TEST REPORT

Application No.:	KSCR2411002399AT
FCC ID:	2AC8UA2431
Applicant:	Anhui Huami Information Technology Co., Ltd.
Address of Applicant:	7/F, Building B2, Huami Global Innovation Center, No. 900, Wangjiang West Road, High-tech Zone, Hefei City, China (Anhui) Pilot Free Trade Zone(230088)
Manufacturer:	Anhui Huami Information Technology Co., Ltd.
Address of Manufacturer:	7/F, Building B2, Huami Global Innovation Center, No. 900, Wangjiang West Road, High-tech Zone, Hefei City, China (Anhui) Pilot Free Trade Zone(230088)
Equipment Under Test (EUT):	
EUT Name:	Amazfit V1TAL
Model No.:	A2431
Trade Mark:	Amazfit
Standard(s) :	47 CFR Part 15, Subpart E 15.407
Date of Receipt:	2024-11-27
Date of Test:	2024-12-17 to 2025-01-08
Date of Issue:	2025-01-09
Test Result:	**Pass***

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

Revision Record			
Version	*Description*	*Date*	*Remark*
00	Original	2025-01-09	/

Authorized for issue by:				
Tested By	*Damon zhou*			
	Damon_Zhou/Project Engineer			
Approved By	*Terry Hou*			
	Terry Hou /Reviewer			

2 Test Summary

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

Radio Spectrum Matter Part					
Item	**Standard**	**Method**	**Requirement**	**Result**	**Test Lab**
Maximum Conducted output power	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II E	47 CFR Part 15, Subpart E 15.407 (a)	Pass	A
Radiated Emissions (Below 1GHz)		KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass	B
Radiated Emissions (Above 1GHz)		KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass	B
Radiated Emissions which fall in the restricted bands		KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass	B
Channel Move Time		KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass	A
Duty Cycle		KDB 789033 D02 II B 1	KDB 789033 D02 II B 1	Pass	A
99% Bandwidth		KDB 789033 D02 II D	N/A	Pass	A
26dB Emission bandwidth		KDB 789033 D02 II C 1	47 CFR Part 15, Subpart E 15.407 (a)	Pass	A
Minimum 6 dB bandwidth (5.725-5.85 GHz band)		KDB 789033 D02 II C 2	47 CFR Part 15, Subpart E 15.407 (e)	Pass	A
Peak Power spectrum density		KDB 789033 D02 II F	47 CFR Part 15, Subpart E 15.407 (a)	Pass	A
Frequency Stability		ANSI C63.10 (2013) Section 6.8	47 CFR Part 15, Subpart E 15.407 (g)	Pass	A
Non-occupancy period		KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass	A
Channel Closing Transmission Time		KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass	A

3   Contents

4 General Information

4.1 Details of E.U.T.

Power supply:	Rechargeable Lion Battery model: PL363536 Nominal Voltage: DC 3.87V Rated Capacity: 610mAh Rated Energy: 2.37Wh
Operation Frequency/Number of channels (20MHz):	U-NII-1: 5180-5240MHz (4 Channels) U-NII-2A: 5260-5320MHz (4 Channels) U-NII-2C: 5500-5700MHz (11 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-2C: 5510-5670MHz (5 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-2C: 5530-5610MHz (2 Channels) U-NII-3: 5775MHz (1 Channel)
Modulation Type:	802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM)
Channel Spacing:	802.11a/n/ac20: 20MHz; 802.11n/ac40: 40MHz; 802.11ac80: 80MHz
DFS Function:	Slave without Radar detection
Antenna Type:	IFA Antenna
Antenna Gain:	U-NII-1: -4.1dBi; (Provided by the manufacturer) U-NII-2A: -3.8dBi; (Provided by the manufacturer) U-NII-2C: -3.7dBi; (Provided by the manufacturer) U-NII-3: -4.0dBi (Provided by the manufacturer)

4.2 Power level setting using in test

Channel	802.11a	802.11n(HT20)	Channel	802.11n(HT40)
	Ant 1	Ant 1		Ant 1
36	12	11	38	10
40	12	11	46	10
48	12	11	54	10
52	12	11	62	10
60	12	11	102	10
64	12	11	110	10
100	12	11	134	10
116	12	11	151	10
140	12	11	159	10
149	12	11		
157	12	11		
165	12	11		

Channel	802.11ac(VHT80)
	Ant 1
42	10
58	10
106	10
122	10
155	10

4.3 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Notebook	Lenovo	/	/
AC Adapter	DVE	/	/

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

Lab A:

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

Lab B:

Radiated Emissions; Radiated Emissions which fall in the restricted bands test at:

SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

No.2,Tongsheng Road,Wuzhong District,Suzhou,Jiangsu,China

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

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:

Lab A:

• A2LA

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

• FCC

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

• ISED

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

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.

Lab B:

• A2LA (Certificate No. 6336.01)

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 6336.01.

• Innovation, Science and Economic Development Canada

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0120.

IC#: 27594.

• FCC –Designation Number: CN1312

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized as an accredited testing laboratory.

Designation Number: CN1312.

Test Firm Registration Number: 717327

4.7 Deviation from Standards

None

4.8 Abnormalities from Standard Conditions

None

5 Equipment List

Lab:A

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
Conducted Emission at Mains Terminals						
1	EMI Test Receive	R&S	ESCI	KS301101	01/15/2024	01/14/2025
2	LISN	R&S	ENV216	KS301197	01/15/2024	01/14/2025
3	LISN	Schwarzbeck	NNLK 8129	KS301091	01/15/2024	01/14/2025
4	Pulse Limiter	R&S	ESH3-Z2	KUS1902E001	01/15/2024	01/14/2025
5	CE test Cable	Thermax	/	CZ301102	01/15/2024	01/14/2025
6	Test Software	ESE	E3_V 6.111221a	/	N.C.R	N.C.R
RF Conducted Test						
1	Spectrum Analyzer	Keysight	N9020A	KUS1911E004-2	08/01/2024	07/31/2025
2	Spectrum Analyzer	Keysight	N9020A	KUS2001M001-2	08/01/2024	07/31/2025
3	Spectrum Analyzer	Keysight	N9030B	KSEM021-1	01/15/2024	01/14/2025
4	Signal Generator	R&S	SMBV100B	KSEM032	03/19/2024	03/18/2025
5	Signal Generator	R&S	SMW200A	KSEM020-1	08/02/2024	08/01/2025
6	Signal Generator	Agilent	N5182A	KUS2001M001-1	08/01/2024	07/31/2025
7	Signal Generator	Agilent	E8257C	KS301066	08/06/2024	08/05/2025
8	Radio Communication Test Station	Anritsu	MT8000A	KSEM001-1	08/01/2024	07/31/2025
9	Radio Communication Analyzer	Anritsu	MT8821C	KSEM002-1	03/19/2024	03/18/2025
10	Universal Radio Communication Tester	R&S	CMW500	KUS1911E004-1	08/12/2024	08/11/2025
11	Switcher	TST	FY562	KUS2001M001-4	01/15/2024	01/14/2025
12	Conducted Test Cable	Thermax	RF01-RF04	CZ301111-CZ301120	01/15/2024	01/14/2025
13	Temp. / Humidity Chamber	TERCHY	MHK-120AK	KS301190	08/26/2024	08/25/2025
14	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-5	03/19/2024	03/18/2025
15	Software	BST	TST-PASS	/	NCR	NCR

Lab B:

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
RF Radiated Test						
1	Semi-Anechoic Chamber	Brilliant-emc	N/A	SUWI-04-02-02	6/3/2023	6/2/2026
2	Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-13	2/8/2024	2/7/2025
3	Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	5/8/2024	5/7/2025
4	Signal Analyzer	KEYSIGHT	N9020A	SUWI-01-02-06	11/20/2024	11/19/2025
5	Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	2/1/2024	1/31/2025
6	Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	VULB 9168	SUWI-01-11-04	11/24/2024	11/23/2025
7	Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9120D	SUWI-01-11-05	11/24/2024	11/23/2025
8	Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9170	SUWI-01-11-03	5/12/2023	5/11/2025
9	Active Loop Antenna	SCHWRZBECK MESS-ELEKTRONIK	FMZB 1519B	SUWI-01-21-01	5/13/2023	5/12/2025
10	Amplifier	Tonscend	TAP9K3G40	SUWI-01-14-01	2/1/2024	1/31/2025
11	Amplifier	Tonscend	TAP01018050	SUWI-01-14-02	2/1/2024	1/31/2025
12	Amplifier	Tonscend	TAP18040048	SUWI-01-14-03	2/1/2024	1/31/2025
13	Measurement Software	Tonscend	JS32-RE	SUWI-02-09-04	NCR	NCR
14	Measurement Software	Tonscend	JS32-RSE	SUWI-02-09-06	NCR	NCR

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 IFA antenna no consideration of replacement. The best case gain of the

5G UNII-1: -4.1dBi,5G UNII-2A: -3.8dBi,5G UNII-2A: -3.7dBi,5G UNII-3: -4.0dBi,

Antenna location: Refer to internal 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

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 Maximum Conducted output power

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

Test Method: KDB 789033 D02 II E

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.

7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 25.4 °C   Humidity: 50.6 % RH   Atmospheric Pressure: 1010   mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	05	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 only the data of worst case is recorded in the report.
Final test	06	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 only the data of worst case is recorded in the report.
Final test	07	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.
Final test	08	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 only the data of worst case is recorded in the report.

7.1.3 Test Setup Diagram

7.1.4 Measurement Procedure and Data

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

Please Refer to Appendix for Details

7.2 Radiated Emissions (Below 1GHz)

Test Requirement   47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)
Test Method: KDB 789033 D02 II G
Measurement Distance: 3m

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

7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 24.6 °C   Humidity: 48.1 % RH   Atmospheric Pressure: 1010   mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	05	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 only the data of worst case is recorded in the report.

7.2.3 Test Setup Diagram

Below 30MHz


30MHz-1GHz
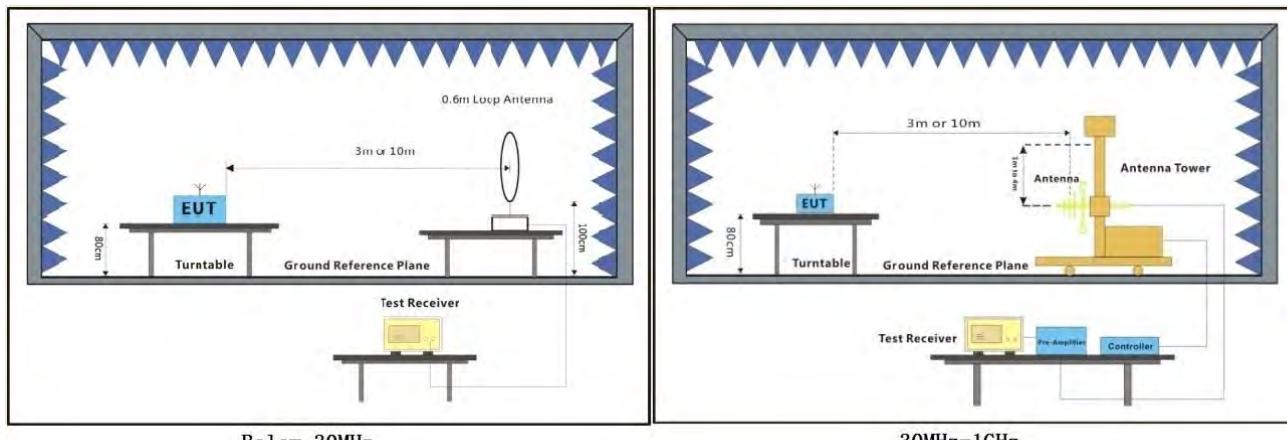
7.2.4 Measurement Procedure and Data

a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. 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.

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 quasi-peak 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. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

2. For emission below 1GHz, through the pre-scan found the worst case is the lowest channel of 802.11a. Only the worst case is recorded in the report.

3. 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 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.

4. The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

11a_Channel 36
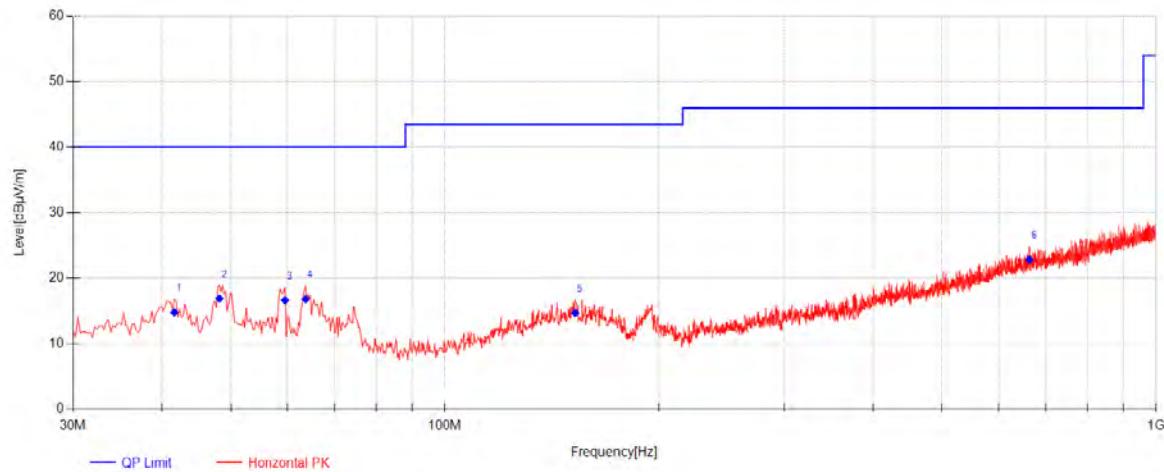
| | QP Limit | | Horizontal PK | |

Final Data List

NO.	Frequency [MHz]]	Reading [dBµV]	Factor [dB]	AF [dB/m]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Polarity
1	41.64	38.28	-42.22	18.74	14.80	40.00	25.20	Horizontal
2	48.1875	40.25	-42.16	18.80	16.89	40.00	23.11	Horizontal
3	59.585	41.08	-42.00	17.54	16.62	40.00	23.38	Horizontal
4	63.7075	41.20	-41.93	17.53	16.80	40.00	23.20	Horizontal
5	152.4625	36.54	-40.71	18.85	14.68	43.50	28.82	Horizontal
6	663.1675	35.26	-37.77	25.36	22.85	46.00	23.15	Horizontal

11a_Channel 36
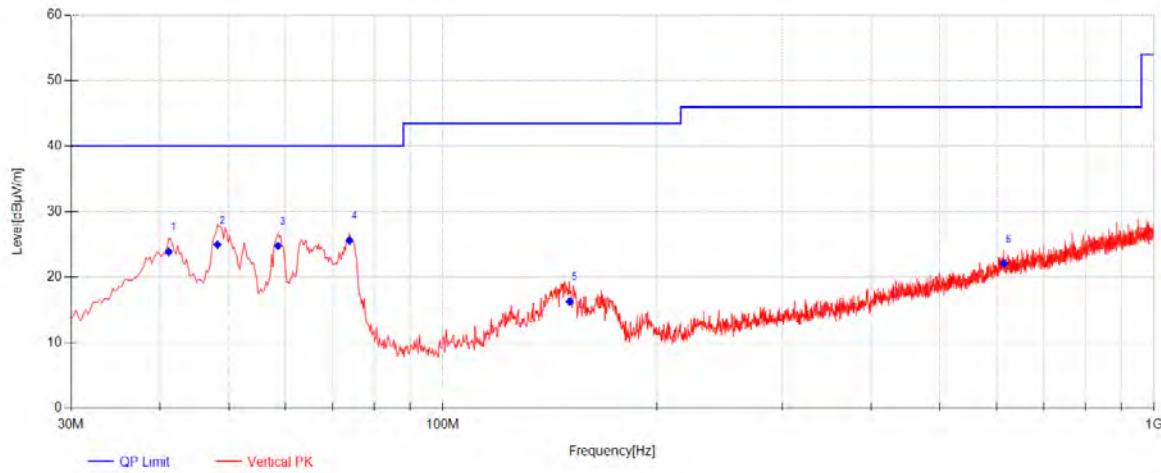
Final Data List								
NO.	Frequency [MHz]]	Reading [dBµV]	Factor [dB]	AF [dB/m]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Polarity
1	41.155	47.31	-42.22	18.78	23.87	40.00	16.13	Vertical
2	48.1875	48.33	-42.16	18.80	24.97	40.00	15.03	Vertical
3	58.615	49.15	-42.01	17.64	24.78	40.00	15.22	Vertical
4	73.8925	51.57	-41.75	15.81	25.63	40.00	14.37	Vertical
5	150.765	37.89	-40.72	19.10	16.27	43.50	27.23	Vertical
6	615.1525	35.23	-37.71	24.60	22.12	46.00	23.88	Vertical

7.3 Radiated Emissions (Above 1GHz)

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

Test Method: KDB 789033 D02 II G

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
Above 1GHz	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: 25.2 °C   Humidity: 47.7 % RH   Atmospheric Pressure: 1010   mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	05	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 only the data of worst case is recorded in the report.
Final test	06	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 only the data of worst case is recorded in the report.
Final test	07	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.
Final test	08	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 only the data of worst case is recorded in the report.

7.3.3 Test Setup Diagram
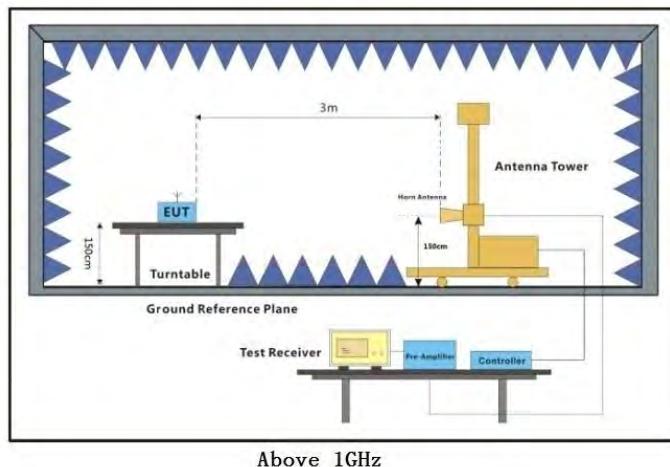

Above 1GHz

7.3.4 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. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

2. Scan from 18GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above 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 harmonics were the highest point could be found when testing, so only the above 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 ≥1/T (Duty cycle＜98%) or 10Hz (Duty cycle≥98%) for Average detection (AV) at frequency above 1GHz

802.11a_Channel 36
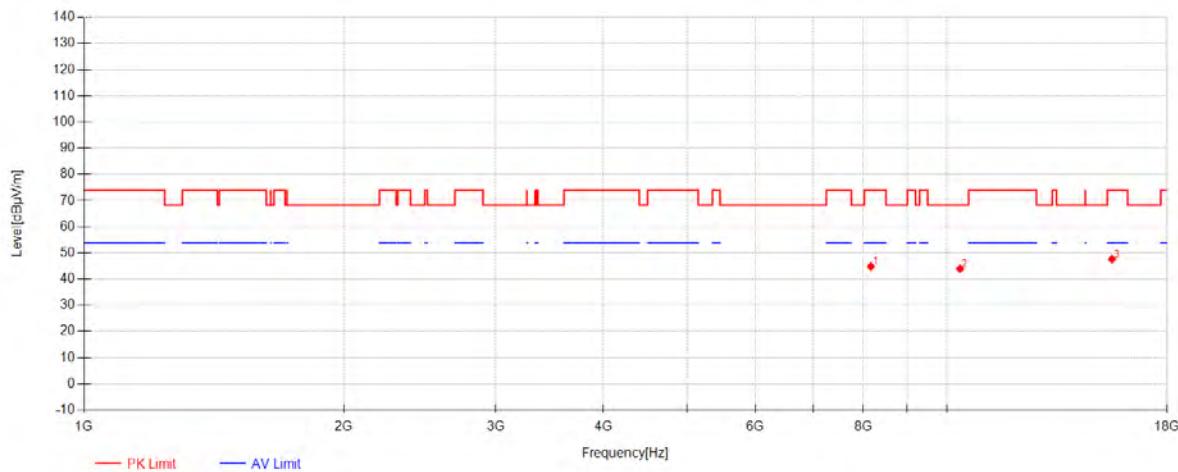
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	8166.5417	49.77	37.00	-41.88	44.89	74.00	29.11	Horizontal
2	10360.000	44.27	38.54	-38.82	43.99	68.30	24.31	Horizontal
3	15540.000	42.01	40.47	-34.81	47.66	74.00	26.34	Horizontal

802.11a_Channel 36
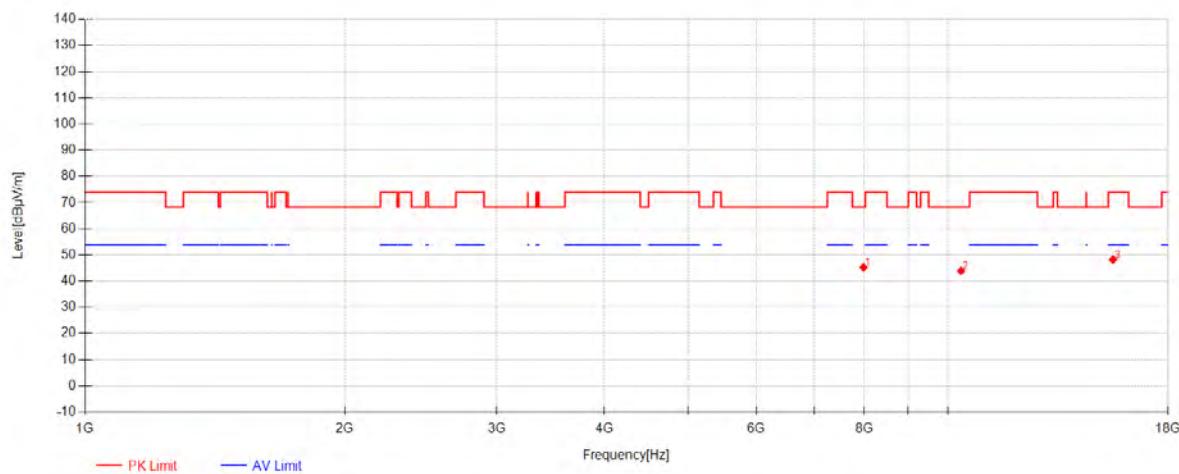
| Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7985.8958	50.45	37.08	-42.22	45.31	68.30	22.99	Vertical
2	10360.000	44.23	38.54	-38.82	43.95	68.30	24.35	Vertical
3	15540.000	42.59	40.47	-34.81	48.24	74.00	25.76	Vertical

802.11a_Channel 44
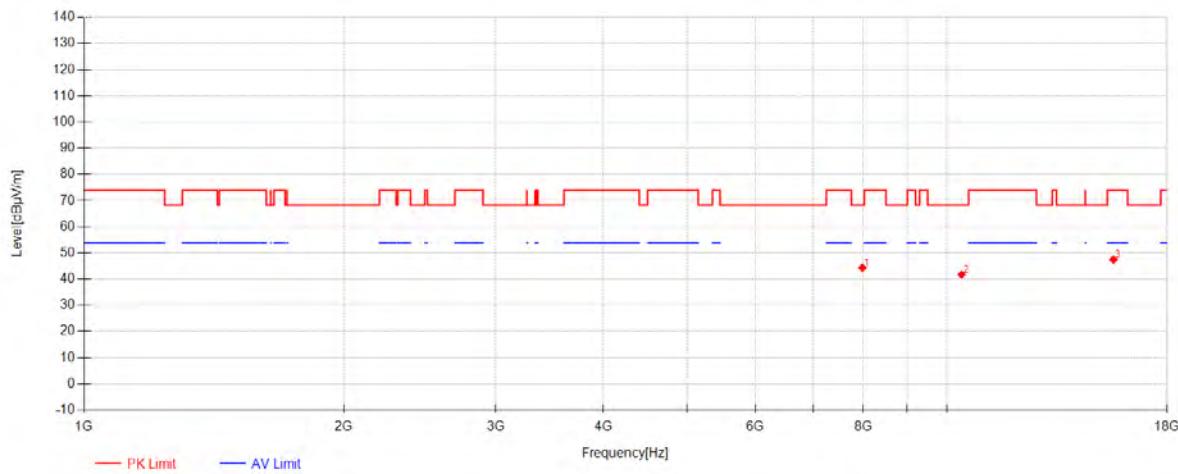
Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7983.0208	49.58	37.08	-42.23	44.42	68.30	23.88	Horizontal
2	10400.000	41.92	38.54	-38.72	41.74	68.30	26.56	Horizontal
3	15600.000	41.52	40.34	-34.37	47.49	74.00	26.51	Horizontal

802.11a_Channel 44
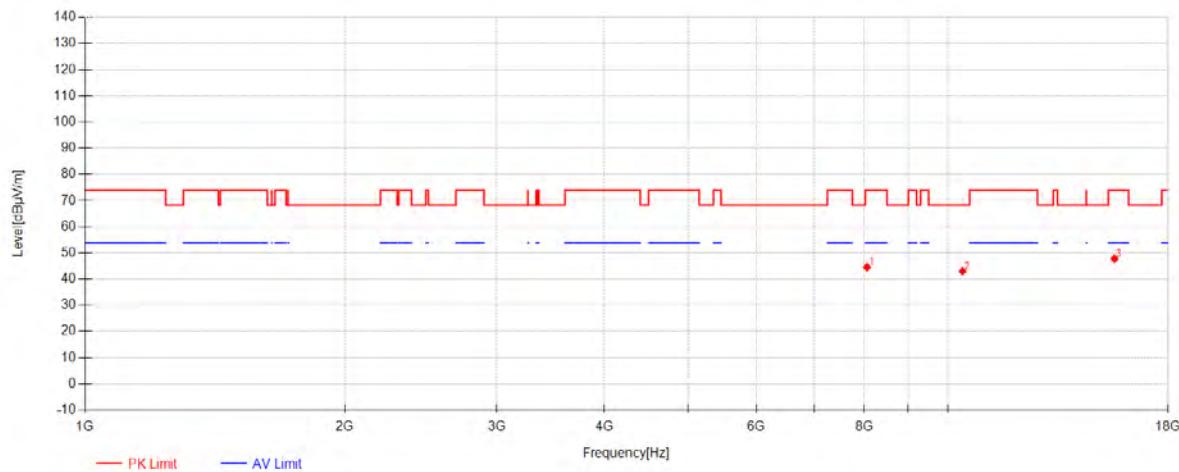
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	8059.2083	49.26	37.06	-41.66	44.66	74.00	29.34	Vertical
2	10400.000	43.21	38.54	-38.72	43.03	68.30	25.27	Vertical
3	15600.000	41.83	40.34	-34.37	47.80	74.00	26.20	Vertical

802.11a_Channel 48
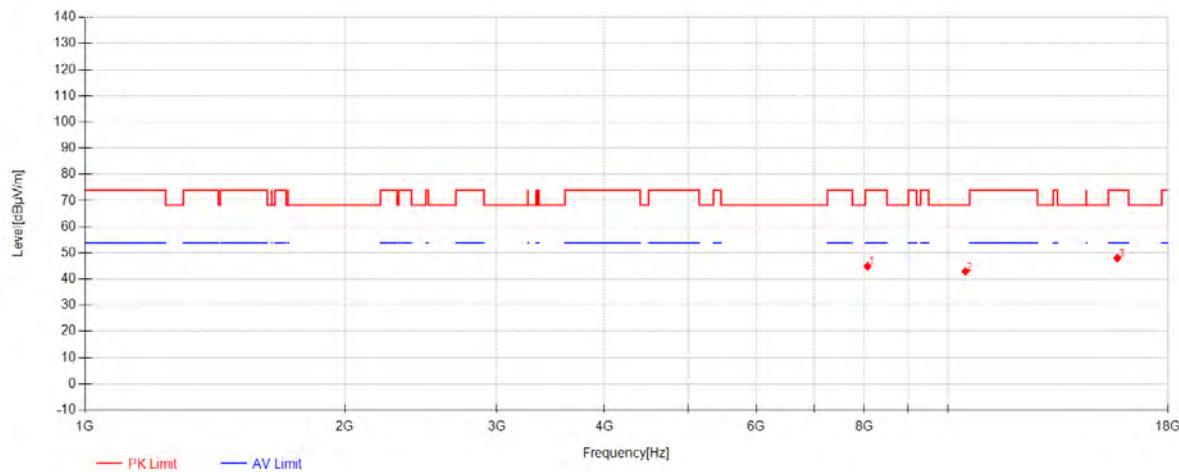
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	8070.7083	49.46	37.06	-41.57	44.95	74.00	29.05	Horizontal
2	10480.000	43.14	38.55	-38.75	42.94	68.30	25.36	Horizontal
3	15720.000	41.16	40.09	-33.22	48.03	74.00	25.97	Horizontal

802.11a_Channel 48
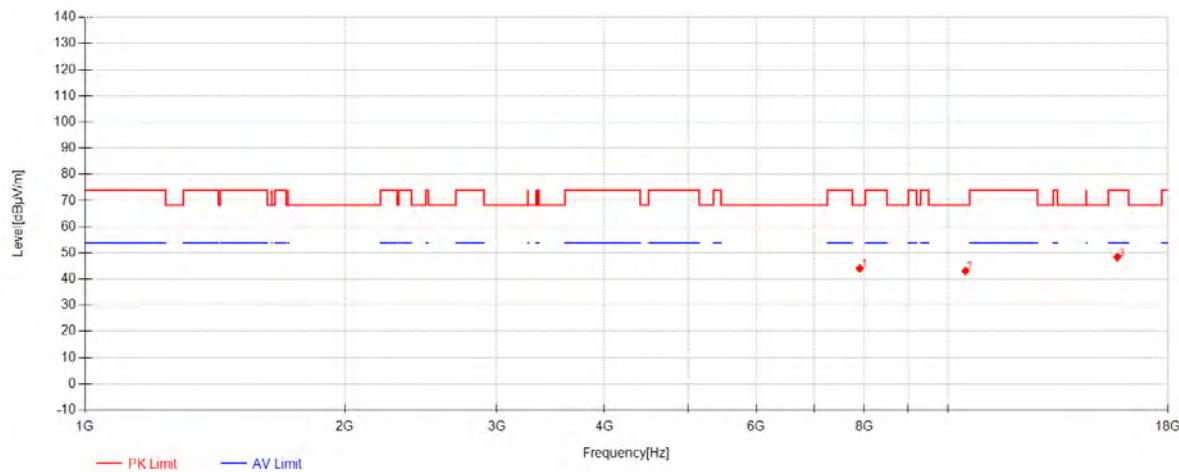
| Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7906.3542	49.86	36.97	-42.70	44.13	68.30	24.17	Vertical
2	10480.000	43.33	38.55	-38.75	43.13	68.30	25.17	Vertical
3	15720.000	41.52	40.09	-33.22	48.39	74.00	25.61	Vertical

802.11a_Channel 52
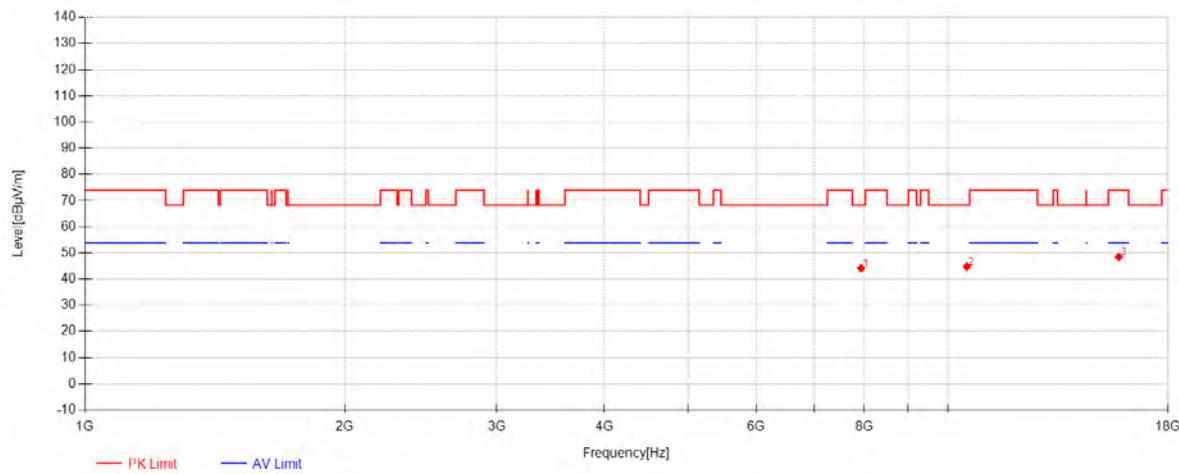
Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7935.5833	49.71	37.01	-42.52	44.20	68.30	24.10	Horizontal
2	10520.000	44.91	38.55	-38.61	44.85	68.30	23.45	Horizontal
3	15780.000	41.66	39.96	-33.10	48.52	74.00	25.48	Horizontal

802.11a_Channel 52
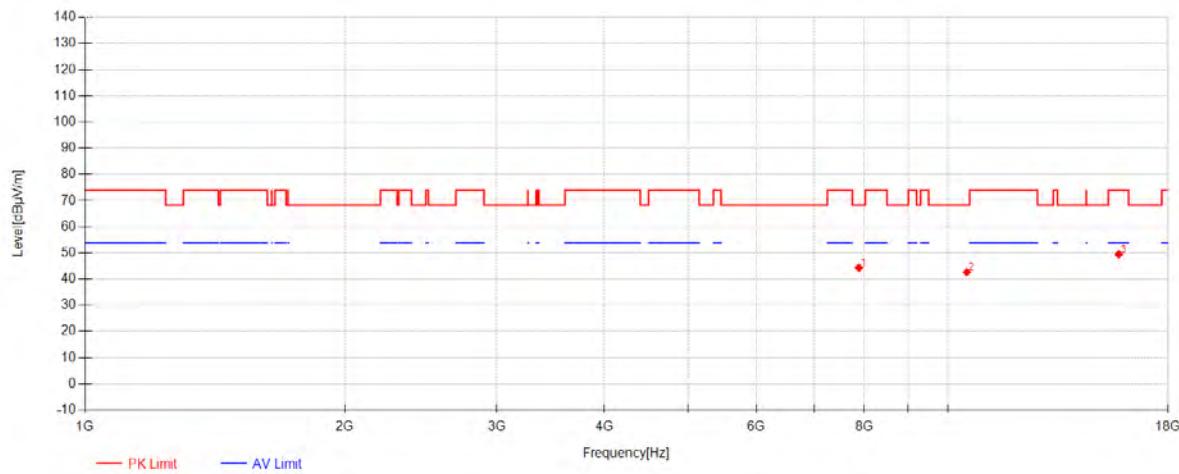
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7888.1458	50.21	36.94	-42.72	44.43	68.30	23.87	Vertical
2	10520.000	42.74	38.55	-38.61	42.68	68.30	25.62	Vertical
3	15780.000	42.65	39.96	-33.10	49.51	74.00	24.49	Vertical

802.11a_Channel 60
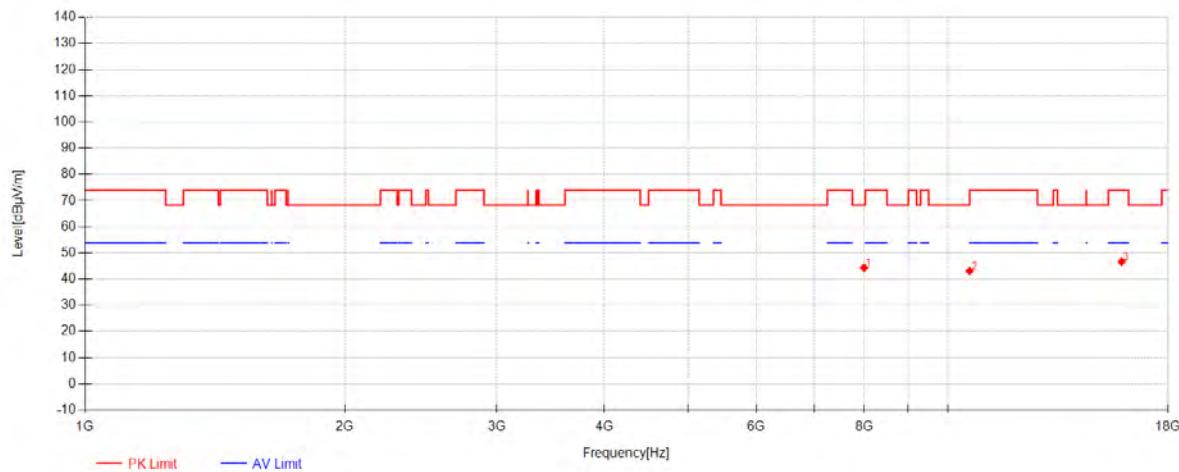
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7996.9167	49.47	37.10	-42.15	44.42	68.30	23.88	Horizontal
2	10600.000	42.56	38.56	-38.01	43.11	74.00	30.89	Horizontal
3	15900.000	41.13	39.71	-34.13	46.71	74.00	27.29	Horizontal

802.11a_Channel 60
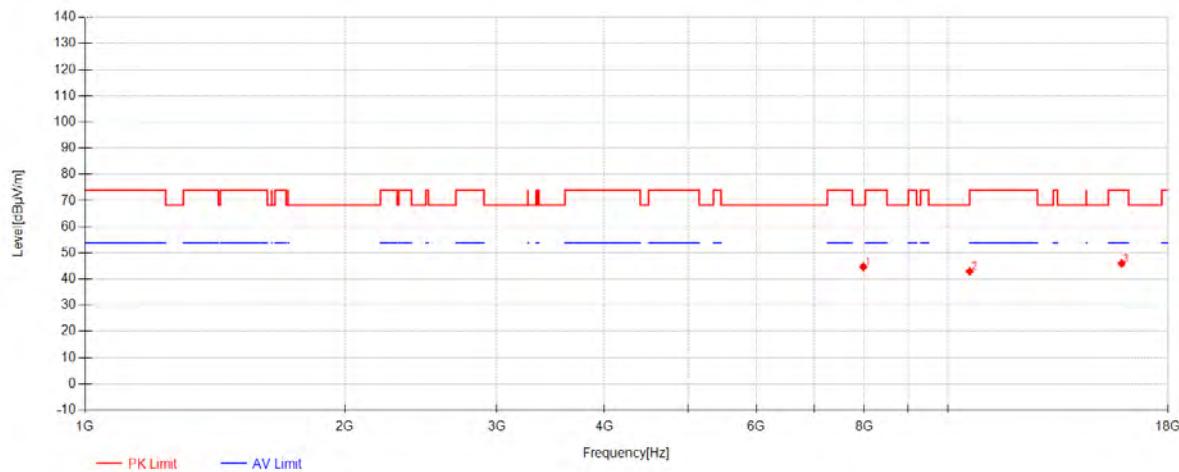
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7981.1042	49.94	37.07	-42.25	44.77	68.30	23.53	Vertical
2	10600.000	42.42	38.56	-38.01	42.97	74.00	31.03	Vertical
3	15900.000	40.44	39.71	-34.13	46.02	74.00	27.98	Vertical

802.11a_Channel 64
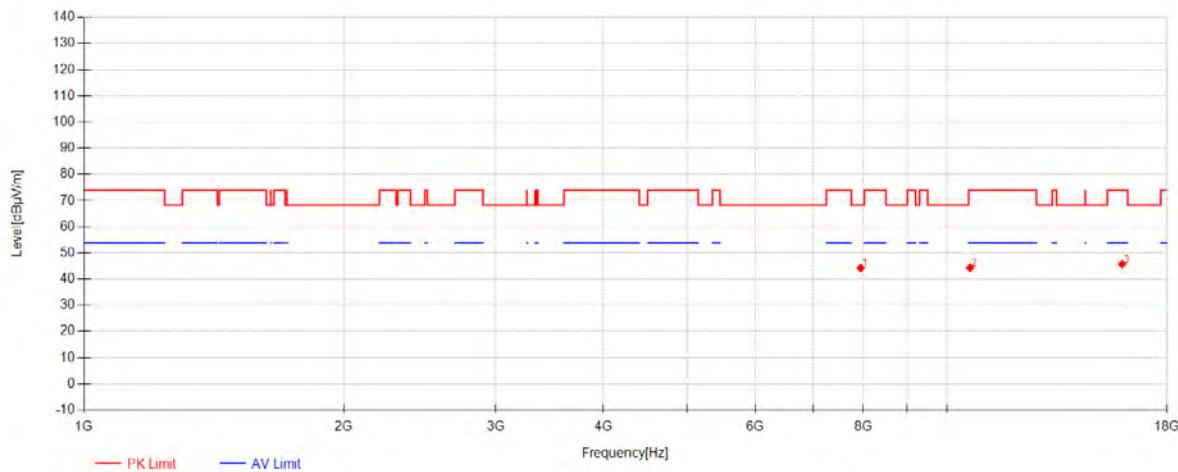
Data List

| NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7947.5625	49.72	37.03	-42.45	44.30	68.30	24.00	Horizontal
2	10640.000	43.64	38.56	-37.80	44.40	74.00	29.60	Horizontal
3	15960.000	40.83	39.58	-34.63	45.78	74.00	28.22	Horizontal

