

TEST REPORT

Application No.: KSCR2601000148AU
FCC ID: 2BS5K-5GY0
Applicant: Heilongjiang Tianyouwei Electronic Co., Ltd
Address of Applicant: No. 9 Kunshan Road, Economic And Technological Development Zone, Suihua City, Heilongjiang Province
Manufacturer: Heilongjiang Tianyouwei Electronic Co., Ltd
Address of Manufacturer: No. 9 Kunshan Road, Economic And Technological Development Zone, Suihua City, Heilongjiang Province
Factory: TYW MANUFACTURING MEXICO, S DE RL DE CV
Address of Factory: Zaraiche 652, Centro Industrial de Guanajuato, Cp 36835, Irapuato, Guanajuato, Mexico
Equipment Under Test (EUT):
EUT Name: Instrument Cluster
Model No.: 5GY0-MMS-01
Standard(s) : 47 CFR Part 15, Subpart E 15.407
Date of Receipt: 2026-01-16
Date of Test: 2026-01-27 to 2026-02-14
Date of Issue: 2026-02-25

Test Result:
Pass*

* In the configuration tested, the EUT complied with the standards specified above.

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Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Revision Record			
Version	Description	Date	Remark
00	Original	2026-02-25	/

Authorized for issue by:			
Tested By		Maker Qi	
		Maker_Qi/Project Engineer	
Approved By		Terry Hou	
		Terry Hou /Reviewer	

2 Test Summary

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
Antenna Requirement	47 CFR Part 15, Subpart E 15.407	N/A	47 CFR Part 15, Subpart C 15.203	Pass
Transmission in the Absence of Data		N/A	47 CFR Part 15, Subpart E 15.407 (c)	Pass

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Radiated Emissions (Below 1GHz)	47 CFR Part 15, Subpart E 15.407	ANSI C63.10 (2020) Section 6.4,6.5	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
Radiated Emissions (Above 1GHz)		ANSI C63.10 (2020) Section 6.6 & 12.7	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
Radiated Emissions which fall in the restricted bands		ANSI C63.10 (2020) Section 6.10.5 & 12.7.2	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
Duty Cycle		ANSI C63.10 (2020) Section 12.2	ANSI C63.10 (2020) Section 12.2	Pass
99% Bandwidth		ANSI C63.10 (2020) Section 12.5.3	ANSI C63.10 (2020) Section 12.5.3	Pass
26dB Emission Bandwidth		ANSI C63.10 (2020) Section 12.5.2	47 CFR Part 15, Subpart E 15.407 (a)	Pass
Minimum 6 dB Bandwidth (5.725-5.85 GHz band)		ANSI C63.10 (2020) Section 12.5.1	47 CFR Part 15, Subpart E 15.407 (e)	Pass
Maximum Conducted Output Power		ANSI C63.10 (2020) Section 12.4	47 CFR Part 15, Subpart E 15.407 (a)	Pass
Power Spectral Density		ANSI C63.10 (2020) Section 12.6	47 CFR Part 15, Subpart E 15.407 (a)	Pass
Frequency Stability		ANSI C63.10 (2020) Section 6.8	47 CFR Part 15, Subpart E 15.407 (g)	Pass
Channel Move Time		KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass
Channel Closing Transmission Time		KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass

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4 General Information

4.1 Details of E.U.T.

Power supply:	DC 13.5V/0.6A 0.6*13.5W
Operation Frequency/Number of channels (20MHz):	U-NII-1: 5180-5240MHz (4 Channels); U-NII-2A: 5260-5320MHz (4 Channels); U-NII-3: 5745-5825MHz (5 Channels)
Operation Frequency/Number of channels/(40MHz):	U-NII-1: 5190-5230MHz (2 Channels); U-NII-2A: 5270-5310MHz (2 Channels); U-NII-3: 5755-5795MHz (2 Channels)
Operation Frequency/Number of channels (80MHz):	U-NII-1: 5210MHz (1 Channel); U-NII-2A: 5290MHz (1 Channels); U-NII-3: 5775MHz (1 Channel)
Modulation Type:	802.11a: OFDM (BPSK, QPSK, 16QAM, 64QAM); 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM); 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM)
Channel Spacing:	802.11a/n/ac 20: 20MHz; 802.11n/ac 40: 40MHz; 802.11ac 80: 80MHz
DFS Function:	Slave without Radar detection
TPC Function:	Support TPC function
Antenna Type:	FPC Antenna
Antenna Gain:	U-NII-1&2A: 3.3dBi (Provided by the manufacturer) U-NII-3: 3.4dBi (Provided by the manufacturer)

4.2 Power level setting using in test

Channel	802.11a	802.11ac(VHT20)
	Ant 1	Ant 1
36	18	17
40	18	17
48	18	17
52	18	17
60	18	17
64	18	17
149	18.5	17.5
157	18.5	17.5
165	18.5	17.5
Channel	802.11ac(VHT40)	
	Ant 1	
38	17	
46	17	
54	17	
62	17	
151	17.5	
159	17.5	
Channel	802.11ac(VHT80)	
	Ant 1	
42	16.5	
58	17	
155	17	

4.3 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
DC power supply	Agilent	E3632A	/
Notebook	LENOVO	K27	EB24537645

4.4 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	8.4×10^{-8}
2	Timeout	2s
3	Duty Cycle	0.37%
4	Occupied Bandwidth	3%
5	RF Conducted Power	0.6dB
6	RF Power Density	2.9dB
7	Conducted Spurious Emissions	0.75dB
8	RF Radiated Power	5.2dB (Below 1GHz)
		5.9dB (Above 1GHz)
9	Radiated Spurious Emission Test	4.2dB (Below 30MHz)
		4.5dB (30MHz-1GHz)
		5.1dB (1GHz-18GHz)
		5.4dB (Above 18GHz)
10	Temperature Test	1°C
11	Humidity Test	3%
12	Supply Voltages	1.5%
13	Time	3%
Note: The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.		

4.5 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

Note:

1. SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).
2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).
3. Sample source: sent by customer.

4.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **A2LA (Certificate No. 2541.01)**

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA).

- **FCC (Designation Number: CN1172)**

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory.

- **ISED (CAB Identifier: CN0072)**

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.

Company Number: 2324E

- **VCCI (Member No:1938)**

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.

4.7 Deviation from Standards

None

4.8 Abnormalities from Standard Conditions

None

5 Equipment List

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
RF Conducted Test						
1	Spectrum Analyzer	Keysight	N9020A	KUS1911E004-2	07/09/2025	07/08/2026
2	Spectrum Analyzer	Keysight	N9020A	KUS2001M001-2	07/09/2025	07/08/2026
3	Spectrum Analyzer	Keysight	N9030B	KSEM021-1	12/17/2025	12/16/2026
4	Signal Generator	R&S	SMBV100B	KSEM032	12/17/2025	12/16/2026
5	Signal Generator	R&S	SMW200A	KSEM020-1	07/09/2025	07/08/2026
6	Signal Generator	Agilent	N5182A	KUS2001M001-1	07/08/2025	07/07/2026
7	Signal Generator	Agilent	E8257C	KS301066	07/22/2025	07/21/2026
8	Radio Communication Test Station	Anritsu	MT8000A	KSEM001-1	07/09/2025	07/08/2026
9	Radio Communication Analyzer	Anritsu	MT8821C	KSEM002-1	12/17/2025	12/16/2026
10	Universal Radio Communication Tester	R&S	CMW500	KUS1911E004-1	07/08/2025	07/07/2026
11	Switcher	TST	FY562	KUS2001M001-4	12/17/2025	12/16/2026
12	Conducted Test Cable	Thermax	RF01-RF04	CZ301111-CZ301120	12/17/2025	12/16/2026
13	Temp. / Humidity Chamber	TERCHY	MHK-120AK	KS301190	07/15/2025	07/14/2026
14	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-5	12/30/2025	12/29/2026
15	Software	BST	TST-PASS	/	NCR	NCR
RF Radiated Test						
1	Spectrum Analyzer	R&S	FSV40	KUS1806E003	07/09/2025	07/08/2026
2	Universal Radio Communication Tester	R&S	CMW500	KSEM009-1	12/17/2025	12/16/2026
3	Signal Generator	Agilent	E8257C	KS301066	07/22/2025	07/21/2026
4	Loop Antenna (9KHz-30MHz)	COM-POWER	AL-130R	KUS1806E001	07/11/2025	07/10/2026
5	Bilog Antenna (30MHz-1GHz)	TESEQ	CBL 6112D	KUS1806E005	07/12/2025	07/11/2026
6	Horn-antenna(1-18GHz)	Schwarzbeck	BBHA9120D	KS301079	01/11/2026	01/10/2028
7	Horn Antenna(18-40GHz)	Schwarzbeck	BBHA9170	CZ301058	01/11/2026	01/10/2028
8	Amplifier(30MHz~1GHz)	TST	LNA009100G30	KSEM061	12/18/2025	12/17/2026
9	Amplifier(400MHz~8GHz)	TST	LNA004080G30	KSEM062	12/18/2025	12/17/2026
10	Amplifier(1GHz~18GHz)	TST	LNA010180G45	KSEM039	07/09/2025	07/08/2026
11	Amplifier(18~40GHz)	TST	LNA180400G40	KSEM038	07/09/2025	07/08/2026
12	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-4	12/30/2025	12/29/2026
13	Software	ESE	E3_V 6.111221a	/	NCR	NCR
14	Measurement Software	Tonscend	JS32-RE V5.0.0.1	/	NCR	NCR



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15	Measurement Software	Tonscend	JS32-RSE V5.0.0.0	/	NCR	NCR
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6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

6.1.2 Conclusion

Standard Requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of an so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The antenna is FPC Antenna and no consideration of replacement. The best case gain of the antenna is U-NII-1&2A: 3.3dBi; U-NII-3: 3.4dBi.

Antenna location: Refer to External Photo.

6.2 Transmission in the Absence of Data

6.2.1 Test Requirement:

47 CFR Part 15, Subpart E 15.407 (c)

6.2.2 Conclusion

6.2.2 Conclusion

Standard Requirement:

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals.

Applicants shall include in their application for equipment authorization a description of how this requirement is met.

EUT Details:

WIFI chip support automatically discontinue transmission in case of either absence of information to transmit or operational failure, if the chip detect absence of information to transmit or operational failure, it will be automatically shut off.

7 Radio Spectrum Matter Test Results

7.1 Radiated Emissions (Below 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)

Test Method: ANSI C63.10 (2020) Section 6.4,6.5

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
960-1000	500	3

Note

1. The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

2. At frequencies below 1GHz, measurements may be performed at a distance different to specified in the regulations.

Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor+ Aux Factor (if applicable)

The aux factor needs to be added when measurements are performed at a distance other than the limit distance provided.

EX. Below 30MHz, Aux Factor = 40 dB/decade of distance, the aux factor is $40\log(3/300) = -80\text{dB}$ (for 3m test distance).

EX. Above 30MHz, Aux Factor = 20 dB/decade of distance, the aux factor is $20\log(10/3) = 10.46\text{dB}$ (for 10m test distance).

7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 22.6 °C

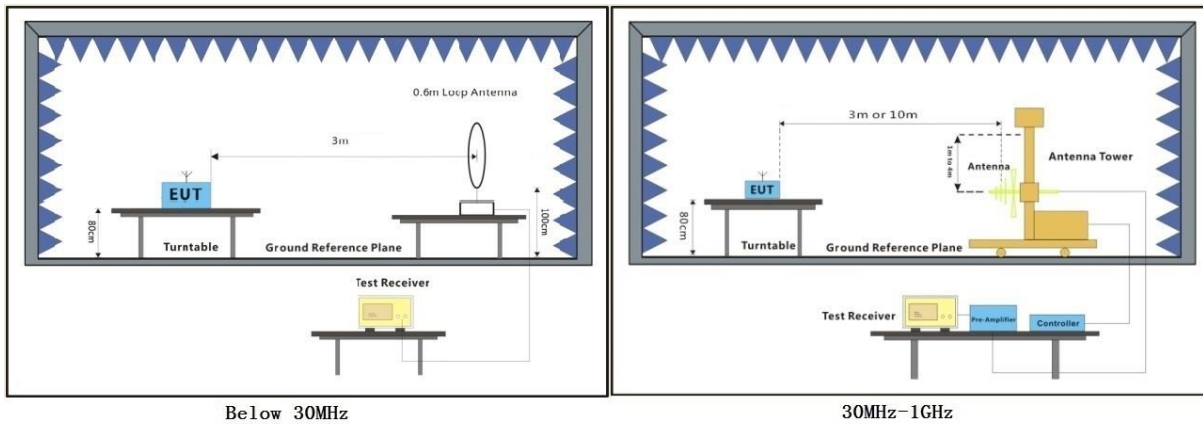
Humidity: 47.7 % RH

Atmospheric Pressure: 1010 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested, Only the data of worst case is recorded in the report.

7.1.3 Test Setup Diagram



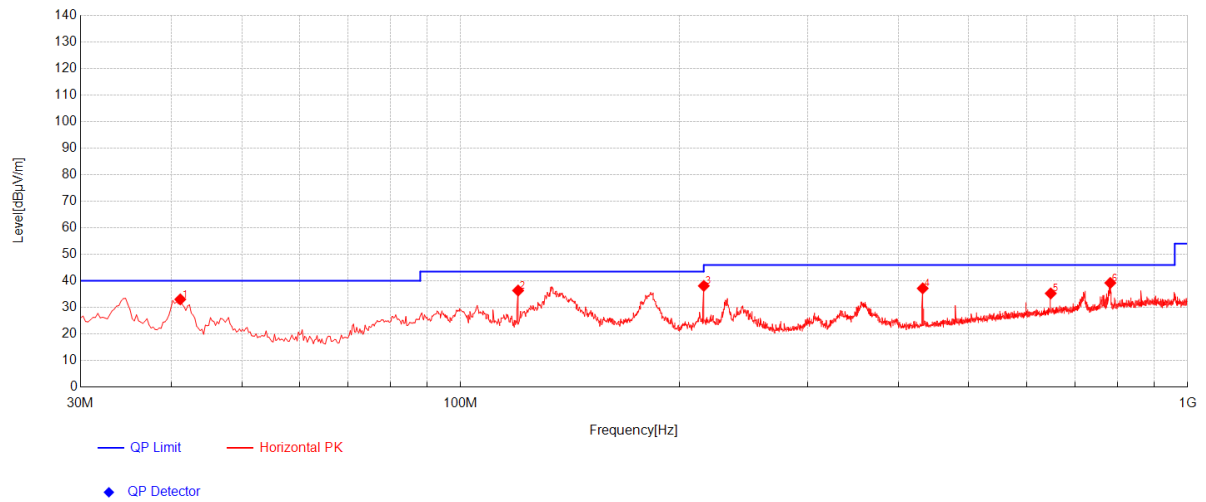
7.1.4 Measurement Procedure and Data

- For below 1GHz, the EUT was placed on the top of a rotating table 0.8m above the ground at a semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3m away from the interference-receiving antenna, which was mounted on the variable-height antenna tower.
- The antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1m to 4m (for the test frequency of below 30MHz, the antenna was tuned to heights 1m) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using quasi-peak method as specified and then reported in a data sheet.
- Test the EUT in the lowest channel, the middle channel, the Highest channel.
- The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- Repeat above procedures until all frequencies measured was complete.

Remark:

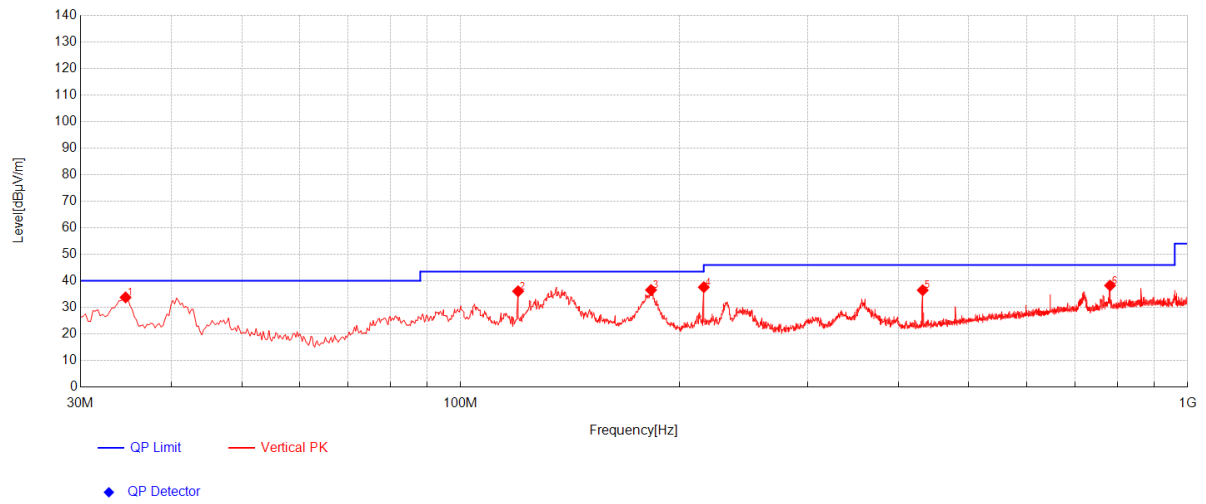
- Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only below points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the worst-case test curve is displayed.

Test Mode: 01; Polarity: Horizontal



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	41.155	54.55	10.89	-32.40	33.04	40.00	6.96	Horizontal
2	119.9675	54.43	13.69	-31.77	36.35	43.50	7.15	Horizontal
3	215.9975	57.82	11.52	-31.23	38.11	43.50	5.39	Horizontal
4	432.065	50.07	17.54	-30.44	37.17	46.00	8.83	Horizontal
5	648.1325	43.93	21.04	-29.71	35.26	46.00	10.74	Horizontal
6	782.72	46.09	22.45	-29.33	39.21	46.00	6.79	Horizontal

Test Mode: 01; Polarity: Vertical



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	34.6075	50.27	15.99	-32.48	33.78	40.00	6.22	Vertical
2	119.9675	54.17	13.69	-31.77	36.09	43.50	7.41	Vertical
3	182.775	56.62	11.39	-31.45	36.56	43.50	6.94	Vertical
4	215.9975	57.32	11.52	-31.23	37.61	43.50	5.89	Vertical
5	432.065	49.38	17.54	-30.44	36.48	46.00	9.52	Vertical
6	781.9925	45.11	22.46	-29.33	38.24	46.00	7.76	Vertical

7.2 Radiated Emissions (Above 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)

Test Method: ANSI C63.10 (2020) Section 6.6 & 12.7

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

*(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
 (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
 (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
 (4) For transmitters operating in the 5.725-5.85 GHz band:
 (i) 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.

Remark:

1. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

2. Above 18GHz, measurements may be performed at a distance shorter than that specified in the regulations

Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor+ Aux Factor (if applicable)

The aux factor needs to be added when measurements are performed at a distance other than the limit distance provided.

EX. Above 18GHz, Aux Factor = 20 dB/decade of distance, the aux factor is $20\log(1/3) = -9.54\text{dB}$ (for 1m test distance).

7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 22.6 °C

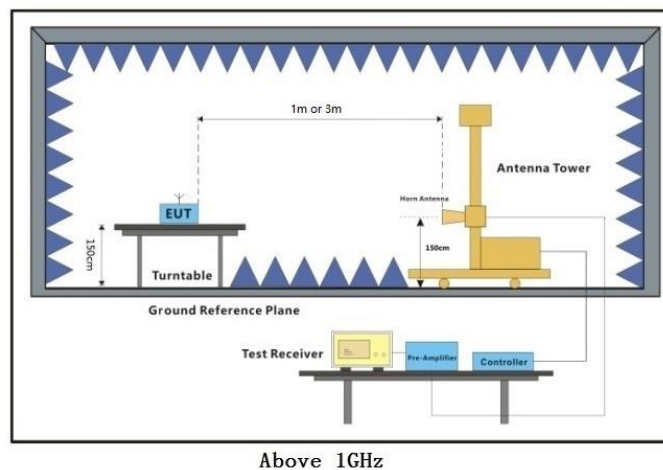
Humidity: 47.7 % RH

Atmospheric Pressure: 1010 mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 40/80, Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-2A) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac /40/80, Only the data of worst case is recorded in the report.
Final test	03	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 40/80, Only the data of worst case is recorded in the report.

7.2.3 Test Setup Diagram



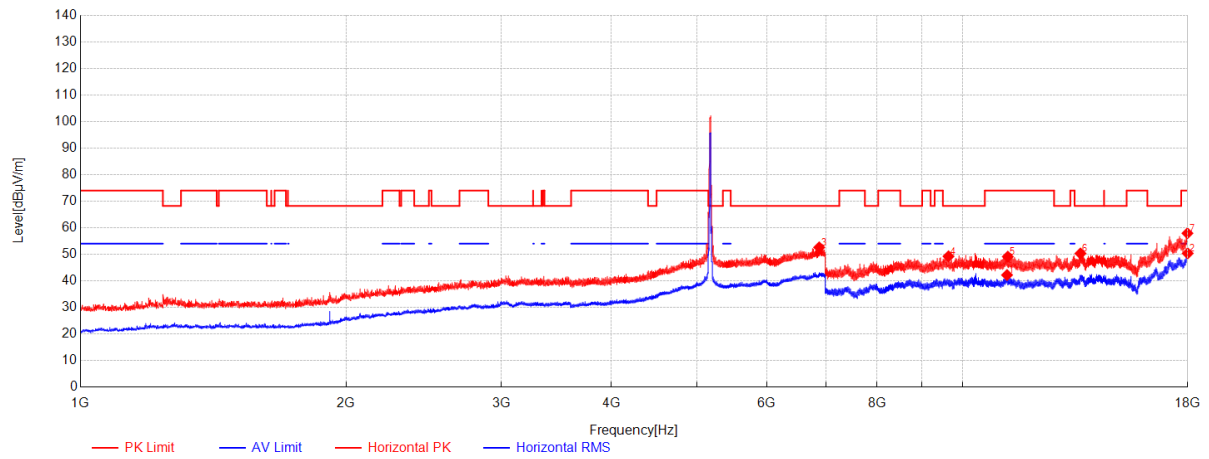
7.2.4 Measurement Procedure and Data

- a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak or average method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

Remark:

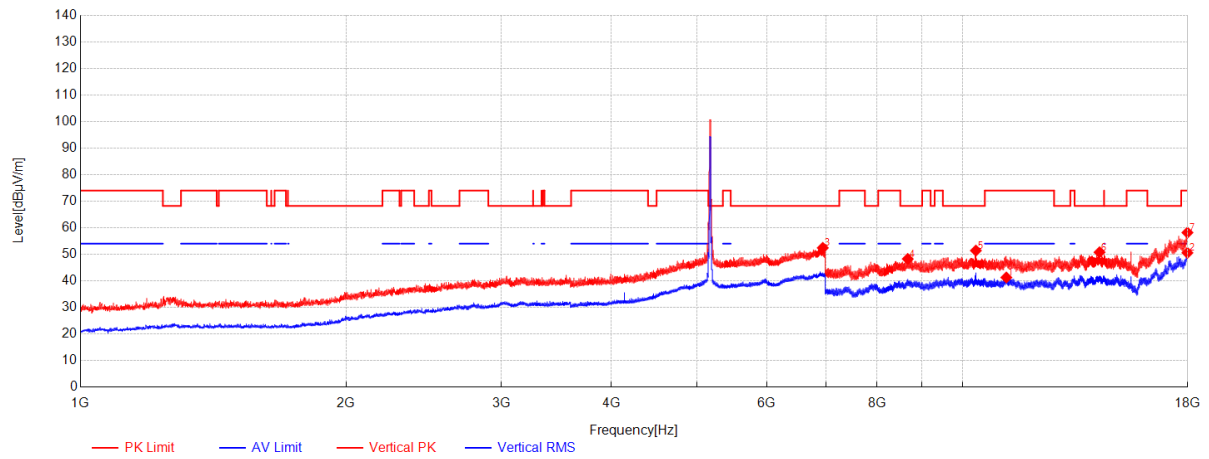
1. $\text{Level} = \text{Read Level} + \text{Cable Loss} + \text{Antenna Factor} - \text{Preamp Factor}$
2. Scan from 18GHz to 40GHz, The points marked on below plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
3. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.
4. The disturbance above 18GHz were very low and the below harmonics were the highest point could be found when testing, so only the below harmonics had been displayed.
5. For devices with multiple operating modes, measurements on the middle channel is used to determine the worst-case mode(s). Only the worst case mode with the highest output power and the mode with the highest output power spectral density for each modulation family (e.g., OFDM and direct sequence spread spectrum) is recorded in the test report.
6. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for Peak detection (PK) and Average detection (AV) at frequency above 1GHz.
7. For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.

11a_TX_CH_36_Horizontal



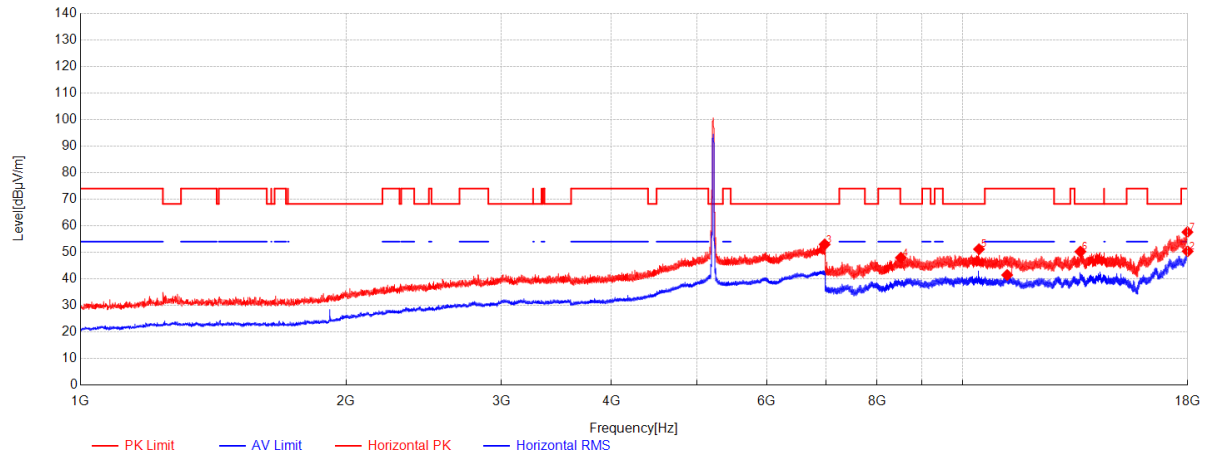
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11232.8	47.15	39.57	-44.52	42.20	54.00	11.80	Horizontal
2	18000	48.89	43.20	-41.75	50.34	54.00	3.66	Horizontal
3	6878.5	38.84	34.90	-21.15	52.59	68.20	15.61	Horizontal
4	9641.8333	55.79	38.67	-45.23	49.23	68.20	18.97	Horizontal
5	11254.8	54.06	39.58	-44.52	49.12	74.00	24.88	Horizontal
6	13604.4	52.59	40.41	-42.70	50.30	68.20	17.90	Horizontal
7	17988.6333	56.60	43.20	-41.90	57.90	74.00	16.10	Horizontal

11a_TX_CH_36_Vertical



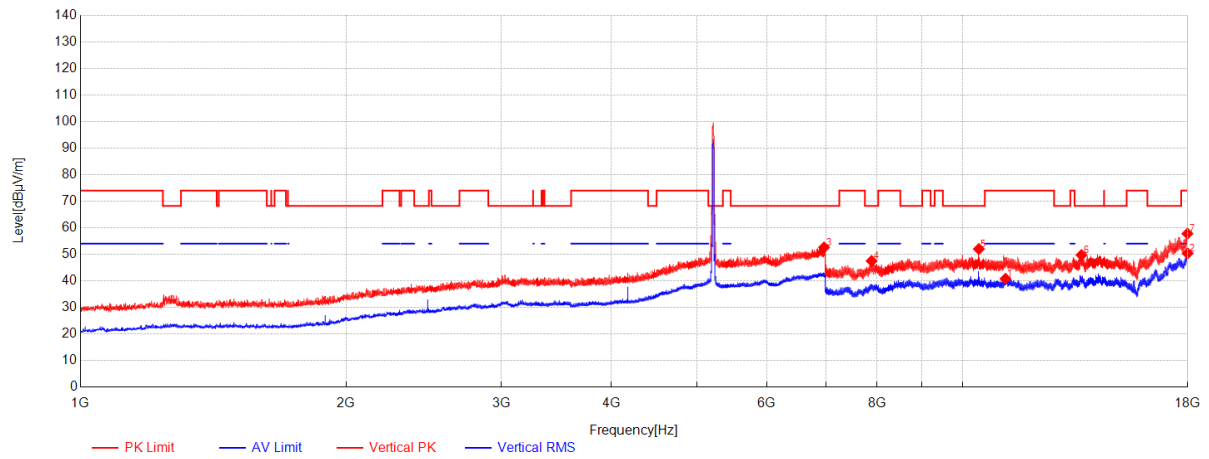
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11211.9	46.26	39.52	-44.51	41.27	54.00	12.73	Vertical
2	17987.5333	49.26	43.20	-41.91	50.55	54.00	3.45	Vertical
3	6943	38.68	35.11	-21.38	52.41	68.20	15.79	Vertical
4	8667.9667	56.79	37.44	-45.99	48.24	68.20	19.96	Vertical
5	10355.3667	57.04	39.48	-45.13	51.39	68.20	16.81	Vertical
6	14299.9667	53.16	40.20	-42.60	50.76	68.20	17.44	Vertical
7	17988.6333	56.87	43.20	-41.90	58.17	74.00	15.83	Vertical

