

Substitution Measurement Test Data								
Test Mode				Mode #7				
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
1720.00	H	85.60	-25.15	2.02	8.44	-18.73	-13.0	5.73
2576.00	H	74.00	-34.16	2.52	9.86	-26.82		13.82
3440.00	H	59.30	-46.63	2.91	10.11	-39.43		26.43
4296.00	H	66.60	-37.81	3.26	10.93	-30.14		17.14
5160.00	H	59.00	-43.15	3.64	10.98	-35.81		22.81
6880.00	H	44.20	-58.77	4.21	11.56	-51.42		38.42
8600.00	H	45.70	-51.58	5.07	12.16	-44.49		31.49

Note

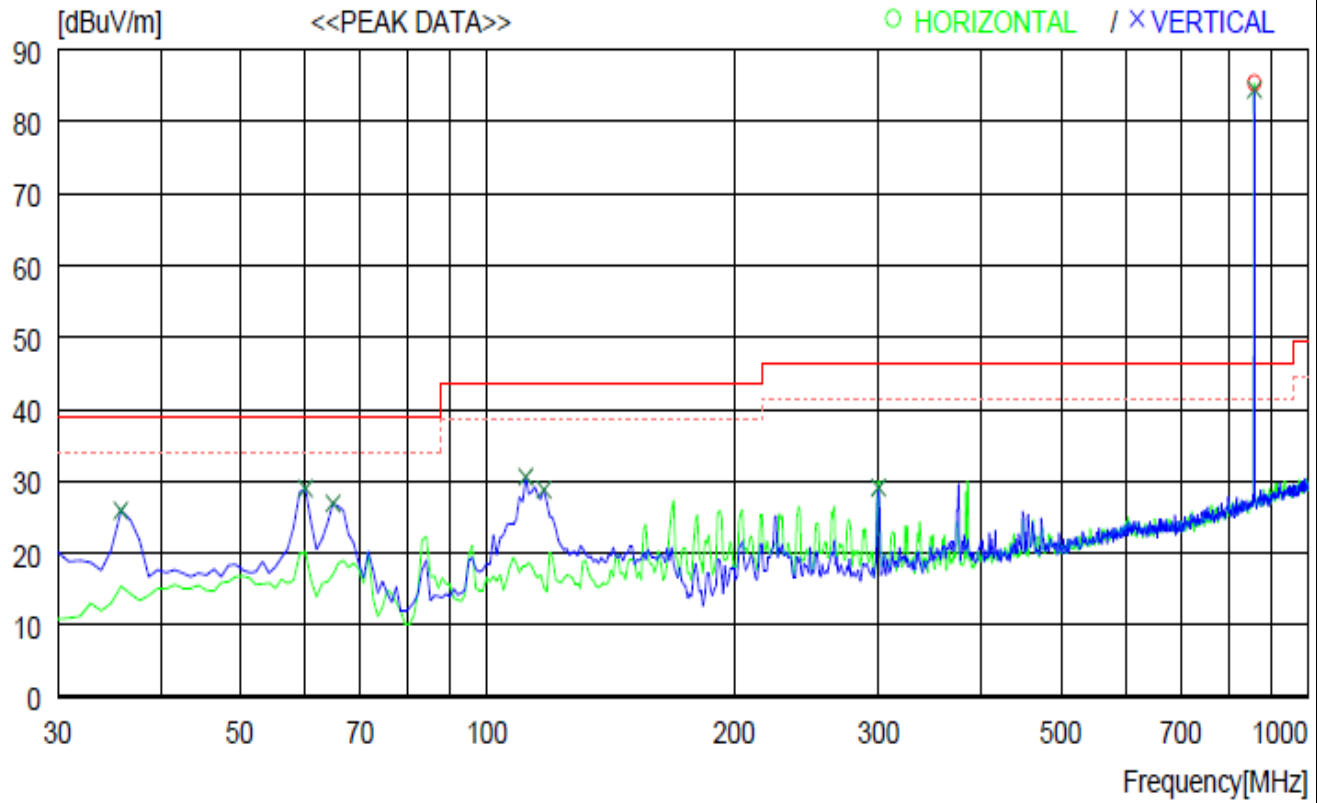
1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall be used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Pre-Scan Test Data

Test Mode

Mode #8

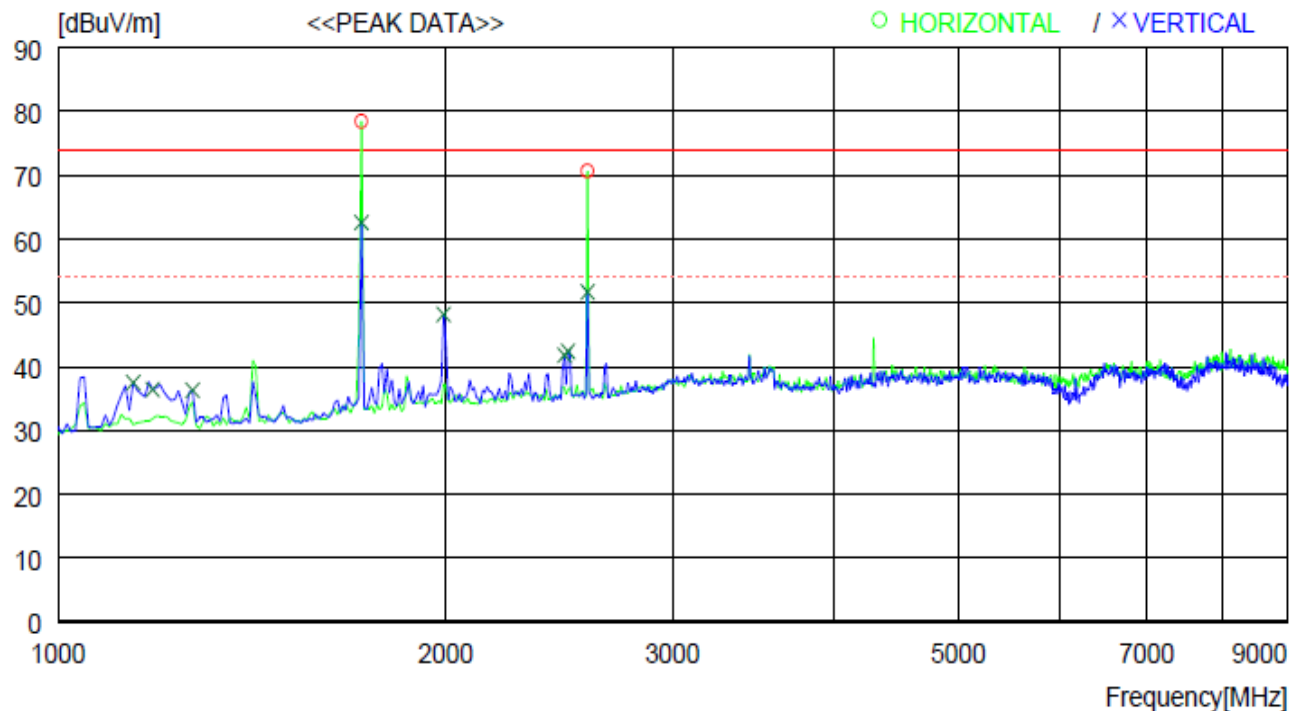


No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	860.310	84.8	22.2	10.8	32.4	85.4	46.4	-39	300	359
----- Vertical -----										
2	35.820	40.7	11.2	6.7	32.7	25.9	39.1	13.2	200	359
3	60.070	42.6	12.0	7.0	32.6	29.0	39.1	10.1	100	10
4	64.920	42.1	10.4	7.0	32.6	26.9	39.1	12.2	100	326
5	111.480	45.6	10.2	7.4	32.6	30.6	43.5	12.9	100	0
6	117.300	44.6	9.3	7.5	32.6	28.8	43.5	14.7	200	352
7	299.660	39.7	13.4	8.6	32.6	29.1	46.4	17.3	100	185
8	860.310	83.9	22.2	10.8	32.4	84.5	46.4	-38.1	200	331

Pre-Scan Test Data

Test Mode

Mode #8



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1720.000	84.5	26.7	6.9	39.6	78.5	74.0	-4.5	100	359
2	2576.000	72.6	29.0	8.6	39.5	70.7	74.0	3.3	100	3
----- Vertical -----										
3	1144.000	47.1	24.6	5.6	39.8	37.5	74.0	36.5	100	0
4	1184.000	45.8	24.7	5.7	39.8	36.4	74.0	37.6	100	0
5	1272.000	45.3	24.9	5.9	39.8	36.3	74.0	37.7	100	286
6	1720.000	68.6	26.7	6.9	39.6	62.6	74.0	11.4	100	194
7	1992.000	51.9	28.2	7.5	39.4	48.2	74.0	25.8	100	0
8	2472.000	44.2	28.7	8.4	39.5	41.8	74.0	32.2	100	53
9	2488.000	44.8	28.7	8.4	39.5	42.4	74.0	31.6	100	0
10	2576.000	53.6	29.0	8.6	39.5	51.7	74.0	22.3	100	0

Substitution Measurement Test Data								
Test Mode					Mode #8			
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
1720.00	H	84.50	-26.23	2.02	8.44	-19.81	-13.0	6.81
2576.00	H	72.60	-35.57	2.52	9.86	-28.23		15.23

Note

1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall is used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Pre-Scan Test Data

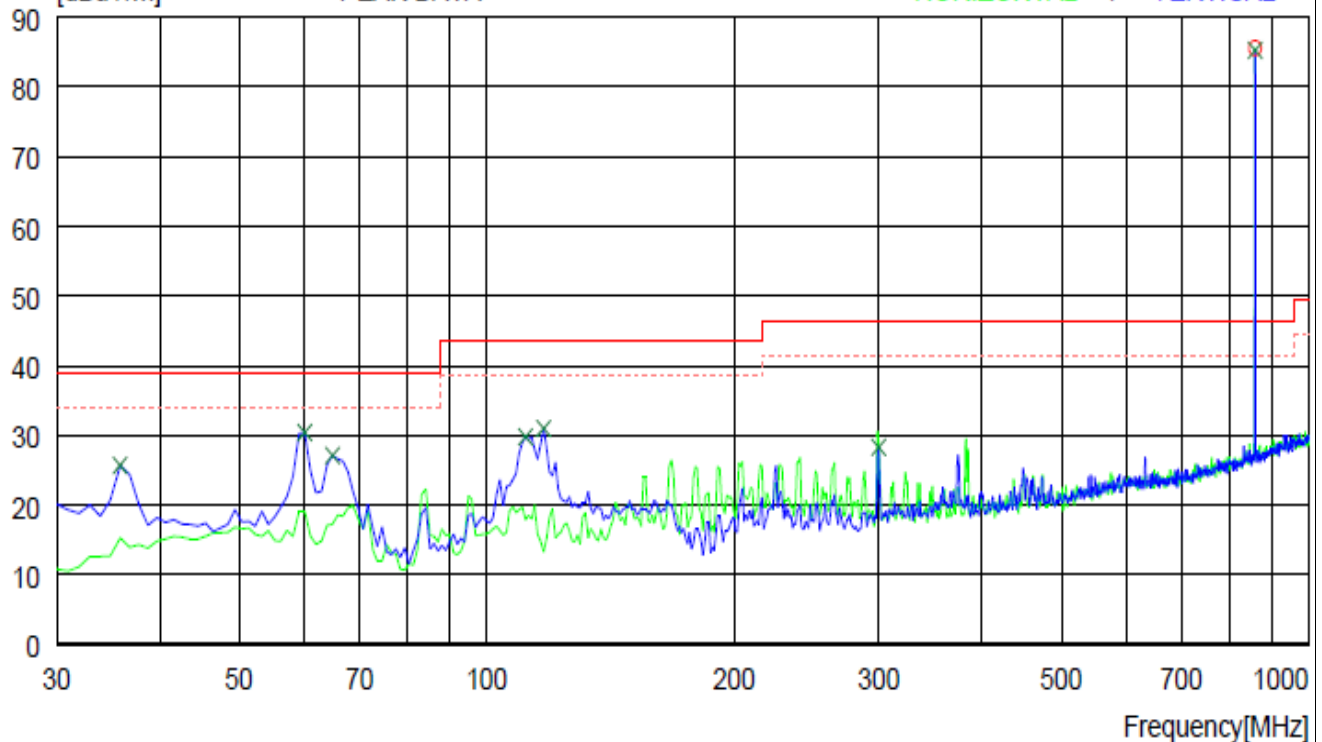
Test Mode

Mode #9

[dBuV/m]

<<PEAK DATA>>

○ HORIZONTAL / × VERTICAL

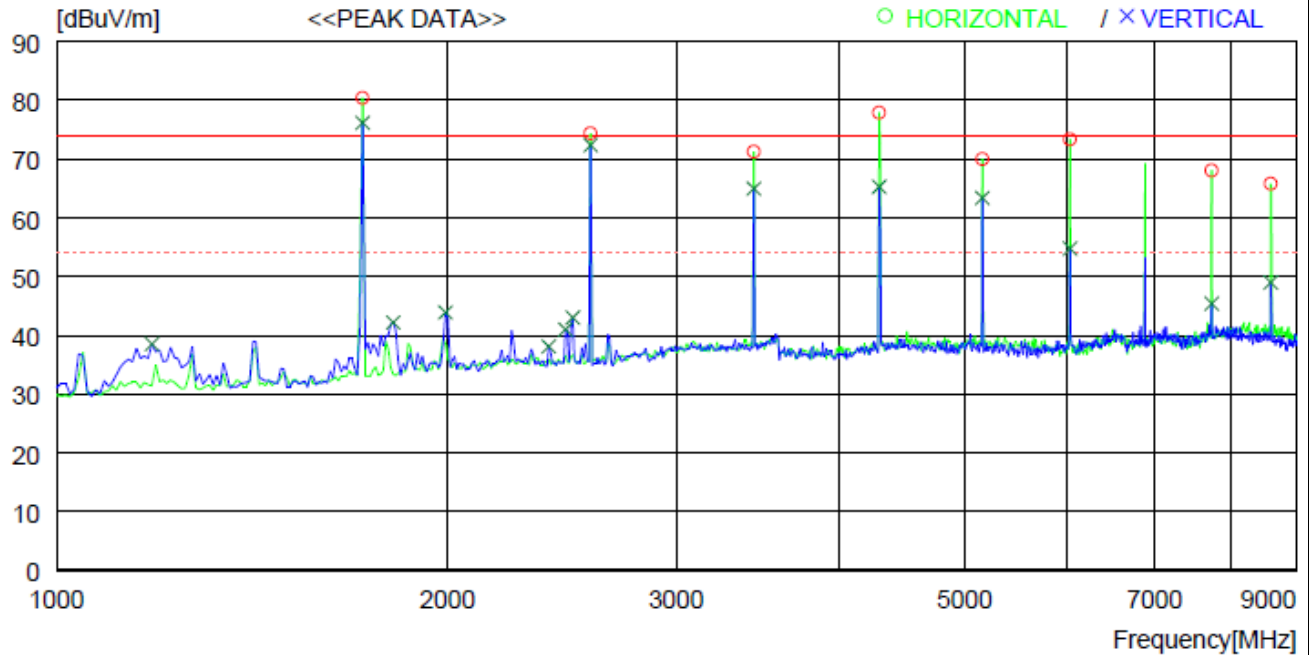


No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	860.310	85.0	22.2	10.8	32.4	85.6	46.4	-39.2	300	128
----- Vertical -----										
2	35.820	40.5	11.2	6.7	32.7	25.7	39.1	13.4	200	255
3	60.070	44.0	12.0	7.0	32.6	30.4	39.1	8.7	100	2
4	64.920	42.3	10.4	7.0	32.6	27.1	39.1	12	200	358
5	111.480	44.8	10.2	7.4	32.6	29.8	43.5	13.7	100	0
6	117.300	46.8	9.3	7.5	32.6	31.0	43.5	12.5	100	310
7	299.660	38.9	13.4	8.6	32.6	28.3	46.4	18.1	100	38
8	860.310	84.7	22.2	10.8	32.4	85.3	46.4	-38.9	200	326

