FCC Test Report

FCC ID	:	**2AN9V-CY889**
Equipment	:	**DIALOG**
Model No.	:	**CY889**
Brand Name	:	**DEVIALET**
Applicant	:	**DEVIALET**
Address	:	**10 Place Vendome, PARIS, France, 75001**
Standard	:	**47 CFR FCC Part 15.407**
Received Date	:	**Jan. 31, 2018**
Tested Date	:	**Feb. 01 ~ Jul. 30, 2018**

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.

Reviewed by: **Approved by:**

Along Chen / Assistant Manager **Gary Chang / Manager**

Testing Laboratory 2732

Table of Contents

Release Record

Report No.	Version	Description	Issued Date
FR813101AN	Rev. 01	Initial issue	Dec. 21, 2018

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 1.317MHz 26.92 (Margin -19.08dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5150.00MHz 53.73 (Margin -0.27dB) - 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]: ***Non-beamforming mode*** 5150-5250MHz: 24.86 5725-5850MHz: 24.22 ***Beamforming mode*** 5150-5250MHz: 24.78 5725-5850MHz: 23.84	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	a	5180-5240	36-48 [4]	2	6-54 Mbps
5150-5250	n (HT20)	5180-5240	36-48 [4]	2	MCS 0-15
5150-5250	n (HT40)	5190-5230	38-46 [2]	2	MCS 0-15
5150-5250	ac (VHT20)	5180-5240	36-48 [4]	2	MCS 0-9
5150-5250	ac (VHT40)	5190-5230	38-46 [2]	2	MCS 0-9
5150-5250	ac (VHT80)	5210	42 [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. Note 3: 802.11ac supports beamforming function.					

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. Note 3: 802.11ac supports beamforming function.					

1.1.2 Antenna Details

Ant. No.	**Model**	**Type**	**Connector**	**Operating Frequency (MHz) / Gain (dBi)**		
				2400~2483.5	**5150~5250**	**5725~5850**
1	Ant 1	PIFA	UFL	1.65	4.16	3.53
2	Ant 2	PIFA	UFL	2.2	3.85	5.95

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	100~240Vac

1.1.4 Accessories

Accessories		
No.	**Equipment**	**Description**
1	RJ45 cable	0.9m shielded without core.
2	Power cord (White)	1.4m non-shielded without core.

1.1.5 Channel List

For Frequency band 5150-5250 MHz			
802.11 a / HT20 / VHT20		**HT40 / VHT40**	
Channel	**Frequency(MHz)**	**Channel**	**Frequency(MHz)**
36	5180	38	5190
40	5200	46	5230
44	5220	**VHT80**	
48	5240	42	5210

For Frequency band 5725~5850 MHz			
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	---	---

1.1.6 Test Tool and Duty Cycle

Test Tool	Non-beamforming: QCART, V3.0.187.0 Beamforming: LanTest20, V2.0.0.2				
Duty Cycle and Duty Factor	Mode	Non-beamforming		Beamforming	
		Duty cycle (%)	Duty factor (dB)	Duty cycle (%)	Duty factor (dB)
	11a	97.29%	0.12	---	---
	VHT20	99.15%	0.04	95.29%	0.21
	VHT40	97.58%	0.11	91.80%	0.37
	VHT80	94.34%	0.25	87.73%	0.57

1.1.7 Power Setting

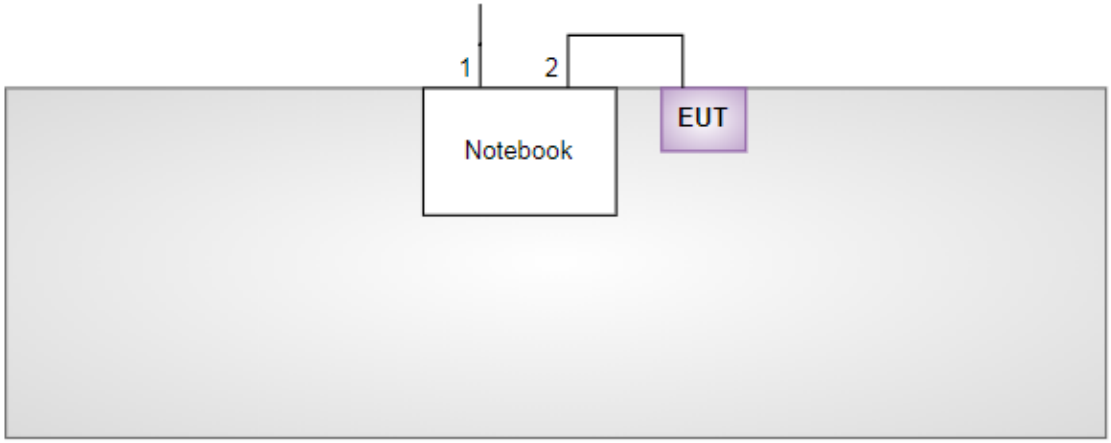
For Frequency band 5150-5250 MHz			
Modulation Mode	Test Frequency (MHz)	Power Set	
		Non-Beamforming	Beamforming
11a	5180	21	---
11a	5200	22.5	---
11a	5240	22.5	---
HT20	5180	21	---
HT20	5200	22.5	---
HT20	5240	22.5	---
HT40	5190	17	---
HT40	5230	22.5	---
VHT20	5180	21	24
VHT20	5200	22.5	24
VHT20	5240	22.5	24
VHT40	5190	17	19
VHT40	5230	22.5	24
VHT80	5210	16.5	20

For Frequency band 5725~5850 MHz			
Modulation Mode	Test Frequency (MHz)	Power Set	
		Non-Beamforming	Beamforming
11a	5745	21	---
11a	5785	20	---
11a	5825	20	---
HT20	5745	21	---
HT20	5785	20	---
HT20	5825	20	---
HT40	5755	20.50	---
HT40	5795	20.50	---
VHT20	5745	21	23
VHT20	5785	20	23
VHT20	5825	20	23
VHT40	5755	20.50	23
VHT40	5795	20.50	23
VHT80	5775	20.00	23

1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Notebook	DELL	Latitude E5470	DoC	---

1.3 Test Setup Chart

Test Setup Diagram


No.	Signal cable / Length (m)
1	Power cord, 1.4m non-shielded.
2	RJ45, 0.9m shielded.

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Jul. 30, 2018				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Jan. 05, 2018	Jan. 04, 2019
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 13, 2017	Nov. 12, 2018
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127-666	Nov. 24, 2017	Nov. 23, 2018
RF Cable-CON	EMC	EMCCFD300-BM-BM-6000	50821	Dec. 18, 2017	Dec. 17, 2018
50 ohm terminal (Support Unit)	NA	50	04	May 22, 2018	May 21, 2019
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission below 1GHz				
Test Site	966 chamber1 / (03CH01-WS)				
Tested Date	Jul. 20, 2018				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101498	Dec. 04, 2017	Dec. 03, 2018
Receiver	R&S	ESR3	101658	Nov. 20, 2017	Nov. 19, 2018
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jul. 25, 2017	Jul. 24, 2018
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Dec. 20, 2017	Dec. 19, 2018
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 23, 2017	Nov. 22, 2018
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 13, 2017	Nov. 12, 2018
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Dec. 07, 2017	Dec. 06, 2018
Preamplifier	EMC	EMC02325	980225	Jul. 28, 2017	Jul. 27, 2018
Preamplifier	Agilent	83017A	MY39501308	Oct. 06, 2017	Oct. 05, 2018
Preamplifier	EMC	EMC184045B	980192	Aug. 22, 2017	Aug. 21, 2018
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16140/4	May. 09, 2018	May. 08, 2019
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Dec. 07, 2017	Dec. 06, 2018
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16139/4	Dec. 07, 2017	Dec. 06, 2018
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	16052	Dec. 07, 2017	Dec. 06, 2018
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Dec. 07, 2017	Dec. 06, 2018
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-002	Dec. 07, 2017	Dec. 06, 2018
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission above 1GHz				
Test Site	966 chamber1 / (03CH01-WS)				
Tested Date	Feb. 01, 2018				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101498	Dec. 04, 2017	Dec. 03, 2018
Receiver	R&S	ESR3	101658	Nov. 20, 2017	Nov. 19, 2018
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jul. 25, 2017	Jul. 24, 2018
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Dec. 20, 2017	Dec. 19, 2018
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 23, 2017	Nov. 22, 2018
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 13, 2017	Nov. 12, 2018
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Dec. 07, 2017	Dec. 06, 2018
Preamplifier	EMC	EMC02325	980225	Jul. 28, 2017	Jul. 27, 2018
Preamplifier	Agilent	83017A	MY39501308	Oct. 06, 2017	Oct. 05, 2018
Preamplifier	EMC	EMC184045B	980192	Aug. 22, 2017	Aug. 21, 2018
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Dec. 07, 2017	Dec. 06, 2018
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Dec. 07, 2017	Dec. 06, 2018
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16139/4	Dec. 07, 2017	Dec. 06, 2018
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	16052	Dec. 07, 2017	Dec. 06, 2018
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Dec. 07, 2017	Dec. 06, 2018
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-002	Dec. 07, 2017	Dec. 06, 2018
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)				
Tested Date	Mar. 14 ~ Mar. 20, 2018				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101486	Nov. 21, 2017	Nov. 20, 2018
Power Meter	Anritsu	ML2495A	1241002	Oct. 16, 2017	Oct. 15, 2018
Power Sensor	Anritsu	MA2411B	1207366	Oct. 16, 2017	Oct. 15, 2018
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 v02r01
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	±3.66 dB
Radiated emission > 1GHz	±5.63 dB
Time	±0.1%
Temperature	±0.6 ^{o}C

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	23°C / 55%	Alex Tsai
Radiated Emissions	03CH01-WS	21-24°C / 65-66%	Akun Chung Roger Lu
RF Conducted	TH01-WS	21°C / 63%	Brad Wu

- FCC Designation No.: TW2732
- FCC site registration No.: 181692
- IC site registration No.: 10807A-1

2.2 The Worst Test Modes and Channel Details

Non-beamforming mode

For Frequency band 5150-5250 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	11a	5200	6 Mbps	---
Radiated Emissions ≤1GHz	11a	5200	6 Mbps	---
RF Output Power	11a HT20 HT40 VHT20 VHT40 VHT80	5180 / 5200 / 5240 5180 / 5200 / 5240 5190 / 5230 5180 / 5200 / 5240 5190 / 5230 5210	6 Mbps MCS 0 MCS 0 MCS 0 MCS 0 MCS 0	---
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	11a VHT20 VHT40 VHT80	5180 / 5200 / 5240 5180 / 5200 / 5240 5190 / 5230 5210	6 Mbps MCS 0 MCS 0 MCS 0	---
Frequency Stability	Un-modulation	5200	---	---
NOTE: The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **X-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	VHT40	5795	MCS 0	---
Radiated Emissions ≤1GHz	VHT40	5795	MCS 0	---
RF Output Power	11a HT20 HT40 VHT20 VHT40 VHT80	5745 / 5785 / 5825 5745 / 5785 / 5825 5755 / 5795 5745 / 5785 / 5825 5755 / 5795 5775	6 Mbps MCS 0 MCS 0 MCS 0 MCS 0 MCS 0	---
Radiated Emissions >1GHz Emission Bandwidth 6dB bandwidth Peak Power Spectral Density	11a VHT20 VHT40 VHT80	5745 / 5785 / 5825 5745 / 5785 / 5825 5755 / 5795 5775	6 Mbps MCS 0 MCS 0 MCS 0	---
Frequency Stability	Un-modulation	5785	---	---
NOTE: The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **X-plane** results were found as the worst case and were shown in this report.				

Beamforming mode

For Frequency band 5150-5250 MHz				
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate (Mbps) / MCS**	**Test Configuration**
Conducted Emissions	VHT40	5230	MCS 0	---
Radiated Emissions ≤1GHz	VHT40	5230	MCS 0	---
RF Output Power	VHT20 VHT40 VHT80	5180 / 5200 / 5240 5190 / 5230 5210	MCS 0 MCS 0 MCS 0	---
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	VHT20 VHT40 VHT80	5180 / 5200 / 5240 5190 / 5230 5210	MCS 0 MCS 0 MCS 0	---
NOTE: The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **X-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	VHT40	5795	MCS 0	---
Radiated Emissions ≤1GHz	VHT40	5795	MCS 0	---
RF Output Power	VHT20 VHT40 VHT80	5745 / 5785 / 5825 5755 / 5795 5775	MCS 0 MCS 0 MCS 0	---
Radiated Emissions >1GHz Emission Bandwidth 6dB bandwidth Peak Power Spectral Density	VHT20 VHT40 VHT80	5745 / 5785 / 5825 5755 / 5795 5775	MCS 0 MCS 0 MCS 0	---
NOTE: The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **X-plane** results were found as the worst case and were shown in this report.				

3 Transmitter Test Results

3.1 Conducted Emissions

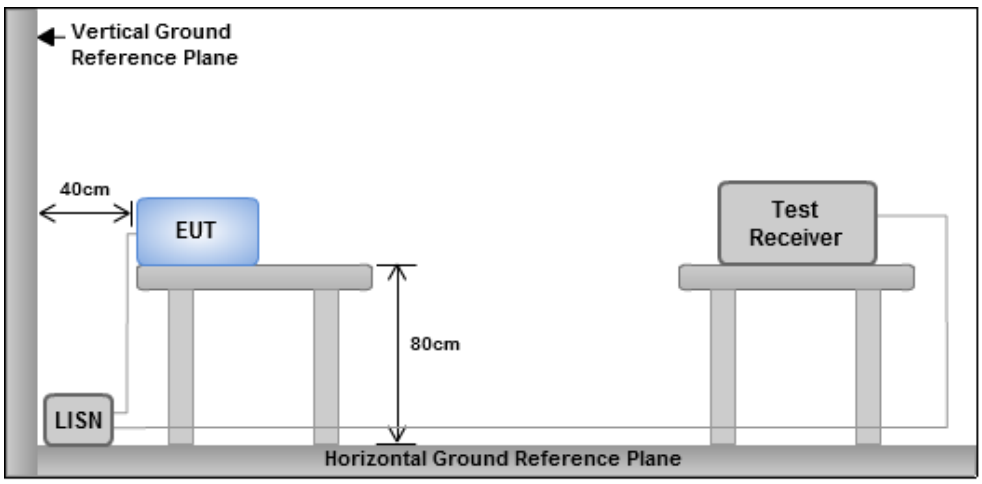
3.1.1 Limit of Conducted Emissions

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



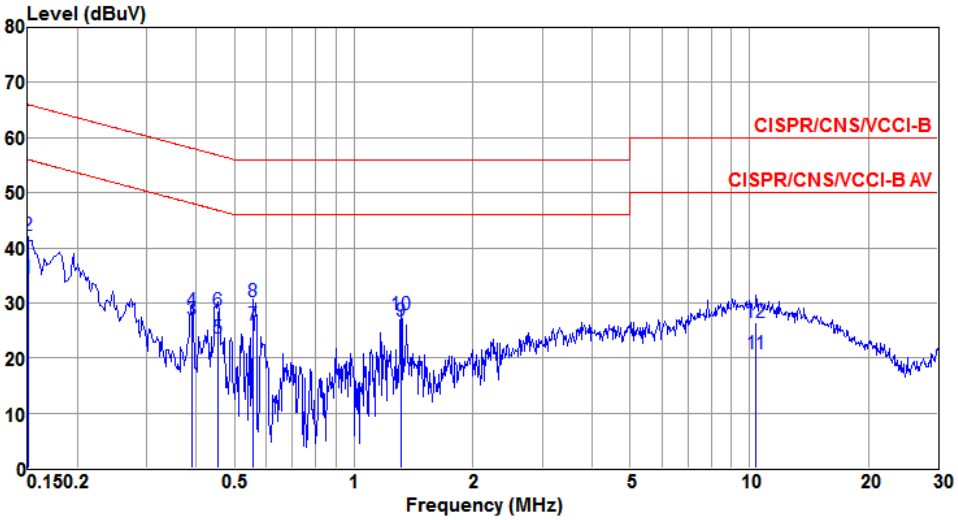
Note: 1. Support units were connected to second LISN.

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

Non-beamforming mode

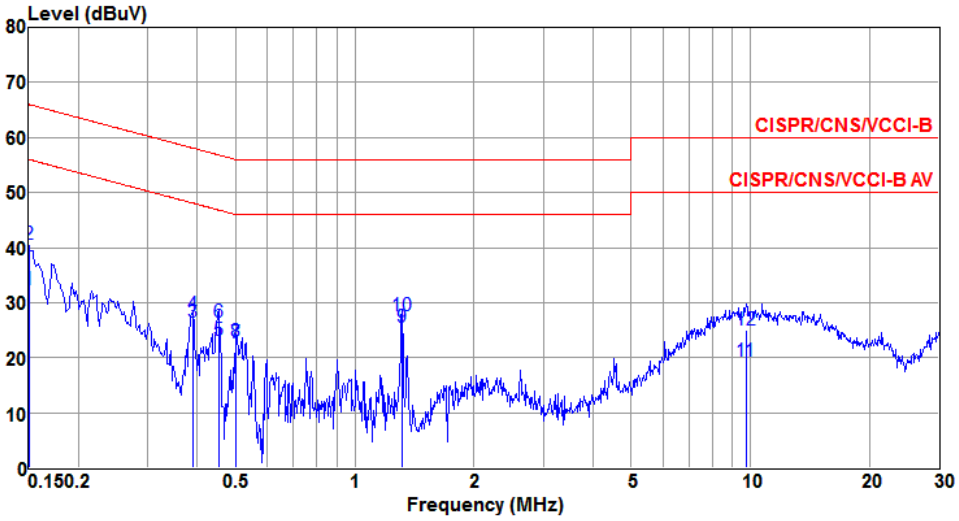
Modulation	11a	Test Freq. (MHz)	5200
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.150	34.43	56.00	-21.57	34.15	0.27	0.01	Average
2	0.150	42.36	66.00	-23.64	42.08	0.27	0.01	QP
3	0.389	26.91	48.08	-21.17	26.55	0.34	0.02	Average
4	0.389	28.48	58.08	-29.60	28.12	0.34	0.02	QP
5	0.454	23.63	46.80	-23.17	23.26	0.35	0.02	Average
6	0.454	28.67	56.80	-28.13	28.30	0.35	0.02	QP
7	0.558	26.03	46.00	-19.97	25.65	0.36	0.02	Average
8	0.558	30.24	56.00	-25.76	29.86	0.36	0.02	QP
9@	1.317	26.60	46.00	-19.40	26.13	0.41	0.06	Average
10	1.317	27.83	56.00	-28.17	27.36	0.41	0.06	QP
11	10.397	20.77	50.00	-29.23	19.87	0.58	0.32	Average
12	10.397	26.43	60.00	-33.57	25.53	0.58	0.32	QP

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

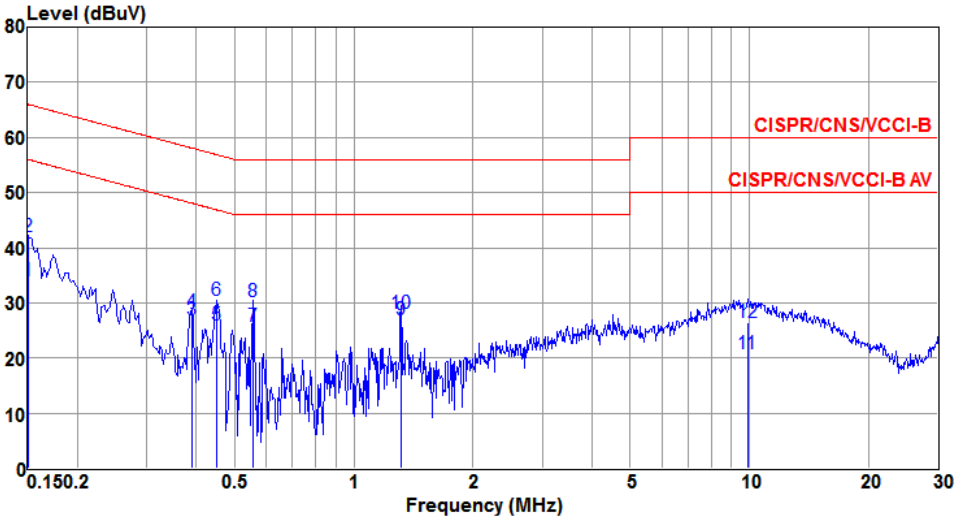
Modulation	11a	Test Freq. (MHz)	5200
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.150	32.33	56.00	-23.67	32.18	0.14	0.01	Average
2	0.150	40.53	66.00	-25.47	40.38	0.14	0.01	QP
3	0.389	26.43	48.08	-21.65	26.22	0.19	0.02	Average
4	0.389	27.79	58.08	-30.29	27.58	0.19	0.02	QP
5	0.454	23.20	46.80	-23.60	22.98	0.20	0.02	Average
6	0.454	26.33	56.80	-30.47	26.11	0.20	0.02	QP
7	0.502	22.76	46.00	-23.24	22.53	0.21	0.02	Average
8	0.502	22.95	56.00	-33.05	22.72	0.21	0.02	QP
9@	1.317	25.43	46.00	-20.57	25.09	0.28	0.06	Average
10	1.317	27.69	56.00	-28.31	27.35	0.28	0.06	QP
11	9.757	19.24	50.00	-30.76	18.46	0.46	0.32	Average
12	9.757	25.03	60.00	-34.97	24.25	0.46	0.32	QP

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

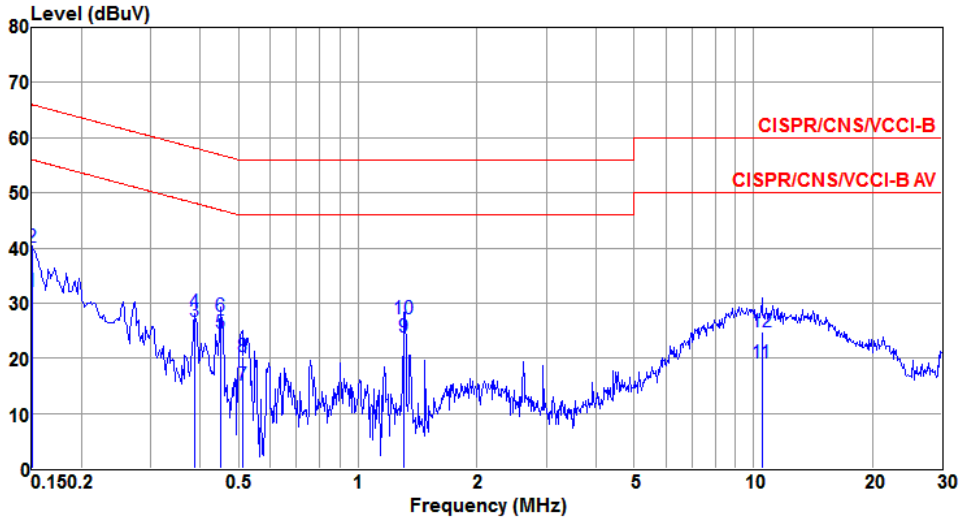
Modulation	VHT40	Test Freq. (MHz)	5795
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.150	34.11	56.00	-21.89	33.83	0.27	0.01	Average
2	0.150	41.93	66.00	-24.07	41.65	0.27	0.01	QP
3	0.389	26.84	48.08	-21.24	26.48	0.34	0.02	Average
4	0.389	28.27	58.08	-29.81	27.91	0.34	0.02	QP
5	0.449	25.94	46.89	-20.95	25.57	0.35	0.02	Average
6	0.449	30.34	56.89	-26.55	29.97	0.35	0.02	QP
7	0.558	25.77	46.00	-20.23	25.39	0.36	0.02	Average
8	0.558	30.10	56.00	-25.90	29.72	0.36	0.02	QP
9@	1.317	26.92	46.00	-19.08	26.45	0.41	0.06	Average
10	1.317	28.07	56.00	-27.93	27.60	0.41	0.06	QP
11	9.913	20.77	50.00	-29.23	19.88	0.57	0.32	Average
12	9.913	26.46	60.00	-33.54	25.57	0.57	0.32	QP

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

Modulation	VHT40	Test Freq. (MHz)	5795
Power Phase	Neutral		

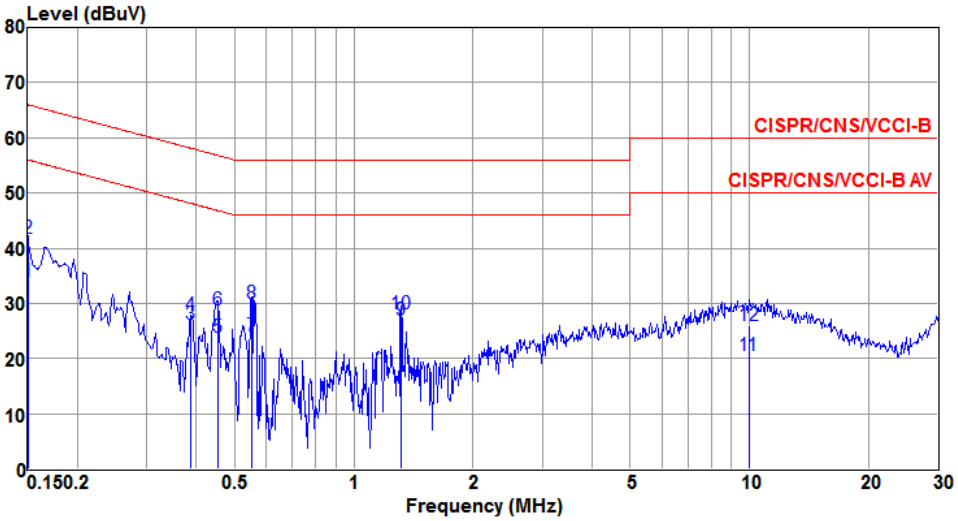


	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.150	32.08	56.00	-23.92	31.93	0.14	0.01	Average
2	0.150	40.05	66.00	-25.95	39.90	0.14	0.01	QP
3@	0.387	26.70	48.12	-21.42	26.49	0.19	0.02	Average
4	0.387	28.26	58.12	-29.86	28.05	0.19	0.02	QP
5	0.449	24.61	46.89	-22.28	24.39	0.20	0.02	Average
6	0.449	27.55	56.89	-29.34	27.33	0.20	0.02	QP
7	0.510	15.21	46.00	-30.79	14.98	0.21	0.02	Average
8	0.510	20.22	56.00	-35.78	19.99	0.21	0.02	QP
9	1.310	23.89	46.00	-22.11	23.55	0.28	0.06	Average
10	1.310	27.12	56.00	-28.88	26.78	0.28	0.06	QP
11	10.508	19.13	50.00	-30.87	18.34	0.47	0.32	Average
12	10.508	24.74	60.00	-35.26	23.95	0.47	0.32	QP

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

Beamforming mode

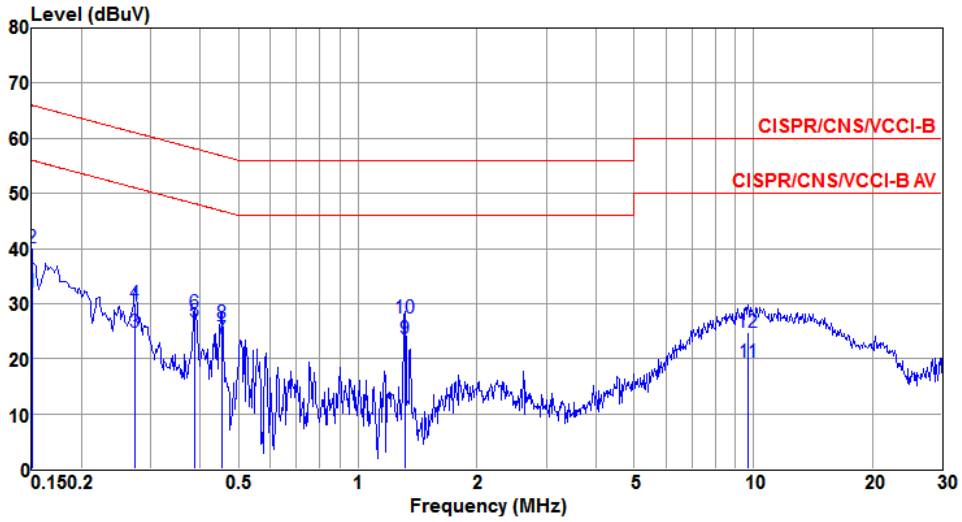
Modulation	VHT40	Test Freq. (MHz)	5230
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.150	33.97	56.00	-22.03	33.69	0.27	0.01	Average
2	0.150	41.85	66.00	-24.15	41.57	0.27	0.01	QP
3	0.387	26.26	48.12	-21.86	25.90	0.34	0.02	Average
4	0.387	27.76	58.12	-30.36	27.40	0.34	0.02	QP
5	0.454	23.76	46.80	-23.04	23.39	0.35	0.02	Average
6	0.454	28.87	56.80	-27.93	28.50	0.35	0.02	QP
7	0.552	24.01	46.00	-21.99	23.63	0.36	0.02	Average
8	0.552	29.89	56.00	-26.11	29.51	0.36	0.02	QP
9@	1.317	26.85	46.00	-19.15	26.38	0.41	0.06	Average
10	1.317	28.08	56.00	-27.92	27.61	0.41	0.06	QP
11	9.966	20.52	50.00	-29.48	19.63	0.57	0.32	Average
12	9.966	26.07	60.00	-33.93	25.18	0.57	0.32	QP