802.11a_Channel 64
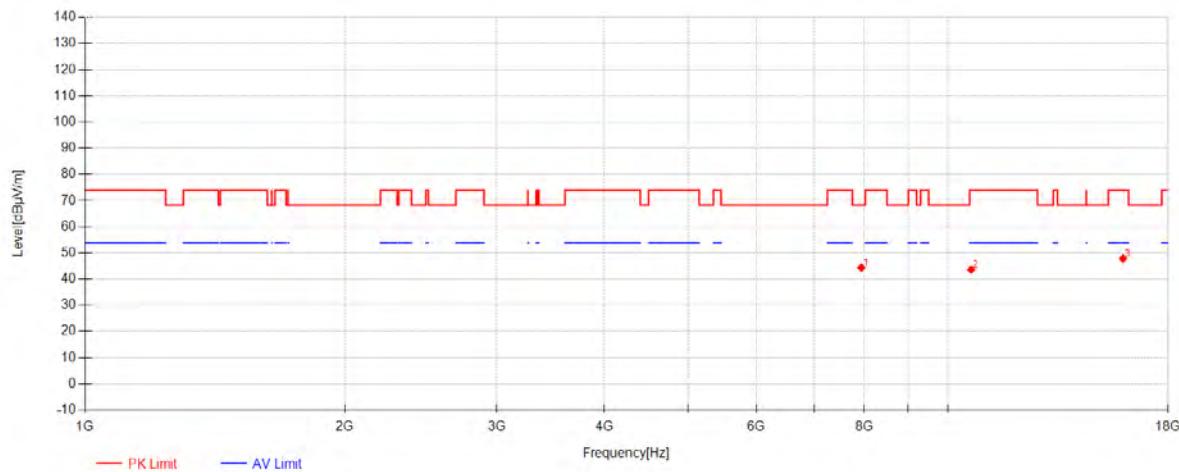
Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7938.4583	49.97	37.01	-42.51	44.48	68.30	23.82	Vertical
2	10640.000	42.89	38.56	-37.80	43.65	74.00	30.35	Vertical
3	15960.000	42.91	39.58	-34.63	47.86	74.00	26.14	Vertical

802.11a_Channel 100
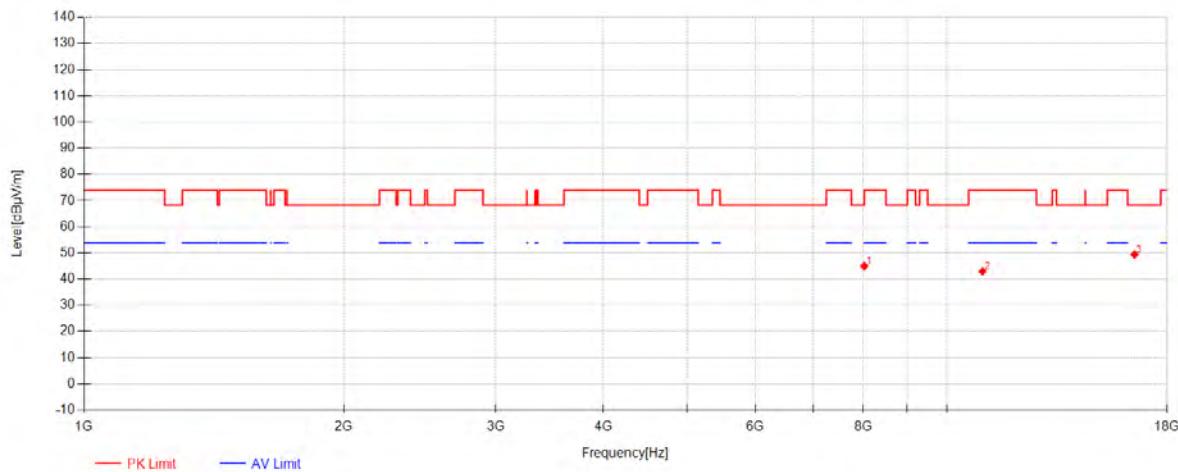
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	8022.7917	49.86	37.09	-41.95	45.00	68.30	23.30	Horizontal
2	11000.000	41.95	38.60	-37.59	42.96	74.00	31.04	Horizontal
3	16500.000	42.89	40.80	-34.28	49.41	68.30	18.89	Horizontal

802.11a_Channel 100
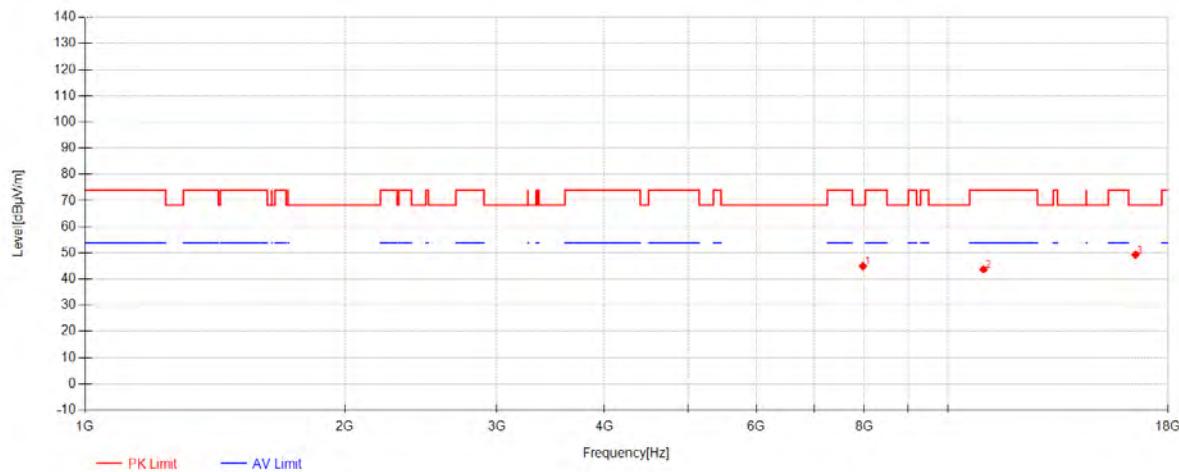
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7973.4375	50.24	37.06	-42.29	45.01	68.30	23.29	Vertical
2	11000.000	42.75	38.60	-37.59	43.76	74.00	30.24	Vertical
3	16500.000	42.81	40.80	-34.28	49.33	68.30	18.97	Vertical

802.11a_Channel 116
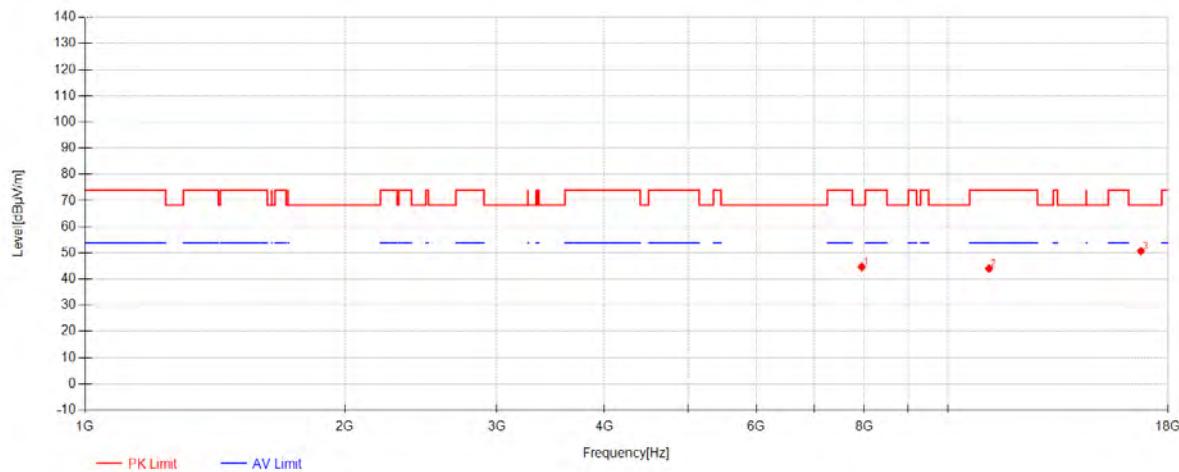
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7947.0833	50.20	37.03	-42.45	44.77	68.30	23.53	Horizontal
2	11160.000	42.45	38.68	-37.06	44.07	74.00	29.93	Horizontal
3	16740.000	44.02	41.42	-34.77	50.68	68.30	17.62	Horizontal

802.11a_Channel 116
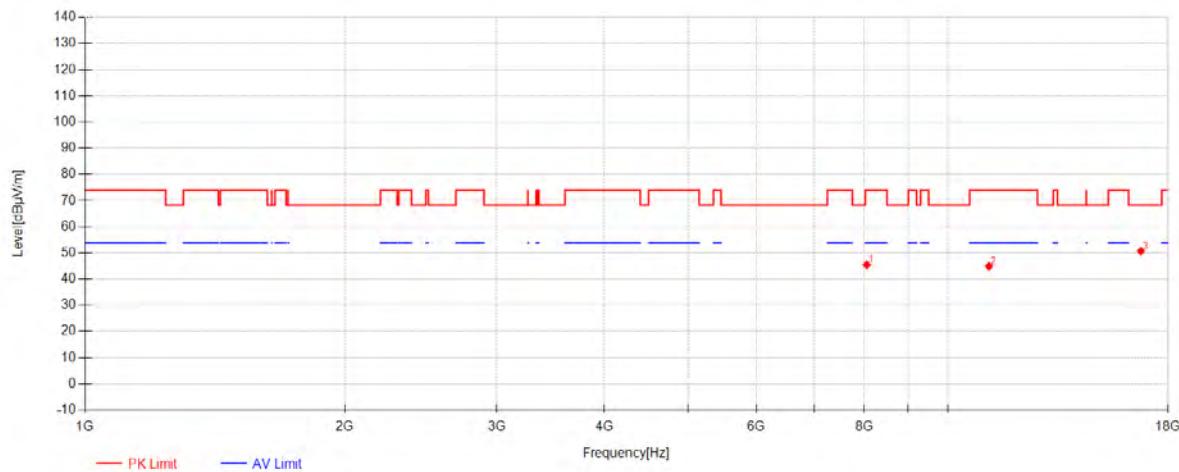
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	8054.4167	50.16	37.07	-41.70	45.53	74.00	28.47	Vertical
2	11160.000	43.34	38.68	-37.06	44.96	74.00	29.04	Vertical
3	16740.000	44.04	41.42	-34.77	50.70	68.30	17.60	Vertical

802.11a_Channel 140
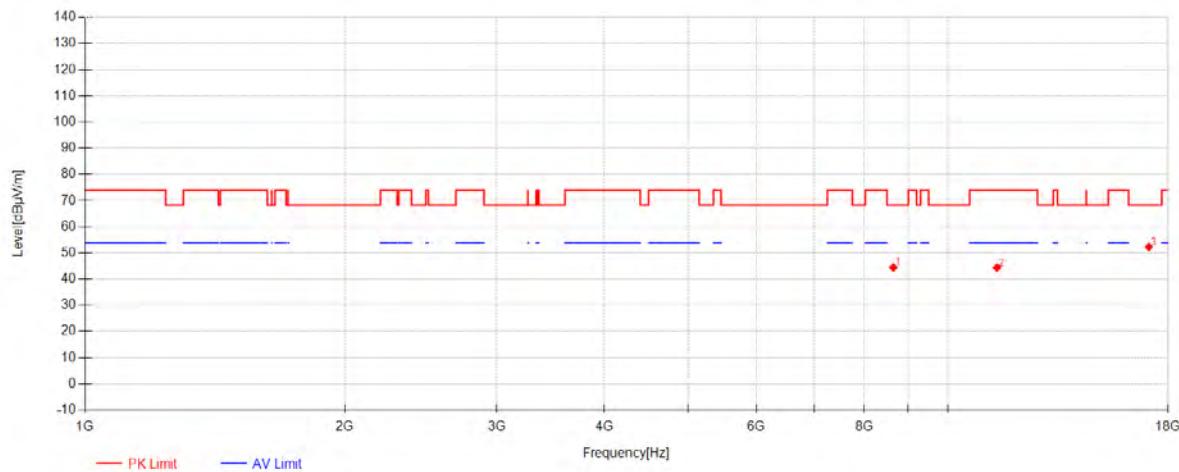
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	8646.1875	48.94	36.71	-41.10	44.55	68.30	23.75	Horizontal
2	11400.000	43.17	38.80	-37.51	44.46	74.00	29.54	Horizontal
3	17100.000	43.53	42.54	-33.74	52.33	68.30	15.97	Horizontal

802.11a_Channel 140
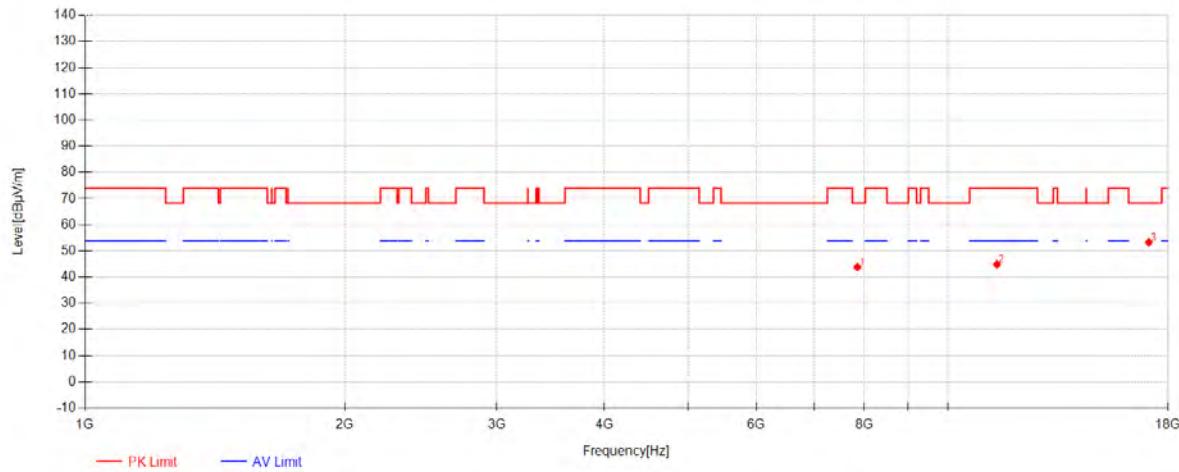
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7855.0833	49.63	36.90	-42.67	43.86	68.30	24.44	Vertical
2	11400.000	43.62	38.80	-37.51	44.91	74.00	29.09	Vertical
3	17100.000	44.54	42.54	-33.74	53.34	68.30	14.96	Vertical

802.11a_Channel 149
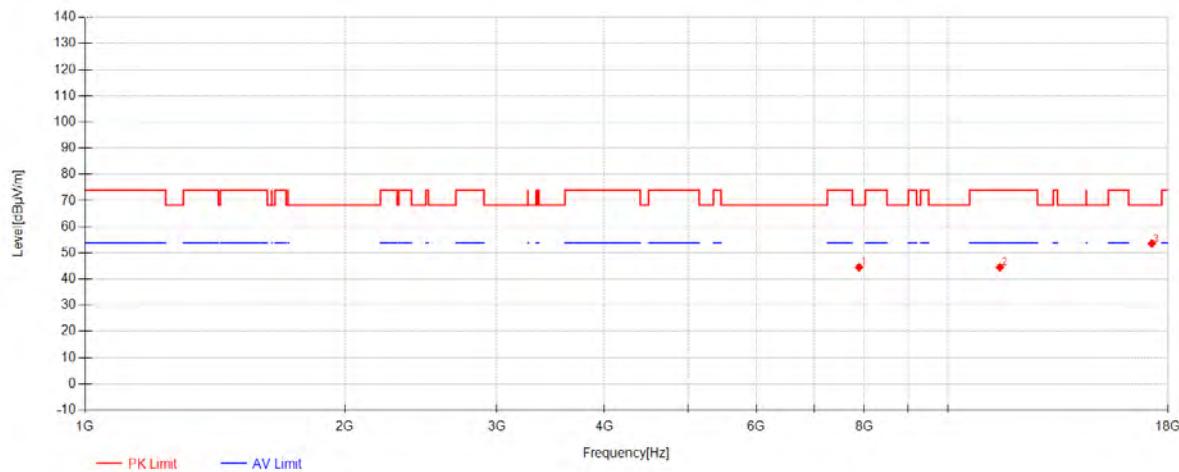
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7891.5	50.39	36.95	-42.73	44.61	68.30	23.69	Horizontal
2	11490.000	42.35	38.85	-36.61	44.59	74.00	29.41	Horizontal
3	17235.000	45.47	43.14	-34.96	53.65	68.30	14.65	Horizontal

802.11a_Channel 149
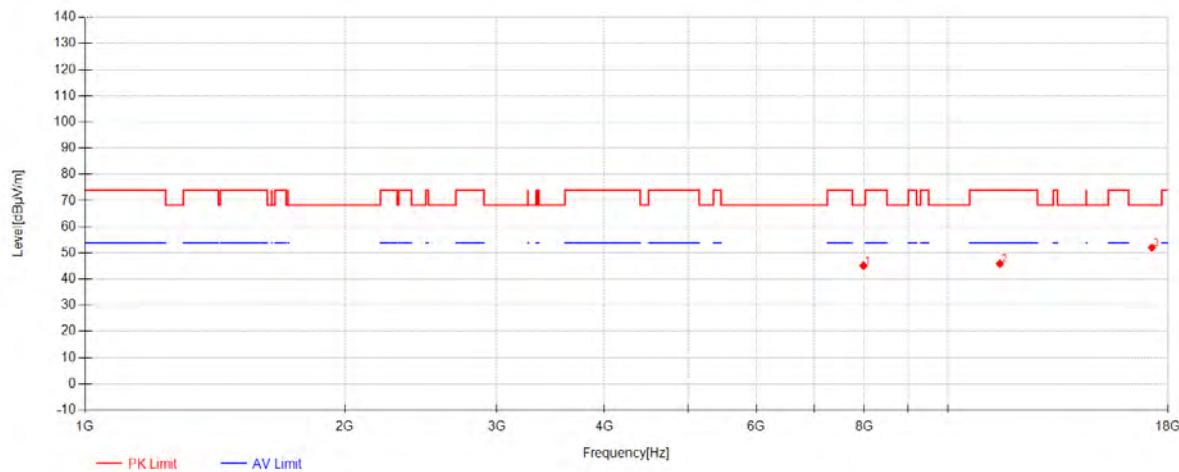
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7986.375	50.30	37.08	-42.21	45.17	68.30	23.13	Vertical
2	11490.000	43.68	38.85	-36.61	45.92	74.00	28.08	Vertical
3	17235.000	43.89	43.14	-34.96	52.07	68.30	16.23	Vertical

802.11a_Channel 157
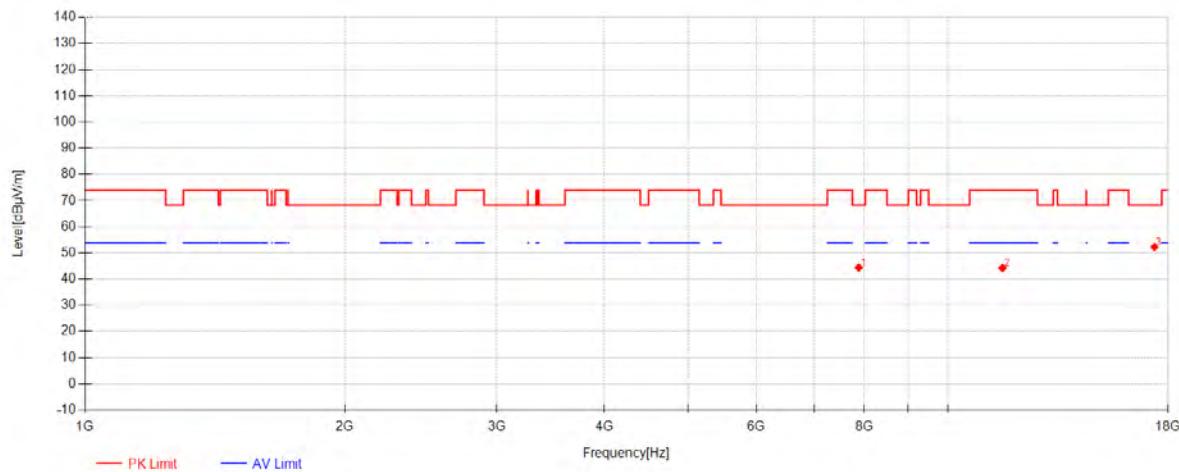
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7884.7917	50.30	36.94	-42.72	44.52	68.30	23.78	Horizontal
2	11570.000	42.24	38.89	-36.84	44.29	74.00	29.71	Horizontal
3	17355.000	43.63	43.66	-35.00	52.29	68.30	16.01	Horizontal

802.11a_Channel 157
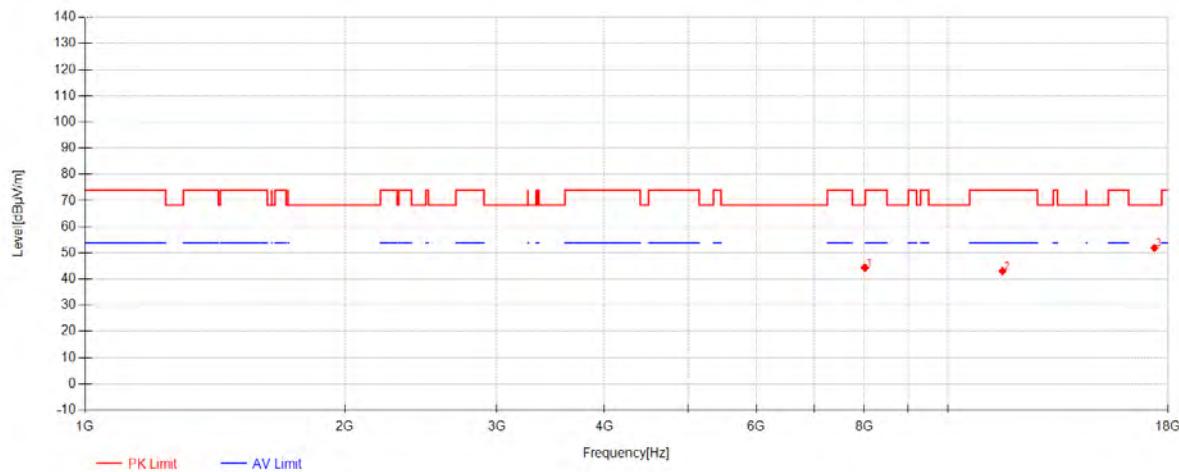
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	8014.6458	49.37	37.09	-42.01	44.45	68.30	23.85	Vertical
2	11570.000	41.02	38.89	-36.84	43.07	74.00	30.93	Vertical
3	17355.000	43.27	43.66	-35.00	51.93	68.30	16.37	Vertical

802.11a_Channel 165
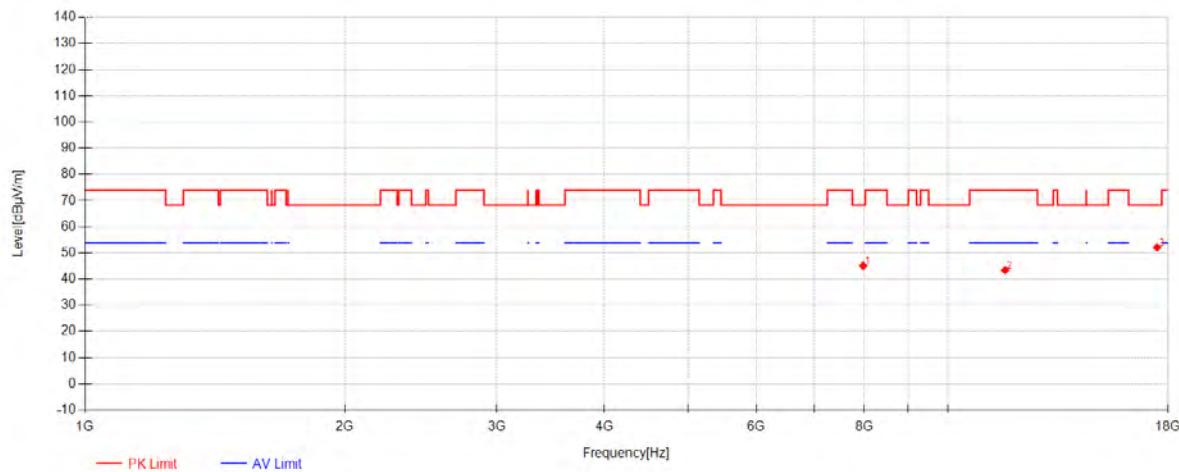
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7978.7083	50.34	37.07	-42.26	45.15	68.30	23.15	Horizontal
2	11650.000	41.02	38.93	-36.53	43.41	74.00	30.59	Horizontal
3	17475.000	42.01	44.19	-34.07	52.13	68.30	16.17	Horizontal

802.11a_Channel 165
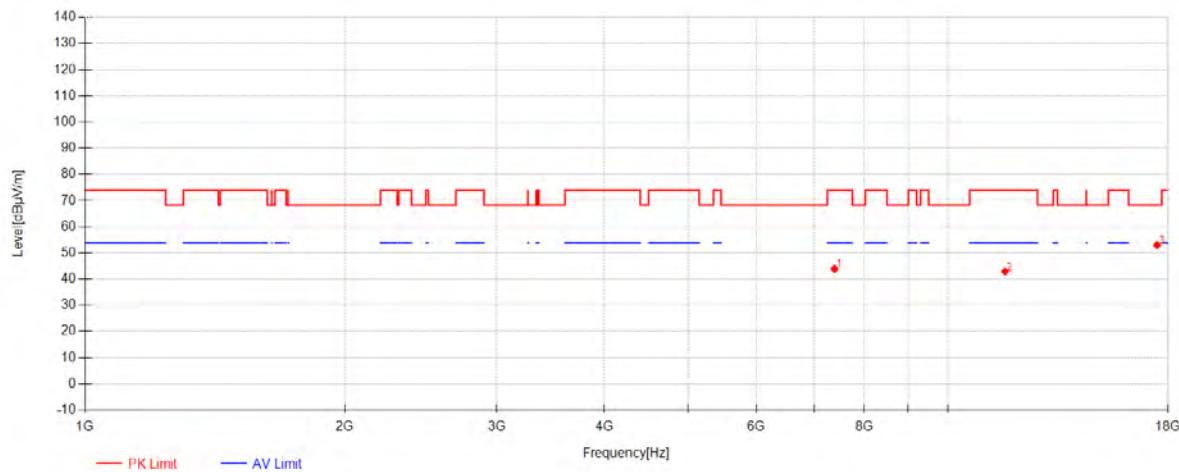
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7389.8125	50.72	36.09	-42.85	43.97	74.00	30.03	Vertical
2	11650.000	40.54	38.93	-36.53	42.93	74.00	31.07	Vertical
3	17475.000	42.97	44.19	-34.07	53.09	68.30	15.21	Vertical

802.11n20_Channel 36
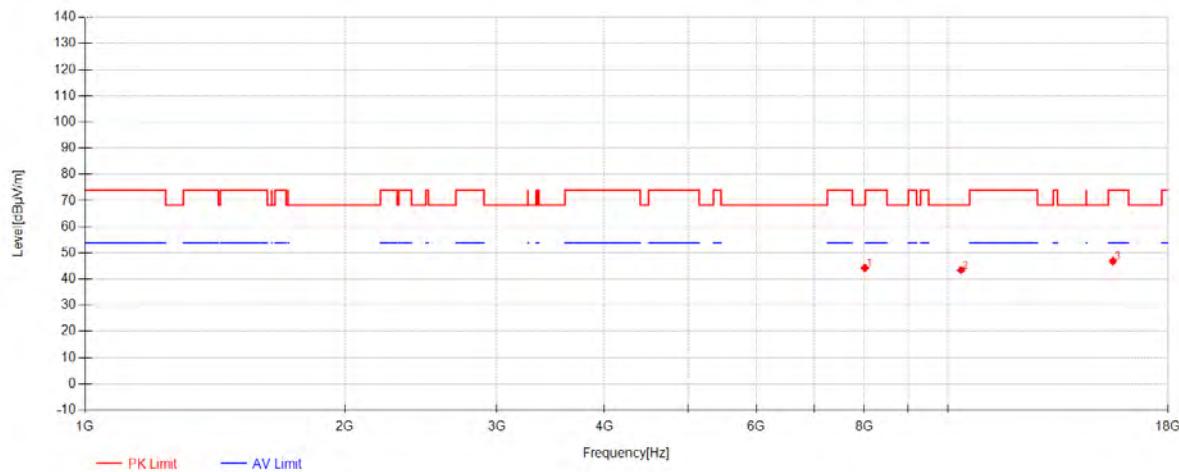
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	8013.6875	49.27	37.09	-42.02	44.34	68.30	23.96	Horizontal
2	10360.000	43.76	38.54	-38.82	43.48	68.30	24.82	Horizontal
3	15540.000	41.22	40.47	-34.81	46.87	74.00	27.13	Horizontal

802.11n20_Channel 36
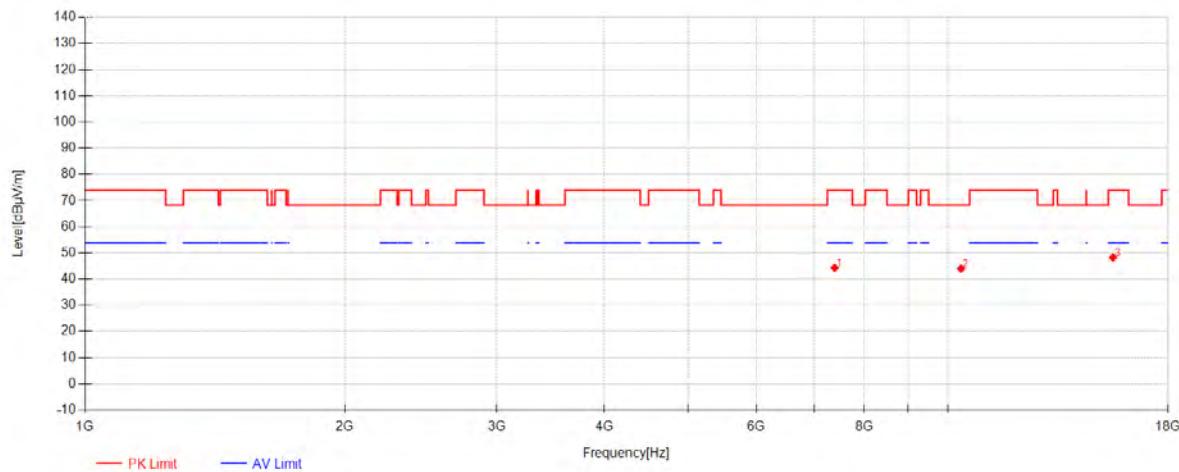
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7393.6458	51.10	36.10	-42.82	44.38	74.00	29.62	Vertical
2	10360.000	44.35	38.54	-38.82	44.07	68.30	24.23	Vertical
3	15540.000	42.61	40.47	-34.81	48.26	74.00	25.74	Vertical

802.11n20_Channel 44
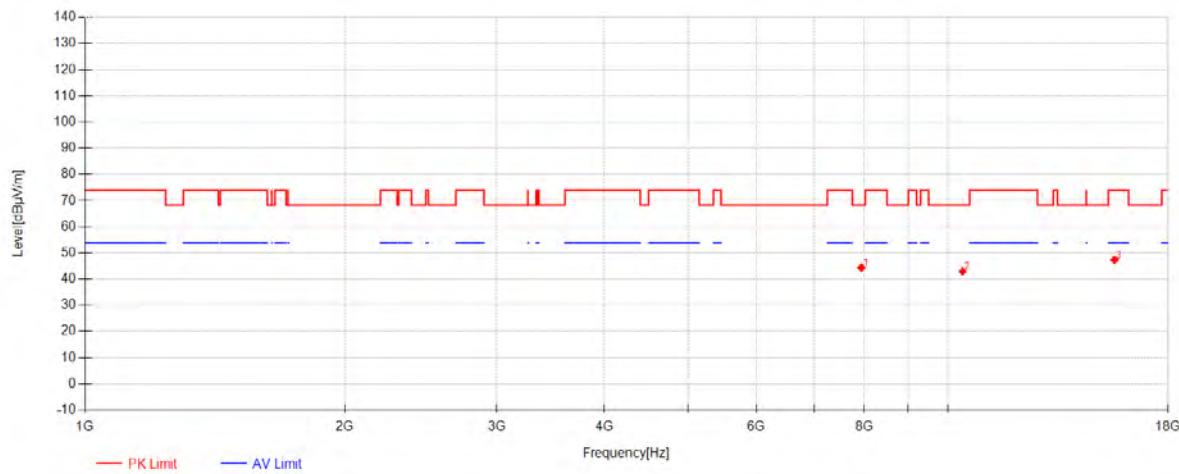
Data List							
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7940.8542	49.96	37.02	-42.49	44.49	68.30	23.81	Horizontal
2	10400.000	43.15	38.54	-38.72	42.97	68.30	25.33	Horizontal
3	15600.000	41.41	40.34	-34.37	47.38	74.00	26.62	Horizontal

802.11n20_Channel 44
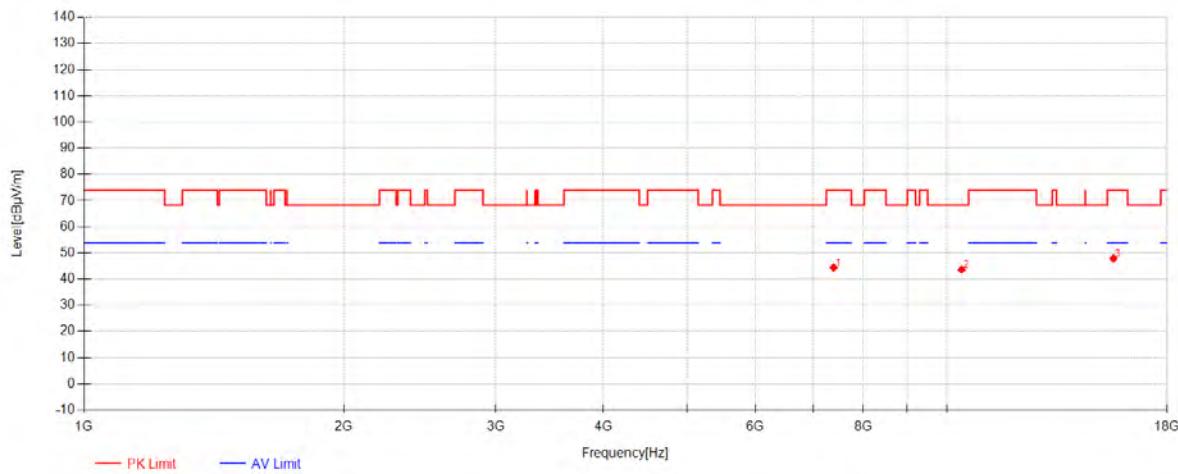
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7393.1667	51.23	36.10	-42.83	44.50	74.00	29.50	Vertical
2	10400.000	43.86	38.54	-38.72	43.68	68.30	24.62	Vertical
3	15600.000	41.92	40.34	-34.37	47.89	74.00	26.11	Vertical

802.11n20_Channel 48
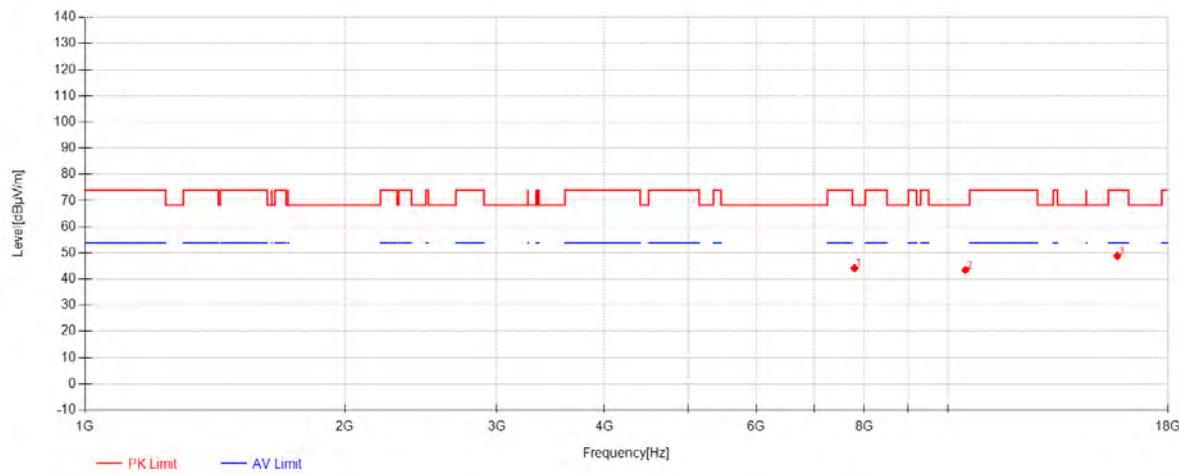
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7796.625	50.01	36.82	-42.59	44.23	68.30	24.07	Horizontal
2	10480.000	43.69	38.55	-38.75	43.49	68.30	24.81	Horizontal
3	15720.000	41.94	40.09	-33.22	48.81	74.00	25.19	Horizontal

802.11n20_Channel 48
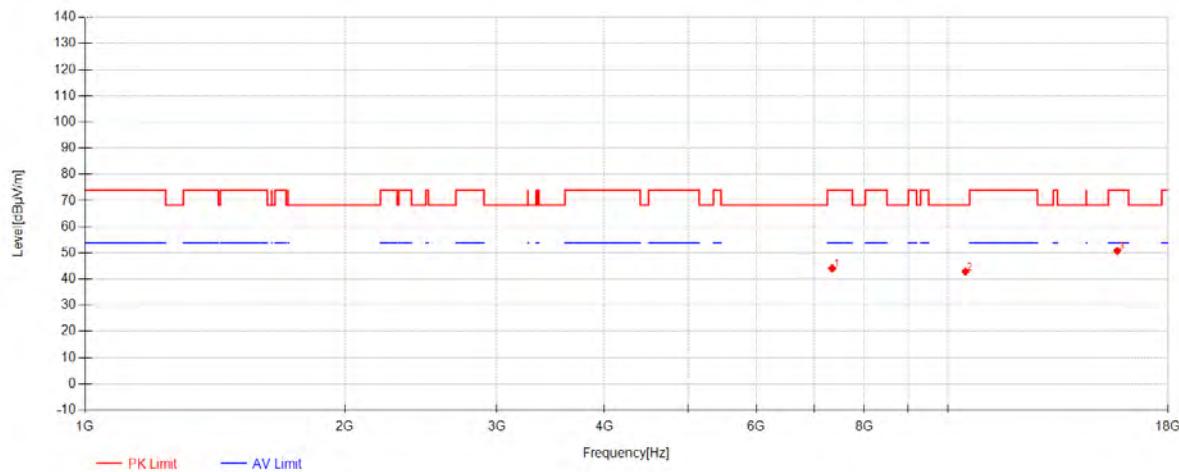
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7346.2083	51.26	35.97	-43.08	44.15	74.00	29.85	Vertical
2	10480.000	43.08	38.55	-38.75	42.88	68.30	25.42	Vertical
3	15720.000	43.92	40.09	-33.22	50.79	74.00	23.21	Vertical

