FCC C2PC Test Report

FCC ID	:	**KA2IR820LB1**
Equipment	:	**Wireless AC1000 Dual Band Cloud Router** **Wireless AC1200 Dual Band Cloud Router**
Model No.	:	**DIR-820L** **DIR-830L**
Brand Name	:	**D-Link**
Applicant	:	**D-Link Corporation**
Address	:	**17595 Mt. Herrmann, Fountain Valley, CA 92708 U.S.A**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Mar. 28, 2016**
Tested Date	:	**Mar. 28 ~ Apr. 07, 2016**

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

Approved & Reviewed by:

Gary Chang / Manager

Testing Laboratory
2732

Table of Contents

Release Record

Report No.	Version	Description	Issued Date
FR430701-04AN	Rev. 01	Initial issue	May 03, 2016

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.363MHz 39.07 (Margin -9.58dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5725.00MHz 77.18 (Margin -1.02dB) – PK [dBuV/m at 3m]: 5860.00MHz 52.98 (Margin -1.02dB) - 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]: 25.63	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

This report is prepared for FCC class II Permissive change.

This report is issued as a supplementary report. The modification is concerned with complying with New U-NII rule requirement. Therefore, related test items had been performed and presented in the following sections.

1.1.1 Product Details

The following models are provided to this EUT.

Brand Name	Model Name	Product Name
D-Link	DIR-820L	Wireless AC1000 Dual Band Cloud Router
	DIR-830L	Wireless AC1200 Dual Band Cloud Router
✦ All models are electrically identical, different model names are for marketing purpose.		

1.1.2 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N_{TX})	Data Rate / MCS
5725-5850	a	5745-5825	149-165 [5]	2	6-54 Mbps
5725-5850	n (HT20)	5745-5825	149-165 [5]	2	MCS 0-15
5725-5850	n (HT40)	5755-5795	151-159 [2]	2	MCS 0-15
5725-5850	ac (VHT20)	5745-5825	149-165 [5]	2	MCS 0-9
5725-5850	ac (VHT40)	5755-5795	151-159 [2]	2	MCS 0-9
5725-5850	ac (VHT80)	5775	155 [1]	2	MCS 0-9
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, 256QAM modulation.					

1.1.3 Antenna Details

Ant. No.	Type	Gain (dBi)	Connector	Remark
1	PCB	0	I-PEX	---
2	PCB	0	I-PEX	---

1.1.4 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from AC adapter

1.1.5 Accessories

Accessories		
No.	**Equipment**	**Description**
1	AC Adapter 1	Brand Name: D-Link Model Name: AMS135-1201000FU Power Rating: I/P: 100-240Vac, 50-60Hz, 0.5A/27VA O/P: 12Vdc, 1.0A Power Line: 1.2m non-shielded cable w/o core
2	AC Adapter 2	Brand Name: D-Link Model Name: MU12AR120100-A1 Power Rating: I/P: 100-240Vac, 50-60Hz, 0.3A O/P: 12Vdc, 1.0A Power Line: 1.2m non-shielded cable w/o core

1.1.6 Channel List

802.11 a / HT20 / VHT20		HT40 / VHT40	
Channel	**Frequency(MHz)**	**Channel**	**Frequency(MHz)**
149	5745	151	5755
153	5765	159	5795
157	5785	**VHT80**	
161	5805	155	5775
165	5825	---	---

1.1.7 Test Tool and Duty Cycle

Test Tool	MPTool, version RTL819x 2.3		
Duty Cycle and Duty Factor	**Mode**	**Duty cycle (%)**	**Duty factor (dB)**
	11a	96.65%	0.15
	VHT20	88.84%	0.51
	VHT40	90.73%	0.42
	VHT80	65.87%	1.81

1.1.8 Power Setting

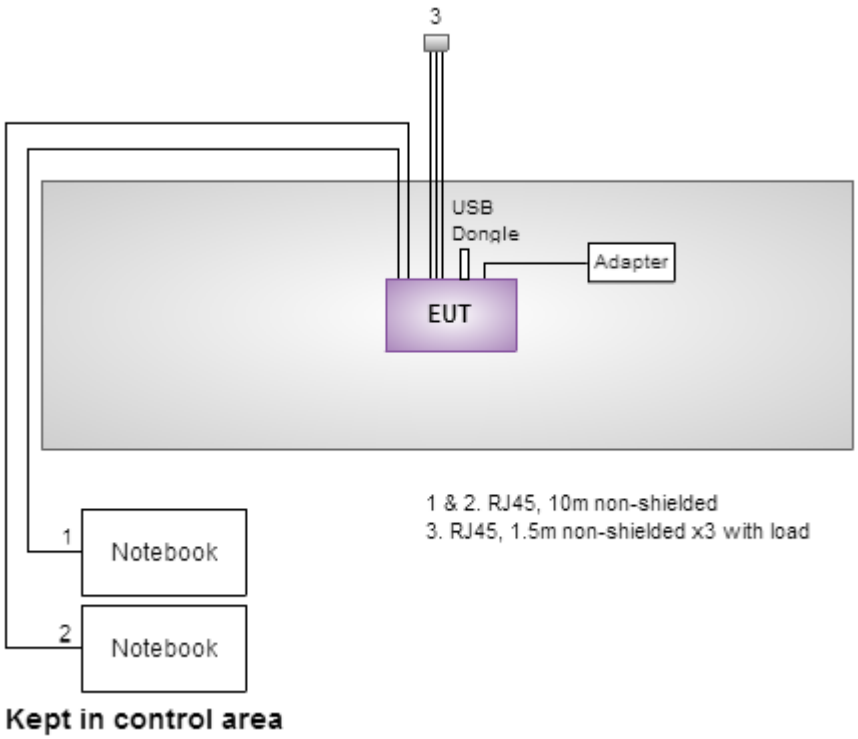
For Frequency band 5725~5850 MHz		
Modulation Mode	**Test Frequency (MHz)**	**Power Set**
11a	5745	44/41
11a	5785	58/54
11a	5825	50/46
HT20	5745	42/38
HT20	5785	57/53
HT20	5825	48/44
HT40	5755	38/35
HT40	5795	54/50
VHT20	5745	42/38
VHT20	5785	57/53
VHT20	5825	48/44
VHT40	5755	38/35
VHT40	5795	54/50
VHT80	5775	36/32

1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Signal cable / Length (m)**
1	Notebook	DELL	Latitude E6430	DoC	RJ45, 10m non-shielded.
2	Notebook	DELL	Latitude E6430	DoC	RJ45, 10m non-shielded.
3	USB dongle	Kingston	DTSE9	---	---

1.3 Test Setup Chart

Test Setup Diagram



1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
EMC Receiver	R&S	ESCS 30	100169	Oct. 21, 2015	Oct. 20, 2016
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 13, 2015	Nov. 12, 2016
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127-666	Nov. 26, 2015	Nov. 25, 2016
RF Cable-CON	EMC	EMCCFD300-BM-BM-6000	50821	Dec. 21, 2015	Dec. 20, 2016
50 ohm terminal (Support Unit)	NA	50	04	Apr. 15, 2015	Apr. 14, 2016
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber 2 / (03CH02-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101499	Dec. 17, 2015	Dec. 16, 2016
Receiver	R&S	ESR3	101657	Jan. 12, 2016	Jan. 11, 2017
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-523	Nov. 09, 2015	Nov. 08, 2016
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1095	Oct. 07, 2015	Oct. 06, 2016
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 04, 2015	Nov. 03, 2016
Loop Antenna	R&S	HFH2-Z2	11900	Nov. 16, 2015	Nov. 15, 2016
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Dec. 10, 2015	Dec. 09, 2016
Preamplifier	Burgeon	BPA-530	100218	Nov. 03, 2015	Nov. 02, 2016
Preamplifier	Agilent	83017A	MY39501309	Sep. 22, 2015	Sep. 21, 2016
Preamplifier	EMC	EMC184045B	980192	Sep. 01, 2015	Aug. 31, 2016
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16140/4	Dec. 10, 2015	Dec. 09, 2016
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16018/4	Dec. 10, 2015	Dec. 09, 2016
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16015/4	Dec. 10, 2015	Dec. 09, 2016
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-003	Dec. 10, 2015	Dec. 09, 2016
LF cable 10M	EMCC	CFD400-E	CFD400-001	Dec. 10, 2015	Dec. 09, 2016
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101063	Feb. 17, 2016	Feb. 16, 2017
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Nov. 27, 2015	Nov. 26, 2016
Power Meter	Anritsu	ML2495A	1241002	Sep. 21, 2015	Sep. 20, 2016
Power Sensor	Anritsu	MA2411B	1207366	Sep. 21, 2015	Sep. 20, 2016
Measurement Software	Sporton	Sporton_1	1.3.30	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Testing Applied Standards

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

47 CFR FCC Part 15.407
ANSI C63.10-2013
FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02
FCC KDB 644545 D03 Guidance for IEEE 802 11ac New Rules v01
FCC KDB 662911 D01 Multiple Transmitter Output v02r01
FCC KDB 412172 D01 Determining ERP and EIRP v01r01

1.6 Measurement Uncertainty

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

Measurement Uncertainty	
Parameters	**Uncertainty**
Bandwidth	±34.134 Hz
Conducted power	±0.808 dB
Frequency error	±34.134 Hz
Power density	±0.463 dB
Conducted emission	±2.670 dB
AC conducted emission	±2.90 dB
Radiated emission ≤ 1GHz	±3.87 dB
Radiated emission > 1GHz	±5.60 dB
Time	±0.1%
Temperature	±0.6 °C

