FCC Test Report

FCC ID	:	**VQK-F01H**
Equipment	:	**Mobile Phone**
Model No.	:	**F-01H**
Brand Name	:	**FUJITSU**
Applicant	:	**FUJITSU LIMITED**
Address	:	**1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki 211-8588, Japan**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Jun. 03, 2015**
Tested Date	:	**Jul. 12 ~ Jul. 15, 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

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Release Record

Report No.	Version	Description	Issued Date
FR560301AN	Rev. 01	Initial issue	Aug. 07, 2015

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 2.692MHz 44.11 (Margin -11.89dB) - QP	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 11160.00MHz 49.92 (Margin -4.08dB) - AV	Pass
15.407(a)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(e)	6dB bandwidth	Meet the requirement of limit	Pass
15.407(a)	RF Output Power	Max Power [dBm]: 5150~5250MHz: 11.16 5250~5350MHz: 10.95 5470~5725MHz: 10.81	Pass
15.407(a)	Peak Power Spectral Density	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

1.1.1 Product Details

Product Name	Mobile Phone
Brand Name	FUJITSU
Model Name	F-01H
IMEI Code	354017060100571 / 354017060117070
H/W Version	v2.1.1
S/W Version	R019.1e

1.1.2 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**
5150-5250 5250-5350 5470-5725	a	5180-5240 5260-5320 5500-5700	36-48 [4] 52-64 [4] 100-140 [11]	1	6-54 Mbps
5150-5250 5250-5350 5470-5725	n (HT20)	5180-5240 5260-5320 5500-5700	36-48 [4] 52-64 [4] 100-140 [11]]	1	MCS 0-7
5150-5250 5250-5350 5470-5725	n (HT40)	5190-5230 5270-5310 5510-5670	38-46 [2] 54-62 [2] 102-134 [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.					

1.1.3 Antenna Details

Ant. No.	**Type**	**Connector**	**Operating Frequencies (MHz) / Antenna Gain (dBi)**		
			2400~2483.5	**5150~5350**	**5470~5725**
1	λ/4 Monopole	---	-1.14	-2.83	-2.83

1.1.4 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	5.0Vdc from AC adapter 3.8Vdc from Battery

1.1.5 Accessories

No.	Equipment	Description
1	Cradle	Brand Name: Fujitsu Limited Model Name: F51 Input rating: 5Vdc, 1.5A Output rating: 5.0Vdc, 1.5A
2	Battery (Unremovable)	Brand Name: NTT Docomo Model Name: CA54310-0064 Power Rating: 3.8Vdc, 2330mAh, 8.9Wh

1.1.6 Channel List

Frequency band (MHz)		5150~5725	
802.11 a / n HT20		802.11n HT40	
Channel	Frequency(MHz)	Channel	Frequency(MHz)
36	5180	38	5190
40	5200	46	5230
44	5220	54	5270
48	5240	62	5310
52	5260	102	5510
56	5280	110	5550
60	5300	134	5670
64	5320	---	---
100	5500	---	---
104	5520	---	---
108	5540	---	---
112	5560	---	---
116	5580	---	---
132	5660	---	---
136	5680	---	---
140	5700	---	---

1.1.7 Test Tool and Duty Cycle

Test Tool	QRCT, Version: 3.0.54.0		
Duty Cycle and Duty Factor	Mode	Duty cycle (%)	Duty factor (dB)
	11a	1.39	0.51
	HT20	1.29	0.57
	HT40	0.65	1.13

1.1.8 Power Setting

For Frequency band 5150-5250 MHz		
Modulation Mode	**Test Frequency (MHz)**	**Power Set**
11a	5180	11.00
11a	5200	11.00
11a	5240	11.00
HT20	5180	10.50
HT20	5200	10.50
HT20	5240	10.50
HT40	5190	10.00
HT40	5230	10.00

For Frequency band 5250-5350 MHz		
Modulation Mode	**Test Frequency (MHz)**	**Power Set**
11a	5260	11.00
11a	5300	11.00
11a	5320	11.00
HT20	5260	10.50
HT20	5300	10.50
HT20	5320	10.50
HT40	5270	10.00
HT40	5310	10.00

For Frequency band 5470-5725 MHz		
Modulation Mode	**Test Frequency (MHz)**	**Power Set**
11a	5500	11.00
11a	5580	11.00
11a	5700	11.00
HT20	5500	10.50
HT20	5580	10.50
HT20	5700	10.50
HT40	5510	10.50
HT40	5550	9.50
HT40	5670	9.50

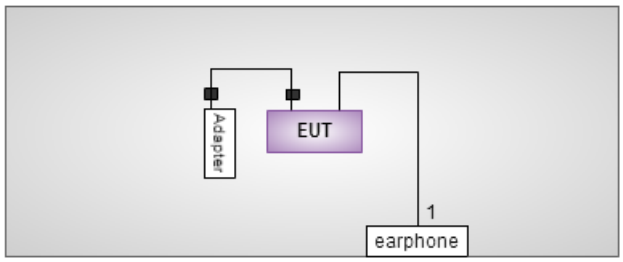
1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**S/N**	**Signal cable / Length (m)**
1	Adapter	NTT docomo	AC Adaptor 04	---	---
2	Earphone	APPLE	MD827FE/A	6	1.2m non-shielded.

Note: Item 1 was provided by applicant.

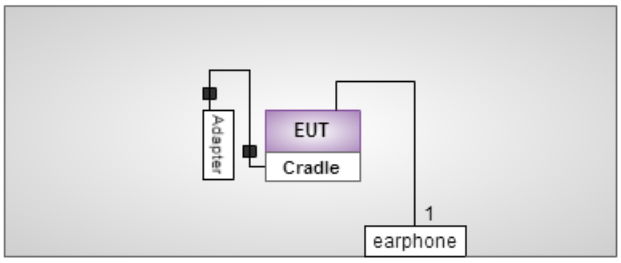
1.3 Test Setup Chart

Test Setup Diagram (Adapter mode)



1. 1.2m non-shielded

Test Setup Diagram (Cradle mode)



1. 1.2m non-shielded

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 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 v01

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**
Bandwidth	±34.134 Hz
Conducted power	±0.808 dB
Frequency error	±34.134 Hz
Power density	±0.463 dB
Conducted emission	±2.670 dB
AC conducted emission	±2.92 dB
Radiated emission ≤ 1GHz	±3.62 dB
Radiated emission > 1GHz	±5.60 dB
Time	±0.1%
Temperature	±0.6 ^{o}C

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	21°C / 60%	Kevin Ma
Radiated Emissions	03CH02-WS	21-23°C / 60-61%	Felix Sung
RF Conducted	TH01-WS	23°C / 65%	Brad Wu

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

2.2 The Worst Test Modes and Channel Details

Test item	Modulation Mode	Test Frequency (MHz)	Data Rate
Conducted Emissions	11a	5180	6 Mbps
Radiated Emissions ≤1GHz	11a	5180	6 Mbps
Radiated Emissions >1GHz RF Output Power Emission Bandwidth Peak Power Spectral Density	11a	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	6 Mbps
	HT20	5180 / 5200 / 5240 / 5260 / 5300 5320 / 5500 / 5580 / 5700	MCS 0
	HT40	5190 / 5230/ 5270 / 5310 / 5510 5550 / 5670	MCS 0
Peak Excursion	11a	5180 / 5300 / 5580	6 Mbps
	HT20	5240 / 5300 / 5500	MCS 0
	HT40	5190 / 5310 / 5550	MCS 0
Frequency Stability	Un-modulation	5320	---

NOTE:

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Y-plane** results were found as the worst case and were shown in this report.
2. The EUT had been tested by following test configurations for spurious emission below 1GHz.
   1) Configuration 1 : Adapter mode
   2) Configuration 2 : Cradle mode

3 Transmitter Test Results

3.1 Conducted Emissions

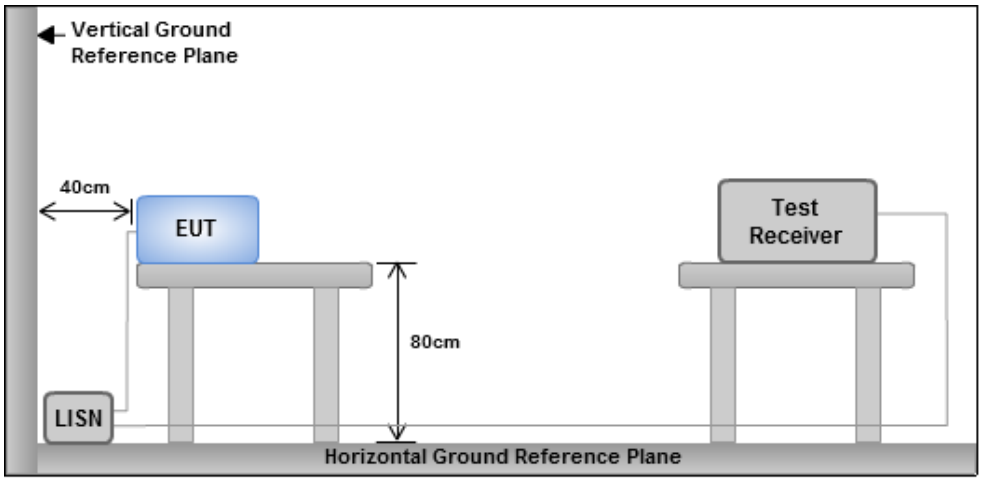
3.1.1 Limit of Conducted Emissions

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

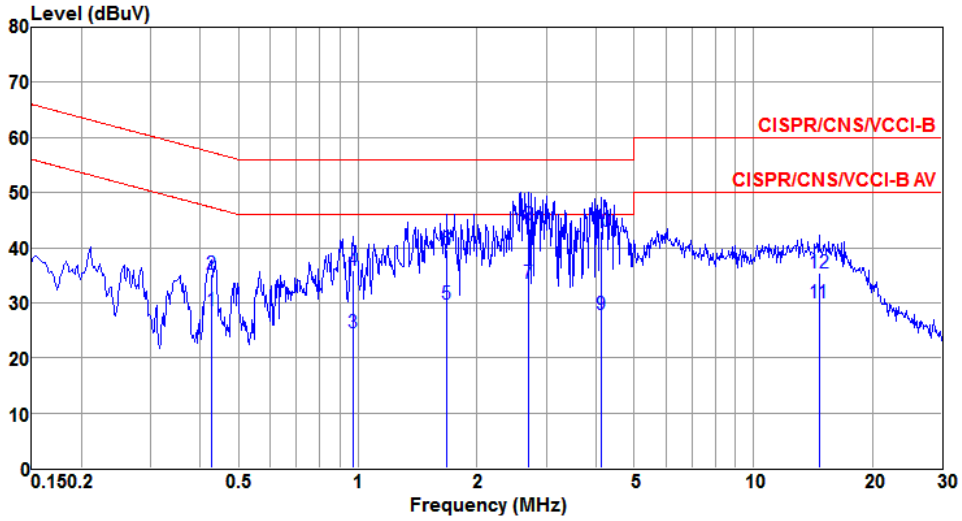
3.1.3 Test Setup



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

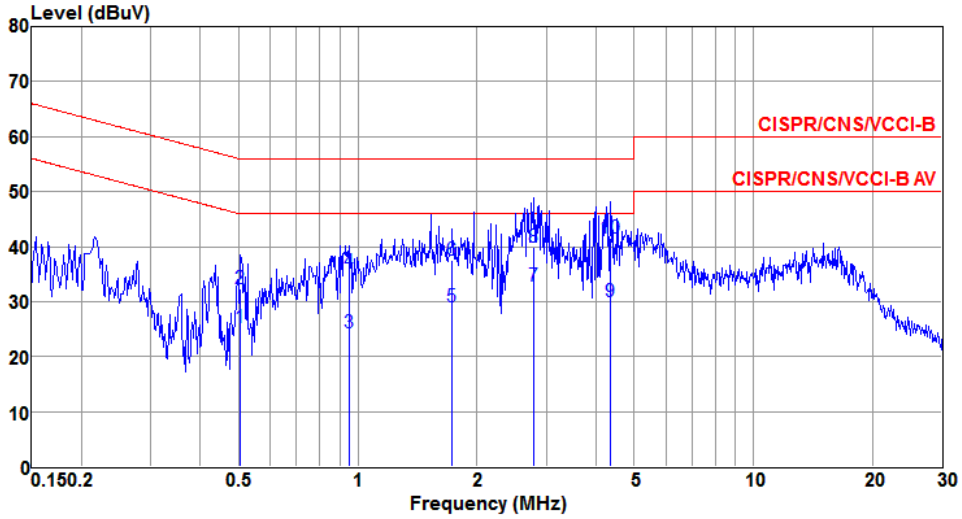
Modulation	11a	Test Freq. (MHz)	5180
Power Phase	Line	Test Configuration	1



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.428	28.46	47.29	-18.83	28.18	0.17	0.11	Average
2	0.428	35.17	57.29	-22.12	34.89	0.17	0.11	QP
3	0.974	24.52	46.00	-21.48	24.27	0.09	0.16	Average
4	0.974	35.96	56.00	-20.04	35.71	0.09	0.16	QP
5	1.680	29.68	46.00	-16.32	28.96	0.50	0.22	Average
6	1.680	39.55	56.00	-16.45	38.83	0.50	0.22	QP
7	2.692	33.50	46.00	-12.50	32.76	0.47	0.27	Average
8*	2.692	44.11	56.00	-11.89	43.37	0.47	0.27	QP
9	4.136	27.74	46.00	-18.26	27.16	0.27	0.31	Average
10	4.136	42.90	56.00	-13.10	42.32	0.27	0.31	QP
11	14.672	30.01	50.00	-19.99	29.07	0.73	0.21	Average
12	14.672	35.50	60.00	-24.50	34.56	0.73	0.21	QP

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

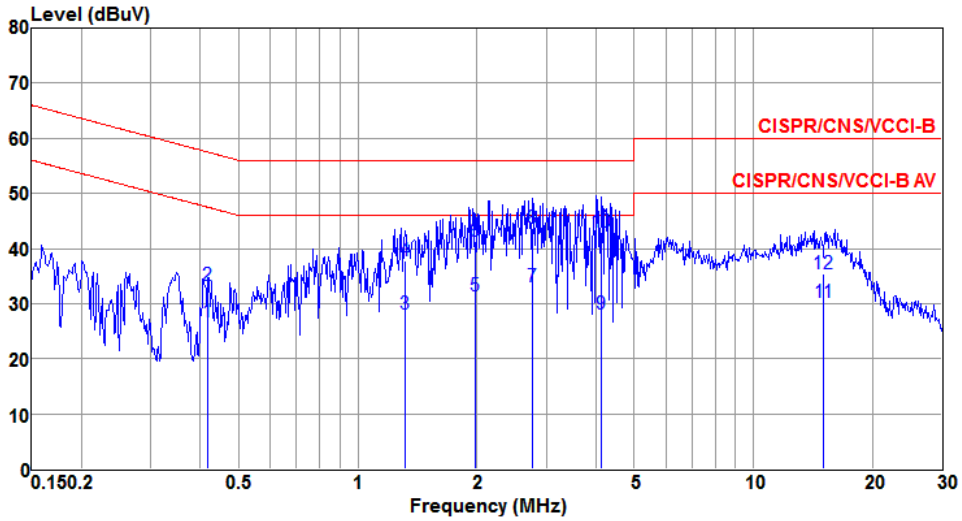
Modulation	11a	Test Freq. (MHz)	5180
Power Phase	Neutral	Test Configuration	1



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.505	25.37	46.00	-20.63	25.09	0.16	0.12	Average
2	0.505	32.34	56.00	-23.66	32.06	0.16	0.12	QP
3	0.948	24.23	46.00	-21.77	23.81	0.26	0.16	Average
4	0.948	35.41	56.00	-20.59	34.99	0.26	0.16	QP
5	1.734	29.09	46.00	-16.91	28.64	0.23	0.22	Average
6	1.734	37.46	56.00	-18.54	37.01	0.23	0.22	QP
7*	2.794	32.76	46.00	-13.24	32.02	0.47	0.27	Average
8	2.794	39.83	56.00	-16.17	39.09	0.47	0.27	QP
9	4.338	29.92	46.00	-16.08	28.89	0.72	0.31	Average
10	4.338	41.62	56.00	-14.38	40.59	0.72	0.31	QP

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

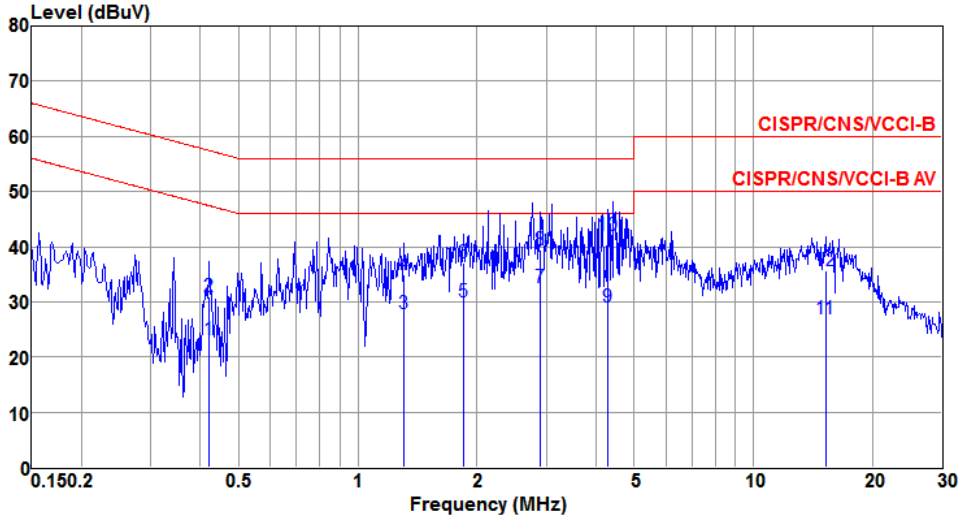
Modulation	11a	Test Freq. (MHz)	5180
Power Phase	Line	Test Configuration	2



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.417	26.79	47.51	-20.72	26.50	0.18	0.11	Average
2	0.417	33.19	57.51	-24.32	32.90	0.18	0.11	QP
3	1.317	28.05	46.00	-17.95	27.55	0.31	0.19	Average
4	1.317	37.79	56.00	-18.21	37.29	0.31	0.19	QP
5	1.980	31.30	46.00	-14.70	30.44	0.62	0.24	Average
6	1.980	41.39	56.00	-14.61	40.53	0.62	0.24	QP
7	2.765	33.00	46.00	-13.00	32.27	0.46	0.27	Average
8*	2.765	43.61	56.00	-12.39	42.88	0.46	0.27	QP
9	4.136	28.03	46.00	-17.97	27.45	0.27	0.31	Average
10	4.136	42.94	56.00	-13.06	42.36	0.27	0.31	QP
11	15.066	30.32	50.00	-19.68	29.39	0.73	0.20	Average
12	15.066	35.50	60.00	-24.50	34.57	0.73	0.20	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)	5180
Power Phase	Neutral	Test Configuration	2



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.421	23.19	47.42	-24.23	22.94	0.14	0.11	Average
2	0.421	30.95	57.42	-26.47	30.70	0.14	0.11	QP
3	1.303	27.75	46.00	-18.25	27.31	0.25	0.19	Average
4	1.303	34.99	56.00	-21.01	34.55	0.25	0.19	QP
5	1.848	30.08	46.00	-15.92	29.62	0.23	0.23	Average
6	1.848	37.12	56.00	-18.88	36.66	0.23	0.23	QP
7*	2.900	32.51	46.00	-13.49	31.73	0.50	0.28	Average
8	2.900	39.49	56.00	-16.51	38.71	0.50	0.28	QP
9	4.269	28.94	46.00	-17.06	27.91	0.72	0.31	Average
10	4.269	42.00	56.00	-14.00	40.97	0.72	0.31	QP
11	15.226	26.93	50.00	-23.07	26.09	0.65	0.19	Average
12	15.226	35.53	60.00	-24.47	34.69	0.65	0.19	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

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

3.2.2 Test Procedures

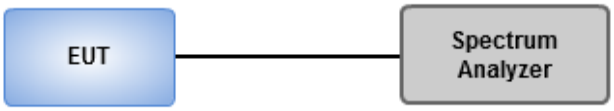
26dB Bandwidth

1. Set RBW = approximately 1% of the emission bandwidth.
2. Set the VBW > RBW, Detector = Peak.
3. Trace mode = max hold.
4. Measure the maximum width of the emission that is 26 dB down from the peak of the emission.