802.11n20_Channel 52
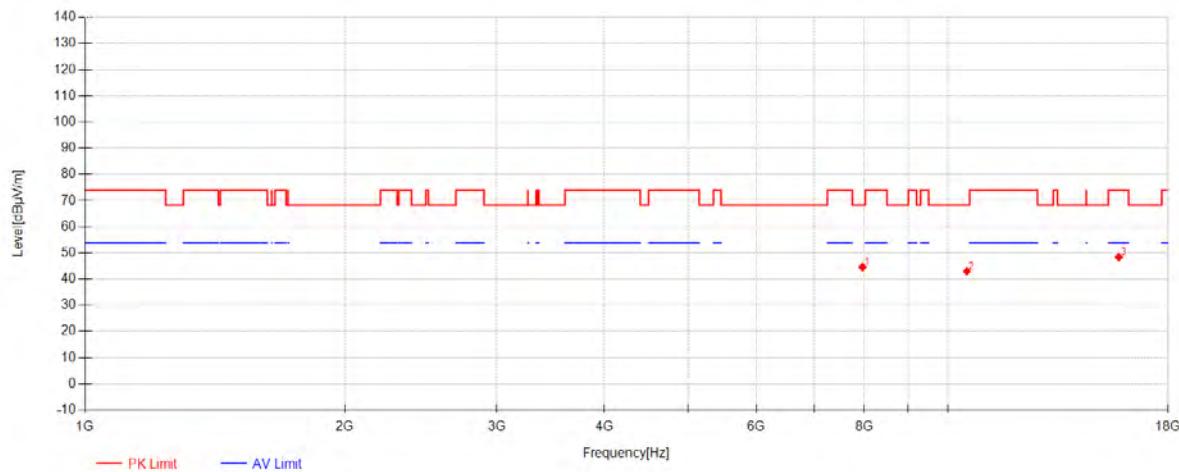
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7963.375	49.99	37.05	-42.35	44.69	68.30	23.61	Horizontal
2	10520.000	43.05	38.55	-38.61	42.99	68.30	25.31	Horizontal
3	15780.000	41.57	39.96	-33.10	48.43	74.00	25.57	Horizontal

802.11n20_Channel 52
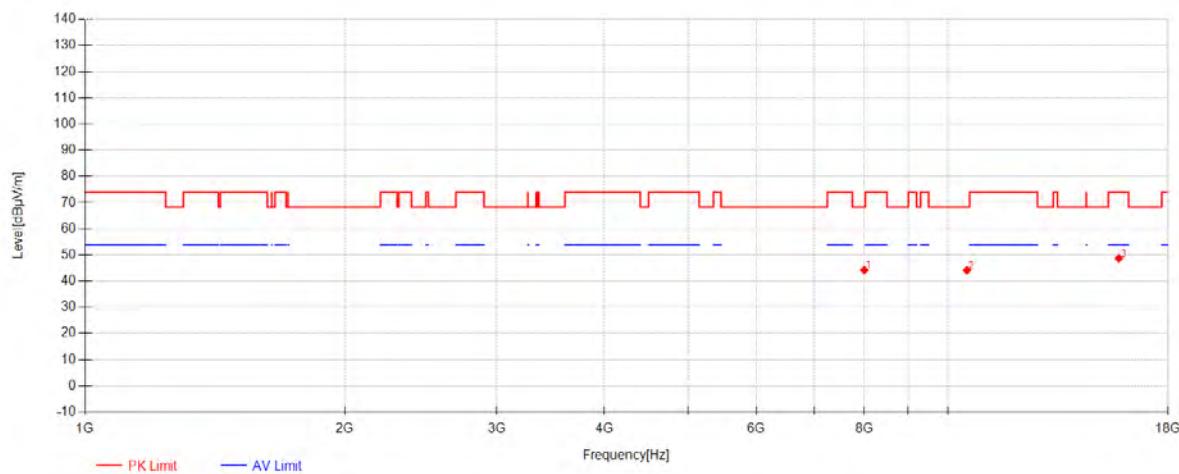
| Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	8002.6667	49.29	37.10	-42.11	44.28	68.30	24.02	Vertical
2	10520.000	44.25	38.55	-38.61	44.19	68.30	24.11	Vertical
3	15780.000	41.84	39.96	-33.10	48.70	74.00	25.30	Vertical

802.11n20_Channel 60
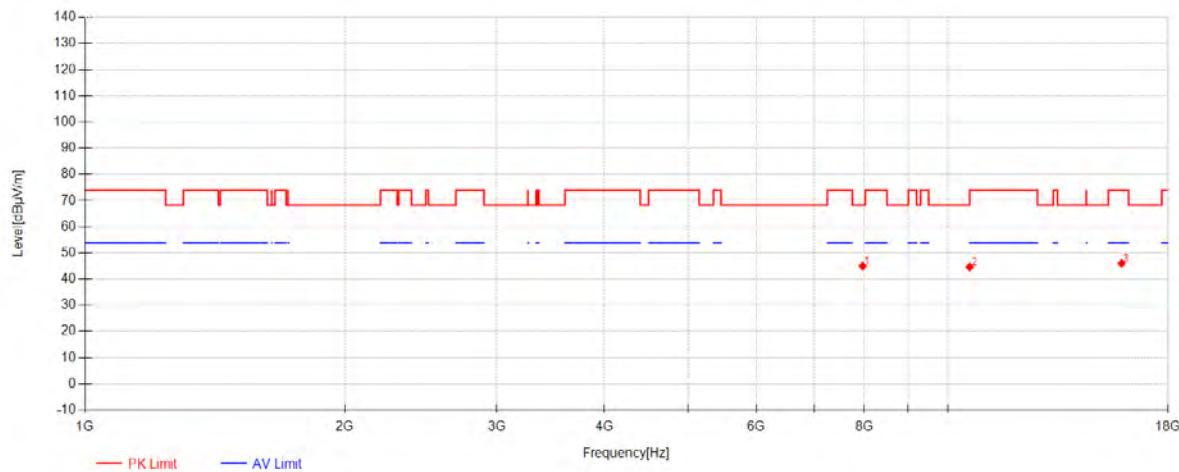
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7967.6875	50.33	37.05	-42.33	45.06	68.30	23.24	Horizontal
2	10600.000	44.18	38.56	-38.01	44.73	74.00	29.27	Horizontal
3	15900.000	40.45	39.71	-34.13	46.03	74.00	27.97	Horizontal

802.11n20_Channel 60
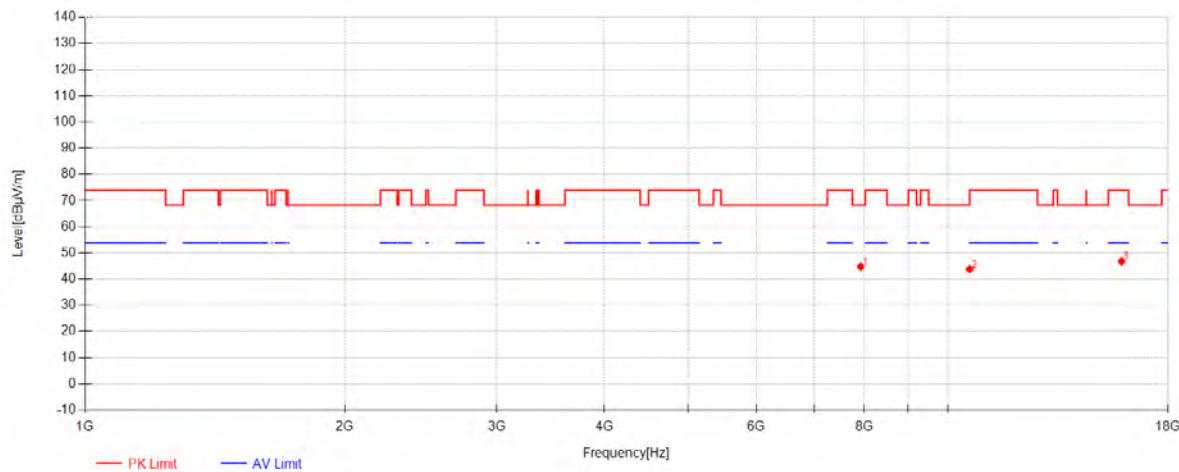
Data List							
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7924.5625	50.45	36.99	-42.59	44.85	68.30	23.45	Vertical
2	10600.000	43.30	38.56	-38.01	43.85	74.00	30.15	Vertical
3	15900.000	41.25	39.71	-34.13	46.83	74.00	27.17	Vertical

802.11n20_Channel 64
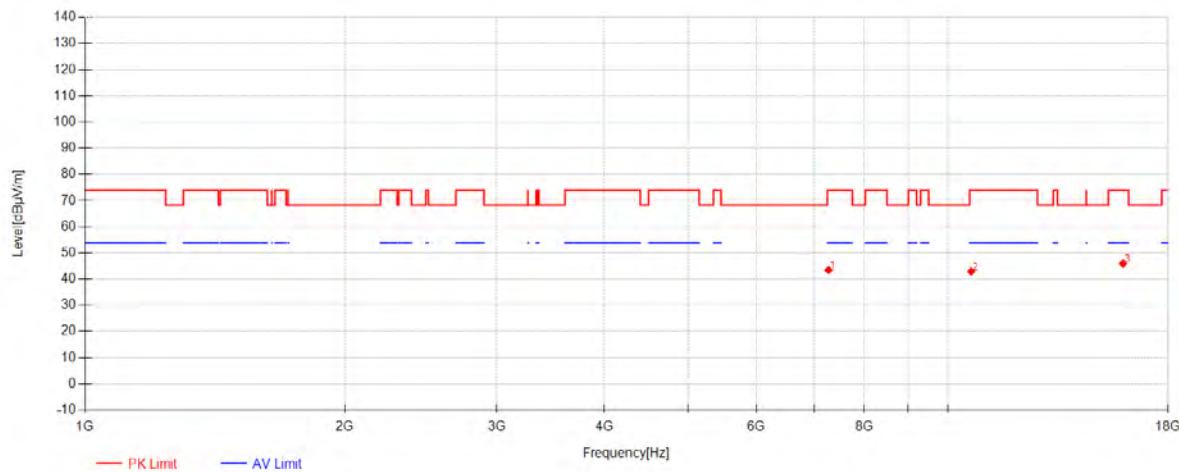
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7272.8958	51.14	35.76	-43.41	43.50	74.00	30.50	Horizontal
2	10640.000	42.17	38.56	-37.80	42.93	74.00	31.07	Horizontal
3	15960.000	41.02	39.58	-34.63	45.97	74.00	28.03	Horizontal

802.11n20_Channel 64
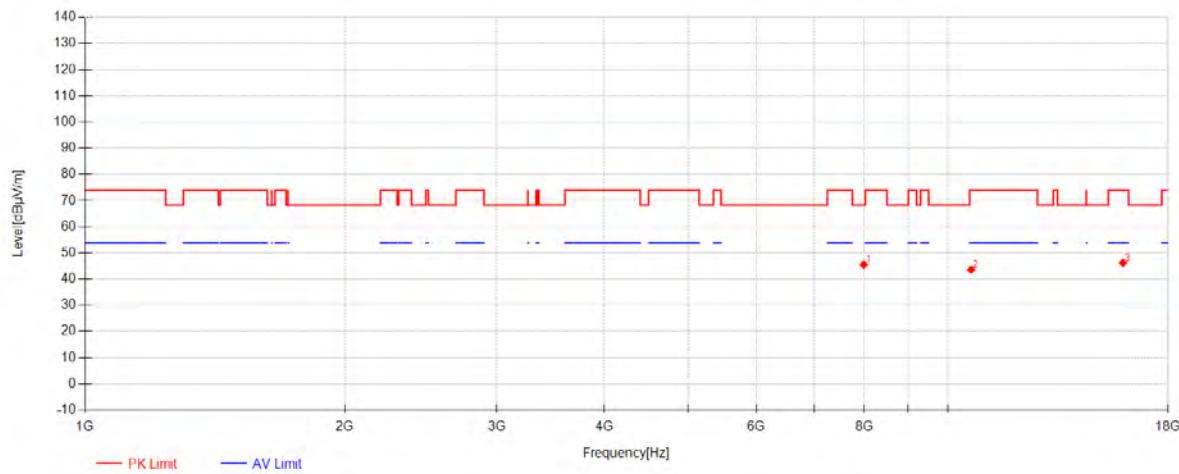
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7989.7292	50.71	37.09	-42.19	45.60	68.30	22.70	Vertical
2	10640.000	42.87	38.56	-37.80	43.63	74.00	30.37	Vertical
3	15960.000	41.32	39.58	-34.63	46.27	74.00	27.73	Vertical

802.11n20_Channel 100
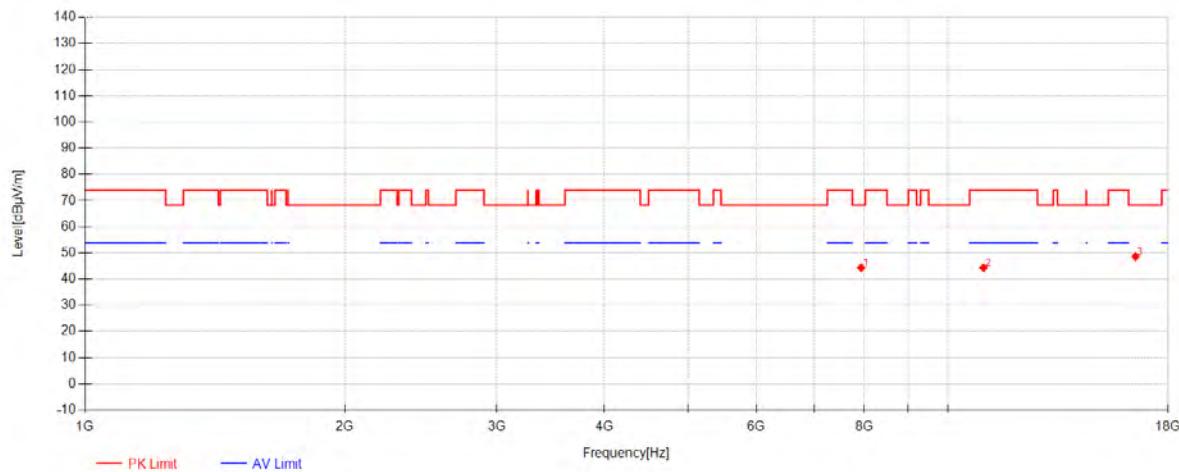
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7936.0625	49.95	37.01	-42.52	44.44	68.30	23.86	Horizontal
2	11000.000	43.43	38.60	-37.59	44.44	74.00	29.56	Horizontal
3	16500.000	42.11	40.80	-34.28	48.63	68.30	19.67	Horizontal

802.11n20_Channel 100
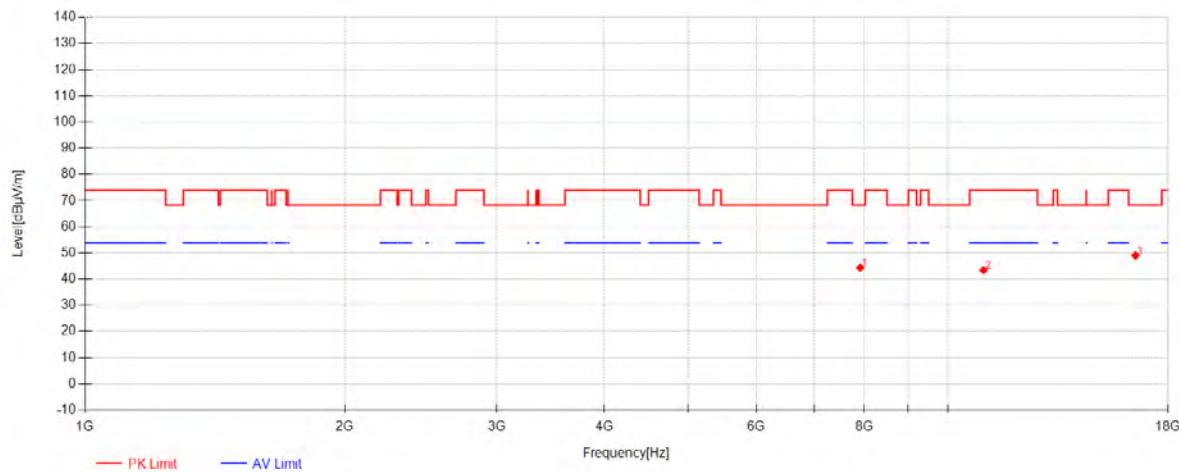
| Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7916.4167	50.12	36.98	-42.64	44.46	68.30	23.84	Vertical
2	11000.000	42.41	38.60	-37.59	43.42	74.00	30.58	Vertical
3	16500.000	42.48	40.80	-34.28	49.00	68.30	19.30	Vertical

802.11n20_Channel 116
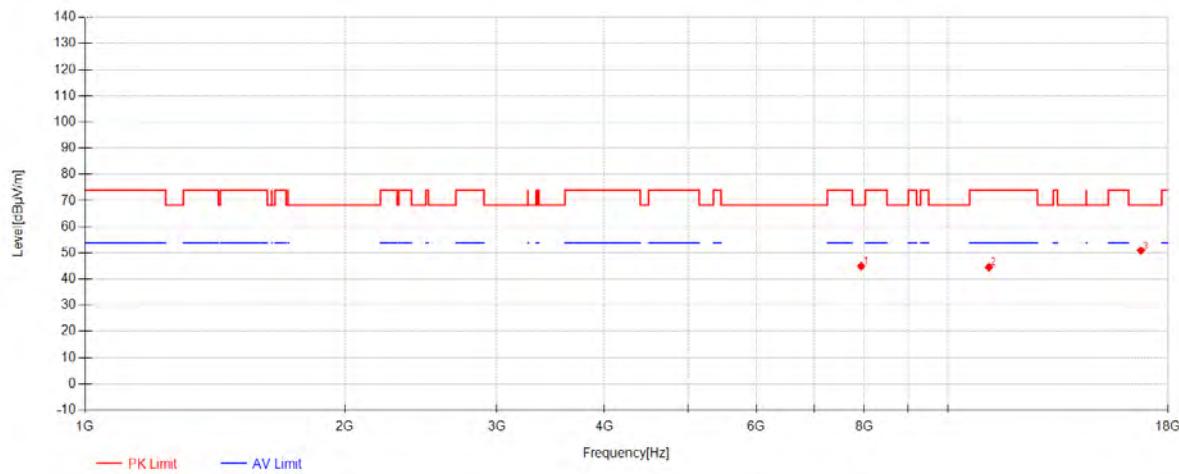
Data List

NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7935.5833	50.49	37.01	-42.52	44.98	68.30	23.32	Horizontal
2	11160.000	43.02	38.68	-37.06	44.64	74.00	29.36	Horizontal
3	16740.000	44.25	41.42	-34.77	50.91	68.30	17.39	Horizontal

802.11n20_Channel 116
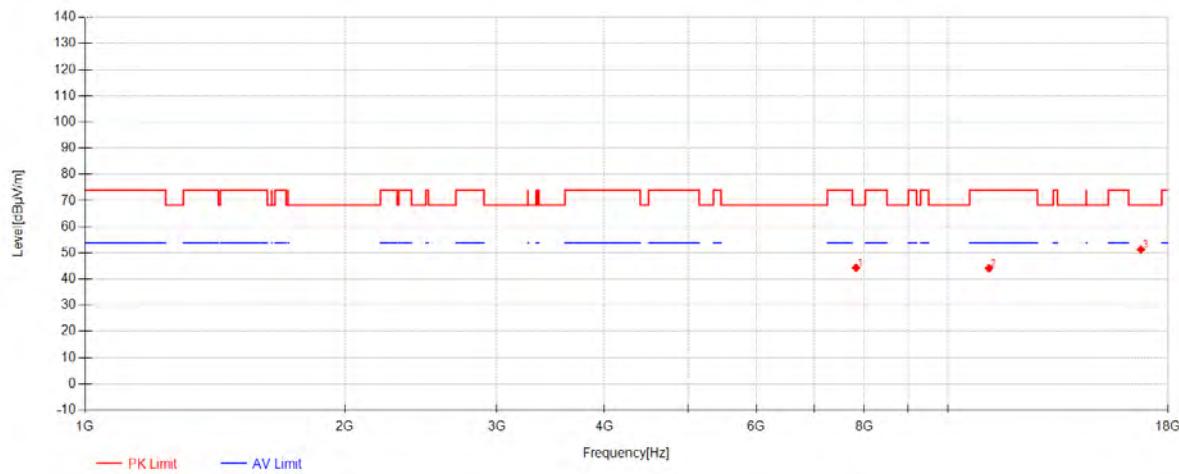
| Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7826.3333	50.18	36.86	-42.62	44.41	68.30	23.89	Vertical
2	11160.000	42.57	38.68	-37.06	44.19	74.00	29.81	Vertical
3	16740.000	44.65	41.42	-34.77	51.31	68.30	16.99	Vertical

802.11n20_Channel 140
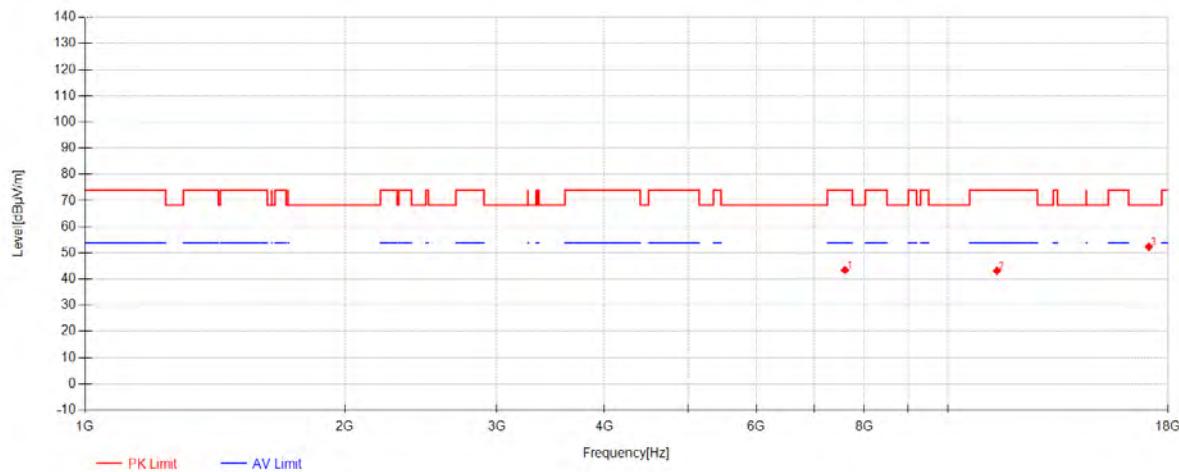
Data List

NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7599.2083	49.70	36.54	-42.74	43.50	74.00	30.50	Horizontal
2	11400.000	41.89	38.80	-37.51	43.18	74.00	30.82	Horizontal
3	17100.000	43.57	42.54	-33.74	52.37	68.30	15.93	Horizontal

802.11n20_Channel 140
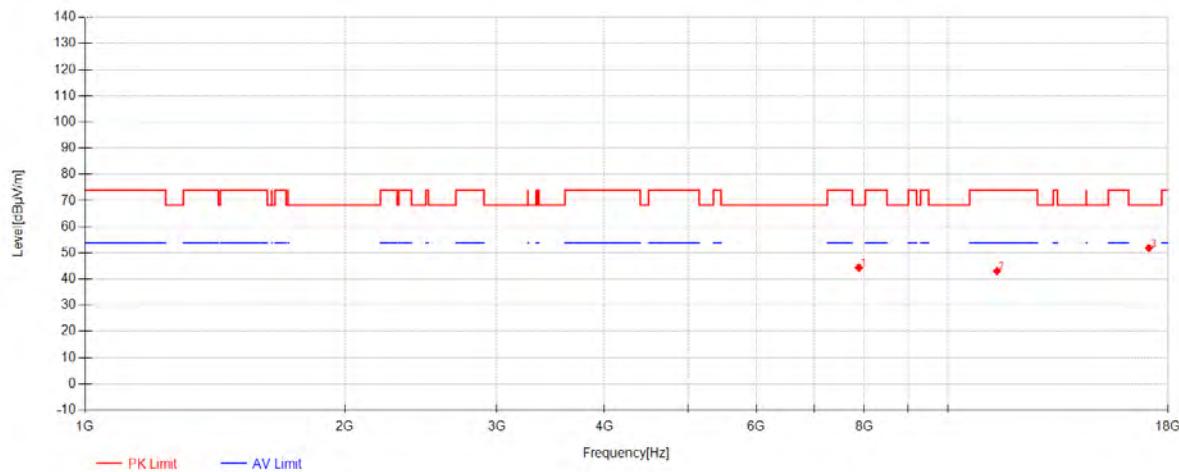
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7888.1458	50.25	36.94	-42.72	44.47	68.30	23.83	Vertical
2	11400.000	41.76	38.80	-37.51	43.05	74.00	30.95	Vertical
3	17100.000	43.07	42.54	-33.74	51.87	68.30	16.43	Vertical

802.11n20_Channel 149
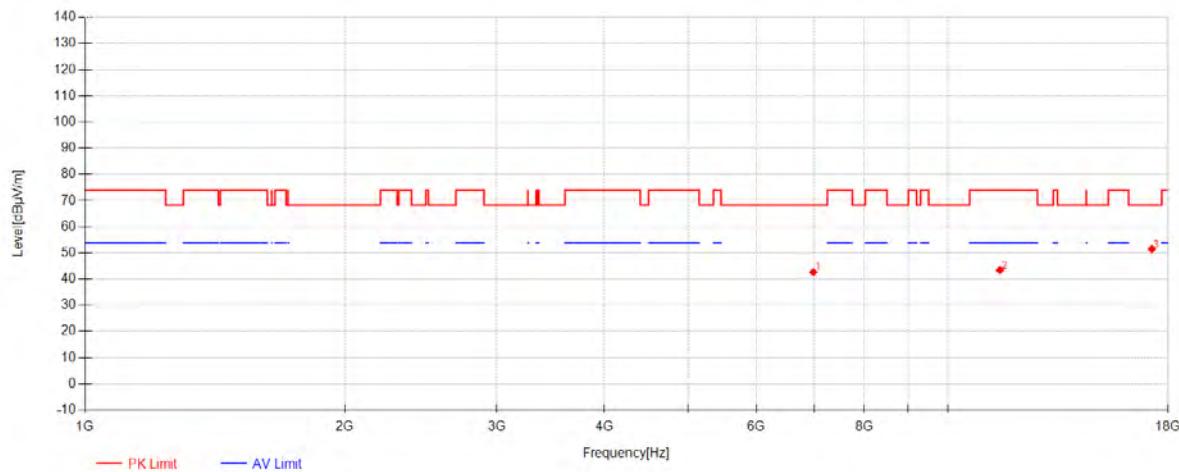
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	6984.9167	50.87	34.97	-43.13	42.72	68.30	25.58	Horizontal
2	11490.000	41.24	38.85	-36.61	43.48	74.00	30.52	Horizontal
3	17235.000	43.35	43.14	-34.96	51.53	68.30	16.77	Horizontal

802.11n20_Channel 149
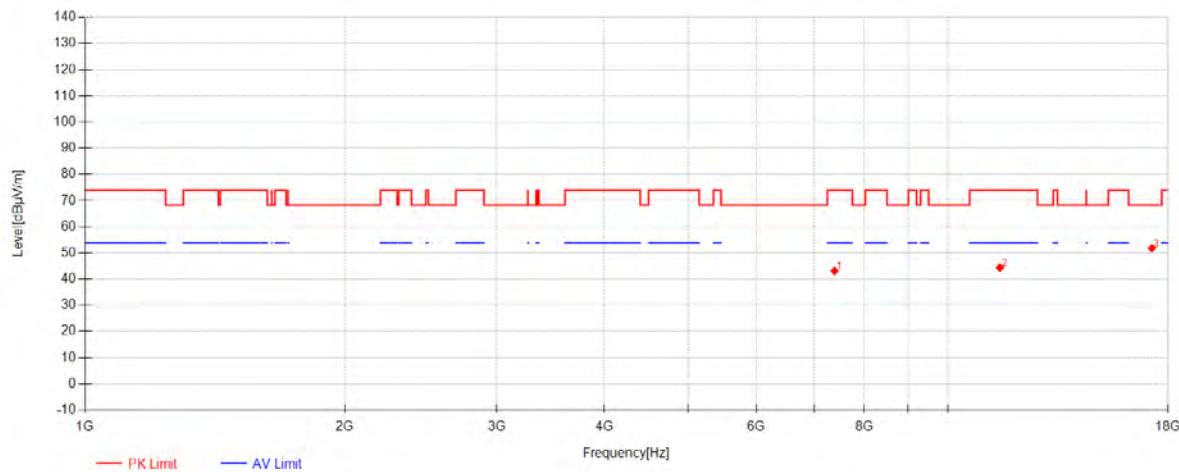
| Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7390.7708	49.91	36.09	-42.84	43.16	74.00	30.84	Vertical
2	11490.000	42.20	38.85	-36.61	44.44	74.00	29.56	Vertical
3	17235.000	43.64	43.14	-34.96	51.82	68.30	16.48	Vertical

802.11n20_Channel 157
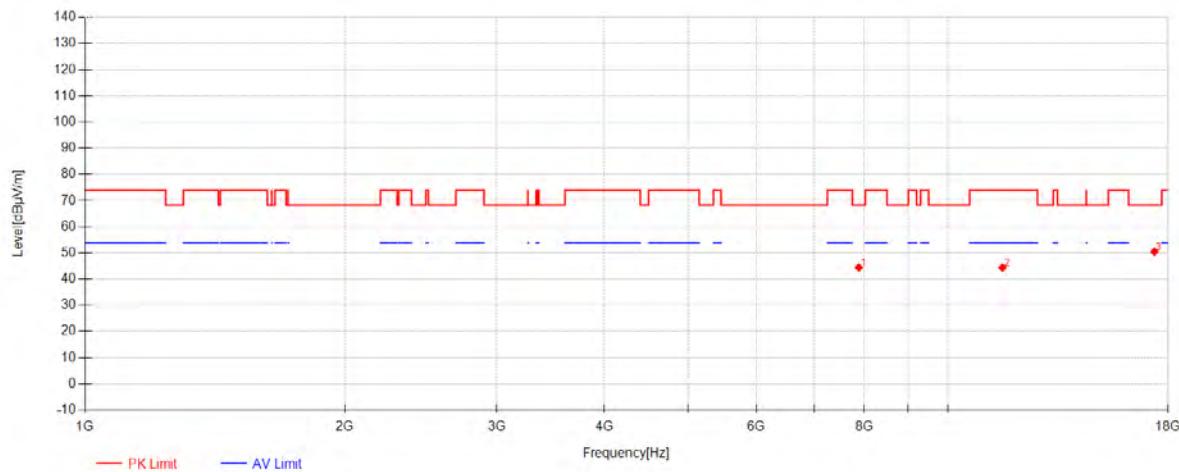
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7885.75	50.32	36.94	-42.72	44.54	68.30	23.76	Horizontal
2	11570.000	42.43	38.89	-36.84	44.48	74.00	29.52	Horizontal
3	17355.000	41.81	43.66	-35.00	50.47	68.30	17.83	Horizontal
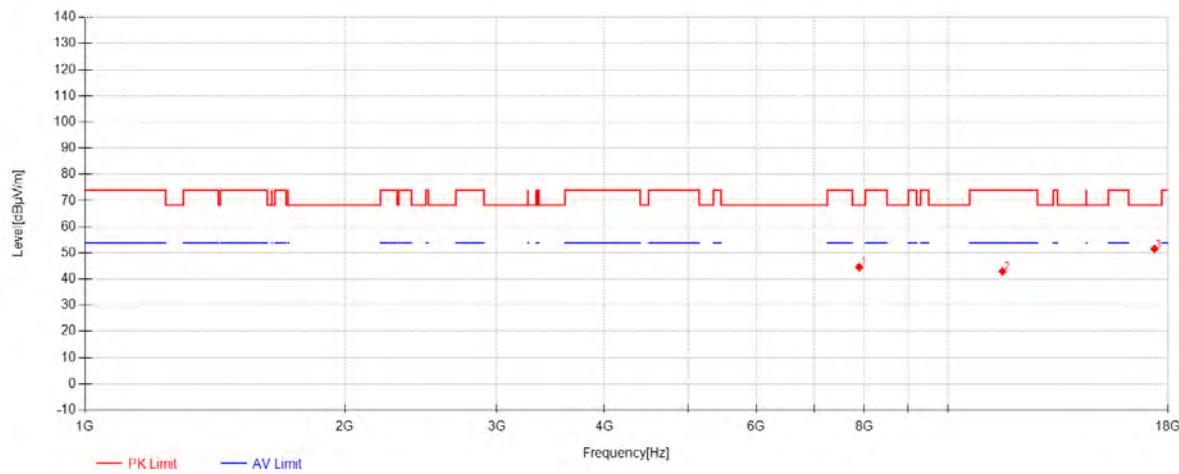
Data List

802.11n20_Channel 157

Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7893.4167	50.45	36.95	-42.73	44.67	68.30	23.63	Vertical
2	11570.000	40.92	38.89	-36.84	42.97	74.00	31.03	Vertical
3	17355.000	42.88	43.66	-35.00	51.54	68.30	16.76	Vertical

802.11n20_Channel 165
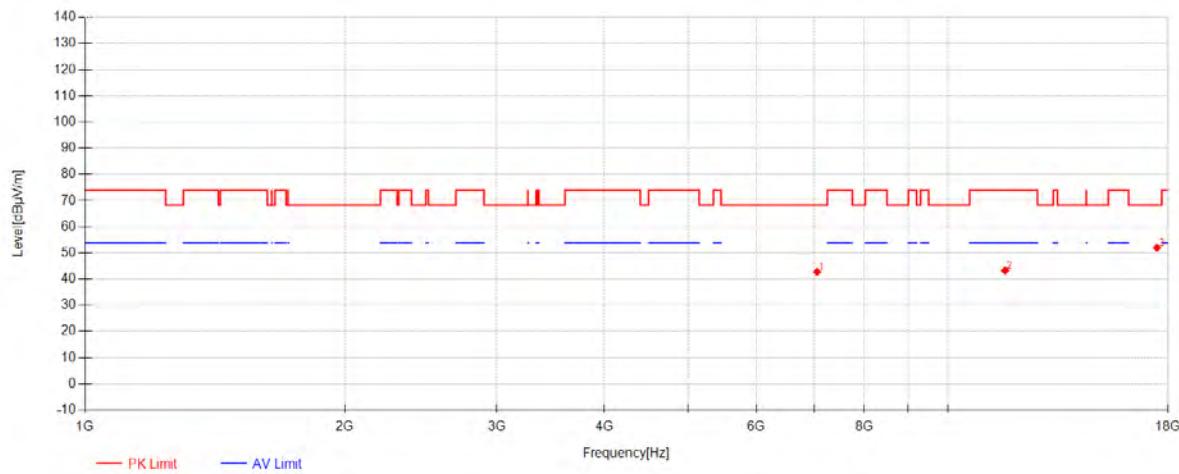
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7053.9167	51.01	35.15	-43.35	42.81	68.30	25.49	Horizontal
2	11650.000	40.91	38.93	-36.53	43.30	74.00	30.70	Horizontal
3	17475.000	41.90	44.19	-34.07	52.02	68.30	16.28	Horizontal

802.11n20_Channel 165
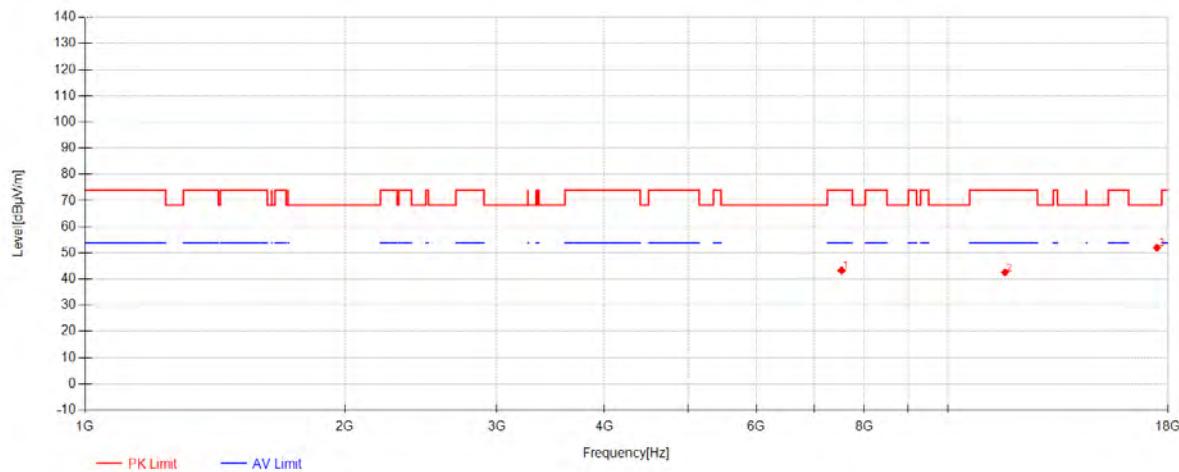
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7530.6875	49.93	36.44	-43.04	43.33	74.00	30.67	Vertical
2	11650.000	40.21	38.93	-36.53	42.60	74.00	31.40	Vertical
3	17475.000	41.90	44.19	-34.07	52.02	68.30	16.28	Vertical

802.11n40_Channel 38
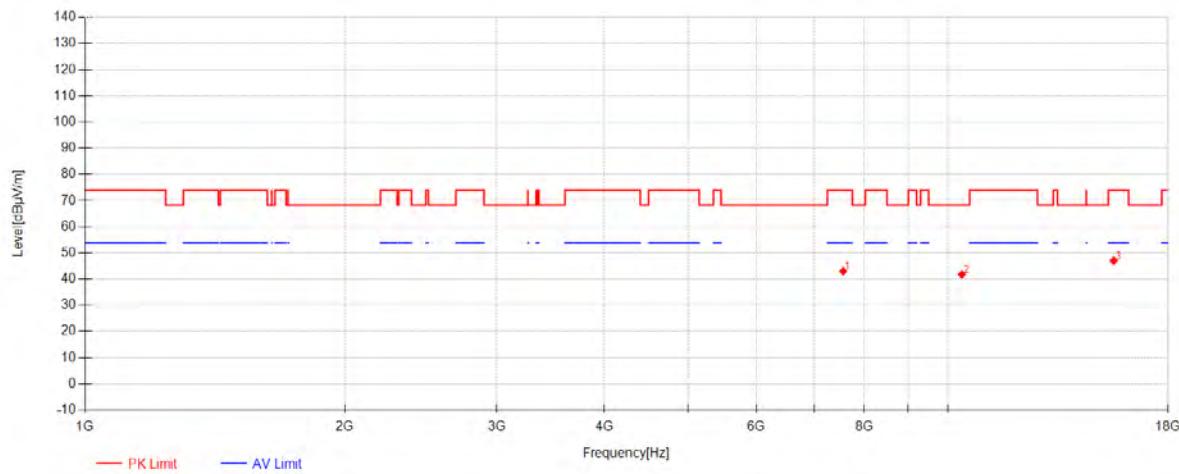
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7563.75	49.45	36.49	-42.90	43.04	74.00	30.96	Horizontal
2	10380.000	41.99	38.54	-38.77	41.76	68.30	26.54	Horizontal
3	15570.000	41.22	40.40	-34.59	47.03	74.00	26.97	Horizontal

