

ELECTROMAGNETIC COMPATIBILITY TEST MEMORANDUM



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Laboratory Accreditations (per ISO/IEC 17025:2017)



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Manufacturer: Tantalus Systems Corp.
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Equipment Tested: TRUSENSE GATEWAY
Model Number(s): TFGBase



**This is a test memorandum that documents tests performed and observations. It is not an ISO 17025 accredited report.*

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QAI EMC ACCREDITATION

QAI EMC is your one-stop regulatory compliance partner for electromagnetic compatibility (EMC) and electromagnetic interference (EMI). Products are tested to the latest and applicable EMC/EMI requirements for domestic and international markets. QAI EMC goes above and beyond being a testing facility—we are your regulatory compliance partner. QAI EMC has the capability to perform RF Emissions and Immunity for all types of electronics manufacturing including Industrial, Scientific, Medical, Information Technology, Telecom, Wireless, Automotive, Marine and Avionics.

EMC Laboratory Location	FCC Designation (3m SAC)	IC Registration (3m SAC)	A2LA Certificate
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SECTION I: GENERAL INFORMATION

1.1 Product Description

The LTE module integrated into the host product (FCC ID: N7NRC76B, IC ID: 2417C-RC76B) has provisions to be connected to a remote antenna. The module is FCC/IC modular approved as long as the antenna gain does not exceed 6dBi.

2 external antenna's can be used in conjunction with 12' of LMR-100 cable:

Patch Antenna P/N: NAN-E207x178B3AMEF

Directional Antenna P/N: NAN-E440x210B2AMEF

The resultant antenna gain for each antenna is shown in table below.

LTE Band	Center Frequency (MHz)	Cable loss (12' LMR-100) (dB)	Resultant Patch Antenna Gain (dBi)	Resultant Directional Antenna Gain (dBi)
71	680.5	2.57	3.43	8.43
12	707.5	2.63	3.37	8.37
13	782.0	2.78	3.22	8.22
14	793.0	2.81	3.19	8.19
26	831.5	2.89	3.11	8.11
5	836.5	2.90	3.10	8.10
4	1732.5	4.16	4.84	10.84
66	1745	4.17	4.83	10.83
2	1880	4.30	4.70	10.70
25	1882.5	4.30	4.70	10.70

Resultant external antenna gain with 12' of LMR-100 cable

The directional antenna that exceeded 6dBi gain was checked across all of the LTE bands. The lower gain patch antenna was spot checked at bands 71, 5 and 25 for completeness.

1.2 Environmental Conditions

The equipment under test was operated and tested under the following environmental conditions:

Parameter	Conditions
Location	Indoors
Temperature	24.0°C
Relative Humidity	34.9 %
Atmospheric Pressure	101.30 kPa

1.3 Measurement Uncertainty

Parameter	Uncertainty
Radiated Emissions, 10kHz-1GHz	± 2.40 dB
Radiated Emissions, 1GHz-40GHz	± 2.48 dB
Conducted Emissions, 10kHz to 40GHz	± 2.82 dB
Radio Frequency	±1.5 x 10 ⁻⁵ MHz
Total RF Power Conducted	±1.36 dB
Spurious Emissions, Conducted	±1.36 dB
RF Power Density, Conducted	±1.36 dB
Temperature	±1°C
Humidity	±5 %
DC and low frequency voltages	±3 %

1.4 Sample Calculations of Emissions Data

Radiated emissions were performed using EMC32 software developed by Rohde & Schwarz. Transducer factors like Antenna factors, Cable Losses and Amplifier gains were stored in the test templates which are used to perform the emissions measurements. After test is finished, data is generated from the EMC32 consisting of product details, emission plots and final data tables as shown below.

Frequency (MHz)	Quasi Peak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
31.0064	25.67	40.00	14.33	1000	120	315.0	H	161	4.0

Quasi-Peak reading shown in the table above is already corrected by the software using correction factor shown in column “Corr.” The correction factor listed under “Corr.” table calculated as:

$$\text{Corr. (dB)} = \text{Antenna factor} + \text{Cable loss}$$

Or

$$\text{Corr. (dB)} = \text{Antenna factor} + \text{Cable Loss} - \text{Amp gain (if pre-amplifier was used)}$$

The final Quasi peak reading shown in the data is calculated by the software using following equation:

$$\text{Corrected Quasi-Peak (dBμV/m)} = \text{Raw Quasi-Peak Reading} + \text{Antenna factor} + \text{Cable loss}$$

1.5 Test Equipment List

The tables below contain all the equipment used by 'QAI Laboratories' in conducting all tests on the Equipment Under Test (EUT) as per Section I.

Emissions Test Equipment

	Manufacturer	Model	Description	Serial No.	S/W Version	Calibration Due Date
1	Sunol Sciences	SC 104V	Turntable Controller	042506-1	N/A	Indication Only
2	Sunol Sciences	SM46C	Turntable	071705-2	N/A	Indication Only
3	Maturo GmbH	BAM 4.0-P	Boresight Antenna Mast	365	3382.01	Indication Only
4	ETS Lindgren	S201	7-meter Semi-Anechoic Chamber	1030	N/A	Indication Only
5	Hewlett Packard	8447F	Amplifier (0.1-1300MHz)	1726A00566	N/A	Indication Only
6	Hewlett Packard	8449B	Preamplifier (1-26.5 GHz)	3008A00982	N/A	Indication Only
7	Microwave Lab	USMC10180	Low Noise Amplifier (0.1-18GHz)	001303JR0802 A2729	N/A	Indication Only
8	Keysight Technologies	N9038B	MXE EMI Receiver, Multi-touch	MY60180014	N/A	2026-Aug-22
9	ETS-Lindgren	3117	Horn, Double-Ridge Guide Ant, 1.0 - 18 GHz	75944	N/A	2026-Jan-25
10	Sunol Sciences	JB3	Biconilog Antenna (30MHz – 3GHz)	A120106	N/A	2026-Mar-28
11	TESEQ	ISN T800	Impedance Stabilization Network (150kHz – 30MHz)	27133	N/A	2026-Feb-08

Note: Equipment listed above have 3 years calibration interval.

Measurement Software List

	Manufacturer	Model	Version	Description
1	Rohde & Schwarz	EMC 32	10.35.10	Emissions Test Software

SECTION II: EXECUTIVE SUMMARY OF STANDARDS AND LIMITS

2.1 Applicable Emission Standards

ISED, FCC –Emissions

Test or Measurement	Applicable Standards	Description
Radiated Emissions	• CFR Title 47 FCC Part 15 - Radio Frequency Devices, Subpart B - Unintentional Radiators • CFR Title 47 FCC Part 15 - Radio Frequency Devices, Subpart C -Intentional Radiators • CFR Title 47 FCC Part 22 – Public Mobile Services • CFR Title 47 FCC Part 24 – Personal Communication Services • CFR Title 47 FCC Part 27 – Miscellaneous Wireless Communication Services • RSS-247 Issue 2 – Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices • RSS-130 Issue 2 — Equipment Operating in the Frequency Bands 617-652 MHz, 663-698 MHz, 698-756 MHz and 777-787 MHz • RSS-132 Issue 3 — Cellular Telephone Systems Operating in the Bands 824-849 MHz and 869-894 MHz • RSS-132 — Equipment Operating in the Frequency Bands 617-652 MHz, 663-698 MHz, 698-756 MHz and 777-787 MHz • RSS-133 Issue 6— 2 GHz Personal Communications Services • RSS-Gen Issue 5 – General Requirements and Information for the Certification of Radio Apparatus • ICES-003 Issue 7 – Information Technology Equipment (Including Digital Apparatus)	The radiated emissions are measured in the 1 GHz-18 GHz range.

Method of Measurement:

For the radiated emissions, the Equipment under test (EUT) is positioned in the center of the turntable in the SAC. The Equipment under test (EUT) is then measured for all the radiated emissions using the spectrum analyzer and receiver using the appropriate antennas, amplifiers, attenuators, and filters.

The required Quasi-Peak CISPR bandwidth shall be 120 kHz for the range 30 – 1000 MHz and 1 MHz for the frequency above 1GHz. The ANSI C63.4 requirement for the placement of RF Absorber on the turntable Ground Plane shall be satisfied.

Emissions in both horizontal and vertical polarizations were measured while rotating the Equipment Under Test (EUT) on the turntable to maximize signal strength and the limit is adjusted as per the equation below. The result is added or subtracted to the required emission level to ensure compliance at the new distance.

$$20 \log \left(\frac{D1}{D2} \right); \quad \text{Where } D1 = \text{Current Distance} \\ D2 = \text{Required Distance}$$

2.2 Applicable Radiated Emission Limits

FCC 47 CFR Part 15.33 (b)(1): Frequency range of radiated measurements

For an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a radiated emission limit is specified, up to the frequency shown in the following table:

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.075	30
1.075 – 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5 th harmonic of the highest frequency or 40 GHz, whichever is lower.

FCC 47 CFR Part 15.109: Radiated emission limits

- a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency of emission (MHz)	Field strength (microvolts/meter)
30 – 88	100
88 – 216	150
216 – 960	200
Above 960	500

- e) Carrier current systems used as unintentional radiator or other unintentional radiators that are designed to conduct their radio frequency emissions via connecting wires or cables and that operate in the frequency range of 9 kHz to 30 MHz, including devices that deliver the radio frequency energy to transducers, such as ultrasonic devices not covered under Part 18, shall comply with the radiated emission limits for intentional radiators provided in 15.209 for the frequency range of 9 kHz to 30 MHz.

ICES-003 3.2.2 Radiated emission limits

The quasi-peak limits for the electric component of the radiated field strength emitted from ITE or digital apparatus, within 30 MHz to 1 GHz, for a measurement distance of 3 m or 10 m, are:

Frequency Range (MHz)	Class A (3 m) Quasi-peak (dBμV/m)	Class A (10 m) Quasi-peak (dBμV/m)	Class B (3 m) Quasi-peak (dBμV/m)	Class B (10 m) Quasi-peak (dBμV/m)
30 – 88	50.0	40.0	40.0	30.0
88 – 216	54.0	43.5	43.5	33.1
216 – 230	56.9	46.4	46.0	35.6
230 – 960	57.0	47.0	47.0	37.0
960 - 1000	60.0	49.5	54.0	43.5

At and above 1 GHz, except for outdoor units of home satellite receiving systems, the ITE or digital apparatus shall comply with:

Frequency Range (MHz)	Class A Average (dBµV/m)	Class A Peak (dBµV/m)	Class B Average (dBµV/m)	Class B Peak (dBµV/m)
1 - F_M	60	80	54	74

F_M is determined by:

Highest internal frequency (F_X)	Highest measurement frequency (F_M)
$F_X \leq 108$ MHz	1 GHz
108 MHz $\leq F_X \leq 500$ MHz	2 GHz
500 MHz $\leq F_X \leq 1$ GHz	5 GHz
$F_X > 1$ GHz	5 x F_X up to a maximum of 40 GHz

FCC 47 CFR Part 15.205 (a), (b): Restricted bands of operation

Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	
13.36-13.41			

The field strength of emissions appearing within these frequency bands shall not exceed the limits show in § 15.209

FCC 47 CFR Part 15.209 (a): Radiated emission limits; general requirements

The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency, f (MHz)	Maximum Field strength Quasi-peak (dBµV/m at 3 m)
0.009 – 0.490	$20 \cdot \log(2400/F(\text{kHz})) + 40$ dB
0.490 – 1.705	$20 \cdot \log(24000/F(\text{kHz})) + 20$ dB

1.705 – 30.0	49.5
30 – 88	40.0
88 – 216	43.5
216 – 960	46.0
above 960	54.0
Note 1: The above field strength limits are specified at a distance of 3 meters. The tighter limits apply at the band edges. Note 2: The emissions limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz., 110-490 kHz. and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector	

FCC 47 CFR Part 15.247 (d): Operation within the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

Calculation of Duty Cycle Correction Factor for Frequency Hopping Emissions:

Per KDB 558074 D01 15.247 Meas Guidance v05r02: the use of a duty cycle correction factor (DCCF) is permitted for calculating average radiated field strength emission levels for an FHSS device in 15.247. This DCCF can be applied when the unwanted emission limit is subject to an average field strength limit (e.g. within a Government Restricted Band) and the conditions specified in Section 15.35(c) can be satisfied. The average radiated field strength is calculated by subtracting the DCCF from the maximum radiated field strength level as determined through measurement. The maximum radiated field strength level represents the worst-case (maximum amplitude) RMS measurement of the emission(s) during continuous transmission (ie, not including any time intervals during which the transmitter is off or is transmitting at a reduced power level). It is also acceptable to apply the DCCF to a measurement performed with a peak detector instead of the specified RMS power averaging detector. Note that Section 15.35(c) specifies that the DCCF shall represent the worst-case (greatest duty cycle) over any 100 msec transmission period. The test report provided with the certification application must provide clear and complete documentation of the justification for use of the procedure as well as the calculations and assumptions that are used. Subclause 7.5 of ANSI C63.10 provides additional measurement guidance applicable to determination of the DCCF.

Per ANSI C63.10:2013: Unless otherwise specified, when the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 s (100 ms). In cases where the pulse train exceeds 0.1 s, the measured field strength shall be determined during a 0.1 s interval. The DCCF is calculated as:

$$\delta(dB) = 20\log(\Delta)$$

Where

δ is the duty cycle correction factor in dB

Δ is the duty cycle (dimensionless)

Data Rate	Dwell Time (ms)	Averaging Time (ms)	Duty Cycle	DCCF (dB)
Low	8.15	100	0.0815	-21.78
High	2.26	100	0.0226	-32.92
3 rd Party	46.06	100	0.4606	-6.73

Duty Cycle Correction Factors

SECTION III: DATA & TEST RESULTS

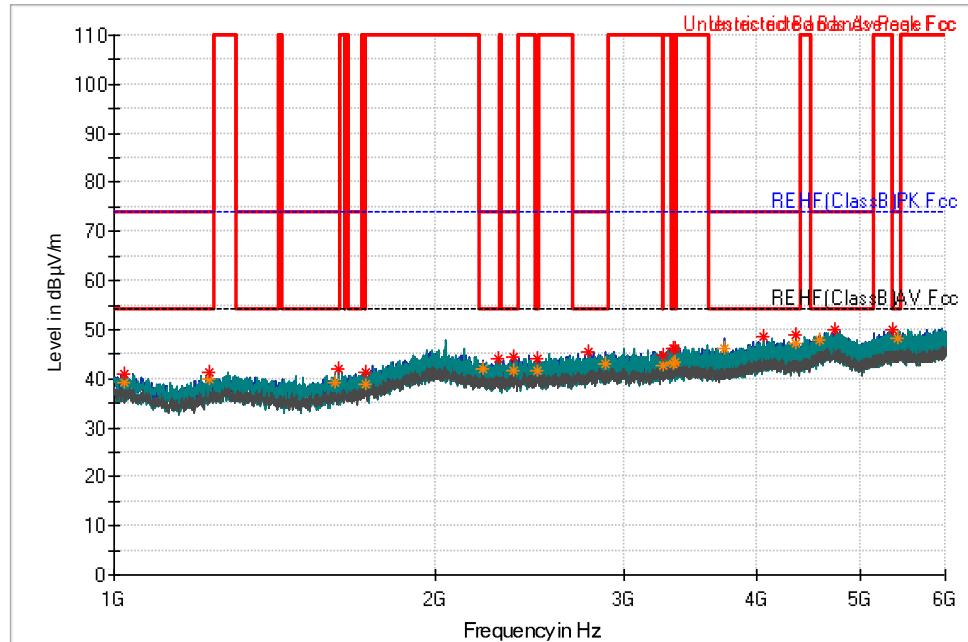
3.1 Radiated Emissions

- **Date Performed:**
September 6, 2024
- **Test Standard:**
As per [Section 2.1](#) of this report
- **Required Limit:**
As per [Section 2.2](#) of this report
- **Test Method:**
As per [Section 2.1](#) of this report
- **Modifications:**
No modification was required.

