FCC C2PC Test Report

FCC ID	:	**SQG-WB45NBT**
Equipment	:	**45 Series WB module with Bluetooth**
Model No.	:	**WB45NBT**
Brand Name	:	**Laird Technologies**
Applicant	:	**Laird Technologies**
Address	:	**11160 Thompson Ave. / Lenexa, Kansas / 66219 / USA**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Jul. 29, 2015**
Tested Date	:	**Aug. 12 ~ Aug. 24, 2015**

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Approved & Reviewed by:

Gary Chang / Manager

Testing Laboratory
2732

Table of Contents

Release Record

Report No.	Version	Description	Issued Date
FR350301-01AI	Rev. 01	Initial issue	Sep. 15, 2015

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	AC Power Line Conducted Emissions	[dBuV]: 0.159MHz 49.69 (Margin -15.83dB) - QP	Pass
15.407(b)(4) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5725.00MHz 77.19 (Margin -1.01dB) - PK	Pass
15.407(a)(5)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(a)(3)	RF Output Power	Max Power [dBm]: 18.71	Pass
15.407(a)(3)	Peak Power Spectral Density	Meet the requirement of limit	Pass
15.407(e)	6dB Bandwidth	Meet the requirement of limit	Pass
15.407(g)	Frequency Stability	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

1 General Description

1.1 Information

This report is prepared for FCC class II permissive change.

This report is issued as a supplementary report to original ICC report no. FR350301AI. The modification is concerned with following:

- ✧ Complying with New U-NII rule requirement.
- ✧ Additional Dipole antennas.
- ✧ Remove components to cancel BT / Wi-Fi diversity function and replace components for NAND flash.

Therefore, all tests had been re-tested and presented in the following sections.

1.1.1 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**Data Rate / MCS**
5725-5850	a	5745-5825	149-165 [5]	1	6-54 Mbps
5725-5850	n (HT20)	5745-5825	149-165 [5]	1	MCS 0-7
Note 1: RF output power specifies that Maximum Conducted Output Power. Note 2: 802.11a/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation. Note 3: 802.11n supports HT20 only.					

1.1.2 Antenna Details (The additional antennas were marked in boldface.)

Ant. No.	Brand /Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)				
				2400~2483.5	**5150~5250**	**5250~5350**	**5470~5725**	**5725~5850**
1	MAG.LAYERS EDA-1513-25GR2-B2-CY	Dipole	SMA Jack Reverse	2	2	2	2	2
2	MAG.LAYERS PCA-4606-2G4C1-A13-CY	PCB Dipole	UFL	2.21	2.21	2.21	2.21	2.21
3	Larid NanoBlade-IP04	PCB Dipole	UFL	2	3.9	3.9	4	4
4	Larid MAF95310 Mini NanoBlade Flex	PCB Dipole	UFL	2.79	3.38	3.38	3.38	3.38
5	Larid NanoBlue-IP04	PCB Dipole	UFL	2	---	---	---	---
6	Ethertronics WLAN_1000146	PIFA	UFL	2.5	3.5	3.5	3.5	3.5
7	**SAA MG7018-41-000-R**	**Dipole**	**UFL**	**1.87**	**0.85**	**0.6**	**0.94**	**0.92**
8	**SAA MG7324-41-000-R**	**Dipole**	**UFL**	**1.32**	**1.04**	**1.6**	**2.75**	**2.24**

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	3.3Vdc or 1.8Vdc from host.

1.1.4 Accessories

N/A

1.1.5 Channel List

802.11 a / HT20	
Channel	**Frequency(MHz)**
149	5745
153	5765
157	5785
161	5805
165	5825

1.1.6 Test Tool and Duty Cycle

Test Tool	VC_Example_windows_forms V1.3		
Duty Cycle and Duty Factor	**Mode**	**Duty cycle (%)**	**Duty factor (dB)**
	11a	99.59%	0.02
	HT20	99.56%	0.02

1.1.7 Power Setting

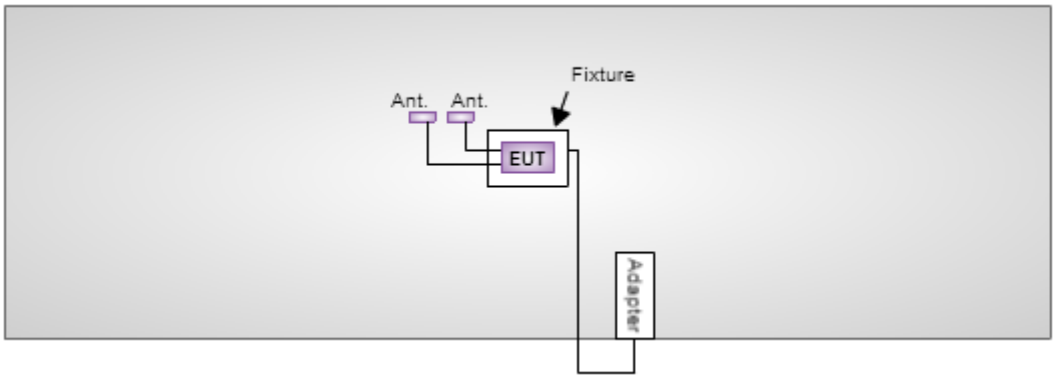
Modulation Mode	Test Frequency (MHz)	Power Set
11a	5745	18
11a	5785	20
11a	5825	20
HT20	5745	17.5
HT20	5785	20
HT20	5825	20

1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Signal cable / Length (m)**
1	Fixture	---	---	---	---

Note: No.1 was provided by applicant

1.3 Test Setup Chart

Test Setup Diagram


1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
EMC Receiver	R&S	ESCS 30	100169	Oct. 17, 2014	Oct. 16, 2015
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 17, 2014	Nov. 16, 2015
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Dec. 31, 2014	Dec. 30, 2015
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber 2 / (03CH02-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101499	Dec. 31, 2014	Dec. 30, 2015
Receiver	R&S	ESR3	101657	Jan. 15, 2015	Jan. 14, 2016
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-524	Oct. 16, 2014	Oct. 15, 2015
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1095	Oct. 14, 2014	Oct. 13, 2015
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 10, 2014	Nov. 09, 2015
Loop Antenna	R&S	HFH2-Z2	11900	Nov. 10, 2014	Nov. 09, 2015
Preamplifier	Burgeon	BPA-530	100218	Nov. 10, 2014	Nov. 09, 2015
Preamplifier	Agilent	83017A	MY39501309	Sep. 29, 2014	Sep. 28, 2015
Preamplifier	EMC	EMC184045B	980192	Aug. 26, 2014	Aug. 25, 2015
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16140/4	Dec. 16, 2014	Dec. 15, 2015
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16018/4	Dec. 16, 2014	Dec. 15, 2015
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16015/4	Dec. 16, 2014	Dec. 15, 2015
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-003	Dec. 16, 2014	Dec. 15, 2015
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-004	Dec. 16, 2014	Dec. 15, 2015
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101063	Feb. 03, 2015	Feb. 02, 2016
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Dec. 03, 2014	Dec. 02, 2015
Power Meter	Anritsu	ML2495A	1241002	Sep. 29, 2014	Sep. 28, 2015
Power Sensor	Anritsu	MA2411B	1207366	Sep. 29, 2014	Sep. 28, 2015
Measurement Software	Sporton	Sporton_1	1.3.30	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Testing Applied Standards

According to the specification of EUT, the EUT must comply with following standards and KDB documents.

47 CFR FCC Part 15.407
ANSI C63.10-2013
FCC KDB 789033 D02 General UNII Test Procedures New Rules v01
FCC KDB 644545 D03 Guidance for IEEE 802 11ac New Rules v01
FCC KDB 412172 D01 Determining ERP and EIRP v01r01

1.6 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Measurement Uncertainty	
Parameters	**Uncertainty**
Conducted emission	±2.670 dB
AC conducted emission	±2.92 dB
Radiated emission ≤ 1GHz	±3.62 dB
Radiated emission > 1GHz	±5.6 dB

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	22°C / 59%	Kevin Ma
Radiated Emissions	03CH02-WS	21-23°C / 61-63%	Anderson Hung Felix Sung
RF Conducted	TH01-WS	23°C / 62%	Felix Sung

- FCC site registration No.: 657002
- IC site registration No.: 10807A-2

2.2 The Worst Test Modes and Channel Details

For Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	11a	5825	6 Mbps	4
Radiated Emissions ≤1GHz	11a	5825	6 Mbps	1, 2, 3, 4
Radiated Emissions >1GHz	11a HT20	5745 / 5785 / 5825 5745 / 5785 / 5825	6 Mbps MCS 0	1, 2, 3, 4
RF Output Power Emission Bandwidth 6dB bandwidth Peak Power Spectral Density	11a HT20	5745 / 5785 / 5825 5745 / 5785 / 5825	6 Mbps MCS 0	4
Frequency Stability	Un-modulation	5785	---	4

NOTE:

1. 3 types antenna are used for this device.
2. For original antennas, the highest gain antenna of each type is selected to perform related test item as below test configuration.
3. For additional antennas, the highest gain antenna is selected to perform all test items as configuration 4.
4. Test configurations are listed as below:
   1) Configuration 1: Dipole antenna (Antenna No.1), Y-plane.
   2) Configuration 2 : PCB Dipole antenna (Antenna No.3) , Y-plane
   3) Configuration 3 : PIFA antenna (Antenna No.6) , Y-plane
   4) Configuration 4 : Dipole antenna (Antenna No.8) , Y-plane
5. The EUT supports two DC voltage options, 3.3Vdc and 1.8Vdc. Both options were assessed and 3.3Vdc was found to be the worst case and was selected for the final test.

3 Transmitter Test Results

3.1 Conducted Emissions

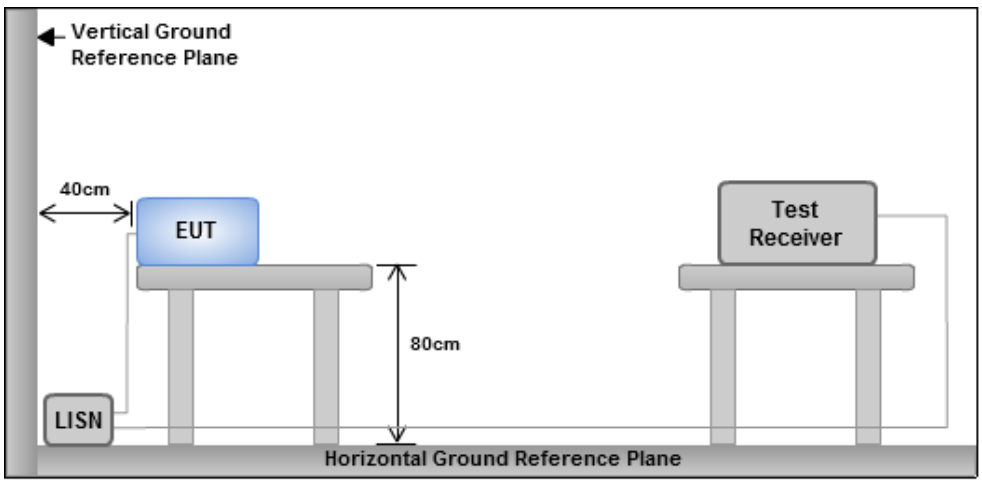
3.1.1 Limit of Conducted Emissions

Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Test Procedures

1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50 Ω LISN port.
3. AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
4. This measurement was performed with AC 120V / 60Hz.

3.1.3 Test Setup

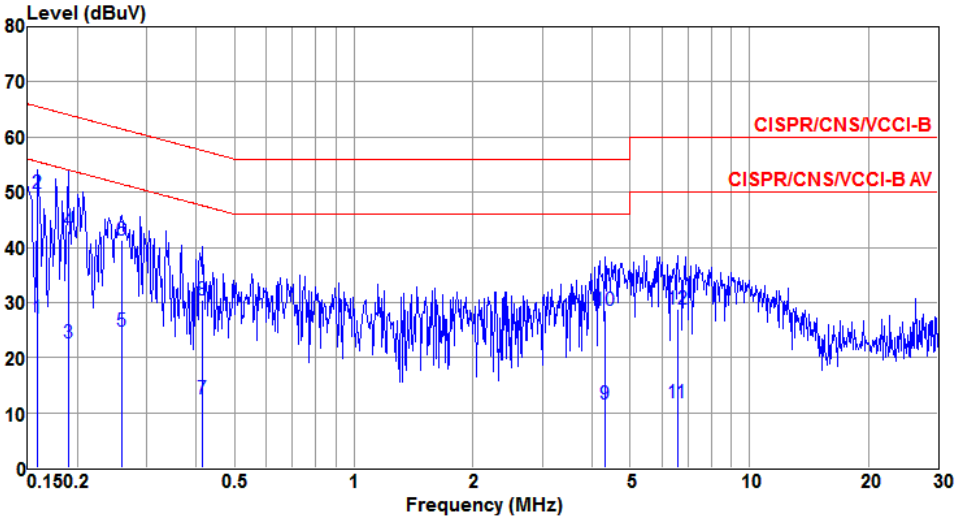


Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.1.4 Test Result of Conducted Emissions

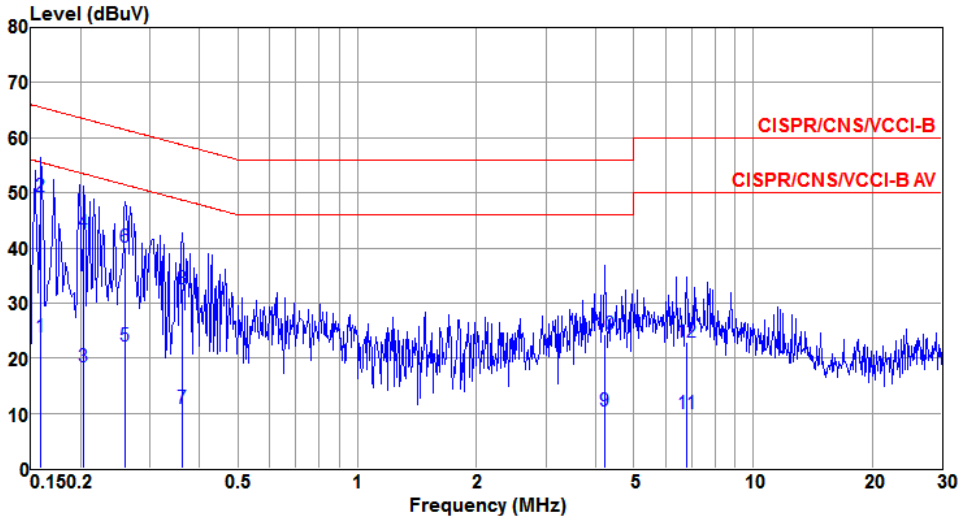
Modulation	11a	Test Freq. (MHz)	5825
Power Phase	Line	Test Configuration	4



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.159	27.10	55.52	-28.42	26.23	0.79	0.08	Average
2*	0.159	49.69	65.52	-15.83	48.82	0.79	0.08	QP
3	0.189	22.74	54.06	-31.32	22.29	0.36	0.09	Average
4	0.189	42.93	64.06	-21.13	42.48	0.36	0.09	QP
5	0.259	24.77	51.47	-26.70	24.45	0.22	0.10	Average
6	0.259	41.41	61.47	-20.06	41.09	0.22	0.10	QP
7	0.415	12.51	47.55	-35.04	12.22	0.18	0.11	Average
8	0.415	30.52	57.55	-27.03	30.23	0.18	0.11	QP
9	4.315	11.65	46.00	-34.35	11.05	0.29	0.31	Average
10	4.315	28.68	56.00	-27.32	28.08	0.29	0.31	QP
11	6.592	11.84	50.00	-38.16	11.06	0.48	0.30	Average
12	6.592	28.83	60.00	-31.17	28.05	0.48	0.30	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

Modulation	11a	Test Freq. (MHz)	5825
Power Phase	Neutral	Test Configuration	4



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.159	23.95	55.52	-31.57	23.14	0.73	0.08	Average
2*	0.159	49.28	65.52	-16.24	48.47	0.73	0.08	QP
3	0.204	18.37	53.45	-35.08	18.04	0.24	0.09	Average
4	0.204	42.71	63.45	-20.74	42.38	0.24	0.09	QP
5	0.259	22.18	51.47	-29.29	21.88	0.20	0.10	Average
6	0.259	40.08	61.47	-21.39	39.78	0.20	0.10	QP
7	0.361	10.91	48.69	-37.78	10.65	0.15	0.11	Average
8	0.361	32.51	58.69	-26.18	32.25	0.15	0.11	QP
9	4.224	10.41	46.00	-35.59	9.37	0.73	0.31	Average
10	4.224	24.31	56.00	-31.69	23.27	0.73	0.31	QP
11	6.805	9.81	50.00	-40.19	8.90	0.61	0.30	Average
12	6.805	22.99	60.00	-37.01	22.08	0.61	0.30	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

3.2 Emission Bandwidth

3.2.1 Limit of Emission Bandwidth

The minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

3.2.2 Test Procedures

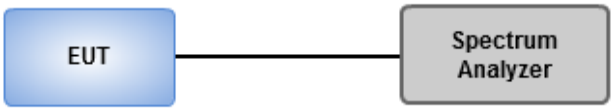
Occupied Bandwidth

1. Set RBW = 1 % to 5 % of the OBW
2. Set VBW ≥ 3 RBW
3. Sample detection and single sweep mode shall be used
4. Use the 99 % power bandwidth function of the instrument

6dB Bandwidth

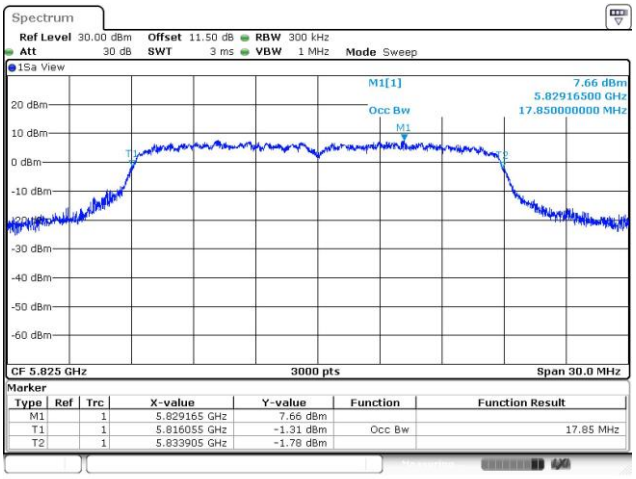
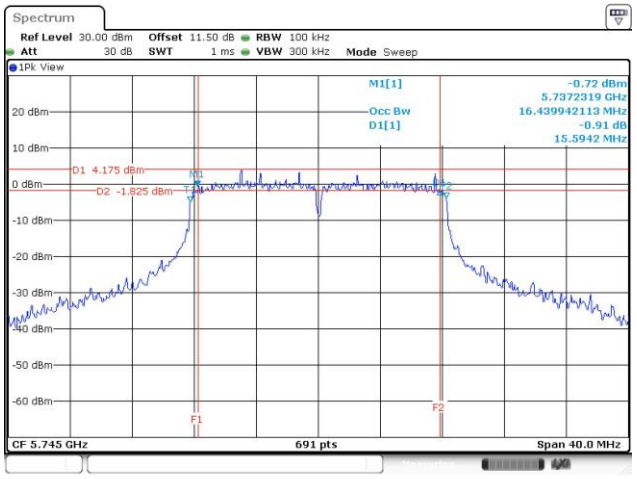
1. Set RBW = 100 kHz, video bandwidth = 300 kHz
2. Detector = Peak, Trace mode = max hold, Sweep = auto couple, Allow the trace to stabilize
3. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

3.2.3 Test Setup



3.2.4 Test Result of Emission Bandwidth

Emission Bandwidth											
Mode	N_{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	6dB BW Limit (MHz)
11a	1	5745	16.64	---	---	---	15.59	---	---	---	0.5
11a	1	5785	16.76	---	---	---	15.77	---	---	---	0.5
11a	1	5825	16.72	---	---	---	15.65	---	---	---	0.5
HT20	1	5745	17.76	---	---	---	16.81	---	---	---	0.5
HT20	1	5785	17.84	---	---	---	16.75	---	---	---	0.5
HT20	1	5825	17.85	---	---	---	16.81	---	---	---	0.5

Worst Plot of 99% Bandwidth	Worst Plot of 6dB Bandwidth
	

3.3 RF Output Power

3.3.1 Limit of RF Output Power

The maximum conducted output power over the frequency band of operation shall not exceed 1 W

3.3.2 Test Procedures

☒ **Method PM-G (Measurement using a gated RF average power meter)**

☒ Measurements may is performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

3.3.3 Test Setup

3.3.4 Test Result of Maximum Conducted Output Power

Mode	N_{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
11a	1	5745	15.62	---	---	---	36.475	15.62	30.00
11a	1	5785	18.43	---	---	---	69.663	18.43	30.00
11a	1	5825	18.71	---	---	---	74.302	**18.71**	30.00
HT20	1	5745	15.16	---	---	---	32.810	15.16	30.00
HT20	1	5785	18.39	---	---	---	69.024	18.39	30.00
HT20	1	5825	18.69	---	---	---	73.961	18.69	30.00

3.4 Peak Power Spectral Density

3.4.1 Limit of Peak Power Spectral Density

The maximum power spectral density shall not exceed 30 dBm in any 500 kHz band.

