TEST REPORT

Application No.:	KSCR2409001732AT
FCC ID:	2BHGF-0211C6U4
IC:	32743-0211C6U4
Name of Testing Laboratory preparing the Report:	Compliance Certification Services (Kunshan) Inc.
Address of Testing Laboratory preparing the Report:	No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.
Applicant:	KeyLife International Technology Limited
Address of Applicant:	27th Floor, Alexandra House, 18 Chater Road,Central, Hong Kong
Manufacturer:	KeyLife International Technology Limited
Address of Manufacturer:	27th Floor, Alexandra House, 18 Chater Road,Central, Hong Kong
Factory:	Zhejiang Uniview Systems Technology Co., Ltd.
Address of Factory:	No.1277 South Qingfeng South Road, Tongxiang City, Jiaxing City, Zhejiang Province, China
Equipment Under Test (EUT):	
EUT Name:	Dual-cam Doorbell (battery)
Model No.:	DB312,DB312 XXX XXX(where X may be 0-9 A-Z a-z or blank. The differences no impact safety related constructions and EMC) ♣
♣	Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
For IC Model No.:	DB312
Standard(s) :	47 CFR Part 15, Subpart E 15.407 RSS-247 Issue 3, August 2023 RSS-Gen Issue 5 Amendment 2 (February 2021)
Date of Receipt:	2024-09-04
Date of Test:	2024-09-13 to 2024-10-22
Date of Issue:	2024-10-22
Test Result:	**Pass***

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

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Member of the SGS Group (SGS SA)

Revision Record			
Version	**Description**	***Date***	***Remark***
00	Original	2024-10-22	/

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

2 Test Summary

Radio Spectrum Technical Requirement					
Item	**FCC Requirement**	**IC Requirement**	**Method**	**Result**	**Test Lab***
Antenna Requirement	47 CFR Part 15, Subpart C 15.203	RSS-Gen Clause 6.8	N/A	Customer Declaration	N/A
Transmission in the Absence of Data	47 CFR Part 15, Subpart E 15.407 (c)	RSS-247 Section 6.4(a)	N/A	Pass	N/A

N/A: Not applicable

Radio Spectrum Matter Part					
Item	**FCC Requirement**	**IC Requirement**	**Method**	**Result**	**Test Lab***
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart C 15.207 & Subpart E 15.407 b(6)	RSS-Gen Section 8.8	ANSI C63.10 (2013) Section 6.2	Pass	B
99% Bandwidth	N/A	RSS-Gen Section 6.7	ANSI C63.10 Section 6.9.3	Pass	A
26dB Emission bandwidth	47 CFR Part 15, Subpart E 15.407 (a)	RSS-247 Section 6.2.1(1)	KDB 789033 D02 II C 1	Pass	A
Minimum 6 dB bandwidth (5.725-5.85 GHz band)	47 CFR Part 15, Subpart E 15.407 (e)	RSS-247 Section 6.2.4	KDB 789033 D02 II C 2	Pass	A
Maximum Conducted output power	47 CFR Part 15, Subpart E 15.407 (a)	RSS-247 Section 6.2.1&6.2.2&6.2.3&6.2.4	KDB 789033 D02 II E	Pass	A
Peak Power spectrum density	47 CFR Part 15, Subpart E 15.407 (a)	RSS-247 Section 6.2.1&6.2.2&6.2.3& 6.2.4	KDB 789033 D02 II F	Pass	A
Radiated Emissions	47 CFR Part 15, Subpart C 15.209 & 15.407(b)	RSS-247 Section 3.3 & RSS-Gen Section 8.9	KDB 789033 D02 II G	Pass	B
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	RSS-247 Section 3.3 & RSS-Gen Section 8.9	KDB 789033 D02 II G	Pass	B
Frequency Stability	47 CFR Part 15, Subpart E 15.407 (g)	RSS-Gen Section 8.11	ANSI C63.10 (2013) Section 6.8& RSS-Gen Section 6.11	Pass	A
Channel Move Time	47 CFR Part 15, Subpart E 15.407	KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass	A
Channel Closing Transmission Time	47 CFR Part 15, Subpart E 15.407	KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass	A
Non-occupancy period	47 CFR Part 15, Subpart E 15.407	KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass	A

Model No.: DB312,DB312 XXX XXX(where X may be 0-9 A-Z a-z or blank. The differences no impact safety related constructions and EMC)

Only the model DB312 was tested.

There are series models mentioned in this report, and they are identical in electrical and electronic characters. Only the model DB312 was tested since their differences were the model number and appearance.

3 Contents

Page

1 COVER PAGE 1

2 Test Summary 3

3 Contents 4

4 General Information 5

4.1 Details of E.U.T. 5
4.2 Power level setting using in test 6
4.3 Description of Support Units 6
4.4 Measurement Uncertainty 7
4.5 Test Location 8
4.6 Test Facility 9
4.7 Deviation from Standards 9
4.8 Abnormalities from Standard Conditions 9

5 Equipment List 10

6 Radio Spectrum Technical Requirement 12

6.1 Antenna Requirement 12
6.2 Transmission in the Absence of Data 13

7 Radio Spectrum Matter Test Results 14

7.1 Conducted Emissions at AC Power Line (150kHz-30MHz) 14
7.2 Maximum Conducted output power 18
7.3 Radiated Emissions (Below 1GHz) 20
7.4 Radiated Emissions (Above 1GHz) 24
7.5 Radiated Emissions which fall in the restricted bands 135
7.6 Duty Cycle 232
7.7 99% Bandwidth 233
7.8 26dB Emission bandwidth 234
7.9 Minimum 6 dB bandwidth (5.725-5.85 GHz band) 235
7.10 Peak Power spectrum density 236
7.11 Frequency Stability 237
7.12 Channel Move Time 238
7.13 Channel Closing Transmission Time 240
7.14 Non-occupancy period 242

8 Test Setup Photo 244

9 EUT Constructional Details (EUT Photos) 244

10 Appendix 245

4 General Information

4.1 Details of E.U.T.

Power supply:	~12-24V,50/60Hz,1.0A DC 5V/2A DC 3.6V by battery
Test voltage:	AC 120V/60Hz
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)
Modulation Type:	OFDM (64QAM, 16QAM, QPSK, BPSK); 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM); 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM); 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024-QAM)
Channel Spacing:	802.11a/n/ac/ax 20: 20MHz; 802.11n/ac/ax 40: 40MHz
DFS Function:	Slave without Radar detection
TPC Function:	Without TPC function
Antenna Type:	Internal antenna
Antenna Gain:	0.8dBi (Provided by the manufacturer)

4.2 Power level setting using in test

Channel	802.11a	802.11ac(VHT20)	802.11ax(HE20)
	Ant 1	Ant 2	Ant 1
36	19	19	19
40	19	18	19
48	18	18	19
52	17	16	17
60	17	17	17
64	16	16	16
100	15	15	14
116	15	14	14
140	15	15	15
149	18	17	17
157	18	17	17
165	18	18	18

Channel	802.11ac(VHT40)	802.11ax(HE40)
	Ant 1	Ant 1
38	17	18
46	17	18
54	15	16
62	15	15
102	13	13
110	11	12
134	12	14
151	15	16
159	15	16

4.3 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Notebook	LENOVO	K27	EB24537645

4.4 Measurement Uncertainty

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

4.5 Test Location

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:

Conducted Emissions at AC Power Line (150kHz-30MHz); Radiated Emissions; Radiated Emissions which fall in the restricted bands test at:

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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone

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
RF Radiated Test						
1	Spectrum Analyzer	R&S	FSV40	KUS1806E003	08/06/2024	08/05/2025
2	Universal Radio Communication Tester	R&S	CMW500	KSEM009-1	03/19/2024	03/18/2025
4	Loop Antenna	COM-POWER	AL-130R	KUS1806E001	03/18/2023	03/17/2025
5	Bilog Antenna	TESEQ	CBL 6112D	KUS1806E005	06/29/2023	06/28/2025
6	Bilog Antenna	TESEQ	CBL 6112D	KUS1806E006	03/19/2024	03/18/2025
7	Horn-antenna(1-18GHz)	Schwarzbeck	BBHA9120D	KS301079	03/23/2024	08/22/2026
8	Horn-antenna(1-18GHz)	ETS-LINDGREN	3117	KS301186	04/07/2023	04/06/2025
9	Horn Antenna(18-40GHz)	Schwarzbeck	BBHA9170	CZ301058	01/07/2024	01/06/2026
10	Amplifier(30MHz~18GHz)	PANSHAN TECHNOLOGY	LNA:1~18G	KSEM010-1	01/15/2024	01/14/2025
11	Amplifier(18~40GHz)	PANSHAN TECHNOLOGY	LNA180400G40	KSEM038	08/12/2024	08/11/2025
12	RE Test Cable	REBES MICROWAVE	/	CZ301097	08/12/2024	08/11/2025
13	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-4	03/21/2024	03/20/2025
14	Software	Faratronic	EZ_EMC-v 3A1	/	NCR	NCR
15	Software	ESE	E3_V 6.111221a	/	NCR	NCR

Lab B:

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
Conducted Emission at Mains Terminals						
1	Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	2/1/2024	1/31/2025
2	Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-06	2/8/2024	2/7/2025
3	Artificial network	ROHDE&SCHWARZ	ENV216	SUWI-01-19-03	2/4/2024	2/3/2025
4	Artificial network	ROHDE&SCHWARZ	ENV216	SUWI-01-19-04	2/4/2024	2/3/2025
5	Measurement Software	Tonscend	JS32-CE	SUWI-02-09-05	NCR	NCR
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	11/21/2023	11/20/2024
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	11/25/2023	11/24/2024
7	Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9120D	SUWI-01-11-05	11/25/2023	11/24/2024
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 Internal antenna on the main PCB and no consideration of replacement. The best case gain of the antenna is 0.8dBi.

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 Conducted Emissions at AC Power Line (150kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.207 & Subpart E 15.407 b(9)
Test Method: ANSI C63.10 (2013) Section 6.2

Limit:

Frequency of emission(MHz)	Conducted limit(dB μV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50
*Decreases with the logarithm of the frequency.		

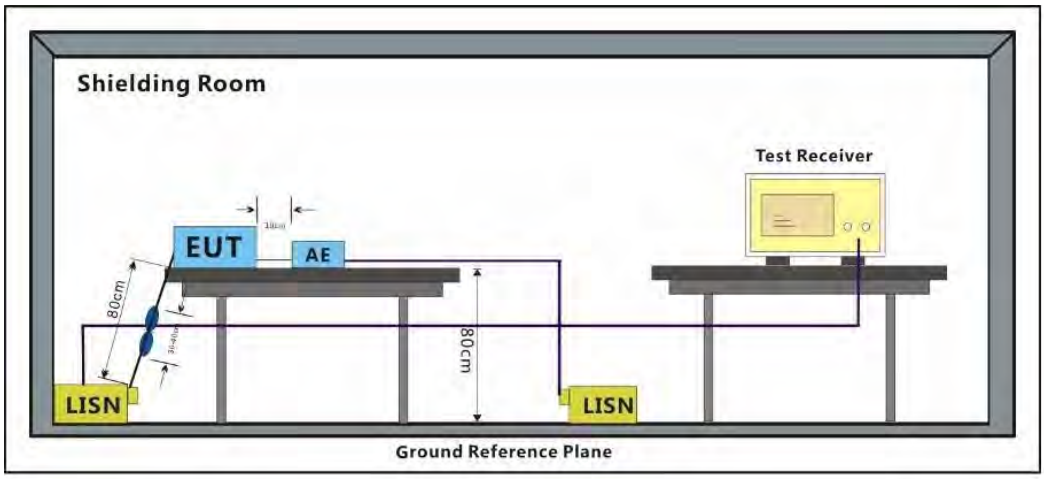
7.1.1 E.U.T. Operation

Operating Environment:
Temperature: 23 °C Humidity: 46 % RH Atmospheric Pressure: 1010 mbar

7.1.2 Test Mode Description

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

7.1.3 Test Setup Diagram



7.1.4 Measurement Procedure and Data

1) The mains terminal disturbance voltage test was conducted in a shielded room.

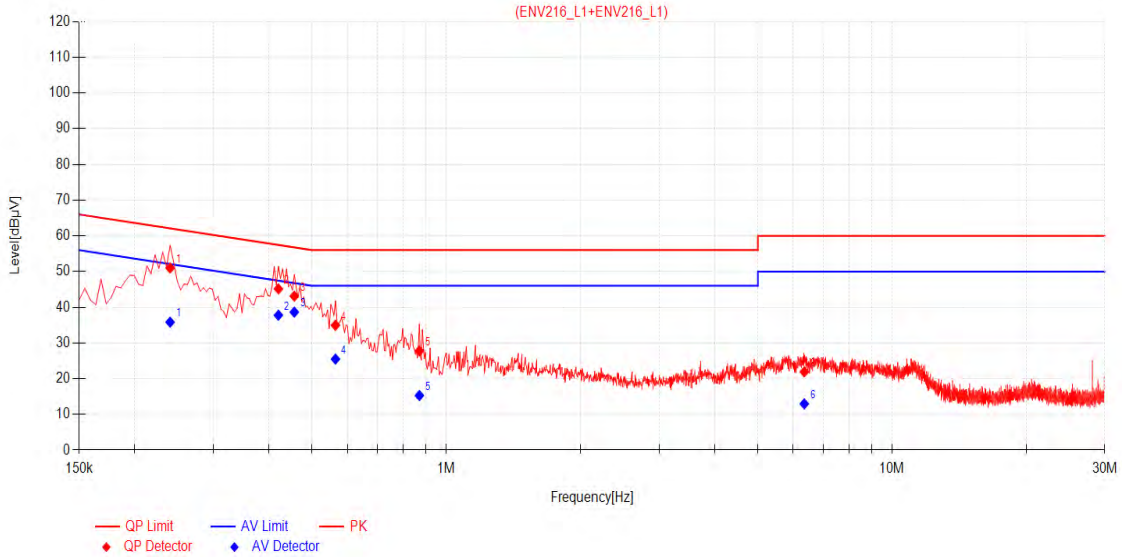
2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50μH + 5ohm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.

3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,

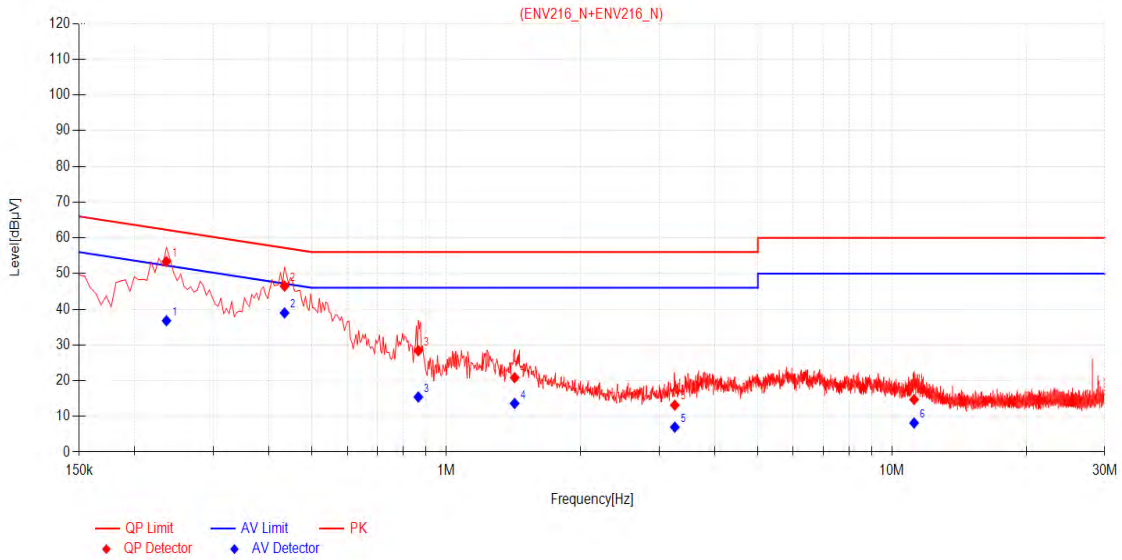
4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.