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

3.2.3 Test Setup



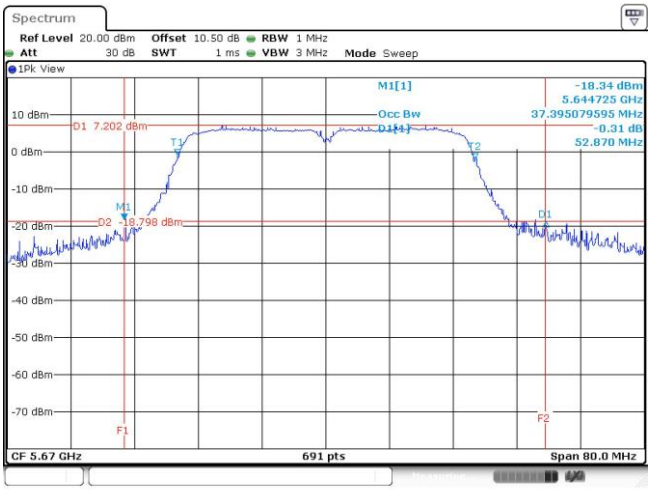
3.2.4 Test Result of Emission Bandwidth

For Frequency band 5150~5250 MHz										
Mode	N_{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)			
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3
11a	1	5180	22.96	---	---	---	17.16	---	---	---
11a	1	5200	23.36	---	---	---	17.24	---	---	---
11a	1	5240	22.96	---	---	---	17.19	---	---	---
HT20	1	5180	23.30	---	---	---	18.11	---	---	---
HT20	1	5200	23.59	---	---	---	18.11	---	---	---
HT20	1	5240	23.13	---	---	---	18.13	---	---	---
HT40	1	5190	46.38	---	---	---	36.74	---	---	---
HT40	1	5230	46.73	---	---	---	36.76	---	---	---

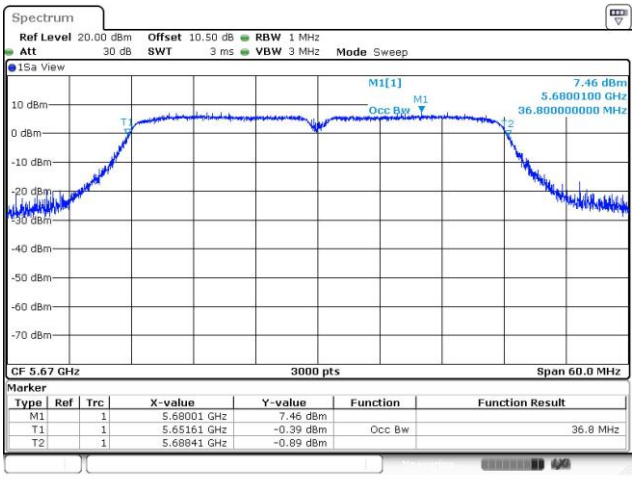
For Frequency band 5250~5350 MHz											
Mode	N_{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
11a	1	5260	23.01	---	---	---	17.17	---	---	---	24.00
11a	1	5300	22.32	---	---	---	17.15	---	---	---	24.00
11a	1	5320	22.38	---	---	---	17.18	---	---	---	24.00
HT20	1	5260	22.96	---	---	---	18.14	---	---	---	24.00
HT20	1	5300	22.61	---	---	---	18.14	---	---	---	24.00
HT20	1	5320	22.67	---	---	---	18.14	---	---	---	24.00
HT40	1	5270	45.80	---	---	---	36.72	---	---	---	24.00
HT40	1	5310	45.10	---	---	---	36.72	---	---	---	24.00

For Frequency band 5470~5725 MHz											
Mode	N_{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
11a	1	5500	22.43	---	---	---	17.19	---	---	---	24.00
11a	1	5580	24.06	---	---	---	17.22	---	---	---	24.00
11a	1	5700	24.93	---	---	---	17.27	---	---	---	24.00
HT20	1	5500	22.96	---	---	---	18.15	---	---	---	24.00
HT20	1	5580	24.00	---	---	---	18.15	---	---	---	24.00
HT20	1	5700	24.29	---	---	---	18.16	---	---	---	24.00
HT40	1	5510	46.15	---	---	---	36.74	---	---	---	24.00
HT40	1	5590	45.68	---	---	---	36.70	---	---	---	24.00
HT40	1	5670	52.87	---	---	---	36.80	---	---	---	24.00

Worst Plots of 26dB Bandwidth



Worst Plots of 99% Bandwidth



3.3 RF Output Power

3.3.1 Limit of RF Output Power

Frequency band 5150-5250 MHz		
Operating Mode		**Limit**
☐	Outdoor access point	Conducted Power: 1 W The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm)
☐	Indoor access point	Conducted Power: 1 W
☐	Fixed point-to-point access points	Conducted Power: 1 W
☒	Mobile and portable client devices	Conducted Power: 250 mW

Frequency Band (MHz)		**Limit**
☒	5250 ~ 5350	250mW or 11dBm+10 log B
☒	5470 ~ 5725	250mW or 11dBm+10 log B
Note: “B” is the 26dB emission bandwidth in MHz.		

3.3.2 Test Procedures

☒ Power meter

☒ Measurements 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

For Frequency band 5150~5250 MHz									
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	5180	11.16	---	---	---	13.062	**11.16**	24.00
11a	1	5200	11.09	---	---	---	12.853	11.09	24.00
11a	1	5240	10.85	---	---	---	12.162	10.85	24.00
HT20	1	5180	10.62	---	---	---	11.535	10.62	24.00
HT20	1	5200	10.58	---	---	---	11.429	10.58	24.00
HT20	1	5240	10.51	---	---	---	11.246	10.51	24.00
HT40	1	5190	10.76	---	---	---	11.912	10.76	24.00
HT40	1	5230	10.66	---	---	---	11.641	10.66	24.00

For Frequency band 5250~5350 MHz									
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	5260	10.95	---	---	---	12.445	**10.95**	24.00
11a	1	5300	10.72	---	---	---	11.803	10.72	24.00
11a	1	5320	10.65	---	---	---	11.614	10.65	24.00
HT20	1	5260	10.46	---	---	---	11.117	10.46	24.00
HT20	1	5300	10.42	---	---	---	11.015	10.42	24.00
HT20	1	5320	10.45	---	---	---	11.092	10.45	24.00
HT40	1	5270	10.55	---	---	---	11.350	10.55	24.00
HT40	1	5310	10.48	---	---	---	11.169	10.48	24.00

For Frequency band 5470~5725 MHz									
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	5500	10.52	---	---	---	11.272	10.52	24.00
11a	1	5580	10.81	---	---	---	12.050	**10.81**	24.00
11a	1	5700	10.71	---	---	---	11.776	10.71	24.00
HT20	1	5500	10.41	---	---	---	10.990	10.41	24.00
HT20	1	5580	10.46	---	---	---	11.117	10.46	24.00
HT20	1	5700	10.35	---	---	---	10.839	10.35	24.00
HT40	1	5510	10.32	---	---	---	10.765	10.32	24.00
HT40	1	5590	10.26	---	---	---	10.617	10.26	24.00
HT40	1	5670	10.25	---	---	---	10.593	10.25	24.00

3.4 Peak Power Spectral Density

3.4.1 Limit of Peak Power Spectral Density

Frequency band 5150-5250 MHz		
Operating Mode		**Limit**
☐	Outdoor access point	17 dBm / MHz
☐	Indoor access point	17 dBm / MHz
☐	Fixed point-to-point access points	17 dBm / MHz
☒	Mobile and portable client devices	11 dBm / MHz

Frequency Band (MHz)		**Limit**
☒	5250 ~ 5350	11 dBm / MHz
☒	5470 ~ 5725	11 dBm / MHz

3.4.2 Test Procedures

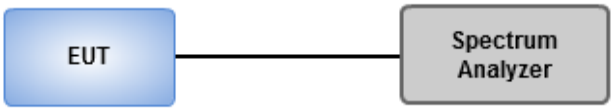
☐ Method SA-1

1. Set RBW = 1 MHz, VBW = 3 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 = 1 MHz, VBW = 3 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

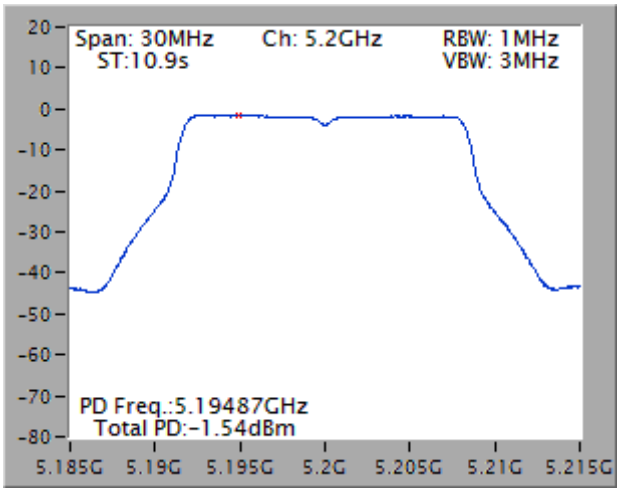
Frequency band			5150~5250 MHz			
Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
11a	1	5180	-1.63	0.51	-1.12	11
11a	1	5200	-1.54	0.51	-1.03	11
11a	1	5240	-1.83	0.51	-1.32	11
HT20	1	5180	-2.35	0.57	-1.78	11
HT20	1	5200	-2.43	0.57	-1.86	11
HT20	1	5240	-2.50	0.57	-1.93	11
HT40	1	5190	-5.00	1.13	-3.87	11
HT40	1	5230	-5.05	1.13	-3.92	11

Frequency band			5250~5350 MHz			
Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
11a	1	5260	-1.66	0.51	-1.15	11
11a	1	5300	-1.92	0.51	-1.41	11
11a	1	5320	-2.03	0.51	-1.52	11
HT20	1	5260	-2.48	0.57	-1.91	11
HT20	1	5300	-2.56	0.57	-1.99	11
HT20	1	5320	-2.54	0.57	-1.97	11
HT40	1	5270	-5.35	1.13	-4.22	11
HT40	1	5310	-5.33	1.13	-4.20	11

Frequency band			5475~5725 MHz			
Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
11a	1	5500	-2.06	0.51	-1.55	11
11a	1	5580	-2.02	0.51	-1.51	11
11a	1	5700	-1.72	0.51	-1.21	11
HT20	1	5500	-2.51	0.57	-1.94	11
HT20	1	5580	-2.52	0.57	-1.95	11
HT20	1	5700	-2.30	0.57	-1.73	11
HT40	1	5510	-5.81	1.13	-4.68	11
HT40	1	5590	-5.84	1.13	-4.71	11
HT40	1	5670	-5.71	1.13	-4.58	11

Note: D.F is duty factor.

Worst Plots



Note: The worst plot is without duty factor.

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] 5.825 5.835 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

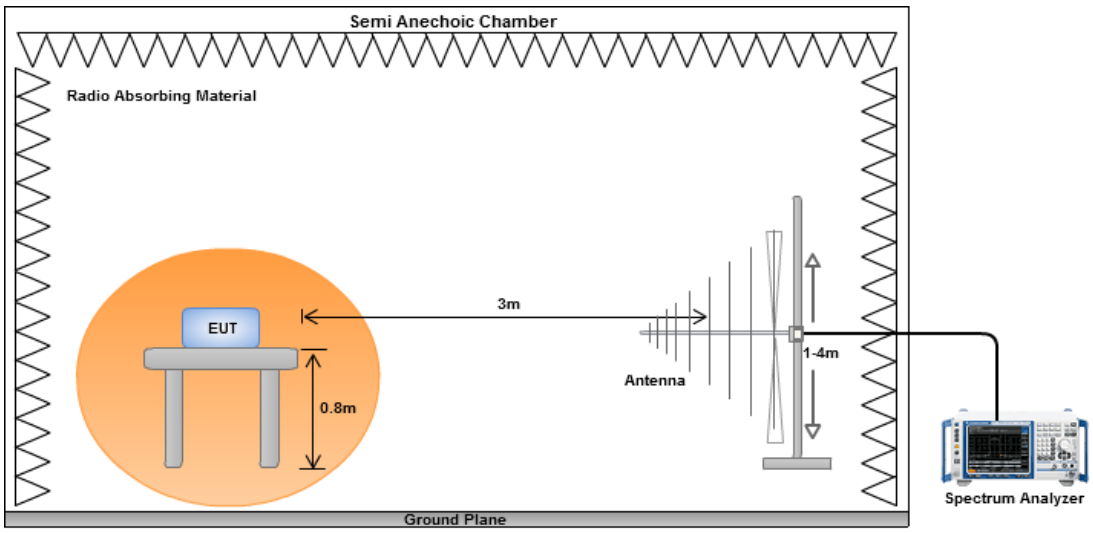
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission 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:

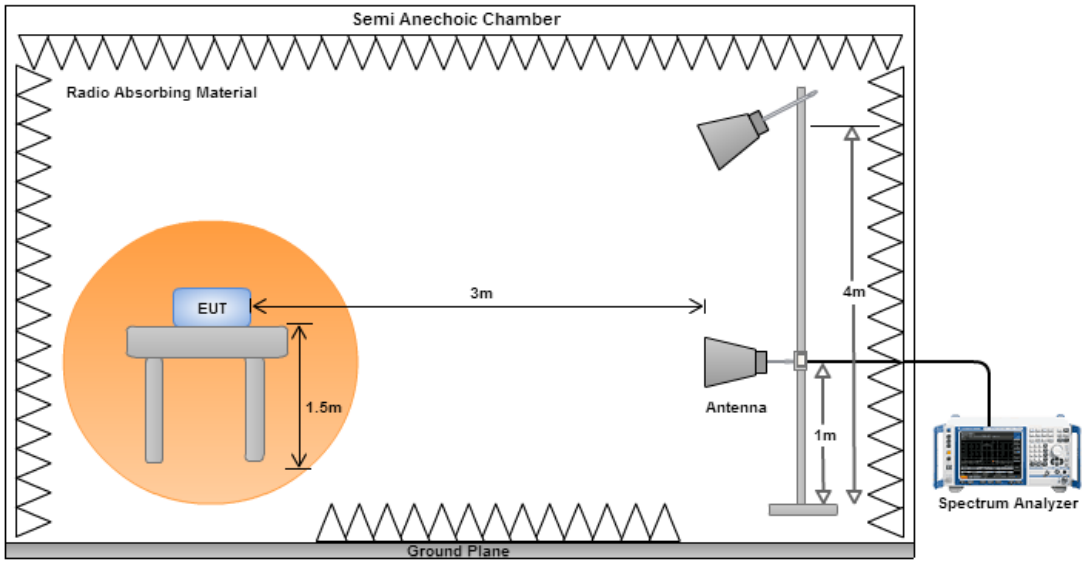
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz

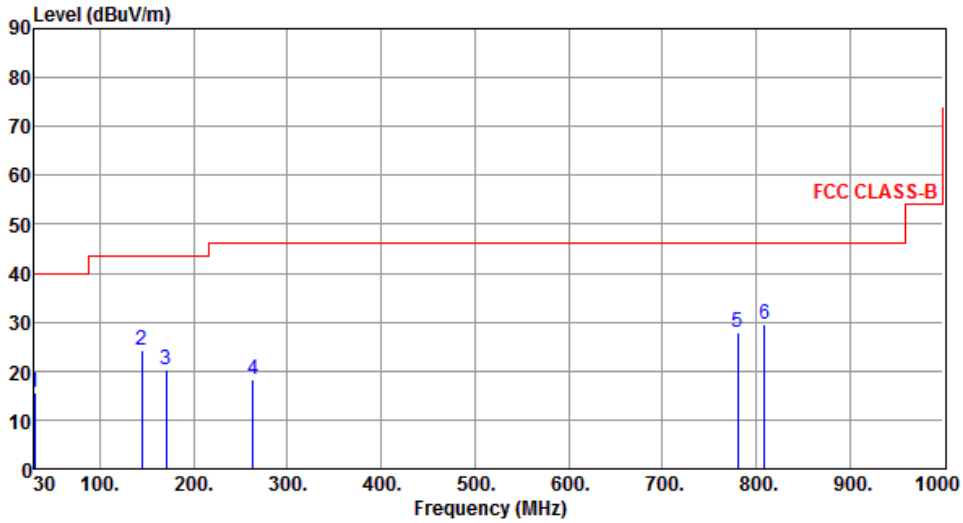


Radiated Emissions above 1 GHz



3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)_Adapter mode

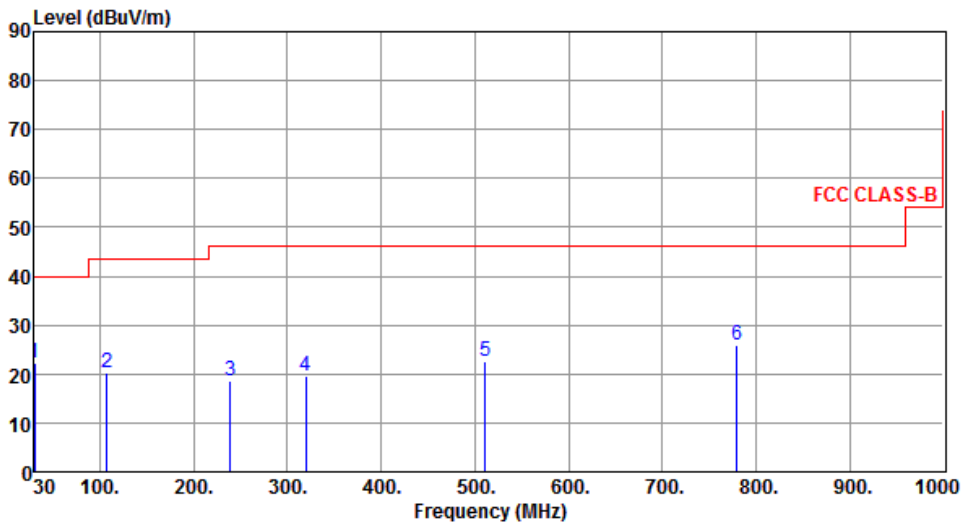
Modulation	11a	**Test Freq. (MHz)**	5180
Polarization	Horizontal	**Test Configuration**	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	30.00	15.45	40.00	-24.55	33.26	-17.81	Peak	---	---
2	144.46	24.25	43.50	-19.25	41.45	-17.20	Peak	---	---
3	170.65	20.20	43.50	-23.30	37.78	-17.58	Peak	---	---
4	263.77	18.25	46.00	-27.75	35.65	-17.40	Peak	---	---
5	780.78	27.78	46.00	-18.22	34.85	-7.07	Peak	---	---
6	808.91	29.61	46.00	-16.39	36.38	-6.77	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)	5180
Polarization	Vertical	Test Configuration	1