3.4.2 Test Procedures

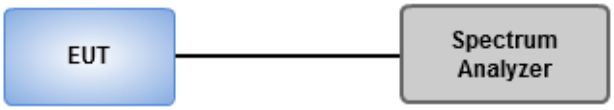
☒ Method SA-1

1. Set RBW = 500 kHz, VBW = 2 MHz, Sweep time = auto, Detector = RMS.
2. Trace average 100 traces.
3. Use the peak marker function to determine the maximum amplitude level.

☐ Method SA-2 Alternative

1. Set RBW = 500 kHz, VBW = 2 MHz, Detector = RMS.
2. Set sweep time ≥ 10 * (number of points in sweep) * (total on/off period of the transmitted signal).
3. Perform a single sweep.
4. Use the peak marker function to determine the maximum amplitude level.
5. Add 10 log(1/x), where x is the duty cycle.

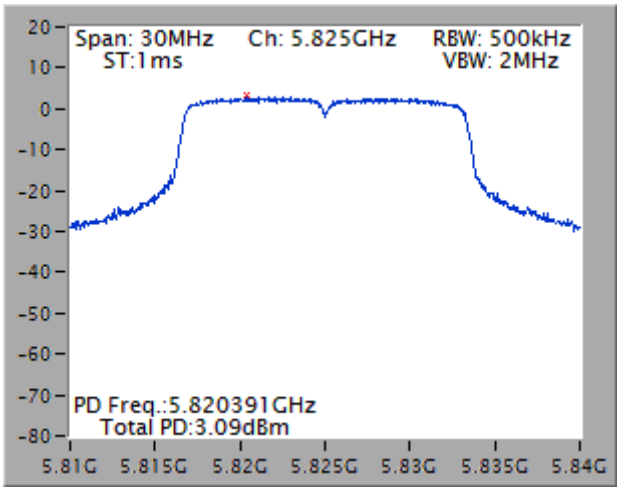
3.4.3 Test Setup



3.4.4 Test Result of Peak Power Spectral Density

Condition			Peak Power Spectral Density (dBm/500kHz)	
Modulation Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/500kHz)	PPSD Limit (dBm/500kHz)
11a	1	5745	1.26	30.00
11a	1	5785	2.98	30.00
11a	1	5825	3.09	30.00
HT20	1	5745	0.28	30.00
HT20	1	5785	2.72	30.00
HT20	1	5825	2.83	30.00

Note: D.F is duty factor.

Worst Plot


3.5 Transmitter Radiated and Band Edge Emissions

3.5.1 Limit of Transmitter Radiated and Band Edge Emissions

Restricted Band Emissions Limit			
Frequency Range (MHz)	**Field Strength (uV/m)**	**Field Strength (dBuV/m)**	**Measure Distance (m)**
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1:
Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit
Note 2:
Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

Un-restricted band emissions above 1GHz Limit	
Operating Band	**Limit**
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.850 GHz	5.715 5.725 GHz: e.i.r.p. -17 dBm [78.2 dBuV/m@3m] 5.850 5.860 GHz: e.i.r.p. -17 dBm [78.2 dBuV/m@3m] Other un-restricted band: e.i.r.p. -27 dBm [68.2 dBuV/m@3m]

Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

3.5.2 Test Procedures

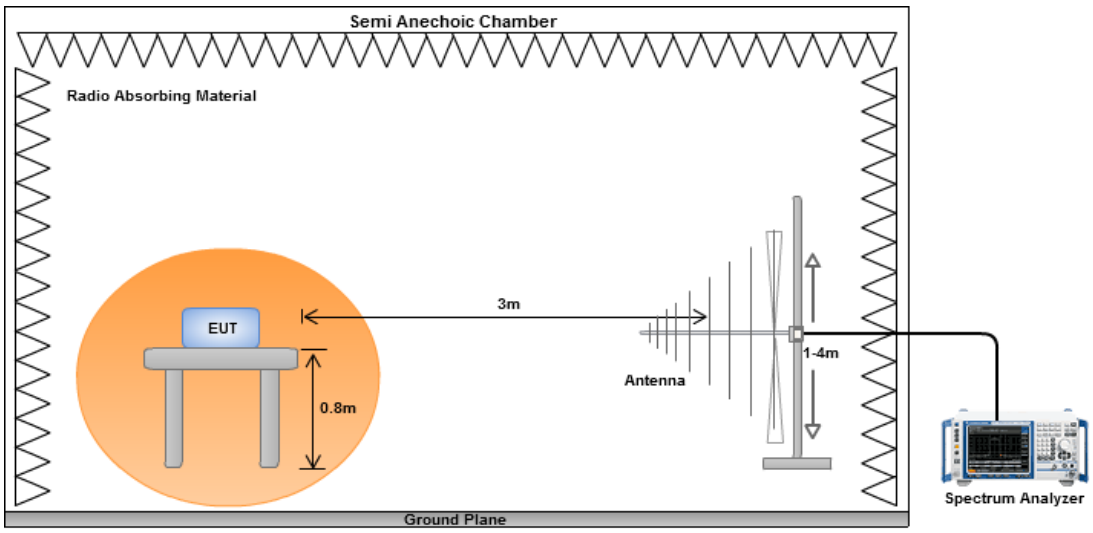
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at test table. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m.
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

Note:

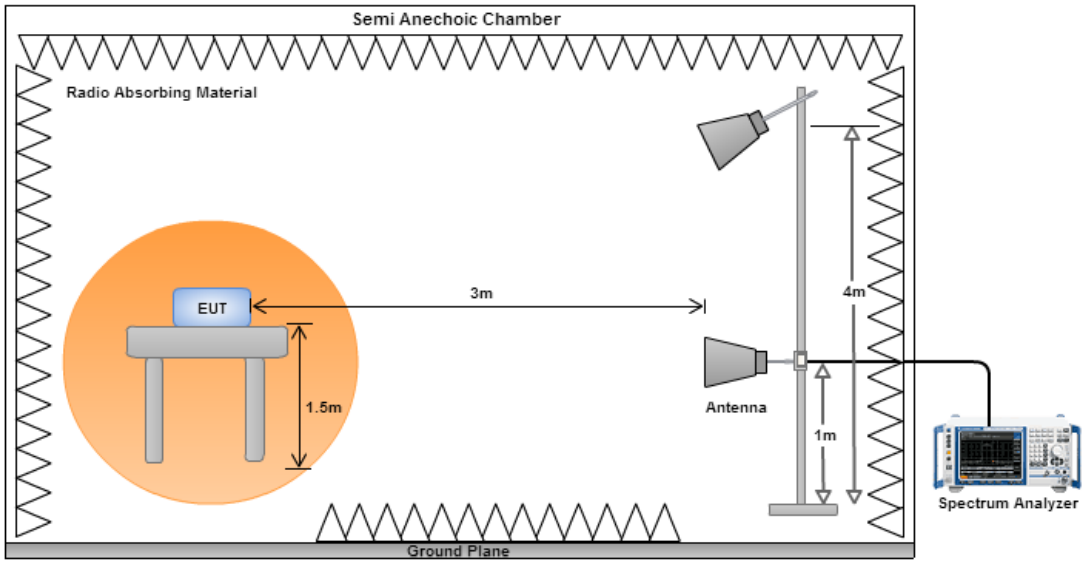
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 1GHz.

3.5.3 Test Setup

Radiated Emissions below 1 GHz

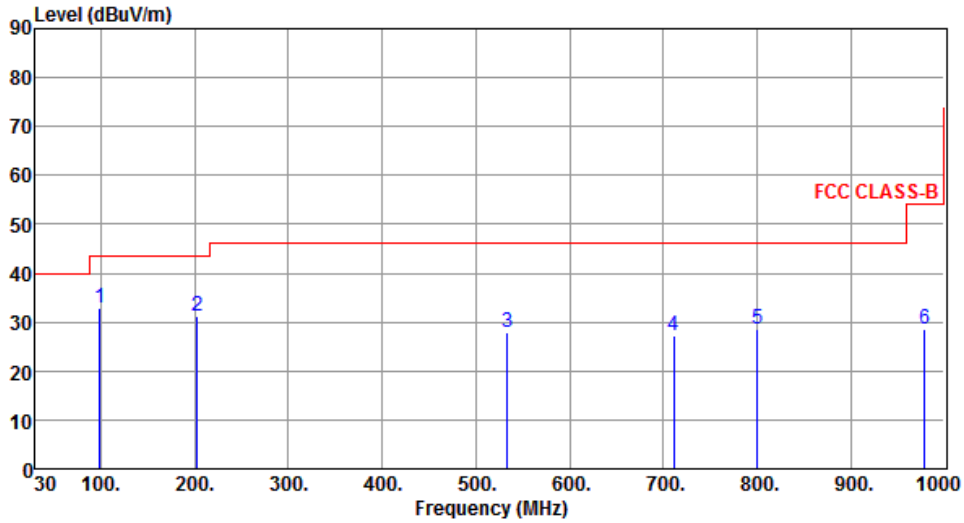


Radiated Emissions above 1 GHz



3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

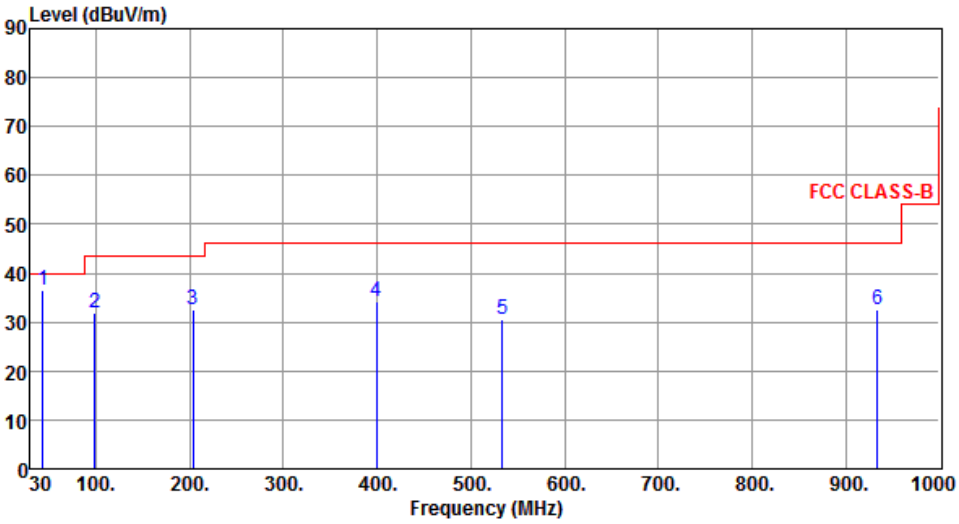
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	98.87	32.99	43.50	-10.51	55.06	-22.07	Peak	---	---
2	202.66	31.27	43.50	-12.23	50.93	-19.66	Peak	---	---
3	533.43	27.92	46.00	-18.08	38.93	-11.01	Peak	---	---
4	710.94	27.07	46.00	-18.93	35.10	-8.03	Peak	---	---
5	800.18	28.48	46.00	-17.52	35.40	-6.92	Peak	---	---
6	978.66	28.60	54.00	-25.40	33.23	-4.63	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

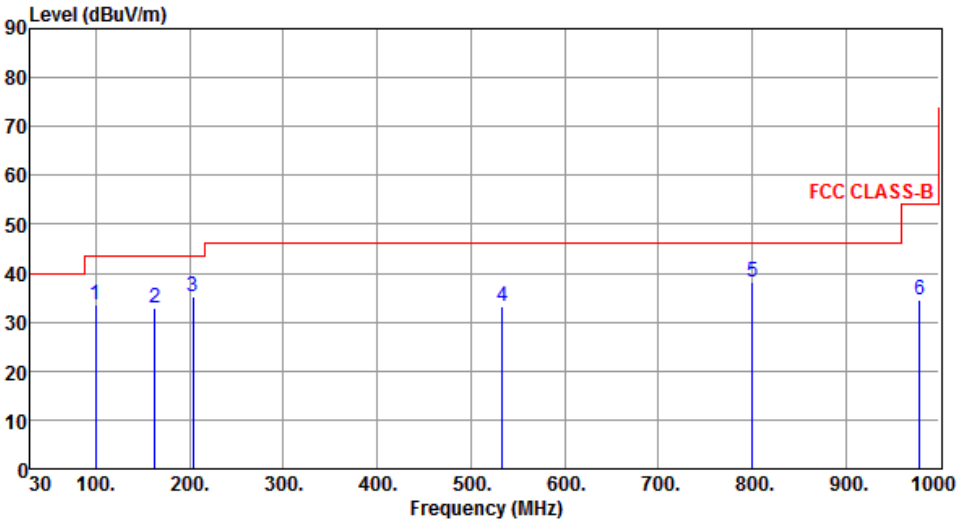
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	43.58	36.56	40.00	-3.44	53.46	-16.90	QP	---	---
2	98.87	31.76	43.50	-11.74	53.83	-22.07	Peak	---	---
3	203.63	32.70	43.50	-10.80	52.31	-19.61	Peak	---	---
4	399.57	34.29	46.00	-11.71	47.96	-13.67	Peak	---	---
5	533.43	30.64	46.00	-15.36	41.65	-11.01	Peak	---	---
6	934.04	32.67	46.00	-13.33	37.58	-4.91	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

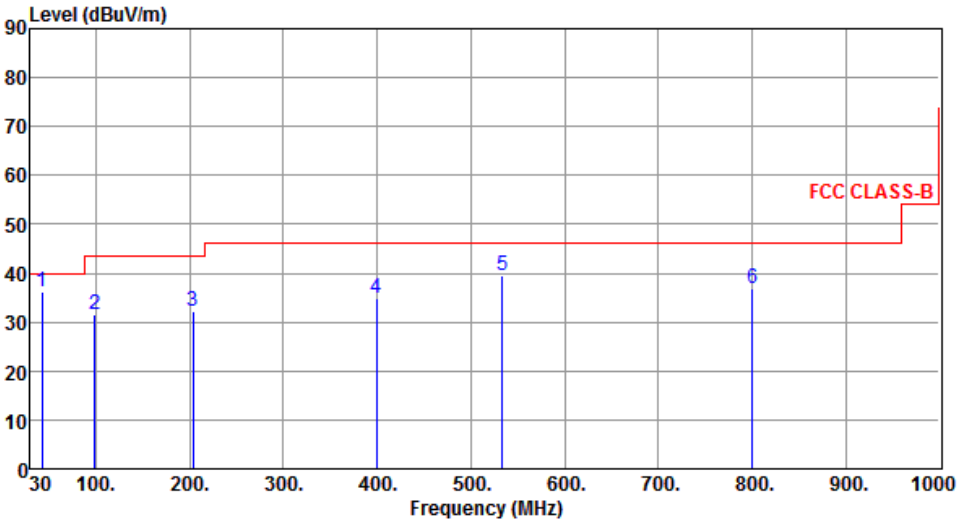
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	99.84	33.57	43.50	-9.93	55.51	-21.94	Peak	---	---
2	162.89	32.99	43.50	-10.51	50.09	-17.10	Peak	---	---
3	203.63	35.16	43.50	-8.34	54.77	-19.61	Peak	---	---
4	533.43	33.28	46.00	-12.72	44.29	-11.01	Peak	---	---
5	800.18	38.33	46.00	-7.67	45.25	-6.92	Peak	---	---
6	978.66	34.38	54.00	-19.62	39.01	-4.63	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