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	23°C / 62%	Alex Tsai
Radiated Emissions	03CH02-WS	15-24°C / 60-62%	Allen Yu Warren Lee
RF Conducted	TH01-WS	22°C / 63%	Felix Sung

- FCC site registration No.: 181692
- IC site registration No.: 10807A-2

2.2 The Worst Test Modes and Channel Details

For Frequency band 5725-5850 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	11a	5785	6 Mbps	---
Radiated Emissions ≤1GHz	11a	5785	6 Mbps	---
RF Output Power	11a	5745 / 5785 / 5825	6 Mbps	---
	HT20	5745 / 5785 / 5825	MCS 0	
	HT40	5755 / 5795	MCS 0	
	VHT20	5745 / 5785 / 5825	MCS 0	
	VHT40	5755 / 5795	MCS 0	
	VHT80	5775	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth 6dB bandwidth Peak Power Spectral Density	11a	5745 / 5785 / 5825	6 Mbps	---
	VHT20	5745 / 5785 / 5825	MCS 0	
	VHT40	5755 / 5795	MCS 0	
	VHT80	5775	MCS 0	
Frequency Stability	Un-modulation	5785	---	---

NOTE:

1. The EUT was pretested in original test report with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Y-plane** results were found as the worst case and were shown in this report.
2. 2 AC adapters had been covered during the pretest in the original report. The worst adapter for conducted emissions is model **MU12AR120100-A1**; and the worst adapter for radiated emissions is model **AMS135-1201000FU**.

3 Transmitter Test Results

3.1 Conducted Emissions

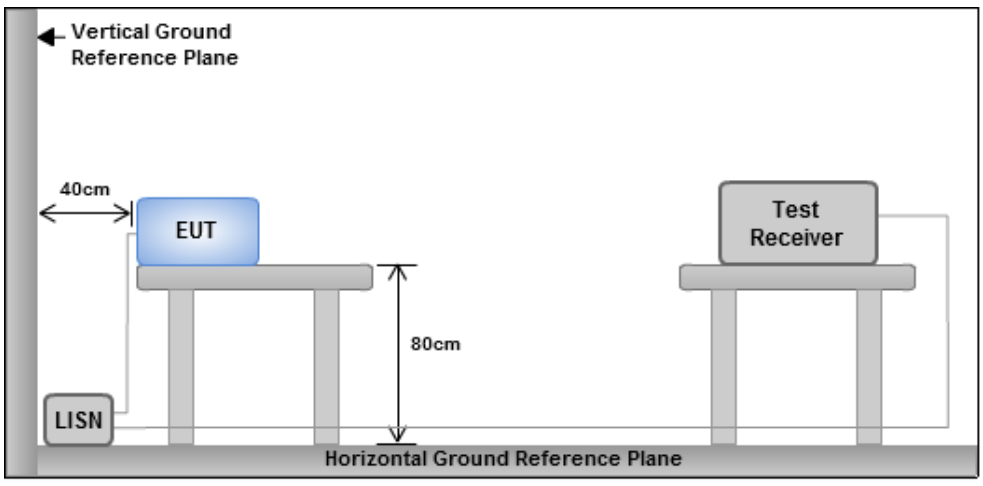
3.1.1 Limit of Conducted Emissions

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

3.1.2 Test Procedures

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

3.1.3 Test Setup

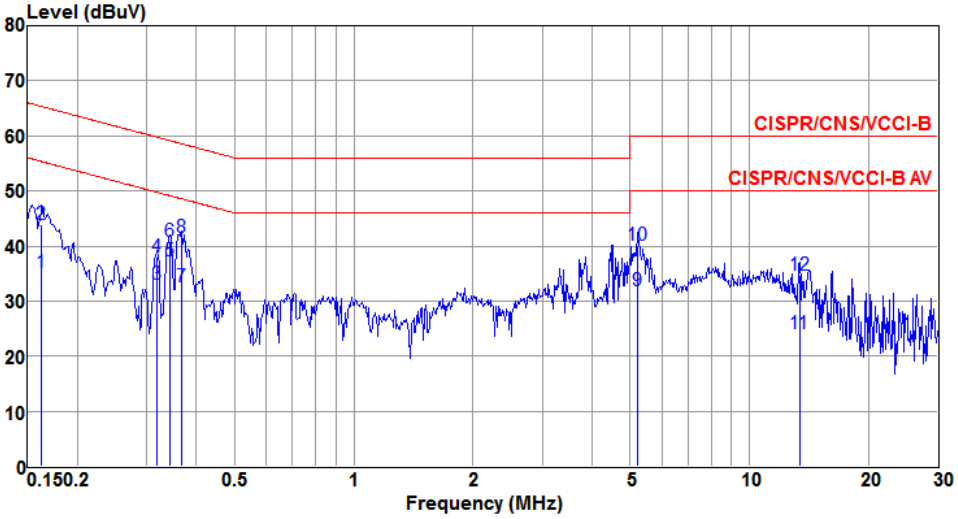


Note: 1. Support units were connected to second LISN.

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

3.1.4 Test Result of Conducted Emissions

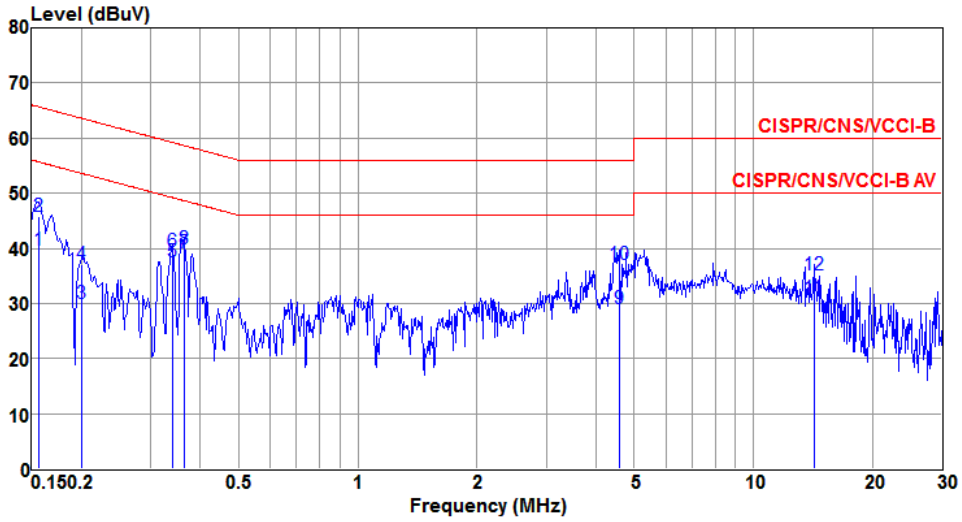
Modulation	11a	Test Freq. (MHz)	5785
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.162	35.29	55.34	-20.05	34.54	0.73	0.02	Average
2	0.162	43.92	65.34	-21.42	43.17	0.73	0.02	QP
3	0.318	32.96	49.75	-16.79	32.73	0.20	0.03	Average
4	0.318	37.99	59.75	-21.76	37.76	0.20	0.03	QP
5@	0.343	37.33	49.13	-11.80	37.10	0.20	0.03	Average
6	0.343	40.93	59.13	-18.20	40.70	0.20	0.03	QP
7	0.367	32.63	48.56	-15.93	32.41	0.19	0.03	Average
8	0.367	41.51	58.56	-17.05	41.29	0.19	0.03	QP
9	5.221	31.87	50.00	-18.13	31.36	0.38	0.13	Average
10	5.221	40.08	60.00	-19.92	39.57	0.38	0.13	QP
11	13.408	24.04	50.00	-25.96	23.13	0.71	0.20	Average
12	13.408	34.73	60.00	-25.27	33.82	0.71	0.20	QP

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

Modulation	11a	Test Freq. (MHz)	5785
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.156	39.73	55.65	-15.92	38.95	0.76	0.02	Average
2	0.156	45.87	65.65	-19.78	45.09	0.76	0.02	QP
3	0.201	29.90	53.58	-23.68	29.64	0.24	0.02	Average
4	0.201	37.04	63.58	-26.54	36.78	0.24	0.02	QP
5	0.339	37.52	49.22	-11.70	37.33	0.16	0.03	Average
6	0.339	39.45	59.22	-19.77	39.26	0.16	0.03	QP
7@	0.363	39.07	48.65	-9.58	38.89	0.15	0.03	Average
8	0.363	39.77	58.65	-18.88	39.59	0.15	0.03	QP
9	4.574	29.04	46.00	-16.96	28.20	0.71	0.13	Average
10	4.574	37.08	56.00	-18.92	36.24	0.71	0.13	QP
11	14.213	30.94	50.00	-19.06	30.11	0.63	0.20	Average
12	14.213	35.13	60.00	-24.87	34.30	0.63	0.20	QP

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

3.2 Emission Bandwidth

3.2.1 Limit of Emission Bandwidth

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

3.2.2 Test Procedures

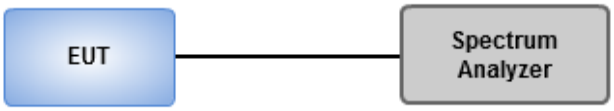
26dB Bandwidth

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 maximum of the emission.