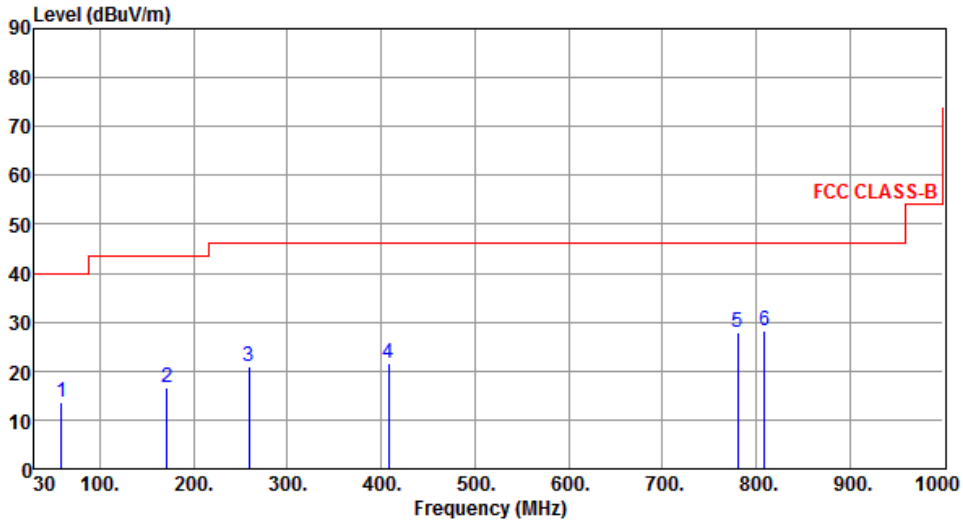


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	30.00	22.10	40.00	-17.90	39.91	-17.81	Peak	---	---
2	107.60	20.22	43.50	-23.28	41.04	-20.82	Peak	---	---
3	239.52	18.47	46.00	-27.53	36.59	-18.12	Peak	---	---
4	320.03	19.51	46.00	-26.49	35.15	-15.64	Peak	---	---
5	511.12	22.46	46.00	-23.54	33.94	-11.48	Peak	---	---
6	779.81	25.79	46.00	-20.21	32.86	-7.07	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 (Below 1GHz)_Cradle mode

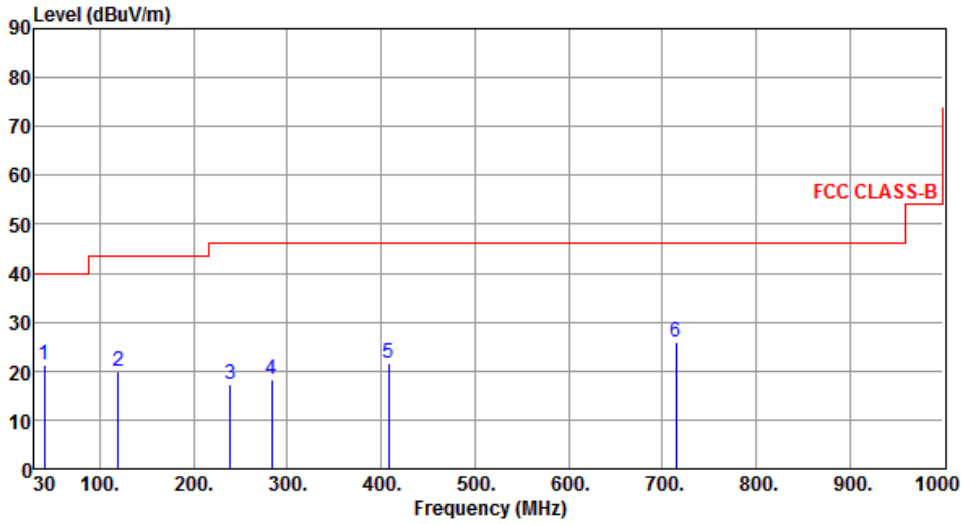
Modulation	11a	**Test Freq. (MHz)**	5180
Polarization	Horizontal	**Test Configuration**	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	59.10	13.66	40.00	-26.34	30.54	-16.88	Peak	---	---
2	171.62	16.55	43.50	-26.95	34.24	-17.69	Peak	---	---
3	258.92	20.86	46.00	-25.14	38.42	-17.56	Peak	---	---
4	408.30	21.42	46.00	-24.58	34.88	-13.46	Peak	---	---
5	780.78	27.81	46.00	-18.19	34.88	-7.07	Peak	---	---
6	808.91	28.10	46.00	-17.90	34.87	-6.77	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)	5180
Polarization	Vertical	Test Configuration	2

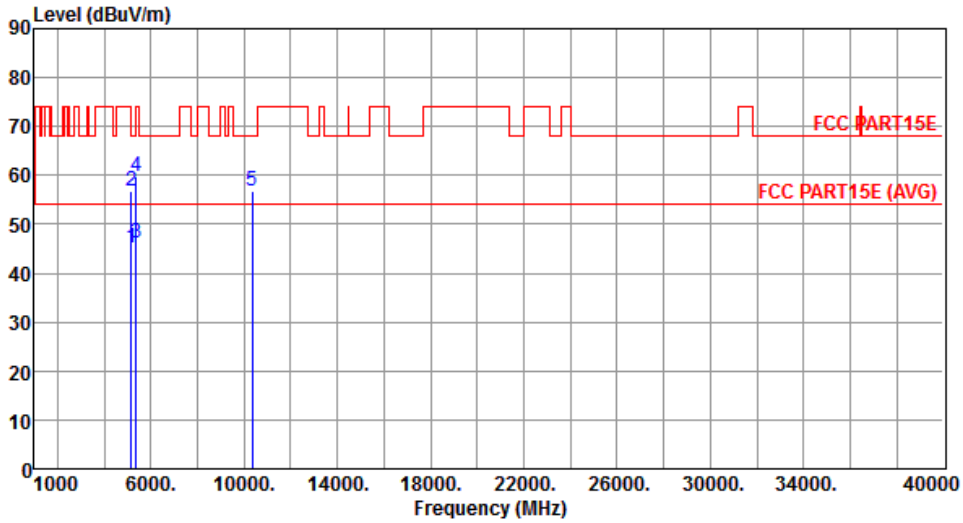


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	40.67	21.42	40.00	-18.58	38.59	-17.17	Peak	---	---
2	119.24	20.06	43.50	-23.44	39.83	-19.77	Peak	---	---
3	239.52	17.28	46.00	-28.72	35.40	-18.12	Peak	---	---
4	283.17	18.30	46.00	-27.70	34.93	-16.63	Peak	---	---
5	408.30	21.52	46.00	-24.48	34.98	-13.46	Peak	---	---
6	714.82	25.83	46.00	-20.17	33.77	-7.94	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.

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

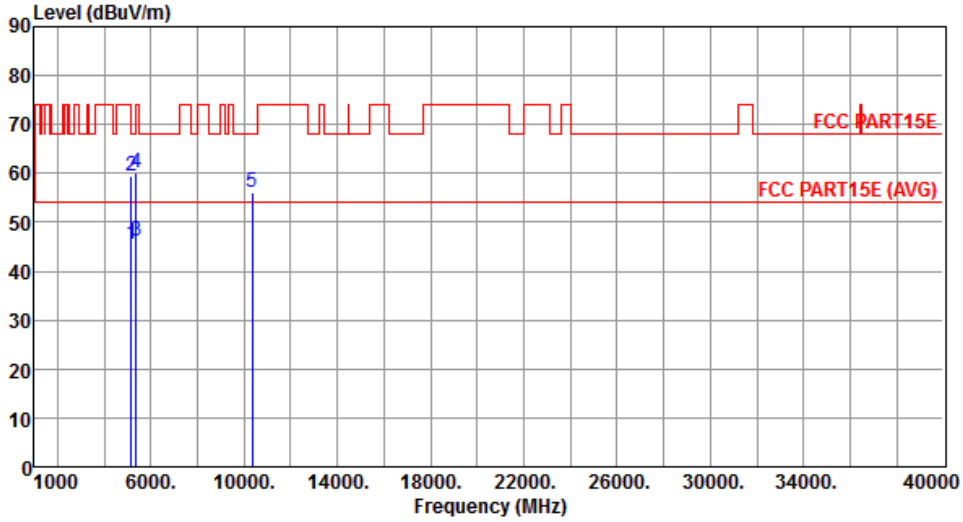
Modulation	11a	**Test Freq. (MHz)**	5180
Polarization	Horizontal	**Test Configuration**	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.09	54.00	-8.91	39.33	5.76	Average	---	---
2	5150.00	56.68	74.00	-17.32	50.92	5.76	Peak	---	---
3	5350.00	46.29	54.00	-7.71	40.25	6.04	Average	---	---
4	5350.00	59.90	74.00	-14.10	53.86	6.04	Peak	---	---
5	10360.00	56.90	68.20	-11.30	42.38	14.52	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).

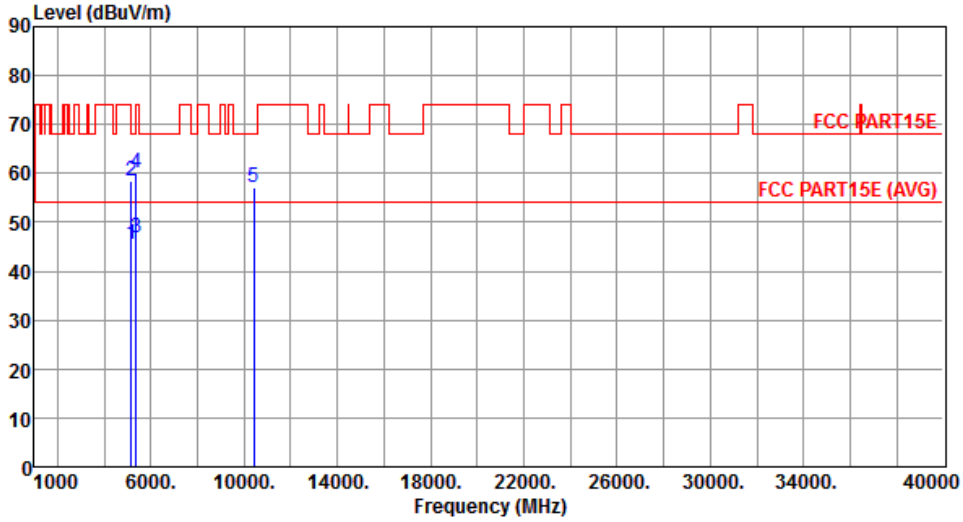
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.49	54.00	-8.51	39.73	5.76	Average	---	---
2	5150.00	59.41	74.00	-14.59	53.65	5.76	Peak	---	---
3	5350.00	46.29	54.00	-7.71	40.25	6.04	Average	---	---
4	5350.00	59.98	74.00	-14.02	53.94	6.04	Peak	---	---
5	10360.00	56.06	68.20	-12.14	41.54	14.52	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).

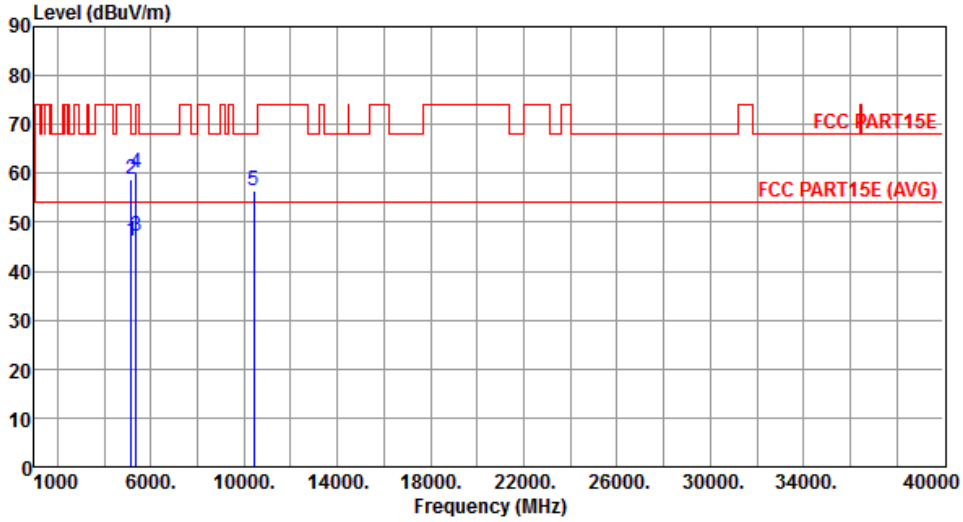
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.58	54.00	-8.42	39.82	5.76	Average	---	---
2	5150.00	58.56	74.00	-15.44	52.80	5.76	Peak	---	---
3	5350.00	46.90	54.00	-7.10	40.86	6.04	Average	---	---
4	5350.00	60.11	74.00	-13.89	54.07	6.04	Peak	---	---
5	10400.00	57.06	68.20	-11.14	42.44	14.62	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).

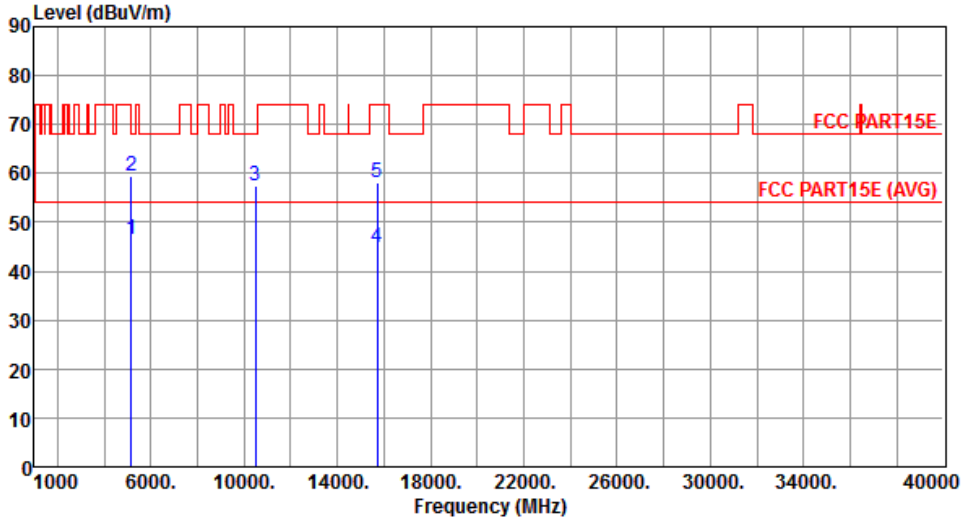
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.03	54.00	-7.97	40.27	5.76	Average	---	---
2	5150.00	58.82	74.00	-15.18	53.06	5.76	Peak	---	---
3	5350.00	47.05	54.00	-6.95	41.01	6.04	Average	---	---
4	5350.00	60.14	74.00	-13.86	54.10	6.04	Peak	---	---
5	10400.00	56.35	68.20	-11.85	41.73	14.62	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).

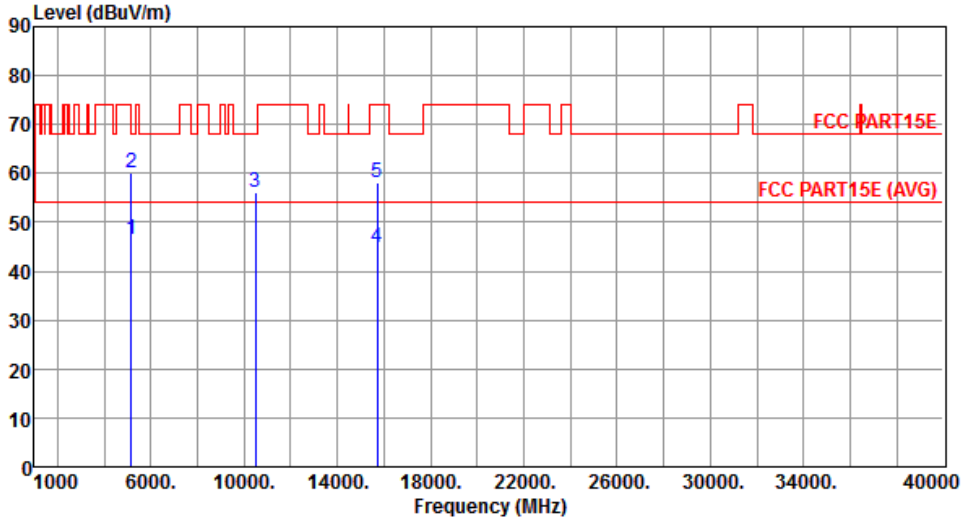
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.45	54.00	-7.55	40.69	5.76	Average	---	---
2	5150.00	59.55	74.00	-14.45	53.79	5.76	Peak	---	---
3	10480.00	57.36	68.20	-10.84	42.53	14.83	Peak	---	---
4	15720.00	44.91	54.00	-9.09	28.63	16.28	Average	---	---
5	15720.00	58.23	74.00	-15.77	41.95	16.28	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).

