FCC Test Report

FCC ID	:	**NKR-P75B**
Equipment	:	**Wireless LAN Adaptor**
Model No.	:	**DNUA-P75B**
Brand Name	:	**Panasonic**
Applicant	:	**Wistron NeWeb Corp.**
Address	:	**20 Park Avenue II, Hsinchu Science Park, Hsinchu 308, Taiwan, R.O.C.**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Sep. 09, 2014**
Tested Date	:	**Sep. 16 ~ Oct. 14, 2014**

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
FR490304AN	Rev. 01	Initial issue	Oct. 21, 2014

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.154MHz 45.69 (Margin -10.09dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5725.00MHz 53.00 (Margin -1.00dB) - 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: 19.36 5250~5350MHz: 19.96 5470~5725MHz: 19.83 5725~5850MHz: 18.30	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 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 5725-5850	a	5180-5240 5260-5320 5500-5700 5745-5825	36-48 [4] 52-64 [4] 100-140 [8] 149-165 [5]	2	6-54 Mbps
5150-5250 5250-5350 5470-5725 5725-5850	n (HT20)	5180-5240 5260-5320 5500-5700 5745-5825	36-48 [4] 52-64 [4] 100-140 [8] 149-165 [5]	2	MCS 0-15
5150-5250 5250-5350 5470-5725 5725-5850	n (HT40)	5190-5230 5270-5310 5510-5670 5755-5795	38-46 [2] 54-62 [2] 102-134 [3] 151-159 [2]	2	MCS 0-15
Note 1: RF output power specifies that Maximum Conducted Output Power. Note 2: 802.11a/n/ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.					

1.1.2 Antenna Details

Ant. No.	Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)				
				2400~2483.5	**5150~5250**	**5250~5350**	**5470~5725**	**5725~5850**
1	ANT0 (Left)	Printed	NA	0.4	2.38	1.53	0.61	1.76
2	ANT1 (Right)	Printed	NA	4.24	0.73	0.62	1.19	0.93

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	5Vdc from host

1.1.4 Accessories

N/A

1.1.5 Channel List

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	151	5755
100	5500	159	5795
104	5520	---	---
108	5540	---	---
112	5560	---	---
116	5580	---	---
132	5660	---	---
136	5680	---	---
140	5700	---	---
149	5745	---	---
153	5765	---	---
157	5785	---	---
161	5805	---	---
165	5825	---	---

1.1.6 Test Tool and Duty Cycle

Test Tool	ART2-GUI V2.3		
Duty Cycle and Duty Factor	**Mode**	**Duty cycle (%)**	**Duty factor (dB)**
	11a	99.03%	0.04
	HT20	98.70%	0.06
	HT40	98.11%	0.08

1.1.7 Power Setting

For Frequency band 5150-5250 MHz		
Modulation Mode	**Test Frequency (MHz)**	**Power Set**
11a	5180	18
11a	5200	18
11a	5240	19
HT20	5180	18
HT20	5200	18
HT20	5240	19
HT40	5190	14.5
HT40	5230	20

For Frequency band 5250~5350 MHz		
Modulation Mode	**Test Frequency (MHz)**	**Power Set**
11a	5260	19
11a	5300	18.5
11a	5320	18.5
HT20	5260	19
HT20	5300	19
HT20	5320	19
HT40	5270	21
HT40	5310	14.5

For Frequency band 5470~5725 MHz		
Modulation Mode	**Test Frequency (MHz)**	**Power Set**
11a	5500	16.5
11a	5580	18
11a	5700	16
HT20	5500	16
HT20	5580	18.5
HT20	5700	15.5
HT40	5510	12.5
HT40	5590	20
HT40	5670	17

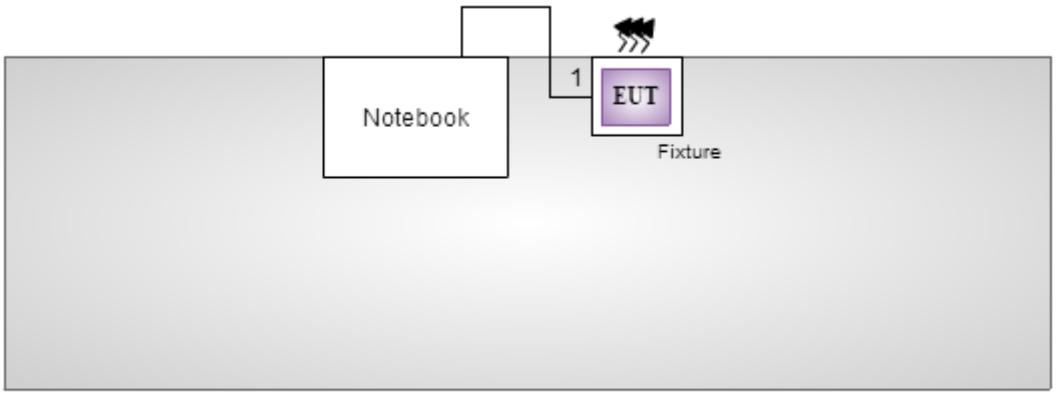
For Frequency band 5725~5850 MHz		
Modulation Mode	**Test Frequency (MHz)**	**Power Set**
11a	5745	12
11a	5785	15.5
11a	5825	15.5
HT20	5745	11.5
HT20	5785	16.5
HT20	5825	16
HT40	5755	10.50
HT40	5795	18.50

1.2 Local Support Equipment List

Support Equipment List						
No.	**Equipment**	**Brand**	**Model**	**S/N**	**FCC ID**	**Signal cable / Length (m)**
1	Notebook	DELL	E6430	---	DoC	USB, 1.0m non-shielded w/o core.

1.3 Test Setup Chart

Test Setup Diagram



1. USB, 1.0m non-shielded w/o core.

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. 15, 2013	Oct. 14, 2014
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 23, 2013	Nov. 22, 2014
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127-666	Dec. 04, 2013	Dec. 03, 2014
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Apr. 23, 2014	Apr. 22, 2015
50 ohm terminal (Support Unit)	NA	50	04	Apr. 18, 2014	Apr. 17, 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 3 / (03CH03-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	Agilent	N9010A	MY53400091	Sep. 16, 2014	Sep. 15, 2015
Receiver	Agilent	N9038A	MY53290044	Jan. 08, 2014	Jan. 07, 2015
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-562	Feb. 07, 2014	Feb. 06, 2015
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Feb. 20, 2014	Feb. 19, 2015
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Dec. 27, 2013	Dec. 26, 2014
Preamplifier	EMC	EMC02325	980187	Nov. 22, 2013	Nov. 21, 2014
Preamplifier	Agilent	83017A	MY39501310	Dec. 18, 2013	Dec. 17, 2014
Preamplifier	EMC	EMC184045B	980192	Aug. 26, 2014	Aug. 25, 2015
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Feb. 19, 2014	Feb. 18, 2015
RF cable-8M	HUBER+SUHNER	SUCOFLEX104	MY22601/4	Feb. 19, 2014	Feb. 18, 2015
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Feb. 19, 2014	Feb. 18, 2015
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Feb. 17, 2014	Feb. 16, 2015
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Feb. 17, 2014	Feb. 16, 2015
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Feb. 17, 2014	Feb. 16, 2015
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Loop Antenna	R&S	HFH2-Z2	100330	Nov. 15, 2012	Nov. 14, 2014
Note: Calibration Interval of instruments listed above is two 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. 17, 2014	Feb. 16, 2015
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Dec. 11, 2013	Dec. 10, 2014
Power Meter	Anritsu	ML2495A	1218007	Oct. 31, 2013	Oct. 30, 2014
Power Sensor	Anritsu	MA2411B	1207367	Oct. 31, 2013	Oct. 30, 2014
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 C63.10-2009
FCC KDB 789033 D02 General UNII Test Procedures New Rules v01
FCC KDB 662911 D01 Multiple Transmitter Output v02r01

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
Temperature	±0.6 ^{o}C
Conducted emission	±2.670 dB
AC conducted emission	±2.92 dB
Radiated emission ≤ 1GHz	±3.26 dB
Radiated emission > 1GHz	±4.94 dB

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	22°C / 62%	Skys Huang
Radiated Emissions	03CH03-WS	22-23°C / 63-65%	York Lin Aska Huang
RF Conducted	TH01-WS	22°C / 61%	Felix Sung

- FCC site registration No.: 390588
- IC site registration No.: 10807C-1

2.2 The Worst Test Modes and Channel Details

Frequency band		5150~5350 MHz 5470~5725 MHz		
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	HT40	5550	MCS 0	---
Radiated Emissions ≤1GHz	HT40	5550	MCS 0	---
RF Output Power	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	---
Radiated Emissions >1GHz 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	---
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.

For Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	HT40	5795	MCS 0	---
Radiated Emissions ≤1GHz	HT40	5795	MCS 0	---
RF Output Power	11a	5745 / 5785 / 5825	6 Mbps	---
	HT20	5745 / 5785 / 5825	MCS 0	
	HT40	5755 / 5795	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth 6dB bandwidth Peak Power Spectral Density	11a	5745 / 5785 / 5825	6 Mbps	---
	HT20	5745 / 5785 / 5825	MCS 0	
	HT40	5755 / 5795	MCS 0	
Frequency Stability	Un-modulation	5785	---	---

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.

3 Transmitter Test Results

3.1 Conducted Emissions

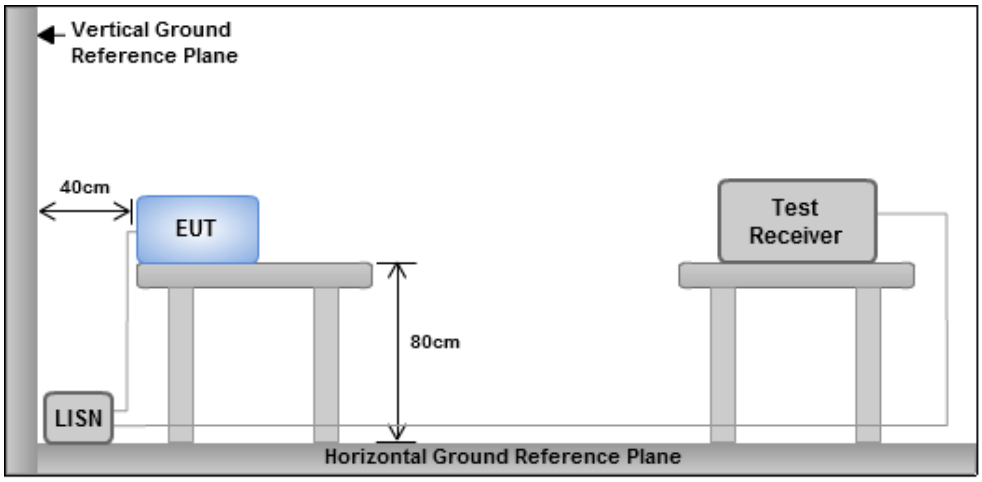
3.1.1 Limit of Conducted Emissions

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

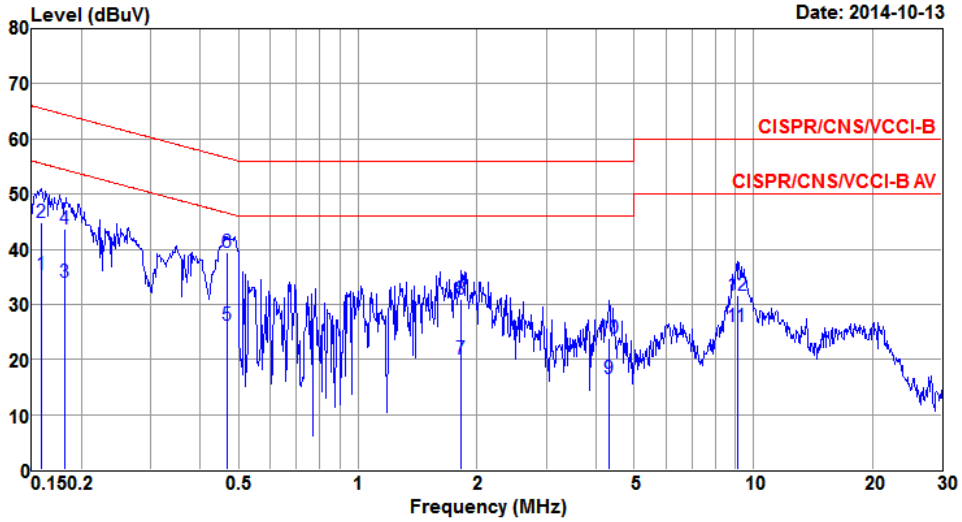
3.1.3 Test Setup



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

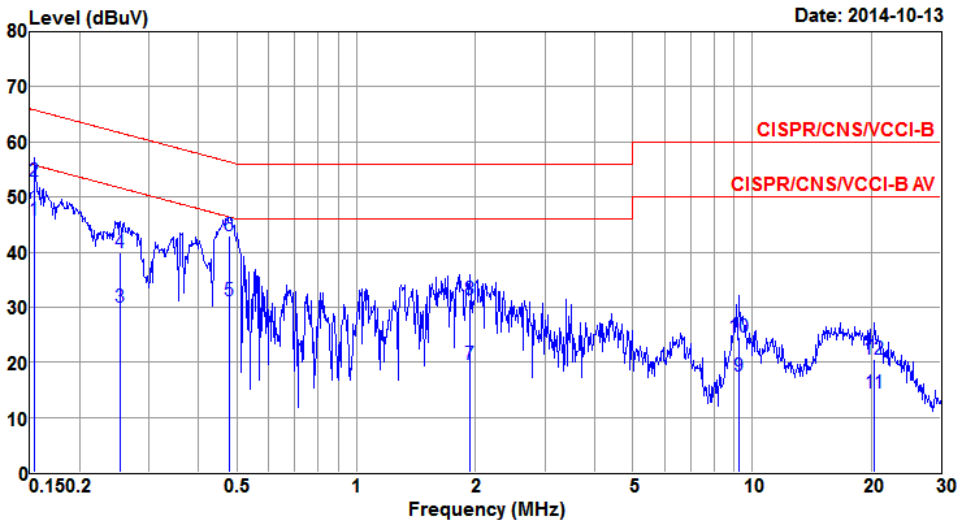
Modulation	HT40	Test Freq. (MHz)	5550
Power Phase	Line		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.159	35.46	55.52	-20.06	35.04	0.40	0.02	Average
2	0.159	44.74	65.52	-20.78	44.32	0.40	0.02	QP
3	0.182	33.89	54.40	-20.51	33.49	0.39	0.01	Average
4	0.182	43.72	64.40	-20.68	43.32	0.39	0.01	QP
5	0.469	26.18	46.54	-20.36	25.77	0.39	0.02	Average
6*	0.469	39.31	56.54	-17.23	38.90	0.39	0.02	QP
7	1.819	19.97	46.00	-26.03	19.52	0.43	0.02	Average
8	1.819	31.02	56.00	-24.98	30.57	0.43	0.02	QP
9	4.315	16.53	46.00	-29.47	15.90	0.47	0.16	Average
10	4.315	23.94	56.00	-32.06	23.31	0.47	0.16	QP
11	9.107	26.04	50.00	-23.96	25.27	0.53	0.24	Average
12	9.107	31.61	60.00	-28.39	30.84	0.53	0.24	QP

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

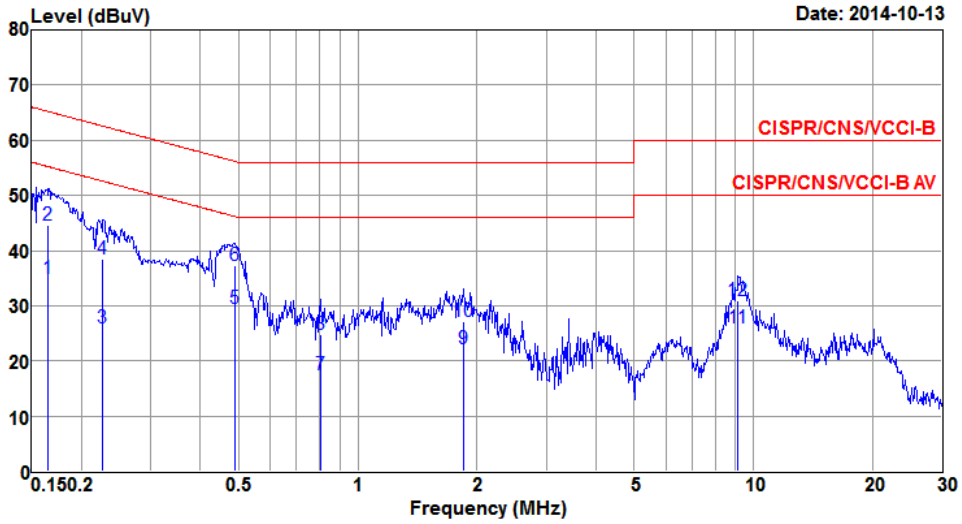
Modulation	HT40	Test Freq. (MHz)	5550
Power Phase	Neutral		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1*	0.154	45.69	55.78	-10.09	45.19	0.48	0.02	Average
2	0.154	52.83	65.78	-12.95	52.33	0.48	0.02	QP
3	0.253	29.91	51.65	-21.74	29.42	0.48	0.01	Average
4	0.253	39.78	61.65	-21.87	39.29	0.48	0.01	QP
5	0.479	31.24	46.36	-15.12	30.75	0.47	0.02	Average
6	0.479	43.00	56.36	-13.36	42.51	0.47	0.02	QP
7	1.939	19.53	46.00	-26.47	19.01	0.50	0.02	Average
8	1.939	31.51	56.00	-24.49	30.99	0.50	0.02	QP
9	9.253	17.50	50.00	-32.50	16.70	0.56	0.24	Average
10	9.253	24.61	60.00	-35.39	23.81	0.56	0.24	QP
11	20.377	14.42	50.00	-35.58	13.46	0.56	0.40	Average
12	20.377	20.45	60.00	-39.55	19.49	0.56	0.40	QP

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

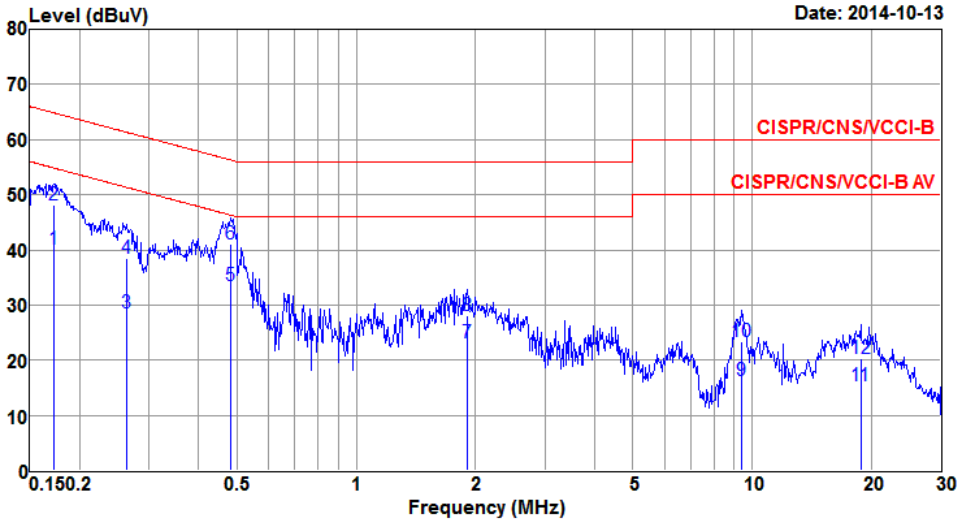
Modulation	HT40	Test Freq. (MHz)	5795
Power Phase	Line		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.164	34.88	55.25	-20.37	34.46	0.40	0.02	Average
2	0.164	44.66	65.25	-20.59	44.24	0.40	0.02	QP
3	0.227	25.88	52.57	-26.69	25.48	0.39	0.01	Average
4	0.227	38.51	62.57	-24.06	38.11	0.39	0.01	QP
5*	0.489	29.52	46.19	-16.67	29.11	0.39	0.02	Average
6	0.489	37.34	56.19	-18.85	36.93	0.39	0.02	QP
7	0.804	17.47	46.00	-28.53	17.04	0.41	0.02	Average
8	0.804	24.88	56.00	-31.12	24.45	0.41	0.02	QP
9	1.848	22.30	46.00	-23.70	21.85	0.43	0.02	Average
10	1.848	27.05	56.00	-28.95	26.60	0.43	0.02	QP
11	9.156	26.05	50.00	-23.95	25.28	0.53	0.24	Average
12	9.156	30.81	60.00	-29.19	30.04	0.53	0.24	QP

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

Modulation	HT40	Test Freq. (MHz)	5795
Power Phase	Neutral		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.172	40.07	54.86	-14.79	39.57	0.48	0.02	Average
2	0.172	48.16	64.86	-16.70	47.66	0.48	0.02	QP
3	0.263	28.60	51.34	-22.74	28.11	0.48	0.01	Average
4	0.263	38.44	61.34	-22.90	37.95	0.48	0.01	QP
5*	0.481	33.62	46.32	-12.70	33.13	0.47	0.02	Average
6	0.481	41.12	56.32	-15.20	40.63	0.47	0.02	QP
7	1.908	23.15	46.00	-22.85	22.63	0.50	0.02	Average
8	1.908	28.09	56.00	-27.91	27.57	0.50	0.02	QP
9	9.401	16.35	50.00	-33.65	15.55	0.56	0.24	Average
10	9.401	23.28	60.00	-36.72	22.48	0.56	0.24	QP
11	18.820	15.24	50.00	-34.76	14.30	0.56	0.38	Average
12	18.820	20.26	60.00	-39.74	19.32	0.56	0.38	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.