Pre-Scan Test Data

Test Mode

Mode #9



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1720.000	86.4	26.7	6.9	39.6	80.4	74.0	-6.4	100	7
2	2576.000	76.3	29.0	8.6	39.5	74.4	74.0	-4.4	100	7
3	3440.000	69.6	31.4	10.0	39.7	71.3	74.0	2.7	100	3
4	4296.000	73.6	32.9	11.3	39.9	77.9	74.0	-3.9	100	3
5	5160.000	63.9	33.9	12.1	39.9	70.0	74.0	4.0	100	7
6	6024.000	65.9	34.2	12.9	39.6	73.4	74.0	.6	100	3
7	7744.000	57.5	35.4	14.7	39.5	68.1	74.0	5.9	100	359
8	8600.000	54.2	36.0	15.1	39.5	65.8	74.0	8.2	100	359
----- Vertical -----										
9	1184.000	47.9	24.7	5.7	39.8	38.5	74.0	35.5	100	194
10	1720.000	82.2	26.7	6.9	39.6	76.2	74.0	-2.2	100	194
11	1816.000	47.4	27.2	7.1	39.5	42.2	74.0	31.8	100	325
12	1992.000	47.6	28.2	7.5	39.4	43.9	74.0	30.1	100	357
13	2392.000	40.7	28.6	8.3	39.5	38.1	74.0	35.9	100	263
14	2464.000	43.4	28.7	8.4	39.5	41.0	74.0	33.0	100	0
15	2496.000	45.4	28.7	8.4	39.5	43.0	74.0	31.0	100	0
16	2576.000	74.3	29.0	8.6	39.5	72.4	74.0	1.6	100	0
17	3440.000	63.3	31.4	10.0	39.7	65.0	74.0	9.0	100	0
18	4296.000	61.0	32.9	11.3	39.9	65.3	74.0	8.7	100	0
19	5160.000	57.3	33.9	12.1	39.9	63.4	74.0	10.6	100	202

Substitution Measurement Test Data								
Test Mode					Mode #9			
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
1720.00	H	86.40	-24.36	2.02	8.44	-17.94	-13.0	4.94
2576.00	H	76.30	-31.84	2.52	9.86	-24.50		11.5
3440.00	H	69.60	-35.96	2.91	10.11	-28.76		15.76
4296.00	H	73.60	-30.78	3.26	10.93	-23.11		10.11
5160.00	H	63.90	-38.02	3.64	10.98	-30.68		17.68
6024.00	H	65.90	-34.60	3.92	11.46	-27.06		14.06
7744.00	H	57.50	-39.99	4.67	11.64	-33.02		20.02
8600.00	H	54.20	-42.78	5.07	12.16	-35.69		22.69

Note

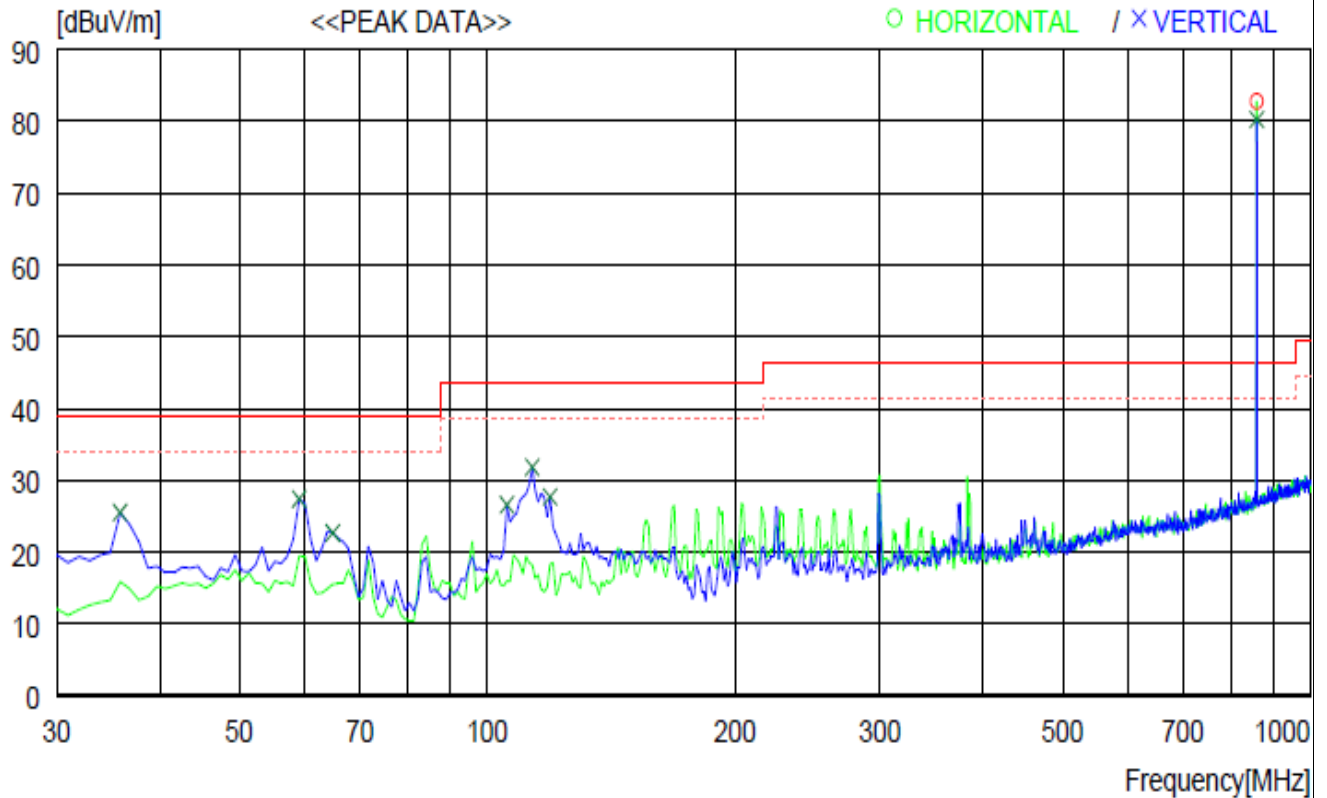
1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall be used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Pre-Scan Test Data

Test Mode

Mode #10

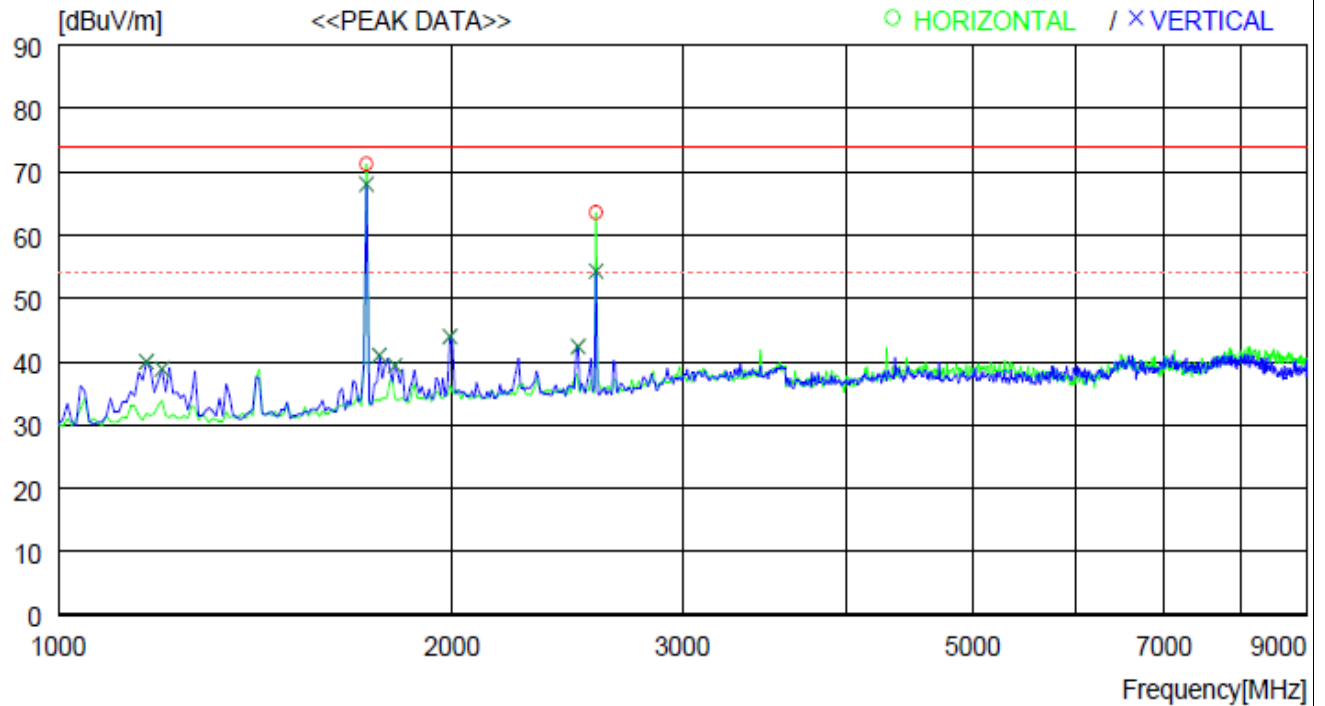


No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	860.310	82.2	22.2	10.8	32.4	82.8	46.4	-36.4	300	136
----- Vertical -----										
2	35.820	40.3	11.2	6.7	32.7	25.5	39.1	13.6	100	3
3	59.100	40.7	12.3	7.0	32.6	27.4	39.1	11.7	100	0
4	64.920	37.9	10.4	7.0	32.6	22.7	39.1	16.4	100	0
5	105.660	40.8	11.1	7.3	32.6	26.6	43.5	16.9	100	0
6	113.420	47.1	9.9	7.4	32.6	31.8	43.5	11.7	100	46
7	119.240	43.8	9.0	7.5	32.6	27.7	43.5	15.8	100	0
8	860.310	79.7	22.2	10.8	32.4	80.3	46.4	-33.9	200	359

Pre-Scan Test Data

Test Mode

Mode #10



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1720.000	77.3	26.7	6.9	39.6	71.3	74.0	2.7	100	359
2	2576.000	65.5	29.0	8.6	39.5	63.6	74.0	10.4	100	6
----- Vertical -----										
3	1168.000	49.5	24.7	5.6	39.8	40.0	74.0	34	100	0
4	1200.000	48.3	24.7	5.7	39.8	38.9	74.0	35.1	100	199
5	1720.000	74.1	26.7	6.9	39.6	68.1	74.0	5.9	100	192
6	1760.000	46.8	26.9	6.9	39.6	41.0	74.0	33	100	0
7	1808.000	44.6	27.2	7.1	39.5	39.4	74.0	34.6	100	152
8	1992.000	47.7	28.2	7.5	39.4	44.0	74.0	30	100	1
9	2496.000	44.8	28.7	8.4	39.5	42.4	74.0	31.6	100	0
10	2576.000	56.2	29.0	8.6	39.5	54.3	74.0	19.7	100	0

Substitution Measurement Test Data								
Test Mode					Mode #10			
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
1720.00	H	77.30	-33.40	2.02	8.44	-26.98	-13.0	13.98
2576.00	H	65.50	-42.83	2.52	9.86	-35.49		22.49

Note

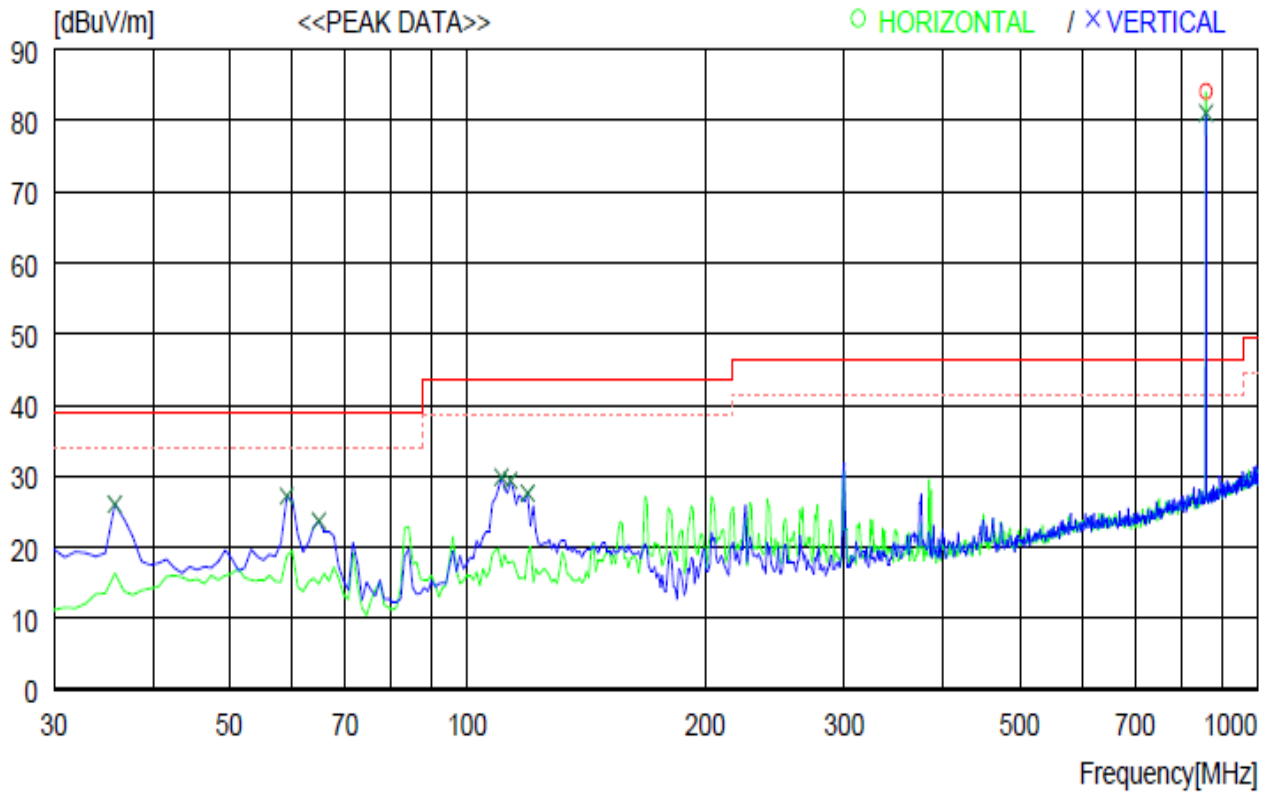
1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall is used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Pre-Scan Test Data

Test Mode

Mode #11

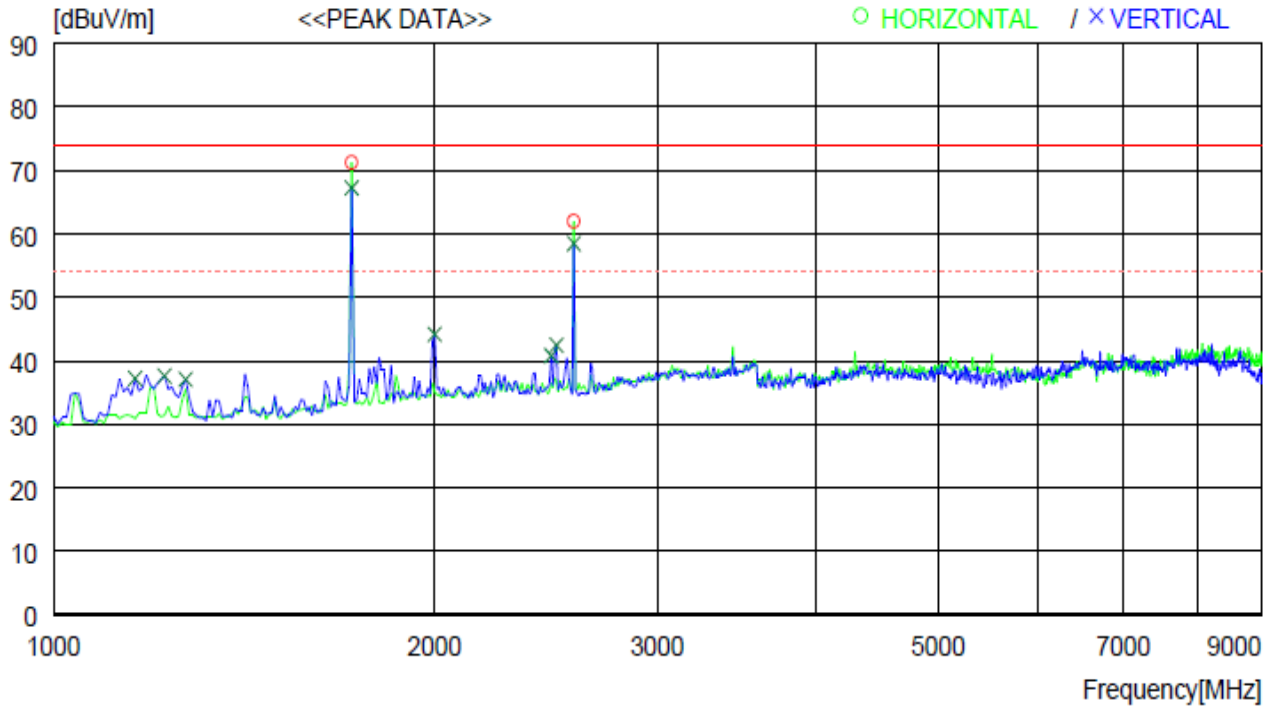


No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	860.310	83.5	22.2	10.8	32.4	84.1	46.4	-37.7	300	129
----- Vertical -----										
2	35.820	40.9	11.2	6.7	32.7	26.1	39.1	13	100	184
3	59.100	40.5	12.3	7.0	32.6	27.2	39.1	11.9	100	0
4	64.920	38.9	10.4	7.0	32.6	23.7	39.1	15.4	200	321
5	110.510	44.8	10.3	7.4	32.6	29.9	43.5	13.6	100	15
6	113.420	44.7	9.9	7.4	32.6	29.4	43.5	14.1	100	0
7	119.240	43.7	9.0	7.5	32.6	27.6	43.5	15.9	200	359
8	860.310	80.5	22.2	10.8	32.4	81.1	46.4	-34.7	200	359