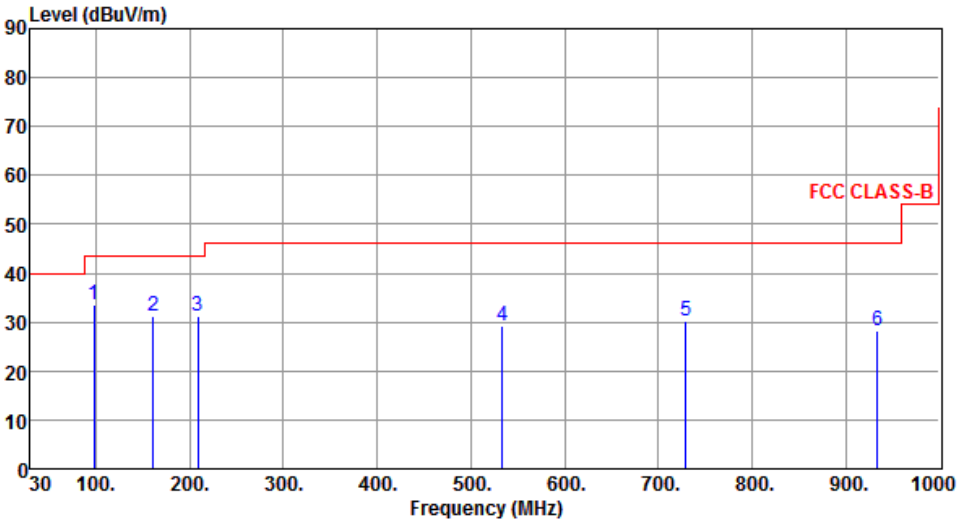
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Vertical	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	42.61	36.28	40.00	-3.72	53.27	-16.99	QP	---	---
2	98.87	31.71	43.50	-11.79	53.78	-22.07	Peak	---	---
3	203.63	32.07	43.50	-11.43	51.68	-19.61	Peak	---	---
4	399.57	34.75	46.00	-11.25	48.42	-13.67	Peak	---	---
5	533.43	39.63	46.00	-6.37	50.64	-11.01	Peak	---	---
6	800.18	36.80	46.00	-9.20	43.72	-6.92	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

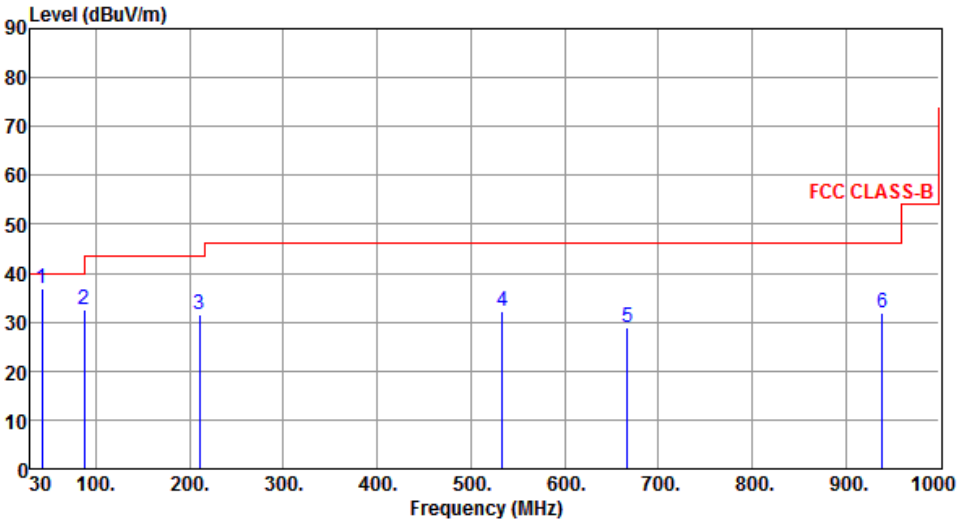
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal	Test Configuration	3



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	97.90	33.53	43.50	-9.97	55.74	-22.21	Peak	---	---
2	160.95	31.38	43.50	-12.12	48.39	-17.01	Peak	---	---
3	208.48	31.31	43.50	-12.19	50.76	-19.45	Peak	---	---
4	533.43	29.35	46.00	-16.65	40.36	-11.01	Peak	---	---
5	729.37	30.16	46.00	-15.84	37.84	-7.68	Peak	---	---
6	934.04	28.35	46.00	-17.65	33.26	-4.91	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

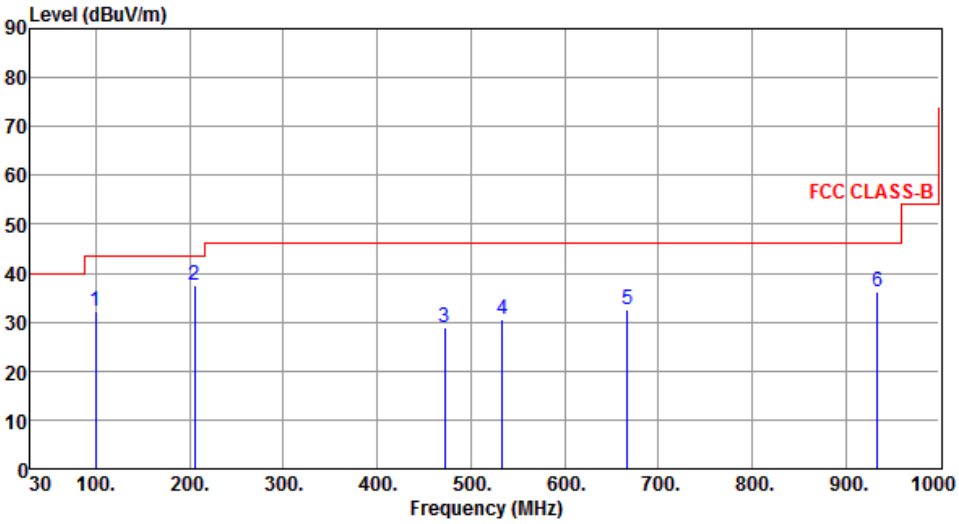
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Vertical	Test Configuration	3



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	42.61	36.77	40.00	-3.23	53.76	-16.99	QP	---	---
2	87.23	32.69	40.00	-7.31	55.60	-22.91	Peak	---	---
3	210.42	31.41	43.50	-12.09	50.81	-19.40	Peak	---	---
4	533.43	32.29	46.00	-13.71	43.30	-11.01	Peak	---	---
5	667.29	28.96	46.00	-17.04	37.72	-8.76	Peak	---	---
6	938.89	31.95	46.00	-14.05	36.81	-4.86	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

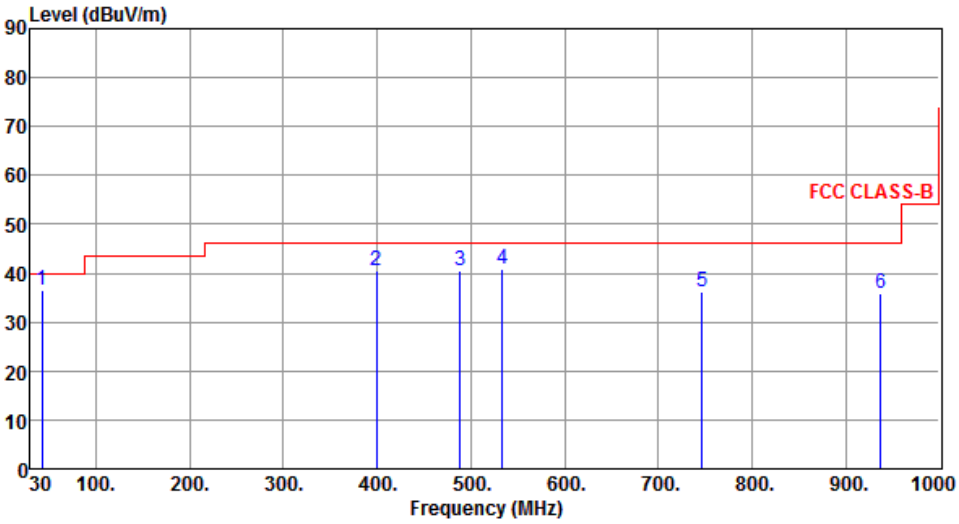
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	99.84	32.32	43.50	-11.18	54.26	-21.94	Peak	---	---
2	205.57	37.47	43.50	-6.03	57.02	-19.55	Peak	---	---
3	472.32	28.89	46.00	-17.11	41.05	-12.16	Peak	---	---
4	533.43	30.67	46.00	-15.33	41.68	-11.01	Peak	---	---
5	667.29	32.52	46.00	-13.48	41.28	-8.76	Peak	---	---
6	934.04	36.33	46.00	-9.67	41.24	-4.91	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

Modulation	11a	Test Freq. (MHz)	5825
Polarization	Vertical	Test Configuration	4

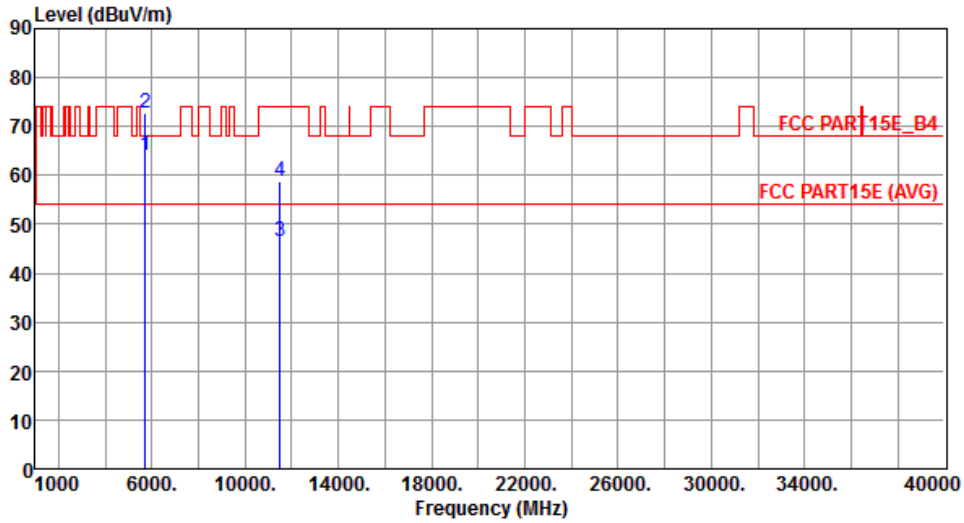


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	42.61	36.67	40.00	-3.33	53.66	-16.99	QP	---	---
2	399.57	40.38	46.00	-5.62	54.05	-13.67	Peak	---	---
3	488.81	40.68	46.00	-5.32	52.58	-11.90	Peak	---	---
4	533.43	40.97	46.00	-5.03	51.98	-11.01	Peak	---	---
5	746.83	36.17	46.00	-9.83	43.52	-7.35	Peak	---	---
6	936.95	35.95	46.00	-10.05	40.83	-4.88	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

3.5.5 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11a

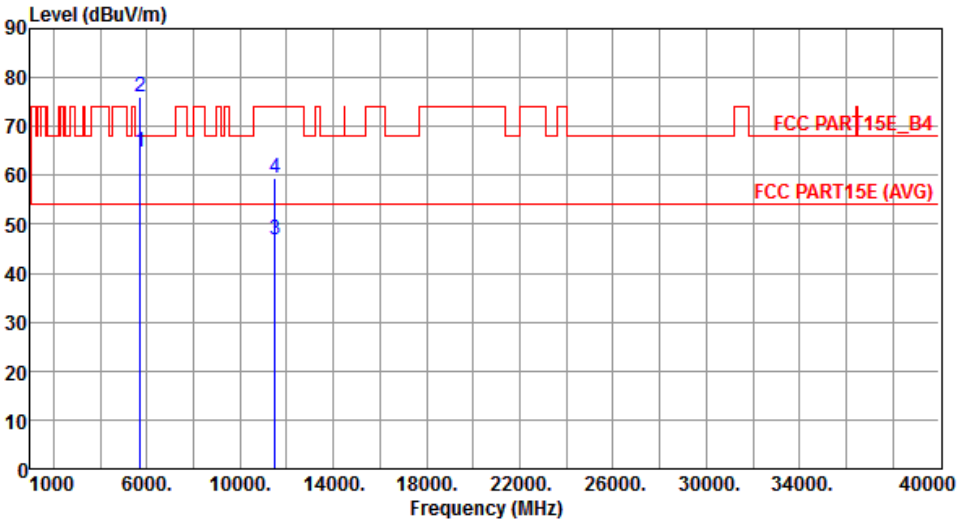
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	63.97	68.20	-4.23	57.27	6.70	Peak	228	48
2	5725.00	72.64	78.20	-5.56	65.93	6.71	Peak	228	48
3	11490.00	46.37	54.00	-7.63	30.15	16.22	Average	120	326
4	11490.00	58.62	74.00	-15.38	42.40	16.22	Peak	120	326

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

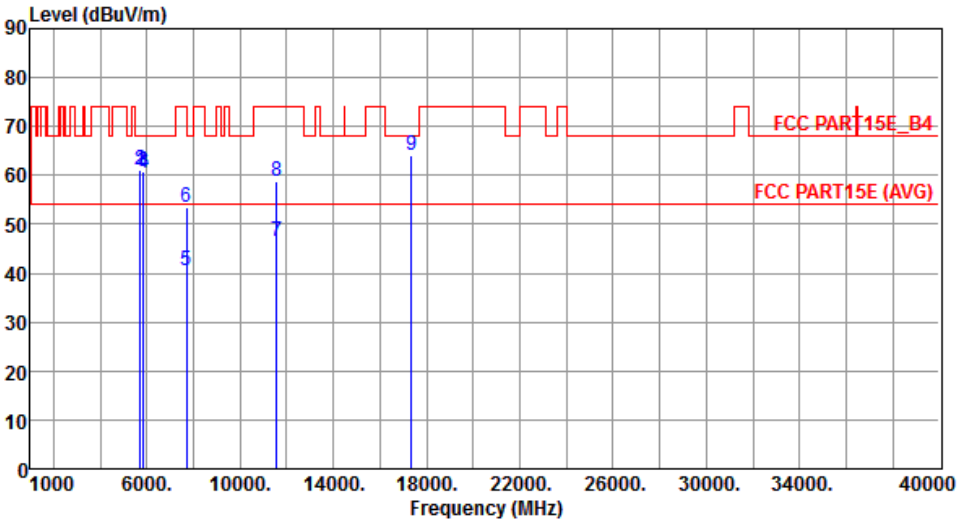
Modulation	11a	**Test Freq. (MHz)**	5745
Polarization	Vertical	**Test Configuration**	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	64.91	68.20	-3.29	58.21	6.70	Peak	387	17
2	5725.00	76.14	78.20	-2.06	69.43	6.71	Peak	387	17
3	11490.00	46.82	54.00	-7.18	30.60	16.22	Average	248	152
4	11490.00	59.54	74.00	-14.46	43.32	16.22	Peak	248	152

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

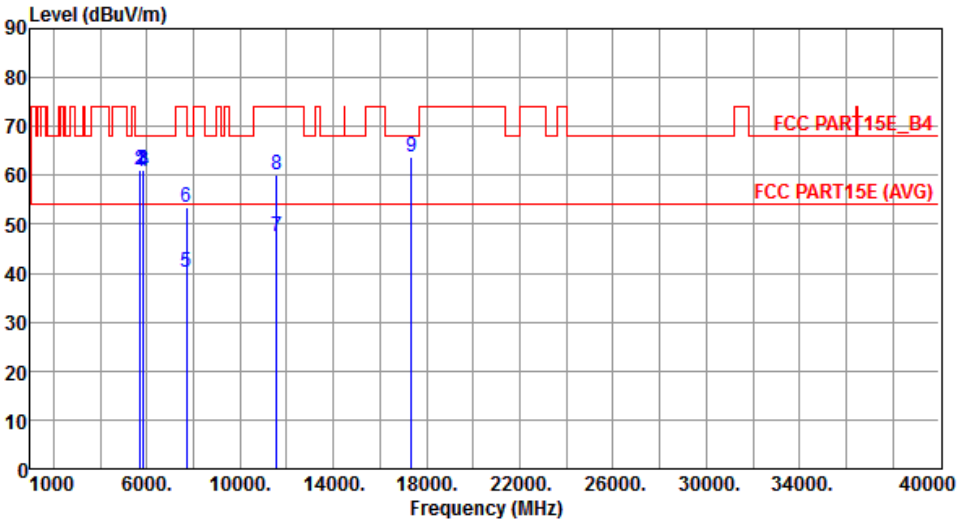
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	60.81	68.20	-7.39	54.11	6.70	Peak	223	47
2	5725.00	61.15	78.20	-17.05	54.44	6.71	Peak	223	47
3	5850.00	60.67	78.20	-17.53	53.72	6.95	Peak	223	47
4	5860.00	60.51	68.20	-7.69	53.56	6.95	Peak	223	47
5	7713.30	40.51	54.00	-13.49	29.75	10.76	Average	100	51
6	7713.30	53.44	74.00	-20.56	42.68	10.76	Peak	100	51
7	11570.00	46.49	54.00	-7.51	30.37	16.12	Average	126	329
8	11570.00	58.78	74.00	-15.22	42.66	16.12	Peak	126	329
9	17355.00	64.09	68.20	-4.11	42.46	21.63	Peak	217	30

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

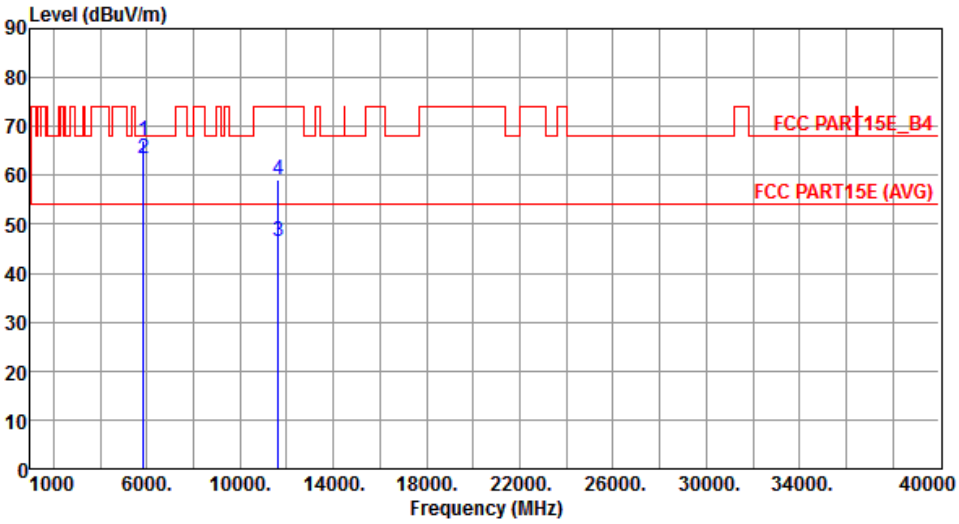
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	60.72	68.20	-7.48	54.02	6.70	Peak	400	25
2	5725.00	61.18	78.20	-17.02	54.47	6.71	Peak	400	25
3	5850.00	61.25	78.20	-16.95	54.30	6.95	Peak	400	25
4	5860.00	60.89	68.20	-7.31	53.94	6.95	Peak	400	25
5	7713.30	40.35	54.00	-13.65	29.59	10.76	Average	173	319
6	7713.30	53.61	74.00	-20.39	42.85	10.76	Peak	173	319
7	11570.00	47.37	54.00	-6.63	31.25	16.12	Average	252	163
8	11570.00	60.01	74.00	-13.99	43.89	16.12	Peak	252	163
9	17355.00	63.76	68.20	-4.44	42.13	21.63	Peak	182	34