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

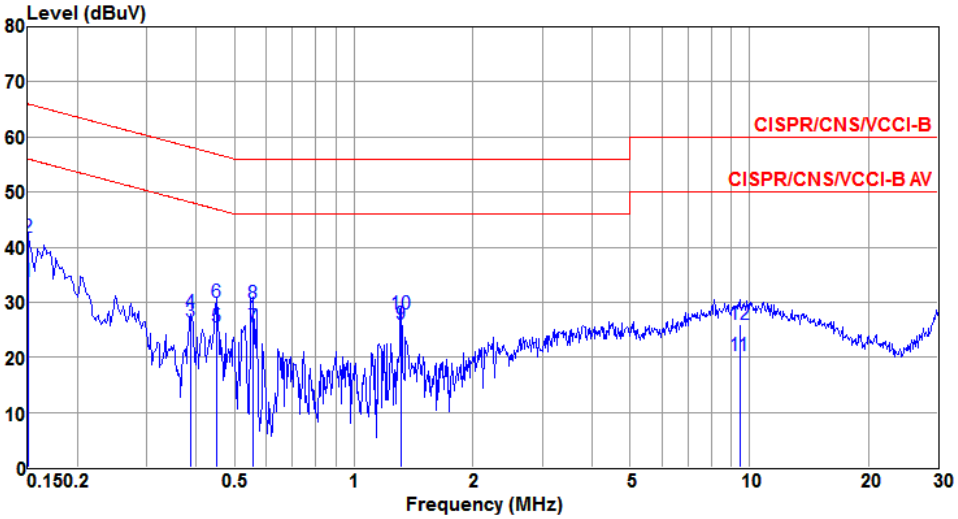
Modulation	VHT40	Test Freq. (MHz)	5230
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.150	32.07	56.00	-23.93	31.92	0.14	0.01	Average
2	0.150	40.16	66.00	-25.84	40.01	0.14	0.01	QP
3	0.273	24.85	51.03	-26.18	24.65	0.17	0.03	Average
4	0.273	29.90	61.03	-31.13	29.70	0.17	0.03	QP
5@	0.387	26.75	48.12	-21.37	26.54	0.19	0.02	Average
6	0.387	28.32	58.12	-29.80	28.11	0.19	0.02	QP
7	0.454	23.56	46.80	-23.24	23.34	0.20	0.02	Average
8	0.454	26.56	56.80	-30.24	26.34	0.20	0.02	QP
9	1.317	23.67	46.00	-22.33	23.33	0.28	0.06	Average
10	1.317	27.29	56.00	-28.71	26.95	0.28	0.06	QP
11	9.705	19.26	50.00	-30.74	18.48	0.46	0.32	Average
12	9.705	24.86	60.00	-35.14	24.08	0.46	0.32	QP

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

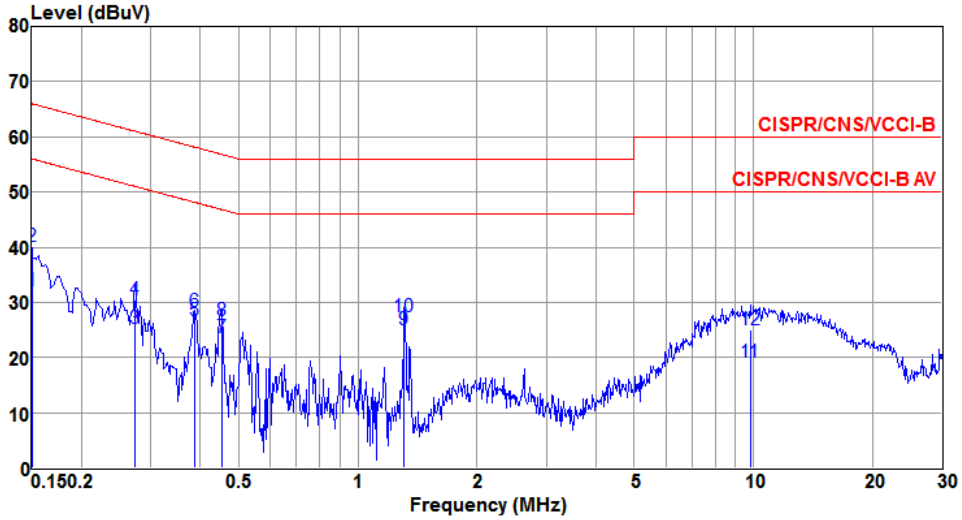
Modulation	VHT40	Test Freq. (MHz)	5795
Power Phase	Line		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.150	33.77	56.00	-22.23	33.49	0.27	0.01	Average
2	0.150	41.89	66.00	-24.11	41.61	0.27	0.01	QP
3	0.387	26.48	48.12	-21.64	26.12	0.34	0.02	Average
4	0.387	27.98	58.12	-30.14	27.62	0.34	0.02	QP
5	0.449	25.54	46.89	-21.35	25.17	0.35	0.02	Average
6	0.449	30.00	56.89	-26.89	29.63	0.35	0.02	QP
7	0.558	25.50	46.00	-20.50	25.12	0.36	0.02	Average
8	0.558	29.78	56.00	-26.22	29.40	0.36	0.02	QP
9@	1.317	26.00	46.00	-20.00	25.53	0.41	0.06	Average
10	1.317	27.88	56.00	-28.12	27.41	0.41	0.06	QP
11	9.451	20.37	50.00	-29.63	19.50	0.56	0.31	Average
12	9.451	26.07	60.00	-33.93	25.20	0.56	0.31	QP

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

Modulation	VHT40	Test Freq. (MHz)	5795
Power Phase	Neutral		



	Freq	Level	Limit Line	Over Limit	Read Level	LISN factor	cable loss	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	
1	0.150	32.03	56.00	-23.97	31.88	0.14	0.01	Average
2	0.150	40.04	66.00	-25.96	39.89	0.14	0.01	QP
3	0.273	25.34	51.03	-25.69	25.14	0.17	0.03	Average
4	0.273	30.38	61.03	-30.65	30.18	0.17	0.03	QP
5	0.387	26.79	48.12	-21.33	26.58	0.19	0.02	Average
6	0.387	28.40	58.12	-29.72	28.19	0.19	0.02	QP
7	0.454	23.51	46.80	-23.29	23.29	0.20	0.02	Average
8	0.454	26.58	56.80	-30.22	26.36	0.20	0.02	QP
9@	1.310	25.02	46.00	-20.98	24.68	0.28	0.06	Average
10	1.310	27.43	56.00	-28.57	27.09	0.28	0.06	QP
11	9.809	19.18	50.00	-30.82	18.40	0.46	0.32	Average
12	9.809	24.99	60.00	-35.01	24.21	0.46	0.32	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.

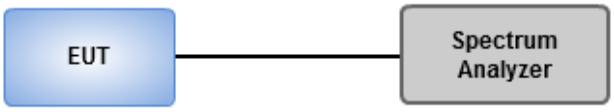
Occupied Bandwidth

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.

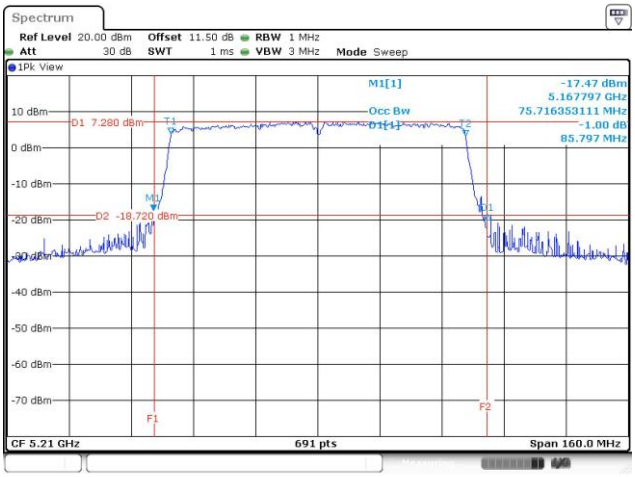
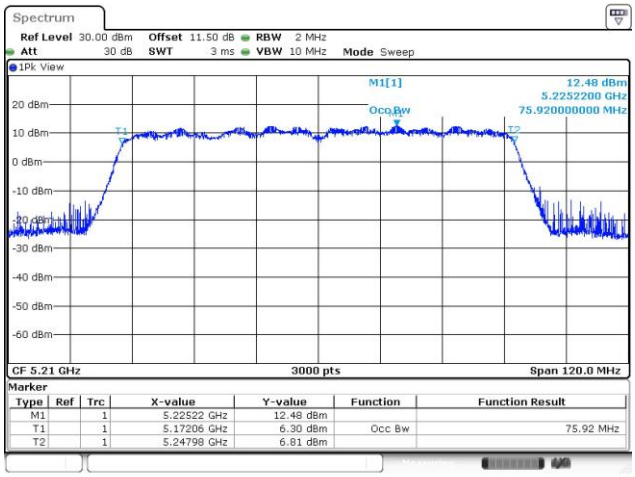
3.2.3 Test Setup



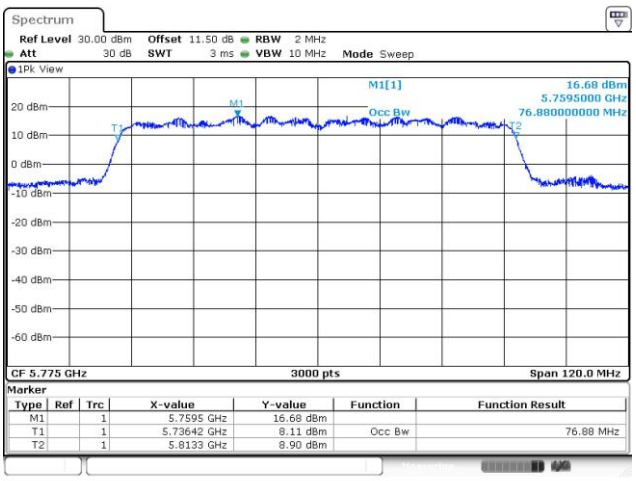
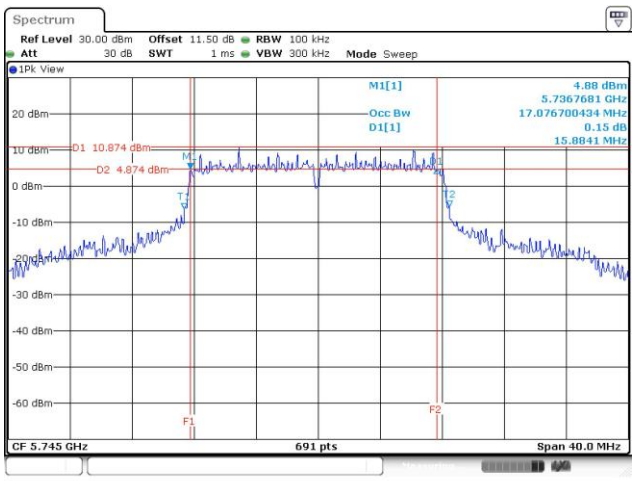
3.2.4 Test Result of Emission Bandwidth

Non-beamforming mode

For Frequency band 5150-5250 MHz										
Emission Bandwidth										
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	30.94	30.51	---	---	16.67	16.75	---	---
11a	2	5200	38.84	40.07	---	---	18.33	17.82	---	---
11a	2	5240	36.01	37.61	---	---	17.09	17.78	---	---
VHT20	2	5180	27.90	29.13	---	---	17.74	17.83	---	---
VHT20	2	5200	38.19	38.04	---	---	18.30	19.20	---	---
VHT20	2	5240	34.78	38.19	---	---	17.96	18.34	---	---
VHT40	2	5190	40.58	40.46	---	---	36.04	35.98	---	---
VHT40	2	5230	75.07	79.86	---	---	37.22	37.48	---	---
VHT80	2	5210	85.80	85.80	---	---	75.92	75.92	---	---

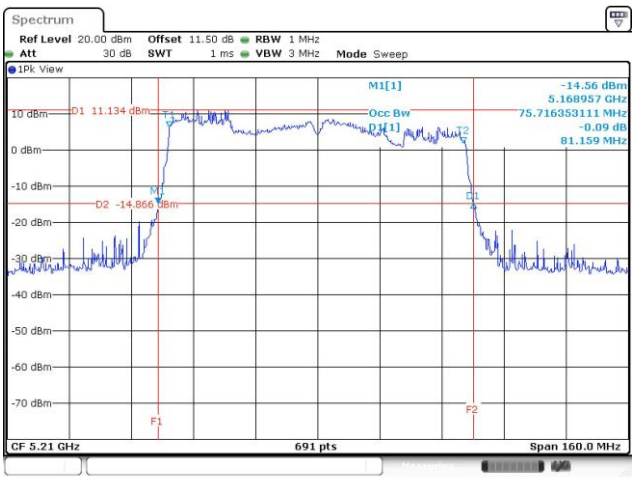
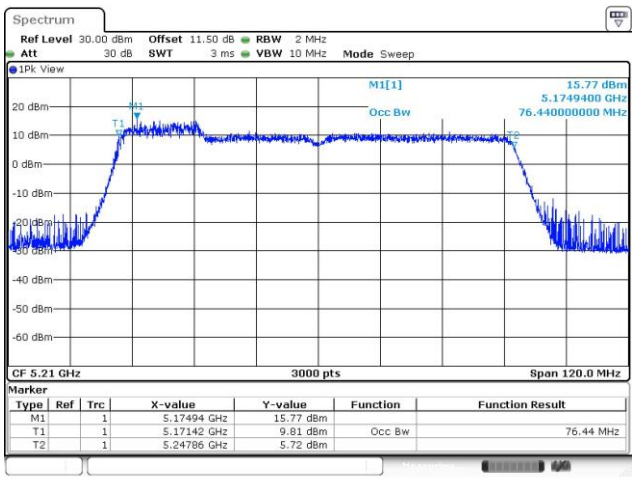
Worst Plot of 26dB Bandwidth	Worst Plot of 99% Bandwidth
	

For Frequency band 5725-5850 MHz											
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	17.04	17.03	---	---	16.29	15.88	---	---	0.5
11a	2	5785	16.71	16.72	---	---	16.29	16.00	---	---	0.5
11a	2	5825	16.74	16.69	---	---	16.29	16.00	---	---	0.5
VHT20	2	5745	17.80	17.98	---	---	17.57	17.57	---	---	0.5
VHT20	2	5785	17.75	17.79	---	---	17.57	17.22	---	---	0.5
VHT20	2	5825	17.77	17.79	---	---	17.57	16.52	---	---	0.5
VHT40	2	5755	36.44	37.08	---	---	35.13	35.13	---	---	0.5
VHT40	2	5795	36.58	38.56	---	---	35.13	35.13	---	---	0.5
VHT80	2	5775	76.32	76.88	---	---	75.36	75.13	---	---	0.5

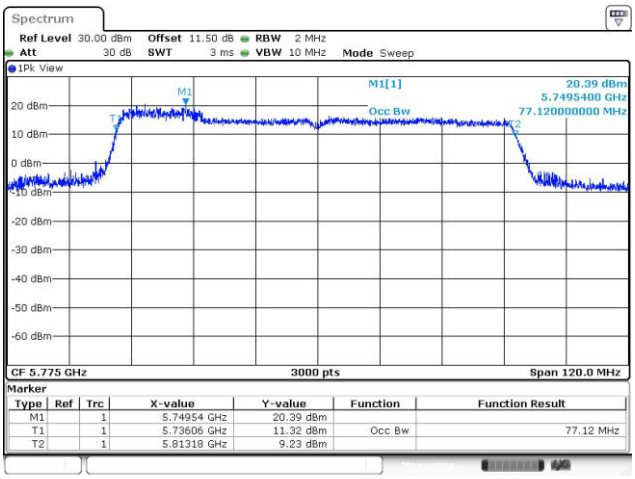
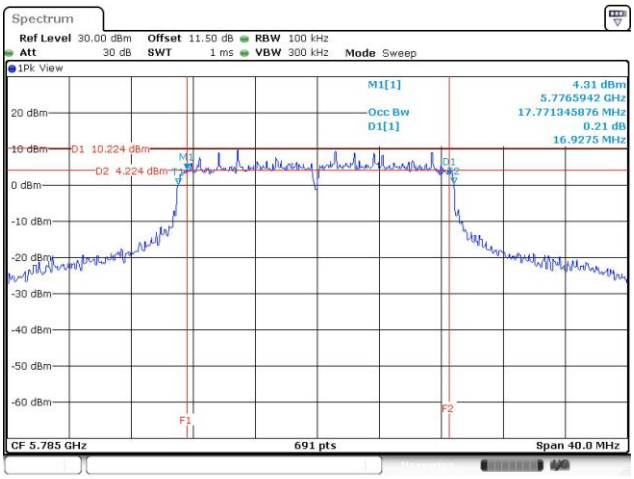
Worst Plots of 99% Bandwidth	Worst Plots of 6dB Bandwidth
	

Beamforming mode

For Frequency band 5150-5250 MHz										
Emission Bandwidth										
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
VHT20	2	5180	25.57	28.46	---	---	17.89	17.94	---	---
VHT20	2	5200	27.01	28.46	---	---	17.82	17.93	---	---
VHT20	2	5240	23.36	27.65	---	---	17.77	17.93	---	---
VHT40	2	5190	41.16	40.00	---	---	36.14	36.16	---	---
VHT40	2	5230	67.68	78.26	---	---	36.76	37.16	---	---
VHT80	2	5210	81.16	80.70	---	---	76.44	76.32	---	---

Worst Plot of 26dB Bandwidth	Worst Plot of 99% Bandwidth
	

For Frequency band 5725-5850 MHz											
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)
VHT20	2	5745	17.78	17.78	---	---	17.39	17.45	---	---	0.5
VHT20	2	5785	17.78	17.89	---	---	17.10	16.93	---	---	0.5
VHT20	2	5825	17.79	17.85	---	---	17.51	16.99	---	---	0.5
VHT40	2	5755	36.48	36.74	---	---	35.25	35.59	---	---	0.5
VHT40	2	5795	36.62	37.18	---	---	35.71	35.71	---	---	0.5
VHT80	2	5775	76.68	77.12	---	---	75.83	76.06	---	---	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
☐	Client devices	Conducted Power: 250 mW

Frequency Band (MHz)		**Limit**
☒	5725 ~ 5850	1 W
Note: “B” is the 26dB emission bandwidth in MHz.		

3.3.2 Test Procedures

Method PM-G (Measurement using a gated RF average 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

Non-beamforming mode

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	20.64	20.66	---	---	232.290	23.66	30.00
11a	2	5200	21.76	21.93	---	---	305.924	**24.86**	30.00
11a	2	5240	21.24	21.82	---	---	285.100	24.55	30.00
HT20	2	5180	20.31	20.42	---	---	217.553	23.38	30.00
HT20	2	5200	21.49	21.83	---	---	293.334	24.67	30.00
HT20	2	5240	21.06	21.62	---	---	272.855	24.36	30.00
HT40	2	5190	16.84	17.05	---	---	99.005	19.96	30.00
HT40	2	5230	21.55	21.86	---	---	296.351	24.72	30.00
VHT20	2	5180	20.45	20.54	---	---	224.158	23.51	30.00
VHT20	2	5200	21.63	21.95	---	---	302.221	24.80	30.00
VHT20	2	5240	21.14	21.76	---	---	279.985	24.47	30.00
VHT40	2	5190	16.97	17.12	---	---	101.297	20.06	30.00
VHT40	2	5230	21.71	21.96	---	---	305.288	24.85	30.00
VHT80	2	5210	15.22	15.84	---	---	71.637	18.55	30.00

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	19.87	20.84	---	---	218.390	23.39	30.00
11a	2	5785	19.02	20.01	---	---	180.030	22.55	30.00
11a	2	5825	19.07	20.12	---	---	183.525	22.64	30.00
HT20	2	5745	19.52	20.41	---	---	199.437	23.00	30.00
HT20	2	5785	18.62	19.81	---	---	168.497	22.27	30.00
HT20	2	5825	18.72	19.89	---	---	171.972	22.35	30.00
HT40	2	5755	20.25	21.16	---	---	236.542	23.74	30.00
HT40	2	5795	20.58	21.45	---	---	253.925	24.05	30.00
VHT20	2	5745	19.66	20.56	---	---	206.233	23.14	30.00
VHT20	2	5785	18.73	19.95	---	---	173.500	22.39	30.00
VHT20	2	5825	18.84	20.02	---	---	177.021	22.48	30.00
VHT40	2	5755	20.38	21.28	---	---	243.421	23.86	30.00
VHT40	2	5795	20.71	21.66	---	---	264.315	**24.22**	30.00
VHT80	2	5775	19.01	20.04	---	---	180.541	22.57	30.00

Beamforming mode

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			
VHT20	2	5180	20.61	20.63	---	---	230.691	23.63	28.98
VHT20	2	5200	20.27	20.54	---	---	219.654	23.42	28.98
VHT20	2	5240	20.01	20.12	---	---	203.032	23.08	28.98
VHT40	2	5190	15.57	15.70	---	---	73.211	18.65	28.98
VHT40	2	5230	21.42	22.10	---	---	300.857	**24.78**	28.98
VHT80	2	5210	14.98	15.54	---	---	67.287	18.28	28.98

Note:

1. Directional gain = 10 *log((10$^{4.16/20}$+10$^{3.85/20}$)^2/2) = 7.02 dBi > 6 dBi.
   Limit shall be reduced to 30 dBm – (7.02 dBi – 6 dBi) = 28.98 dBm.

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			
VHT20	2	5745	18.72	19.69	---	---	167.584	22.24	28.17
VHT20	2	5785	18.96	20.12	---	---	181.506	22.59	28.17
VHT20	2	5825	18.84	20.07	---	---	178.185	22.51	28.17
VHT40	2	5755	19.68	20.69	---	---	210.116	23.22	28.17
VHT40	2	5795	19.98	21.54	---	---	242.101	**23.84**	28.17
VHT80	2	5775	18.97	20.01	---	---	179.117	22.53	28.17

Note:

1. Directional gain = 10*log((10$^{3.53/20}$+10$^{5.95/20}$)^2/2) = 7.83 > 6 dBi.
   Limit shall be reduced to 30 dBm – (7.83 dBi – 6 dBi) = 28.17 dBm.

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
☐	Client devices	11 dBm / MHz

Frequency Band (MHz)		**Limit**
☒	5725 ~ 5850	30 dBm /500 kHz

3.4.2 Test Procedures

For 5150 ~ 5250 MHz

Duty cycle ≥ 98 %

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.

Duty cycle < 98 %

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

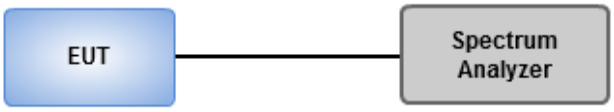
Duty cycle ≥ 98 %

1. Set RBW = 500 kHz, 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.

Duty cycle < 98 %

1. Set RBW = 500 kHz, 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



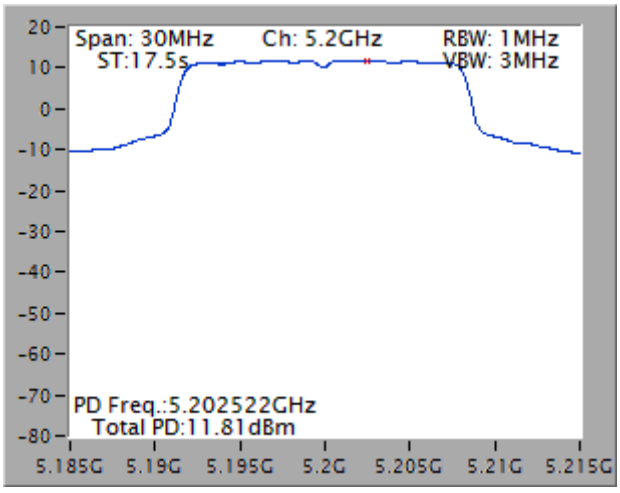
3.4.4 Test Result of Peak Power Spectral Density

Non-beamforming mode

For Frequency band 5150-5250 MHz						
Condition			Peak Power Spectral Density (dBm/MHz)			
Modulation 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	10.51	0.12	10.63	15.98
11a	2	5200	11.81	0.12	11.93	15.98
11a	2	5240	11.81	0.12	11.93	15.98
VHT20	2	5180	10.27	0.00	10.27	15.98
VHT20	2	5200	11.58	0.00	11.58	15.98
VHT20	2	5240	11.49	0.00	11.49	15.98
VHT40	2	5190	4.11	0.11	4.22	15.98
VHT40	2	5230	8.45	0.11	8.56	15.98
VHT80	2	5210	-0.59	0.25	-0.34	15.98

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = $10 * \log((10^{4.16/20}+10^{3.85/20})^2/2) = 7.02$ dBi
   Limit shall be reduced to 17 dBm – (7.02 dBi – 6 dBi) = 15.98 dBm.

Worst Plot

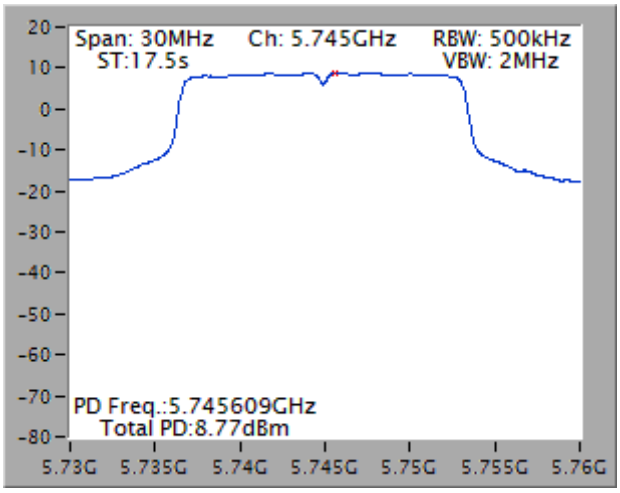


The plot without duty factor

For Frequency band 5725-5850 MHz						
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	8.77	0.12	8.89	28.17
11a	2	5785	8.10	0.12	8.22	28.17
11a	2	5825	8.09	0.12	8.21	28.17
VHT20	2	5745	8.81	0.00	8.81	28.17
VHT20	2	5785	8.44	0.00	8.44	28.17
VHT20	2	5825	8.17	0.00	8.17	28.17
VHT40	2	5755	6.36	0.11	6.47	28.17
VHT40	2	5795	6.74	0.11	6.85	28.17
VHT80	2	5775	1.48	0.25	1.73	28.17

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain =10 * log((10$^{3.53/20}$+10$^{5.95/20}$)^2/2) = 7.83 dBi
   Limit shall be reduced to 30 dBm – (7.83 dBi – 6 dBi) = 28.17 dBm.