5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

Remark: Level=Read Level+ Cable Loss+ LISN Factor



Final Data List											
NO.	Frequency [MHz]	Factor [dB]	QP Reading [dBμV]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Reading [dBμV]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict
1	0.2400	10.16	40.85	51.01	62.10	11.09	25.67	35.83	52.10	16.27	PASS
2	0.4200	10.17	34.98	45.15	57.45	12.30	27.60	37.77	47.45	9.68	PASS
3	0.4560	10.17	32.94	43.11	56.77	13.66	28.47	38.64	46.77	8.13	PASS
4	0.5640	10.18	24.78	34.96	56.00	21.04	15.31	25.49	46.00	20.51	PASS
5	0.8700	10.13	17.66	27.79	56.00	28.21	5.16	15.29	46.00	30.71	PASS
6	6.3555	10.09	11.82	21.91	60.00	38.09	2.86	12.95	50.00	37.05	PASS



Final Data List											
NO.	Frequency [MHz]	Factor [dB]	QP Reading [dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict
1	0.2355	10.16	43.20	53.36	62.25	8.89	26.62	36.78	52.25	15.47	PASS
2	0.4335	10.16	36.32	46.48	57.19	10.71	28.81	38.97	47.19	8.22	PASS
3	0.8655	10.13	18.28	28.41	56.00	27.59	5.30	15.43	46.00	30.57	PASS
4	1.4235	10.11	10.73	20.84	56.00	35.16	3.52	13.63	46.00	32.37	PASS
5	3.2550	10.14	3.01	13.15	56.00	42.85	-3.15	6.99	46.00	39.01	PASS
6	11.2065	9.99	4.73	14.72	60.00	45.28	-1.82	8.17	50.00	41.83	PASS

7.2 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.

7.2.1 E.U.T. Operation

Operating Environment:
Temperature: 22.5 °C Humidity: 48.2 % RH Atmospheric Pressure: 1010 mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-2A) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	03	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 found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	04	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.2.3 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

7.3 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

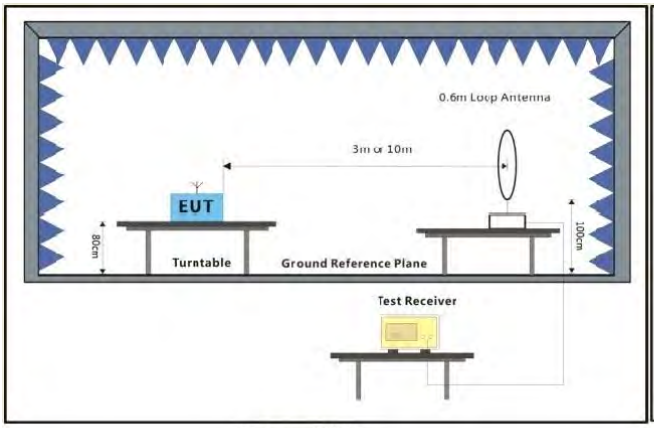
7.3.1 E.U.T. Operation

Operating Environment:
Temperature: 23 °C Humidity: 46 % RH Atmospheric Pressure: 1010 mbar

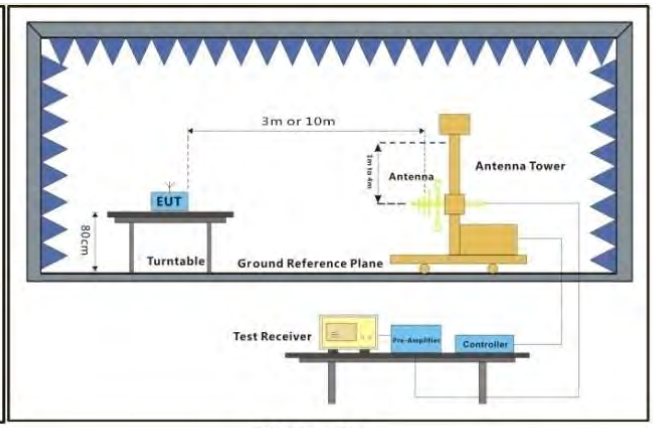
7.3.2 Test Mode Description

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

7.3.3 Test Setup Diagram



Below 30MHz



30MHz-1GHz

7.3.4 Measurement Procedure and Data

a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 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:

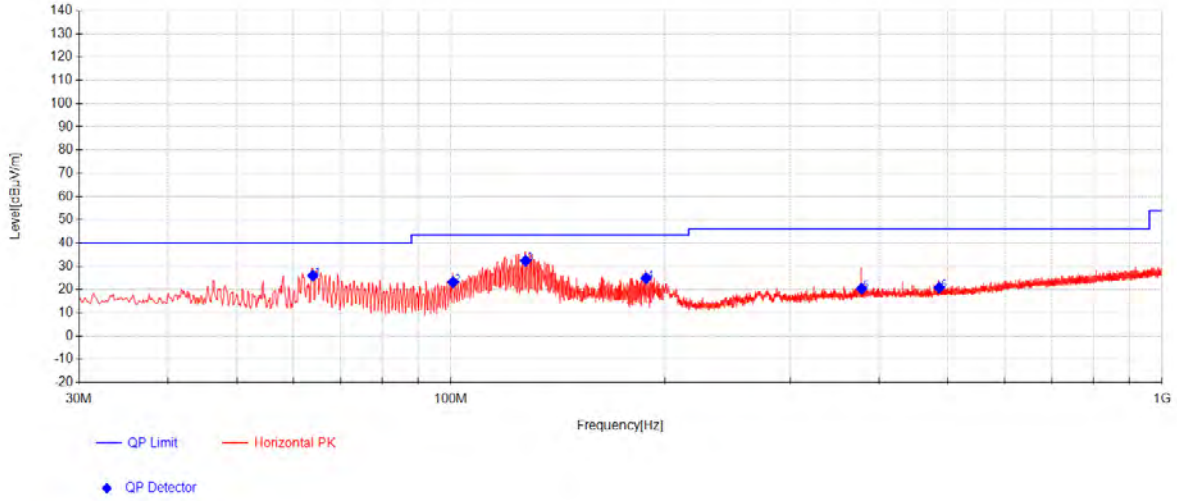
1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

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.

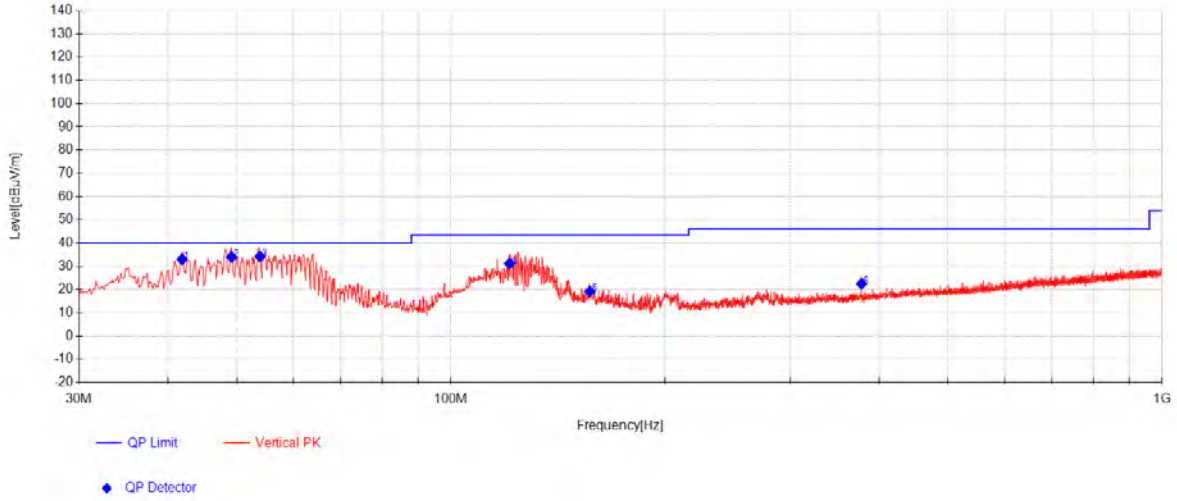
4. The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

11ax20_Channel 100



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	63.95	42.28	-33.81	17.51	25.97	40.00	14.03	Horizontal
2	100.6888	41.89	-33.47	14.74	23.15	43.50	20.35	Horizontal
3	127.3638	48.32	-33.30	17.39	32.41	43.50	11.09	Horizontal
4	188.11	42.06	-32.83	15.59	24.82	43.50	18.68	Horizontal
5	377.9875	32.24	-31.62	19.84	20.46	46.00	25.54	Horizontal
6	486.0212	30.09	-31.18	21.92	20.84	46.00	25.16	Horizontal

11ax20_Channel 100



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	41.8825	48.32	-33.99	18.71	33.04	40.00	6.96	Vertical
2	49.1575	49.22	-33.98	18.77	34.01	40.00	5.99	Vertical
3	53.8862	50.06	-33.93	18.11	34.24	40.00	5.76	Vertical
4	120.9375	47.38	-33.34	17.18	31.22	43.50	12.28	Vertical
5	156.8275	33.28	-33.10	19.01	19.19	43.50	24.31	Vertical
6	377.9875	34.29	-31.62	19.84	22.51	46.00	23.49	Vertical

7.4 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.

7.4.1 E.U.T. Operation

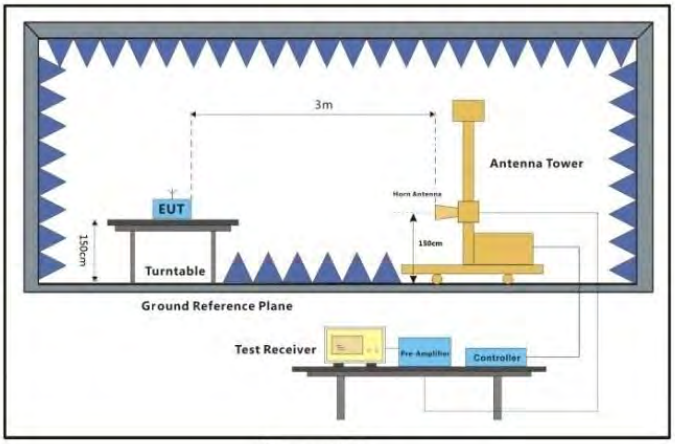
Operating Environment:
Temperature: 23 °C Humidity: 46 % RH Atmospheric Pressure: 1010 mbar

7.4.2 Test Mode Description

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

		modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	03	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 found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	04	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.4.3 Test Setup Diagram



Above 1GHz

7.4.4 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.

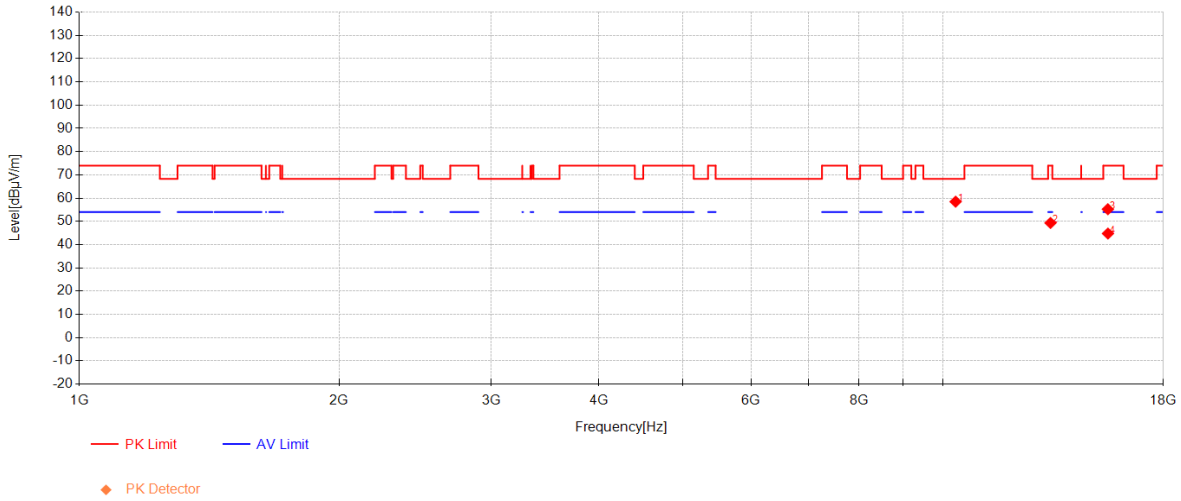
4. The disturbance above 18GHz were very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

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.

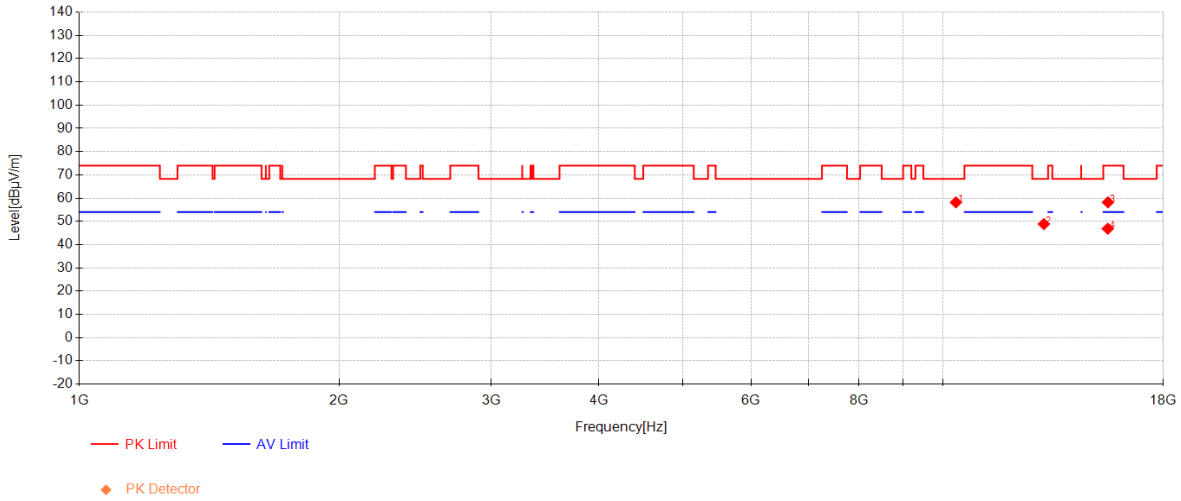
7. For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ⩾1/T (Duty cycle＜98%) or 10Hz (Duty cycle⩾98%) for Average detection (AV) at frequency above 1GHz.