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

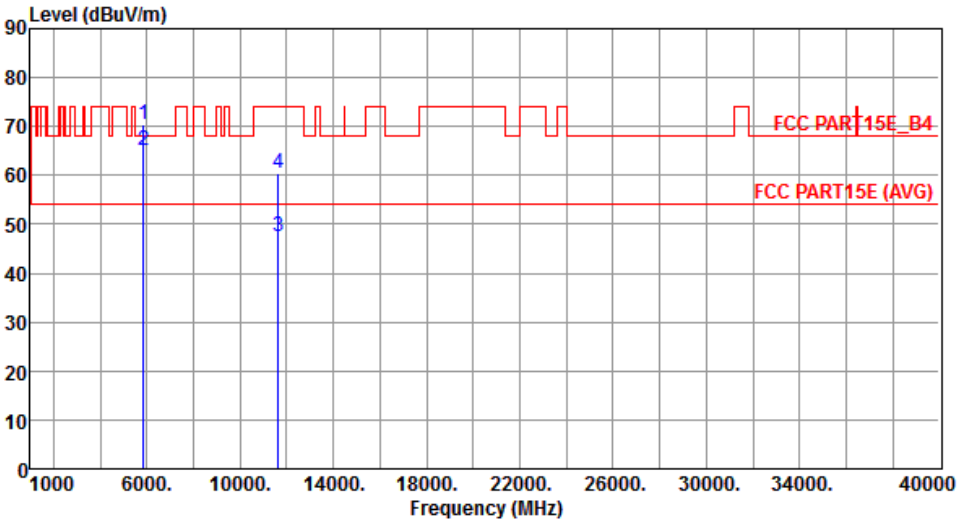
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	67.21	78.20	-10.99	60.26	6.95	Peak	234	47
2	5860.00	63.49	68.20	-4.71	56.54	6.95	Peak	234	47
3	11650.00	46.62	54.00	-7.38	30.60	16.02	Average	135	330
4	11650.00	59.02	74.00	-14.98	43.00	16.02	Peak	135	330

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

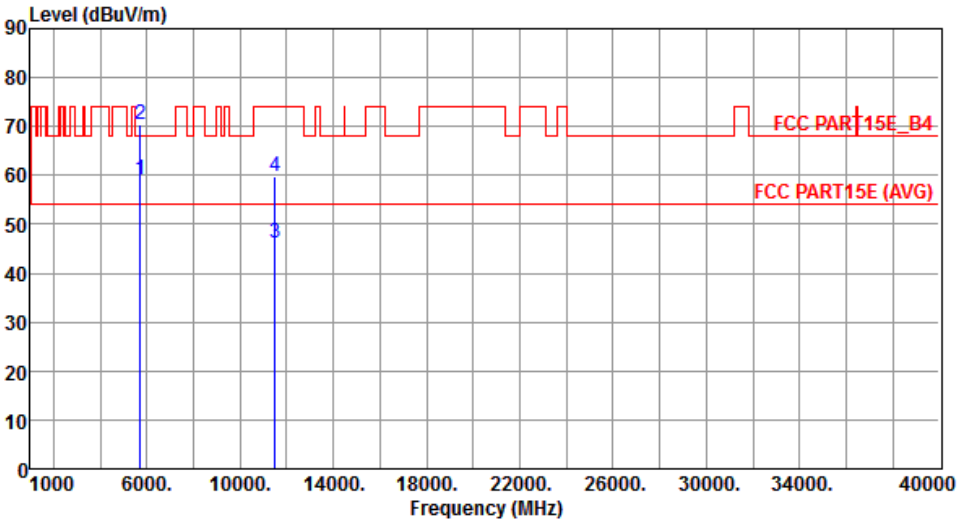
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	70.37	78.20	-7.83	63.42	6.95	Peak	310	285
2	5860.00	65.06	68.20	-3.14	58.11	6.95	Peak	310	285
3	11650.00	47.44	54.00	-6.56	31.42	16.02	Average	259	166
4	11650.00	60.37	74.00	-13.63	44.35	16.02	Peak	259	166

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

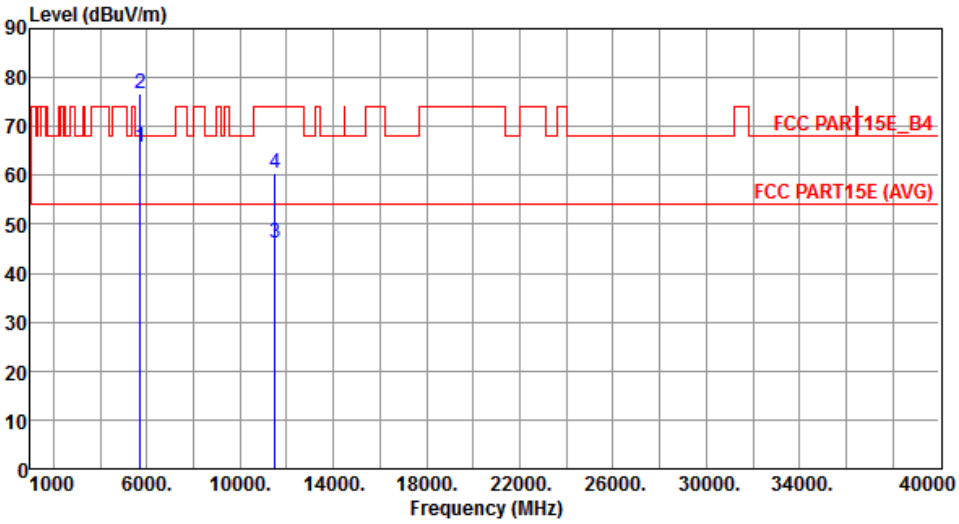
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	59.12	68.20	-9.08	52.42	6.70	Peak	100	199
2	5725.00	70.30	78.20	-7.90	63.59	6.71	Peak	100	199
3	11490.00	46.05	54.00	-7.95	29.83	16.22	Average	150	316
4	11490.00	59.85	74.00	-14.15	43.63	16.22	Peak	150	316

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

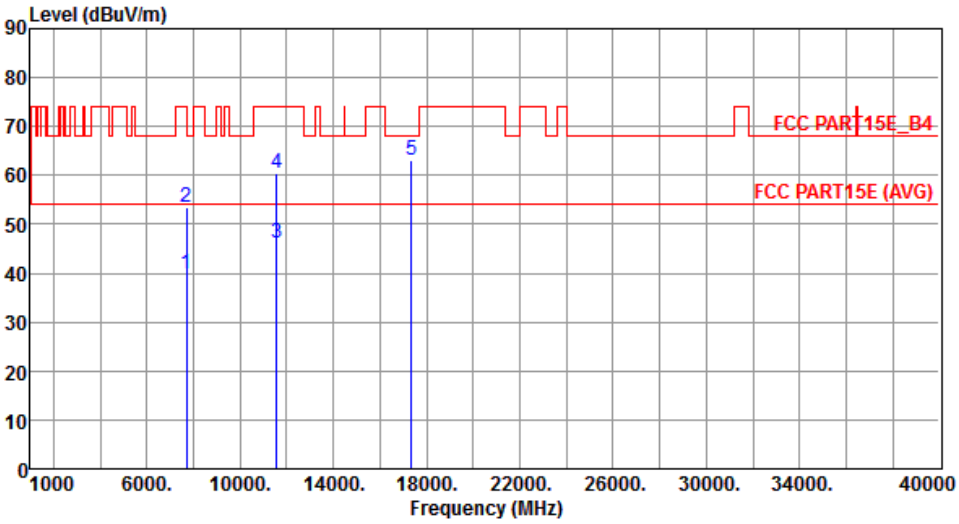
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	65.63	68.20	-2.57	58.93	6.70	Peak	117	21
2	5725.00	76.63	78.20	-1.57	69.92	6.71	Peak	117	21
3	11490.00	46.33	54.00	-7.67	30.11	16.22	Average	243	165
4	11490.00	60.48	74.00	-13.52	44.26	16.22	Peak	243	165

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

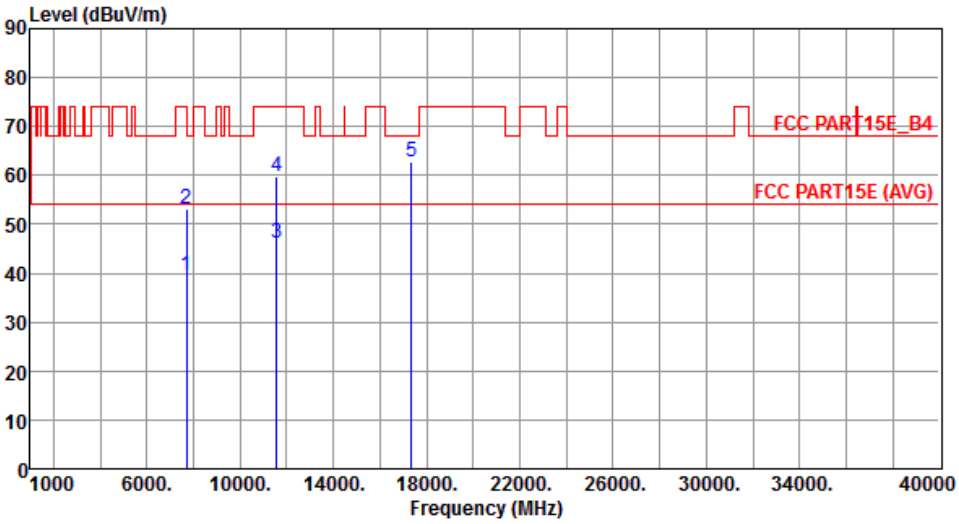
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	7713.00	39.72	54.00	-14.28	28.96	10.76	Average	150	137
2	7713.00	53.45	74.00	-20.55	42.69	10.76	Peak	150	137
3	11570.00	46.28	54.00	-7.72	30.16	16.12	Average	259	176
4	11570.00	60.46	74.00	-13.54	44.34	16.12	Peak	259	176
5	17355.00	63.03	68.20	-5.17	41.40	21.63	Peak	100	166

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

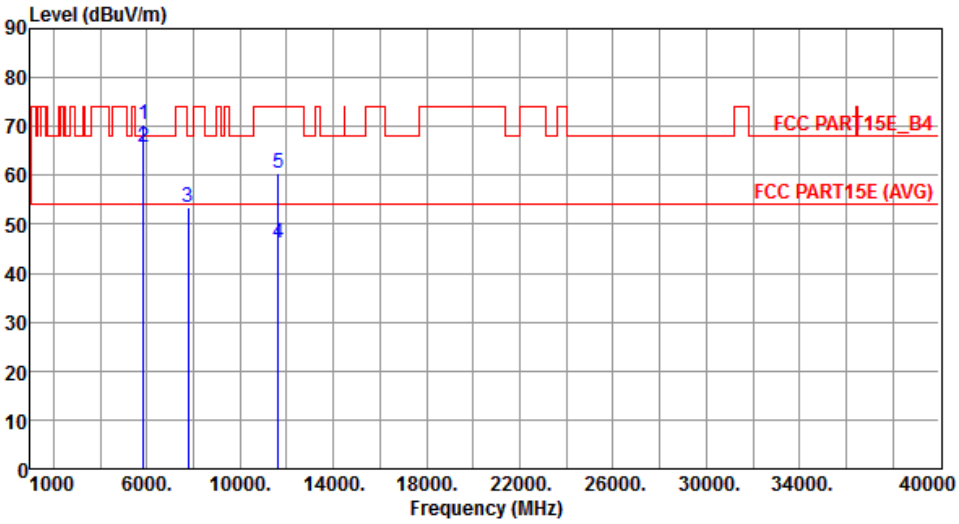
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	7713.00	39.62	54.00	-14.38	28.86	10.76	Average	150	111
2	7713.00	52.98	74.00	-21.02	42.22	10.76	Peak	150	111
3	11570.00	46.11	54.00	-7.89	29.99	16.12	Average	150	329
4	11570.00	59.62	74.00	-14.38	43.50	16.12	Peak	150	329
5	17355.00	62.86	68.20	-5.34	41.23	21.63	Peak	100	129

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

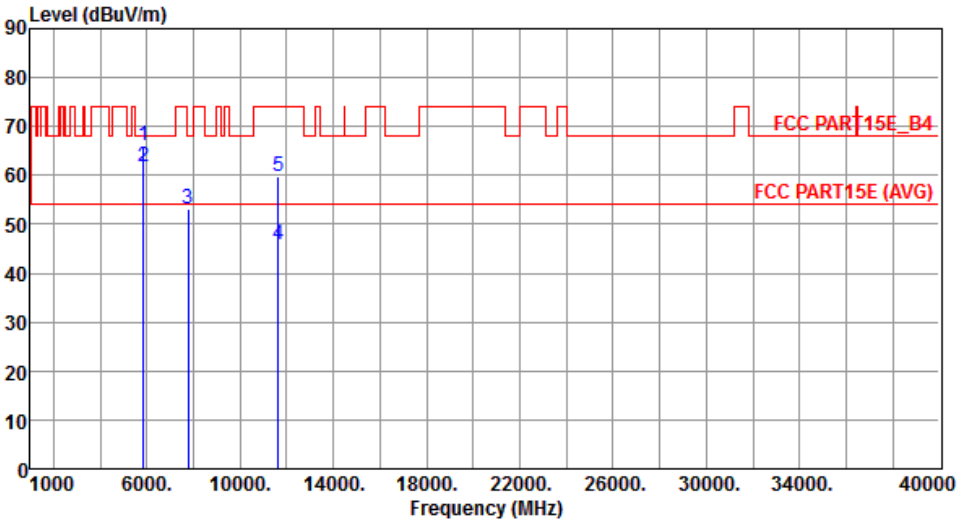
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	70.34	78.20	-7.86	63.39	6.95	Peak	105	26
2	5860.00	65.71	68.20	-2.49	58.76	6.95	Peak	110	32
3	7766.60	53.39	68.20	-14.81	42.55	10.84	Peak	111	163
4	11650.00	46.18	54.00	-7.82	30.16	16.02	Average	255	163
5	11650.00	60.31	74.00	-13.69	44.29	16.02	Peak	255	163

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

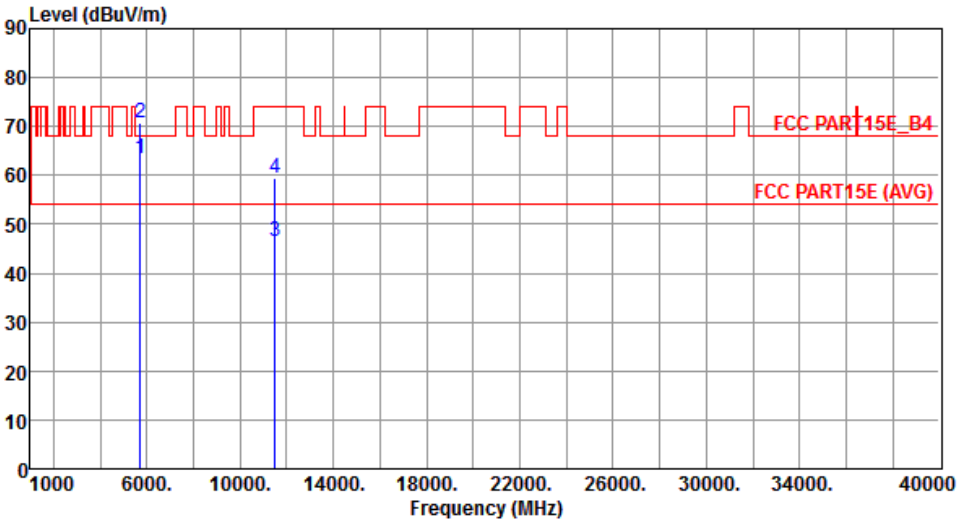
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Vertical	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	66.14	78.20	-12.06	59.19	6.95	Peak	100	206
2	5860.00	61.70	68.20	-6.50	54.75	6.95	Peak	100	209
3	7766.60	53.21	68.20	-14.99	42.37	10.84	Peak	100	116
4	11650.00	45.90	54.00	-8.10	29.88	16.02	Average	155	321
5	11650.00	59.89	74.00	-14.11	43.87	16.02	Peak	155	321

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

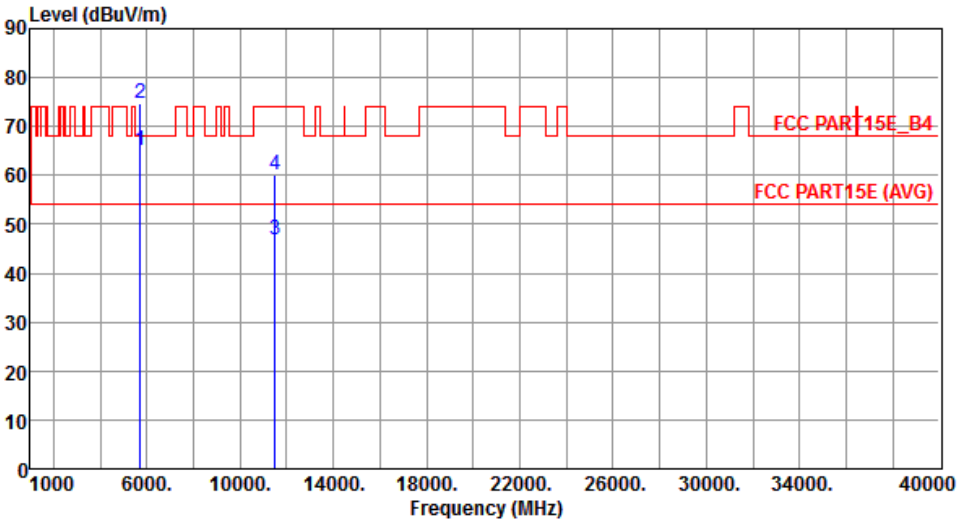
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal	Test Configuration	3



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	63.59	68.20	-4.61	56.89	6.70	Peak	100	6
2	5725.00	70.84	78.20	-7.36	64.13	6.71	Peak	100	6
3	11490.00	46.35	54.00	-7.65	30.13	16.22	Average	166	4
4	11490.00	59.55	74.00	-14.45	43.33	16.22	Peak	166	4