Measurement Data and Plots:

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 1GHz to 6GHz
- Test mode: 1

High Gain Antenna. Band 71



Plot 1: Radiated Emissions at 3m SAC

Table 1: Quasi Peak Data of Radiated Emissions at 3m SAC

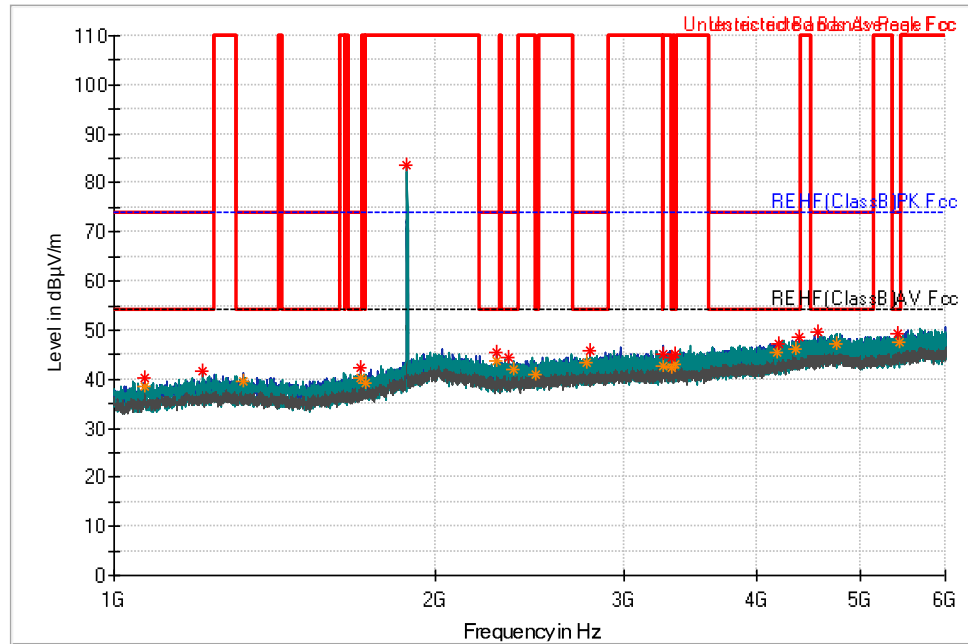
Frequency (MHz)	Max Peak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1020.5000	---	39.30	54.00	14.70	---	---	250.0	V	274	-7.6
1020.5000	41.11	---	74.00	32.89	---	---	250.0	V	274	-7.6
1230.0000	---	39.93	54.00	14.07	---	---	200.0	V	0	-5.4
1230.0000	41.19	---	74.00	32.81	---	---	200.0	V	0	-5.4
1608.5000	---	39.30	54.00	14.70	---	---	300.0	V	222	-4.3
1622.0000	41.83	---	74.00	32.17	---	---	100.0	V	81	-4.2
1720.0000	---	38.74	54.00	15.26	---	---	250.0	V	284	-3.2
1720.0000	41.24	---	74.00	32.76	---	---	250.0	V	284	-3.2
2215.5000	---	41.92	54.00	12.08	---	---	350.0	H	82	-0.1
2290.5000	44.01	---	74.00	29.99	---	---	250.0	V	162	-0.2
2362.0000	44.25	---	74.00	29.75	---	---	150.0	H	266	0.0
2365.5000	---	41.81	54.00	12.19	---	---	150.0	H	0	0.0
2486.0000	---	41.76	54.00	12.24	---	---	250.0	V	122	0.4
2489.5000	44.13	---	74.00	29.87	---	---	200.0	H	304	0.4
2784.0000	45.53	---	74.00	28.47	---	---	250.0	V	63	1.2



2888.5000	---	43.09	54.00	10.91	---	---	400.0	V	111	1.4
3261.0000	44.86	---	74.00	29.14	---	---	350.0	H	359	2.3
3263.0000	---	42.85	54.00	11.15	---	---	250.0	H	49	2.3
3337.5000	---	43.14	54.00	10.86	---	---	100.0	V	330	2.5
3337.5000	46.19	---	74.00	27.81	---	---	150.0	V	0	2.5
3351.0000	46.19	---	74.00	27.81	---	---	100.0	V	143	2.5
3356.5000	---	43.34	54.00	10.66	---	---	200.0	V	182	2.5
3728.5000	---	46.06	54.00	7.94	---	---	300.0	H	40	3.9
4059.0000	48.46	---	74.00	25.54	---	---	150.0	V	100	4.9
4353.5000	---	47.13	54.00	6.87	---	---	350.0	V	0	5.7
4353.5000	48.77	---	74.00	25.23	---	---	350.0	V	0	5.7
4576.0000	---	47.87	54.00	6.13	---	---	150.0	H	49	6.4
4730.0000	49.83	---	74.00	24.17	---	---	300.0	V	60	7.0
5351.5000	49.80	---	74.00	24.20	---	---	300.0	H	200	7.4
5417.5000	---	48.06	54.00	5.94	---	---	150.0	H	317	7.4

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 1GHz to 6GHz
- Test mode: 1

High Gain Antenna. Band 2



Plot 2: Radiated Emissions at 3m SAC

Table 2: Quasi Peak Data of Radiated Emissions at 3m SAC

Frequency (MHz)	Max Peak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
4566.0000	49.49	---	74.00	24.51	---	---	200.0	H	64	6.4
4375.5000	48.65	---	74.00	25.35	---	---	200.0	H	248	5.8
4176.0000	---	45.30	54.00	8.70	---	---	250.0	H	60	5.2
2765.5000	---	43.26	54.00	10.74	---	---	250.0	H	172	1.1
2788.0000	45.87	---	74.00	28.13	---	---	250.0	H	232	1.2
1721.0000	---	39.32	54.00	14.68	---	---	300.0	H	63	-3.2
3264.0000	45.14	---	74.00	28.86	---	---	350.0	H	223	2.3
1319.5000	---	39.45	54.00	14.55	---	---	350.0	H	321	-5.3
4345.5000	---	46.24	54.00	7.76	---	---	400.0	H	141	5.7
2283.5000	---	43.87	54.00	10.13	---	---	400.0	H	273	-0.2
2283.5000	45.51	---	74.00	28.49	---	---	400.0	H	273	-0.2
3332.0000	---	42.49	54.00	11.51	---	---	100.0	V	0	2.5
3332.0000	44.49	---	74.00	29.51	---	---	100.0	V	0	2.5
2485.0000	---	40.95	54.00	13.05	---	---	100.0	V	59	0.4
5409.0000	49.13	---	74.00	24.87	---	---	100.0	V	182	7.4
2370.0000	---	42.00	54.00	12.00	---	---	100.0	V	321	0.0
4746.5000	---	47.33	54.00	6.67	---	---	100.0	V	350	7.1
1068.0000	---	38.43	54.00	15.57	---	---	150.0	V	102	-7.1

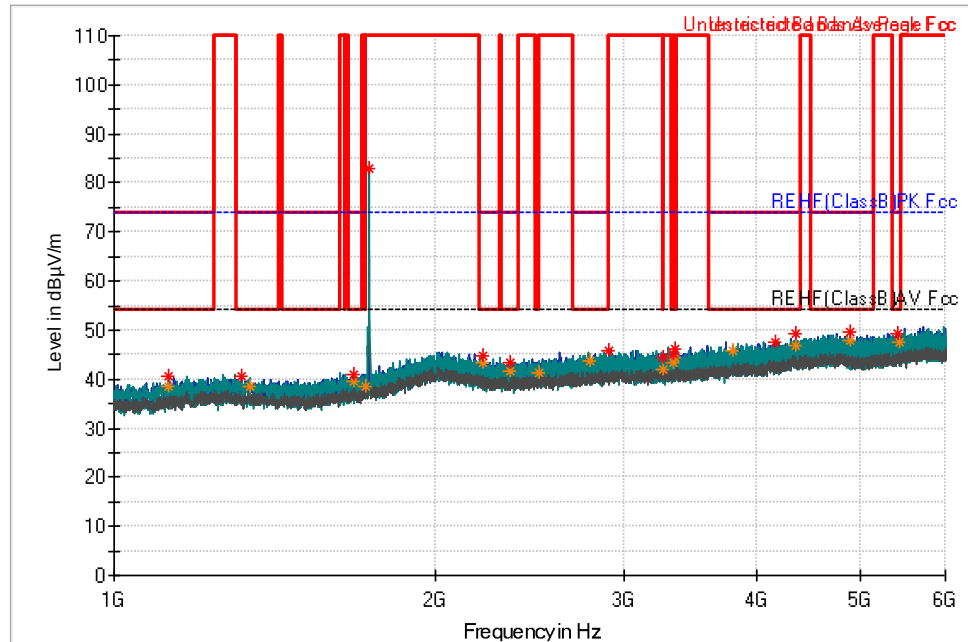


1068.0000	40.29	---	74.00	33.71	---	---	150.0	V	102	-7.1
1701.0000	---	40.28	54.00	13.72	---	---	150.0	V	253	-3.4
1701.0000	42.21	---	74.00	31.79	---	---	150.0	V	253	-3.4
3350.5000	45.13	---	74.00	28.87	---	---	150.0	V	284	2.5
3350.5000	---	43.20	54.00	10.80	---	---	150.0	V	284	2.5
1879.5000	83.68	---	110.00	26.32	---	---	200.0	V	349	-0.6
5437.5000	---	47.62	54.00	6.38	---	---	250.0	V	212	7.4
2342.0000	44.39	---	74.00	29.61	---	---	250.0	V	315	0.0
4183.5000	47.27	---	74.00	26.73	---	---	250.0	V	349	5.2
3266.5000	---	42.76	54.00	11.24	---	---	300.0	V	152	2.3
1208.5000	41.59	---	74.00	32.41	---	---	350.0	V	202	-5.6

Note: 10dB Attenuator is used.

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 1GHz to 6GHz
- Test mode: 1

High Gain Antenna. Band 4



Plot 3: Radiated Emissions at 3m SAC

Table 3: Quasi Peak Data of Radiated Emissions at 3m SAC

Frequency (MHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1123.5000	40.49	---	74.00	33.51	---	---	250.0	V	32	-6.5
1126.0000	---	38.44	54.00	15.56	---	---	300.0	H	0	-6.5
1314.0000	40.63	---	74.00	33.37	---	---	250.0	H	336	-5.3
1340.0000	---	38.37	54.00	15.63	---	---	400.0	V	0	-5.3
1675.0000	40.98	---	74.00	33.02	---	---	150.0	V	222	-3.7
1675.0000	---	39.51	54.00	14.49	---	---	150.0	V	222	-3.7
1720.5000	---	38.55	54.00	15.45	---	---	300.0	V	38	-3.2
1732.5000	82.91	---	110.00	27.09	---	---	150.0	V	0	-3.1
2214.0000	44.72	---	74.00	29.28	---	---	100.0	V	132	0.0
2214.0000	---	43.40	54.00	10.60	---	---	100.0	V	132	0.0
2350.5000	---	41.67	54.00	12.33	---	---	100.0	V	252	0.0
2350.5000	43.54	---	74.00	30.46	---	---	100.0	V	252	0.0
2496.0000	---	41.17	54.00	12.83	---	---	150.0	V	72	0.4
2792.0000	---	43.73	54.00	10.27	---	---	150.0	H	0	1.2
2900.0000	45.77	---	74.00	28.23	---	---	400.0	V	202	1.4
3264.0000	---	41.89	54.00	12.11	---	---	400.0	V	162	2.3
3265.5000	44.29	---	74.00	29.71	---	---	150.0	H	310	2.3

Manufacturer: Tantalus Systems Corp.

Report Number: E10402-2405_Tantalus_TRUSENSE GATEWAY_Rev0.0

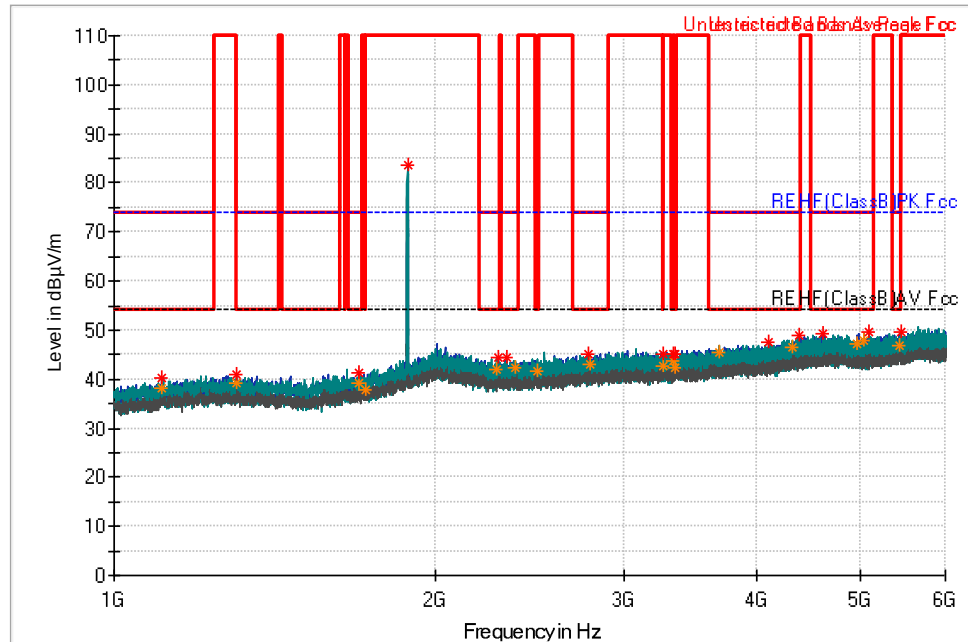


3336.5000	---	43.20	54.00	10.80	---	---	350.0	V	0	2.5
3336.5000	44.97	---	74.00	29.03	---	---	350.0	V	0	2.5
3352.0000	46.22	---	74.00	27.78	---	---	250.0	V	3	2.5
3352.0000	---	44.25	54.00	9.75	---	---	250.0	V	3	2.5
3792.5000	---	45.71	54.00	8.29	---	---	100.0	H	326	4.1
4153.5000	47.59	---	74.00	26.41	---	---	400.0	H	68	5.1
4339.5000	---	46.90	54.00	7.10	---	---	250.0	V	326	5.7
4343.5000	49.31	---	74.00	24.69	---	---	250.0	H	156	5.7
4879.0000	49.65	---	74.00	24.35	---	---	250.0	H	359	7.0
4879.0000	---	48.02	54.00	5.98	---	---	250.0	H	359	7.0
5420.0000	49.35	---	74.00	24.65	---	---	350.0	H	246	7.4
5425.5000	---	47.39	54.00	6.61	---	---	150.0	V	232	7.4

Note: 10dB Attenuator is used.

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 1GHz to 6GHz
- Test mode: 1

High Gain Antenna. Band 25



Plot 4: Radiated Emissions at 3m SAC

Table 4: Quasi Peak Data of Radiated Emissions at 3m SAC

Frequency (MHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1107.5000	40.41	---	74.00	33.59	---	---	150.0	H	153	-6.7
1107.5000	---	38.07	54.00	15.93	---	---	150.0	H	153	-6.7
1300.5000	---	39.32	54.00	14.68	---	---	250.0	V	2	-5.3
1300.5000	40.95	---	74.00	33.05	---	---	250.0	H	27	-5.3
1697.5000	41.26	---	74.00	32.74	---	---	150.0	H	0	-3.4
1697.5000	---	39.05	54.00	14.95	---	---	150.0	H	0	-3.4
1719.5000	---	37.67	54.00	16.33	---	---	200.0	V	343	-3.2
1881.5000	83.46	---	110.00	26.54	---	---	150.0	V	0	-0.6
2279.0000	---	42.04	54.00	11.96	---	---	150.0	V	293	-0.2
2291.5000	44.39	---	74.00	29.61	---	---	350.0	H	183	-0.2
2327.5000	44.42	---	74.00	29.58	---	---	400.0	V	225	-0.1
2373.0000	---	42.30	54.00	11.70	---	---	350.0	V	315	0.0
2492.5000	---	41.68	54.00	12.32	---	---	100.0	V	259	0.4
2784.5000	45.02	---	74.00	28.98	---	---	350.0	V	294	1.2
2791.5000	---	43.11	54.00	10.89	---	---	250.0	V	241	1.2
3261.5000	45.18	---	74.00	28.82	---	---	250.0	H	60	2.3
3266.0000	---	42.51	54.00	11.49	---	---	200.0	V	15	2.3
3332.5000	45.25	---	74.00	28.75	---	---	100.0	H	304	2.5

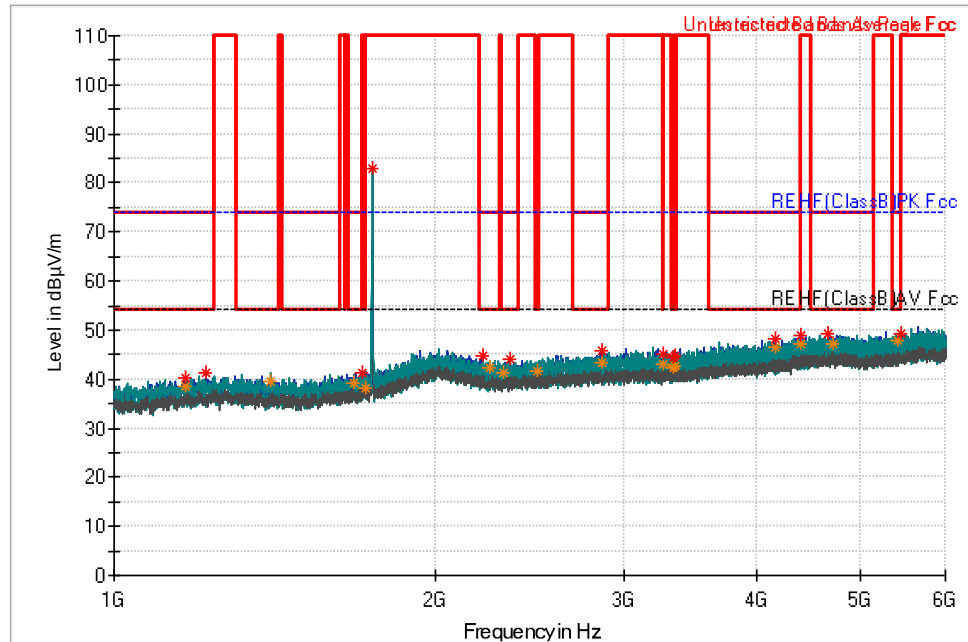


3336.5000	---	43.71	54.00	10.29	---	---	400.0	V	61	2.5
3349.0000	44.99	---	74.00	29.01	---	---	400.0	H	211	2.5
3354.0000	---	42.28	54.00	11.72	---	---	200.0	V	343	2.5
3689.5000	---	45.60	54.00	8.40	---	---	400.0	V	0	3.8
4095.5000	47.44	---	74.00	26.56	---	---	250.0	H	49	5.0
4320.0000	---	46.62	54.00	7.38	---	---	100.0	V	269	5.6
4381.0000	48.75	---	74.00	25.25	---	---	350.0	V	39	5.8
4615.0000	49.12	---	74.00	24.88	---	---	350.0	H	122	6.6
4965.0000	---	47.32	54.00	6.68	---	---	350.0	H	203	6.9
5027.0000	---	47.79	54.00	6.21	---	---	150.0	H	342	6.9
5097.0000	49.53	---	74.00	24.47	---	---	150.0	V	293	7.0
5435.0000	---	46.84	54.00	7.16	---	---	350.0	H	303	7.4
5451.0000	49.59	---	74.00	24.41	---	---	400.0	V	72	7.5

Note: 10dB Attenuator is used.