802.11a_Channel 36



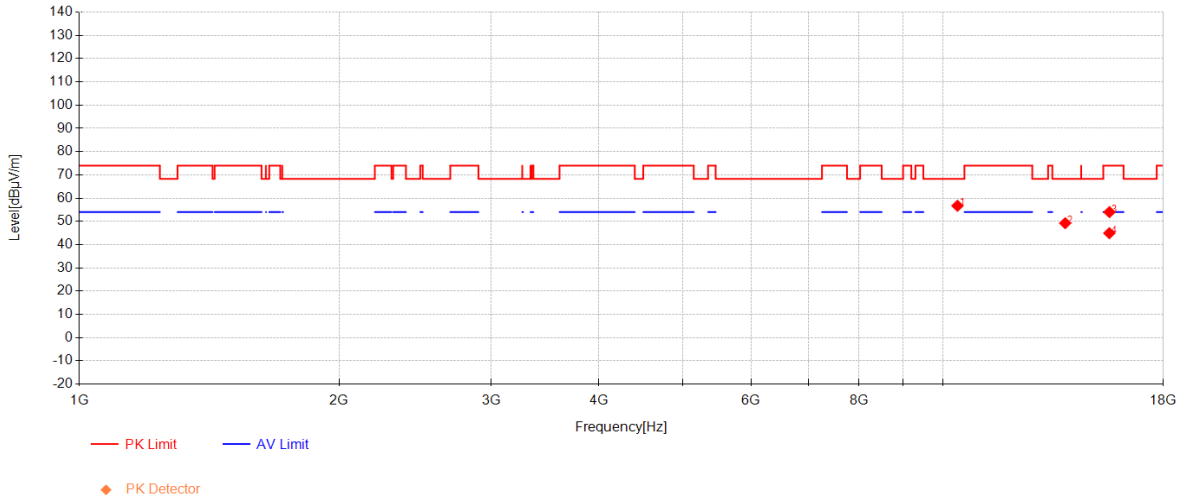
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10352.5	51.95	38.08	-31.54	58.48	68.30	9.82	Horizontal
2	13333.333	38.75	39.83	-29.25	49.33	74.00	24.67	Horizontal
3	15537.916	43.74	39.08	-27.59	55.23	74.00	18.77	Horizontal
4	15541.25	33.29	39.07	-27.58	44.78	54.00	9.22	Horizontal

802.11a_Channel 36



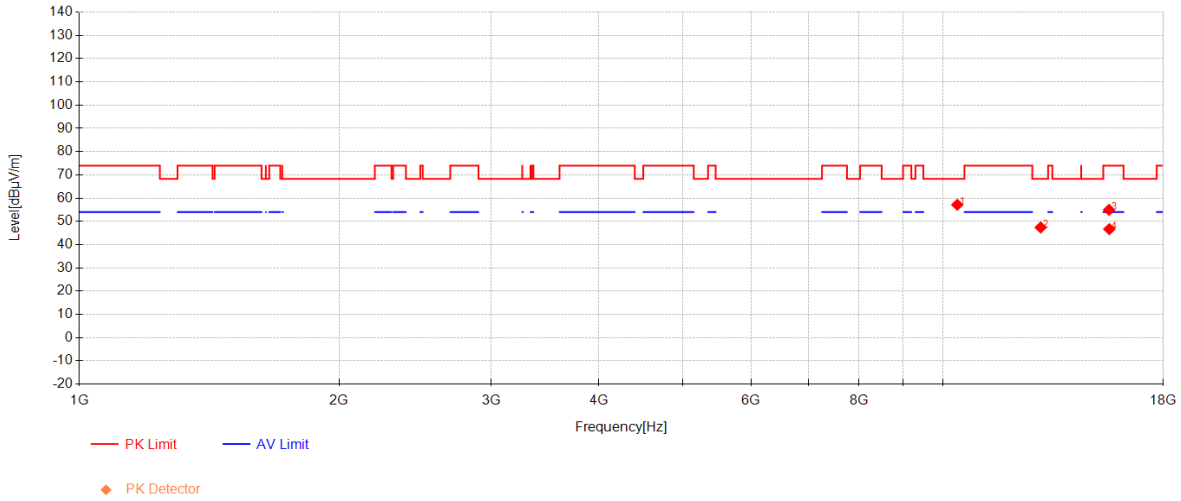
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10361.666	51.57	38.08	-31.47	58.18	68.30	10.12	Vertical
2	13099.583	38.06	39.67	-28.89	48.84	68.30	19.46	Vertical
3	15542.5	46.71	39.07	-27.58	58.20	74.00	15.80	Vertical
4	15534.166	35.35	39.09	-27.59	46.84	54.00	7.16	Vertical

802.11a_Channel 40



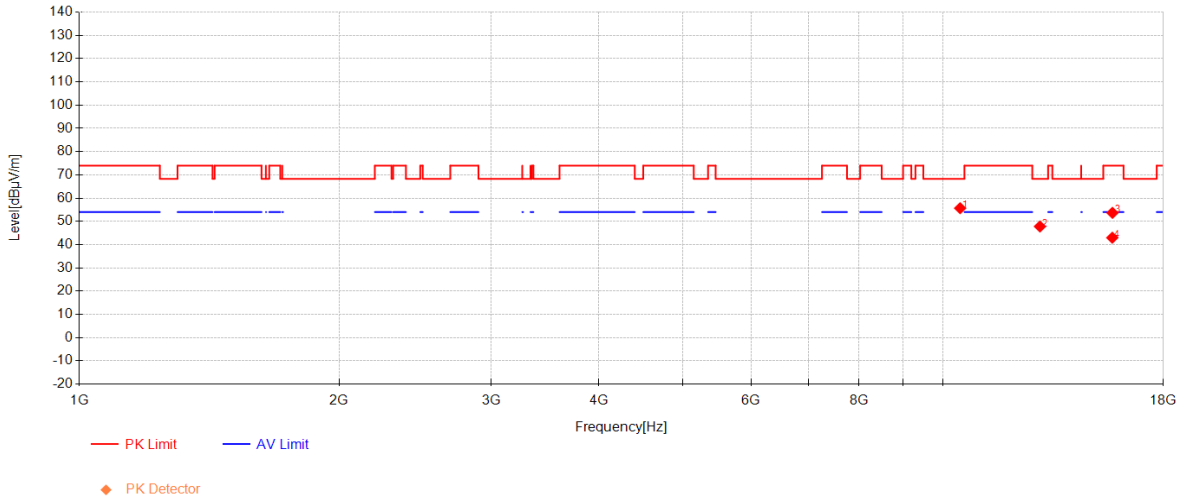
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10404.166	49.76	38.10	-31.15	56.71	68.30	11.59	Horizontal
2	13867.5	37.71	40.21	-28.69	49.23	68.30	19.07	Horizontal
3	15602.916	42.51	38.95	-27.46	54.00	74.00	20.00	Horizontal
4	15600	33.41	38.96	-27.45	44.92	54.00	9.08	Horizontal

802.11a_Channel 40



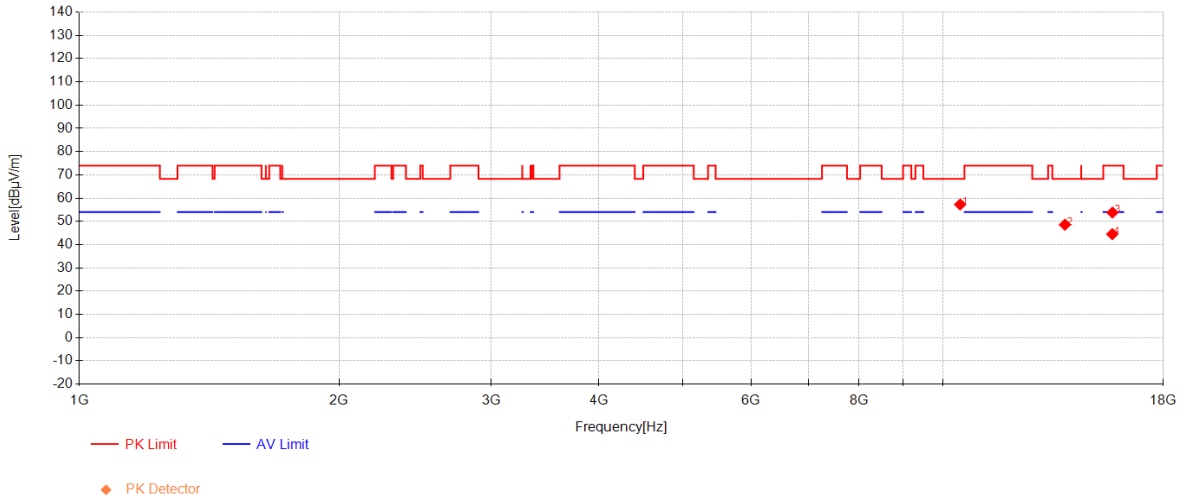
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10398.75	50.21	38.10	-31.17	57.14	68.30	11.16	Vertical
2	12989.166	37.60	39.59	-29.81	47.38	68.30	20.92	Vertical
3	15587.5	43.45	38.98	-27.48	54.96	74.00	19.04	Vertical
4	15597.916	35.16	38.96	-27.45	46.67	54.00	7.33	Vertical

802.11a_Channel 48



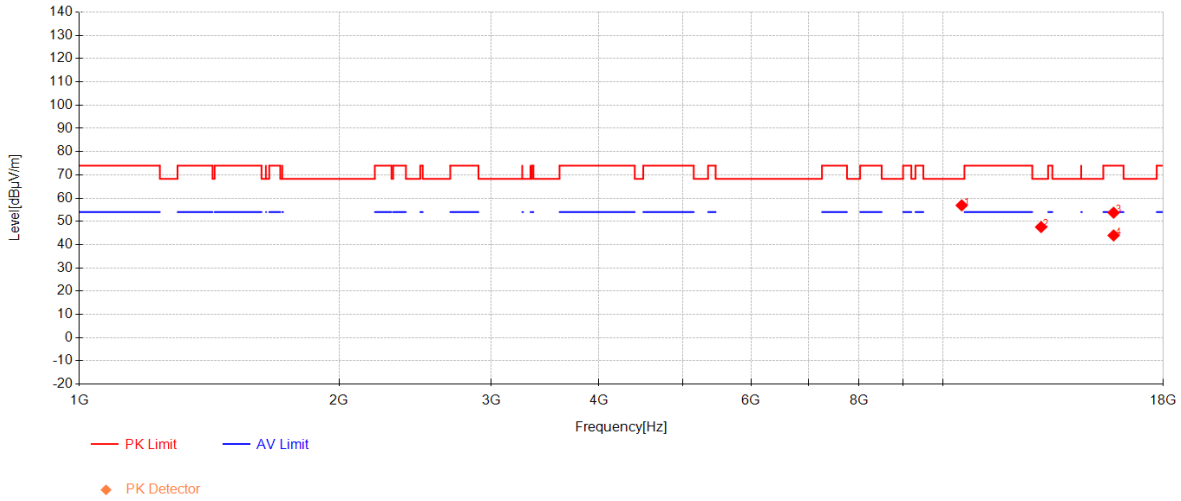
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10478.333	48.59	38.14	-31.06	55.67	68.30	12.63	Horizontal
2	12964.166	37.94	39.56	-29.70	47.80	68.30	20.50	Horizontal
3	15730.416	42.63	38.71	-27.68	53.67	74.00	20.33	Horizontal
4	15722.5	32.00	38.73	-27.75	42.98	54.00	11.02	Horizontal

802.11a_Channel 48



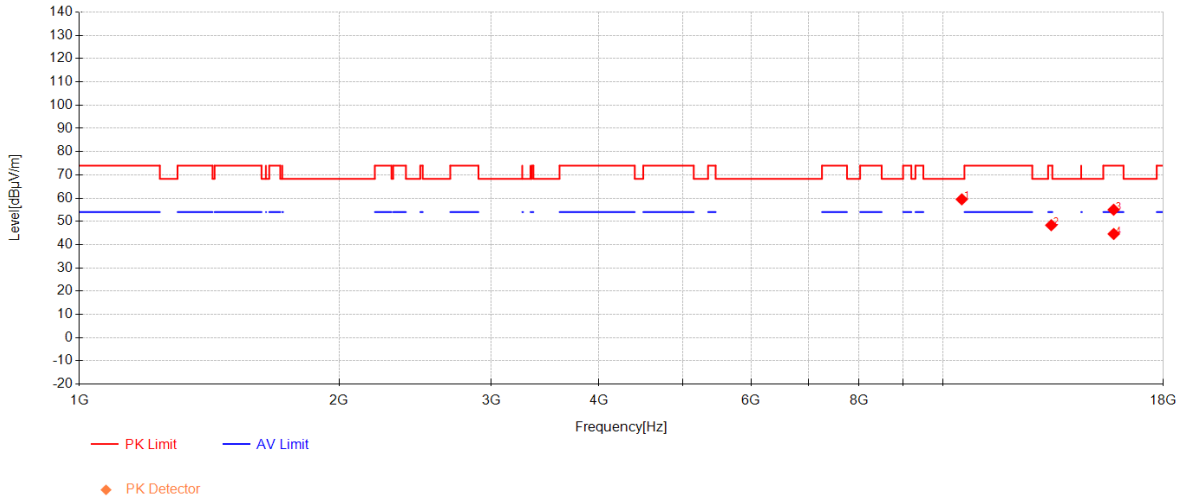
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10479.166	50.19	38.14	-31.06	57.27	68.30	11.03	Vertical
2	13856.666	37.15	40.20	-28.78	48.57	68.30	19.73	Vertical
3	15729.583	42.76	38.71	-27.68	53.79	74.00	20.21	Vertical
4	15722.083	33.54	38.73	-27.75	44.52	54.00	9.48	Vertical

802.11a_Channel 52



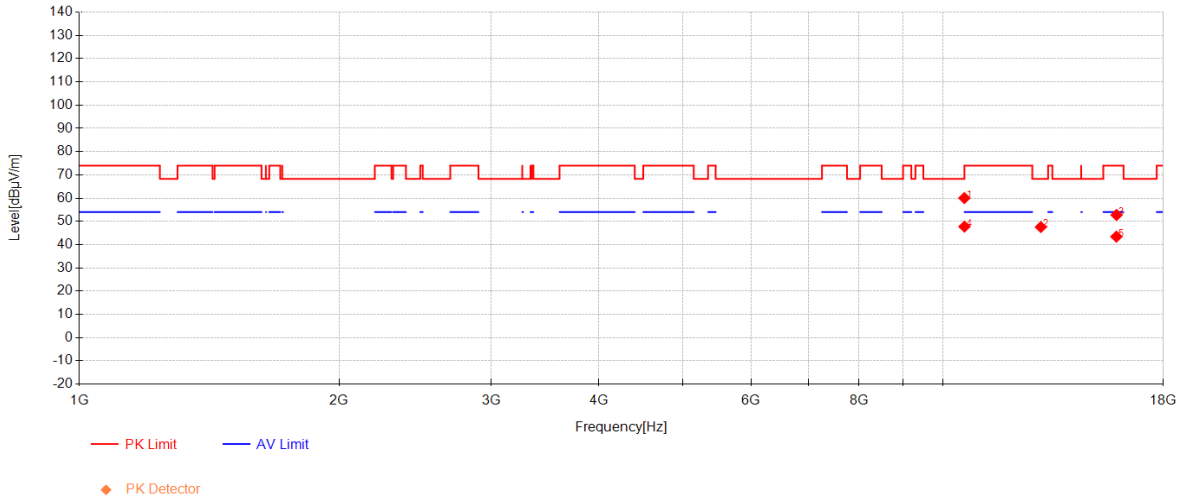
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10521.666	49.80	38.16	-31.07	56.89	68.30	11.41	Horizontal
2	13004.166	37.79	39.60	-29.82	47.57	68.30	20.73	Horizontal
3	15778.333	42.36	38.62	-27.25	53.74	74.00	20.26	Horizontal
4	15778.75	32.59	38.62	-27.24	43.97	54.00	10.03	Horizontal