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

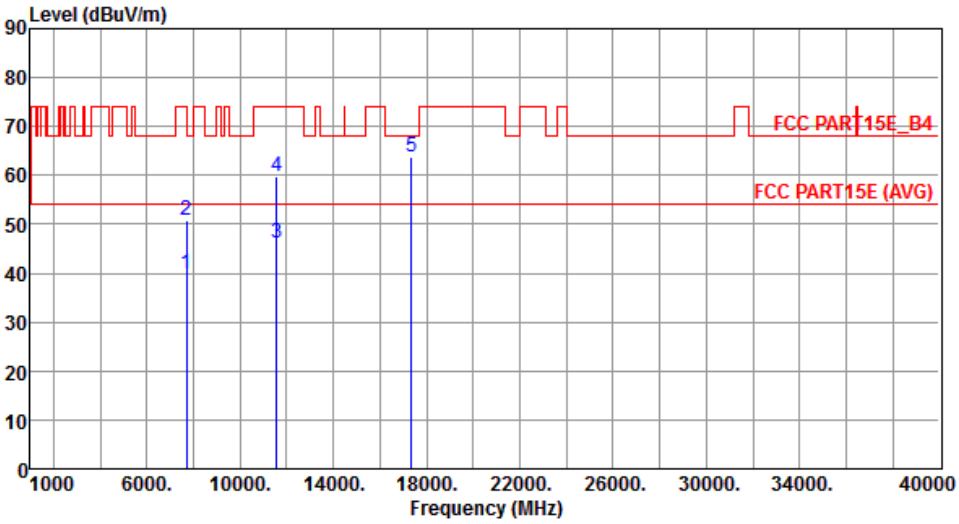
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical	Test Configuration	3



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	64.99	68.20	-3.21	58.29	6.70	Peak	136	247
2	5725.00	74.89	78.20	-3.31	68.18	6.71	Peak	136	247
3	11490.00	46.79	54.00	-7.21	30.57	16.22	Average	288	158
4	11490.00	60.22	74.00	-13.78	44.00	16.22	Peak	288	158

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

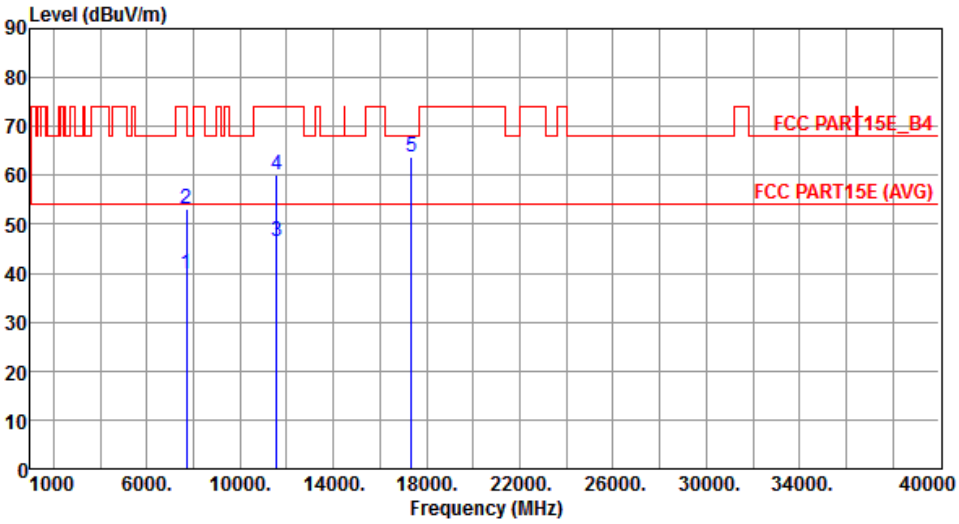
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal	Test Configuration	3



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	7713.00	39.87	54.00	-14.13	29.11	10.76	Average	100	111
2	7713.00	50.94	74.00	-23.06	40.18	10.76	Peak	100	111
3	11570.00	46.23	54.00	-7.77	30.11	16.12	Average	162	5
4	11570.00	59.64	74.00	-14.36	43.52	16.12	Peak	162	5
5	17355.00	63.90	68.20	-4.30	42.27	21.63	Peak	123	166

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

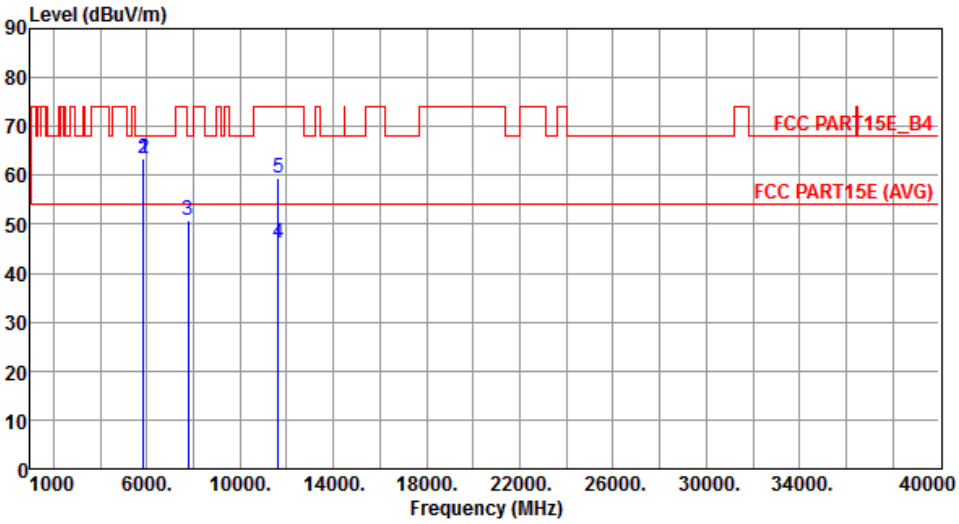
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical	Test Configuration	3



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	7713.00	39.89	54.00	-14.11	29.13	10.76	Average	100	160
2	7713.00	53.15	74.00	-20.85	42.39	10.76	Peak	100	160
3	11570.00	46.63	54.00	-7.37	30.51	16.12	Average	289	160
4	11570.00	60.19	74.00	-13.81	44.07	16.12	Peak	289	160
5	17355.00	63.80	68.20	-4.40	42.17	21.63	Peak	100	162

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

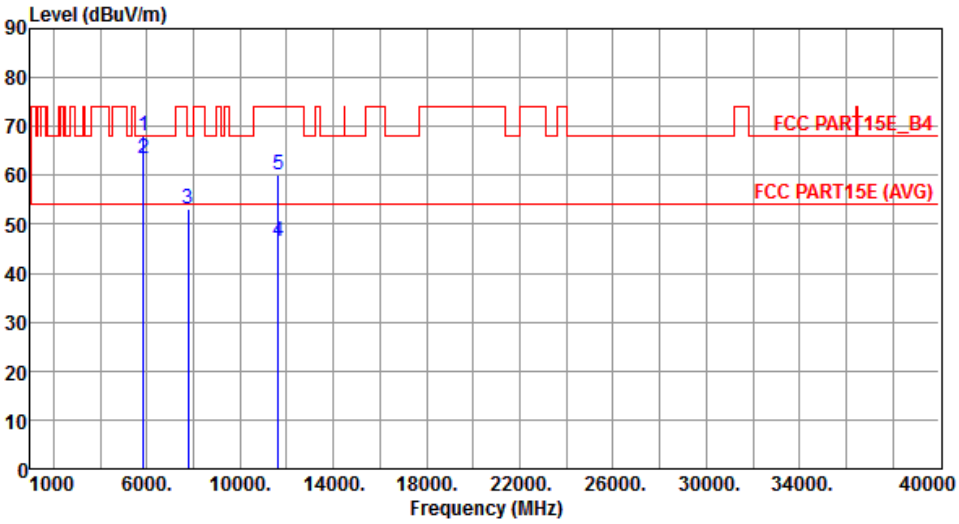
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal	Test Configuration	3



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	63.42	78.20	-14.78	56.47	6.95	Peak	100	3
2	5860.00	63.44	68.20	-4.76	56.49	6.95	Peak	100	3
3	7766.60	50.91	68.20	-17.29	40.07	10.84	Peak	100	116
4	11650.00	46.16	54.00	-7.84	30.14	16.02	Average	162	3
5	11650.00	59.55	74.00	-14.45	43.53	16.02	Peak	162	3

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

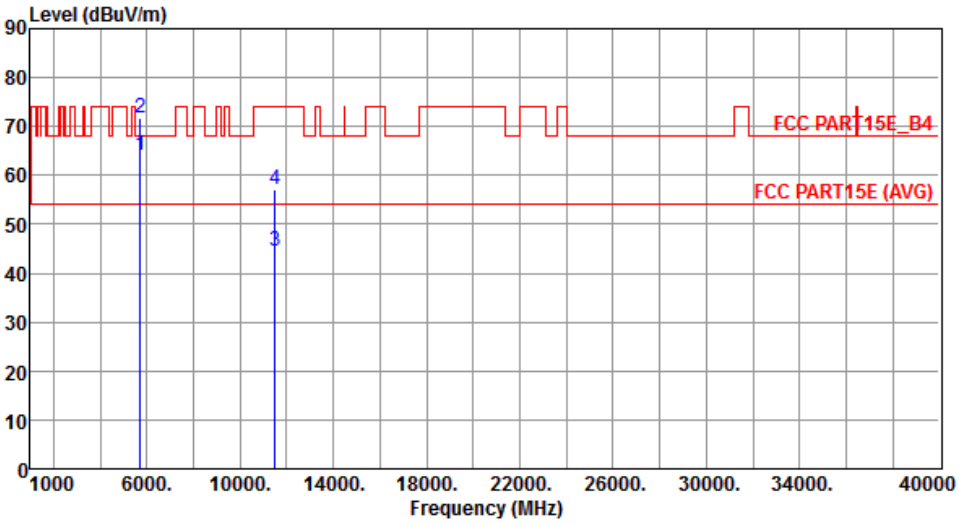
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Vertical	Test Configuration	3



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	68.20	78.20	-10.00	61.25	6.95	Peak	100	3
2	5860.00	63.32	68.20	-4.88	56.37	6.95	Peak	100	3
3	7766.60	53.26	68.20	-14.94	42.42	10.84	Peak	100	165
4	11650.00	46.66	54.00	-7.34	30.64	16.02	Average	289	166
5	11650.00	60.22	74.00	-13.78	44.20	16.02	Peak	289	166

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

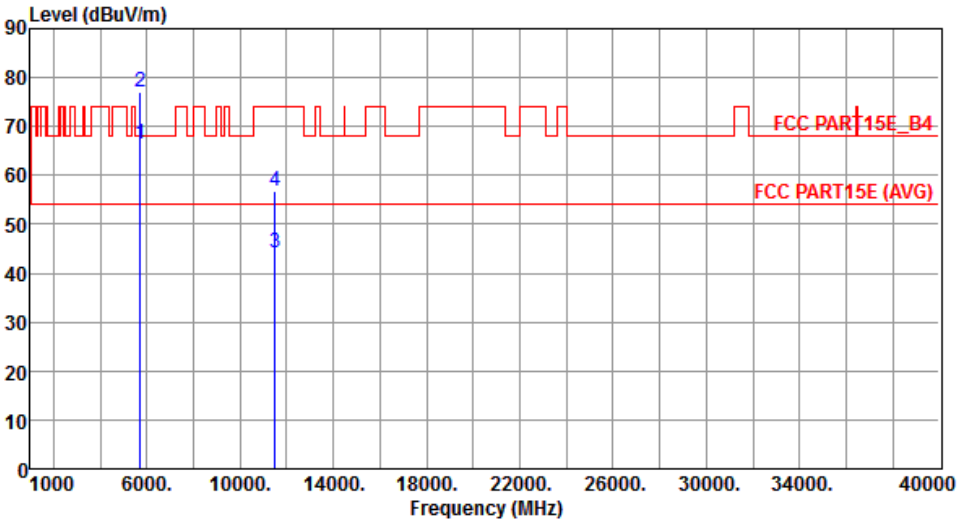
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	64.03	68.20	-4.17	57.33	6.70	Peak	131	244
2	5725.00	71.68	78.20	-6.52	64.97	6.71	Peak	131	244
3	11490.00	44.57	54.00	-9.43	28.35	16.22	Average	159	112
4	11490.00	57.19	74.00	-16.81	40.97	16.22	Peak	159	112

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

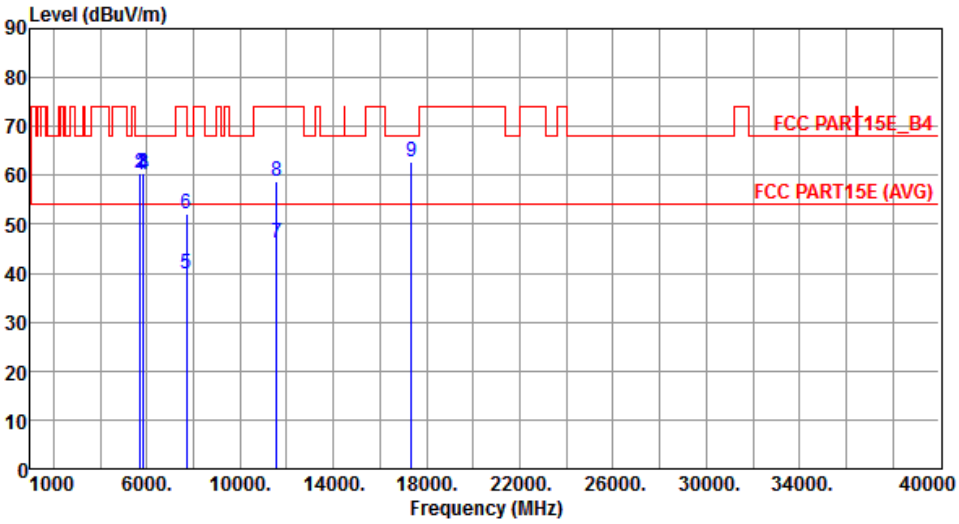
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	66.46	68.20	-1.74	59.76	6.70	Peak	229	179
2	5725.00	77.07	78.20	-1.13	70.36	6.71	Peak	229	179
3	11490.00	44.06	54.00	-9.94	27.84	16.22	Average	258	133
4	11490.00	56.75	74.00	-17.25	40.53	16.22	Peak	258	133

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

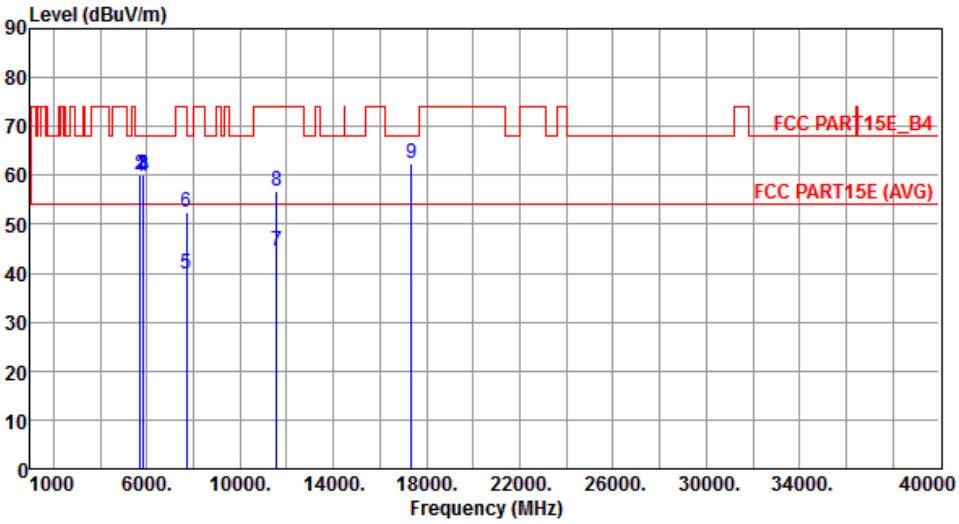
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	60.02	68.20	-8.18	53.32	6.70	Peak	138	229
2	5725.00	60.44	78.20	-17.76	53.73	6.71	Peak	138	229
3	5850.00	60.40	78.20	-17.80	53.45	6.95	Peak	138	229
4	5860.00	60.07	68.20	-8.13	53.12	6.95	Peak	138	229
5	7713.30	39.71	54.00	-14.29	28.95	10.76	Average	173	308
6	7713.30	52.06	74.00	-21.94	41.30	10.76	Peak	173	308
7	11570.00	46.04	54.00	-7.96	29.92	16.12	Average	150	112
8	11570.00	58.81	74.00	-15.19	42.69	16.12	Peak	150	112
9	17355.00	62.66	68.20	-5.54	41.03	21.63	Peak	255	76

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

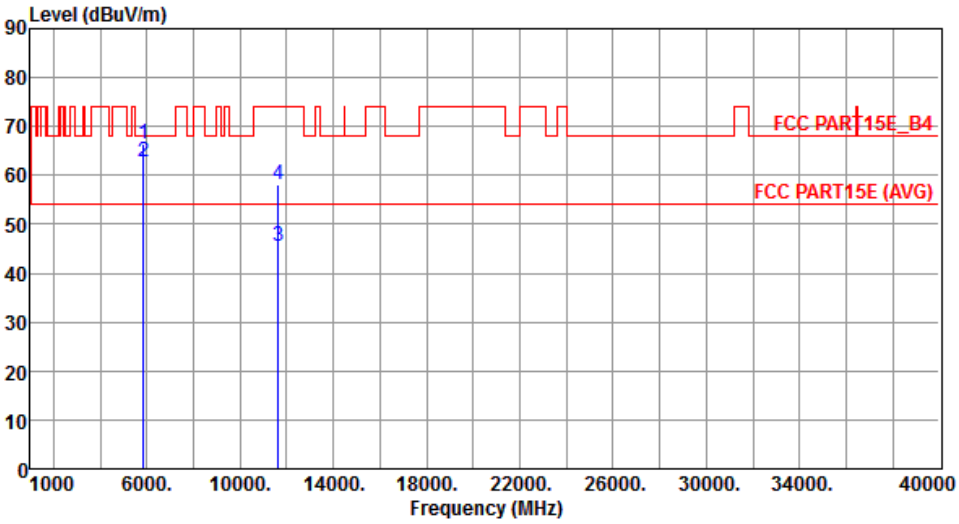
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	59.72	68.20	-8.48	53.02	6.70	Peak	221	202
2	5725.00	60.20	78.20	-18.00	53.49	6.71	Peak	221	202
3	5850.00	60.03	78.20	-18.17	53.08	6.95	Peak	221	202
4	5860.00	59.94	68.20	-8.26	52.99	6.95	Peak	221	202
5	7713.30	39.72	54.00	-14.28	28.96	10.76	Average	219	48
6	7713.30	52.31	74.00	-21.69	41.55	10.76	Peak	219	48
7	11570.00	44.41	54.00	-9.59	28.29	16.12	Average	266	123
8	11570.00	56.92	74.00	-17.08	40.80	16.12	Peak	266	123
9	17355.00	62.56	68.20	-5.64	40.93	21.63	Peak	324	303