Worst Plot



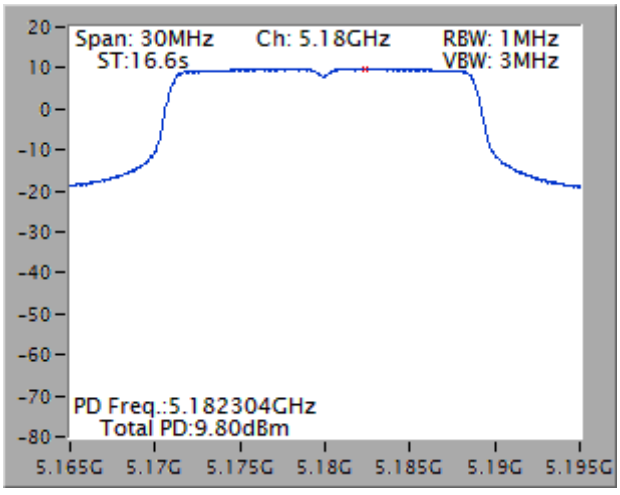
The plot without duty factor

Beamforming mode

For Frequency band 5150-5250 MHz						
Condition			Peak Power Spectral Density (dBm/MHz)			
Modulation 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)
VHT20	2	5180	9.80	0.21	10.01	15.98
VHT20	2	5200	9.77	0.21	9.98	15.98
VHT20	2	5240	9.59	0.21	9.80	15.98
VHT40	2	5190	1.95	0.37	2.32	15.98
VHT40	2	5230	8.27	0.37	8.64	15.98
VHT80	2	5210	-1.62	0.57	-1.05	15.98

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = $10 * \log((10^{4.16/20}+10^{3.85/20})^2/2) = 7.02$ dBi
   Limit shall be reduced to 17 dBm – (7.02 dBi – 6 dBi) = 15.98 dBm.

Worst Plots

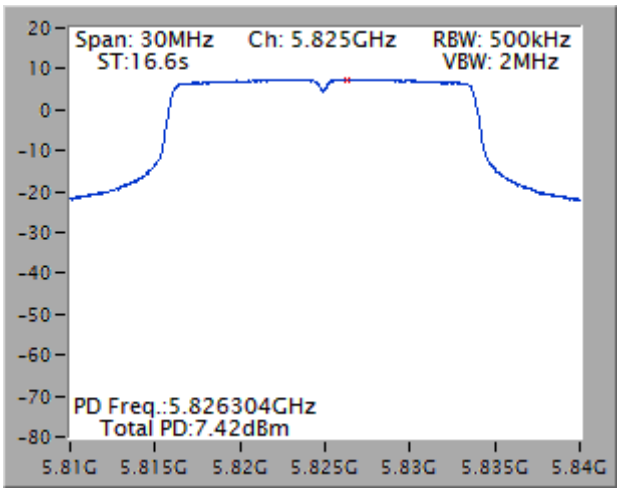


The plot without duty factor

For Frequency band 5725-5850 MHz						
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)
VHT20	2	5745	7.08	0.21	7.29	28.17
VHT20	2	5785	7.30	0.21	7.51	28.17
VHT20	2	5825	7.42	0.21	7.63	28.17
VHT40	2	5755	5.31	0.37	5.68	28.17
VHT40	2	5795	5.94	0.37	6.31	28.17
VHT80	2	5775	0.75	0.57	1.32	28.17

Note:
1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = $10 * \log((10^{3.53/20}+10^{5.95/20})^2/2) = 7.83$ dBi
   Limit shall be reduced to 30 dBm – (7.83 dBi – 6 dBi) = 28.17 dBm.

Worst Plots



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]
5.725 - 5.850 GHz	All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

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

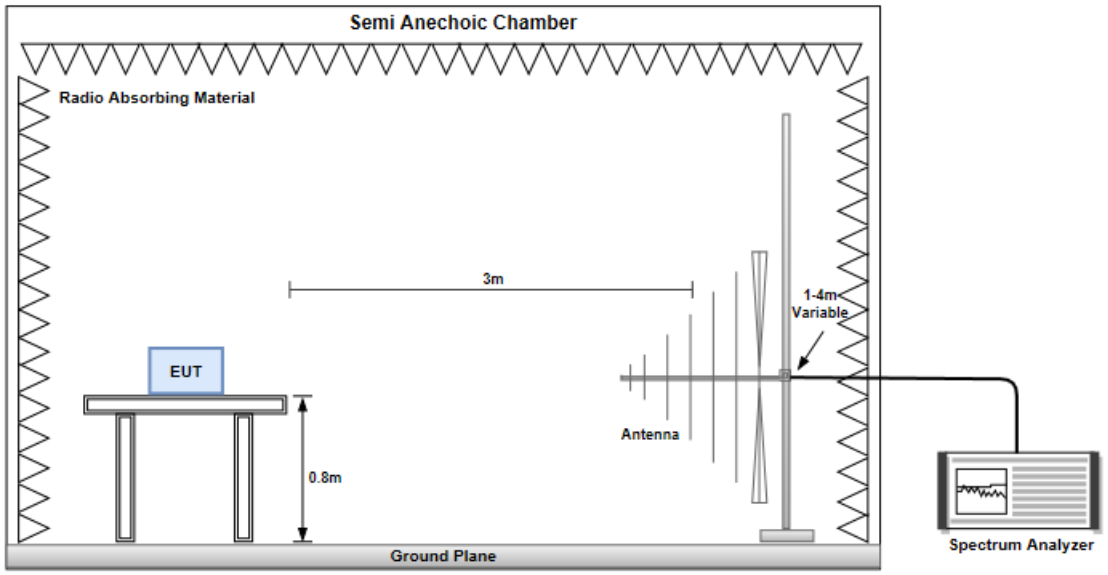
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

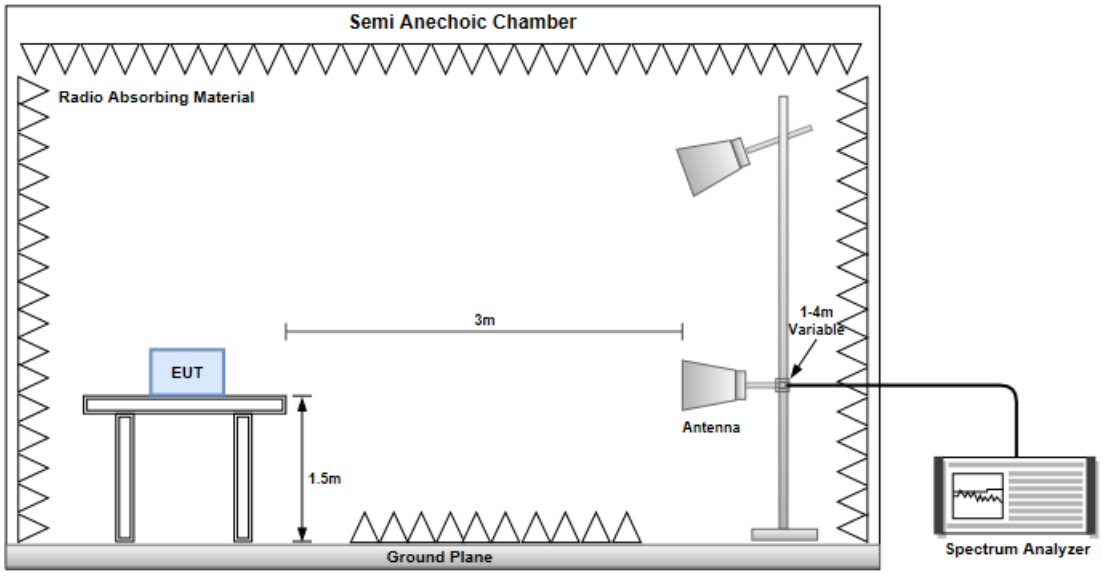
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.5.3 Test Setup

Radiated Emissions below 1 GHz



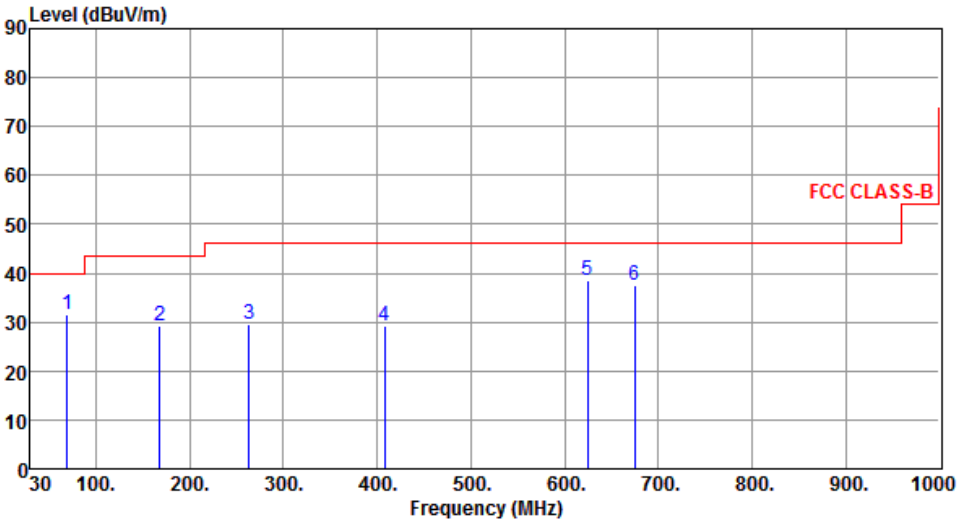
Radiated Emissions above 1 GHz



Non- beamforming mode

3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

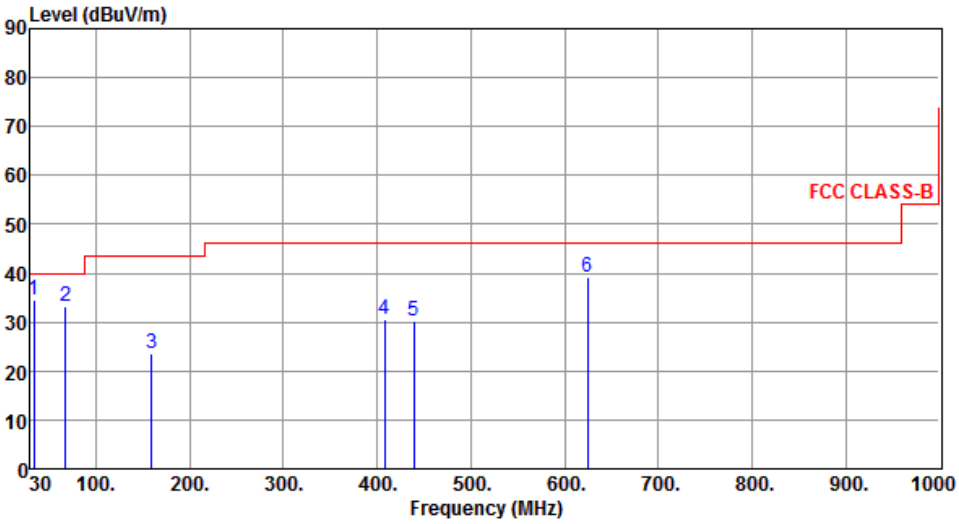
Modulation	11a	**Test Freq. (MHz)**	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	69.66	31.57	40.00	-8.43	42.09	-10.52	Peak	---	---
2	167.74	29.27	43.50	-14.23	37.62	-8.35	Peak	---	---
3	263.68	29.41	46.00	-16.59	38.32	-8.91	Peak	---	---
4	408.29	29.37	46.00	-16.63	34.46	-5.09	Peak	---	---
5	624.61	38.56	46.00	-7.44	39.01	-0.45	Peak	---	---
6	675.17	37.69	46.00	-8.31	37.42	0.27	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.

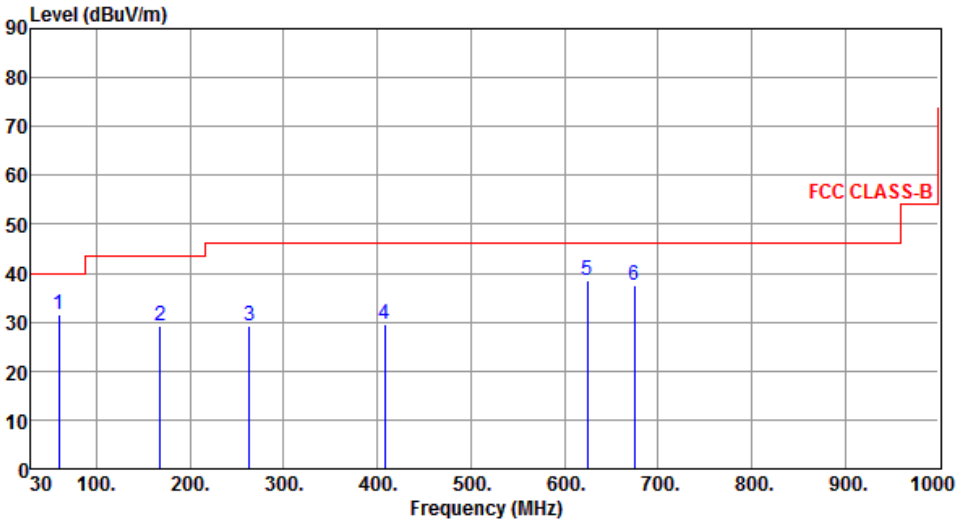
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	33.79	34.69	40.00	-5.31	43.77	-9.08	QP	100	248
2	67.77	33.24	40.00	-6.76	43.43	-10.19	Peak	---	---
3	159.17	23.61	43.50	-19.89	31.75	-8.14	Peak	---	---
4	408.27	30.49	46.00	-15.51	35.58	-5.09	Peak	---	---
5	439.47	30.37	46.00	-15.63	34.68	-4.31	Peak	---	---
6	624.55	39.26	46.00	-6.74	39.71	-0.45	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).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

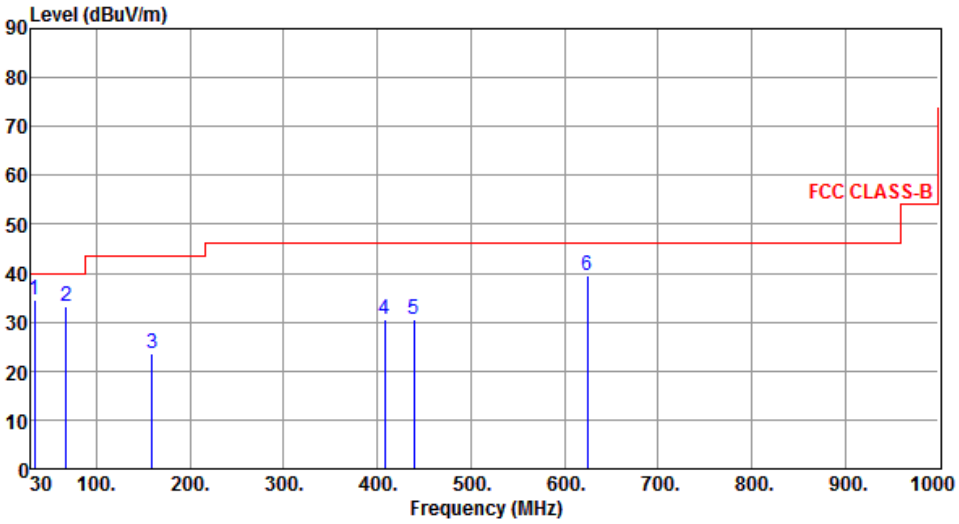
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	59.71	31.42	40.00	-8.58	40.13	-8.71	Peak	---	---
2	167.66	29.16	43.50	-14.34	37.51	-8.35	Peak	---	---
3	263.75	29.37	46.00	-16.63	38.28	-8.91	Peak	---	---
4	408.31	29.47	46.00	-16.53	34.56	-5.09	Peak	---	---
5	624.52	38.41	46.00	-7.59	38.86	-0.45	Peak	---	---
6	675.21	37.46	46.00	-8.54	37.19	0.27	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	VHT40	Test Freq. (MHz)	5795
Polarization	Vertical		

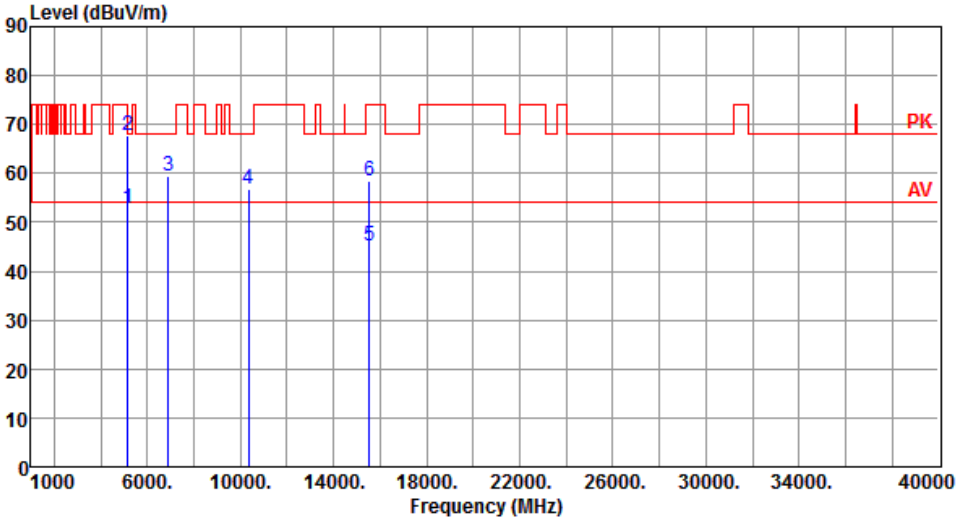


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	33.82	34.68	40.00	-5.32	43.76	-9.08	QP	100	250
2	67.85	33.35	40.00	-6.65	43.56	-10.21	Peak	---	---
3	159.22	23.54	43.50	-19.96	31.68	-8.14	Peak	---	---
4	408.31	30.56	46.00	-15.44	35.65	-5.09	Peak	---	---
5	439.55	30.55	46.00	-15.45	34.86	-4.31	Peak	---	---
6	624.41	39.42	46.00	-6.58	39.87	-0.45	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).
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

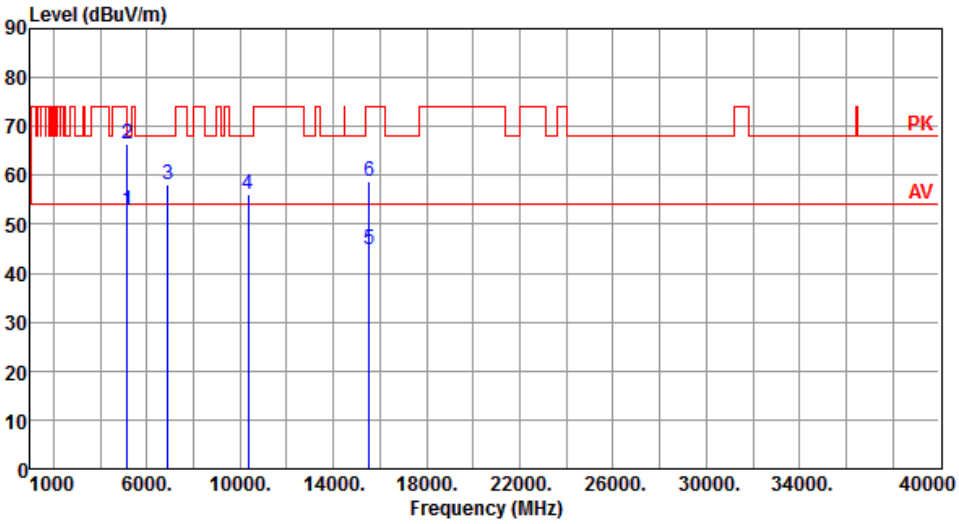
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Horizontal		



	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	52.68	54.00	-1.32	48.40	4.28	Average	100	357
2	5150.00	67.90	74.00	-6.10	63.62	4.28	Peak	100	357
3	6906.66	59.45	68.20	-8.75	51.98	7.47	Peak	100	337
4	10360.00	56.71	68.20	-11.49	43.11	13.60	Peak	100	233
5	15540.00	45.01	54.00	-8.99	30.34	14.67	Average	100	231
6	15540.00	58.36	74.00	-15.64	43.69	14.67	Peak	100	231

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).

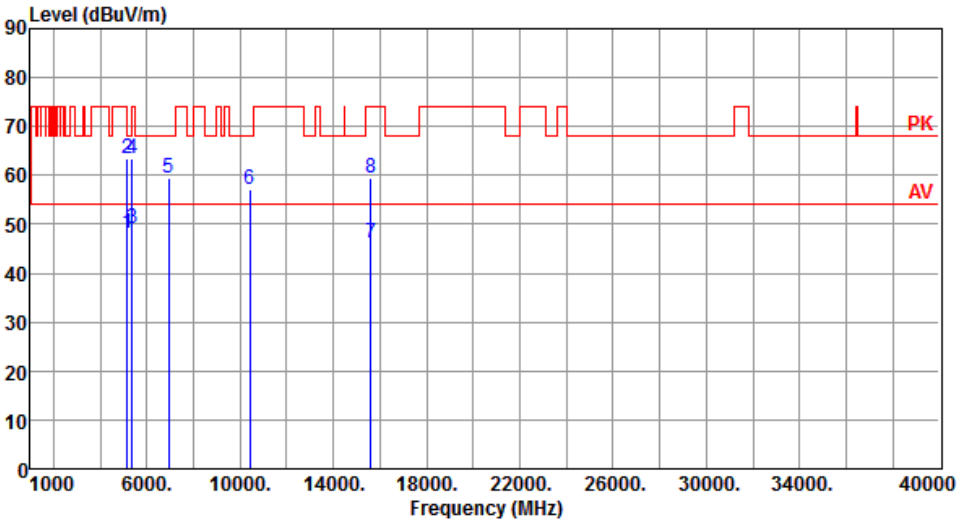
Modulation	11a	Test Freq. (MHz)	5180
Polarization	Vertical		



	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	52.70	54.00	-1.30	48.42	4.28	Average	100	1
2	5150.00	66.33	74.00	-7.67	62.05	4.28	Peak	100	1
3	6906.66	58.26	68.20	-9.94	50.79	7.47	Peak	100	118
4	10360.00	56.29	68.20	-11.91	42.69	13.60	Peak	100	232
5	15540.00	44.93	54.00	-9.07	30.26	14.67	Average	100	57
6	15540.00	58.92	74.00	-15.08	44.25	14.67	Peak	100	57

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).

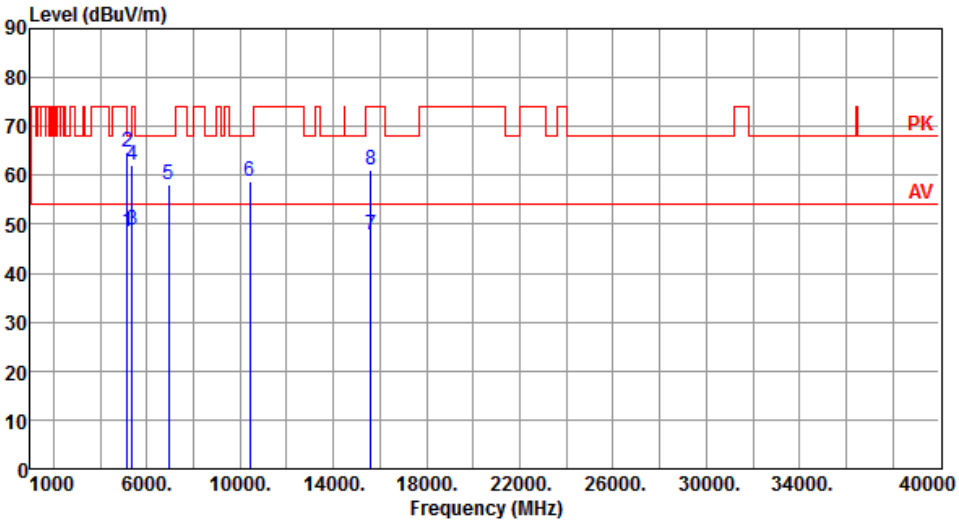
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	48.28	54.00	-5.72	44.00	4.28	Average	100	295
2	5150.00	63.43	74.00	-10.57	59.15	4.28	Peak	100	295
3	5350.00	48.99	54.00	-5.01	44.55	4.44	Average	100	295
4	5350.00	63.45	74.00	-10.55	59.01	4.44	Peak	100	295
5	6933.33	59.52	68.20	-8.68	52.04	7.48	Peak	100	335
6	10400.00	57.25	68.20	-10.95	43.61	13.64	Peak	100	231
7	15600.00	46.20	54.00	-7.80	31.62	14.58	Average	100	232
8	15600.00	59.28	74.00	-14.72	44.70	14.58	Peak	100	232

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).

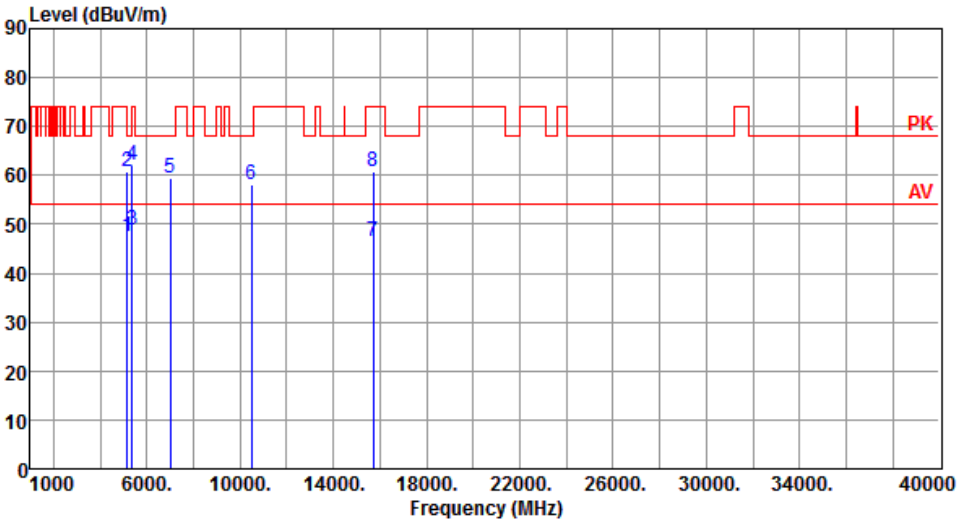
Modulation	11a	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	48.44	54.00	-5.56	44.16	4.28	Average	100	359
2	5150.00	64.63	74.00	-9.37	60.35	4.28	Peak	100	359
3	5350.00	48.95	54.00	-5.05	44.51	4.44	Average	100	359
4	5350.00	62.03	74.00	-11.97	57.59	4.44	Peak	100	359
5	6933.33	58.25	68.20	-9.95	50.77	7.48	Peak	100	116
6	10400.00	58.91	68.20	-9.29	45.27	13.64	Peak	100	230
7	15600.00	47.74	54.00	-6.26	33.16	14.58	Average	100	53
8	15600.00	61.20	74.00	-12.80	46.62	14.58	Peak	100	53

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).

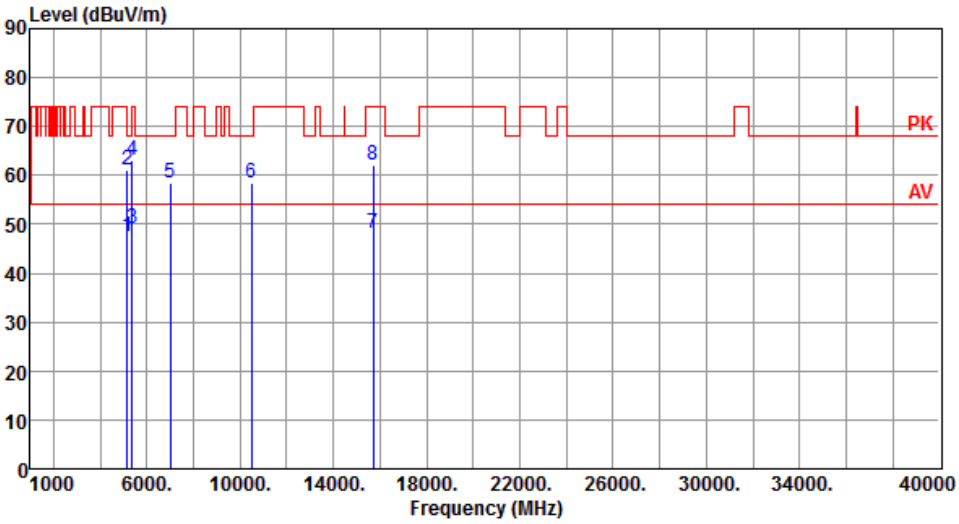
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.43	54.00	-6.57	43.15	4.28	Average	100	306
2	5150.00	60.74	74.00	-13.26	56.46	4.28	Peak	100	306
3	5350.00	48.98	54.00	-5.02	44.54	4.44	Average	100	306
4	5350.00	62.03	74.00	-11.97	57.59	4.44	Peak	100	306
5	6986.66	59.59	68.20	-8.61	52.06	7.53	Peak	100	335
6	10480.00	58.22	68.20	-9.98	44.52	13.70	Peak	100	222
7	15720.00	46.62	54.00	-7.38	32.20	14.42	Average	100	228
8	15720.00	60.82	74.00	-13.18	46.40	14.42	Peak	100	228

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).