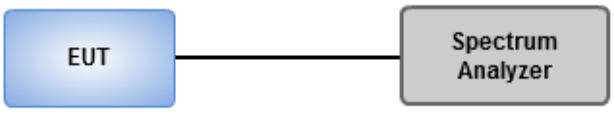
Occupied Bandwidth

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

6dB Bandwidth

1. Set RBW = 100kHz, VBW = 300kHz
2. Detector = Peak,Trace mode = max hold.
3. Allow the trace to stabilize.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

3.2.3 Test Setup

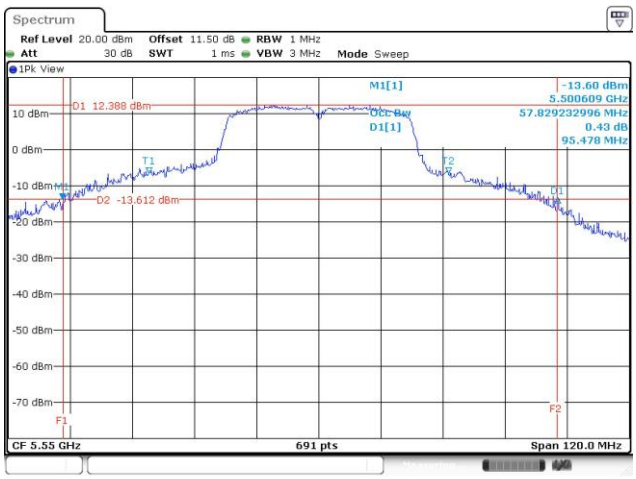
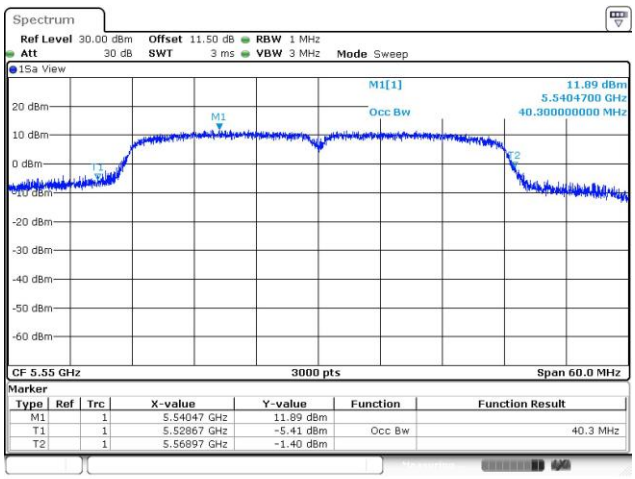


3.2.4 Test Result of Emission Bandwidth

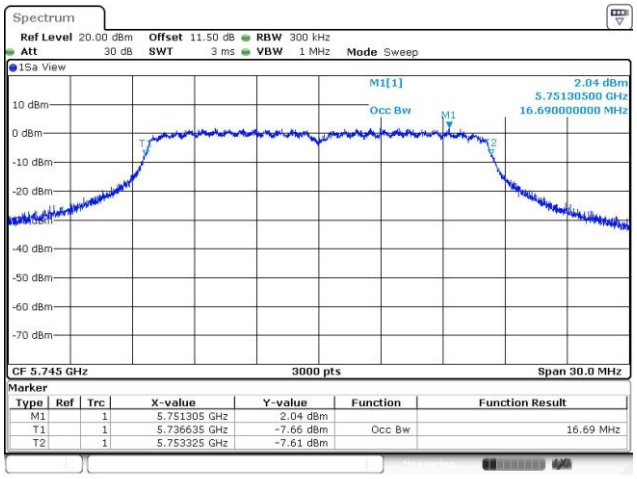
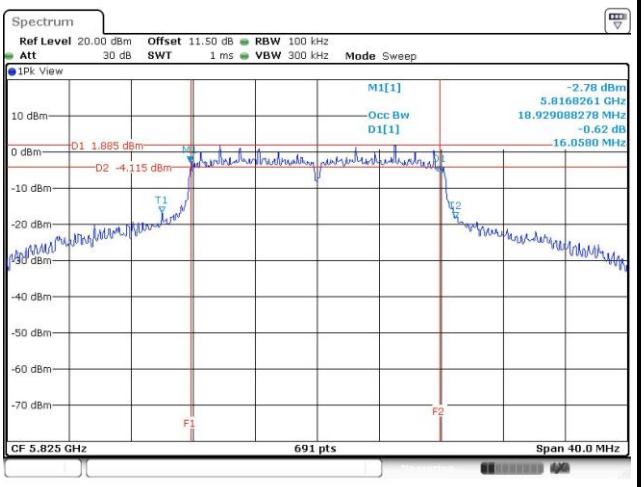
For Frequency band 5150~5250 MHz										
Mode	N_{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)			
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3
11a	2	5180	38.99	38.26	---	---	17.25	17.58	---	---
11a	2	5200	40.14	39.93	---	---	17.32	17.46	---	---
11a	2	5240	41.59	40.00	---	---	17.74	18.30	---	---
HT20	2	5180	38.62	43.26	---	---	18.13	18.38	---	---
HT20	2	5200	39.93	42.39	---	---	18.22	18.71	---	---
HT20	2	5240	42.25	45.65	---	---	18.61	18.93	---	---
HT40	2	5190	53.57	65.04	---	---	36.72	37.04	---	---
HT40	2	5230	90.44	91.13	---	---	37.96	38.08	---	---

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	2	5260	40.07	36.88	---	---	17.83	17.87	---	---	24.00
11a	2	5300	40.58	39.35	---	---	17.44	17.59	---	---	24.00
11a	2	5320	40.94	38.41	---	---	17.55	17.53	---	---	24.00
HT20	2	5260	43.70	44.64	---	---	18.43	18.49	---	---	24.00
HT20	2	5300	43.55	45.51	---	---	18.36	18.56	---	---	24.00
HT20	2	5320	44.13	43.04	---	---	18.52	18.46	---	---	24.00
HT40	2	5270	87.65	94.61	---	---	38.52	40.10	---	---	24.00
HT40	2	5310	53.22	62.61	---	---	36.84	36.86	---	---	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	2	5500	36.30	38.62	---	---	17.03	17.48	---	---	24.00
11a	2	5580	43.12	42.68	---	---	19.01	18.47	---	---	24.00
11a	2	5700	42.10	37.75	---	---	17.99	17.26	---	---	24.00
HT20	2	5500	35.94	42.97	---	---	18.03	18.28	---	---	24.00
HT20	2	5580	45.29	45.51	---	---	20.00	19.00	---	---	24.00
HT20	2	5700	44.42	42.83	---	---	18.29	18.03	---	---	24.00
HT40	2	5510	49.39	57.04	---	---	36.78	36.78	---	---	24.00
HT40	2	5550	92.52	95.48	---	---	39.26	40.30	---	---	24.00
HT40	2	5670	87.83	89.74	---	---	37.90	38.14	---	---	24.00

Worst Plots of 26dB Bandwidth	Worst Plots of 99% Bandwidth
	

For Frequency band 5725-5850 MHz											
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	2	5745	26.23	23.55	---	---	16.29	16.35	---	---	0.5
11a	2	5785	40.94	36.09	---	---	16.29	16.35	---	---	0.5
11a	2	5825	40.22	38.62	---	---	16.06	16.35	---	---	0.5
HT20	2	5745	26.74	25.43	---	---	16.35	16.93	---	---	0.5
HT20	2	5785	44.57	44.28	---	---	16.29	17.51	---	---	0.5
HT20	2	5825	43.70	41.81	---	---	16.29	16.70	---	---	0.5
HT40	2	5755	51.01	48.35	---	---	35.36	35.36	---	---	0.5
HT40	2	5795	93.62	90.29	---	---	35.13	35.48	---	---	0.5

Worst Plots of 99% Bandwidth	Worst Plots of 6dB 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
☒	5725 ~ 5850	1 W
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	2	5180	15.5	14.31	---	---	62.459	17.96	24.00
11a	2	5200	15.82	14.48	---	---	66.249	18.21	24.00
11a	2	5240	16.48	15.15	---	---	77.197	18.88	24.00
HT20	2	5180	15.42	14.25	---	---	61.441	17.88	24.00
HT20	2	5200	15.74	14.36	---	---	64.787	18.11	24.00
HT20	2	5240	16.52	15.02	---	---	76.643	18.84	24.00
HT40	2	5190	12.15	11.18	---	---	29.528	14.70	24.00
HT40	2	5230	17.10	15.44	---	---	86.281	19.36	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	2	5260	16.63	14.84	---	---	76.505	18.84	24.00
11a	2	5300	15.85	14.51	---	---	66.708	18.24	24.00
11a	2	5320	15.72	14.43	---	---	65.058	18.13	24.00
HT20	2	5260	16.58	14.83	---	---	75.908	18.80	24.00
HT20	2	5300	15.92	14.78	---	---	69.145	18.40	24.00
HT20	2	5320	15.84	14.65	---	---	67.545	18.30	24.00
HT40	2	5270	17.63	16.15	---	---	99.153	19.96	24.00
HT40	2	5310	12.48	10.84	---	---	29.835	14.75	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	2	5500	12.65	15.81	---	---	56.514	17.52	24.00
11a	2	5580	14.53	16.91	---	---	77.470	18.89	24.00
11a	2	5700	13.74	15.32	---	---	57.700	17.61	24.00
HT20	2	5500	12.13	15.33	---	---	50.450	17.03	24.00
HT20	2	5580	14.83	17.22	---	---	83.132	19.20	24.00
HT20	2	5700	13.03	14.72	---	---	49.739	16.97	24.00
HT40	2	5510	7.92	10.95	---	---	18.640	12.70	24.00
HT40	2	5550	15.17	18.01	---	---	96.126	19.83	24.00
HT40	2	5670	16.14	17.15	---	---	92.995	19.68	24.00

For Frequency band 5725-5850 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	2	5745	9.31	10.73	---	---	20.361	13.09	30.00
11a	2	5785	13.02	14.35	---	---	47.272	16.75	30.00
11a	2	5825	13.06	14.18	---	---	46.412	16.67	30.00
HT20	2	5745	8.98	10.16	---	---	18.282	12.62	30.00
HT20	2	5785	13.9	15.15	---	---	57.281	17.58	30.00
HT20	2	5825	13.32	14.48	---	---	49.533	16.95	30.00
HT40	2	5755	7.98	9.13	---	---	14.465	11.60	30.00
HT40	2	5795	14.42	16.02	---	---	67.664	18.30	30.00

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
☒	5725 ~ 5850	30 dBm / 500 kHz

3.4.2 Test Procedures

For 5150~5250 MHz, 5250~5350 MHz, 5470~5725 MHz

☒ 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.

For 5725~5850 MHz

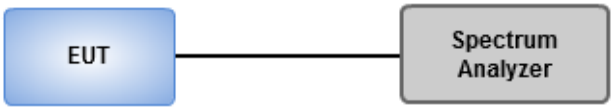
☒ Method SA-1

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

Frequency band			5150~5250 MHz / 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	2	5180	6.26	0.00	6.26	11
11a	2	5200	5.84	0.00	5.84	11
11a	2	5240	6.26	0.00	6.26	11
HT20	2	5180	5.41	0.00	5.41	11
HT20	2	5200	5.62	0.00	5.62	11
HT20	2	5240	6.00	0.00	6.00	11
HT40	2	5190	-0.63	0.00	-0.63	11
HT40	2	5230	3.33	0.00	3.33	11
11a	2	5260	6.17	0.00	6.17	11
11a	2	5300	5.62	0.00	5.62	11
11a	2	5320	5.40	0.00	5.40	11
HT20	2	5260	5.89	0.00	5.89	11
HT20	2	5300	5.61	0.00	5.61	11
HT20	2	5320	5.58	0.00	5.58	11
HT40	2	5270	3.56	0.00	3.56	11
HT40	2	5310	-1.80	0.00	-1.80	11

Note:

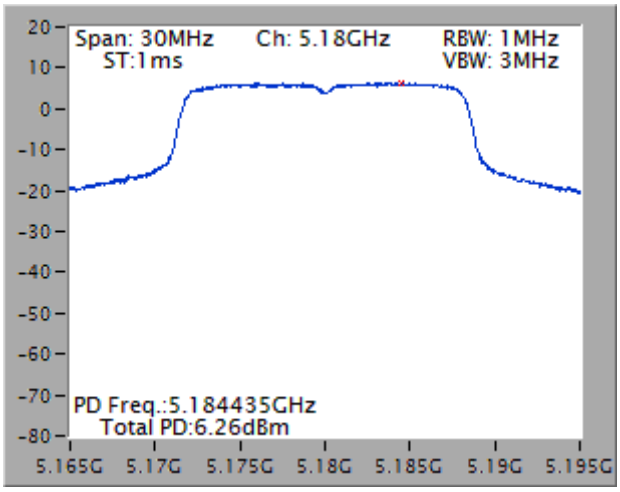
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.

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	2	5500	4.97	0.00	4.97	11
11a	2	5580	5.06	0.00	5.06	11
11a	2	5700	5.25	0.00	5.25	11
11a	2	5720	4.17	0.00	4.17	11
HT20	2	5500	5.24	0.00	5.24	11
HT20	2	5580	4.53	0.00	4.53	11
HT20	2	5700	-3.78	0.00	-3.78	11
HT20	2	5720	3.90	0.00	3.90	11
HT40	2	5510	2.02	0.00	2.02	11
HT40	2	5550	6.26	0.00	6.26	11

Note:

1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.

Worst Plots

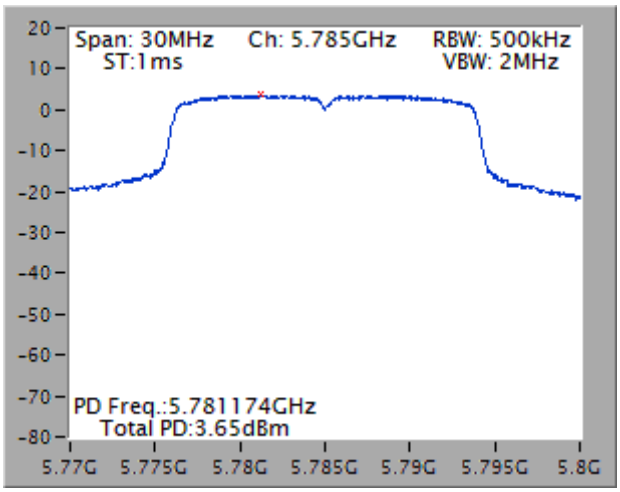


Frequency band			5725-5850 MHz			
Condition			Peak Power Spectral Density (dBm/500kHz)			
Mode	N_{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/500kHz)	Duty Factor (dB)	PPSD with D.F (dBm/500kHz)	PPSD Limit (dBm/500kHz)
11a	2	5745	-0.68	0.00	-0.68	30.00
11a	2	5785	3.23	0.00	3.23	30.00
11a	2	5825	3.38	0.00	3.38	30.00
HT20	2	5745	-1.26	0.00	-1.26	30.00
HT20	2	5785	3.65	0.00	3.65	30.00
HT20	2	5825	3.33	0.00	3.33	30.00
HT40	2	5755	-6.93	0.00	-6.93	30.00
HT40	2	5795	0.77	0.00	0.77	30.00

Note:

1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.

Worst Plots



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 - 5.825 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

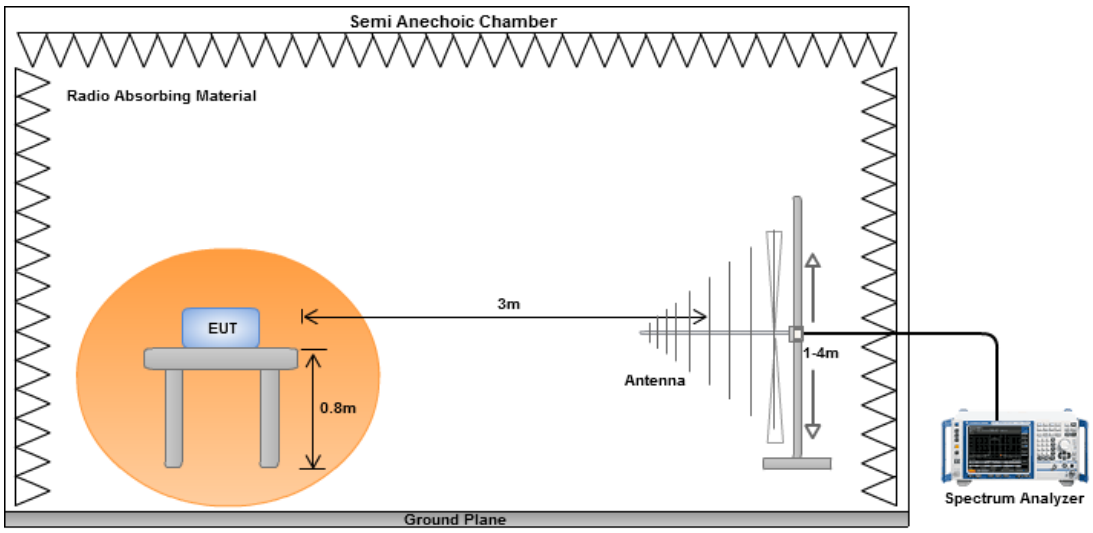
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at a height of 0.8 m test table above the ground plane.
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:

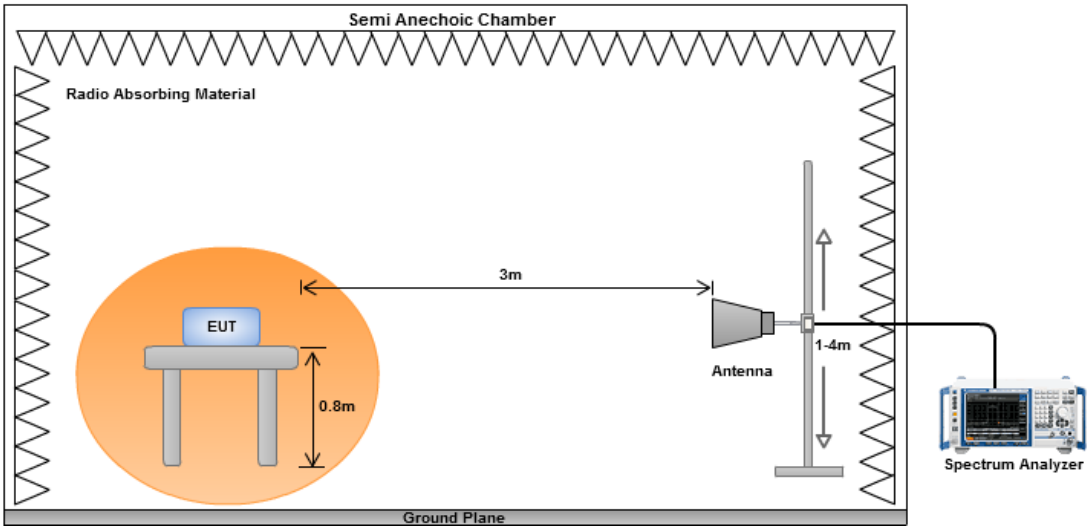
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz

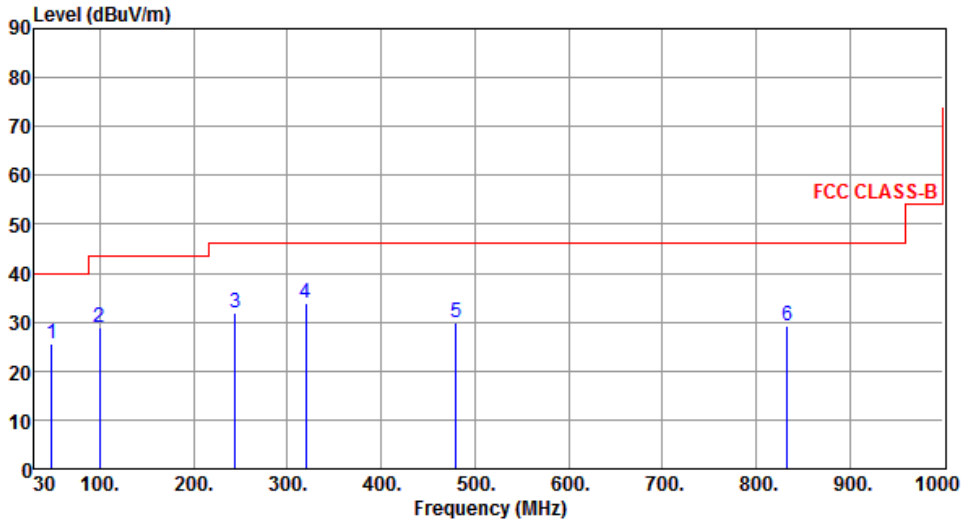


Radiated Emissions above 1 GHz



3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

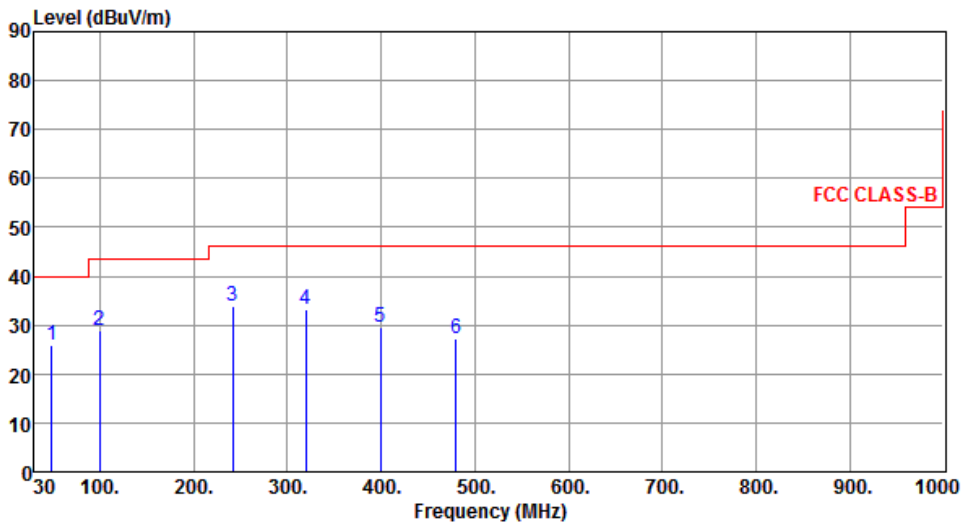
Modulation	HT40	**Test Freq. (MHz)**	5550
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	48.43	25.66	40.00	-14.34	38.72	-13.06	Peak	---	---
2	99.84	28.84	43.50	-14.66	47.14	-18.30	Peak	---	---
3	244.37	31.89	46.00	-14.11	46.52	-14.63	Peak	---	---
4	320.03	33.83	46.00	-12.17	46.00	-12.17	Peak	---	---
5	480.08	29.85	46.00	-16.15	38.15	-8.30	Peak	---	---
6	833.16	29.27	46.00	-16.73	31.24	-1.97	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.

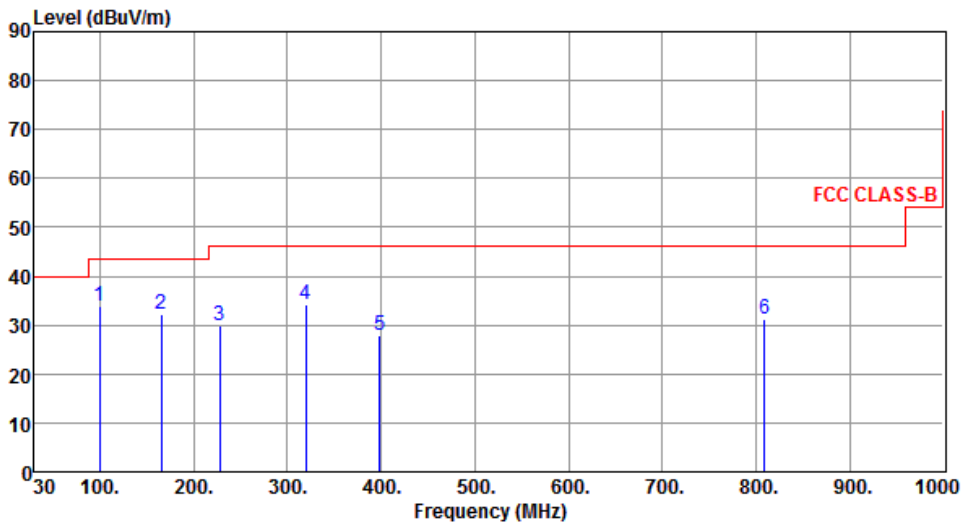
Modulation	HT40	Test Freq. (MHz)	5550
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	48.43	25.98	40.00	-14.02	39.04	-13.06	Peak	---	---
2	99.84	28.87	43.50	-14.63	47.17	-18.30	Peak	---	---
3	241.46	33.78	46.00	-12.22	48.48	-14.70	Peak	---	---
4	320.03	33.16	46.00	-12.84	45.33	-12.17	Peak	---	---
5	399.57	29.46	46.00	-16.54	39.71	-10.25	Peak	---	---
6	480.08	27.18	46.00	-18.82	35.48	-8.30	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.