Pre-Scan Test Data

Test Mode

Mode #11



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1720.000	77.3	26.7	6.9	39.6	71.3	74.0	2.7	100	359
2	2576.000	63.9	29.0	8.6	39.5	62.0	74.0	12	100	13
----- Vertical -----										
3	1160.000	46.8	24.6	5.6	39.8	37.2	74.0	36.8	100	0
4	1224.000	46.8	24.8	5.8	39.8	37.6	74.0	36.4	100	0
5	1272.000	46.1	24.9	5.9	39.8	37.1	74.0	36.9	100	271
6	1720.000	73.3	26.7	6.9	39.6	67.3	74.0	6.7	100	0
7	2000.000	47.9	28.2	7.5	39.4	44.2	74.0	29.8	100	0
8	2472.000	43.2	28.7	8.4	39.5	40.8	74.0	33.2	100	255
9	2496.000	44.9	28.7	8.4	39.5	42.5	74.0	31.5	100	0
10	2576.000	60.4	29.0	8.6	39.5	58.5	74.0	15.5	100	0

Substitution Measurement Test Data								
Test Mode					Mode #11			
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
1720.00	H	77.30	-33.40	2.02	8.44	-26.98	-13.0	13.98
2576.00	H	63.90	-44.51	2.52	9.86	-37.17		24.17

Note

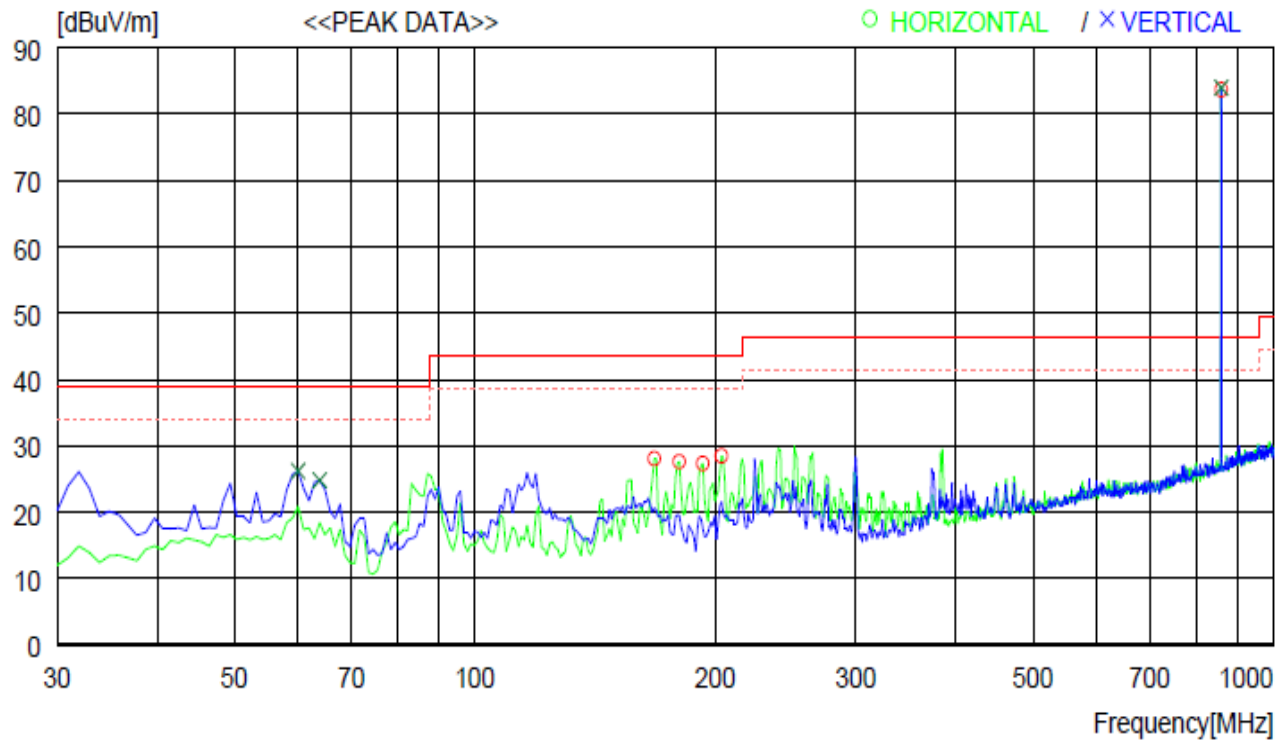
1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall is used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Pre-Scan Test Data

Test Mode

Mode #12

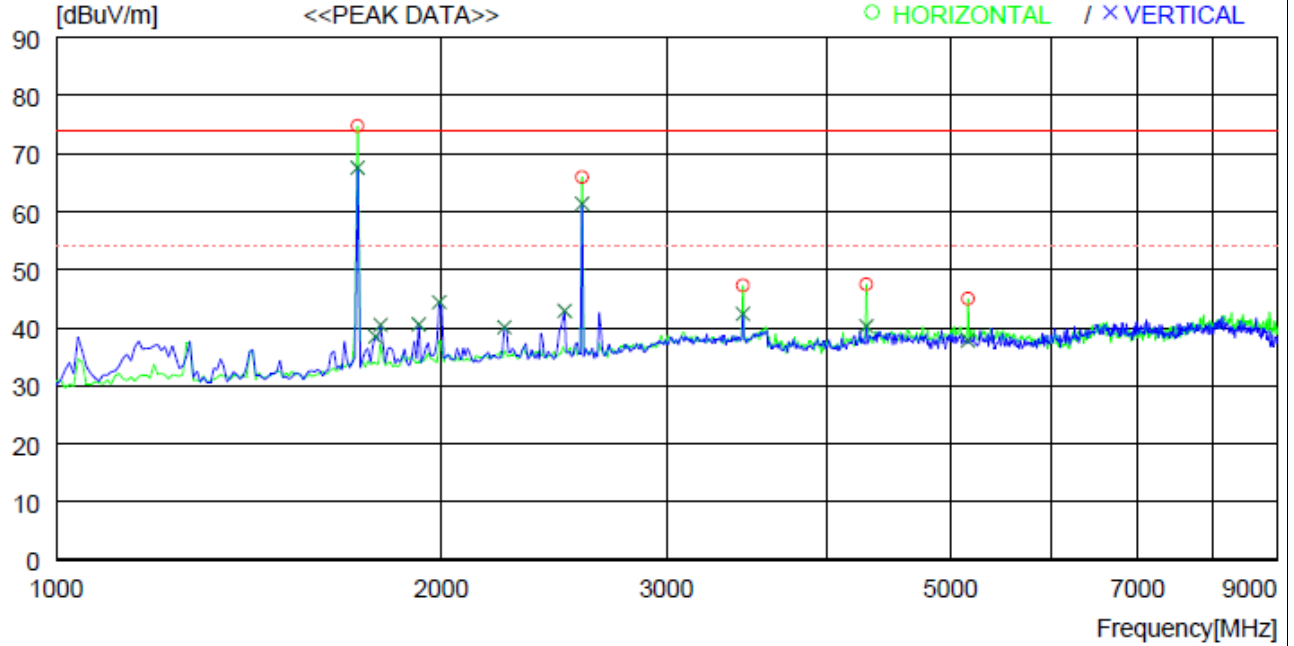


No.	FREQ [MHz]	READING [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	167.740	44.2	8.7	7.8	32.6	28.1	43.5	15.4	300	205
2	180.350	43.0	9.3	7.9	32.6	27.6	43.5	15.9	400	359
3	192.960	41.4	10.6	7.9	32.6	27.3	43.5	16.2	400	359
4	203.630	41.6	11.5	8.0	32.6	28.5	43.5	15	300	214
5	860.310	83.1	22.2	10.8	32.4	83.7	46.4	-37.3	300	136
----- Vertical -----										
6	60.070	39.8	12.0	7.0	32.6	26.2	39.1	12.9	100	359
7	63.950	39.7	10.7	7.0	32.6	24.8	39.1	14.3	200	0
8	860.310	83.4	22.2	10.8	32.4	84.0	46.4	-37.6	200	0

Pre-Scan Test Data

Test Mode

Mode #12



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1720.000	80.8	26.7	6.9	39.6	74.8	74.0	- .8	100	359
2	2576.000	67.9	29.0	8.6	39.5	66.0	74.0	8	100	359
3	3440.000	45.6	31.4	10.0	39.7	47.3	74.0	26.7	100	2
4	4296.000	43.2	32.9	11.3	39.9	47.5	74.0	26.5	100	359
5	5160.000	38.9	33.9	12.1	39.9	45.0	74.0	29	100	359
----- Vertical -----										
6	1720.000	73.6	26.7	6.9	39.6	67.6	74.0	6.4	100	0
7	1776.000	44.1	27.0	7.0	39.6	38.5	74.0	35.5	100	0
8	1792.000	45.9	27.1	7.0	39.5	40.5	74.0	33.5	100	303
9	1920.000	45.0	27.8	7.3	39.5	40.6	74.0	33.4	100	263
10	1992.000	48.1	28.2	7.5	39.4	44.4	74.0	29.6	100	3
11	2240.000	43.2	28.5	7.9	39.5	40.1	74.0	33.9	100	263
12	2496.000	45.3	28.7	8.4	39.5	42.9	74.0	31.1	100	0
13	2576.000	63.3	29.0	8.6	39.5	61.4	74.0	12.6	100	0
14	3440.000	40.7	31.4	10.0	39.7	42.4	74.0	31.6	100	201
15	4296.000	36.0	32.9	11.3	39.9	40.3	74.0	33.7	100	0
16	5160.000	31.7	33.9	12.1	39.9	37.8	74.0	36.2	100	0

Substitution Measurement Test Data								
Test Mode					Mode #12			
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
1720.00	H	80.80	-29.87	2.02	8.44	-23.45	-13.0	10.45
2576.00	H	67.90	-40.32	2.52	9.86	-32.98		19.98

Note

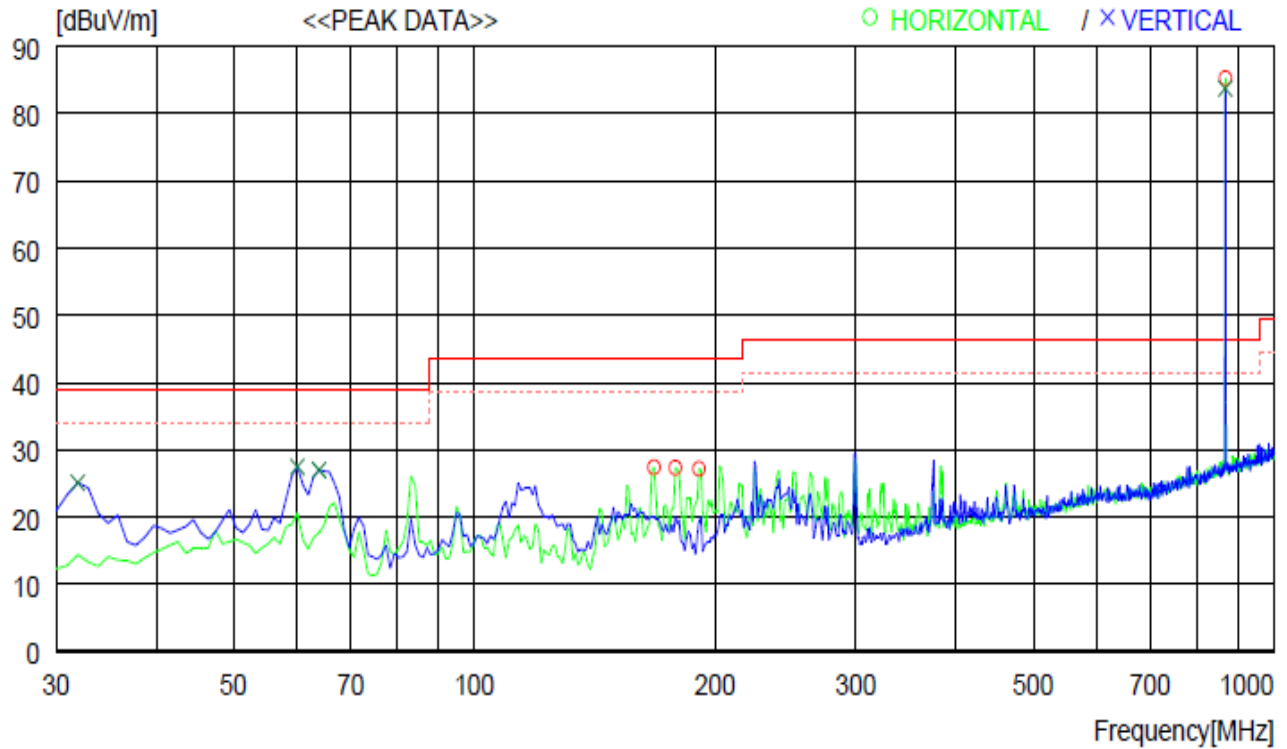
1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall is used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Pre-Scan Test Data

Test Mode

Mode #13

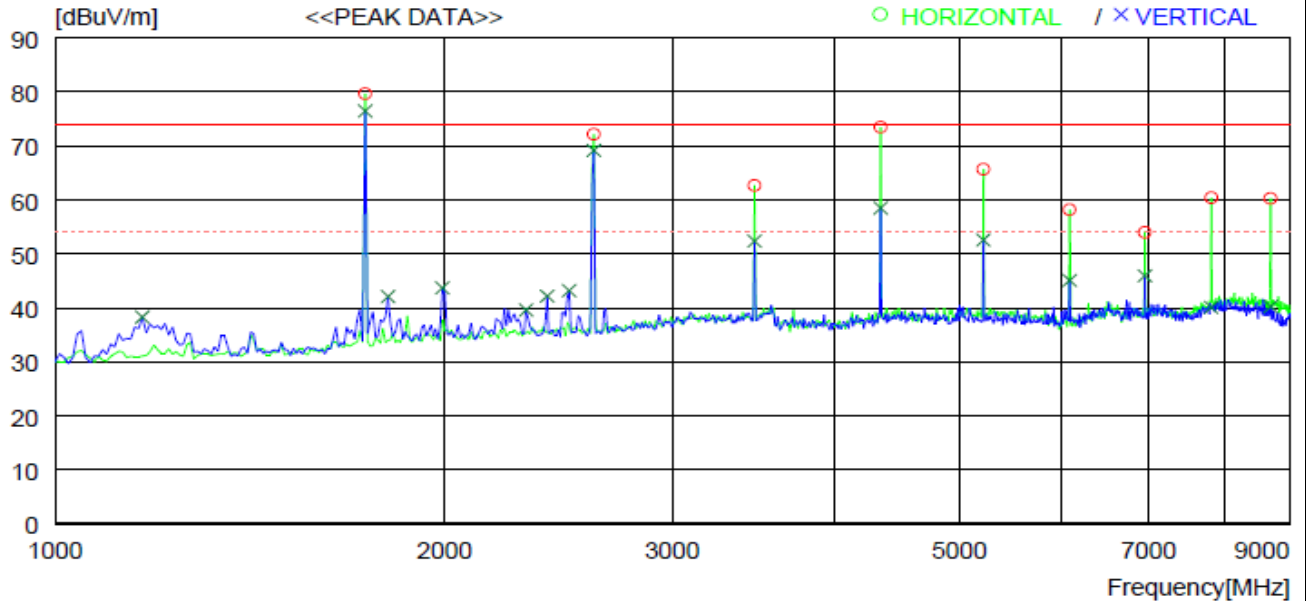


No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	167.740	43.5	8.7	7.8	32.6	27.4	43.5	16.1	300	200
2	178.410	42.8	9.2	7.9	32.6	27.3	43.5	16.2	400	223
3	191.020	41.5	10.4	7.9	32.6	27.2	43.5	16.3	400	223
4	869.040	84.5	22.4	10.8	32.4	85.3	46.4	-38.9	300	0
----- Vertical -----										
5	31.940	41.3	9.9	6.6	32.7	25.1	39.1	14	100	359
6	60.070	41.1	12.0	7.0	32.6	27.5	39.1	11.6	100	359
7	63.950	41.9	10.7	7.0	32.6	27.0	39.1	12.1	100	261
8	869.040	83.0	22.4	10.8	32.4	83.8	46.4	-37.4	200	0