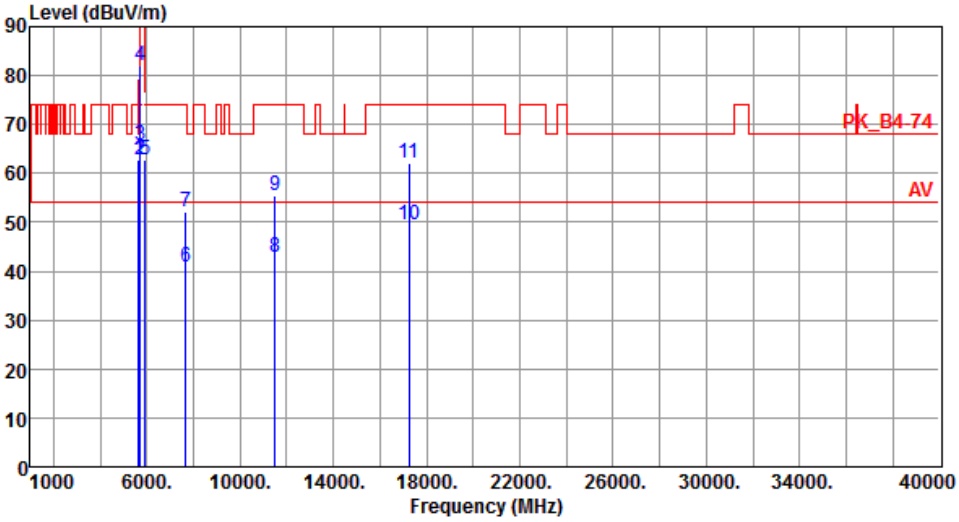
Modulation	11a	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.49	54.00	-6.51	43.21	4.28	Average	100	358
2	5150.00	60.96	74.00	-13.04	56.68	4.28	Peak	100	358
3	5350.00	49.02	54.00	-4.98	44.58	4.44	Average	100	358
4	5350.00	63.21	74.00	-10.79	58.77	4.44	Peak	100	358
5	6986.66	58.31	68.20	-9.89	50.78	7.53	Peak	100	114
6	10480.00	58.30	68.20	-9.90	44.60	13.70	Peak	100	218
7	15720.00	48.02	54.00	-5.98	33.60	14.42	Average	100	54
8	15720.00	62.11	74.00	-11.89	47.69	14.42	Peak	100	54

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).

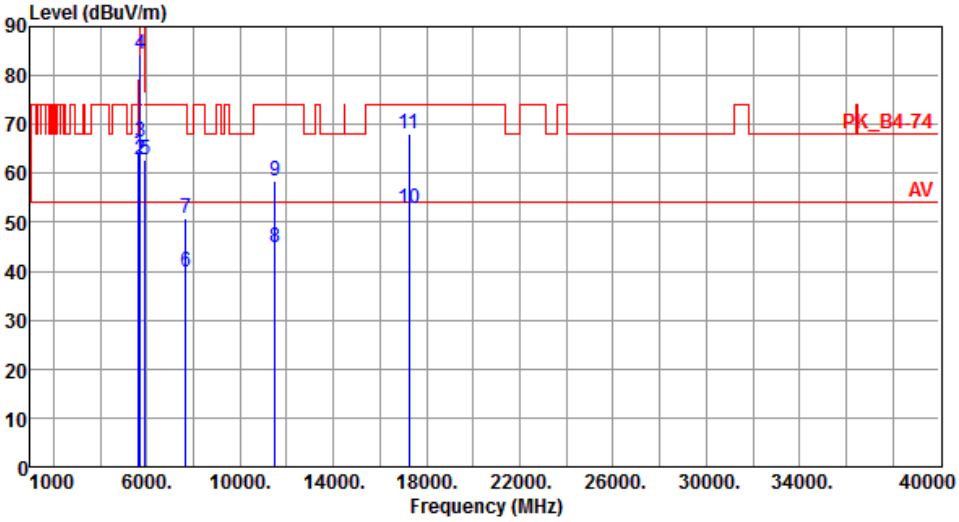
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.61	68.20	-5.59	57.88	4.73	Peak	100	75
2	5700.00	62.78	105.20	-42.42	57.97	4.81	Peak	100	75
3	5720.00	65.80	110.80	-45.00	60.96	4.84	Peak	100	75
4	5725.00	82.10	122.20	-40.10	77.26	4.84	Peak	100	75
5	5925.00	62.65	68.20	-5.55	57.52	5.13	Peak	100	75
6	7660.00	40.81	54.00	-13.19	32.19	8.62	Average	100	7
7	7660.00	52.27	74.00	-21.73	43.65	8.62	Peak	100	7
8	11490.00	42.83	54.00	-11.17	28.72	14.11	Average	100	237
9	11490.00	55.60	74.00	-18.40	41.49	14.11	Peak	100	237
10	17235.00	49.52	54.00	-4.48	31.58	17.94	Average	100	151
11	17235.00	62.02	74.00	-11.98	44.08	17.94	Peak	100	151

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).

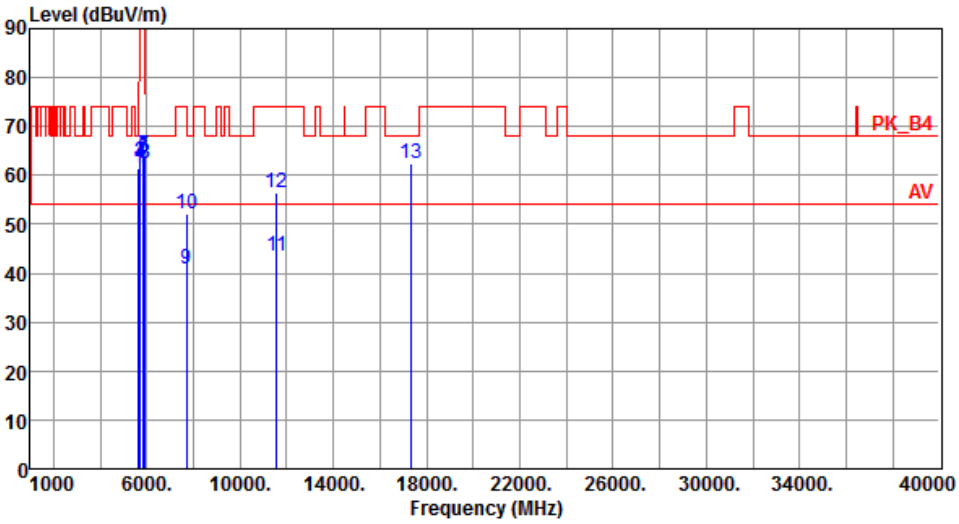
Modulation	11a	Test Freq. (MHz)	5745
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	64.01	68.20	-4.19	59.28	4.73	Peak	102	318
2	5700.00	62.88	105.20	-42.32	58.07	4.81	Peak	102	318
3	5720.00	66.43	110.80	-44.37	61.59	4.84	Peak	102	318
4	5725.00	84.34	122.20	-37.86	79.50	4.84	Peak	102	318
5	5925.00	62.62	68.20	-5.58	57.49	5.13	Peak	102	318
6	7660.00	39.75	54.00	-14.25	31.13	8.62	Average	100	259
7	7660.00	50.87	74.00	-23.13	42.25	8.62	Peak	100	259
8	11490.00	44.75	54.00	-9.25	30.64	14.11	Average	100	250
9	11490.00	58.34	74.00	-15.66	44.23	14.11	Peak	100	250
10	17235.00	52.82	54.00	-1.18	34.88	17.94	Average	100	142
11	17235.00	67.94	74.00	-6.06	50.00	17.94	Peak	100	142

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).

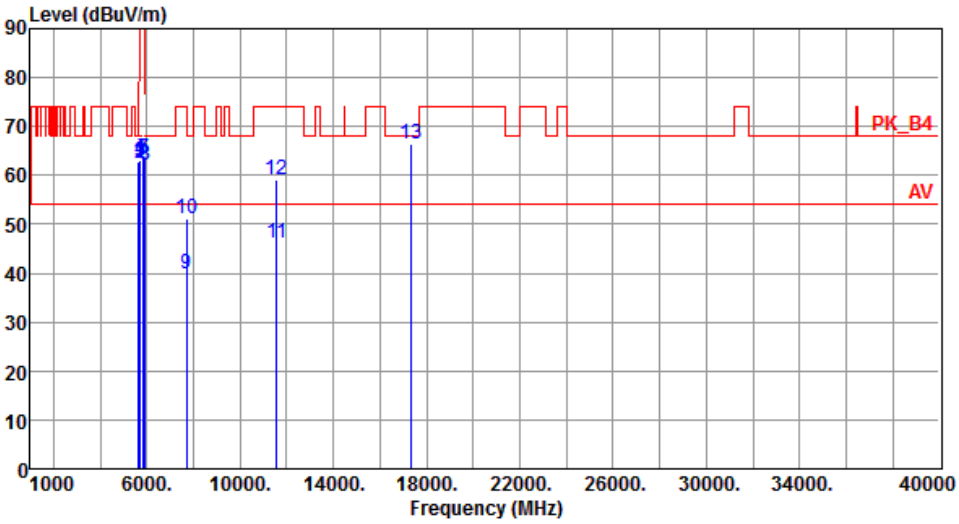
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	61.55	68.20	-6.65	56.82	4.73	Peak	100	76
2	5700.00	62.81	105.20	-42.39	58.00	4.81	Peak	100	76
3	5720.00	62.61	110.80	-48.19	57.77	4.84	Peak	100	76
4	5725.00	62.41	122.20	-59.79	57.57	4.84	Peak	100	76
5	5850.00	63.68	122.20	-58.52	58.64	5.04	Peak	100	76
6	5855.00	63.29	110.80	-47.51	58.25	5.04	Peak	100	76
7	5875.00	64.11	105.20	-41.09	59.04	5.07	Peak	100	76
8	5925.00	62.49	68.20	-5.71	57.36	5.13	Peak	100	76
9	7713.33	40.81	54.00	-13.19	32.11	8.70	Average	100	8
10	7713.33	52.25	74.00	-21.75	43.55	8.70	Peak	100	8
11	11570.00	43.51	54.00	-10.49	29.53	13.98	Average	100	234
12	11570.00	56.55	74.00	-17.45	42.57	13.98	Peak	100	234
13	17355.00	62.37	68.20	-5.83	44.12	18.25	Peak	100	158

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

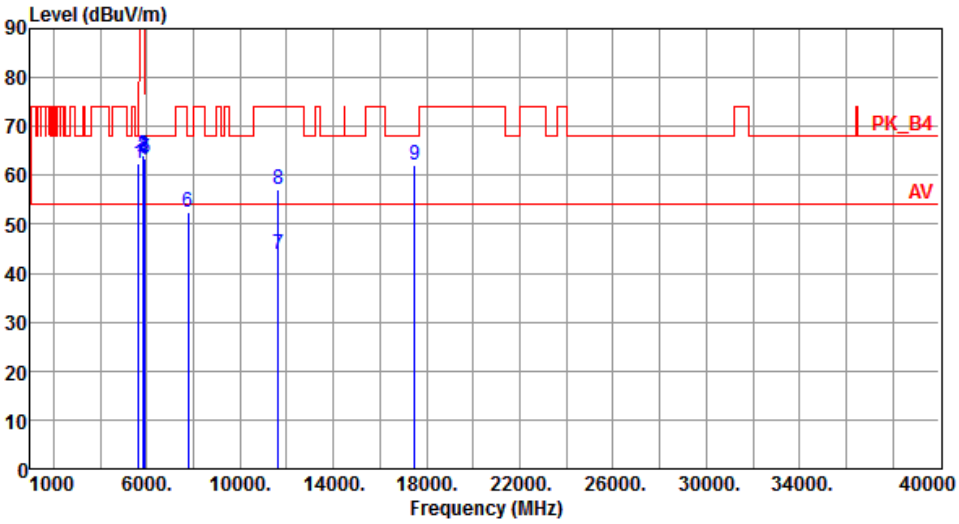
Modulation	11a	Test Freq. (MHz)	5785
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.85	68.20	-5.35	58.12	4.73	Peak	118	315
2	5700.00	62.44	105.20	-42.76	57.63	4.81	Peak	118	315
3	5720.00	62.64	110.80	-48.16	57.80	4.84	Peak	118	315
4	5725.00	63.06	122.20	-59.14	58.22	4.84	Peak	118	315
5	5850.00	63.43	122.20	-58.77	58.39	5.04	Peak	118	315
6	5855.00	63.38	110.80	-47.42	58.34	5.04	Peak	118	315
7	5875.00	63.55	105.20	-41.65	58.48	5.07	Peak	118	315
8	5925.00	62.26	68.20	-5.94	57.13	5.13	Peak	118	315
9	7713.33	39.75	54.00	-14.25	31.05	8.70	Average	100	267
10	7713.33	51.09	74.00	-22.91	42.39	8.70	Peak	100	267
11	11570.00	46.20	54.00	-7.80	32.22	13.98	Average	100	250
12	11570.00	59.12	74.00	-14.88	45.14	13.98	Peak	100	250
13	17355.00	66.28	68.20	-1.92	48.03	18.25	Peak	100	141

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).

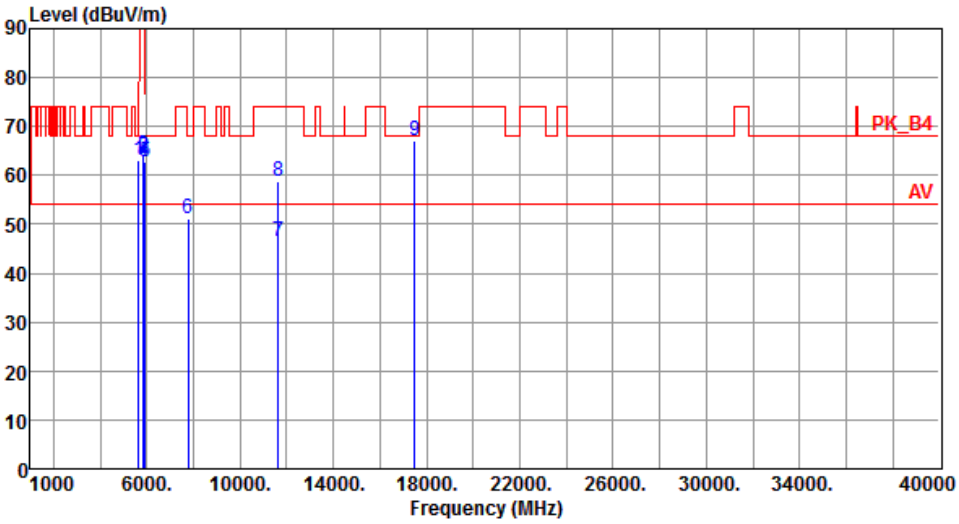
Modulation	11a	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.38	68.20	-5.82	57.65	4.73	Peak	100	77
2	5850.00	63.64	122.20	-58.56	58.60	5.04	Peak	100	77
3	5855.00	63.98	110.80	-46.82	58.94	5.04	Peak	100	77
4	5875.00	63.12	105.20	-42.08	58.05	5.07	Peak	100	77
5	5925.00	63.51	68.20	-4.69	58.38	5.13	Peak	100	77
6	7766.66	52.38	68.20	-15.82	43.60	8.78	Peak	100	11
7	11650.00	43.85	54.00	-10.15	30.02	13.83	Average	100	234
8	11650.00	57.13	74.00	-16.87	43.30	13.83	Peak	100	234
9	17475.00	62.25	68.20	-5.95	43.70	18.55	Peak	100	145

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		

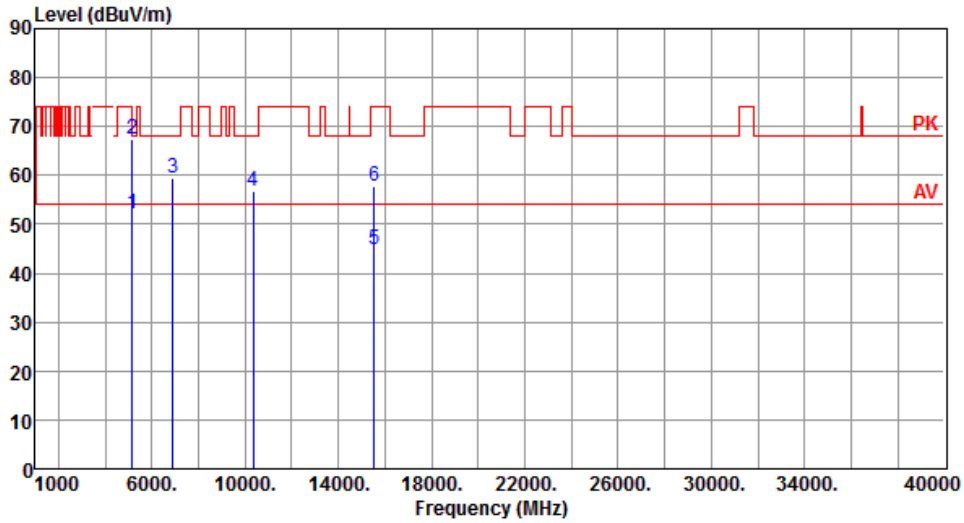


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	63.26	68.20	-4.94	58.53	4.73	Peak	100	317
2	5850.00	63.82	122.20	-58.38	58.78	5.04	Peak	100	317
3	5855.00	64.02	110.80	-46.78	58.98	5.04	Peak	100	317
4	5875.00	62.80	105.20	-42.40	57.73	5.07	Peak	100	317
5	5925.00	62.71	68.20	-5.49	57.58	5.13	Peak	100	317
6	7766.66	51.05	68.20	-17.15	42.27	8.78	Peak	100	264
7	11650.00	46.41	54.00	-7.59	32.58	13.83	Average	100	247
8	11650.00	58.86	74.00	-15.14	45.03	13.83	Peak	100	247
9	17475.00	67.05	68.20	-1.15	48.50	18.55	Peak	100	143

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

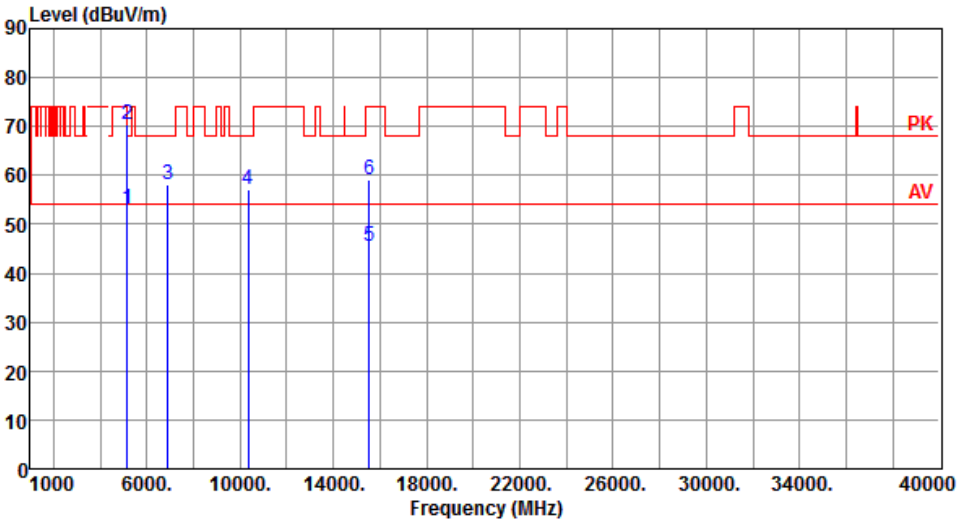
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Horizontal		



	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	52.30	54.00	-1.70	48.02	4.28	Average	100	342
2	5150.00	67.32	74.00	-6.68	63.04	4.28	Peak	100	342
3	6906.66	59.45	68.20	-8.75	51.98	7.47	Peak	100	340
4	10360.00	56.75	68.20	-11.45	43.15	13.60	Peak	100	124
5	15540.00	44.83	54.00	-9.17	30.14	14.69	Average	100	310
6	15540.00	57.93	74.00	-16.07	43.24	14.69	Peak	100	310

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).

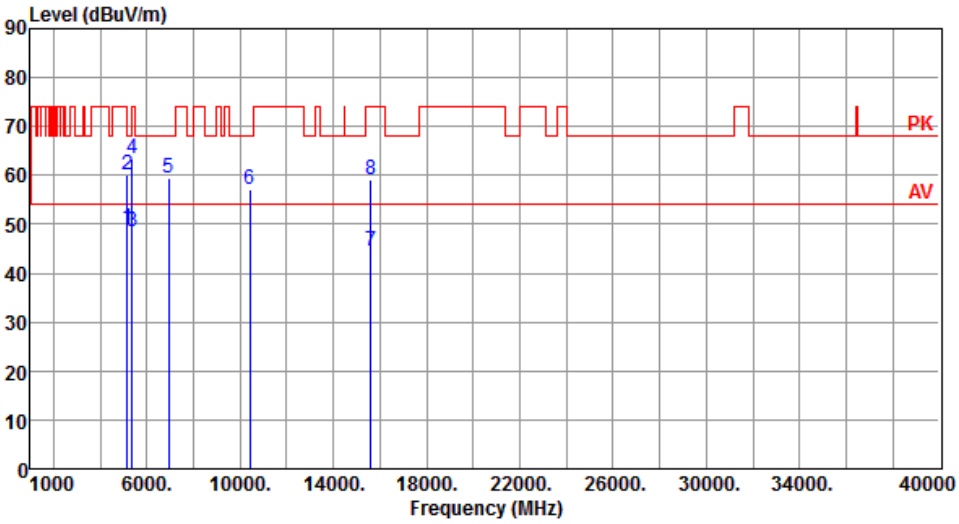
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



	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	52.98	54.00	-1.02	48.70	4.28	Average	100	359
2	5150.00	70.26	74.00	-3.74	65.98	4.28	Peak	100	359
3	6906.66	58.24	68.20	-9.96	50.77	7.47	Peak	100	117
4	10360.00	57.26	68.20	-10.94	43.66	13.60	Peak	100	255
5	15540.00	45.39	54.00	-8.61	30.70	14.69	Average	100	130
6	15540.00	59.26	74.00	-14.74	44.57	14.69	Peak	100	130

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).

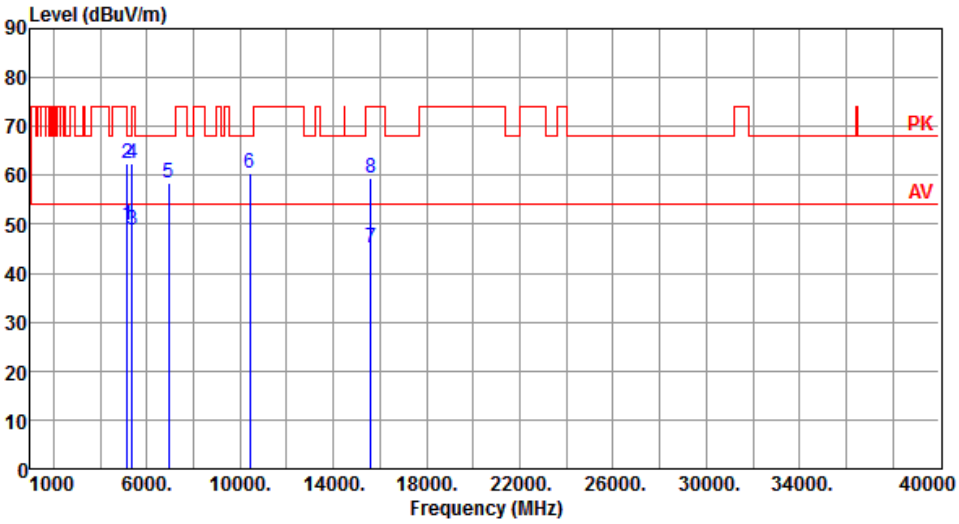
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	49.13	54.00	-4.87	44.85	4.28	Average	100	317
2	5150.00	60.27	74.00	-13.73	55.99	4.28	Peak	100	317
3	5350.00	48.65	54.00	-5.35	44.21	4.44	Average	100	317
4	5350.00	63.59	74.00	-10.41	59.15	4.44	Peak	100	317
5	6933.33	59.48	68.20	-8.72	52.00	7.48	Peak	100	339
6	10400.00	57.14	68.20	-11.06	43.50	13.64	Peak	100	127
7	15600.00	44.61	54.00	-9.39	30.03	14.58	Average	100	318
8	15600.00	59.09	74.00	-14.91	44.51	14.58	Peak	100	318

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).

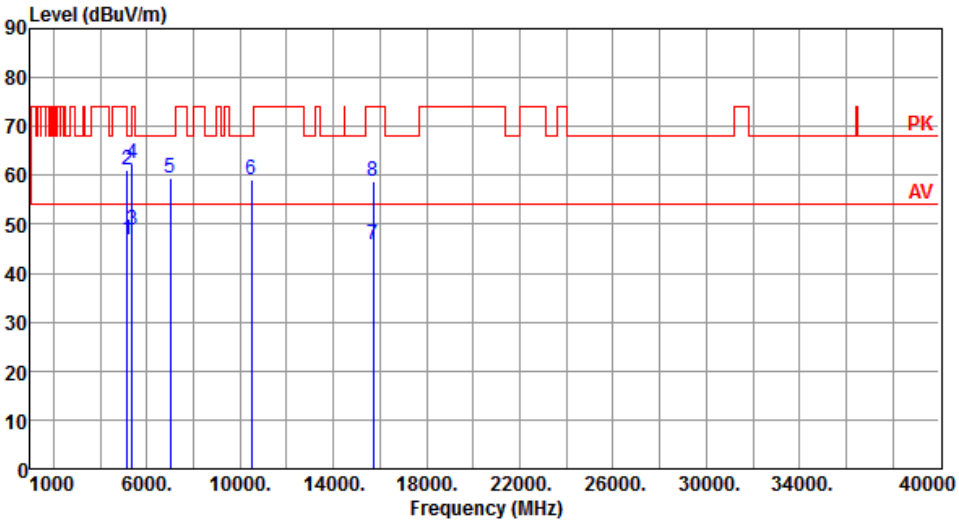
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	49.71	54.00	-4.29	45.43	4.28	Average	100	356
2	5150.00	62.56	74.00	-11.44	58.28	4.28	Peak	100	356
3	5350.00	48.66	54.00	-5.34	44.22	4.44	Average	100	356
4	5350.00	62.48	74.00	-11.52	58.04	4.44	Peak	100	356
5	6933.33	58.37	68.20	-9.83	50.89	7.48	Peak	100	115
6	10400.00	60.28	68.20	-7.92	46.64	13.64	Peak	100	247
7	15600.00	45.32	54.00	-8.68	30.74	14.58	Average	100	137
8	15600.00	59.33	74.00	-14.67	44.75	14.58	Peak	100	137

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).