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 1GHz to 6GHz
- Test mode: 1

High Gain Antenna. Band 66



Plot 5: Radiated Emissions at 3m SAC

Table 5: Quasi Peak Data of Radiated Emissions at 3m SAC

Frequency (MHz)	Max Peak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1168.0000	---	38.36	54.00	15.64	---	---	250.0	V	315	-6.0
1168.0000	40.29	---	74.00	33.71	---	---	250.0	V	315	-6.0
1217.5000	41.29	---	74.00	32.71	---	---	100.0	H	101	-5.5
1401.0000	---	39.68	54.00	14.32	---	---	200.0	V	358	-5.4
1675.5000	---	39.13	54.00	14.87	---	---	150.0	V	231	-3.6
1710.0000	41.32	---	74.00	32.68	---	---	150.0	H	272	-3.3
1721.0000	---	38.33	54.00	15.67	---	---	100.0	H	181	-3.2
1745.5000	82.94	---	110.00	27.06	---	---	200.0	V	352	-3.0
2217.5000	44.94	---	74.00	29.06	---	---	300.0	V	352	-0.1
2243.5000	---	42.29	54.00	11.71	---	---	200.0	V	243	-0.3
2315.0000	---	41.44	54.00	12.56	---	---	300.0	H	252	-0.1
2349.5000	43.93	---	74.00	30.07	---	---	250.0	V	41	0.0
2491.0000	---	41.63	54.00	12.37	---	---	200.0	V	92	0.4
2858.0000	45.82	---	74.00	28.18	---	---	150.0	H	358	1.3
2858.0000	---	43.27	54.00	10.73	---	---	150.0	H	358	1.3
3262.0000	---	43.07	54.00	10.93	---	---	400.0	H	261	2.3
3262.0000	44.95	---	74.00	29.05	---	---	400.0	H	261	2.3
3333.0000	44.37	---	74.00	29.63	---	---	200.0	V	204	2.5

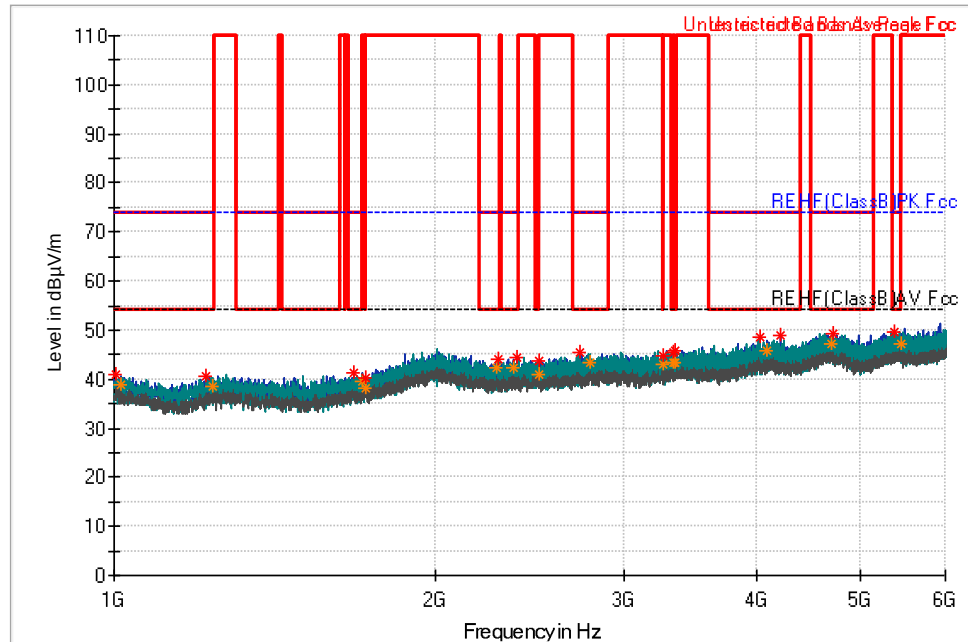


3334.5000	---	42.26	54.00	11.74	---	---	300.0	H	293	2.5
3354.0000	---	42.79	54.00	11.21	---	---	400.0	V	38	2.5
3354.0000	44.91	---	74.00	29.09	---	---	400.0	V	38	2.5
4159.5000	---	46.38	54.00	7.62	---	---	300.0	H	1	5.2
4159.5000	48.27	---	74.00	25.73	---	---	300.0	H	1	5.2
4398.0000	---	47.29	54.00	6.71	---	---	300.0	V	82	5.8
4398.0000	49.00	---	74.00	25.00	---	---	300.0	V	82	5.8
4664.0000	49.20	---	74.00	24.80	---	---	150.0	V	349	6.8
4708.5000	---	47.10	54.00	6.90	---	---	250.0	V	2	6.9
5419.0000	---	48.04	54.00	5.96	---	---	350.0	V	29	7.4
5454.5000	49.31	---	74.00	24.69	---	---	150.0	V	349	7.5

Note: 10dB Attenuator is used.

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 1GHz to 6GHz
- Test mode: 1

High Gain Antenna. Band 5



Plot 6: Radiated Emissions at 3m SAC

Table 6: Quasi Peak Data of Radiated Emissions at 3m SAC

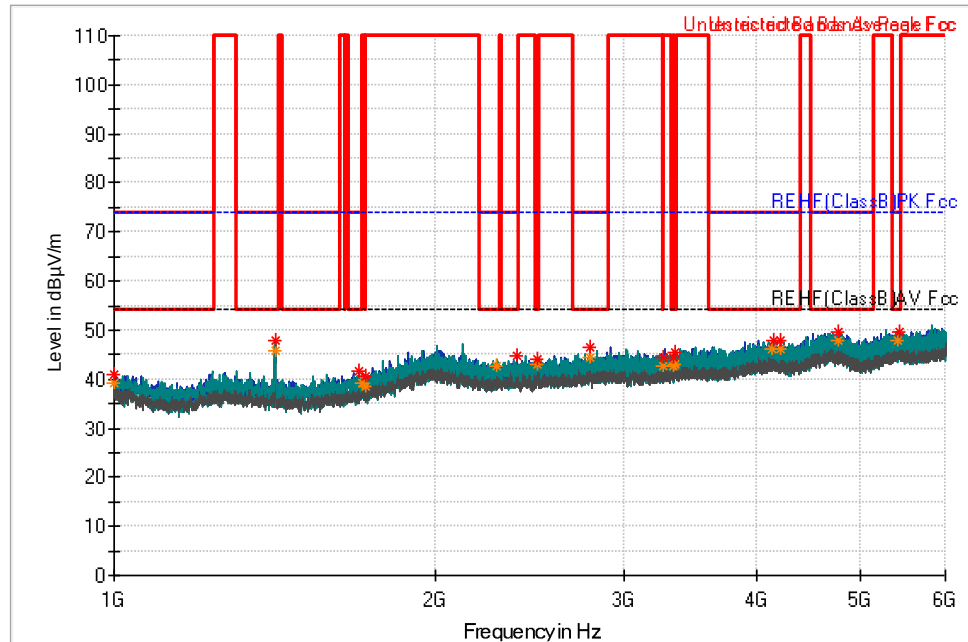
Frequency (MHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1004.5000	41.00	---	74.00	33.00	---	---	300.0	V	359	-7.8
1013.5000	---	38.80	54.00	15.20	---	---	150.0	H	154	-7.7
1221.0000	40.57	---	74.00	33.43	---	---	400.0	V	194	-5.5
1237.0000	---	38.63	54.00	15.37	---	---	350.0	V	186	-5.3
1675.5000	41.34	---	74.00	32.66	---	---	350.0	V	15	-3.6
1707.0000	---	39.59	54.00	14.41	---	---	400.0	V	82	-3.3
1719.5000	---	38.34	54.00	15.66	---	---	100.0	H	69	-3.2
1721.5000	40.37	---	74.00	33.63	---	---	300.0	H	190	-3.2
2280.5000	---	42.22	54.00	11.78	---	---	150.0	H	72	-0.2
2288.0000	43.96	---	74.00	30.04	---	---	200.0	V	27	-0.2
2361.5000	---	42.45	54.00	11.55	---	---	200.0	H	283	0.0
2382.0000	44.30	---	74.00	29.70	---	---	250.0	H	0	0.1
2496.0000	43.63	---	74.00	30.37	---	---	300.0	H	20	0.4
2499.0000	---	40.98	54.00	13.02	---	---	150.0	H	175	0.4
2726.0000	45.49	---	74.00	28.51	---	---	400.0	H	261	1.0
2794.0000	---	43.23	54.00	10.77	---	---	300.0	H	241	1.2
3264.5000	---	42.90	54.00	11.10	---	---	350.0	H	0	2.3
3266.5000	44.73	---	74.00	29.27	---	---	200.0	H	119	2.3



3333.0000	45.58	---	74.00	28.42	---	---	350.0	H	264	2.5
3333.0000	---	43.50	54.00	10.50	---	---	350.0	H	264	2.5
3351.5000	---	43.22	54.00	10.78	---	---	300.0	V	112	2.5
3351.5000	45.79	---	74.00	28.21	---	---	300.0	V	112	2.5
4021.5000	48.70	---	74.00	25.30	---	---	150.0	V	130	4.8
4085.5000	---	45.85	54.00	8.15	---	---	200.0	H	231	4.9
4211.0000	48.87	---	74.00	25.13	---	---	150.0	H	27	5.3
4691.0000	---	47.20	54.00	6.80	---	---	300.0	V	123	6.9
4704.5000	49.43	---	74.00	24.57	---	---	350.0	H	304	6.9
5383.5000	49.70	---	74.00	24.30	---	---	100.0	H	304	7.4
5457.5000	---	47.32	54.00	6.68	---	---	400.0	H	0	7.5

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 1GHz to 6GHz
- Test mode: 1

High Gain Antenna. Band 12



Plot 7: Radiated Emissions at 3m SAC

Table 7: Quasi Peak Data of Radiated Emissions at 3m SAC

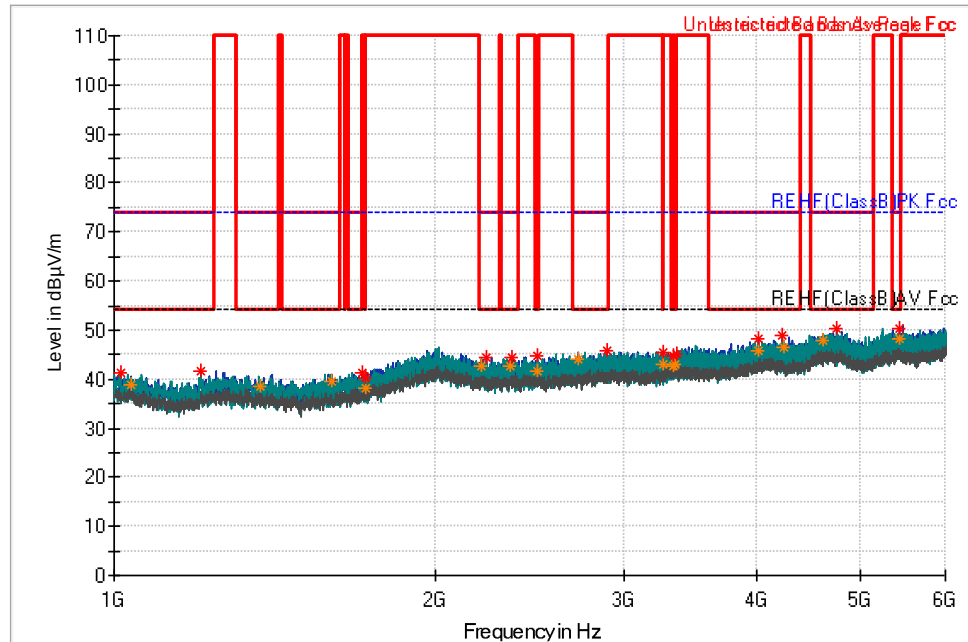
Frequency (MHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1000.0000	---	39.34	54.00	14.66	---	---	300.0	H	315	-7.8
1000.0000	41.08	---	74.00	32.92	---	---	300.0	H	315	-7.8
1415.5000	---	45.65	54.00	8.35	---	---	150.0	V	0	-5.5
1416.0000	47.74	---	74.00	26.26	---	---	150.0	V	0	-5.5
1698.0000	41.72	---	74.00	32.28	---	---	250.0	V	189	-3.4
1706.5000	---	39.27	54.00	14.73	---	---	350.0	H	0	-3.3
1719.5000	---	38.54	54.00	15.46	---	---	350.0	H	305	-3.2
1722.0000	40.71	---	74.00	33.29	---	---	400.0	V	114	-3.2
2284.5000	---	42.54	54.00	11.46	---	---	400.0	V	134	-0.2
2381.0000	44.70	---	74.00	29.30	---	---	200.0	H	241	0.1
2492.5000	44.24	---	74.00	29.76	---	---	100.0	H	221	0.4
2492.5000	---	43.06	54.00	10.94	---	---	100.0	H	221	0.4
2785.5000	---	44.38	54.00	9.62	---	---	100.0	H	8	1.2
2785.5000	46.67	---	74.00	27.33	---	---	100.0	H	8	1.2
3261.5000	---	42.54	54.00	11.46	---	---	350.0	H	50	2.3
3265.0000	44.36	---	74.00	29.64	---	---	350.0	H	0	2.3
3335.5000	44.40	---	74.00	29.60	---	---	300.0	H	282	2.5
3338.5000	---	42.73	54.00	11.27	---	---	150.0	V	96	2.5



3350.5000	45.50	---	74.00	28.50	---	---	250.0	H	144	2.5
3352.5000	---	43.11	54.00	10.89	---	---	400.0	V	256	2.5
4136.5000	---	46.11	54.00	7.89	---	---	100.0	H	89	5.1
4141.0000	47.86	---	74.00	26.14	---	---	250.0	V	129	5.1
4209.5000	47.88	---	74.00	26.12	---	---	100.0	H	139	5.3
4209.5000	---	46.21	54.00	7.79	---	---	100.0	H	139	5.3
4756.0000	49.76	---	74.00	24.24	---	---	400.0	V	175	7.1
4756.0000	---	47.86	54.00	6.14	---	---	400.0	V	175	7.1
5417.5000	---	47.93	54.00	6.07	---	---	350.0	V	145	7.4
5437.5000	49.75	---	74.00	24.25	---	---	300.0	H	128	7.4

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 1GHz to 6GHz
- Test mode: 1

High Gain Antenna. Band 13



Plot 8: Radiated Emissions at 3m SAC

Table 8: Quasi Peak Data of Radiated Emissions at 3m SAC

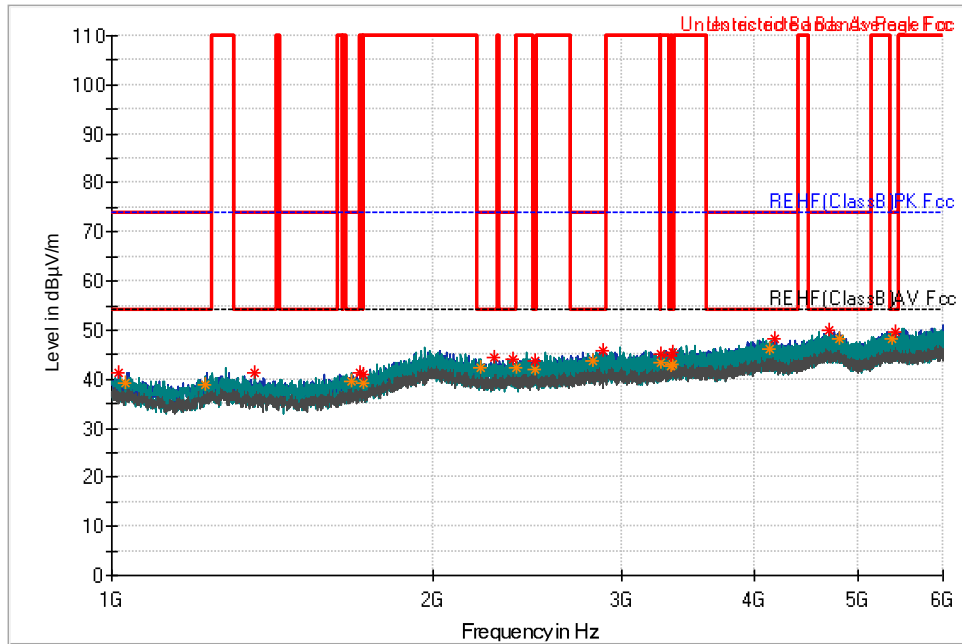
Frequency (MHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1013.0000	41.13	---	74.00	32.87	---	---	250.0	V	241	-7.7
1035.5000	---	38.97	54.00	15.03	---	---	300.0	H	349	-7.4
1204.0000	41.72	---	74.00	32.28	---	---	400.0	V	153	-5.7
1372.5000	---	38.65	54.00	15.35	---	---	250.0	H	155	-5.4
1597.5000	---	39.44	54.00	14.56	---	---	300.0	H	109	-4.4
1707.0000	41.28	---	74.00	32.72	---	---	150.0	H	236	-3.3
1720.5000	---	38.28	54.00	15.72	---	---	300.0	V	266	-3.2
1720.5000	40.34	---	74.00	33.66	---	---	300.0	V	266	-3.2
2209.0000	---	42.70	54.00	11.30	---	---	250.0	V	28	0.0
2233.5000	44.27	---	74.00	29.73	---	---	150.0	H	71	-0.2
2349.0000	---	42.55	54.00	11.45	---	---	300.0	H	1	0.0
2361.0000	44.44	---	74.00	29.56	---	---	300.0	H	326	0.0
2492.0000	---	41.75	54.00	12.25	---	---	150.0	V	87	0.4
2492.5000	44.86	---	74.00	29.14	---	---	150.0	V	87	0.4
2715.0000	---	44.20	54.00	9.80	---	---	300.0	H	0	1.0
2892.5000	45.95	---	74.00	28.05	---	---	400.0	V	359	1.4
3264.5000	45.49	---	74.00	28.51	---	---	100.0	V	72	2.3
3264.5000	---	43.02	54.00	10.98	---	---	100.0	V	72	2.3