802.11a_Channel 52



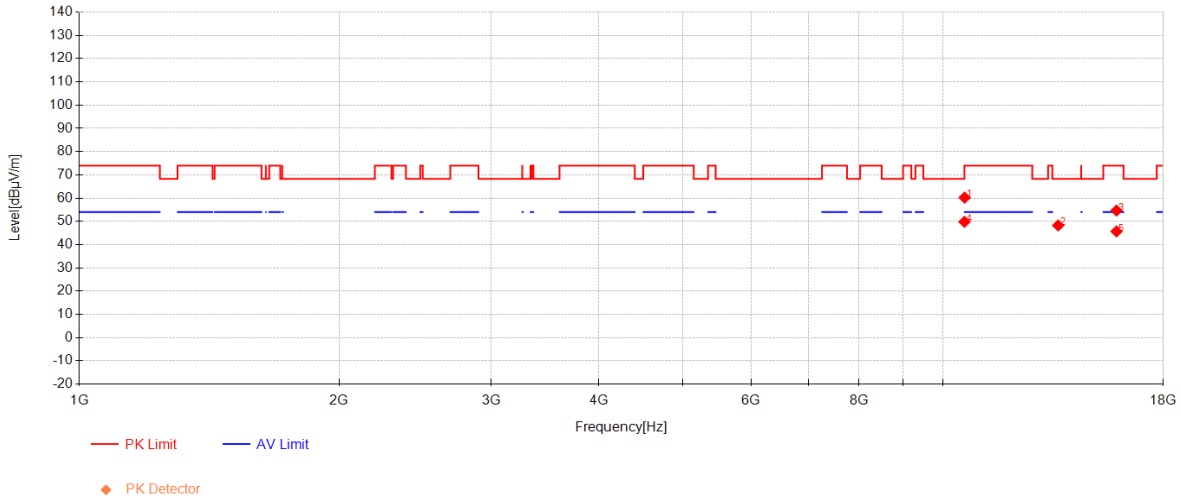
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10525	52.39	38.16	-31.07	59.48	68.30	8.82	Vertical
2	13361.666	37.60	39.85	-29.11	48.35	74.00	25.65	Vertical
3	15779.583	43.62	38.62	-27.23	55.01	74.00	18.99	Vertical
4	15783.333	33.17	38.61	-27.20	44.58	54.00	9.42	Vertical

802.11a_Channel 60



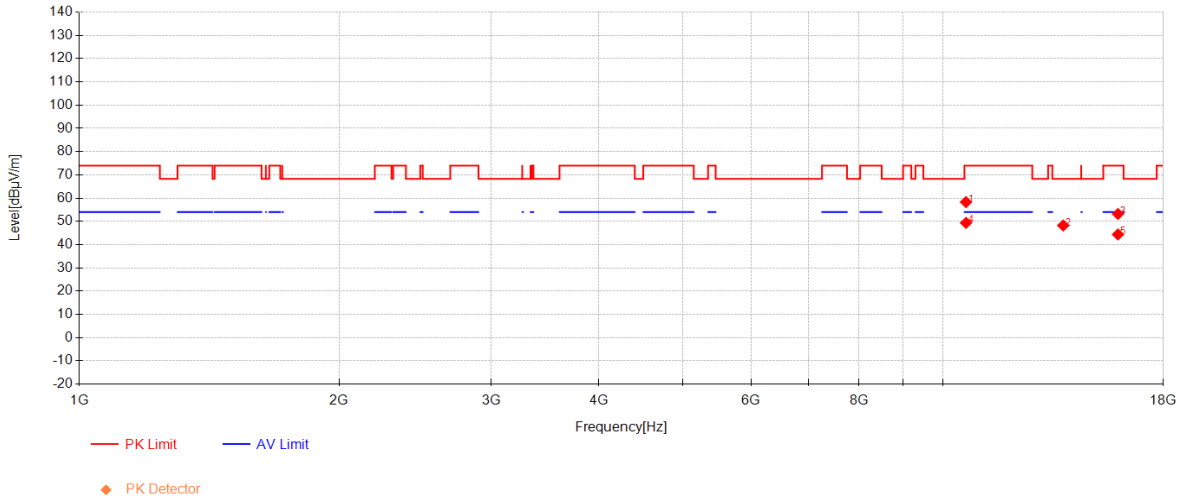
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10596.25	53.03	38.20	-31.19	60.03	68.30	8.27	Horizontal
2	12994.583	37.81	39.59	-29.84	47.57	68.30	20.73	Horizontal
3	15902.5	41.85	38.39	-27.48	52.76	74.00	21.24	Horizontal
4	10600	40.77	38.20	-31.20	47.77	54.00	6.23	Horizontal
5	15894.583	32.50	38.40	-27.46	43.44	54.00	10.56	Horizontal

802.11a_Channel 60



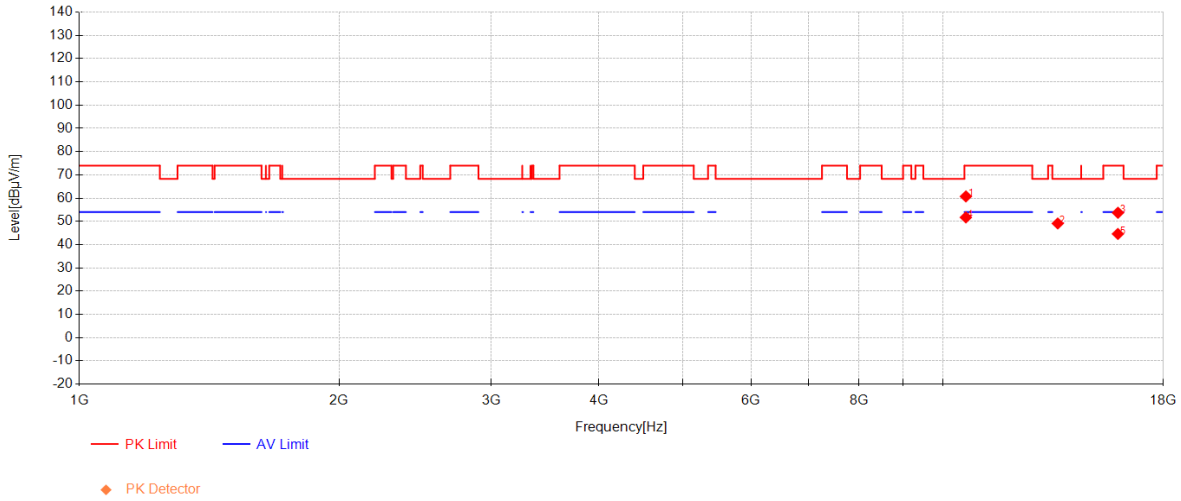
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10604.166	53.19	38.20	-31.16	60.23	74.00	13.77	Vertical
2	13609.583	36.02	40.03	-27.80	48.25	68.30	20.05	Vertical
3	15900	43.75	38.39	-27.48	54.66	74.00	19.34	Vertical
4	10600	42.82	38.20	-31.20	49.82	54.00	4.18	Vertical
5	15899.166	34.77	38.39	-27.48	45.69	54.00	8.31	Vertical

802.11a_Channel 64



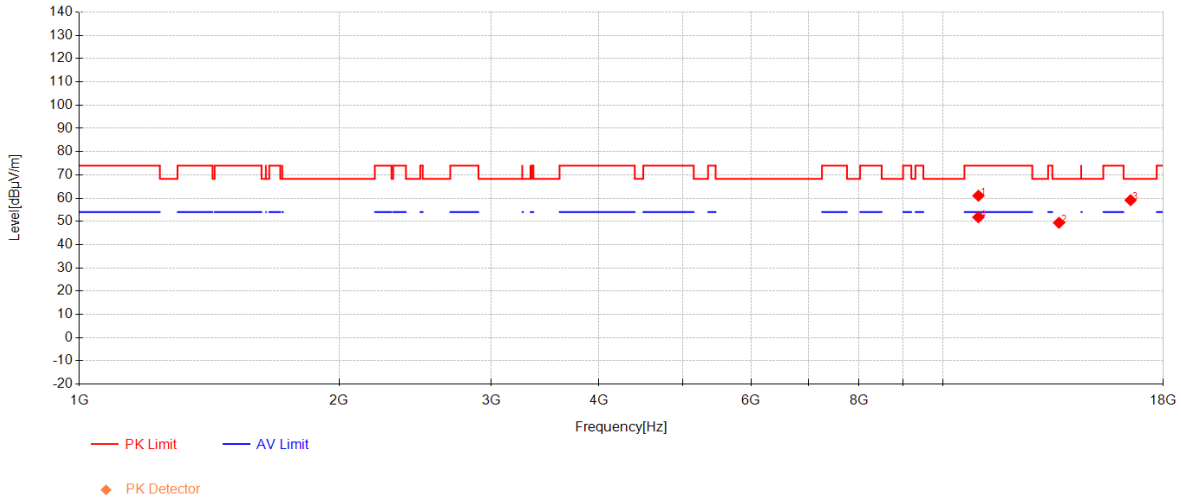
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10642.916	50.89	38.22	-30.81	58.30	74.00	15.70	Horizontal
2	13794.166	37.34	40.16	-29.26	48.24	68.30	20.06	Horizontal
3	15962.5	42.37	38.27	-27.45	53.19	74.00	20.81	Horizontal
4	10644.166	41.94	38.22	-30.80	49.36	54.00	4.64	Horizontal
5	15960.833	33.55	38.27	-27.45	44.37	54.00	9.63	Horizontal

802.11a_Channel 64



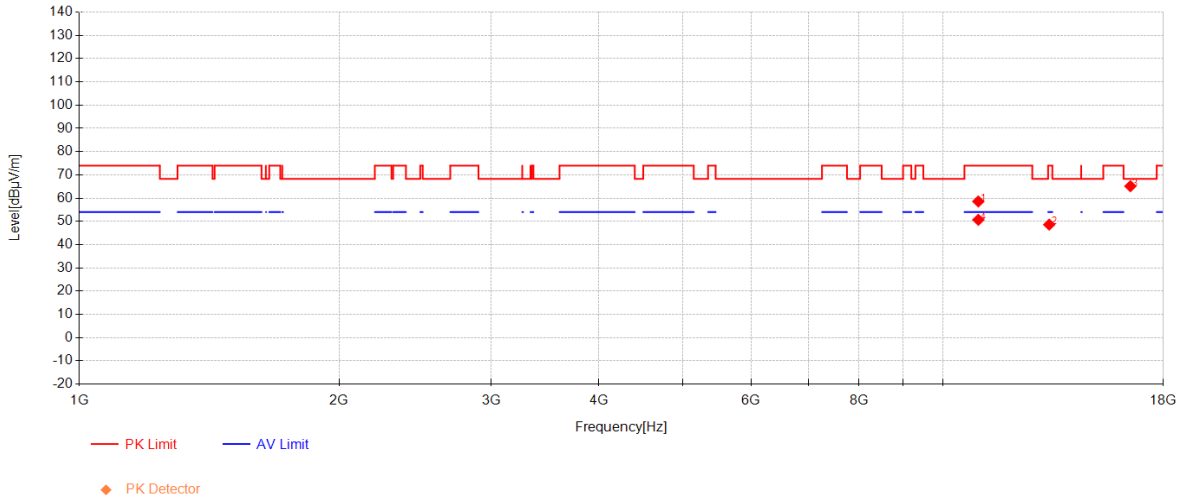
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10641.25	53.35	38.22	-30.83	60.74	74.00	13.26	Vertical
2	13594.583	36.84	40.02	-27.75	49.10	68.30	19.20	Vertical
3	15962.083	42.90	38.27	-27.45	53.72	74.00	20.28	Vertical
4	10639.583	44.33	38.22	-30.84	51.71	54.00	2.29	Vertical
5	15958.75	33.78	38.28	-27.45	44.61	54.00	9.39	Vertical

802.11a_Channel 100



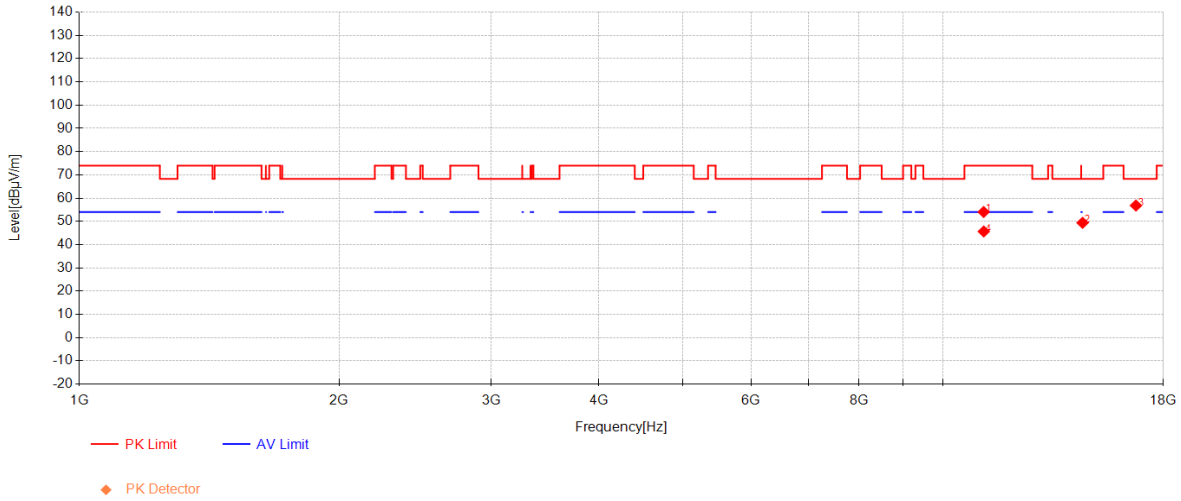
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11002.083	53.13	38.40	-30.50	61.03	74.00	12.97	Horizontal
2	13640	37.64	40.05	-28.27	49.41	68.30	18.89	Horizontal
3	16508.75	47.15	38.56	-26.59	59.12	68.30	9.18	Horizontal
4	11000.833	43.91	38.40	-30.50	51.81	54.00	2.19	Horizontal

802.11a_Channel 100



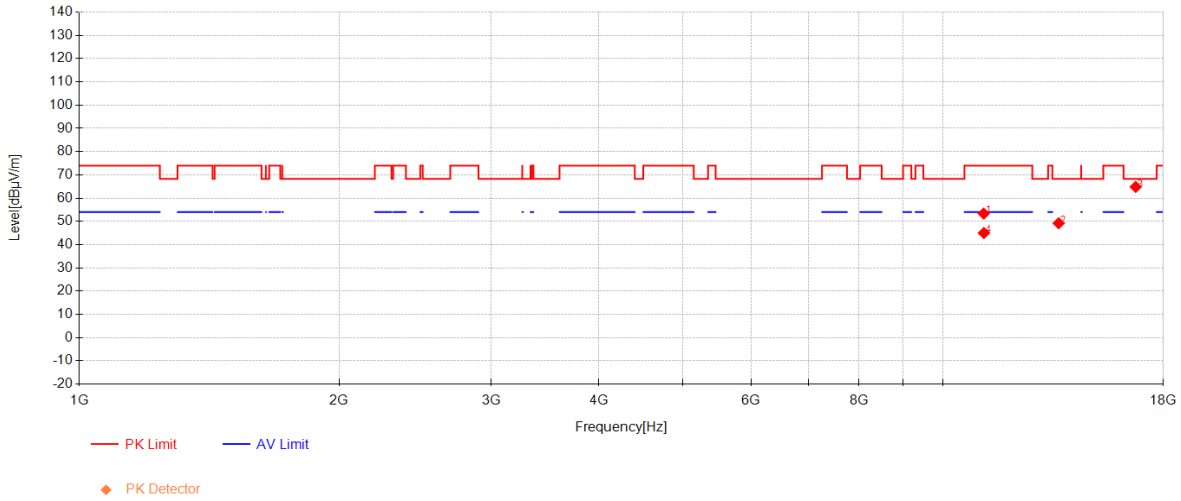
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10998.75	50.68	38.40	-30.50	58.58	74.00	15.42	Vertical
2	13287.916	38.21	39.80	-29.40	48.62	74.00	25.38	Vertical
3	16500.833	53.19	38.55	-26.60	65.14	68.30	3.16	Vertical
4	10999.166	42.77	38.40	-30.50	50.67	54.00	3.33	Vertical