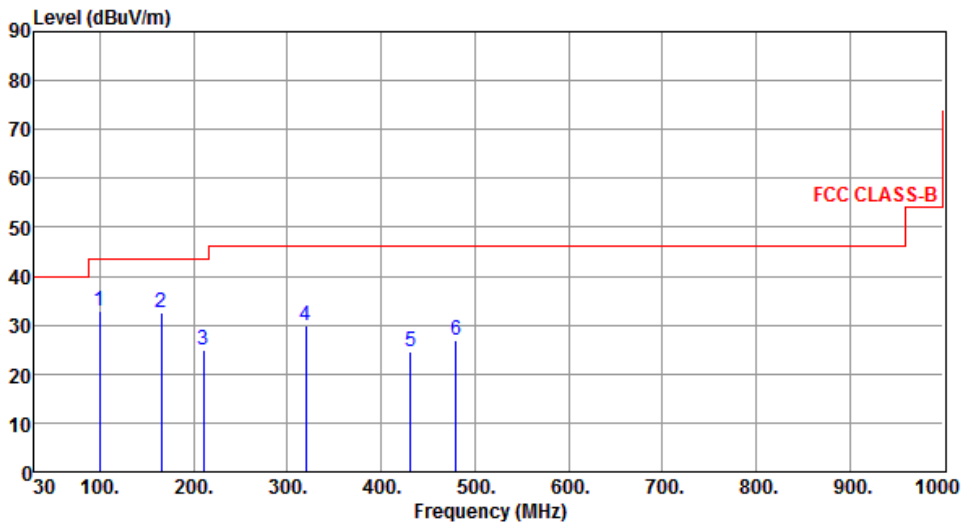
Modulation	HT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	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	33.95	43.50	-9.55	52.25	-18.30	Peak	---	---
2	165.80	32.27	43.50	-11.23	46.00	-13.73	Peak	---	---
3	227.88	29.78	46.00	-16.22	45.27	-15.49	Peak	---	---
4	320.03	34.33	46.00	-11.67	46.50	-12.17	Peak	---	---
5	398.60	27.86	46.00	-18.14	38.13	-10.27	Peak	---	---
6	808.91	31.36	46.00	-14.64	33.72	-2.36	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	HT40	Test Freq. (MHz)	5795
Polarization	Vertical		

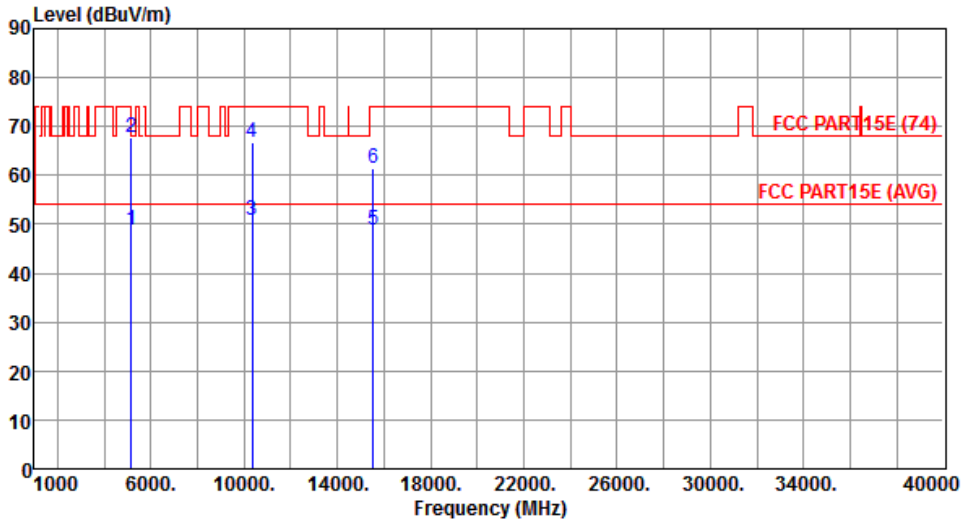


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	99.84	32.78	43.50	-10.72	51.08	-18.30	Peak	---	---
2	165.80	32.71	43.50	-10.79	46.44	-13.73	Peak	---	---
3	210.42	24.81	43.50	-18.69	40.99	-16.18	Peak	---	---
4	320.03	30.03	46.00	-15.97	42.20	-12.17	Peak	---	---
5	431.58	24.69	46.00	-21.31	33.94	-9.25	Peak	---	---
6	480.08	26.75	46.00	-19.25	35.05	-8.30	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

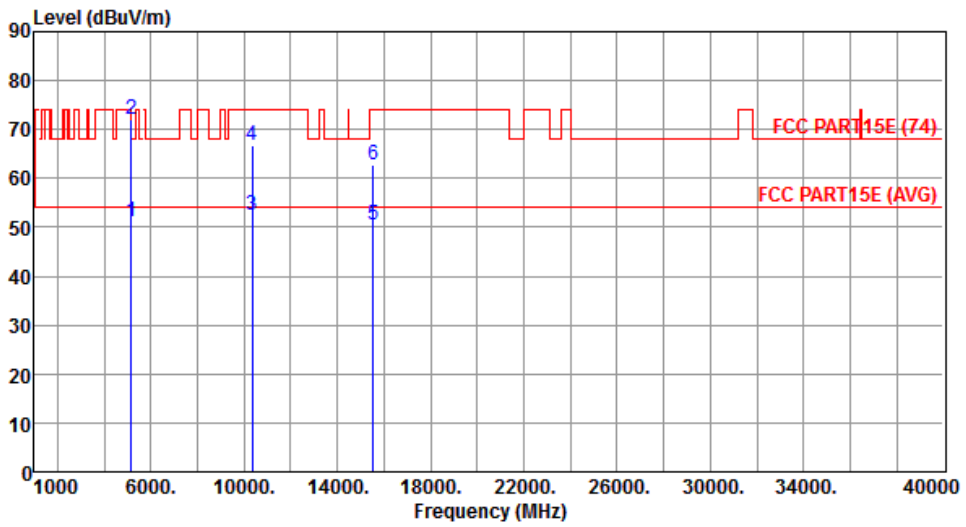
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal		



	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	48.78	54.00	-5.22	47.15	1.63	Average	---	---
2	5150.00	67.76	74.00	-6.24	66.13	1.63	Peak	---	---
3	10360.00	50.68	54.00	-3.32	35.66	15.02	Average	---	---
4	10360.00	66.78	74.00	-7.22	51.76	15.02	Peak	---	---
5	15540.00	48.78	54.00	-5.22	32.26	16.52	Average	---	---
6	15540.00	61.38	74.00	-12.62	44.86	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).

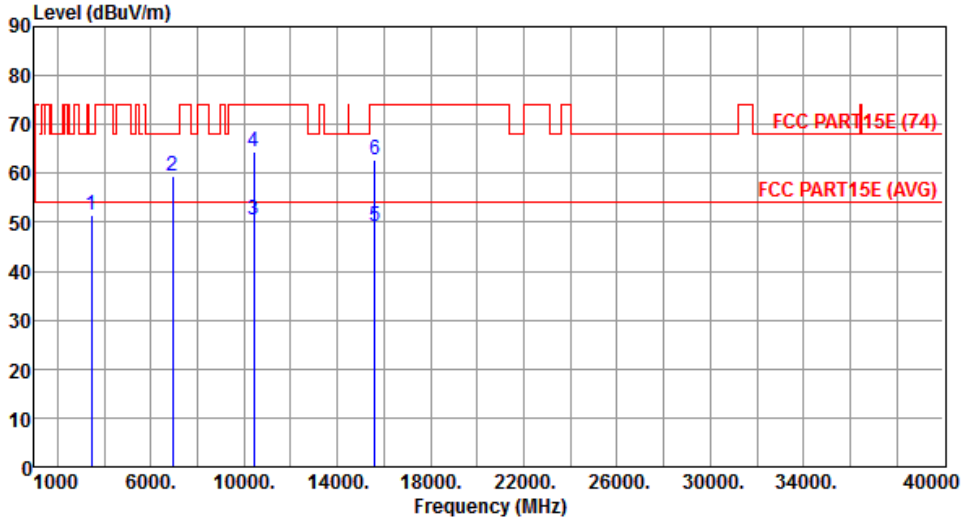
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		



	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	51.26	54.00	-2.74	49.63	1.63	Average	---	---
2	5150.00	72.00	74.00	-2.00	70.37	1.63	Peak	---	---
3	10360.00	52.58	54.00	-1.42	37.56	15.02	Average	---	---
4	10360.00	66.62	74.00	-7.38	51.60	15.02	Peak	---	---
5	15540.00	50.40	54.00	-3.60	33.88	16.52	Average	---	---
6	15540.00	62.79	74.00	-11.21	46.27	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).

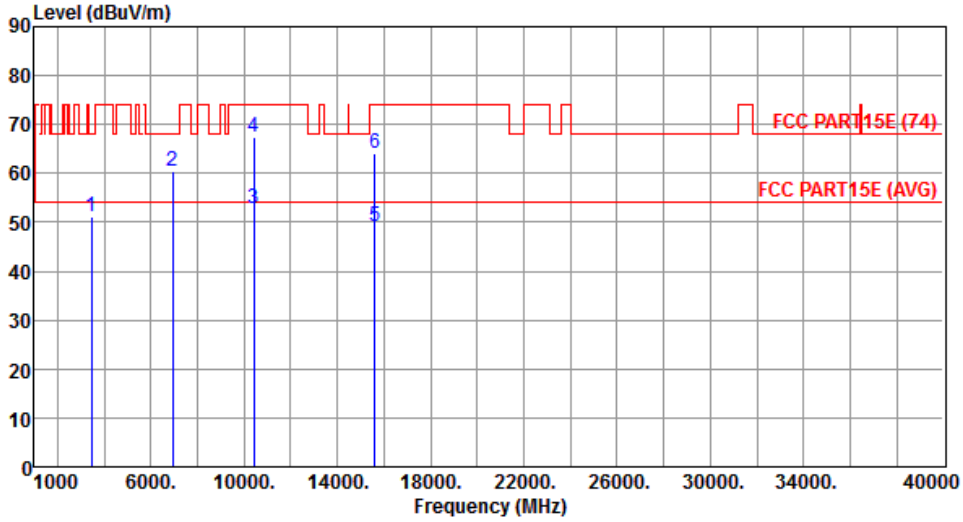
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	3466.67	51.58	68.20	-16.62	54.57	-2.99	Peak	---	---
2	6933.60	59.58	68.20	-8.62	52.26	7.32	Peak	---	---
3	10400.00	50.61	54.00	-3.39	35.44	15.17	Average	---	---
4	10400.00	64.29	74.00	-9.71	49.12	15.17	Peak	---	---
5	15600.00	49.24	54.00	-4.76	32.85	16.39	Average	---	---
6	15600.00	62.80	74.00	-11.20	46.41	16.39	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).

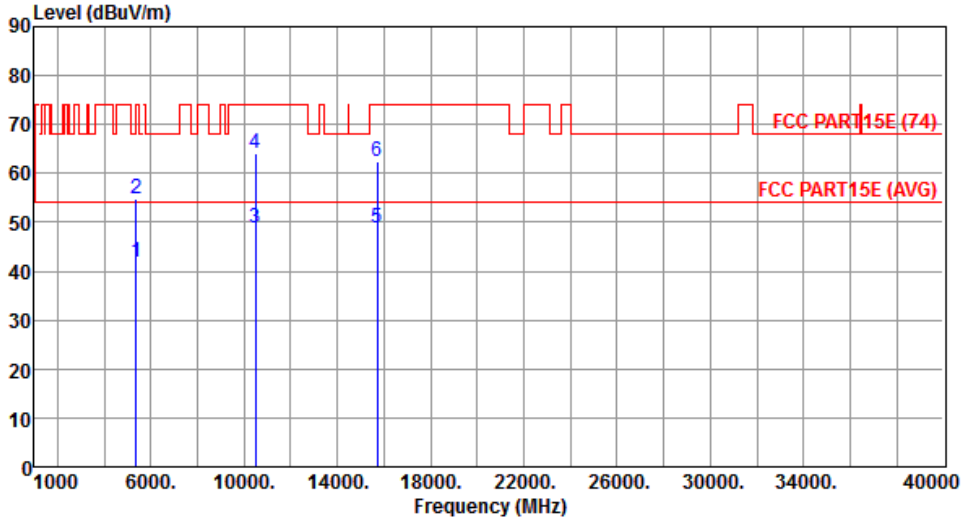
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	3466.67	51.26	68.20	-16.94	54.25	-2.99	Peak	---	---
2	6933.60	60.31	68.20	-7.89	52.99	7.32	Peak	---	---
3	10400.00	52.70	54.00	-1.30	37.53	15.17	Average	---	---
4	10400.00	67.30	74.00	-6.70	52.13	15.17	Peak	---	---
5	15600.00	49.28	54.00	-4.72	32.89	16.39	Average	---	---
6	15600.00	64.09	74.00	-9.91	47.70	16.39	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).

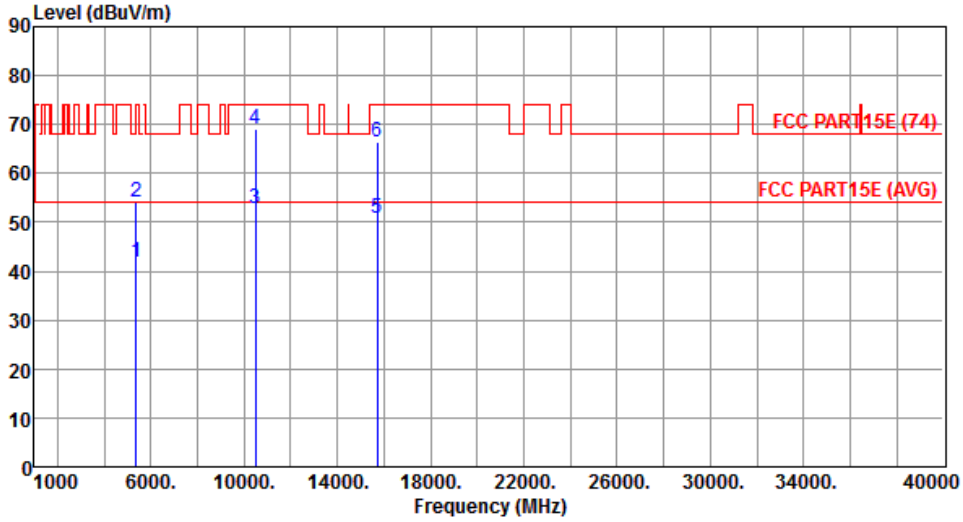
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		



	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	41.78	54.00	-12.22	39.80	1.98	Average	---	---
2	5350.00	54.81	74.00	-19.19	52.83	1.98	Peak	---	---
3	10480.00	48.68	54.00	-5.32	33.20	15.48	Average	---	---
4	10480.00	63.98	74.00	-10.02	48.50	15.48	Peak	---	---
5	15720.00	48.96	54.00	-5.04	32.82	16.14	Average	---	---
6	15720.00	62.60	74.00	-11.40	46.46	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).

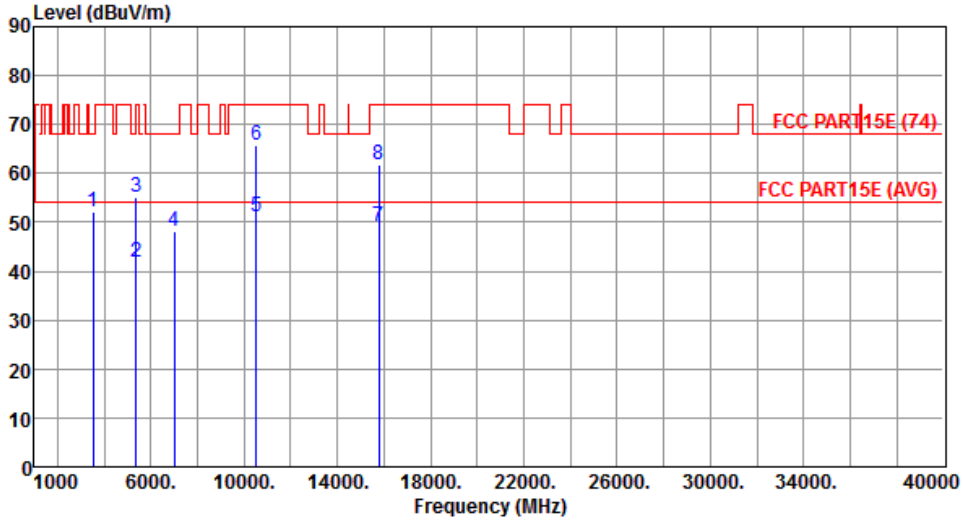
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



	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	41.97	54.00	-12.03	39.99	1.98	Average	---	---
2	5350.00	54.15	74.00	-19.85	52.17	1.98	Peak	---	---
3	10480.00	52.89	54.00	-1.11	37.41	15.48	Average	---	---
4	10480.00	69.11	74.00	-4.89	53.63	15.48	Peak	---	---
5	15720.00	50.86	54.00	-3.14	34.72	16.14	Average	---	---
6	15720.00	66.39	74.00	-7.61	50.25	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).

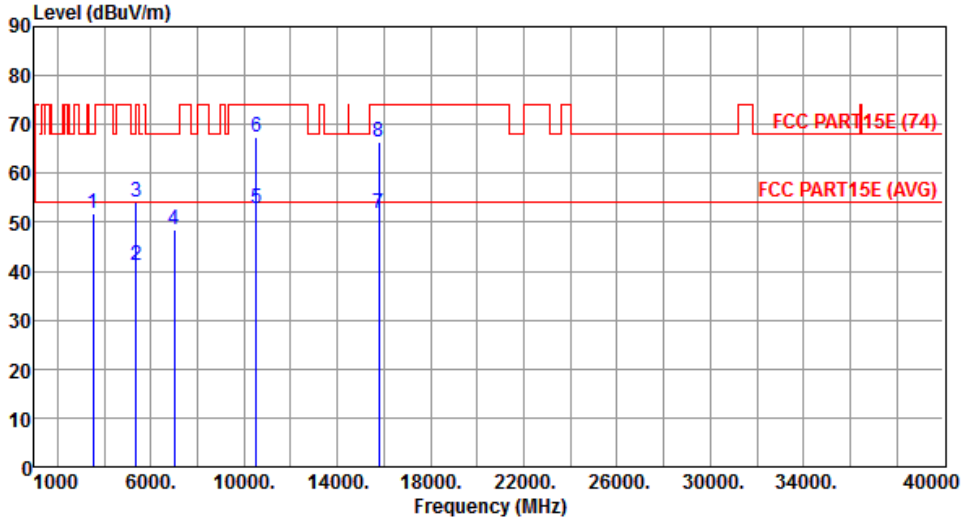
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	3506.70	52.15	68.20	-16.05	55.07	-2.92	Peak	---	---
2	5350.00	41.85	54.00	-12.15	39.87	1.98	Average	---	---
3	5350.00	55.06	74.00	-18.94	53.08	1.98	Peak	---	---
4	7013.30	48.13	68.20	-20.07	40.30	7.83	Peak	---	---
5	10520.00	51.18	54.00	-2.82	35.60	15.58	Average	---	---
6	10520.00	65.91	74.00	-8.09	50.33	15.58	Peak	---	---
7	15780.00	49.06	54.00	-4.94	33.03	16.03	Average	---	---
8	15780.00	61.77	74.00	-12.23	45.74	16.03	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).

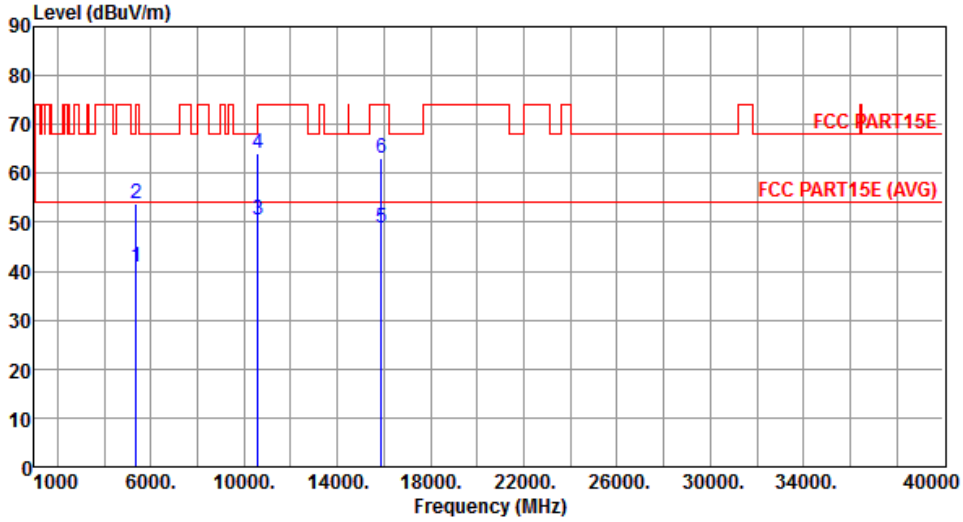
Modulation	11a	Test Freq. (MHz)	5260
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	3506.70	51.97	68.20	-16.23	54.89	-2.92	Peak	---	---
2	5350.00	41.33	54.00	-12.67	39.35	1.98	Average	---	---
3	5350.00	54.22	74.00	-19.78	52.24	1.98	Peak	---	---
4	7013.30	48.55	68.20	-19.65	40.72	7.83	Peak	---	---
5	10520.00	52.69	54.00	-1.31	37.11	15.58	Average	---	---
6	10520.00	67.51	74.00	-6.49	51.93	15.58	Peak	---	---
7	15780.00	51.89	54.00	-2.11	35.86	16.03	Average	---	---
8	15780.00	66.53	74.00	-7.47	50.50	16.03	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).

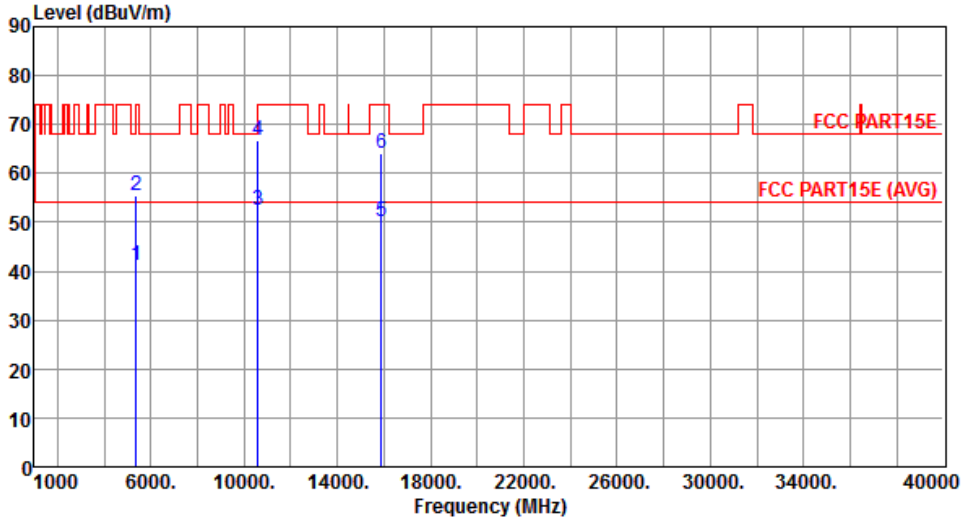
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Horizontal		



	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	40.96	54.00	-13.04	38.98	1.98	Average	---	---
2	5350.00	53.69	74.00	-20.31	51.71	1.98	Peak	---	---
3	10600.00	50.37	54.00	-3.63	34.65	15.72	Average	---	---
4	10600.00	64.18	74.00	-9.82	48.46	15.72	Peak	---	---
5	15900.00	48.90	54.00	-5.10	33.12	15.78	Average	---	---
6	15900.00	63.21	74.00	-10.79	47.43	15.78	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).

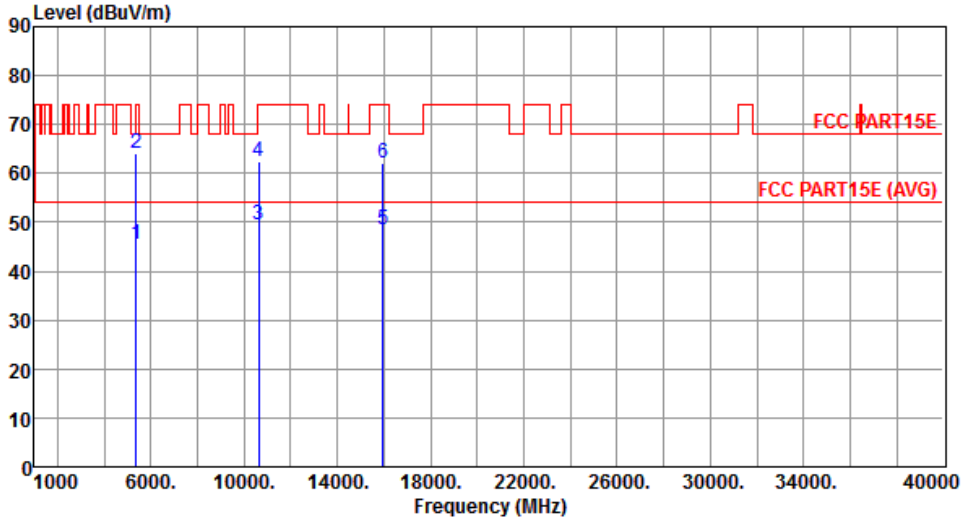
Modulation	11a	Test Freq. (MHz)	5300
Polarization	Vertical		



	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	41.15	54.00	-12.85	39.17	1.98	Average	---	---
2	5350.00	55.37	74.00	-18.63	53.39	1.98	Peak	---	---
3	10600.00	52.47	54.00	-1.53	36.75	15.72	Average	---	---
4	10600.00	66.82	74.00	-7.18	51.10	15.72	Peak	---	---
5	15900.00	50.12	54.00	-3.88	34.34	15.78	Average	---	---
6	15900.00	64.10	74.00	-9.90	48.32	15.78	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).

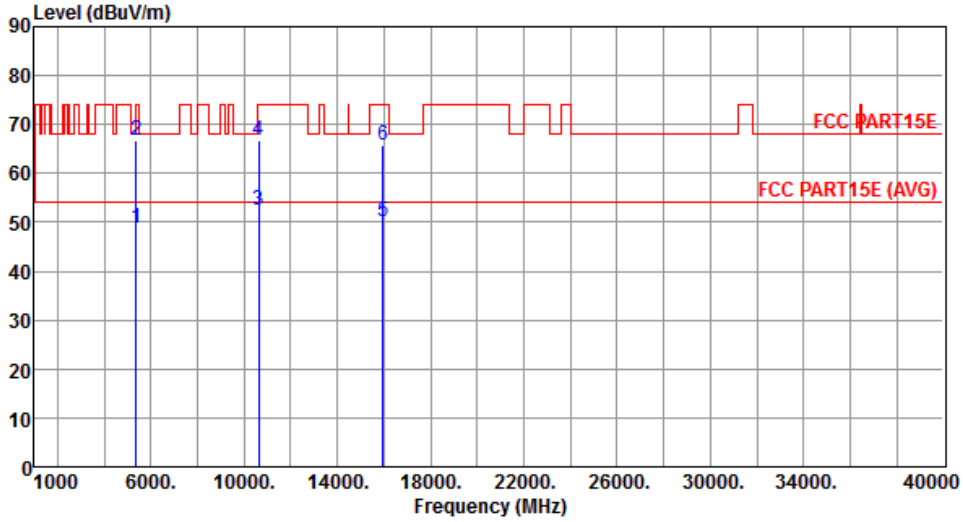
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Horizontal		



	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	45.65	54.00	-8.35	43.67	1.98	Average	---	---
2	5350.00	64.07	74.00	-9.93	62.09	1.98	Peak	---	---
3	10640.00	49.51	54.00	-4.49	33.72	15.79	Average	---	---
4	10640.00	62.51	74.00	-11.49	46.72	15.79	Peak	---	---
5	15960.00	48.55	54.00	-5.45	32.90	15.65	Average	---	---
6	15960.00	62.14	74.00	-11.86	46.49	15.65	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).