3334.0000	44.69	---	74.00	29.31	---	---	300.0	V	71	2.5
3335.0000	---	42.59	54.00	11.41	---	---	250.0	V	0	2.5
3353.0000	---	43.07	54.00	10.93	---	---	250.0	V	0	2.5
3358.0000	45.09	---	74.00	28.91	---	---	200.0	V	104	2.6
4006.5000	---	45.82	54.00	8.18	---	---	150.0	V	148	4.7
4012.5000	48.18	---	74.00	25.82	---	---	400.0	H	89	4.7
4224.0000	48.80	---	74.00	25.20	---	---	400.0	V	194	5.3
4233.0000	---	46.48	54.00	7.52	---	---	100.0	H	0	5.4
4612.0000	---	47.93	54.00	6.07	---	---	100.0	H	169	6.6
4745.5000	50.25	---	74.00	23.75	---	---	300.0	V	113	7.1
5429.0000	50.36	---	74.00	23.64	---	---	150.0	H	144	7.4
5429.0000	---	48.11	54.00	5.89	---	---	150.0	H	144	7.4

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 1GHz to 6GHz
- Test mode: 1

High Gain Antenna. Band 14



Plot 9: Radiated Emissions at 3m SAC

Table 9: Quasi Peak Data of Radiated Emissions at 3m SAC

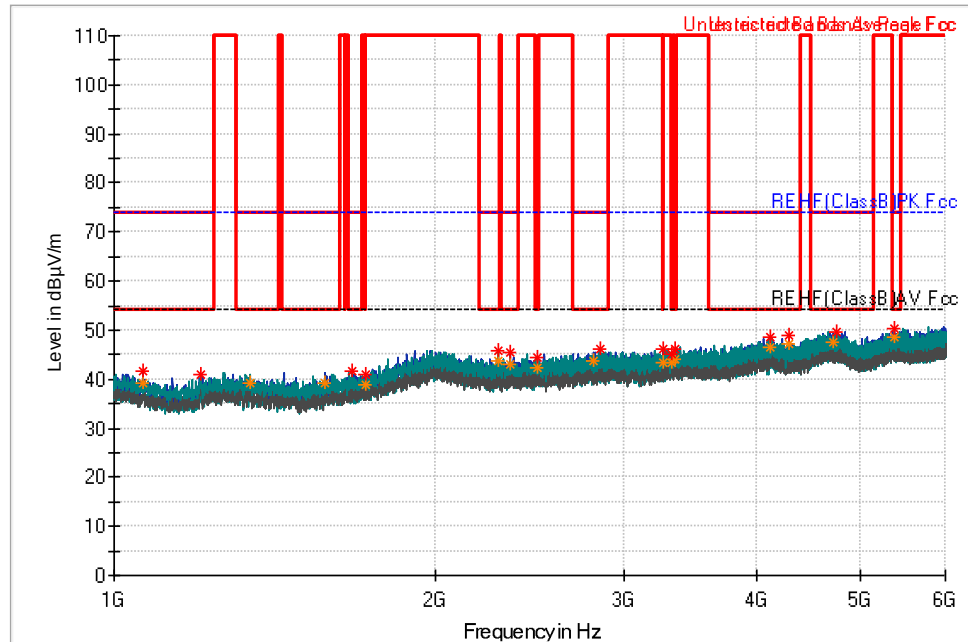
Frequency (MHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1014.5000	41.28	---	74.00	32.72	---	---	150.0	H	215	-7.7
1031.0000	---	39.05	54.00	14.95	---	---	250.0	V	200	-7.5
1222.5000	---	39.00	54.00	15.00	---	---	350.0	V	66	-5.5
1359.5000	41.34	---	74.00	32.66	---	---	350.0	V	273	-5.4
1678.0000	---	39.58	54.00	14.42	---	---	150.0	V	39	-3.6
1710.0000	41.37	---	74.00	32.63	---	---	250.0	H	198	-3.3
1722.0000	---	39.16	54.00	14.84	---	---	300.0	H	315	-3.2
1722.0000	40.99	---	74.00	33.01	---	---	300.0	H	315	-3.2
2217.5000	---	42.50	54.00	11.50	---	---	150.0	H	82	-0.1
2284.0000	44.52	---	74.00	29.48	---	---	300.0	H	178	-0.2
2376.5000	44.09	---	74.00	29.91	---	---	400.0	V	134	0.0
2390.0000	---	42.24	54.00	11.76	---	---	150.0	H	266	0.1
2487.5000	---	42.06	54.00	11.94	---	---	150.0	H	315	0.4
2487.5000	43.81	---	74.00	30.19	---	---	150.0	H	315	0.4
2818.0000	---	43.80	54.00	10.20	---	---	350.0	H	206	1.3
2887.5000	45.86	---	74.00	28.14	---	---	150.0	H	71	1.4
3263.5000	45.19	---	74.00	28.81	---	---	300.0	H	178	2.3
3267.0000	---	43.45	54.00	10.55	---	---	250.0	V	0	2.3



3339.0000	44.69	---	74.00	29.31	---	---	100.0	V	82	2.5
3339.0000	---	42.59	54.00	11.41	---	---	100.0	V	82	2.5
3350.0000	45.44	---	74.00	28.56	---	---	200.0	V	154	2.5
3352.0000	---	43.13	54.00	10.87	---	---	300.0	V	50	2.5
4127.5000	---	46.22	54.00	7.78	---	---	400.0	V	256	5.1
4174.5000	48.09	---	74.00	25.91	---	---	100.0	H	315	5.2
4702.5000	49.88	---	74.00	24.12	---	---	400.0	H	315	6.9
4805.5000	---	48.32	54.00	5.68	---	---	200.0	H	18	7.0
5368.5000	---	48.29	54.00	5.71	---	---	200.0	V	0	7.4
5412.0000	49.67	---	74.00	24.33	---	---	100.0	H	304	7.4

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 1GHz to 6GHz
- Test mode: 1

High Gain Antenna. Band 26



Plot 10: Radiated Emissions at 3m SAC

Table 10: Quasi Peak Data of Radiated Emissions at 3m SAC

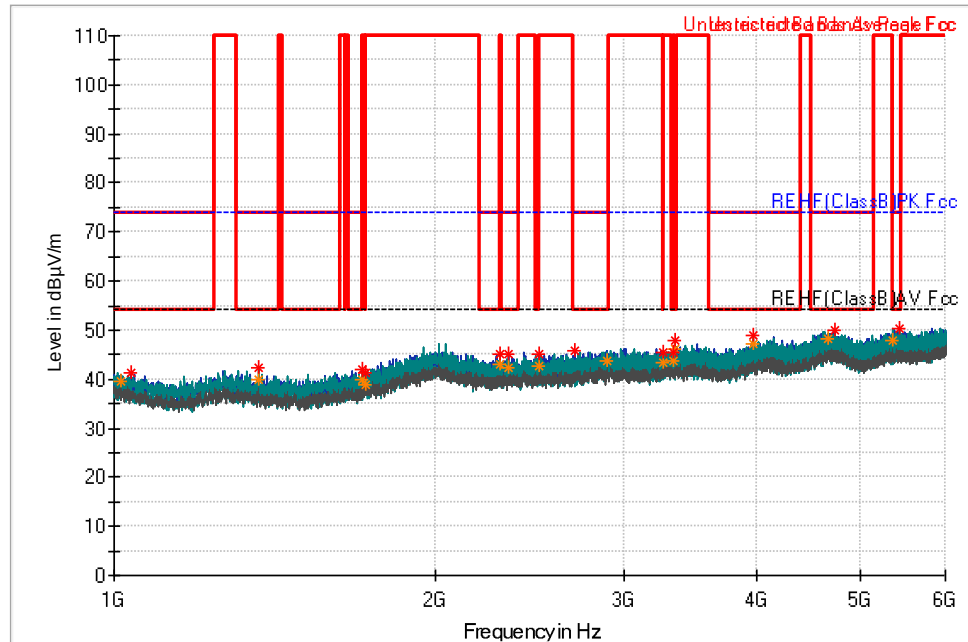
Frequency (MHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1063.5000	---	39.12	54.00	14.88	---	---	300.0	H	37	-7.1
1064.0000	41.75	---	74.00	32.25	---	---	300.0	H	37	-7.1
1203.5000	41.03	---	74.00	32.97	---	---	400.0	V	254	-5.7
1339.0000	---	39.22	54.00	14.78	---	---	100.0	V	296	-5.3
1575.5000	---	39.09	54.00	14.91	---	---	100.0	H	7	-4.7
1667.5000	41.47	---	74.00	32.53	---	---	150.0	V	294	-3.7
1720.0000	40.89	---	74.00	33.11	---	---	400.0	H	170	-3.2
1721.0000	---	38.94	54.00	15.06	---	---	300.0	H	349	-3.2
2286.0000	45.76	---	74.00	28.24	---	---	200.0	V	205	-0.2
2286.0000	---	43.67	54.00	10.33	---	---	200.0	V	205	-0.2
2345.5000	45.30	---	74.00	28.70	---	---	250.0	H	218	0.0
2345.5000	---	43.05	54.00	10.95	---	---	250.0	H	218	0.0
2490.5000	---	42.20	54.00	11.80	---	---	100.0	H	250	0.4
2490.5000	44.42	---	74.00	29.58	---	---	100.0	H	250	0.4
2813.0000	---	43.58	54.00	10.42	---	---	100.0	H	0	1.2
2855.5000	46.15	---	74.00	27.85	---	---	200.0	V	50	1.3
3265.5000	46.04	---	74.00	27.96	---	---	150.0	H	186	2.3
3265.5000	---	43.49	54.00	10.51	---	---	150.0	H	186	2.3



3332.0000	45.03	---	74.00	28.97	---	---	350.0	H	92	2.5
3332.0000	---	43.24	54.00	10.76	---	---	350.0	H	92	2.5
3351.0000	45.99	---	74.00	28.01	---	---	350.0	H	92	2.5
3351.0000	---	44.22	54.00	9.78	---	---	350.0	H	92	2.5
4110.0000	---	46.53	54.00	7.47	---	---	300.0	H	107	5.0
4110.0000	48.61	---	74.00	25.39	---	---	300.0	H	107	5.0
4289.5000	48.79	---	74.00	25.21	---	---	200.0	V	205	5.5
4289.5000	---	47.02	54.00	6.98	---	---	200.0	V	205	5.5
4707.5000	---	47.71	54.00	6.29	---	---	150.0	H	226	6.9
4745.0000	49.65	---	74.00	24.35	---	---	400.0	H	190	7.1
5374.0000	50.27	---	74.00	23.73	---	---	300.0	H	315	7.4
5374.0000	---	48.53	54.00	5.47	---	---	300.0	H	315	7.4

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 1GHz to 6GHz
- Test mode: 1

Patch Antenna. Band 71



Plot 11: Radiated Emissions at 3m SAC

Table 11: Quasi Peak Data of Radiated Emissions at 3m SAC

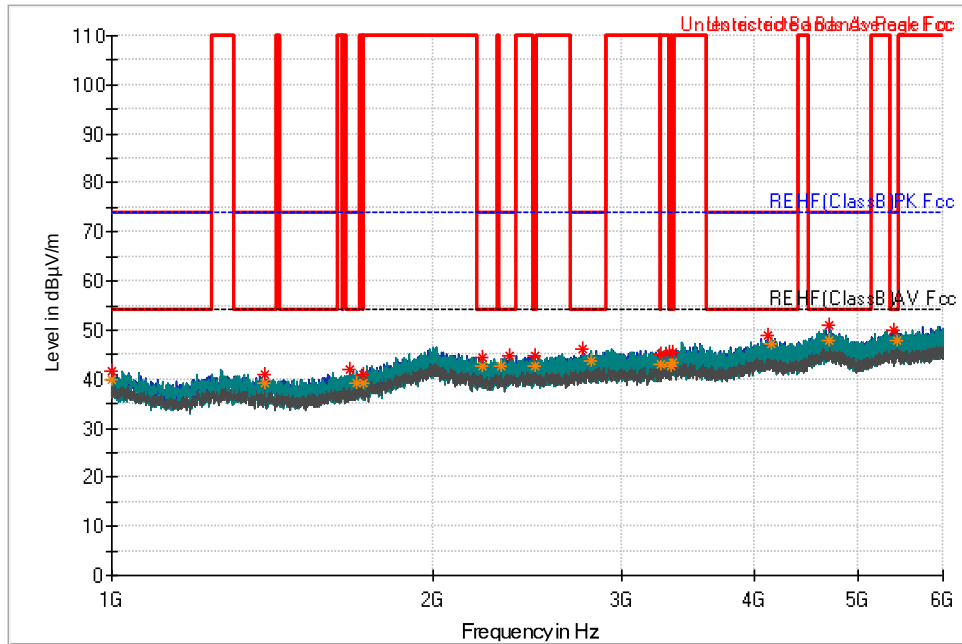
Frequency (MHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1013.0000	---	39.64	54.00	14.36	---	---	350.0	H	326	-7.7
1036.5000	41.30	---	74.00	32.70	---	---	300.0	H	314	-7.4
1365.5000	---	39.89	54.00	14.11	---	---	300.0	V	251	-5.4
1366.0000	42.18	---	74.00	31.82	---	---	300.0	V	251	-5.4
1708.5000	---	39.78	54.00	14.22	---	---	200.0	H	0	-3.3
1709.0000	42.02	---	74.00	31.98	---	---	200.0	H	0	-3.3
1720.0000	---	38.82	54.00	15.18	---	---	350.0	H	79	-3.2
1720.5000	41.31	---	74.00	32.69	---	---	350.0	H	79	-3.2
2297.0000	---	42.89	54.00	11.11	---	---	400.0	V	139	-0.2
2297.0000	45.17	---	74.00	28.83	---	---	400.0	V	139	-0.2
2342.5000	---	42.23	54.00	11.77	---	---	200.0	H	244	0.0
2342.5000	45.12	---	74.00	28.88	---	---	200.0	H	244	0.0
2495.0000	44.95	---	74.00	29.05	---	---	400.0	H	255	0.4
2495.0000	---	42.74	54.00	11.26	---	---	400.0	H	255	0.4
2702.5000	45.97	---	74.00	28.03	---	---	350.0	H	315	1.0
2894.0000	---	43.64	54.00	10.36	---	---	250.0	H	56	1.4
3267.0000	45.48	---	74.00	28.52	---	---	300.0	H	111	2.3
3267.0000	---	43.34	54.00	10.66	---	---	300.0	H	111	2.3



3339.0000	45.54	---	74.00	28.46	---	---	250.0	H	241	2.5
3339.0000	---	43.65	54.00	10.35	---	---	200.0	V	0	2.5
3354.5000	47.75	---	74.00	26.25	---	---	100.0	V	110	2.5
3354.5000	---	46.21	54.00	7.79	---	---	100.0	V	110	2.5
3968.5000	48.82	---	74.00	25.18	---	---	300.0	V	90	4.6
3968.5000	---	47.34	54.00	6.66	---	---	300.0	V	90	4.6
4652.0000	---	48.11	54.00	5.89	---	---	300.0	V	283	6.7
4733.5000	50.02	---	74.00	23.98	---	---	150.0	H	0	7.0
5354.5000	---	47.81	54.00	6.19	---	---	400.0	V	0	7.4
5433.5000	50.28	---	74.00	23.72	---	---	400.0	V	240	7.4

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 1GHz to 6GHz
- Test mode: 1