6dB Bandwidth

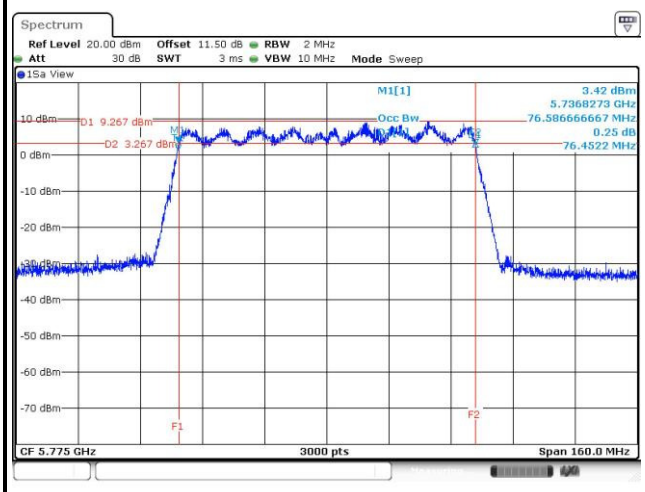
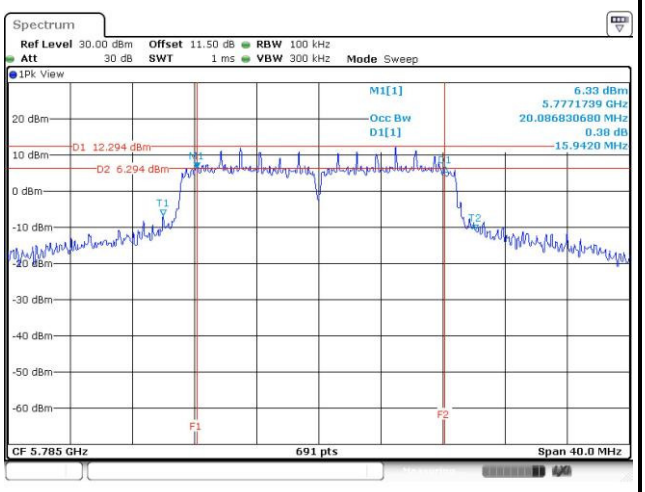
1. Set RBW = 100 kHz, video bandwidth = 300 kHz
2. Detector = Peak, Trace mode = max hold, Sweep = auto couple, Allow the trace to stabilize
3. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points that are attenuated by 6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

3.2.3 Test Setup



3.2.4 Test Result of Emission Bandwidth

Emission Bandwidth											
Mode	N_{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	6dB BW Limit (MHz)
11a	2	5745	16.91	16.89	---	---	16.29	16.29	---	---	0.5
11a	2	5785	24.35	24.29	---	---	16.29	16.29	---	---	0.5
11a	2	5825	19.37	18.24	---	---	16.29	16.29	---	---	0.5
VHT20	2	5745	17.93	17.89	---	---	17.33	17.57	---	---	0.5
VHT20	2	5785	24.45	21.69	---	---	15.94	17.28	---	---	0.5
VHT20	2	5825	18.23	18.45	---	---	17.04	17.33	---	---	0.5
VHT40	2	5755	36.80	36.83	---	---	35.71	36.17	---	---	0.5
VHT40	2	5795	38.29	38.72	---	---	35.48	35.59	---	---	0.5
VHT80	2	5775	76.59	76.53	---	---	75.59	75.59	---	---	0.5

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

3.3 RF Output Power

3.3.1 Limit of RF Output Power

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

3.3.2 Test Procedures

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

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

3.3.3 Test Setup

3.3.4 Test Result of Maximum Conducted Output Power

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	18.62	18.41	---	---	142.121	21.53	30.00
11a	2	5785	22.55	22.68	---	---	365.240	**25.63**	30.00
11a	2	5825	20.62	20.66	---	---	231.758	23.65	30.00
HT20	2	5745	17.63	16.95	---	---	107.488	20.31	30.00
HT20	2	5785	22.42	22.43	---	---	349.567	25.44	30.00
HT20	2	5825	20.21	19.89	---	---	202.453	23.06	30.00
HT40	2	5755	14.95	14.78	---	---	61.322	17.88	30.00
HT40	2	5795	21.38	21.19	---	---	268.927	24.30	30.00
VHT20	2	5745	17.78	17.03	---	---	110.445	20.43	30.00
VHT20	2	5785	22.49	22.51	---	---	355.657	25.51	30.00
VHT20	2	5825	20.33	19.98	---	---	207.435	23.17	30.00
VHT40	2	5755	15.04	14.98	---	---	63.393	18.02	30.00
VHT40	2	5795	21.50	21.33	---	---	277.085	24.43	30.00
VHT80	2	5775	14.72	14.11	---	---	55.412	17.44	30.00

3.4 Peak Power Spectral Density

3.4.1 Limit of Peak Power Spectral Density

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

3.4.2 Test Procedures

☐ Method SA-1

1. Set RBW = 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.

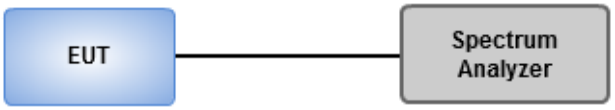
☐ Method SA-2

1. Set RBW = 1 MHz, VBW = 3 MHz, Sweep time = auto, Detector = RMS.
2. Trace average at 100 traces
3. Use the peak marker function to determine the maximum amplitude level.
4. Add 10 log(1/x), where x is the duty cycle

☒ Method SA-2 Alternative

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

3.4.3 Test Setup

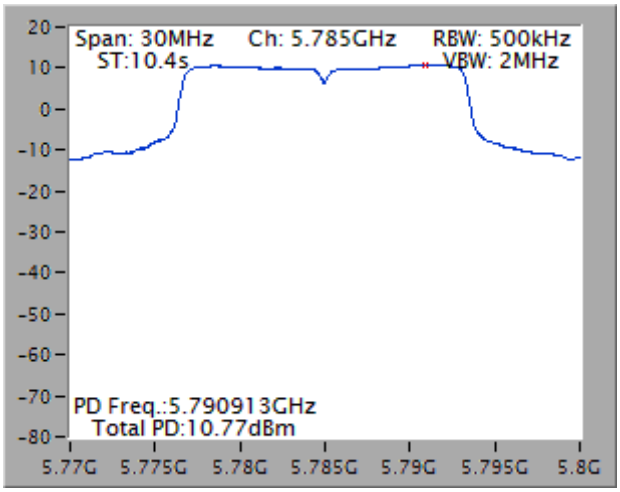


3.4.4 Test Result of Peak Power Spectral Density

Condition			Peak Power Spectral Density (dBm/500kHz)			
Modulation 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	6.41	0.15	6.56	30.00
11a	2	5785	10.77	0.15	10.92	30.00
11a	2	5825	8.69	0.15	8.84	30.00
VHT20	2	5745	5.25	0.51	5.76	30.00
VHT20	2	5785	10.10	0.51	10.61	30.00
VHT20	2	5825	7.73	0.51	8.24	30.00
VHT40	2	5755	-0.93	0.42	-0.51	30.00
VHT40	2	5795	5.89	0.42	6.31	30.00
VHT80	2	5775	-4.57	1.81	-2.76	30.00

Note:
1. D.F is duty factor.
2. Test results are bin-by-bin summing measured value of each TX port.

Worst Plot



Note: The plot without duty factor

3.5 Transmitter Radiated and Band Edge Emissions

3.5.1 Limit of Transmitter Radiated and Band Edge Emissions

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

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

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

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

3.5.2 Test Procedures

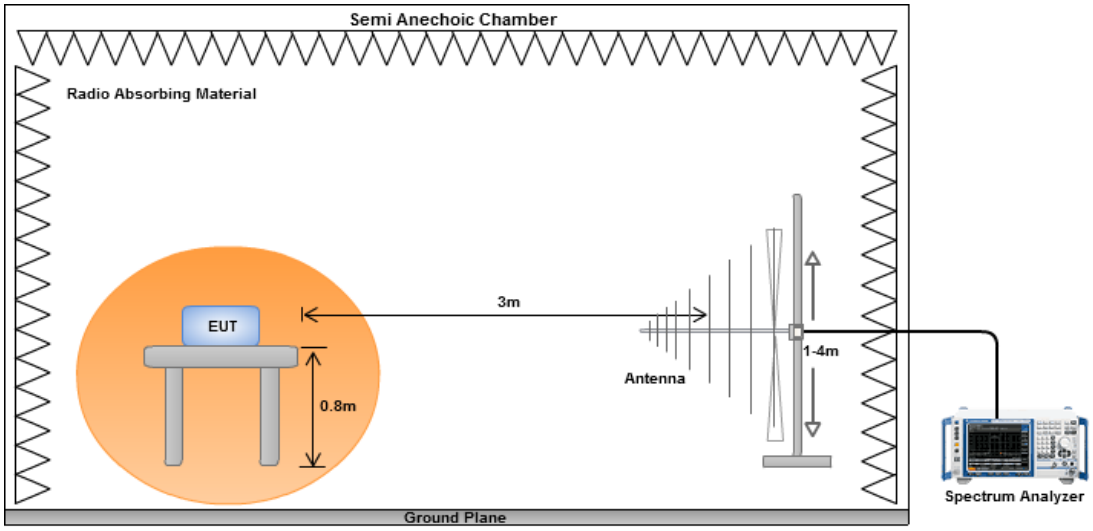
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