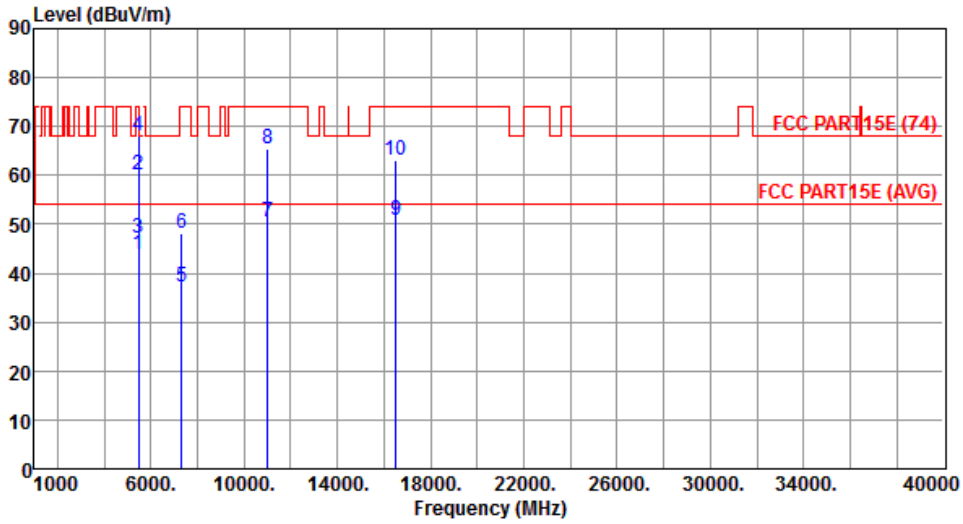
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Vertical		



	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	48.65	54.00	-5.35	46.67	1.98	Average	---	---
2	5350.00	66.75	74.00	-7.25	64.77	1.98	Peak	---	---
3	10640.00	52.37	54.00	-1.63	36.58	15.79	Average	---	---
4	10640.00	66.76	74.00	-7.24	50.97	15.79	Peak	---	---
5	15960.00	50.07	54.00	-3.93	34.42	15.65	Average	---	---
6	15960.00	65.66	74.00	-8.34	50.01	15.65	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).

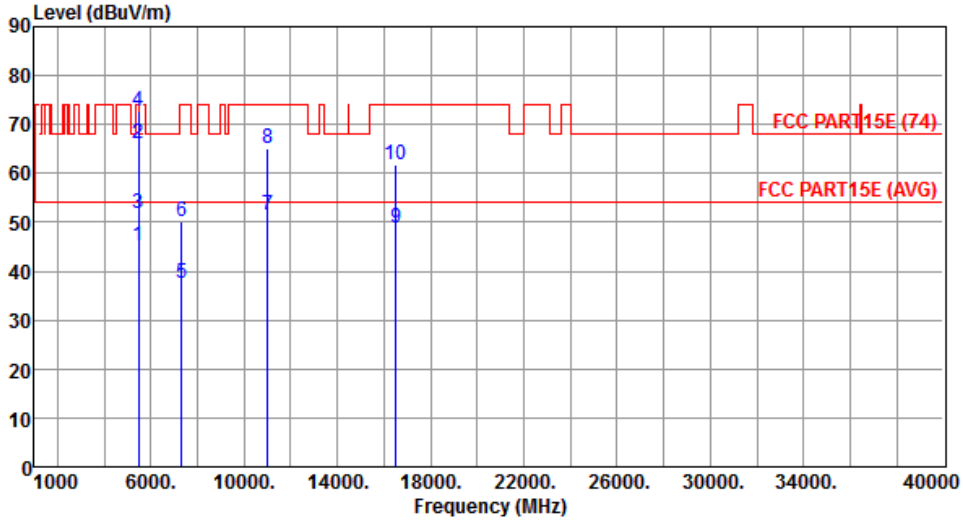
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Horizontal		



	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	43.77	54.00	-10.23	41.59	2.18	Average	---	---
2	5460.00	60.04	74.00	-13.96	57.86	2.18	Peak	---	---
3	5470.00	47.03	54.00	-6.97	44.83	2.20	Average	---	---
4	5470.00	68.23	74.00	-5.77	66.03	2.20	Peak	---	---
5	7333.30	37.04	54.00	-16.96	28.55	8.49	Average	---	---
6	7333.30	48.24	74.00	-25.76	39.75	8.49	Peak	---	---
7	11000.00	50.41	54.00	-3.59	33.98	16.43	Average	---	---
8	11000.00	65.33	74.00	-8.67	48.90	16.43	Peak	---	---
9	16500.00	50.92	54.00	-3.08	33.72	17.20	Average	---	---
10	16500.00	63.18	74.00	-10.82	45.98	17.20	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).

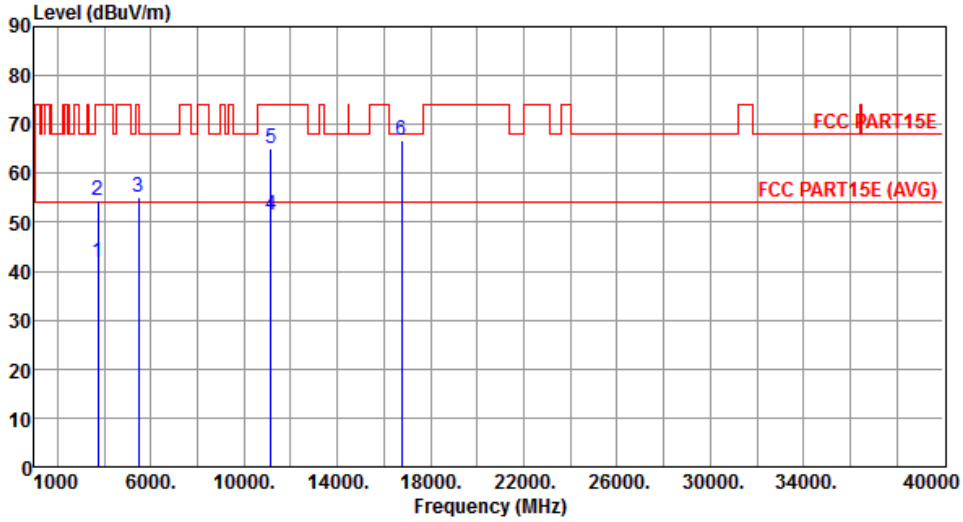
Modulation	11a	Test Freq. (MHz)	5500
Polarization	Vertical		



	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	45.11	54.00	-8.89	42.93	2.18	Average	---	---
2	5460.00	65.97	74.00	-8.03	63.79	2.18	Peak	---	---
3	5470.00	51.89	54.00	-2.11	49.69	2.20	Average	---	---
4	5470.00	72.75	74.00	-1.25	70.55	2.20	Peak	---	---
5	7333.30	37.53	54.00	-16.47	29.04	8.49	Average	---	---
6	7333.30	50.23	74.00	-23.77	41.74	8.49	Peak	---	---
7	11000.00	51.48	54.00	-2.52	35.05	16.43	Average	---	---
8	11000.00	65.09	74.00	-8.91	48.66	16.43	Peak	---	---
9	16500.00	48.98	54.00	-5.02	31.78	17.20	Average	---	---
10	16500.00	61.83	74.00	-12.17	44.63	17.20	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).

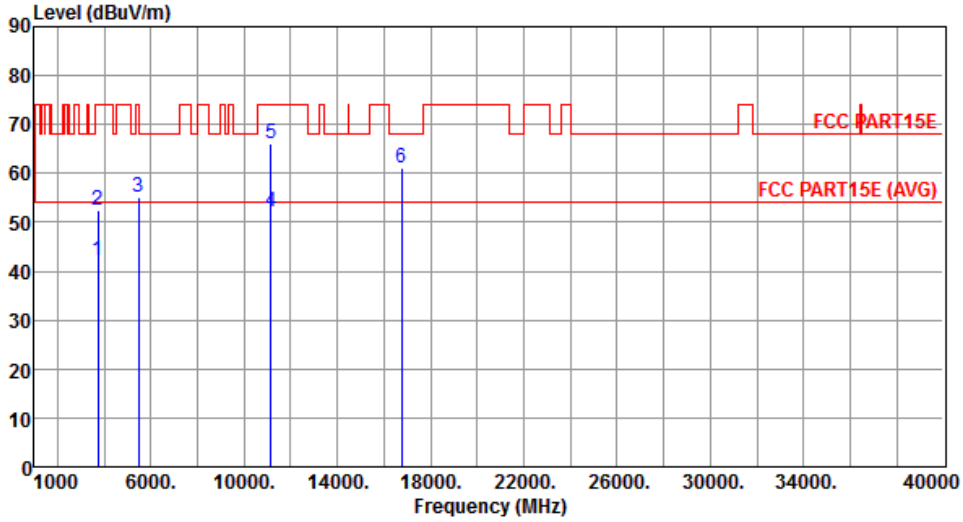
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	3720.00	42.00	54.00	-12.00	44.25	-2.25	Average	---	---
2	3720.00	54.42	74.00	-19.58	56.67	-2.25	Peak	---	---
3	5470.00	55.26	68.20	-12.94	53.06	2.20	Peak	---	---
4	11160.00	51.58	54.00	-2.42	35.38	16.20	Average	---	---
5	11160.00	65.11	74.00	-8.89	48.91	16.20	Peak	---	---
6	16740.00	66.89	68.20	-1.31	49.71	17.18	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).

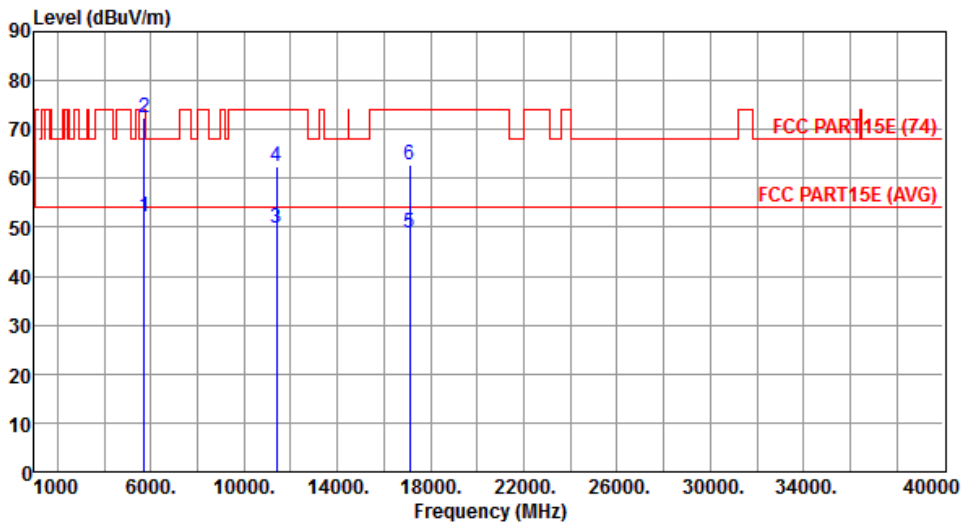
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	3720.00	42.32	54.00	-11.68	44.57	-2.25	Average	---	---
2	3720.00	52.52	74.00	-21.48	54.77	-2.25	Peak	---	---
3	5470.00	55.16	68.20	-13.04	52.96	2.20	Peak	---	---
4	11160.00	52.21	54.00	-1.79	36.01	16.20	Average	---	---
5	11160.00	65.93	74.00	-8.07	49.73	16.20	Peak	---	---
6	16740.00	61.16	68.20	-7.04	43.98	17.18	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).

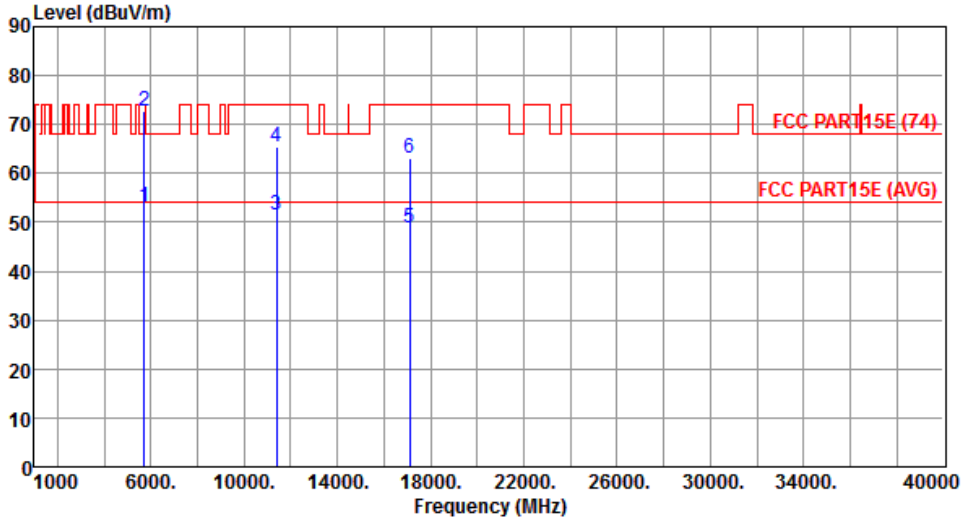
Modulation	11a	Test Freq. (MHz)	5700
Polarization	Horizontal		



	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	52.07	54.00	-1.93	49.33	2.74	Average	---	---
2	5725.00	72.24	74.00	-1.76	69.50	2.74	Peak	---	---
3	11400.00	49.72	54.00	-4.28	33.87	15.85	Average	---	---
4	11400.00	62.48	74.00	-11.52	46.63	15.85	Peak	---	---
5	17100.00	48.83	54.00	-5.17	31.20	17.63	Average	---	---
6	17100.00	62.66	74.00	-11.34	45.03	17.63	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).

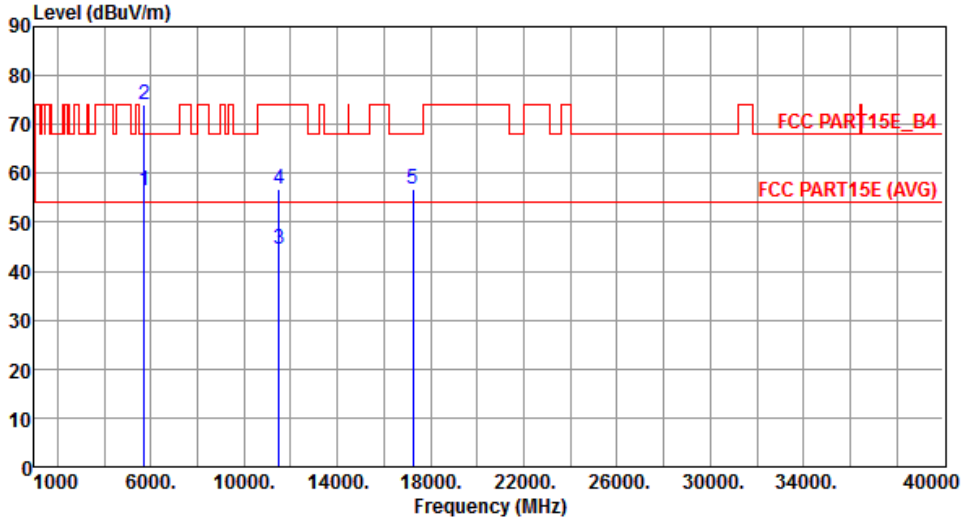
Modulation	11a	Test Freq. (MHz)	5700
Polarization	Vertical		



	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	53.00	54.00	-1.00	50.26	2.74	Average	---	---
2	5725.00	72.89	74.00	-1.11	70.15	2.74	Peak	---	---
3	11400.00	51.52	54.00	-2.48	35.67	15.85	Average	---	---
4	11400.00	65.50	74.00	-8.50	49.65	15.85	Peak	---	---
5	17100.00	48.96	54.00	-5.04	31.33	17.63	Average	---	---
6	17100.00	63.10	74.00	-10.90	45.47	17.63	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).

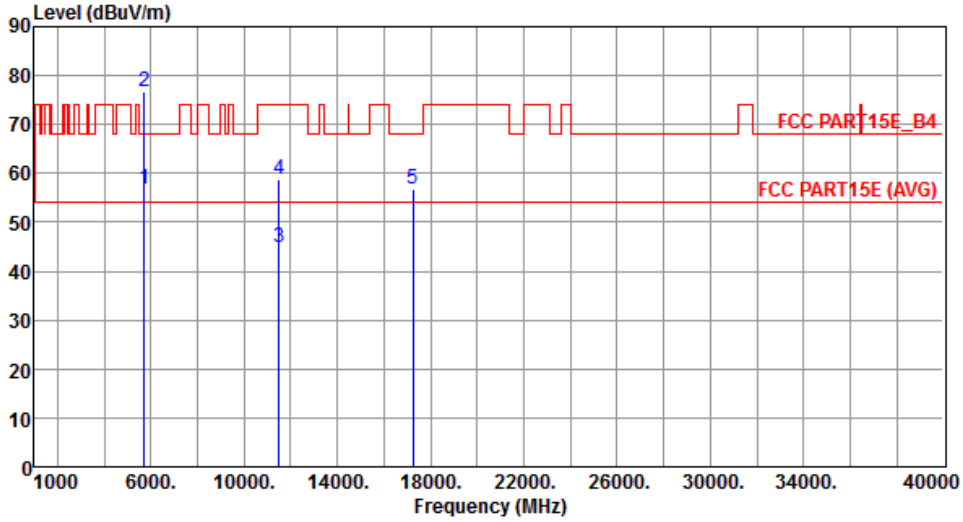
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		



	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	56.48	68.20	-11.72	53.75	2.73	Peak	---	---
2	5725.00	74.03	78.20	-4.17	71.29	2.74	Peak	---	---
3	11490.00	44.54	54.00	-9.46	28.84	15.70	Average	---	---
4	11490.00	56.93	74.00	-17.07	41.23	15.70	Peak	---	---
5	17235.00	56.76	68.20	-11.44	38.51	18.25	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).

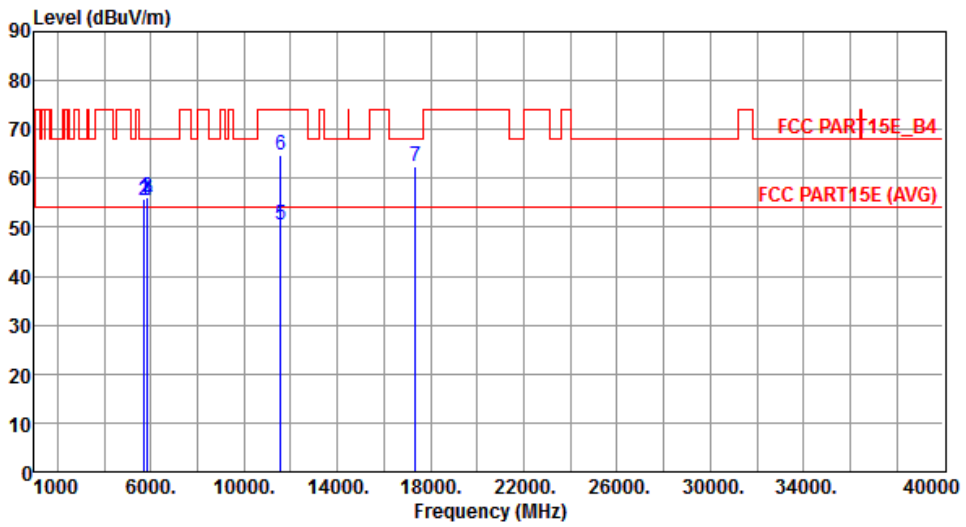
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		



	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	56.75	68.20	-11.45	54.02	2.73	Peak	---	---
2	5725.00	76.61	78.20	-1.59	73.87	2.74	Peak	---	---
3	11490.00	44.93	54.00	-9.07	29.23	15.70	Average	---	---
4	11490.00	58.82	74.00	-15.18	43.12	15.70	Peak	---	---
5	17235.00	56.91	68.20	-11.29	38.66	18.25	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).

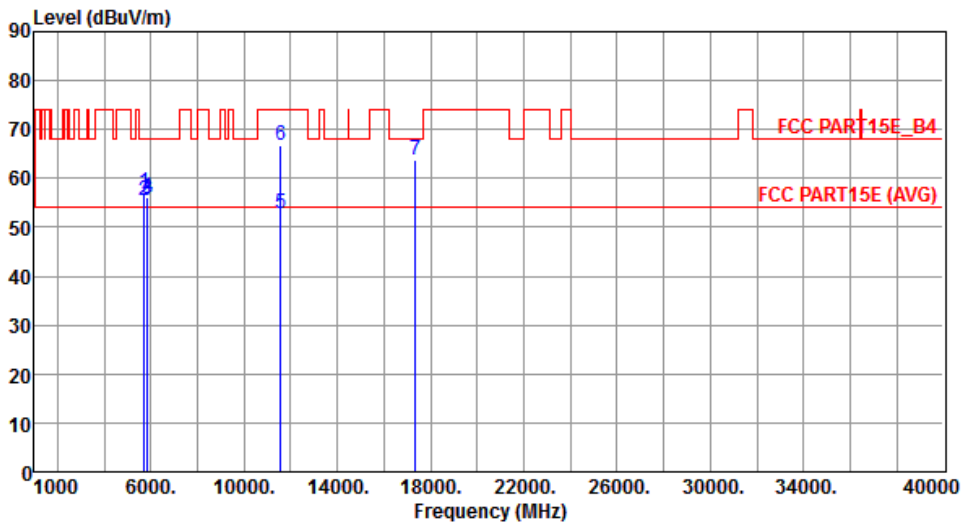
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		



	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	55.96	68.20	-12.24	53.23	2.73	Peak	---	---
2	5725.00	55.58	78.20	-22.62	52.84	2.74	Peak	---	---
3	5850.00	56.13	78.20	-22.07	53.15	2.98	Peak	---	---
4	5860.00	55.33	68.20	-12.87	52.34	2.99	Peak	---	---
5	11570.00	50.55	54.00	-3.45	35.00	15.55	Average	---	---
6	11570.00	64.62	74.00	-9.38	49.07	15.55	Peak	---	---
7	17355.00	62.37	68.20	-5.83	43.58	18.79	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).

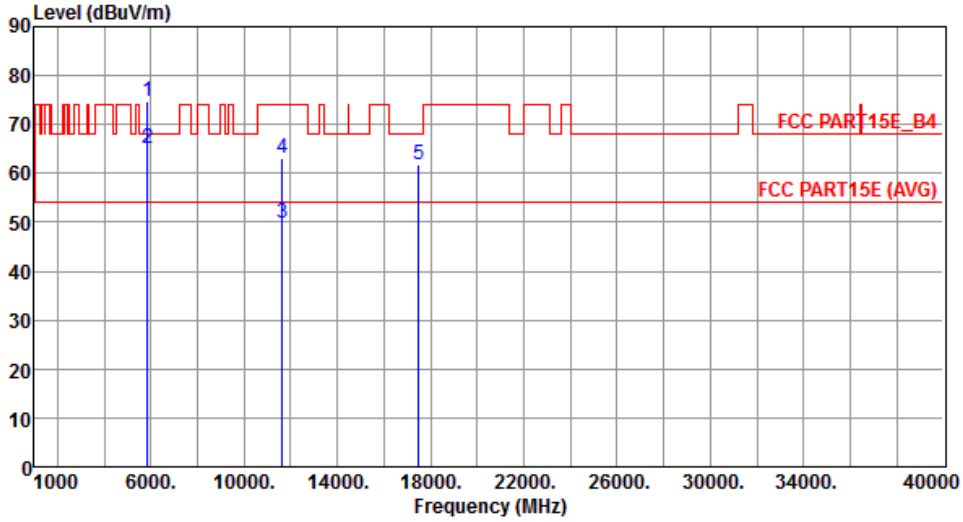
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		



	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	57.28	68.20	-10.92	54.55	2.73	Peak	---	---
2	5725.00	55.35	78.20	-22.85	52.61	2.74	Peak	---	---
3	5850.00	55.83	78.20	-22.37	52.85	2.98	Peak	---	---
4	5860.00	56.27	68.20	-11.93	53.28	2.99	Peak	---	---
5	11570.00	52.74	54.00	-1.26	37.19	15.55	Average	---	---
6	11570.00	66.84	74.00	-7.16	51.29	15.55	Peak	---	---
7	17355.00	63.92	68.20	-4.28	45.13	18.79	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).