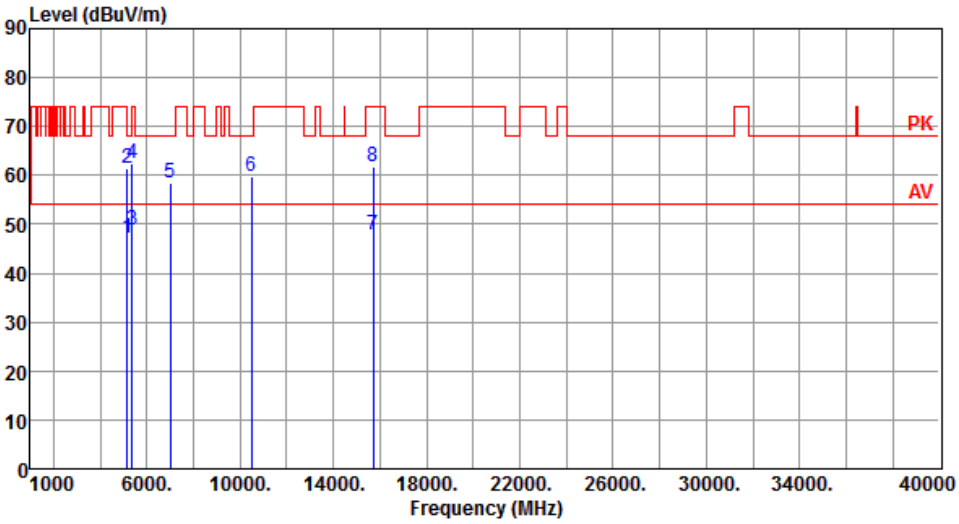
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.97	54.00	-7.03	42.69	4.28	Average	100	314
2	5150.00	61.06	74.00	-12.94	56.78	4.28	Peak	100	314
3	5350.00	48.70	54.00	-5.30	44.26	4.44	Average	100	314
4	5350.00	62.53	74.00	-11.47	58.09	4.44	Peak	100	314
5	6986.66	59.40	68.20	-8.80	51.87	7.53	Peak	100	318
6	10480.00	59.26	68.20	-8.94	45.56	13.70	Peak	100	118
7	15720.00	45.70	54.00	-8.30	31.28	14.42	Average	100	315
8	15720.00	58.66	74.00	-15.34	44.24	14.42	Peak	100	315

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).

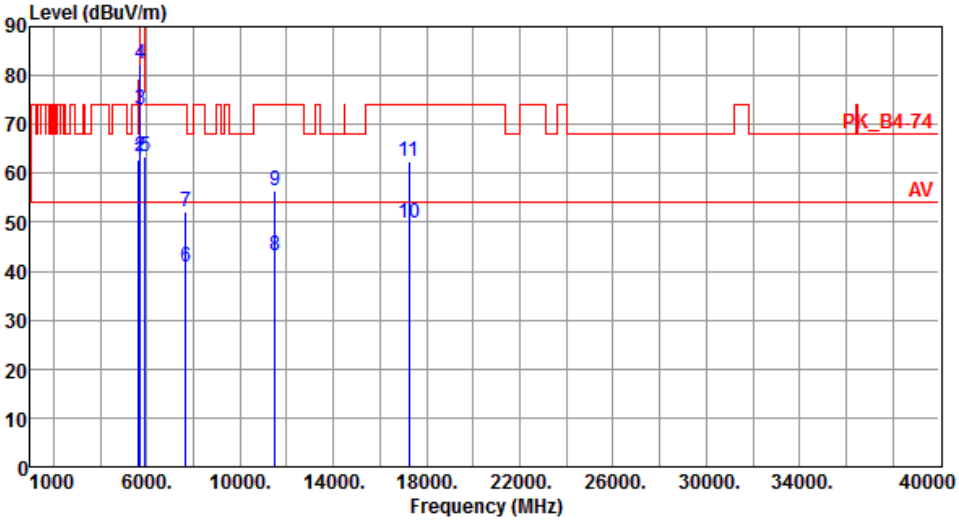
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.11	54.00	-6.89	42.83	4.28	Average	100	1
2	5150.00	61.28	74.00	-12.72	57.00	4.28	Peak	100	1
3	5350.00	48.66	54.00	-5.34	44.22	4.44	Average	100	1
4	5350.00	62.43	74.00	-11.57	57.99	4.44	Peak	100	1
5	6986.66	58.44	68.20	-9.76	50.91	7.53	Peak	100	118
6	10480.00	59.79	68.20	-8.41	46.09	13.70	Peak	100	258
7	15720.00	47.80	54.00	-6.20	33.38	14.42	Average	100	134
8	15720.00	61.81	74.00	-12.19	47.39	14.42	Peak	100	134

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).

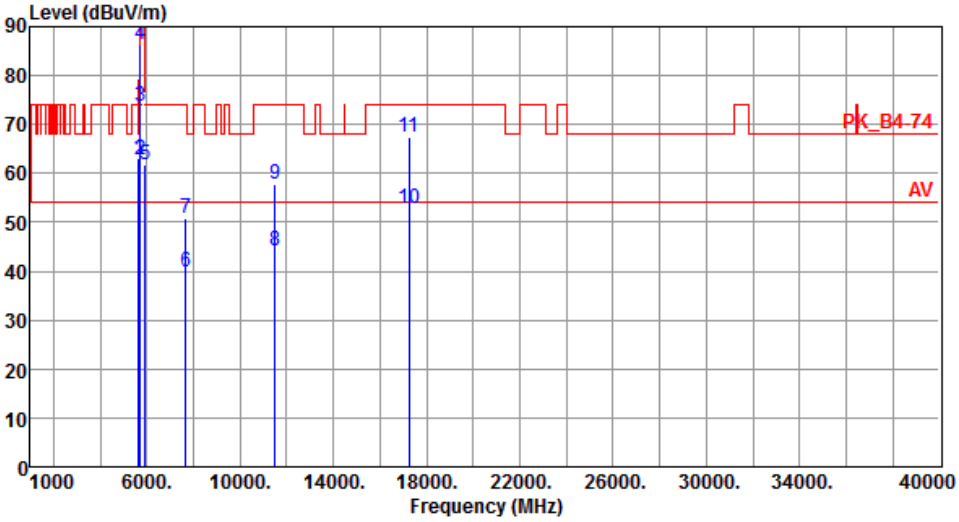
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.89	68.20	-5.31	58.16	4.73	Peak	100	73
2	5700.00	63.29	105.20	-41.91	58.48	4.81	Peak	100	73
3	5720.00	72.91	110.80	-37.89	68.07	4.84	Peak	100	73
4	5725.00	82.49	122.20	-39.71	77.65	4.84	Peak	100	73
5	5925.00	63.38	68.20	-4.82	58.25	5.13	Peak	100	73
6	7660.00	40.82	54.00	-13.18	32.20	8.62	Average	116	10
7	7660.00	52.22	74.00	-21.78	43.60	8.62	Peak	116	10
8	11490.00	43.08	54.00	-10.92	28.97	14.11	Average	100	242
9	11490.00	56.45	74.00	-17.55	42.34	14.11	Peak	100	242
10	17235.00	49.76	54.00	-4.24	31.82	17.94	Average	100	151
11	17235.00	62.51	74.00	-11.49	44.57	17.94	Peak	100	151

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).

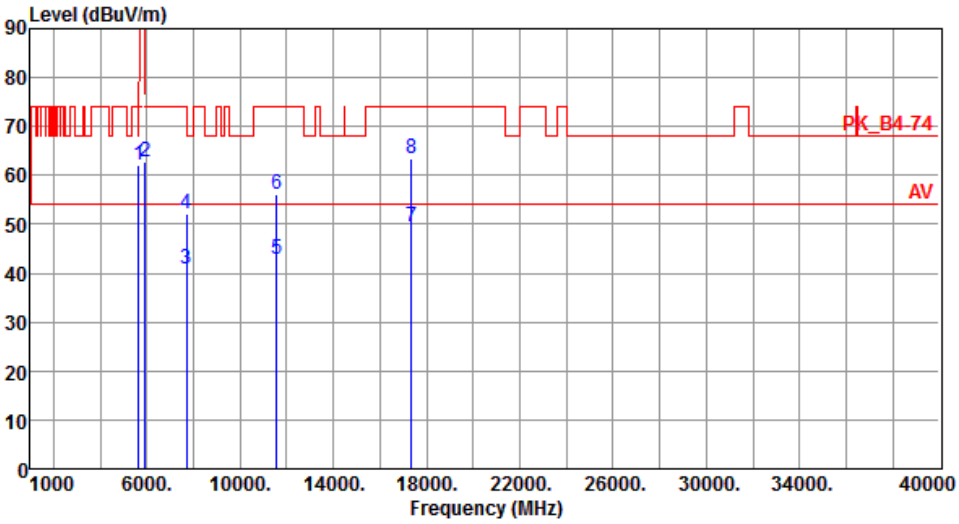
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.96	68.20	-5.24	58.23	4.73	Peak	100	321
2	5700.00	62.87	105.20	-42.33	58.06	4.81	Peak	100	321
3	5720.00	73.64	110.80	-37.16	68.80	4.84	Peak	100	321
4	5725.00	86.42	122.20	-35.78	81.58	4.84	Peak	100	321
5	5925.00	61.88	68.20	-6.32	56.75	5.13	Peak	100	321
6	7660.00	39.74	54.00	-14.26	31.12	8.62	Average	100	262
7	7660.00	50.96	74.00	-23.04	42.34	8.62	Peak	100	262
8	11490.00	44.28	54.00	-9.72	30.17	14.11	Average	100	242
9	11490.00	57.91	74.00	-16.09	43.80	14.11	Peak	100	242
10	17235.00	52.71	54.00	-1.29	34.77	17.94	Average	100	144
11	17235.00	67.40	74.00	-6.60	49.46	17.94	Peak	100	144

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).

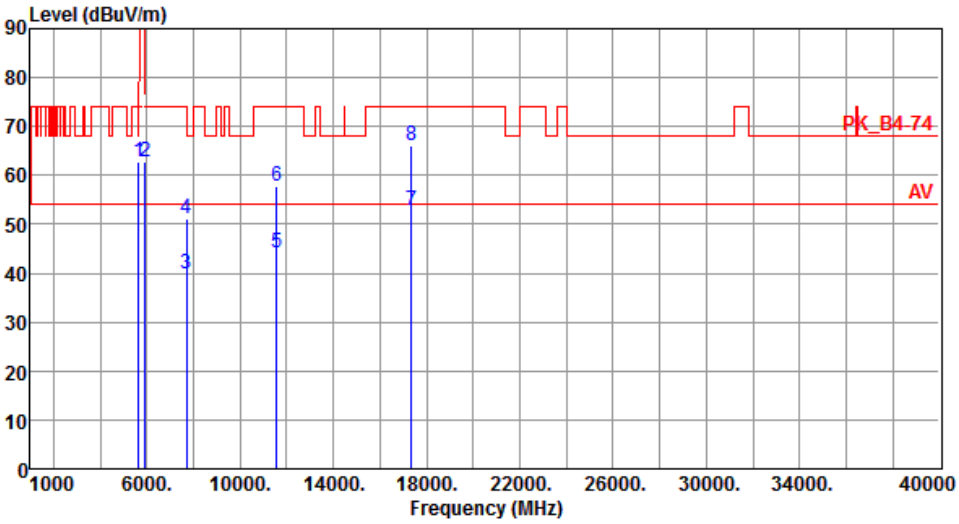
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.20	68.20	-6.00	57.47	4.73	Peak	100	75
2	5925.00	62.72	68.20	-5.48	57.59	5.13	Peak	100	75
3	7713.33	40.81	54.00	-13.19	32.11	8.70	Average	115	9
4	7713.33	52.25	74.00	-21.75	43.55	8.70	Peak	115	9
5	11570.00	42.97	54.00	-11.03	28.99	13.98	Average	100	239
6	11570.00	56.00	74.00	-18.00	42.02	13.98	Peak	100	239
7	17355.00	49.60	54.00	-4.40	31.35	18.25	Average	100	162
8	17355.00	63.27	74.00	-10.73	45.02	18.25	Peak	100	162

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

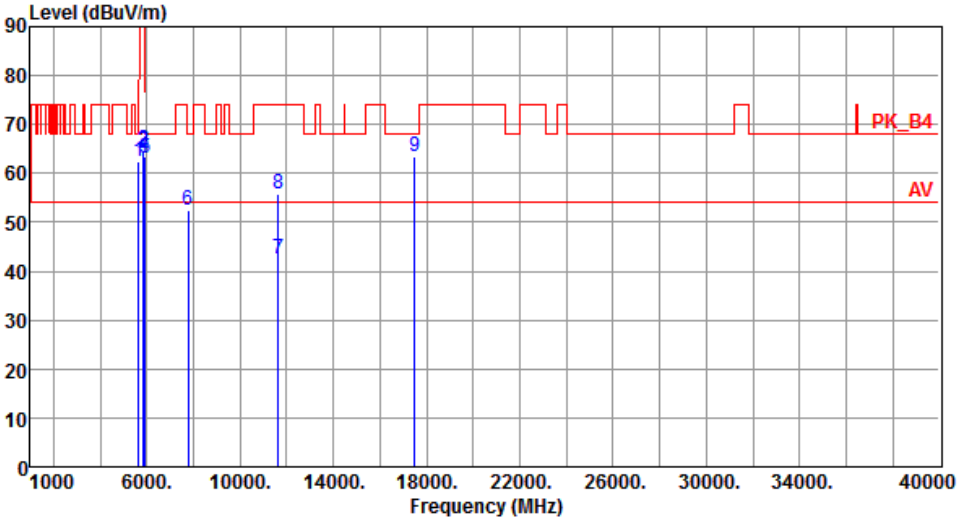
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.65	68.20	-5.55	57.92	4.73	Peak	100	313
2	5925.00	62.88	68.20	-5.32	57.75	5.13	Peak	100	313
3	7713.33	39.76	54.00	-14.24	31.06	8.70	Average	100	265
4	7713.33	51.11	74.00	-22.89	42.41	8.70	Peak	100	265
5	11570.00	44.19	54.00	-9.81	30.21	13.98	Average	100	240
6	11570.00	57.74	74.00	-16.26	43.76	13.98	Peak	100	240
7	17355.00	52.73	54.00	-1.27	34.48	18.25	Average	100	142
8	17355.00	66.10	74.00	-7.90	47.85	18.25	Peak	100	142

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).

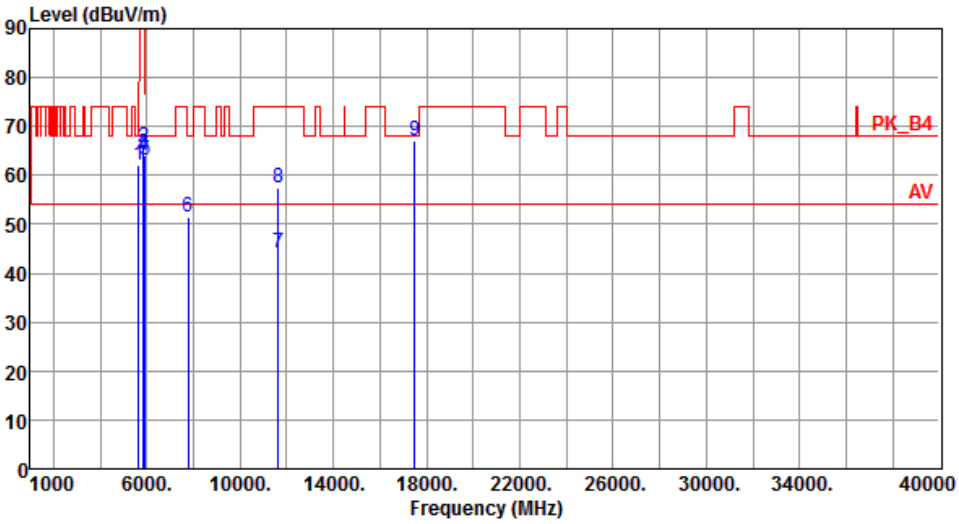
Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.43	68.20	-5.77	57.70	4.73	Peak	100	77
2	5850.00	64.63	122.20	-57.57	59.59	5.04	Peak	100	77
3	5855.00	64.31	110.80	-46.49	59.27	5.04	Peak	100	77
4	5875.00	63.55	105.20	-41.65	58.48	5.07	Peak	100	77
5	5925.00	63.06	68.20	-5.14	57.93	5.13	Peak	100	77
6	7766.66	52.46	68.20	-15.74	43.68	8.78	Peak	100	12
7	11650.00	42.61	54.00	-11.39	28.78	13.83	Average	100	237
8	11650.00	55.89	74.00	-18.11	42.06	13.83	Peak	100	237
9	17475.00	63.59	68.20	-4.61	45.04	18.55	Peak	100	164

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		

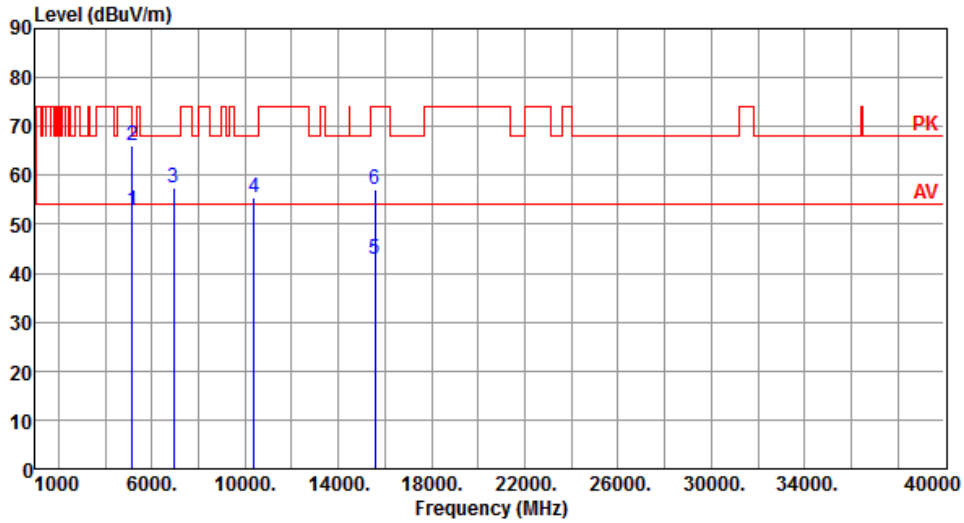


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.20	68.20	-6.00	57.47	4.73	Peak	100	48
2	5850.00	65.84	122.20	-56.36	60.80	5.04	Peak	100	48
3	5855.00	64.51	110.80	-46.29	59.47	5.04	Peak	100	48
4	5875.00	64.04	105.20	-41.16	58.97	5.07	Peak	100	48
5	5925.00	63.01	68.20	-5.19	57.88	5.13	Peak	100	48
6	7766.66	51.34	68.20	-16.86	42.56	8.78	Peak	100	263
7	11650.00	44.01	54.00	-9.99	30.18	13.83	Average	100	239
8	11650.00	57.41	74.00	-16.59	43.58	13.83	Peak	100	239
9	17475.00	67.07	68.20	-1.13	48.52	18.55	Peak	100	143

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

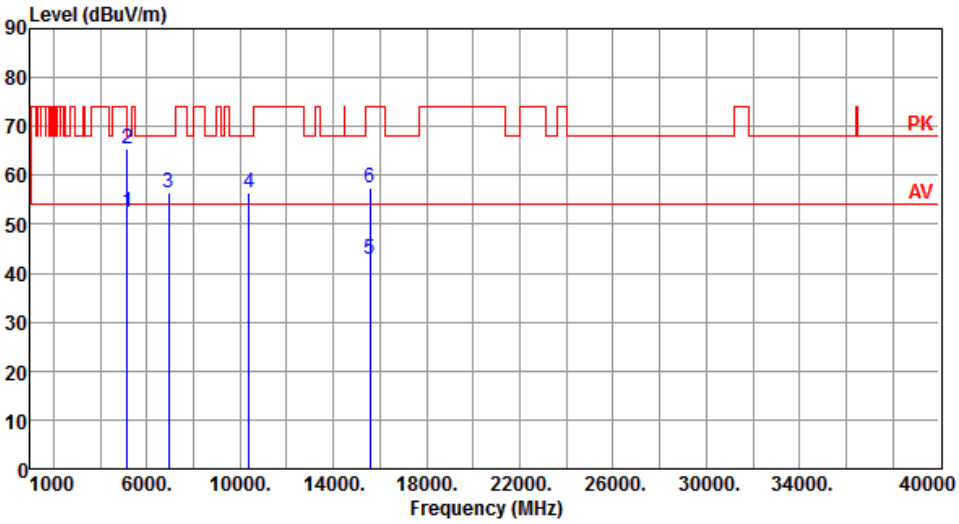
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Horizontal		



	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	52.82	54.00	-1.18	48.54	4.28	Average	100	358
2	5150.00	66.00	74.00	-8.00	61.72	4.28	Peak	100	358
3	6920.00	57.33	68.20	-10.87	49.85	7.48	Peak	100	334
4	10380.00	55.47	68.20	-12.73	41.85	13.62	Peak	100	150
5	15570.00	42.88	54.00	-11.12	28.26	14.62	Average	100	300
6	15570.00	57.17	74.00	-16.83	42.55	14.62	Peak	100	300

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).

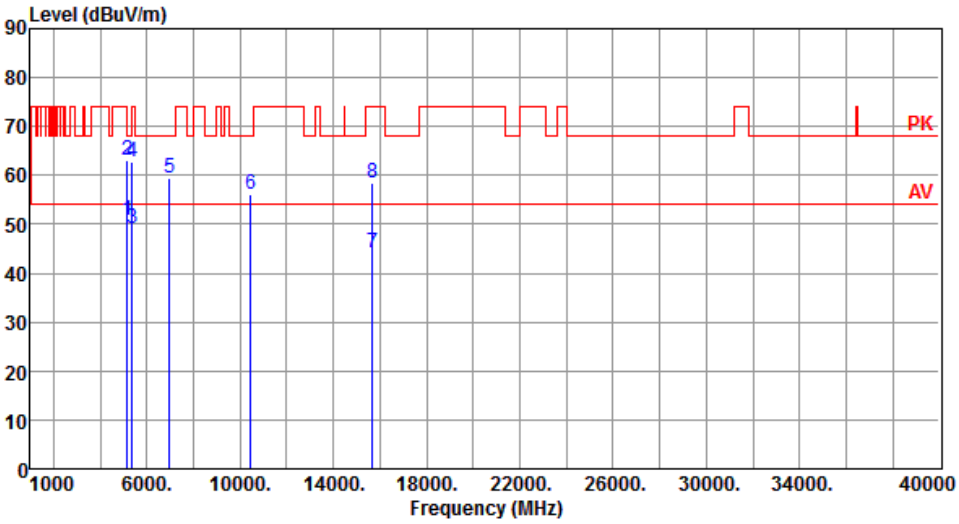
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		



	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	52.40	54.00	-1.60	48.12	4.28	Average	100	349
2	5150.00	65.48	74.00	-8.52	61.20	4.28	Peak	100	349
3	6920.00	56.43	68.20	-11.77	48.95	7.48	Peak	100	110
4	10380.00	56.48	68.20	-11.72	42.86	13.62	Peak	100	250
5	15570.00	42.98	54.00	-11.02	28.36	14.62	Average	100	50
6	15570.00	57.51	74.00	-16.49	42.89	14.62	Peak	100	50

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).

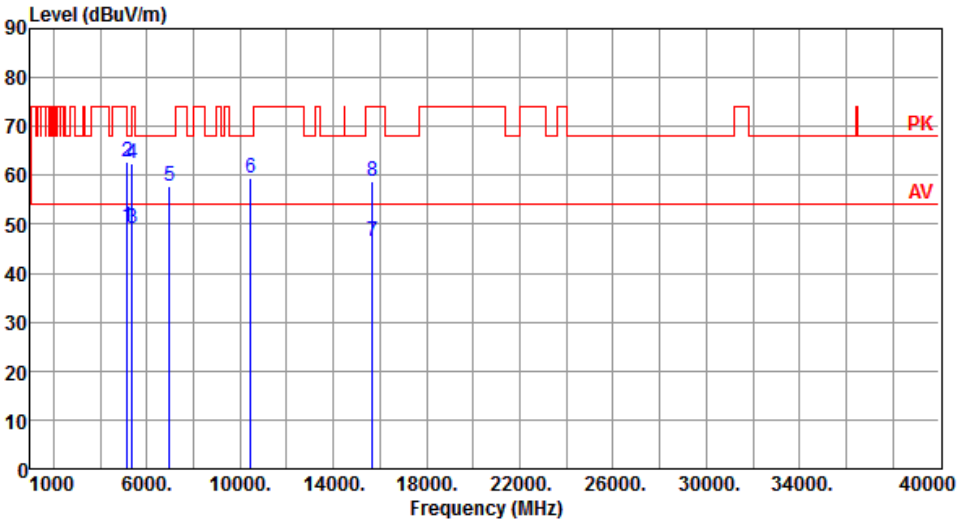
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



	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	50.77	54.00	-3.23	46.49	4.28	Average	100	357
2	5150.00	63.05	74.00	-10.95	58.77	4.28	Peak	100	357
3	5350.00	49.20	54.00	-4.80	44.76	4.44	Average	100	357
4	5350.00	62.64	74.00	-11.36	58.20	4.44	Peak	100	357
5	6973.33	59.30	68.20	-8.90	51.78	7.52	Peak	100	335
6	10460.00	56.16	68.20	-12.04	42.49	13.67	Peak	100	124
7	15690.00	44.31	54.00	-9.69	29.85	14.46	Average	100	313
8	15690.00	58.31	74.00	-15.69	43.85	14.46	Peak	100	313

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).

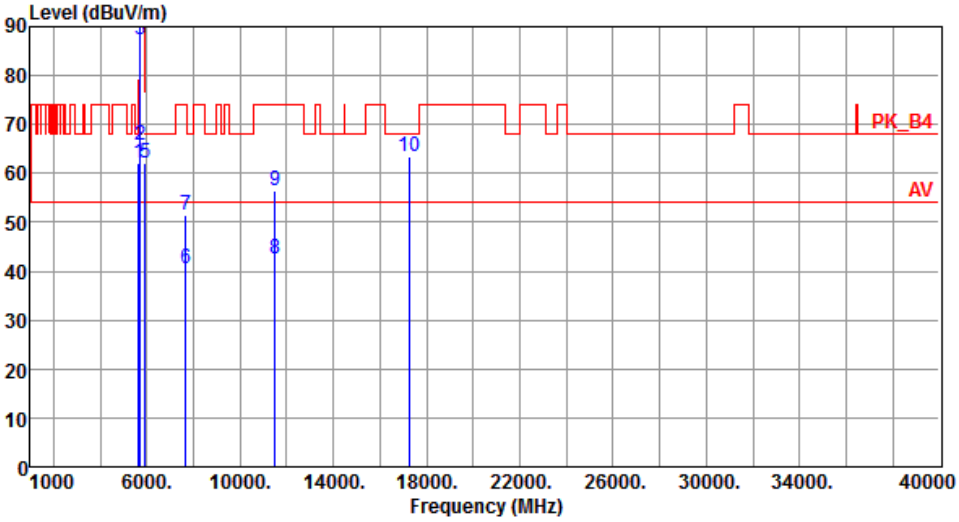
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	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	49.40	54.00	-4.60	45.12	4.28	Average	100	344
2	5150.00	62.80	74.00	-11.20	58.52	4.28	Peak	100	344
3	5350.00	49.25	54.00	-4.75	44.81	4.44	Average	100	358
4	5350.00	62.55	74.00	-11.45	58.11	4.44	Peak	100	358
5	6973.33	57.83	68.20	-10.37	50.31	7.52	Peak	100	108
6	10460.00	59.28	68.20	-8.92	45.61	13.67	Peak	100	261
7	15690.00	46.36	54.00	-7.64	31.90	14.46	Average	100	136
8	15690.00	58.93	74.00	-15.07	44.47	14.46	Peak	100	136

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).