802.11a_Channel 116



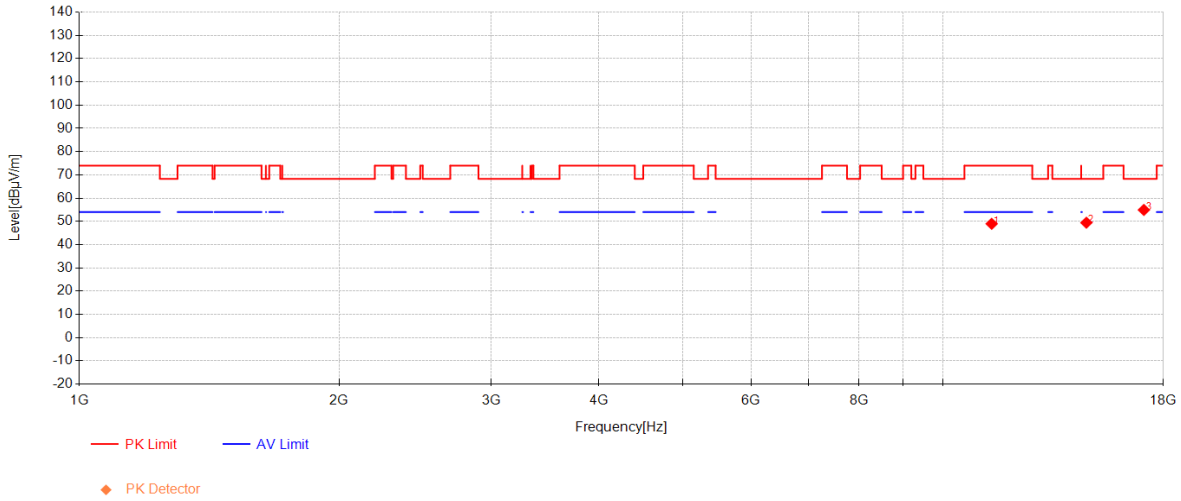
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11156.666	45.76	38.40	-30.12	54.04	74.00	19.96	Horizontal
2	14525.416	38.19	40.19	-28.99	49.40	68.30	18.90	Horizontal
3	16745.833	44.58	38.72	-26.48	56.82	68.30	11.48	Horizontal
4	11160	37.36	38.40	-30.10	45.66	54.00	8.34	Horizontal

802.11a_Channel 116



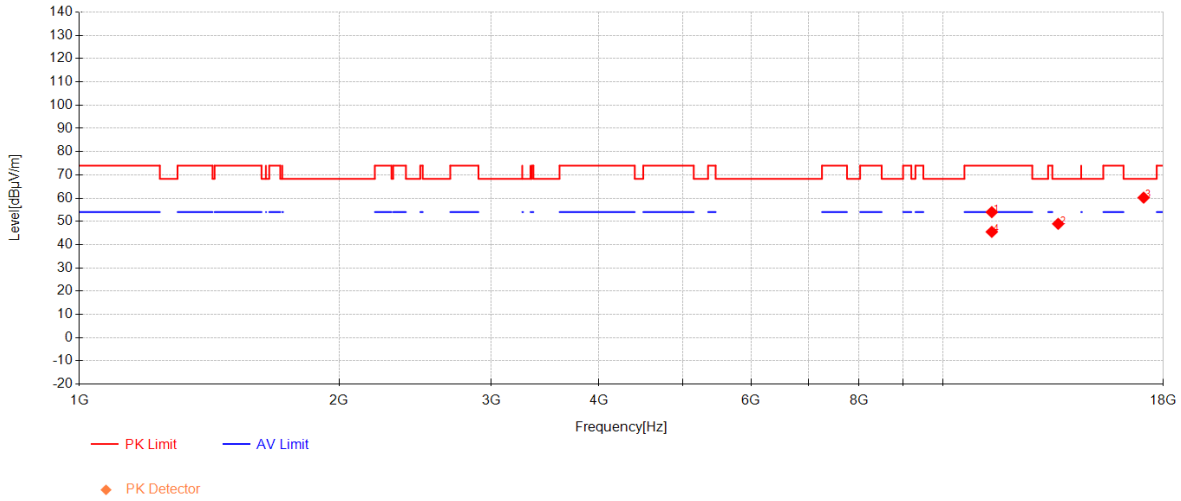
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11157.5	45.07	38.40	-30.11	53.36	74.00	20.64	Vertical
2	13626.666	37.24	40.04	-28.07	49.21	68.30	19.09	Vertical
3	16735.416	52.67	38.71	-26.54	64.84	68.30	3.46	Vertical
4	11162.083	36.70	38.40	-30.10	45.00	54.00	9.00	Vertical

802.11a_Channel 140



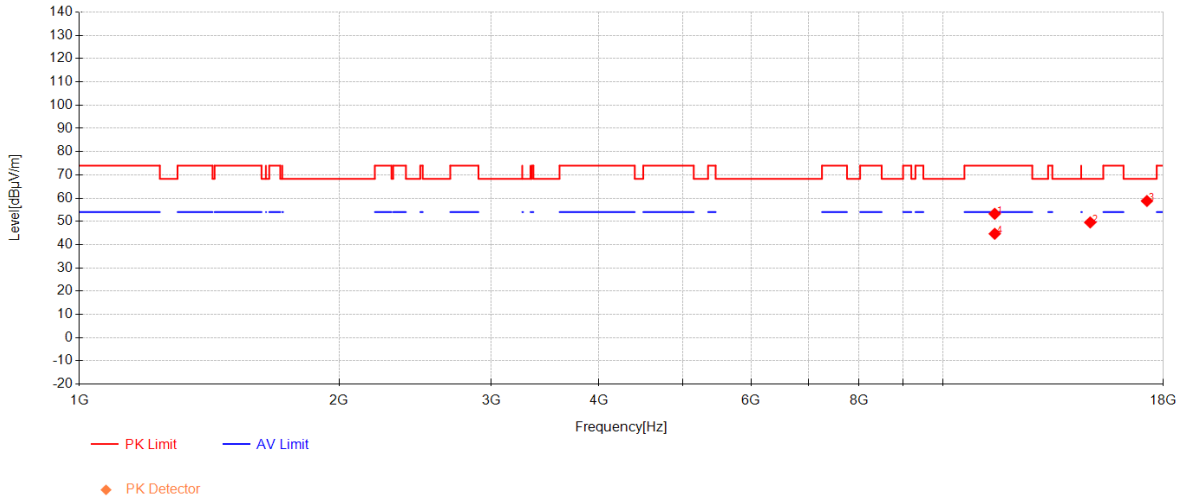
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11397.5	40.43	38.40	-29.88	48.95	74.00	25.05	Horizontal
2	14673.333	37.87	40.17	-28.60	49.43	68.30	18.87	Horizontal
3	17104.166	41.72	39.15	-25.94	54.93	68.30	13.37	Horizontal

802.11a_Channel 140



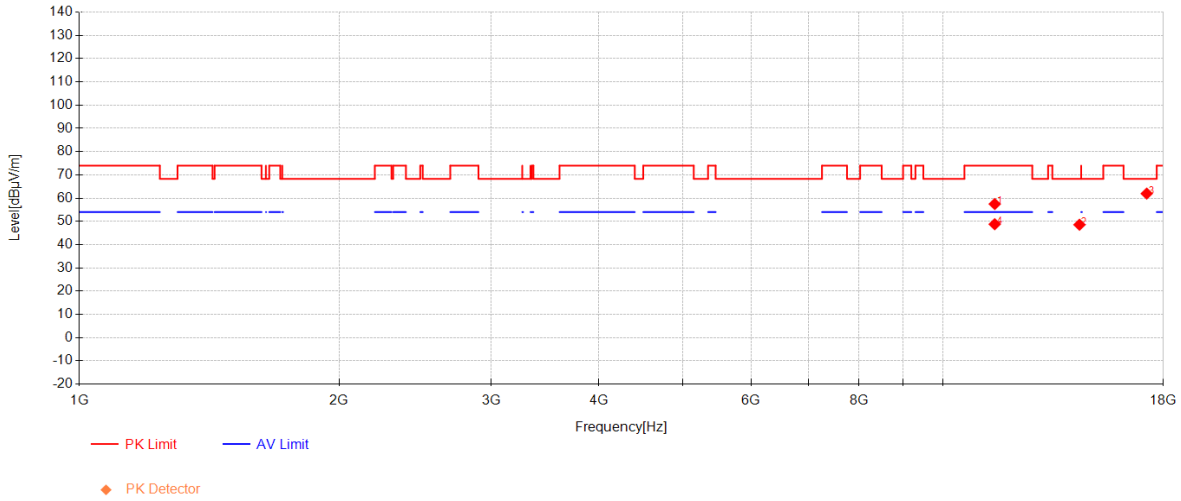
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11401.666	45.43	38.40	-29.86	53.97	74.00	20.03	Vertical
2	13609.583	36.72	40.03	-27.80	48.95	68.30	19.35	Vertical
3	17094.583	47.03	39.13	-25.95	60.21	68.30	8.09	Vertical
4	11401.666	36.96	38.40	-29.86	45.50	54.00	8.50	Vertical

802.11a_Channel 149



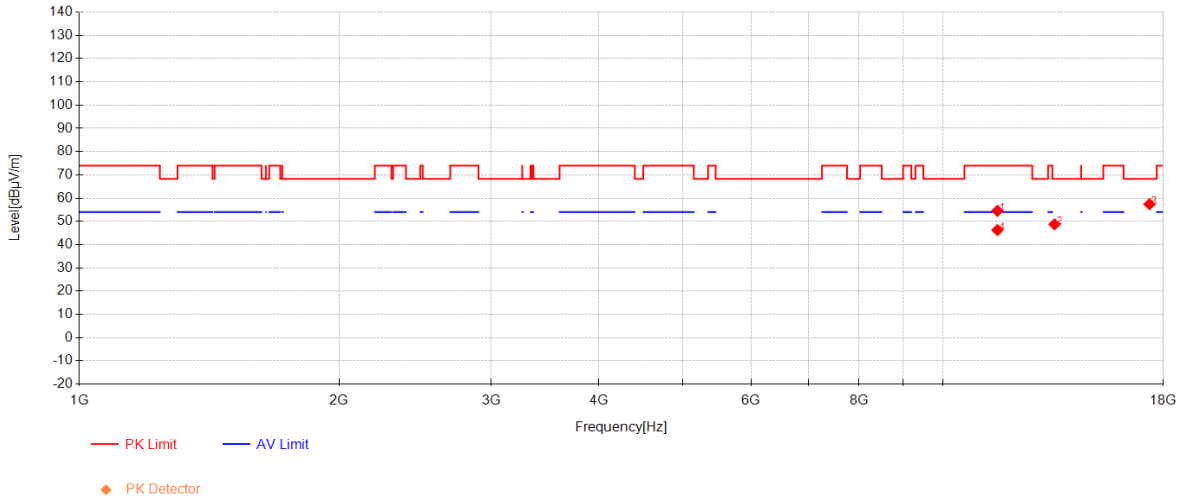
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11491.666	44.84	38.40	-29.98	53.26	74.00	20.74	Horizontal
2	14823.333	36.87	40.14	-27.45	49.55	68.30	18.75	Horizontal
3	17244.166	44.54	39.49	-25.25	58.78	68.30	9.52	Horizontal
4	11491.666	36.25	38.40	-29.98	44.67	54.00	9.33	Horizontal

802.11a_Channel 149



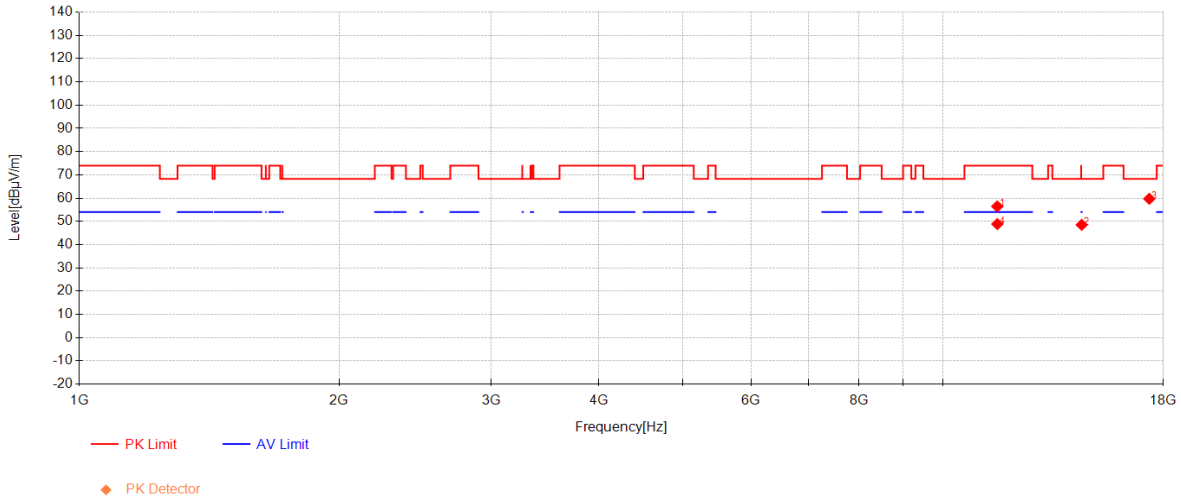
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11491.25	49.05	38.40	-29.98	57.47	74.00	16.53	Vertical
2	14405	36.76	40.22	-28.42	48.56	68.30	19.74	Vertical
3	17234.583	47.64	39.46	-25.15	61.95	68.30	6.35	Vertical
4	11491.25	40.37	38.40	-29.98	48.79	54.00	5.21	Vertical

802.11a_Channel 157



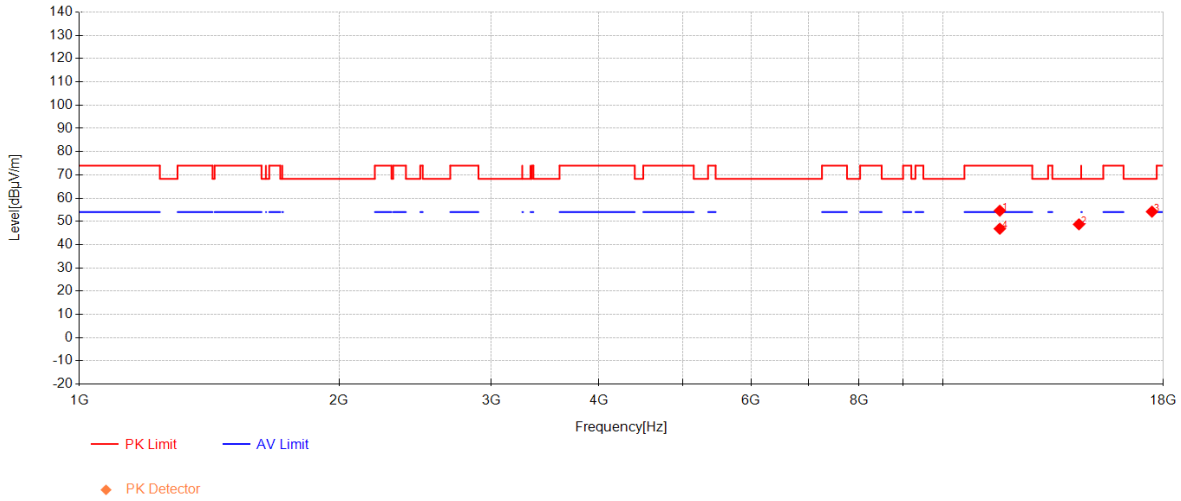
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11574.166	45.82	38.40	-29.69	54.53	74.00	19.47	Horizontal
2	13479.166	38.21	39.94	-29.41	48.74	68.30	19.56	Horizontal
3	17364.583	43.00	39.77	-25.36	57.41	68.30	10.89	Horizontal
4	11572.916	37.55	38.40	-29.70	46.25	54.00	7.75	Horizontal