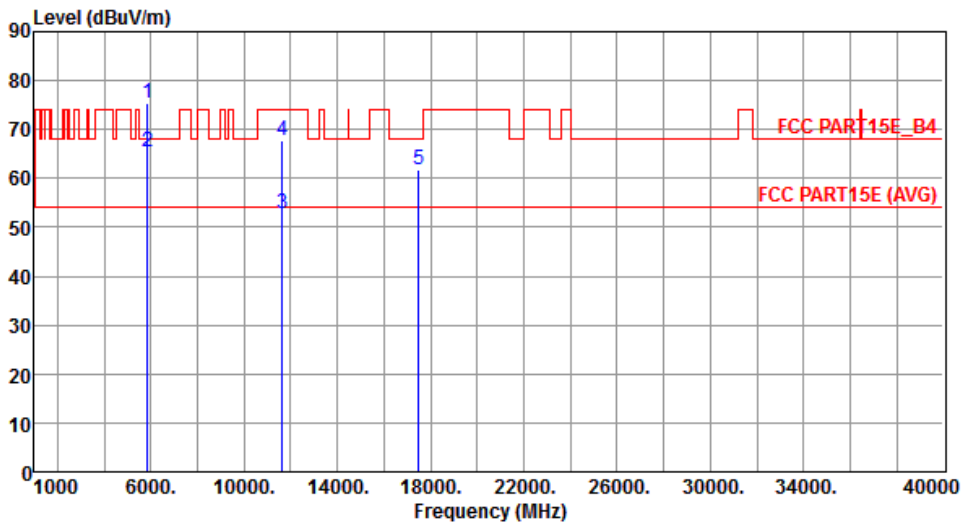
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		



	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	74.78	78.20	-3.42	71.80	2.98	Peak	---	---
2	5860.00	64.93	68.20	-3.27	61.94	2.99	Peak	---	---
3	11650.00	49.71	54.00	-4.29	34.32	15.39	Average	---	---
4	11650.00	63.17	74.00	-10.83	47.78	15.39	Peak	---	---
5	17475.00	61.63	68.20	-6.57	42.29	19.34	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)	5825
Polarization	Vertical		

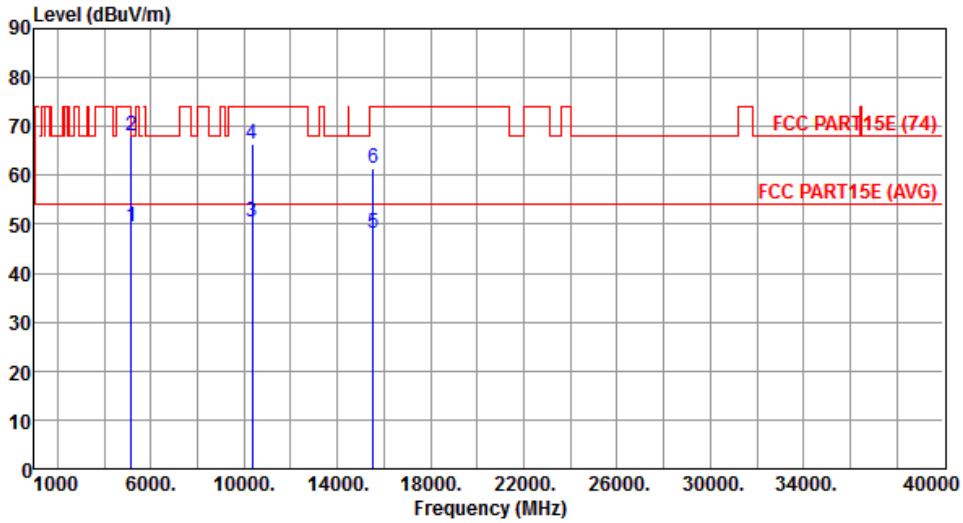


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	75.42	78.20	-2.78	72.44	2.98	Peak	---	---
2	5860.00	65.51	68.20	-2.69	62.52	2.99	Peak	---	---
3	11650.00	52.65	54.00	-1.35	37.26	15.39	Average	---	---
4	11650.00	67.85	74.00	-6.15	52.46	15.39	Peak	---	---
5	17475.00	61.81	68.20	-6.39	42.47	19.34	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).

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

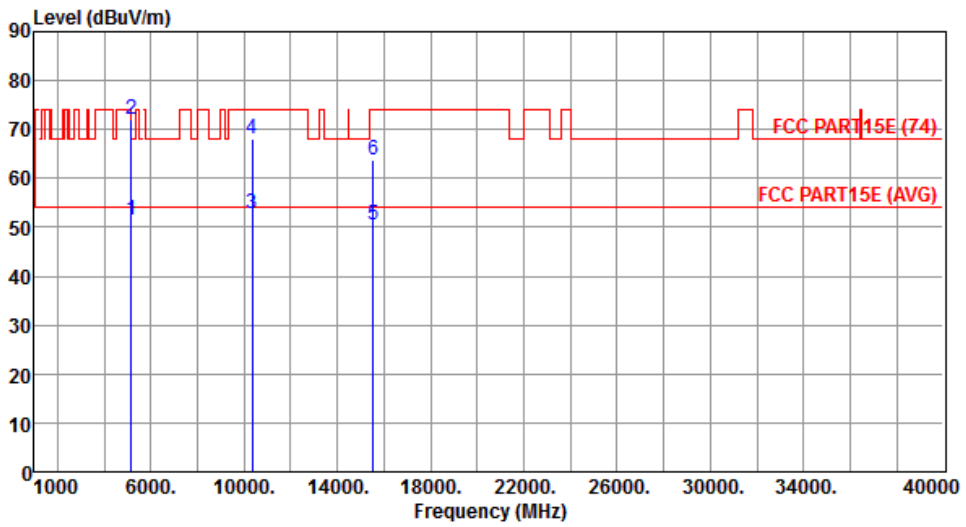
Modulation	HT20	**Test Freq. (MHz)**	5180
Polarization	Horizontal		



	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	49.49	54.00	-4.51	47.86	1.63	Average	---	---
2	5150.00	68.16	74.00	-5.84	66.53	1.63	Peak	---	---
3	10360.00	50.54	54.00	-3.46	35.52	15.02	Average	---	---
4	10360.00	66.49	74.00	-7.51	51.47	15.02	Peak	---	---
5	15540.00	48.06	54.00	-5.94	31.54	16.52	Average	---	---
6	15540.00	61.55	74.00	-12.45	45.03	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).

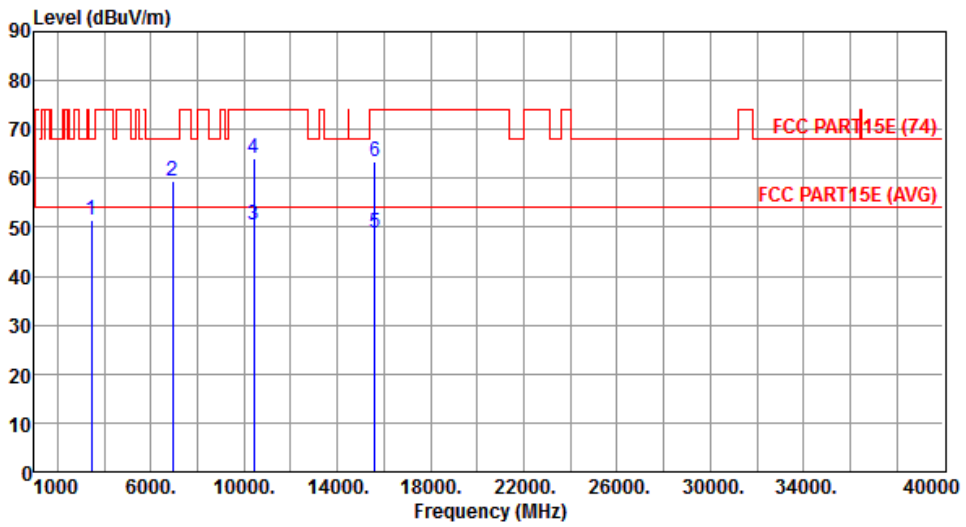
Modulation	HT20	Test Freq. (MHz)	5180
Polarization	Vertical		



	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	51.48	54.00	-2.52	49.85	1.63	Average	---	---
2	5150.00	72.19	74.00	-1.81	70.56	1.63	Peak	---	---
3	10360.00	52.70	54.00	-1.30	37.68	15.02	Average	---	---
4	10360.00	68.19	74.00	-5.81	53.17	15.02	Peak	---	---
5	15540.00	50.40	54.00	-3.60	33.88	16.52	Average	---	---
6	15540.00	63.82	74.00	-10.18	47.30	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).

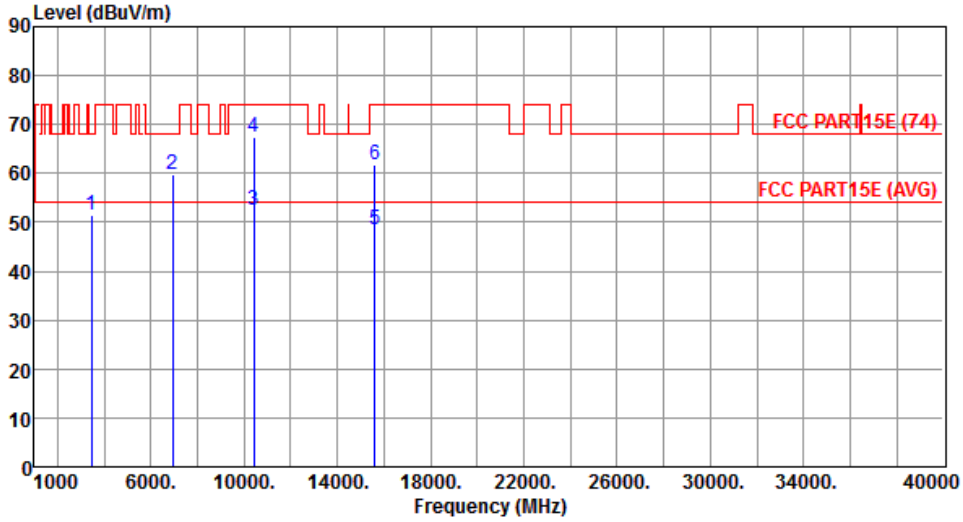
Modulation	HT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	3466.67	51.56	68.20	-16.64	54.55	-2.99	Peak	---	---
2	6933.60	59.52	68.20	-8.68	52.20	7.32	Peak	---	---
3	10400.00	50.44	54.00	-3.56	35.27	15.17	Average	---	---
4	10400.00	64.22	74.00	-9.78	49.05	15.17	Peak	---	---
5	15600.00	48.88	54.00	-5.12	32.49	16.39	Average	---	---
6	15600.00	63.52	74.00	-10.48	47.13	16.39	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).

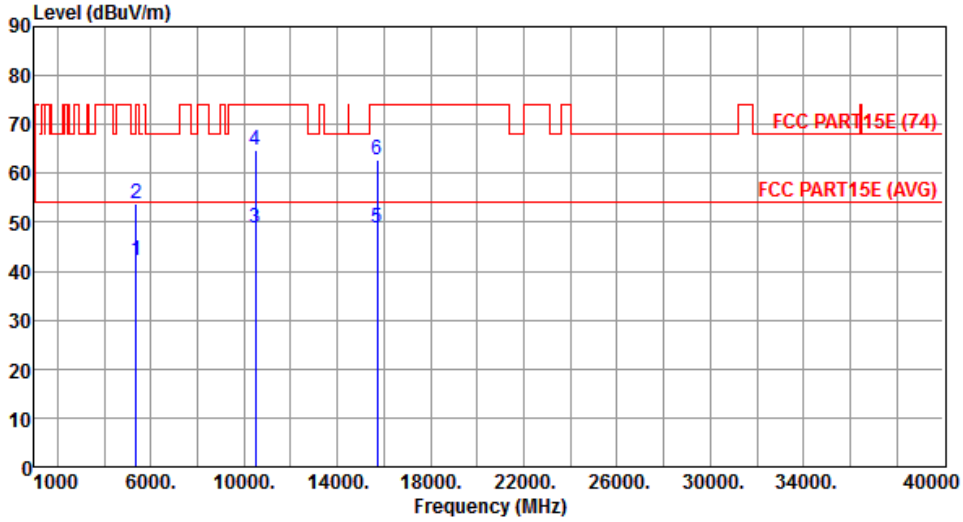
Modulation	HT20	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	3466.67	51.44	68.20	-16.76	54.43	-2.99	Peak	---	---
2	6933.60	59.64	68.20	-8.56	52.32	7.32	Peak	---	---
3	10400.00	52.56	54.00	-1.44	37.39	15.17	Average	---	---
4	10400.00	67.57	74.00	-6.43	52.40	15.17	Peak	---	---
5	15600.00	48.61	54.00	-5.39	32.22	16.39	Average	---	---
6	15600.00	61.75	74.00	-12.25	45.36	16.39	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).

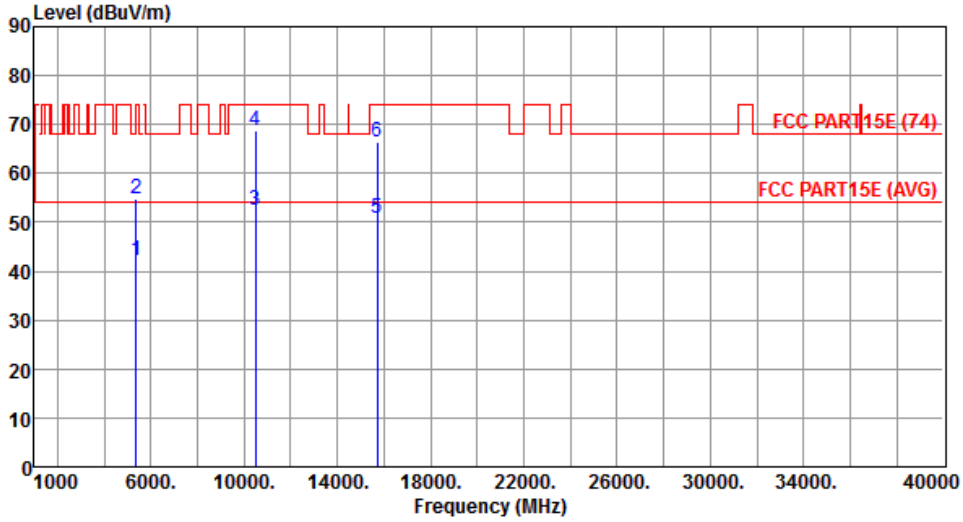
Modulation	HT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



	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	42.10	54.00	-11.90	40.12	1.98	Average	---	---
2	5350.00	53.97	74.00	-20.03	51.99	1.98	Peak	---	---
3	10480.00	48.98	54.00	-5.02	33.50	15.48	Average	---	---
4	10480.00	64.59	74.00	-9.41	49.11	15.48	Peak	---	---
5	15720.00	48.91	54.00	-5.09	32.77	16.14	Average	---	---
6	15720.00	62.90	74.00	-11.10	46.76	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).

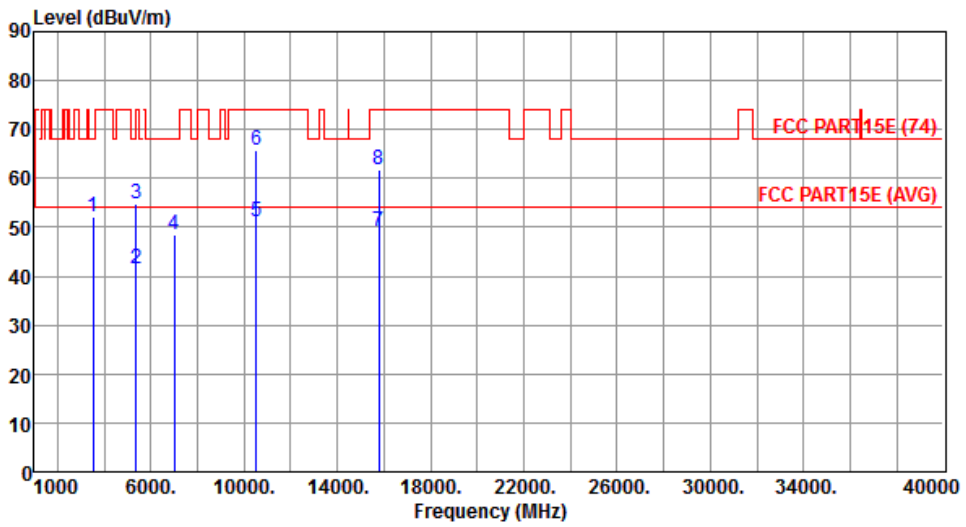
Modulation	HT20	Test Freq. (MHz)	5240
Polarization	Vertical		



	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	42.19	54.00	-11.81	40.21	1.98	Average	---	---
2	5350.00	54.76	74.00	-19.24	52.78	1.98	Peak	---	---
3	10480.00	52.49	54.00	-1.51	37.01	15.48	Average	---	---
4	10480.00	68.85	74.00	-5.15	53.37	15.48	Peak	---	---
5	15720.00	50.68	54.00	-3.32	34.54	16.14	Average	---	---
6	15720.00	66.32	74.00	-7.68	50.18	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).

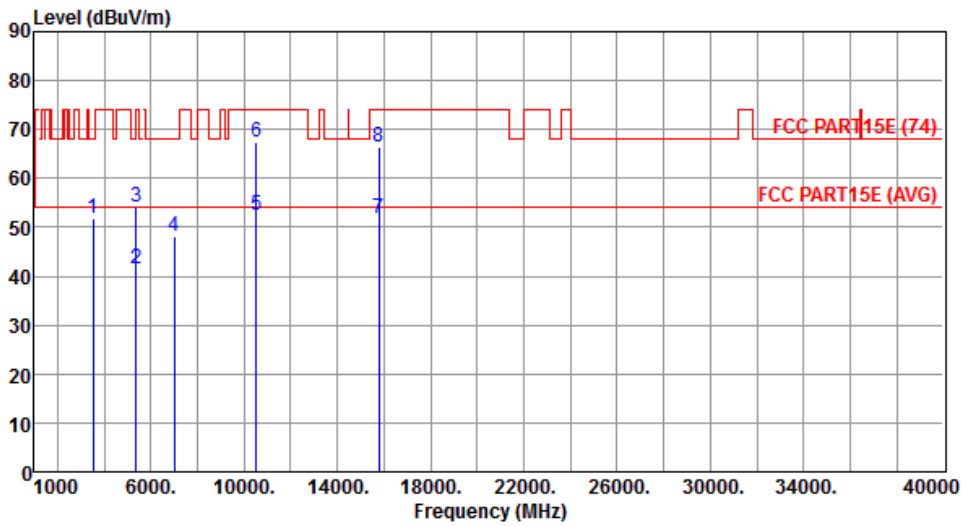
Modulation	HT20	Test Freq. (MHz)	5260
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	3506.70	52.06	68.20	-16.14	54.98	-2.92	Peak	---	---
2	5350.00	41.65	54.00	-12.35	39.67	1.98	Average	---	---
3	5350.00	54.69	74.00	-19.31	52.71	1.98	Peak	---	---
4	7013.30	48.39	68.20	-19.81	40.56	7.83	Peak	---	---
5	10520.00	51.07	54.00	-2.93	35.49	15.58	Average	---	---
6	10520.00	65.83	74.00	-8.17	50.25	15.58	Peak	---	---
7	15780.00	49.00	54.00	-5.00	32.97	16.03	Average	---	---
8	15780.00	61.63	74.00	-12.37	45.60	16.03	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).

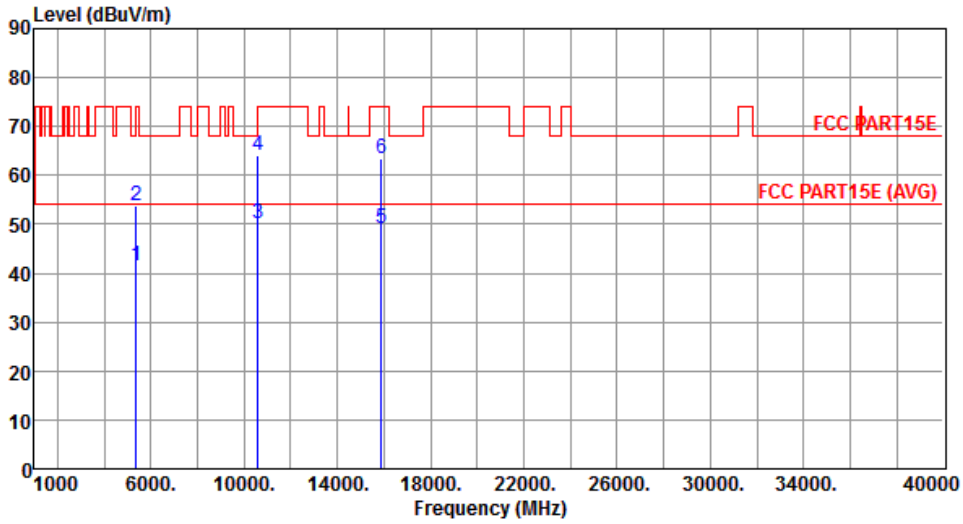
Modulation	HT20	Test Freq. (MHz)	5260
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	3506.70	51.85	68.20	-16.35	54.77	-2.92	Peak	---	---
2	5350.00	41.62	54.00	-12.38	39.64	1.98	Average	---	---
3	5350.00	54.30	74.00	-19.70	52.32	1.98	Peak	---	---
4	7013.30	48.07	68.20	-20.13	40.24	7.83	Peak	---	---
5	10520.00	52.53	54.00	-1.47	36.95	15.58	Average	---	---
6	10520.00	67.36	74.00	-6.64	51.78	15.58	Peak	---	---
7	15780.00	51.67	54.00	-2.33	35.64	16.03	Average	---	---
8	15780.00	66.39	74.00	-7.61	50.36	16.03	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).

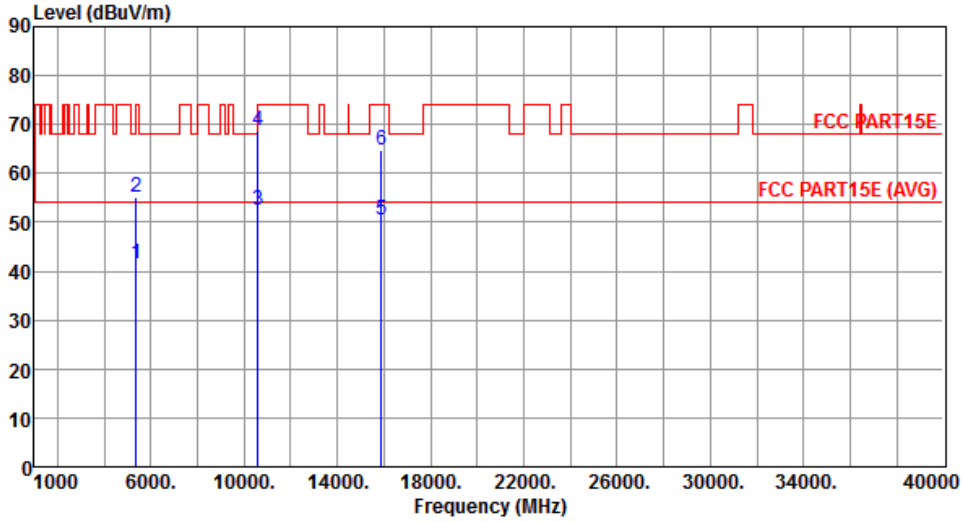
Modulation	HT20	Test Freq. (MHz)	5300
Polarization	Horizontal		



	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	41.62	54.00	-12.38	39.64	1.98	Average	---	---
2	5350.00	53.94	74.00	-20.06	51.96	1.98	Peak	---	---
3	10600.00	50.27	54.00	-3.73	34.55	15.72	Average	---	---
4	10600.00	64.25	74.00	-9.75	48.53	15.72	Peak	---	---
5	15900.00	49.21	54.00	-4.79	33.43	15.78	Average	---	---
6	15900.00	63.46	74.00	-10.54	47.68	15.78	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).