Patch Antenna. Band 5



Plot 12: Radiated Emissions at 3m SAC

Table 12: Quasi Peak Data of Radiated Emissions at 3m SAC

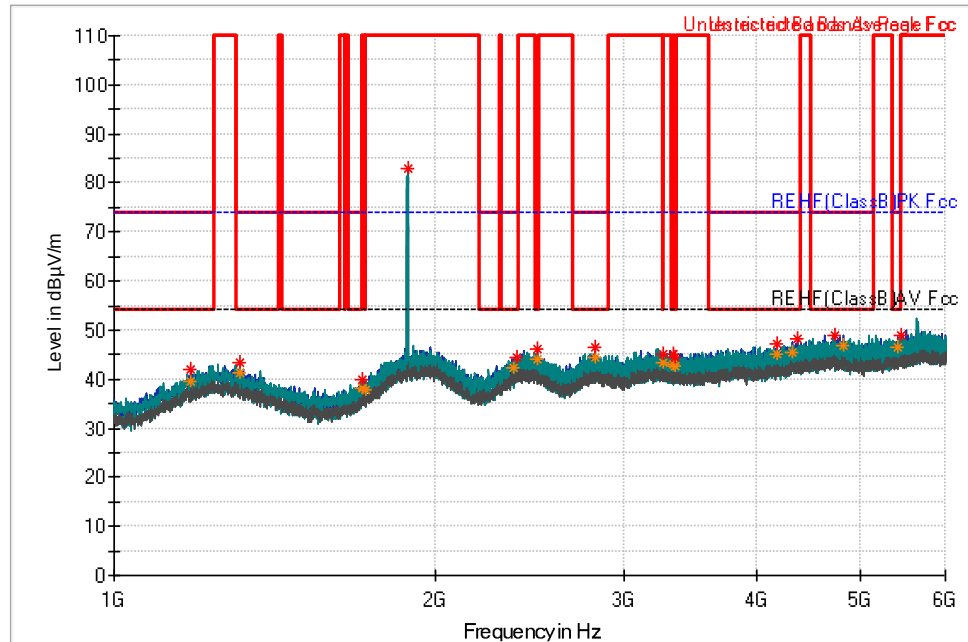
Frequency (MHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1000.5000	41.64	---	74.00	32.36	---	---	400.0	H	0	-7.8
1000.5000	---	40.03	54.00	13.97	---	---	400.0	H	0	-7.8
1390.0000	---	39.22	54.00	14.78	---	---	400.0	V	220	-5.4
1391.5000	41.09	---	74.00	32.91	---	---	250.0	V	61	-5.4
1672.5000	42.12	---	74.00	31.88	---	---	100.0	H	337	-3.7
1696.5000	---	39.17	54.00	14.83	---	---	200.0	V	337	-3.4
1721.5000	---	39.32	54.00	14.68	---	---	400.0	H	213	-3.2
1721.5000	40.97	---	74.00	33.03	---	---	400.0	H	213	-3.2
2223.5000	---	42.81	54.00	11.19	---	---	400.0	V	241	-0.1
2223.5000	44.47	---	74.00	29.53	---	---	400.0	V	241	-0.1
2313.0000	---	42.71	54.00	11.29	---	---	100.0	V	0	-0.1
2360.0000	44.69	---	74.00	29.31	---	---	300.0	V	10	0.0
2489.5000	44.69	---	74.00	29.31	---	---	150.0	H	282	0.4
2489.5000	---	42.74	54.00	11.26	---	---	150.0	H	282	0.4
2763.5000	45.98	---	74.00	28.02	---	---	100.0	H	0	1.1
2814.0000	---	43.81	54.00	10.19	---	---	150.0	V	134	1.2
3261.5000	---	42.97	54.00	11.03	---	---	300.0	H	0	2.3
3261.5000	45.13	---	74.00	28.87	---	---	300.0	H	0	2.3



3332.0000	45.29	---	74.00	28.71	---	---	300.0	H	92	2.5
3338.5000	---	42.66	54.00	11.34	---	---	250.0	H	272	2.5
3347.0000	---	43.23	54.00	10.77	---	---	150.0	V	123	2.5
3351.0000	45.46	---	74.00	28.54	---	---	400.0	H	294	2.5
4107.0000	48.81	---	74.00	25.19	---	---	250.0	H	116	5.0
4149.0000	---	47.25	54.00	6.75	---	---	300.0	V	130	5.1
4702.0000	---	48.05	54.00	5.95	---	---	250.0	H	0	6.9
4702.0000	50.98	---	74.00	23.02	---	---	250.0	H	0	6.9
5398.0000	49.99	---	74.00	24.01	---	---	300.0	V	40	7.4
5432.5000	---	47.84	54.00	6.16	---	---	350.0	H	231	7.4

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 1GHz to 6GHz
- Test mode: 1

Patch Antenna. Band 25



Plot 13: Radiated Emissions at 3m SAC

Table 13: Quasi Peak Data of Radiated Emissions at 3m SAC

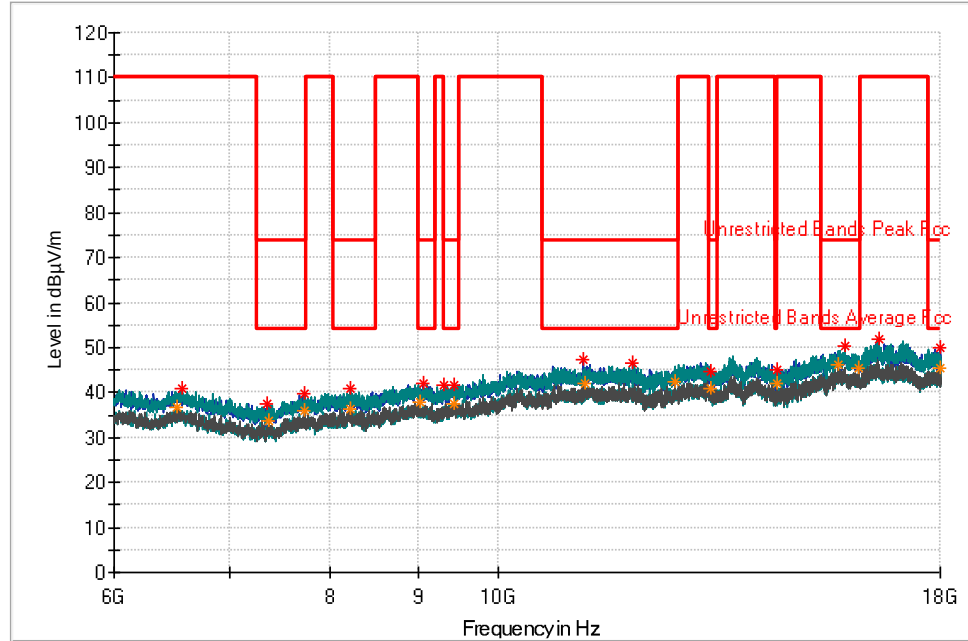
Frequency (MHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1179.0000	41.83	---	74.00	32.17	---	---	200.0	H	0	-5.9
1179.0000	---	39.57	54.00	14.43	---	---	200.0	H	0	-5.9
1310.5000	43.27	---	74.00	30.73	---	---	300.0	V	0	-5.3
1310.5000	---	41.23	54.00	12.77	---	---	300.0	V	0	-5.3
1708.0000	---	38.12	54.00	15.88	---	---	250.0	H	67	-3.3
1708.0000	39.80	---	74.00	34.20	---	---	250.0	H	67	-3.3
1719.0000	---	37.75	54.00	16.25	---	---	200.0	V	87	-3.2
1882.5000	83.05	---	110.00	26.95	---	---	250.0	V	0	-0.6
2365.0000	---	42.19	54.00	11.81	---	---	100.0	H	336	0.0
2383.5000	44.55	---	74.00	29.45	---	---	200.0	V	118	0.1
2488.5000	46.19	---	74.00	27.81	---	---	150.0	H	70	0.4
2488.5000	---	43.91	54.00	10.09	---	---	150.0	H	70	0.4
2821.5000	46.39	---	74.00	27.61	---	---	350.0	H	71	1.3
2821.5000	---	44.54	54.00	9.46	---	---	350.0	H	71	1.3
3262.5000	---	43.29	54.00	10.71	---	---	400.0	H	92	2.3
3265.0000	45.14	---	74.00	28.86	---	---	200.0	V	148	2.3
3333.0000	---	42.97	54.00	11.03	---	---	350.0	H	191	2.5
3333.0000	45.00	---	74.00	29.00	---	---	350.0	H	191	2.5



3346.0000	44.51	---	74.00	29.49	---	---	200.0	H	245	2.5
3350.5000	---	42.83	54.00	11.17	---	---	250.0	H	26	2.5
4175.5000	---	45.19	54.00	8.81	---	---	250.0	H	110	5.2
4175.5000	47.03	---	74.00	26.97	---	---	250.0	H	110	5.2
4318.0000	---	45.46	54.00	8.54	---	---	400.0	H	50	5.6
4357.5000	48.13	---	74.00	25.87	---	---	400.0	H	39	5.7
4734.5000	49.07	---	74.00	24.93	---	---	400.0	H	224	7.0
4813.5000	---	46.85	54.00	7.15	---	---	400.0	H	204	7.0
5405.5000	---	46.37	54.00	7.63	---	---	150.0	H	273	7.4
5458.5000	48.82	---	74.00	25.18	---	---	300.0	V	200	7.5

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 6GHz to 18GHz
- Test mode: 1

High Gain Antenna. Band 71



Plot 14: Radiated Emissions at 3m SAC

Table 14: Quasi Peak Data of Radiated Emissions at 3m SAC

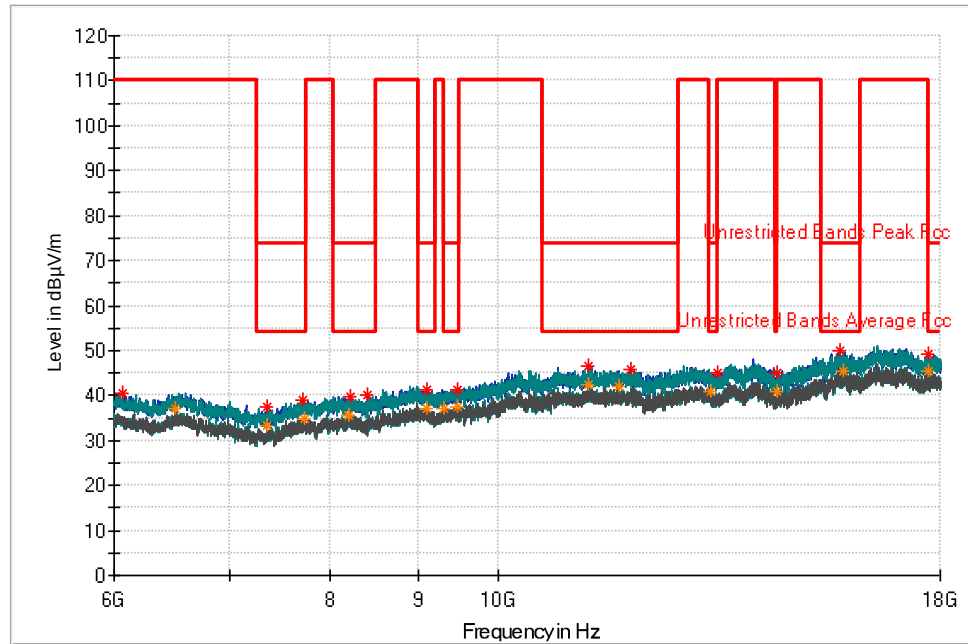
Frequency (MHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
6518.4000	---	36.77	110.00	73.23	---	---	150.0	V	83	-6.5
6573.6000	41.01	---	110.00	68.99	---	---	100.0	V	294	-6.4
7352.4000	37.34	---	74.00	36.66	---	---	200.0	H	231	-4.8
7363.2000	---	33.64	54.00	20.36	---	---	200.0	V	246	-4.8
7720.8000	39.85	---	74.00	34.15	---	---	100.0	H	55	-4.1
7725.6000	---	35.84	54.00	18.16	---	---	150.0	V	349	-4.0
8208.0000	---	36.43	54.00	17.57	---	---	100.0	V	341	-3.1
8222.4000	40.90	---	74.00	33.10	---	---	350.0	V	0	-3.1
9015.6000	---	37.88	54.00	16.12	---	---	300.0	H	332	-0.9
9044.4000	41.85	---	74.00	32.15	---	---	300.0	H	197	-0.9
9302.4000	41.75	---	74.00	32.25	---	---	350.0	V	131	-0.2
9424.8000	---	37.48	54.00	16.52	---	---	150.0	V	349	0.2
9434.4000	41.56	---	74.00	32.44	---	---	100.0	H	32	0.3
11198.4000	47.20	---	74.00	26.80	---	---	250.0	H	261	5.0
11224.8000	---	42.02	54.00	11.98	---	---	200.0	V	91	5.1
11944.8000	46.45	---	74.00	27.55	---	---	350.0	H	203	8.0
12658.8000	---	42.44	54.00	11.56	---	---	150.0	H	54	7.5
13264.8000	---	40.74	54.00	13.26	---	---	350.0	V	61	6.6



13264.8000	44.58	---	74.00	29.42	---	---	350.0	V	61	6.6
14490.0000	44.88	---	74.00	29.12	---	---	200.0	V	0	8.1
14490.0000	---	41.91	54.00	12.09	---	---	100.0	H	293	8.1
15733.2000	---	46.16	54.00	7.84	---	---	350.0	V	84	12.6
15848.4000	50.25	---	74.00	23.75	---	---	350.0	V	178	12.4
16135.2000	---	45.61	54.00	8.39	---	---	400.0	V	0	11.8
16582.8000	51.86	---	110.00	58.14	---	---	150.0	V	83	12.9
17991.6000	---	45.49	54.00	8.51	---	---	400.0	H	0	15.2
17991.6000	49.94	---	74.00	24.06	---	---	400.0	H	0	15.2

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 6GHz to 18GHz
- Test mode: 1

High Gain Antenna. Band 5



Plot 15: Radiated Emissions at 3m SAC

Table 15: Quasi Peak Data of Radiated Emissions at 3m SAC

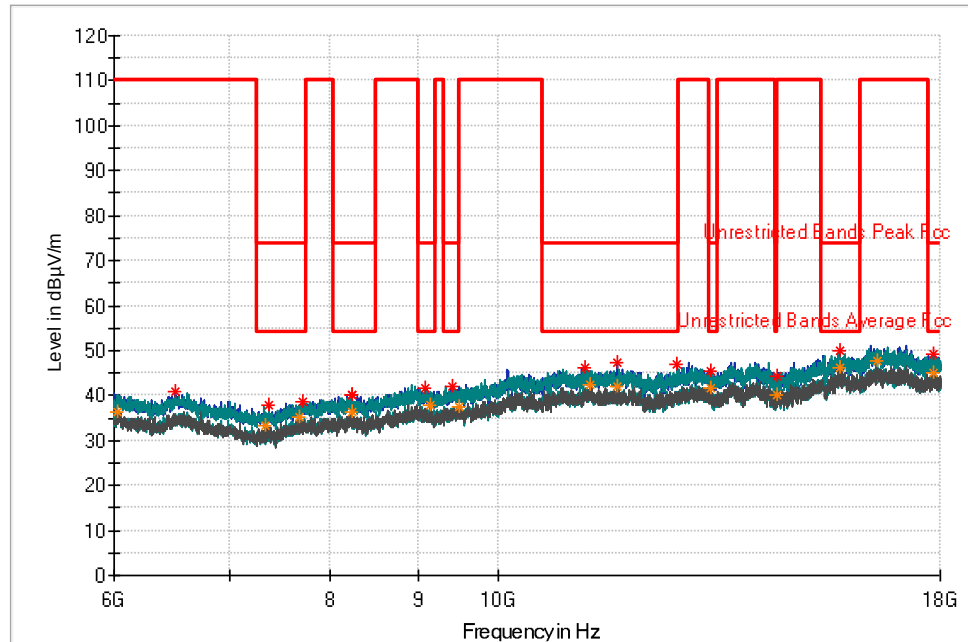
Frequency (MHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
6066.0000	40.65	---	110.00	69.35	---	---	100.0	V	318	-7.6
6513.6000	---	36.98	110.00	73.02	---	---	300.0	V	0	-6.5
7359.6000	37.61	---	74.00	36.39	---	---	200.0	V	328	-4.8
7360.8000	---	33.35	54.00	20.65	---	---	200.0	V	328	-4.8
7719.6000	38.91	---	74.00	35.09	---	---	100.0	V	294	-4.1
7720.8000	---	34.82	54.00	19.18	---	---	100.0	V	306	-4.1
8200.8000	---	35.75	54.00	18.25	---	---	150.0	V	24	-3.1
8200.8000	---	35.75	54.00	18.25	---	---	150.0	V	24	-3.1
8218.8000	39.79	---	74.00	34.21	---	---	150.0	V	188	-3.1
8409.6000	40.04	---	74.00	33.96	---	---	300.0	H	118	-2.6
9093.6000	41.28	---	74.00	32.72	---	---	250.0	H	273	-0.8
9103.2000	---	37.19	54.00	16.81	---	---	200.0	V	80	-0.7
9310.8000	---	37.21	54.00	16.79	---	---	250.0	H	95	-0.2
9469.2000	---	37.51	54.00	16.49	---	---	300.0	V	140	0.4
9470.4000	41.40	---	74.00	32.60	---	---	250.0	V	154	0.4
11283.6000	46.69	---	74.00	27.31	---	---	250.0	V	0	5.2
11283.6000	---	42.30	54.00	11.70	---	---	250.0	V	0	5.2
11738.4000	---	42.06	54.00	11.94	---	---	350.0	V	0	6.6



11937.6000	45.93	---	74.00	28.07	---	---	200.0	V	104	7.9
13263.6000	---	40.96	54.00	13.05	---	---	200.0	V	258	6.6
13399.2000	44.89	---	74.00	29.11	---	---	250.0	V	225	6.9
14494.8000	45.01	---	74.00	28.99	---	---	200.0	H	176	8.1
14497.2000	---	40.74	54.00	13.26	---	---	300.0	V	326	8.1
15751.2000	50.06	---	74.00	23.94	---	---	300.0	V	315	12.7
15838.8000	---	45.53	54.00	8.47	---	---	200.0	V	258	12.4
17707.2000	49.05	---	74.00	24.95	---	---	200.0	V	0	14.8
17707.2000	---	45.56	54.00	8.44	---	---	200.0	V	0	14.8

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 6GHz to 18GHz
- Test mode: 1