Pre-Scan Test Data

Test Mode

Mode #13



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
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----- Horizontal -----

1	1736.000	85.6	26.8	6.9	39.6	79.7	74.0	-5.7	100	359
2	2608.000	74.0	29.1	8.6	39.5	72.2	74.0	1.8	100	359
3	3472.000	60.9	31.5	10.0	39.7	62.7	74.0	11.3	100	3
4	4344.000	69.0	33.0	11.4	39.9	73.5	74.0	.5	100	3
5	5216.000	59.5	33.9	12.2	39.9	65.7	74.0	8.3	100	3
6	6080.000	50.6	34.3	12.9	39.6	58.2	74.0	15.8	100	359
7	6952.000	44.4	35.0	14.2	39.6	54.0	74.0	20	100	8
8	7824.000	49.4	35.5	14.9	39.4	60.4	74.0	13.6	100	8
9	8696.000	48.7	36.1	15.1	39.6	60.3	74.0	13.7	100	359

----- Vertical -----

10	1168.000	47.8	24.7	5.6	39.8	38.3	74.0	35.7	100	200
11	1736.000	82.4	26.8	6.9	39.6	76.5	74.0	-2.5	100	0
12	1808.000	47.3	27.2	7.1	39.5	42.1	74.0	31.9	100	0
13	1992.000	47.4	28.2	7.5	39.4	43.7	74.0	30.3	100	0
14	2312.000	42.5	28.5	8.1	39.5	39.6	74.0	34.4	100	255
15	2400.000	44.8	28.6	8.3	39.5	42.2	74.0	31.8	100	0
16	2496.000	45.6	28.7	8.4	39.5	43.2	74.0	30.8	100	316
17	2608.000	71.0	29.1	8.6	39.5	69.2	74.0	4.8	100	200
18	3472.000	50.6	31.5	10.0	39.7	52.4	74.0	21.6	100	200
19	4344.000	54.0	33.0	11.4	39.9	58.5	74.0	15.5	100	200

No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
20	5216.000	46.4	33.9	12.2	39.9	52.6	74.0	21.4	100	0
21	6080.000	37.5	34.3	12.9	39.6	45.1	74.0	28.9	100	200
22	6952.000	36.4	35.0	14.2	39.6	46.0	74.0	28	100	0
23	7824.000	29.1	35.5	14.9	39.4	40.1	74.0	33.9	100	0
24	8696.000	28.7	36.1	15.1	39.6	40.3	74.0	33.7	100	0

Substitution Measurement Test Data								
Test Mode				Mode #13				
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
1736.00	H	85.60	-25.03	2.04	8.42	-18.65	-13.0	5.65
2608.00	H	74.00	-34.08	2.53	9.83	-26.78		13.78
3472.00	H	60.90	-44.79	2.93	10.15	-37.57		24.57
4344.00	H	69.00	-35.39	3.29	11.02	-27.66		14.66
5216.00	H	59.50	-42.52	3.65	10.99	-35.18		22.18
6080.00	H	50.60	-50.01	3.93	11.50	-42.44		29.44
6952.00	H	44.40	-58.08	4.24	11.52	-50.80		37.8
7824.00	H	49.40	-49.70	4.72	11.66	-42.76		29.76
8696.00	H	48.70	-49.70	4.90	12.18	-42.42		29.42

Note

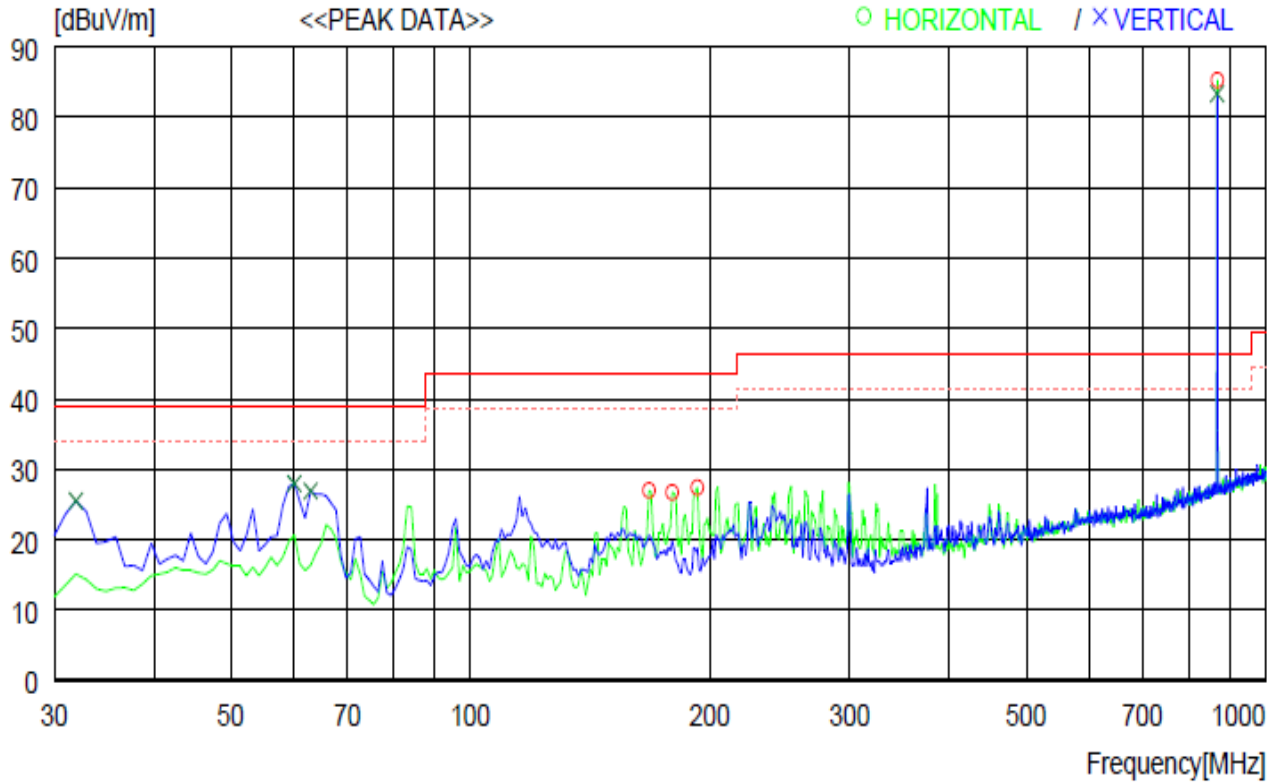
1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall is used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Pre-Scan Test Data

Test Mode

Mode #14

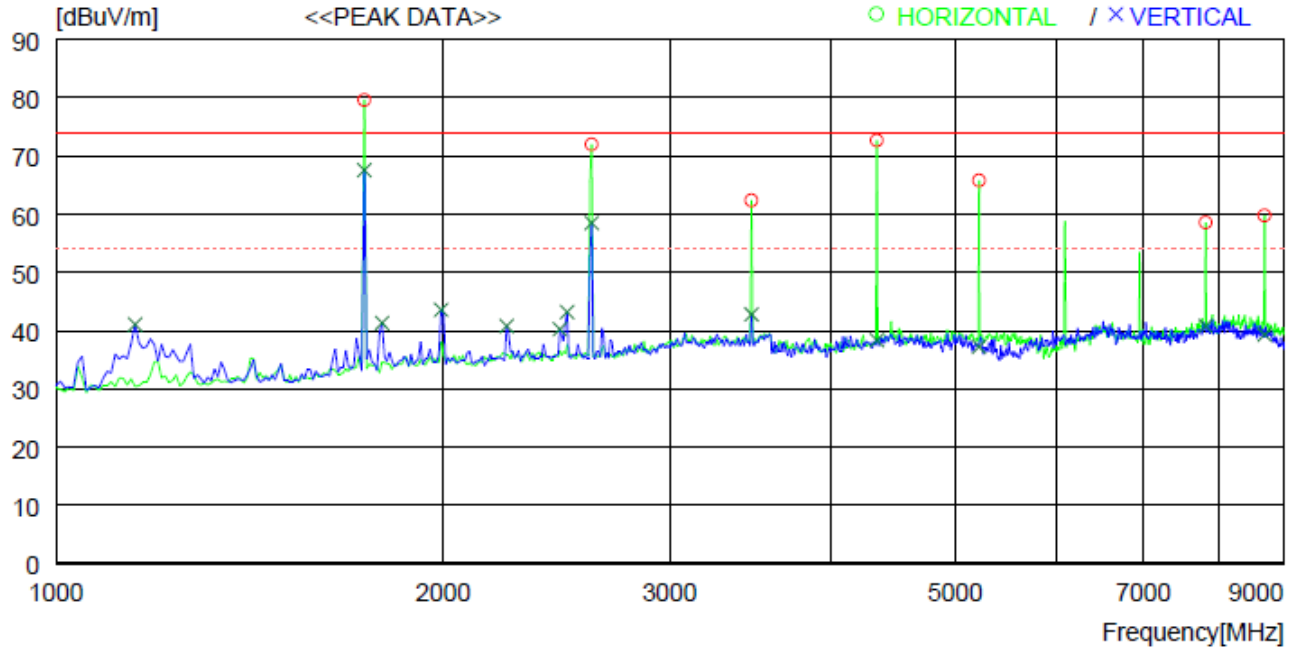


No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	167.740	43.1	8.7	7.8	32.6	27.0	43.5	16.5	300	0
2	179.380	42.2	9.2	7.9	32.6	26.7	43.5	16.8	400	359
3	192.960	41.5	10.6	7.9	32.6	27.4	43.5	16.1	300	209
4	869.040	84.5	22.4	10.8	32.4	85.3	46.4	-38.9	300	0
----- Vertical -----										
5	31.940	41.7	9.9	6.6	32.7	25.5	39.1	13.6	100	330
6	60.070	41.6	12.0	7.0	32.6	28.0	39.1	11.1	100	359
7	62.980	41.4	11.1	7.0	32.6	26.9	39.1	12.2	200	0
8	869.040	82.6	22.4	10.8	32.4	83.4	46.4	-37	200	0

Pre-Scan Test Data

Test Mode

Mode #14



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
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----- Horizontal -----

1	1736.000	85.5	26.8	6.9	39.6	79.6	74.0	-5.6	100	359
2	2608.000	73.8	29.1	8.6	39.5	72.0	74.0	2	100	359
3	3472.000	60.6	31.5	10.0	39.7	62.4	74.0	11.6	100	359
4	4344.000	68.2	33.0	11.4	39.9	72.7	74.0	1.3	100	359
5	5216.000	59.6	33.9	12.2	39.9	65.8	74.0	8.2	100	359
6	7824.000	47.6	35.5	14.9	39.4	58.6	74.0	15.4	100	359
7	8696.000	48.2	36.1	15.1	39.6	59.8	74.0	14.2	100	7

----- Vertical -----

8	1152.000	50.7	24.6	5.6	39.8	41.1	74.0	32.9	100	194
9	1736.000	73.5	26.8	6.9	39.6	67.6	74.0	6.4	100	0
10	1792.000	46.7	27.1	7.0	39.5	41.3	74.0	32.7	100	340
11	1992.000	47.3	28.2	7.5	39.4	43.6	74.0	30.4	100	357
12	2240.000	43.9	28.5	7.9	39.5	40.8	74.0	33.2	100	0
13	2464.000	42.7	28.7	8.4	39.5	40.3	74.0	33.7	100	0
14	2496.000	45.6	28.7	8.4	39.5	43.2	74.0	30.8	100	147
15	2608.000	60.3	29.1	8.6	39.5	58.5	74.0	15.5	100	357
16	3472.000	41.0	31.5	10.0	39.7	42.8	74.0	31.2	100	0
17	4344.000	33.9	33.0	11.4	39.9	38.4	74.0	35.6	100	333
18	5216.000	31.0	33.9	12.2	39.9	37.2	74.0	36.8	100	132
19	7824.000	29.8	35.5	14.9	39.4	40.8	74.0	33.2	100	54

No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
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20	8696.000	27.7	36.1	15.1	39.6	39.3	74.0	34.7	100	231
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Substitution Measurement Test Data								
Test Mode					Mode #14			
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
1736.00	H	85.50	-25.13	2.04	8.42	-18.75	-13.0	5.75
2608.00	H	73.80	-34.28	2.53	9.83	-26.98		13.98
4344.00	H	68.20	-36.19	3.29	11.02	-28.46		15.46
5216.00	H	59.60	-42.41	3.65	10.99	-35.07		22.07

Note

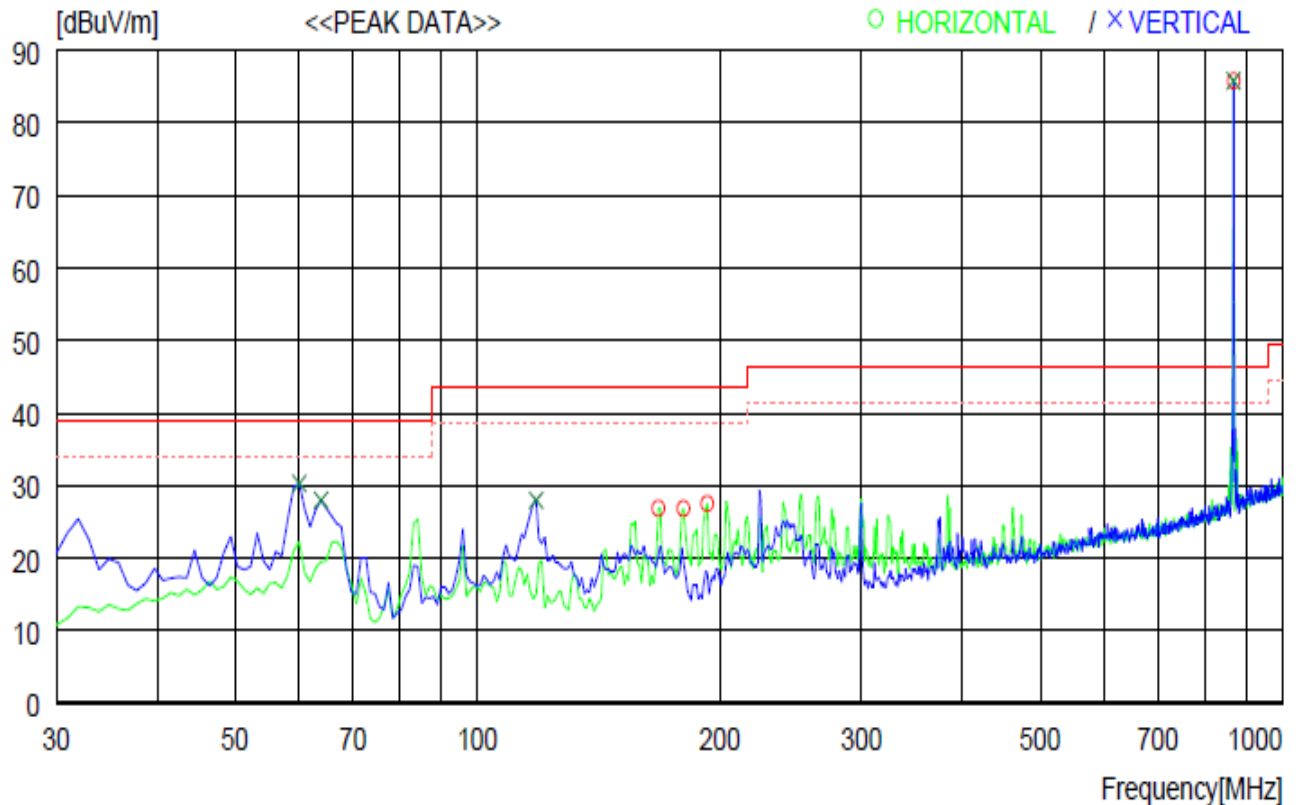
1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall be used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Pre-Scan Test Data