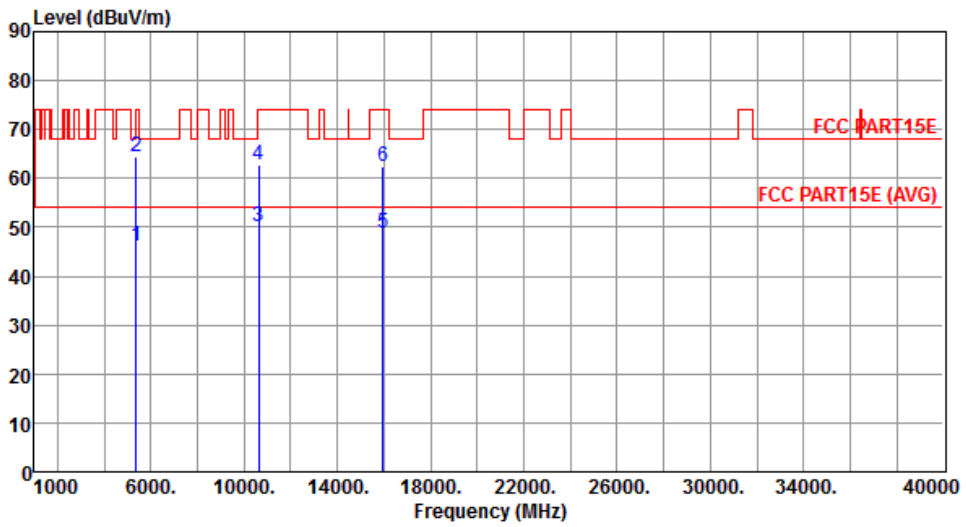
Modulation	HT20	Test Freq. (MHz)	5300
Polarization	Vertical		



	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	41.51	54.00	-12.49	39.53	1.98	Average	---	---
2	5350.00	55.17	74.00	-18.83	53.19	1.98	Peak	---	---
3	10600.00	52.57	54.00	-1.43	36.85	15.72	Average	---	---
4	10600.00	68.79	74.00	-5.21	53.07	15.72	Peak	---	---
5	15900.00	50.39	54.00	-3.61	34.61	15.78	Average	---	---
6	15900.00	64.71	74.00	-9.29	48.93	15.78	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).

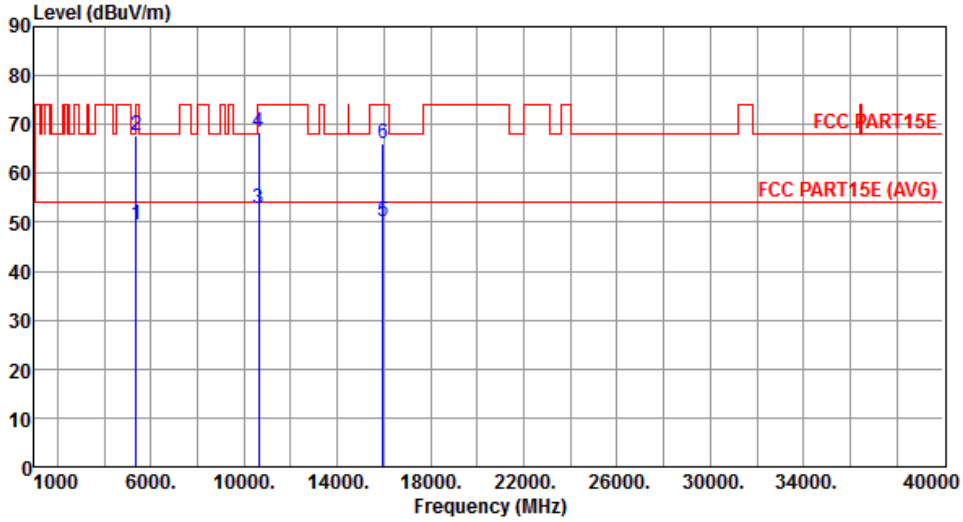
Modulation	HT20	Test Freq. (MHz)	5320
Polarization	Horizontal		



	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	46.24	54.00	-7.76	44.26	1.98	Average	---	---
2	5350.00	64.36	74.00	-9.64	62.38	1.98	Peak	---	---
3	10640.00	49.99	54.00	-4.01	34.20	15.79	Average	---	---
4	10640.00	62.75	74.00	-11.25	46.96	15.79	Peak	---	---
5	15960.00	48.77	54.00	-5.23	33.12	15.65	Average	---	---
6	15960.00	62.38	74.00	-11.62	46.73	15.65	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).

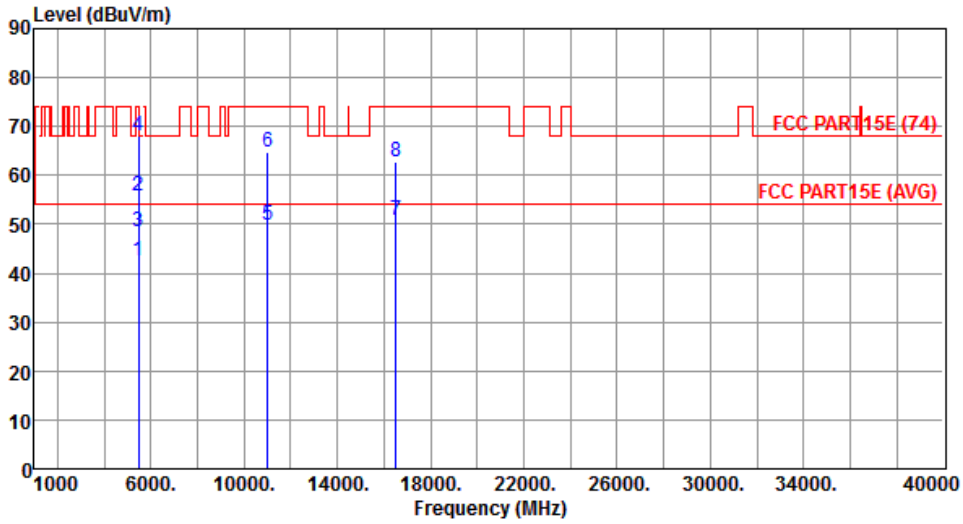
Modulation	HT20	Test Freq. (MHz)	5320
Polarization	Vertical		



	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	49.60	54.00	-4.40	47.62	1.98	Average	---	---
2	5350.00	67.72	74.00	-6.28	65.74	1.98	Peak	---	---
3	10640.00	52.74	54.00	-1.26	36.95	15.79	Average	---	---
4	10640.00	68.44	74.00	-5.56	52.65	15.79	Peak	---	---
5	15960.00	50.28	54.00	-3.72	34.63	15.65	Average	---	---
6	15960.00	66.07	74.00	-7.93	50.42	15.65	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).

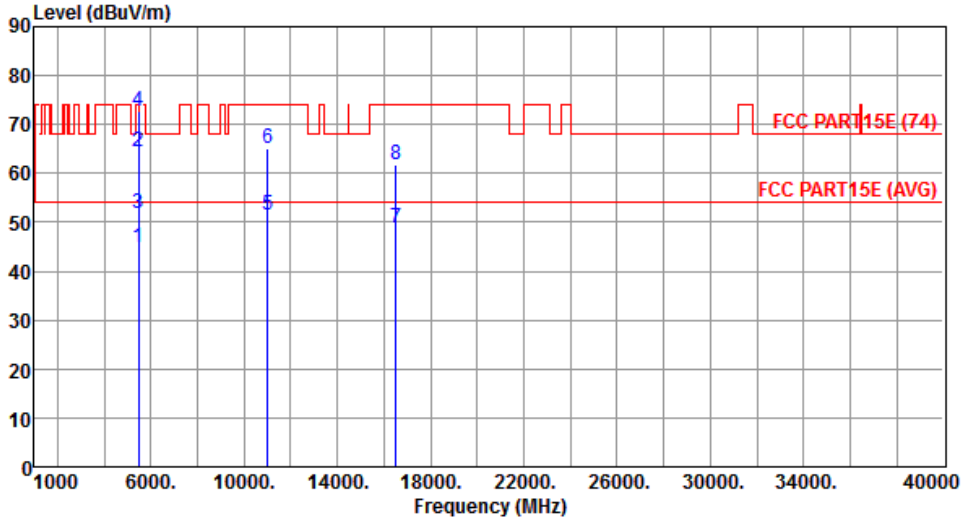
Modulation	HT20	Test Freq. (MHz)	5500
Polarization	Horizontal		



	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	42.65	54.00	-11.35	40.47	2.18	Average	---	---
2	5460.00	55.88	74.00	-18.12	53.70	2.18	Peak	---	---
3	5470.00	48.62	54.00	-5.38	46.42	2.20	Average	---	---
4	5470.00	68.10	74.00	-5.90	65.90	2.20	Peak	---	---
5	11000.00	49.96	54.00	-4.04	33.53	16.43	Average	---	---
6	11000.00	64.85	74.00	-9.15	48.42	16.43	Peak	---	---
7	16500.00	50.72	54.00	-3.28	33.52	17.20	Average	---	---
8	16500.00	62.93	74.00	-11.07	45.73	17.20	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).

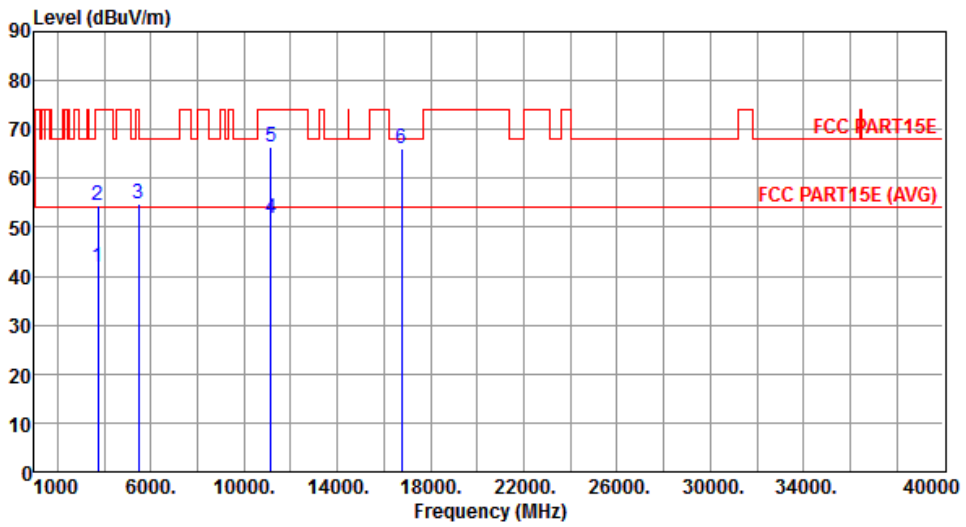
Modulation	HT20	Test Freq. (MHz)	5500
Polarization	Vertical		



	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	44.71	54.00	-9.29	42.53	2.18	Average	---	---
2	5460.00	64.43	74.00	-9.57	62.25	2.18	Peak	---	---
3	5470.00	51.73	54.00	-2.27	49.53	2.20	Average	---	---
4	5470.00	72.62	74.00	-1.38	70.42	2.20	Peak	---	---
5	11000.00	51.44	54.00	-2.56	35.01	16.43	Average	---	---
6	11000.00	64.96	74.00	-9.04	48.53	16.43	Peak	---	---
7	16500.00	48.68	54.00	-5.32	31.48	17.20	Average	---	---
8	16500.00	61.63	74.00	-12.37	44.43	17.20	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).

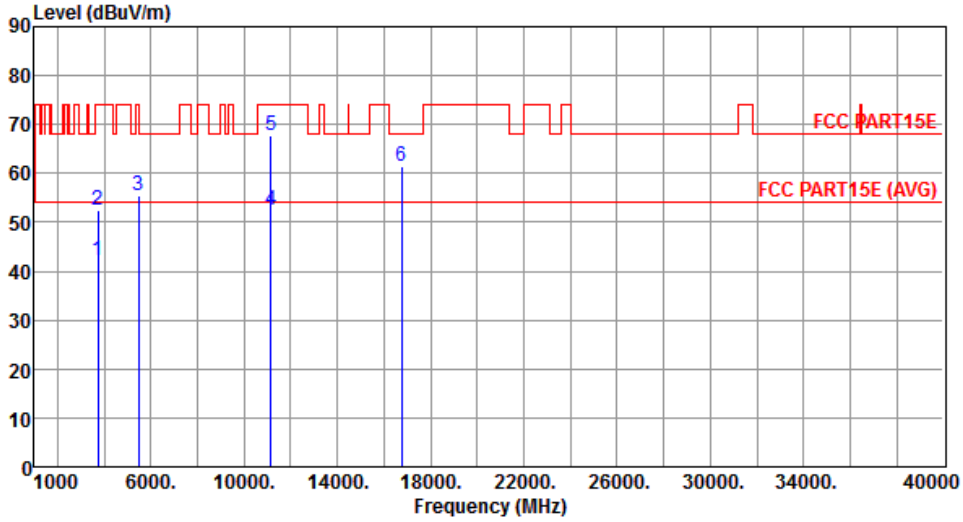
Modulation	HT20	Test Freq. (MHz)	5580
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	3720.00	41.90	54.00	-12.10	44.15	-2.25	Average	---	---
2	3720.00	54.48	74.00	-19.52	56.73	-2.25	Peak	---	---
3	5470.00	54.84	68.20	-13.36	52.64	2.20	Peak	---	---
4	11160.00	51.76	54.00	-2.24	35.56	16.20	Average	---	---
5	11160.00	66.31	74.00	-7.69	50.11	16.20	Peak	---	---
6	16740.00	65.95	68.20	-2.25	48.77	17.18	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).

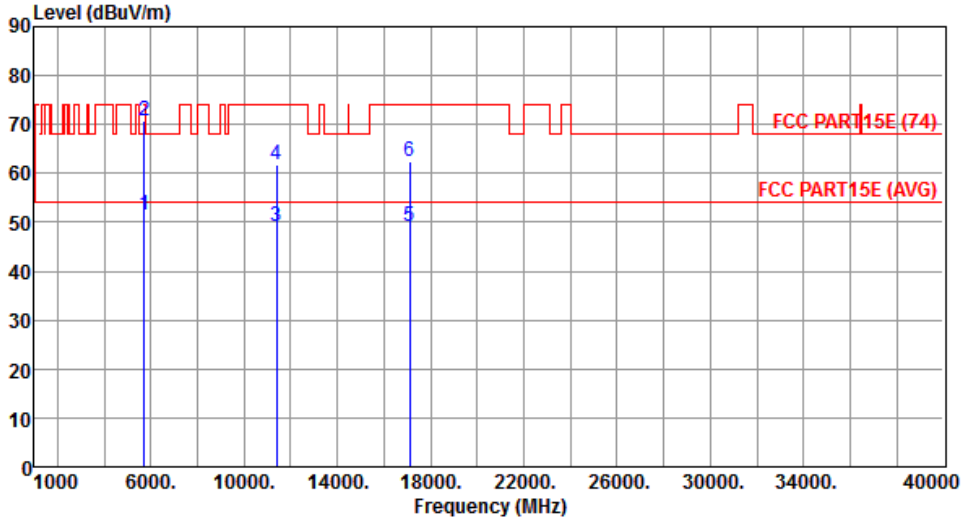
Modulation	HT20	Test Freq. (MHz)	5580
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	3720.00	42.09	54.00	-11.91	44.34	-2.25	Average	---	---
2	3720.00	52.43	74.00	-21.57	54.68	-2.25	Peak	---	---
3	5470.00	55.51	68.20	-12.69	53.31	2.20	Peak	---	---
4	11160.00	52.61	54.00	-1.39	36.41	16.20	Average	---	---
5	11160.00	67.62	74.00	-6.38	51.42	16.20	Peak	---	---
6	16740.00	61.39	68.20	-6.81	44.21	17.18	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).

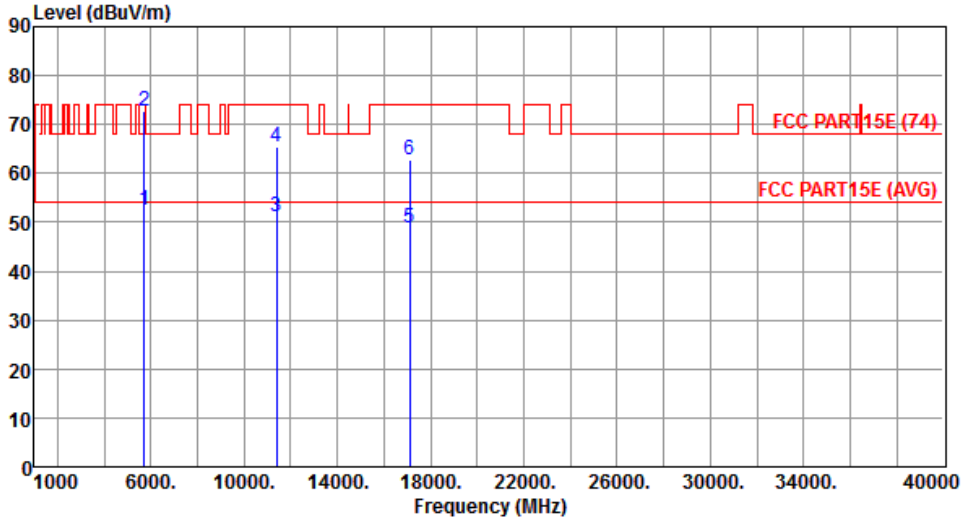
Modulation	HT20	Test Freq. (MHz)	5700
Polarization	Horizontal		



	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	51.56	54.00	-2.44	48.82	2.74	Average	---	---
2	5725.00	70.90	74.00	-3.10	68.16	2.74	Peak	---	---
3	11400.00	49.00	54.00	-5.00	33.15	15.85	Average	---	---
4	11400.00	61.83	74.00	-12.17	45.98	15.85	Peak	---	---
5	17100.00	49.08	54.00	-4.92	31.45	17.63	Average	---	---
6	17100.00	62.49	74.00	-11.51	44.86	17.63	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).

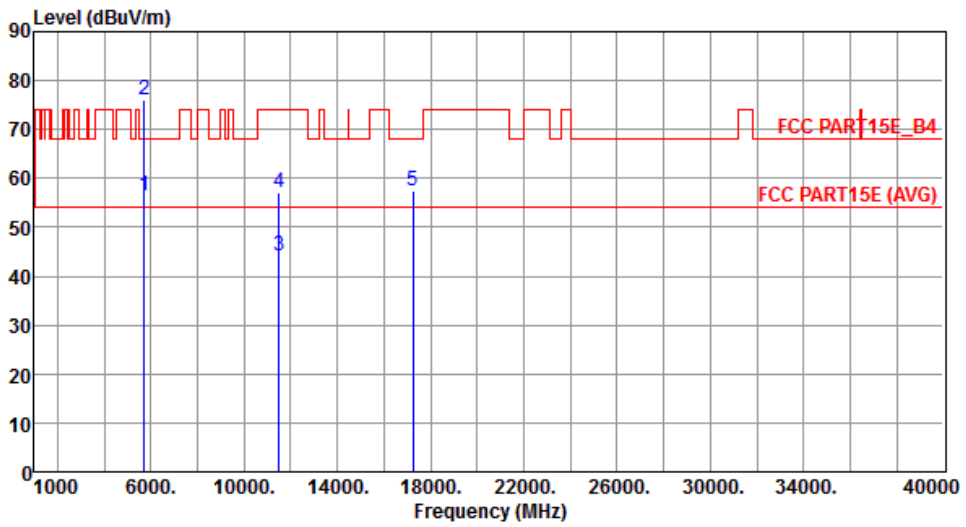
Modulation	HT20	Test Freq. (MHz)	5700
Polarization	Vertical		



	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	52.57	54.00	-1.43	49.83	2.74	Average	---	---
2	5725.00	72.77	74.00	-1.23	70.03	2.74	Peak	---	---
3	11400.00	51.06	54.00	-2.94	35.21	15.85	Average	---	---
4	11400.00	65.38	74.00	-8.62	49.53	15.85	Peak	---	---
5	17100.00	48.68	54.00	-5.32	31.05	17.63	Average	---	---
6	17100.00	62.87	74.00	-11.13	45.24	17.63	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).

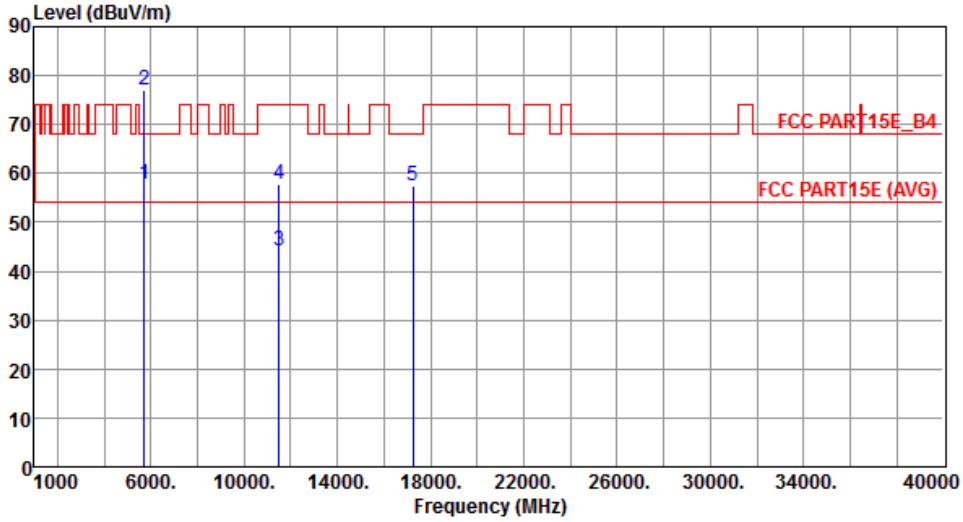
Modulation	HT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



	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	56.55	68.20	-11.65	53.82	2.73	Peak	---	---
2	5725.00	76.20	78.20	-2.00	73.46	2.74	Peak	---	---
3	11490.00	44.24	54.00	-9.76	28.54	15.70	Average	---	---
4	11490.00	57.16	74.00	-16.84	41.46	15.70	Peak	---	---
5	17235.00	57.56	68.20	-10.64	39.31	18.25	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).

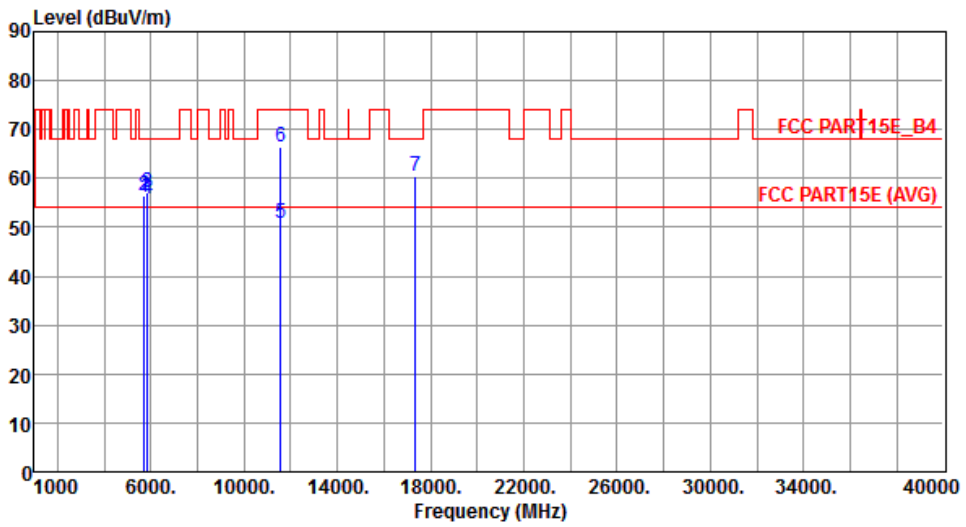
Modulation	HT20	Test Freq. (MHz)	5745
Polarization	Vertical		



	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	57.72	68.20	-10.48	54.99	2.73	Peak	---	---
2	5725.00	76.93	78.20	-1.27	74.19	2.74	Peak	---	---
3	11490.00	44.16	54.00	-9.84	28.46	15.70	Average	---	---
4	11490.00	57.83	74.00	-16.17	42.13	15.70	Peak	---	---
5	17235.00	57.40	68.20	-10.80	39.15	18.25	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).