High Gain Antenna. Band 12



Plot 16: Radiated Emissions at 3m SAC

Table 16: Quasi Peak Data of Radiated Emissions at 3m SAC

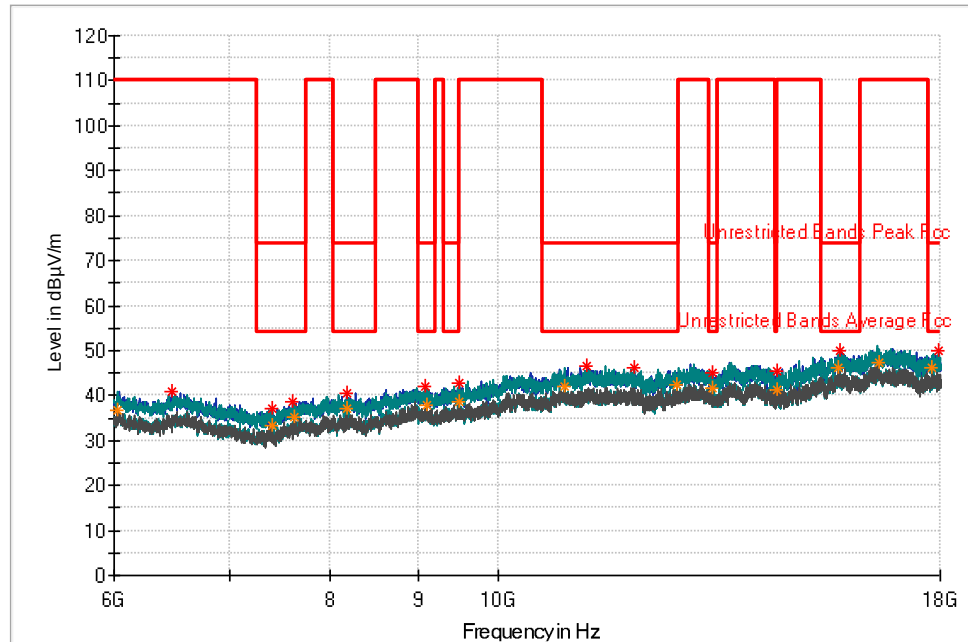
Frequency (MHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
6033.6000	---	36.43	110.00	73.57	---	---	400.0	V	0	-7.6
6505.2000	40.77	---	110.00	69.23	---	---	300.0	H	2	-6.5
7344.0000	---	33.27	54.00	20.73	---	---	200.0	V	199	-4.8
7375.2000	37.69	---	74.00	36.31	---	---	400.0	V	163	-4.7
7681.2000	---	35.06	54.00	18.94	---	---	350.0	V	92	-4.1
7706.4000	38.57	---	74.00	35.43	---	---	300.0	V	270	-4.1
8224.8000	40.15	---	74.00	33.85	---	---	250.0	H	359	-3.1
8224.8000	40.15	---	74.00	33.85	---	---	250.0	H	359	-3.1
8226.0000	---	36.30	54.00	17.70	---	---	250.0	H	359	-3.1
9076.8000	41.57	---	74.00	32.43	---	---	200.0	H	152	-0.8
9129.6000	---	37.76	54.00	16.24	---	---	200.0	H	0	-0.7
9398.4000	41.96	---	74.00	32.04	---	---	250.0	H	295	0.1
9489.6000	---	37.65	54.00	16.35	---	---	400.0	V	350	0.5
11224.8000	46.10	---	74.00	27.90	---	---	100.0	H	72	5.1
11292.0000	---	42.34	54.00	11.66	---	---	200.0	H	2	5.2
11708.4000	47.22	---	74.00	26.78	---	---	250.0	H	260	6.4
11709.6000	---	42.02	54.00	11.98	---	---	250.0	H	248	6.4
12668.4000	47.00	---	74.00	27.00	---	---	300.0	H	349	7.5



13262.4000	45.61	---	74.00	28.39	---	---	400.0	V	0	6.6
13272.0000	---	41.58	54.00	12.42	---	---	150.0	H	328	6.6
14492.4000	---	40.25	54.00	13.75	---	---	100.0	V	0	8.1
14498.4000	44.41	---	74.00	29.59	---	---	400.0	H	59	8.1
15738.0000	49.87	---	74.00	24.13	---	---	250.0	V	58	12.6
15748.8000	---	46.20	54.00	7.80	---	---	300.0	V	177	12.7
16557.6000	---	47.60	110.00	62.40	---	---	150.0	H	129	12.9
17834.4000	49.05	---	74.00	24.95	---	---	250.0	H	119	15.0
17834.4000	---	45.19	54.00	8.81	---	---	250.0	H	119	15.0

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 6GHz to 18GHz
- Test mode: 1

High Gain Antenna. Band 13



Plot 17: Radiated Emissions at 3m SAC

Table 17: Quasi Peak Data of Radiated Emissions at 3m SAC

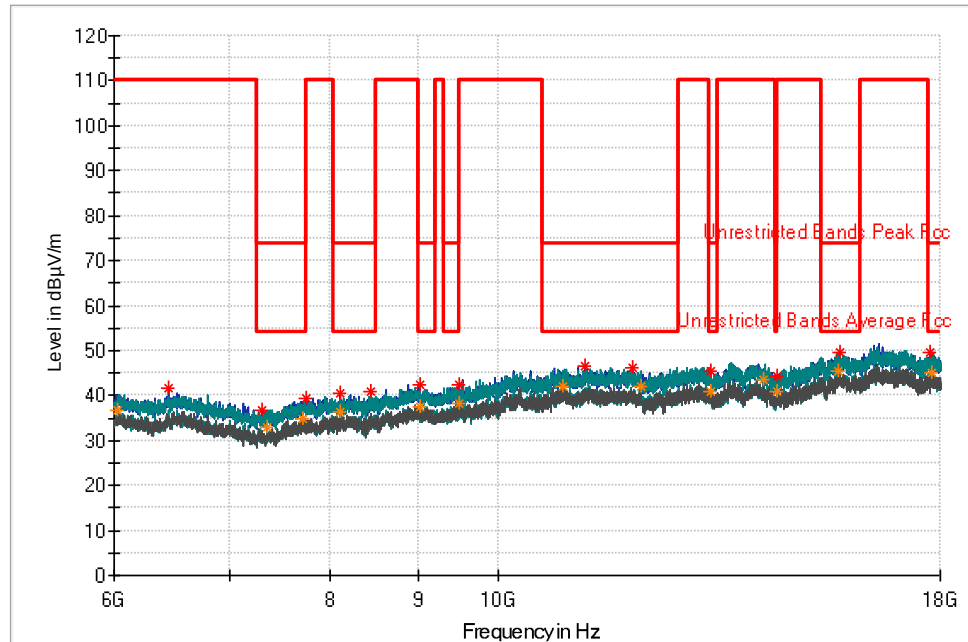
Frequency (MHz)	Max Peak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
6032.4000	---	36.84	110.00	73.16	---	---	350.0	V	67	-7.7
6472.8000	40.96	---	110.00	69.04	---	---	400.0	H	213	-6.6
7396.8000	37.08	---	74.00	36.92	---	---	250.0	V	0	-4.7
7398.0000	---	33.34	54.00	20.66	---	---	250.0	V	0	-4.7
7611.6000	38.79	---	74.00	35.21	---	---	400.0	H	36	-4.3
7626.0000	---	35.20	54.00	18.80	---	---	350.0	V	307	-4.3
8169.6000	40.59	---	74.00	33.41	---	---	150.0	H	352	-3.2
8170.8000	---	37.13	54.00	16.87	---	---	150.0	H	42	-3.2
9078.0000	42.00	---	74.00	32.00	---	---	250.0	V	212	-0.8
9097.2000	---	37.97	54.00	16.03	---	---	100.0	V	0	-0.7
9483.6000	---	38.63	54.00	15.37	---	---	200.0	V	282	0.4
9490.8000	42.63	---	74.00	31.37	---	---	250.0	V	201	0.5
10917.6000	---	42.18	54.00	11.82	---	---	150.0	V	310	4.5
11245.2000	46.70	---	74.00	27.30	---	---	300.0	V	116	5.1
11973.6000	46.01	---	74.00	27.99	---	---	300.0	V	259	8.1
12690.0000	---	42.46	54.00	11.54	---	---	150.0	V	236	7.5
13287.6000	---	41.45	54.00	12.55	---	---	150.0	H	247	6.6
13296.0000	45.07	---	74.00	28.93	---	---	200.0	V	258	6.7



14491.2000	45.36	---	74.00	28.64	---	---	300.0	H	140	8.1
14492.4000	---	41.44	54.00	12.56	---	---	300.0	H	140	8.1
15729.6000	---	46.19	54.00	7.81	---	---	300.0	V	140	12.6
15740.4000	49.99	---	74.00	24.01	---	---	400.0	H	323	12.6
16586.4000	---	47.44	110.00	62.56	---	---	350.0	H	128	12.9
17805.6000	---	46.16	54.00	7.84	---	---	300.0	H	260	15.0
17962.8000	49.80	---	74.00	24.20	---	---	400.0	V	344	15.1

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 6GHz to 18GHz
- Test mode: 1

High Gain Antenna. Band 14



Plot 18: Radiated Emissions at 3m SAC

Table 18: Quasi Peak Data of Radiated Emissions at 3m SAC

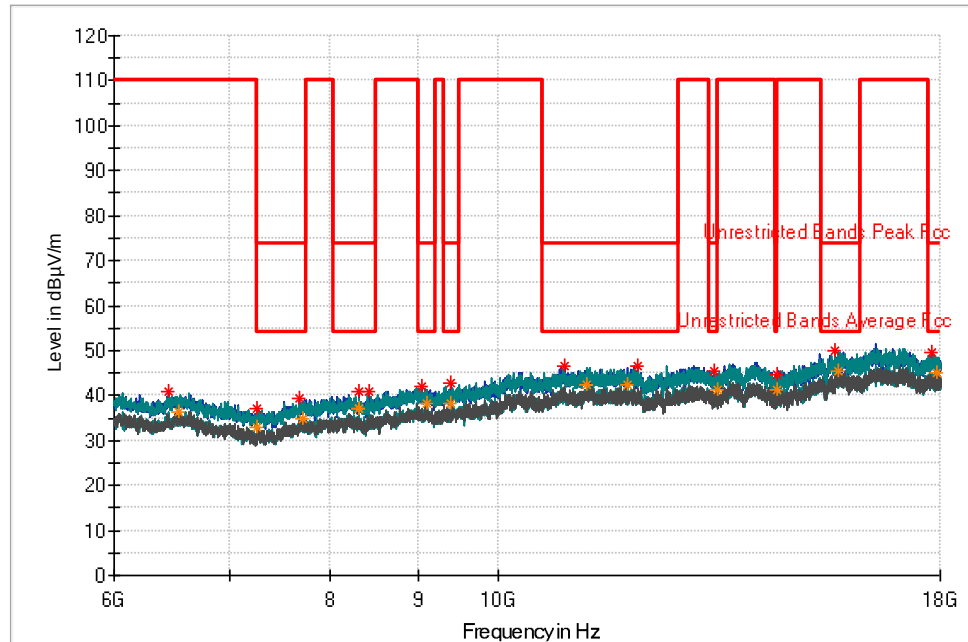
Frequency (MHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
6033.6000	---	36.85	110.00	73.15	---	---	200.0	H	152	-7.6
6453.6000	41.56	---	110.00	68.44	---	---	250.0	H	204	-6.7
7306.8000	36.90	---	74.00	37.10	---	---	400.0	H	69	-4.9
7351.2000	---	32.92	54.00	21.08	---	---	400.0	H	349	-4.8
7711.2000	---	34.94	54.00	19.06	---	---	100.0	H	176	-4.1
7744.8000	39.33	---	74.00	34.67	---	---	400.0	H	69	-4.0
8112.0000	40.68	---	74.00	33.32	---	---	150.0	H	256	-3.3
8113.2000	---	36.38	54.00	17.62	---	---	150.0	H	198	-3.3
8440.8000	40.78	---	74.00	33.22	---	---	250.0	V	323	-2.5
9012.0000	42.30	---	74.00	31.70	---	---	100.0	V	247	-0.9
9013.2000	---	37.35	54.00	16.65	---	---	100.0	V	0	-0.9
9489.6000	---	38.35	54.00	15.65	---	---	250.0	V	0	0.5
9495.6000	42.25	---	74.00	31.75	---	---	250.0	H	310	0.5
10888.8000	---	41.94	54.00	12.06	---	---	150.0	V	0	4.5
11230.8000	46.41	---	74.00	27.59	---	---	150.0	H	315	5.1
11942.4000	46.29	---	74.00	27.71	---	---	400.0	V	115	7.9
12081.6000	---	42.06	54.00	11.94	---	---	400.0	V	339	8.0
13258.8000	45.40	---	74.00	28.60	---	---	100.0	V	200	6.6



13263.6000	---	40.98	54.00	13.02	---	---	350.0	V	114	6.6
14234.4000	---	43.72	110.00	66.28	---	---	250.0	H	156	8.5
14492.4000	---	40.75	54.00	13.25	---	---	400.0	H	284	8.1
14492.4000	44.19	---	74.00	29.81	---	---	100.0	H	0	8.1
15728.4000	---	45.53	54.00	8.47	---	---	150.0	V	188	12.5
15736.8000	49.62	---	74.00	24.38	---	---	300.0	H	34	12.6
17739.6000	49.50	---	74.00	24.50	---	---	350.0	V	319	14.9
17785.2000	---	44.97	54.00	9.04	---	---	200.0	V	176	14.9

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 6GHz to 18GHz
- Test mode: 1

High Gain Antenna. Band 26



Plot 19: Radiated Emissions at 3m SAC

Table 19: Quasi Peak Data of Radiated Emissions at 3m SAC

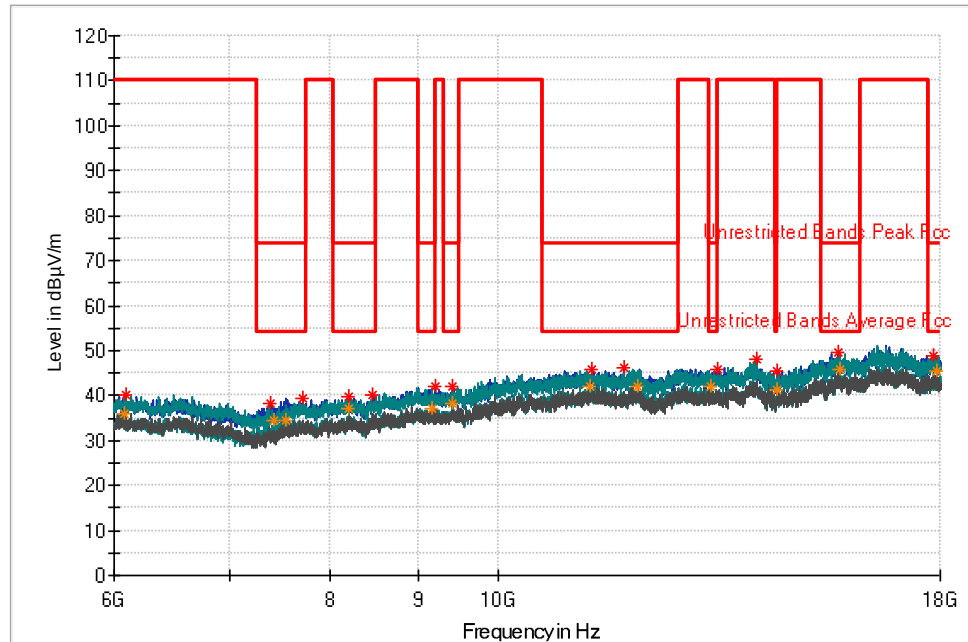
Frequency (MHz)	Max Peak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
6446.4000	40.71	---	110.00	69.29	---	---	200.0	H	127	-6.7
6543.6000	---	36.52	110.00	73.48	---	---	150.0	H	248	-6.5
7262.4000	---	32.83	54.00	21.17	---	---	150.0	V	323	-4.9
7262.4000	37.08	---	74.00	36.92	---	---	150.0	V	323	-4.9
7672.8000	39.37	---	74.00	34.63	---	---	400.0	H	224	-4.2
7717.2000	---	34.83	54.00	19.17	---	---	200.0	V	176	-4.1
8314.8000	---	37.16	54.00	16.84	---	---	250.0	H	286	-2.8
8314.8000	40.93	---	74.00	33.07	---	---	250.0	H	286	-2.8
8314.8000	---	37.16	54.00	16.84	---	---	250.0	H	286	-2.8
8426.4000	41.04	---	74.00	32.96	---	---	150.0	H	359	-2.6
9031.2000	41.98	---	74.00	32.02	---	---	350.0	H	16	-0.9
9104.4000	---	38.35	54.00	15.65	---	---	100.0	H	285	-0.7
9380.4000	42.72	---	74.00	31.28	---	---	100.0	H	1	0.1
9393.6000	---	38.05	54.00	15.95	---	---	300.0	H	140	0.1
10920.0000	46.44	---	74.00	27.56	---	---	350.0	H	0	4.5
11244.0000	---	42.53	54.00	11.47	---	---	400.0	H	0	5.1
11874.0000	---	42.46	54.00	11.54	---	---	300.0	H	105	7.5
12025.2000	46.71	---	74.00	27.29	---	---	150.0	V	225	8.2