Note:

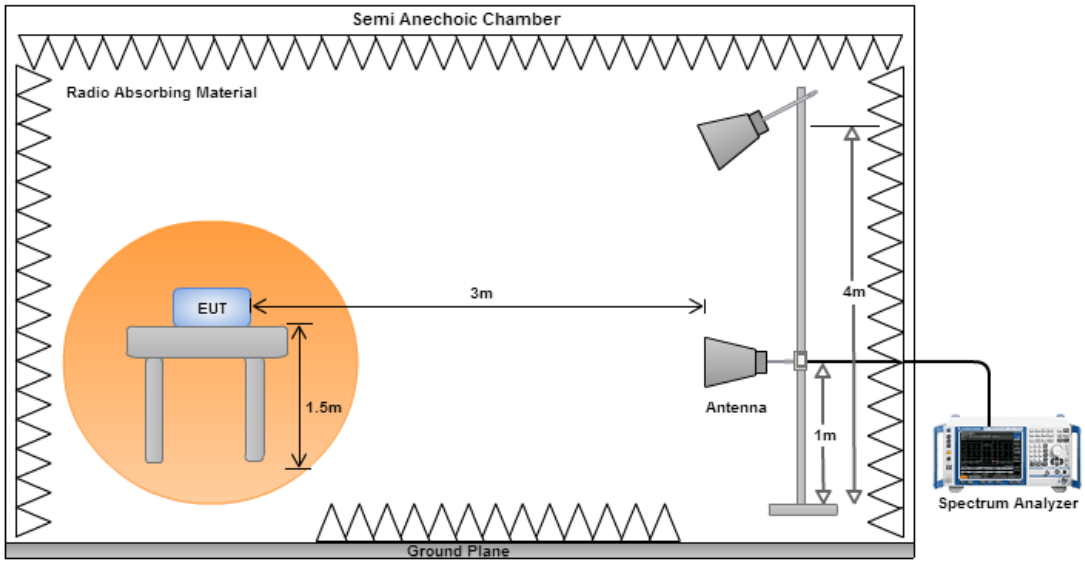
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz

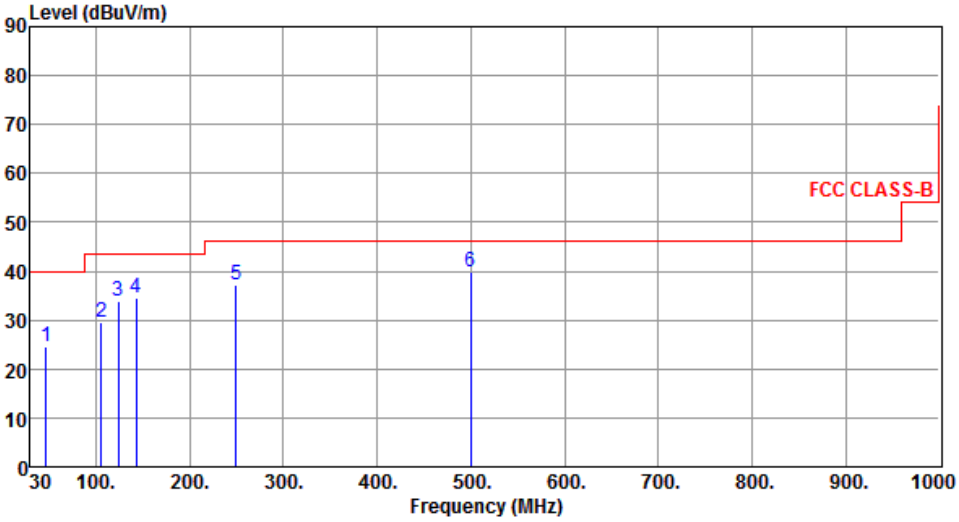


Radiated Emissions above 1 GHz



3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

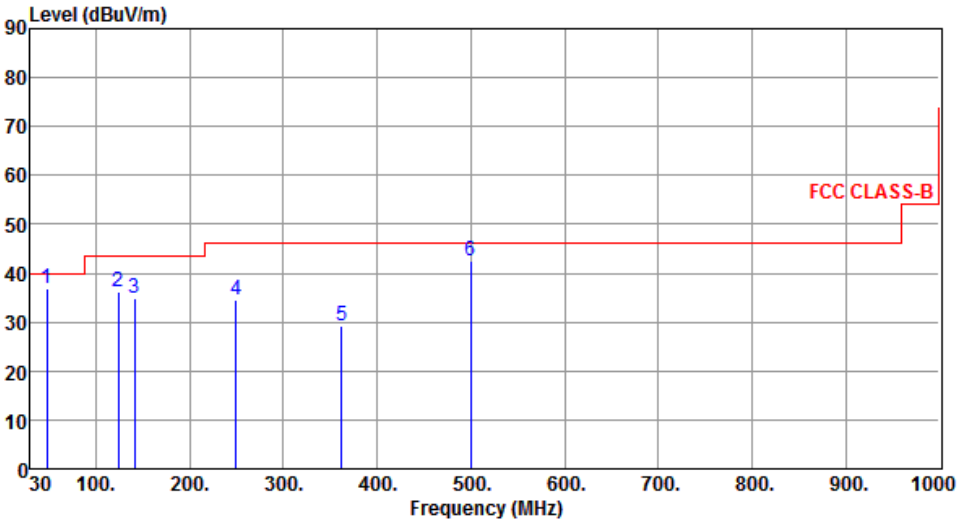
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	46.49	24.71	40.00	-15.29	36.35	-11.64	Peak	---	---
2	105.66	29.61	43.50	-13.89	45.32	-15.71	Peak	---	---
3	124.09	33.98	43.50	-9.52	47.66	-13.68	Peak	---	---
4	142.52	34.43	43.50	-9.07	46.60	-12.17	Peak	---	---
5	249.22	37.08	46.00	-8.92	49.87	-12.79	Peak	---	---
6	499.48	39.71	46.00	-6.29	46.23	-6.52	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).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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

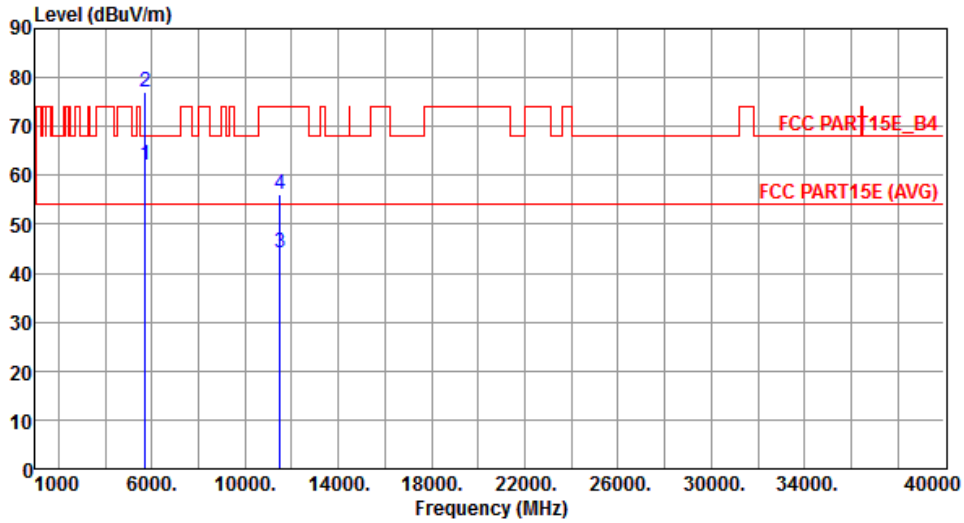


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	47.80	36.97	40.00	-3.03	48.62	-11.65	QP	100	166
2	124.09	36.09	43.50	-7.41	49.77	-13.68	Peak	---	---
3	141.55	34.97	43.50	-8.53	47.18	-12.21	Peak	---	---
4	249.22	34.68	46.00	-11.32	47.47	-12.79	Peak	---	---
5	361.74	29.27	46.00	-16.73	38.96	-9.69	Peak	---	---
6	499.48	42.53	46.00	-3.47	49.05	-6.52	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).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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

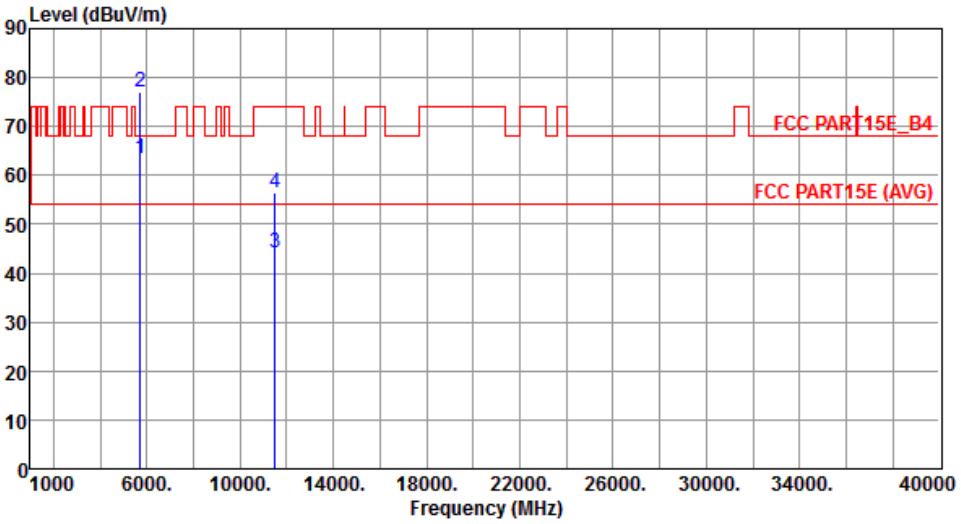
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		



	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	62.16	68.20	-6.04	56.46	5.70	Peak	165	159
2	5725.00	76.94	78.20	-1.26	71.23	5.71	Peak	165	159
3	11490.00	44.28	54.00	-9.72	29.66	14.62	Average	120	41
4	11490.00	56.20	74.00	-17.80	41.58	14.62	Peak	120	41

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).