802.11a_Channel 157



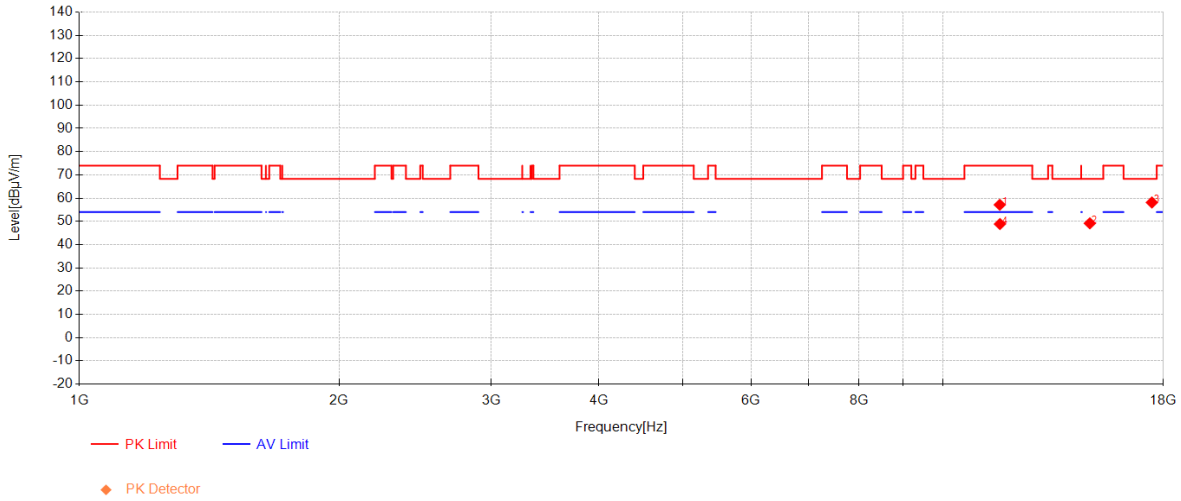
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11569.166	47.75	38.40	-29.71	56.44	74.00	17.56	Vertical
2	14490.833	37.29	40.20	-28.97	48.52	74.00	25.48	Vertical
3	17353.333	45.40	39.75	-25.44	59.71	68.30	8.59	Vertical
4	11571.666	40.15	38.40	-29.70	48.85	54.00	5.15	Vertical

802.11a_Channel 165



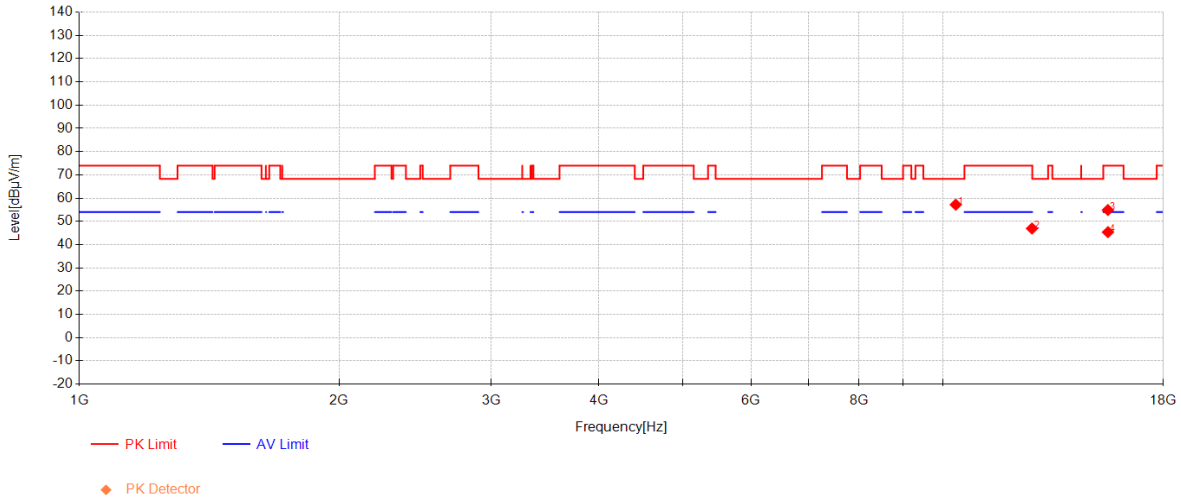
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11647.916	45.79	38.40	-29.59	54.60	74.00	19.40	Horizontal
2	14385.833	37.04	40.22	-28.53	48.73	68.30	19.57	Horizontal
3	17478.333	38.25	40.05	-24.12	54.18	68.30	14.12	Horizontal
4	11647.916	38.04	38.40	-29.59	46.85	54.00	7.15	Horizontal

802.11a_Channel 165



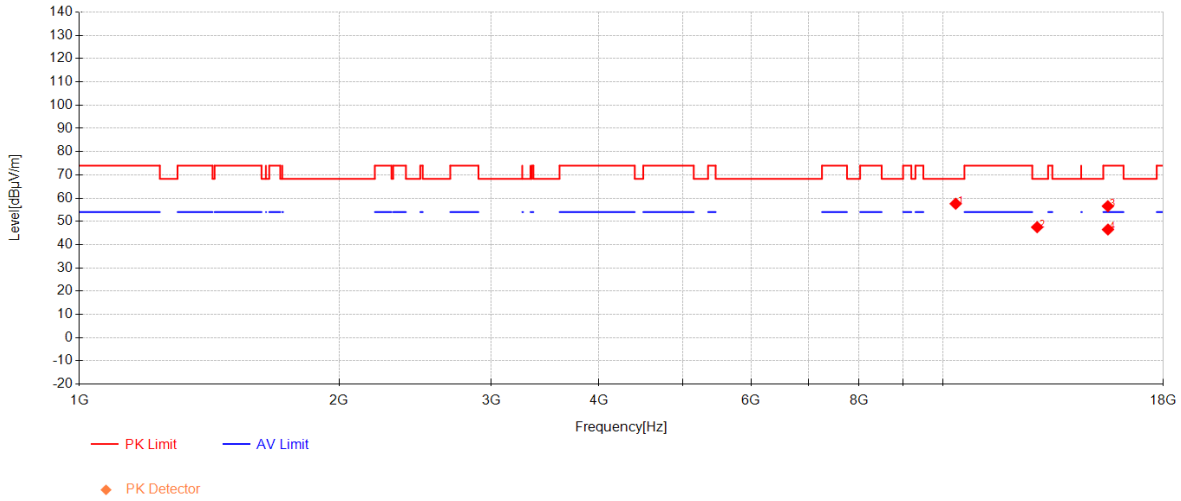
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11646.25	48.33	38.40	-29.59	57.14	74.00	16.86	Vertical
2	14808.75	36.39	40.14	-27.35	49.18	68.30	19.12	Vertical
3	17472.916	42.28	40.03	-24.19	58.13	68.30	10.17	Vertical
4	11652.5	40.07	38.40	-29.60	48.87	54.00	5.13	Vertical

802.11n20_Channel 36



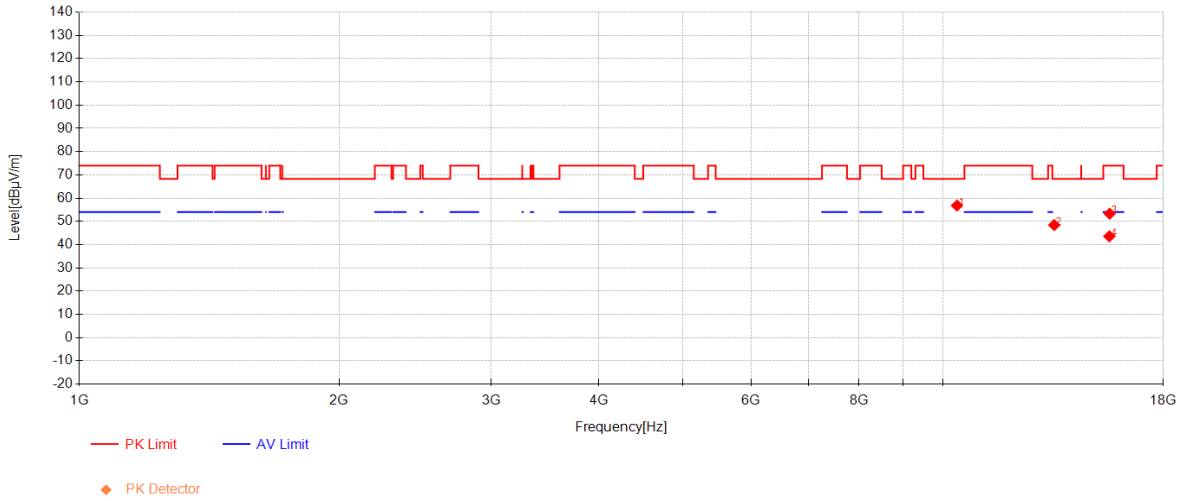
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10357.083	50.60	38.08	-31.51	57.17	68.30	11.13	Horizontal
2	12692.916	37.27	39.23	-29.56	46.94	74.00	27.06	Horizontal
3	15540.416	43.40	39.07	-27.58	54.89	74.00	19.11	Horizontal
4	15542.5	33.88	39.07	-27.58	45.37	54.00	8.63	Horizontal

802.11n20_Channel 36



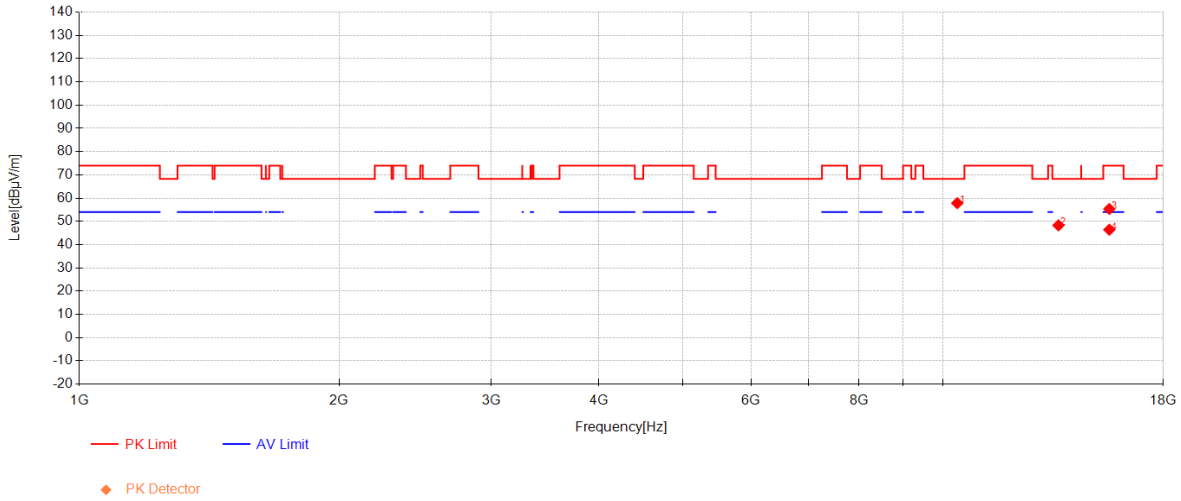
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10355	51.05	38.08	-31.52	57.60	68.30	10.70	Vertical
2	12867.083	37.63	39.44	-29.57	47.50	68.30	20.80	Vertical
3	15538.333	45.05	39.08	-27.59	56.54	74.00	17.46	Vertical
4	15542.916	35.01	39.07	-27.58	46.50	54.00	7.50	Vertical

802.11n20_Channel 40



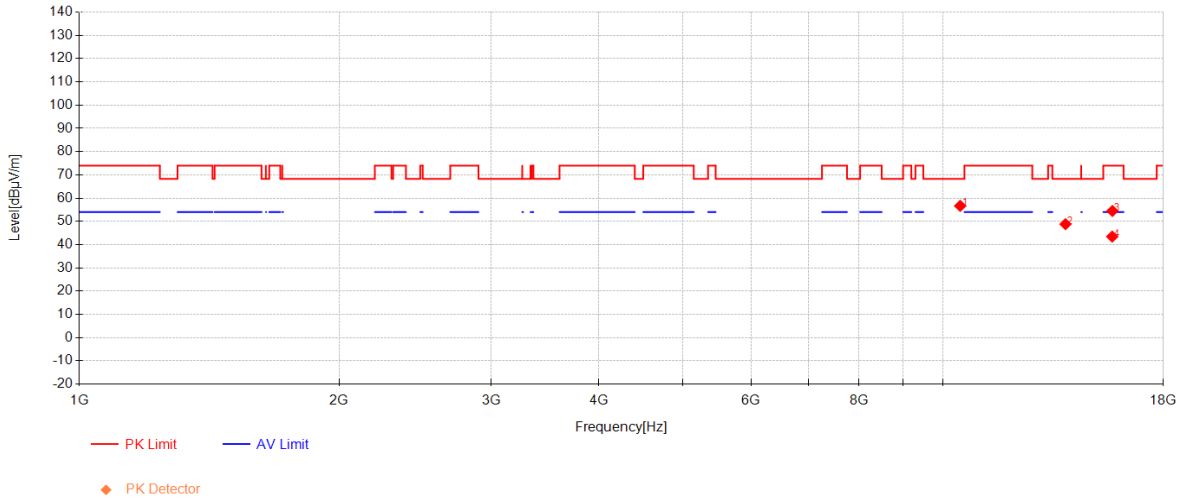
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10391.666	49.94	38.10	-31.23	56.81	68.30	11.49	Horizontal
2	13465.833	37.81	39.93	-29.32	48.41	68.30	19.89	Horizontal
3	15611.25	41.90	38.94	-27.51	53.33	74.00	20.67	Horizontal
4	15598.333	32.07	38.96	-27.45	43.58	54.00	10.42	Horizontal

802.11n20_Channel 40



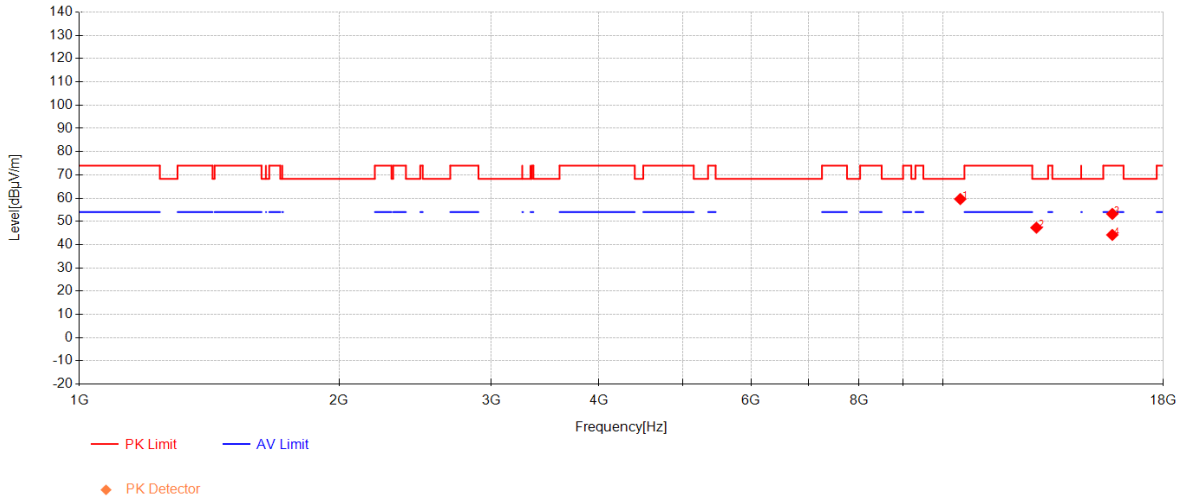
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10399.583	50.90	38.10	-31.16	57.84	68.30	10.46	Vertical
2	13620	36.22	40.03	-27.96	48.29	68.30	20.01	Vertical
3	15598.75	43.84	38.96	-27.45	55.35	74.00	18.65	Vertical
4	15600	34.90	38.96	-27.45	46.41	54.00	7.59	Vertical