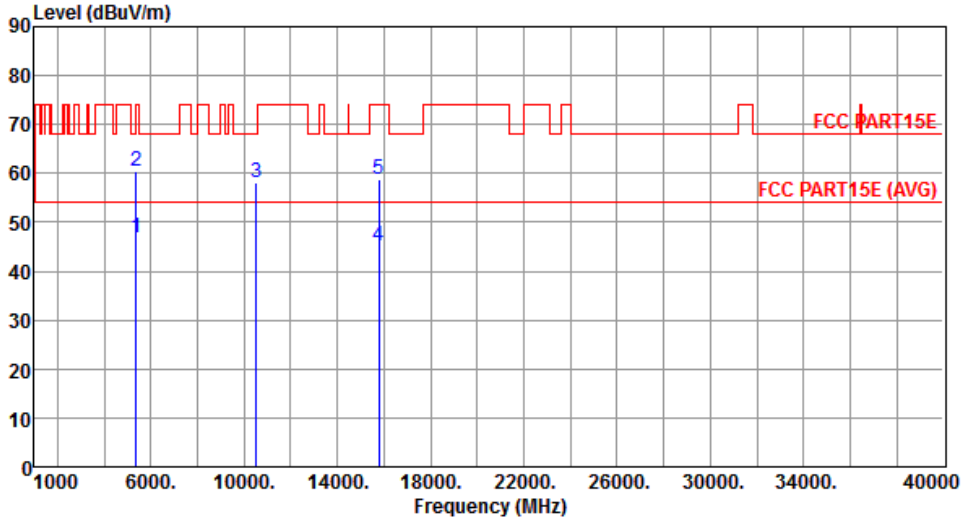
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.54	54.00	-7.46	40.78	5.76	Average	---	---
2	5150.00	60.21	74.00	-13.79	54.45	5.76	Peak	---	---
3	10480.00	56.21	68.20	-11.99	41.38	14.83	Peak	---	---
4	15720.00	44.81	54.00	-9.19	28.53	16.28	Average	---	---
5	15720.00	57.96	74.00	-16.04	41.68	16.28	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).

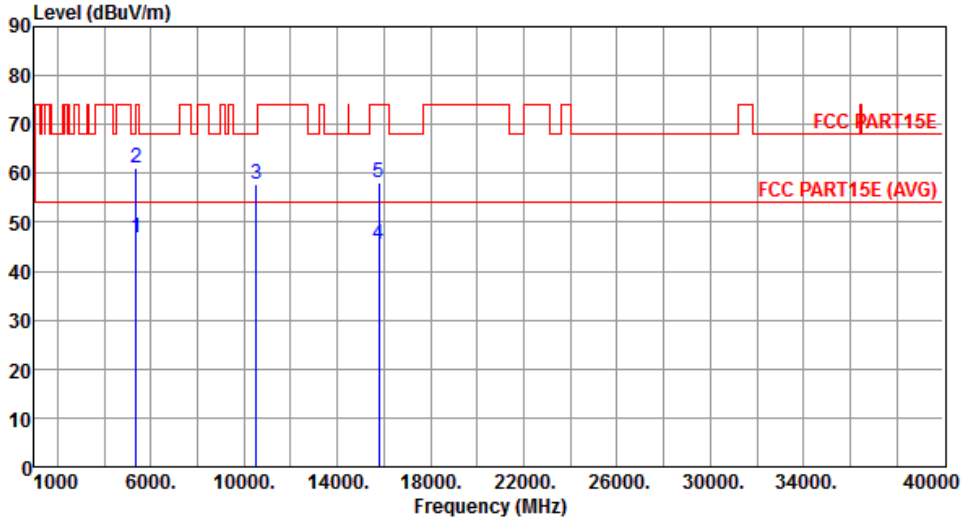
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.96	54.00	-7.04	40.92	6.04	Average	---	---
2	5350.00	60.29	74.00	-13.71	54.25	6.04	Peak	---	---
3	10520.00	58.06	68.20	-10.14	43.13	14.93	Peak	---	---
4	15780.00	45.32	54.00	-8.68	29.13	16.19	Average	---	---
5	15780.00	58.66	74.00	-15.34	42.47	16.19	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).

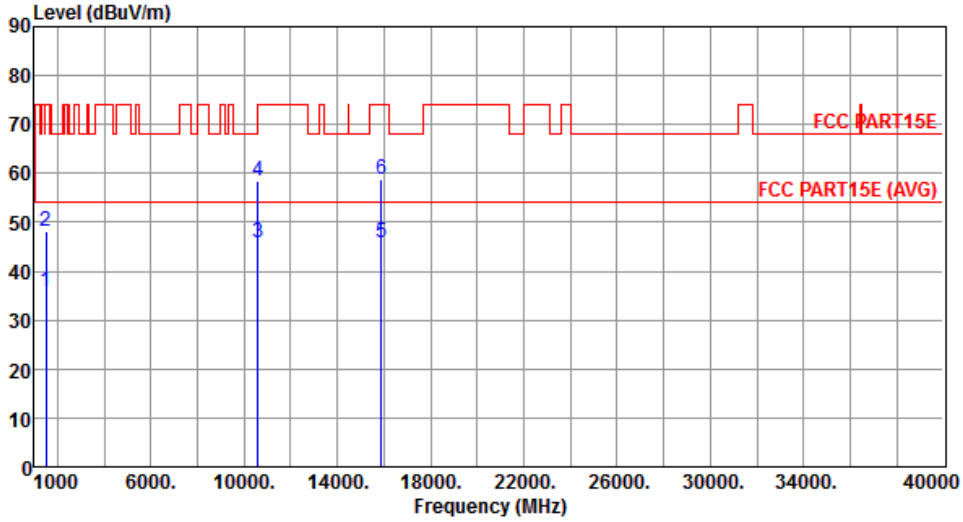
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.93	54.00	-7.07	40.89	6.04	Average	---	---
2	5350.00	61.14	74.00	-12.86	55.10	6.04	Peak	---	---
3	10520.00	57.62	68.20	-10.58	42.69	14.93	Peak	---	---
4	15780.00	45.45	54.00	-8.55	29.26	16.19	Average	---	---
5	15780.00	58.13	74.00	-15.87	41.94	16.19	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).

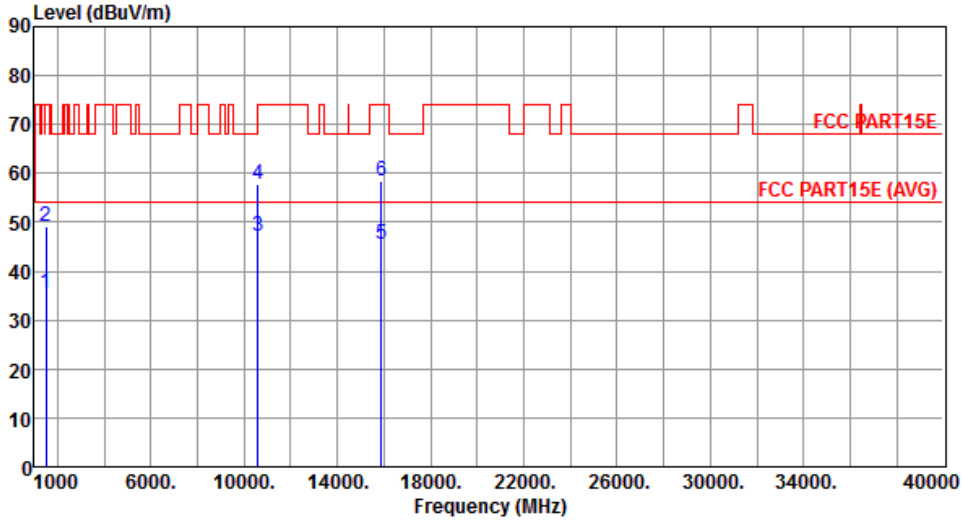
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	35.96	54.00	-18.04	41.53	-5.57	Average	---	---
2	1500.00	48.21	74.00	-25.79	53.78	-5.57	Peak	---	---
3	10600.00	45.87	54.00	-8.13	30.74	15.13	Average	---	---
4	10600.00	58.39	74.00	-15.61	43.26	15.13	Peak	---	---
5	15900.00	45.69	54.00	-8.31	29.69	16.00	Average	---	---
6	15900.00	58.82	74.00	-15.18	42.82	16.00	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).

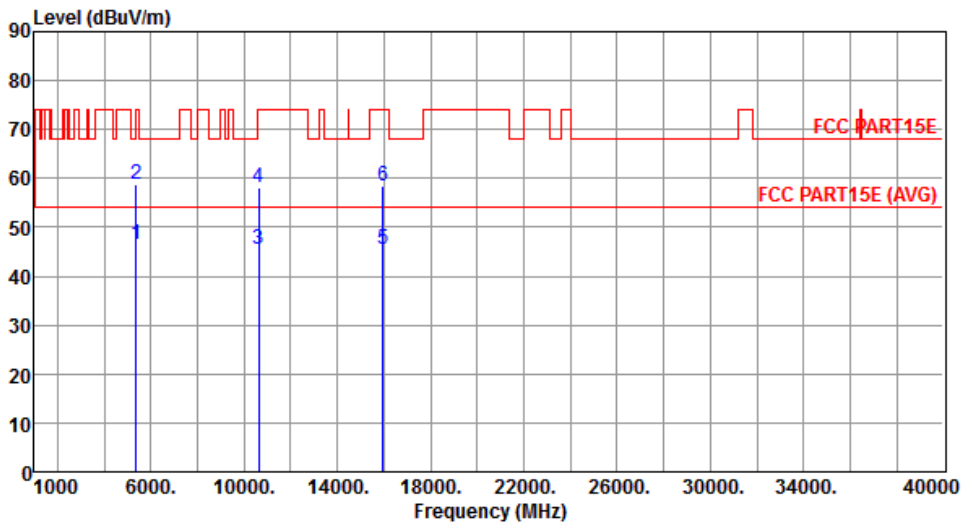
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	35.47	54.00	-18.53	41.04	-5.57	Average	---	---
2	1500.00	49.10	74.00	-24.90	54.67	-5.57	Peak	---	---
3	10600.00	47.13	54.00	-6.87	32.00	15.13	Average	---	---
4	10600.00	57.84	74.00	-16.16	42.71	15.13	Peak	---	---
5	15900.00	45.63	54.00	-8.37	29.63	16.00	Average	---	---
6	15900.00	58.36	74.00	-15.64	42.36	16.00	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).

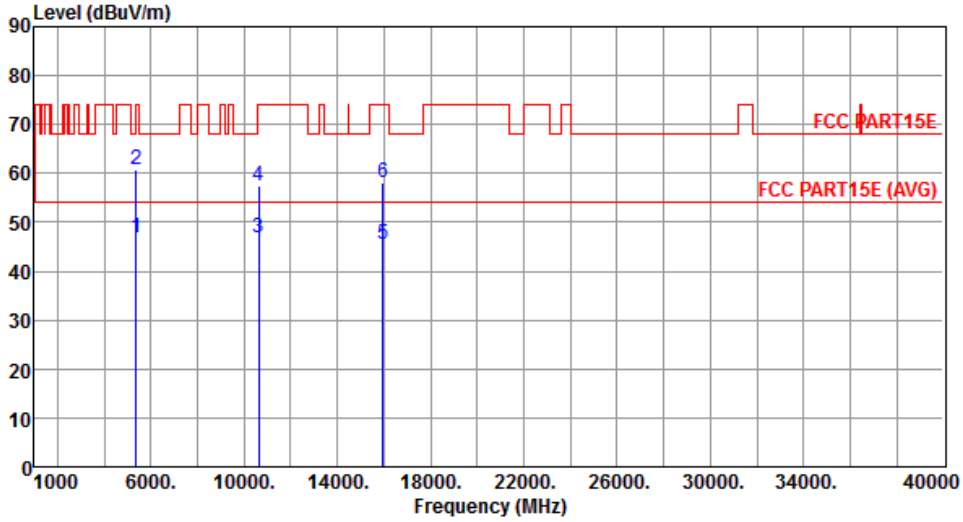
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.39	54.00	-7.61	40.35	6.04	Average	---	---
2	5350.00	58.62	74.00	-15.38	52.58	6.04	Peak	---	---
3	10640.00	45.62	54.00	-8.38	30.40	15.22	Average	---	---
4	10640.00	58.17	74.00	-15.83	42.95	15.22	Peak	---	---
5	15960.00	45.46	54.00	-8.54	29.56	15.90	Average	---	---
6	15960.00	58.52	74.00	-15.48	42.62	15.90	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).

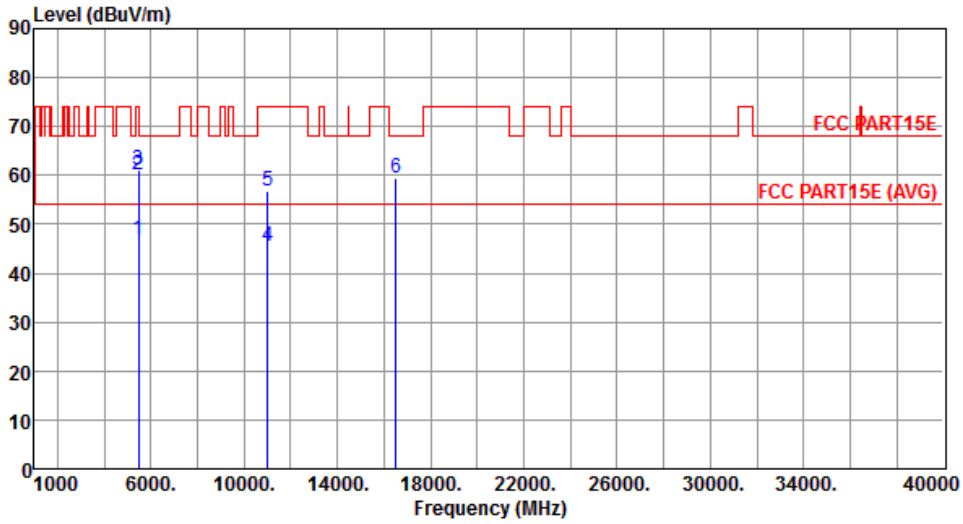
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.78	54.00	-7.22	40.74	6.04	Average	---	---
2	5350.00	60.66	74.00	-13.34	54.62	6.04	Peak	---	---
3	10640.00	46.99	54.00	-7.01	31.77	15.22	Average	---	---
4	10640.00	57.58	74.00	-16.42	42.36	15.22	Peak	---	---
5	15960.00	45.44	54.00	-8.56	29.54	15.90	Average	---	---
6	15960.00	58.15	74.00	-15.85	42.25	15.90	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).

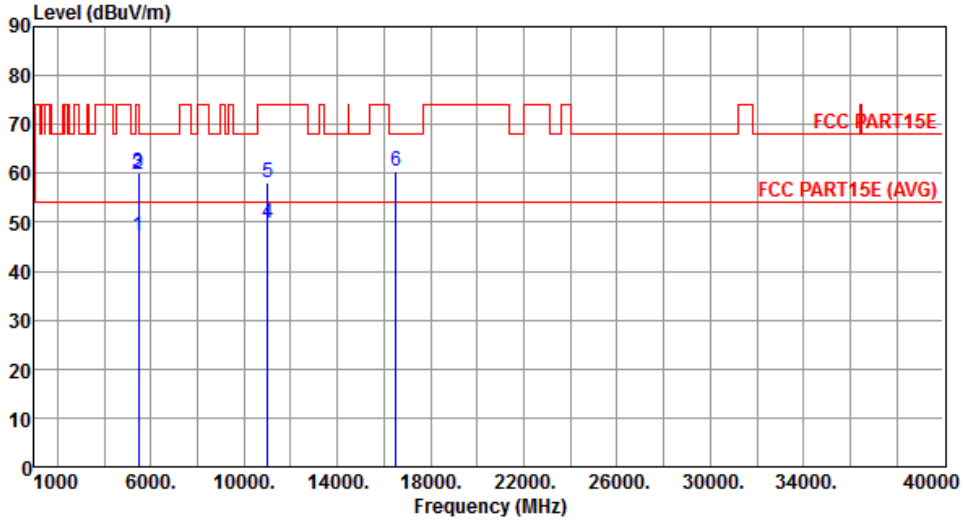
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.83	54.00	-7.17	40.63	6.20	Average	---	---
2	5460.00	60.19	74.00	-13.81	53.99	6.20	Peak	---	---
3	5470.00	60.96	68.20	-7.24	54.74	6.22	Peak	---	---
4	11000.00	45.34	54.00	-8.66	29.24	16.10	Average	---	---
5	11000.00	56.87	74.00	-17.13	40.77	16.10	Peak	---	---
6	16500.00	59.43	68.20	-8.77	41.96	17.47	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).

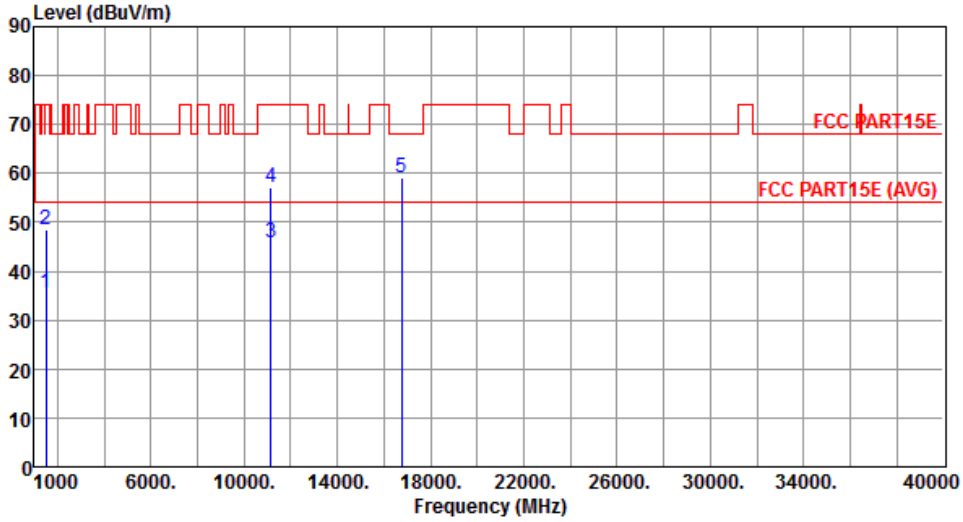
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.02	54.00	-6.98	40.82	6.20	Average	---	---
2	5460.00	59.84	74.00	-14.16	53.64	6.20	Peak	---	---
3	5470.00	60.12	68.20	-8.08	53.90	6.22	Peak	---	---
4	11000.00	49.88	54.00	-4.12	33.78	16.10	Average	---	---
5	11000.00	58.03	74.00	-15.97	41.93	16.10	Peak	---	---
6	16500.00	60.37	68.20	-7.83	42.90	17.47	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).