Test Mode

Mode #15

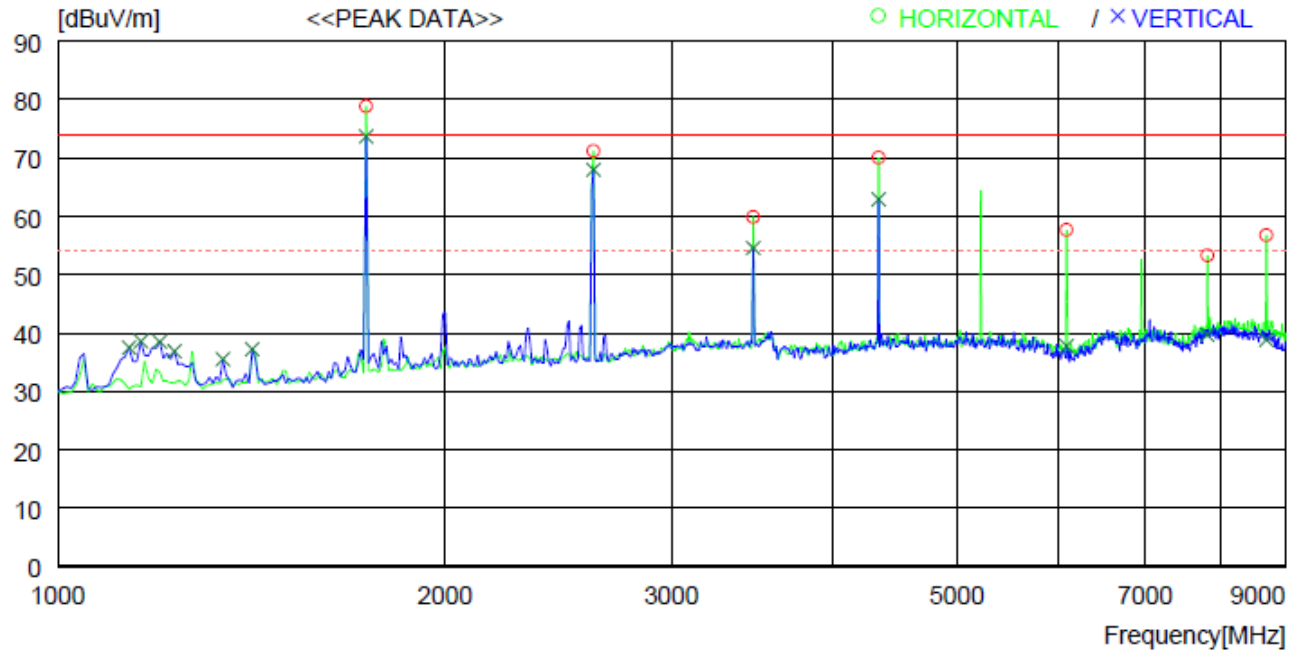


No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	167.740	43.0	8.7	7.8	32.6	26.9	43.5	16.6	300	0
2	180.350	42.2	9.3	7.9	32.6	26.8	43.5	16.7	300	0
3	192.960	41.6	10.6	7.9	32.6	27.5	43.5	16	400	206
4	869.040	85.0	22.4	10.8	32.4	85.8	46.4	-39.4	400	359
----- Vertical -----										
5	60.070	43.9	12.0	7.0	32.6	30.3	39.1	8.8	100	359
6	63.950	42.9	10.7	7.0	32.6	28.0	39.1	11.1	200	270
7	118.270	44.0	9.1	7.5	32.6	28.0	43.5	15.5	100	359
8	869.040	85.0	22.4	10.8	32.4	85.8	46.4	-39.4	200	0

Pre-Scan Test Data

Test Mode

Mode #15



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1736.000	84.8	26.8	6.9	39.6	78.9	74.0	-4.9	100	359
2	2608.000	73.0	29.1	8.6	39.5	71.2	74.0	2.8	100	359
3	3472.000	58.1	31.5	10.0	39.7	59.9	74.0	14.1	100	359
4	4344.000	65.6	33.0	11.4	39.9	70.1	74.0	3.9	100	359
5	6080.000	50.1	34.3	12.9	39.6	57.7	74.0	16.3	100	4
6	7824.000	42.3	35.5	14.9	39.4	53.3	74.0	20.7	100	359
7	8696.000	45.2	36.1	15.1	39.6	56.8	74.0	17.2	100	359
----- Vertical -----										
8	1136.000	47.1	24.6	5.6	39.8	37.5	74.0	36.5	100	0
9	1160.000	48.2	24.6	5.6	39.8	38.6	74.0	35.4	100	0
10	1200.000	47.9	24.7	5.7	39.8	38.5	74.0	35.5	100	201
11	1232.000	46.1	24.8	5.8	39.8	36.9	74.0	37.1	100	0
12	1344.000	44.1	25.1	6.1	39.8	35.5	74.0	38.5	100	286
13	1416.000	45.4	25.3	6.3	39.8	37.2	74.0	36.8	100	11
14	1736.000	79.6	26.8	6.9	39.6	73.7	74.0	.3	100	201
15	2608.000	69.8	29.1	8.6	39.5	68.0	74.0	6	100	201
16	3472.000	52.8	31.5	10.0	39.7	54.6	74.0	19.4	100	201
17	4344.000	58.4	33.0	11.4	39.9	62.9	74.0	11.1	100	201
18	6080.000	30.2	34.3	12.9	39.6	37.8	74.0	36.2	100	132
19	7824.000	28.7	35.5	14.9	39.4	39.7	74.0	34.3	100	32

Substitution Measurement Test Data								
Test Mode					Mode #15			
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
1736.00	H	84.80	-25.82	2.04	8.42	-19.44	-13.0	6.44
2608.00	H	73.00	-35.09	2.53	9.83	-27.79		14.79
4344.00	H	65.60	-38.80	3.29	11.02	-31.07		18.07
6080.00	H	50.10	-50.58	3.93	11.50	-43.01		30.01

Note

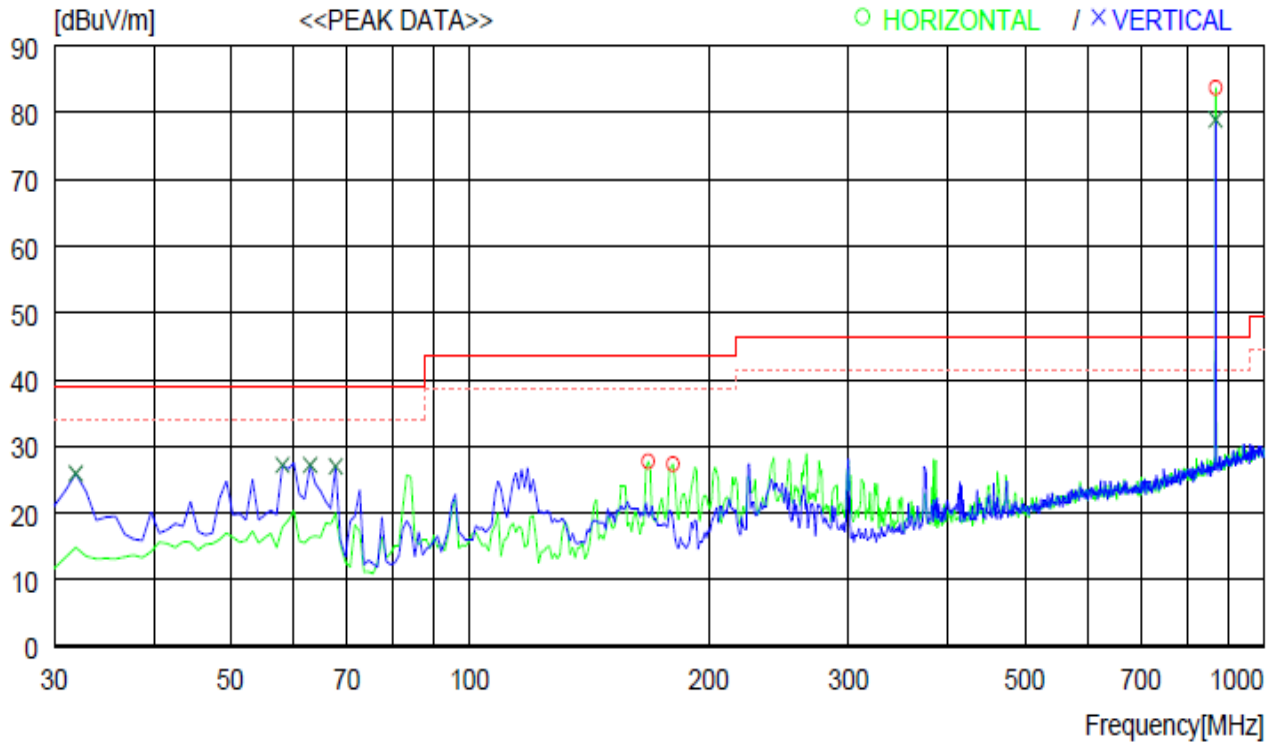
1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall be used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Pre-Scan Test Data

Test Mode

Mode #16

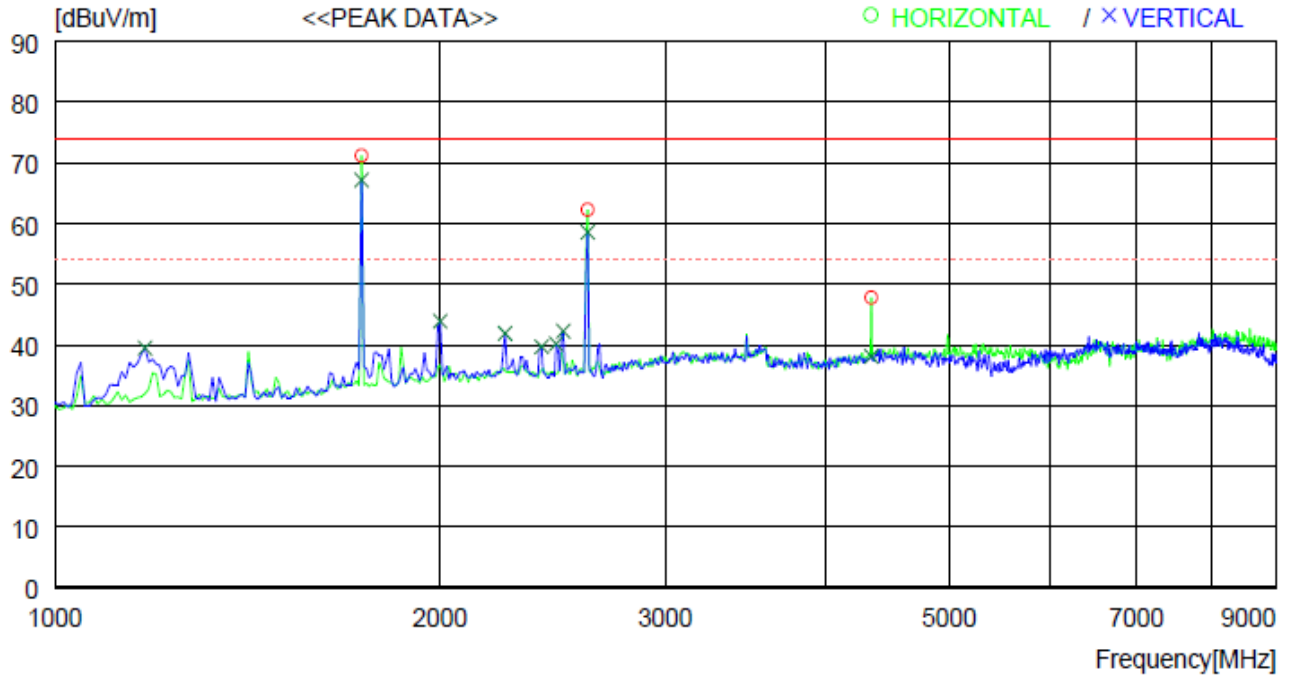


No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	167.740	43.8	8.7	7.8	32.6	27.7	43.5	15.8	300	0
2	180.350	42.7	9.3	7.9	32.6	27.3	43.5	16.2	300	194
3	869.040	83.0	22.4	10.8	32.4	83.8	46.4	-37.4	300	0
----- Vertical -----										
4	31.940	42.1	9.9	6.6	32.7	25.9	39.1	13.2	100	359
5	58.130	40.4	12.5	6.9	32.6	27.2	39.1	11.9	100	359
6	62.980	41.7	11.1	7.0	32.6	27.2	39.1	11.9	100	359
7	67.830	43.2	9.4	7.0	32.6	27.0	39.1	12.1	100	245
8	869.040	78.2	22.4	10.8	32.4	79.0	46.4	-32.6	200	0

Pre-Scan Test Data

Test Mode

Mode #16



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1736.000	77.1	26.8	6.9	39.6	71.2	74.0	2.8	100	2
2	2608.000	64.1	29.1	8.6	39.5	62.3	74.0	11.7	100	359
3	4344.000	43.3	33.0	11.4	39.9	47.8	74.0	26.2	100	359
----- Vertical -----										
4	1176.000	49.0	24.7	5.6	39.8	39.5	74.0	34.5	100	0
5	1736.000	73.1	26.8	6.9	39.6	67.2	74.0	6.8	100	0
6	2000.000	47.6	28.2	7.5	39.4	43.9	74.0	30.1	100	0
7	2248.000	45.0	28.5	7.9	39.5	41.9	74.0	32.1	100	271
8	2400.000	42.3	28.6	8.3	39.5	39.7	74.0	34.3	100	256
9	2464.000	42.6	28.7	8.4	39.5	40.2	74.0	33.8	100	0
10	2496.000	44.7	28.7	8.4	39.5	42.3	74.0	31.7	100	148
11	2608.000	60.4	29.1	8.6	39.5	58.6	74.0	15.4	100	202
12	4344.000	33.6	33.0	11.4	39.9	38.1	74.0	35.9	100	209

Substitution Measurement Test Data								
Test Mode					Mode #16			
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
1736.00	H	77.10	-33.48	2.04	8.42	-27.10	-13.0	14.1
2608.00	H	64.10	-44.26	2.53	9.83	-36.96		23.96

Note

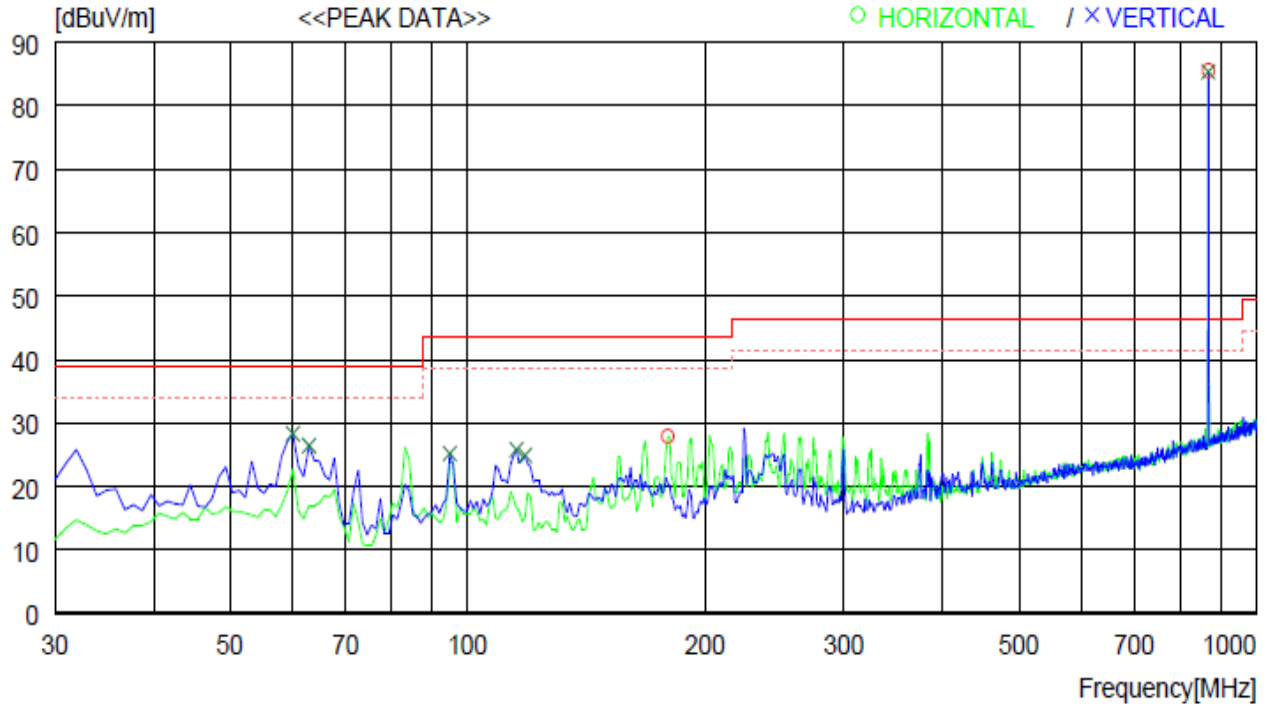
1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall is used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Pre-Scan Test Data