13333.2000	45.37	---	74.00	28.63	---	---	150.0	H	0	6.7
13371.6000	---	41.14	54.00	12.86	---	---	250.0	V	199	6.8
14473.2000	---	41.15	54.00	12.85	---	---	150.0	V	107	8.1
14488.8000	44.60	---	74.00	29.40	---	---	400.0	H	13	8.1
15652.8000	50.15	---	74.00	23.85	---	---	150.0	V	24	12.0
15728.4000	---	45.57	54.00	8.43	---	---	200.0	V	200	12.5
17810.4000	49.46	---	74.00	24.54	---	---	350.0	H	247	15.0
17901.6000	---	45.13	54.00	8.87	---	---	300.0	V	354	15.1

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 6GHz to 18GHz
- Test mode: 1

High Gain Antenna. Band 2



Plot 20: Radiated Emissions at 3m SAC

Table 20: Quasi Peak Data of Radiated Emissions at 3m SAC

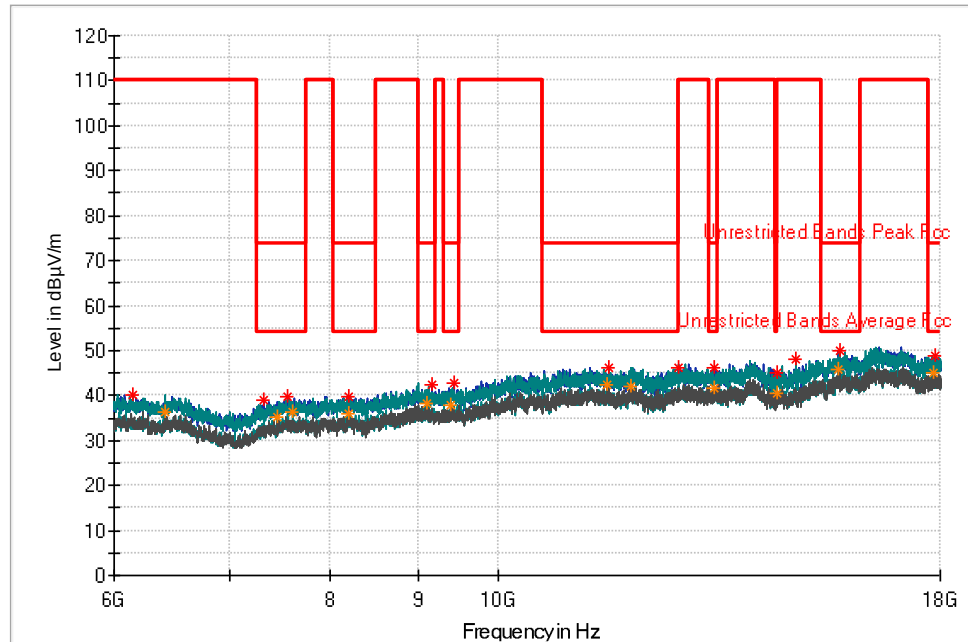
Frequency (MHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
6078.0000	---	36.14	110.00	73.86	---	---	300.0	V	11	-7.5
6097.2000	40.13	---	110.00	69.87	---	---	200.0	V	248	-7.5
7384.8000	38.30	---	74.00	35.70	---	---	100.0	H	141	-4.7
7422.0000	---	34.36	54.00	19.64	---	---	150.0	H	164	-4.7
7538.4000	---	34.46	54.00	19.54	---	---	200.0	H	352	-4.5
7707.6000	39.27	---	74.00	34.73	---	---	400.0	H	0	-4.1
8190.0000	39.89	---	74.00	34.11	---	---	300.0	V	200	-3.1
8192.4000	---	36.98	54.00	17.02	---	---	300.0	H	0	-3.1
8466.0000	40.16	---	74.00	33.84	---	---	250.0	H	0	-2.5
9159.6000	---	37.05	54.00	16.95	---	---	250.0	H	149	-0.6
9189.6000	42.05	---	74.00	31.95	---	---	350.0	H	91	-0.6
9400.8000	41.86	---	74.00	32.14	---	---	400.0	V	0	0.1
9403.2000	---	38.17	54.00	15.83	---	---	150.0	H	164	0.1
11292.0000	---	42.12	54.00	11.88	---	---	300.0	H	153	5.2
11325.6000	45.68	---	74.00	28.32	---	---	400.0	V	55	5.2
11815.2000	46.11	---	74.00	27.89	---	---	100.0	H	0	7.1
12038.4000	---	42.08	54.00	11.92	---	---	400.0	V	349	8.2
13263.6000	---	42.02	54.00	11.98	---	---	250.0	H	113	6.6



13375.2000	45.81	---	74.00	28.20	---	---	300.0	H	353	6.8
14107.2000	48.00	---	110.00	62.00	---	---	250.0	H	308	8.3
14494.8000	45.46	---	74.00	28.54	---	---	100.0	V	58	8.1
14496.0000	---	41.22	54.00	12.78	---	---	100.0	V	58	8.1
15726.0000	49.54	---	74.00	24.46	---	---	150.0	H	58	12.5
15738.0000	---	45.94	54.00	8.06	---	---	150.0	V	116	12.6
17818.8000	48.92	---	74.00	25.08	---	---	250.0	H	0	15.0
17917.2000	---	45.26	54.00	8.74	---	---	300.0	H	0	15.1

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 6GHz to 18GHz
- Test mode: 1

High Gain Antenna. Band 25



Plot 21: Radiated Emissions at 3m SAC

Table 21: Quasi Peak Data of Radiated Emissions at 3m SAC

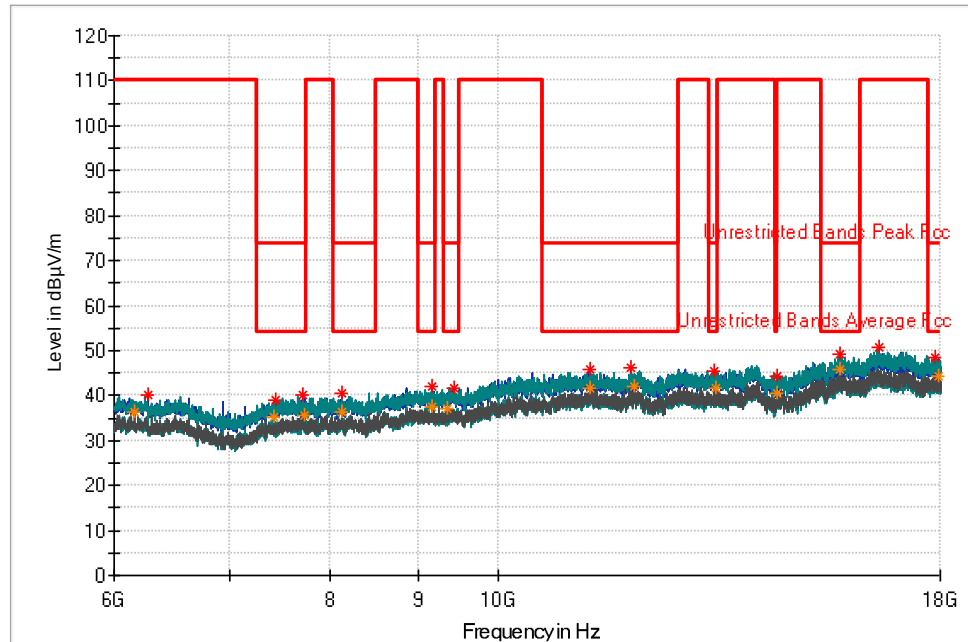
Frequency (MHz)	Max Peak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
6154.8000	40.26	---	110.00	69.74	---	---	200.0	V	0	-7.4
6420.0000	---	36.45	110.00	73.55	---	---	200.0	V	100	-6.7
7315.2000	38.85	---	74.00	35.15	---	---	250.0	H	196	-4.8
7458.0000	---	35.03	54.00	18.97	---	---	350.0	H	0	-4.6
7563.6000	39.69	---	74.00	34.31	---	---	250.0	H	297	-4.4
7606.8000	---	36.30	54.00	17.70	---	---	200.0	H	141	-4.3
8190.0000	39.87	---	74.00	34.13	---	---	400.0	H	188	-3.1
8203.2000	---	36.09	54.00	17.91	---	---	400.0	H	310	-3.1
9087.6000	---	38.08	54.00	15.92	---	---	400.0	V	298	-0.8
9156.0000	42.31	---	74.00	31.69	---	---	250.0	H	297	-0.6
9384.0000	---	37.90	54.00	16.10	---	---	200.0	V	29	0.1
9432.0000	42.74	---	74.00	31.26	---	---	350.0	H	41	0.2
11551.2000	---	42.37	54.00	11.63	---	---	300.0	V	211	5.6
11580.0000	46.14	---	74.00	27.86	---	---	400.0	V	0	5.7
11936.4000	---	42.06	54.00	11.94	---	---	300.0	V	349	7.9
12699.6000	46.36	---	74.00	27.64	---	---	200.0	V	112	7.5
13332.0000	46.11	---	74.00	27.89	---	---	300.0	H	270	6.7
13333.2000	---	41.80	54.00	12.20	---	---	300.0	H	270	6.7



14498.4000	44.94	---	74.00	29.06	---	---	150.0	V	240	8.1
14499.6000	---	40.52	54.00	13.48	---	---	150.0	V	240	8.1
14838.0000	47.92	---	110.00	62.08	---	---	150.0	V	356	9.0
15728.4000	---	45.69	54.00	8.31	---	---	250.0	H	50	12.5
15735.6000	50.04	---	74.00	23.96	---	---	200.0	V	195	12.6
17833.2000	---	45.20	54.00	8.80	---	---	100.0	H	128	15.0
17862.0000	48.76	---	74.00	25.24	---	---	400.0	H	227	15.0

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 6GHz to 18GHz
- Test mode: 1

High Gain Antenna. Band 4



Plot 22: Radiated Emissions at 3m SAC

Table 22: Quasi Peak Data of Radiated Emissions at 3m SAC

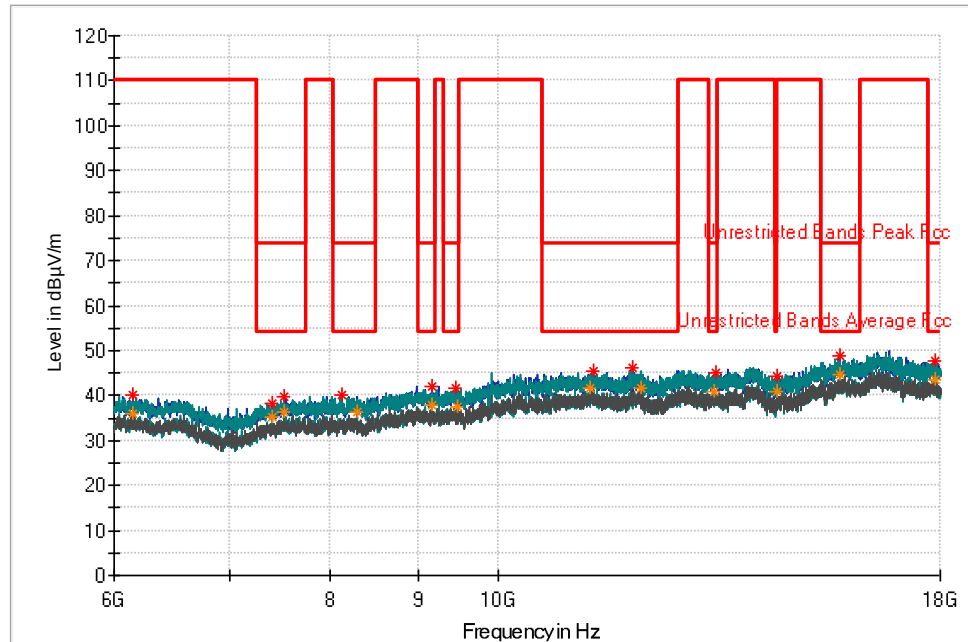
Frequency (MHz)	Max Peak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
6162.0000	---	36.26	110.00	73.74	---	---	250.0	V	82	-7.3
6280.8000	40.09	---	110.00	69.91	---	---	200.0	H	247	-7.1
7428.0000	---	35.13	54.00	18.87	---	---	150.0	V	142	-4.7
7438.8000	38.92	---	74.00	35.08	---	---	350.0	H	27	-4.7
7706.4000	40.00	---	74.00	34.00	---	---	350.0	V	238	-4.1
7736.4000	---	35.58	54.00	18.42	---	---	250.0	V	258	-4.0
8119.2000	40.60	---	74.00	33.40	---	---	150.0	V	258	-3.3
8120.4000	---	36.48	54.00	17.52	---	---	150.0	V	57	-3.3
9146.4000	42.04	---	74.00	31.96	---	---	100.0	V	156	-0.6
9150.0000	---	37.44	54.00	16.56	---	---	400.0	H	78	-0.6
9338.4000	---	37.28	54.00	16.72	---	---	150.0	H	299	-0.1
9423.6000	41.61	---	74.00	32.39	---	---	100.0	H	357	0.2
11299.2000	45.90	---	74.00	28.10	---	---	300.0	V	258	5.2
11304.0000	---	41.70	54.00	12.30	---	---	100.0	V	30	5.2
11929.2000	46.33	---	74.00	27.67	---	---	300.0	V	38	7.8
11982.0000	---	41.83	54.00	12.17	---	---	150.0	V	94	8.2
13317.6000	45.41	---	74.00	28.59	---	---	150.0	V	0	6.7
13347.6000	---	41.63	54.00	12.37	---	---	200.0	V	230	6.8



14491.2000	44.21	---	74.00	29.79	---	---	200.0	H	208	8.1
14497.2000	---	40.42	54.00	13.58	---	---	350.0	V	238	8.1
15739.2000	49.24	---	74.00	24.76	---	---	200.0	V	149	12.6
15739.2000	---	45.96	54.00	8.04	---	---	200.0	V	149	12.6
16582.8000	50.69	---	110.00	59.31	---	---	200.0	V	184	12.9
17876.4000	48.38	---	74.00	25.62	---	---	100.0	V	336	15.0
17967.6000	---	44.19	54.00	9.81	---	---	300.0	V	258	15.1

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 6GHz to 18GHz
- Test mode: 1

High Gain Antenna. Band 66



Plot 23: Radiated Emissions at 3m SAC

Table 23: Quasi Peak Data of Radiated Emissions at 3m SAC

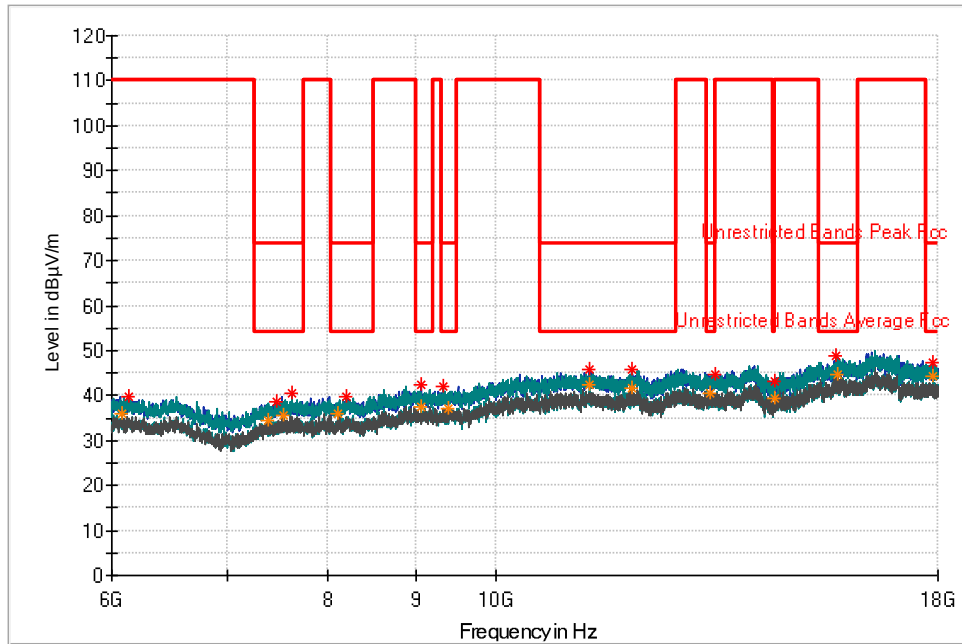
Frequency (MHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
6154.8000	40.31	---	110.00	69.69	---	---	150.0	H	250	-7.4
6154.8000	---	36.08	110.00	73.92	---	---	150.0	H	250	-7.4
7400.4000	38.29	---	74.00	35.71	---	---	300.0	H	242	-4.7
7401.6000	---	35.02	54.00	18.98	---	---	300.0	H	242	-4.7
7525.2000	39.56	---	74.00	34.44	---	---	100.0	V	0	-4.5
7526.4000	---	36.37	54.00	17.63	---	---	100.0	V	0	-4.5
8124.0000	40.08	---	74.00	33.92	---	---	350.0	V	66	-3.3
8294.4000	---	36.18	54.00	17.83	---	---	200.0	H	116	-2.9
9154.8000	---	38.03	54.00	15.97	---	---	200.0	H	314	-0.6
9159.6000	41.84	---	74.00	32.16	---	---	150.0	V	253	-0.6
9442.8000	41.62	---	74.00	32.38	---	---	350.0	V	299	0.3
9481.2000	---	37.50	54.00	16.50	---	---	150.0	V	253	0.4
11290.8000	---	41.78	54.00	12.22	---	---	100.0	H	165	5.2
11341.2000	45.24	---	74.00	28.76	---	---	400.0	V	169	5.2
11966.4000	46.10	---	74.00	27.90	---	---	250.0	V	90	8.1
12082.8000	---	41.60	54.00	12.40	---	---	250.0	V	196	8.0
13321.2000	---	40.93	54.00	13.08	---	---	200.0	H	92	6.7
13366.8000	44.89	---	74.00	29.11	---	---	250.0	V	324	6.8