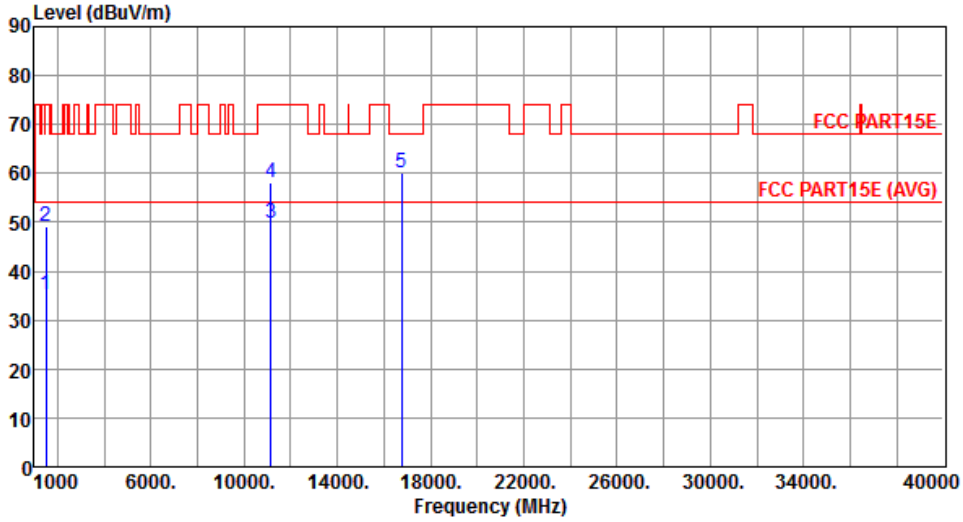
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	35.40	54.00	-18.60	40.97	-5.57	Average	---	---
2	1500.00	48.65	74.00	-25.35	54.22	-5.57	Peak	---	---
3	11160.00	45.71	54.00	-8.29	29.57	16.14	Average	---	---
4	11160.00	57.10	74.00	-16.90	40.96	16.14	Peak	---	---
5	16740.00	59.26	68.20	-8.94	40.78	18.48	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).

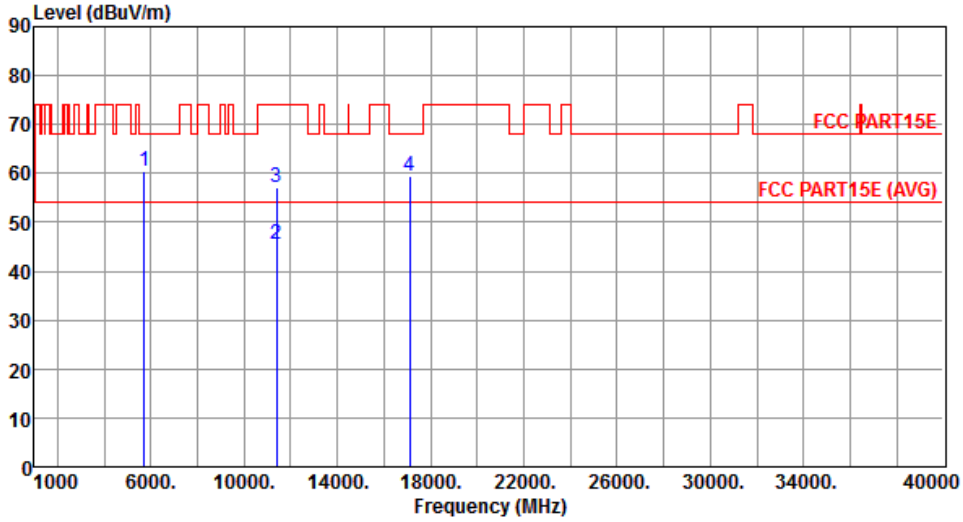
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	35.36	54.00	-18.64	40.93	-5.57	Average	---	---
2	1500.00	49.19	74.00	-24.81	54.76	-5.57	Peak	---	---
3	11160.00	49.92	54.00	-4.08	33.78	16.14	Average	---	---
4	11160.00	58.19	74.00	-15.81	42.05	16.14	Peak	---	---
5	16740.00	60.24	68.20	-7.96	41.76	18.48	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).

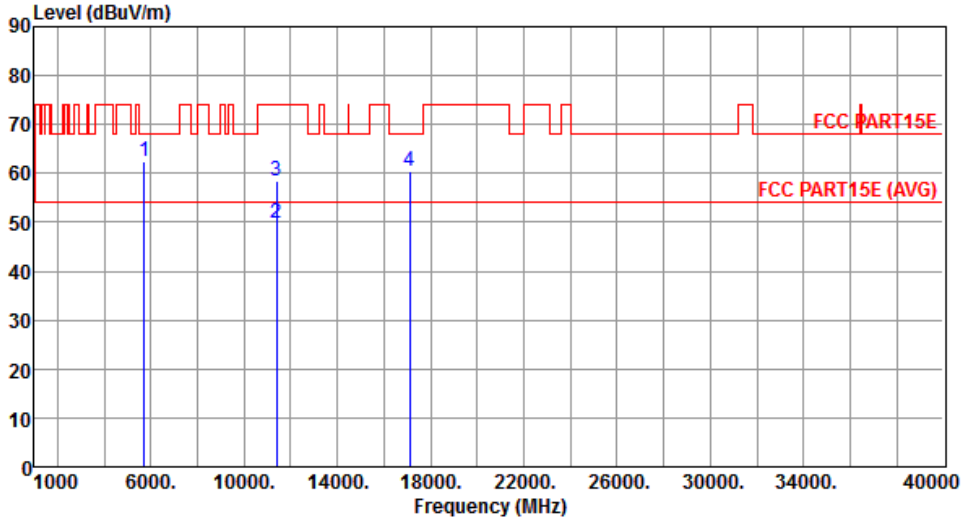
Modulation	11a	Test Freq. (MHz)	5700
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	60.51	68.20	-7.69	53.80	6.71	Peak	---	---
2	11400.00	45.54	54.00	-8.46	29.35	16.19	Average	---	---
3	11400.00	57.13	74.00	-16.87	40.94	16.19	Peak	---	---
4	17100.00	59.43	68.20	-8.77	39.27	20.16	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).

Modulation	11a	Test Freq. (MHz)	5700
Polarization	Vertical	Test Configuration	1

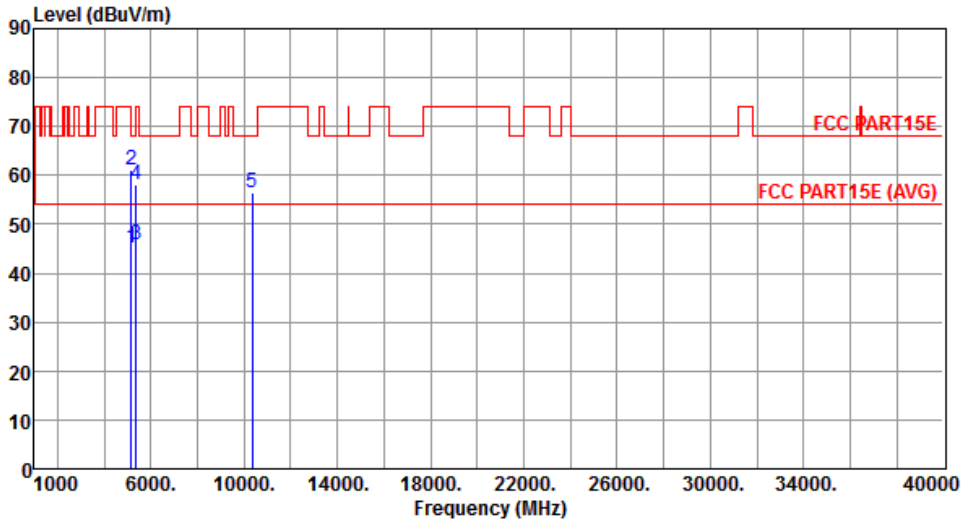


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	62.44	68.20	-5.76	55.73	6.71	Peak	---	---
2	11400.00	49.78	54.00	-4.22	33.59	16.19	Average	---	---
3	11400.00	58.32	74.00	-15.68	42.13	16.19	Peak	---	---
4	17100.00	60.35	68.20	-7.85	40.19	20.16	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).

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

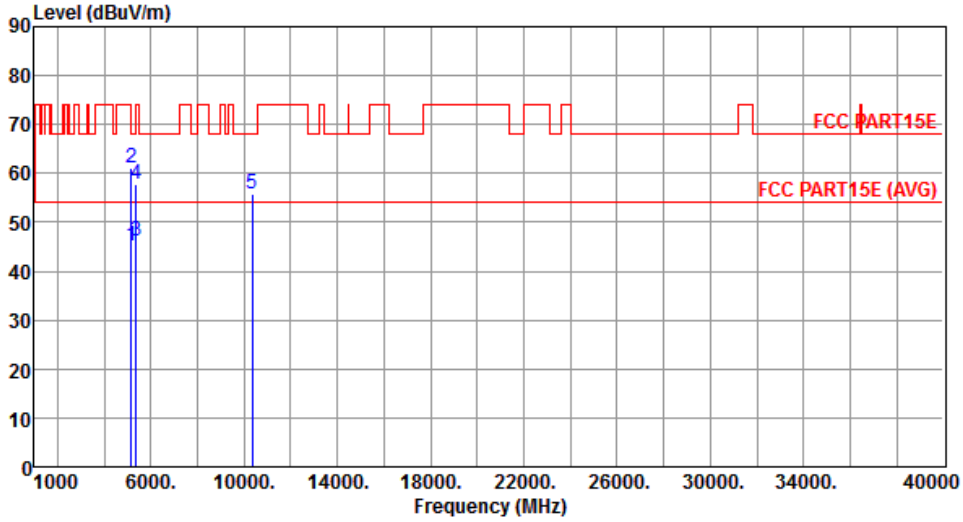
Modulation	HT20	**Test Freq. (MHz)**	5180
Polarization	Horizontal	**Test Configuration**	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.21	54.00	-8.79	39.45	5.76	Average	---	---
2	5150.00	60.94	74.00	-13.06	55.18	5.76	Peak	---	---
3	5350.00	45.96	54.00	-8.04	39.92	6.04	Average	---	---
4	5350.00	58.22	74.00	-15.78	52.18	6.04	Peak	---	---
5	10360.00	56.57	68.20	-11.63	42.05	14.52	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).

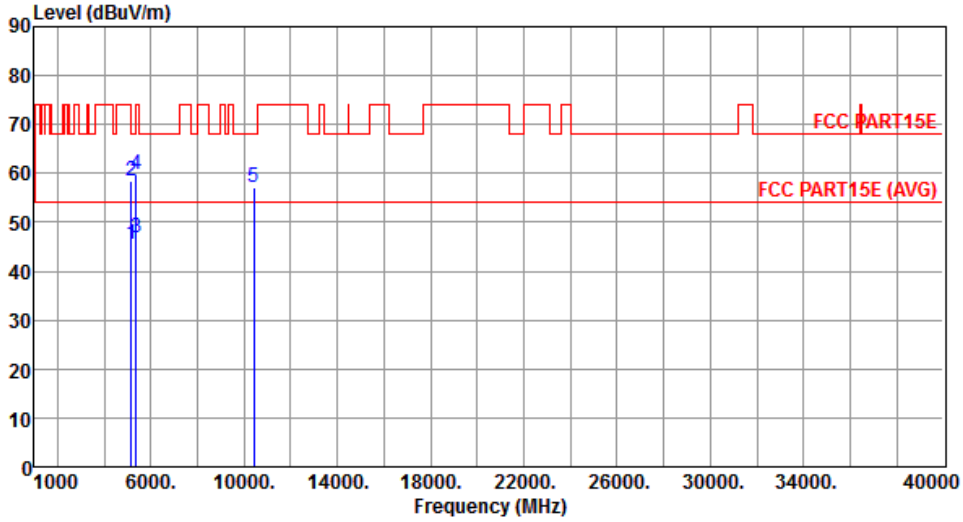
Modulation	HT20	Test Freq. (MHz)	5180
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.19	54.00	-8.81	39.43	5.76	Average	---	---
2	5150.00	60.96	74.00	-13.04	55.20	5.76	Peak	---	---
3	5350.00	46.14	54.00	-7.86	40.10	6.04	Average	---	---
4	5350.00	57.84	74.00	-16.16	51.80	6.04	Peak	---	---
5	10360.00	55.94	68.20	-12.26	41.42	14.52	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).

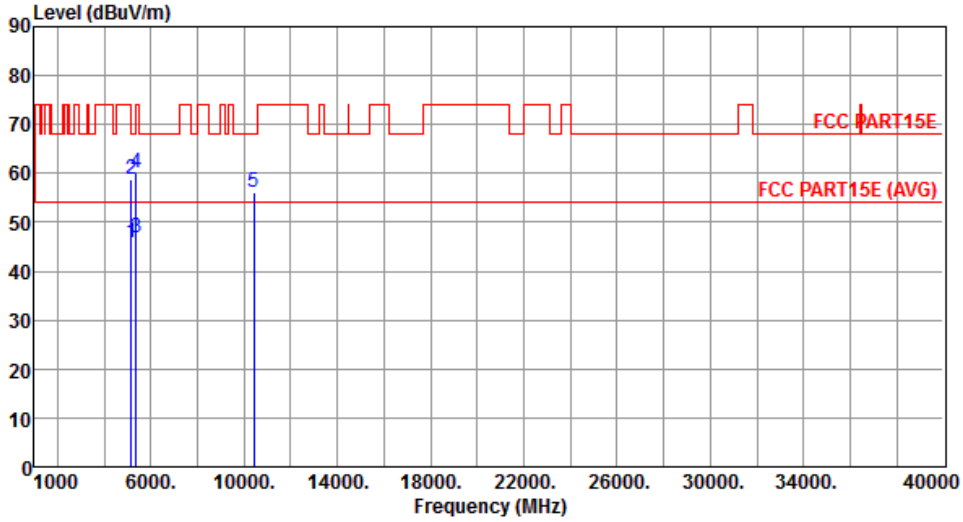
Modulation	HT20	Test Freq. (MHz)	5200
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.52	54.00	-8.48	39.76	5.76	Average	---	---
2	5150.00	58.49	74.00	-15.51	52.73	5.76	Peak	---	---
3	5350.00	46.84	54.00	-7.16	40.80	6.04	Average	---	---
4	5350.00	59.91	74.00	-14.09	53.87	6.04	Peak	---	---
5	10400.00	57.01	68.20	-11.19	42.39	14.62	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).

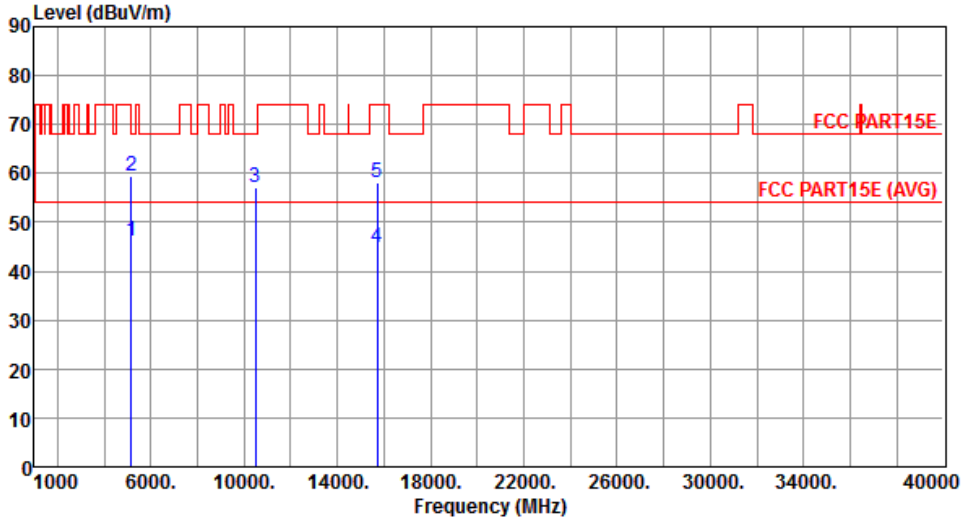
Modulation	HT20	Test Freq. (MHz)	5200
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.99	54.00	-8.01	40.23	5.76	Average	---	---
2	5150.00	58.77	74.00	-15.23	53.01	5.76	Peak	---	---
3	5350.00	46.92	54.00	-7.08	40.88	6.04	Average	---	---
4	5350.00	60.06	74.00	-13.94	54.02	6.04	Peak	---	---
5	10400.00	56.28	68.20	-11.92	41.66	14.62	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).

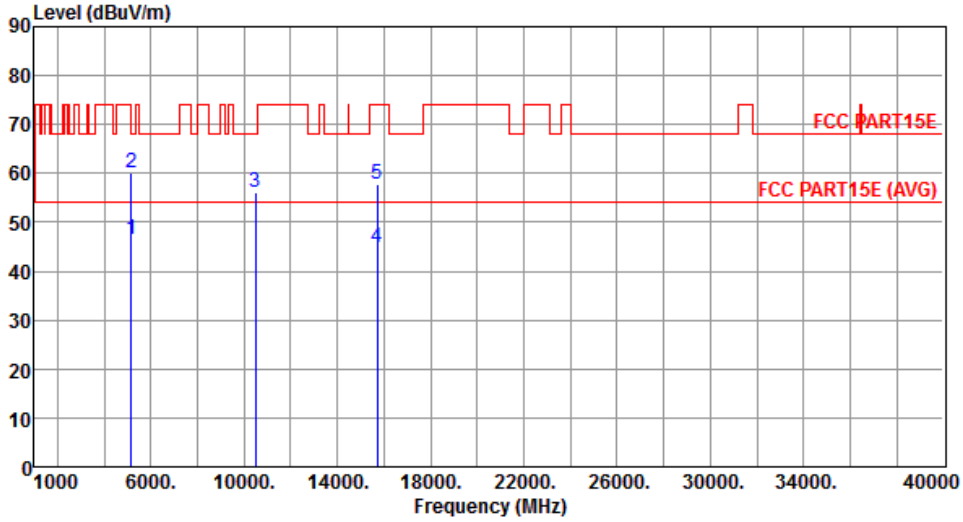
Modulation	HT20	Test Freq. (MHz)	5240
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.29	54.00	-7.71	40.53	5.76	Average	---	---
2	5150.00	59.47	74.00	-14.53	53.71	5.76	Peak	---	---
3	10480.00	57.27	68.20	-10.93	42.44	14.83	Peak	---	---
4	15720.00	44.89	54.00	-9.11	28.61	16.28	Average	---	---
5	15720.00	58.17	74.00	-15.83	41.89	16.28	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).