11a_TX_CH_44_Horizontal



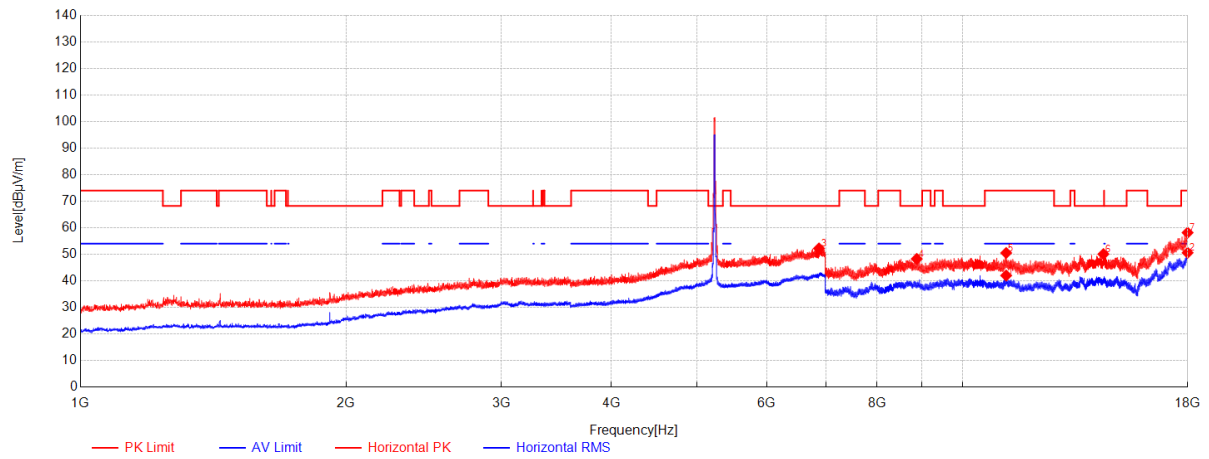
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11235.7333	46.39	39.57	-44.52	41.44	54.00	12.56	Horizontal
2	17999.2667	48.93	43.20	-41.76	50.37	54.00	3.63	Horizontal
3	6977.5	39.27	35.32	-21.64	52.95	68.20	15.25	Horizontal
4	8514.7	57.13	36.96	-46.14	47.95	68.20	20.25	Horizontal
5	10439.7	56.89	39.22	-44.94	51.17	68.20	17.03	Horizontal
6	13604.0333	52.54	40.41	-42.70	50.25	68.20	17.95	Horizontal
7	17987.9	56.30	43.20	-41.91	57.59	74.00	16.41	Horizontal

11a_TX_CH_44_Verical



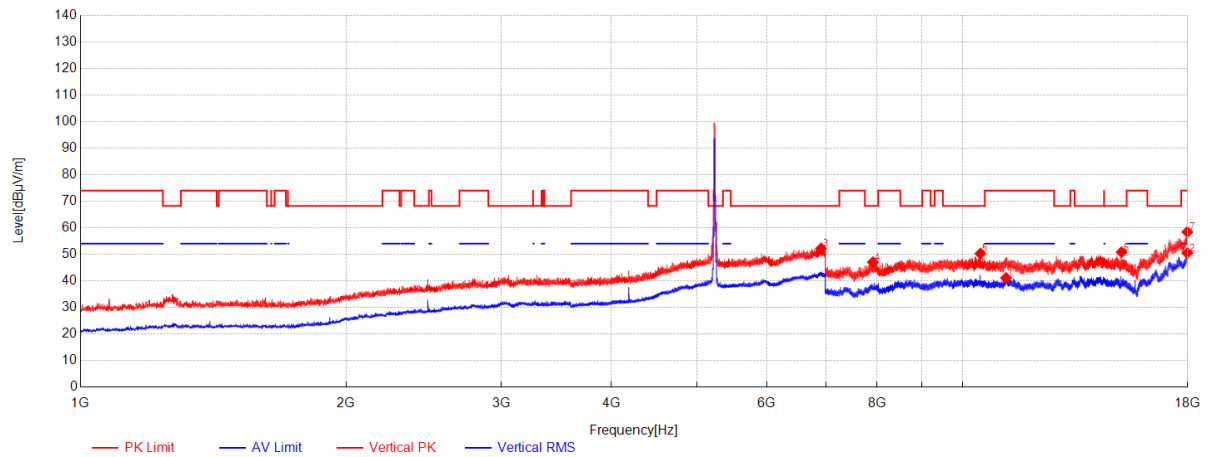
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11186.9667	45.90	39.45	-44.55	40.80	54.00	13.20	Vertical
2	17996.3333	48.94	43.20	-41.80	50.34	54.00	3.66	Vertical
3	6966	38.90	35.23	-21.55	52.58	68.20	15.62	Vertical
4	7887.3333	57.22	36.85	-46.59	47.48	68.20	20.72	Vertical
5	10435.3	57.63	39.23	-44.89	51.97	68.20	16.23	Vertical
6	13640.7	52.00	40.48	-42.76	49.72	68.20	18.48	Vertical
7	17988.6333	56.48	43.20	-41.90	57.78	74.00	16.22	Vertical

11a_TX_CH_48_Horizontal



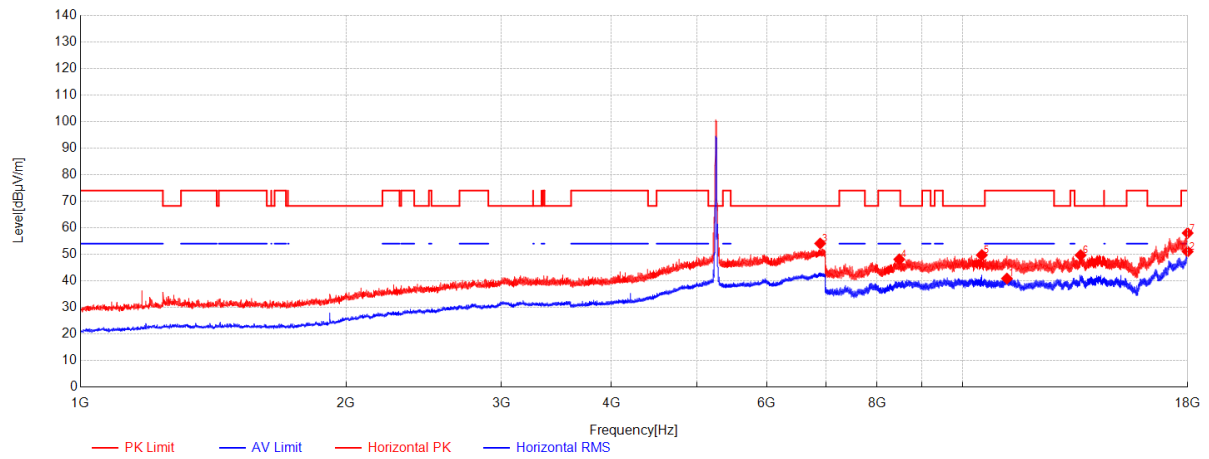
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11207.5	47.02	39.51	-44.51	42.02	54.00	11.98	Horizontal
2	17997.8	49.15	43.20	-41.78	50.57	54.00	3.43	Horizontal
3	6875	38.51	34.85	-21.17	52.19	68.20	16.01	Horizontal
4	8873.6667	56.92	37.70	-46.37	48.25	68.20	19.95	Horizontal
5	11207.1333	55.49	39.51	-44.51	50.49	74.00	23.51	Horizontal
6	14444.4333	53.00	40.29	-43.23	50.06	68.20	18.14	Horizontal
7	17997.8	56.72	43.20	-41.78	58.14	74.00	15.86	Horizontal

11a_TX_CH_48_Vertical



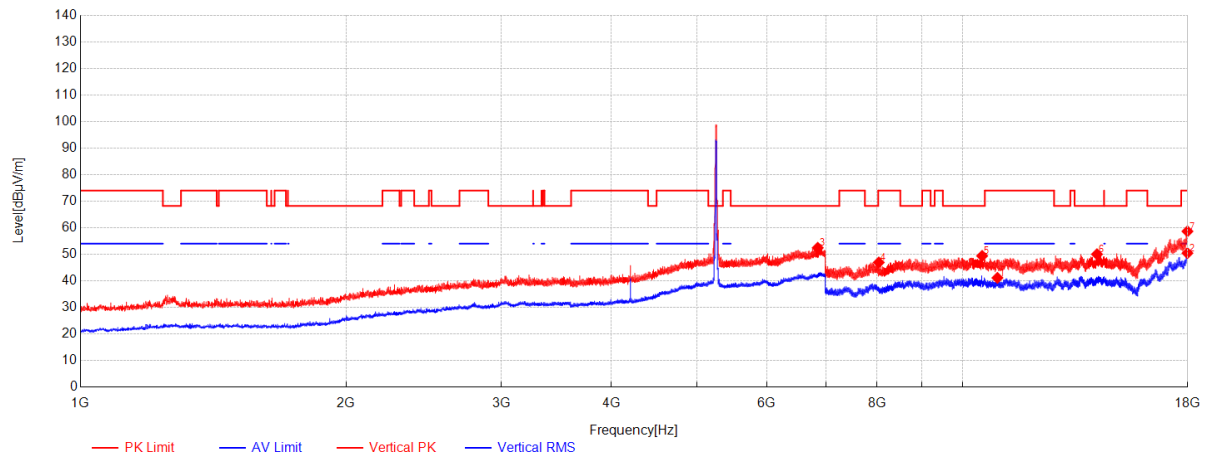
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11204.2	46.07	39.51	-44.51	41.07	54.00	12.93	Vertical
2	17982.0333	49.28	43.20	-41.99	50.49	54.00	3.51	Vertical
3	6913	38.20	35.17	-21.16	52.21	68.20	15.99	Vertical
4	7914.4667	56.65	36.84	-46.49	47.00	68.20	21.20	Vertical
5	10477.8333	56.35	39.31	-45.41	50.25	68.20	17.95	Vertical
6	15147.7	54.17	39.40	-42.78	50.79	68.20	17.41	Vertical
7	17982.0333	57.17	43.20	-41.99	58.38	74.00	15.62	Vertical

11a_TX_CH_52_Horizontal



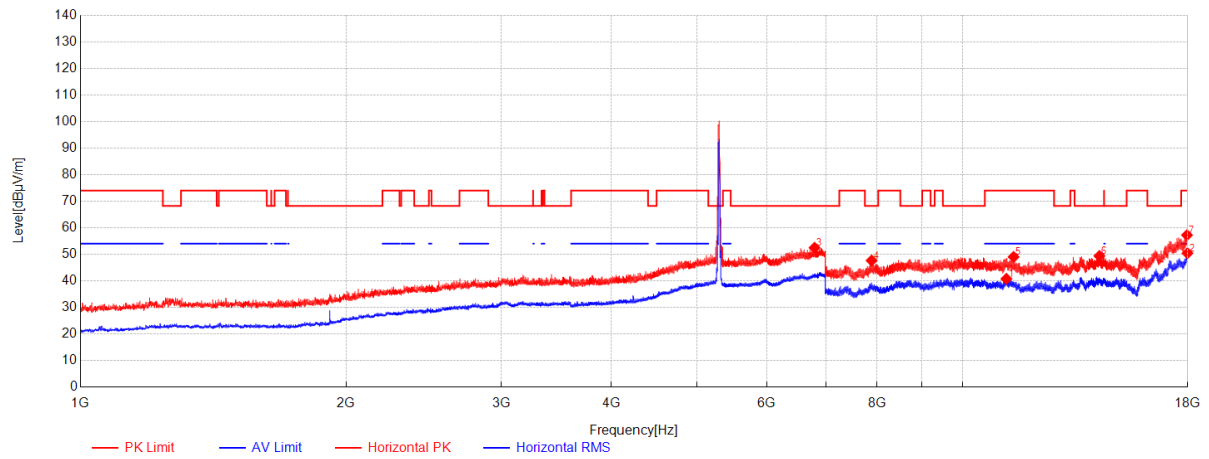
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11229.5	45.81	39.56	-44.52	40.85	54.00	13.15	Horizontal
2	17998.5333	49.59	43.20	-41.77	51.02	54.00	2.98	Horizontal
3	6896.5	40.00	35.15	-21.08	54.07	68.20	14.13	Horizontal
4	8479.1333	57.52	36.86	-46.31	48.07	74.00	25.93	Horizontal
5	10515.9667	55.89	39.40	-45.59	49.70	68.20	18.50	Horizontal
6	13612.1	51.95	40.42	-42.71	49.66	68.20	18.54	Horizontal
7	17998.5333	56.56	43.20	-41.77	57.99	74.00	16.01	Horizontal

11a_TX_CH_52_Vertical



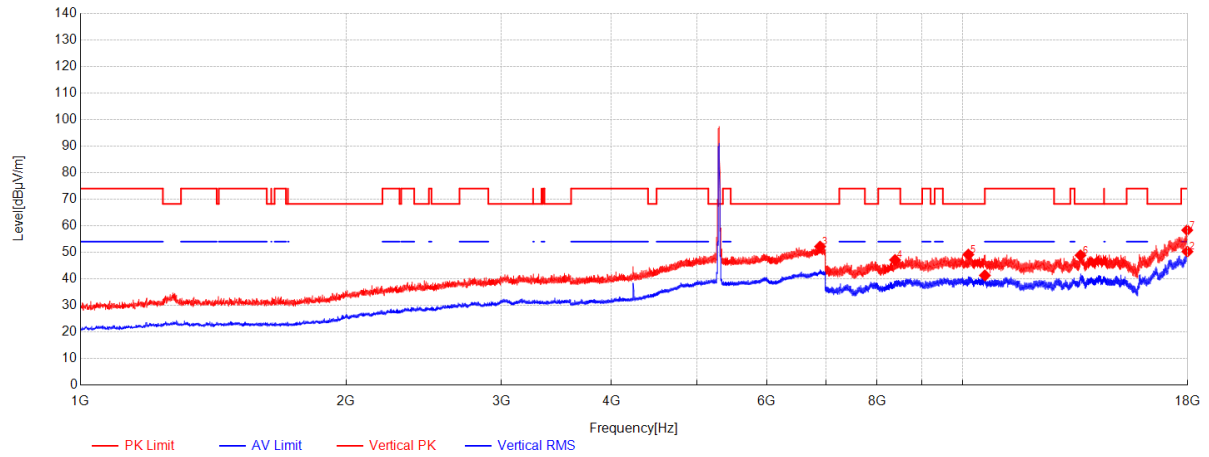
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	10953.4	46.62	39.69	-45.19	41.12	54.00	12.88	Vertical
2	17989	49.11	43.20	-41.89	50.42	54.00	3.58	Vertical
3	6852.5	39.14	34.54	-21.26	52.42	68.20	15.78	Vertical
4	8036.9333	57.53	36.60	-47.20	46.93	74.00	27.07	Vertical
5	10525.5	55.52	39.40	-45.53	49.39	68.20	18.81	Vertical
6	14203.5333	51.54	40.57	-42.10	50.01	68.20	18.19	Vertical
7	17988.6333	57.32	43.20	-41.90	58.62	74.00	15.38	Vertical

11a_TX_CH_60_Horizontal



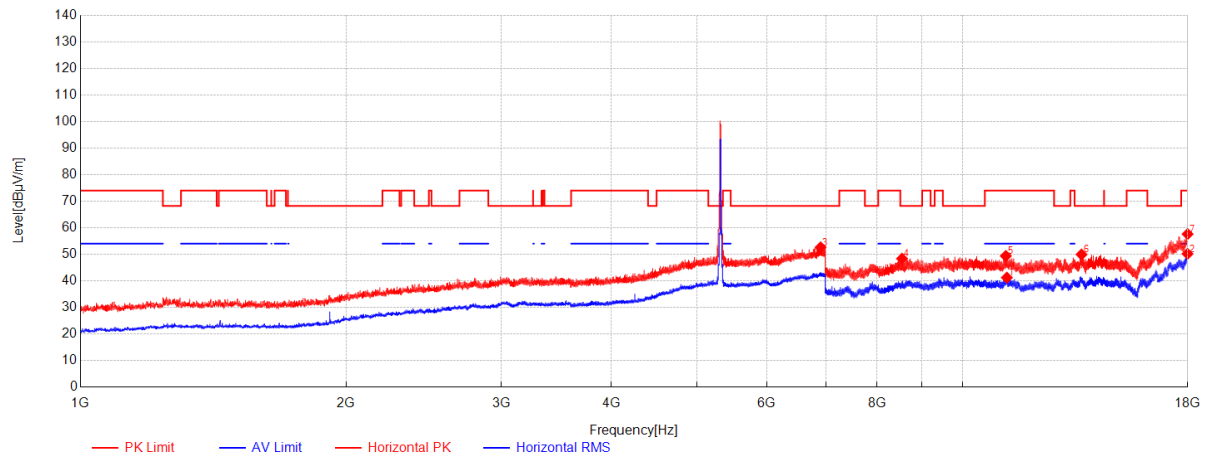
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11213.7333	45.75	39.53	-44.51	40.77	54.00	13.23	Horizontal
2	17990.1	49.07	43.20	-41.88	50.39	54.00	3.61	Horizontal
3	6796	39.04	34.88	-21.48	52.44	68.20	15.76	Horizontal
4	7887.3333	57.39	36.85	-46.59	47.65	68.20	20.55	Horizontal
5	11426.7667	53.84	39.45	-44.29	49.00	74.00	25.00	Horizontal
6	14295.5667	51.74	40.20	-42.58	49.36	68.20	18.84	Horizontal
7	17968.4667	56.17	43.20	-42.16	57.21	74.00	16.79	Horizontal

11a_TX_CH_60_Vertical



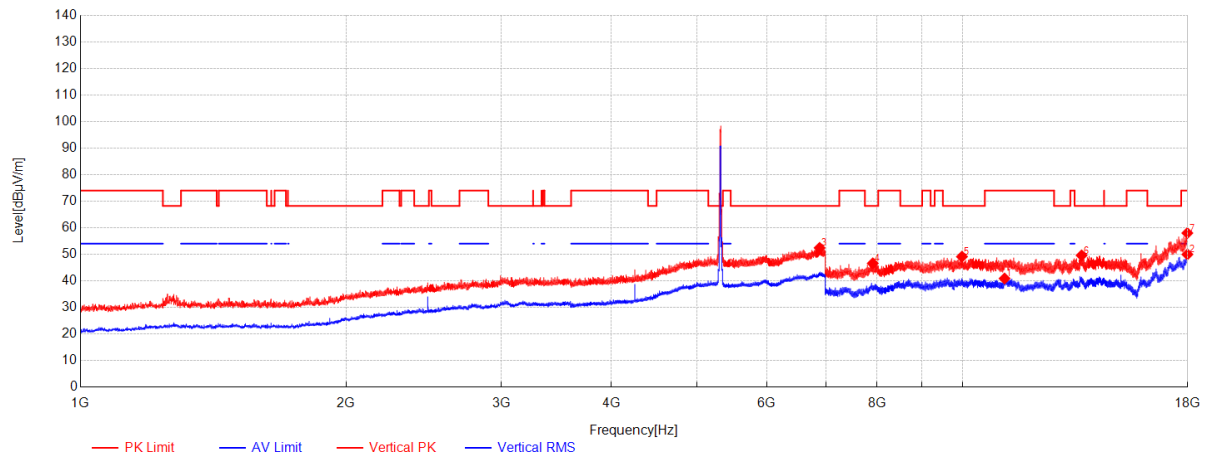
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	10601.7667	46.89	39.50	-45.10	41.29	54.00	12.71	Vertical
2	17989	48.94	43.20	-41.89	50.25	54.00	3.75	Vertical
3	6895.5	38.09	35.14	-21.09	52.14	68.20	16.06	Vertical
4	8385.2667	57.31	36.95	-47.15	47.11	74.00	26.89	Vertical
5	10154.0667	55.14	39.10	-45.10	49.14	68.20	19.06	Vertical
6	13607.3333	51.15	40.41	-42.70	48.86	68.20	19.34	Vertical
7	17978	57.15	43.20	-42.04	58.31	74.00	15.69	Vertical

11a_TX_CH_64_Horizontal



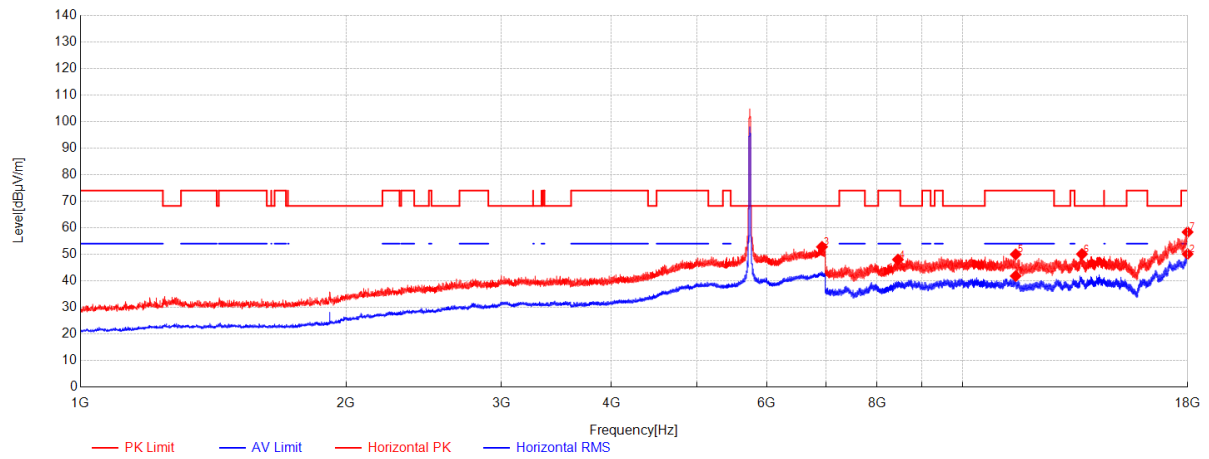
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11226.5667	46.18	39.55	-44.52	41.21	54.00	12.79	Horizontal
2	17991.9333	48.82	43.20	-41.86	50.16	54.00	3.84	Horizontal
3	6903.5	38.52	35.19	-21.10	52.61	68.20	15.59	Horizontal
4	8539.6333	57.49	37.06	-46.20	48.35	68.20	19.85	Horizontal
5	11196.8667	54.39	39.49	-44.52	49.36	74.00	24.64	Horizontal
6	13643.6333	52.20	40.49	-42.77	49.92	68.20	18.28	Horizontal
7	17995.2333	56.21	43.20	-41.81	57.60	74.00	16.40	Horizontal

11a_TX_CH_64_Vertical



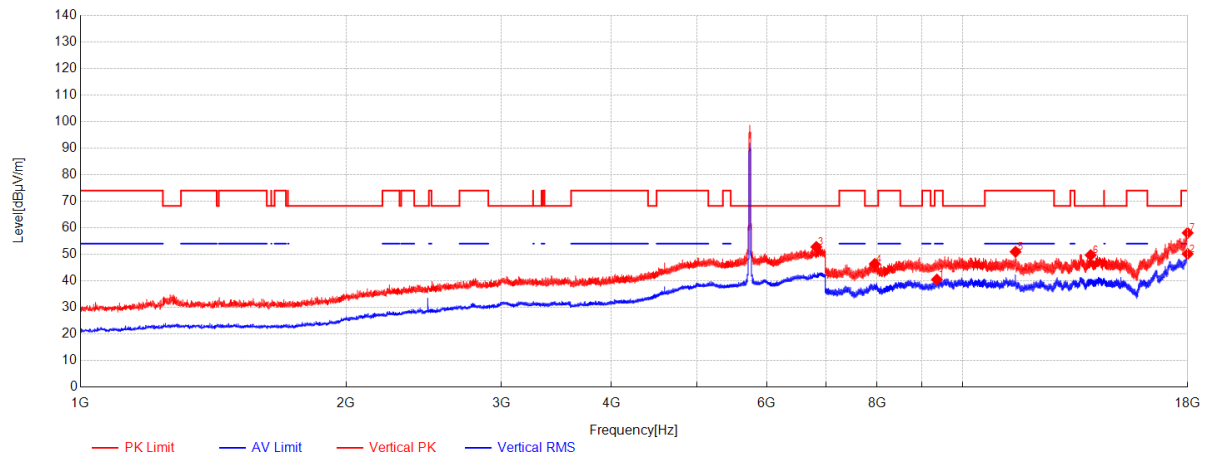
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11160.2	46.16	39.34	-44.62	40.88	54.00	13.12	Vertical
2	17986.8	48.66	43.20	-41.92	49.94	54.00	4.06	Vertical
3	6886.5	38.51	35.01	-21.12	52.40	68.20	15.80	Vertical
4	7911.5333	56.20	36.85	-46.47	46.58	68.20	21.62	Vertical
5	9985.7667	55.20	38.81	-44.90	49.11	68.20	19.09	Vertical
6	13646.2	51.86	40.49	-42.77	49.58	68.20	18.62	Vertical
7	17983.5	56.75	43.20	-41.97	57.98	74.00	16.02	Vertical

11a_TX_CH_149_Horizontal



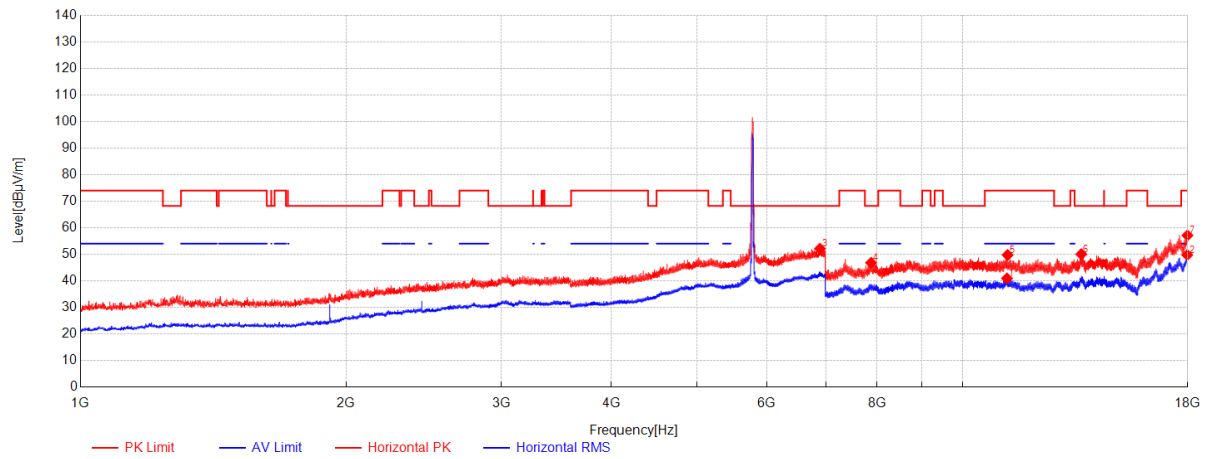
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11489.4667	46.90	39.58	-44.67	41.81	54.00	12.19	Horizontal
2	17996.3333	48.68	43.20	-41.80	50.08	54.00	3.92	Horizontal
3	6929	38.93	35.14	-21.28	52.79	68.20	15.41	Horizontal
4	8449.0667	57.80	36.81	-46.60	48.01	74.00	25.99	Horizontal
5	11489.8333	55.07	39.58	-44.67	49.98	74.00	24.02	Horizontal
6	13659.0333	52.35	40.52	-42.80	50.07	68.20	18.13	Horizontal
7	17995.2333	56.96	43.20	-41.81	58.35	74.00	15.65	Horizontal