802.11n20_Channel 48



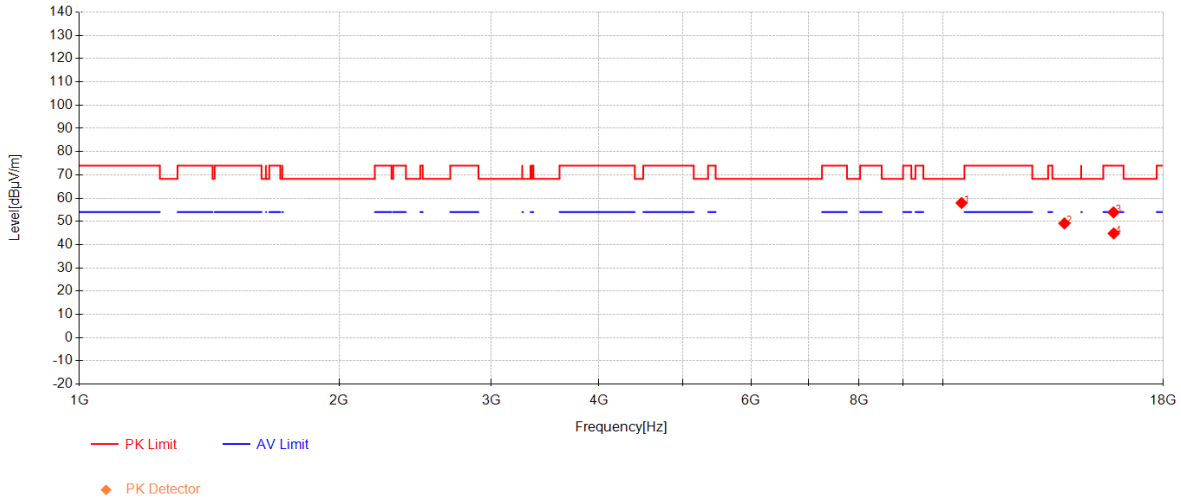
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10479.583	49.59	38.14	-31.06	56.67	68.30	11.63	Horizontal
2	13878.333	37.20	40.21	-28.59	48.82	68.30	19.48	Horizontal
3	15727.083	43.47	38.72	-27.71	54.48	74.00	19.52	Horizontal
4	15720	32.51	38.73	-27.77	43.47	54.00	10.53	Horizontal

802.11n20_Channel 48



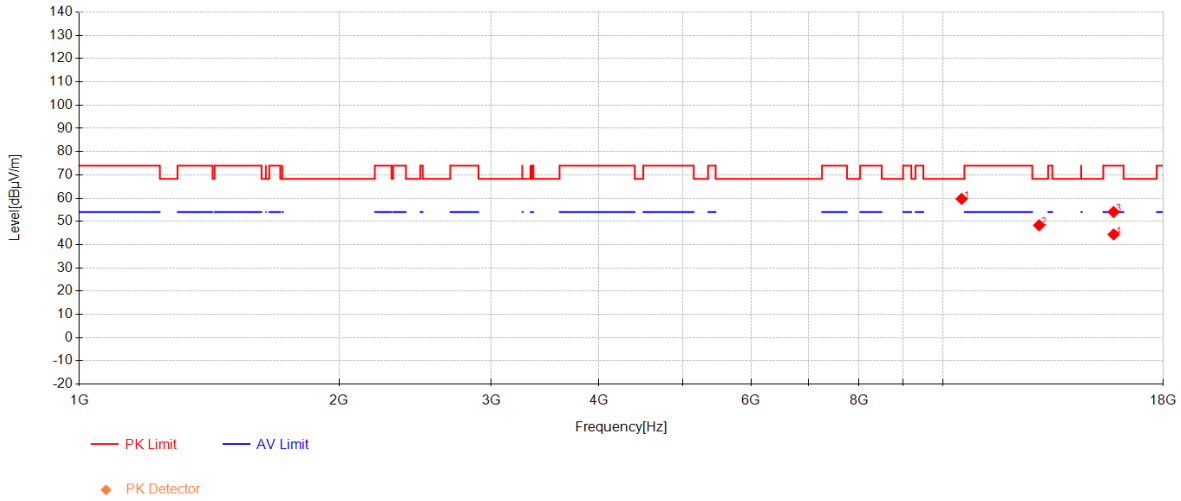
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10482.5	52.52	38.14	-31.05	59.61	68.30	8.69	Vertical
2	12842.083	37.57	39.41	-29.70	47.29	68.30	21.01	Vertical
3	15723.75	42.23	38.72	-27.74	53.22	74.00	20.78	Vertical
4	15723.75	33.18	38.72	-27.74	44.17	54.00	9.83	Vertical

802.11n20_Channel 52



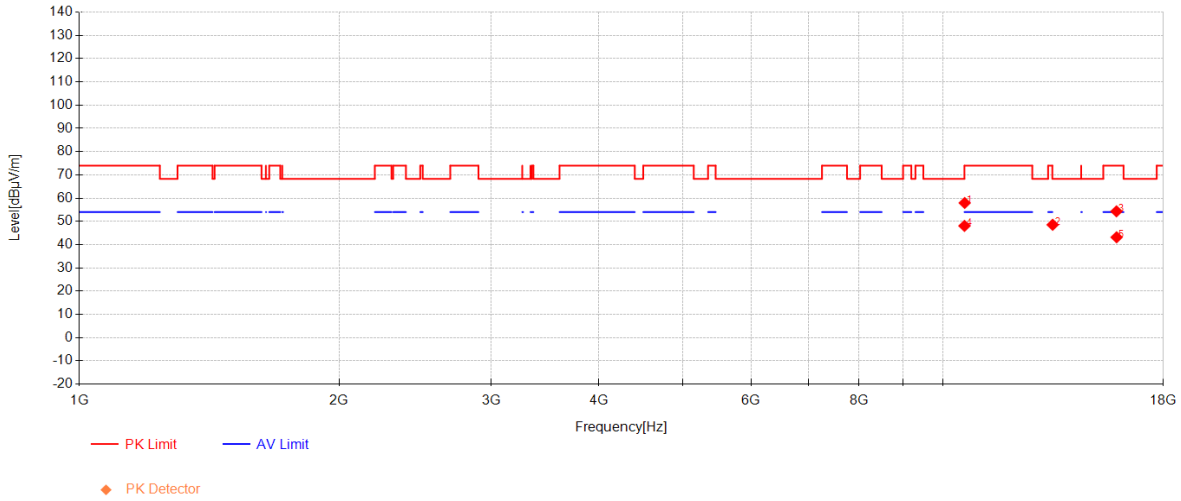
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10518.75	50.82	38.16	-31.06	57.92	68.30	10.38	Horizontal
2	13839.166	37.89	40.19	-28.93	49.15	68.30	19.15	Horizontal
3	15772.5	42.54	38.63	-27.30	53.87	74.00	20.13	Horizontal
4	15782.916	33.42	38.61	-27.20	44.83	54.00	9.17	Horizontal

802.11n20_Channel 52



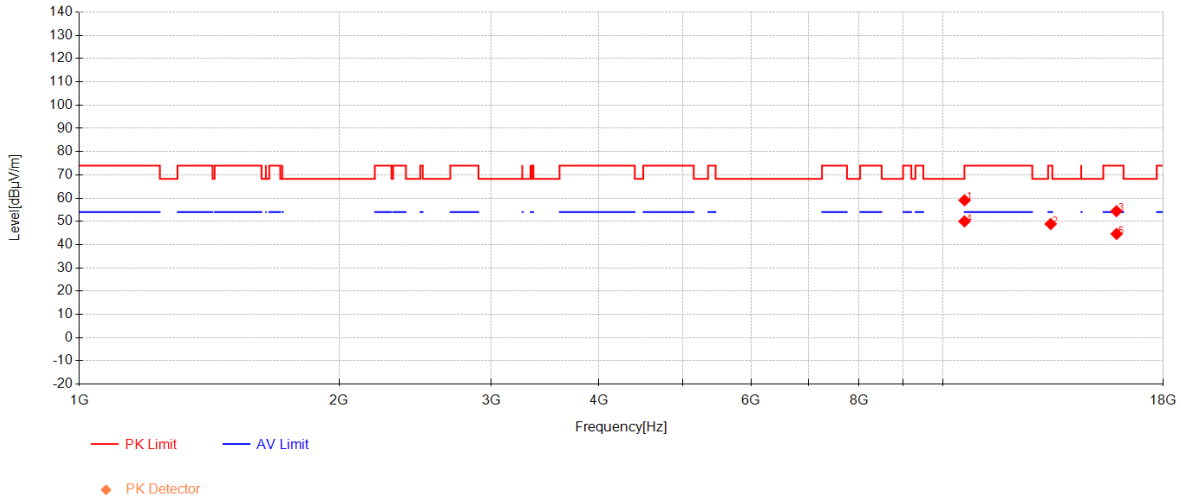
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10520.833	52.56	38.16	-31.07	59.66	68.30	8.64	Vertical
2	12933.75	38.36	39.52	-29.56	48.33	68.30	19.97	Vertical
3	15775.416	42.69	38.63	-27.27	54.05	74.00	19.95	Vertical
4	15780.416	33.00	38.62	-27.23	44.39	54.00	9.61	Vertical

802.11n20_Channel 60



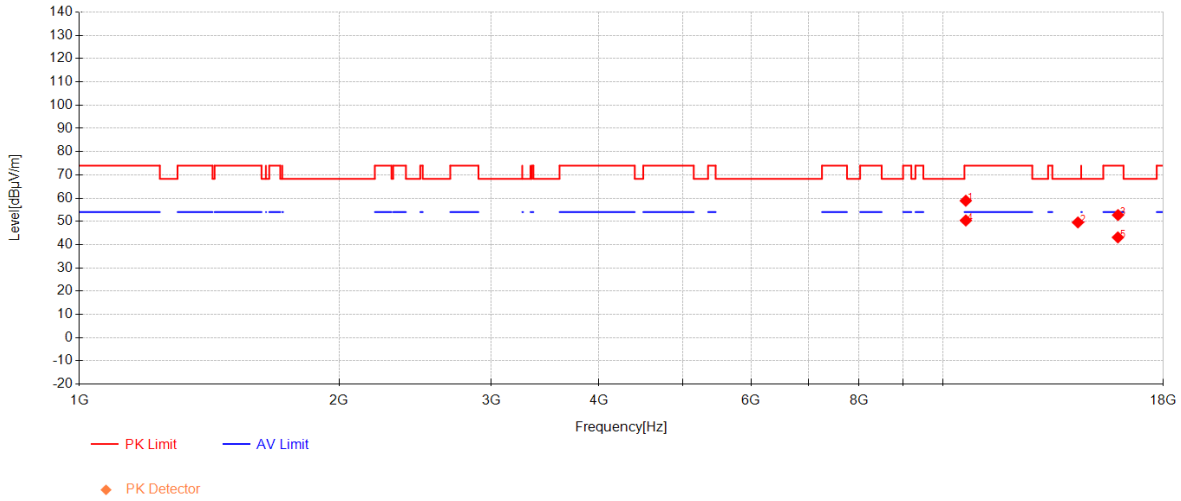
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10606.666	50.88	38.20	-31.14	57.94	74.00	16.06	Horizontal
2	13410.833	37.63	39.89	-28.98	48.54	68.30	19.76	Horizontal
3	15899.583	43.42	38.39	-27.48	54.33	74.00	19.67	Horizontal
4	10600	41.06	38.20	-31.20	48.06	54.00	5.94	Horizontal
5	15904.583	32.27	38.38	-27.48	43.17	54.00	10.83	Horizontal

802.11n20_Channel 60



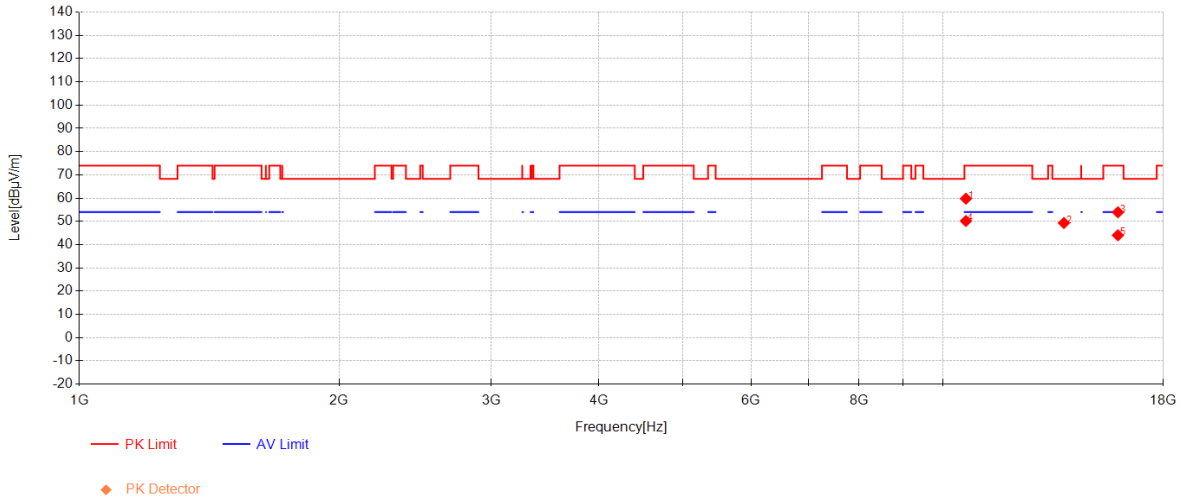
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10602.916	52.05	38.20	-31.17	59.08	74.00	14.92	Vertical
2	13338.333	38.25	39.84	-29.22	48.86	74.00	25.14	Vertical
3	15896.666	43.46	38.40	-27.47	54.39	74.00	19.61	Vertical
4	10600	42.99	38.20	-31.20	49.99	54.00	4.01	Vertical
5	15905	33.72	38.38	-27.48	44.62	54.00	9.38	Vertical

802.11n20_Channel 64



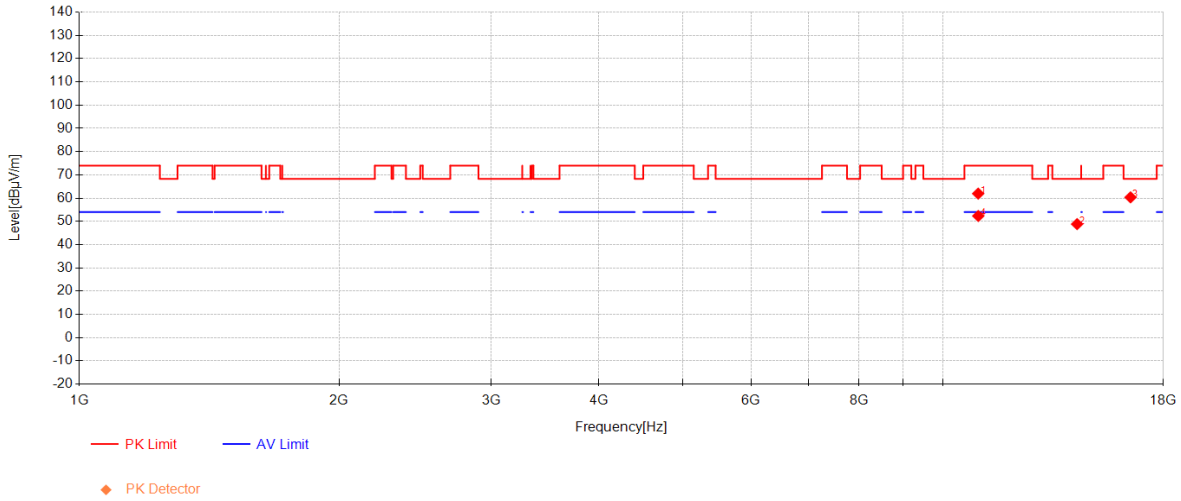
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10638.333	51.53	38.22	-30.86	58.89	74.00	15.11	Horizontal
2	14345.416	38.28	40.23	-28.95	49.56	68.30	18.74	Horizontal
3	15965	41.89	38.27	-27.45	52.71	74.00	21.29	Horizontal
4	10639.583	43.01	38.22	-30.84	50.39	54.00	3.61	Horizontal
5	15958.333	32.28	38.28	-27.45	43.11	54.00	10.89	Horizontal