802.11n40_Channel 38
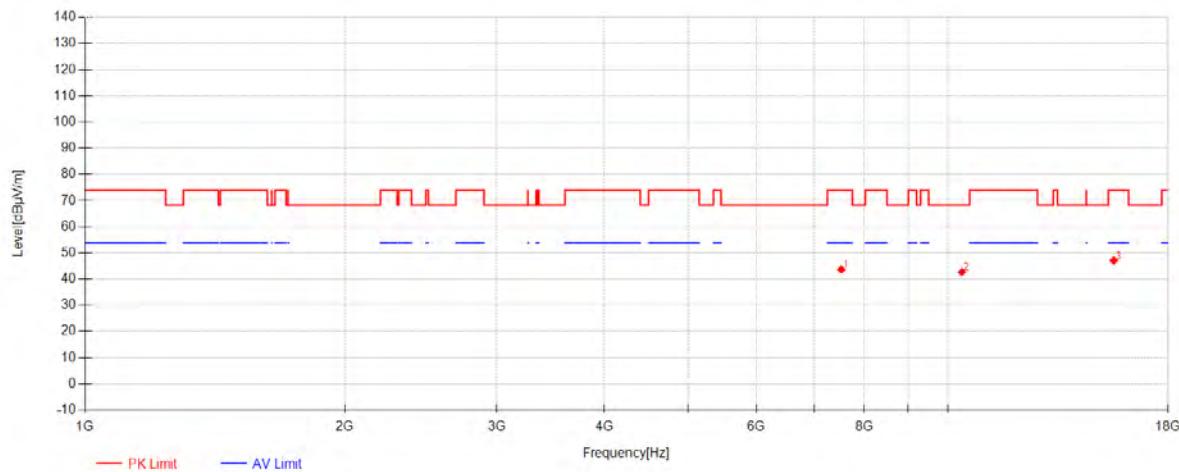
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7525.8958	50.34	36.44	-43.06	43.72	74.00	30.28	Vertical
2	10380.000	42.95	38.54	-38.77	42.72	68.30	25.58	Vertical
3	15570.000	41.30	40.40	-34.59	47.11	74.00	26.89	Vertical

802.11n40_Channel 46
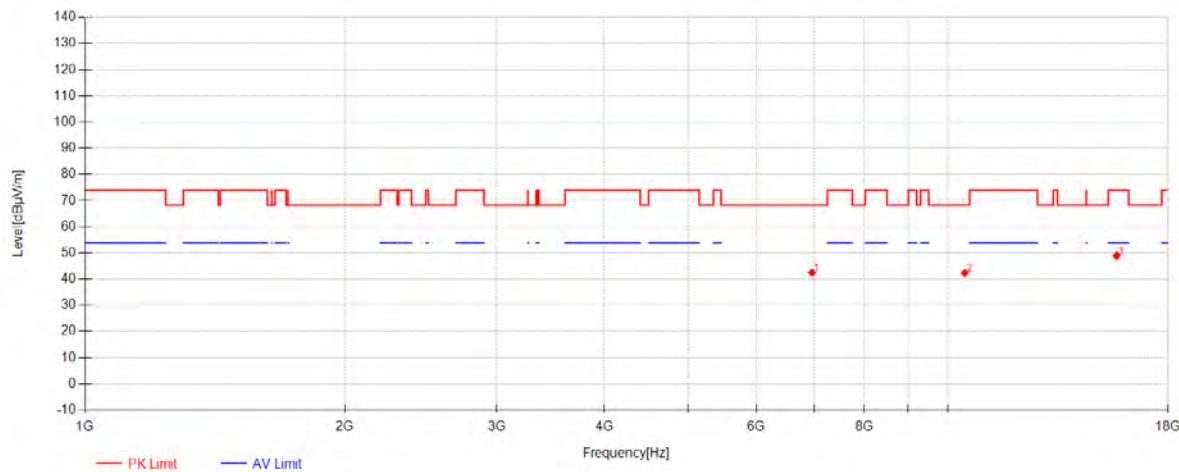
| Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	6960	50.92	34.93	-43.35	42.49	68.30	25.81	Horizontal
2	10460.000	42.57	38.55	-38.74	42.37	68.30	25.93	Horizontal
3	15690.000	42.14	40.15	-33.37	48.92	74.00	25.08	Horizontal

802.11n40_Channel 46
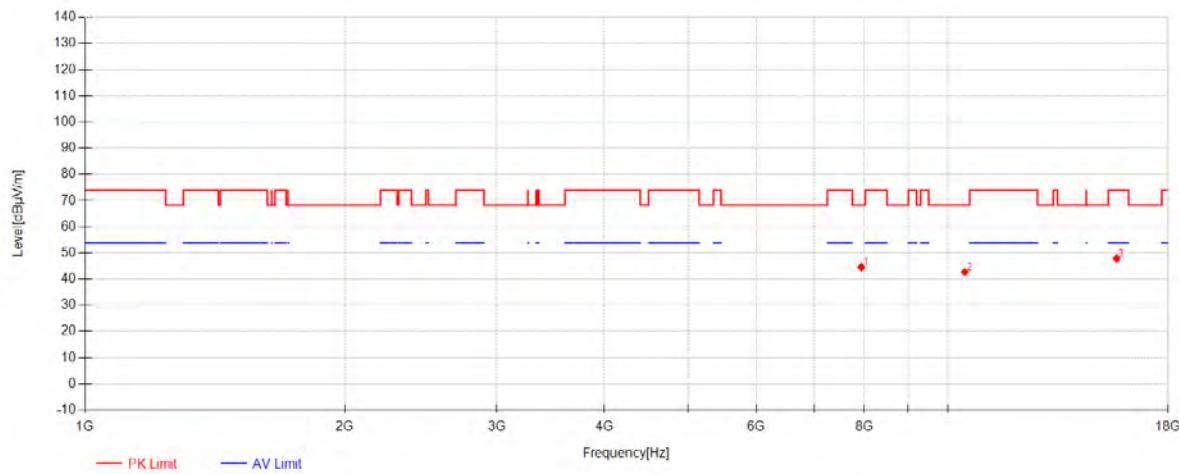
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7938.4583	50.16	37.01	-42.51	44.67	68.30	23.63	Vertical
2	10460.000	42.95	38.55	-38.74	42.75	68.30	25.55	Vertical
3	15690.000	41.10	40.15	-33.37	47.88	74.00	26.12	Vertical

802.11n40_Channel 54
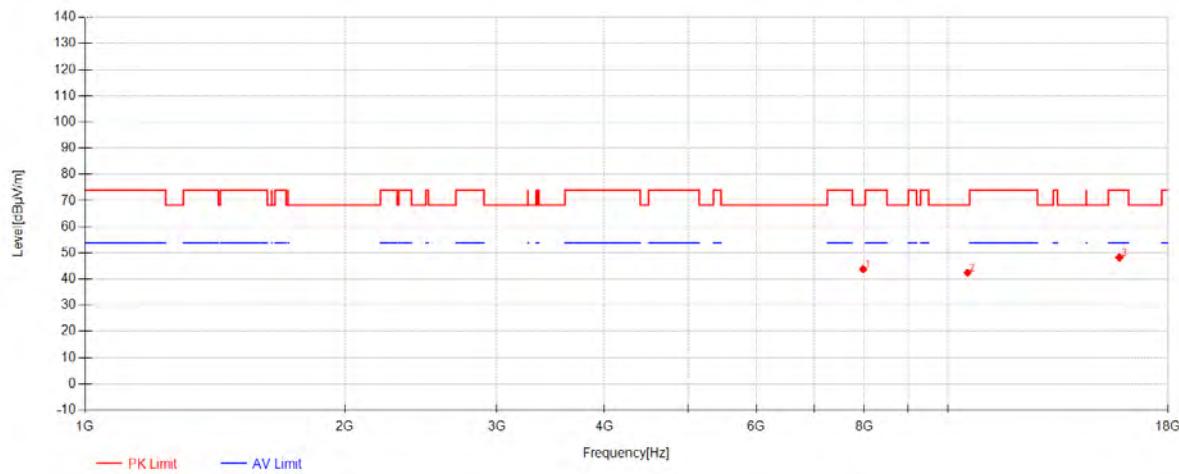
Data List							
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7978.2292	49.05	37.07	-42.26	43.86	68.30	24.44	Horizontal
2	10540.000	42.35	38.55	-38.46	42.45	68.30	25.85	Horizontal
3	15810.000	41.56	39.90	-33.17	48.29	74.00	25.71	Horizontal

802.11n40_Channel 54
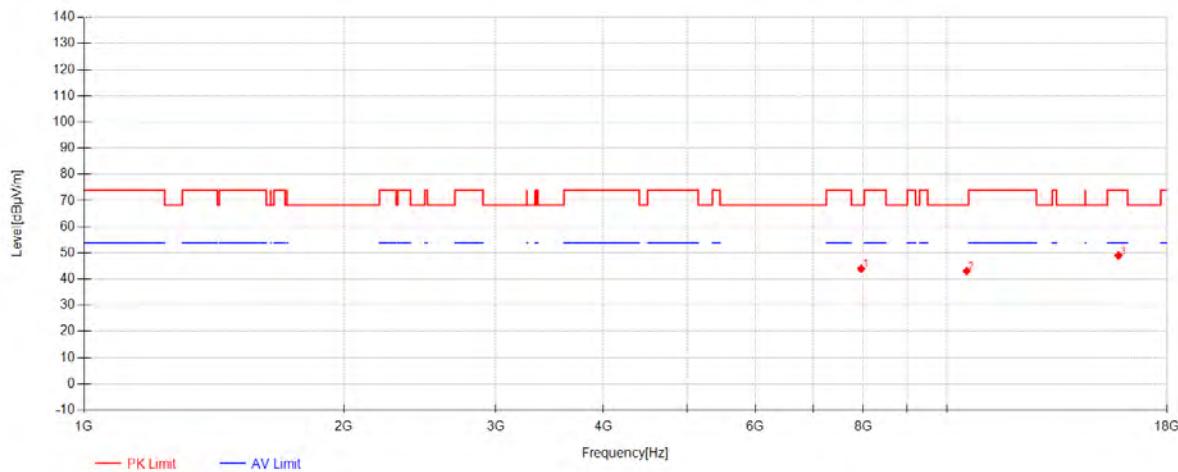
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7955.7083	49.36	37.04	-42.40	44.00	68.30	24.30	Vertical
2	10540.000	42.98	38.55	-38.46	43.08	68.30	25.22	Vertical
3	15810.000	42.24	39.90	-33.17	48.97	74.00	25.03	Vertical

802.11n40_Channel 62
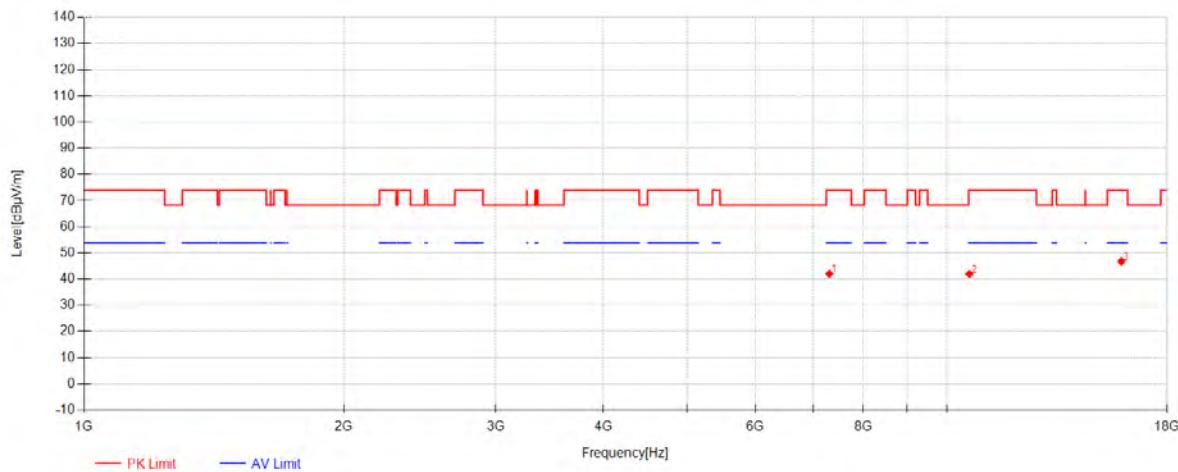
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7309.3125	49.45	35.87	-43.28	42.04	74.00	31.96	Horizontal
2	10620.000	41.28	38.56	-37.90	41.94	74.00	32.06	Horizontal
3	15930.000	41.49	39.65	-34.38	46.76	74.00	27.24	Horizontal

802.11n40_Channel 62
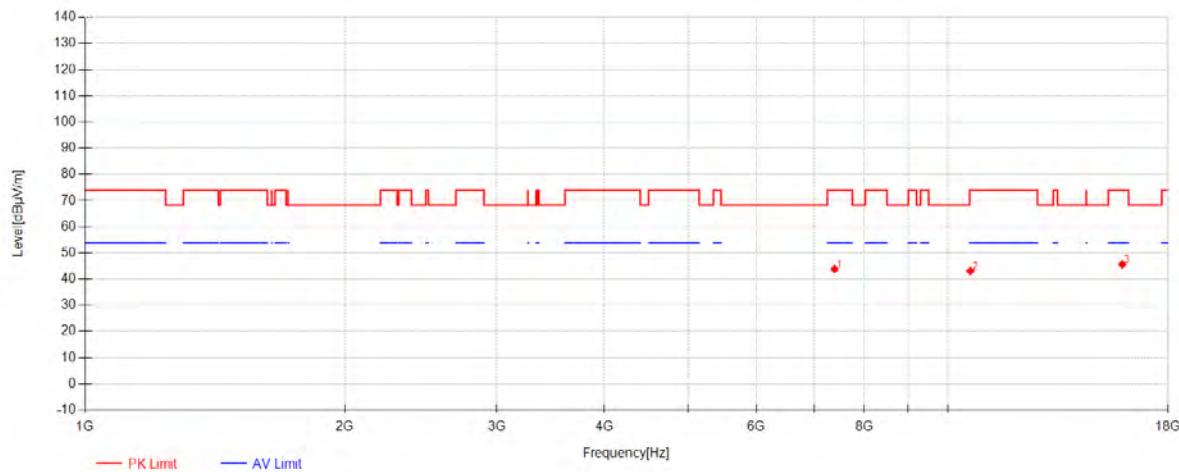
Data List

NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7391.25	50.64	36.10	-42.84	43.90	74.00	30.10	Vertical
2	10620.000	42.47	38.56	-37.90	43.13	74.00	30.87	Vertical
3	15930.000	40.44	39.65	-34.38	45.71	74.00	28.29	Vertical

802.11n40_Channel 102
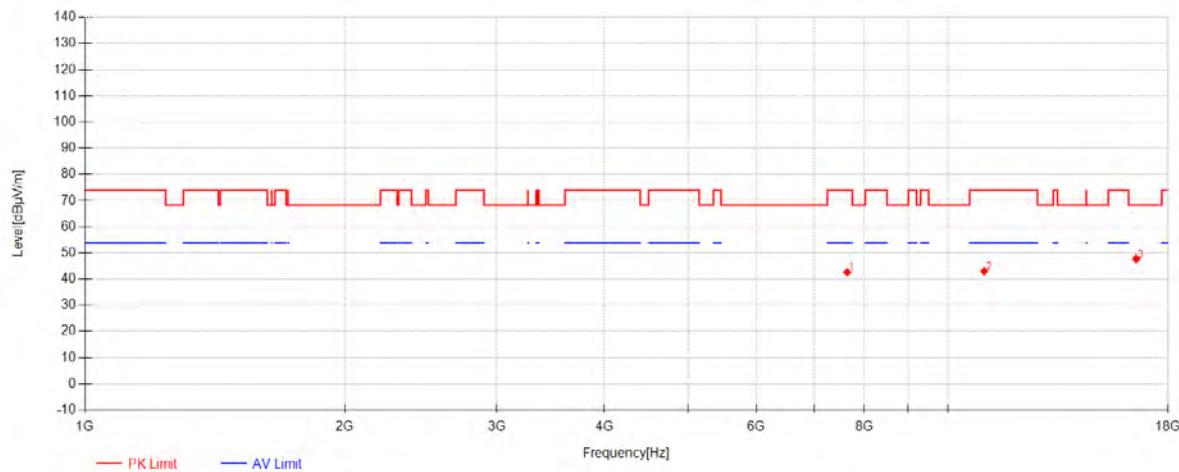
Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7644.7292	48.90	36.60	-42.83	42.67	74.00	31.33	Horizontal
2	11020.000	42.03	38.61	-37.62	43.02	74.00	30.98	Horizontal
3	16530.000	41.20	40.88	-34.35	47.73	68.30	20.57	Horizontal

802.11n40_Channel 102
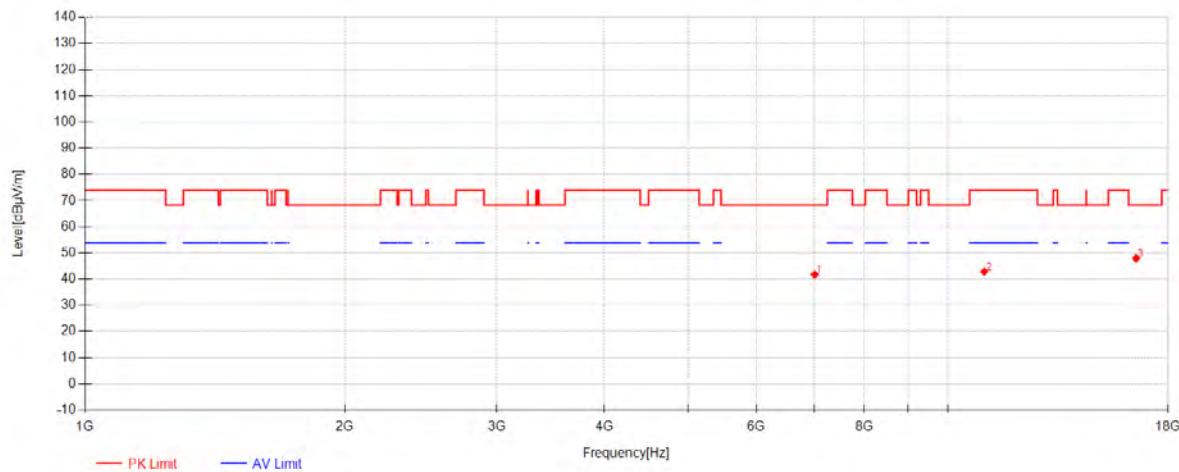
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7009.8333	49.79	35.03	-43.06	41.76	68.30	26.54	Vertical
2	11020.000	41.87	38.61	-37.62	42.86	74.00	31.14	Vertical
3	16530.000	41.38	40.88	-34.35	47.91	68.30	20.39	Vertical

802.11n40_Channel 110
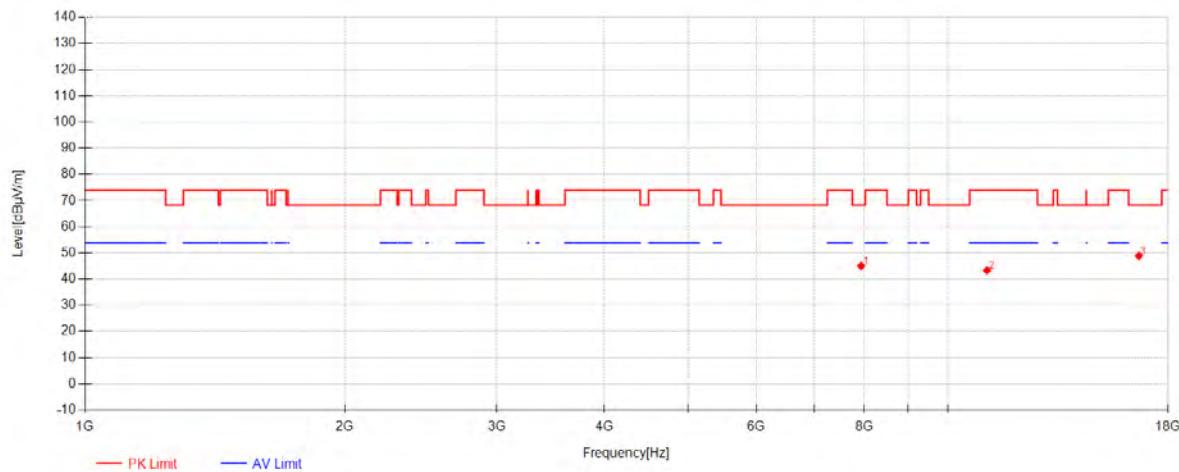
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7935.5833	50.60	37.01	-42.52	45.09	68.30	23.21	Horizontal
2	11100.000	42.45	38.65	-37.75	43.35	74.00	30.65	Horizontal
3	16650.000	42.34	41.19	-34.68	48.85	68.30	19.45	Horizontal

802.11n40_Channel 110
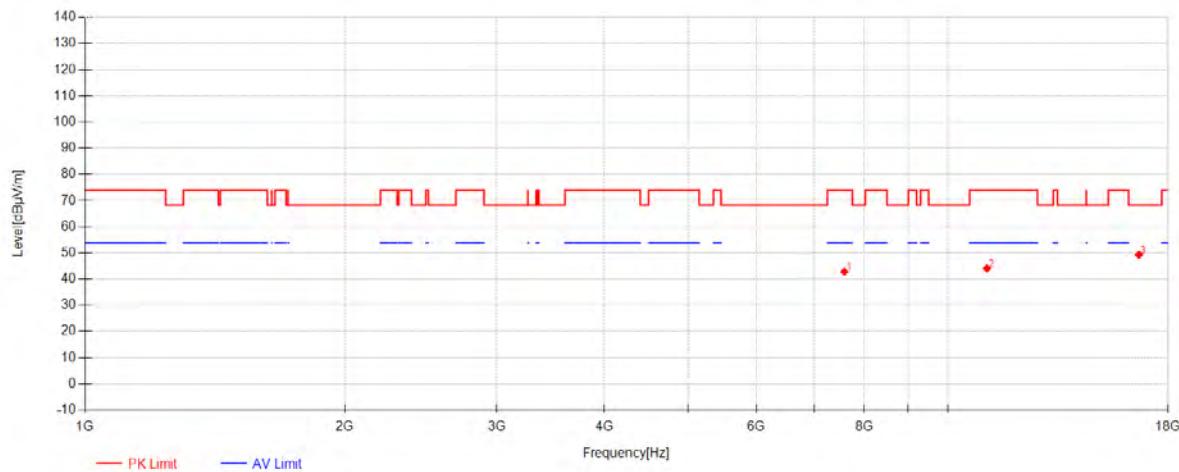
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7585.7917	49.13	36.52	-42.80	42.85	74.00	31.15	Vertical
2	11100.000	43.22	38.65	-37.75	44.12	74.00	29.88	Vertical
3	16650.000	42.79	41.19	-34.68	49.30	68.30	19.00	Vertical

802.11n40_Channel 134
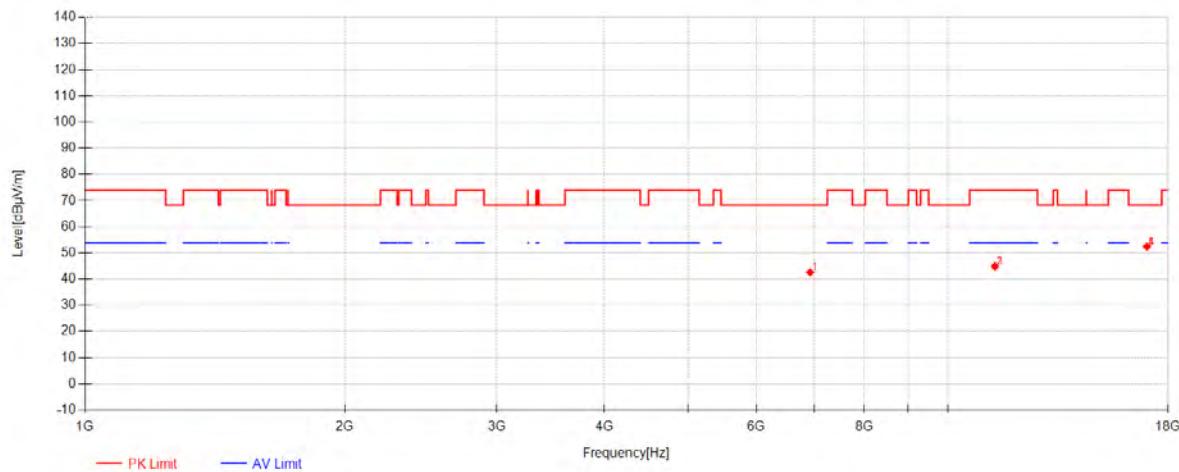
Data List							
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	6925.5	51.43	34.87	-43.67	42.63	68.30	25.67	Horizontal
2	11340.000	43.50	38.77	-37.34	44.93	74.00	29.07	Horizontal
3	17010.000	44.00	42.14	-33.70	52.44	68.30	15.86	Horizontal

802.11n40_Channel 134
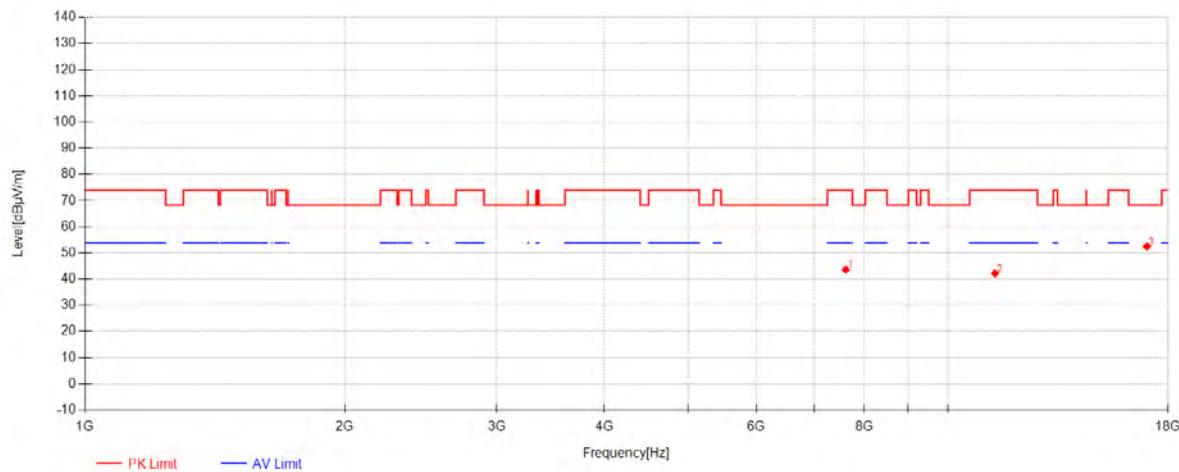
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7615.9792	49.88	36.56	-42.77	43.67	74.00	30.33	Vertical
2	11340.000	40.78	38.77	-37.34	42.21	74.00	31.79	Vertical
3	17010.000	44.05	42.14	-33.70	52.49	68.30	15.81	Vertical

802.11n40_Channel 151
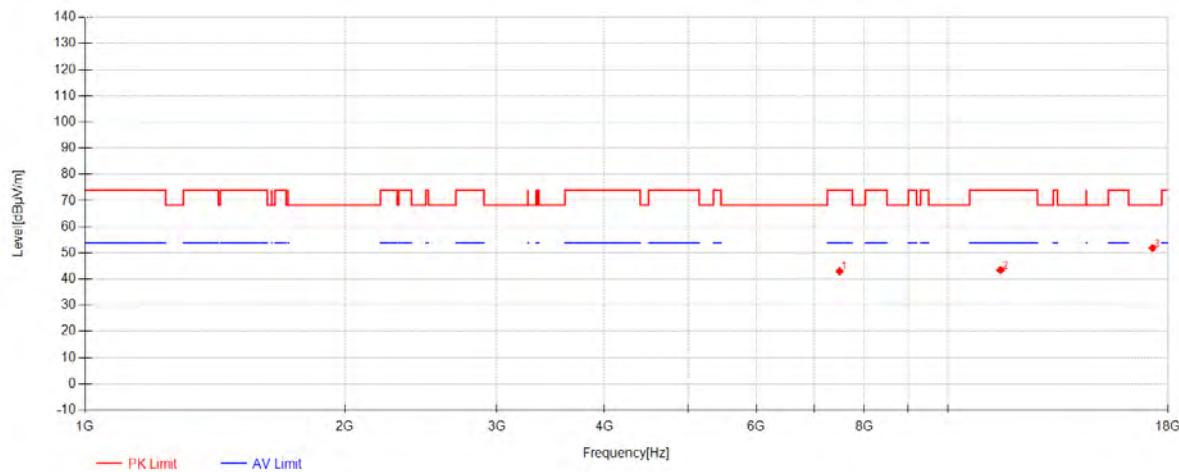
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7491.3958	49.77	36.38	-43.14	43.01	74.00	30.99	Horizontal
2	11510.000	41.19	38.86	-36.56	43.49	74.00	30.51	Horizontal
3	17265.000	43.73	43.27	-35.11	51.89	68.30	16.41	Horizontal

802.11n40_Channel 151
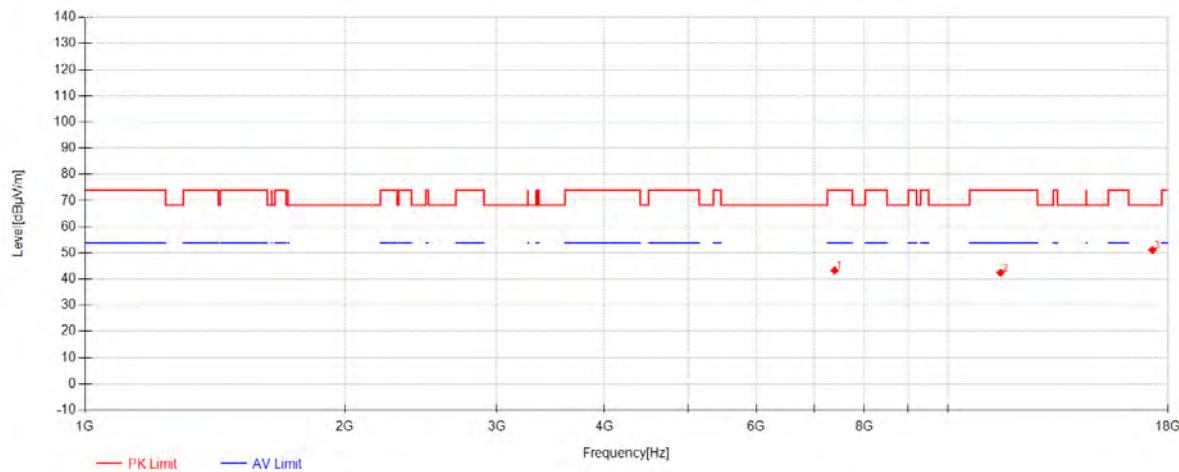
| Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7393.6458	50.05	36.10	-42.82	43.33	74.00	30.67	Vertical
2	11510.000	40.18	38.86	-36.56	42.48	74.00	31.52	Vertical
3	17265.000	42.99	43.27	-35.11	51.15	68.30	17.15	Vertical

802.11n40_Channel 159
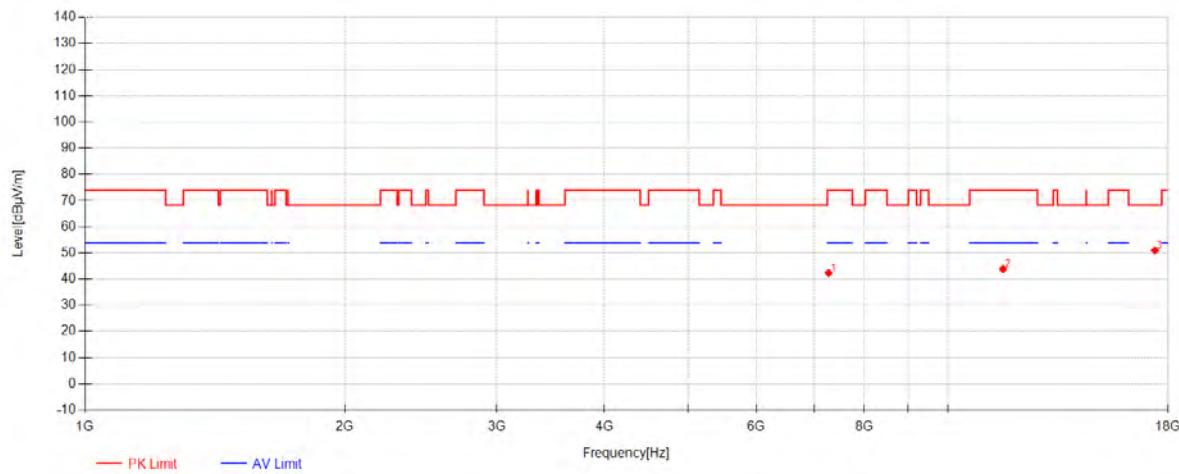
Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7274.8125	49.99	35.77	-43.40	42.36	74.00	31.64	Horizontal
2	11590.000	41.95	38.90	-36.93	43.91	74.00	30.09	Horizontal
3	17385.000	42.03	43.80	-34.85	50.98	68.30	17.32	Horizontal

802.11n40_Channel 159
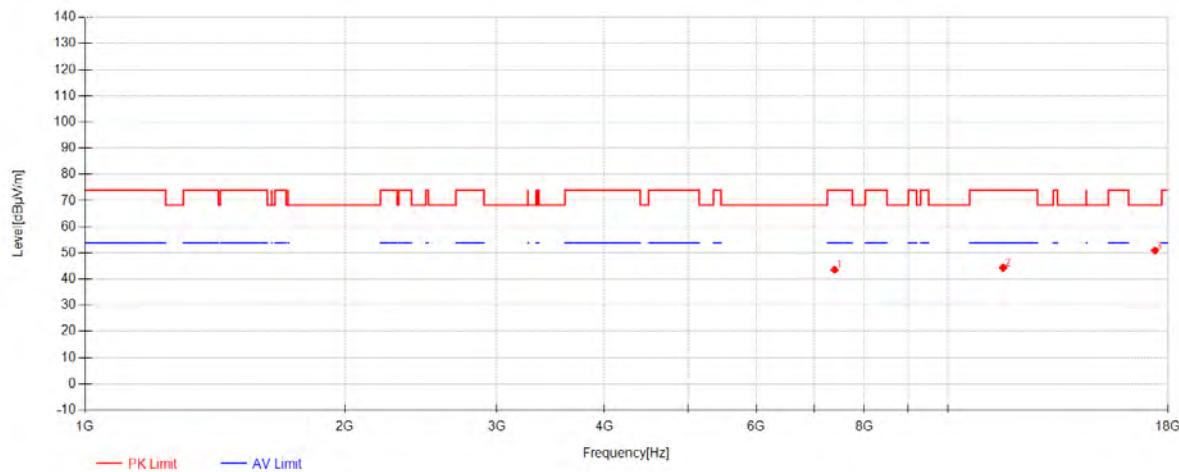
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7392.2083	50.36	36.10	-42.83	43.63	74.00	30.37	Vertical
2	11590.000	42.47	38.90	-36.93	44.43	74.00	29.57	Vertical
3	17385.000	41.99	43.80	-34.85	50.94	68.30	17.36	Vertical

802.11ac80_Channel 42
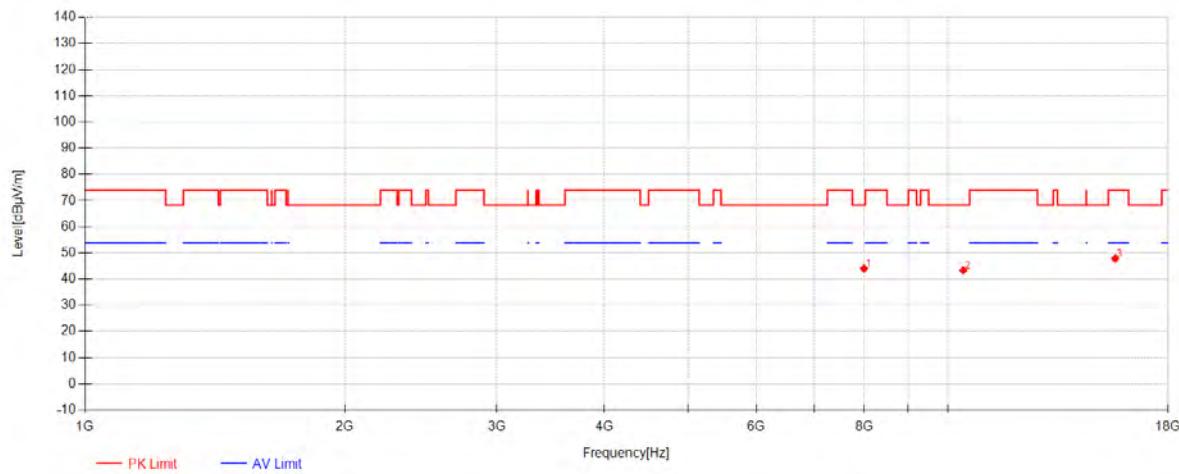
| Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7995.9583	49.17	37.09	-42.15	44.11	68.30	24.19	Horizontal
2	10420.000	43.60	38.54	-38.73	43.41	68.30	24.89	Horizontal
3	15630.000	41.63	40.28	-34.04	47.87	74.00	26.13	Horizontal

802.11ac80_Channel 42
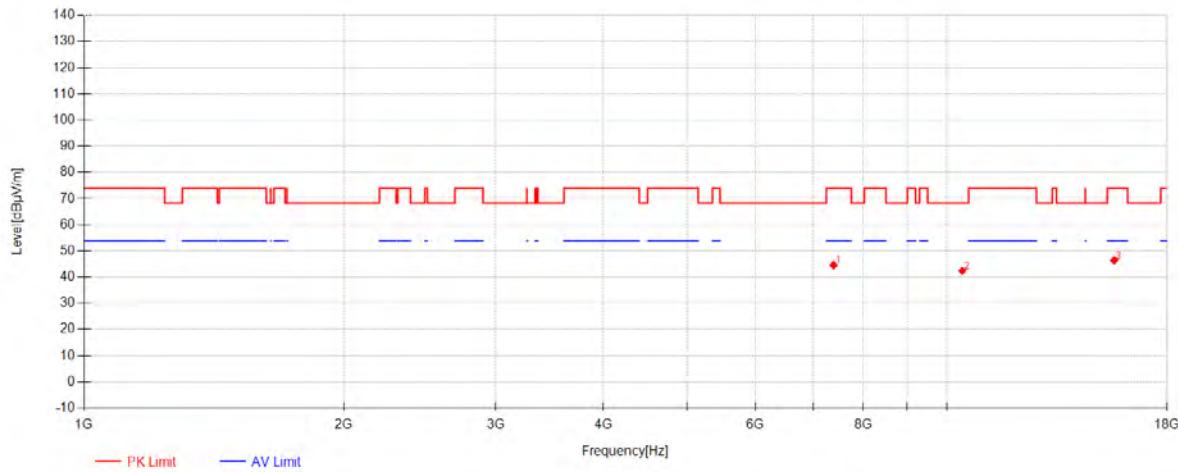
Data List

NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7391.7292	51.41	36.10	-42.83	44.67	74.00	29.33	Vertical
2	10420.000	42.62	38.54	-38.73	42.43	68.30	25.87	Vertical
3	15630.000	40.23	40.28	-34.04	46.47	74.00	27.53	Vertical

802.11ac80_Channel 58
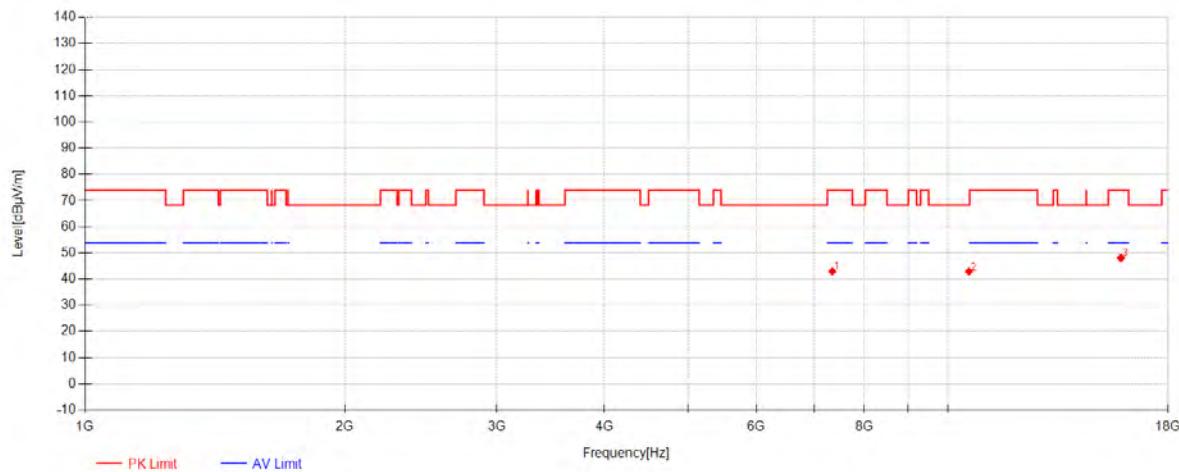
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7347.1667	50.06	35.97	-43.08	42.96	74.00	31.04	Horizontal
2	10580.000	42.53	38.56	-38.16	42.93	68.30	25.37	Horizontal
3	15870.000	42.13	39.77	-33.81	48.09	74.00	25.91	Horizontal