11a_TX_CH_149_Vertical



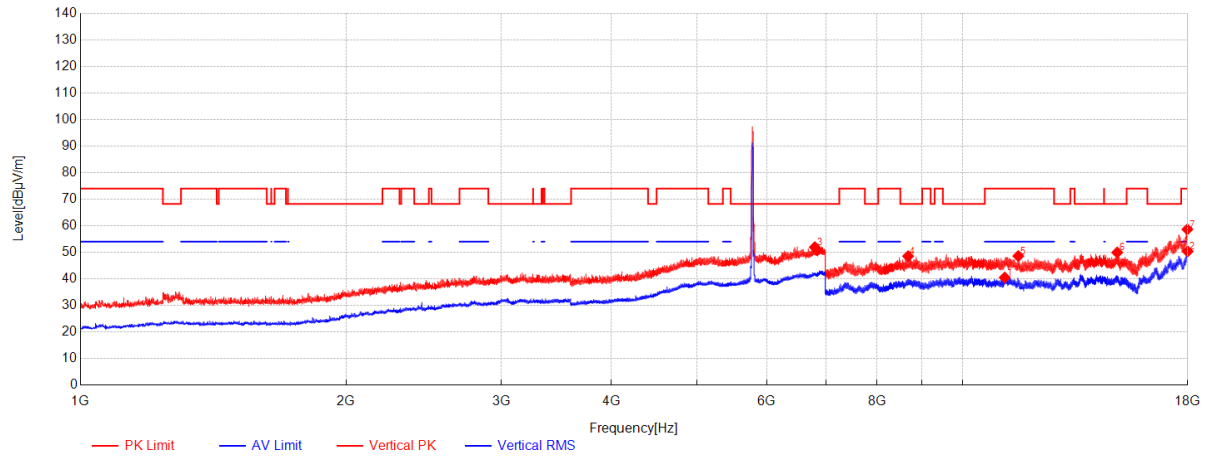
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	9352.9	48.61	38.31	-46.43	40.49	54.00	13.51	Vertical
2	17999.2667	48.68	43.20	-41.76	50.12	54.00	3.88	Vertical
3	6827	39.44	34.68	-21.35	52.77	68.20	15.43	Vertical
4	7952.2333	56.45	36.71	-46.77	46.39	68.20	21.81	Vertical
5	11485.0667	56.02	39.57	-44.64	50.95	74.00	23.05	Vertical
6	13974.3667	51.67	40.45	-42.44	49.68	68.20	18.52	Vertical
7	17998.9	56.61	43.20	-41.76	58.05	74.00	15.95	Vertical

11a_TX_CH_157_Horizontal



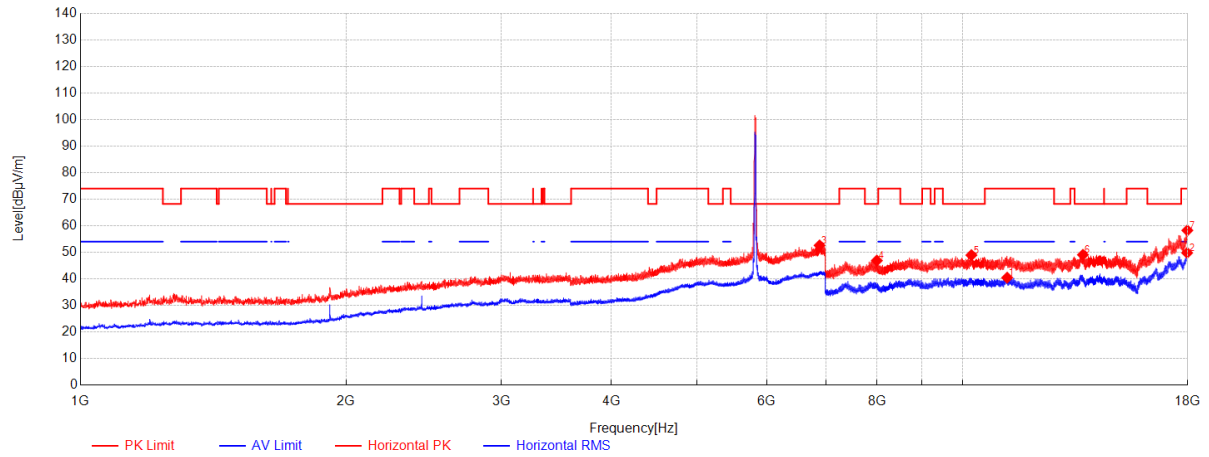
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11230.9667	45.87	39.56	-44.52	40.91	54.00	13.09	Horizontal
2	17979.1	48.56	43.20	-42.02	49.74	54.00	4.26	Horizontal
3	6892	38.10	35.09	-21.10	52.09	68.20	16.11	Horizontal
4	7876.3333	56.75	36.81	-46.77	46.79	68.20	21.41	Horizontal
5	11248.2	54.64	39.60	-44.52	49.72	74.00	24.28	Horizontal
6	13634.8333	52.31	40.47	-42.75	50.03	68.20	18.17	Horizontal
7	17987.9	55.81	43.20	-41.91	57.10	74.00	16.90	Horizontal

11a_TX_CH_157_Vertical



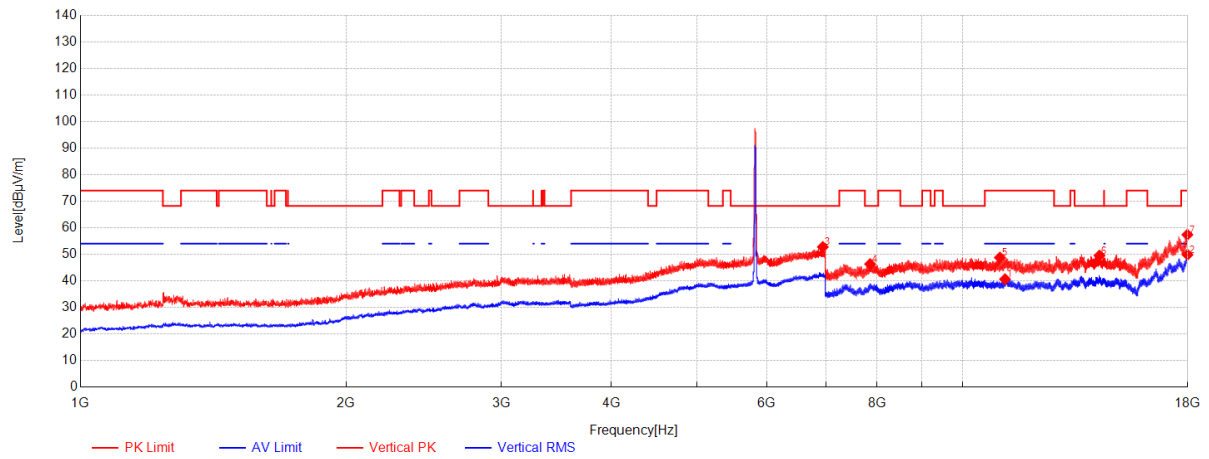
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11164.9667	45.74	39.36	-44.60	40.50	54.00	13.50	Vertical
2	17999.2667	48.88	43.20	-41.76	50.32	54.00	3.68	Vertical
3	6800.5	38.47	34.90	-21.46	51.91	68.20	16.29	Vertical
4	8674.9333	57.02	37.45	-45.95	48.52	68.20	19.68	Vertical
5	11566.8333	53.43	39.47	-44.32	48.58	74.00	25.42	Vertical
6	14975.7333	51.82	39.70	-41.60	49.92	68.20	18.28	Vertical
7	17985.7	57.36	43.20	-41.94	58.62	74.00	15.38	Vertical

11a_TX_CH_165_Horizontal



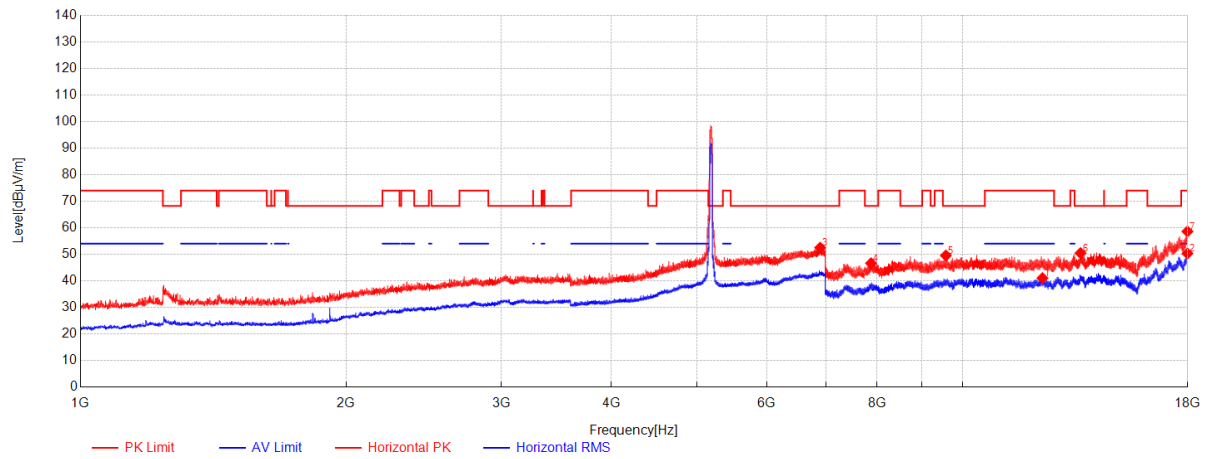
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11235.3667	45.39	39.57	-44.52	40.44	54.00	13.56	Horizontal
2	17975.4333	48.63	43.20	-42.07	49.76	54.00	4.24	Horizontal
3	6885.5	38.71	35.00	-21.13	52.58	68.20	15.62	Horizontal
4	7995.8667	57.10	36.88	-47.10	46.88	68.20	21.32	Horizontal
5	10234	54.59	39.30	-44.97	48.92	68.20	19.28	Horizontal
6	13692.7667	51.33	40.59	-42.86	49.06	68.20	19.14	Horizontal
7	17984.6	56.99	43.20	-41.95	58.24	74.00	15.76	Horizontal

11a_TX_CH_165_Vertical



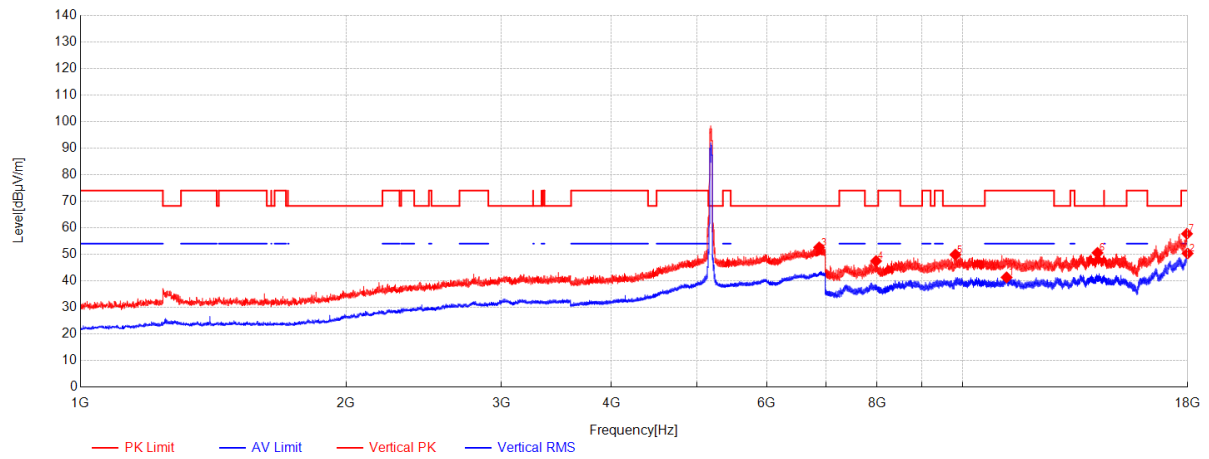
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11173.7667	45.80	39.40	-44.58	40.62	54.00	13.38	Vertical
2	17991.9333	48.51	43.20	-41.86	49.85	54.00	4.15	Vertical
3	6945	39.04	35.11	-21.40	52.75	68.20	15.45	Vertical
4	7856.9	56.66	36.73	-47.08	46.31	68.20	21.89	Vertical
5	11023.4333	54.12	39.55	-44.93	48.74	74.00	25.26	Vertical
6	14298.1333	51.90	40.20	-42.59	49.51	68.20	18.69	Vertical
7	17988.2667	56.06	43.20	-41.90	57.36	74.00	16.64	Vertical

11ac(VHT40)_TX_CH_38_Horizontal



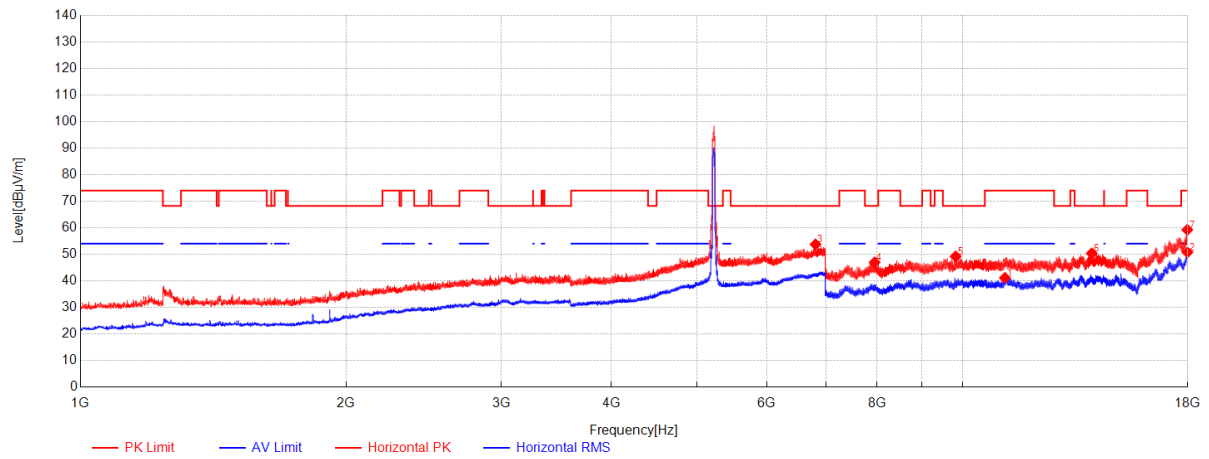
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	12319.6	45.27	39.02	-43.27	41.02	54.00	12.98	Horizontal
2	17989.7333	48.96	43.20	-41.88	50.28	54.00	3.72	Horizontal
3	6896	38.42	35.14	-21.09	52.47	68.20	15.73	Horizontal
4	7875.9667	56.59	36.80	-46.77	46.62	68.20	21.58	Horizontal
5	9574.7333	56.19	38.60	-45.27	49.52	68.20	18.68	Horizontal
6	13606.9667	52.73	40.41	-42.70	50.44	68.20	17.76	Horizontal
7	17989.3667	57.28	43.20	-41.89	58.59	74.00	15.41	Horizontal

11ac(VHT40)_TX_CH_38_Vertical



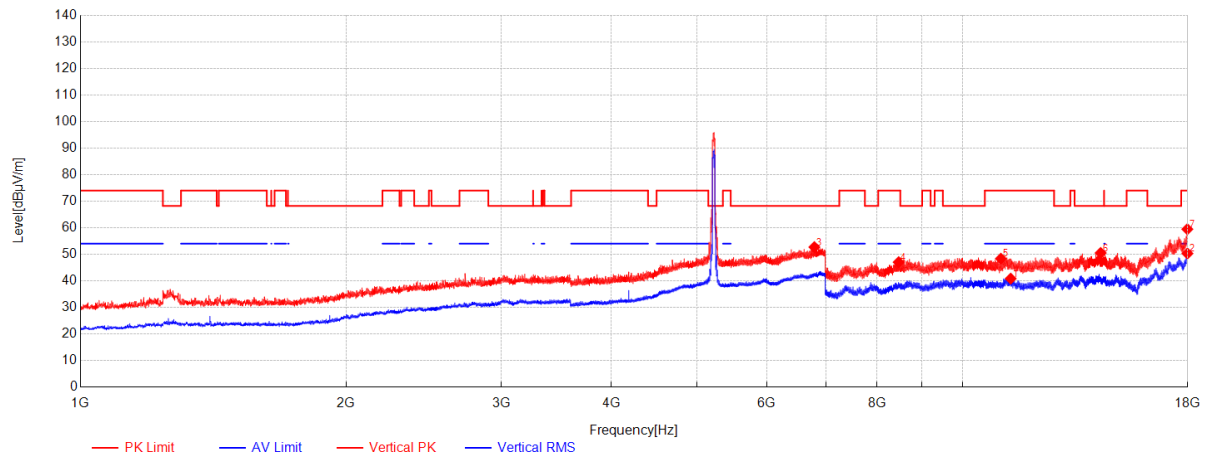
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11219.6	46.28	39.54	-44.51	41.31	54.00	12.69	Vertical
2	17996.3333	48.91	43.20	-41.80	50.31	54.00	3.69	Vertical
3	6878	38.86	34.89	-21.16	52.59	68.20	15.61	Vertical
4	7980.1	57.60	36.82	-46.98	47.44	68.20	20.76	Vertical
5	9814.9	55.83	38.74	-44.71	49.86	68.20	18.34	Vertical
6	14225.1667	52.33	40.40	-42.21	50.52	68.20	17.68	Vertical
7	17967.7333	56.68	43.20	-42.17	57.71	74.00	16.29	Vertical

11ac(VHT40)_TX_CH_46_Horizontal



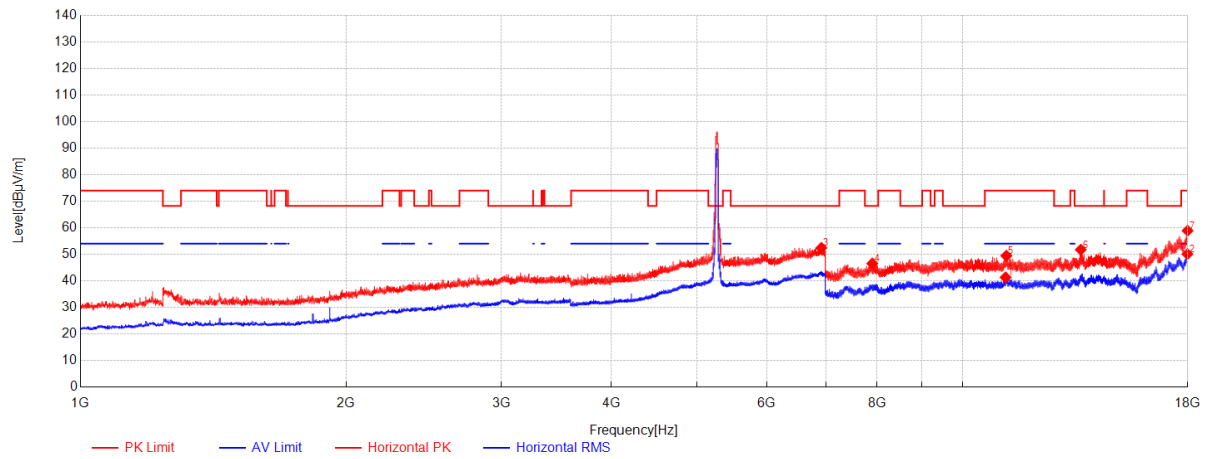
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11170.1	46.33	39.38	-44.59	41.12	54.00	12.88	Horizontal
2	17988.6333	49.45	43.20	-41.90	50.75	54.00	3.25	Horizontal
3	6813	40.31	34.80	-21.41	53.70	68.20	14.50	Horizontal
4	7950.0333	57.03	36.70	-46.76	46.97	68.20	21.23	Horizontal
5	9822.9667	55.22	38.71	-44.76	49.17	68.20	19.03	Horizontal
6	14011.0333	52.31	40.37	-42.33	50.35	68.20	17.85	Horizontal
7	17980.5667	57.99	43.20	-42.00	59.19	74.00	14.81	Horizontal

11ac(VHT40)_TX_CH_46_Vertical



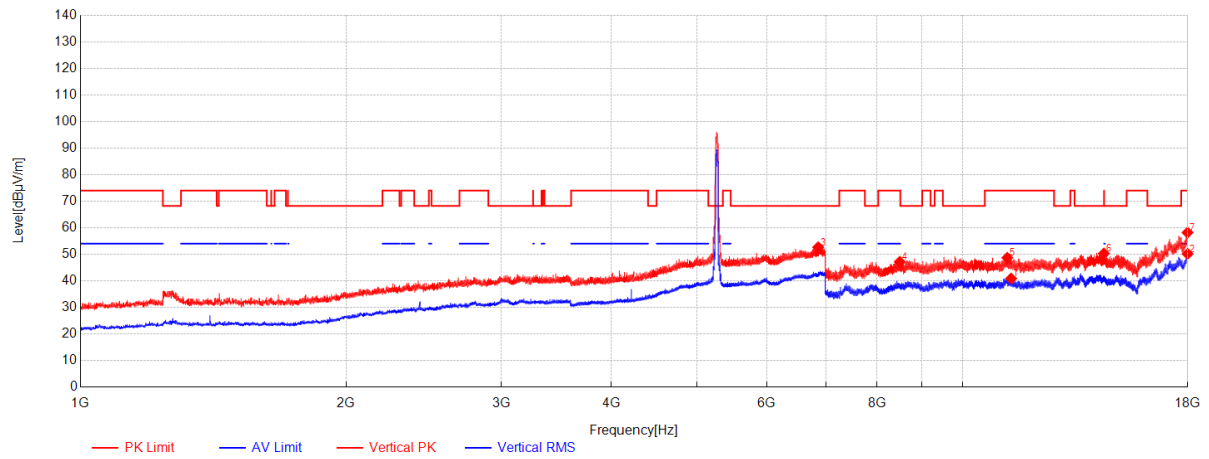
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11340.9667	45.73	39.48	-44.37	40.84	54.00	13.16	Vertical
2	17987.9	49.00	43.20	-41.91	50.29	54.00	3.71	Vertical
3	6793	39.33	34.86	-21.50	52.69	68.20	15.51	Vertical
4	8464.4667	56.65	36.83	-46.45	47.03	74.00	26.97	Vertical
5	11054.2333	53.70	39.51	-44.87	48.34	74.00	25.66	Vertical
6	14342.1333	53.17	40.28	-42.95	50.50	68.20	17.70	Vertical
7	17984.6	58.20	43.20	-41.95	59.45	74.00	14.55	Vertical

11ac(VHT40)_TX_CH_54_Horizontal



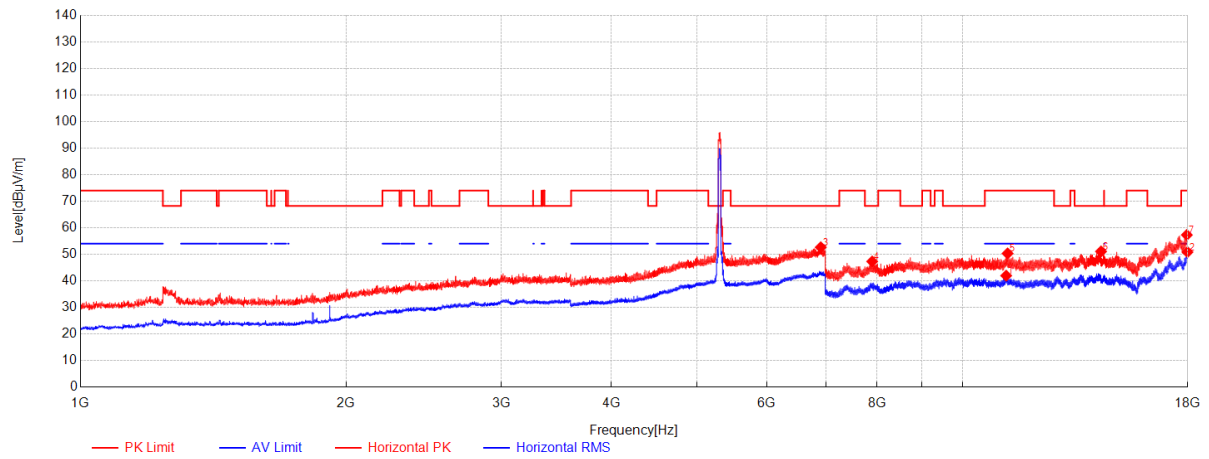
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11191.7333	46.35	39.47	-44.53	41.29	54.00	12.71	Horizontal
2	17988.2667	48.76	43.20	-41.90	50.06	54.00	3.94	Horizontal
3	6918	38.44	35.16	-21.20	52.40	68.20	15.80	Horizontal
4	7903.1	56.03	36.89	-46.40	46.52	68.20	21.68	Horizontal
5	11211.5333	54.44	39.52	-44.51	49.45	74.00	24.55	Horizontal
6	13616.5	54.01	40.43	-42.72	51.72	68.20	16.48	Horizontal
7	17994.8667	57.49	43.20	-41.82	58.87	74.00	15.13	Horizontal

11ac(VHT40)_TX_CH_54_Vertical



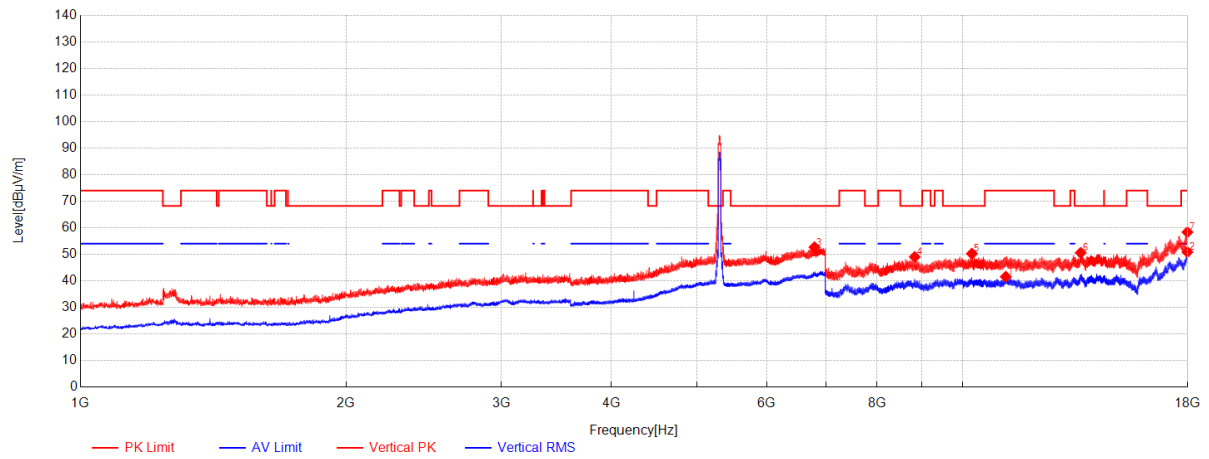
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11353.8	45.69	39.49	-44.31	40.87	54.00	13.13	Vertical
2	17997.4333	48.71	43.20	-41.78	50.13	54.00	3.87	Vertical
3	6860.5	39.20	34.65	-21.22	52.63	68.20	15.57	Vertical
4	8490.1333	56.48	36.88	-46.20	47.16	74.00	26.84	Vertical
5	11240.1333	53.62	39.58	-44.52	48.68	74.00	25.32	Vertical
6	14464.2333	53.10	40.33	-43.15	50.28	68.20	17.92	Vertical
7	17992.3	56.82	43.20	-41.85	58.17	74.00	15.83	Vertical

11ac(VHT40)_TX_CH_62_Horizontal



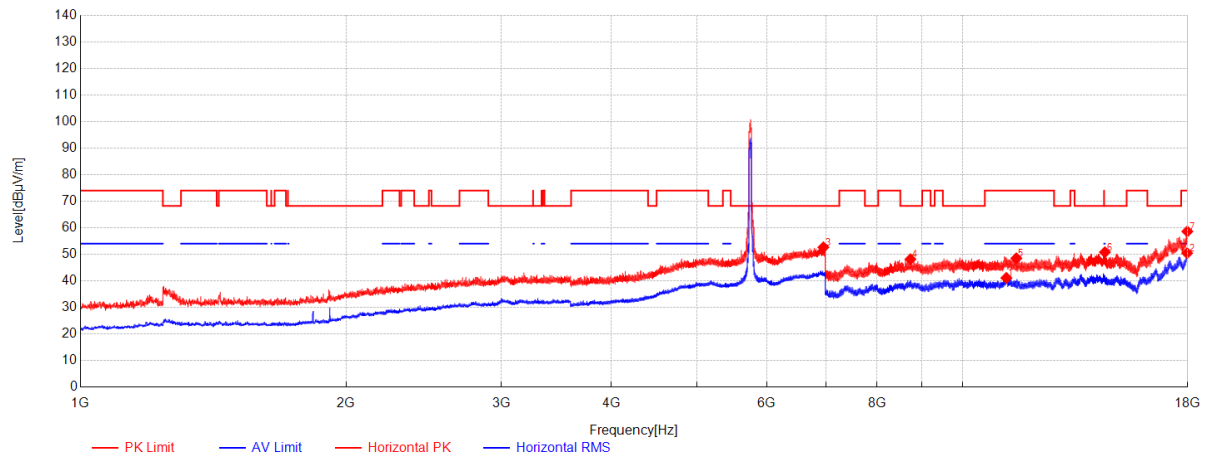
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11207.5	46.95	39.51	-44.51	41.95	54.00	12.05	Horizontal
2	17987.9	49.53	43.20	-41.91	50.82	54.00	3.18	Horizontal
3	6907	38.56	35.19	-21.12	52.63	68.20	15.57	Horizontal
4	7899.4333	56.79	36.90	-46.39	47.30	68.20	20.90	Horizontal
5	11248.5667	55.23	39.60	-44.52	50.31	74.00	23.69	Horizontal
6	14355.3333	53.83	40.29	-43.06	51.06	68.20	17.14	Horizontal
7	17960.4	56.35	43.20	-42.27	57.28	74.00	16.72	Horizontal