Test Mode

Mode #17

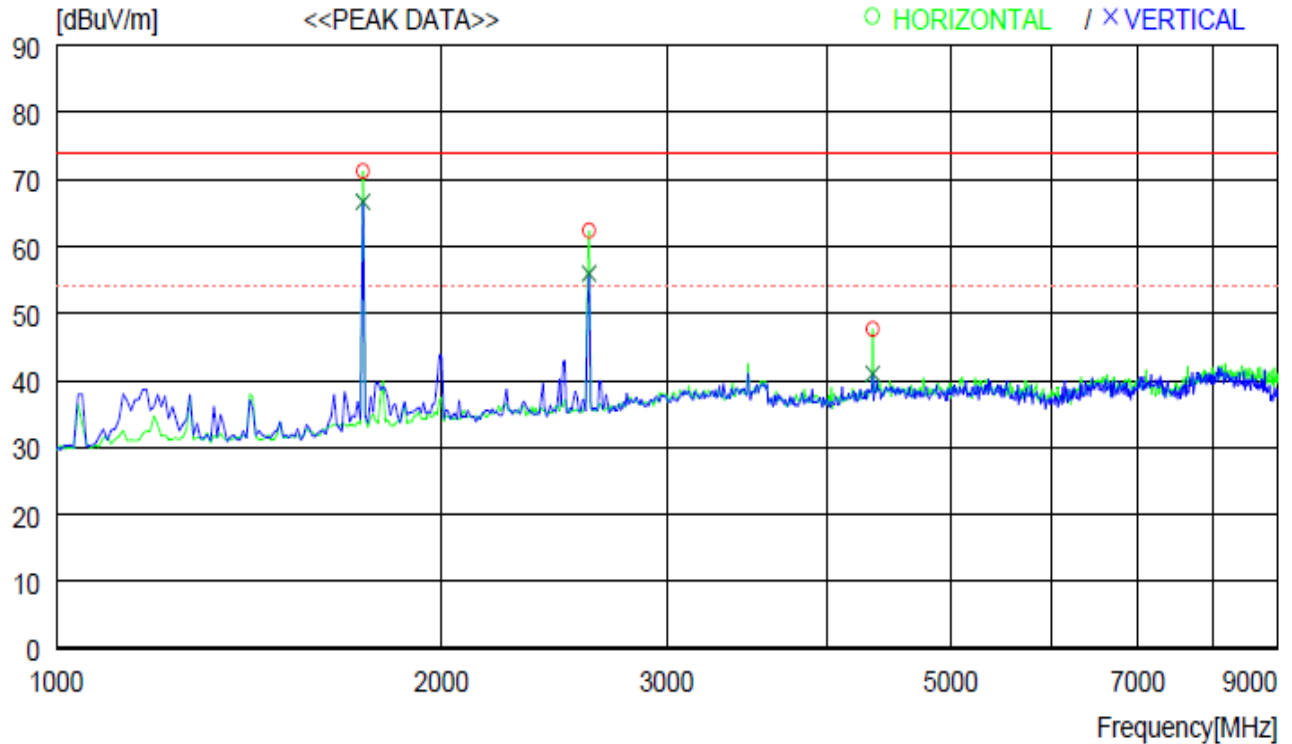


No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	179.380	43.4	9.2	7.9	32.6	27.9	43.5	15.6	400	0
2	869.040	84.8	22.4	10.8	32.4	85.6	46.4	-39.2	400	202
----- Vertical -----										
3	60.070	41.9	12.0	7.0	32.6	28.3	39.1	10.8	100	293
4	62.980	40.9	11.1	7.0	32.6	26.4	39.1	12.7	200	284
5	94.990	39.3	11.2	7.3	32.6	25.2	43.5	18.3	200	359
6	115.360	41.4	9.6	7.4	32.6	25.8	43.5	17.7	100	0
7	118.270	40.9	9.1	7.5	32.6	24.9	43.5	18.6	100	340
8	869.040	84.6	22.4	10.8	32.4	85.4	46.4	-39	200	44

Pre-Scan Test Data

Test Mode

Mode #17



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1736.000	77.2	26.8	6.9	39.6	71.3	74.0	2.7	100	7
2	2608.000	64.2	29.1	8.6	39.5	62.4	74.0	11.6	100	2
3	4344.000	43.2	33.0	11.4	39.9	47.7	74.0	26.3	100	359
----- Vertical -----										
4	1736.000	72.6	26.8	6.9	39.6	66.7	74.0	7.3	100	195
5	2608.000	57.8	29.1	8.6	39.5	56.0	74.0	18	100	0
6	4344.000	36.5	33.0	11.4	39.9	41.0	74.0	33	100	0

Substitution Measurement Test Data								
Test Mode					Mode #17			
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
1736.00	H	77.20	-33.38	2.04	8.42	-27.00	-13.0	14
2608.00	H	64.20	-44.15	2.53	9.83	-36.85		23.85

Note

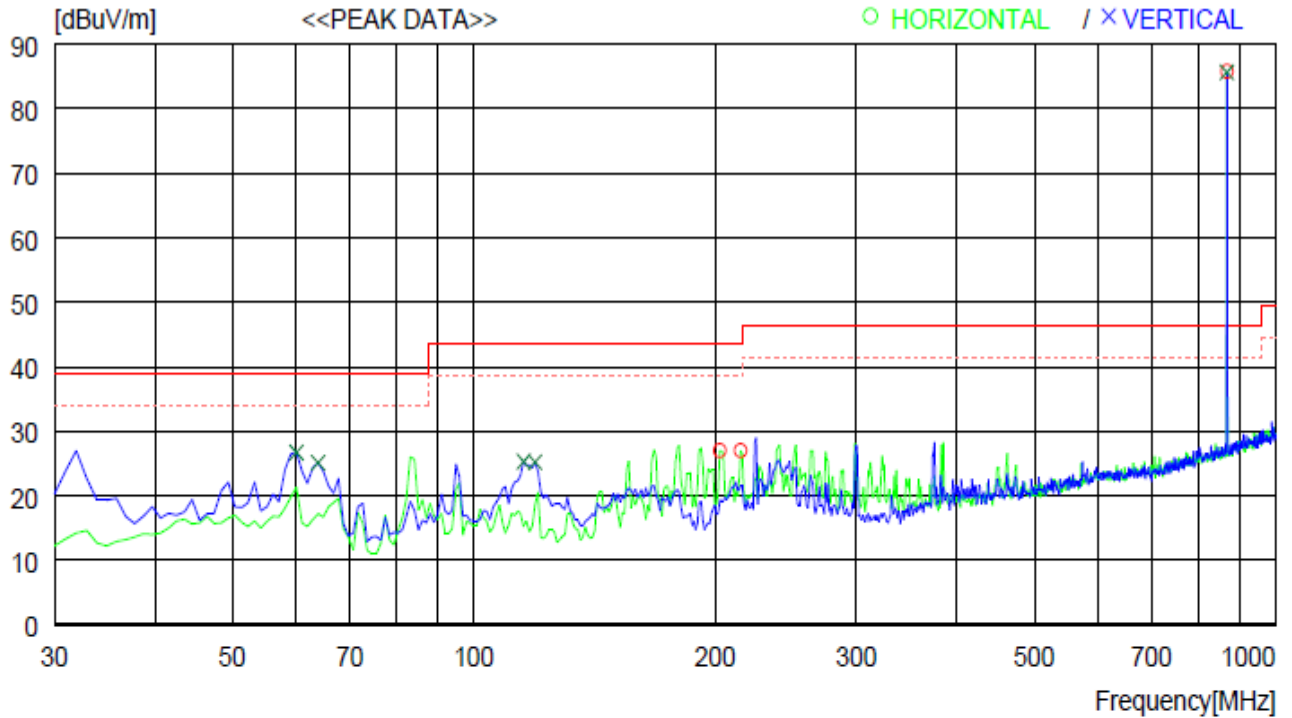
1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall is used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Pre-Scan Test Data

Test Mode

Mode #18

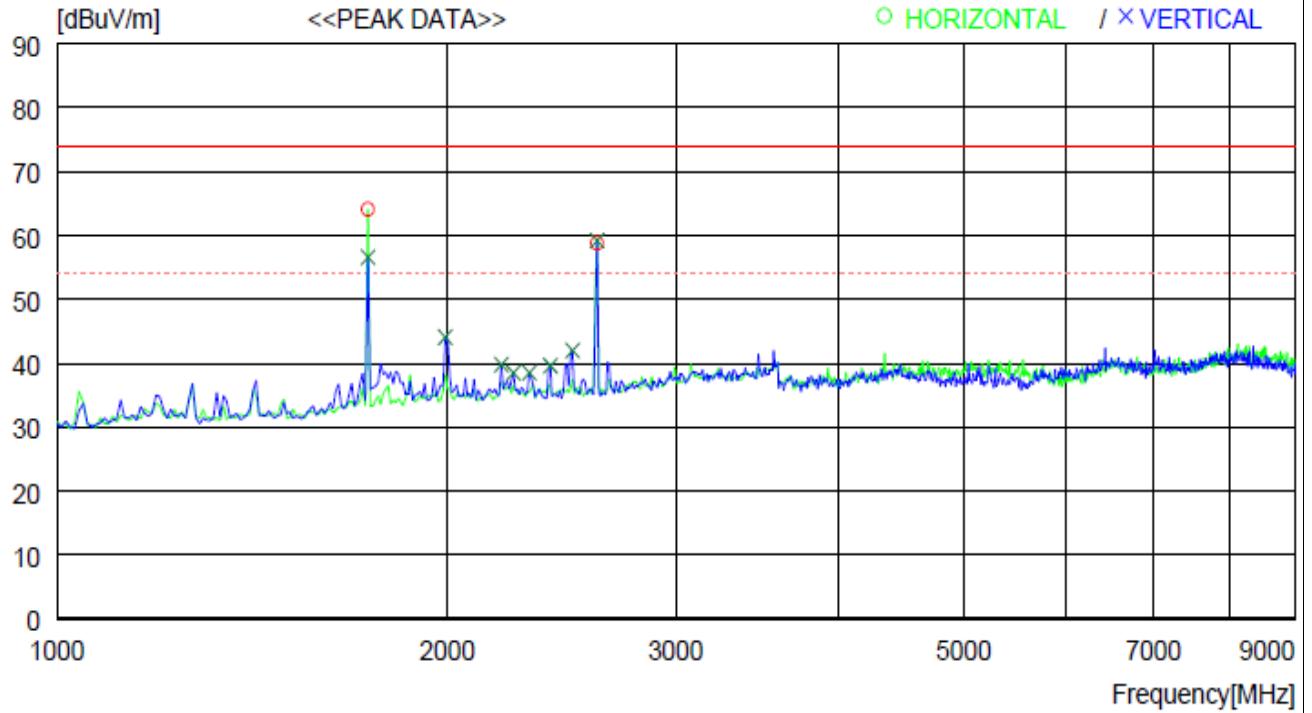


No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	202.660	40.1	11.5	8.0	32.6	27.0	43.5	16.5	400	0
2	215.270	39.7	11.8	8.1	32.6	27.0	43.5	16.5	400	211
3	869.040	85.0	22.4	10.8	32.4	85.8	46.4	-39.4	400	195
----- Vertical -----										
4	60.070	40.3	12.0	7.0	32.6	26.7	39.1	12.4	100	0
5	63.950	40.0	10.7	7.0	32.6	25.1	39.1	14	100	240
6	115.360	40.9	9.6	7.4	32.6	25.3	43.5	18.2	100	287
7	119.240	41.3	9.0	7.5	32.6	25.2	43.5	18.3	200	359
8	869.040	84.9	22.4	10.8	32.4	85.7	46.4	-39.3	200	42

Pre-Scan Test Data

Test Mode

Mode #18



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1736.000	70.0	26.8	6.9	39.6	64.1	74.0	9.9	100	359
2	2608.000	60.6	29.1	8.6	39.5	58.8	74.0	15.2	100	65
----- Vertical -----										
3	1736.000	62.5	26.8	6.9	39.6	56.6	74.0	17.4	100	0
4	1992.000	47.8	28.2	7.5	39.4	44.1	74.0	29.9	100	0
5	2200.000	42.9	28.4	7.9	39.4	39.8	74.0	34.2	100	332
6	2248.000	41.6	28.5	7.9	39.5	38.5	74.0	35.5	100	270
7	2312.000	41.4	28.5	8.1	39.5	38.5	74.0	35.5	100	0
8	2400.000	42.2	28.6	8.3	39.5	39.6	74.0	34.4	100	0
9	2496.000	44.4	28.7	8.4	39.5	42.0	74.0	32	100	145
10	2608.000	61.0	29.1	8.6	39.5	59.2	74.0	14.8	100	115

Substitution Measurement Test Data								
Test Mode					Mode #18			
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
1736.00	H	70.00	-40.64	2.04	8.42	-34.26	-13.0	21.26
2608.00	H	60.60	-47.94	2.53	9.83	-40.64		27.64

Note

1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall be used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

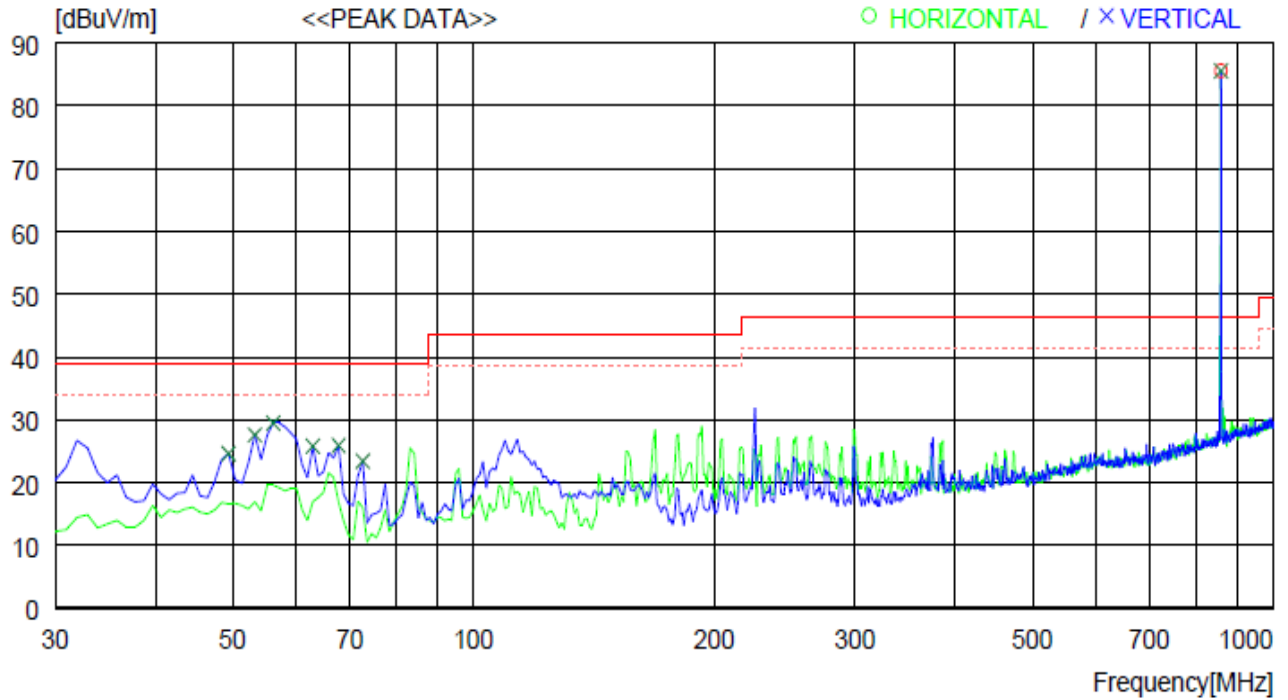
Pre-Scan Test Data

Operating Band: 800 MHz Band

Input Voltage: DC 48 V

Test Mode

Mode #19

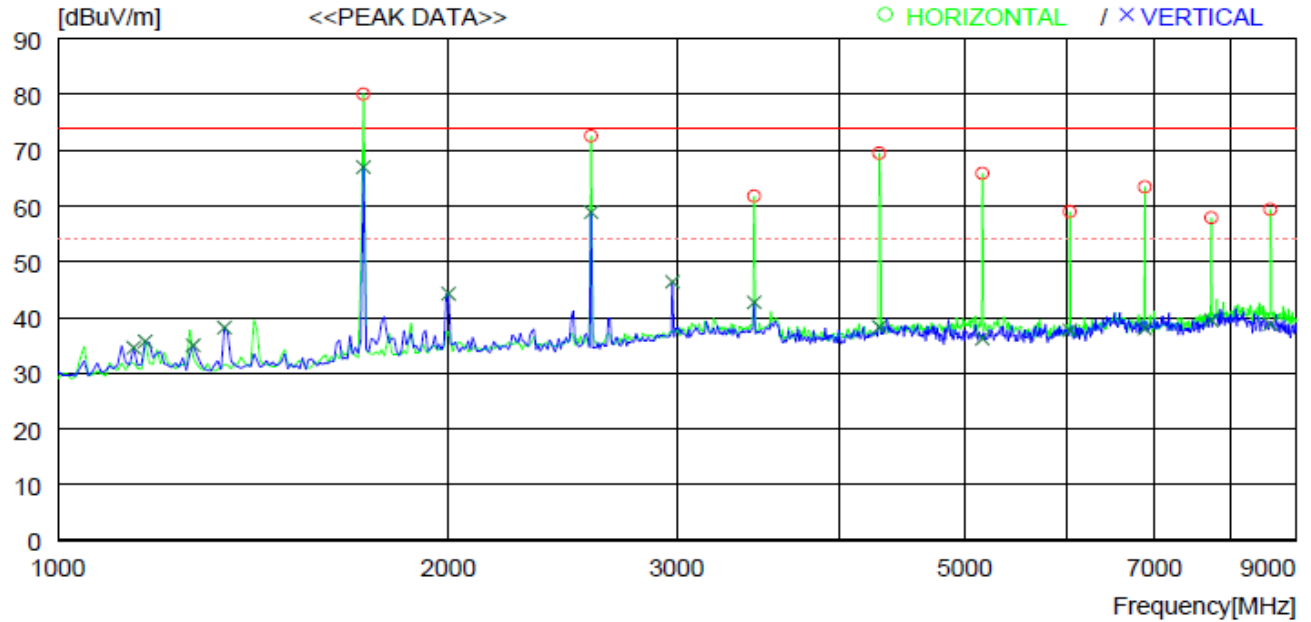


No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	860.310	85.0	22.2	10.8	32.4	85.6	46.4	-39.2	300	359
----- Vertical -----										
2	49.400	36.2	14.2	6.9	32.7	24.6	39.1	14.5	100	0
3	53.280	39.8	13.5	6.9	32.6	27.6	39.1	11.5	100	278
4	56.190	42.3	12.9	6.9	32.6	29.5	39.1	9.6	100	0
5	62.980	40.3	11.1	7.0	32.6	25.8	39.1	13.3	200	359
6	67.830	42.1	9.4	7.0	32.6	25.9	39.1	13.2	200	221
7	72.680	40.7	8.2	7.1	32.6	23.4	39.1	15.7	200	277
8	860.310	85.0	22.2	10.8	32.4	85.6	46.4	-39.2	200	7