802.11ac80_Channel 58
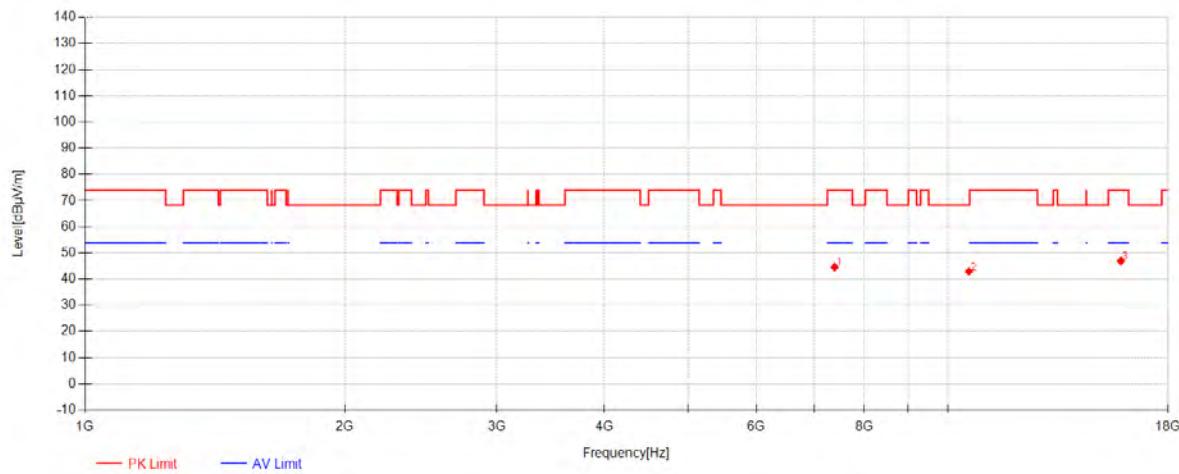
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7393.1667	51.41	36.10	-42.83	44.68	74.00	29.32	Vertical
2	10580.000	42.54	38.56	-38.16	42.94	68.30	25.36	Vertical
3	15870.000	40.98	39.77	-33.81	46.94	74.00	27.06	Vertical

802.11ac80_Channel 106
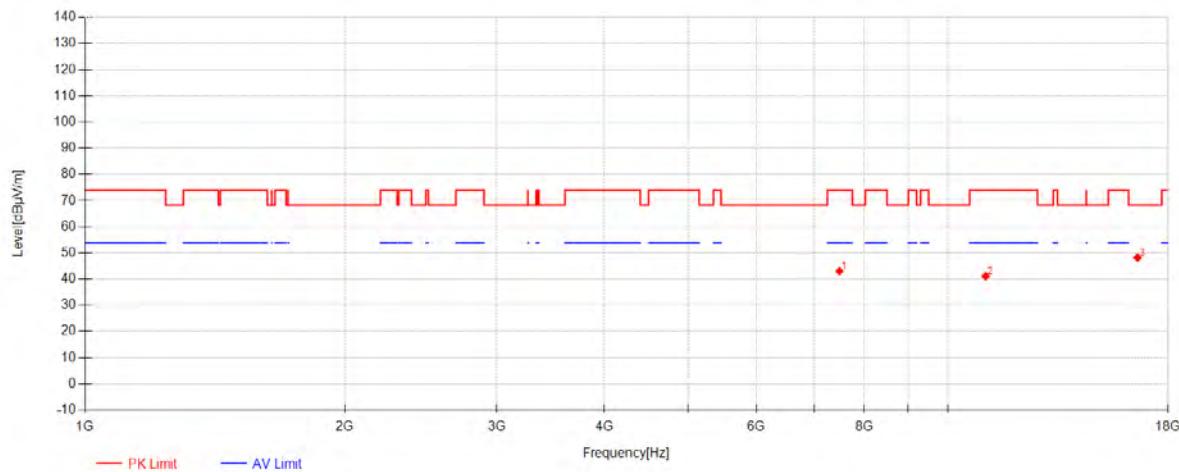
Data List

| NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7487.5625	49.83	36.37	-43.12	43.07	74.00	30.93	Horizontal
2	11060.000	40.15	38.63	-37.69	41.09	74.00	32.91	Horizontal
3	16590.000	41.65	41.03	-34.50	48.19	68.30	20.11	Horizontal

802.11ac80_Channel 106
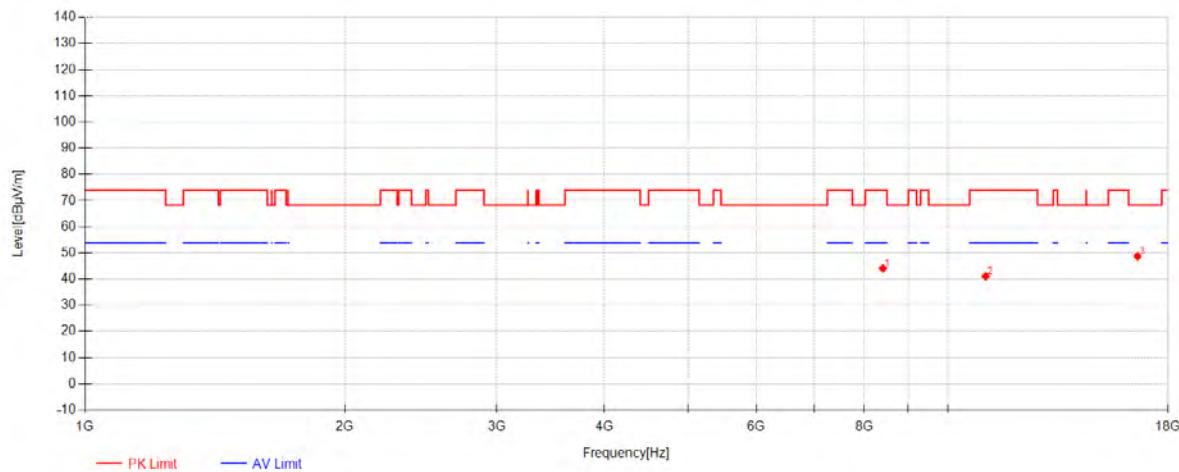
Data List

NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	8408.0417	48.69	36.86	-41.40	44.14	74.00	29.86	Vertical
2	11060.000	40.12	38.63	-37.69	41.06	74.00	32.94	Vertical
3	16590.000	42.18	41.03	-34.50	48.72	68.30	19.58	Vertical

802.11ac80_Channel 155
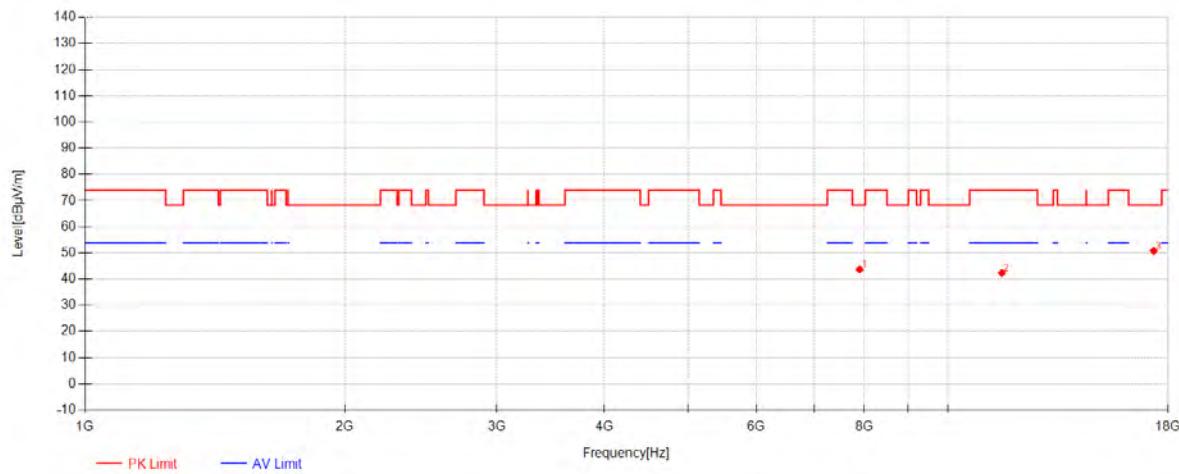
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	7902.5208	49.49	36.96	-42.72	43.73	68.30	24.57	Horizontal
2	11550.000	40.23	38.88	-36.75	42.36	74.00	31.64	Horizontal
3	17325.000	42.40	43.53	-35.15	50.78	68.30	17.52	Horizontal

802.11ac80_Channel 155
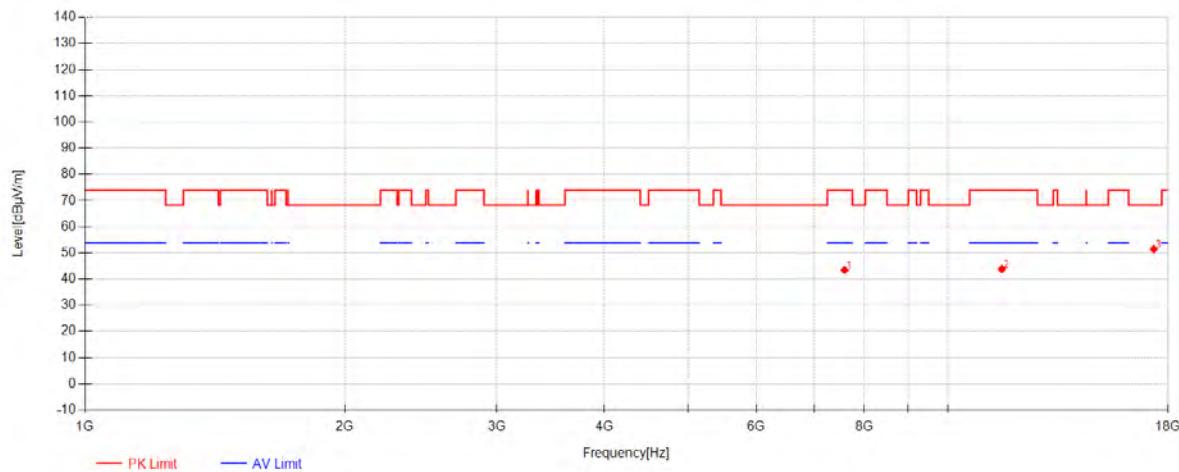
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7591.5417	49.76	36.53	-42.78	43.51	74.00	30.49	Vertical
2	11550.000	41.75	38.88	-36.75	43.88	74.00	30.12	Vertical
3	17325.000	43.12	43.53	-35.15	51.50	68.30	16.80	Vertical

7.4 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: KDB 789033 D02 II G

Measurement Distance: 3m

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.

7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 25.2 °C   Humidity: 47.7 % RH   Atmospheric Pressure: 1010   mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	05	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 only

		the data of worst case is recorded in the report.
Final test	06	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 only the data of worst case is recorded in the report.
Final test	07	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.
Final test	08	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 only the data of worst case is recorded in the report.

### 7.4.3 Test Setup Diagram
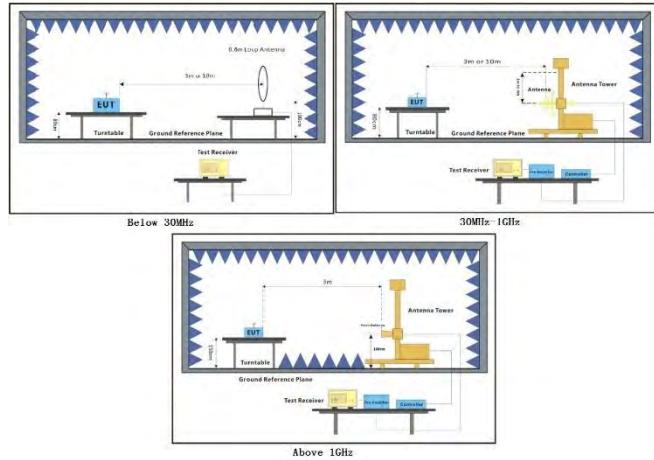
7.4.4 Measurement Procedure and Data

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: Level= Read Level+ Cable Loss+ Antenna Factor- 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 ≥1/T (Duty cycle＜98%) or 10Hz (Duty cycle≥98%) for Average detection (AV) at frequency above 1GHz.

802.11a_Channel 36
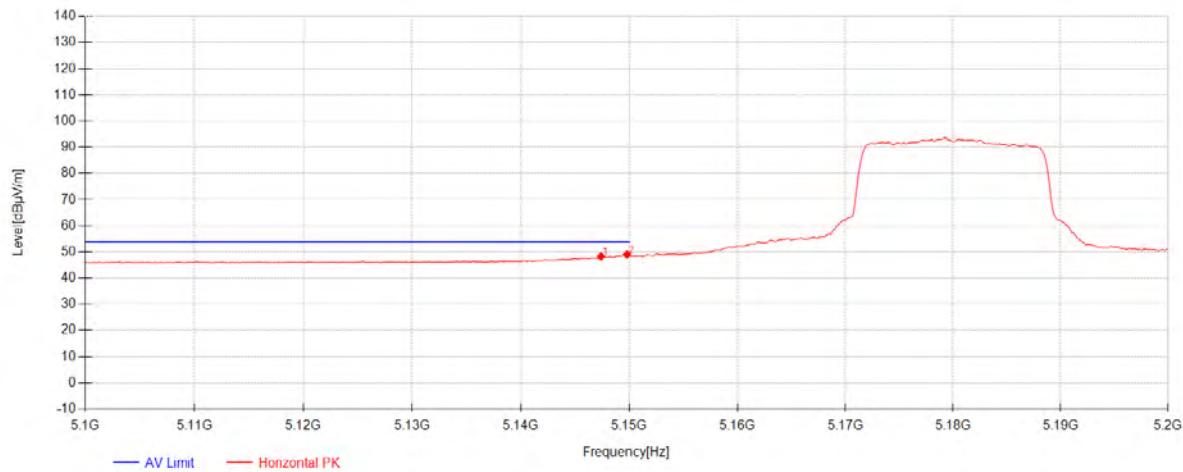
Data List

NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5147.4	35.80	31.67	-19.15	48.32	54.00	5.68	Horizontal
2	5149.8	36.46	31.67	-19.14	48.99	54.00	5.01	Horizontal

802.11a_Channel 36
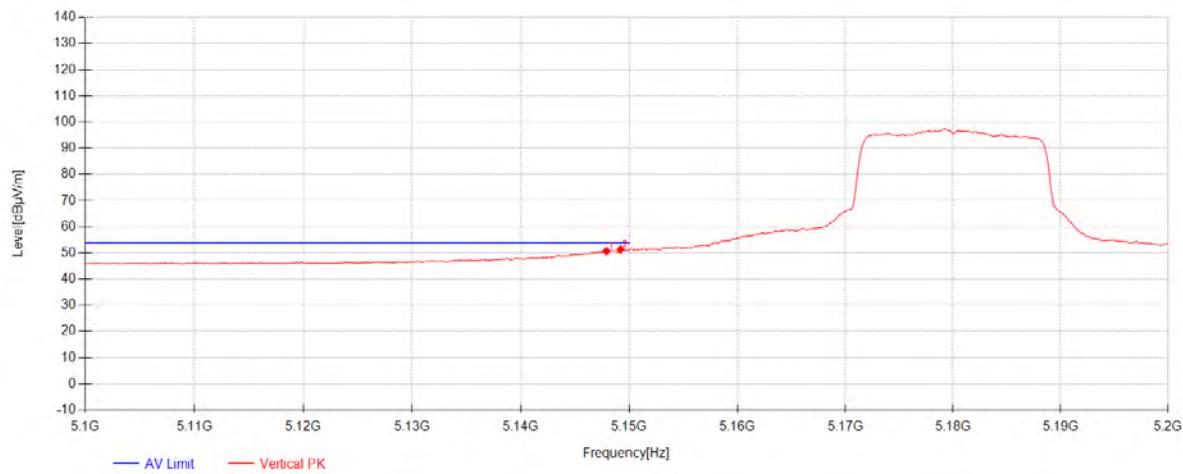
| Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.9	38.18	31.67	-19.15	50.70	54.00	3.30	Vertical
2	5149.2	38.82	31.67	-19.14	51.35	54.00	2.65	Vertical

802.11a_Channel 36
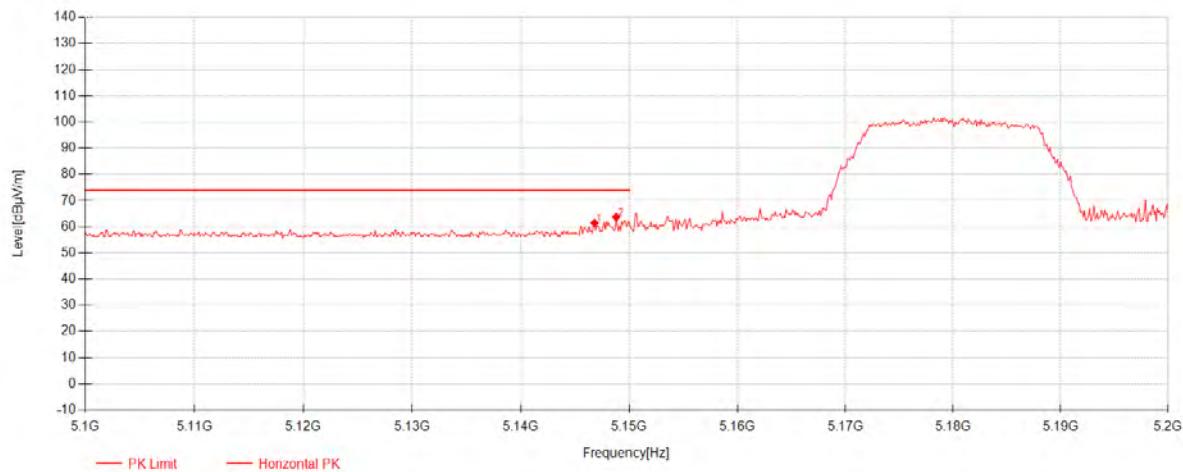
| NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5146.8	48.94	31.66	-19.15	61.46	74.00	12.54	Horizontal
2	5148.8	51.26	31.67	-19.14	63.78	74.00	10.22	Horizontal

802.11a_Channel 36
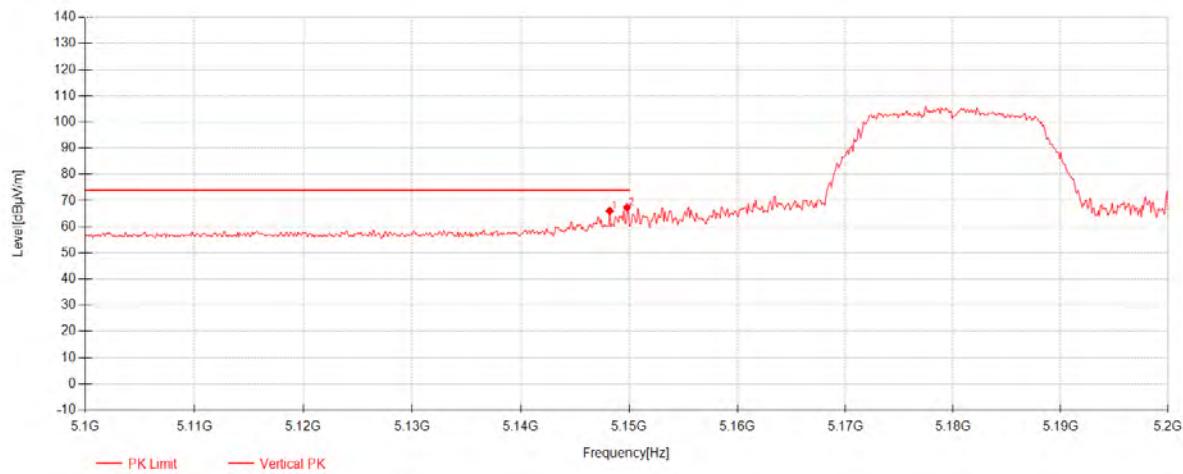
Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.2	53.57	31.67	-19.14	66.09	74.00	7.91	Vertical
2	5149.8	54.82	31.67	-19.14	67.35	74.00	6.65	Vertical

802.11a_Channel 64
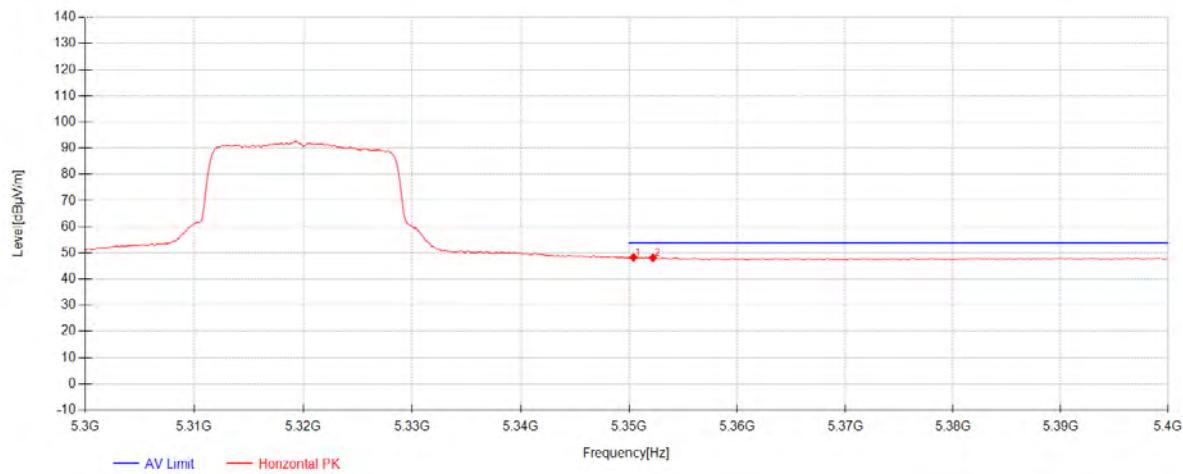
| Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5350.4	35.20	32.03	-18.90	48.33	54.00	5.67	Horizontal
2	5352.2	35.00	32.03	-18.91	48.13	54.00	5.87	Horizontal

802.11a_Channel 64
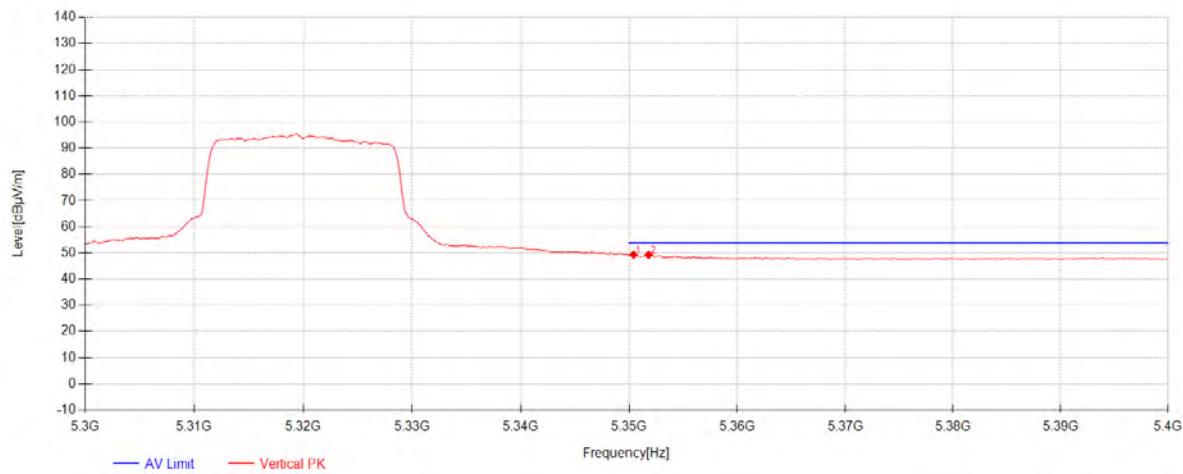
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.4	36.22	32.03	-18.90	49.35	54.00	4.65	Vertical
2	5351.8	36.14	32.03	-18.90	49.27	54.00	4.73	Vertical

802.11a_Channel 64
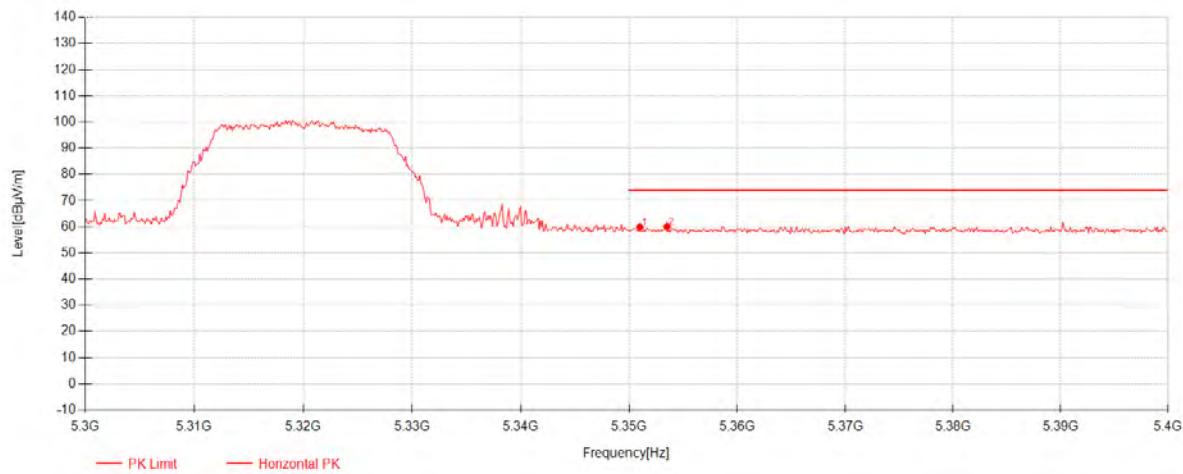
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5351	46.73	32.03	-18.90	59.86	74.00	14.14	Horizontal
2	5353.5	46.87	32.04	-18.91	60.00	74.00	14.00	Horizontal

802.11a_Channel 64
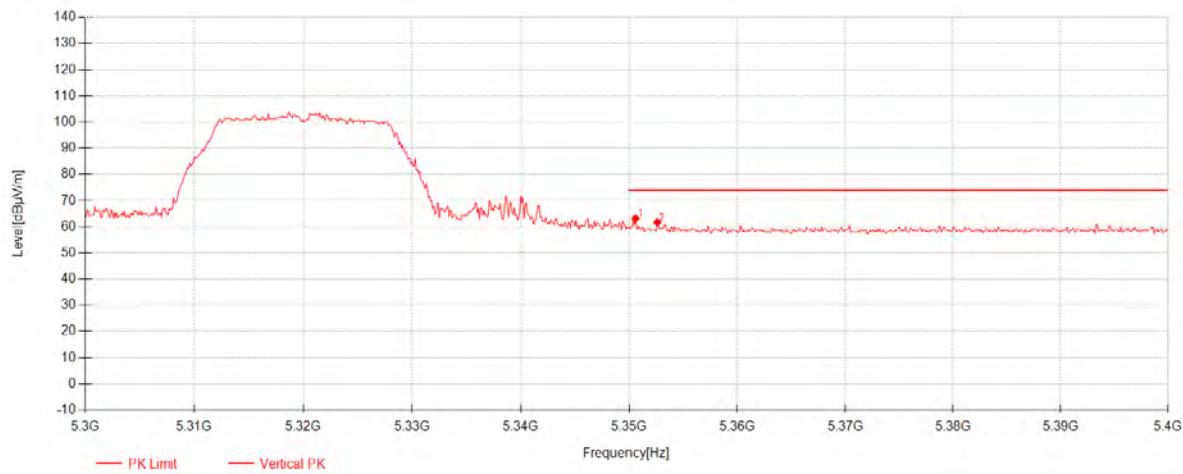
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5350.6	50.13	32.03	-18.90	63.26	74.00	10.74	Vertical
2	5352.6	48.57	32.03	-18.91	61.70	74.00	12.30	Vertical

802.11a_Channel 100
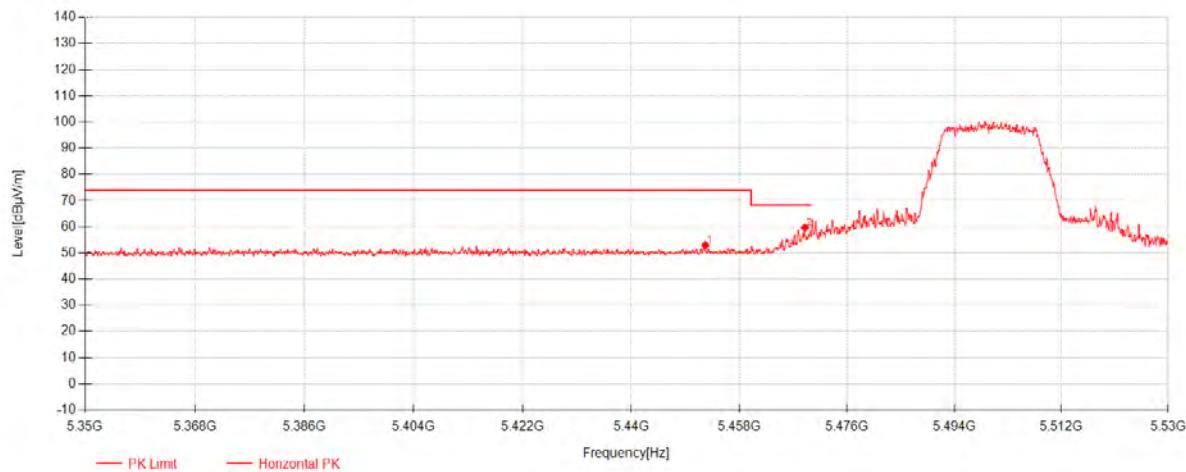
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5452.36	39.93	32.21	-19.10	53.04	74.00	20.96	Horizontal
2	5468.98	46.54	32.24	-19.13	59.65	68.30	8.65	Horizontal

802.11a_Channel 100
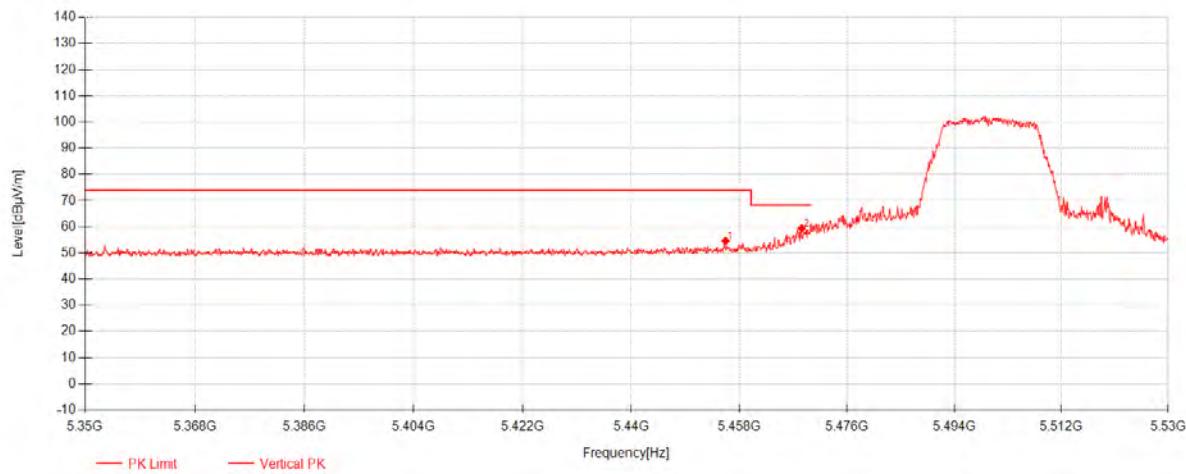
Data List							
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5455.72	41.54	32.22	-19.11	54.65	74.00	19.35	Vertical
2	5468.44	46.24	32.24	-19.13	59.35	68.30	8.95	Vertical

802.11a_Channel 100
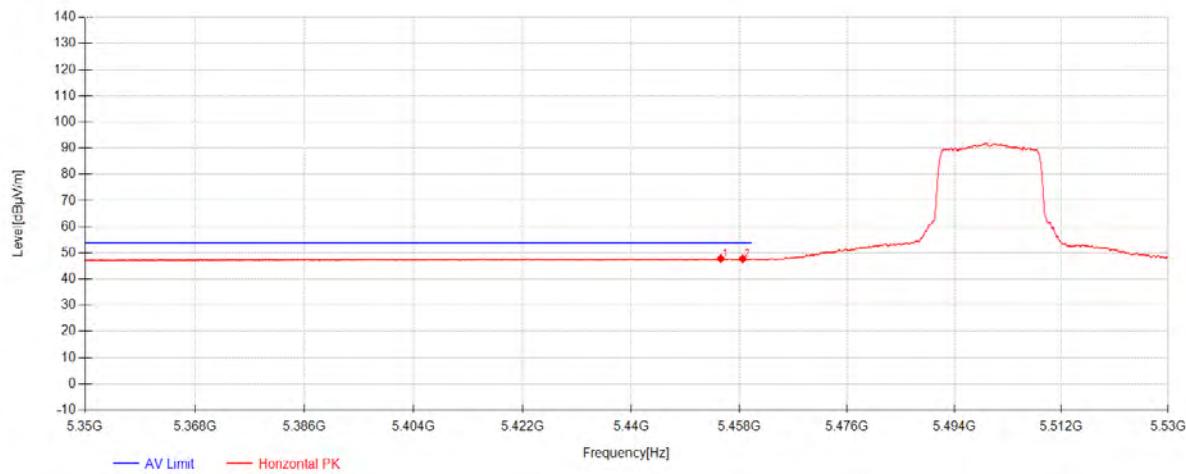
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5454.94	34.75	32.22	-19.11	47.86	54.00	6.14	Horizontal
2	5458.6	34.65	32.23	-19.11	47.76	54.00	6.24	Horizontal

802.11a_Channel 100
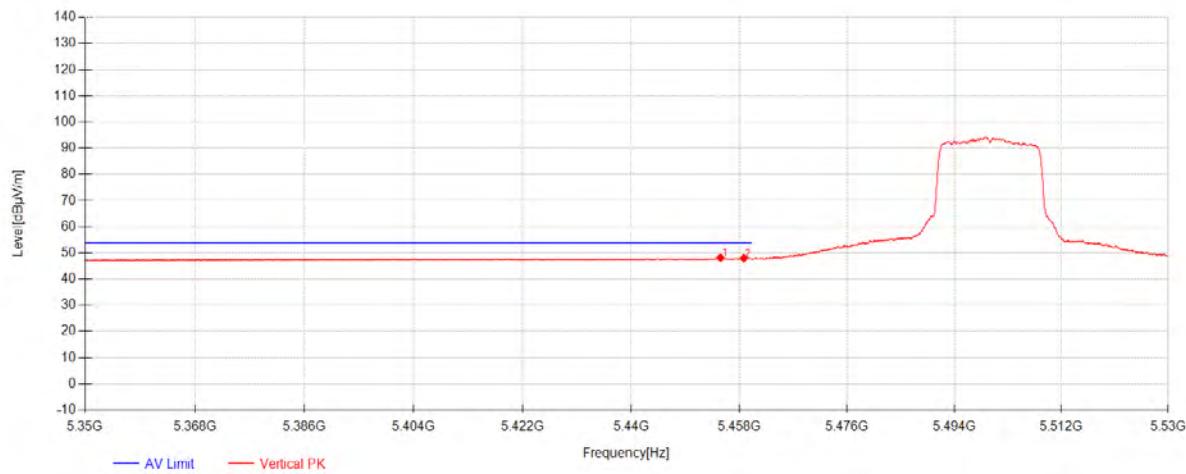
Data List

NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5454.88	35.09	32.22	-19.11	48.20	54.00	5.80	Vertical
2	5458.78	34.88	32.23	-19.11	47.99	54.00	6.01	Vertical

802.11a_Channel 140
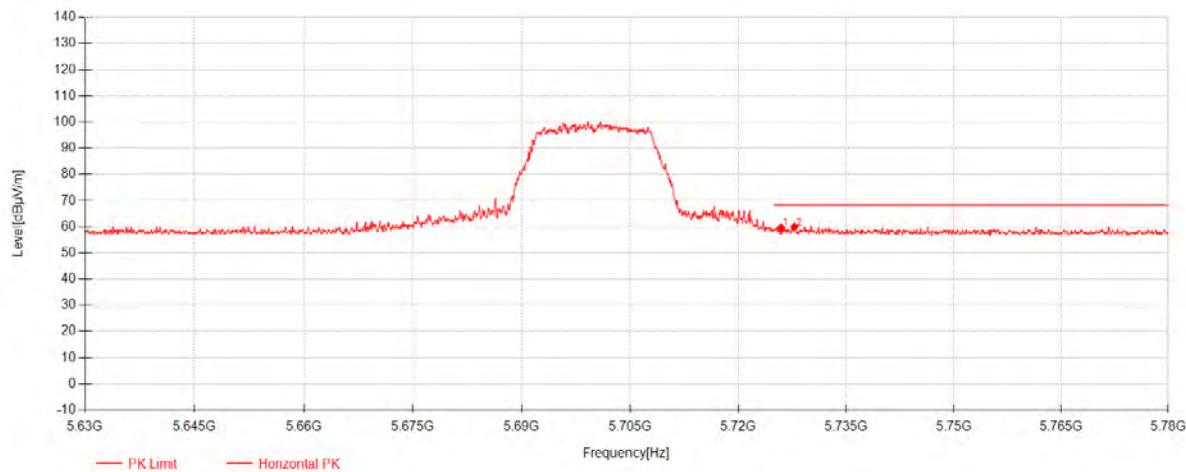
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5725.95	46.09	32.35	-18.81	59.63	68.30	8.67	Horizontal
2	5727.8	46.39	32.35	-18.81	59.92	68.30	8.38	Horizontal

802.11a_Channel 140
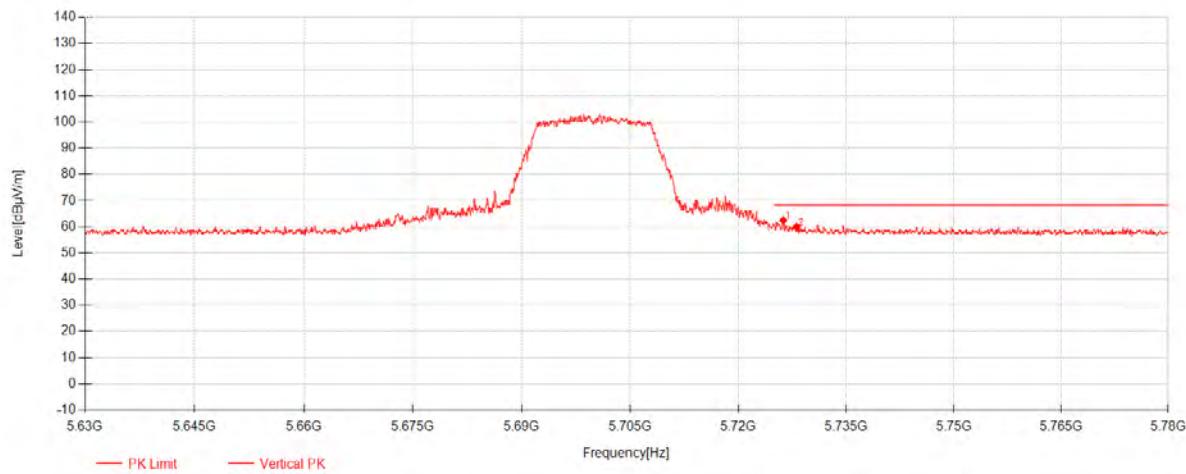
Data List

NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5726.25	48.90	32.35	-18.81	62.44	68.30	5.86	Vertical
2	5728.1	46.38	32.35	-18.81	59.91	68.30	8.39	Vertical