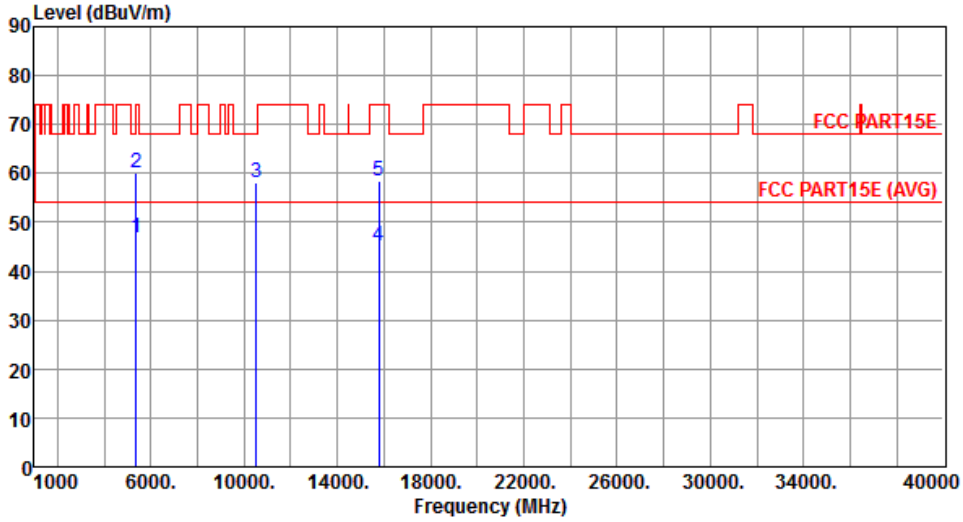
Modulation	HT20	Test Freq. (MHz)	5240
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.41	54.00	-7.59	40.65	5.76	Average	---	---
2	5150.00	60.20	74.00	-13.80	54.44	5.76	Peak	---	---
3	10480.00	56.12	68.20	-12.08	41.29	14.83	Peak	---	---
4	15720.00	44.77	54.00	-9.23	28.49	16.28	Average	---	---
5	15720.00	57.81	74.00	-16.19	41.53	16.28	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).

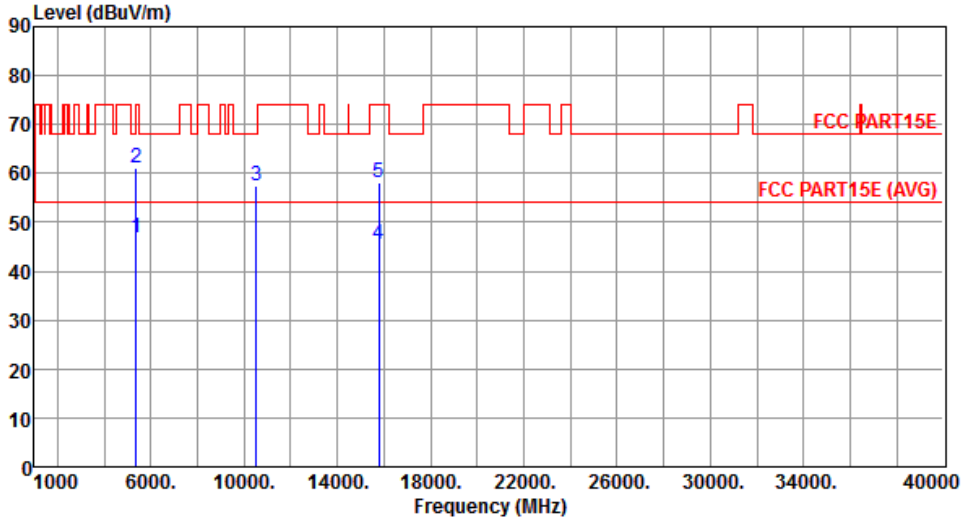
Modulation	HT20	Test Freq. (MHz)	5260
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.86	54.00	-7.14	40.82	6.04	Average	---	---
2	5350.00	60.24	74.00	-13.76	54.20	6.04	Peak	---	---
3	10520.00	57.99	68.20	-10.21	43.06	14.93	Peak	---	---
4	15780.00	45.25	54.00	-8.75	29.06	16.19	Average	---	---
5	15780.00	58.41	74.00	-15.59	42.22	16.19	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).

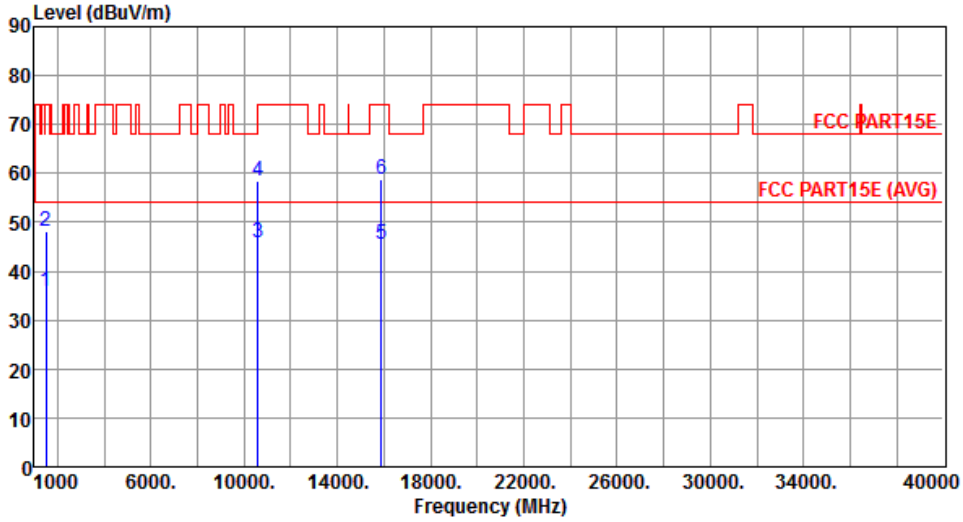
Modulation	HT20	Test Freq. (MHz)	5260
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.79	54.00	-7.21	40.75	6.04	Average	---	---
2	5350.00	61.06	74.00	-12.94	55.02	6.04	Peak	---	---
3	10520.00	57.57	68.20	-10.63	42.64	14.93	Peak	---	---
4	15780.00	45.40	54.00	-8.60	29.21	16.19	Average	---	---
5	15780.00	58.07	74.00	-15.93	41.88	16.19	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).

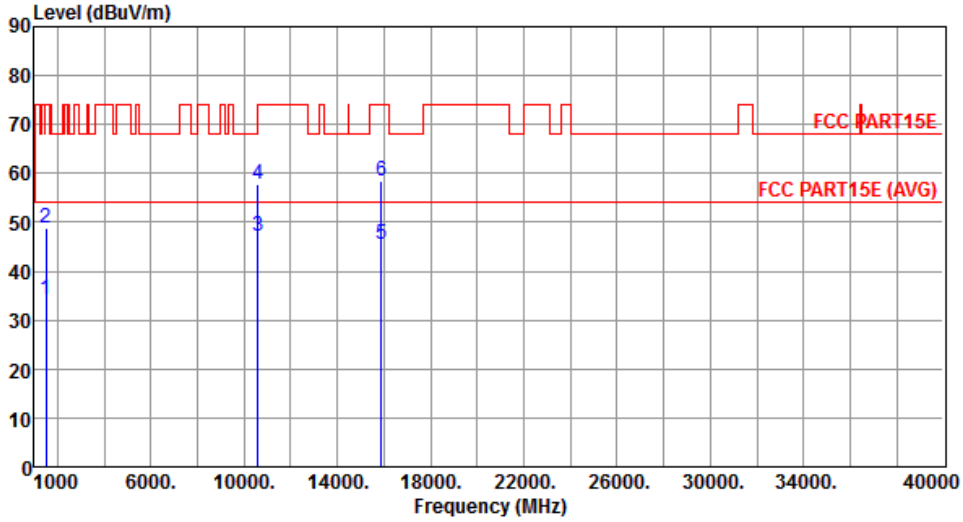
Modulation	HT20	Test Freq. (MHz)	5300
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	35.87	54.00	-18.13	41.44	-5.57	Average	---	---
2	1500.00	48.08	74.00	-25.92	53.65	-5.57	Peak	---	---
3	10600.00	45.78	54.00	-8.22	30.65	15.13	Average	---	---
4	10600.00	58.31	74.00	-15.69	43.18	15.13	Peak	---	---
5	15900.00	45.53	54.00	-8.47	29.53	16.00	Average	---	---
6	15900.00	58.78	74.00	-15.22	42.78	16.00	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).

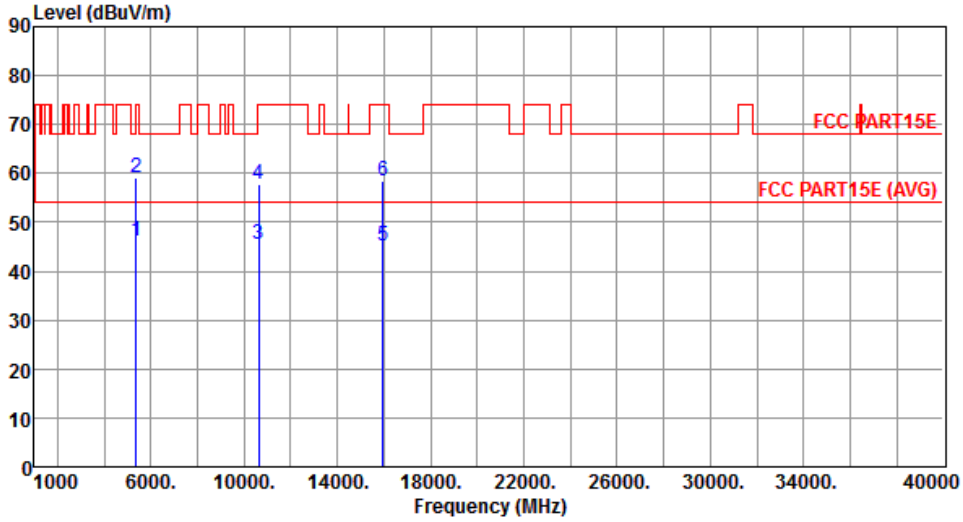
Modulation	HT20	Test Freq. (MHz)	5300
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	34.36	54.00	-19.64	39.93	-5.57	Average	---	---
2	1500.00	48.98	74.00	-25.02	54.55	-5.57	Peak	---	---
3	10600.00	47.08	54.00	-6.92	31.95	15.13	Average	---	---
4	10600.00	57.75	74.00	-16.25	42.62	15.13	Peak	---	---
5	15900.00	45.58	54.00	-8.42	29.58	16.00	Average	---	---
6	15900.00	58.29	74.00	-15.71	42.29	16.00	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).

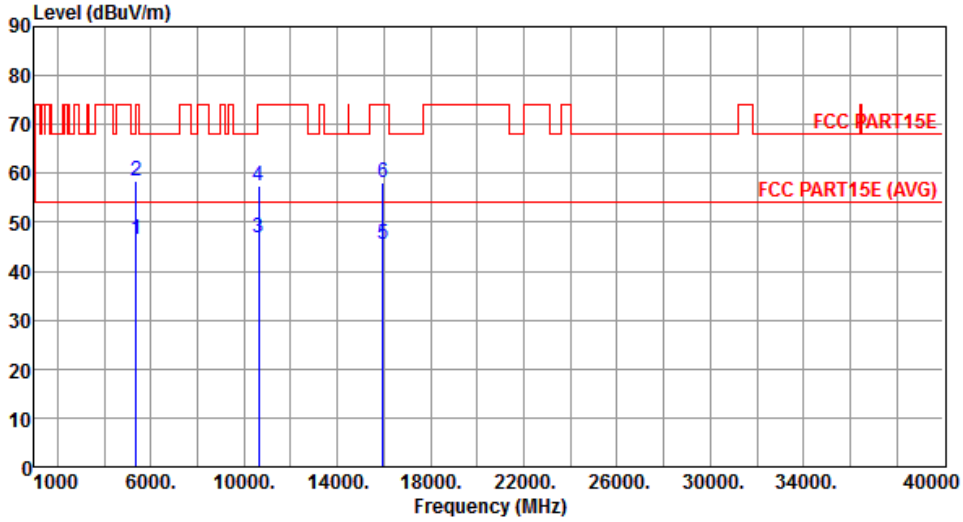
Modulation	HT20	Test Freq. (MHz)	5320
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.17	54.00	-7.83	40.13	6.04	Average	---	---
2	5350.00	59.15	74.00	-14.85	53.11	6.04	Peak	---	---
3	10640.00	45.55	54.00	-8.45	30.33	15.22	Average	---	---
4	10640.00	57.87	74.00	-16.13	42.65	15.22	Peak	---	---
5	15960.00	45.28	54.00	-8.72	29.38	15.90	Average	---	---
6	15960.00	58.33	74.00	-15.67	42.43	15.90	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).

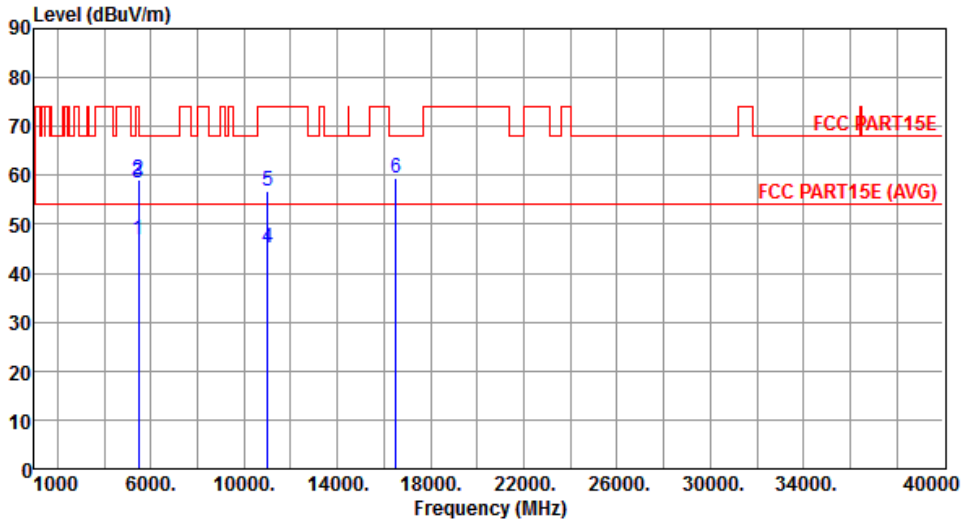
Modulation	HT20	Test Freq. (MHz)	5320
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.45	54.00	-7.55	40.41	6.04	Average	---	---
2	5350.00	58.50	74.00	-15.50	52.46	6.04	Peak	---	---
3	10640.00	46.94	54.00	-7.06	31.72	15.22	Average	---	---
4	10640.00	57.45	74.00	-16.55	42.23	15.22	Peak	---	---
5	15960.00	45.33	54.00	-8.67	29.43	15.90	Average	---	---
6	15960.00	58.06	74.00	-15.94	42.16	15.90	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).

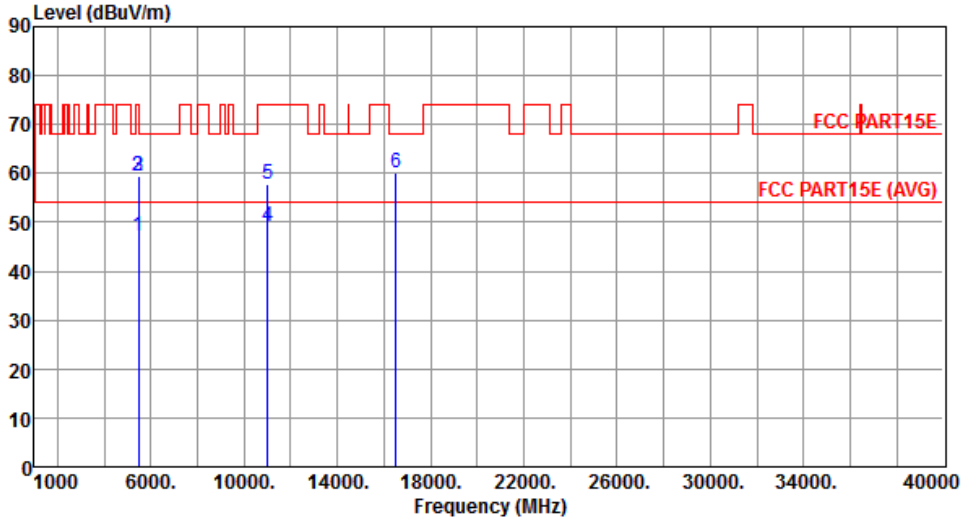
Modulation	HT20	Test Freq. (MHz)	5500
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.80	54.00	-7.20	40.60	6.20	Average	---	---
2	5460.00	59.02	74.00	-14.98	52.82	6.20	Peak	---	---
3	5470.00	58.36	68.20	-9.84	52.14	6.22	Peak	---	---
4	11000.00	45.32	54.00	-8.68	29.22	16.10	Average	---	---
5	11000.00	56.79	74.00	-17.21	40.69	16.10	Peak	---	---
6	16500.00	59.36	68.20	-8.84	41.89	17.47	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).

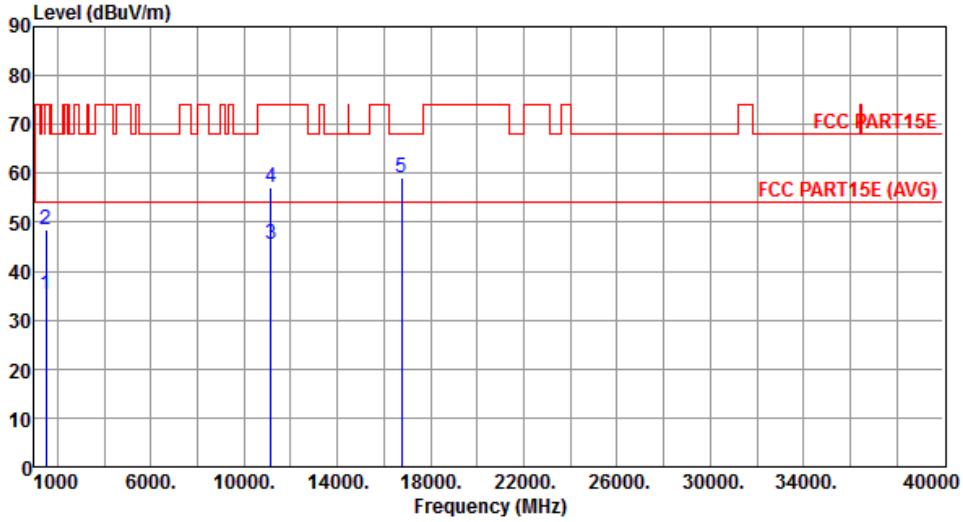
Modulation	HT20	Test Freq. (MHz)	5500
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.24	54.00	-6.76	41.04	6.20	Average	---	---
2	5460.00	59.30	74.00	-14.70	53.10	6.20	Peak	---	---
3	5470.00	59.42	68.20	-8.78	53.20	6.22	Peak	---	---
4	11000.00	49.16	54.00	-4.84	33.06	16.10	Average	---	---
5	11000.00	57.93	74.00	-16.07	41.83	16.10	Peak	---	---
6	16500.00	60.24	68.20	-7.96	42.77	17.47	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).