11ac(VHT40)_TX_CH_62_Vertical



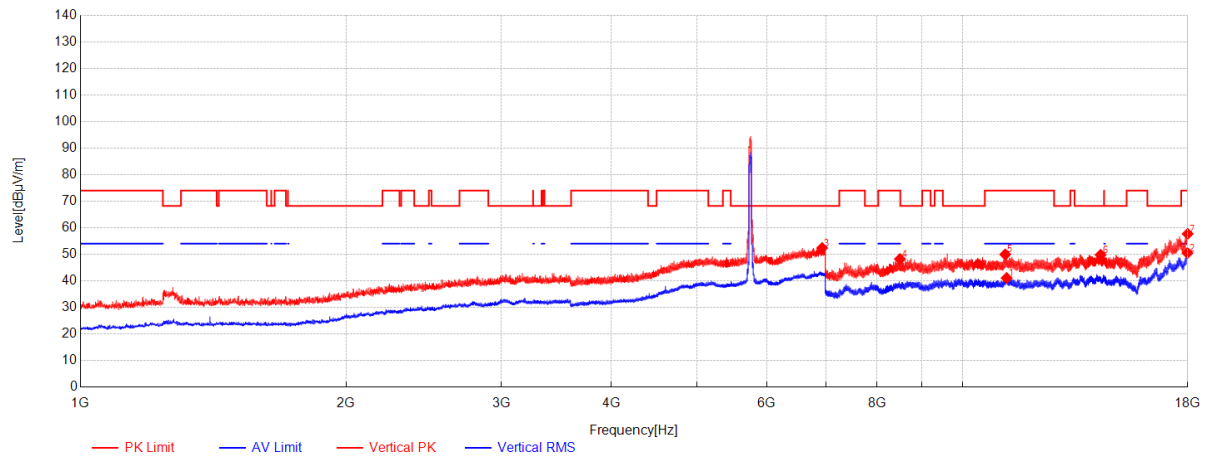
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11194.3	46.60	39.48	-44.53	41.55	54.00	12.45	Vertical
2	17984.9667	49.59	43.20	-41.95	50.84	54.00	3.16	Vertical
3	6794.5	39.27	34.87	-21.49	52.65	68.20	15.55	Vertical
4	8828.2	57.84	37.61	-46.44	49.01	68.20	19.19	Vertical
5	10247.5667	56.02	39.39	-45.18	50.23	68.20	17.97	Vertical
6	13613.2	52.83	40.43	-42.71	50.55	68.20	17.65	Vertical
7	17986.0667	57.05	43.20	-41.93	58.32	74.00	15.68	Vertical

11ac(VHT40)_TX_CH_151_Horizontal



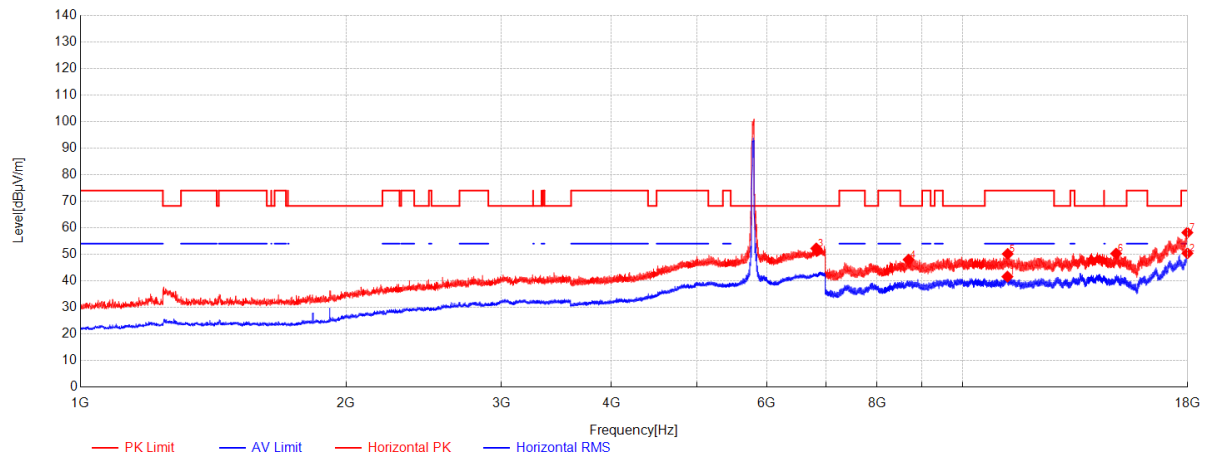
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11211.9	46.08	39.52	-44.51	41.09	54.00	12.91	Horizontal
2	17974.3333	49.30	43.20	-42.09	50.41	54.00	3.59	Horizontal
3	6954.5	38.94	35.14	-21.47	52.61	68.20	15.59	Horizontal
4	8728.4667	56.58	37.56	-46.01	48.13	68.20	20.07	Horizontal
5	11508.5333	53.58	39.57	-44.68	48.47	74.00	25.53	Horizontal
6	14501.2667	53.38	40.40	-43.00	50.78	68.20	17.42	Horizontal
7	17983.1333	57.36	43.20	-41.97	58.59	74.00	15.41	Horizontal

11ac(VHT40)_TX_CH_151_Vertical



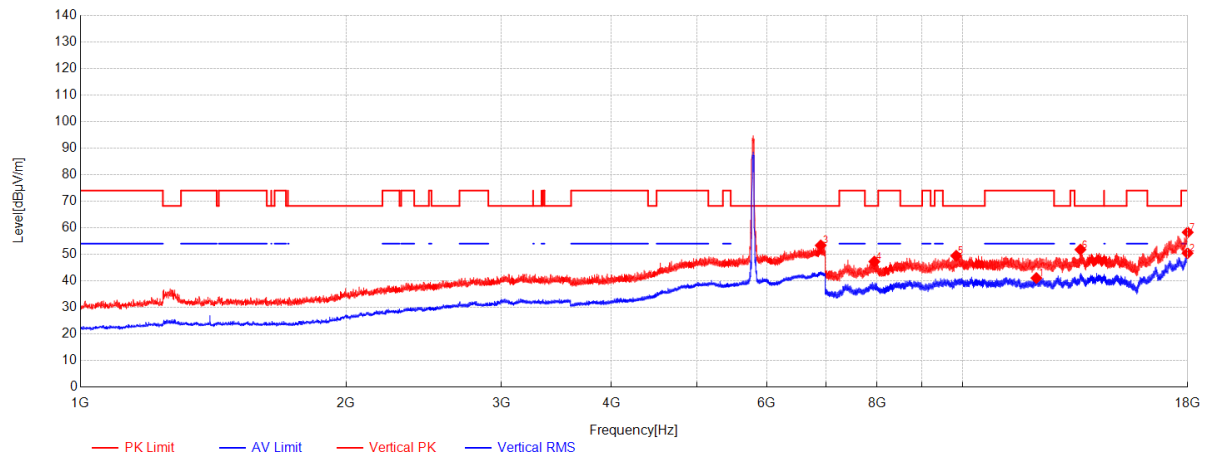
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11219.9667	46.03	39.54	-44.51	41.06	54.00	12.94	Vertical
2	17990.4667	49.14	43.20	-41.87	50.47	54.00	3.53	Vertical
3	6931.5	38.53	35.14	-21.30	52.37	68.20	15.83	Vertical
4	8492.7	57.49	36.89	-46.18	48.20	74.00	25.80	Vertical
5	11179.6333	55.07	39.42	-44.56	49.93	74.00	24.07	Vertical
6	14339.2	52.43	40.28	-42.93	49.78	68.20	18.42	Vertical
7	17999.6333	56.24	43.20	-41.75	57.69	74.00	16.31	Vertical

11ac(VHT40)_TX_CH_159_Horizontal



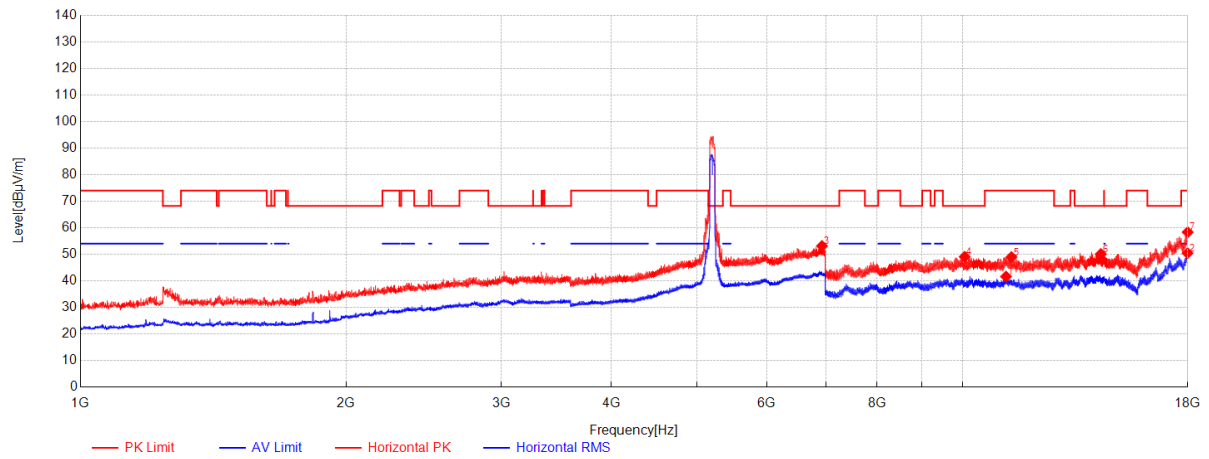
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11244.1667	46.51	39.59	-44.52	41.58	54.00	12.42	Horizontal
2	17987.9	49.07	43.20	-41.91	50.36	54.00	3.64	Horizontal
3	6826.5	38.88	34.69	-21.36	52.21	68.20	15.99	Horizontal
4	8687.4	56.38	37.47	-45.89	47.96	68.20	20.24	Horizontal
5	11251.8667	55.05	39.59	-44.52	50.12	74.00	23.88	Horizontal
6	14933.9333	52.80	39.83	-42.37	50.26	68.20	17.94	Horizontal
7	17983.5	56.94	43.20	-41.97	58.17	74.00	15.83	Horizontal

11ac(VHT40)_TX_CH_159_Vertical



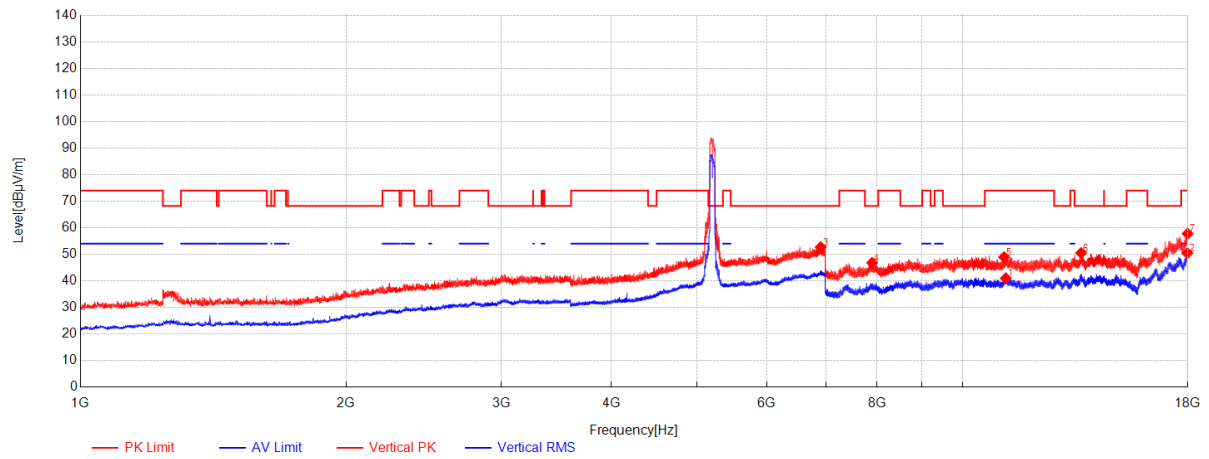
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	12126.3667	45.45	39.25	-43.64	41.06	54.00	12.94	Vertical
2	17993.4	49.03	43.20	-41.84	50.39	54.00	3.61	Vertical
3	6906.5	39.27	35.19	-21.12	53.34	68.20	14.86	Vertical
4	7945.2667	57.24	36.72	-46.72	47.24	68.20	20.96	Vertical
5	9836.5333	55.61	38.65	-44.84	49.42	68.20	18.78	Vertical
6	13604.7667	54.05	40.41	-42.70	51.76	68.20	16.44	Vertical
7	18000	56.81	43.20	-41.75	58.26	74.00	15.74	Vertical

11ac(VHT80)_TX_CH_42_Horizontal



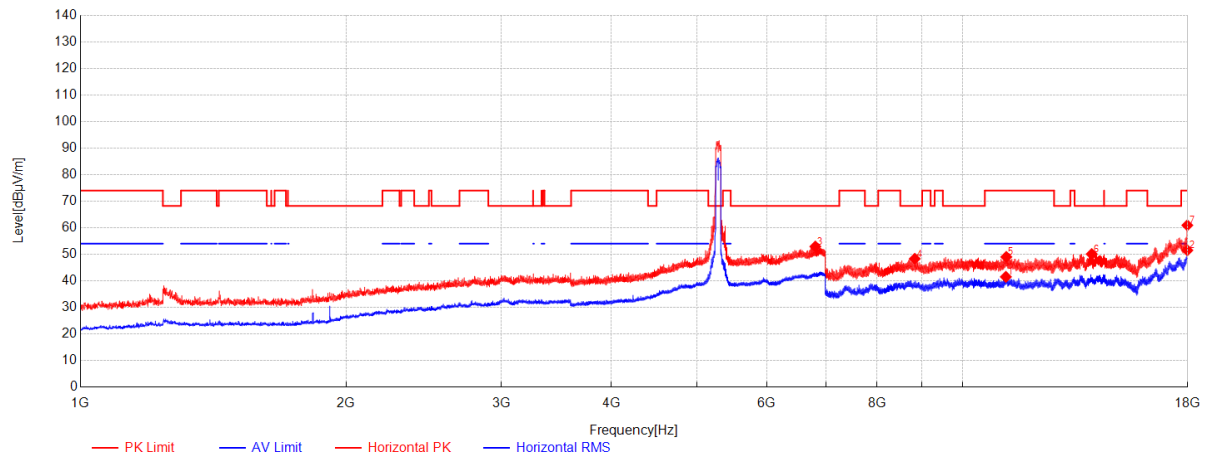
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11202	46.62	39.50	-44.51	41.61	54.00	12.39	Horizontal
2	17992.6667	49.06	43.20	-41.85	50.41	54.00	3.59	Horizontal
3	6929	39.26	35.14	-21.28	53.12	68.20	15.08	Horizontal
4	10056.1667	55.63	38.85	-45.41	49.07	68.20	19.13	Horizontal
5	11361.8667	53.75	39.48	-44.28	48.95	74.00	25.05	Horizontal
6	14348	52.79	40.30	-43.00	50.09	68.20	18.11	Horizontal
7	17999.6333	56.88	43.20	-41.75	58.33	74.00	15.67	Horizontal

11ac(VHT80)_TX_CH_42_Vertical



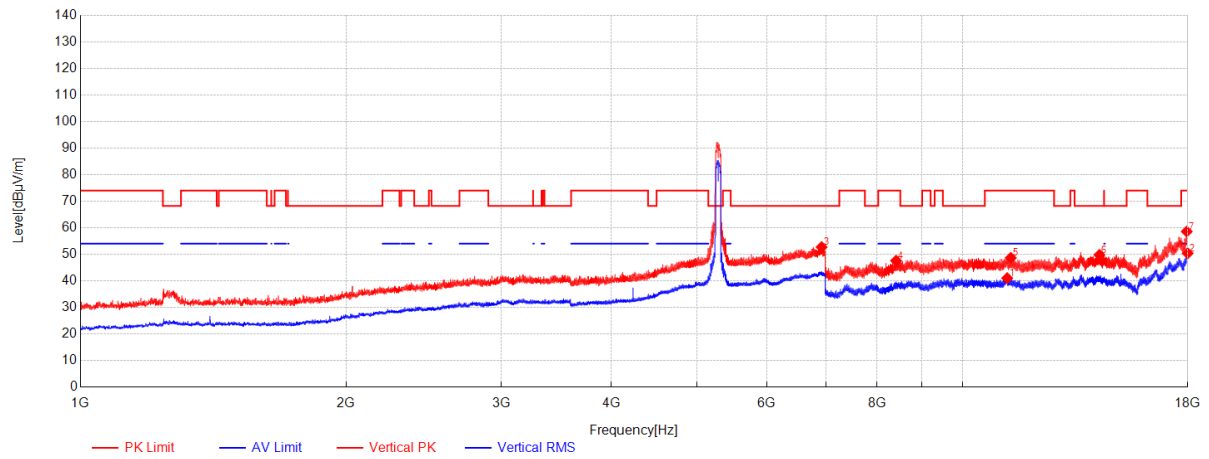
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11196.8667	46.01	39.49	-44.52	40.98	54.00	13.02	Vertical
2	17985.7	49.14	43.20	-41.94	50.40	54.00	3.60	Vertical
3	6906	38.60	35.19	-21.11	52.68	68.20	15.52	Vertical
4	7897.9667	56.29	36.89	-46.41	46.77	68.20	21.43	Vertical
5	11146.6333	54.24	39.32	-44.65	48.91	74.00	25.09	Vertical
6	13627.8667	52.75	40.46	-42.74	50.47	68.20	17.73	Vertical
7	17996.7	56.34	43.20	-41.79	57.75	74.00	16.25	Vertical

11ac(VHT80)_TX_CH_58_Horizontal



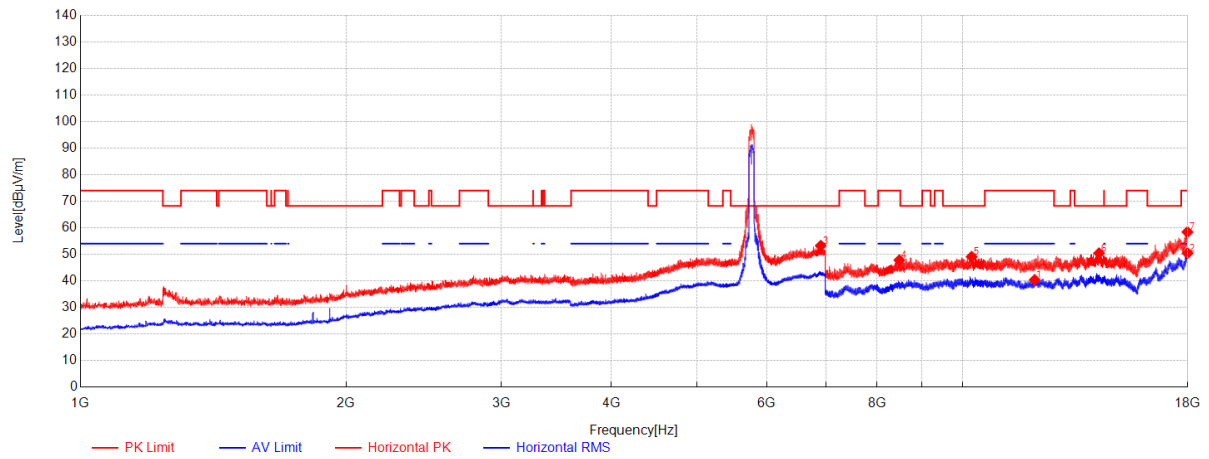
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11197.6	46.54	39.49	-44.52	41.51	54.00	12.49	Horizontal
2	17983.8667	50.26	43.20	-41.96	51.50	54.00	2.50	Horizontal
3	6810	39.51	34.82	-21.42	52.91	68.20	15.29	Horizontal
4	8827.4667	57.14	37.61	-46.45	48.30	68.20	19.90	Horizontal
5	11210.4333	53.99	39.52	-44.51	49.00	74.00	25.00	Horizontal
6	14012.1333	52.04	40.37	-42.34	50.07	68.20	18.13	Horizontal
7	17983.5	59.69	43.20	-41.97	60.92	74.00	13.08	Horizontal

11ac(VHT80)_TX_CH_58_Vertical



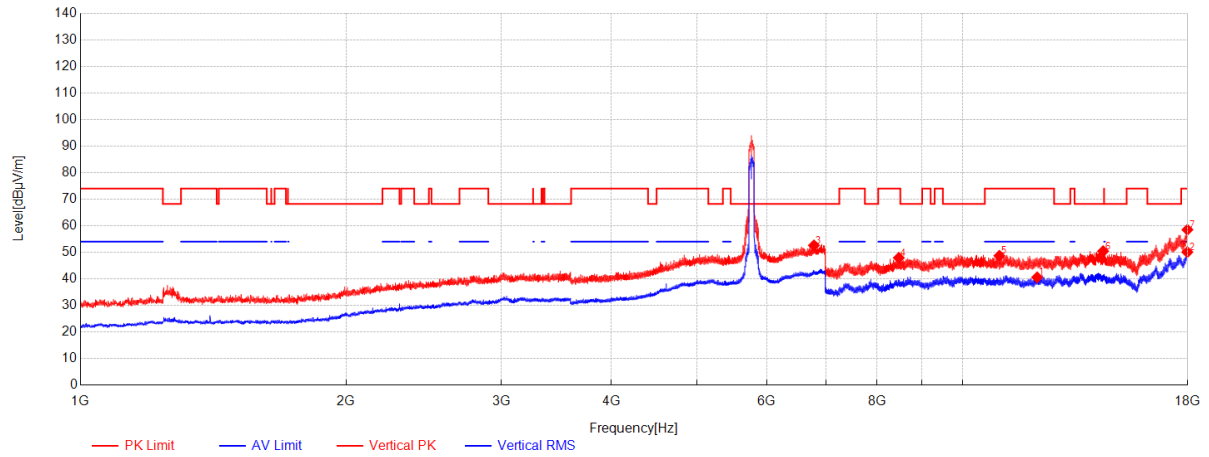
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	11236.8333	45.97	39.57	-44.52	41.02	54.00	12.98	Vertical
2	17997.8	48.95	43.20	-41.78	50.37	54.00	3.63	Vertical
3	6922	38.78	35.16	-21.23	52.71	68.20	15.49	Vertical
4	8407.6333	57.53	37.05	-47.00	47.58	74.00	26.42	Vertical
5	11343.1667	53.52	39.49	-44.36	48.65	74.00	25.35	Vertical
6	14294.4667	52.13	40.20	-42.57	49.76	68.20	18.44	Vertical
7	17955.2667	57.70	43.20	-42.34	58.56	74.00	15.44	Vertical

11ac(VHT80)_TX_CH_155_Horizontal



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	12071	44.91	39.14	-43.69	40.36	54.00	13.64	Horizontal
2	17991.9333	49.06	43.20	-41.86	50.40	54.00	3.60	Horizontal
3	6906.5	39.15	35.19	-21.12	53.22	68.20	14.98	Horizontal
4	8479.5	57.24	36.86	-46.31	47.79	74.00	26.21	Horizontal
5	10239.5	54.78	39.34	-45.06	49.06	68.20	19.14	Horizontal
6	14280.9	52.69	40.20	-42.50	50.39	68.20	17.81	Horizontal
7	17986.4333	57.11	43.20	-41.93	58.38	74.00	15.62	Horizontal

11ac(VHT80)_TX_CH_155_Vertical



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	12150.2	45.24	39.30	-43.98	40.56	54.00	13.44	Vertical
2	17983.8667	48.81	43.20	-41.96	50.05	54.00	3.95	Vertical
3	6785	39.33	34.81	-21.55	52.59	68.20	15.61	Vertical
4	8467.7667	57.48	36.84	-46.42	47.90	74.00	26.10	Vertical
5	11009.8667	54.05	39.58	-44.95	48.68	74.00	25.32	Vertical
6	14435.2667	53.40	40.27	-43.27	50.40	68.20	17.80	Vertical
7	17988.2667	57.19	43.20	-41.90	58.49	74.00	15.51	Vertical

7.3 Radiated Emissions which fall in the restricted bands

Test Requirement 47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)

Test Method: ANSI C63.10 (2020) Section 6.10.5 & 12.7.2

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

*(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band:

(i) 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.

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 22.6 °C

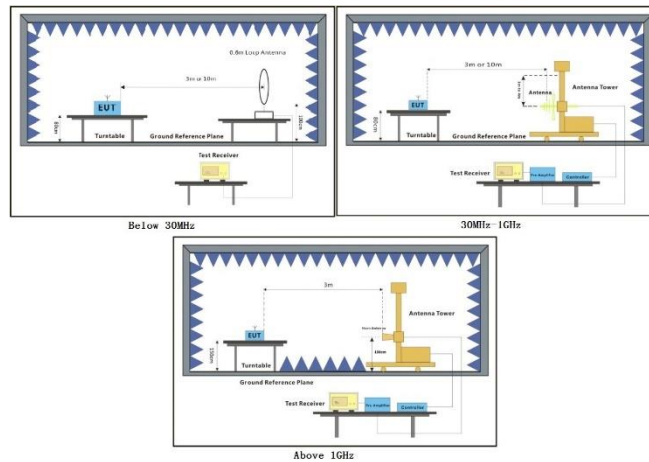
Humidity: 47.9 % RH

Atmospheric Pressure: 1010 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-2A) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.
Final test	03	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.

7.3.3 Test Setup Diagram



7.3.4 Measurement Procedure and Data

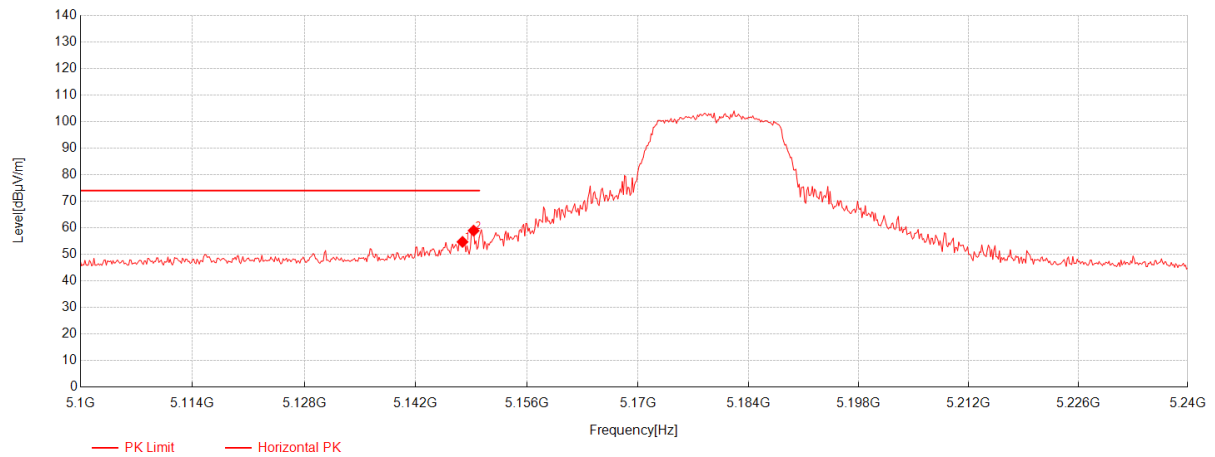
- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

Remark 1: $\text{Level} = \text{Read Level} + \text{Cable Loss} + \text{Antenna Factor} - \text{Preamp Factor}$

Remark 2: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for Peak detection (PK) and Average detection (AV) at frequency above 1GHz.

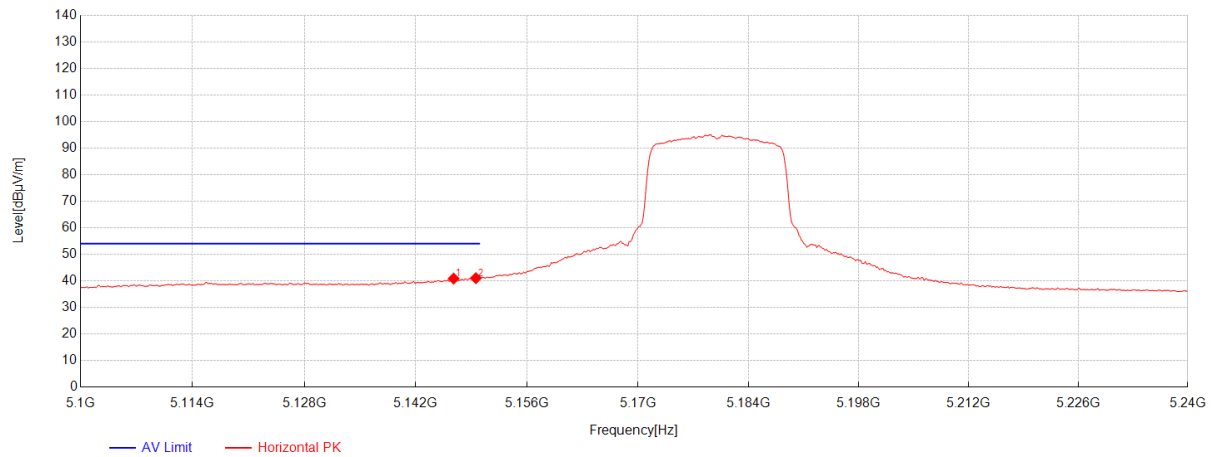
Remark 3: For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.