802.11a_Channel 149
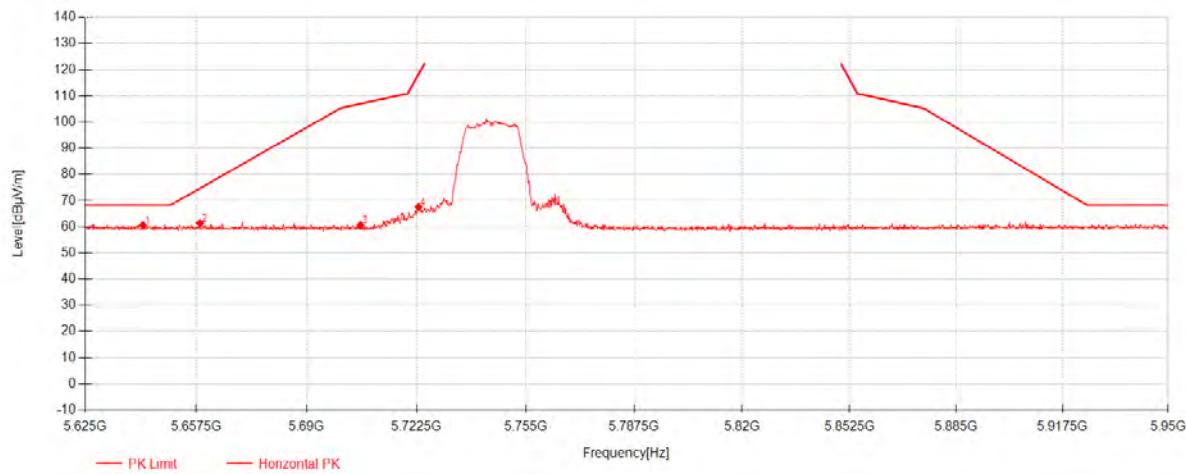
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5641.9	46.96	32.33	-18.72	60.56	68.30	7.74	Horizontal
2	5658.6375	47.76	32.33	-18.73	61.37	74.72	13.35	Horizontal
3	5705.925	47.00	32.34	-18.75	60.59	106.96	46.37	Horizontal
4	5723.15	53.96	32.34	-18.80	67.51	118.08	50.57	Horizontal

802.11a_Channel 149
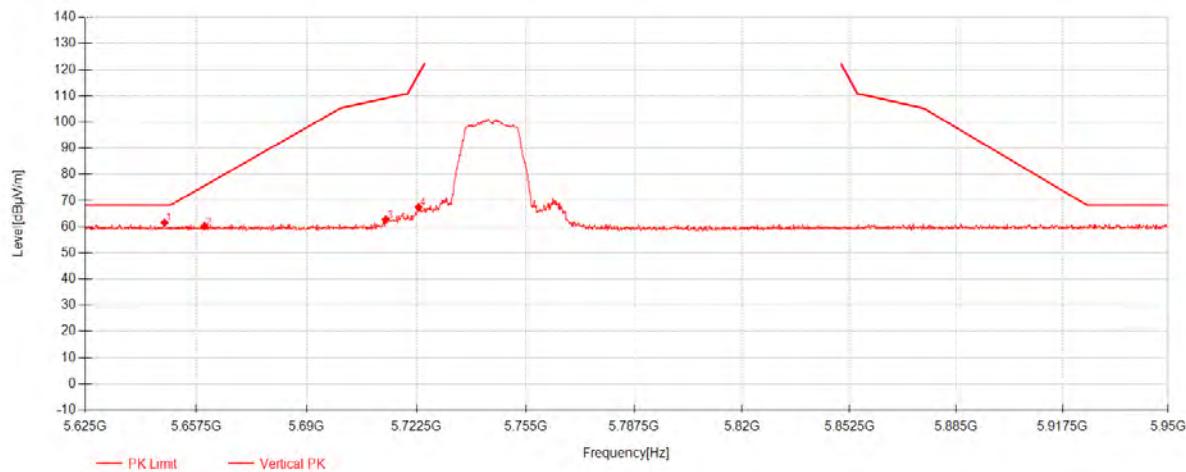
Data List							
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5648.2375	47.99	32.33	-18.72	61.59	68.30	6.71	Vertical
2	5659.9375	46.56	32.33	-18.73	60.17	75.68	15.51	Vertical
3	5713.4	49.21	32.34	-18.77	62.78	109.05	46.27	Vertical
4	5723.15	53.88	32.34	-18.80	67.43	118.08	50.65	Vertical

802.11a_Channel 165
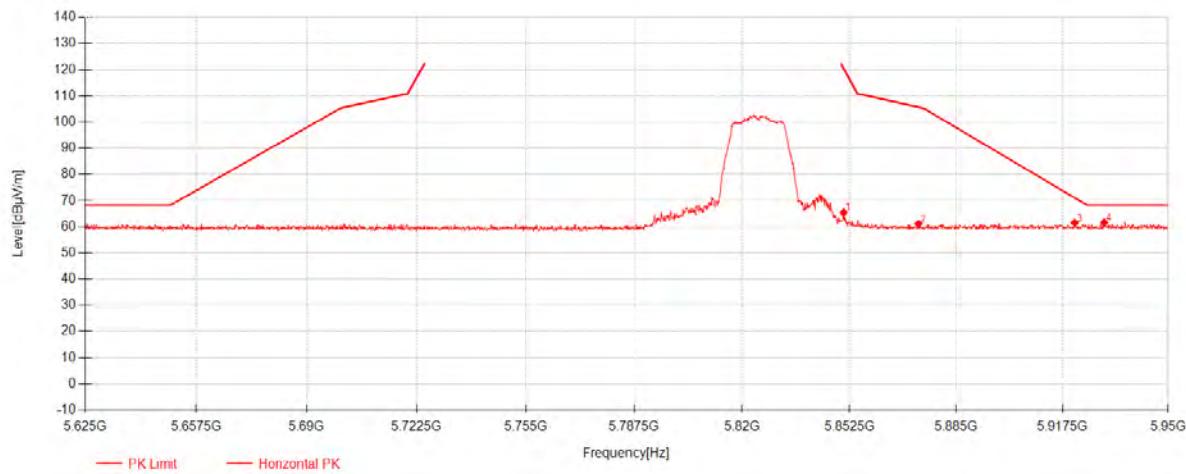
Data List							
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5850.7125	51.99	32.37	-18.88	65.48	120.67	55.19	Horizontal
2	5873.4625	47.50	32.37	-18.82	61.06	105.73	44.67	Horizontal
3	5921.2375	47.91	32.38	-18.78	61.51	71.07	9.56	Horizontal
4	5930.3375	48.04	32.39	-18.80	61.62	68.30	6.68	Horizontal

802.11a_Channel 165
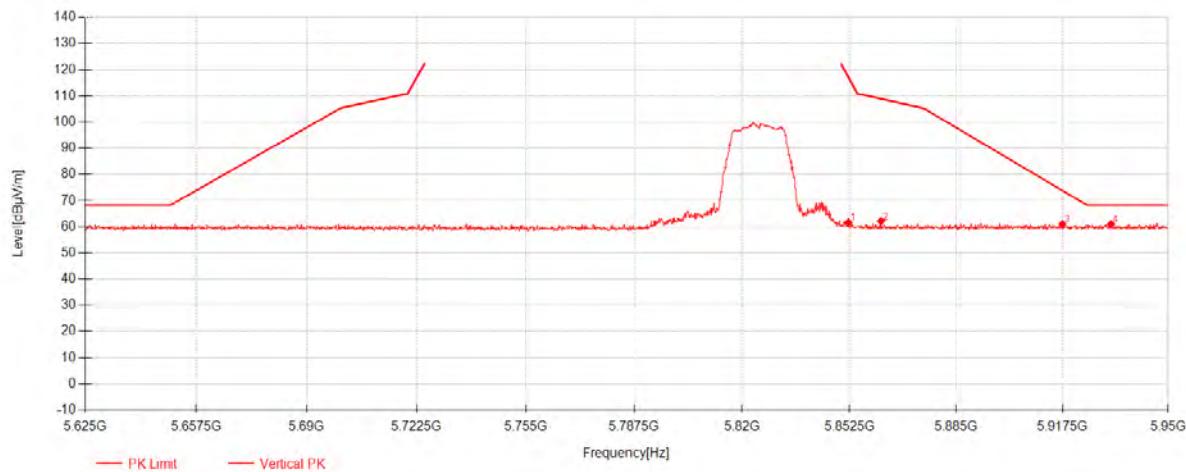
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5852.175	48.14	32.37	-18.88	61.63	117.34	55.71	Vertical
2	5862.0875	48.64	32.37	-18.85	62.16	108.91	46.75	Vertical
3	5917.5	47.33	32.38	-18.78	60.94	73.83	12.89	Vertical
4	5932.45	47.39	32.39	-18.81	60.97	68.30	7.33	Vertical

802.11n20_Channel 36
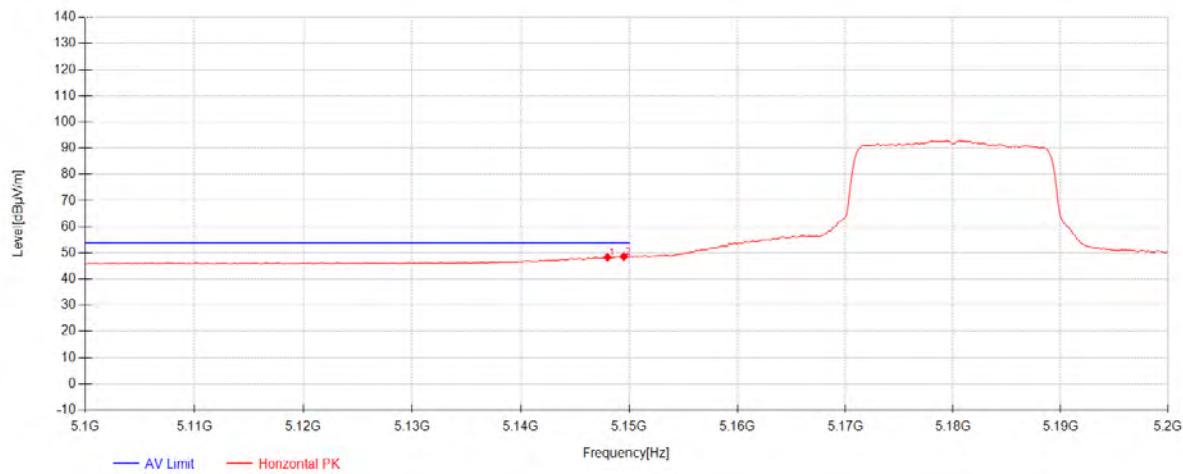
Data List							
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5148	35.84	31.67	-19.14	48.36	54.00	5.64	Horizontal
2	5149.5	36.11	31.67	-19.14	48.64	54.00	5.36	Horizontal

802.11n20_Channel 36
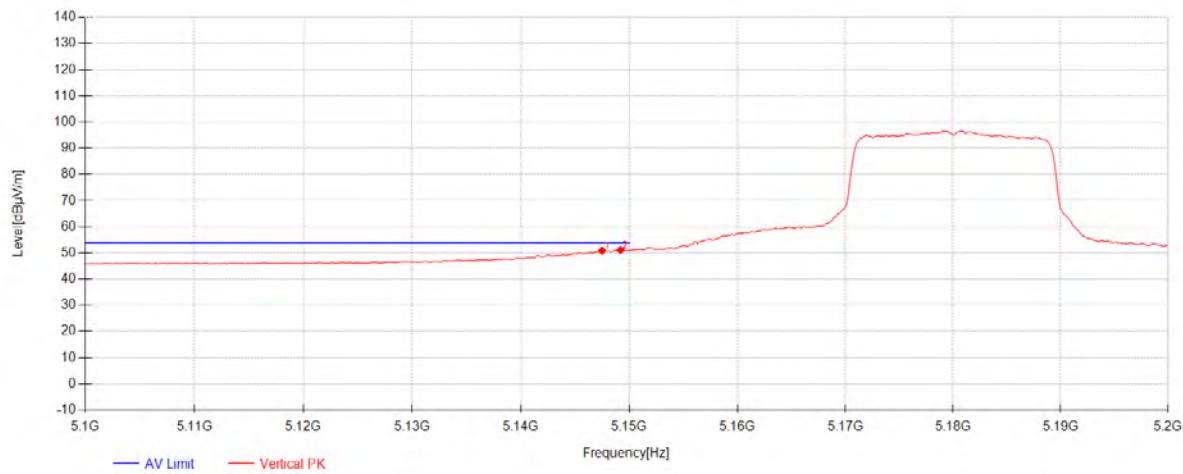
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5147.5	38.35	31.67	-19.15	50.87	54.00	3.13	Vertical
2	5149.2	38.60	31.67	-19.14	51.13	54.00	2.87	Vertical

802.11n20_Channel 36
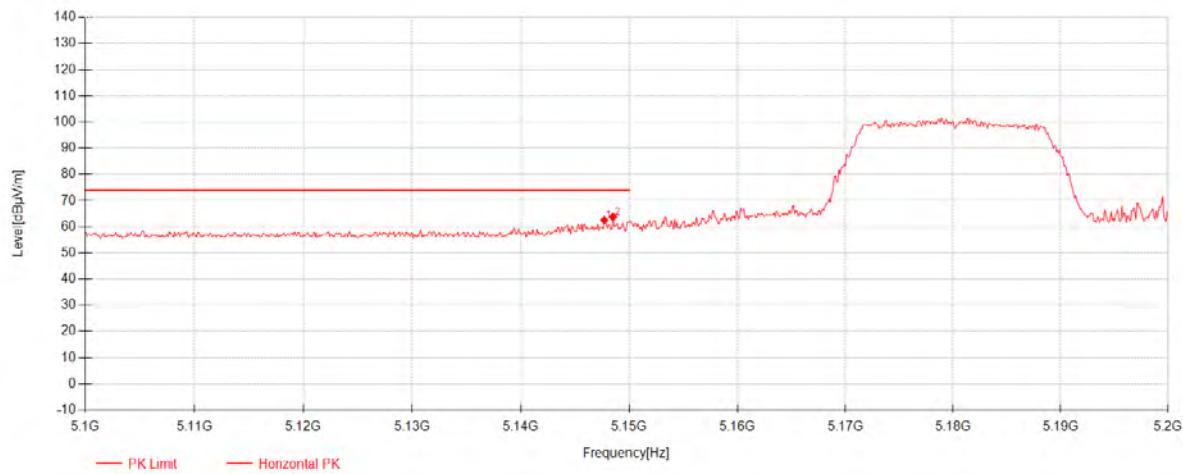
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.7	50.05	31.67	-19.15	62.57	74.00	11.43	Horizontal
2	5148.5	51.29	31.67	-19.14	63.81	74.00	10.19	Horizontal

802.11n20_Channel 36
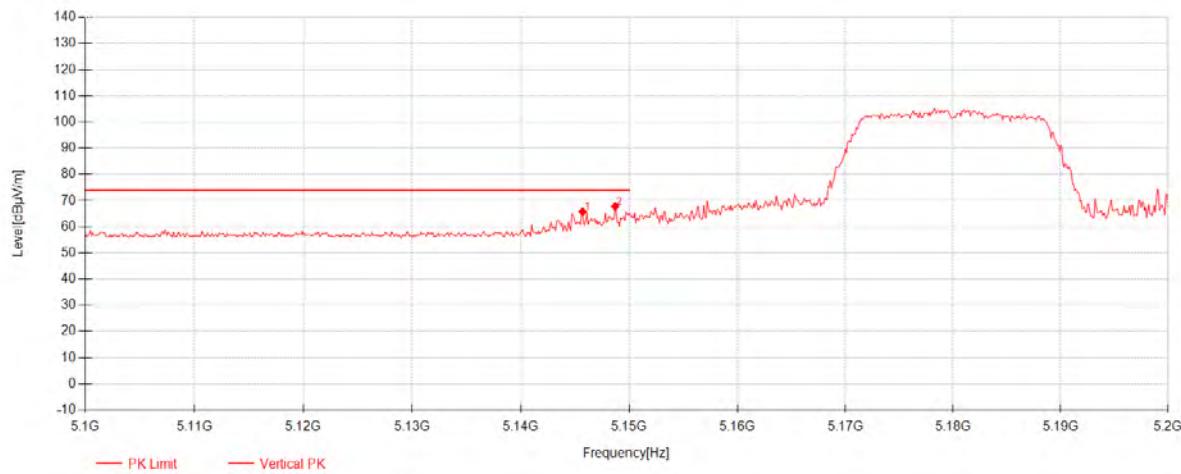
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5145.7	53.28	31.66	-19.15	65.79	74.00	8.21	Vertical
2	5148.7	55.27	31.67	-19.14	67.79	74.00	6.21	Vertical

802.11n20_Channel 64
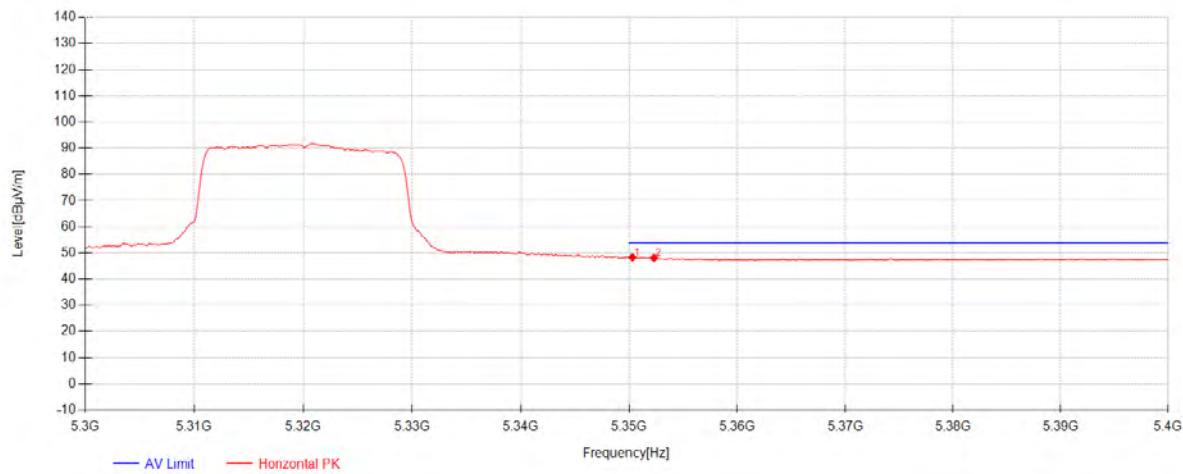
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5350.3	35.19	32.03	-18.90	48.32	54.00	5.68	Horizontal
2	5352.3	34.95	32.03	-18.91	48.08	54.00	5.92	Horizontal

802.11n20_Channel 64
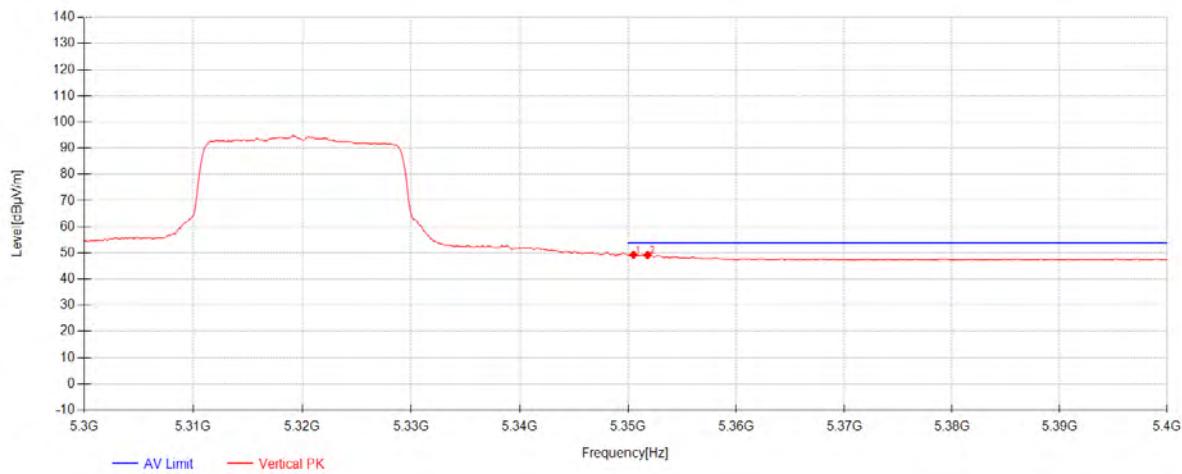
Data List							
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.5	36.16	32.03	-18.90	49.29	54.00	4.71	Vertical
2	5351.8	36.03	32.03	-18.90	49.16	54.00	4.84	Vertical

802.11n20_Channel 64
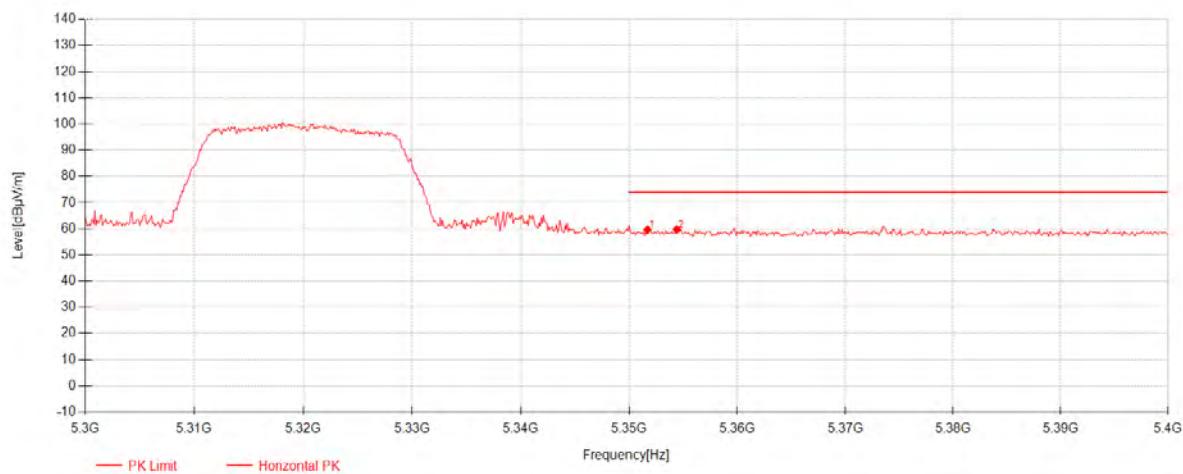
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5351.7	46.52	32.03	-18.90	59.65	74.00	14.35	Horizontal
2	5354.4	46.60	32.04	-18.91	59.73	74.00	14.27	Horizontal

802.11n20_Channel 64
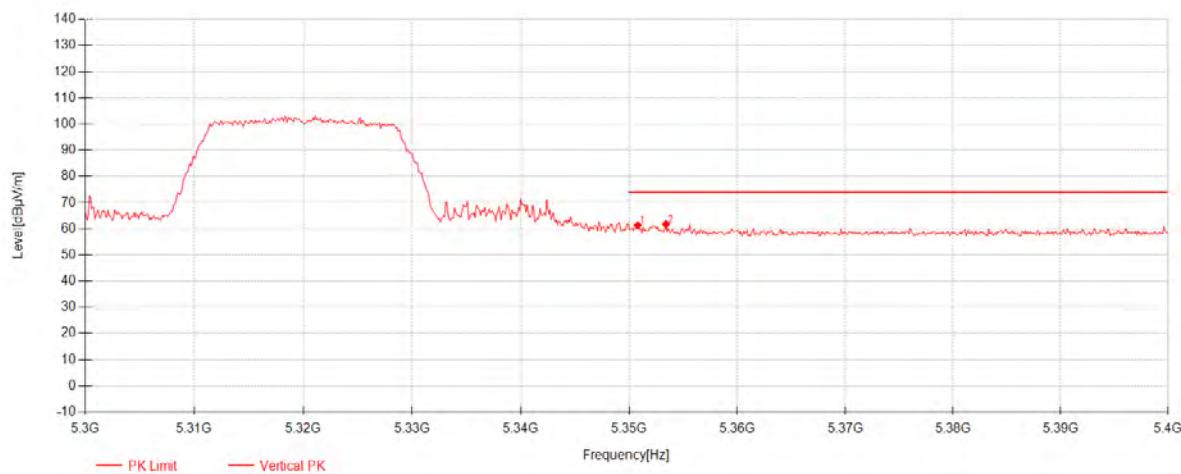
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.8	48.16	32.03	-18.90	61.29	74.00	12.71	Vertical
2	5353.4	48.62	32.04	-18.91	61.75	74.00	12.25	Vertical

802.11n20_Channel 100
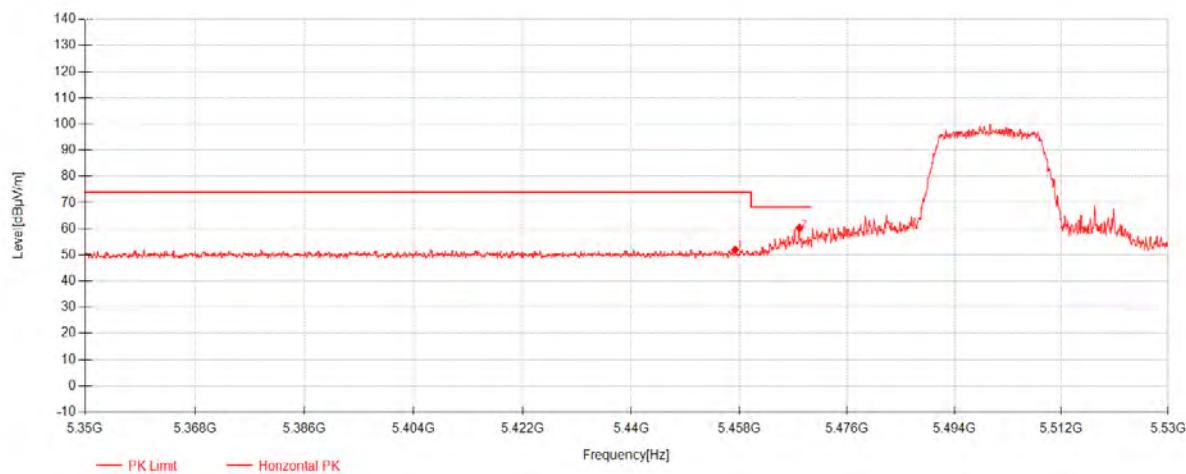
| Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5457.34	38.94	32.22	-19.11	52.05	74.00	21.95	Horizontal
2	5468.08	47.14	32.24	-19.13	60.25	68.30	8.05	Horizontal

802.11n20_Channel 100
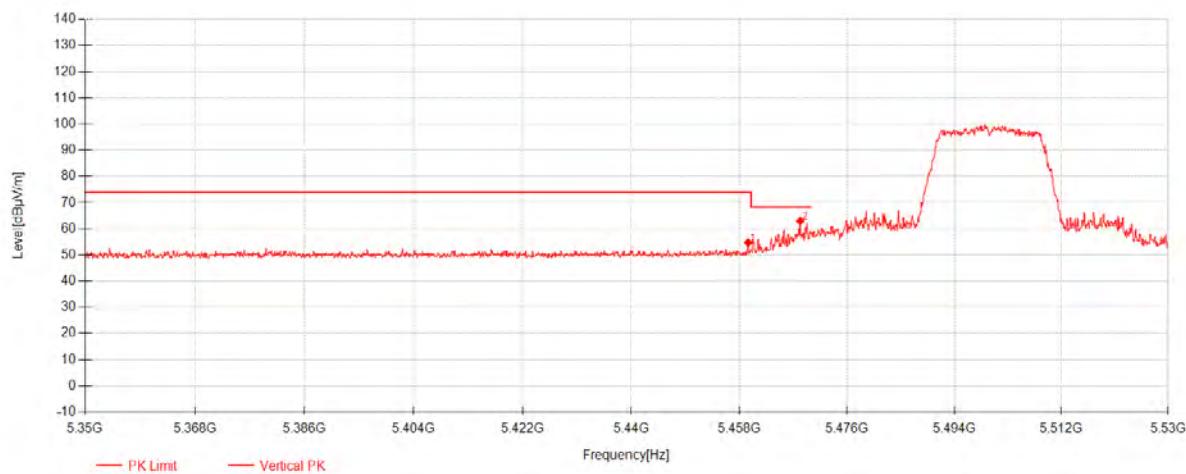
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5459.5	41.69	32.23	-19.12	54.80	74.00	19.20	Vertical
2	5468.2	49.91	32.24	-19.13	63.02	68.30	5.28	Vertical
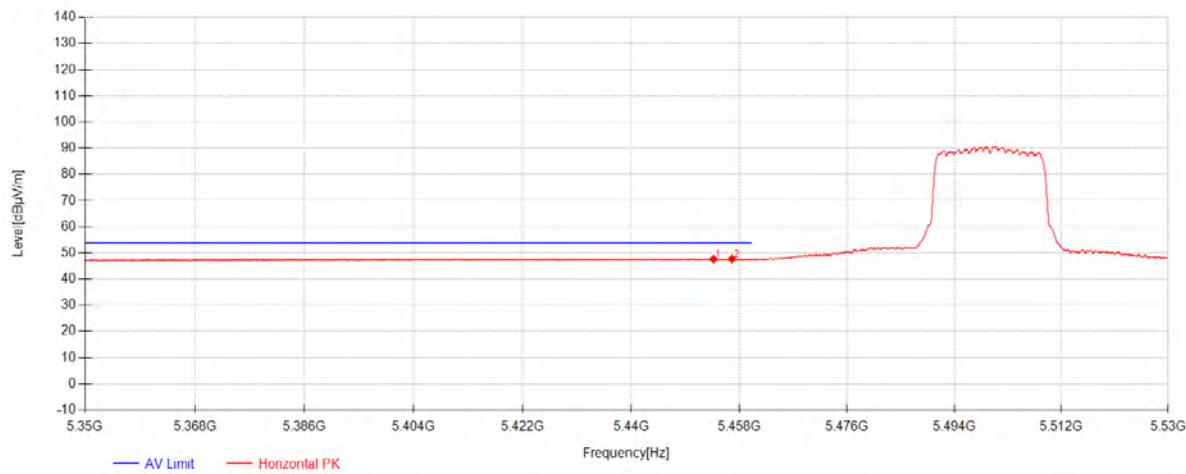
Data List

802.11n20_Channel 100

NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5453.74	34.55	32.22	-19.11	47.66	54.00	6.34	Horizontal
2	5456.8	34.60	32.22	-19.11	47.71	54.00	6.29	Horizontal

802.11n20_Channel 100
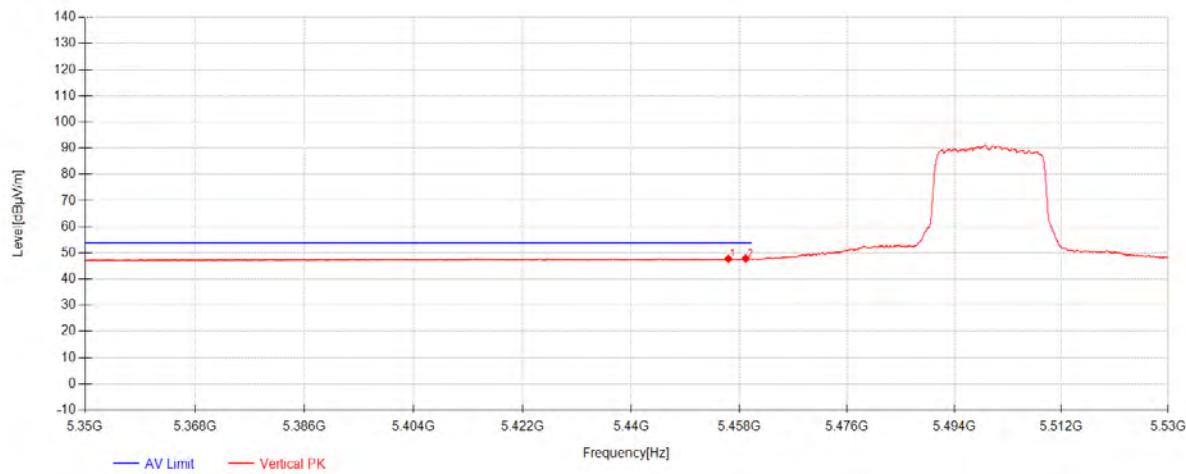
Data List							
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5456.2	34.66	32.22	-19.11	47.77	54.00	6.23	Vertical
2	5459.08	34.77	32.23	-19.11	47.88	54.00	6.12	Vertical

802.11n20_Channel 140
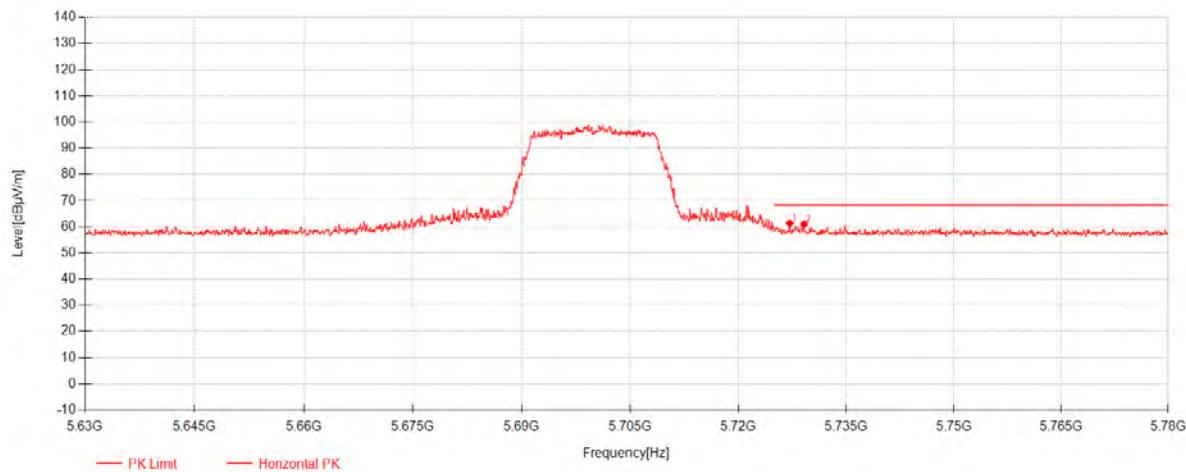
Data List							
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5727.15	47.79	32.35	-18.81	61.32	68.30	6.98	Horizontal
2	5729.15	47.39	32.35	-18.82	60.92	68.30	7.38	Horizontal

802.11n20_Channel 140
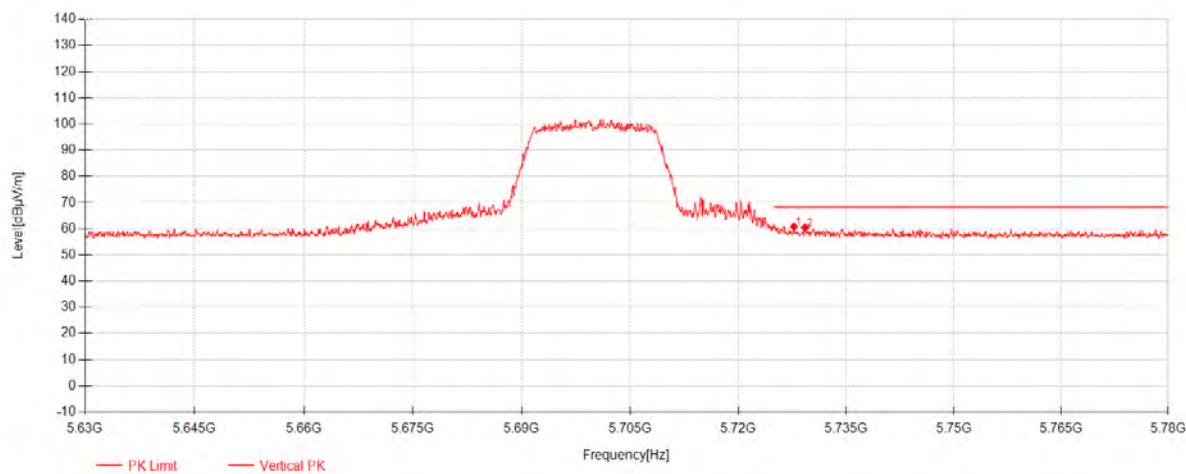
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5727.75	47.27	32.35	-18.81	60.80	68.30	7.50	Vertical
2	5729.3	46.87	32.35	-18.82	60.40	68.30	7.90	Vertical

802.11n20_Channel 149
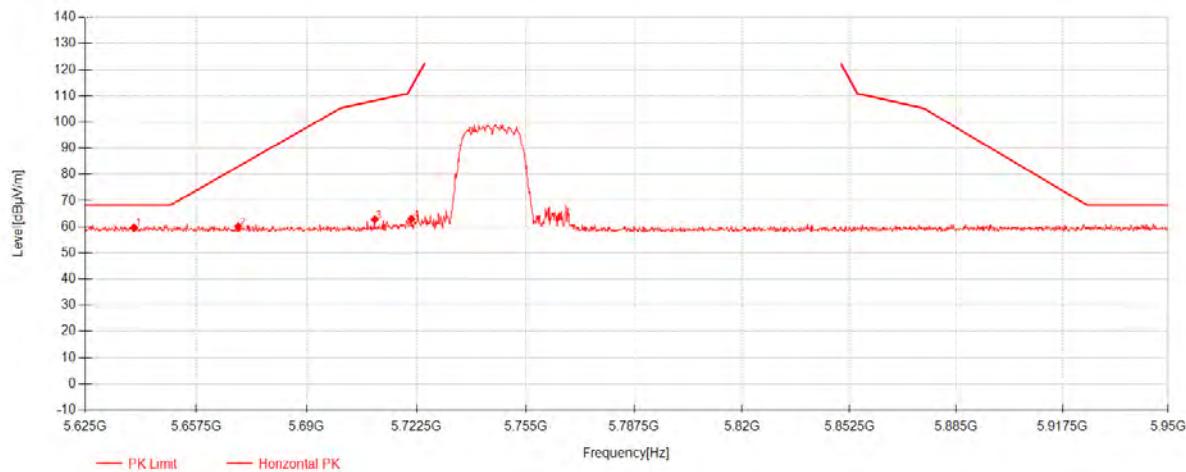
Data List							
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5639.3	46.04	32.33	-18.72	59.64	68.30	8.66	Horizontal
2	5669.85	46.41	32.33	-18.73	60.02	83.03	23.01	Horizontal
3	5710.15	49.21	32.34	-18.76	62.79	108.14	45.35	Horizontal
4	5721.0375	49.51	32.34	-18.79	63.06	113.27	50.21	Horizontal

802.11n20_Channel 149
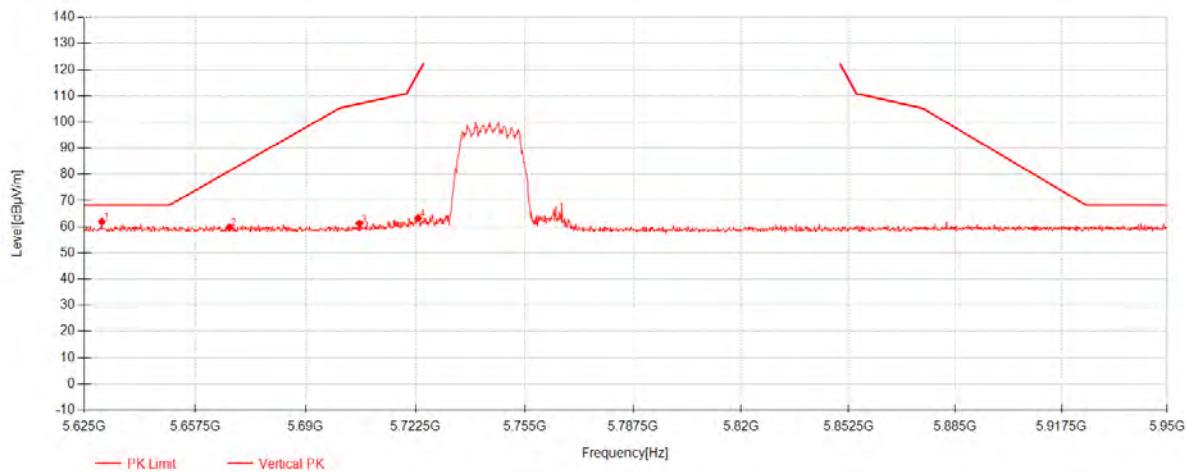
Data List							
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5630.2	48.37	32.33	-18.72	61.97	68.30	6.33	Vertical
2	5667.575	46.13	32.33	-18.73	59.74	81.34	21.60	Vertical
3	5705.925	47.62	32.34	-18.75	61.21	106.96	45.75	Vertical
4	5723.3125	49.86	32.34	-18.80	63.40	118.45	55.05	Vertical