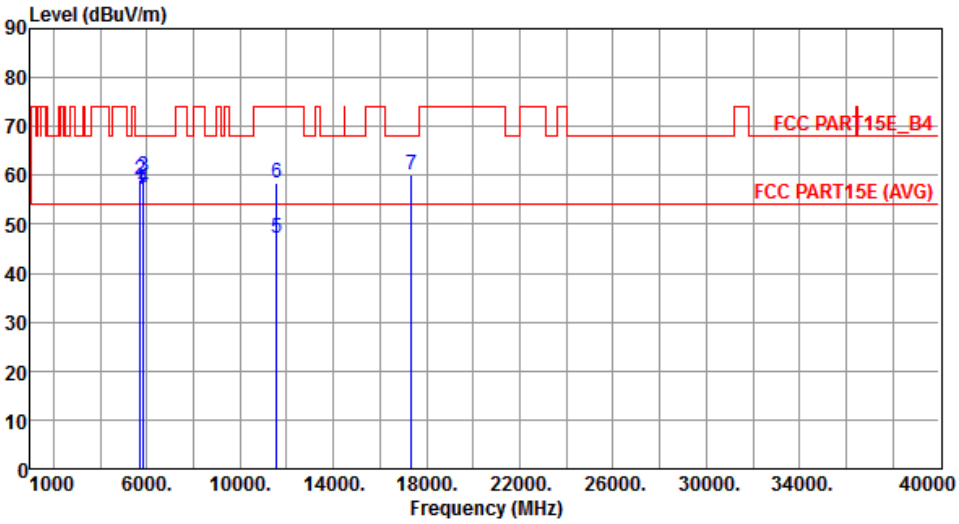
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		



	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	63.52	68.20	-4.68	57.82	5.70	Peak	236	266
2	5725.00	77.18	78.20	-1.02	71.47	5.71	Peak	236	266
3	11490.00	44.05	54.00	-9.95	29.43	14.62	Average	170	132
4	11490.00	56.31	74.00	-17.69	41.69	14.62	Peak	170	132

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).

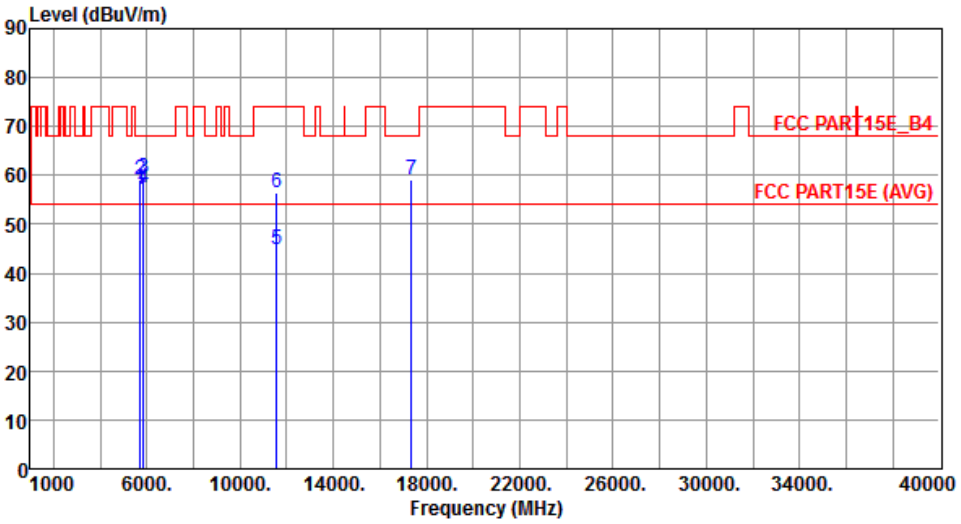
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		



	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	57.11	68.20	-11.09	51.41	5.70	Peak	167	157
2	5725.00	59.09	78.20	-19.11	53.38	5.71	Peak	167	157
3	5850.00	59.83	78.20	-18.37	53.86	5.97	Peak	167	157
4	5860.00	57.36	68.20	-10.84	51.38	5.98	Peak	167	157
5	11570.00	47.26	54.00	-6.74	32.74	14.52	Average	100	36
6	11570.00	58.46	74.00	-15.54	43.94	14.52	Peak	100	36
7	17355.00	60.08	68.20	-8.12	38.79	21.29	Peak	157	124

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).

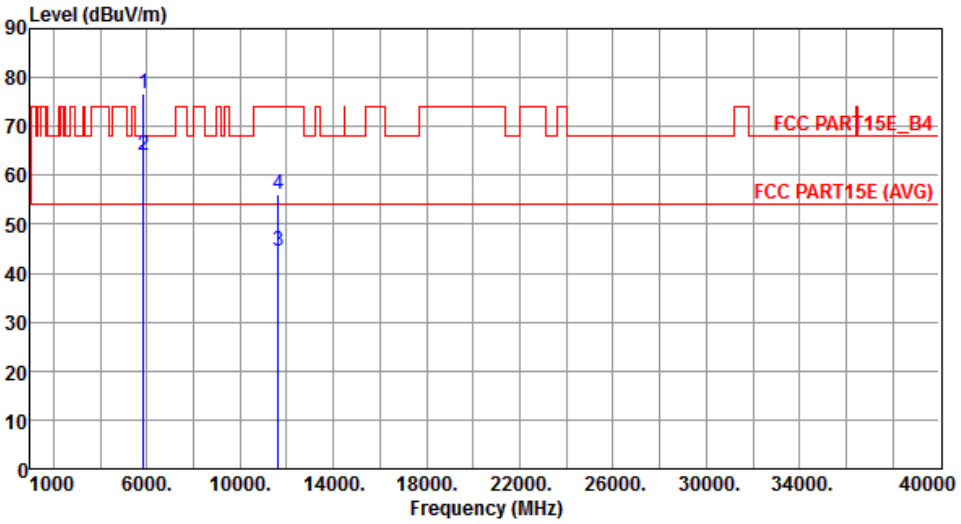
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		



	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	57.00	68.20	-11.20	51.30	5.70	Peak	100	272
2	5725.00	59.19	78.20	-19.01	53.48	5.71	Peak	100	272
3	5850.00	59.42	78.20	-18.78	53.45	5.97	Peak	100	272
4	5860.00	57.48	68.20	-10.72	51.50	5.98	Peak	100	272
5	11570.00	44.68	54.00	-9.32	30.16	14.52	Average	163	107
6	11570.00	56.37	74.00	-17.63	41.85	14.52	Peak	163	107
7	17355.00	59.10	68.20	-9.10	37.81	21.29	Peak	265	114

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).

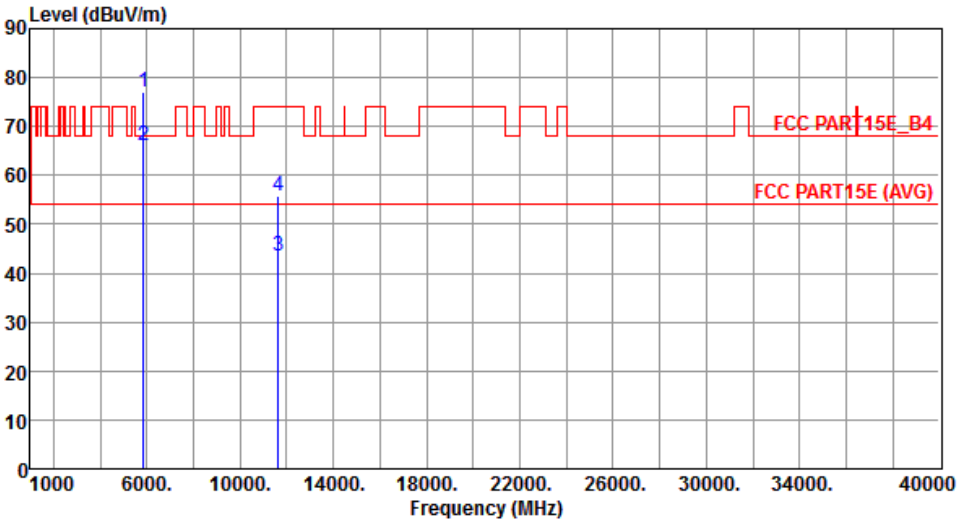
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		



	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	76.62	78.20	-1.58	70.65	5.97	Peak	257	187
2	5860.00	64.06	68.20	-4.14	58.08	5.98	Peak	257	187
3	11650.00	44.57	54.00	-9.43	30.17	14.40	Average	100	40
4	11650.00	56.03	74.00	-17.97	41.63	14.40	Peak	100	40