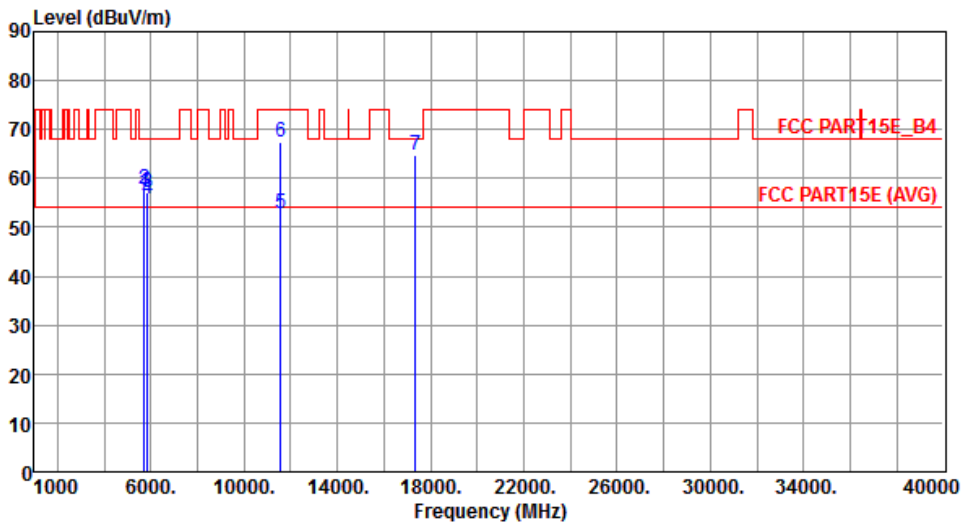
Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	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	56.11	68.20	-12.09	53.38	2.73	Peak	---	---
2	5725.00	56.42	78.20	-21.78	53.68	2.74	Peak	---	---
3	5850.00	57.09	78.20	-21.11	54.11	2.98	Peak	---	---
4	5860.00	55.76	68.20	-12.44	52.77	2.99	Peak	---	---
5	11570.00	50.79	54.00	-3.21	35.24	15.55	Average	---	---
6	11570.00	66.44	74.00	-7.56	50.89	15.55	Peak	---	---
7	17355.00	60.49	68.20	-7.71	41.70	18.79	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).

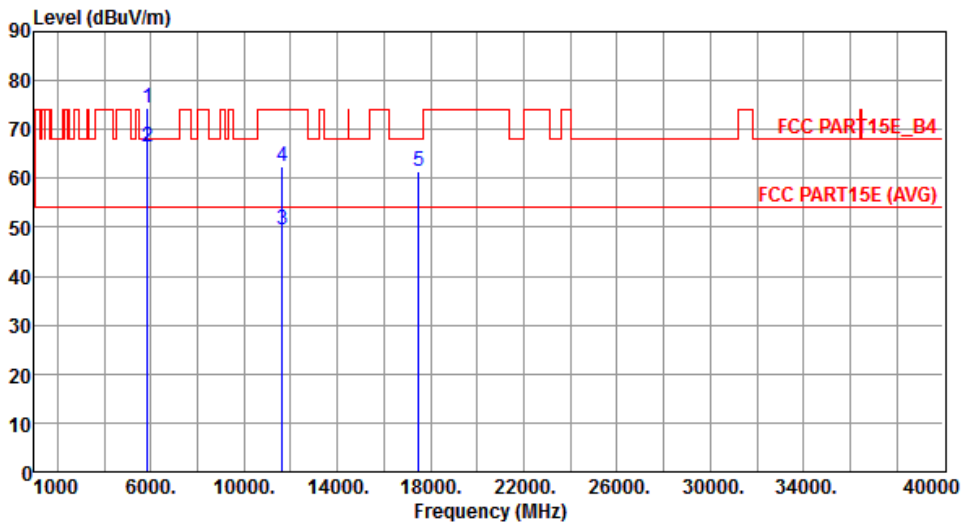
Modulation	HT20	Test Freq. (MHz)	5785
Polarization	Vertical		



	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	56.97	68.20	-11.23	54.24	2.73	Peak	---	---
2	5725.00	57.91	78.20	-20.29	55.17	2.74	Peak	---	---
3	5850.00	57.19	78.20	-21.01	54.21	2.98	Peak	---	---
4	5860.00	55.76	68.20	-12.44	52.77	2.99	Peak	---	---
5	11570.00	52.64	54.00	-1.36	37.09	15.55	Average	---	---
6	11570.00	67.28	74.00	-6.72	51.73	15.55	Peak	---	---
7	17355.00	64.62	68.20	-3.58	45.83	18.79	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).

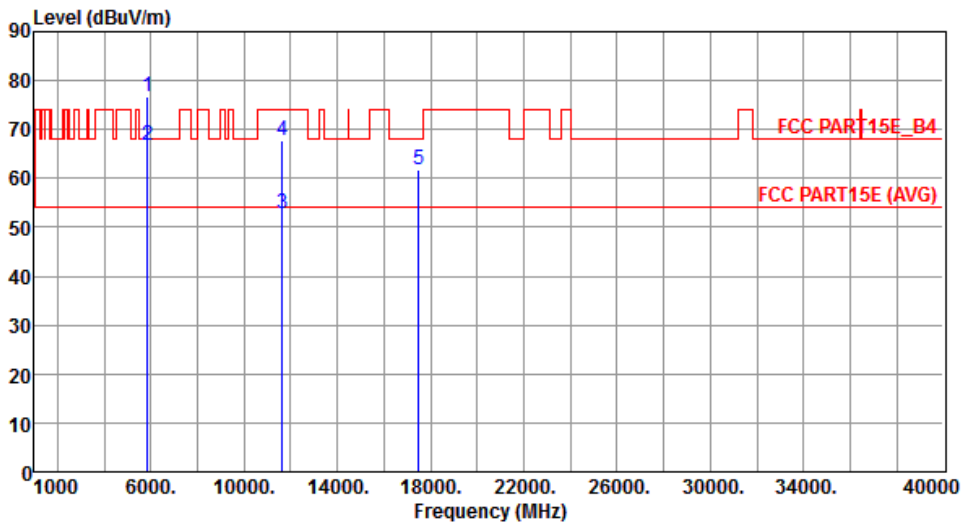
Modulation	HT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



	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	74.42	78.20	-3.78	71.44	2.98	Peak	---	---
2	5860.00	66.31	68.20	-1.89	63.32	2.99	Peak	---	---
3	11650.00	49.42	54.00	-4.58	34.03	15.39	Average	---	---
4	11650.00	62.28	74.00	-11.72	46.89	15.39	Peak	---	---
5	17475.00	61.33	68.20	-6.87	41.99	19.34	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)	5825
Polarization	Vertical		

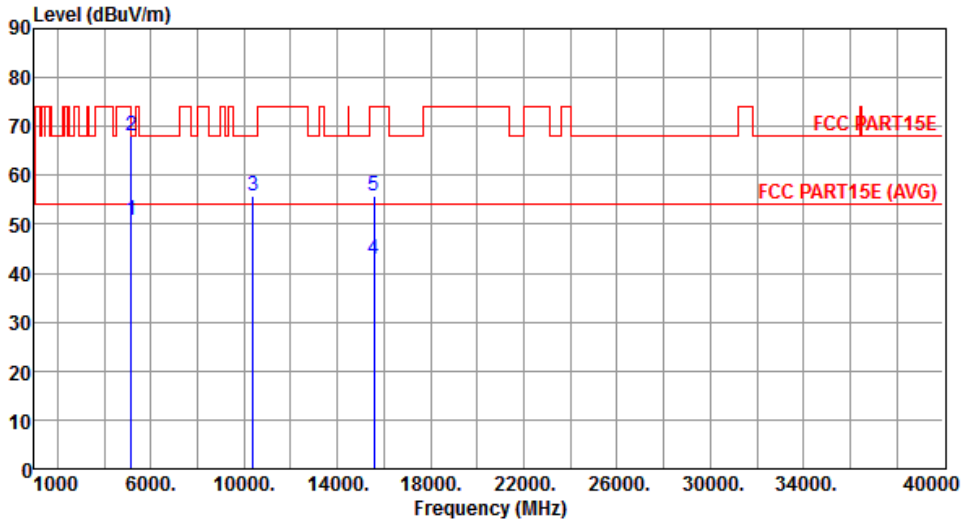


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	76.83	78.20	-1.37	73.85	2.98	Peak	---	---
2	5860.00	66.71	68.20	-1.49	63.72	2.99	Peak	---	---
3	11650.00	52.71	54.00	-1.29	37.32	15.39	Average	---	---
4	11650.00	67.71	74.00	-6.29	52.32	15.39	Peak	---	---
5	17475.00	61.78	68.20	-6.42	42.44	19.34	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 HT40

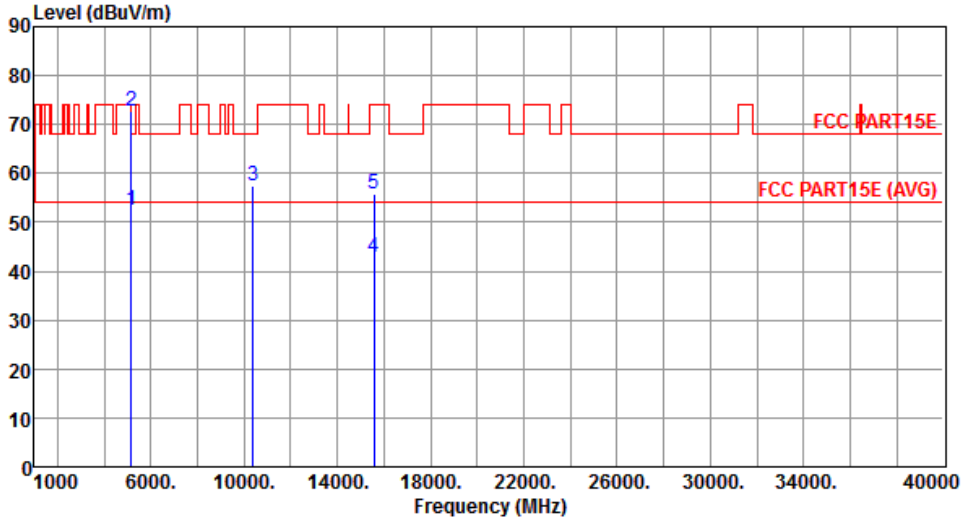
Modulation	HT40	**Test Freq. (MHz)**	5190
Polarization	Horizontal		



	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	50.85	54.00	-3.15	49.22	1.63	Average	---	---
2	5150.00	68.04	74.00	-5.96	66.41	1.63	Peak	---	---
3	10380.00	55.81	68.20	-12.39	40.71	15.10	Peak	---	---
4	15570.00	42.76	54.00	-11.24	26.31	16.45	Average	---	---
5	15570.00	55.80	74.00	-18.20	39.35	16.45	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).

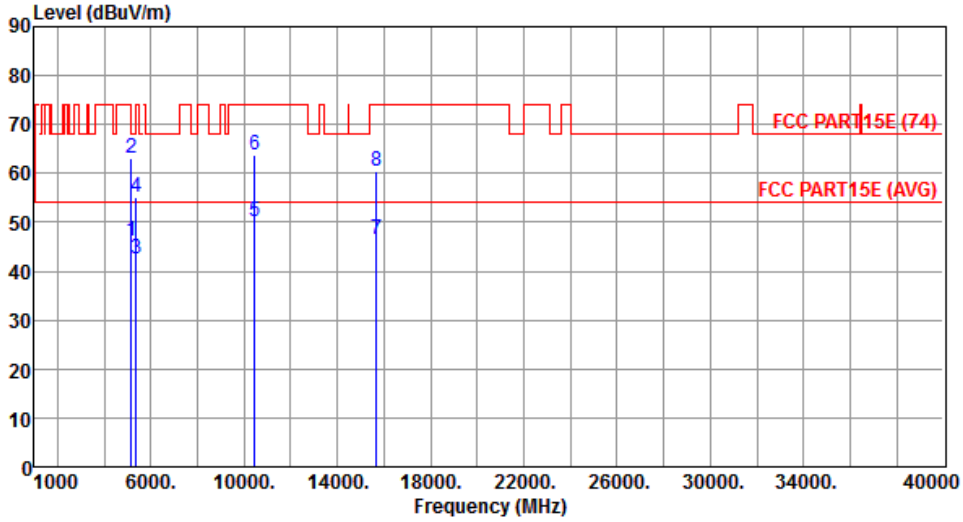
Modulation	HT40	Test Freq. (MHz)	5190
Polarization	Vertical		



	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	52.57	54.00	-1.43	50.94	1.63	Average	---	---
2	5150.00	72.75	74.00	-1.25	71.12	1.63	Peak	---	---
3	10380.00	57.49	68.20	-10.71	42.39	15.10	Peak	---	---
4	15570.00	42.76	54.00	-11.24	26.31	16.45	Average	---	---
5	15570.00	55.66	74.00	-18.34	39.21	16.45	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).

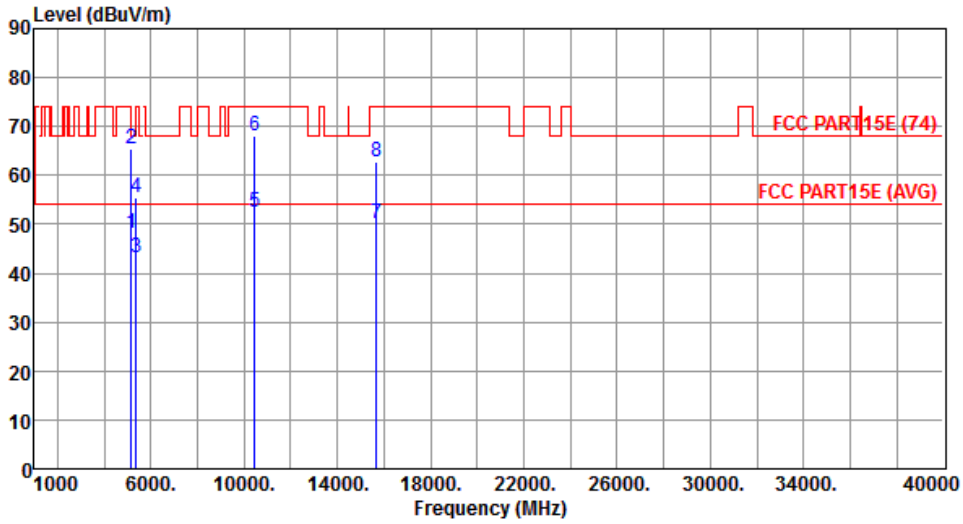
Modulation	HT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



	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	46.17	54.00	-7.83	44.54	1.63	Average	---	---
2	5150.00	63.09	74.00	-10.91	61.46	1.63	Peak	---	---
3	5350.00	42.40	54.00	-11.60	40.42	1.98	Average	---	---
4	5350.00	55.17	74.00	-18.83	53.19	1.98	Peak	---	---
5	10460.00	50.06	54.00	-3.94	34.66	15.40	Average	---	---
6	10460.00	63.88	74.00	-10.12	48.48	15.40	Peak	---	---
7	15690.00	46.49	54.00	-7.51	30.28	16.21	Average	---	---
8	15690.00	60.34	74.00	-13.66	44.13	16.21	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).

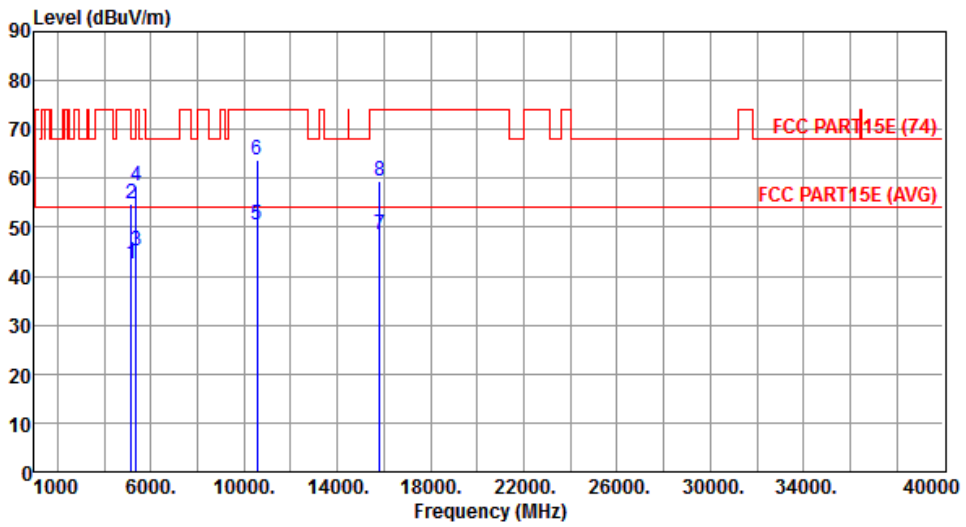
Modulation	HT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	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	48.14	54.00	-5.86	46.51	1.63	Average	---	---
2	5150.00	65.35	74.00	-8.65	63.72	1.63	Peak	---	---
3	5350.00	43.19	54.00	-10.81	41.21	1.98	Average	---	---
4	5350.00	55.33	74.00	-18.67	53.35	1.98	Peak	---	---
5	10460.00	52.38	54.00	-1.62	36.98	15.40	Average	---	---
6	10460.00	68.18	74.00	-5.82	52.78	15.40	Peak	---	---
7	15690.00	50.24	54.00	-3.76	34.03	16.21	Average	---	---
8	15690.00	62.89	74.00	-11.11	46.68	16.21	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).

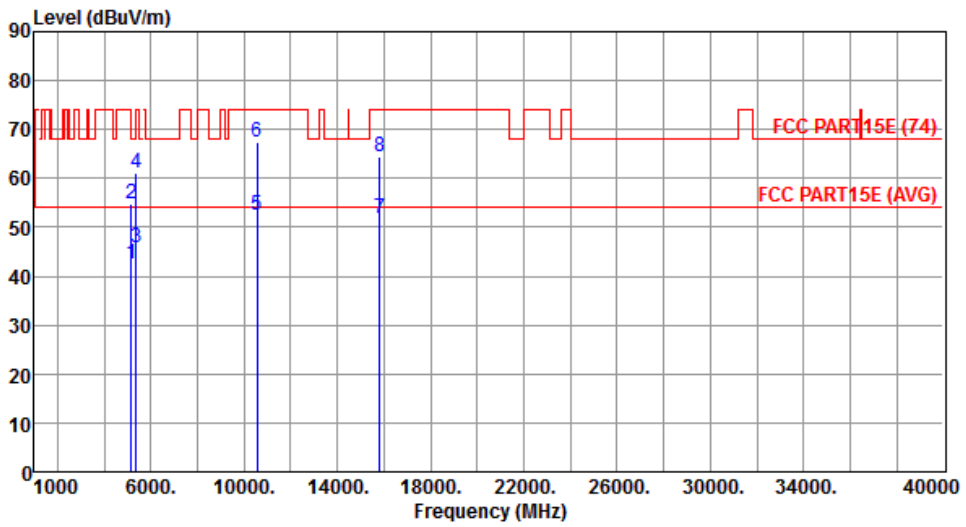
Modulation	HT40	Test Freq. (MHz)	5270
Polarization	Horizontal		



	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	42.39	54.00	-11.61	40.76	1.63	Average	---	---
2	5150.00	54.74	74.00	-19.26	53.11	1.63	Peak	---	---
3	5350.00	45.01	54.00	-8.99	43.03	1.98	Average	---	---
4	5350.00	58.40	74.00	-15.60	56.42	1.98	Peak	---	---
5	10540.00	50.39	54.00	-3.61	34.77	15.62	Average	---	---
6	10540.00	63.85	74.00	-10.15	48.23	15.62	Peak	---	---
7	15810.00	48.36	54.00	-5.64	32.40	15.96	Average	---	---
8	15810.00	59.51	74.00	-14.49	43.55	15.96	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).

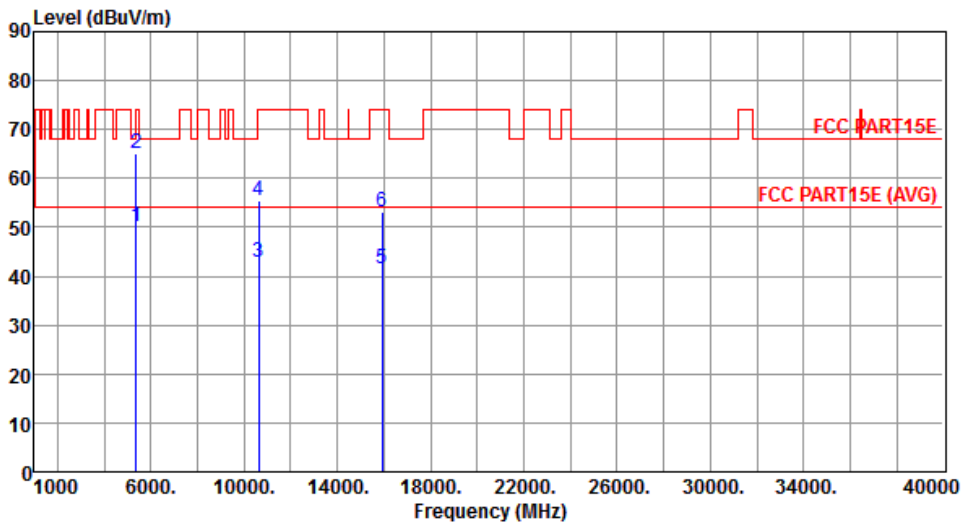
Modulation	HT40	Test Freq. (MHz)	5270
Polarization	Vertical		



	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	42.48	54.00	-11.52	40.85	1.63	Average	---	---
2	5150.00	54.84	74.00	-19.16	53.21	1.63	Peak	---	---
3	5350.00	45.87	54.00	-8.13	43.89	1.98	Average	---	---
4	5350.00	61.01	74.00	-12.99	59.03	1.98	Peak	---	---
5	10540.00	52.55	54.00	-1.45	36.93	15.62	Average	---	---
6	10540.00	67.27	74.00	-6.73	51.65	15.62	Peak	---	---
7	15810.00	51.97	54.00	-2.03	36.01	15.96	Average	---	---
8	15810.00	64.55	74.00	-9.45	48.59	15.96	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).

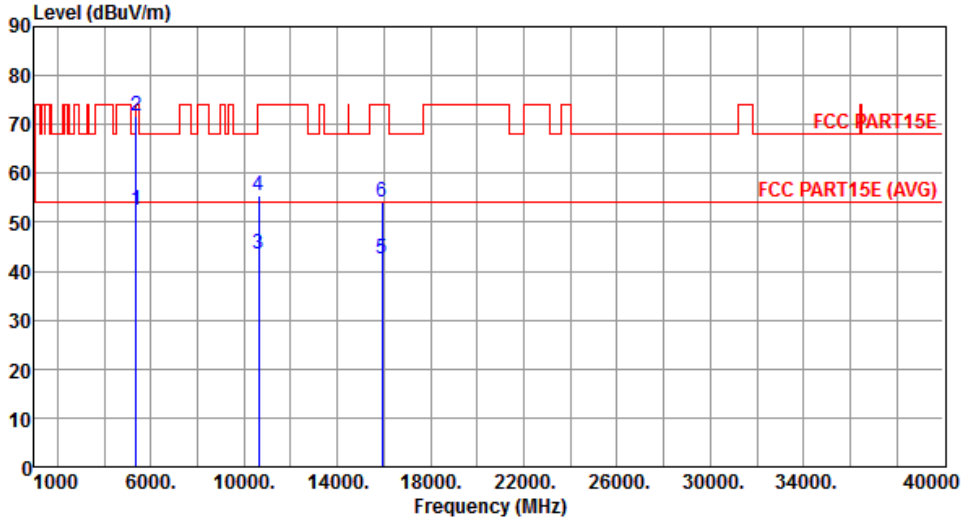
Modulation	HT40	Test Freq. (MHz)	5310
Polarization	Horizontal		



	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	50.10	54.00	-3.90	48.12	1.98	Average	---	---
2	5350.00	65.06	74.00	-8.94	63.08	1.98	Peak	---	---
3	10620.00	42.93	54.00	-11.07	27.18	15.75	Average	---	---
4	10620.00	55.58	74.00	-18.42	39.83	15.75	Peak	---	---
5	15930.00	41.35	54.00	-12.65	25.63	15.72	Average	---	---
6	15930.00	53.16	74.00	-20.84	37.44	15.72	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).

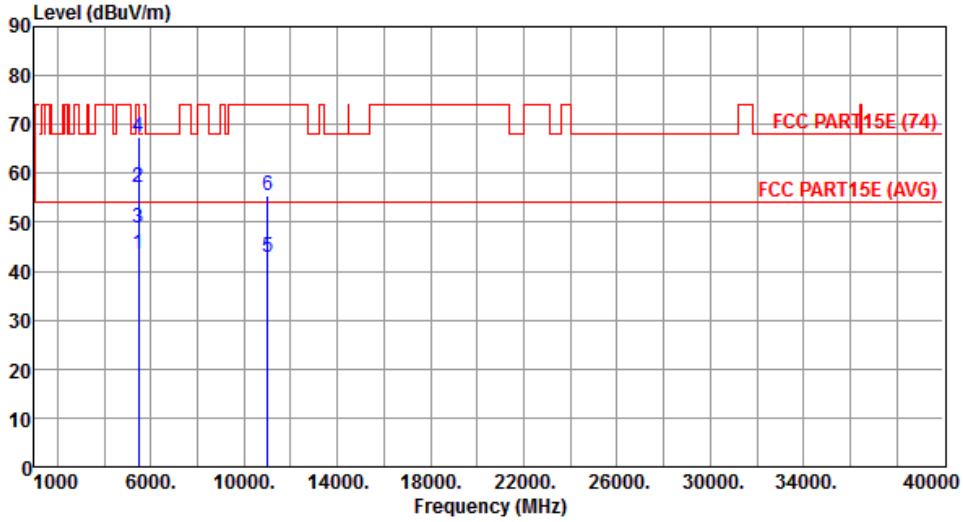
Modulation	HT40	Test Freq. (MHz)	5310
Polarization	Vertical		



	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	52.55	54.00	-1.45	50.57	1.98	Average	---	---
2	5350.00	71.78	74.00	-2.22	69.80	1.98	Peak	---	---
3	10620.00	43.67	54.00	-10.33	27.92	15.75	Average	---	---
4	10620.00	55.42	74.00	-18.58	39.67	15.75	Peak	---	---
5	15930.00	42.60	54.00	-11.40	26.88	15.72	Average	---	---
6	15930.00	54.26	74.00	-19.74	38.54	15.72	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).