11a_TX_CH_36_Horizontal_Peak



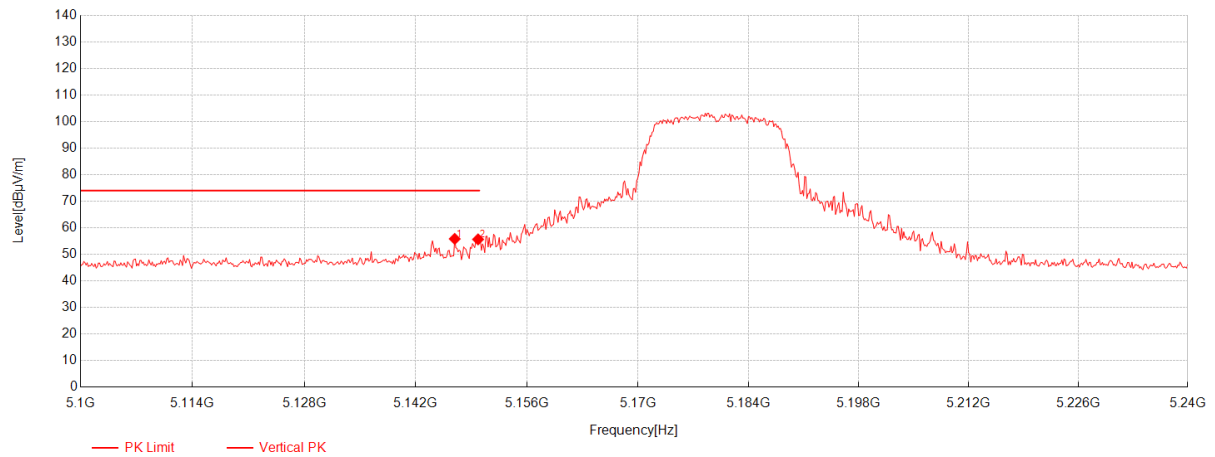
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.88	44.58	31.80	-21.70	54.68	74.00	19.32	Horizontal
2	5149.28	48.78	31.80	-21.69	58.89	74.00	15.11	Horizontal

11a_TX_CH_36_Horizontal_Average



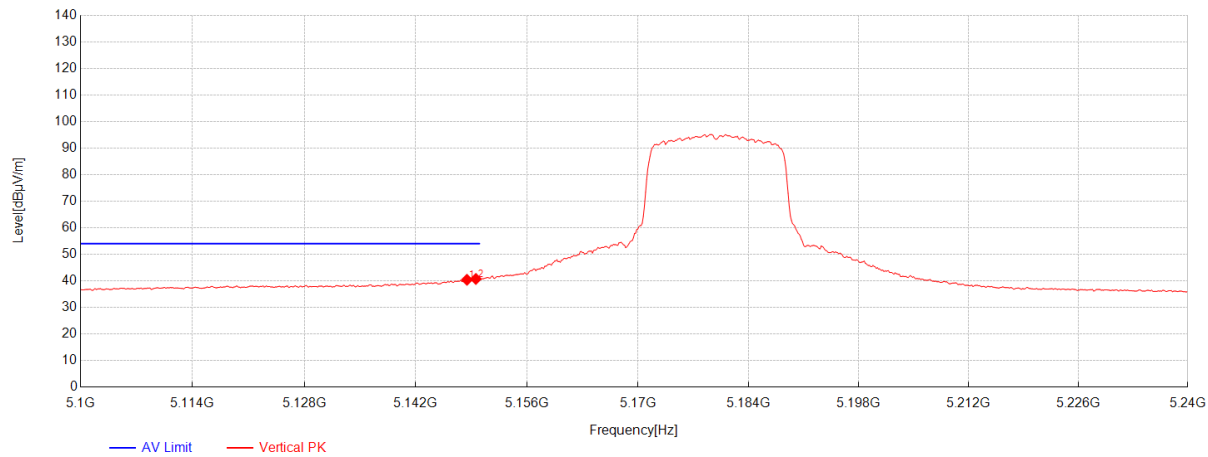
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5146.76	30.74	31.81	-21.70	40.85	54.00	13.15	Horizontal
2	5149.56	30.90	31.80	-21.69	41.01	54.00	12.99	Horizontal

11a_TX_CH_36_Vertical_Peak



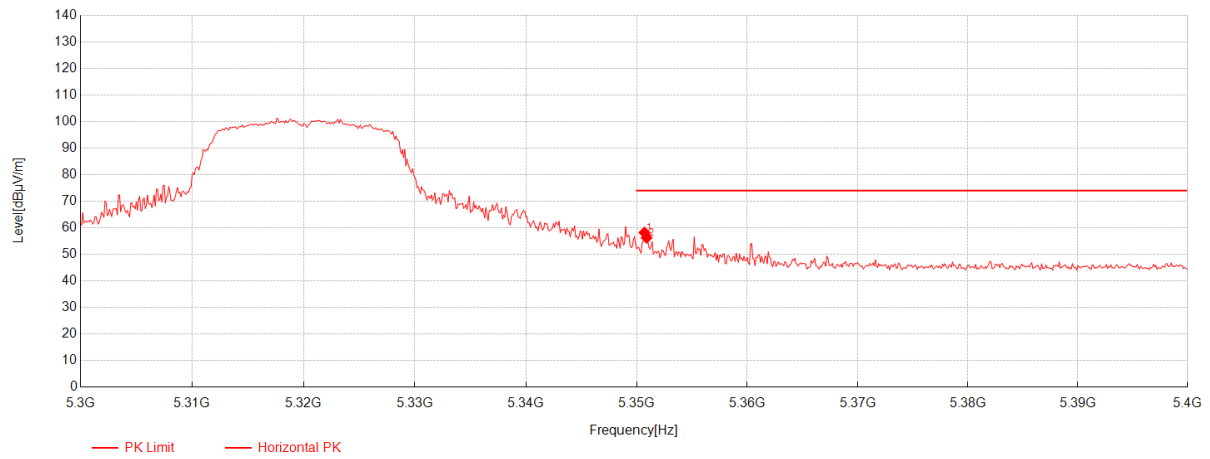
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5146.9	45.68	31.81	-21.70	55.79	74.00	18.21	Vertical
2	5149.84	45.50	31.80	-21.69	55.61	74.00	18.39	Vertical

11a_TX_CH_36_Vertical_Average



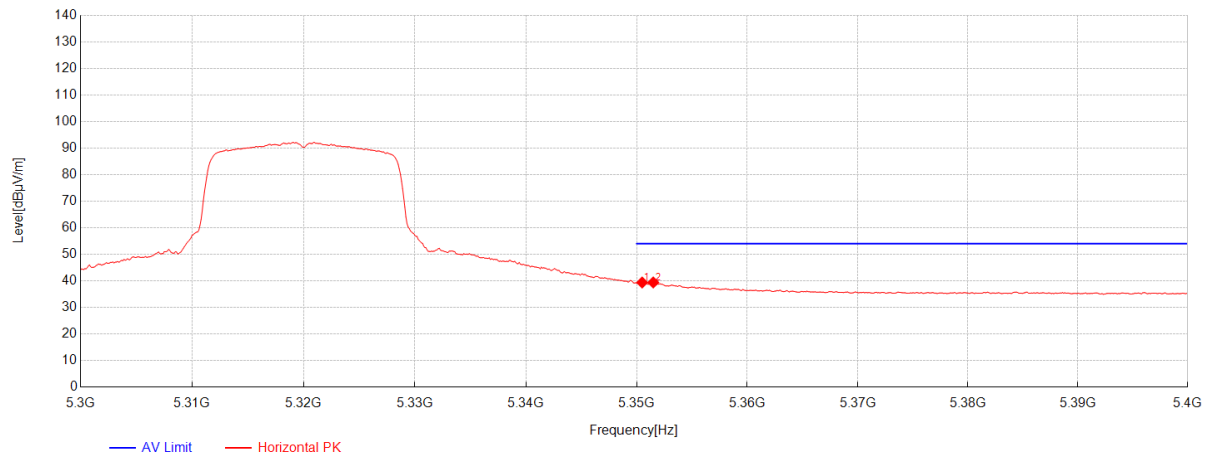
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5148.44	30.31	31.80	-21.70	40.41	54.00	13.59	Vertical
2	5149.56	30.60	31.80	-21.69	40.71	54.00	13.29	Vertical

11a_TX_CH_64_Horizontal_Peak



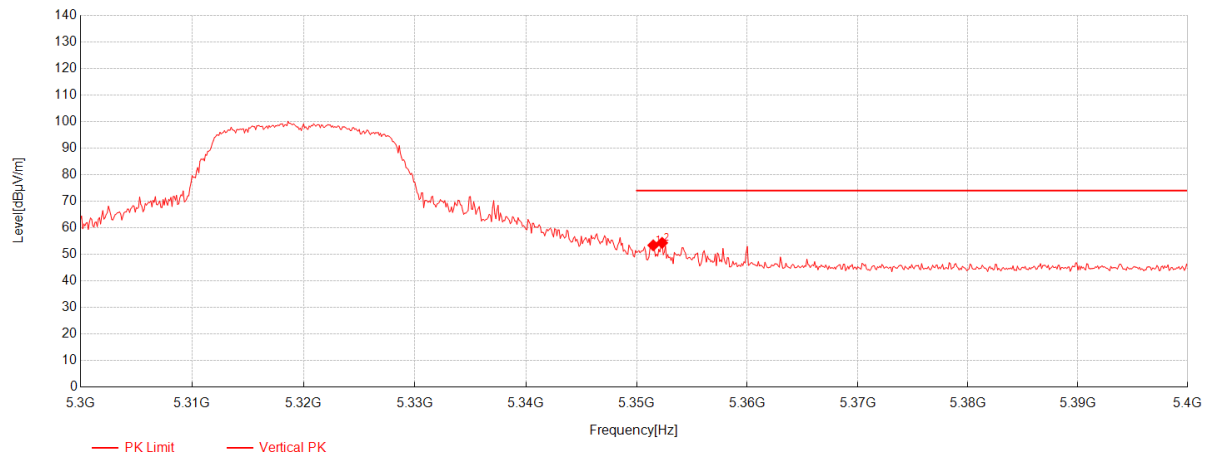
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.7	49.14	31.70	-22.66	58.18	74.00	15.82	Horizontal
2	5350.9	47.17	31.70	-22.66	56.21	74.00	17.79	Horizontal

11a_TX_CH_64_Horizontal_Average



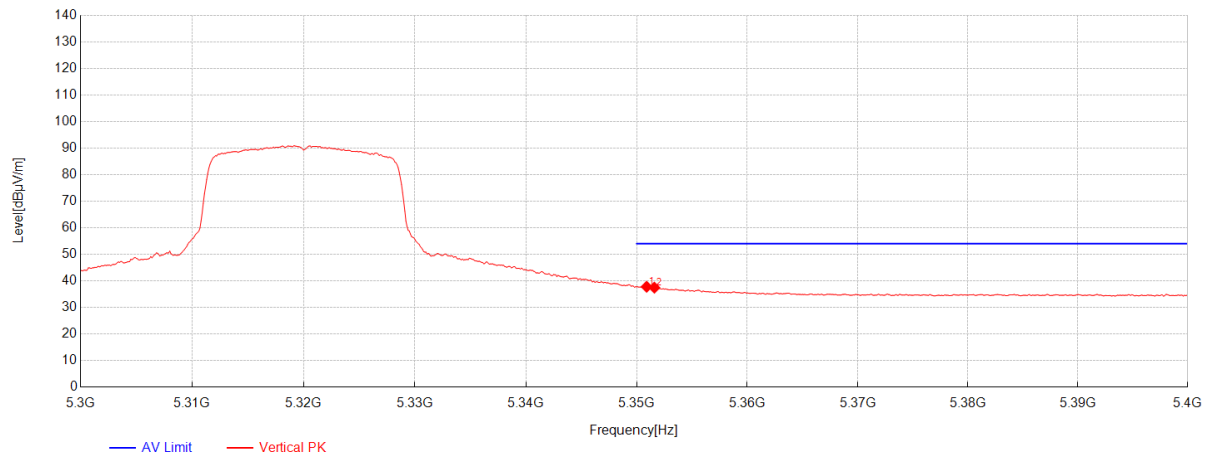
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.5	30.34	31.70	-22.66	39.38	54.00	14.62	Horizontal
2	5351.5	30.36	31.70	-22.66	39.40	54.00	14.60	Horizontal

11a_TX_CH_64_Vertical_Peak



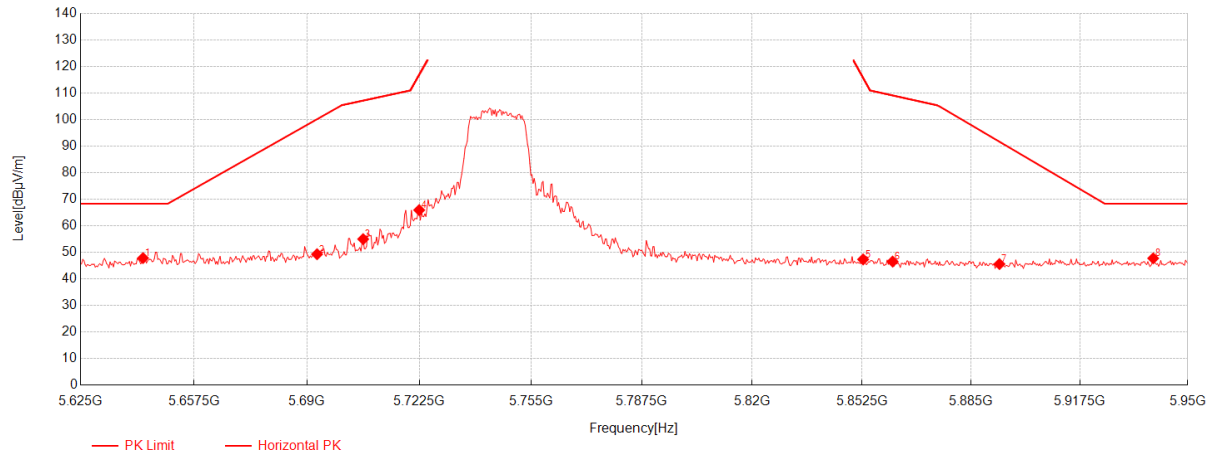
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5351.5	44.33	31.70	-22.66	53.37	74.00	20.63	Vertical
2	5352.3	45.27	31.70	-22.66	54.31	74.00	19.69	Vertical

11a_TX_CH_64_Vertical_Average



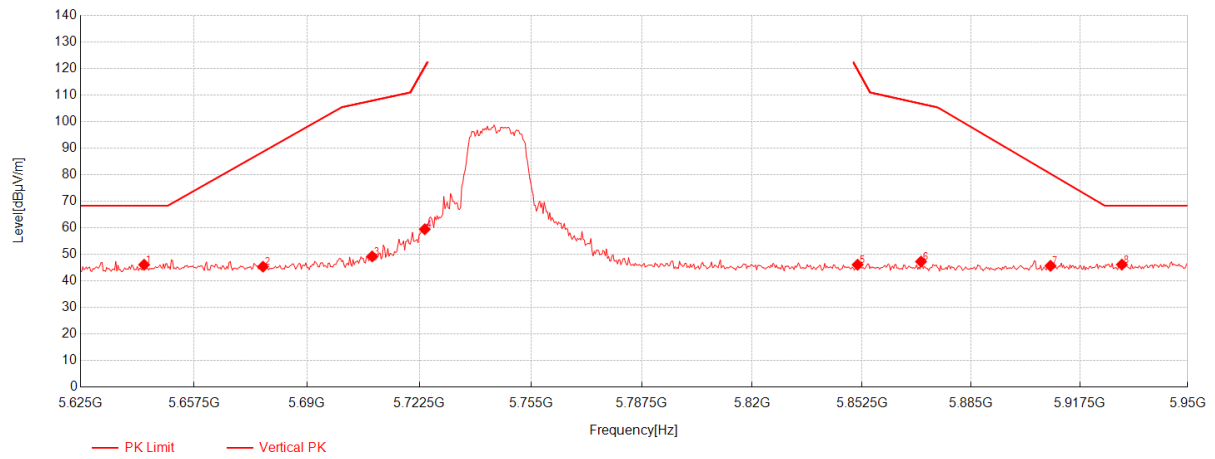
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.9	28.74	31.70	-22.66	37.78	54.00	16.22	Vertical
2	5351.6	28.40	31.70	-22.66	37.44	54.00	16.56	Vertical

11a_TX_CH_149_Horizontal_Peak



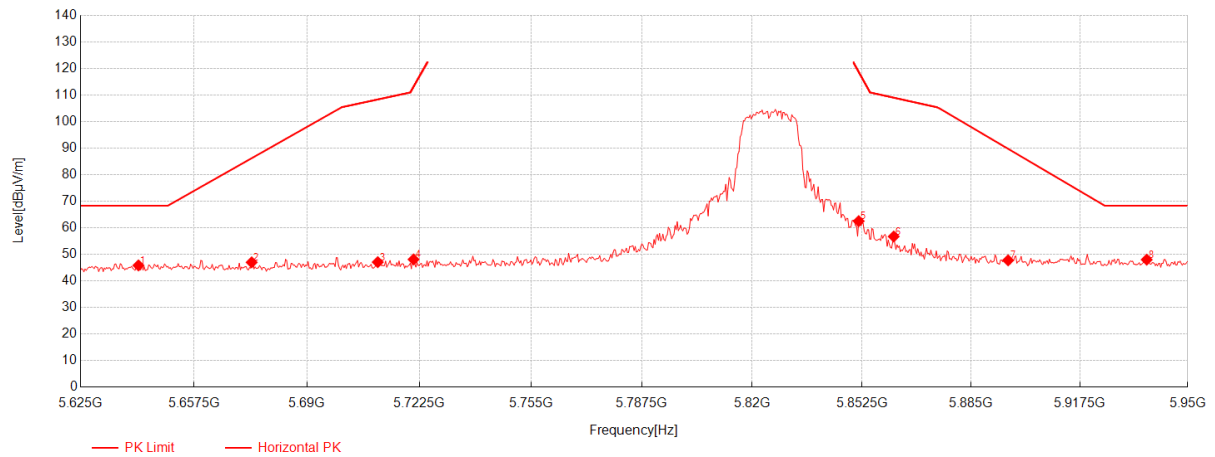
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5642.875	38.10	32.44	-22.73	47.81	68.30	20.49	Horizontal
2	5692.925	39.88	32.50	-23.12	49.26	100.08	50.82	Horizontal
3	5706.25	45.65	32.50	-23.19	54.96	107.05	52.09	Horizontal
4	5722.5	56.62	32.50	-23.24	65.88	116.60	50.72	Horizontal
5	5852.825	37.70	32.78	-23.16	47.32	115.86	68.54	Horizontal
6	5861.6	36.89	32.73	-23.11	46.51	109.05	62.54	Horizontal
7	5893.45	35.95	32.54	-22.92	45.57	91.61	46.04	Horizontal
8	5939.6	37.58	32.82	-22.68	47.72	68.30	20.58	Horizontal

11a_TX_CH_149_Vertical_Peak



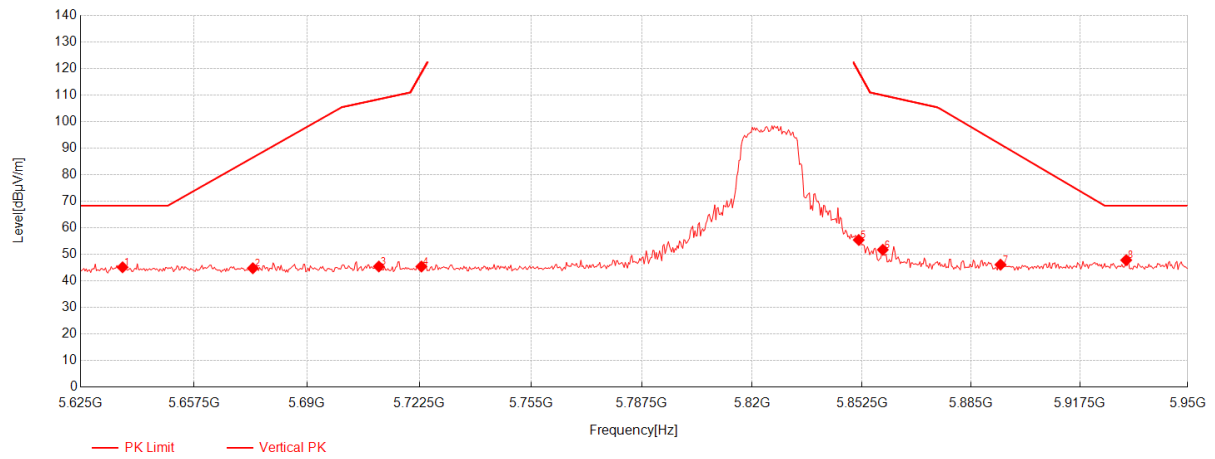
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5643.2	36.35	32.45	-22.73	46.07	68.30	22.23	Vertical
2	5677.325	35.82	32.50	-23.00	45.32	88.56	43.24	Vertical
3	5708.85	39.91	32.50	-23.20	49.21	107.78	58.57	Vertical
4	5724.125	50.16	32.50	-23.24	59.42	120.31	60.89	Vertical
5	5851.2	36.45	32.79	-23.17	46.07	119.56	73.49	Vertical
6	5870.05	37.63	32.68	-23.06	47.25	106.68	59.43	Vertical
7	5908.725	35.93	32.57	-22.84	45.66	80.31	34.65	Vertical
8	5930.175	36.10	32.74	-22.73	46.11	68.30	22.19	Vertical

11a_TX_CH_165_Horizontal_Peak



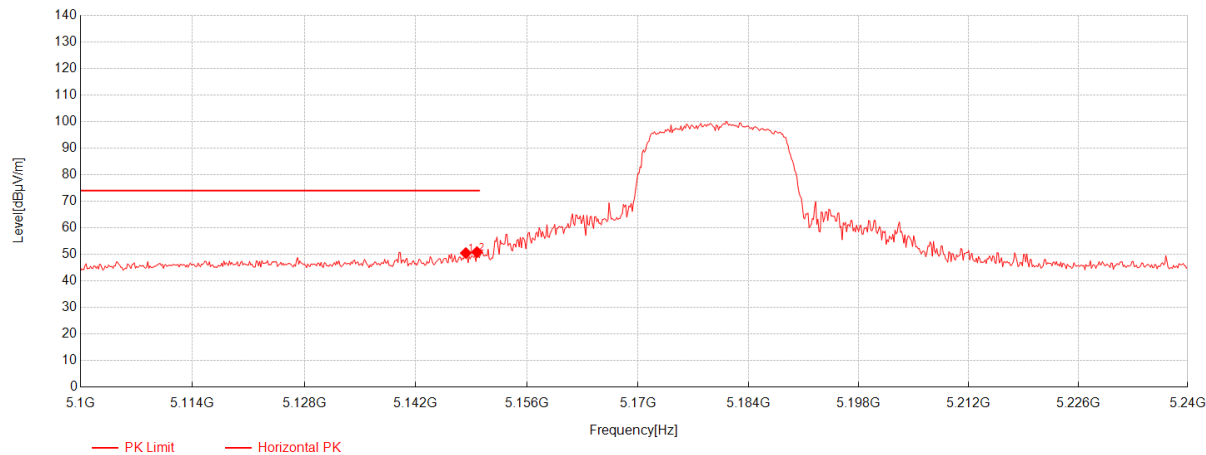
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5641.575	36.10	32.43	-22.72	45.81	68.30	22.49	Horizontal
2	5674.075	37.44	32.50	-22.97	46.97	86.16	39.19	Horizontal
3	5710.475	37.74	32.50	-23.20	47.04	108.24	61.20	Horizontal
4	5720.875	38.79	32.50	-23.23	48.06	112.90	64.84	Horizontal
5	5851.525	52.85	32.79	-23.17	62.47	118.82	56.35	Horizontal
6	5861.925	47.06	32.73	-23.10	56.69	108.96	52.27	Horizontal
7	5896.05	38.11	32.52	-22.90	47.73	89.68	41.95	Horizontal
8	5937.65	37.86	32.80	-22.69	47.97	68.30	20.33	Horizontal

11a_TX_CH_165_Vertical_Peak



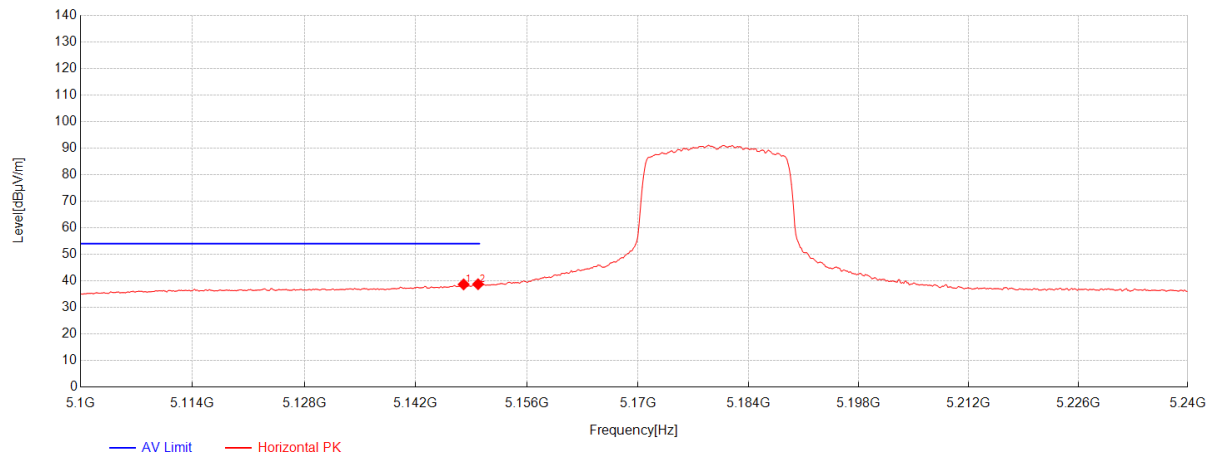
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5637.025	35.40	32.40	-22.69	45.11	68.30	23.19	Vertical
2	5674.4	35.21	32.50	-22.97	44.74	86.40	41.66	Vertical
3	5710.8	36.11	32.50	-23.20	45.41	108.33	62.92	Vertical
4	5723.15	36.13	32.50	-23.24	45.39	118.08	72.69	Vertical
5	5851.525	45.78	32.79	-23.17	55.40	118.82	63.42	Vertical
6	5858.675	42.07	32.75	-23.12	51.70	109.87	58.17	Vertical
7	5893.775	36.47	32.54	-22.92	46.09	91.37	45.28	Vertical
8	5931.475	37.77	32.75	-22.72	47.80	68.30	20.50	Vertical

11ac(VHT20)_TX_CH_36_Horizontal_Peak



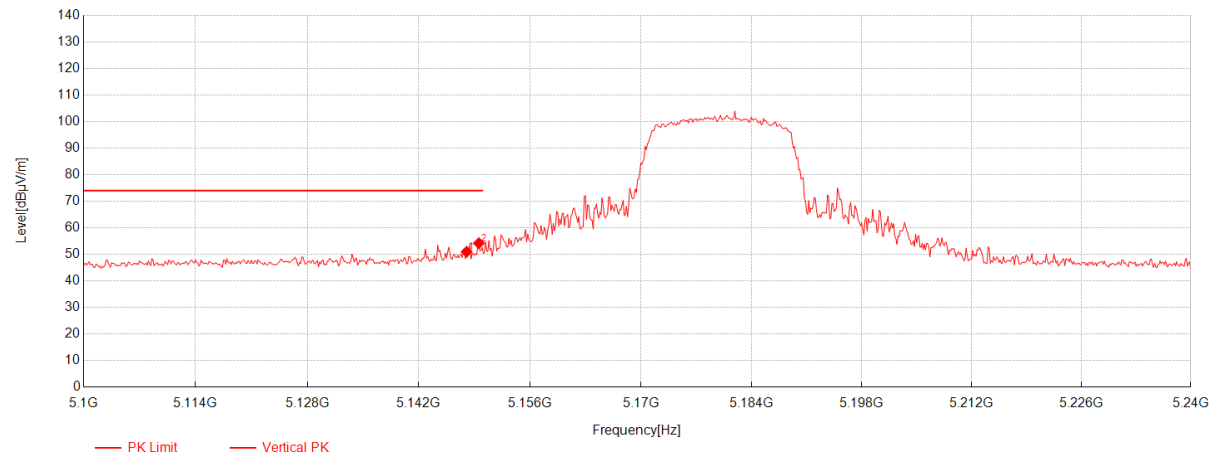
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.3	40.36	31.80	-21.70	50.46	74.00	23.54	Horizontal
2	5149.7	40.70	31.80	-21.69	50.81	74.00	23.19	Horizontal