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		

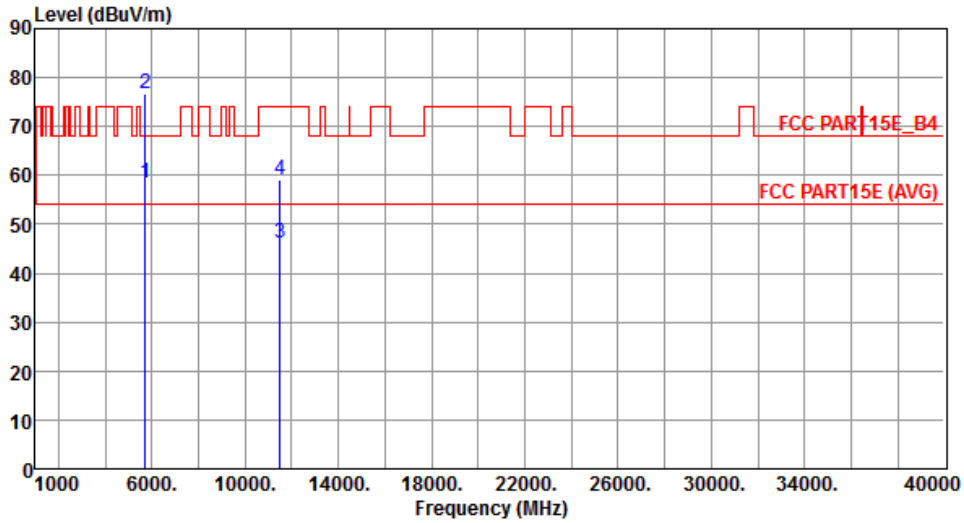


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	77.10	78.20	-1.10	71.13	5.97	Peak	236	262
2	5860.00	65.98	68.20	-2.22	60.00	5.98	Peak	236	262
3	11650.00	43.63	54.00	-10.37	29.23	14.40	Average	165	117
4	11650.00	55.63	74.00	-18.37	41.23	14.40	Peak	165	117

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

3.5.6 Transmitter Radiated Unwanted Emissions (Above 1GHz) for VHT20

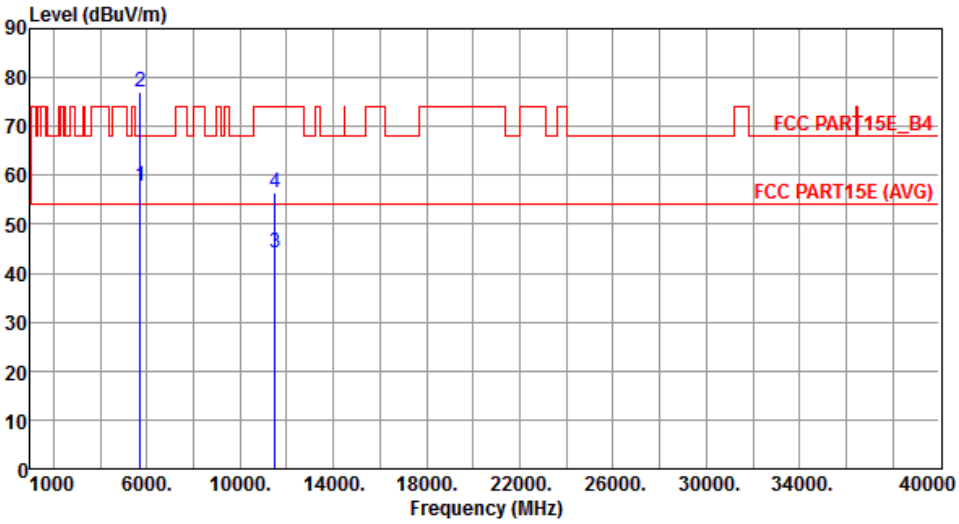
Modulation	VHT20	**Test Freq. (MHz)**	5745
Polarization	Horizontal		



	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	58.45	68.20	-9.75	52.75	5.70	Peak	165	162
2	5725.00	76.86	78.20	-1.34	71.15	5.71	Peak	165	162
3	11490.00	46.17	54.00	-7.83	31.55	14.62	Average	100	42
4	11490.00	58.98	74.00	-15.02	44.36	14.62	Peak	100	42

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

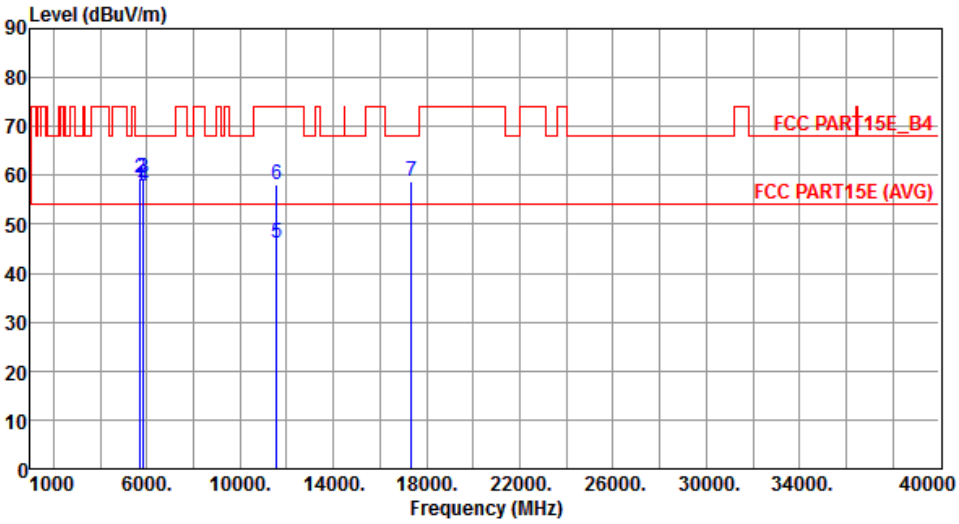
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		



	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	57.77	68.20	-10.43	52.07	5.70	Peak	233	265
2	5725.00	77.16	78.20	-1.04	71.45	5.71	Peak	233	265
3	11490.00	44.28	54.00	-9.72	29.66	14.62	Average	174	147
4	11490.00	56.61	74.00	-17.39	41.99	14.62	Peak	174	147

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).

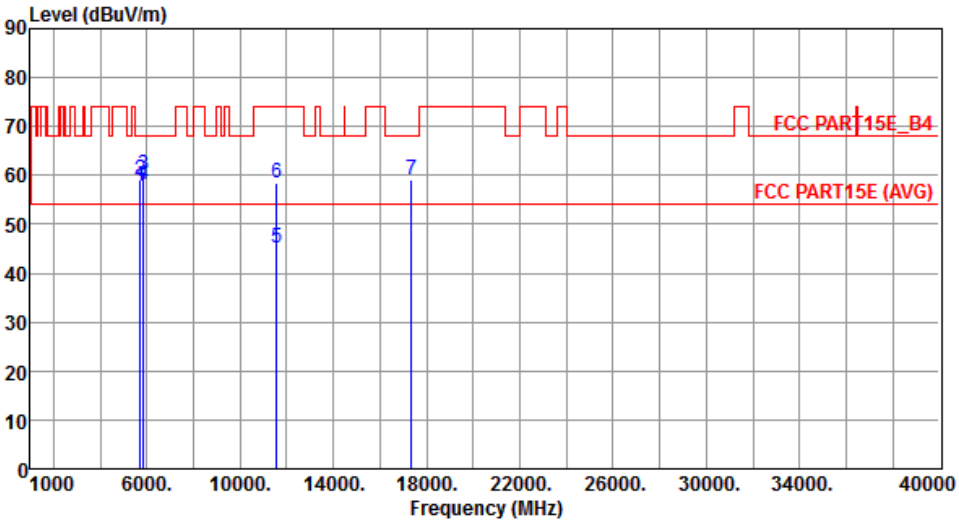
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	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	57.70	68.20	-10.50	52.00	5.70	Peak	190	152
2	5725.00	59.43	78.20	-18.77	53.72	5.71	Peak	190	152
3	5850.00	59.58	78.20	-18.62	53.61	5.97	Peak	190	152
4	5860.00	57.78	68.20	-10.42	51.80	5.98	Peak	190	152
5	11570.00	46.13	54.00	-7.87	31.61	14.52	Average	100	43
6	11570.00	58.16	74.00	-15.84	43.64	14.52	Peak	100	43
7	17355.00	58.65	68.20	-9.55	37.36	21.29	Peak	180	147

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).