802.11n20_Channel 165
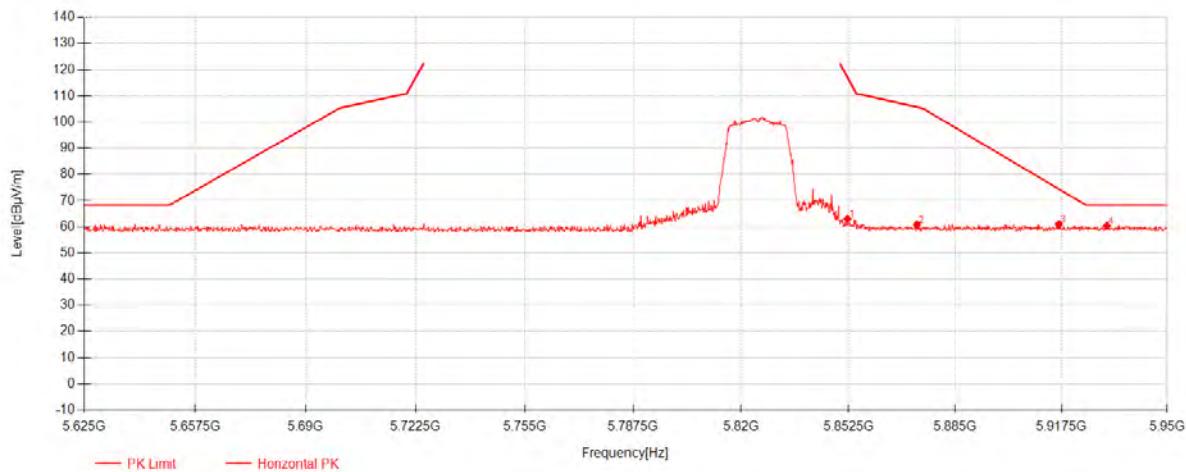
Data List							
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5852.175	49.59	32.37	-18.88	63.08	117.34	54.26	Horizontal
2	5873.3	47.24	32.37	-18.82	60.80	105.78	44.98	Horizontal
3	5916.6875	47.34	32.38	-18.78	60.95	74.43	13.48	Horizontal
4	5931.475	46.76	32.39	-18.81	60.34	68.30	7.96	Horizontal

802.11n20_Channel 165
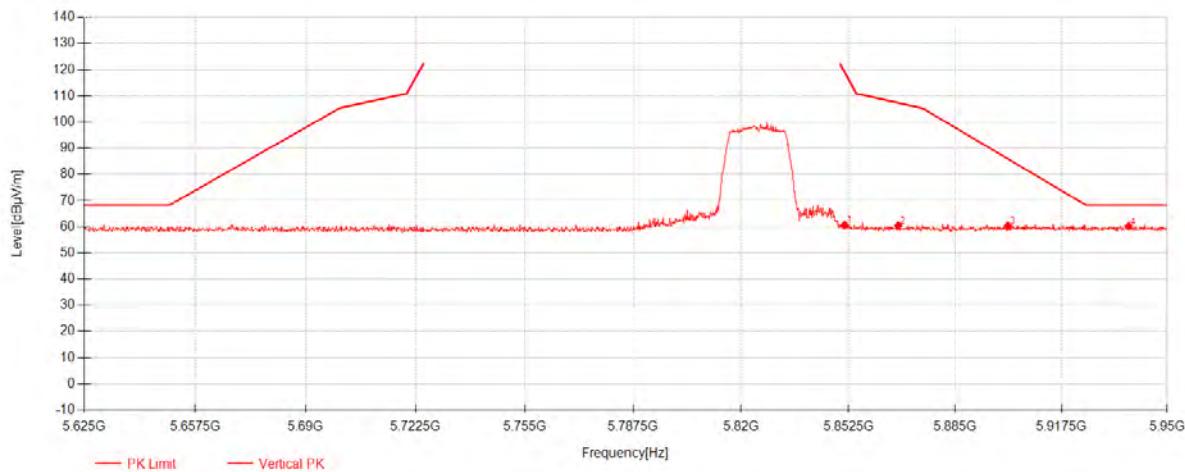
Data List							
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5851.3625	47.23	32.37	-18.88	60.72	119.19	58.47	Vertical
2	5867.6125	46.90	32.37	-18.83	60.44	107.37	46.93	Vertical
3	5901.0875	46.73	32.38	-18.74	60.37	85.96	25.59	Vertical
4	5938.1375	46.62	32.39	-18.82	60.19	68.30	8.11	Vertical

802.11n40_Channel 38
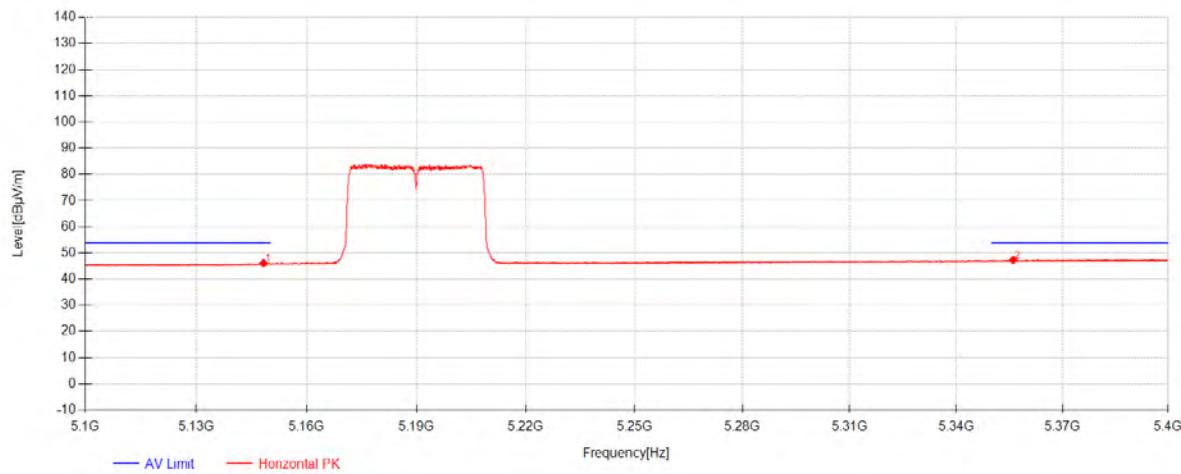
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5148.2667	33.63	31.67	-19.14	46.15	54.00	7.85	Horizontal
2	5356.04	34.24	32.04	-18.91	47.37	54.00	6.63	Horizontal

802.11n40_Channel 38
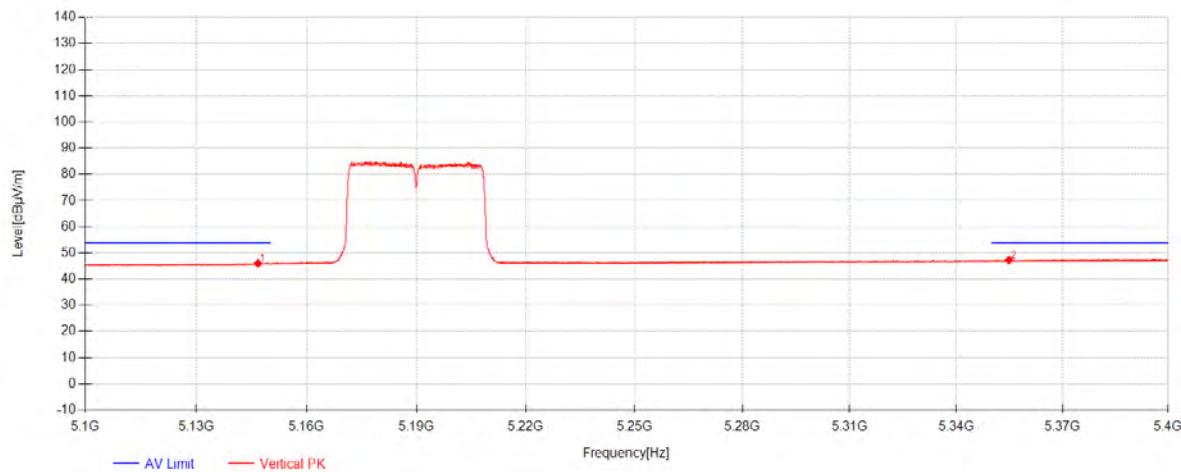
Data List

NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5146.7733	33.54	31.66	-19.15	46.06	54.00	7.94	Vertical
2	5354.85	34.17	32.04	-18.91	47.30	54.00	6.70	Vertical

802.11n40_Channel 38
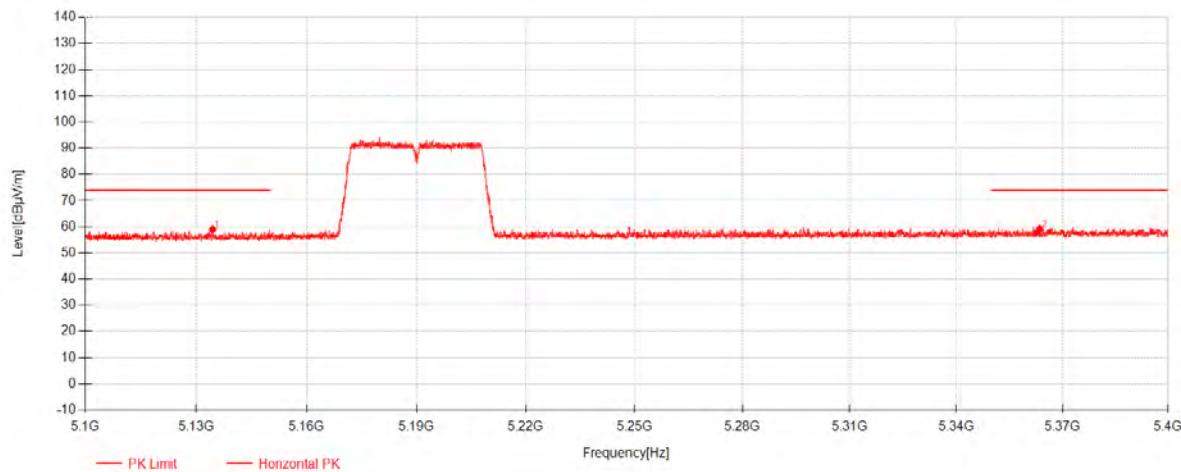
| Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5134.46	46.50	31.64	-19.18	58.96	74.00	15.04	Horizontal
2	5363.5125	45.96	32.05	-18.93	59.08	74.00	14.92	Horizontal

802.11n40_Channel 38
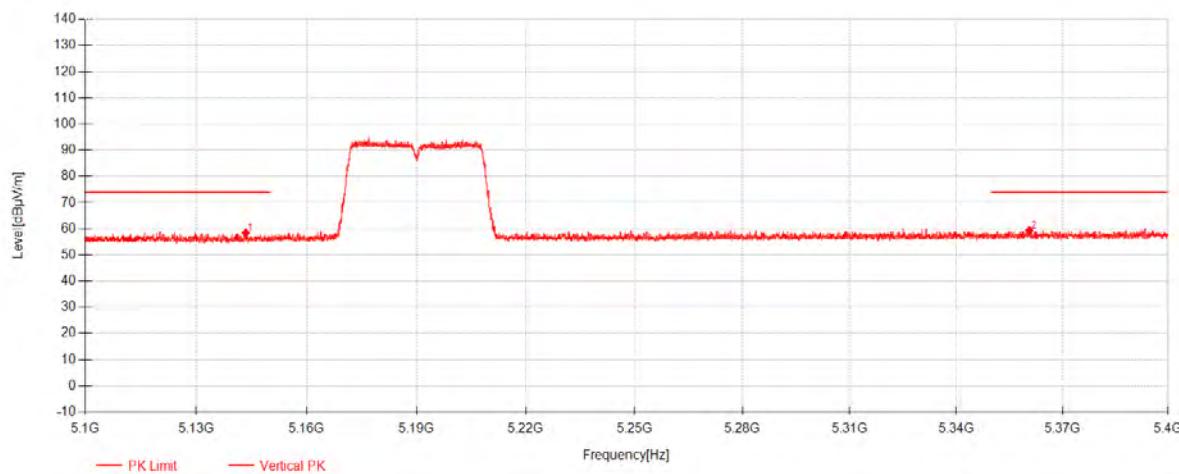
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5143.44	45.95	31.66	-19.16	58.45	74.00	15.55	Vertical
2	5360.59	46.19	32.05	-18.93	59.31	74.00	14.69	Vertical
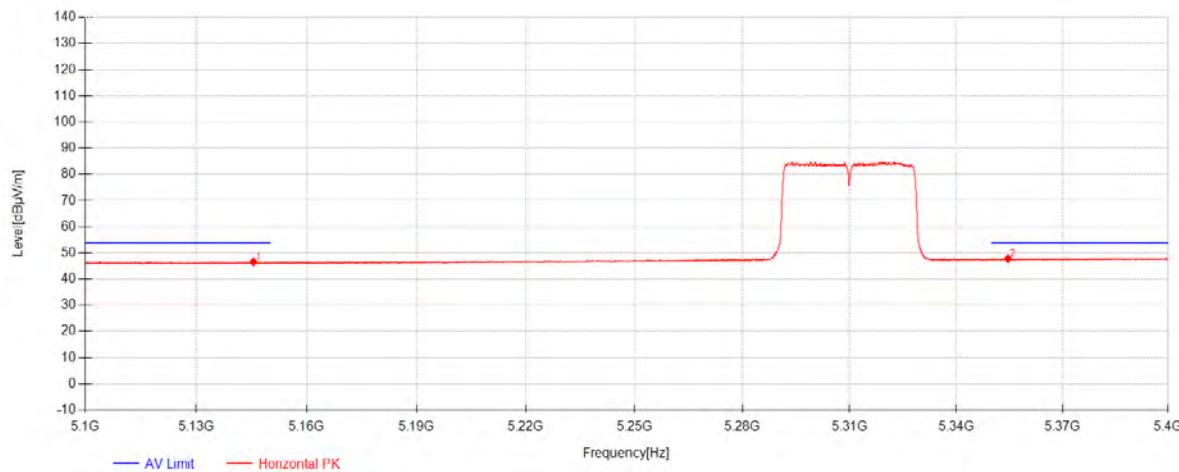
Data List

802.11n40_Channel 62

Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5145.55	34.13	31.66	-19.15	46.64	54.00	7.36	Horizontal
2	5354.575	34.69	32.04	-18.91	47.82	54.00	6.18	Horizontal

802.11n40_Channel 62
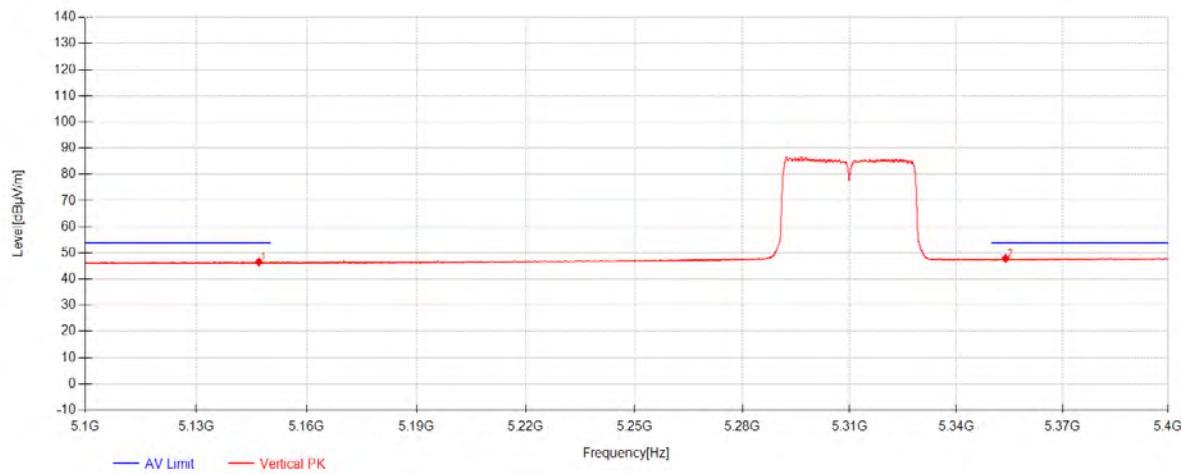
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147	34.08	31.66	-19.15	46.60	54.00	7.40	Vertical
2	5353.9	34.76	32.04	-18.91	47.89	54.00	6.11	Vertical

802.11n40_Channel 62
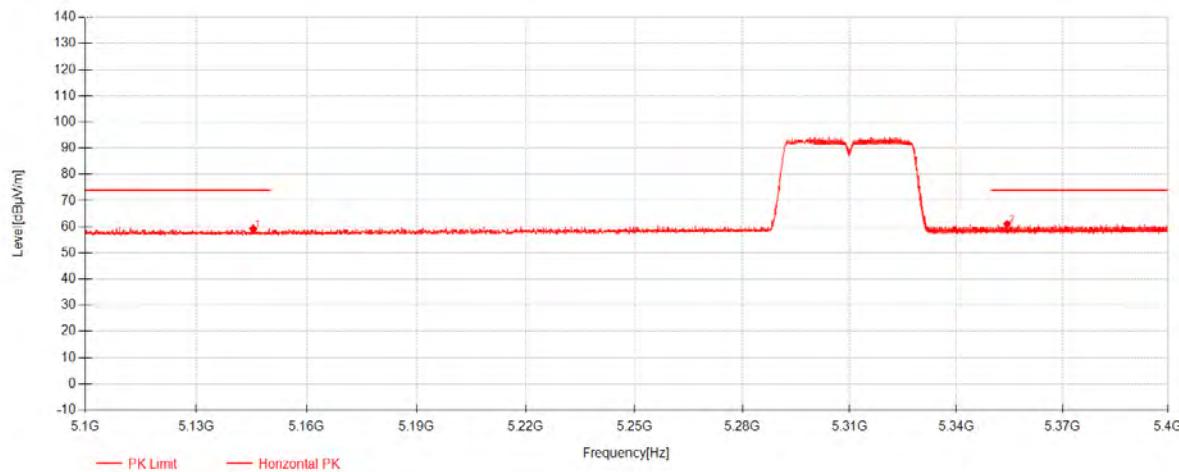
Data List

NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5145.4667	46.69	31.66	-19.15	59.20	74.00	14.80	Horizontal
2	5354.3375	47.87	32.04	-18.91	61.00	74.00	13.00	Horizontal

802.11n40_Channel 62
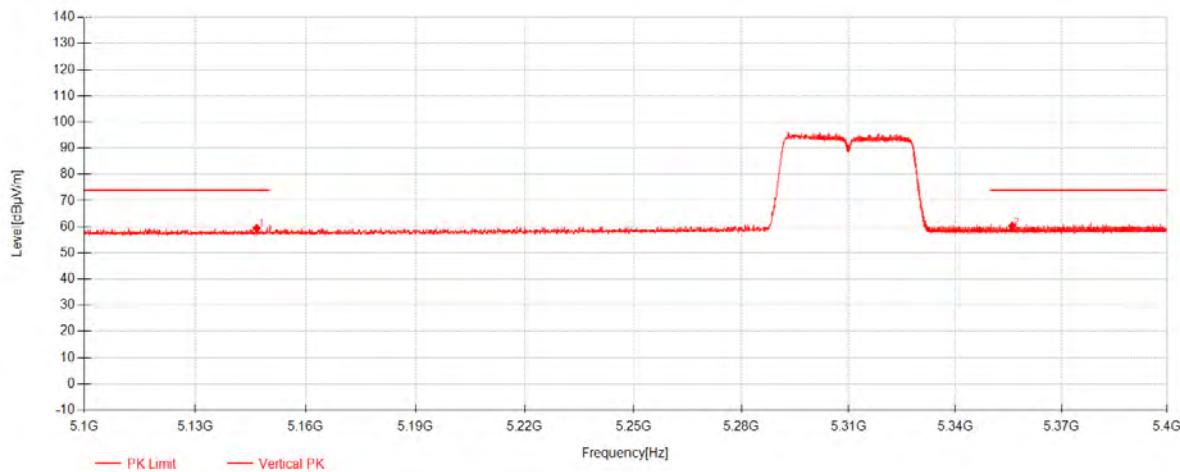
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5146.6667	46.91	31.66	-19.15	59.43	74.00	14.57	Vertical
2	5356.025	47.10	32.04	-18.91	60.23	74.00	13.77	Vertical

802.11n40_Channel 102
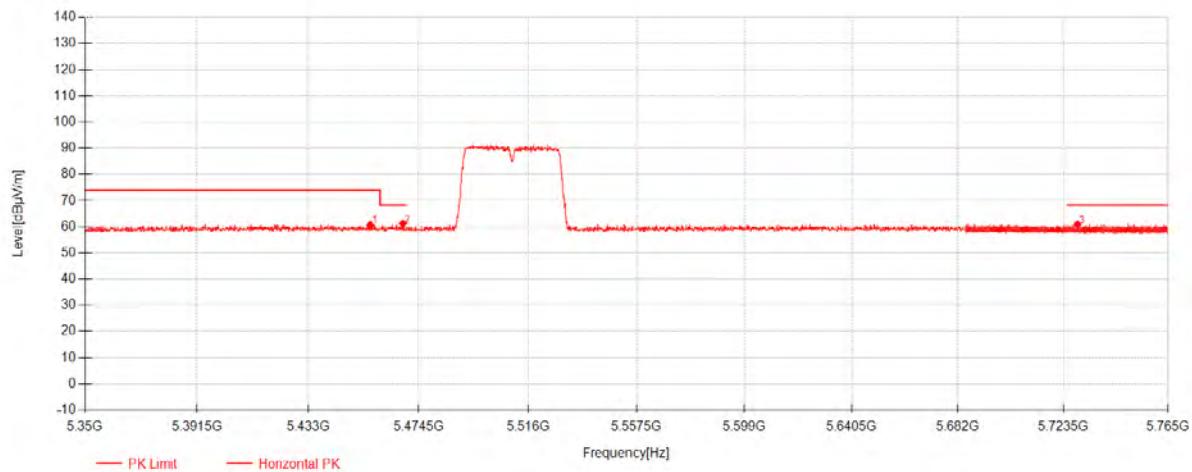
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5456.3067	47.57	32.22	-19.11	60.68	74.00	13.32	Horizontal
2	5468.59	48.09	32.24	-19.13	61.20	68.30	7.10	Horizontal
3	5729.05	47.30	32.35	-18.82	60.83	68.30	7.47	Horizontal

802.11n40_Channel 102
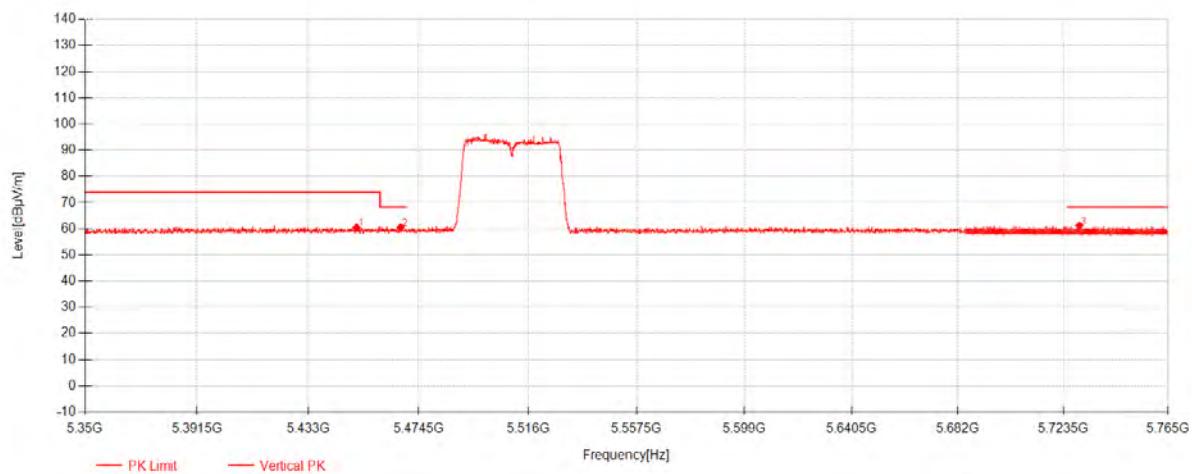
| Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5451.17	47.30	32.21	-19.10	60.41	74.00	13.59	Vertical
2	5467.6967	47.36	32.24	-19.13	60.47	68.30	7.83	Vertical
3	5729.84	47.64	32.35	-18.82	61.17	68.30	7.13	Vertical

802.11n40_Channel 102
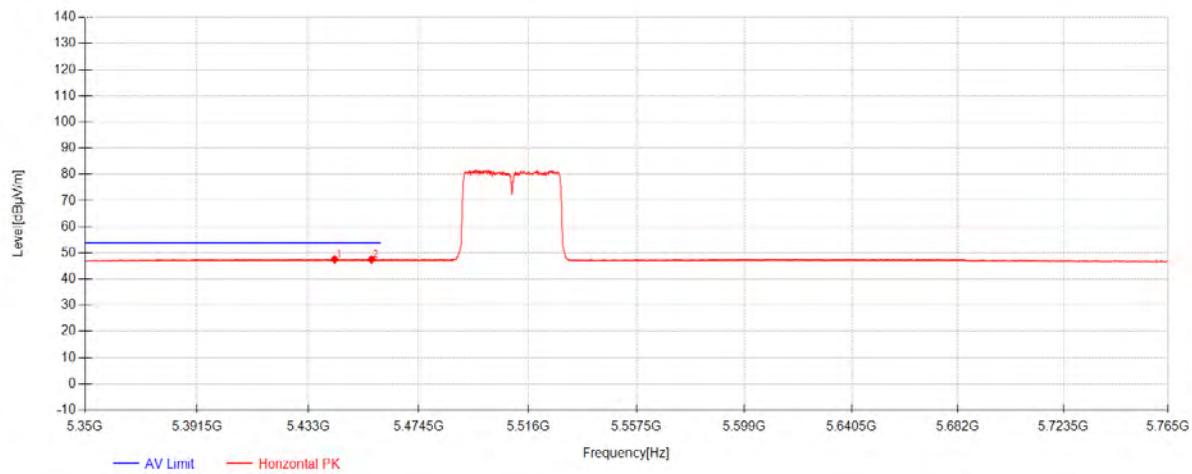
Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5442.9067	34.48	32.20	-19.09	47.59	54.00	6.41	Horizontal
2	5456.7533	34.41	32.22	-19.11	47.52	54.00	6.48	Horizontal

802.11n40_Channel 102
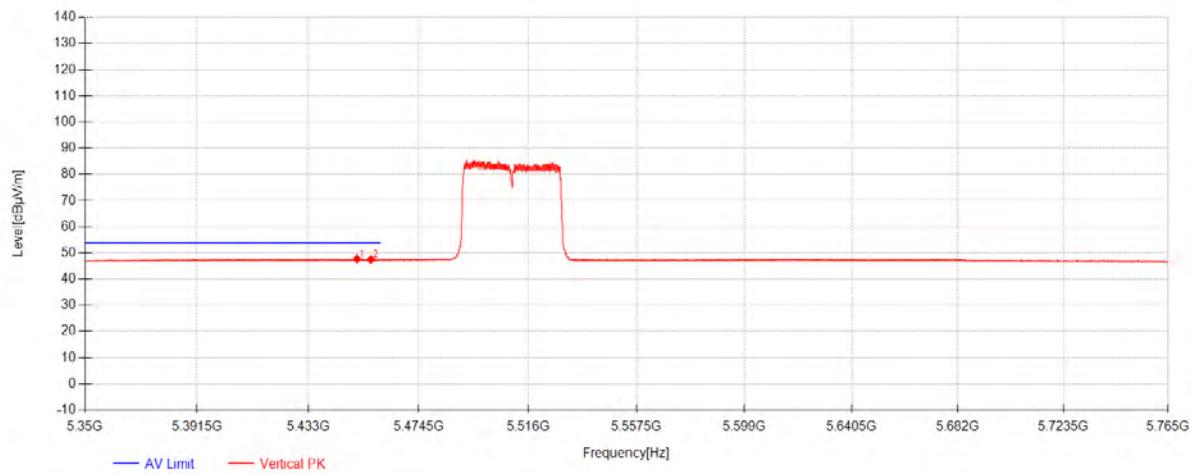
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5451.2817	34.61	32.21	-19.10	47.72	54.00	6.28	Vertical
2	5456.53	34.39	32.22	-19.11	47.50	54.00	6.50	Vertical

802.11n40_Channel 134
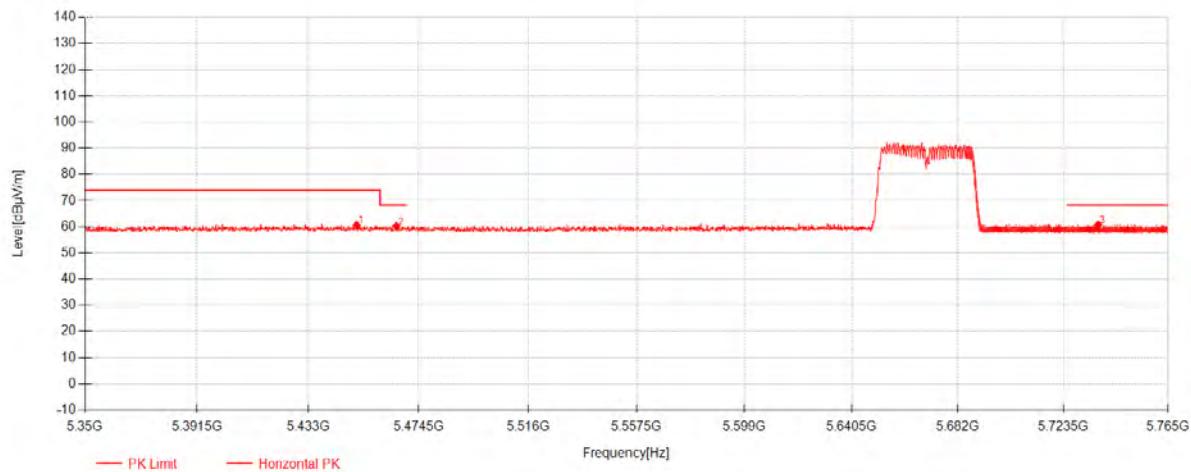
Data List

NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5451.17	47.50	32.21	-19.10	60.61	74.00	13.39	Horizontal
2	5466.1333	47.06	32.24	-19.13	60.17	68.30	8.13	Horizontal
3	5737.25	47.20	32.35	-18.84	60.71	68.30	7.59	Horizontal

802.11n40_Channel 134
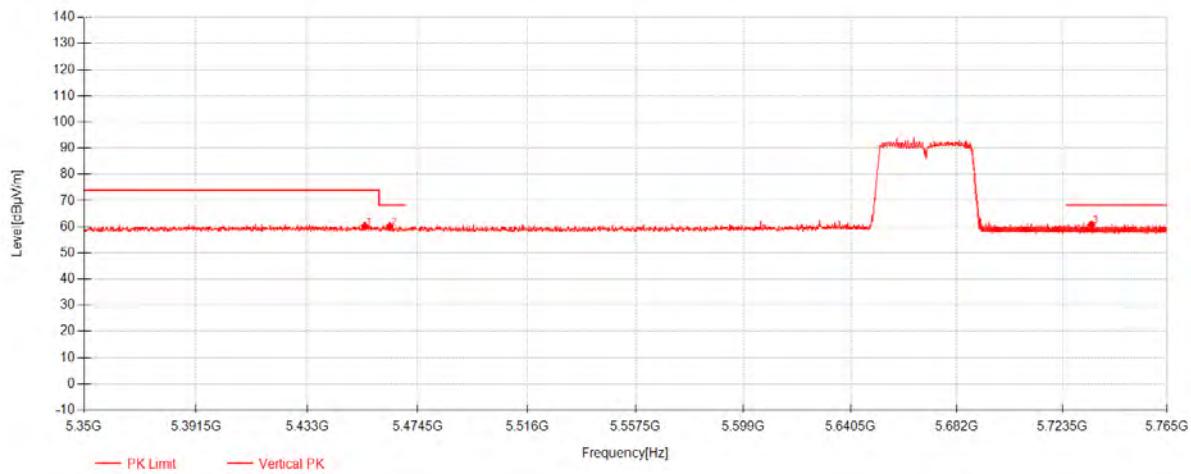
Data List							
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5454.6317	47.14	32.22	-19.11	60.25	74.00	13.75	Vertical
2	5464.0117	47.02	32.24	-19.12	60.13	68.30	8.17	Vertical
3	5734.97	47.26	32.35	-18.83	60.77	68.30	7.53	Vertical

802.11n40_Channel 134
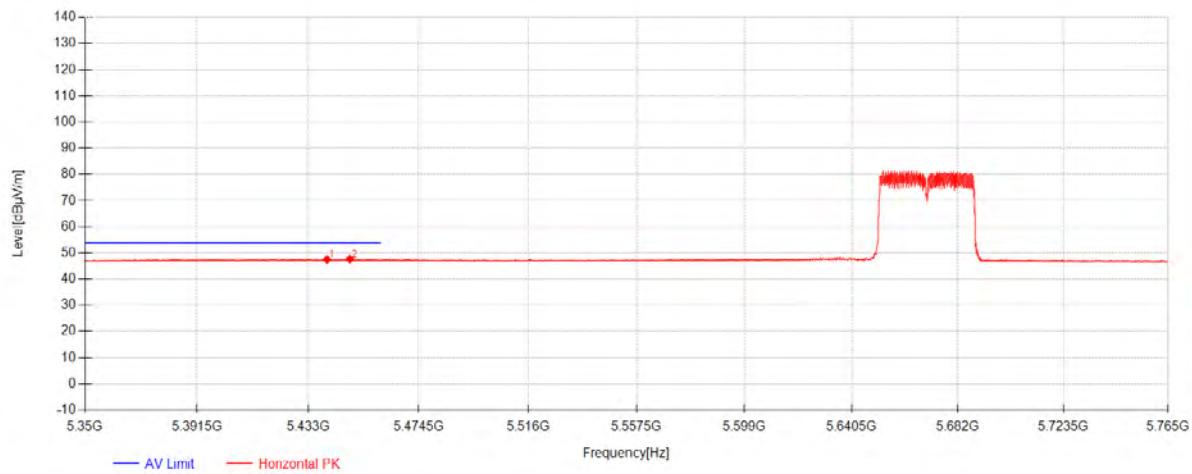
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5440.0033	34.40	32.19	-19.08	47.51	54.00	6.49	Horizontal
2	5448.6017	34.55	32.21	-19.10	47.66	54.00	6.34	Horizontal

802.11n40_Channel 134
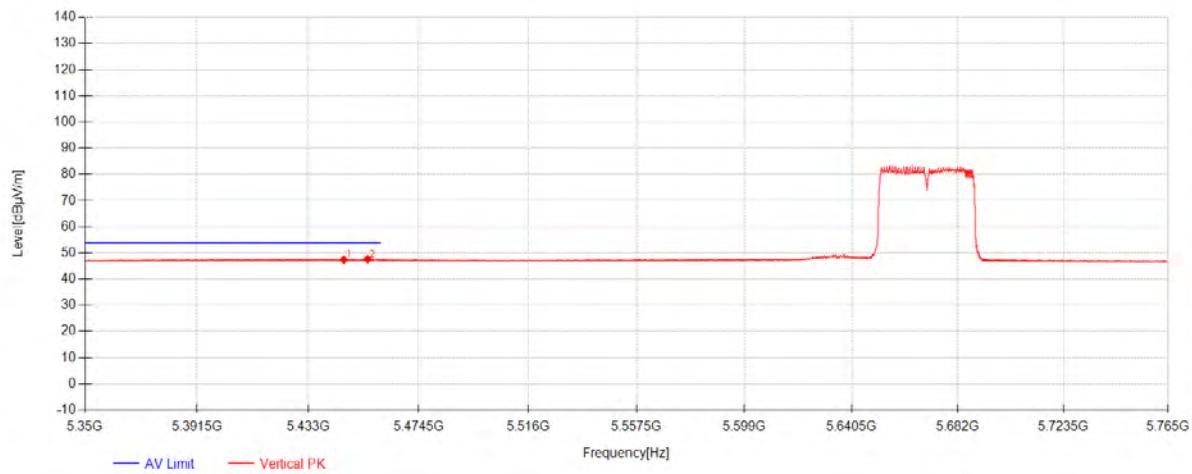
Data List

NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5446.3683	34.34	32.20	-19.09	47.45	54.00	6.55	Vertical
2	5455.3017	34.52	32.22	-19.11	47.63	54.00	6.37	Vertical

802.11n40_Channel 151
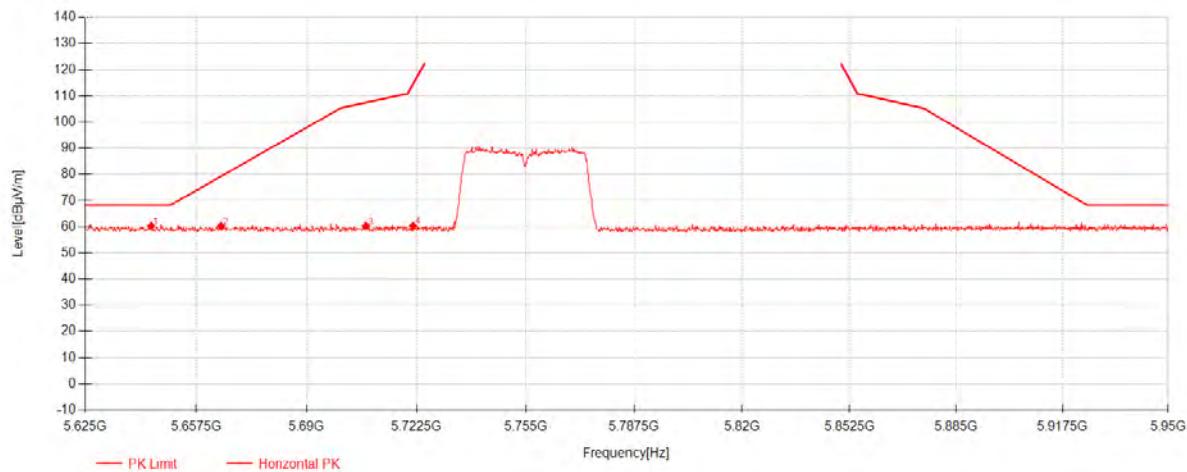
Data List							
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5644.3375	46.61	32.33	-18.72	60.21	68.30	8.09	Horizontal
2	5664.8125	46.54	32.33	-18.73	60.15	79.30	19.15	Horizontal
3	5707.55	46.64	32.34	-18.75	60.23	107.42	47.19	Horizontal
4	5721.525	46.72	32.34	-18.79	60.27	114.38	54.11	Horizontal

802.11n40_Channel 151
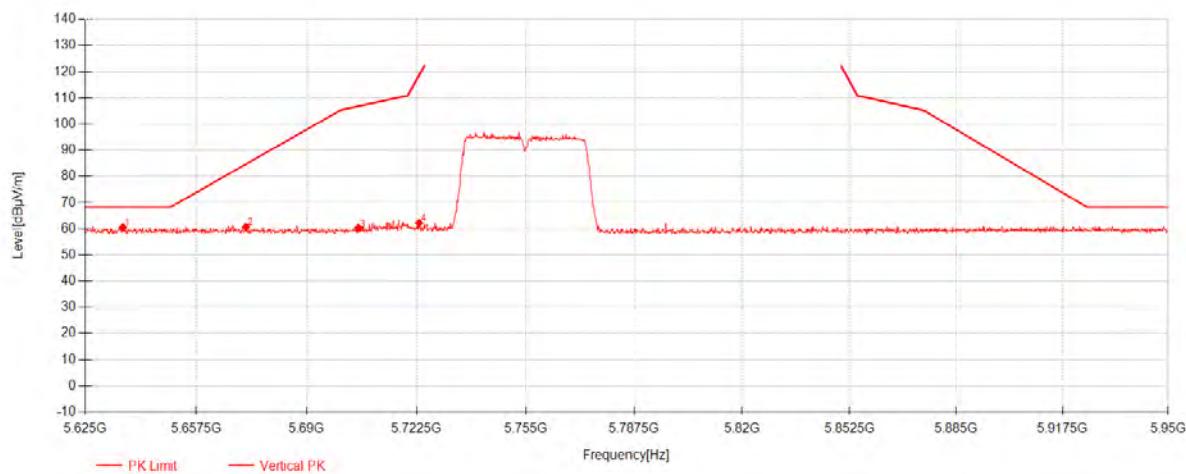
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5636.05	46.88	32.33	-18.72	60.48	68.30	7.82	Vertical
2	5672.125	47.03	32.33	-18.73	60.64	84.71	24.07	Vertical
3	5705.275	46.65	32.34	-18.75	60.25	106.78	46.53	Vertical
4	5723.3125	48.71	32.34	-18.80	62.25	118.45	56.20	Vertical