Pre-Scan Test Data

Test Mode

Mode #19



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1720.000	86.1	26.7	6.9	39.6	80.1	74.0	-6.1	100	0
2	2576.000	74.5	29.0	8.6	39.5	72.6	74.0	1.4	100	6
3	3440.000	60.1	31.4	10.0	39.7	61.8	74.0	12.2	100	3
4	4296.000	65.2	32.9	11.3	39.9	69.5	74.0	4.5	100	0
5	5160.000	59.8	33.9	12.1	39.9	65.9	74.0	8.1	100	0
6	6024.000	51.5	34.2	12.9	39.6	59.0	74.0	15	100	0
7	6880.000	53.9	34.9	14.1	39.5	63.4	74.0	10.6	100	6
8	7744.000	47.3	35.4	14.7	39.5	57.9	74.0	16.1	100	6
9	8600.000	47.8	36.0	15.1	39.5	59.4	74.0	14.6	100	16
----- Vertical -----										
10	1144.000	44.2	24.6	5.6	39.8	34.6	74.0	39.4	100	239
11	1168.000	45.2	24.7	5.6	39.8	35.7	74.0	38.3	100	230
12	1272.000	44.0	24.9	5.9	39.8	35.0	74.0	39	100	271
13	1344.000	46.8	25.1	6.1	39.8	38.2	74.0	35.8	100	271
14	1720.000	73.0	26.7	6.9	39.6	67.0	74.0	7	100	230
15	2000.000	48.0	28.2	7.5	39.4	44.3	74.0	29.7	100	230
16	2576.000	60.8	29.0	8.6	39.5	58.9	74.0	15.1	100	358
17	2976.000	46.2	30.3	9.5	39.6	46.4	74.0	27.6	100	302
18	3440.000	41.0	31.4	10.0	39.7	42.7	74.0	31.3	100	310
19	4296.000	34.0	32.9	11.3	39.9	38.3	74.0	35.7	100	358

Substitution Measurement Test Data								
Test Mode				Mode #19				
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
1720.00	H	86.10	-24.66	2.02	8.44	-18.24	-13.0	5.24
2576.00	H	74.50	-33.65	2.52	9.86	-26.31		13.31
3440.00	H	60.10	-45.79	2.91	10.11	-38.59		25.59
4296.00	H	65.20	-39.22	3.26	10.93	-31.55		18.55
5160.00	H	59.80	-42.30	3.64	10.98	-34.96		21.96
6880.00	H	53.90	-46.35	4.21	11.56	-39.00		26

Note

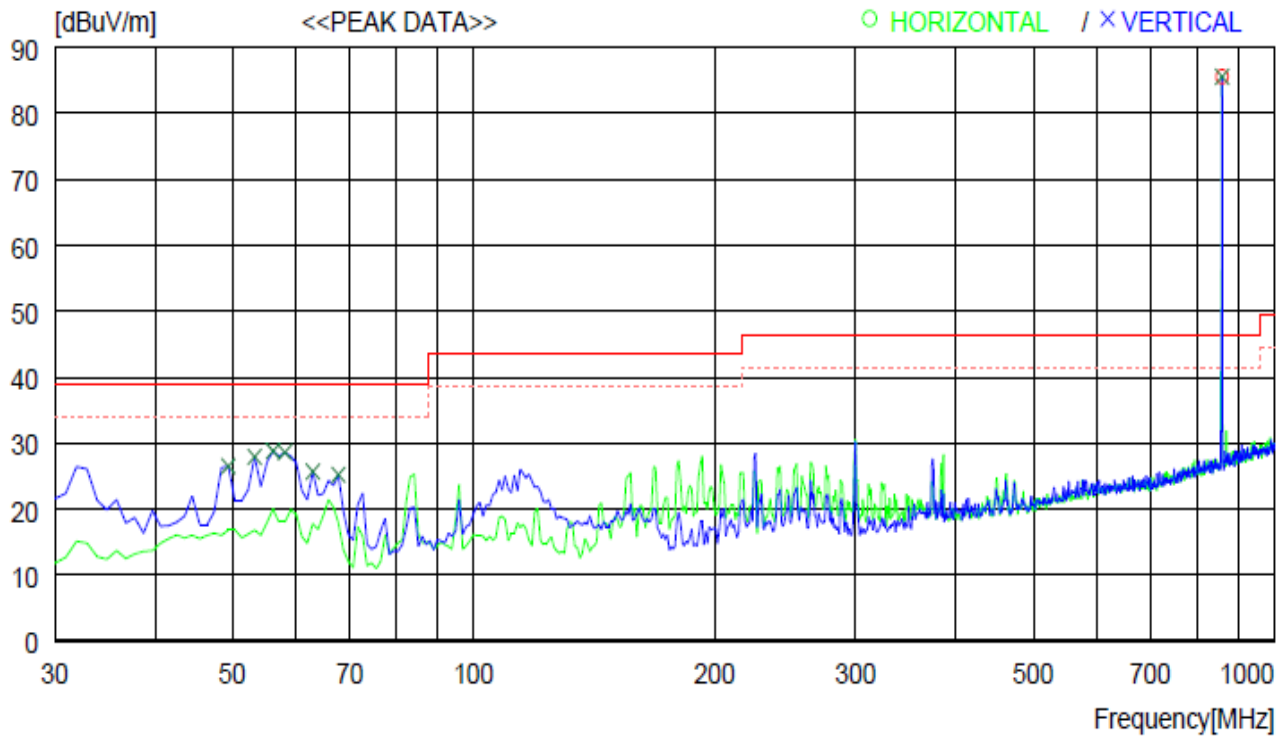
1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall be used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Pre-Scan Test Data

Test Mode

Mode #20

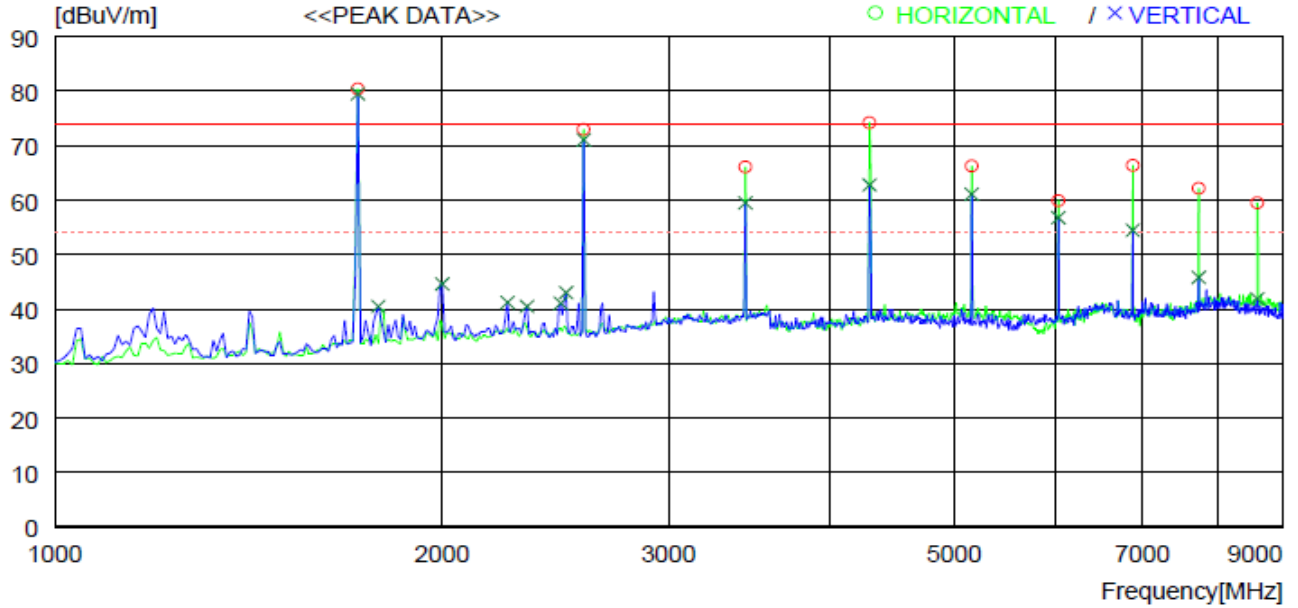


No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	860.310	85.0	22.2	10.8	32.4	85.6	46.4	-39.2	400	0
----- Vertical -----										
2	49.400	38.1	14.2	6.9	32.7	26.5	39.1	12.6	200	359
3	53.280	40.1	13.5	6.9	32.6	27.9	39.1	11.2	100	0
4	56.190	41.6	12.9	6.9	32.6	28.8	39.1	10.3	100	0
5	58.130	41.8	12.5	6.9	32.6	28.6	39.1	10.5	100	277
6	62.980	40.2	11.1	7.0	32.6	25.7	39.1	13.4	100	0
7	67.830	41.4	9.4	7.0	32.6	25.2	39.1	13.9	100	231
8	860.310	85.0	22.2	10.8	32.4	85.6	46.4	-39.2	200	359

Pre-Scan Test Data

Test Mode

Mode #20



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1720.000	86.4	26.7	6.9	39.6	80.4	74.0	-6.4	100	359
2	2576.000	74.9	29.0	8.6	39.5	73.0	74.0	1	100	11
3	3440.000	64.4	31.4	10.0	39.7	66.1	74.0	7.9	100	11
4	4296.000	69.9	32.9	11.3	39.9	74.2	74.0	-2	100	359
5	5160.000	60.2	33.9	12.1	39.9	66.3	74.0	7.7	100	359
6	6024.000	52.4	34.2	12.9	39.6	59.9	74.0	14.1	100	7
7	6880.000	56.9	34.9	14.1	39.5	66.4	74.0	7.6	100	359
8	7744.000	51.6	35.4	14.7	39.5	62.2	74.0	11.8	100	359
9	8600.000	47.9	36.0	15.1	39.5	59.5	74.0	14.5	100	88

----- Vertical -----

10	1720.000	85.5	26.7	6.9	39.6	79.5	74.0	-5.5	100	0
11	1784.000	46.1	27.0	7.0	39.6	40.5	74.0	33.5	100	169
12	2000.000	48.3	28.2	7.5	39.4	44.6	74.0	29.4	100	0
13	2248.000	44.3	28.5	7.9	39.5	41.2	74.0	32.8	100	0
14	2328.000	43.4	28.5	8.1	39.5	40.5	74.0	33.5	100	240
15	2472.000	43.5	28.7	8.4	39.5	41.1	74.0	32.9	100	255
16	2496.000	45.4	28.7	8.4	39.5	43.0	74.0	31	100	147
17	2576.000	73.0	29.0	8.6	39.5	71.1	74.0	2.9	100	201
18	3440.000	57.8	31.4	10.0	39.7	59.5	74.0	14.5	100	201
19	4296.000	58.5	32.9	11.3	39.9	62.8	74.0	11.2	100	201

No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
20	5160.000	55.0	33.9	12.1	39.9	61.1	74.0	12.9	100	201
21	6024.000	49.3	34.2	12.9	39.6	56.8	74.0	17.2	100	201
22	6880.000	45.0	34.9	14.1	39.5	54.5	74.0	19.5	100	201
23	7744.000	35.2	35.4	14.7	39.5	45.8	74.0	28.2	100	0
24	8600.000	30.3	36.0	15.1	39.5	41.9	74.0	32.1	100	0

Substitution Measurement Test Data								
Test Mode				Mode #20				
Freq. (MHz)	Ant. Pol. (HV)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
1720.00	H	86.40	-24.36	2.02	8.44	-17.94	-13.0	4.94
2576.00	H	74.90	-33.25	2.52	9.86	-25.91		12.91
3440.00	H	64.40	-41.27	2.91	10.11	-34.07		21.07
4296.00	H	69.90	-34.50	3.26	10.93	-26.83		13.83
5160.00	H	60.20	-41.87	3.64	10.98	-34.53		21.53
6880.00	H	56.90	-43.00	4.21	11.56	-35.65		22.65

Note

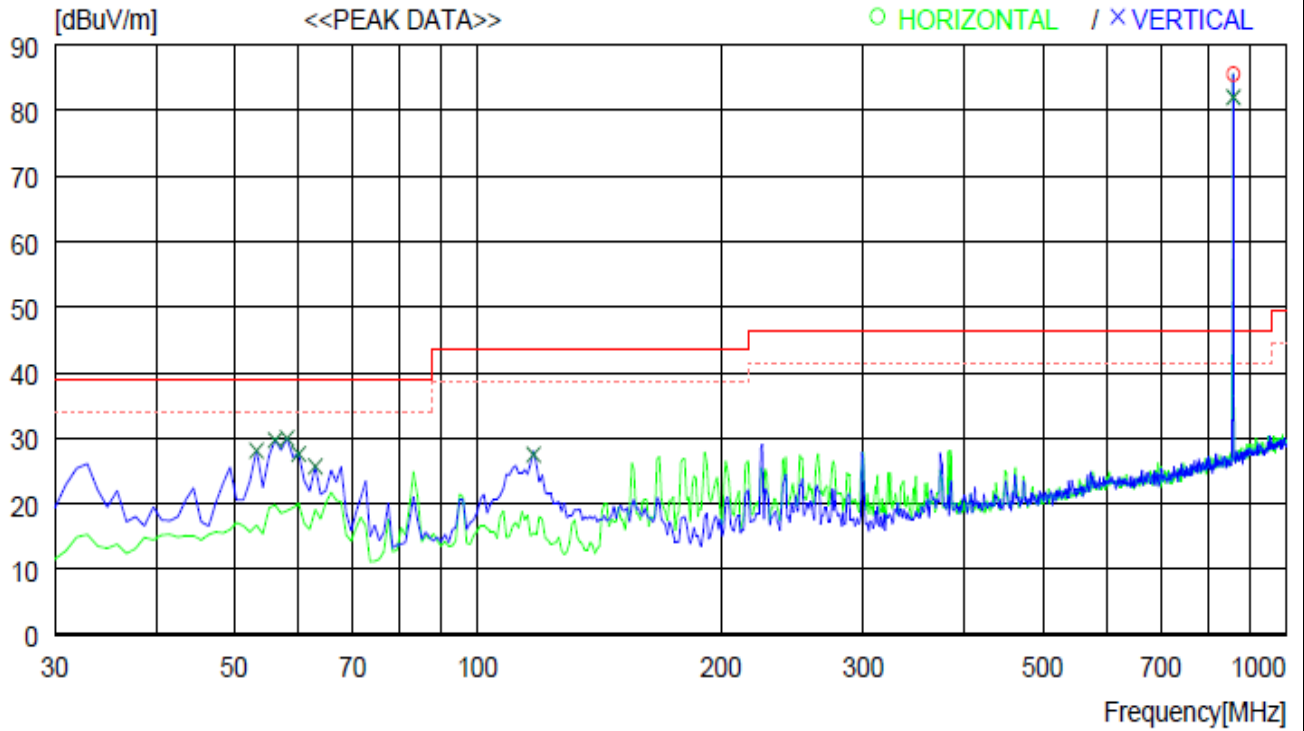
1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall be used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Pre-Scan Test Data