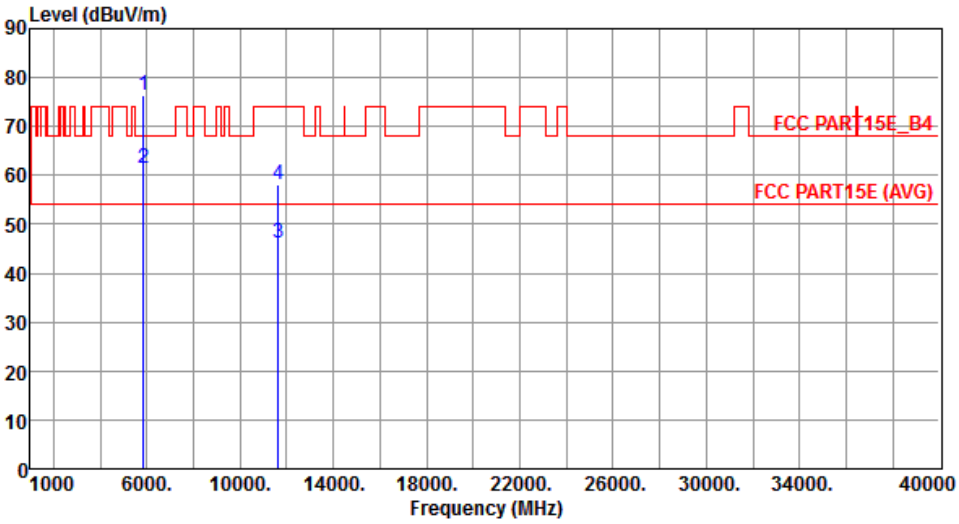
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		



	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	57.80	68.20	-10.40	52.10	5.70	Peak	239	260
2	5725.00	59.10	78.20	-19.10	53.39	5.71	Peak	239	260
3	5850.00	60.04	78.20	-18.16	54.07	5.97	Peak	239	260
4	5860.00	57.99	68.20	-10.21	52.01	5.98	Peak	239	260
5	11570.00	45.28	54.00	-8.72	30.76	14.52	Average	169	120
6	11570.00	58.28	74.00	-15.72	43.76	14.52	Peak	169	120
7	17355.00	59.02	68.20	-9.18	37.73	21.29	Peak	280	152

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

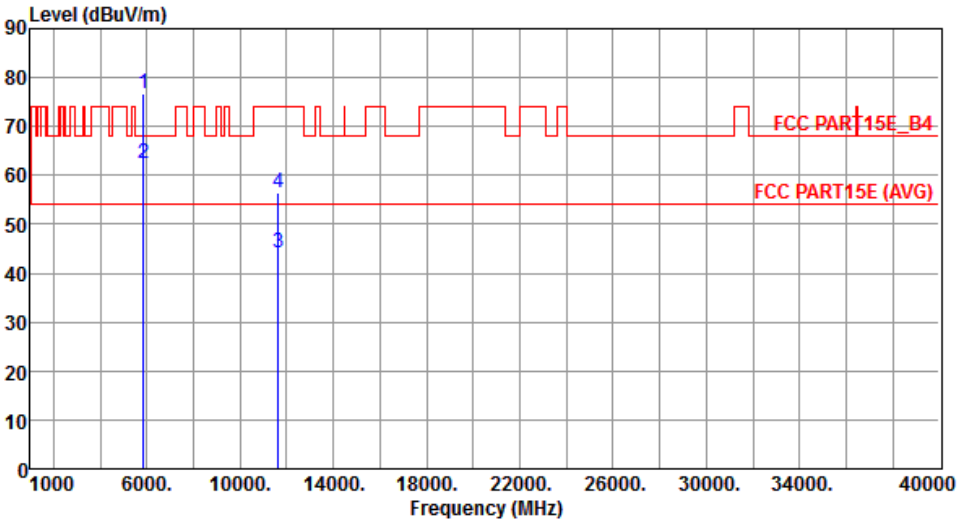
Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



	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	76.33	78.20	-1.87	70.36	5.97	Peak	174	153
2	5860.00	61.48	68.20	-6.72	55.50	5.98	Peak	174	153
3	11650.00	46.24	54.00	-7.76	31.84	14.40	Average	112	32
4	11650.00	58.18	74.00	-15.82	43.78	14.40	Peak	112	32

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	VHT20	Test Freq. (MHz)	5825
Polarization	Vertical		

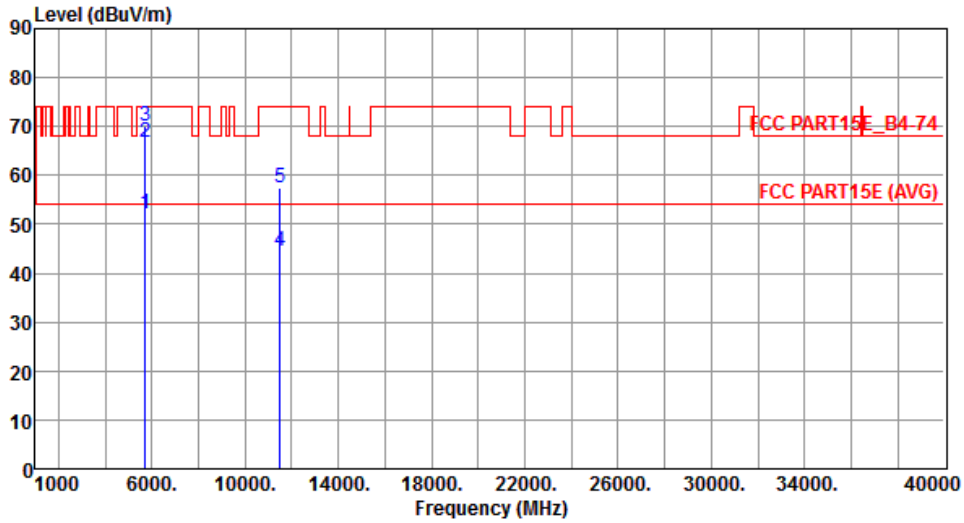


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	76.82	78.20	-1.38	70.85	5.97	Peak	219	264
2	5860.00	62.45	68.20	-5.75	56.47	5.98	Peak	219	264
3	11650.00	44.13	54.00	-9.87	29.73	14.40	Average	163	112
4	11650.00	56.48	74.00	-17.52	42.08	14.40	Peak	163	112

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

3.5.7 Transmitter Radiated Unwanted Emissions (Above 1GHz) for VHT40

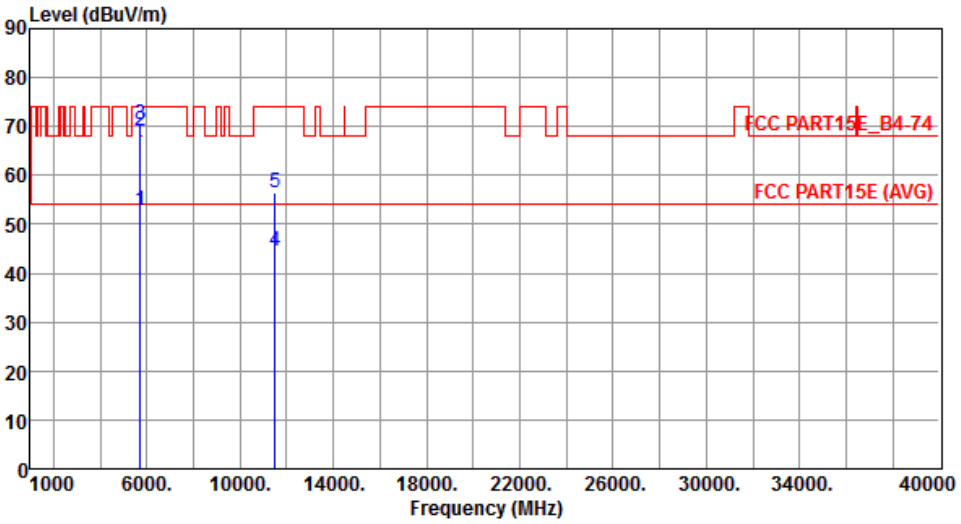
Modulation	VHT40	**Test Freq. (MHz)**	5755
Polarization	Horizontal		



	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	52.05	54.00	-1.95	46.35	5.70	Average	200	165
2	5715.00	66.91	74.00	-7.09	61.21	5.70	Peak	200	165
3	5725.00	70.16	78.20	-8.04	64.45	5.71	Peak	200	165
4	11510.00	44.37	54.00	-9.63	29.75	14.62	Average	100	40
5	11510.00	57.57	74.00	-16.43	42.95	14.62	Peak	100	40

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).

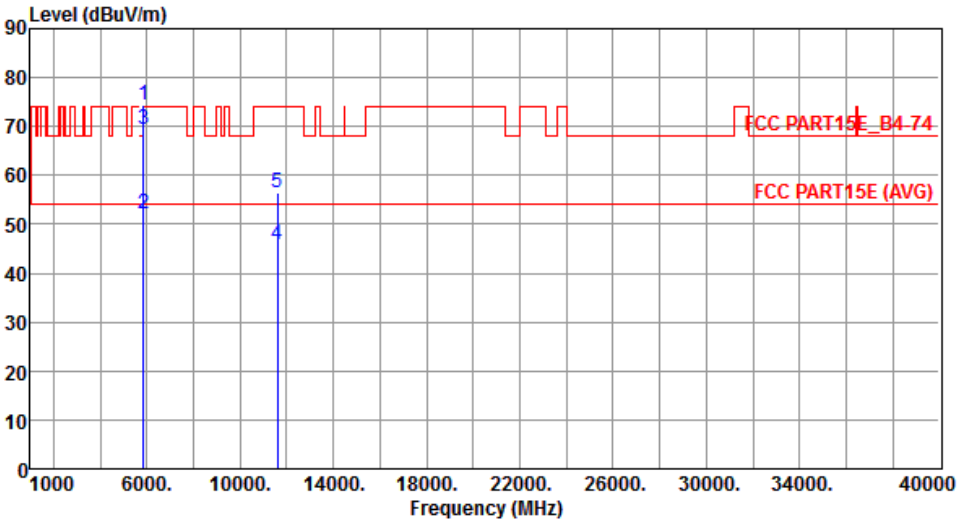
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		



	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	52.71	54.00	-1.29	47.01	5.70	Average	236	261
2	5715.00	69.00	74.00	-5.00	63.30	5.70	Peak	236	261
3	5725.00	70.41	78.20	-7.79	64.70	5.71	Peak	236	261
4	11510.00	44.60	54.00	-9.40	29.98	14.62	Average	159	100
5	11510.00	56.30	74.00	-17.70	41.68	14.62	Peak	159	100

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).