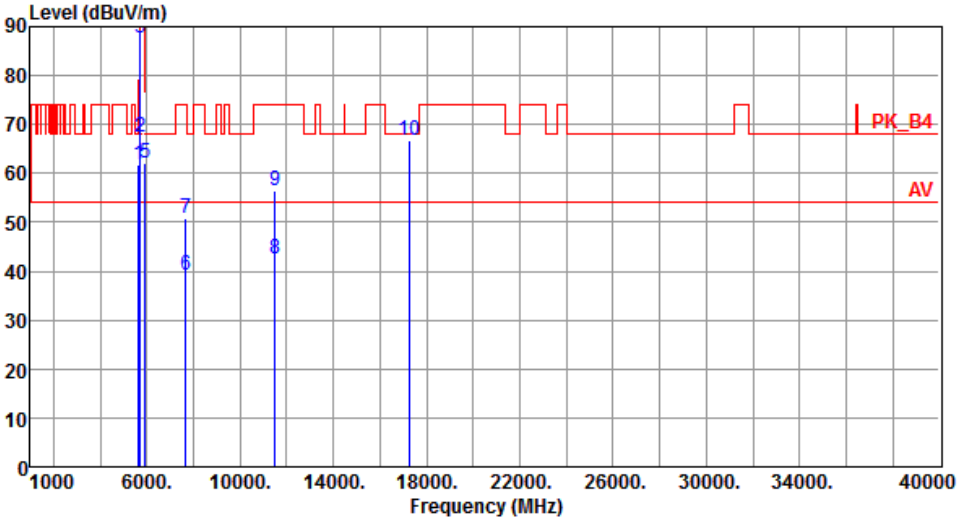
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.00	68.20	-6.20	57.27	4.73	Peak	100	74
2	5700.00	65.82	105.20	-39.38	61.01	4.81	Peak	100	74
3	5720.00	87.43	110.80	-23.37	82.59	4.84	Peak	100	74
4	5725.00	91.20	122.20	-31.00	86.36	4.84	Peak	100	74
5	5925.00	62.19	68.20	-6.01	57.06	5.13	Peak	100	74
6	7673.33	40.49	54.00	-13.51	31.85	8.64	Average	100	5
7	7673.33	51.49	74.00	-22.51	42.85	8.64	Peak	100	5
8	11510.00	42.47	54.00	-11.53	28.38	14.09	Average	100	150
9	11510.00	56.30	74.00	-17.70	42.21	14.09	Peak	100	150
10	17265.00	63.31	68.20	-4.89	45.29	18.02	Peak	100	163

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

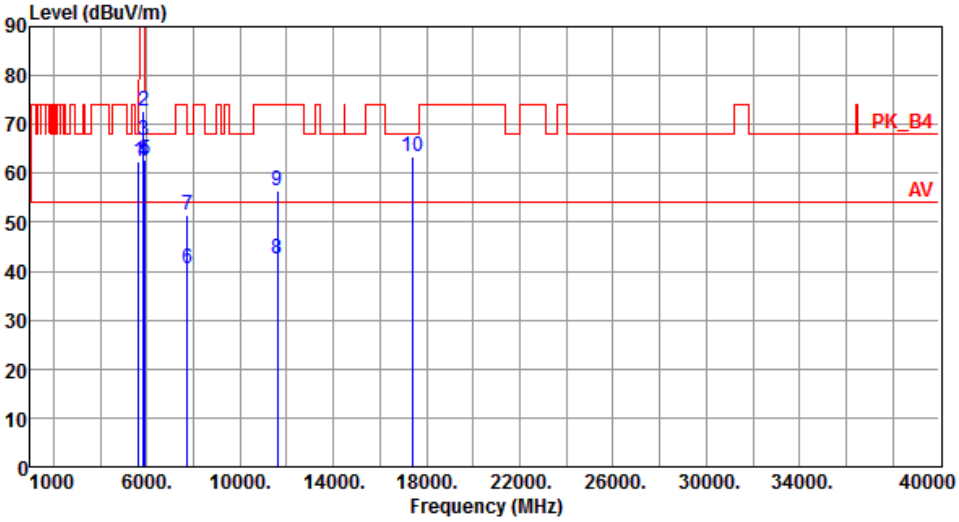
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	61.87	68.20	-6.33	57.14	4.73	Peak	100	320
2	5700.00	67.57	105.20	-37.63	62.76	4.81	Peak	100	320
3	5720.00	87.60	110.80	-23.20	82.76	4.84	Peak	100	320
4	5725.00	89.18	122.20	-33.02	84.34	4.84	Peak	100	320
5	5925.00	62.19	68.20	-6.01	57.06	5.13	Peak	100	320
6	7673.33	39.16	54.00	-14.84	30.52	8.64	Average	100	263
7	7673.33	50.79	74.00	-23.21	42.15	8.64	Peak	100	263
8	11510.00	42.45	54.00	-11.55	28.36	14.09	Average	100	200
9	11510.00	56.44	74.00	-17.56	42.35	14.09	Peak	100	200
10	17265.00	66.86	68.20	-1.34	48.84	18.02	Peak	100	143

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).

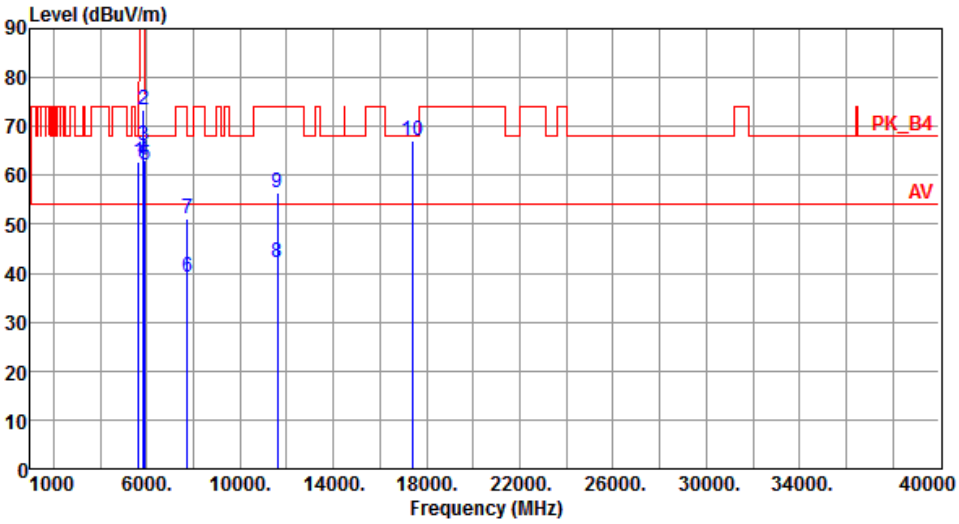
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.28	68.20	-5.92	57.55	4.73	Peak	100	74
2	5850.00	72.89	122.20	-49.31	67.85	5.04	Peak	100	74
3	5855.00	66.62	110.80	-44.18	61.58	5.04	Peak	100	74
4	5875.00	62.58	105.20	-42.62	57.51	5.07	Peak	100	74
5	5925.00	62.74	68.20	-5.46	57.61	5.13	Peak	100	74
6	7726.66	40.46	54.00	-13.54	31.74	8.72	Average	100	6
7	7726.66	51.50	74.00	-22.50	42.78	8.72	Peak	100	6
8	11590.00	42.39	54.00	-11.61	28.45	13.94	Average	100	120
9	11590.00	56.30	74.00	-17.70	42.36	13.94	Peak	100	120
10	17385.00	63.54	68.20	-4.66	45.21	18.33	Peak	100	164

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		

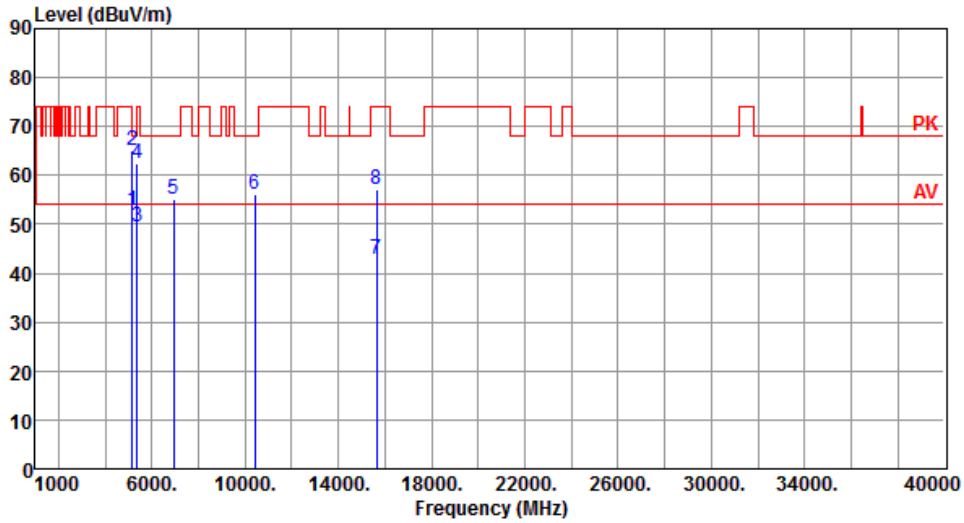


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.93	68.20	-5.27	58.20	4.73	Peak	108	313
2	5850.00	73.30	122.20	-48.90	68.26	5.04	Peak	108	313
3	5855.00	66.19	110.80	-44.61	61.15	5.04	Peak	108	313
4	5875.00	62.96	105.20	-42.24	57.89	5.07	Peak	108	313
5	5925.00	62.05	68.20	-6.15	56.92	5.13	Peak	108	313
6	7726.66	39.21	54.00	-14.79	30.49	8.72	Average	100	265
7	7726.66	51.03	74.00	-22.97	42.31	8.72	Peak	100	265
8	11590.00	42.20	54.00	-11.80	28.26	13.94	Average	100	150
9	11590.00	56.33	74.00	-17.67	42.39	13.94	Peak	100	150
10	17385.00	67.10	68.20	-1.10	48.77	18.33	Peak	100	142

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

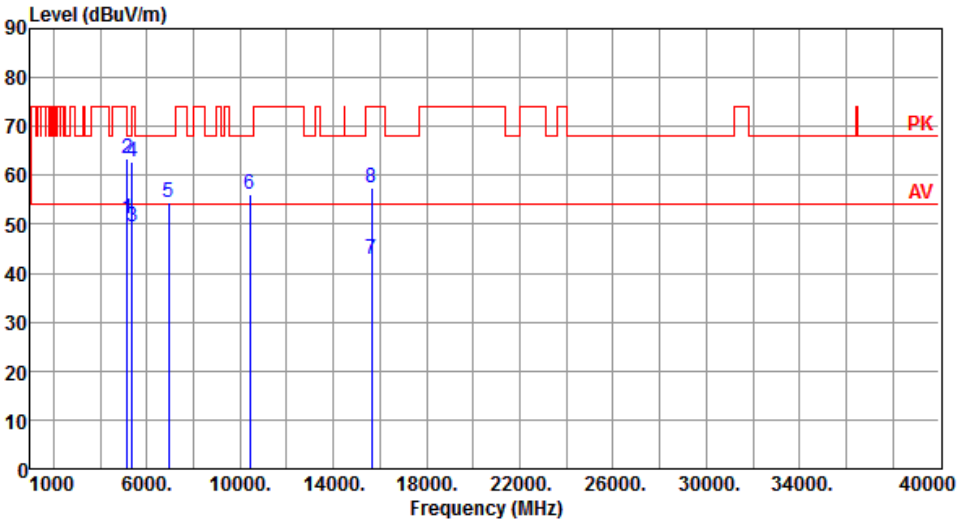
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Horizontal		



	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	52.91	54.00	-1.09	48.63	4.28	Average	112	320
2	5150.00	65.04	74.00	-8.96	60.76	4.28	Peak	112	320
3	5350.00	49.50	54.00	-4.50	45.06	4.44	Average	112	320
4	5350.00	62.50	74.00	-11.50	58.06	4.44	Peak	112	320
5	6946.66	55.19	68.20	-13.01	47.69	7.50	Peak	100	335
6	10420.00	56.01	68.20	-12.19	42.35	13.66	Peak	100	20
7	15630.00	42.85	54.00	-11.15	28.31	14.54	Average	100	50
8	15630.00	57.23	74.00	-16.77	42.69	14.54	Peak	100	50

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).

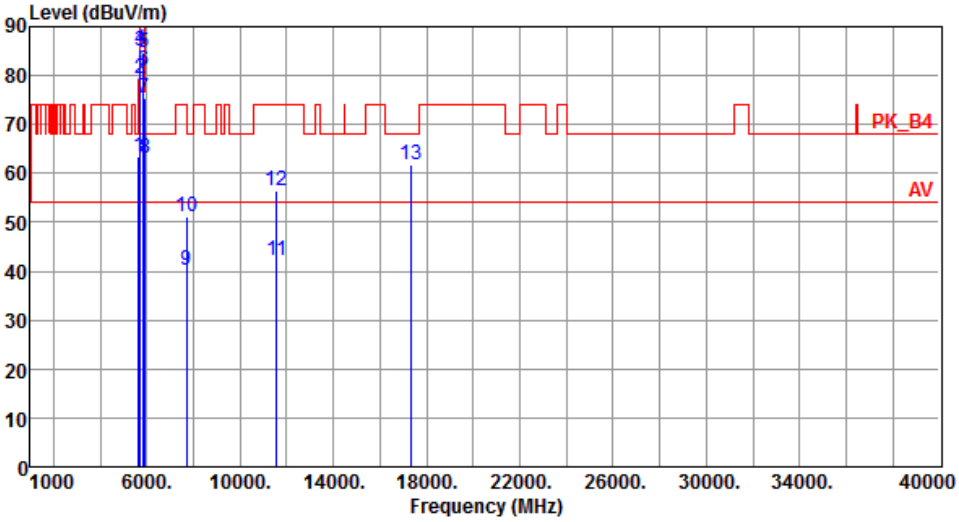
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		



	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	51.13	54.00	-2.87	46.85	4.28	Average	100	343
2	5150.00	63.53	74.00	-10.47	59.25	4.28	Peak	100	343
3	5350.00	49.49	54.00	-4.51	45.05	4.44	Average	100	357
4	5350.00	62.64	74.00	-11.36	58.20	4.44	Peak	100	357
5	6946.66	54.37	68.20	-13.83	46.87	7.50	Peak	100	112
6	10420.00	56.20	68.20	-12.00	42.54	13.66	Peak	100	150
7	15630.00	42.95	54.00	-11.05	28.41	14.54	Average	100	70
8	15630.00	57.41	74.00	-16.59	42.87	14.54	Peak	100	70

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).

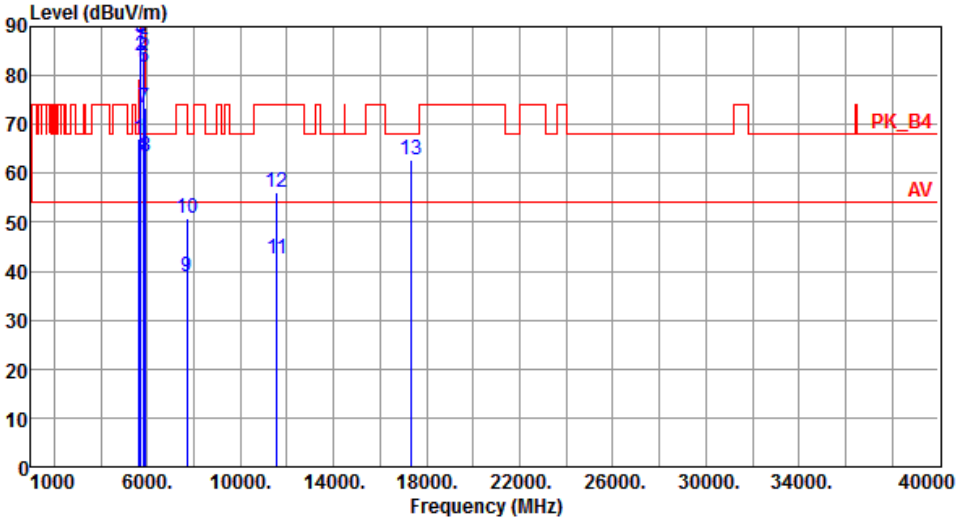
Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	63.31	68.20	-4.89	58.58	4.73	Peak	100	77
2	5700.00	79.53	105.20	-25.67	74.72	4.81	Peak	100	77
3	5720.00	84.99	110.80	-25.81	80.15	4.84	Peak	100	77
4	5725.00	85.31	122.20	-36.89	80.47	4.84	Peak	100	77
5	5850.00	84.56	122.20	-37.64	79.52	5.04	Peak	100	77
6	5855.00	80.92	110.80	-29.88	75.88	5.04	Peak	100	77
7	5875.00	75.40	105.20	-29.80	70.33	5.07	Peak	100	77
8	5925.00	62.94	68.20	-5.26	57.81	5.13	Peak	100	77
9	7700.00	40.23	54.00	-13.77	31.55	8.68	Average	100	4
10	7700.00	51.27	74.00	-22.73	42.59	8.68	Peak	100	4
11	11550.00	42.34	54.00	-11.66	28.33	14.01	Average	100	30
12	11550.00	56.49	74.00	-17.51	42.48	14.01	Peak	100	30
13	17325.00	61.76	68.20	-6.44	43.59	18.17	Peak	100	20

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		



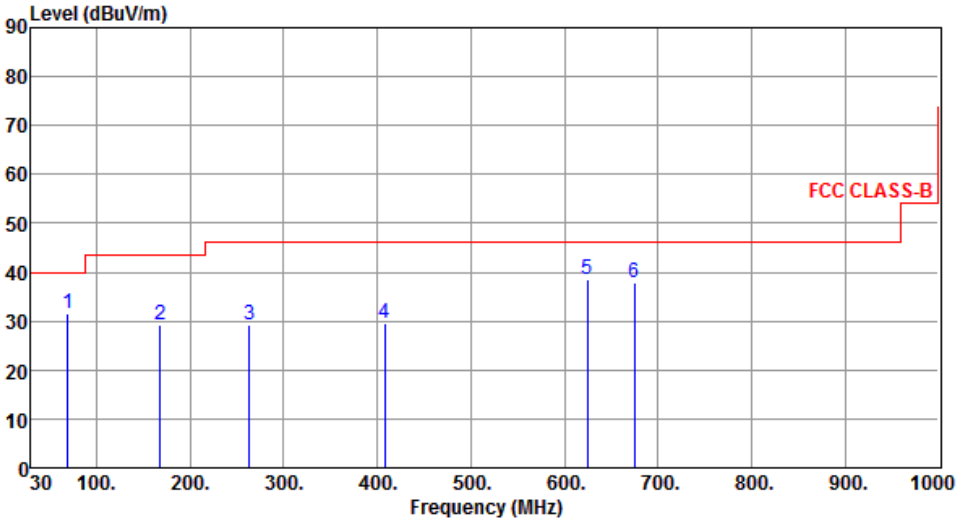
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	67.10	68.20	-1.10	62.37	4.73	Peak	104	314
2	5700.00	83.99	105.20	-21.21	79.18	4.81	Peak	104	314
3	5720.00	87.64	110.80	-23.16	82.80	4.84	Peak	104	314
4	5725.00	87.46	122.20	-34.74	82.62	4.84	Peak	104	314
5	5850.00	84.83	122.20	-37.37	79.79	5.04	Peak	104	314
6	5855.00	81.69	110.80	-29.11	76.65	5.04	Peak	104	314
7	5875.00	73.32	105.20	-31.88	68.25	5.07	Peak	104	314
8	5925.00	63.44	68.20	-4.76	58.31	5.13	Peak	104	314
9	7700.00	38.93	54.00	-15.07	30.25	8.68	Average	100	260
10	7700.00	50.94	74.00	-23.06	42.26	8.68	Peak	100	260
11	11550.00	42.38	54.00	-11.62	28.37	14.01	Average	100	25
12	11550.00	56.18	74.00	-17.82	42.17	14.01	Peak	100	25
13	17325.00	62.67	68.20	-5.53	44.50	18.17	Peak	100	143

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).

Beamforming mode

3.5.9 Transmitter Radiated Unwanted Emissions (Below 1GHz)

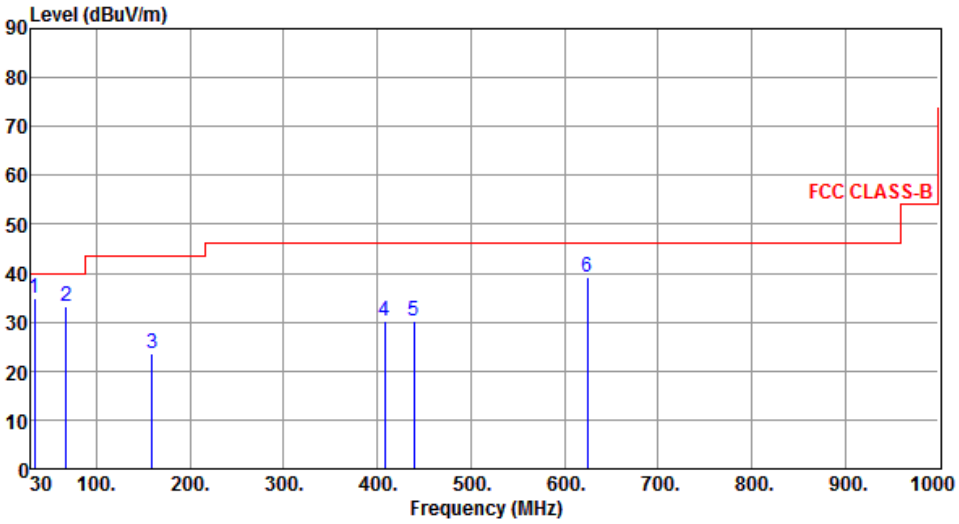
Modulation	VHT40	**Test Freq. (MHz)**	5230
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	69.61	31.52	40.00	-8.48	42.03	-10.51	Peak	---	---
2	167.68	29.25	43.50	-14.25	37.60	-8.35	Peak	---	---
3	263.69	29.27	46.00	-16.73	38.18	-8.91	Peak	---	---
4	408.29	29.55	46.00	-16.45	34.64	-5.09	Peak	---	---
5	624.57	38.54	46.00	-7.46	38.99	-0.45	Peak	---	---
6	675.12	37.98	46.00	-8.02	37.71	0.27	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.

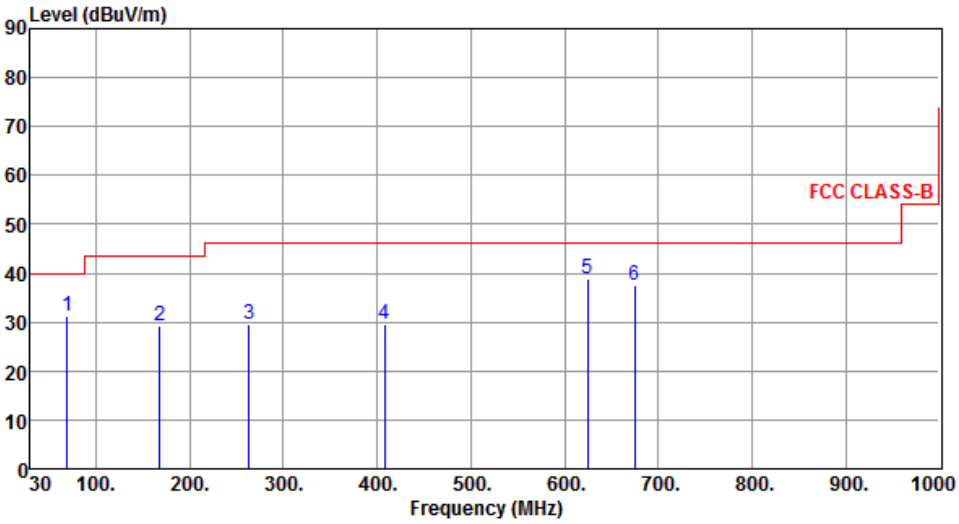
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	33.86	34.75	40.00	-5.25	43.83	-9.08	QP	100	253
2	67.77	33.27	40.00	-6.73	43.46	-10.19	Peak	---	---
3	159.17	23.61	43.50	-19.89	31.75	-8.14	Peak	---	---
4	408.27	30.26	46.00	-15.74	35.35	-5.09	Peak	---	---
5	439.51	30.11	46.00	-15.89	34.42	-4.31	Peak	---	---
6	624.58	39.13	46.00	-6.87	39.58	-0.45	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).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

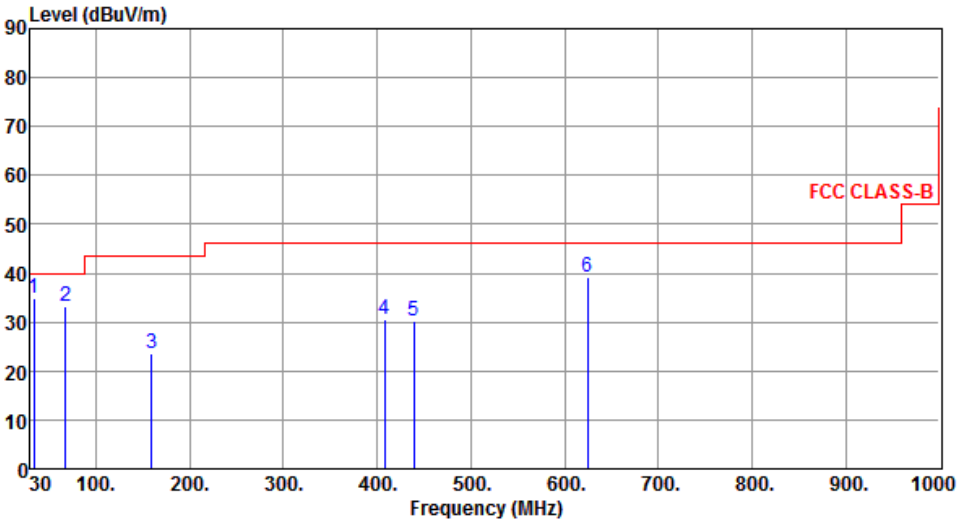
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	69.63	31.23	40.00	-8.77	41.74	-10.51	Peak	---	---
2	167.67	29.06	43.50	-14.44	37.41	-8.35	Peak	---	---
3	263.61	29.41	46.00	-16.59	38.32	-8.91	Peak	---	---
4	408.27	29.52	46.00	-16.48	34.61	-5.09	Peak	---	---
5	624.51	38.77	46.00	-7.23	39.22	-0.45	Peak	---	---
6	675.05	37.63	46.00	-8.37	37.36	0.27	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	VHT40	Test Freq. (MHz)	5795
Polarization	Vertical		

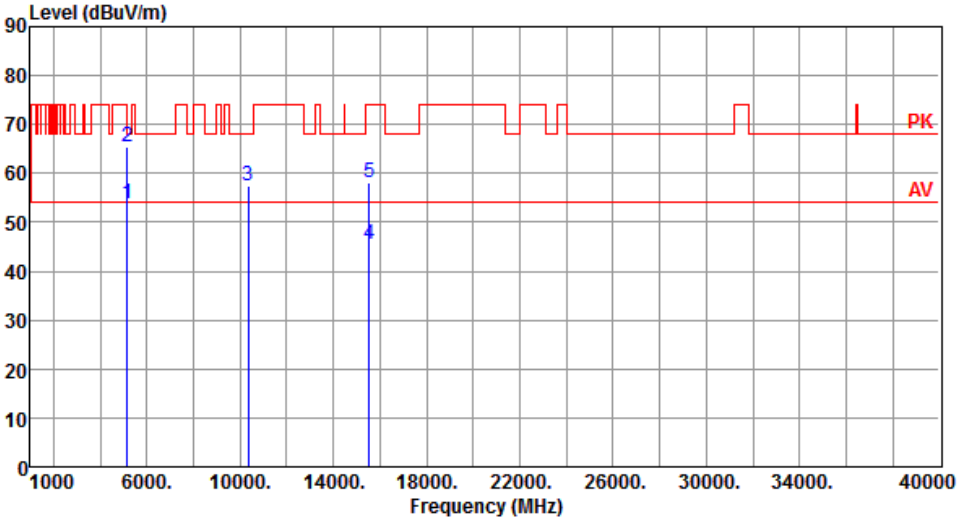


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	33.92	34.74	40.00	-5.26	43.82	-9.08	QP	100	252
2	67.85	33.21	40.00	-6.79	43.42	-10.21	Peak	---	---
3	159.01	23.42	43.50	-20.08	31.56	-8.14	Peak	---	---
4	408.37	30.42	46.00	-15.58	35.50	-5.08	Peak	---	---
5	439.47	30.16	46.00	-15.84	34.47	-4.31	Peak	---	---
6	624.56	39.13	46.00	-6.87	39.58	-0.45	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).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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

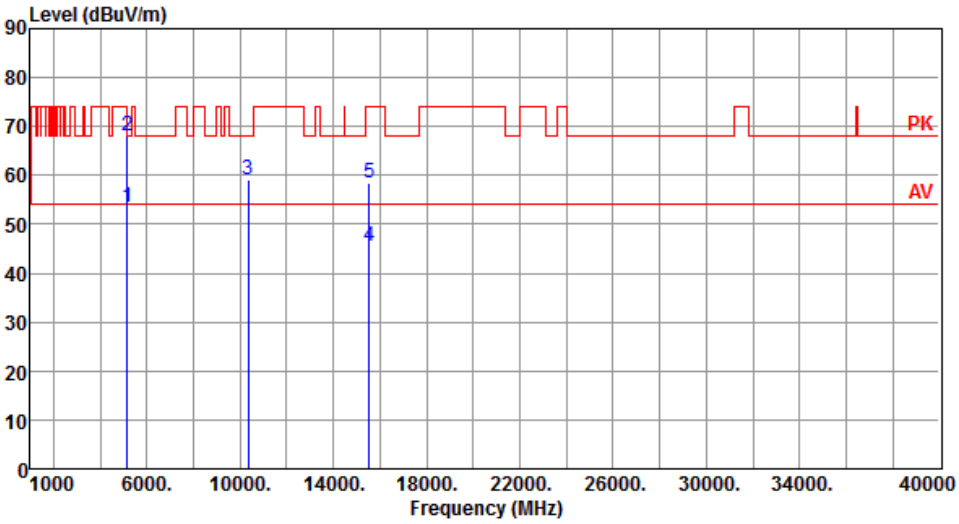
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Horizontal		



	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	53.73	54.00	-0.27	49.45	4.28	Average	301	301
2	5150.00	65.38	74.00	-8.62	61.10	4.28	Peak	301	301
3	10360.00	57.55	68.20	-10.65	43.95	13.60	Peak	100	107
4	15540.00	45.45	54.00	-8.55	30.78	14.67	Average	100	255
5	15540.00	58.10	74.00	-15.90	43.43	14.67	Peak	100	255

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).