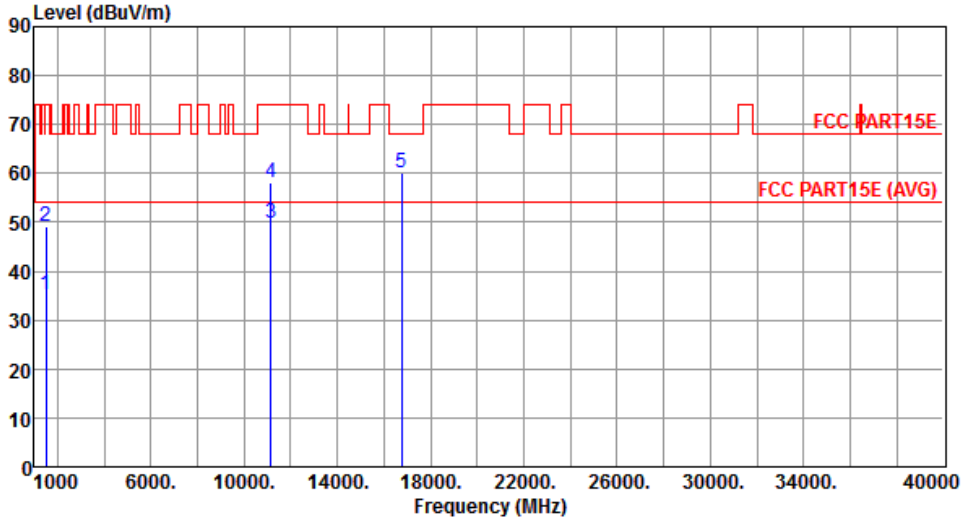
Modulation	HT20	Test Freq. (MHz)	5580
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	35.31	54.00	-18.69	40.88	-5.57	Average	---	---
2	1500.00	48.59	74.00	-25.41	54.16	-5.57	Peak	---	---
3	11160.00	45.57	54.00	-8.43	29.43	16.14	Average	---	---
4	11160.00	57.02	74.00	-16.98	40.88	16.14	Peak	---	---
5	16740.00	59.17	68.20	-9.03	40.69	18.48	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).

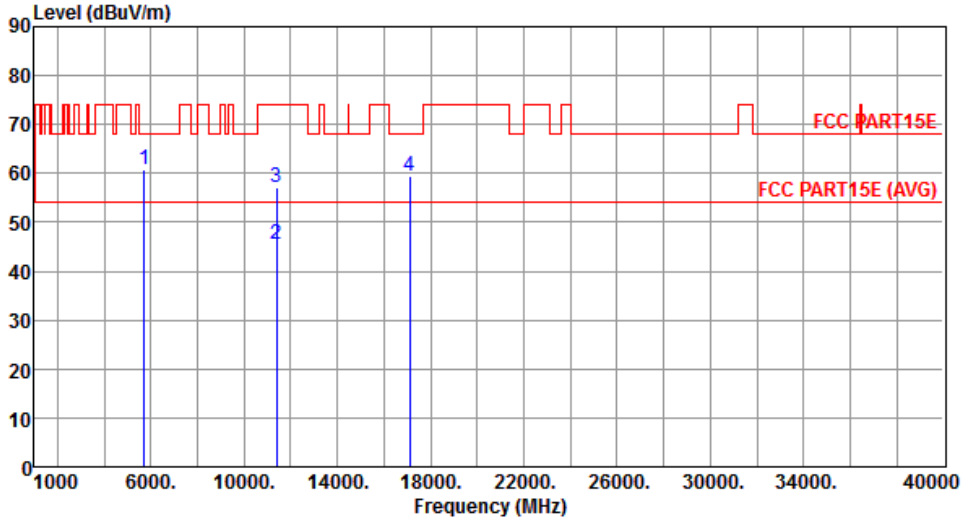
Modulation	HT20	Test Freq. (MHz)	5580
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	35.29	54.00	-18.71	40.86	-5.57	Average	---	---
2	1500.00	49.08	74.00	-24.92	54.65	-5.57	Peak	---	---
3	11160.00	49.87	54.00	-4.13	33.73	16.14	Average	---	---
4	11160.00	58.06	74.00	-15.94	41.92	16.14	Peak	---	---
5	16740.00	60.16	68.20	-8.04	41.68	18.48	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).

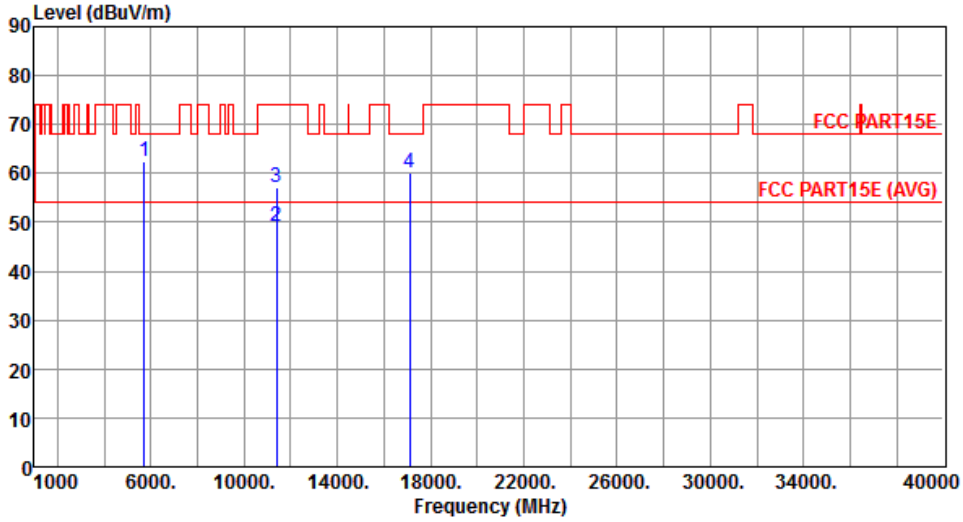
Modulation	HT20	Test Freq. (MHz)	5700
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	60.75	68.20	-7.45	54.04	6.71	Peak	---	---
2	11400.00	45.52	54.00	-8.48	29.33	16.19	Average	---	---
3	11400.00	57.11	74.00	-16.89	40.92	16.19	Peak	---	---
4	17100.00	59.36	68.20	-8.84	39.20	20.16	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).

Modulation	HT20	Test Freq. (MHz)	5700
Polarization	Vertical	Test Configuration	1

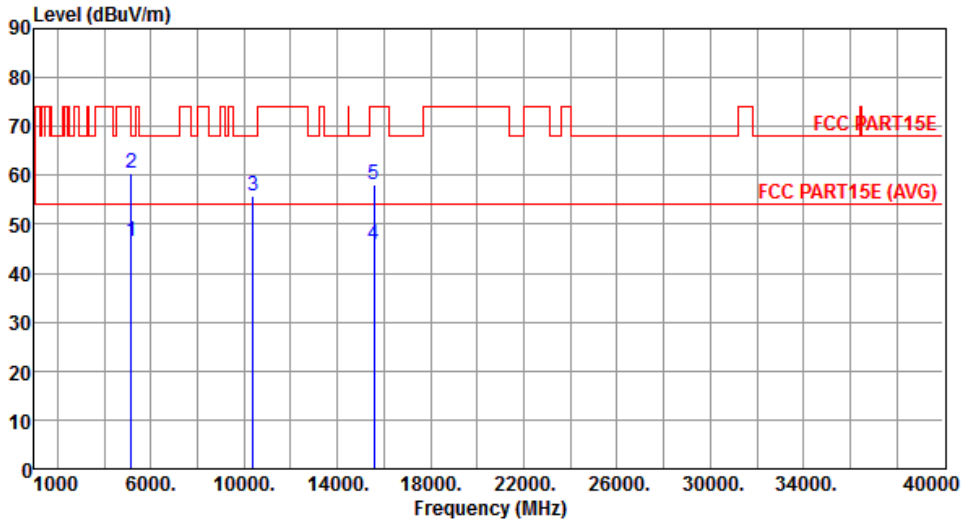


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	62.44	68.20	-5.76	55.73	6.71	Peak	---	---
2	11400.00	49.16	54.00	-4.84	32.97	16.19	Average	---	---
3	11400.00	57.26	74.00	-16.74	41.07	16.19	Peak	---	---
4	17100.00	60.26	68.20	-7.94	40.10	20.16	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).

3.5.8 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT40

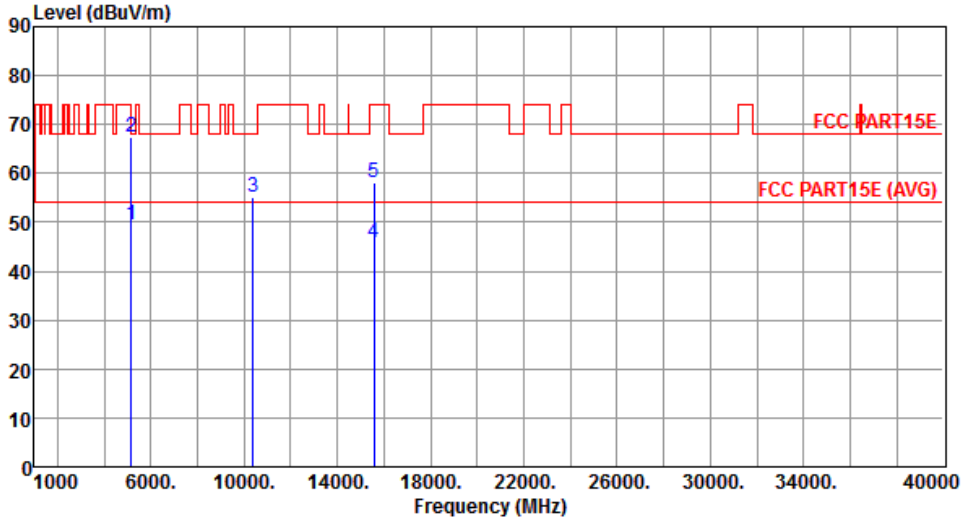
Modulation	HT40	**Test Freq. (MHz)**	5190
Polarization	Horizontal	**Test Configuration**	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.65	54.00	-7.35	40.89	5.76	Average	---	---
2	5150.00	60.30	74.00	-13.70	54.54	5.76	Peak	---	---
3	10380.00	55.75	68.20	-12.45	41.19	14.56	Peak	---	---
4	15570.00	45.68	54.00	-8.32	29.16	16.52	Average	---	---
5	15570.00	58.12	74.00	-15.88	41.60	16.52	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).

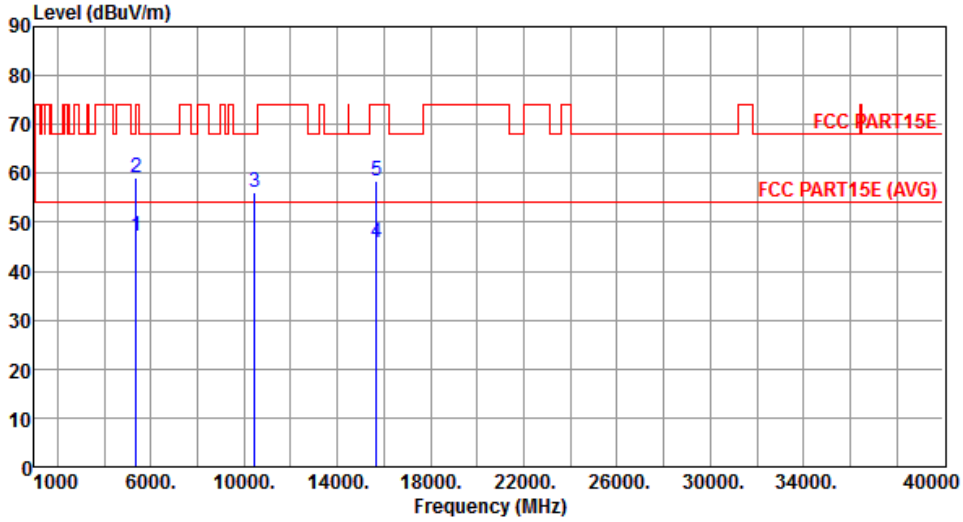
Modulation	HT40	Test Freq. (MHz)	5190
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	49.43	54.00	-4.57	43.67	5.76	Average	---	---
2	5150.00	67.28	74.00	-6.72	61.52	5.76	Peak	---	---
3	10380.00	55.26	68.20	-12.94	40.70	14.56	Peak	---	---
4	15570.00	45.73	54.00	-8.27	29.21	16.52	Average	---	---
5	15570.00	58.01	74.00	-15.99	41.49	16.52	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).

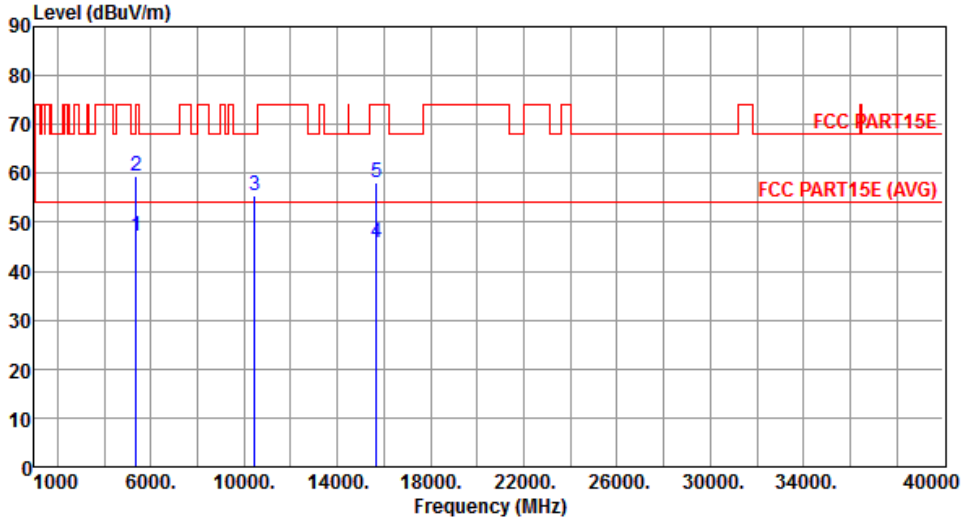
Modulation	HT40	Test Freq. (MHz)	5230
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	47.07	54.00	-6.93	41.03	6.04	Average	---	---
2	5350.00	59.07	74.00	-14.93	53.03	6.04	Peak	---	---
3	10460.00	55.99	68.20	-12.21	41.21	14.78	Peak	---	---
4	15690.00	45.76	54.00	-8.24	29.43	16.33	Average	---	---
5	15690.00	58.33	74.00	-15.67	42.00	16.33	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).

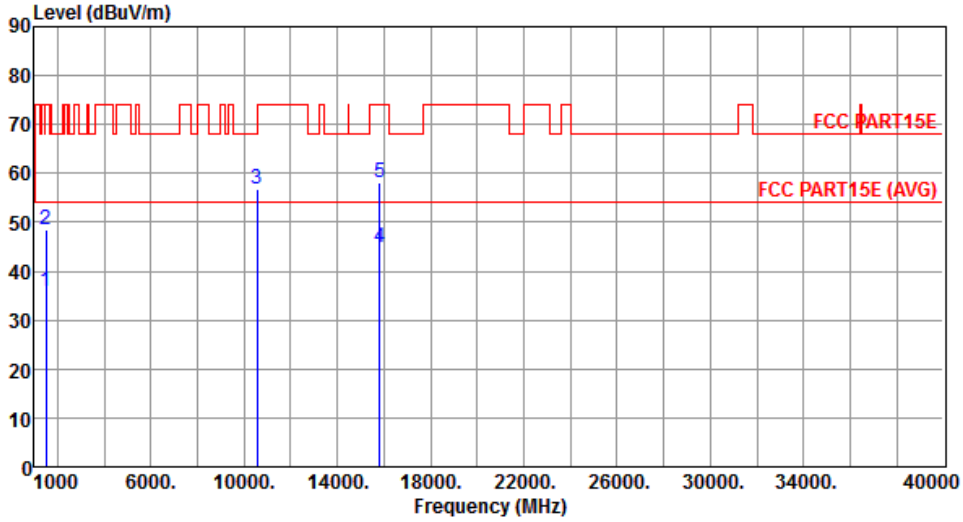
Modulation	HT40	Test Freq. (MHz)	5230
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	47.02	54.00	-6.98	40.98	6.04	Average	---	---
2	5350.00	59.50	74.00	-14.50	53.46	6.04	Peak	---	---
3	10460.00	55.53	68.20	-12.67	40.75	14.78	Peak	---	---
4	15690.00	45.81	54.00	-8.19	29.48	16.33	Average	---	---
5	15690.00	58.25	74.00	-15.75	41.92	16.33	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).

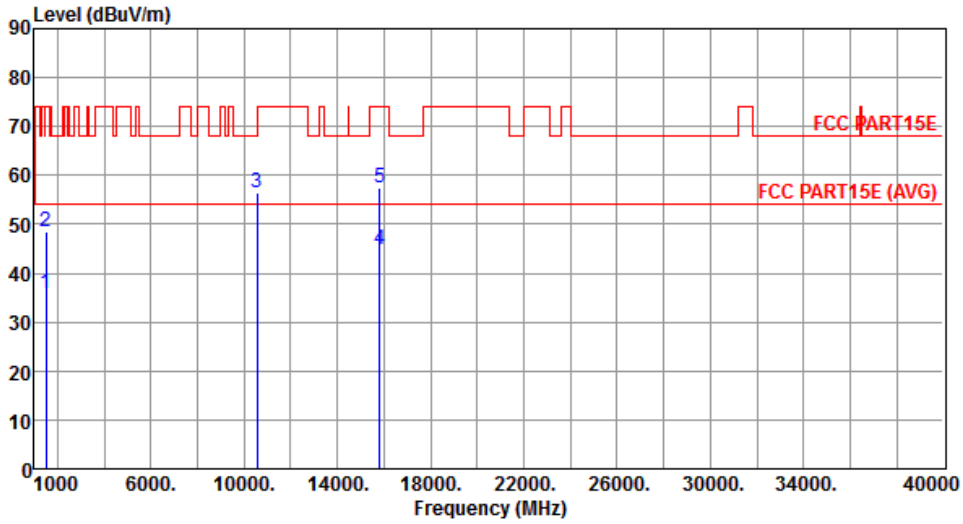
Modulation	HT40	Test Freq. (MHz)	5270
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	35.72	54.00	-18.28	41.29	-5.57	Average	---	---
2	1500.00	48.37	74.00	-25.63	53.94	-5.57	Peak	---	---
3	10540.00	56.95	68.20	-11.25	41.97	14.98	Peak	---	---
4	15810.00	44.90	54.00	-9.10	28.76	16.14	Average	---	---
5	15810.00	58.24	74.00	-15.76	42.10	16.14	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).