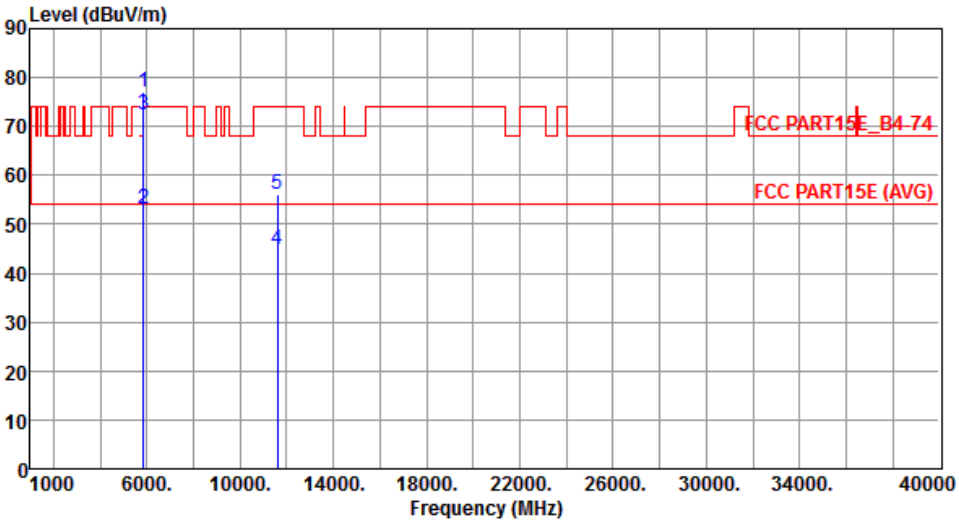
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	74.50	78.20	-3.70	68.53	5.97	Peak	181	157
2	5860.00	52.29	54.00	-1.71	46.31	5.98	Average	181	157
3	5860.00	69.34	74.00	-4.66	63.36	5.98	Peak	181	157
4	11590.00	45.76	54.00	-8.24	31.26	14.50	Average	100	35
5	11590.00	56.45	74.00	-17.55	41.95	14.50	Peak	100	35

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	VHT40	Test Freq. (MHz)	5795
Polarization	Vertical		

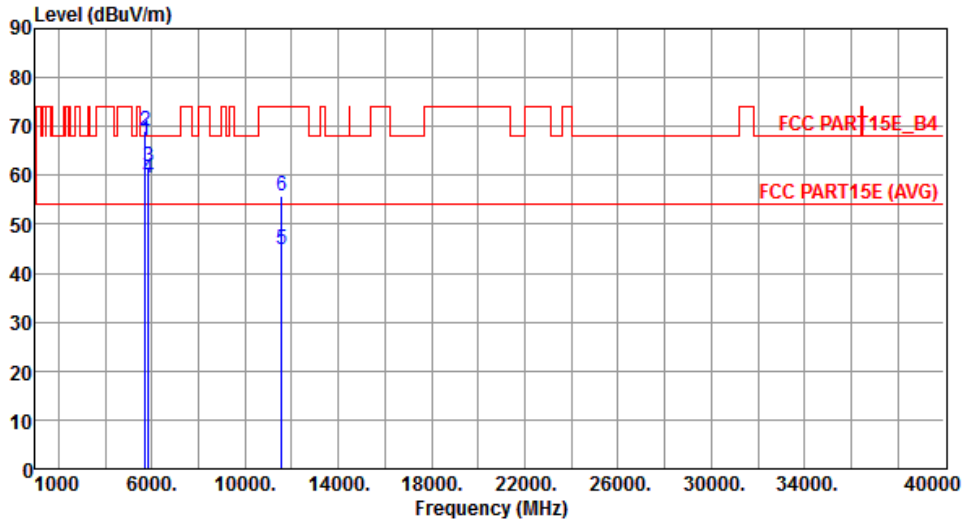


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5850.00	77.07	78.20	-1.13	71.10	5.97	Peak	236	260
2	5860.00	52.98	54.00	-1.02	47.00	5.98	Average	236	260
3	5860.00	72.45	74.00	-1.55	66.47	5.98	Peak	236	260
4	11590.00	44.82	54.00	-9.18	30.32	14.50	Average	170	96
5	11590.00	56.14	74.00	-17.86	41.64	14.50	Peak	170	96

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

3.5.8 Transmitter Radiated Unwanted Emissions (Above 1GHz) for VHT80

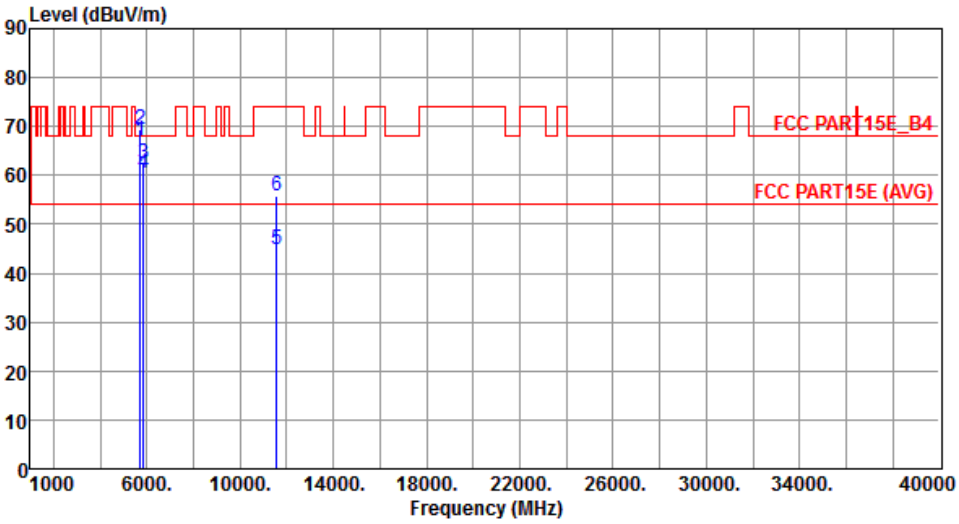
Modulation	VHT80	**Test Freq. (MHz)**	5775
Polarization	Horizontal		



	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	66.93	68.20	-1.27	61.23	5.70	Peak	170	156
2	5725.00	69.09	78.20	-9.11	63.38	5.71	Peak	170	156
3	5850.00	61.78	78.20	-16.42	55.81	5.97	Peak	170	156
4	5860.00	59.45	68.20	-8.75	53.47	5.98	Peak	170	156
5	11550.00	44.91	54.00	-9.09	30.36	14.55	Average	100	22
6	11550.00	55.91	74.00	-18.09	41.36	14.55	Peak	100	22

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	VHT80	Test Freq. (MHz)	5775
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	66.95	68.20	-1.25	61.25	5.70	Peak	227	266
2	5725.00	69.43	78.20	-8.77	63.72	5.71	Peak	227	266
3	5850.00	62.54	78.20	-15.66	56.57	5.97	Peak	227	266
4	5860.00	60.47	68.20	-7.73	54.49	5.98	Peak	227	266
5	11550.00	44.80	54.00	-9.20	30.25	14.55	Average	165	107
6	11550.00	55.67	74.00	-18.33	41.12	14.55	Peak	165	107

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

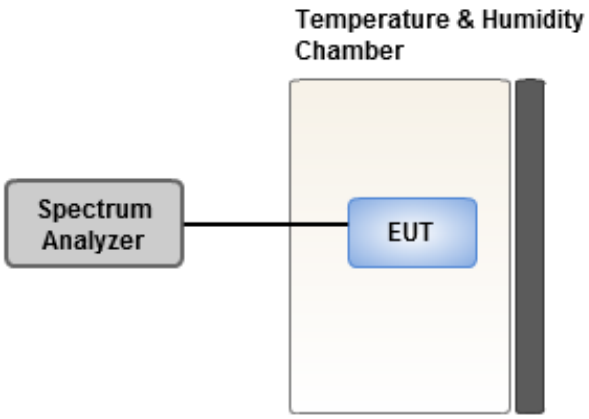
3.6.1 Limit of Frequency Stability

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: 5785 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	5.97	5.53	5.91	6.35
T20°CVmin	5.29	4.85	5.13	5.17
T50°CVnom	4.98	5.01	5.38	5.34
T40°CVnom	3.88	3.62	3.85	3.87
T30°CVnom	4.33	4.03	4.22	4.58
T20°CVnom	4.58	4.56	3.96	4.64
T10°CVnom	3.98	3.42	3.80	3.77
T0°CVnom	3.01	2.99	3.36	2.79
T-10°CVnom	1.95	1.01	1.05	2.03
T-20°CVnom	1.75	1.82	1.49	1.71
T-30°CVnom	2.25	2.25	2.02	1.70
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 102
Tnom [°C]: 20		Tmax [°C]: 50		Tmin [°C]: -30

4 Test laboratory information

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

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

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

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

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

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

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