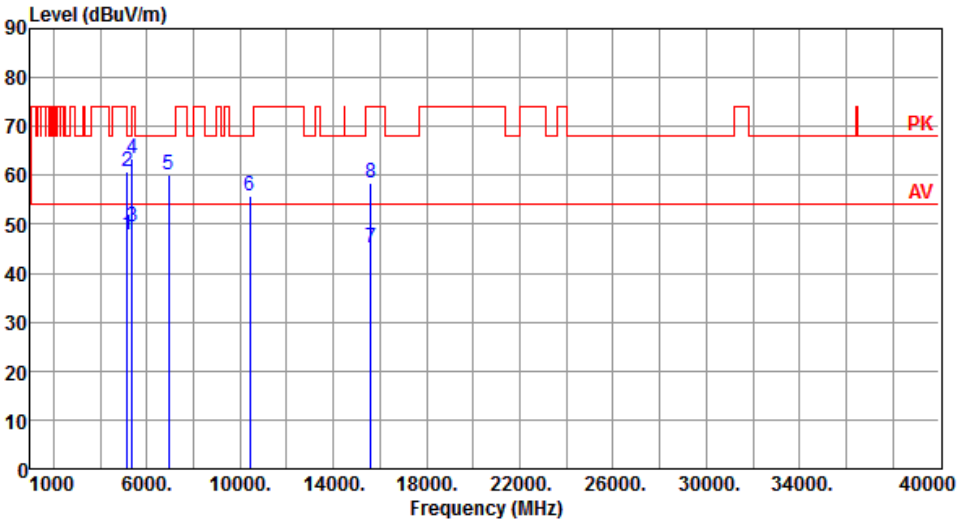
Modulation	VHT20	Test Freq. (MHz)	5180
Polarization	Vertical		



	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	53.56	54.00	-0.44	49.28	4.28	Average	100	353
2	5150.00	68.14	74.00	-5.86	63.86	4.28	Peak	100	353
3	10360.00	59.11	68.20	-9.09	45.51	13.60	Peak	100	295
4	15540.00	45.52	54.00	-8.48	30.85	14.67	Average	100	298
5	15540.00	58.53	74.00	-15.47	43.86	14.67	Peak	100	298

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).

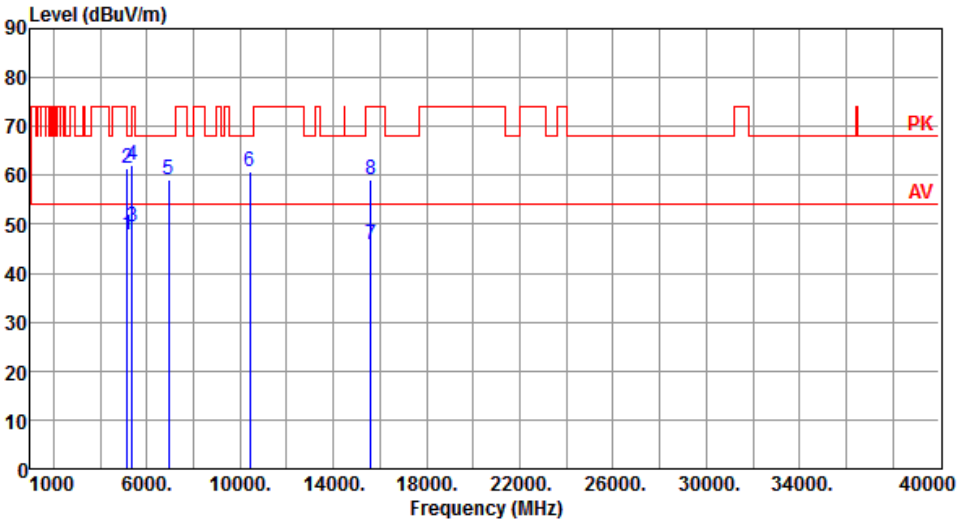
Modulation	VHT20	Test Freq. (MHz)	5200
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.96	54.00	-6.04	43.68	4.28	Average	100	319
2	5150.00	60.90	74.00	-13.10	56.62	4.28	Peak	100	319
3	5350.00	49.55	54.00	-4.45	45.11	4.44	Average	100	319
4	5350.00	63.29	74.00	-10.71	58.85	4.44	Peak	100	319
5	6933.30	60.19	68.20	-8.01	52.71	7.48	Peak	100	335
6	10400.00	55.75	68.20	-12.45	42.11	13.64	Peak	100	108
7	15600.00	45.06	54.00	-8.94	30.48	14.58	Average	100	258
8	15600.00	58.39	74.00	-15.61	43.81	14.58	Peak	100	258

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).

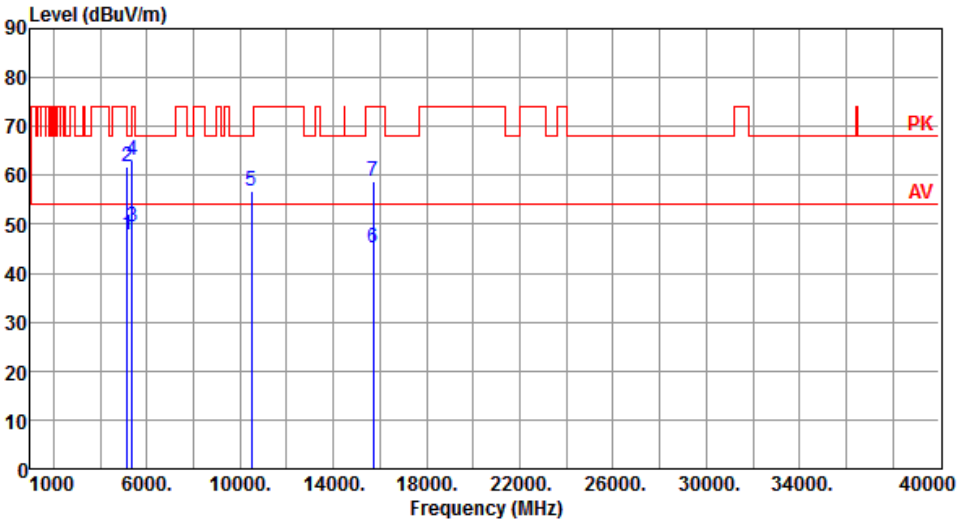
Modulation	VHT20	**Test Freq. (MHz)**	5200
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.99	54.00	-6.01	43.71	4.28	Average	100	0
2	5150.00	61.50	74.00	-12.50	57.22	4.28	Peak	100	0
3	5350.00	49.39	54.00	-4.61	44.95	4.44	Average	100	0
4	5350.00	62.19	74.00	-11.81	57.75	4.44	Peak	100	0
5	6933.30	58.98	68.20	-9.22	51.50	7.48	Peak	108	100
6	10400.00	60.84	68.20	-7.36	47.20	13.64	Peak	100	300
7	15600.00	45.74	54.00	-8.26	31.16	14.58	Average	100	316
8	15600.00	59.17	74.00	-14.83	44.59	14.58	Peak	100	316

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

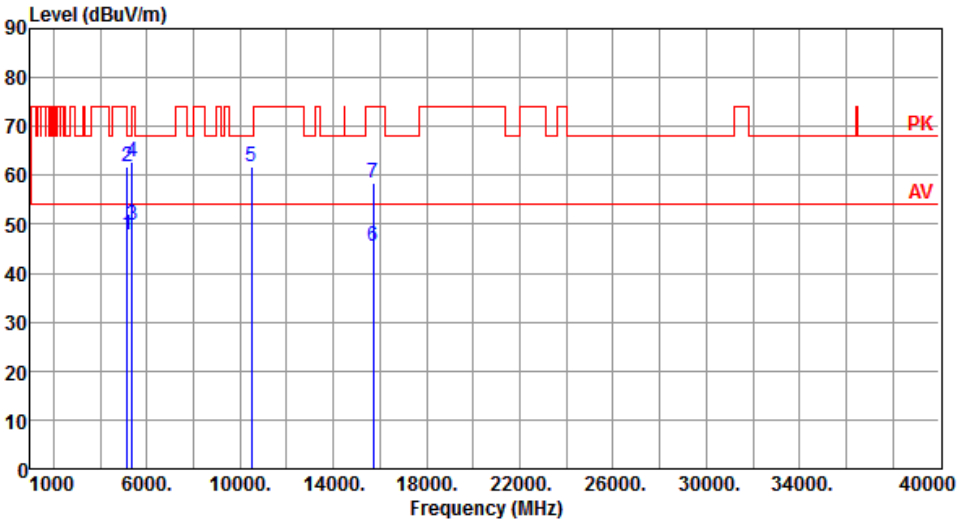
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.99	54.00	-6.01	43.71	4.28	Average	100	315
2	5150.00	61.66	74.00	-12.34	57.38	4.28	Peak	100	315
3	5350.00	49.41	54.00	-4.59	44.97	4.44	Average	100	315
4	5350.00	63.14	74.00	-10.86	58.70	4.44	Peak	100	315
5	10480.00	56.80	68.20	-11.40	43.10	13.70	Peak	100	267
6	15720.00	45.00	54.00	-9.00	30.58	14.42	Average	100	261
7	15720.00	58.70	74.00	-15.30	44.28	14.42	Peak	100	261

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).

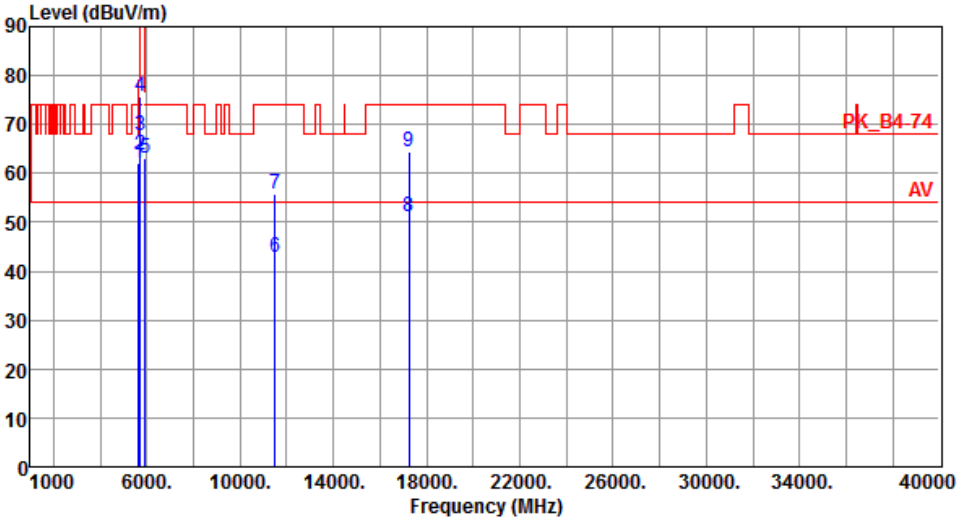
Modulation	VHT20	Test Freq. (MHz)	5240
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.96	54.00	-6.04	43.68	4.28	Average	100	359
2	5150.00	61.71	74.00	-12.29	57.43	4.28	Peak	100	359
3	5350.00	49.82	54.00	-4.18	45.38	4.44	Average	100	359
4	5350.00	62.81	74.00	-11.19	58.37	4.44	Peak	100	359
5	10480.00	61.91	68.20	-6.29	48.21	13.70	Peak	100	112
6	15720.00	45.66	54.00	-8.34	31.24	14.42	Average	100	318
7	15720.00	58.31	74.00	-15.69	43.89	14.42	Peak	100	318

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).

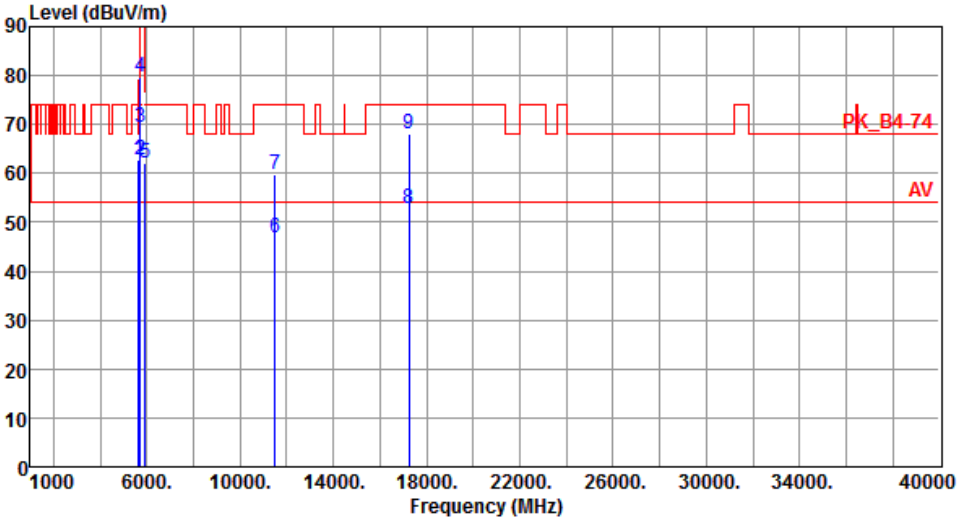
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	61.99	68.20	-6.21	57.26	4.73	Peak	100	20
2	5700.00	63.60	105.20	-41.60	58.79	4.81	Peak	100	20
3	5720.00	67.90	110.80	-42.90	63.06	4.84	Peak	100	20
4	5725.00	75.72	122.20	-46.48	70.88	4.84	Peak	100	20
5	5925.00	63.15	68.20	-5.05	58.02	5.13	Peak	100	20
6	11490.00	42.87	54.00	-11.13	28.76	14.11	Average	100	36
7	11490.00	55.87	74.00	-18.13	41.76	14.11	Peak	100	36
8	17235.00	51.28	54.00	-2.72	33.34	17.94	Average	100	234
9	17235.00	64.54	74.00	-9.46	46.60	17.94	Peak	100	234

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).

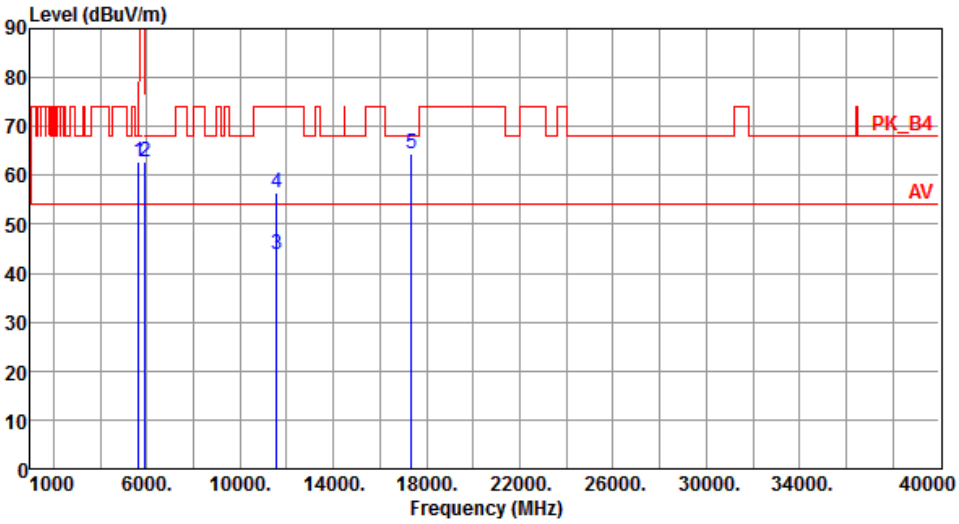
Modulation	VHT20	Test Freq. (MHz)	5745
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.72	68.20	-5.48	57.99	4.73	Peak	105	318
2	5700.00	62.69	105.20	-42.51	57.88	4.81	Peak	105	318
3	5720.00	69.31	110.80	-41.49	64.47	4.84	Peak	105	318
4	5725.00	79.73	122.20	-42.47	74.89	4.84	Peak	105	318
5	5925.00	61.97	68.20	-6.23	56.84	5.13	Peak	105	318
6	11490.00	46.76	54.00	-7.24	32.65	14.11	Average	100	247
7	11490.00	59.82	74.00	-14.18	45.71	14.11	Peak	100	247
8	17235.00	52.96	54.00	-1.04	35.02	17.94	Average	100	41
9	17235.00	68.24	74.00	-5.76	50.30	17.94	Peak	100	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).

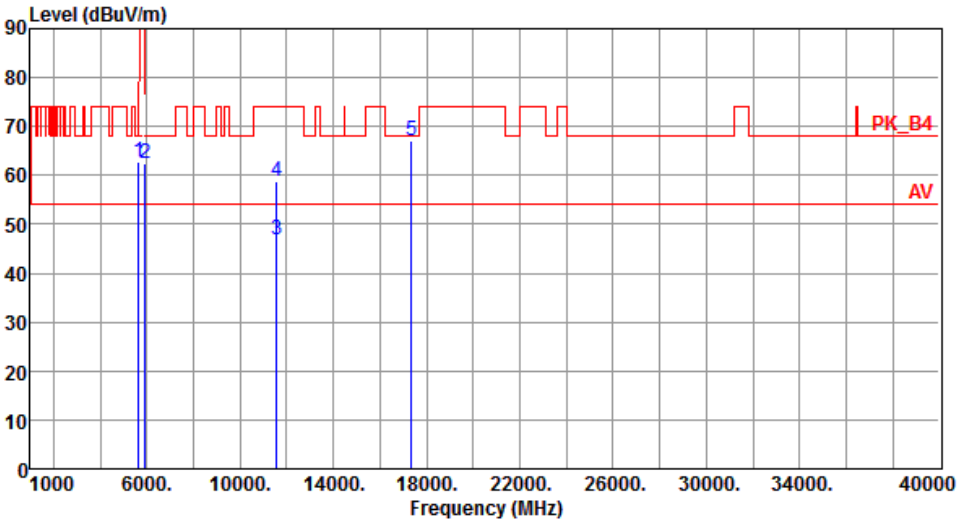
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.62	68.20	-5.58	57.89	4.73	Peak	112	122
2	5925.00	62.74	68.20	-5.46	57.61	5.13	Peak	112	122
3	11570.00	43.75	54.00	-10.25	29.77	13.98	Average	100	151
4	11570.00	56.59	74.00	-17.41	42.61	13.98	Peak	100	151
5	17355.00	64.29	68.20	-3.91	46.04	18.25	Peak	100	300

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).

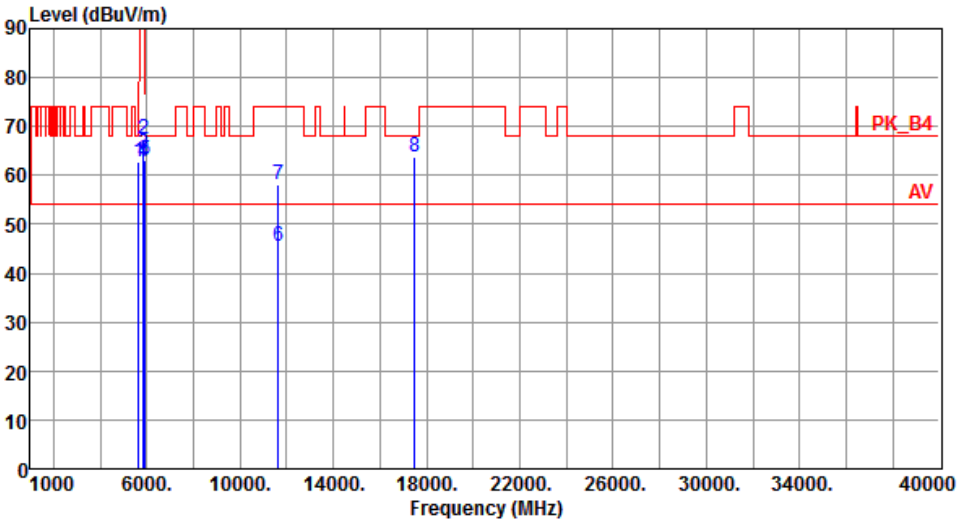
Modulation	VHT20	Test Freq. (MHz)	5785
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.79	68.20	-5.41	58.06	4.73	Peak	100	239
2	5925.00	62.56	68.20	-5.64	57.43	5.13	Peak	100	239
3	11570.00	46.84	54.00	-7.16	32.86	13.98	Average	100	239
4	11570.00	58.77	74.00	-15.23	44.79	13.98	Peak	100	239
5	17355.00	67.17	68.20	-1.03	48.92	18.25	Peak	100	244

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).

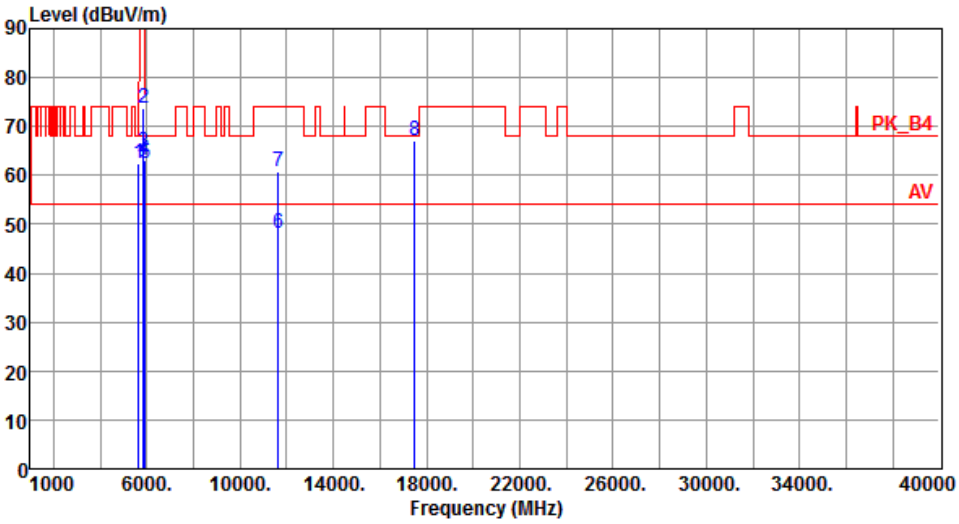
Modulation	VHT20	Test Freq. (MHz)	5825
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.92	68.20	-5.28	58.19	4.73	Peak	100	68
2	5850.00	67.40	122.20	-54.80	62.36	5.04	Peak	100	68
3	5855.00	64.28	110.80	-46.52	59.24	5.04	Peak	100	68
4	5875.00	62.92	105.20	-42.28	57.85	5.07	Peak	100	68
5	5925.00	63.03	68.20	-5.17	57.90	5.13	Peak	100	68
6	11650.00	45.36	54.00	-8.64	31.53	13.83	Average	100	182
7	11650.00	58.07	74.00	-15.93	44.24	13.83	Peak	100	182
8	17475.00	63.68	68.20	-4.52	45.13	18.55	Peak	100	300

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		

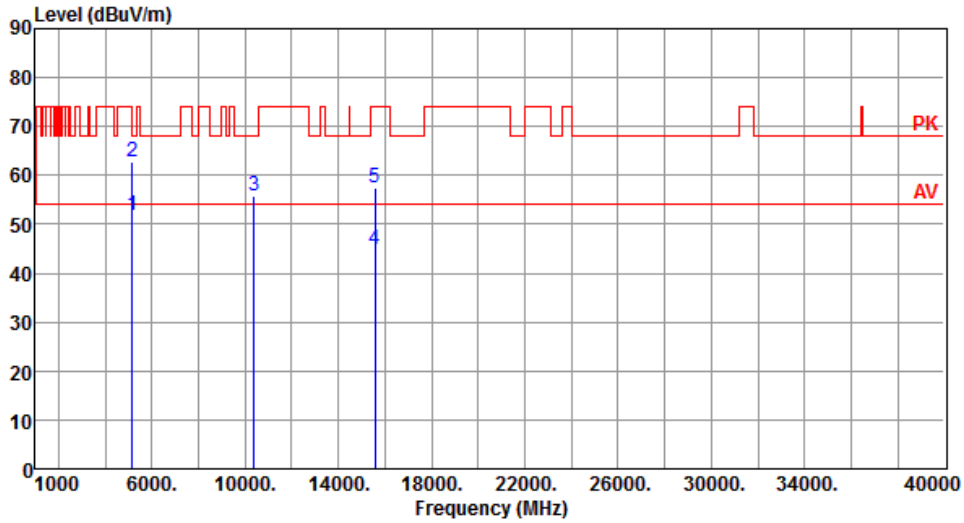


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.28	68.20	-5.92	57.55	4.73	Peak	100	309
2	5850.00	73.83	122.20	-48.37	68.79	5.04	Peak	100	309
3	5855.00	64.86	110.80	-45.94	59.82	5.04	Peak	100	309
4	5875.00	63.10	105.20	-42.10	58.03	5.07	Peak	100	309
5	5925.00	62.49	68.20	-5.71	57.36	5.13	Peak	100	309
6	11650.00	48.10	54.00	-5.90	34.27	13.83	Average	100	243
7	11650.00	60.90	74.00	-13.10	47.07	13.83	Peak	100	243
8	17475.00	67.18	68.20	-1.02	48.63	18.55	Peak	100	261

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).

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

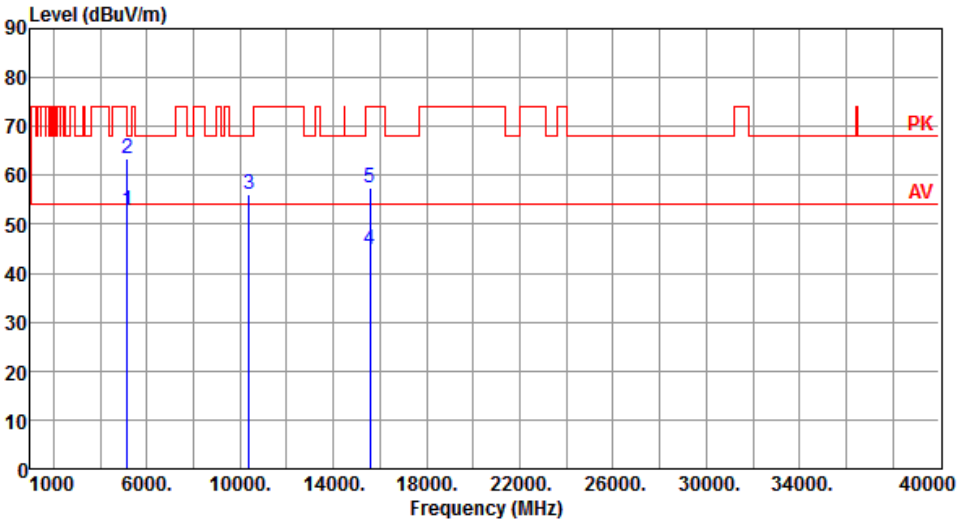
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Horizontal		



	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	51.87	54.00	-2.13	47.59	4.28	Average	100	353
2	5150.00	62.70	74.00	-11.30	58.42	4.28	Peak	100	353
3	10380.00	55.77	68.20	-12.43	42.15	13.62	Peak	100	70
4	15570.00	44.88	54.00	-9.12	30.26	14.62	Average	100	60
5	15570.00	57.31	74.00	-16.69	42.69	14.62	Peak	100	60

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).