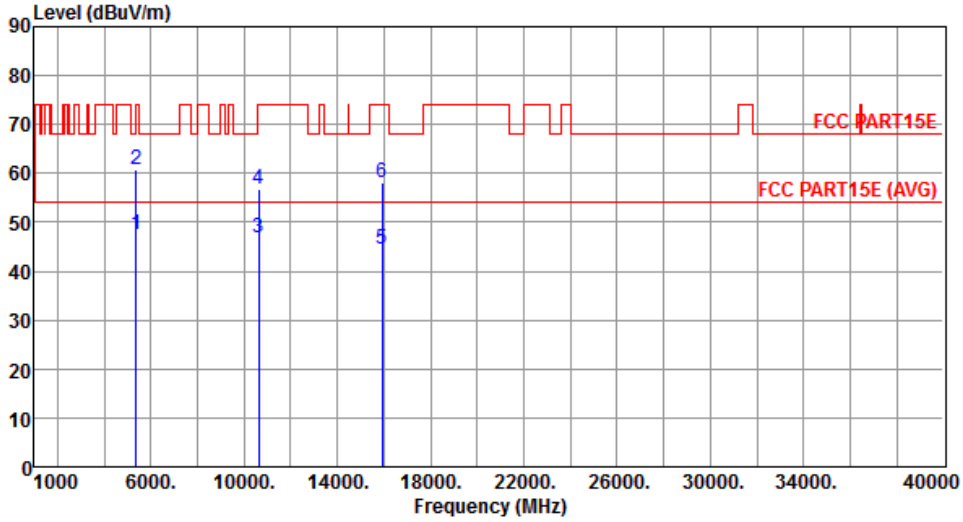
Modulation	HT40	Test Freq. (MHz)	5270
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	35.76	54.00	-18.24	41.33	-5.57	Average	---	---
2	1500.00	48.39	74.00	-25.61	53.96	-5.57	Peak	---	---
3	10540.00	56.60	68.20	-11.60	41.62	14.98	Peak	---	---
4	15810.00	44.70	54.00	-9.30	28.56	16.14	Average	---	---
5	15810.00	57.53	74.00	-16.47	41.39	16.14	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).

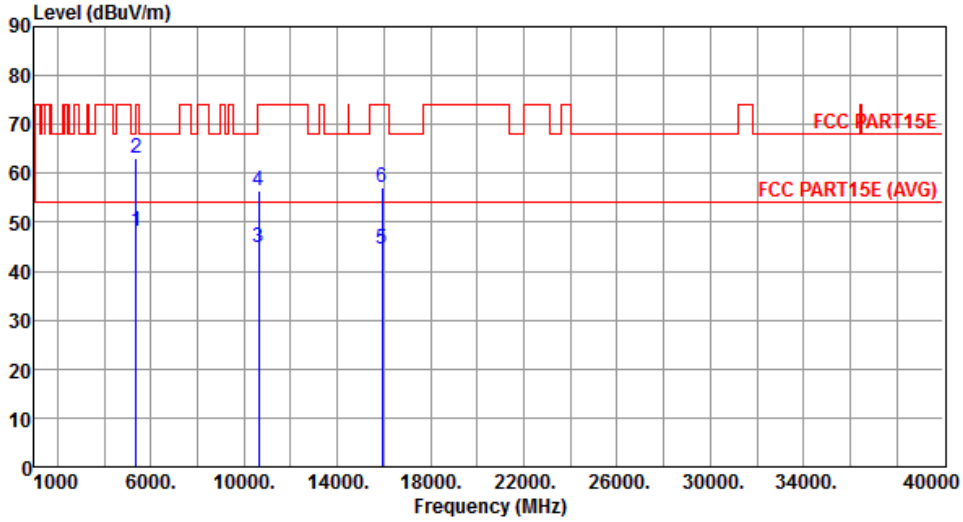
Modulation	HT40	Test Freq. (MHz)	5310
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	47.48	54.00	-6.52	41.44	6.04	Average	---	---
2	5350.00	60.86	74.00	-13.14	54.82	6.04	Peak	---	---
3	10620.00	46.88	54.00	-7.12	31.70	15.18	Average	---	---
4	10620.00	56.72	74.00	-17.28	41.54	15.18	Peak	---	---
5	15930.00	44.62	54.00	-9.38	28.67	15.95	Average	---	---
6	15930.00	58.02	74.00	-15.98	42.07	15.95	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).

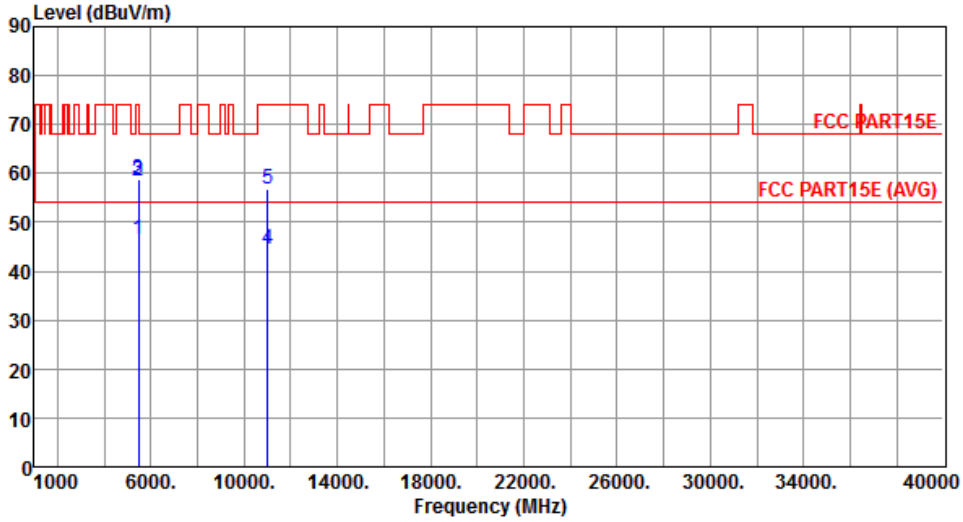
Modulation	HT40	Test Freq. (MHz)	5310
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	48.11	54.00	-5.89	42.07	6.04	Average	---	---
2	5350.00	63.10	74.00	-10.90	57.06	6.04	Peak	---	---
3	10620.00	44.78	54.00	-9.22	29.60	15.18	Average	---	---
4	10620.00	56.35	74.00	-17.65	41.17	15.18	Peak	---	---
5	15930.00	44.58	54.00	-9.42	28.63	15.95	Average	---	---
6	15930.00	57.26	74.00	-16.74	41.31	15.95	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).

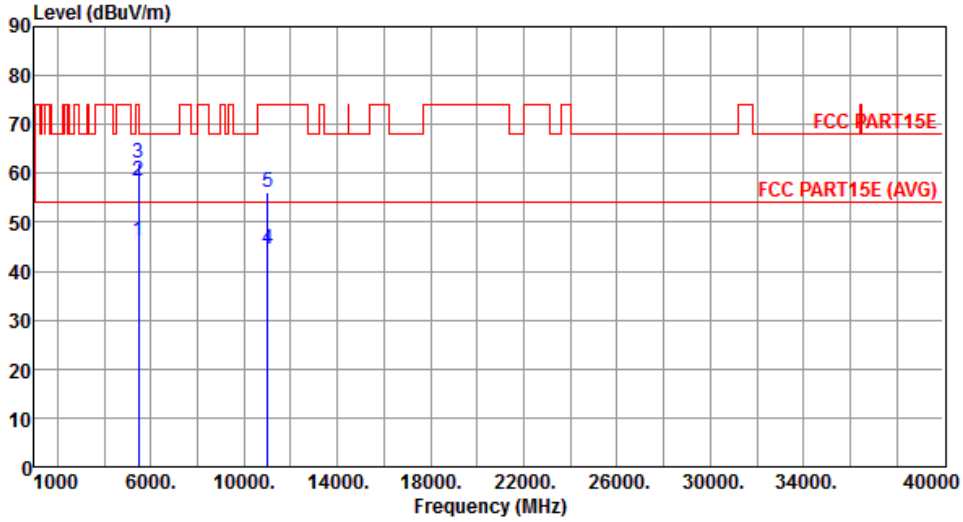
Modulation	HT40	Test Freq. (MHz)	5510
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.33	54.00	-7.67	40.13	6.20	Average	---	---
2	5460.00	58.40	74.00	-15.60	52.20	6.20	Peak	---	---
3	5470.00	58.75	68.20	-9.45	52.53	6.22	Peak	---	---
4	11020.00	44.61	54.00	-9.39	28.50	16.11	Average	---	---
5	11020.00	56.73	74.00	-17.27	40.62	16.11	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).

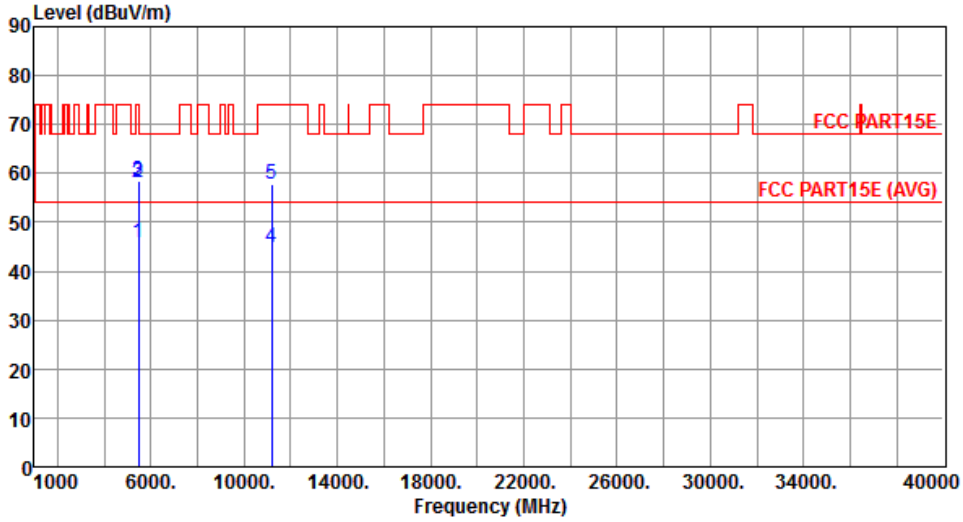
Modulation	HT40	Test Freq. (MHz)	5510
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.17	54.00	-7.83	39.97	6.20	Average	---	---
2	5460.00	58.39	74.00	-15.61	52.19	6.20	Peak	---	---
3	5470.00	61.96	68.20	-6.24	55.74	6.22	Peak	---	---
4	11020.00	44.42	54.00	-9.58	28.31	16.11	Average	---	---
5	11020.00	56.24	74.00	-17.76	40.13	16.11	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).

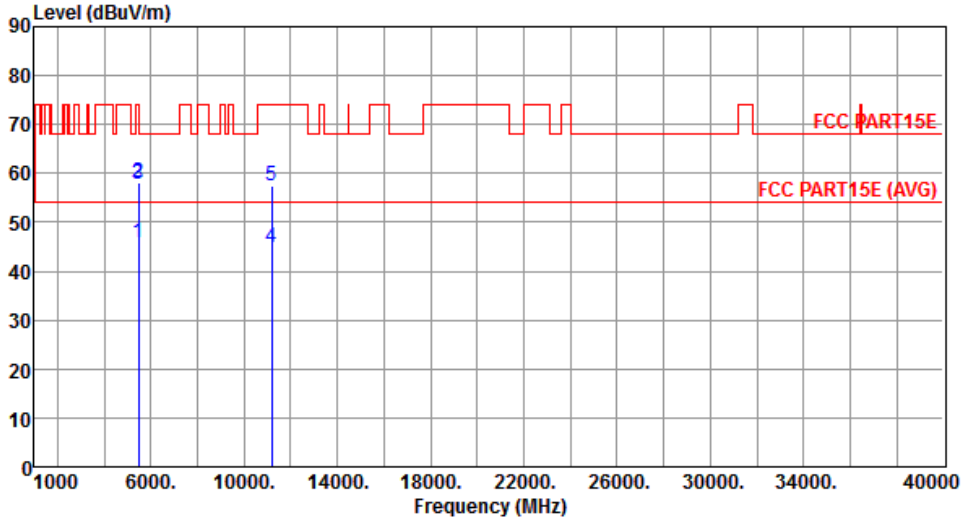
Modulation	HT40	Test Freq. (MHz)	5550
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.81	54.00	-8.19	39.61	6.20	Average	---	---
2	5460.00	58.17	74.00	-15.83	51.97	6.20	Peak	---	---
3	5470.00	58.45	68.20	-9.75	52.23	6.22	Peak	---	---
4	11180.00	44.84	54.00	-9.16	28.70	16.14	Average	---	---
5	11180.00	57.72	74.00	-16.28	41.58	16.14	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).

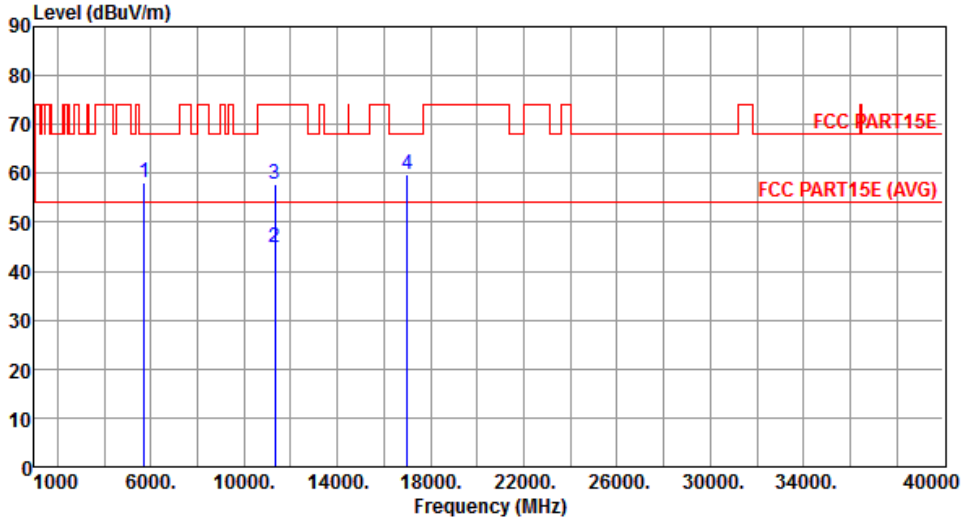
Modulation	HT40	Test Freq. (MHz)	5550
Polarization	Vertical	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.97	54.00	-8.03	39.77	6.20	Average	---	---
2	5460.00	58.22	74.00	-15.78	52.02	6.20	Peak	---	---
3	5470.00	57.73	68.20	-10.47	51.51	6.22	Peak	---	---
4	11180.00	44.67	54.00	-9.33	28.53	16.14	Average	---	---
5	11180.00	57.36	74.00	-16.64	41.22	16.14	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).

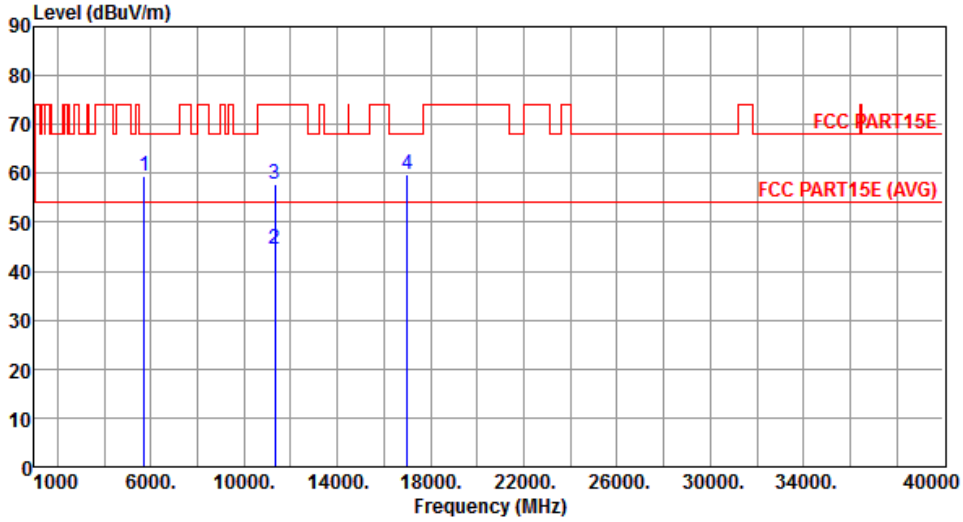
Modulation	HT40	Test Freq. (MHz)	5670
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	57.98	68.20	-10.22	51.27	6.71	Peak	---	---
2	11340.00	44.71	54.00	-9.29	28.53	16.18	Average	---	---
3	11340.00	57.77	74.00	-16.23	41.59	16.18	Peak	---	---
4	17010.00	59.74	68.20	-8.46	40.10	19.64	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).

Modulation	HT40	Test Freq. (MHz)	5670
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	5725.00	59.43	68.20	-8.77	52.72	6.71	Peak	---	---
2	11340.00	44.57	54.00	-9.43	28.39	16.18	Average	---	---
3	11340.00	57.71	74.00	-16.29	41.53	16.18	Peak	---	---
4	17010.00	59.69	68.20	-8.51	40.05	19.64	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).

3.6 Frequency Stability

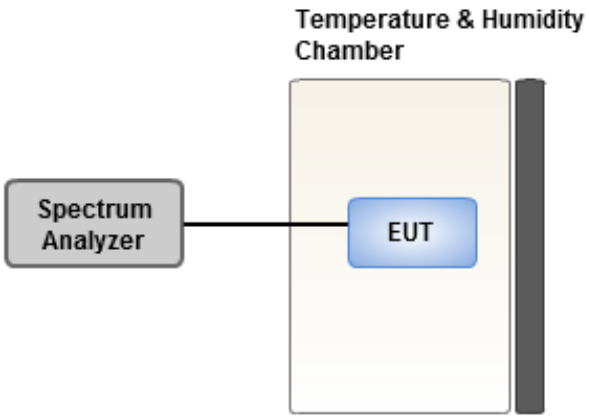
3.6.1 Limit of Frequency Stability

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 50 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 55 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: 5320 MHz	Frequency Drift (ppm)			
Temperature (°C)	**0 minute**	**2 minutes**	**5 minutes**	**10 minutes**
T20°CVmax	5.59	5.57	5.49	5.43
T20°CVmin	4.10	4.43	4.18	4.53
T55CVnom	3.78	3.74	4.14	4.23
T50CVnom	4.10	4.85	4.22	4.66
T40°CVnom	3.08	3.11	3.54	3.77
T30°CVnom	2.90	2.67	2.68	3.14
T20°CVnom	2.86	3.46	3.21	3.47
T10°CVnom	2.61	2.82	2.70	2.45
T0°CVnom	1.62	1.74	1.10	1.64
T-10°CVnom	0.52	0.54	0.81	1.30
T-20°CVnom	1.35	2.10	1.74	1.47
T-30°CVnom	-0.18	-0.19	0.13	0.10
Vnom [Vdc]: 3.9		Vmax [Vdc]: 4.29		Vmin [Vdc]: 3.51
Tnom [°C]: 20		Tmax [°C]: 55		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

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