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

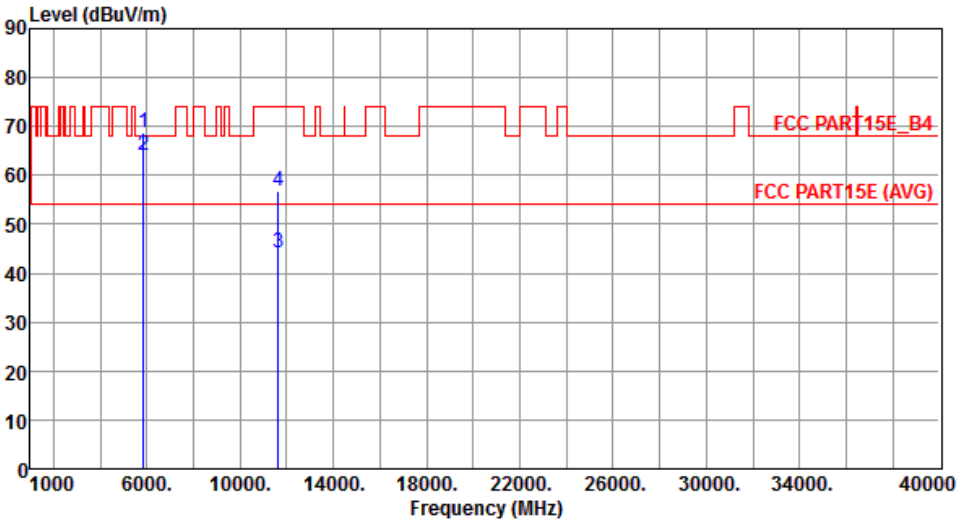
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	66.47	78.20	-11.73	59.52	6.95	Peak	137	242
2	5860.00	62.66	68.20	-5.54	55.71	6.95	Peak	137	242
3	11650.00	45.53	54.00	-8.47	29.51	16.02	Average	153	117
4	11650.00	58.26	74.00	-15.74	42.24	16.02	Peak	153	117

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	11a	Test Freq. (MHz)	5825
Polarization	Vertical	Test Configuration	4

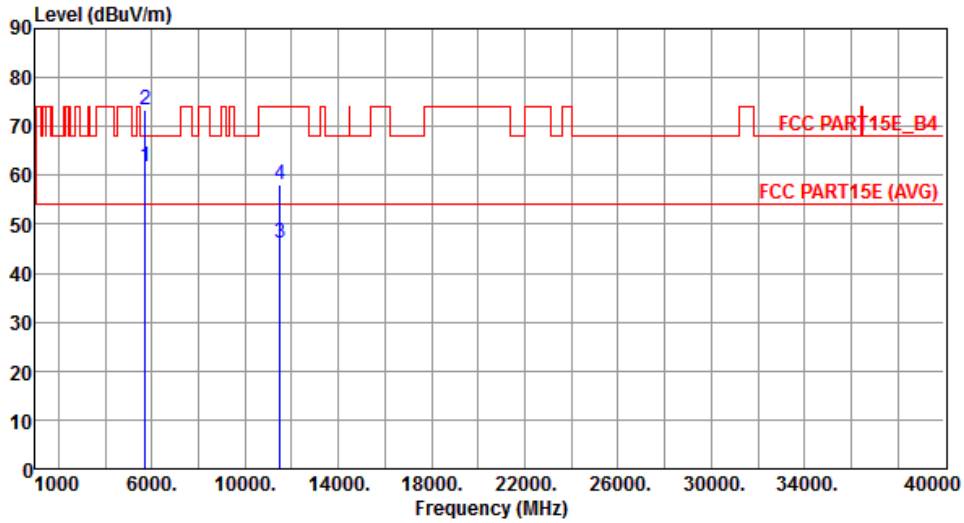


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	68.81	78.20	-9.39	61.86	6.95	Peak	222	185
2	5860.00	63.99	68.20	-4.21	57.04	6.95	Peak	222	185
3	11650.00	44.15	54.00	-9.85	28.13	16.02	Average	261	128
4	11650.00	56.83	74.00	-17.17	40.81	16.02	Peak	261	128

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.6 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT20

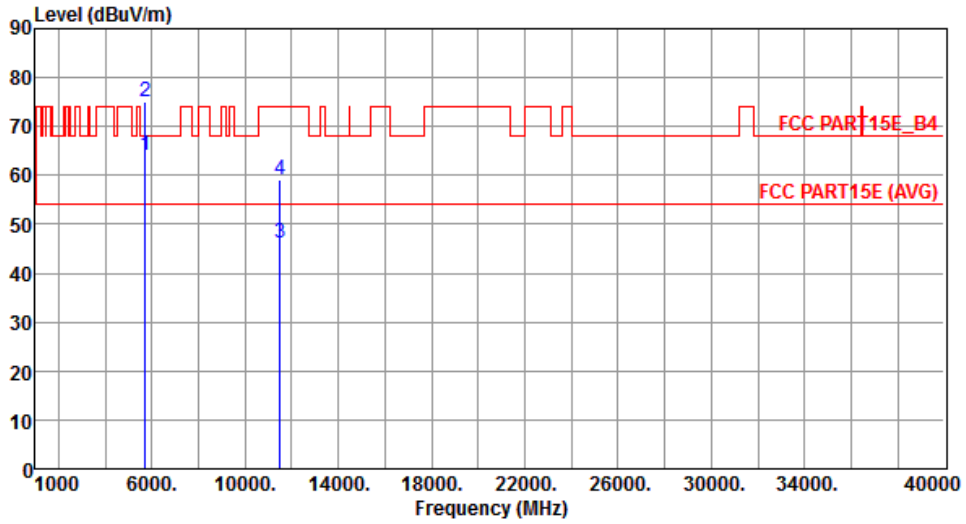
Modulation	HT20	Test Freq. (MHz)	5745
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	61.65	68.20	-6.55	54.95	6.70	Peak	238	47
2	5725.00	73.47	78.20	-4.73	66.76	6.71	Peak	238	47
3	11490.00	46.02	54.00	-7.98	29.80	16.22	Average	123	324
4	11490.00	58.22	74.00	-15.78	42.00	16.22	Peak	123	324

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

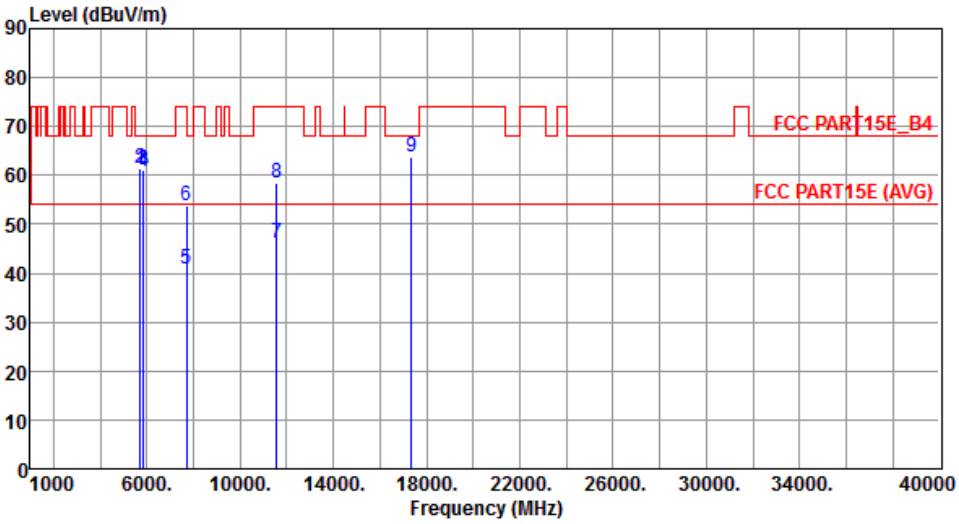
Modulation	HT20	**Test Freq. (MHz)**	5745
Polarization	Vertical	**Test Configuration**	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	64.14	68.20	-4.06	57.44	6.70	Peak	391	26
2	5725.00	75.03	78.20	-3.17	68.32	6.71	Peak	391	26
3	11490.00	46.21	54.00	-7.79	29.99	16.22	Average	242	157
4	11490.00	59.13	74.00	-14.87	42.91	16.22	Peak	242	157

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

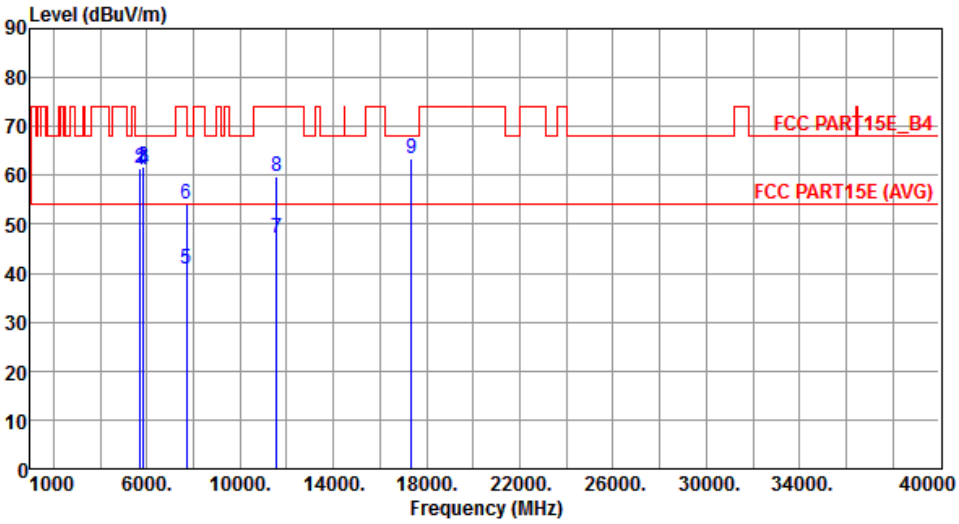
Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	61.13	68.20	-7.07	54.43	6.70	Peak	221	52
2	5725.00	61.48	78.20	-16.72	54.77	6.71	Peak	221	52
3	5850.00	60.96	78.20	-17.24	54.01	6.95	Peak	221	52
4	5860.00	60.63	68.20	-7.57	53.68	6.95	Peak	221	52
5	7713.30	40.87	54.00	-13.13	30.11	10.76	Average	100	56
6	7713.30	53.79	74.00	-20.21	43.03	10.76	Peak	100	56
7	11570.00	46.11	54.00	-7.89	29.99	16.12	Average	123	324
8	11570.00	58.47	74.00	-15.53	42.35	16.12	Peak	123	324
9	17355.00	63.78	68.20	-4.42	42.15	21.63	Peak	210	38

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

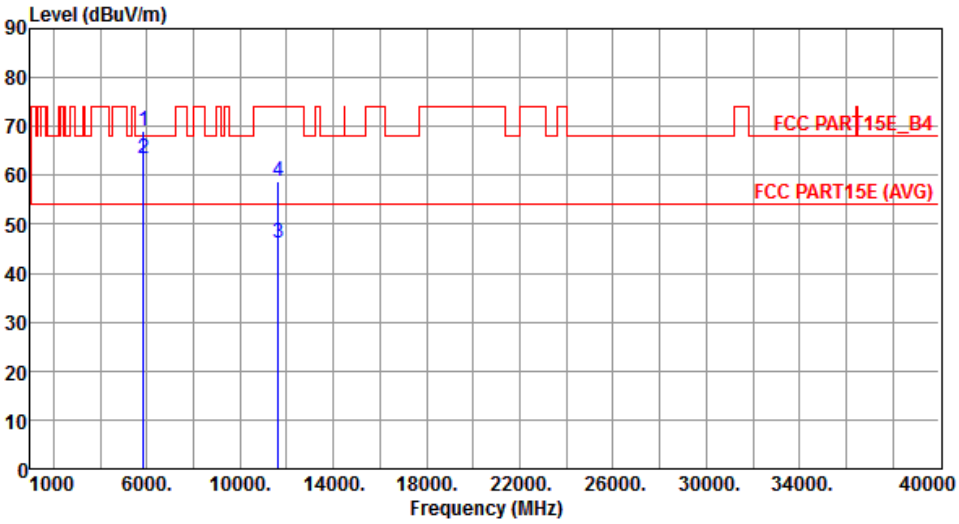
Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	61.25	68.20	-6.95	54.55	6.70	Peak	395	26
2	5725.00	61.57	78.20	-16.63	54.86	6.71	Peak	395	26
3	5850.00	61.72	78.20	-16.48	54.77	6.95	Peak	395	26
4	5860.00	61.10	68.20	-7.10	54.15	6.95	Peak	395	26
5	7713.30	40.84	54.00	-13.16	30.08	10.76	Average	178	311
6	7713.30	54.12	74.00	-19.88	43.36	10.76	Peak	178	311
7	11570.00	47.02	54.00	-6.98	30.90	16.12	Average	250	169
8	11570.00	59.89	74.00	-14.11	43.77	16.12	Peak	250	169
9	17355.00	63.42	68.20	-4.78	41.79	21.63	Peak	186	42

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

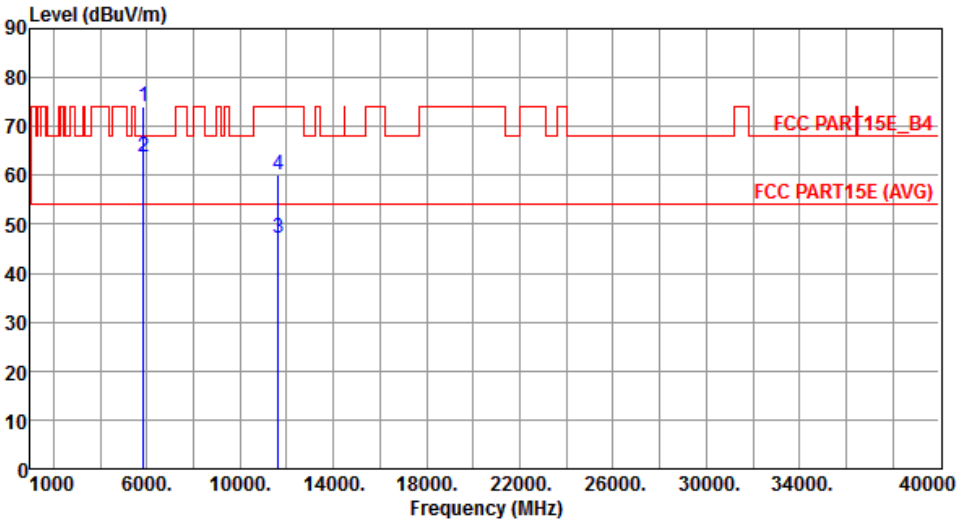
Modulation	HT20	Test Freq. (MHz)	5825
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	69.04	78.20	-9.16	62.09	6.95	Peak	239	47
2	5860.00	63.42	68.20	-4.78	56.47	6.95	Peak	239	47
3	11650.00	46.26	54.00	-7.74	30.24	16.02	Average	139	324
4	11650.00	58.78	74.00	-15.22	42.76	16.02	Peak	139	324

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

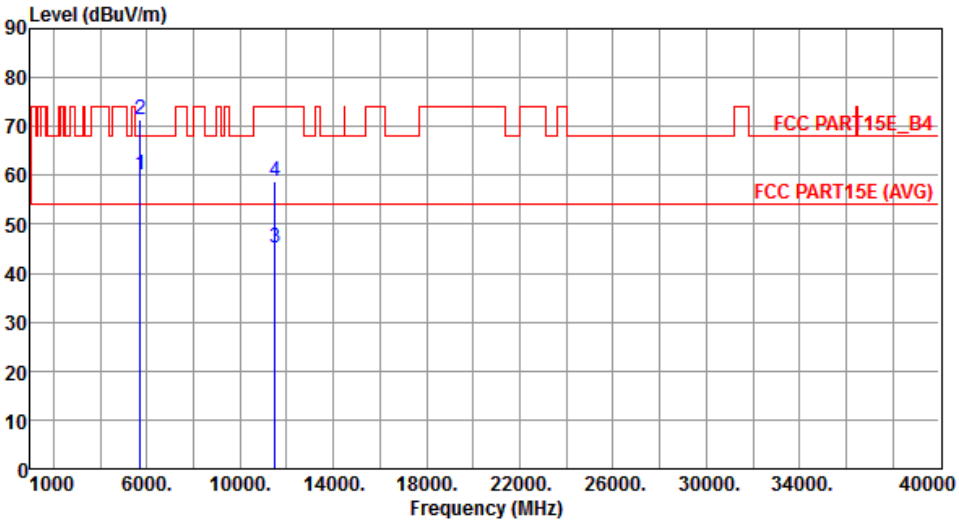
Modulation	HT20	**Test Freq. (MHz)**	5825
Polarization	Vertical	**Test Configuration**	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	74.22	78.20	-3.98	67.27	6.95	Peak	393	29
2	5860.00	63.82	68.20	-4.38	56.87	6.95	Peak	393	29
3	11650.00	47.12	54.00	-6.88	31.10	16.02	Average	252	160
4	11650.00	60.03	74.00	-13.97	44.01	16.02	Peak	252	160

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

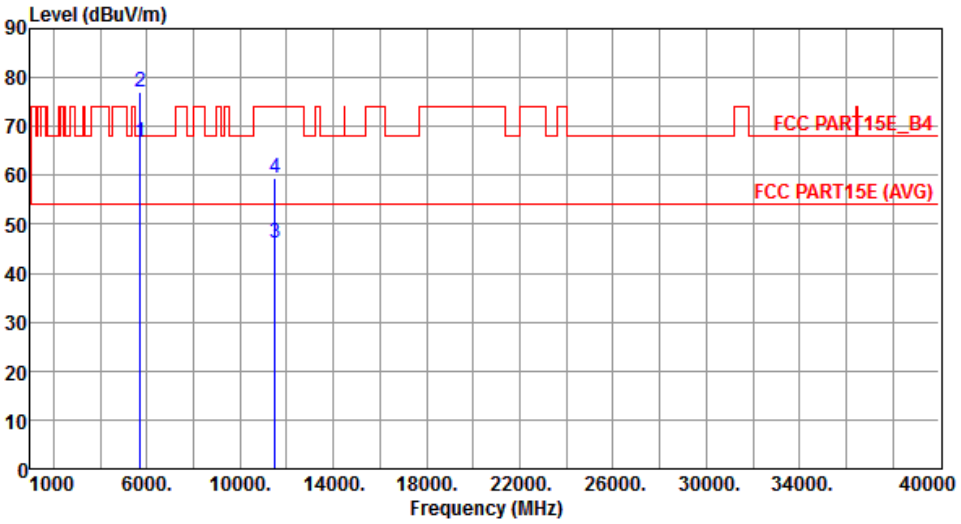
Modulation	HT20	Test Freq. (MHz)	5745
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	60.03	68.20	-8.17	53.33	6.70	Peak	111	198
2	5725.00	71.27	78.20	-6.93	64.56	6.71	Peak	111	198
3	11490.00	45.18	54.00	-8.82	28.96	16.22	Average	116	326
4	11490.00	58.71	74.00	-15.29	42.49	16.22	Peak	116	326