14491.2000	44.32	---	74.00	29.68	---	---	250.0	H	337	8.1
14494.8000	---	40.69	54.00	13.31	---	---	100.0	V	152	8.1
15746.4000	48.89	---	74.00	25.11	---	---	200.0	V	112	12.7
15748.8000	---	44.53	54.00	9.47	---	---	150.0	V	78	12.7
17880.0000	47.80	---	74.00	26.20	---	---	250.0	H	53	15.0
17880.0000	---	43.37	54.00	10.63	---	---	250.0	H	53	15.0

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 6GHz to 18GHz
- Test mode: 1

Patch Antenna. Band 25



Plot 24: Radiated Emissions at 3m SAC

Table 24: Quasi Peak Data of Radiated Emissions at 3m SAC

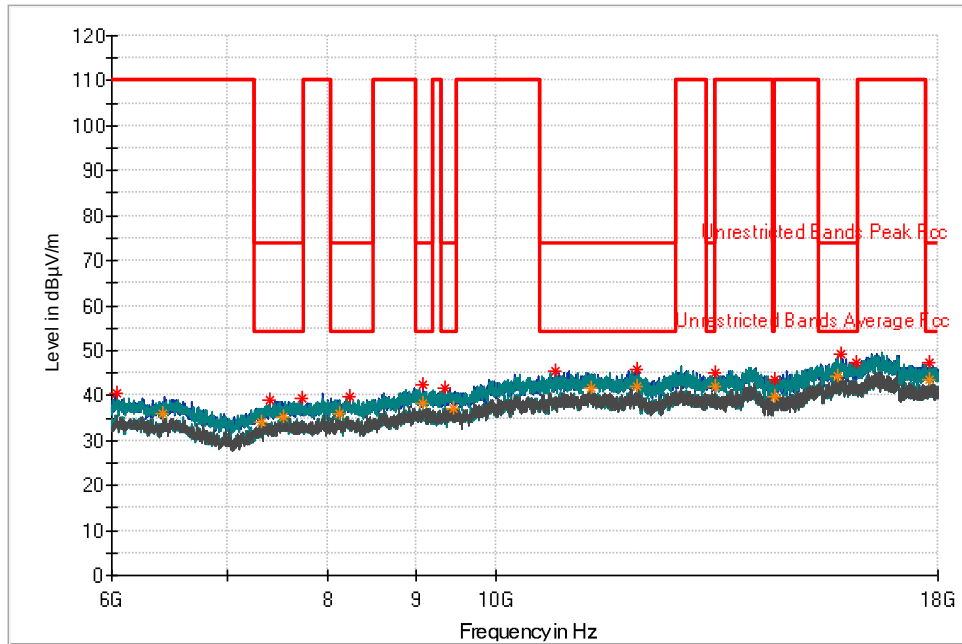
Frequency (MHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
6082.8000	---	35.98	110.00	74.02	---	---	300.0	V	18	-7.5
6133.2000	39.85	---	110.00	70.15	---	---	300.0	V	0	-7.4
7394.4000	---	34.28	54.00	19.72	---	---	100.0	V	75	-4.7
7468.8000	38.59	---	74.00	35.41	---	---	150.0	V	0	-4.6
7544.4000	---	35.44	54.00	18.56	---	---	200.0	H	305	-4.5
7621.2000	40.42	---	74.00	33.58	---	---	100.0	V	191	-4.3
8109.6000	---	36.14	54.00	17.86	---	---	350.0	V	268	-3.3
8188.8000	39.87	---	74.00	34.13	---	---	100.0	V	18	-3.2
9045.6000	42.32	---	74.00	31.68	---	---	400.0	H	356	-0.8
9046.8000	---	37.66	54.00	16.34	---	---	400.0	H	15	-0.8
9319.2000	41.91	---	74.00	32.09	---	---	250.0	V	196	-0.2
9392.4000	---	37.19	54.00	16.81	---	---	150.0	V	322	0.1
11328.0000	---	42.46	54.00	11.54	---	---	200.0	H	259	5.2
11328.0000	45.96	---	74.00	28.04	---	---	200.0	H	259	5.2
11974.8000	45.78	---	74.00	28.22	---	---	100.0	V	0	8.2
11974.8000	---	41.68	54.00	12.32	---	---	100.0	V	0	8.2
13287.6000	---	40.60	54.00	13.40	---	---	100.0	H	213	6.6
13376.4000	44.66	---	74.00	29.34	---	---	100.0	V	52	6.8



14487.6000	43.25	---	74.00	30.75	---	---	300.0	V	6	8.1
14497.2000	---	39.50	54.00	14.50	---	---	400.0	H	0	8.1
15727.2000	48.89	---	74.00	25.11	---	---	400.0	V	53	12.5
15742.8000	---	44.69	54.00	9.31	---	---	350.0	H	336	12.6
17862.0000	47.44	---	74.00	26.56	---	---	200.0	H	142	15.0
17863.2000	---	44.33	54.00	9.67	---	---	200.0	H	107	15.0

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 6GHz to 18GHz
- Test mode: 1

Patch Antenna. Band 5



Plot 25: Radiated Emissions at 3m SAC

Table 25: Quasi Peak Data of Radiated Emissions at 3m SAC

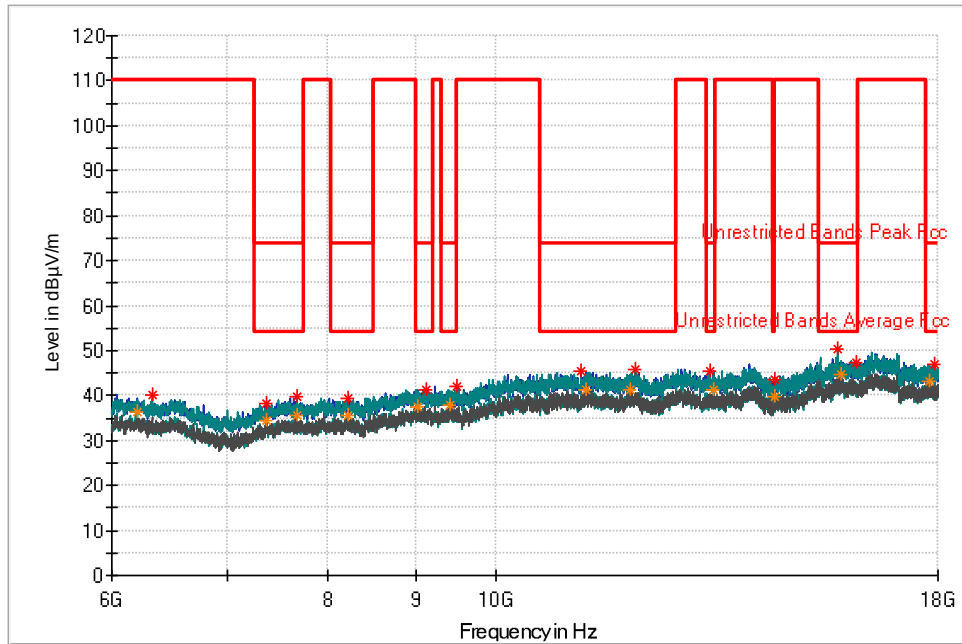
Frequency (MHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
6036.0000	40.48	---	110.00	69.52	---	---	300.0	V	121	-7.6
6423.6000	---	35.82	110.00	74.18	---	---	200.0	V	311	-6.7
7312.8000	---	34.01	54.00	19.99	---	---	100.0	V	75	-4.8
7399.2000	38.94	---	74.00	35.06	---	---	300.0	V	7	-4.7
7537.2000	---	35.29	54.00	18.71	---	---	150.0	H	179	-4.5
7724.4000	39.51	---	74.00	34.49	---	---	200.0	V	286	-4.0
8124.0000	---	35.80	54.00	18.20	---	---	250.0	V	197	-3.3
8235.6000	39.63	---	74.00	34.37	---	---	300.0	V	0	-3.0
9069.6000	42.26	---	74.00	31.74	---	---	300.0	H	220	-0.8
9070.8000	---	38.11	54.00	15.89	---	---	300.0	H	102	-0.8
9343.2000	41.76	---	74.00	32.24	---	---	150.0	V	311	-0.1
9442.8000	---	37.25	54.00	16.75	---	---	200.0	H	173	0.3
10834.8000	45.28	---	74.00	28.72	---	---	150.0	V	0	4.5
11343.6000	---	41.66	54.00	12.34	---	---	400.0	V	98	5.2
12061.2000	45.71	---	74.00	28.29	---	---	250.0	H	274	8.1
12078.0000	---	41.96	54.00	12.04	---	---	150.0	H	28	8.0
13378.8000	45.17	---	74.00	28.83	---	---	200.0	V	157	6.8
13380.0000	---	42.03	54.00	11.97	---	---	200.0	V	0	6.8



14485.2000	43.67	---	74.00	30.33	---	---	150.0	V	16	8.1
14485.2000	---	39.70	54.00	14.30	---	---	150.0	V	16	8.1
15736.8000	---	44.42	54.00	9.58	---	---	200.0	V	0	12.6
15841.2000	49.30	---	74.00	24.70	---	---	200.0	H	149	12.4
16132.8000	47.37	---	74.00	26.63	---	---	250.0	H	132	11.8
17808.0000	47.14	---	74.00	26.86	---	---	250.0	H	262	15.0
17809.2000	---	43.66	54.00	10.34	---	---	250.0	H	286	15.0

- Class: B
- EUT input voltage: 120V 60Hz
- Frequency Range: 6GHz to 18GHz
- Test mode: 1

Patch Antenna. Band 71



Plot 26: Radiated Emissions at 3m SAC

Table 26: Quasi Peak Data of Radiated Emissions at 3m SAC

Frequency (MHz)	Max Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
6206.4000	---	36.29	110.00	73.71	---	---	300.0	H	173	-7.2
6327.6000	40.27	---	110.00	69.73	---	---	400.0	V	0	-6.9
7365.6000	---	34.53	54.00	19.47	---	---	350.0	H	0	-4.8
7365.6000	38.37	---	74.00	35.63	---	---	350.0	H	0	-4.8
7670.4000	39.70	---	74.00	34.30	---	---	400.0	V	0	-4.2
7671.6000	---	35.73	54.00	18.27	---	---	400.0	V	139	-4.2
8217.6000	39.52	---	74.00	34.48	---	---	350.0	V	41	-3.1
8220.0000	---	35.50	54.00	18.50	---	---	400.0	H	0	-3.1
9012.0000	---	37.46	54.00	16.54	---	---	350.0	H	68	-0.9
9105.6000	41.45	---	74.00	32.55	---	---	250.0	V	259	-0.7
9418.8000	---	37.84	54.00	16.16	---	---	250.0	H	34	0.2
9494.4000	42.07	---	74.00	31.93	---	---	100.0	V	225	0.5
11187.6000	45.47	---	74.00	28.53	---	---	350.0	H	202	5.0
11272.8000	---	41.16	54.00	12.84	---	---	200.0	H	79	5.2
11965.2000	---	41.14	54.00	12.86	---	---	250.0	H	73	8.1
12031.2000	45.94	---	74.00	28.06	---	---	100.0	V	285	8.2
13285.2000	45.52	---	74.00	28.48	---	---	250.0	H	108	6.6
13352.4000	---	41.44	54.00	12.56	---	---	350.0	H	57	6.8



14492.4000	---	39.73	54.00	14.27	---	---	150.0	H	178	8.1
14499.6000	43.71	---	74.00	30.29	---	---	200.0	V	21	8.1
15742.8000	50.19	---	74.00	23.81	---	---	250.0	V	78	12.6
15841.2000	---	44.64	54.00	9.36	---	---	250.0	V	236	12.4
16141.2000	47.23	---	74.00	26.77	---	---	300.0	H	0	11.8
17804.4000	---	43.09	54.00	10.91	---	---	100.0	V	38	15.0
17914.8000	46.85	---	74.00	27.15	---	---	400.0	H	0	15.1

Appendix A: TEST SETUP PHOTOS

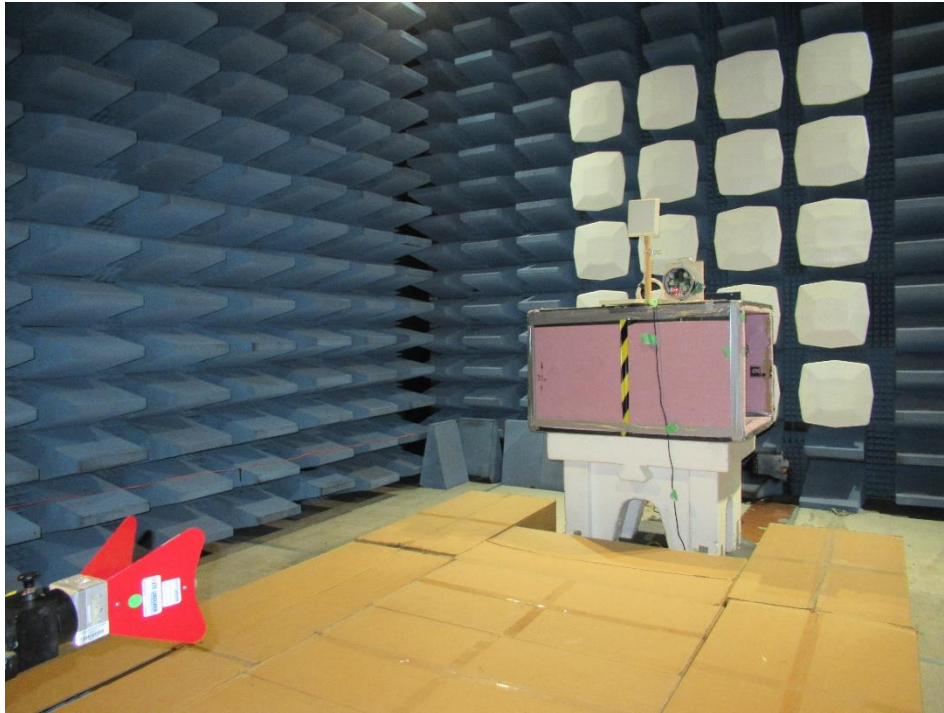


Figure 1: Radiated Emissions performed at the SAC Test Setup – Flat Panel Antenna

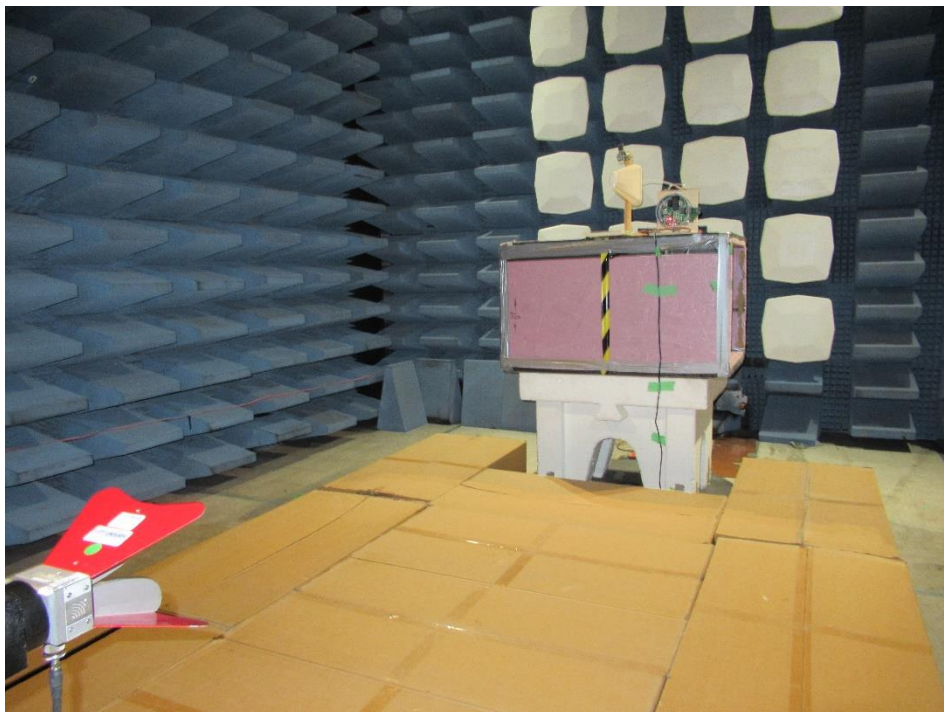


Figure 2: Radiated Emissions performed at the SAC Test Setup- High gain Antenna

Appendix B: ABBREVIATIONS

Abbreviation	Definition
AC	Alternating Current
AM	Amplitude Modulation
ASW	Anti-Submarine Warfare
BIT	Built-in-Test
CE	European Conformity
CISPR	Comité International Spécial des Perturbations Radioélectriques (International Special Committee on Radio Interference)
DC	Direct Current
EFT	Electrical Fast Transient
EMC	Electro Magnetic Compatibility
EMI	Electro Magnetic Interference
ERP	Effective Radiated Power
ESD	Electrostatic Discharge
EUT	Equipment Under Test
FCC	Federal Communications Commission
FVIN	Firmware Version Identification Number FVIN
GFE	Government Furnished Equipment
IC	Industry Canada
ICES	Interference Causing Equipment Standard
IEC	International Electrotechnical Commission
LISN	Line Impedance Stabilizing Network
OATS	Open Area Test Site
RF	Radio Frequency
RMS	Root-Mean-Square
SAC	Semi-Anechoic Chamber
TEM	Transverse Electromagnetic
TPD	Terminal Protection Device

END OF REPORT