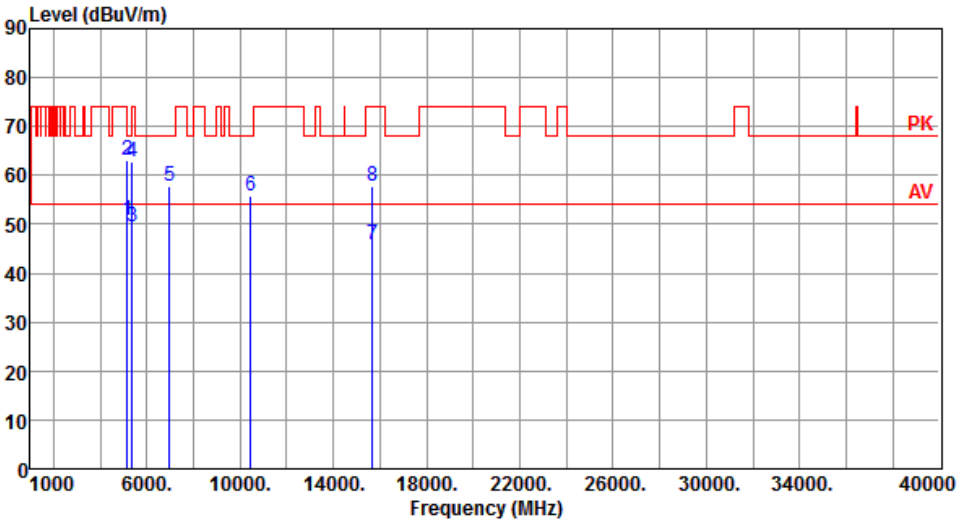
Modulation	VHT40	Test Freq. (MHz)	5190
Polarization	Vertical		



	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	52.85	54.00	-1.15	48.57	4.28	Average	100	357
2	5150.00	63.52	74.00	-10.48	59.24	4.28	Peak	100	357
3	10380.00	55.98	68.20	-12.22	42.36	13.62	Peak	100	20
4	15570.00	44.77	54.00	-9.23	30.15	14.62	Average	100	15
5	15570.00	57.47	74.00	-16.53	42.85	14.62	Peak	100	15

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).

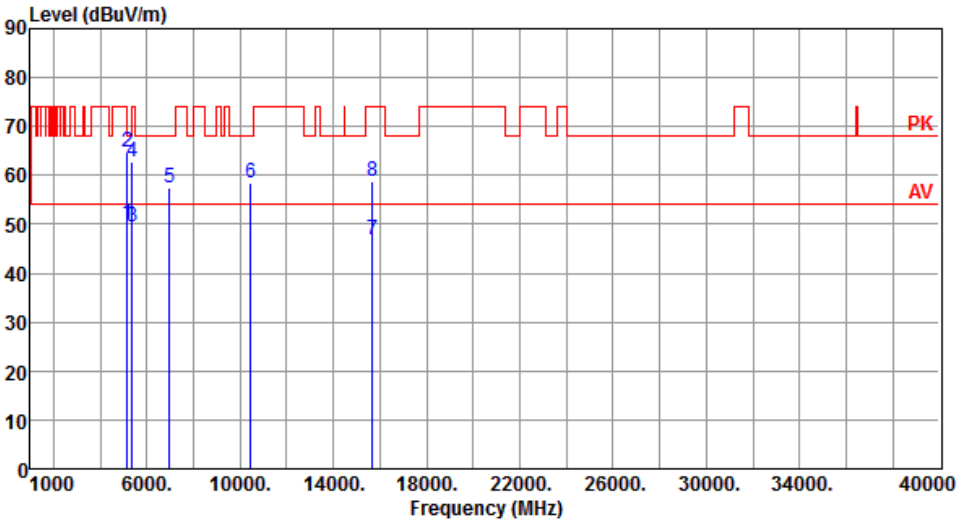
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Horizontal		



	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	50.65	54.00	-3.35	46.37	4.28	Average	100	319
2	5150.00	63.17	74.00	-10.83	58.89	4.28	Peak	100	319
3	5350.00	49.58	54.00	-4.42	45.14	4.44	Average	100	319
4	5350.00	62.65	74.00	-11.35	58.21	4.44	Peak	100	319
5	6973.33	57.76	68.20	-10.44	50.24	7.52	Peak	100	331
6	10460.00	55.77	68.20	-12.43	42.10	13.67	Peak	100	320
7	15690.00	45.92	54.00	-8.08	31.46	14.46	Average	100	234
8	15690.00	57.87	74.00	-16.13	43.41	14.46	Peak	100	234

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).

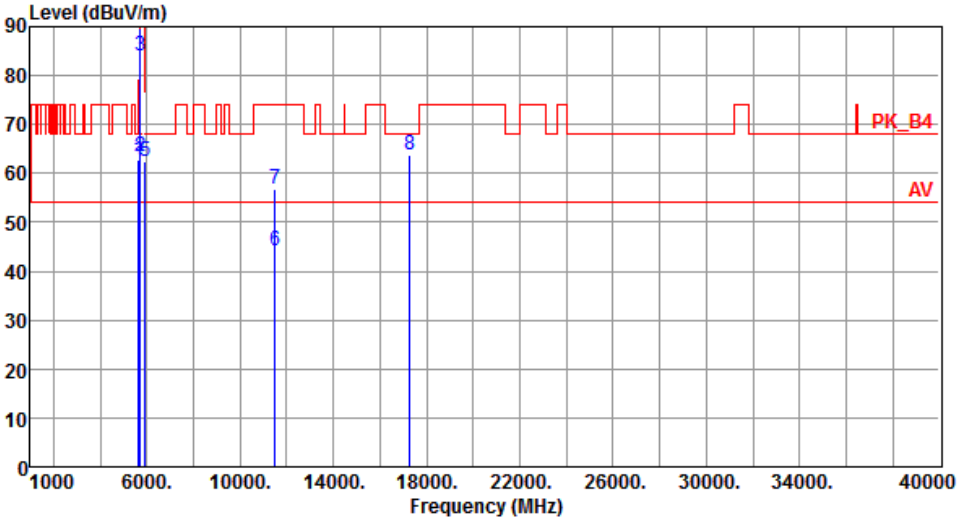
Modulation	VHT40	Test Freq. (MHz)	5230
Polarization	Vertical		



	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	50.10	54.00	-3.90	45.82	4.28	Average	100	353
2	5150.00	64.80	74.00	-9.20	60.52	4.28	Peak	100	353
3	5350.00	49.60	54.00	-4.40	45.16	4.44	Average	100	353
4	5350.00	62.67	74.00	-11.33	58.23	4.44	Peak	100	353
5	6973.33	57.36	68.20	-10.84	49.84	7.52	Peak	100	109
6	10460.00	58.46	68.20	-9.74	44.79	13.67	Peak	100	300
7	15690.00	46.97	54.00	-7.03	32.51	14.46	Average	100	10
8	15690.00	58.93	74.00	-15.07	44.47	14.46	Peak	100	10

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).

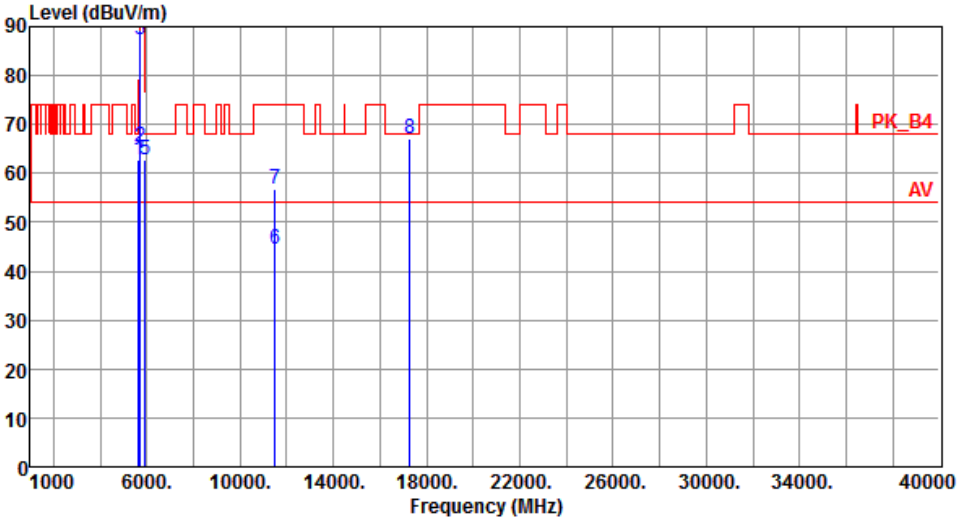
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.73	68.20	-5.47	58.00	4.73	Peak	100	74
2	5700.00	63.53	105.20	-41.67	58.72	4.81	Peak	100	74
3	5720.00	84.07	110.80	-26.73	79.23	4.84	Peak	100	74
4	5725.00	89.51	122.20	-32.69	84.67	4.84	Peak	100	74
5	5925.00	62.58	68.20	-5.62	57.45	5.13	Peak	100	74
6	11510.00	44.22	54.00	-9.78	30.13	14.09	Average	100	175
7	11510.00	56.63	74.00	-17.37	42.54	14.09	Peak	100	175
8	17265.00	63.60	68.20	-4.60	45.58	18.02	Peak	100	295

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).

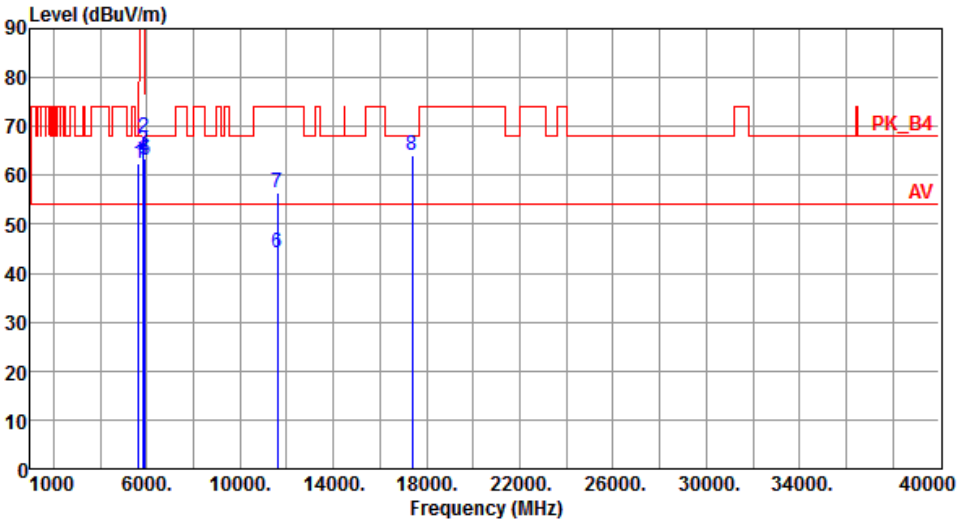
Modulation	VHT40	Test Freq. (MHz)	5755
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.93	68.20	-5.27	58.20	4.73	Peak	111	316
2	5700.00	65.31	105.20	-39.89	60.50	4.81	Peak	111	316
3	5720.00	87.33	110.80	-23.47	82.49	4.84	Peak	111	316
4	5725.00	89.44	122.20	-32.76	84.60	4.84	Peak	111	316
5	5925.00	62.85	68.20	-5.35	57.72	5.13	Peak	111	316
6	11510.00	44.54	54.00	-9.46	30.45	14.09	Average	100	237
7	11510.00	56.91	74.00	-17.09	42.82	14.09	Peak	100	237
8	17265.00	67.18	68.20	-1.02	49.16	18.02	Peak	100	308

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

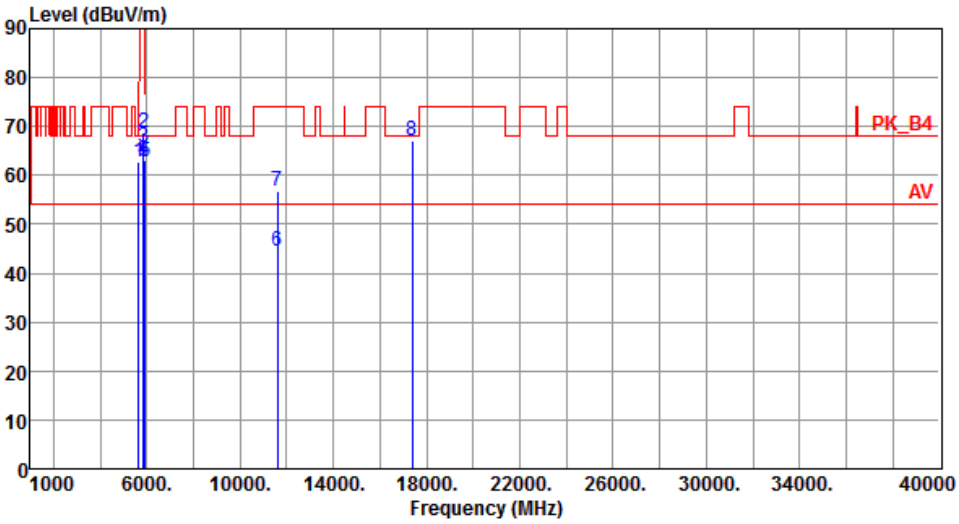
Modulation	VHT40	Test Freq. (MHz)	5795
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.35	68.20	-5.85	57.62	4.73	Peak	100	73
2	5850.00	67.69	122.20	-54.51	62.65	5.04	Peak	100	73
3	5855.00	65.02	110.80	-45.78	59.98	5.04	Peak	100	73
4	5875.00	63.31	105.20	-41.89	58.24	5.07	Peak	100	73
5	5925.00	63.17	68.20	-5.03	58.04	5.13	Peak	100	73
6	11590.00	44.15	54.00	-9.85	30.21	13.94	Average	100	173
7	11590.00	56.60	74.00	-17.40	42.66	13.94	Peak	100	173
8	17385.00	64.12	68.20	-4.08	45.79	18.33	Peak	100	293

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		

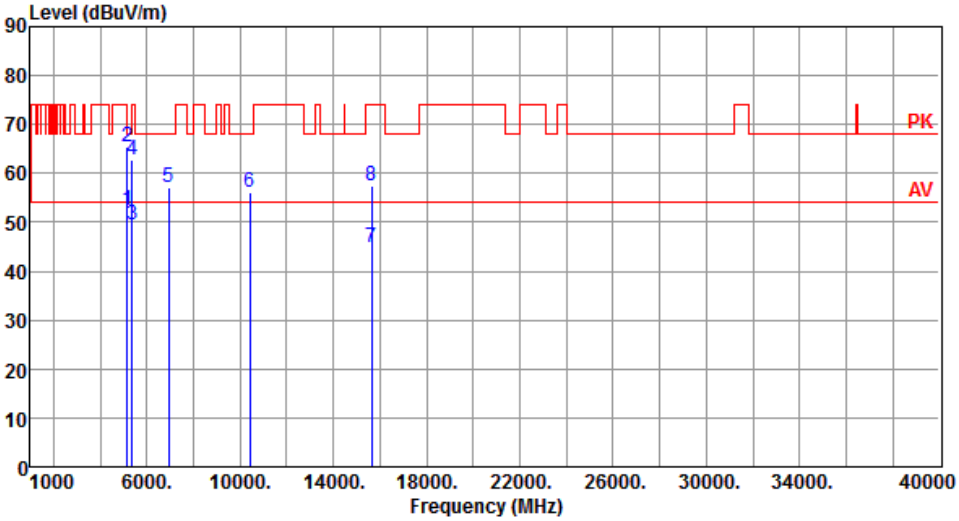


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	62.77	68.20	-5.43	58.04	4.73	Peak	100	312
2	5850.00	68.74	122.20	-53.46	63.70	5.04	Peak	100	312
3	5855.00	65.64	110.80	-45.16	60.60	5.04	Peak	100	312
4	5875.00	62.97	105.20	-42.23	57.90	5.07	Peak	100	312
5	5925.00	62.92	68.20	-5.28	57.79	5.13	Peak	100	312
6	11590.00	44.53	54.00	-9.47	30.59	13.94	Average	100	240
7	11590.00	56.89	74.00	-17.11	42.95	13.94	Peak	100	240
8	17385.00	67.13	68.20	-1.07	48.80	18.33	Peak	100	261

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).

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

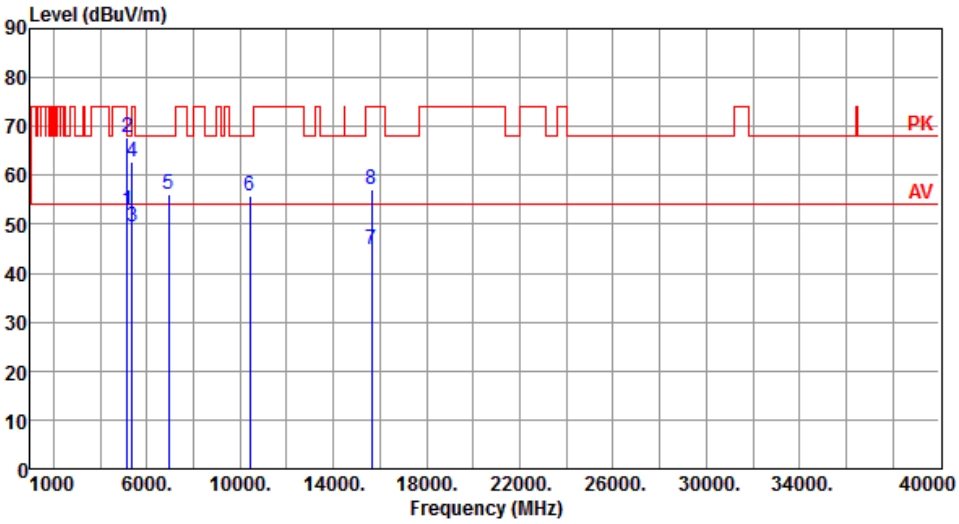
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Horizontal		



	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	52.56	54.00	-1.44	48.28	4.28	Average	100	357
2	5150.00	65.53	74.00	-8.47	61.25	4.28	Peak	100	357
3	5350.00	49.56	54.00	-4.44	45.12	4.44	Average	100	357
4	5350.00	62.87	74.00	-11.13	58.43	4.44	Peak	100	357
5	6946.66	57.27	68.20	-10.93	49.77	7.50	Peak	100	329
6	10420.00	56.01	68.20	-12.19	42.35	13.66	Peak	100	50
7	15630.00	44.80	54.00	-9.20	30.26	14.54	Average	100	90
8	15630.00	57.42	74.00	-16.58	42.88	14.54	Peak	100	90

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).

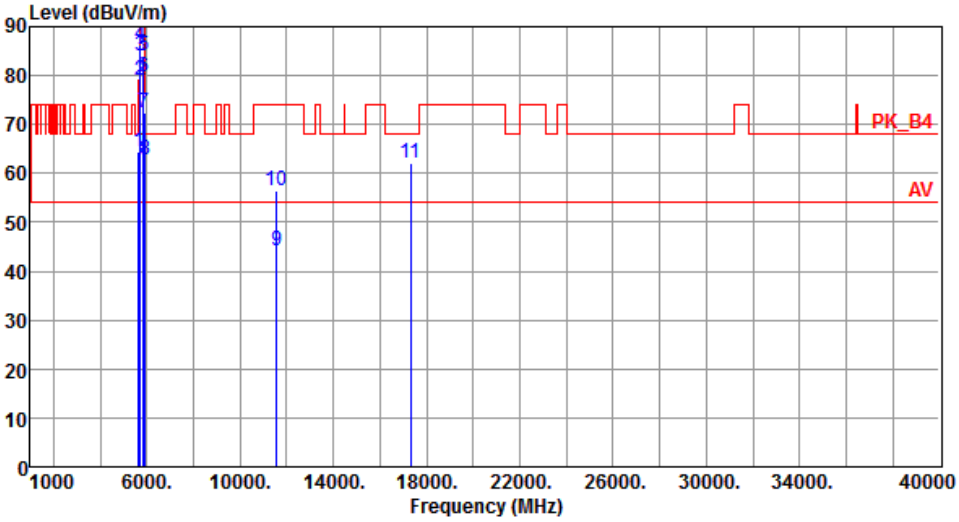
Modulation	VHT80	Test Freq. (MHz)	5210
Polarization	Vertical		



	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	52.94	54.00	-1.06	48.66	4.28	Average	100	353
2	5150.00	67.79	74.00	-6.21	63.51	4.28	Peak	100	353
3	5350.00	49.60	54.00	-4.40	45.16	4.44	Average	100	353
4	5350.00	62.71	74.00	-11.29	58.27	4.44	Peak	100	353
5	6946.66	56.27	68.20	-11.93	48.77	7.50	Peak	100	112
6	10420.00	55.86	68.20	-12.34	42.20	13.66	Peak	100	50
7	15630.00	44.85	54.00	-9.15	30.31	14.54	Average	100	70
8	15630.00	57.09	74.00	-16.91	42.55	14.54	Peak	100	70

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).

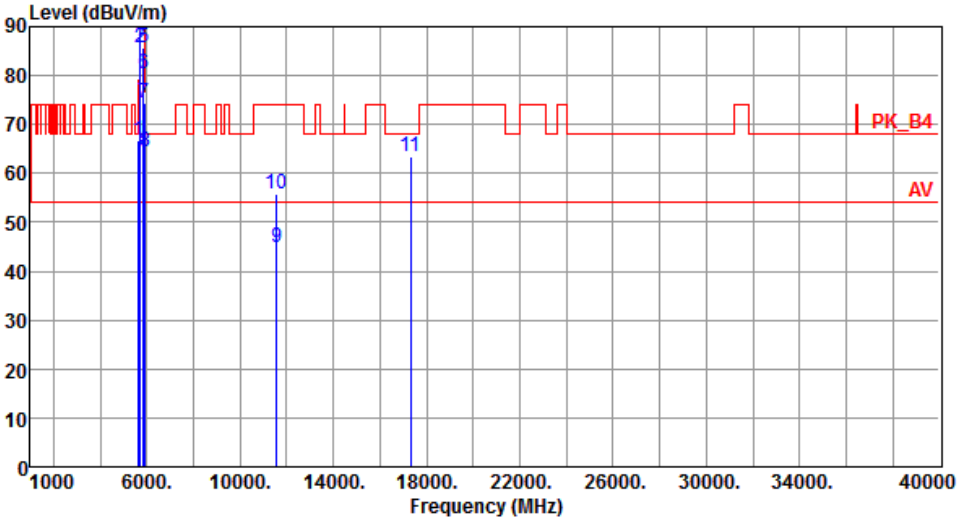
Modulation	VHT80	Test Freq. (MHz)	5775
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5650.00	64.43	68.20	-3.77	59.70	4.73	Peak	100	72
2	5700.00	79.14	105.20	-26.06	74.33	4.81	Peak	100	72
3	5720.00	83.90	110.80	-26.90	79.06	4.84	Peak	100	72
4	5725.00	86.34	122.20	-35.86	81.50	4.84	Peak	100	72
5	5850.00	84.17	122.20	-38.03	79.13	5.04	Peak	100	72
6	5855.00	79.62	110.80	-31.18	74.58	5.04	Peak	100	72
7	5875.00	72.36	105.20	-32.84	67.29	5.07	Peak	100	72
8	5925.00	62.76	68.20	-5.44	57.63	5.13	Peak	100	72
9	11550.00	44.20	54.00	-9.80	30.19	14.01	Average	100	150
10	11550.00	56.57	74.00	-17.43	42.56	14.01	Peak	100	150
11	17325.00	62.00	68.20	-6.20	43.83	18.17	Peak	100	297

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	5650.00	66.81	68.20	-1.39	62.08	4.73	Peak	104	315
2	5700.00	85.53	105.20	-19.67	80.72	4.81	Peak	104	315
3	5720.00	88.20	110.80	-22.60	83.36	4.84	Peak	104	315
4	5725.00	88.93	122.20	-33.27	84.09	4.84	Peak	104	315
5	5850.00	85.82	122.20	-36.38	80.78	5.04	Peak	104	315
6	5855.00	80.35	110.80	-30.45	75.31	5.04	Peak	104	315
7	5875.00	74.46	105.20	-30.74	69.39	5.07	Peak	104	315
8	5925.00	64.32	68.20	-3.88	59.19	5.13	Peak	104	315
9	11550.00	44.75	54.00	-9.25	30.74	14.01	Average	100	237
10	11550.00	55.79	74.00	-18.21	41.78	14.01	Peak	100	237
11	17325.00	63.31	68.20	-4.89	45.14	18.17	Peak	100	262

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

3.6 Frequency Stability

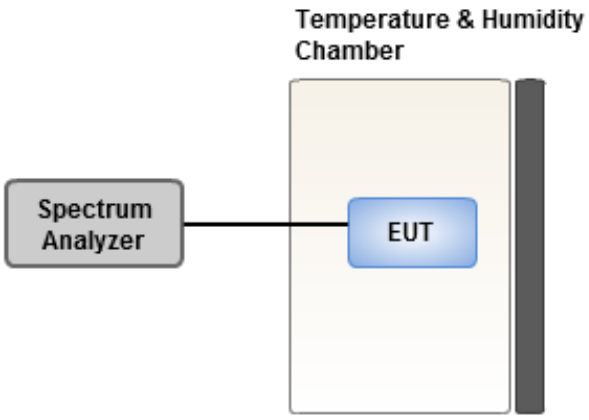
3.6.1 Limit of Frequency Stability

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

3.6.2 Test Procedures

1. The EUT is installed in an environment test chamber with external power source.
2. Set the chamber to operate at 20 centigrade and external power source to output at nominal voltage of EUT.
3. A sufficient stabilization period at each temperature is used prior to each frequency measurement.
4. When temperature is stabled, measure the frequency stability.
5. The test shall be performed under normal and extreme condition for temperature and voltage.

3.6.3 Test Setup



3.6.4 Test Result of Frequency Stability

Frequency: 5200 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	6.19	7.02	6.06	6.55
T20°CVmin	5.19	5.93	5.08	5.70
T50°CVnom	4.33	5.14	3.84	4.73
T40°CVnom	3.80	3.81	4.32	4.40
T30°CVnom	3.26	3.25	2.95	2.98
T20°CVnom	3.04	3.03	2.97	3.05
T10°CVnom	2.17	2.27	1.74	2.38
T0°CVnom	3.37	3.66	3.52	3.43
T-10°CVnom	3.12	3.69	3.50	3.19
T-20°CVnom	0.36	0.53	0.57	0.52
T-30°CVnom	0.65	0.72	0.72	0.96
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 102
Tnom [°C]: 20		Tmax [°C]: 50		Tmin [°C]: -30

Frequency: 5785 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°CVmax	6.39	6.08	6.99	6.84
T20°CVmin	5.38	5.99	5.69	5.63
T50°CVnom	3.49	4.21	3.79	3.77
T40°CVnom	4.07	4.21	3.85	4.26
T30°CVnom	2.85	2.84	3.05	2.79
T20°CVnom	2.97	3.33	2.85	3.00
T10°CVnom	1.93	2.34	2.30	2.56
T0°CVnom	3.76	3.89	4.30	3.81
T-10°CVnom	3.40	4.11	3.54	3.78
T-20°CVnom	0.58	0.69	1.11	1.27
T-30°CVnom	0.91	0.76	0.65	0.85
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 (EMC and Wireless Communication Laboratory), 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 District. 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 District, Tao Yuan City 333, Taiwan, R.O.C.	No. 14-1, Lane 19, Wen San 3rd St., Kwei Shan District, Tao Yuan City 333, Taiwan, R.O.C.

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

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

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