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

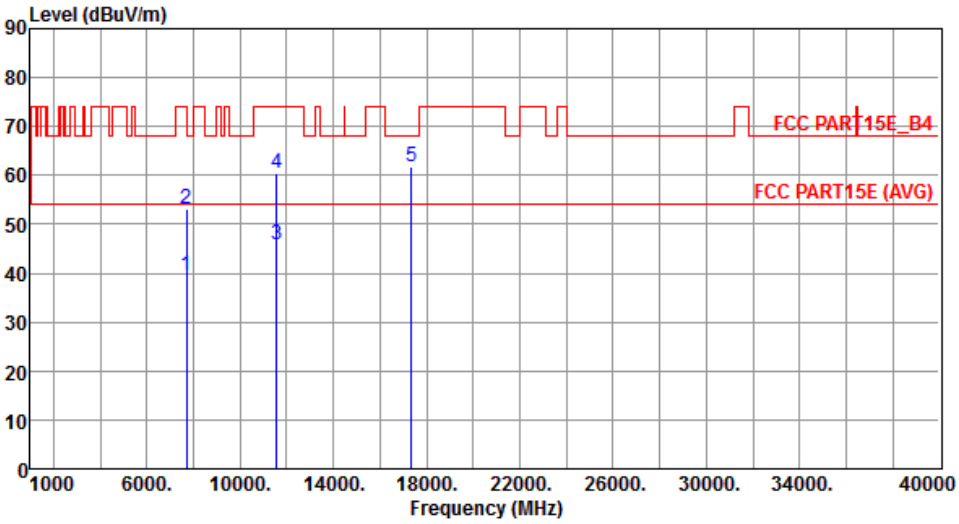
Modulation	HT20	Test Freq. (MHz)	5745
Polarization	Vertical	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	66.88	68.20	-1.32	60.18	6.70	Peak	127	195
2	5725.00	77.19	78.20	-1.01	70.48	6.71	Peak	127	195
3	11490.00	46.08	54.00	-7.92	29.86	16.22	Average	255	173
4	11490.00	59.51	74.00	-14.49	43.29	16.22	Peak	255	173

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

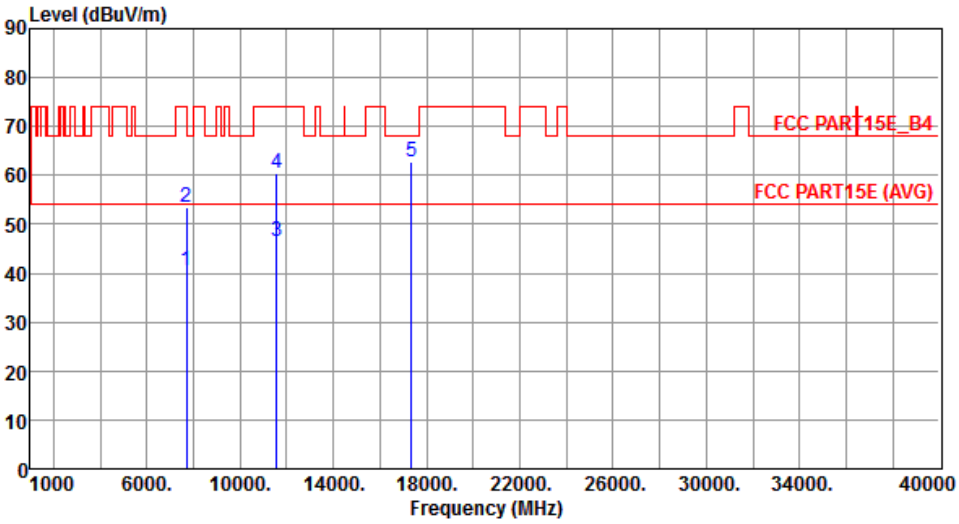
Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	7713.00	39.65	54.00	-14.35	28.89	10.76	Average	100	132
2	7713.00	53.06	74.00	-20.94	42.30	10.76	Peak	100	132
3	11570.00	45.88	54.00	-8.12	29.76	16.12	Average	143	132
4	11570.00	60.51	74.00	-13.49	44.39	16.12	Peak	143	132
5	17355.00	61.83	68.20	-6.37	40.20	21.63	Peak	123	166

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

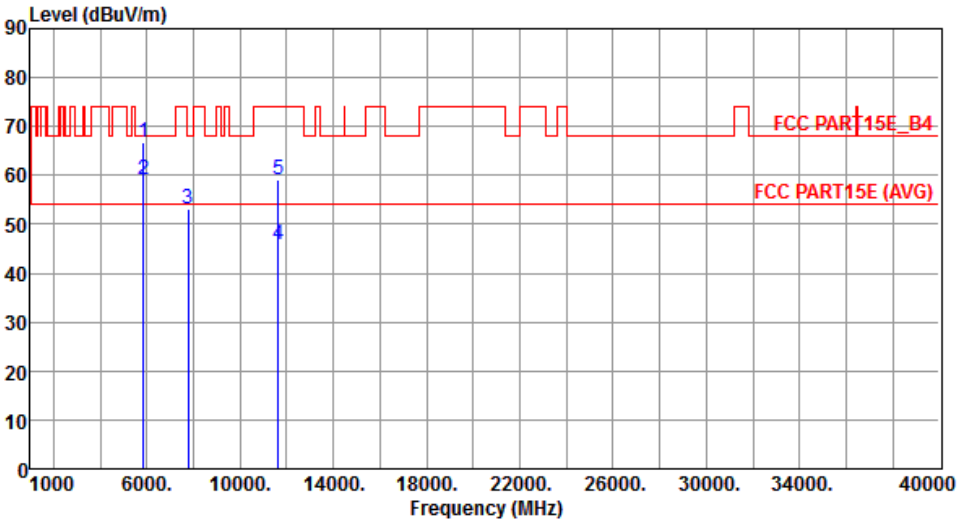
Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Vertical	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	7713.00	40.64	54.00	-13.36	29.88	10.76	Average	117	120
2	7713.00	53.35	74.00	-20.65	42.59	10.76	Peak	117	120
3	11570.00	46.45	54.00	-7.55	30.33	16.12	Average	250	170
4	11570.00	60.28	74.00	-13.72	44.16	16.12	Peak	250	170
5	17355.00	62.78	68.20	-5.42	41.15	21.63	Peak	100	123

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

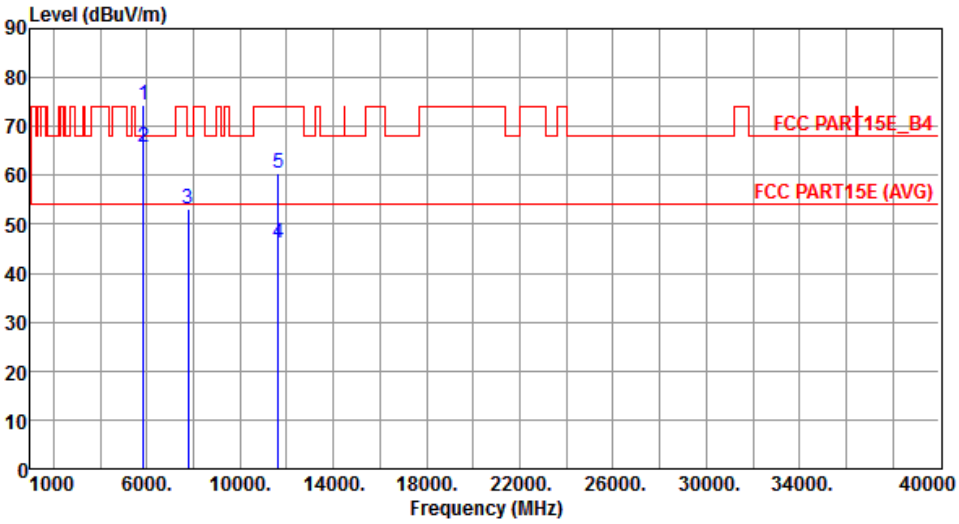
Modulation	HT20	Test Freq. (MHz)	5825
Polarization	Horizontal	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	66.86	78.20	-11.34	59.91	6.95	Peak	100	199
2	5860.00	59.18	68.20	-9.02	52.23	6.95	Peak	100	199
3	7766.60	52.99	68.20	-15.21	42.15	10.84	Peak	100	129
4	11650.00	45.90	54.00	-8.10	29.88	16.02	Average	143	133
5	11650.00	59.28	74.00	-14.72	43.26	16.02	Peak	143	133

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

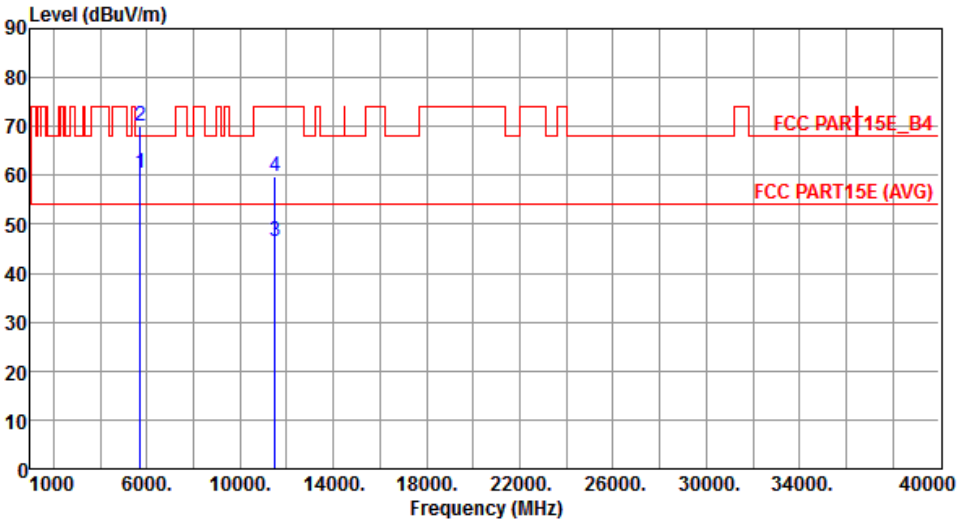
Modulation	HT20	Test Freq. (MHz)	5825
Polarization	Vertical	Test Configuration	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	74.27	78.20	-3.93	67.32	6.95	Peak	120	353
2	5860.00	65.69	68.20	-2.51	58.74	6.95	Peak	120	353
3	7766.60	53.22	68.20	-14.98	42.38	10.84	Peak	116	123
4	11650.00	46.18	54.00	-7.82	30.16	16.02	Average	253	170
5	11650.00	60.31	74.00	-13.69	44.29	16.02	Peak	253	170

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

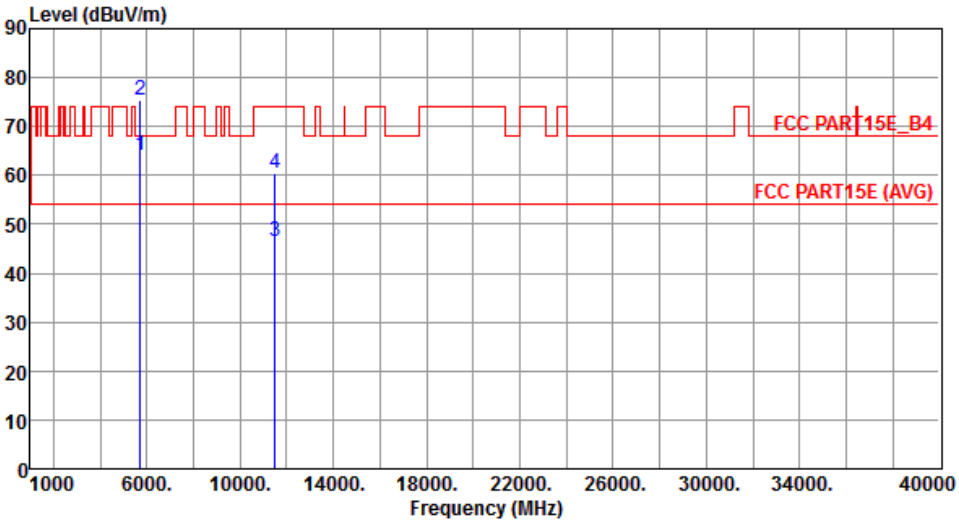
Modulation	HT20	Test Freq. (MHz)	5745
Polarization	Horizontal	Test Configuration	3



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	60.46	68.20	-7.74	53.76	6.70	Peak	100	6
2	5725.00	70.16	78.20	-8.04	63.45	6.71	Peak	100	6
3	11490.00	46.36	54.00	-7.64	30.14	16.22	Average	166	7
4	11490.00	59.73	74.00	-14.27	43.51	16.22	Peak	166	7

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

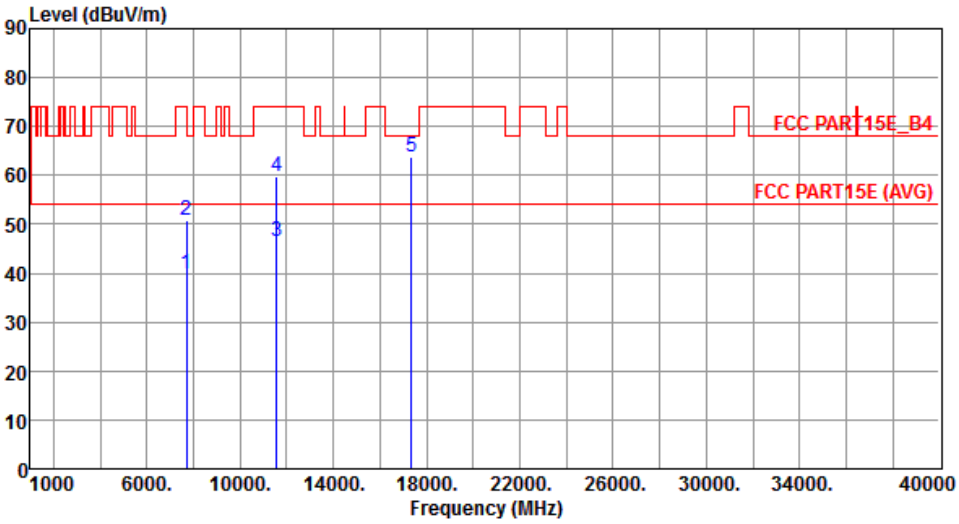
Modulation	HT20	Test Freq. (MHz)	5745
Polarization	Vertical	Test Configuration	3



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	64.25	68.20	-3.95	57.55	6.70	Peak	106	246
2	5725.00	75.28	78.20	-2.92	68.57	6.71	Peak	106	246
3	11490.00	46.53	54.00	-7.47	30.31	16.22	Average	281	163
4	11490.00	60.35	74.00	-13.65	44.13	16.22	Peak	281	163

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

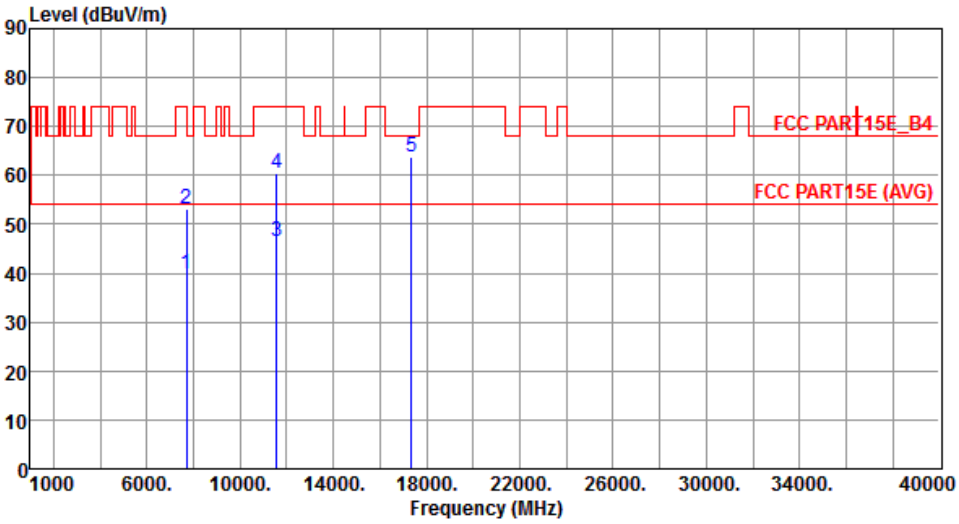
Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Horizontal	Test Configuration	3



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	7713.00	39.76	54.00	-14.24	29.00	10.76	Average	100	123
2	7713.00	50.85	74.00	-23.15	40.09	10.76	Peak	100	123
3	11570.00	46.44	54.00	-7.56	30.32	16.12	Average	162	9
4	11570.00	59.73	74.00	-14.27	43.61	16.12	Peak	162	9
5	17355.00	63.79	68.20	-4.41	42.16	21.63	Peak	123	158

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

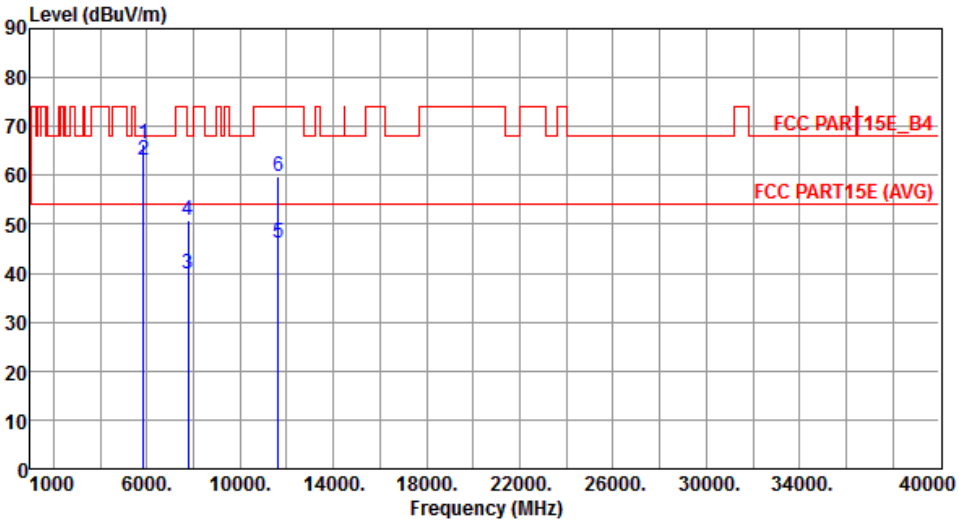
Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Vertical	Test Configuration	3



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	7713.00	39.78	54.00	-14.22	29.02	10.76	Average	100	166
2	7713.00	53.26	74.00	-20.74	42.50	10.76	Peak	100	166
3	11570.00	46.55	54.00	-7.45	30.43	16.12	Average	289	162
4	11570.00	60.31	74.00	-13.69	44.19	16.12	Peak	289	162
5	17355.00	63.85	68.20	-4.35	42.22	21.63	Peak	100	167