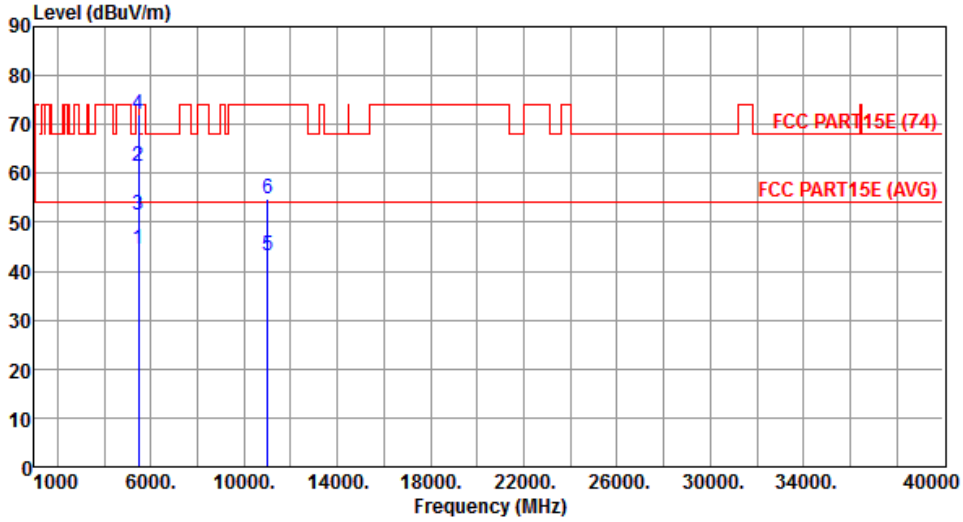
Modulation	HT40	Test Freq. (MHz)	5510
Polarization	Horizontal		



	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	43.66	54.00	-10.34	41.48	2.18	Average	---	---
2	5460.00	57.07	74.00	-16.93	54.89	2.18	Peak	---	---
3	5470.00	48.91	54.00	-5.09	46.71	2.20	Average	---	---
4	5470.00	67.44	74.00	-6.56	65.24	2.20	Peak	---	---
5	11020.00	42.71	54.00	-11.29	26.30	16.41	Average	---	---
6	11020.00	55.61	74.00	-18.39	39.20	16.41	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).

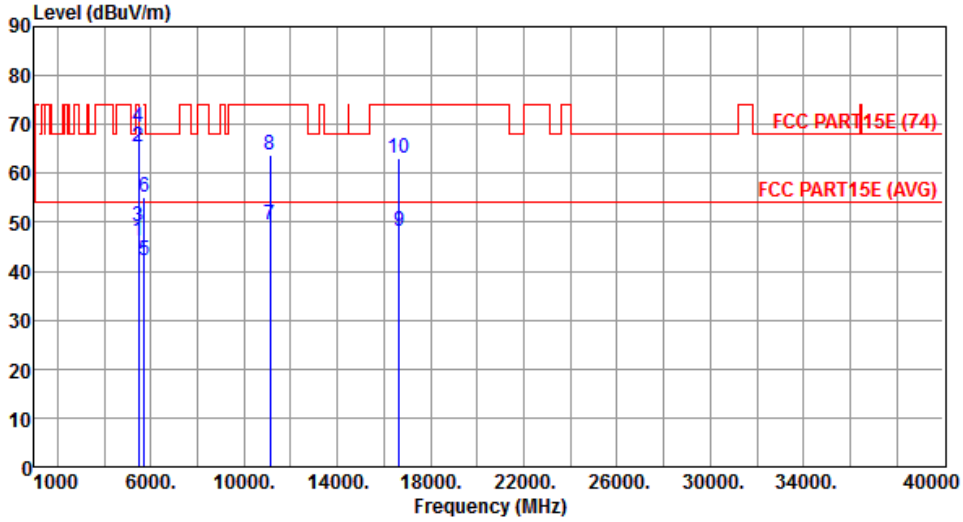
Modulation	HT40	Test Freq. (MHz)	5510
Polarization	Vertical		



	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	44.39	54.00	-9.61	42.21	2.18	Average	---	---
2	5460.00	61.39	74.00	-12.61	59.21	2.18	Peak	---	---
3	5470.00	51.55	54.00	-2.45	49.35	2.20	Average	---	---
4	5470.00	72.17	74.00	-1.83	69.97	2.20	Peak	---	---
5	11020.00	43.15	54.00	-10.85	26.74	16.41	Average	---	---
6	11020.00	54.64	74.00	-19.36	38.23	16.41	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).

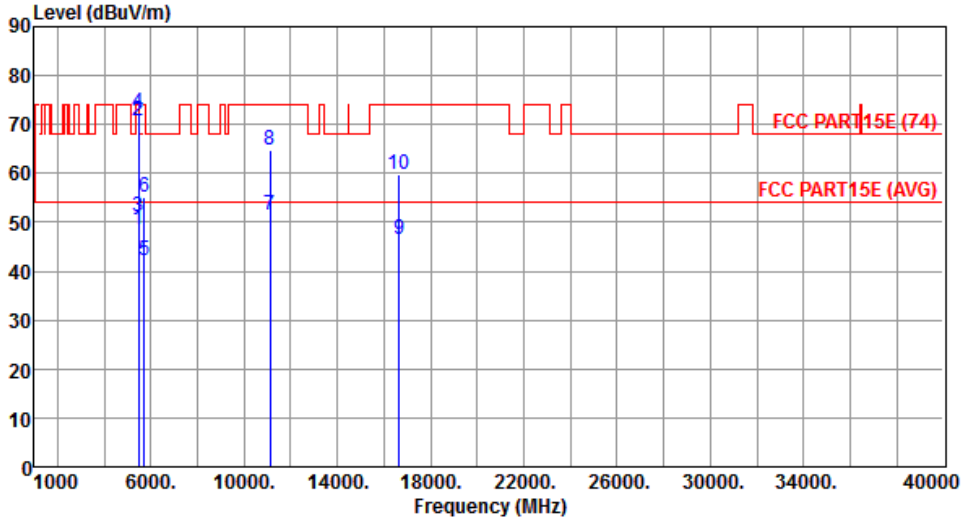
Modulation	HT40	Test Freq. (MHz)	5550
Polarization	Horizontal		



	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	46.21	54.00	-7.79	44.03	2.18	Average	---	---
2	5460.00	65.45	74.00	-8.55	63.27	2.18	Peak	---	---
3	5470.00	49.15	54.00	-4.85	46.95	2.20	Average	---	---
4	5470.00	69.33	74.00	-4.67	67.13	2.20	Peak	---	---
5	5725.00	42.22	54.00	-11.78	39.48	2.74	Average	---	---
6	5725.00	55.09	74.00	-18.91	52.35	2.74	Peak	---	---
7	11100.00	49.37	54.00	-4.63	33.08	16.29	Average	---	---
8	11100.00	63.83	74.00	-10.17	47.54	16.29	Peak	---	---
9	16650.00	48.11	54.00	-5.89	30.93	17.18	Average	---	---
10	16650.00	63.00	74.00	-11.00	45.82	17.18	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).

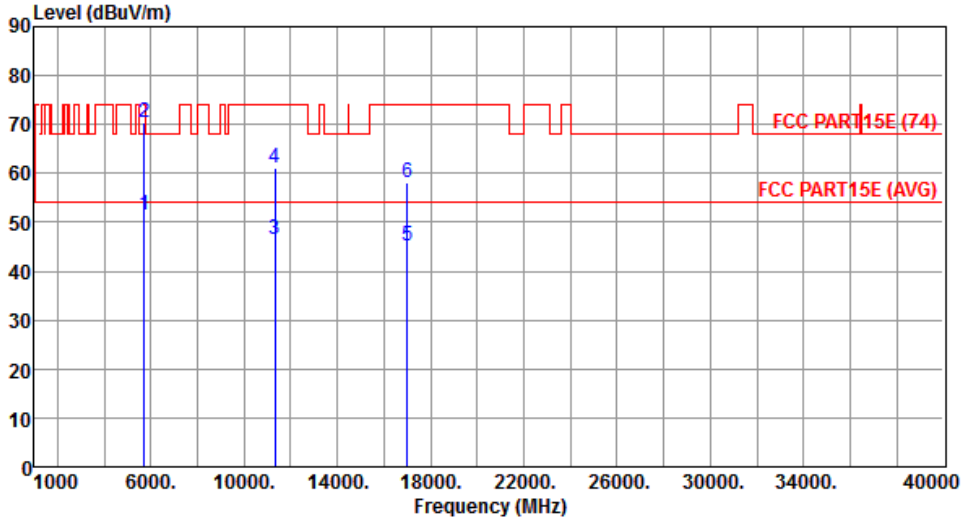
Modulation	HT40	Test Freq. (MHz)	5550
Polarization	Vertical		



	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	48.63	54.00	-5.37	46.45	2.18	Average	---	---
2	5460.00	70.88	74.00	-3.12	68.70	2.18	Peak	---	---
3	5470.00	51.02	54.00	-2.98	48.82	2.20	Average	---	---
4	5470.00	72.50	74.00	-1.50	70.30	2.20	Peak	---	---
5	5725.00	42.31	54.00	-11.69	39.57	2.74	Average	---	---
6	5725.00	55.05	74.00	-18.95	52.31	2.74	Peak	---	---
7	11100.00	51.34	54.00	-2.66	35.05	16.29	Average	---	---
8	11100.00	64.87	74.00	-9.13	48.58	16.29	Peak	---	---
9	16650.00	46.45	54.00	-7.55	29.27	17.18	Average	---	---
10	16650.00	59.73	74.00	-14.27	42.55	17.18	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).

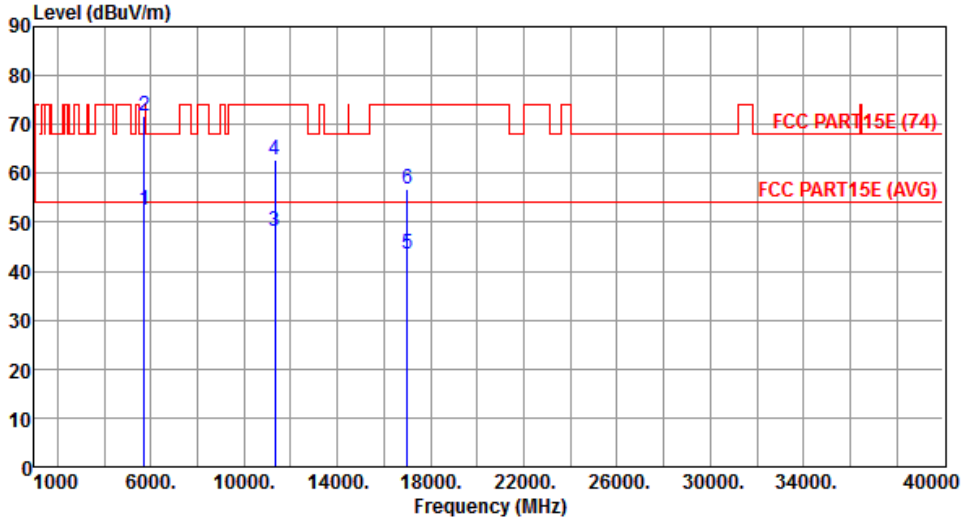
Modulation	HT40	Test Freq. (MHz)	5670
Polarization	Horizontal		



	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	51.51	54.00	-2.49	48.77	2.74	Average	---	---
2	5725.00	70.47	74.00	-3.53	67.73	2.74	Peak	---	---
3	11340.00	46.42	54.00	-7.58	30.48	15.94	Average	---	---
4	11340.00	61.15	74.00	-12.85	45.21	15.94	Peak	---	---
5	17010.00	45.06	54.00	-8.94	27.83	17.23	Average	---	---
6	17010.00	58.19	74.00	-15.81	40.96	17.23	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).

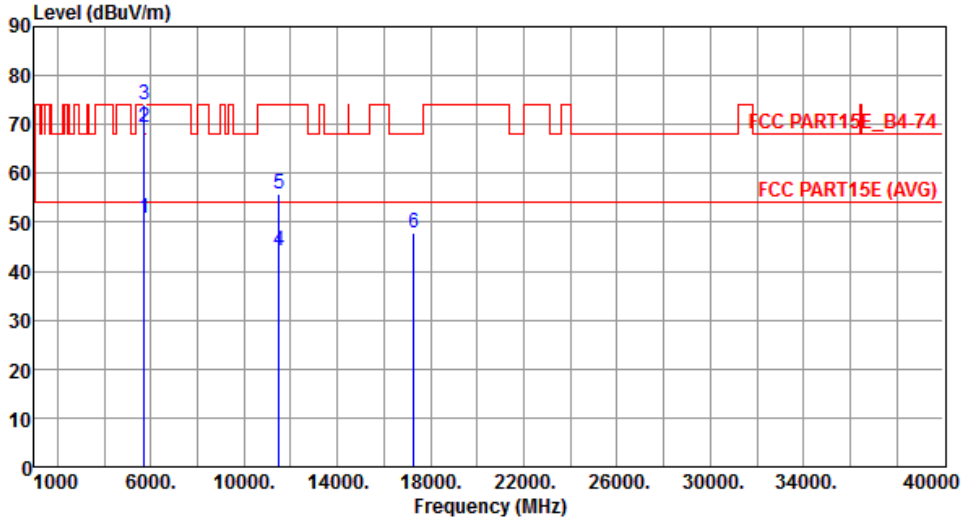
Modulation	HT40	Test Freq. (MHz)	5670
Polarization	Vertical		



	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	52.43	54.00	-1.57	49.69	2.74	Average	---	---
2	5725.00	71.57	74.00	-2.43	68.83	2.74	Peak	---	---
3	11340.00	48.12	54.00	-5.88	32.18	15.94	Average	---	---
4	11340.00	62.67	74.00	-11.33	46.73	15.94	Peak	---	---
5	17010.00	43.55	54.00	-10.45	26.32	17.23	Average	---	---
6	17010.00	56.92	74.00	-17.08	39.69	17.23	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).

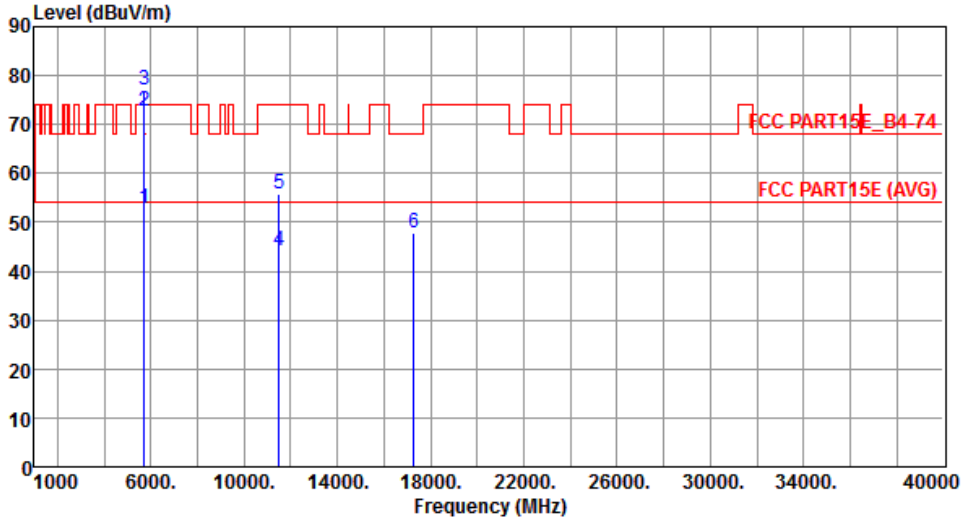
Modulation	HT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



	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	50.85	54.00	-3.15	48.12	2.73	Average	---	---
2	5715.00	69.25	74.00	-4.75	66.52	2.73	Peak	---	---
3	5725.00	74.01	78.20	-4.19	71.27	2.74	Peak	---	---
4	11510.00	44.33	54.00	-9.67	28.66	15.67	Average	---	---
5	11510.00	55.91	74.00	-18.09	40.24	15.67	Peak	---	---
6	17265.00	47.79	68.20	-20.41	29.41	18.38	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).

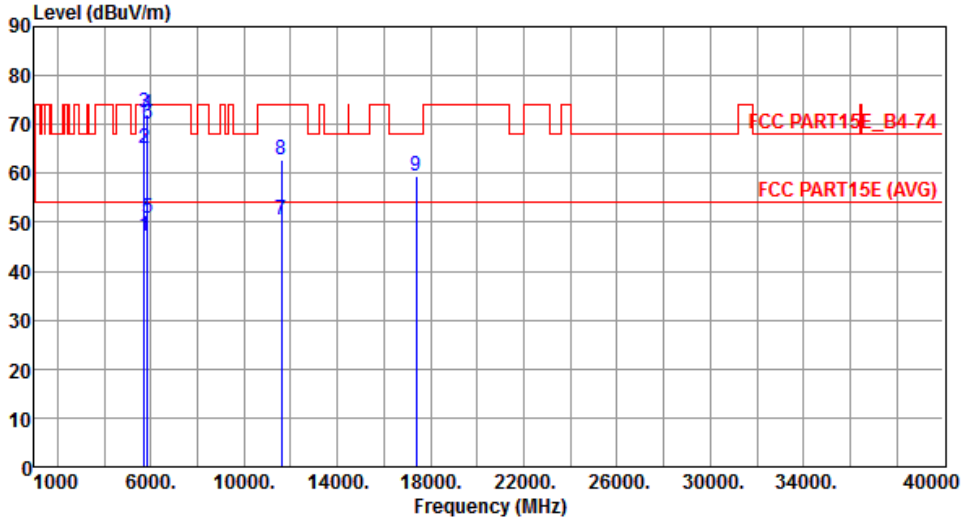
Modulation	HT40	Test Freq. (MHz)	5755
Polarization	Vertical		



	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	52.96	54.00	-1.04	50.23	2.73	Average	---	---
2	5715.00	72.66	74.00	-1.34	69.93	2.73	Peak	---	---
3	5725.00	77.01	78.20	-1.19	74.27	2.74	Peak	---	---
4	11510.00	44.10	54.00	-9.90	28.43	15.67	Average	---	---
5	11510.00	55.82	74.00	-18.18	40.15	15.67	Peak	---	---
6	17265.00	47.71	68.20	-20.49	29.33	18.38	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).

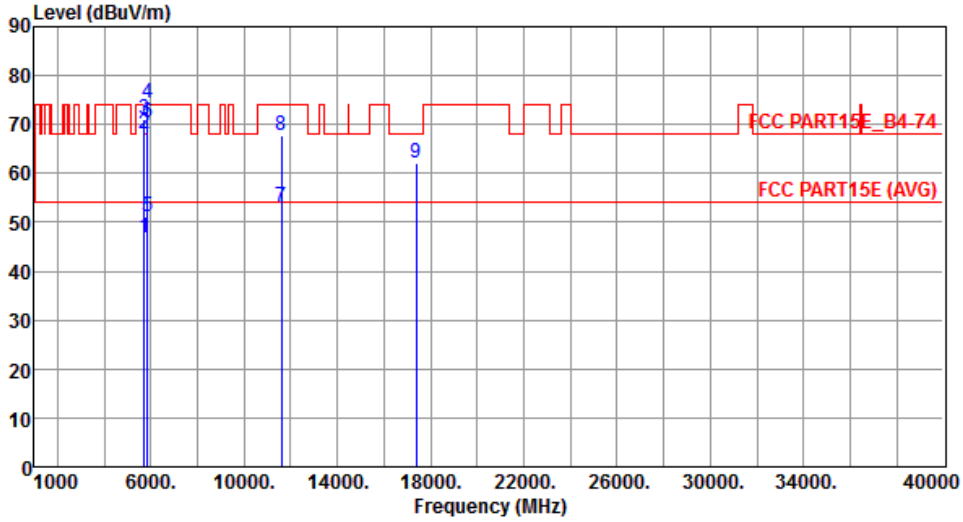
Modulation	HT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	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	47.26	54.00	-6.74	44.53	2.73	Average	---	---
2	5715.00	65.16	74.00	-8.84	62.43	2.73	Peak	---	---
3	5725.00	72.29	78.20	-5.91	69.55	2.74	Peak	---	---
4	5850.00	72.20	78.20	-6.00	69.22	2.98	Peak	---	---
5	5860.00	50.66	54.00	-3.34	47.67	2.99	Average	---	---
6	5860.00	70.12	74.00	-3.88	67.13	2.99	Peak	---	---
7	11590.00	50.48	54.00	-3.52	34.97	15.51	Average	---	---
8	11590.00	62.85	74.00	-11.15	47.34	15.51	Peak	---	---
9	17385.00	59.49	68.20	-8.71	40.55	18.94	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).

Modulation	HT40	Test Freq. (MHz)	5795
Polarization	Vertical		



	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	46.98	54.00	-7.02	44.25	2.73	Average	---	---
2	5715.00	68.07	74.00	-5.93	65.34	2.73	Peak	---	---
3	5725.00	71.17	78.20	-7.03	68.43	2.74	Peak	---	---
4	5850.00	74.31	78.20	-3.89	71.33	2.98	Peak	---	---
5	5860.00	51.12	54.00	-2.88	48.13	2.99	Average	---	---
6	5860.00	70.43	74.00	-3.57	67.44	2.99	Peak	---	---
7	11590.00	52.97	54.00	-1.03	37.46	15.51	Average	---	---
8	11590.00	67.89	74.00	-6.11	52.38	15.51	Peak	---	---
9	17385.00	62.08	68.20	-6.12	43.14	18.94	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).

3.6 Frequency Stability

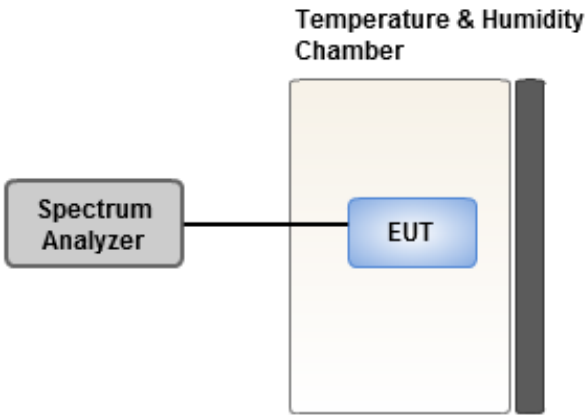
3.6.1 Limit of Frequency Stability

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 50 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	-0.99	-0.25	-0.68	-0.73
T20°CVmin	2.27	2.60	2.71	2.96
T60CVnom	5.97	6.78	7.10	6.36
T50CVnom	5.96	5.80	5.72	5.41
T40°CVnom	5.04	5.37	5.75	5.19
T30°CVnom	4.60	4.51	4.95	5.14
T20°CVnom	2.30	3.09	3.13	2.39
T10°CVnom	1.26	0.79	1.43	1.64
T0°CVnom	0.63	0.64	0.56	0.64
T-10°CVnom	-3.04	-3.30	-3.39	-3.14
T-20°CVnom	-2.35	-2.77	-2.96	-3.58
T-30°CVnom	-2.79	-2.87	-3.17	-3.21
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 102
Tnom [°C]: 20		Tmax [°C]: 60		Tmin [°C]: -30

Frequency: 5785 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	-0.90	-0.47	-0.68	-0.28
T20°CVmin	1.77	2.87	2.26	1.87
T60CVnom	5.65	6.02	5.77	6.18
T50CVnom	6.00	5.77	6.08	5.68
T40°CVnom	4.70	4.56	5.16	4.65
T30°CVnom	4.31	4.26	4.83	4.50
T20°CVnom	2.31	2.08	2.53	2.19
T10°CVnom	1.48	1.15	1.92	1.32
T0°CVnom	0.85	1.21	0.69	0.43
T-10°CVnom	-2.64	-2.12	-2.04	-3.02
T-20°CVnom	-1.96	-1.58	-1.73	-1.74
T-30°CVnom	-2.25	-2.46	-2.18	-2.22
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 102
Tnom [°C]: 20		Tmax [°C]: 60		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

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Email: ICC_Service@icertifi.com.tw

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