11ac(VHT20)_TX_CH_36_Horizontal_Average



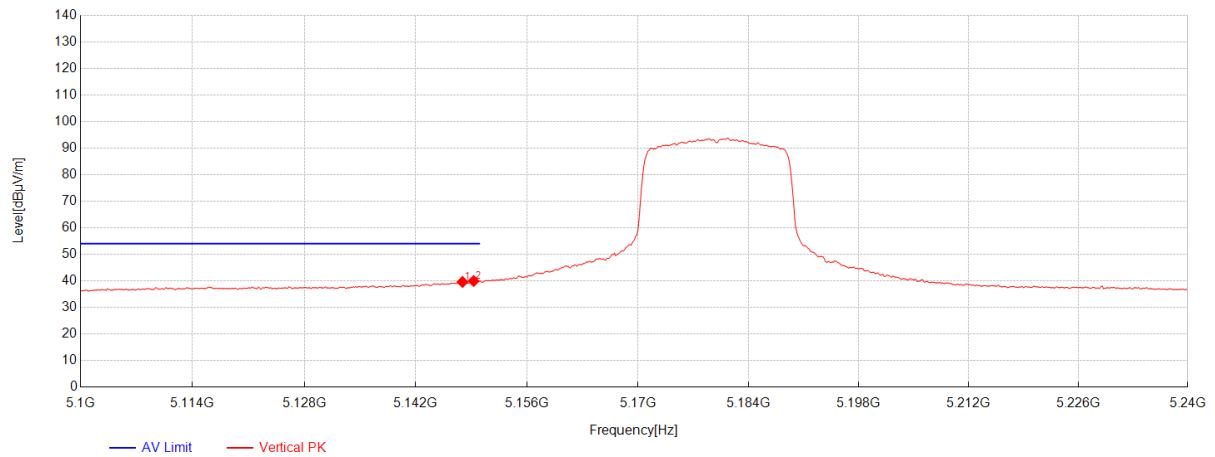
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.02	28.57	31.80	-21.70	38.67	54.00	15.33	Horizontal
2	5149.84	28.62	31.80	-21.69	38.73	54.00	15.27	Horizontal

11ac(VHT20)_TX_CH_36_Vetical_Peak



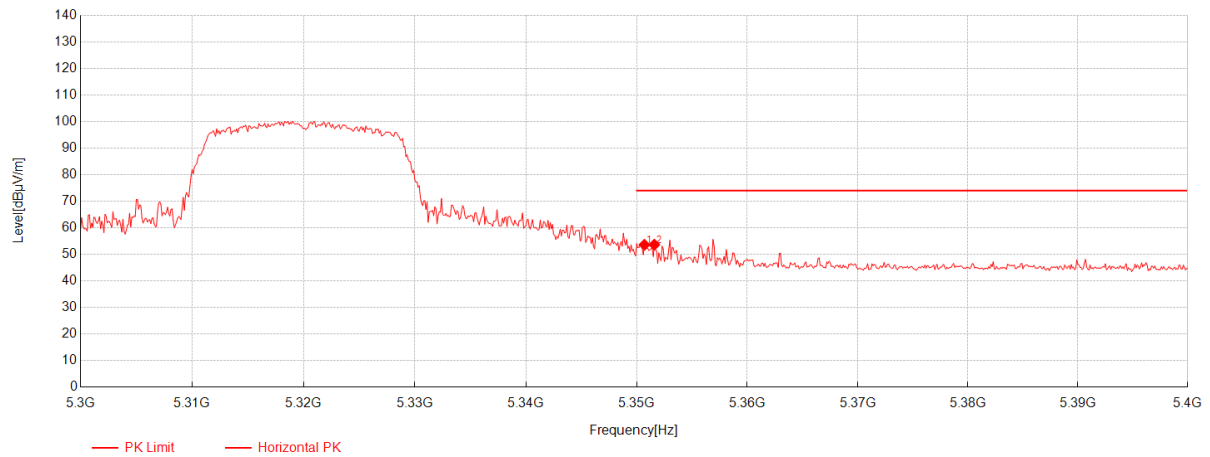
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.02	40.86	31.80	-21.70	50.96	74.00	23.04	Vertical
2	5149.56	44.06	31.80	-21.69	54.17	74.00	19.83	Vertical

11ac(VHT20)_TX_CH_36_Vetical_Average



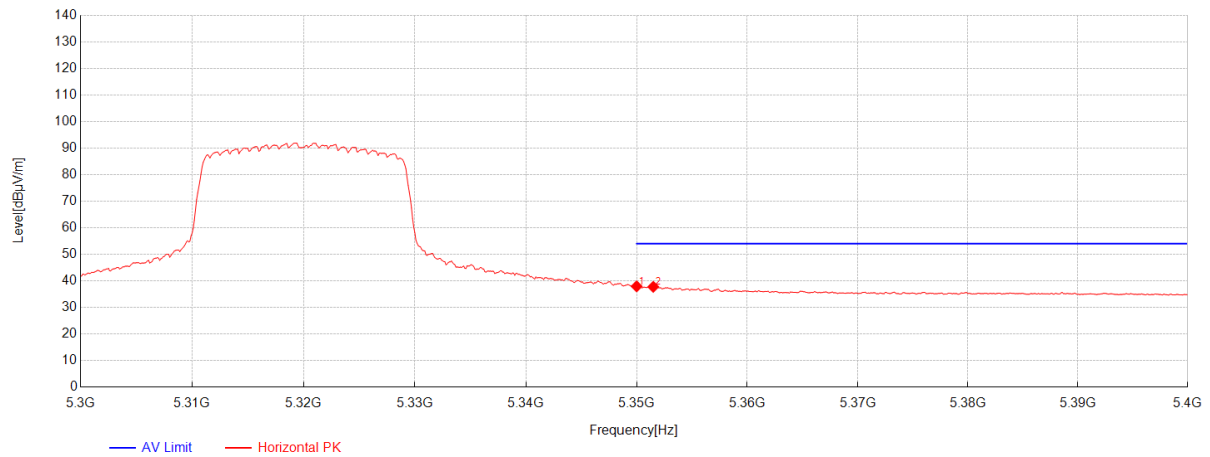
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.88	29.50	31.80	-21.70	39.60	54.00	14.40	Vertical
2	5149.28	29.82	31.80	-21.69	39.93	54.00	14.07	Vertical

11ac(VHT20)_TX_CH_64_Horizontal_Peak



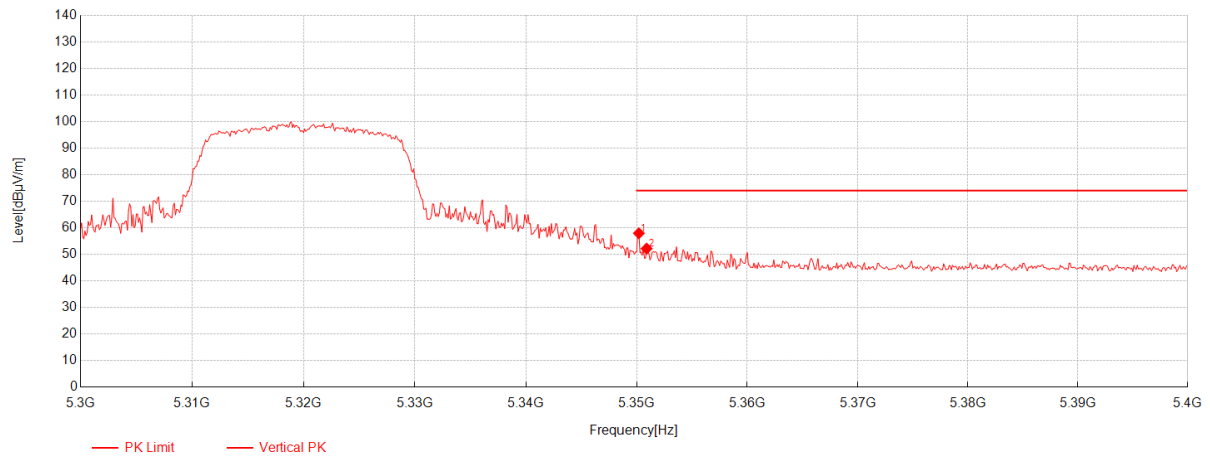
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.7	44.53	31.70	-22.66	53.57	74.00	20.43	Horizontal
2	5351.6	44.58	31.70	-22.66	53.62	74.00	20.38	Horizontal

11ac(VHT20)_TX_CH_64_Horizontal_Average



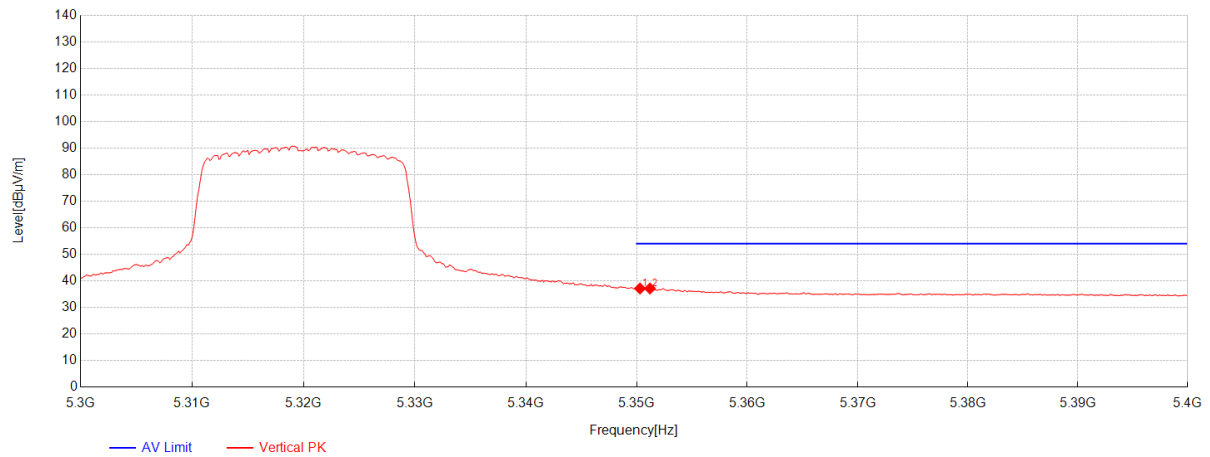
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350	28.91	31.70	-22.67	37.94	54.00	16.06	Horizontal
2	5351.5	28.71	31.70	-22.66	37.75	54.00	16.25	Horizontal

11ac(VHT20)_TX_CH_64_Vetical_Peak



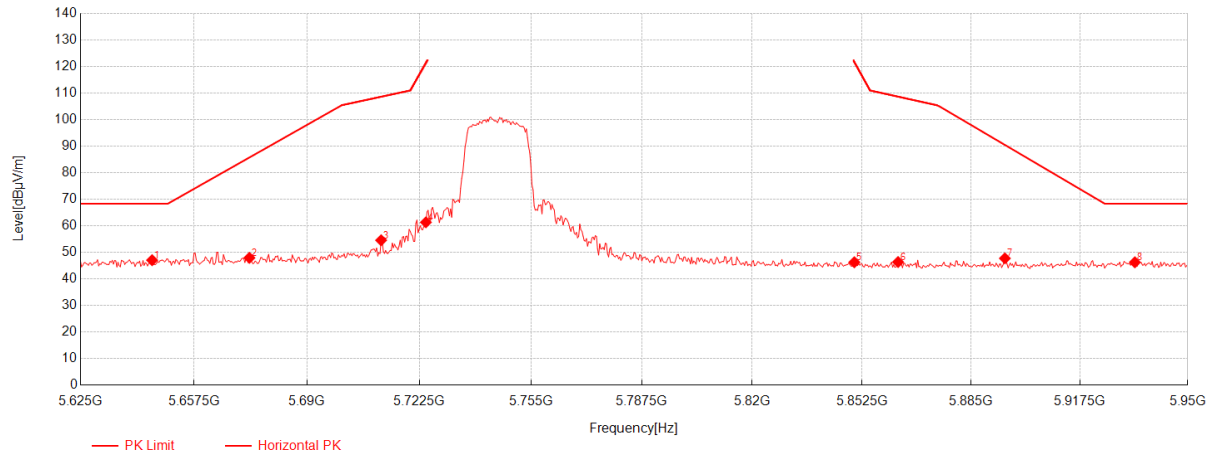
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.2	48.86	31.70	-22.66	57.90	74.00	16.10	Vertical
2	5350.9	43.09	31.70	-22.66	52.13	74.00	21.87	Vertical

11ac(VHT20)_TX_CH_64_Vetical_Average



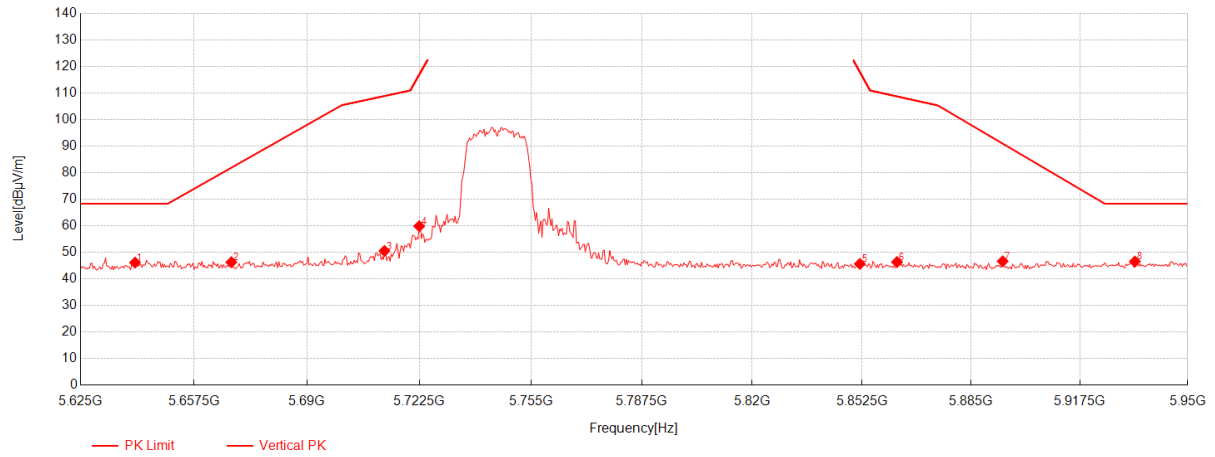
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.3	28.08	31.70	-22.66	37.12	54.00	16.88	Vertical
2	5351.2	28.09	31.70	-22.66	37.13	54.00	16.87	Vertical

11ac(VHT20)_TX_CH_149_Horizontal_Peak



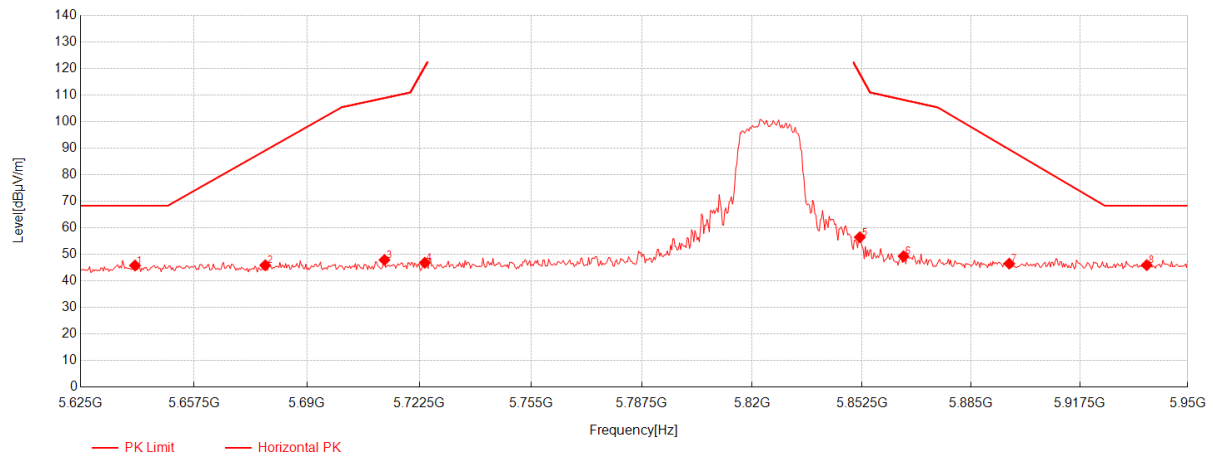
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5645.475	37.31	32.46	-22.75	47.02	68.30	21.28	Horizontal
2	5673.425	38.38	32.50	-22.97	47.91	85.68	37.77	Horizontal
3	5711.45	45.23	32.50	-23.20	54.53	108.51	53.98	Horizontal
4	5724.45	52.03	32.50	-23.24	61.29	121.05	59.76	Horizontal
5	5850.225	36.61	32.80	-23.17	46.24	121.79	75.55	Horizontal
6	5863.225	36.72	32.72	-23.10	46.34	108.59	62.25	Horizontal
7	5895.075	38.09	32.53	-22.91	47.71	90.41	42.70	Horizontal
8	5934.075	36.17	32.77	-22.71	46.23	68.30	22.07	Horizontal

11ac(VHT20)_TX_CH_149_Vertical_Peak



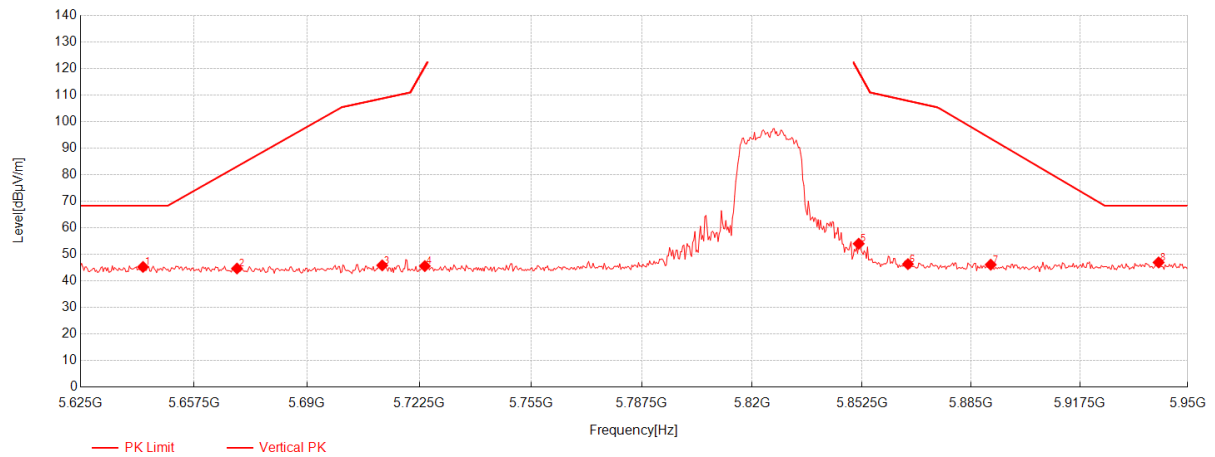
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5640.6	36.41	32.42	-22.71	46.12	68.30	22.18	Vertical
2	5668.225	36.70	32.50	-22.93	46.27	81.82	35.55	Vertical
3	5712.425	41.22	32.50	-23.21	50.51	108.78	58.27	Vertical
4	5722.5	50.56	32.50	-23.24	59.82	116.60	56.78	Vertical
5	5851.85	36.00	32.79	-23.16	45.63	118.08	72.45	Vertical
6	5862.9	36.70	32.72	-23.10	46.32	108.69	62.37	Vertical
7	5894.425	36.99	32.53	-22.91	46.61	90.89	44.28	Vertical
8	5934.075	36.45	32.77	-22.71	46.51	68.30	21.79	Vertical

11ac(VHT20)_TX_CH_165_Horizontal_Peak



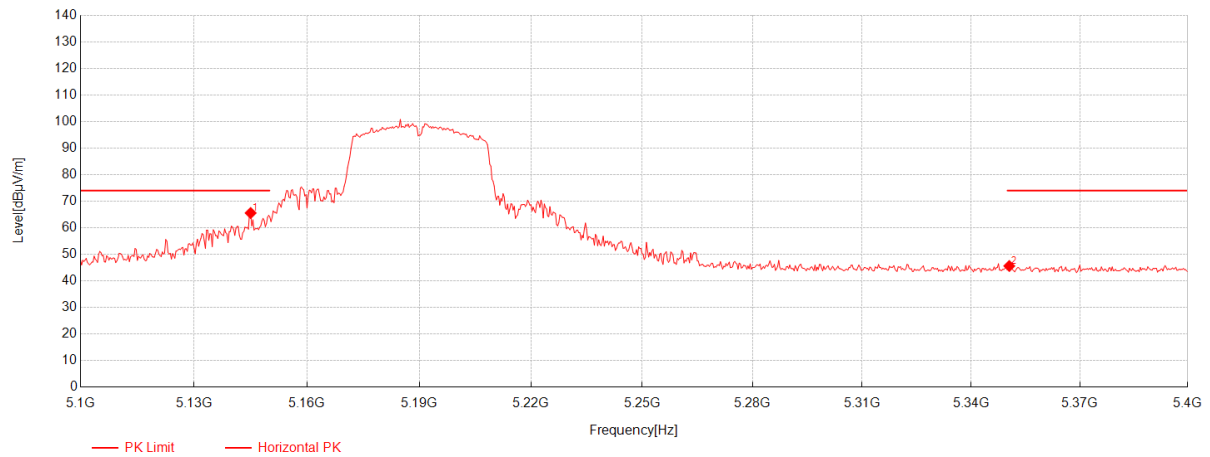
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5640.6	36.07	32.42	-22.71	45.78	68.30	22.52	Horizontal
2	5677.975	36.36	32.50	-23.00	45.86	89.04	43.18	Horizontal
3	5712.425	38.57	32.50	-23.21	47.86	108.78	60.92	Horizontal
4	5724.125	37.55	32.50	-23.24	46.81	120.31	73.50	Horizontal
5	5851.85	46.78	32.79	-23.16	56.41	118.08	61.67	Horizontal
6	5864.85	39.66	32.71	-23.09	49.28	108.14	58.86	Horizontal
7	5896.375	36.85	32.52	-22.90	46.47	89.44	42.97	Horizontal
8	5937.65	35.81	32.80	-22.69	45.92	68.30	22.38	Horizontal

11ac(VHT20)_TX_CH_165_Vertical_Peak



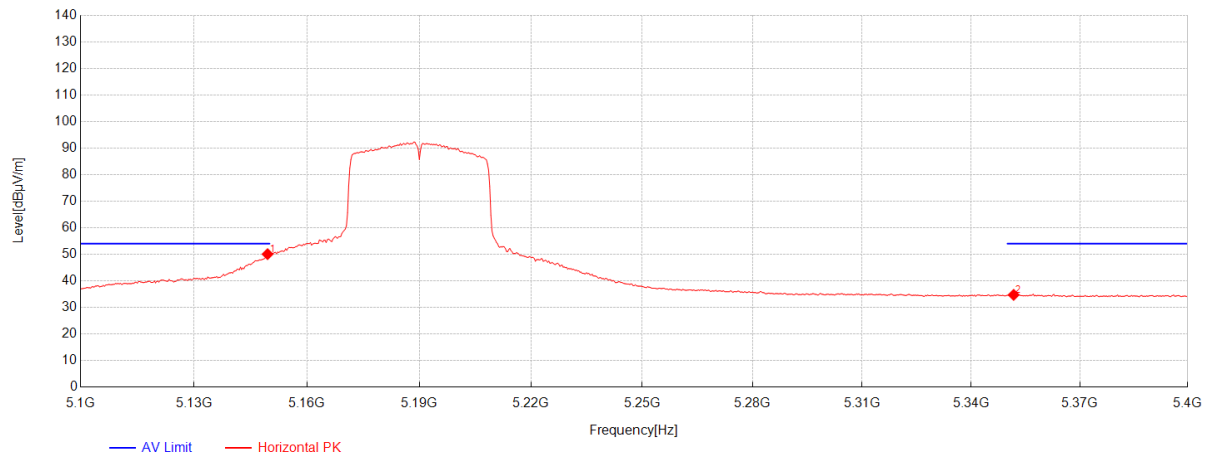
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5642.875	35.53	32.44	-22.73	45.24	68.30	23.06	Vertical
2	5669.85	35.09	32.50	-22.94	44.65	83.03	38.38	Vertical
3	5711.775	36.53	32.50	-23.21	45.82	108.60	62.78	Vertical
4	5724.125	36.31	32.50	-23.24	45.57	120.31	74.74	Vertical
5	5851.525	44.35	32.79	-23.17	53.97	118.82	64.85	Vertical
6	5866.15	36.68	32.70	-23.08	46.30	107.78	61.48	Vertical
7	5890.85	36.47	32.55	-22.93	46.09	93.54	47.45	Vertical
8	5941.225	36.77	32.83	-22.67	46.93	68.30	21.37	Vertical

11ac(VHT40)_TX_CH_38_Horizontal_Peak



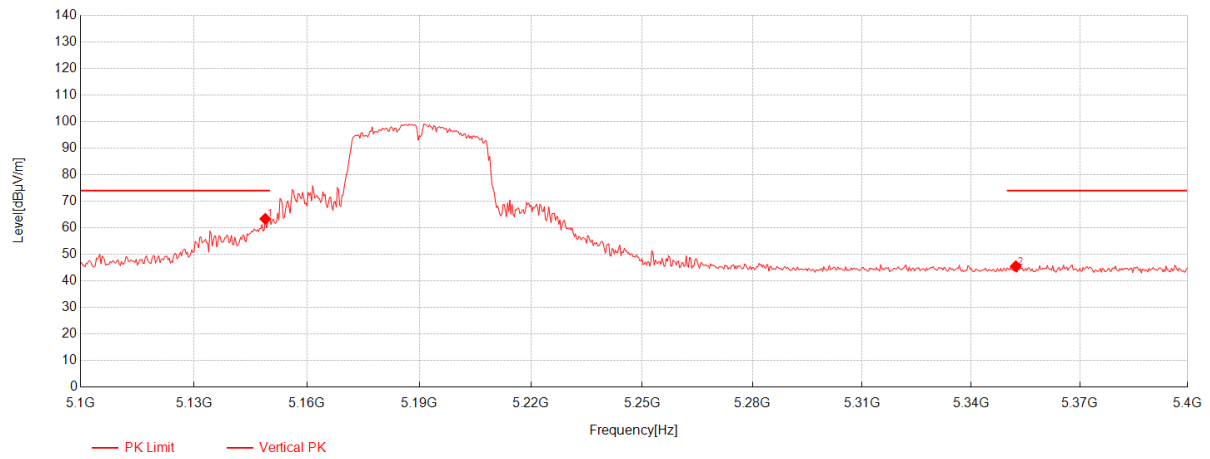
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5145	55.43	31.81	-21.71	65.53	74.00	8.47	Horizontal
2	5350.5	36.55	31.70	-22.66	45.59	74.00	28.41	Horizontal

11ac(VHT40)_TX_CH_38_Horizontal_Average



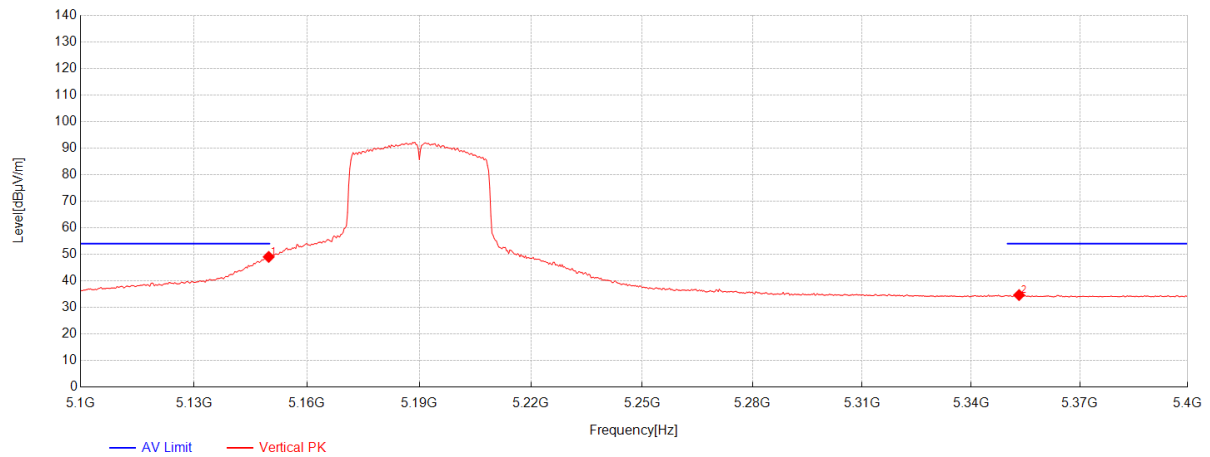
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5149.5	39.94	31.80	-21.69	50.05	54.00	3.95	Horizontal
2	5351.7	25.69	31.70	-22.66	34.73	54.00	19.27	Horizontal