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

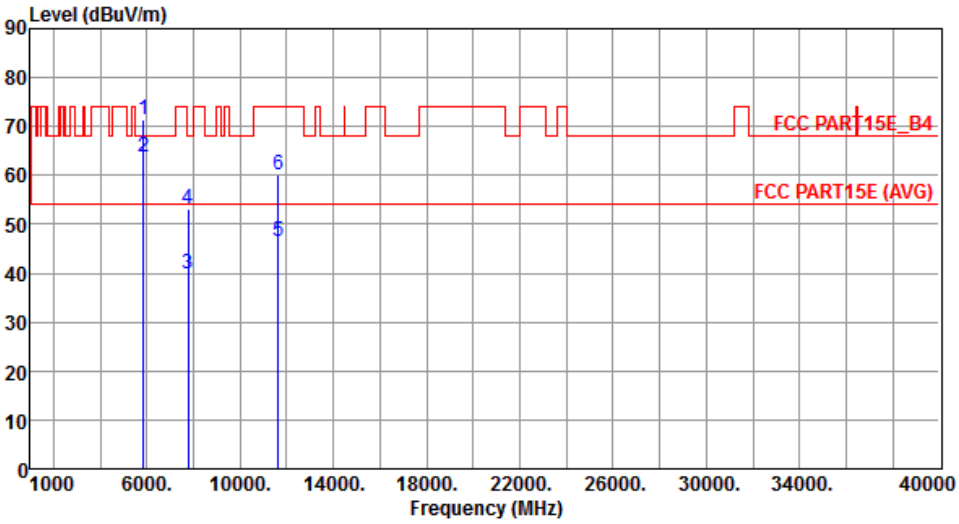
Modulation	HT20	Test Freq. (MHz)	5825
Polarization	Horizontal	Test Configuration	3



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	66.27	78.20	-11.93	59.32	6.95	Peak	171	3
2	5860.00	63.18	68.20	-5.02	56.23	6.95	Peak	171	3
3	7766.60	39.96	54.00	-14.04	29.12	10.84	Average	100	123
4	7766.60	50.83	68.20	-17.37	39.99	10.84	Peak	100	123
5	11650.00	46.29	54.00	-7.71	30.27	16.02	Average	166	4
6	11650.00	59.73	74.00	-14.27	43.71	16.02	Peak	166	4

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

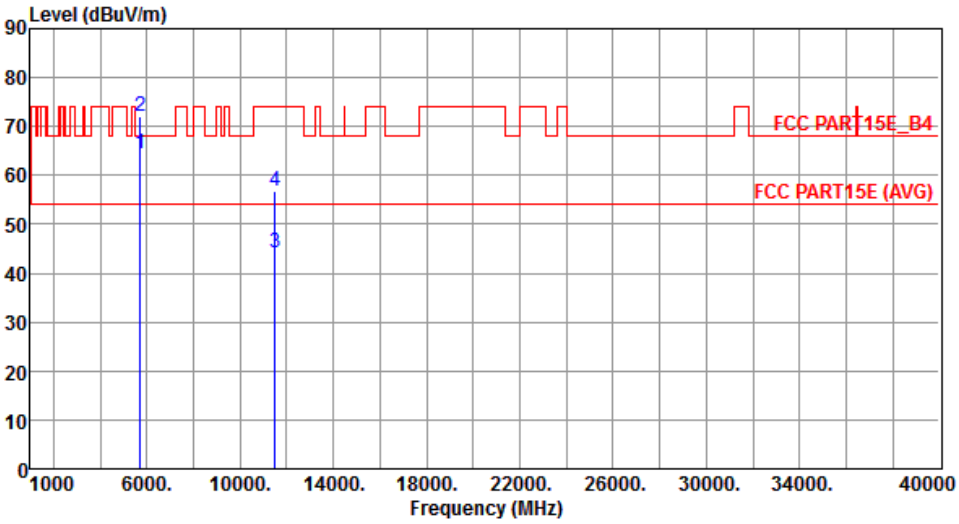
Modulation	HT20	Test Freq. (MHz)	5825
Polarization	Vertical	Test Configuration	3



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	71.36	78.20	-6.84	64.41	6.95	Peak	113	359
2	5860.00	63.83	68.20	-4.37	56.88	6.95	Peak	113	359
3	7766.60	39.96	54.00	-14.04	29.12	10.84	Average	100	166
4	7766.60	53.26	68.20	-14.94	42.42	10.84	Peak	100	166
5	11650.00	46.59	54.00	-7.41	30.57	16.02	Average	276	166
6	11650.00	60.25	74.00	-13.75	44.23	16.02	Peak	276	166

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

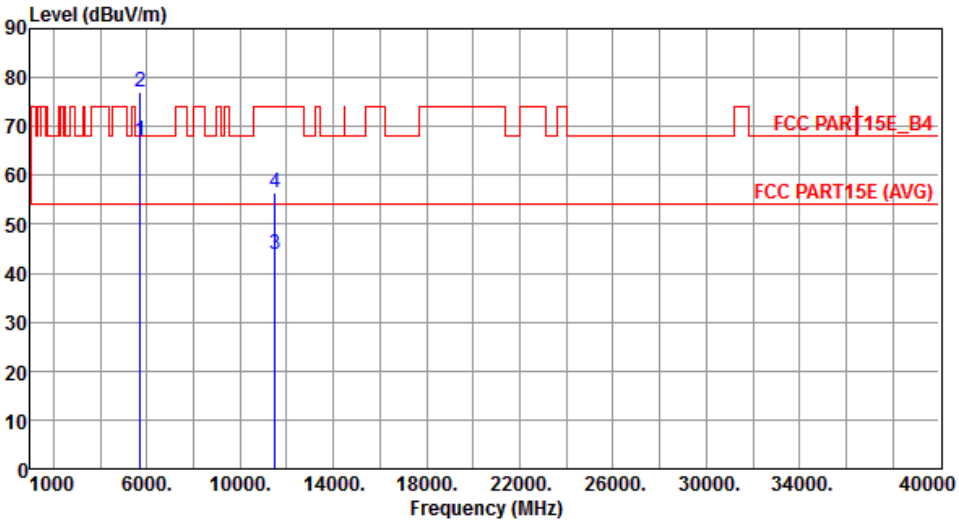
Modulation	HT20	Test Freq. (MHz)	5745
Polarization	Horizontal	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	64.28	68.20	-3.92	57.58	6.70	Peak	135	249
2	5725.00	72.03	78.20	-6.17	65.32	6.71	Peak	135	249
3	11490.00	44.23	54.00	-9.77	28.01	16.22	Average	155	113
4	11490.00	56.89	74.00	-17.11	40.67	16.22	Peak	155	113

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

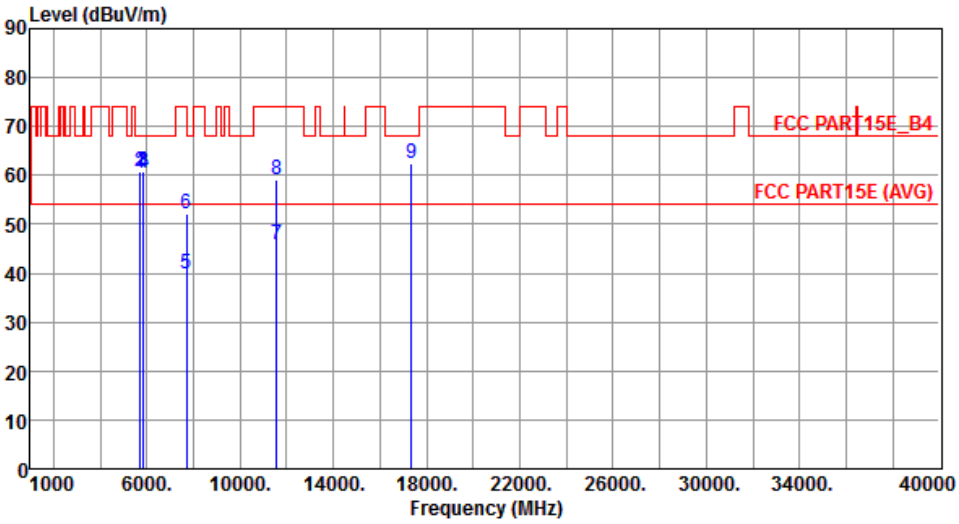
Modulation	HT20	Test Freq. (MHz)	5745
Polarization	Vertical	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	67.04	68.20	-1.16	60.34	6.70	Peak	242	209
2	5725.00	76.94	78.20	-1.26	70.23	6.71	Peak	242	209
3	11490.00	43.78	54.00	-10.22	27.56	16.22	Average	253	140
4	11490.00	56.35	74.00	-17.65	40.13	16.22	Peak	253	140

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

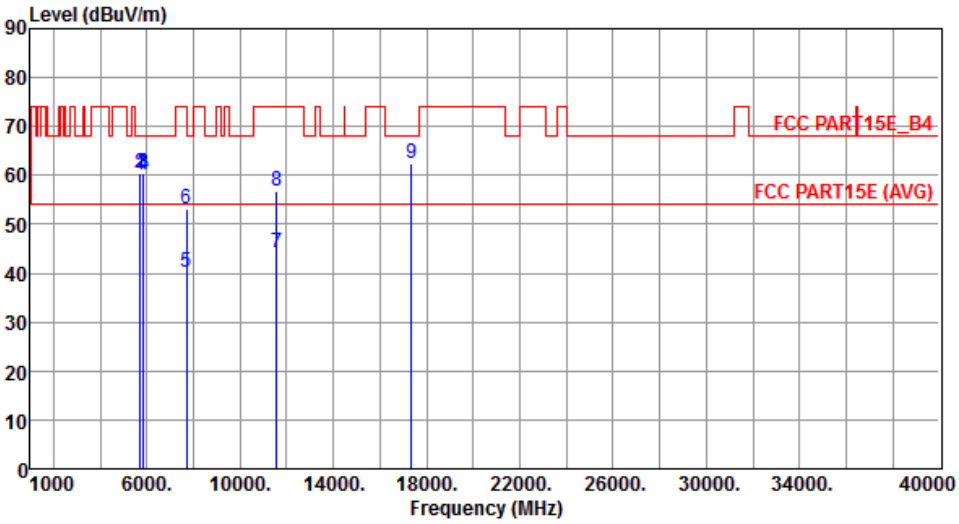
Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Horizontal	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	60.48	68.20	-7.72	53.78	6.70	Peak	136	224
2	5725.00	60.79	78.20	-17.41	54.08	6.71	Peak	136	224
3	5850.00	60.78	78.20	-17.42	53.83	6.95	Peak	136	224
4	5860.00	60.37	68.20	-7.83	53.42	6.95	Peak	136	224
5	7713.30	39.88	54.00	-14.12	29.12	10.76	Average	171	315
6	7713.30	52.29	74.00	-21.71	41.53	10.76	Peak	171	315
7	11570.00	45.85	54.00	-8.15	29.73	16.12	Average	153	119
8	11570.00	59.02	74.00	-14.98	42.90	16.12	Peak	153	119
9	17355.00	62.27	68.20	-5.93	40.64	21.63	Peak	251	82

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

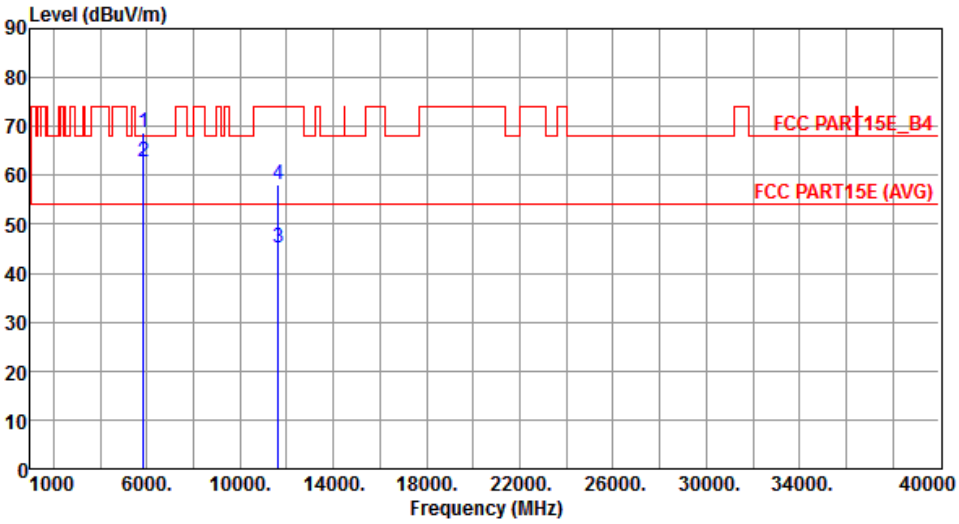
Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Vertical	Test Configuration	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5715.00	60.23	68.20	-7.97	53.53	6.70	Peak	223	208
2	5725.00	60.58	78.20	-17.62	53.87	6.71	Peak	223	208
3	5850.00	60.45	78.20	-17.75	53.50	6.95	Peak	223	208
4	5860.00	60.27	68.20	-7.93	53.32	6.95	Peak	223	208
5	7713.30	40.12	54.00	-13.88	29.36	10.76	Average	215	43
6	7713.30	53.00	74.00	-21.00	42.24	10.76	Peak	215	43
7	11570.00	44.16	54.00	-9.84	28.04	16.12	Average	262	124
8	11570.00	56.63	74.00	-17.37	40.51	16.12	Peak	262	124
9	17355.00	62.33	68.20	-5.87	40.70	21.63	Peak	324	308

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

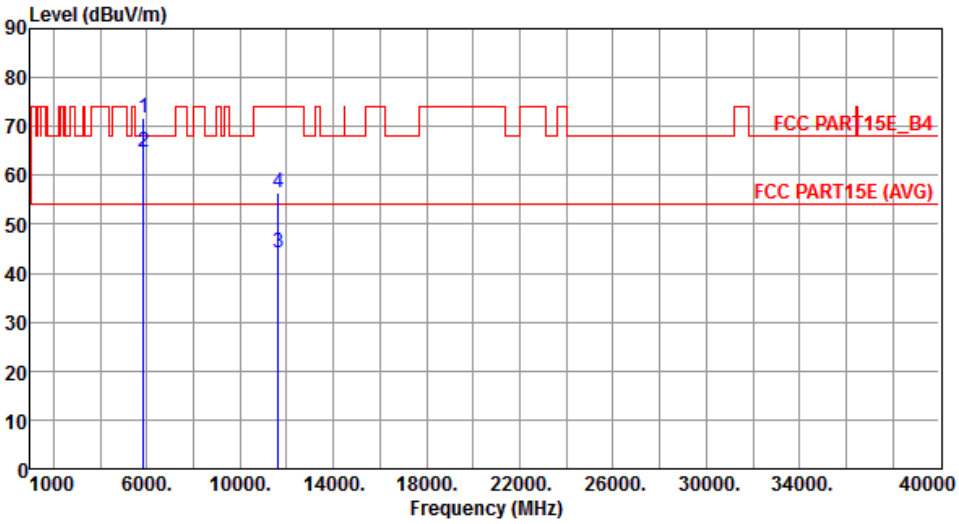
Modulation	HT20	**Test Freq. (MHz)**	5825
Polarization	Horizontal	**Test Configuration**	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	68.81	78.20	-9.39	61.86	6.95	Peak	133	248
2	5860.00	62.72	68.20	-5.48	55.77	6.95	Peak	133	248
3	11650.00	45.12	54.00	-8.88	29.10	16.02	Average	159	110
4	11650.00	58.02	74.00	-15.98	42.00	16.02	Peak	159	110

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	HT20	**Test Freq. (MHz)**	5825
Polarization	Vertical	**Test Configuration**	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	71.75	78.20	-6.45	64.80	6.95	Peak	232	182
2	5860.00	64.92	68.20	-3.28	57.97	6.95	Peak	232	182
3	11650.00	44.02	54.00	-9.98	28.00	16.02	Average	265	122
4	11650.00	56.42	74.00	-17.58	40.40	16.02	Peak	265	122

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.6 Frequency Stability

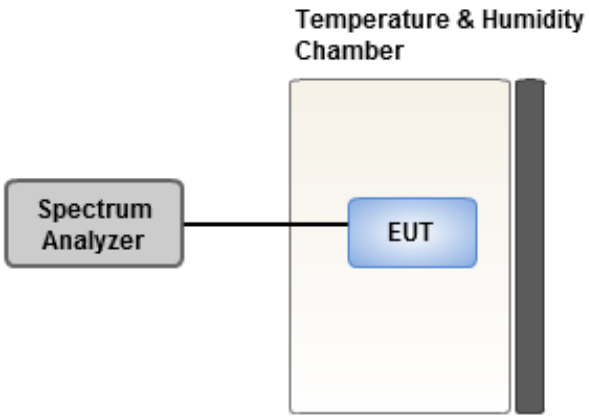
3.6.1 Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

3.6.2 Test Procedures

1. The EUT is installed in an environment test chamber with external power source.
2. Set the chamber to operate at 20 centigrade and external power source to output at nominal voltage of EUT.
3. A sufficient stabilization period at each temperature is used prior to each frequency measurement.
4. When temperature is stabled, measure the frequency stability.
5. The test shall be performed under -30 to 70 centigrade and 85 to 115 percent of the nominal voltage. Change setting of chamber and external power source to complete all conditions.

3.6.3 Test Setup



3.6.4 Test Result of Frequency Stability

Frequency: 5785 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	6.87	6.83	6.78	6.68
T20°CVmin	8.71	9.02	9.04	9.44
T70°CVnom	7.60	7.64	7.76	7.53
T60°CVnom	7.09	6.87	6.88	7.50
T50°CVnom	8.83	8.87	8.38	8.31
T40°CVnom	8.36	8.83	8.59	8.56
T30°CVnom	7.55	7.61	7.86	8.04
T20°CVnom	6.96	7.07	7.45	7.18
T10°CVnom	6.75	7.37	6.70	7.02
T0°CVnom	7.73	7.91	7.83	8.26
T-10°CVnom	6.75	6.92	7.02	6.95
T-20°CVnom	6.98	7.14	6.91	7.41
T-30°CVnom	7.86	8.07	7.70	8.04
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 102
Tnom [°C]: 20		Tmax [°C]: 70		Tmin [°C]: -30

4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corp, it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan Hsiang. Location map can be found on our website http://www.icertifi.com.tw.

Linkou	**Kwei Shan**	**Kwei Shan Site II**
Tel: 886-2-2601-1640	Tel: 886-3-271-8666	Tel: 886-3-271-8640
No. 30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan, R.O.C.	No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan Hsiang, Tao Yuan Hsien 333, Taiwan, R.O.C.	No. 14-1, Lane 19, Wen San 3rd St., Kwei Shan Hsiang, Tao Yuan Hsien 333, Taiwan, R.O.C.

If you have any suggestion, please feel free to contact us as below information

Tel: 886-3-271-8666
Fax: 886-3-318-0155
Email: ICC_Service@icertifi.com.tw

==END==