802.11n40_Channel 159
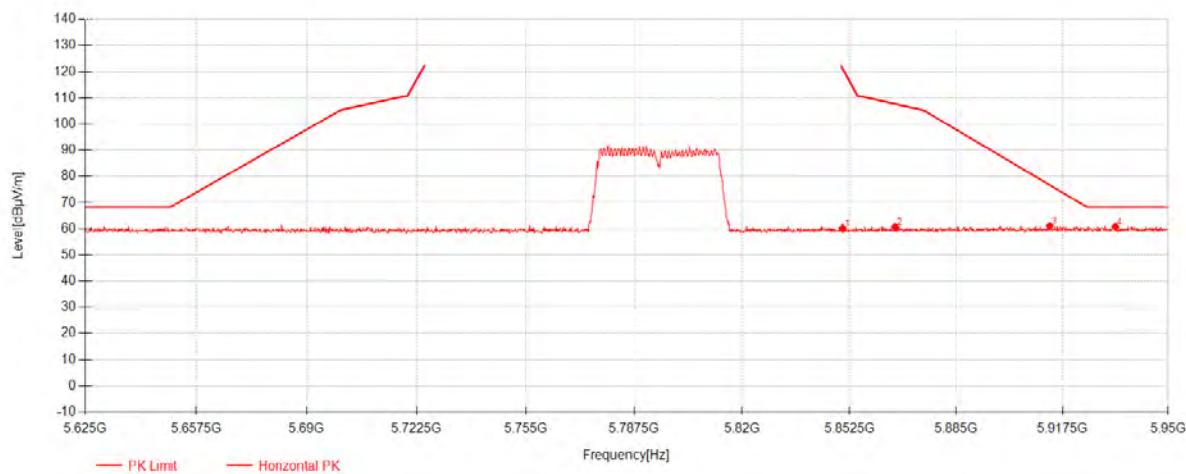
Data List							
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5850.3875	46.68	32.37	-18.88	60.17	121.42	61.25	Horizontal
2	5866.3125	47.14	32.37	-18.84	60.68	107.73	47.05	Horizontal
3	5913.6	47.41	32.38	-18.77	61.02	76.71	15.69	Horizontal
4	5933.75	47.16	32.39	-18.81	60.74	68.30	7.56	Horizontal

802.11n40_Channel 159
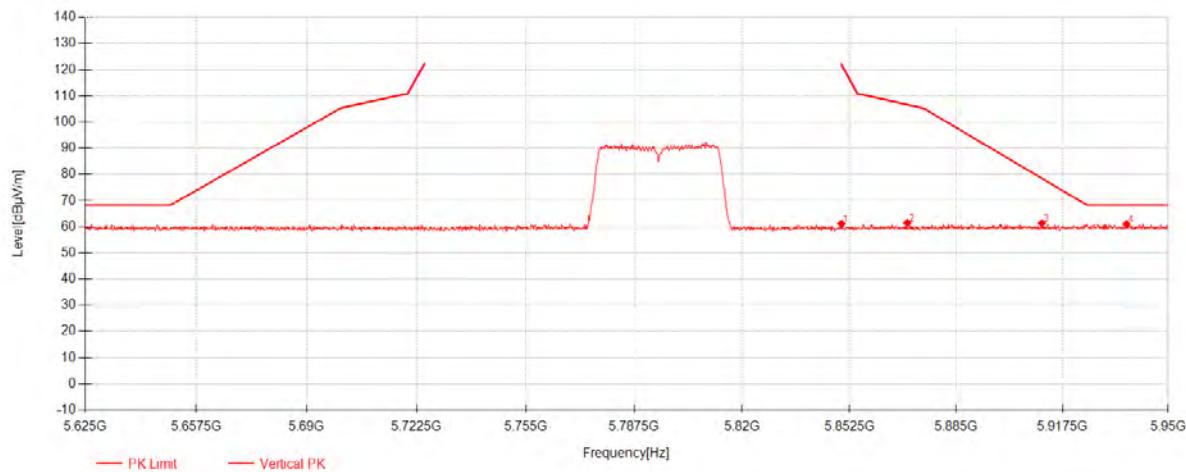
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5850.0625	47.65	32.37	-18.88	61.14	122.16	61.02	Vertical
2	5870.05	47.90	32.37	-18.83	61.45	106.68	45.23	Vertical
3	5911.1625	47.71	32.38	-18.76	61.33	78.51	17.18	Vertical
4	5937.1625	47.37	32.39	-18.82	60.94	68.30	7.36	Vertical

802.11ac80_Channel 42
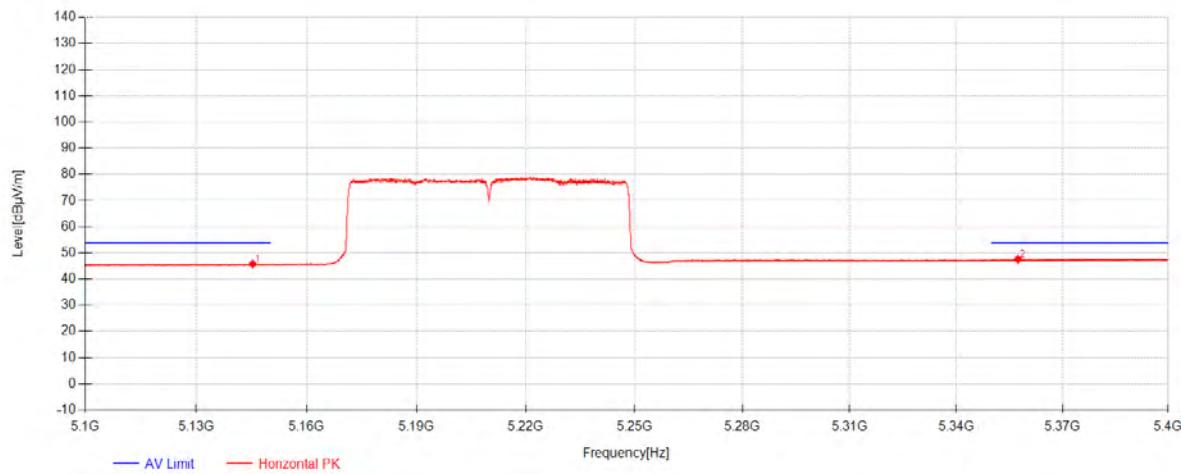
Data List							
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5145.3333	33.32	31.66	-19.15	45.83	54.00	8.17	Horizontal
2	5357.37	34.47	32.04	-18.92	47.60	54.00	6.40	Horizontal

802.11ac80_Channel 42
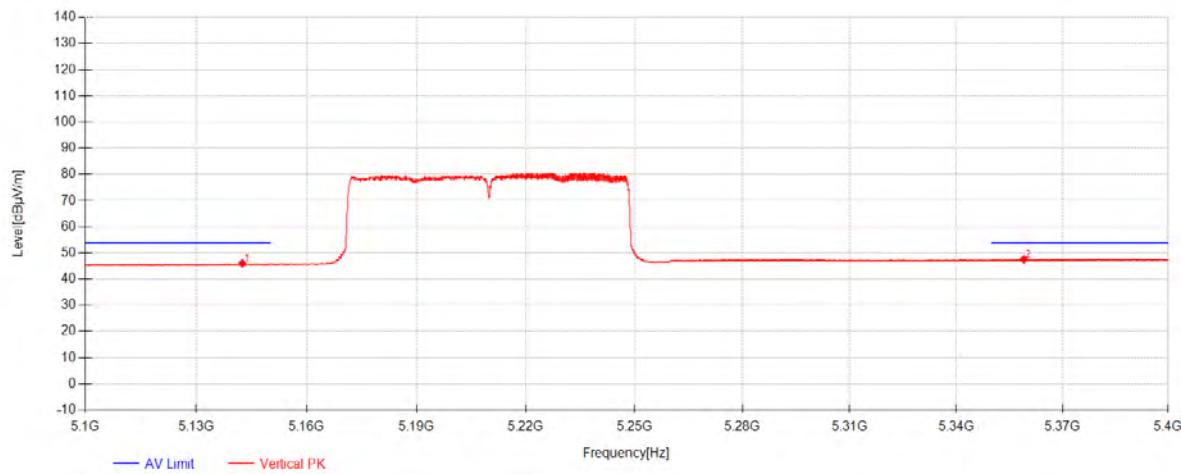
Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5142.5067	33.53	31.66	-19.16	46.03	54.00	7.97	Vertical
2	5359.05	34.48	32.05	-18.92	47.60	54.00	6.40	Vertical

802.11ac80_Channel 42
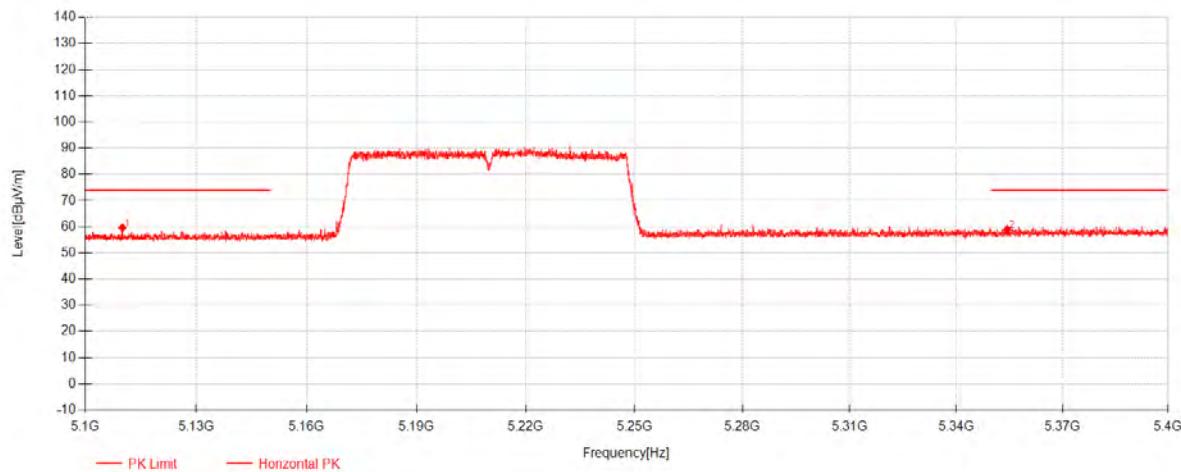
Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5110.06	47.26	31.60	-19.24	59.62	74.00	14.38	Horizontal
2	5354.3075	45.82	32.04	-18.91	58.95	74.00	15.05	Horizontal

802.11ac80_Channel 42
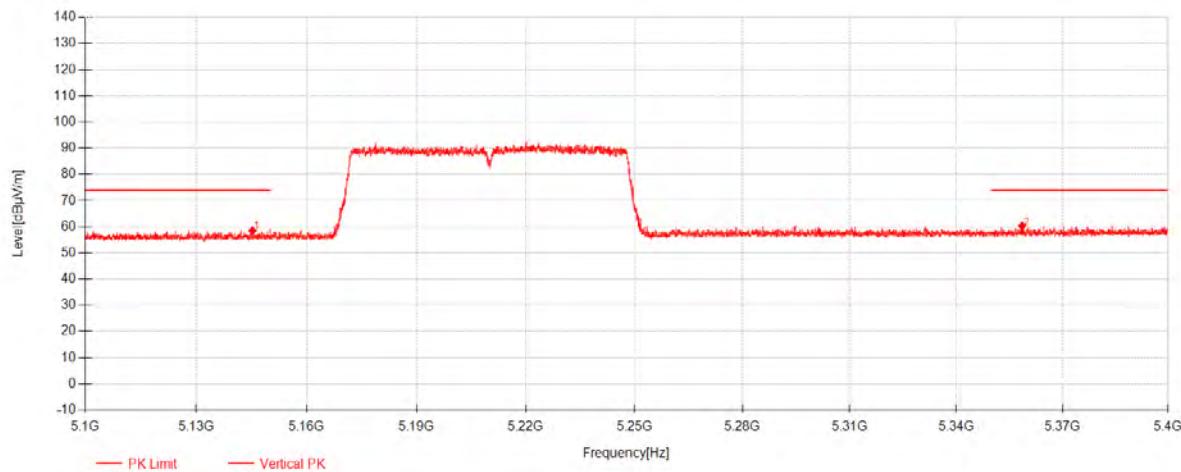
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5145.28	45.98	31.66	-19.15	58.49	74.00	15.51	Vertical
2	5358.56	47.14	32.05	-18.92	60.26	74.00	13.74	Vertical

802.11ac80_Channel 58
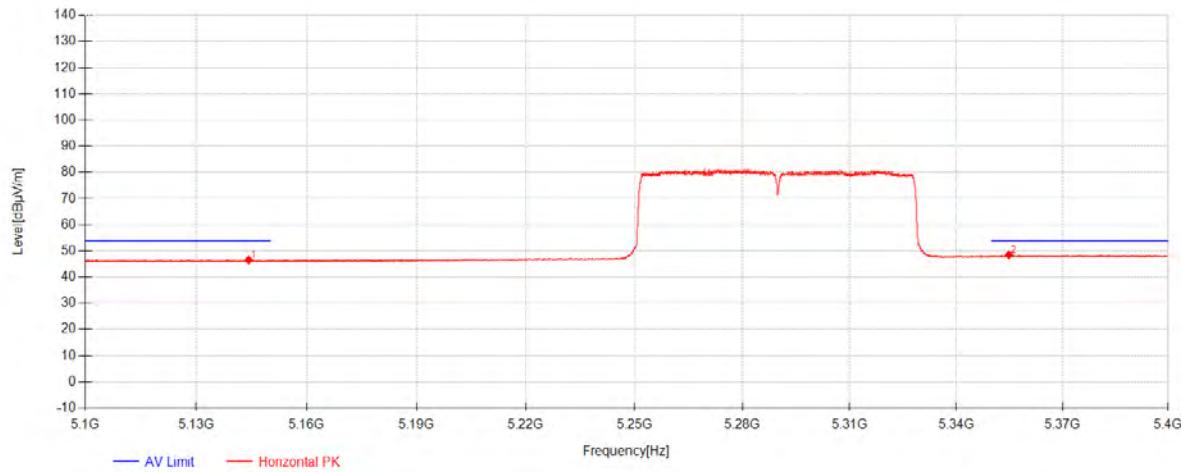
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5144.25	34.11	31.66	-19.15	46.62	54.00	7.38	Horizontal
2	5354.825	35.39	32.04	-18.91	48.52	54.00	5.48	Horizontal

802.11ac80_Channel 58
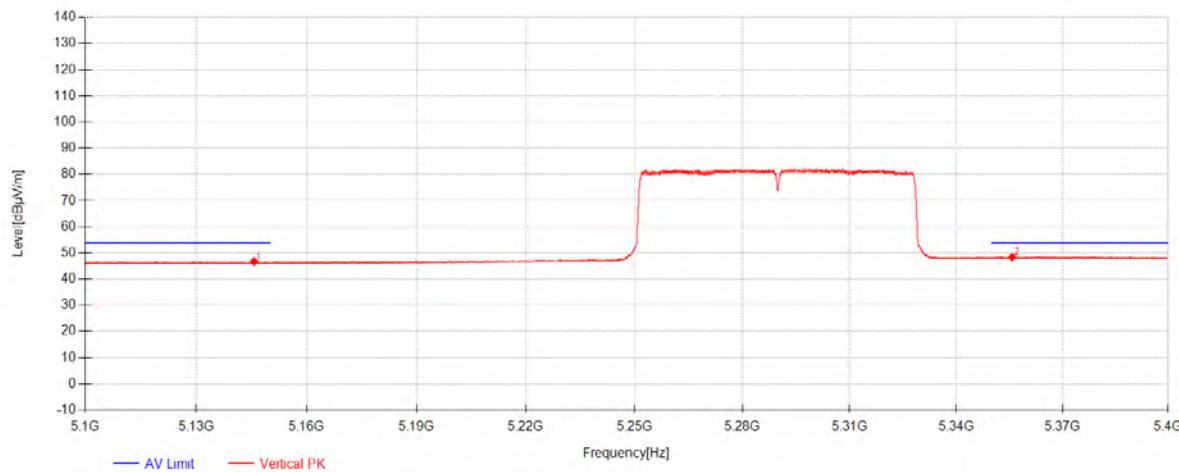
| Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5145.7	34.23	31.66	-19.15	46.74	54.00	7.26	Vertical
2	5355.725	35.29	32.04	-18.91	48.42	54.00	5.58	Vertical

802.11ac80_Channel 58
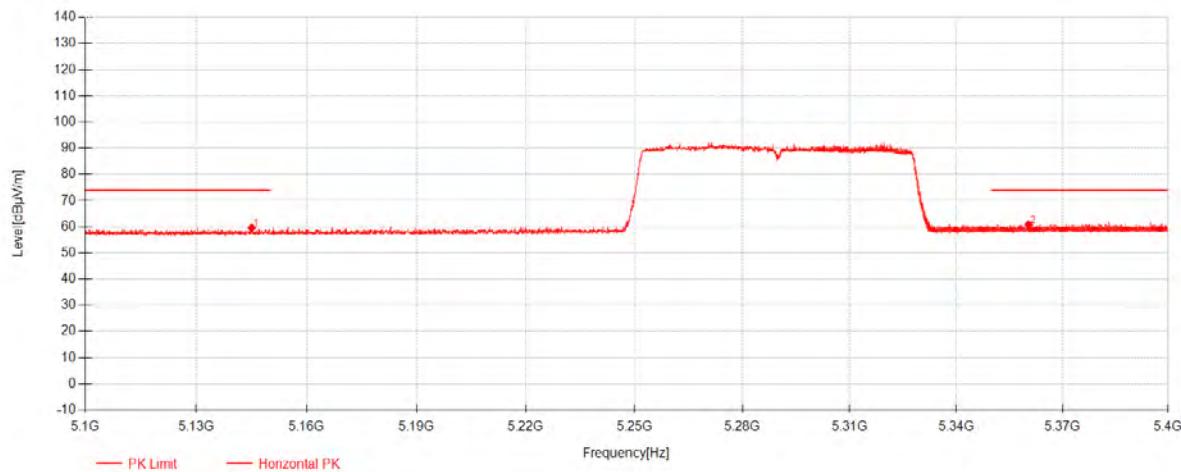
Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5145.0667	47.08	31.66	-19.15	59.59	74.00	14.41	Horizontal
2	5360.35	47.70	32.05	-18.92	60.82	74.00	13.18	Horizontal

802.11ac80_Channel 58
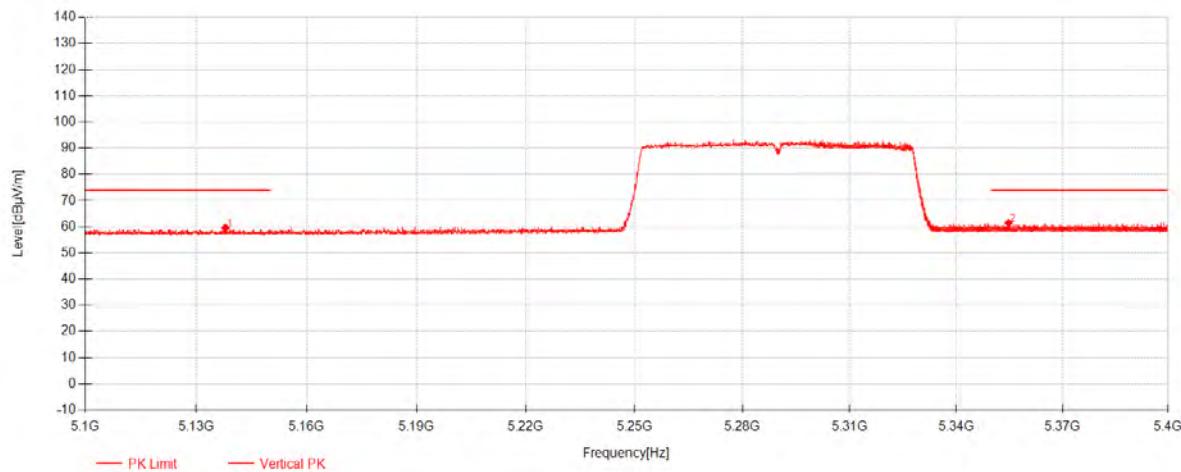
Data List

NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5137.9333	47.10	31.65	-19.17	59.58	74.00	14.42	Vertical
2	5354.7125	48.28	32.04	-18.91	61.41	74.00	12.59	Vertical

802.11ac80_Channel 106
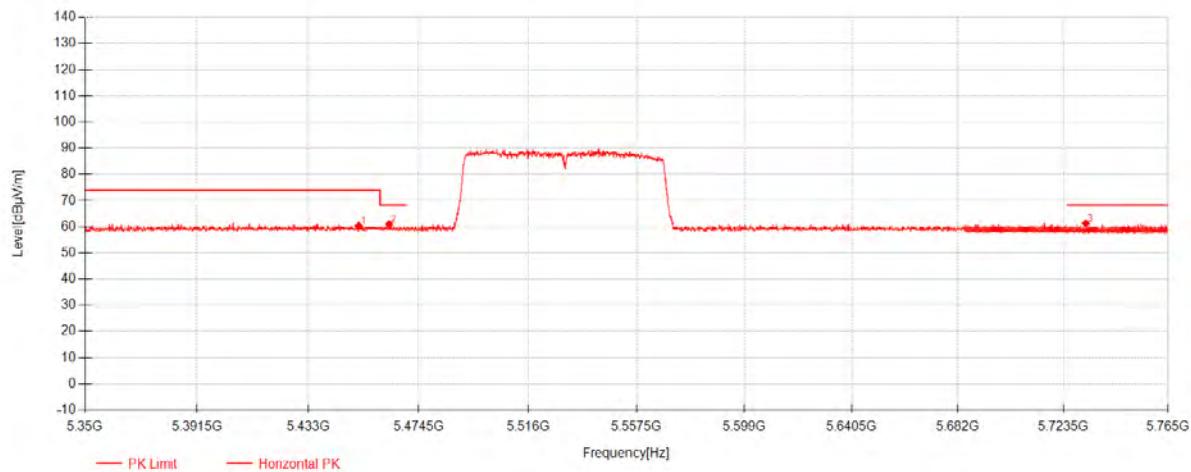
Data List							
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5451.9517	47.18	32.21	-19.10	60.29	74.00	13.71	Horizontal
2	5463.4533	47.80	32.23	-19.12	60.91	68.30	7.39	Horizontal
3	5732.38	47.73	32.35	-18.83	61.25	68.30	7.05	Horizontal

802.11ac80_Channel 106
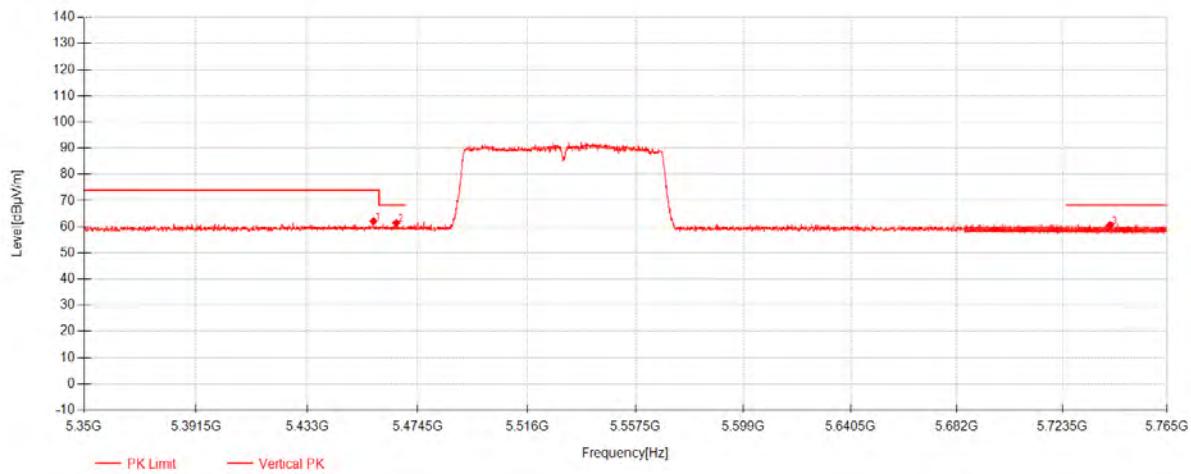
| Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5457.87	49.02	32.22	-19.11	62.13	74.00	11.87	Vertical
2	5466.4683	48.32	32.24	-19.13	61.43	68.30	6.87	Vertical
3	5742.36	47.06	32.35	-18.86	60.55	68.30	7.75	Vertical

802.11ac80_Channel 106
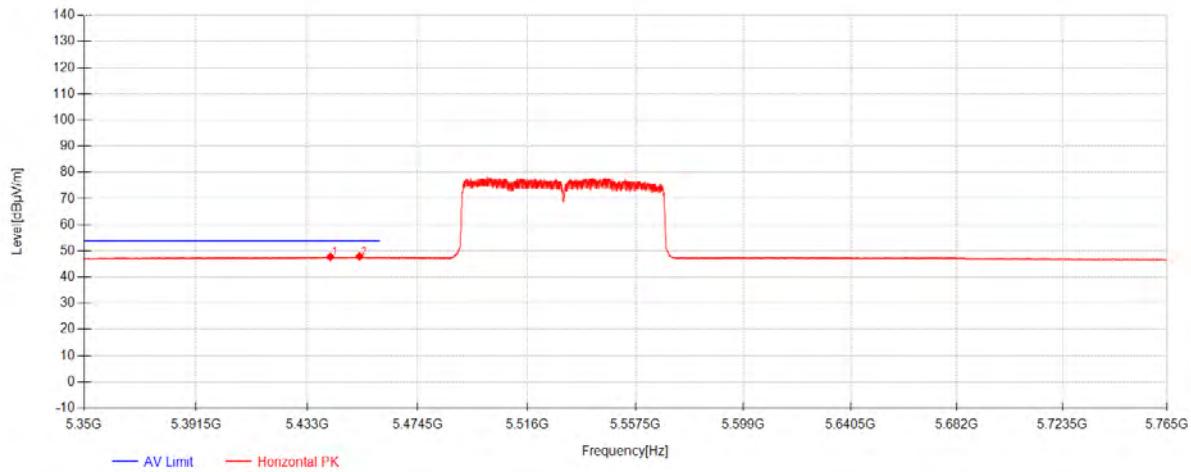
Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5441.6783	34.65	32.20	-19.09	47.76	54.00	6.24	Horizontal
2	5452.6217	34.81	32.21	-19.10	47.92	54.00	6.08	Horizontal

802.11ac80_Channel 106
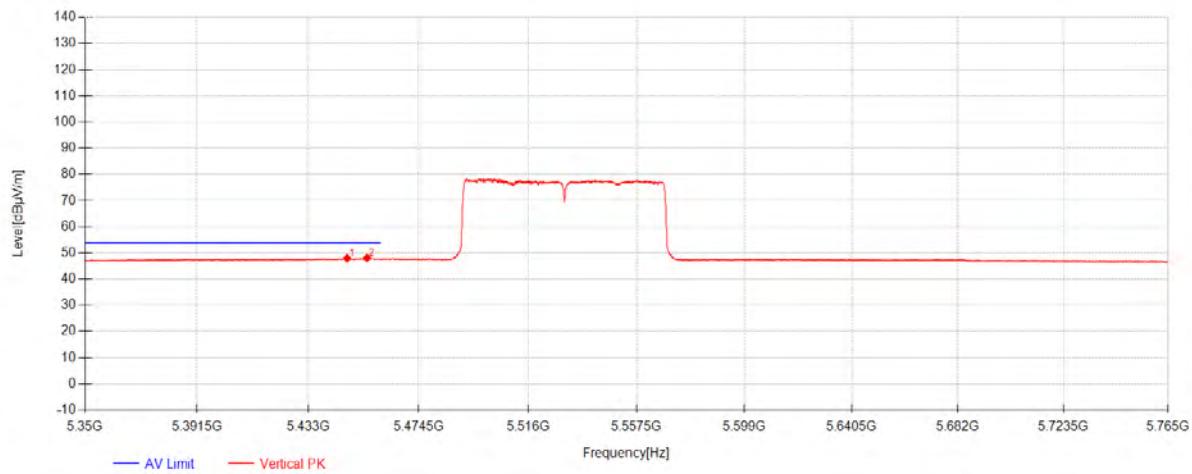
Data List

NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5447.5967	34.87	32.21	-19.10	47.98	54.00	6.02	Vertical
2	5455.0783	34.97	32.22	-19.11	48.08	54.00	5.92	Vertical

802.11ac80_Channel 155
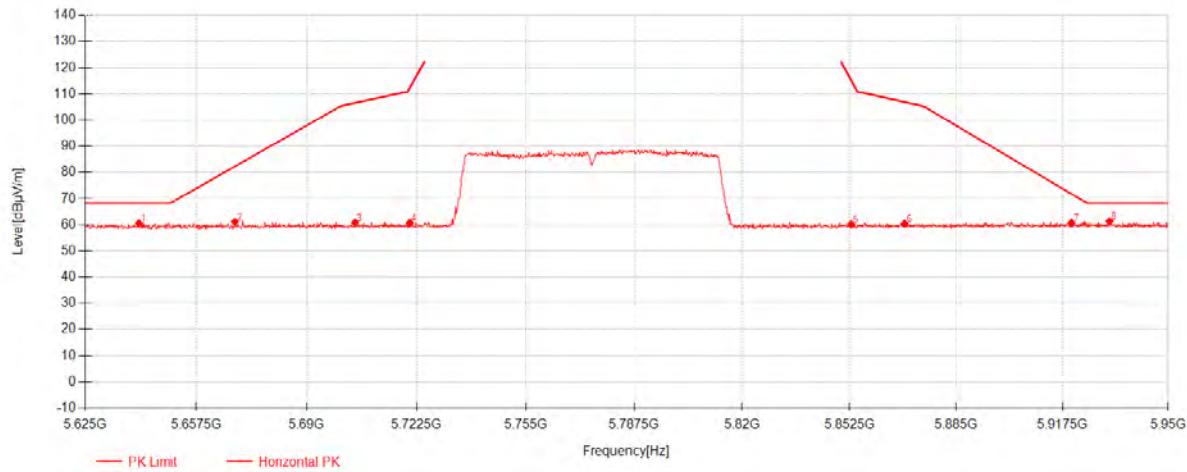
Data List							
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5640.7625	46.94	32.33	-18.72	60.54	68.30	7.76	Horizontal
2	5668.875	47.45	32.33	-18.73	61.06	82.31	21.25	Horizontal
3	5704.3	47.18	32.34	-18.74	60.78	106.51	45.73	Horizontal
4	5720.55	47.16	32.34	-18.79	60.71	112.15	51.44	Horizontal
5	5852.9875	46.65	32.37	-18.88	60.14	115.49	55.35	Horizontal
6	5869.2375	46.85	32.37	-18.83	60.39	106.91	46.52	Horizontal
7	5920.2625	47.09	32.38	-18.78	60.69	71.79	11.10	Horizontal
8	5931.9625	47.73	32.39	-18.81	61.31	68.30	6.99	Horizontal

802.11ac80_Channel 155
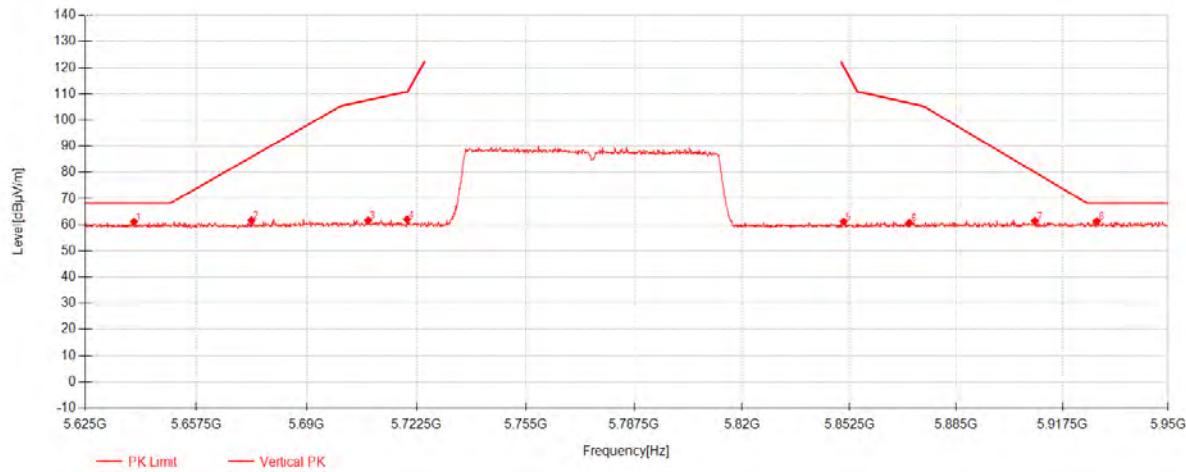
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5639.3	47.52	32.33	-18.72	61.12	68.30	7.18	Vertical
2	5673.75	48.09	32.33	-18.73	61.70	85.92	24.22	Vertical
3	5708.2	48.08	32.34	-18.75	61.67	107.60	45.93	Vertical
4	5719.7375	48.54	32.34	-18.79	62.09	110.83	48.74	Vertical
5	5850.7125	47.67	32.37	-18.88	61.16	120.67	59.51	Vertical
6	5870.7	47.10	32.37	-18.82	60.65	106.50	45.85	Vertical
7	5909.05	47.85	32.38	-18.76	61.47	80.07	18.60	Vertical
8	5928.0625	47.78	32.39	-18.80	61.37	68.30	6.93	Vertical

7.5 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.

7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 25.4 °C Humidity: 50.6 % RH Atmospheric Pressure: 1010 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	06	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 only the data of worst case is recorded in the report.
Final test	07	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.

7.5.3 Test Setup Diagram

DFS Master

DFS slave without radar detection

DFS slave with radar detection

7.5.4 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 X 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

7.6 Duty Cycle

Test Requirement   KDB 789033 D02 II B 1
Test Method: KDB 789033 D02 II B 1

7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 25.4 °C   Humidity: 50.6 % RH   Atmospheric Pressure: 1010   mbar

7.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	05	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 only the data of worst case is recorded in the report.
Final test	06	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 only the data of worst case is recorded in the report.
Final test	07	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.
Final test	08	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 only the data of worst case is recorded in the report.

7.6.3 Measurement Procedure and Data

Please Refer to Appendix for Details

7.7 99% Bandwidth

Test Requirement   N/A
Test Method: KDB 789033 D02 II D

7.7.1 E.U.T. Operation

Operating Environment:
Temperature: 25.4 °C   Humidity: 50.6 % RH   Atmospheric Pressure: 1010   mbar

7.7.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	05	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 only the data of worst case is recorded in the report.
Final test	06	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 only the data of worst case is recorded in the report.
Final test	07	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.
Final test	08	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 only the data of worst case is recorded in the report.

7.7.3 Measurement Procedure and Data

Please Refer to Appendix for Details

7.8 26dB Emission bandwidth

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

Test Method: KDB 789033 D02 II C 1

7.8.1 E.U.T. Operation

Operating Environment:

Temperature: 25.4 °C   Humidity: 50.6 % RH   Atmospheric Pressure: 1010   mbar

7.8.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	05	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 only the data of worst case is recorded in the report.
Final test	06	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 only the data of worst case is recorded in the report.
Final test	07	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.
Final test	08	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 only the data of worst case is recorded in the report.

7.8.3 Measurement Procedure and Data

Please Refer to Appendix for Details

7.9 Minimum 6 dB bandwidth (5.725-5.85 GHz band)

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

Test Method:　　　　　KDB 789033 D02 II C 2

Limit:

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

7.9.1 E.U.T. Operation

Operating Environment:

Temperature:　　25.4 °C　　　　Humidity:　　50.6 % RH　　　Atmospheric Pressure:　1010　mbar

7.9.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	08	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 only the data of worst case is recorded in the report.

7.9.3 Measurement Procedure and Data

Please Refer to Appendix for Details

7.10 Peak Power spectrum density

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

Test Method: KDB 789033 D02 II F

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.

7.10.1 E.U.T. Operation

Operating Environment:

Temperature: 25.4 °C   Humidity: 50.6 % RH   Atmospheric Pressure: 1010   mbar

7.10.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	05	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 only the data of worst case is recorded in the report.
Final test	06	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 only the data of worst case is recorded in the report.
Final test	07	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.
Final test	08	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 only the data of worst case is recorded in the report.

7.10.3 Measurement Procedure and Data

Please Refer to Appendix for Details

7.11 Frequency Stability

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

Test Method:　　　　　ANSI C63.10 (2013) Section 6.8

7.11.1　E.U.T. Operation

Operating Environment:

Temperature:　　25.4 °C　　　　Humidity:　50.6 % RH　　　Atmospheric Pressure:　1010　mbar

7.11.2　Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	05	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 only the data of worst case is recorded in the report.
Final test	06	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 only the data of worst case is recorded in the report.
Final test	07	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.
Final test	08	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 only the data of worst case is recorded in the report.

7.11.3　Measurement Procedure and Data

Please Refer to Appendix for Details

7.12 Non-occupancy period

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: 25.4 °C   Humidity: 50.6 % RH   Atmospheric Pressure: 1010   mbar

7.12.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	06	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 only the data of worst case is recorded in the report.

Final test	07	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.

7.12.3 Test Setup Diagram

DFS Master
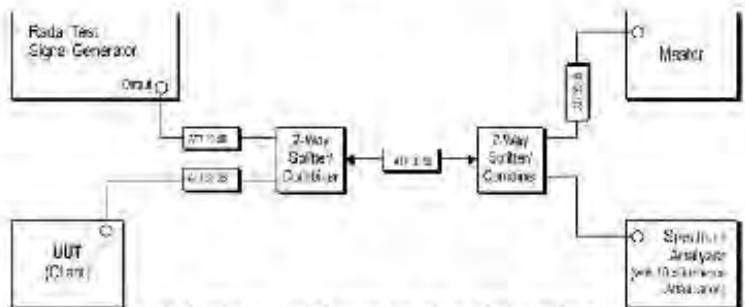
DFS slave without radar detection
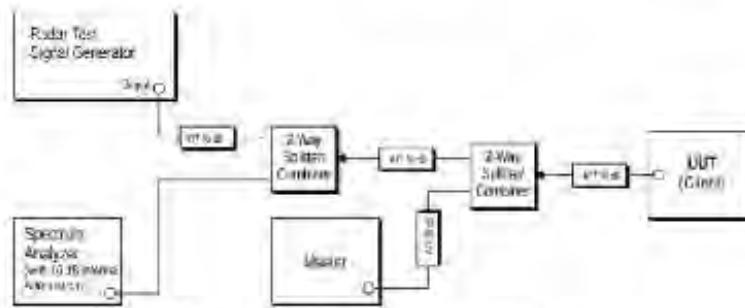
DFS slave with radar detection

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 X 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

7.13 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.

7.13.1 E.U.T. Operation

Operating Environment:

Temperature: 25.4 °C   Humidity: 50.6 % RH   Atmospheric Pressure: 1010   mbar

7.13.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	06	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 only the data of worst case is recorded in the report.
Final test	07	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and only the data of worst case is recorded in the report.

7.13.3 Test Setup Diagram

DFS Master

DFS slave without radar detection

DFS slave with radar detection

7.13.4 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 X 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 KSCR2411002399AT

9   EUT Constructional Details (EUT Photos)

Refer to Appendix_Photographs of EUT Constructional Details for KSCR2411002399AT