Test Mode

Mode #21

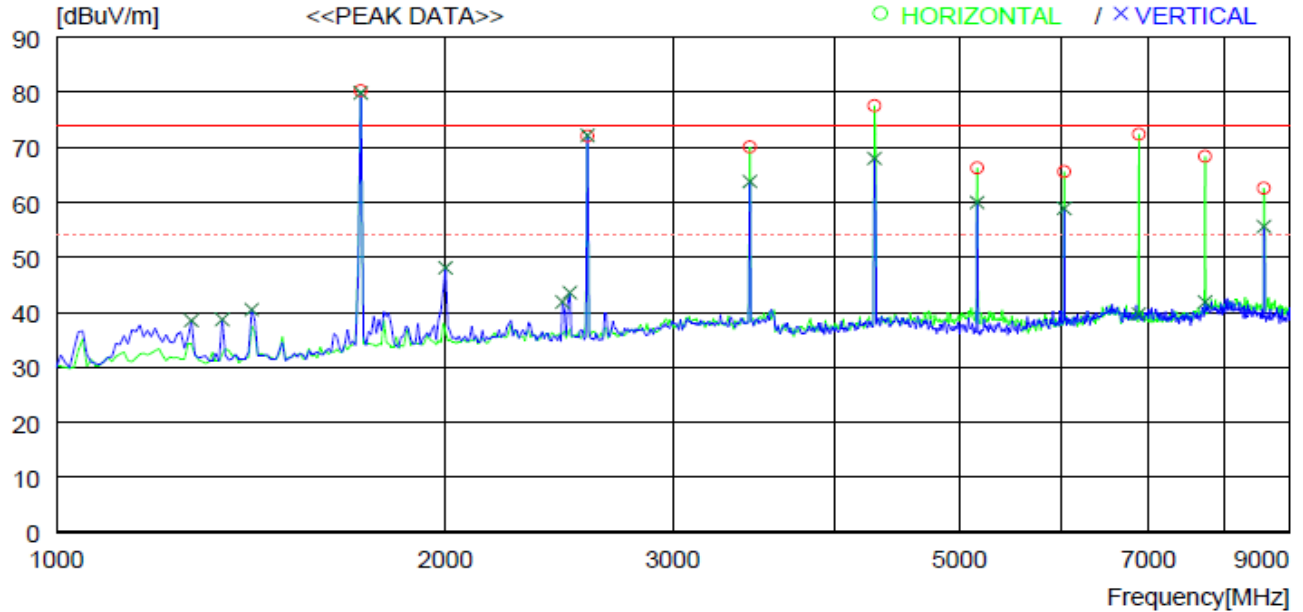


No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	860.310	85.0	22.2	10.8	32.4	85.6	46.4	-39.2	400	0
----- Vertical -----										
2	53.280	40.4	13.5	6.9	32.7	28.1	39.1	11	100	233
3	56.190	42.5	12.9	6.9	32.6	29.7	39.1	9.4	100	0
4	58.130	43.2	12.5	6.9	32.6	30.0	39.1	9.1	100	256
5	60.070	41.3	12.0	6.9	32.6	27.6	39.1	11.5	100	69
6	62.980	40.2	11.1	7.0	32.6	25.7	39.1	13.4	200	269
7	117.300	43.8	9.3	7.0	32.6	27.5	43.5	16	200	359
8	860.310	85.0	22.2	7.5	32.6	82.1	46.4	-35.7	200	359

Pre-Scan Test Data

Test Mode

Mode #21



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
-----	---------------	-------------------	-------------------------------	--------------	--------------	--------------------	-------------------	----------------	-----------------	----------------

----- Horizontal -----

1	1720.000	86.3	26.7	6.9	39.6	80.3	74.0	-6.3	100	359
2	2576.000	74.0	29.0	8.6	39.5	72.1	74.0	1.9	100	359
3	3440.000	68.4	31.4	10.0	39.7	70.1	74.0	3.9	100	3
4	4296.000	73.3	32.9	11.3	39.9	77.6	74.0	-3.6	100	8
5	5160.000	60.2	33.9	12.1	39.9	66.3	74.0	7.7	100	359
6	6024.000	58.1	34.2	12.9	39.6	65.6	74.0	8.4	100	359
7	6880.000	62.9	34.9	14.1	39.5	72.4	74.0	1.6	100	359
8	7744.000	57.8	35.4	14.7	39.5	68.4	74.0	5.6	100	3
9	8600.000	51.0	36.0	15.1	39.5	62.6	74.0	11.4	100	8

----- Vertical -----

10	1272.000	47.5	24.9	5.9	39.8	38.5	74.0	35.5	100	0
11	1344.000	47.3	25.1	6.1	39.8	38.7	74.0	35.3	100	0
12	1416.000	48.7	25.3	6.3	39.8	40.5	74.0	33.5	100	341
13	1720.000	85.9	26.7	6.9	39.6	79.9	74.0	-5.9	100	0
14	2000.000	51.8	28.2	7.5	39.4	48.1	74.0	25.9	100	0
15	2464.000	44.3	28.7	8.4	39.5	41.9	74.0	32.1	100	56
16	2496.000	46.0	28.7	8.4	39.5	43.6	74.0	30.4	100	0
17	2576.000	74.1	29.0	8.6	39.5	72.2	74.0	1.8	100	0
18	3440.000	62.1	31.4	10.0	39.7	63.8	74.0	10.2	100	202
19	4296.000	63.7	32.9	11.3	39.9	68.0	74.0	6	100	0

No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
20	5160.000	53.9	33.9	12.1	39.9	60.0	74.0	14	100	202
21	6024.000	51.4	34.2	12.9	39.6	58.9	74.0	15.1	100	0
22	6880.000	30.2	34.9	14.1	39.5	39.7	74.0	34.3	100	0
23	7744.000	31.3	35.4	14.7	39.5	41.9	74.0	32.1	100	0
24	8600.000	44.0	36.0	15.1	39.5	55.6	74.0	18.4	100	0

Substitution Measurement Test Data								
Test Mode				Mode #21				
Freq. (MHz)	Ant. Pol. (H/V)	S/A Reading (dBuV)	S/G Level (dBm)	Cable Loss (dB)	Ant. Gain (dBd/dBi)	ERP/EIRP (dBm)	Limit (dBm)	Margin (dB)
1720.00	H	86.30	-24.46	2.02	8.44	-18.04	-13.0	5.04
2576.00	H	74.00	-34.16	2.52	9.86	-26.82		13.82
3440.00	H	68.40	-37.17	2.91	10.11	-29.97		16.97
4296.00	H	73.30	-31.08	3.26	10.93	-23.41		10.41
5160.00	H	60.20	-41.87	3.64	10.98	-34.53		21.53
6024.00	H	58.10	-42.40	3.92	11.46	-34.86		21.86
6880.00	H	62.90	-36.56	4.21	11.56	-29.21		16.21
7744.00	H	57.80	-39.68	4.67	11.64	-32.71		19.71

Note

1. Pre-scan test data : Exploratory radiated measurements (pre-scans) to determine the general EUT radiated emissions characteristics and, EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall be used to determine the emission frequencies and emission levels for substitution method.
2. ERP/EIRP calculation

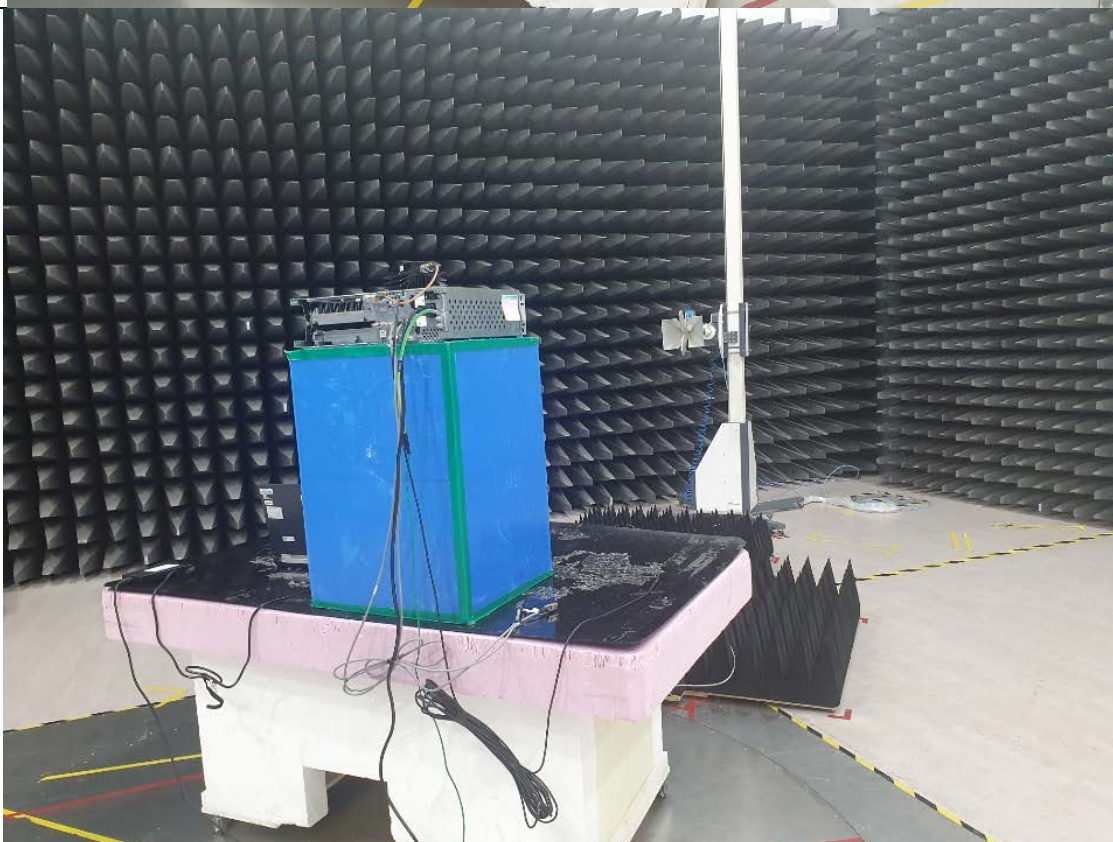
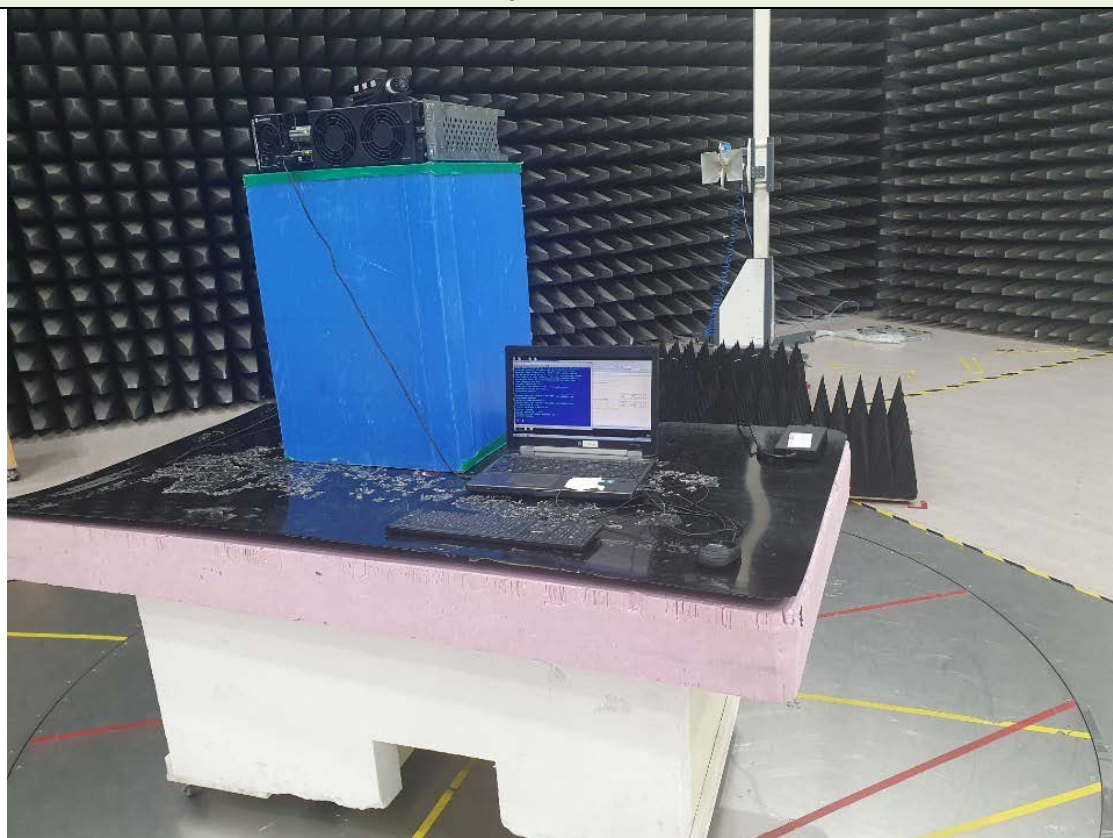
$$\text{ERP/EIRP} = \text{Substitute Level (dBm)} + \text{Ant. Gain} - \text{CL (Cable Loss)}$$

Appendix I - Test Setup Photos: Radiated Emission Test

Test Setup for 30 MHz – 1 GHz



Test Setup for above 1 GHz



Appendix II - Test Instrumentation

Name of Equipment	Model Number	Manufacturer	Serial Number	Last Cal. (Interval)	USE
EMI Test Receiver	ESCI 7	Rohde & Schwarz	100722	2019-02-12(1Y)	☐
Test Receiver	ESIB 26	Rohde & Schwarz	100298	2019-01-18(1Y)	☒
LISN	ENV4200	Rohde & Schwarz	100203	2019-01-18(1Y)	☒
LISN	ENV216	Rohde & Schwarz	100110	2019-07-27(1Y)	☐
LISN	LS16C	AFJ	16011403310	2019-08-08(1Y)	☐
LISN	NNLK8121	SchwarzBeck	8121-163	2019-07-26(1Y)	☒
Voltage Probe	TK9420	Schwarzbeck	9420-165	2019-01-18(1Y)	☐
Loop Antenna	HFH2-Z2	Rohde & Schwarz	100341	2019-06-21(2Y)	☐
8-Wire ISN CAT 3	CAT3 8158	Schwarzbeck	CAT3 8158 #70	2019-01-30(1Y)	☐
8-Wire ISN CAT 5	CAT5 8158	Schwarzbeck	CAT5 8158 #126	2019-01-30(1Y)	☐
8-Wire ISN CAT 6	NTFM 8158	Schwarzbeck	NTFM 8158 #95	2019-01-28(1Y)	☐
Test Receiver	ESU	Rohde & Schwarz	100303	2019-01-18(1Y)	☒
TRILog Broadband Antenna	VULB9163	Schwarzbeck	9163-799	2017-10-23(2Y)	☒
DOPPEL STEG HORN Antenna	HF 907	Rohde & Schwarz	102426	2019-01-11(2Y)	☒
Preamp (1-18) GHz	SCU 18D	Rohde & Schwarz	19006450	2019-04-19(1Y)	☒
Preamp 9 kHz-1 GHz	310N	Sonoma Instrument	344015	2019-01-18(1Y)	☒
Attenuators	6 dB	Rohde & Schwarz	272.4110.50	2019-01-18(1Y)	☒
Antenna Master	MA4000-EP	INNCO SYSTEM	4600814	N/A	☒
Antenna Master	MA4000-XP-ET	INNCO SYSTEM	N/A	N/A	☒
Turn Table	DT3000-3t	INNCO SYSTEM	1310814	N/A	☒
CO3000 Controller	CO3000-4PORT	INNCO SYSTEM	CO3000/806/34130 814/L	N/A	☒
CO3000 Controller	CO3000-4PORT	INNCO SYSTEM	CO3000/806/10030 0505/L	N/A	☒
Digital Power Analyzer For Harmonic & Flicker	DPA 500	EM Test	V0713102356	2019-01-25(1Y)	☐
AC Power Source	ACS 500	EM Test	V0713102357	2019-07-27(1Y)	☐

The above measuring equipments have been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipments, which is traceable to recognized national standards.