11ac(VHT40)_TX_CH_38_Vetical_Peak



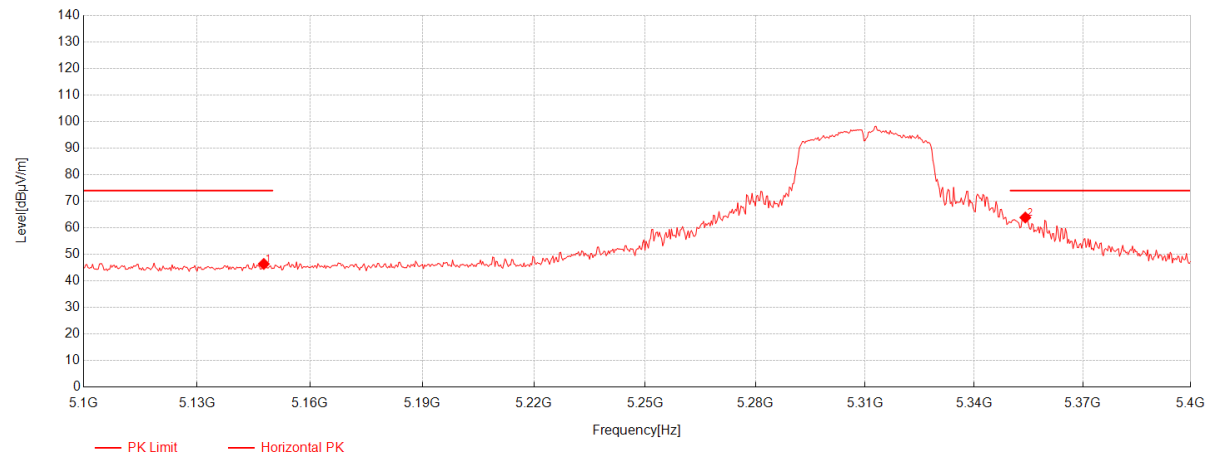
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.9	53.22	31.80	-21.69	63.33	74.00	10.67	Vertical
2	5352.3	36.46	31.70	-22.66	45.50	74.00	28.50	Vertical

11ac(VHT40)_TX_CH_38_Vetical_Average



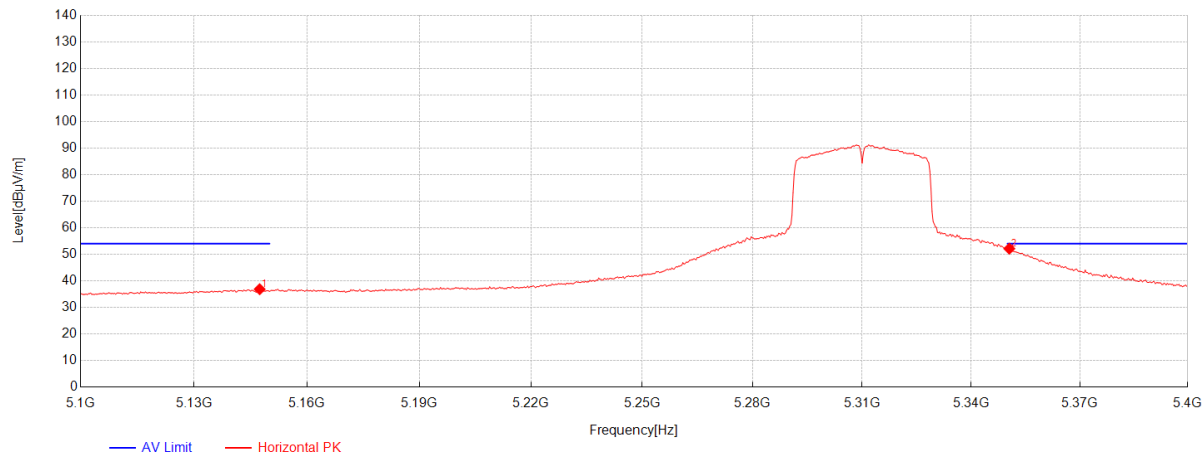
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5149.8	38.90	31.80	-21.69	49.01	54.00	4.99	Vertical
2	5353.2	25.61	31.70	-22.66	34.65	54.00	19.35	Vertical

11ac(VHT40)_TX_CH_62_Horizontal_Peak



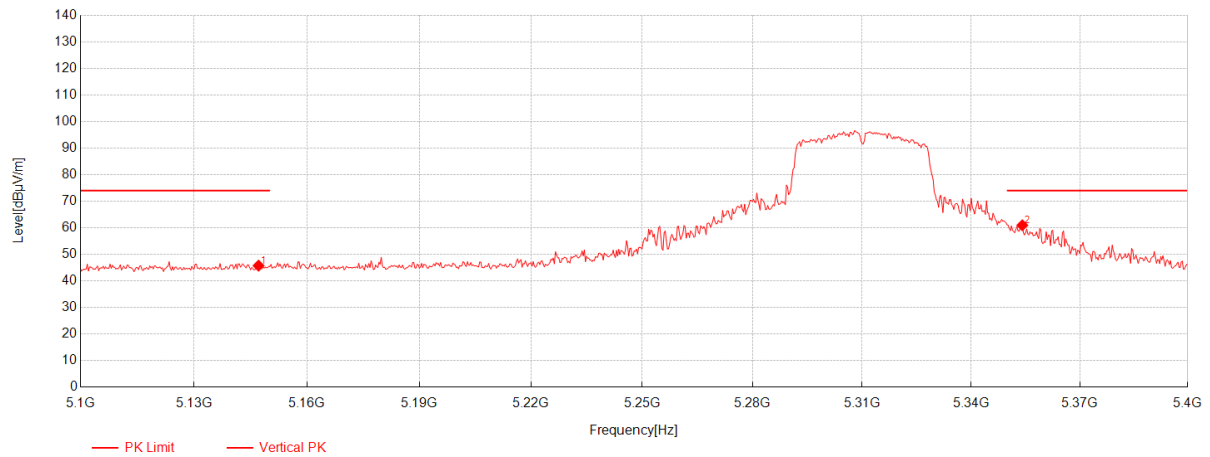
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.7	36.27	31.80	-21.70	46.37	74.00	27.63	Horizontal
2	5354.1	54.79	31.70	-22.66	63.83	74.00	10.17	Horizontal

11ac(VHT40)_TX_CH_62_Horizontal_Average



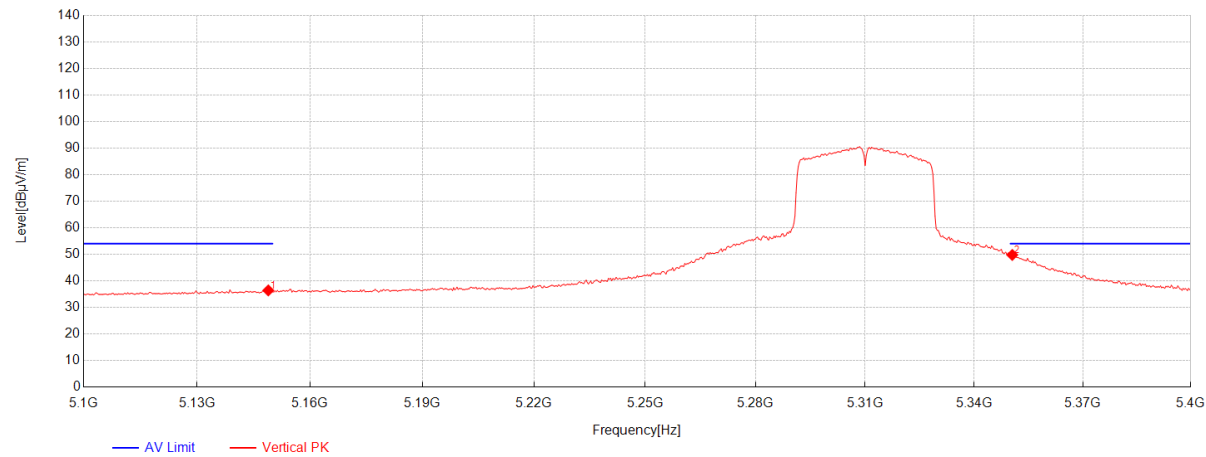
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.4	26.74	31.81	-21.70	36.85	54.00	17.15	Horizontal
2	5350.5	43.07	31.70	-22.66	52.11	54.00	1.89	Horizontal

11ac(VHT40)_TX_CH_62_Vetical_Peak



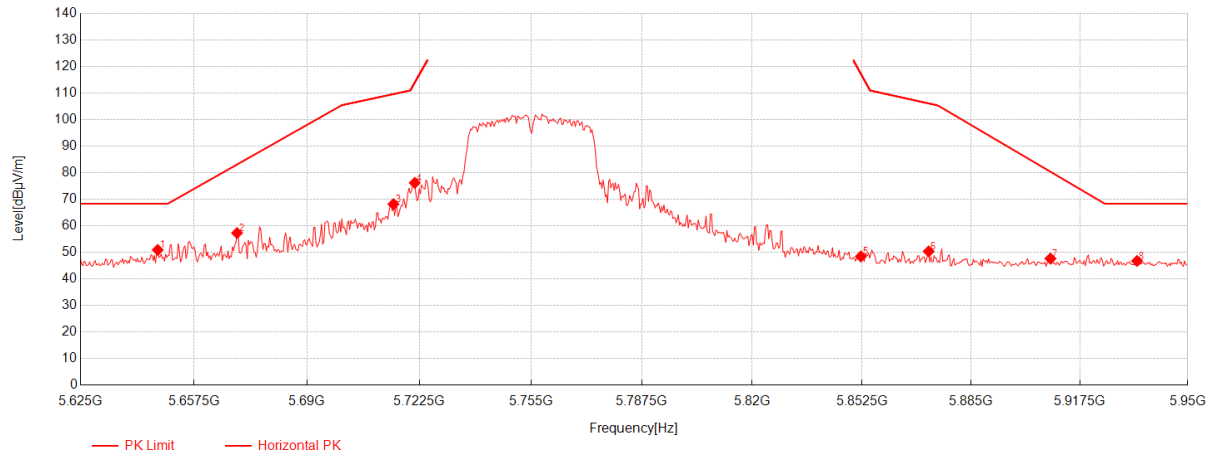
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.1	35.60	31.81	-21.70	45.71	74.00	28.29	Vertical
2	5354.1	51.87	31.70	-22.66	60.91	74.00	13.09	Vertical

11ac(VHT40)_TX_CH_62_Vetical_Average



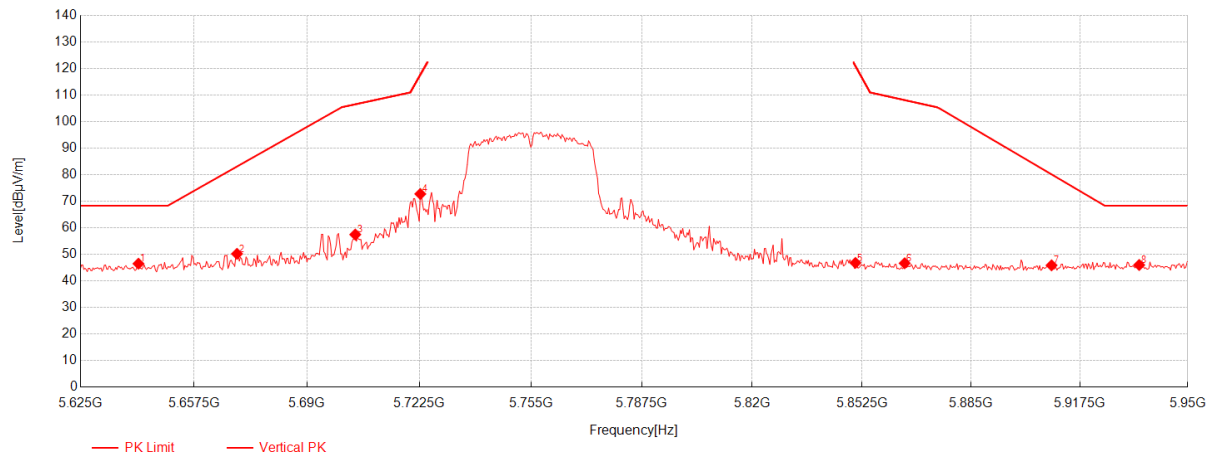
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.9	26.30	31.80	-21.69	36.41	54.00	17.59	Vertical
2	5350.5	40.71	31.70	-22.66	49.75	54.00	4.25	Vertical

11ac(VHT40)_TX_CH_151_Horizontal_Peak



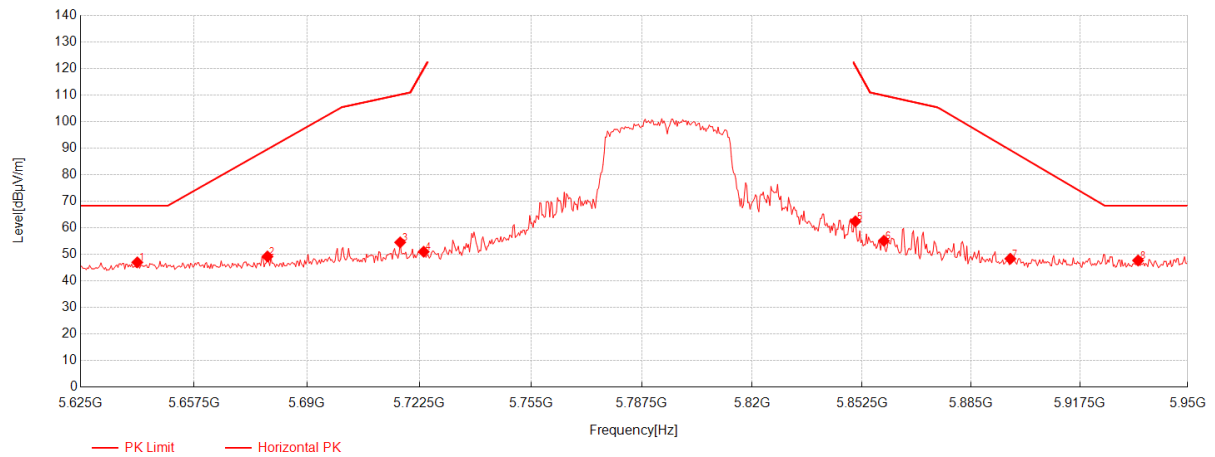
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5647.1	41.17	32.48	-22.76	50.89	68.30	17.41	Horizontal
2	5669.85	47.69	32.50	-22.94	57.25	83.03	25.78	Horizontal
3	5715.025	58.84	32.50	-23.22	68.12	109.51	41.39	Horizontal
4	5721.2	66.83	32.50	-23.23	76.10	113.64	37.54	Horizontal
5	5852.175	38.80	32.79	-23.16	48.43	117.34	68.91	Horizontal
6	5872.325	40.70	32.67	-23.04	50.33	106.05	55.72	Horizontal
7	5908.725	37.90	32.57	-22.84	47.63	80.31	32.68	Horizontal
8	5934.725	36.65	32.78	-22.70	46.73	68.30	21.57	Horizontal

11ac(VHT40)_TX_CH_151_Vertical_Peak



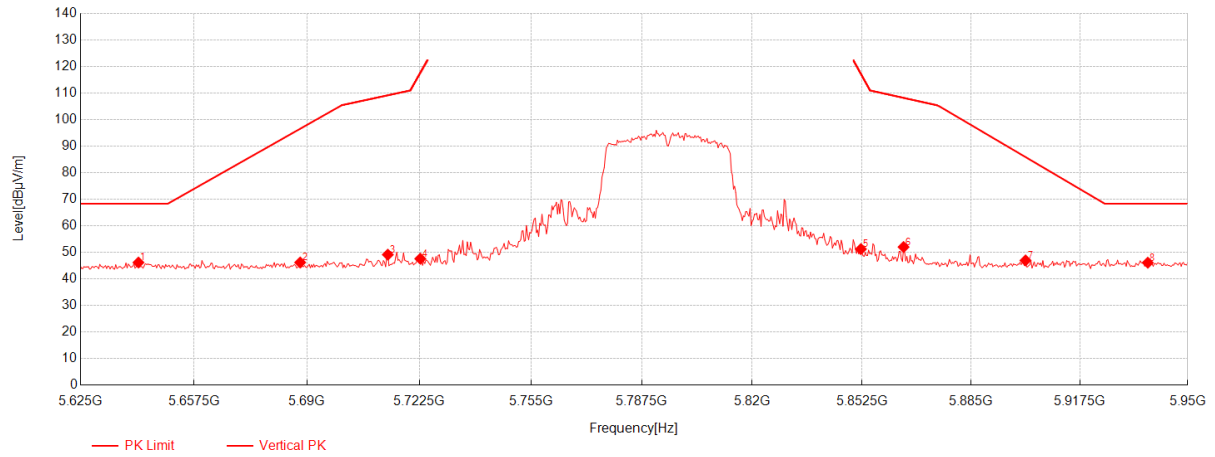
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5641.575	36.76	32.43	-22.72	46.47	68.30	21.83	Vertical
2	5669.85	40.61	32.50	-22.94	50.17	83.03	32.86	Vertical
3	5703.975	48.10	32.50	-23.18	57.42	106.41	48.99	Vertical
4	5722.825	63.44	32.50	-23.24	72.70	117.34	44.64	Vertical
5	5850.55	37.12	32.80	-23.17	46.75	121.05	74.30	Vertical
6	5865.175	37.00	32.71	-23.09	46.62	108.05	61.43	Vertical
7	5909.05	36.11	32.57	-22.83	45.85	80.07	34.22	Vertical
8	5935.375	35.90	32.78	-22.70	45.98	68.30	22.32	Vertical

11ac(VHT40)_TX_CH_159_Horizontal_Peak



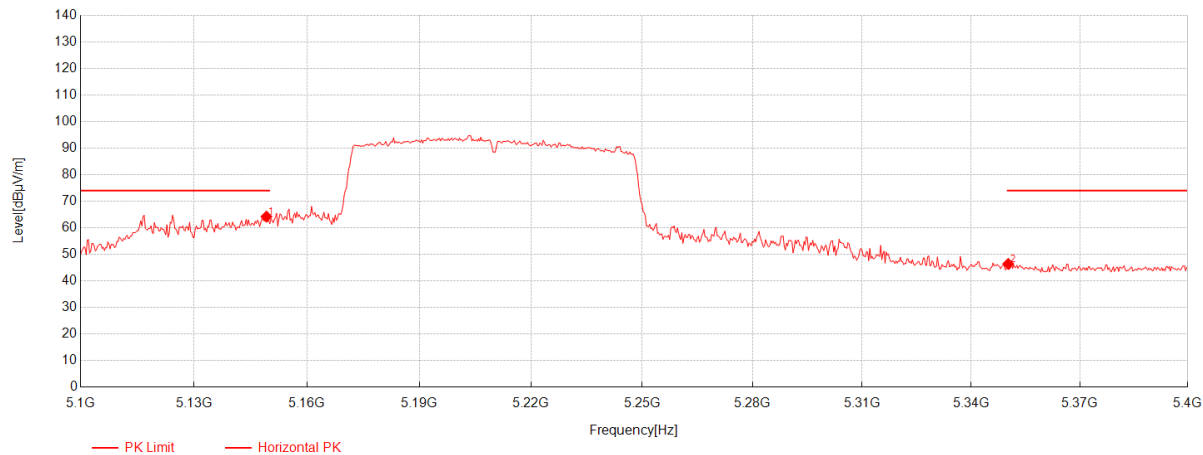
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5641.25	37.26	32.43	-22.72	46.97	68.30	21.33	Horizontal
2	5678.625	39.69	32.50	-23.01	49.18	89.52	40.34	Horizontal
3	5716.975	45.20	32.50	-23.22	54.48	110.05	55.57	Horizontal
4	5723.8	41.71	32.50	-23.24	50.97	119.56	68.59	Horizontal
5	5850.55	52.74	32.80	-23.17	62.37	121.05	58.68	Horizontal
6	5859	45.46	32.75	-23.12	55.09	109.78	54.69	Horizontal
7	5896.7	38.71	32.52	-22.90	48.33	89.20	40.87	Horizontal
8	5935.05	37.59	32.78	-22.70	47.67	68.30	20.63	Horizontal

11ac(VHT40)_TX_CH_159_Veritical_Peak



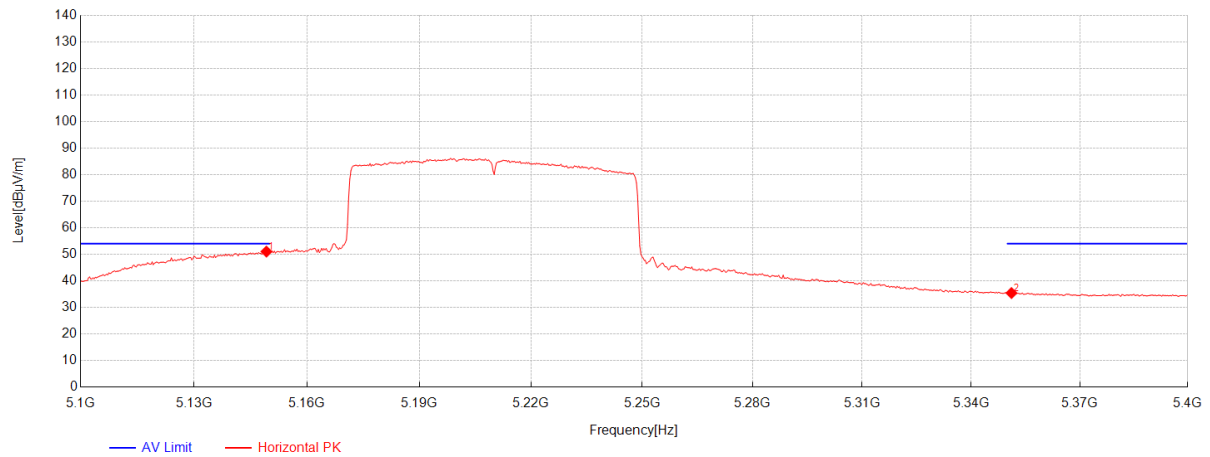
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5641.575	36.44	32.43	-22.72	46.15	68.30	22.15	Vertical
2	5688.05	36.74	32.50	-23.08	46.16	96.49	50.33	Vertical
3	5713.4	39.81	32.50	-23.21	49.10	109.05	59.95	Vertical
4	5722.825	38.31	32.50	-23.24	47.57	117.34	69.77	Vertical
5	5852.175	41.56	32.79	-23.16	51.19	117.34	66.15	Vertical
6	5864.85	42.35	32.71	-23.09	51.97	108.14	56.17	Vertical
7	5901.25	37.30	32.51	-22.87	46.94	85.84	38.90	Vertical
8	5937.975	35.97	32.80	-22.69	46.08	68.30	22.22	Vertical

11ac(VHT80)_TX_CH_42_Horizontal_Peak



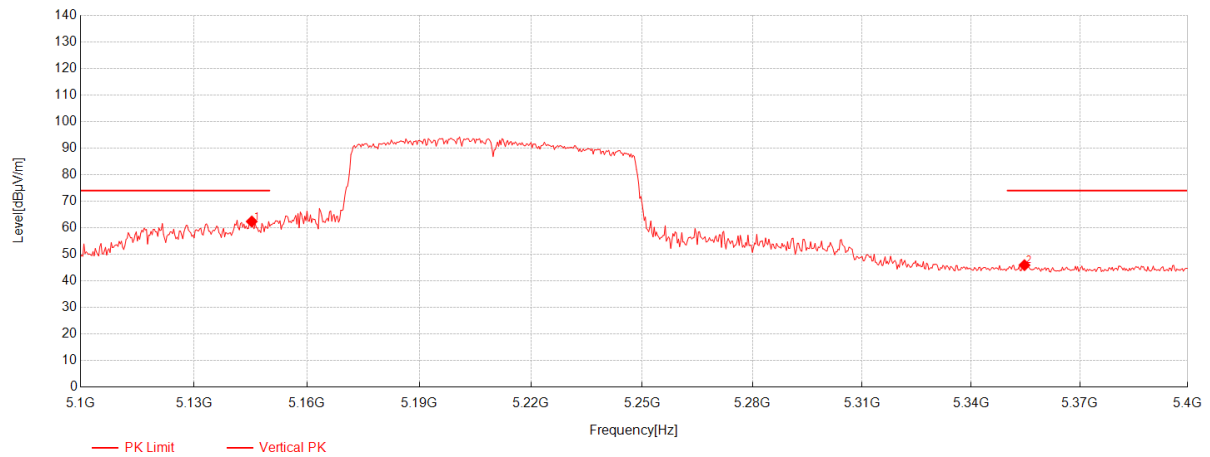
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5149.2	54.07	31.80	-21.69	64.18	74.00	9.82	Horizontal
2	5350.2	37.35	31.70	-22.66	46.39	74.00	27.61	Horizontal

11ac(VHT80)_TX_CH_42_Horizontal_Average



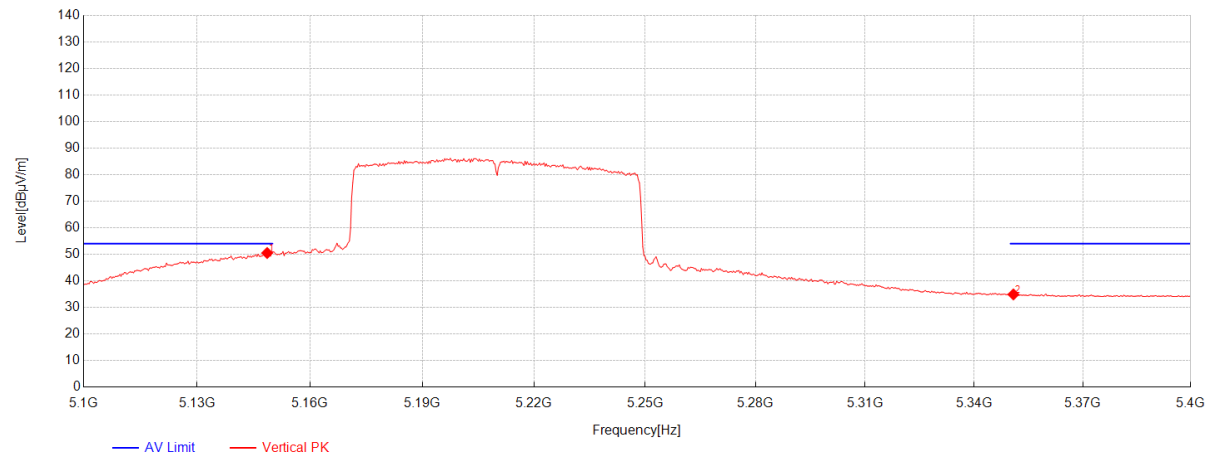
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5149.2	40.90	31.80	-21.69	51.01	54.00	2.99	Horizontal
2	5351.1	26.37	31.70	-22.66	35.41	54.00	18.59	Horizontal

11ac(VHT80)_TX_CH_42_Vetical_Peak



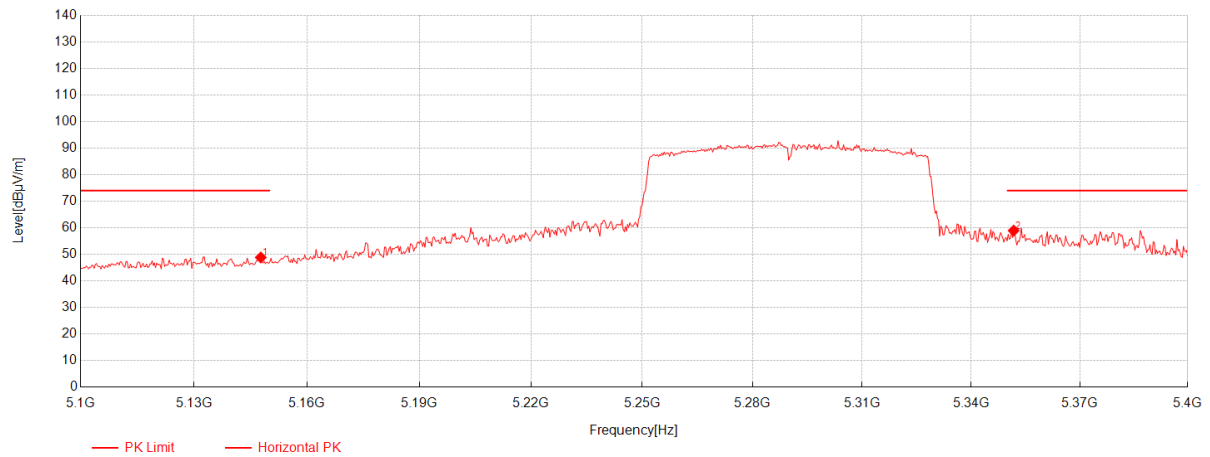
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5145.3	52.25	31.81	-21.71	62.35	74.00	11.65	Vertical
2	5354.7	36.86	31.70	-22.66	45.90	74.00	28.10	Vertical

11ac(VHT80)_TX_CH_42_Vetical_Average



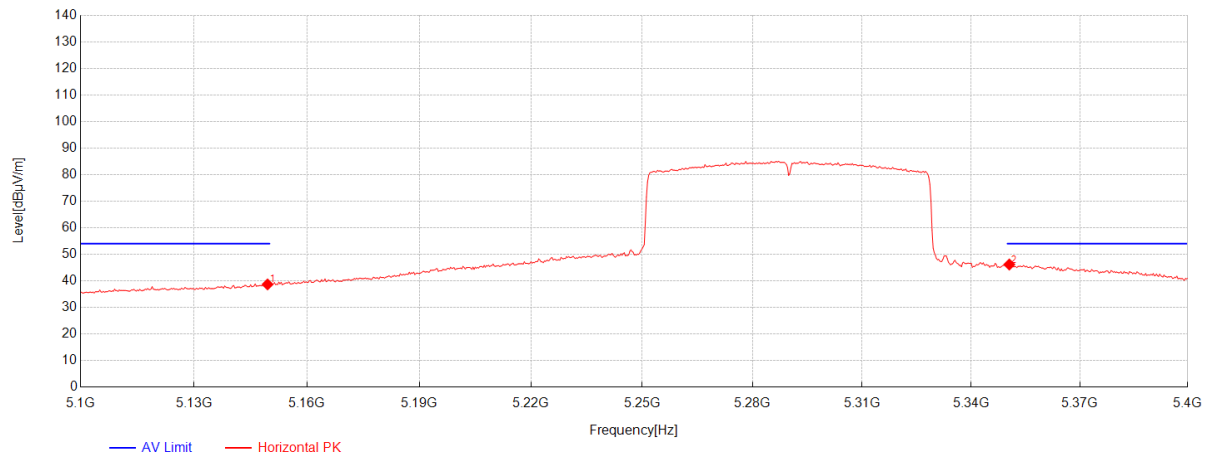
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.6	40.37	31.80	-21.70	50.47	54.00	3.53	Vertical
2	5350.8	25.85	31.70	-22.66	34.89	54.00	19.11	Vertical

11ac(VHT80)_TX_CH_58_Horizontal_Peak



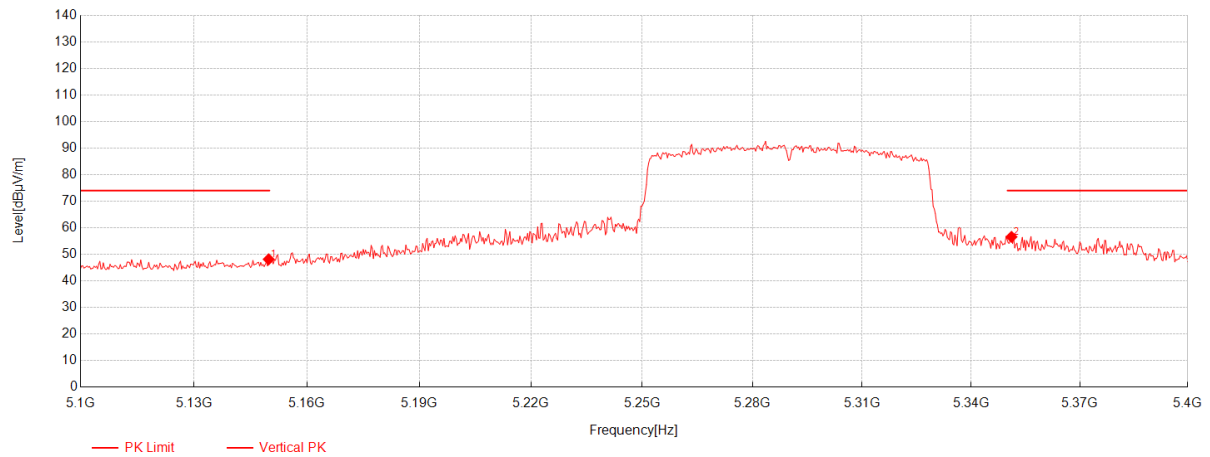
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.7	38.70	31.80	-21.70	48.80	74.00	25.20	Horizontal
2	5351.7	49.87	31.70	-22.66	58.91	74.00	15.09	Horizontal

11ac(VHT80)_TX_CH_58_Horizontal_Average



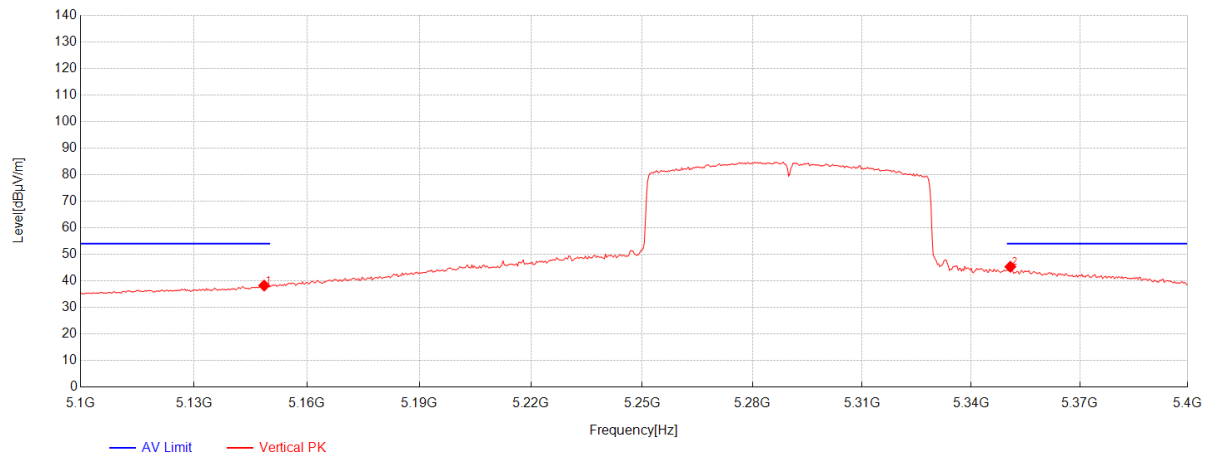
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5149.5	28.55	31.80	-21.69	38.66	54.00	15.34	Horizontal
2	5350.5	37.10	31.70	-22.66	46.14	54.00	7.86	Horizontal

11ac(VHT80)_TX_CH_58_Vertical_Peak



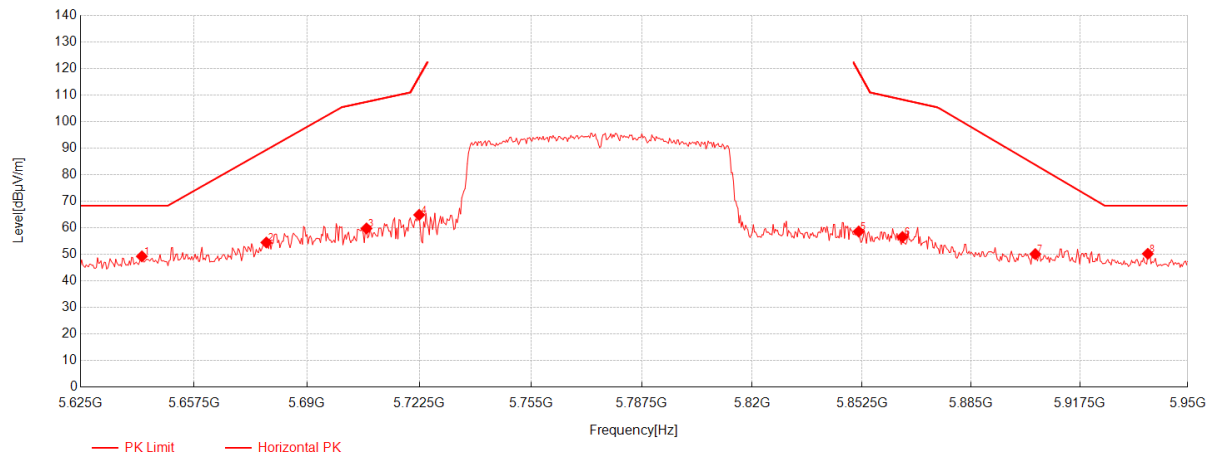
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5149.8	38.00	31.80	-21.69	48.11	74.00	25.89	Vertical
2	5351.1	47.52	31.70	-22.66	56.56	74.00	17.44	Vertical

11ac(VHT80)_TX_CH_58_Vetical_Average



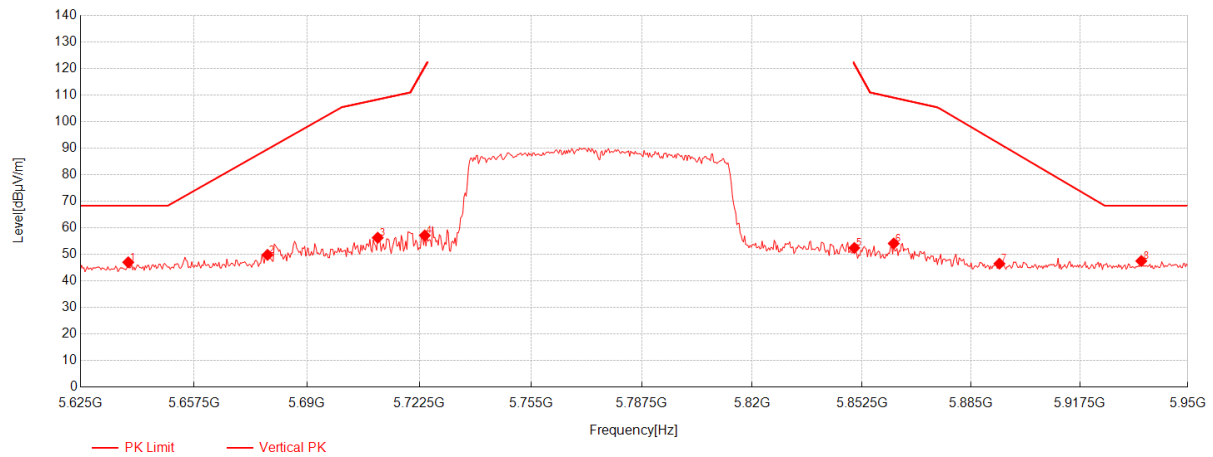
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.6	28.13	31.80	-21.70	38.23	54.00	15.77	Vertical
2	5350.8	36.28	31.70	-22.66	45.32	54.00	8.68	Vertical

11ac(VHT80)_TX_CH_155_Horizontal_Peak



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5642.55	39.51	32.44	-22.73	49.22	68.30	19.08	Horizontal
2	5678.3	44.93	32.50	-23.00	54.43	89.28	34.85	Horizontal
3	5707.225	50.41	32.50	-23.19	59.72	107.33	47.61	Horizontal
4	5722.5	55.58	32.50	-23.24	64.84	116.60	51.76	Horizontal
5	5851.525	48.95	32.79	-23.17	58.57	118.82	60.25	Horizontal
6	5864.525	46.89	32.71	-23.09	56.51	108.23	51.72	Horizontal
7	5904.175	40.41	32.53	-22.86	50.08	83.67	33.59	Horizontal
8	5937.975	40.06	32.80	-22.69	50.17	68.30	18.13	Horizontal

11ac(VHT80)_TX_CH_155_Vertical_Peak



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5638.65	37.27	32.41	-22.70	46.98	68.30	21.32	Vertical
2	5678.625	40.28	32.50	-23.01	49.77	89.52	39.75	Vertical
3	5710.475	46.93	32.50	-23.20	56.23	108.24	52.01	Vertical
4	5724.125	47.83	32.50	-23.24	57.09	120.31	63.22	Vertical
5	5850.225	42.76	32.80	-23.17	52.39	121.79	69.40	Vertical
6	5861.925	44.43	32.73	-23.10	54.06	108.96	54.90	Vertical
7	5893.45	36.85	32.54	-22.92	46.47	91.61	45.14	Vertical
8	5936.025	37.38	32.79	-22.70	47.47	68.30	20.83	Vertical

7.4 Duty Cycle

Test Requirement ANSI C63.10 (2020) Section 12.2

Test Method: ANSI C63.10 (2020) Section 12.2

7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 22.6 °C

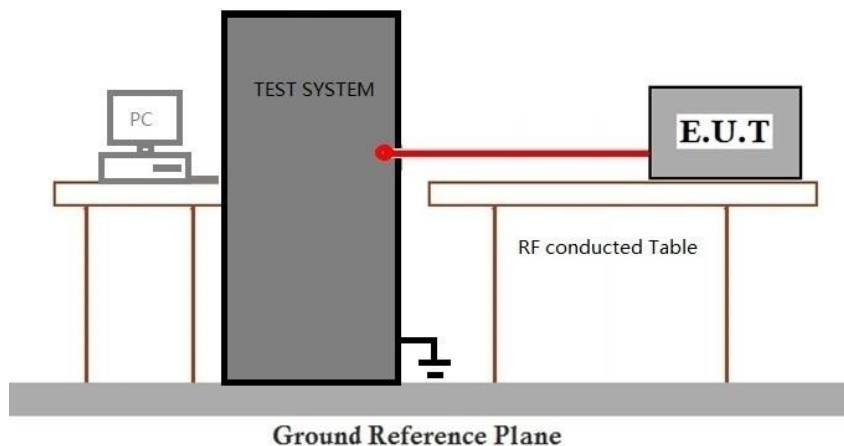
Humidity: 47.7 % RH

Atmospheric Pressure: 1010 mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-2A) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.
Final test	03	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.

7.4.3 Test Setup Diagram



7.4.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.5 99% Bandwidth

Test Requirement ANSI C63.10 (2020) Section 12.5.3

Test Method: ANSI C63.10 (2020) Section 12.5.3

7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 22.7 °C

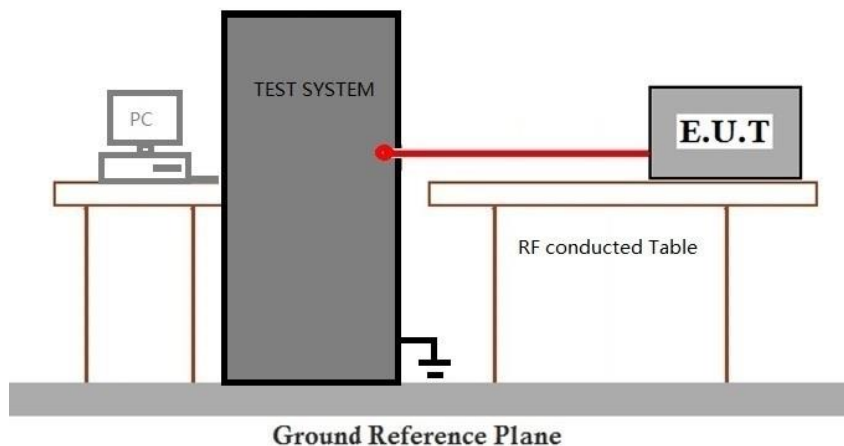
Humidity: 47.8 % RH

Atmospheric Pressure: 1010 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-2A) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.
Final test	03	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.

7.5.3 Test Setup Diagram



7.5.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.6 26dB Emission Bandwidth

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)
Test Method: ANSI C63.10 (2020) Section 12.5.2

7.6.1 E.U.T. Operation

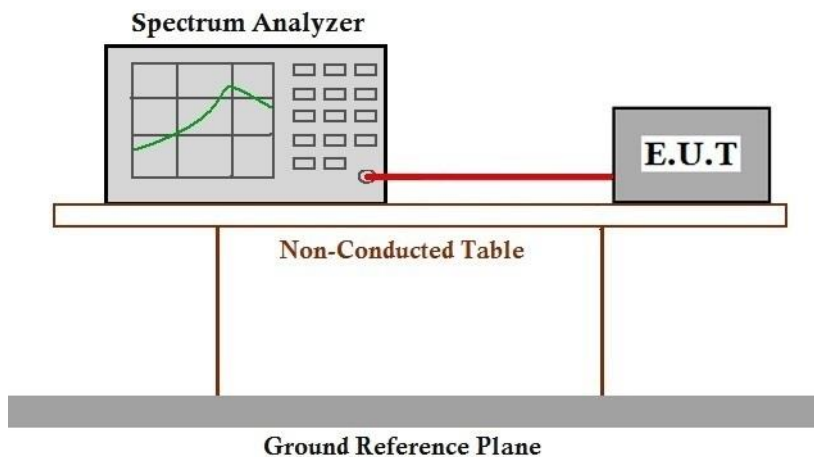
Operating Environment:

Temperature: 22.7 °C Humidity: 47.8 % RH Atmospheric Pressure: 1010 mbar

7.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-2A) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.

7.6.3 Test Setup Diagram



7.6.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.7 Minimum 6 dB Bandwidth (5.725-5.85 GHz band)

Test Requirement 47 CFR Part 15, Subpart E 15.407 (e)

Test Method: ANSI C63.10 (2020) Section 12.5.1

Limit:

Frequency band(MHz)	Limit
5725-5850	≥ 500 kHz

7.7.1 E.U.T. Operation

Operating Environment:

Temperature: 22.7 °C

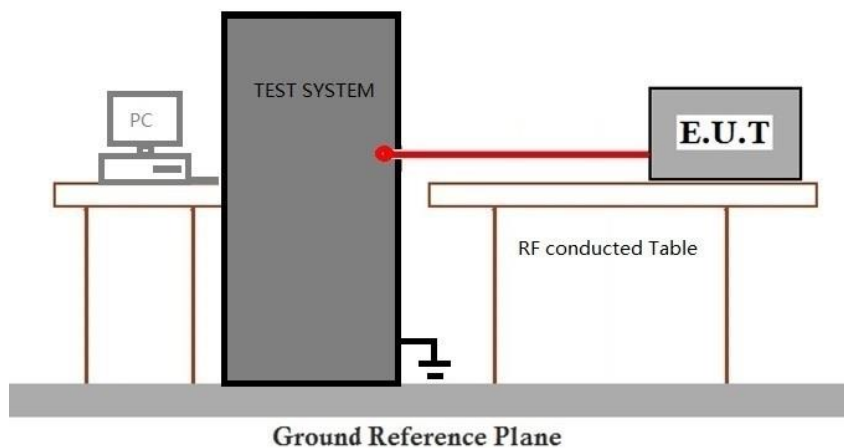
Humidity: 47.6 % RH

Atmospheric Pressure: 1010 mbar

7.7.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.

7.7.3 Test Setup Diagram



7.7.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.8 Maximum Conducted Output Power

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)

Test Method: ANSI C63.10 (2020) Section 12.4

Limit:

Frequency band(MHz)	Limit
5150-5250	≤1W(30dBm) for master device
	≤250mW(24dBm) for client device
5250-5350	≤250mW(24dBm) or 11dBm+10logB*
5470-5725	≤250mW(24dBm) or 11dBm+10logB*
5725-5850	≤1W(30dBm)
Remark:	* Where B is the 26dB emission bandwidth in MHz. The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.

7.8.1 E.U.T. Operation

Operating Environment:

Temperature: 22.7 °C

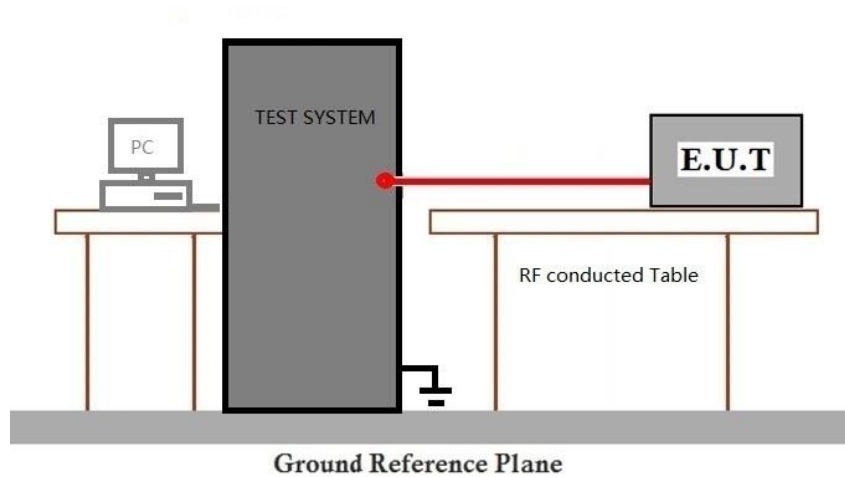
Humidity: 47.6 % RH

Atmospheric Pressure: 1010 mbar

7.8.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-2A) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.
Final test	03	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.

7.8.3 Test Setup Diagram



7.8.4 Measurement Procedure and Data

Note: Since the verify power the same operating range bandwidth and smaller power can be covered by the higher power.

AV Output power Level = Reading level + Cable loss + DCCF

Please Refer to Appendix for Details

7.9 Power Spectral Density

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)

Test Method: ANSI C63.10 (2020) Section 12.6

Limit:

Frequency band(MHz)	Limit
5150-5250	≤17dBm in 1MHz for master device
	≤11dBm in 1MHz for client device
5250-5350	≤11dBm in 1MHz for client device
5470-5725	≤11dBm in 1MHz for client device
5725-5850	≤30dBm in 500 kHz
Remark:	The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test.

7.9.1 E.U.T. Operation

Operating Environment:

Temperature: 22.7 °C

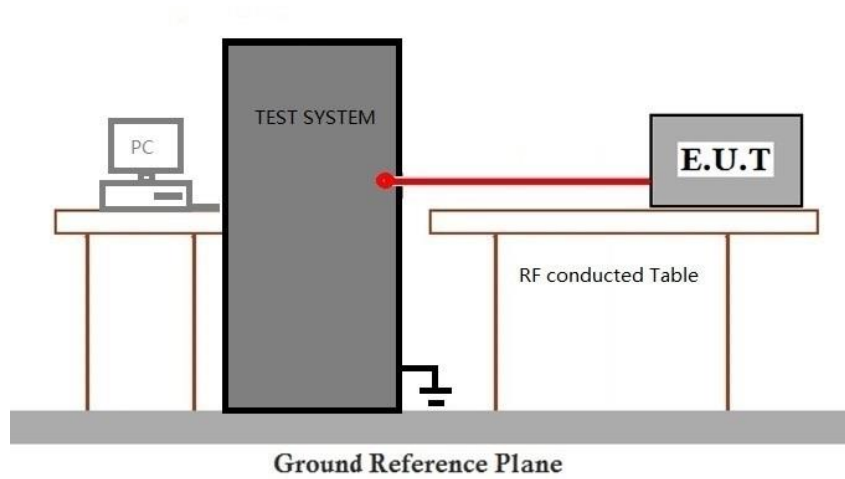
Humidity: 47.5 % RH

Atmospheric Pressure: 1010 mbar

7.9.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-2A) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.
Final test	03	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.

7.9.3 Test Setup Diagram



7.9.4 Measurement Procedure and Data

RBW conversion factor from 300kHz to 500kHz (2.22dB) for UNII Band 3 has been considered.

Please Refer to Appendix for Details

7.10 Frequency Stability

Test Requirement 47 CFR Part 15, Subpart E 15.407 (g)

Test Method: ANSI C63.10 (2020) Section 6.8

7.10.1 E.U.T. Operation

Operating Environment:

Temperature: 22.7 °C

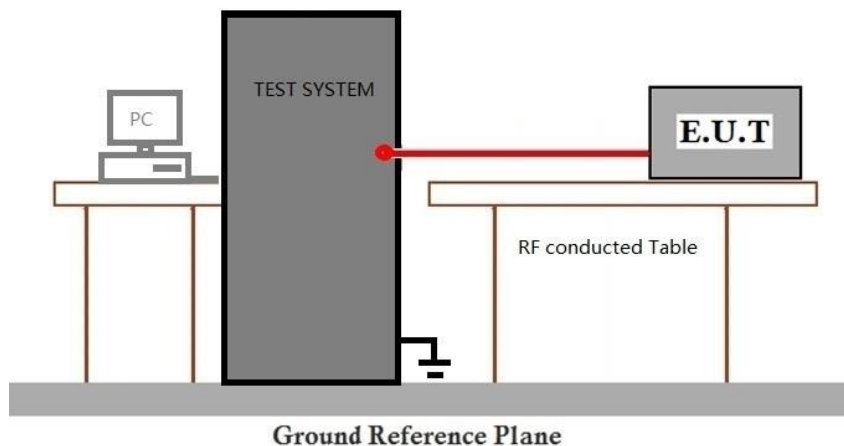
Humidity: 47.2 % RH

Atmospheric Pressure: 1010 mbar

7.10.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-2A) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.
Final test	03	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11ac 20/40/80, Only the data of worst case is recorded in the report.

7.10.3 Test Setup Diagram



7.10.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.11 Channel Move Time

Test Requirement KDB 905462 D02 Section 5.1
Test Method: KDB 905462 D02 Section 7.8.3

Limit:

Test item	Limit	Applicability	
		Master Device or client with Radar Detection	Client without Radar Detection
Non-occupancy period	Minimum 30 minutes	Yes	Not required
Channel Availability Check Time	60 seconds	Yes	Not required
Channel Move Time	10 seconds See Note 1.	Yes	Yes
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	Yes	Yes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.	Yes	Not required

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

7.11.1 E.U.T. Operation

Operating Environment:

Temperature: 22.7 °C

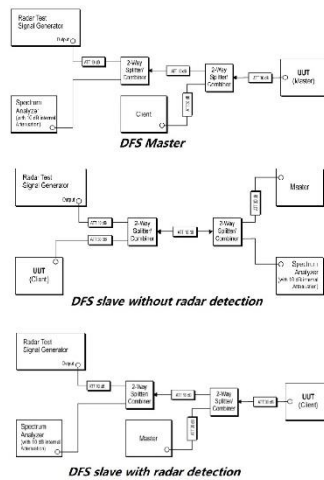
Humidity: 47.2 % RH

Atmospheric Pressure: 1010 mbar

7.11.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	Normal operating_Keep the EUT communication with the companion device.

7.11.3 Test Setup Diagram



7.11.4 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: $Dwell (0.3ms) = S (12000ms) / B (4000)$; where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: $C (ms) = N \times Dwell (0.3ms)$; where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

Please Refer to Appendix for Details

7.12 Channel Closing Transmission Time

Test Requirement KDB 905462 D02 Section 5.1
Test Method: KDB 905462 D02 Section 7.8.3

Limit:

Test item	Limit	Applicability	
		Master Device or client with Radar Detection	Client without Radar Detection
Non-occupancy period	Minimum 30 minutes	Yes	Not required
Channel Availability Check Time	60 seconds	Yes	Not required
Channel Move Time	10 seconds See Note 1.	Yes	Yes
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	Yes	Yes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.	Yes	Not required
Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.			

7.12.1 E.U.T. Operation

Operating Environment:

Temperature: 23.6 °C

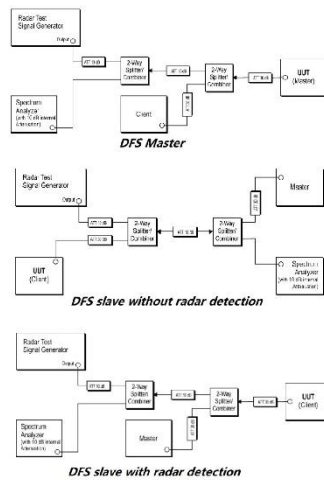
Humidity: 46.7 % RH

Atmospheric Pressure: 1010 mbar

7.12.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	Normal operating_Keep the EUT communication with the companion device.

7.12.3 Test Setup Diagram



7.12.4 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: $Dwell (0.3ms) = S (12000ms) / B (4000)$; where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: $C (ms) = N \times Dwell (0.3ms)$; where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

Please Refer to Appendix for Details

8 Test Setup Photo

Refer to Appendix - Test Setup Photo for KSCR2601000148AU

9 EUT Constructional Details (EUT Photos)

Refer to Appendix_Photographs of EUT Constructional Details for KSCR2601000148AU

10 Appendix

1. Duty Cycle

1.1 Test Result

1.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	1.392	1.436	96.94	0.14	0.03
		5200	1.392	1.436	96.94	0.14	0.00
		5240	1.393	1.437	96.94	0.14	0.06
		5260	1.393	1.437	96.94	0.14	0.03
		5300	1.393	1.437	96.94	0.14	0.10
		5320	1.393	1.437	96.94	0.14	0.06
		5745	1.393	1.437	96.94	0.14	0.10
		5785	1.392	1.436	96.94	0.14	0.07
		5825	1.392	1.437	96.87	0.14	0.06
802.11ac (VHT20)	SISO	5180	1.314	1.357	96.83	0.14	0.03
		5200	1.313	1.356	96.83	0.14	0.03
		5240	1.314	1.357	96.83	0.14	0.03
		5260	1.313	1.358	96.69	0.15	0.07
		5300	1.312	1.356	96.76	0.14	0.07
		5320	1.312	1.357	96.68	0.15	0.03
		5745	1.314	1.357	96.83	0.14	0.03
		5785	1.314	1.357	96.83	0.14	0.03
		5825	1.314	1.356	96.90	0.14	0.00
802.11ac (VHT40)	SISO	5190	0.653	0.696	93.82	0.28	0.03
		5230	0.653	0.696	93.82	0.28	0.00
		5270	0.652	0.696	93.68	0.28	0.04
		5310	0.652	0.696	93.68	0.28	0.03
		5755	0.653	0.696	93.82	0.28	0.03
		5795	0.654	0.696	93.97	0.27	0.03
802.11ac (VHT80)	SISO	5210	0.326	0.369	88.35	0.54	0.07
		5290	0.324	0.368	88.04	0.55	0.11
		5775	0.326	0.369	88.35	0.54	0.00

1.2 Test Graph

1.2.1 Ant1