802.11n20_Channel 64



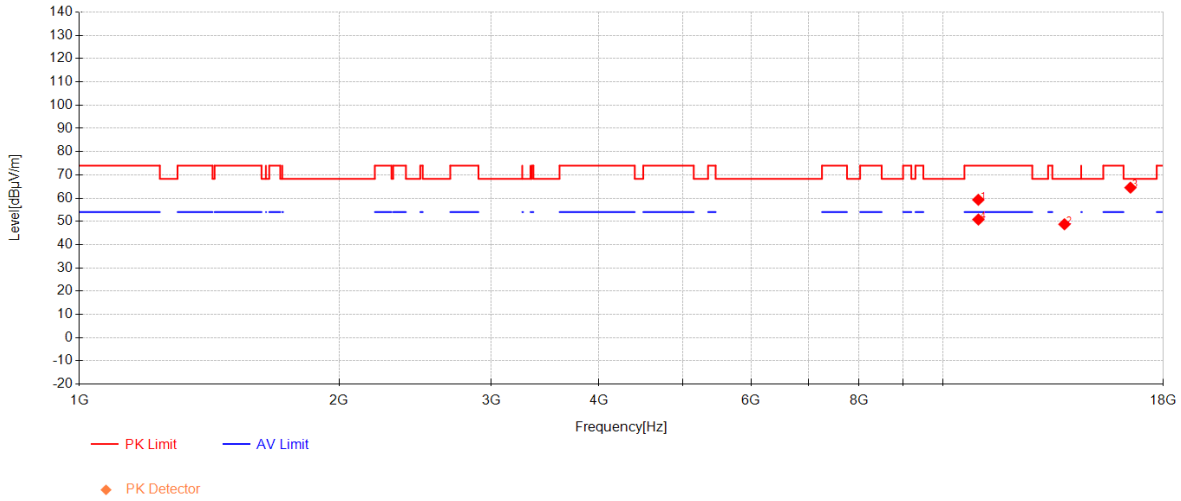
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10640.833	52.38	38.22	-30.83	59.77	74.00	14.23	Vertical
2	13819.166	38.24	40.17	-29.10	49.32	68.30	18.98	Vertical
3	15961.25	43.10	38.27	-27.45	53.92	74.00	20.08	Vertical
4	10640.416	42.78	38.22	-30.84	50.16	54.00	3.84	Vertical
5	15958.333	33.18	38.28	-27.45	44.01	54.00	9.99	Vertical

802.11n20_Channel 100



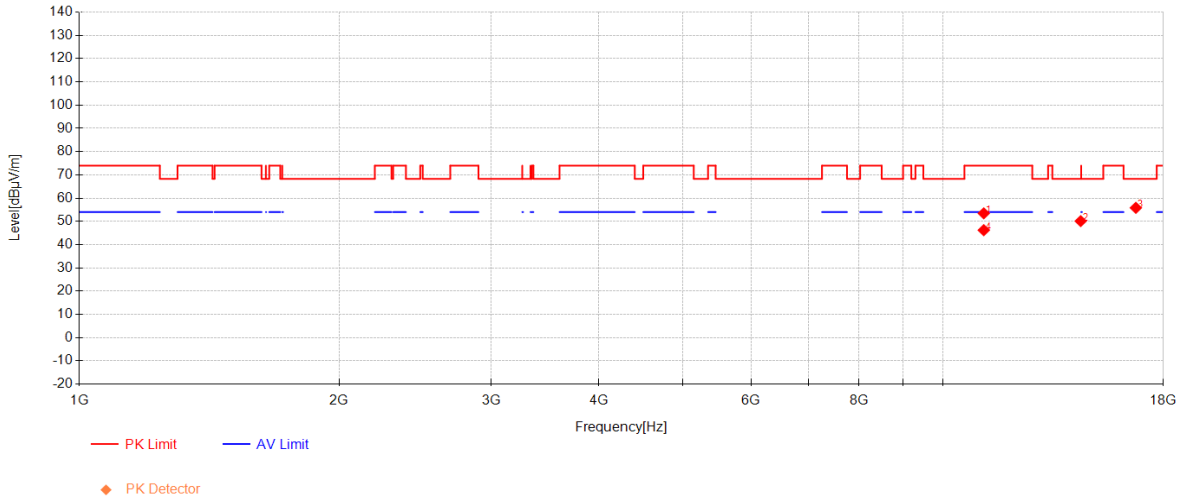
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10994.583	54.05	38.40	-30.49	61.95	74.00	12.05	Horizontal
2	14313.333	37.88	40.24	-29.27	48.84	68.30	19.46	Horizontal
3	16506.25	48.38	38.55	-26.59	60.34	68.30	7.96	Horizontal
4	10997.916	44.42	38.40	-30.50	52.32	54.00	1.68	Horizontal

802.11n20_Channel 100



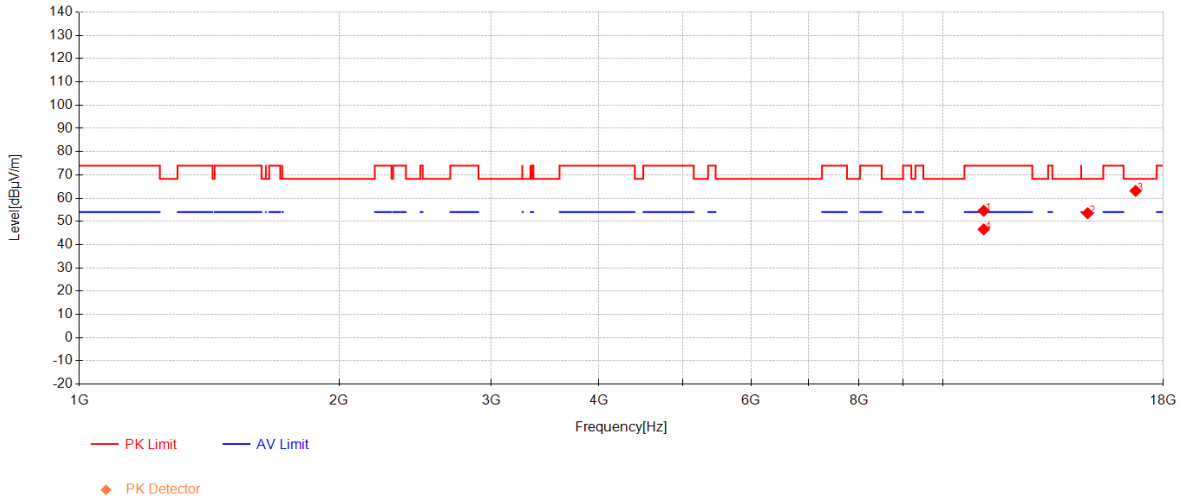
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10999.583	51.39	38.40	-30.50	59.29	74.00	14.71	Vertical
2	13839.583	37.51	40.19	-28.92	48.77	68.30	19.53	Vertical
3	16502.5	52.56	38.55	-26.60	64.51	68.30	3.79	Vertical
4	11001.666	42.89	38.40	-30.50	50.79	54.00	3.21	Vertical

802.11n20_Channel 116



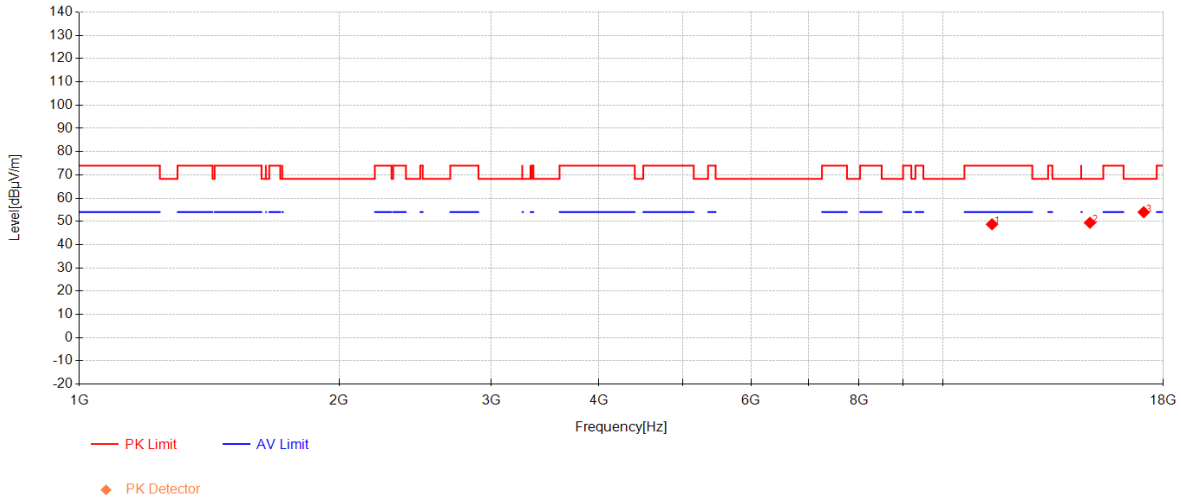
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11160	45.15	38.40	-30.10	53.45	74.00	20.55	Horizontal
2	14451.666	38.63	40.21	-28.72	50.12	68.30	18.18	Horizontal
3	16741.666	43.62	38.72	-26.50	55.83	68.30	12.47	Horizontal
4	11159.583	37.93	38.40	-30.11	46.22	54.00	7.78	Horizontal

802.11n20_Channel 116



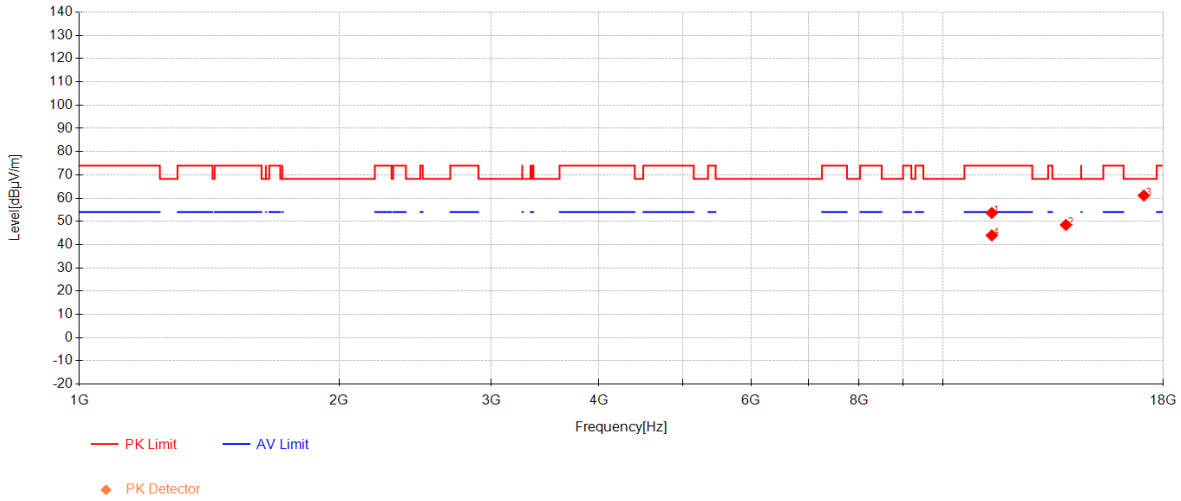
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11158.333	46.26	38.40	-30.11	54.55	74.00	19.45	Vertical
2	14721.25	41.60	40.16	-28.25	53.50	68.30	14.80	Vertical
3	16733.75	50.95	38.71	-26.55	63.11	68.30	5.19	Vertical
4	11158.75	38.28	38.40	-30.11	46.57	54.00	7.43	Vertical

802.11n20_Channel 140



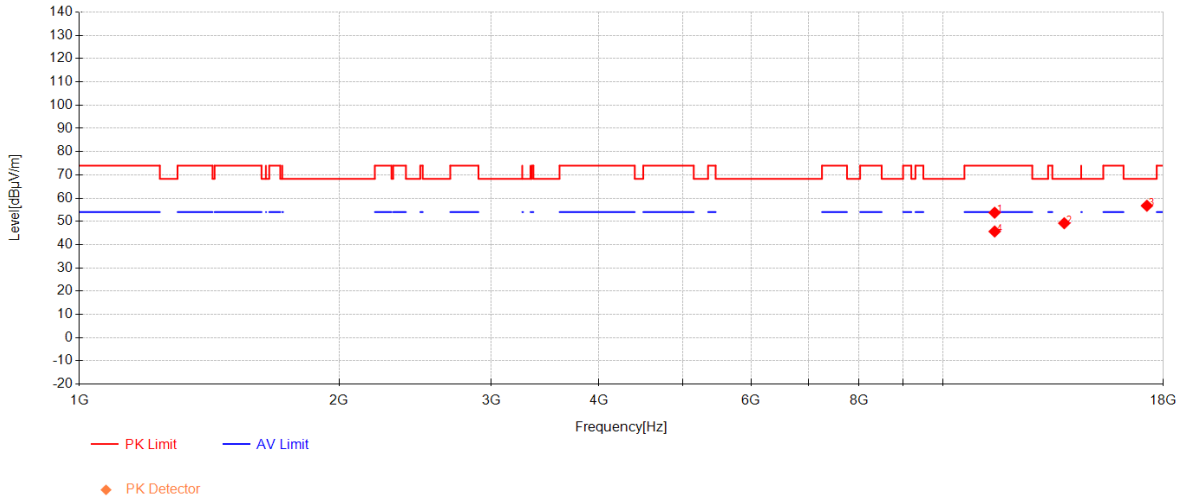
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11407.5	40.21	38.40	-29.87	48.74	74.00	25.26	Horizontal
2	14812.916	36.66	40.14	-27.38	49.42	68.30	18.88	Horizontal
3	17097.083	40.80	39.13	-25.97	53.96	68.30	14.34	Horizontal

802.11n20_Channel 140



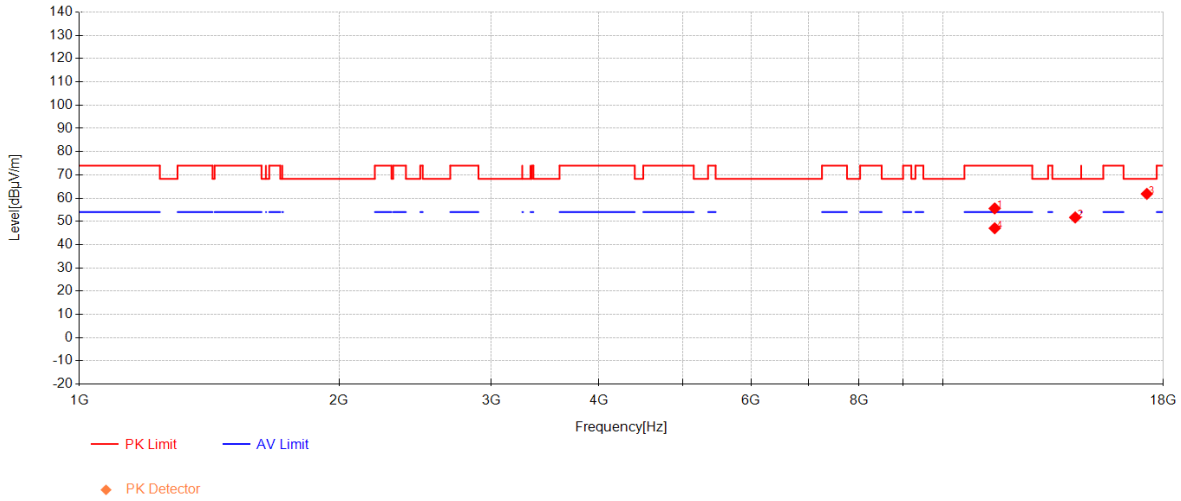
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11401.666	45.07	38.40	-29.86	53.61	74.00	20.39	Vertical
2	13893.333	36.70	40.23	-28.47	48.46	68.30	19.84	Vertical
3	17102.916	47.93	39.15	-25.96	61.12	68.30	7.18	Vertical
4	11401.666	35.42	38.40	-29.86	43.96	54.00	10.04	Vertical

802.11n20_Channel 149



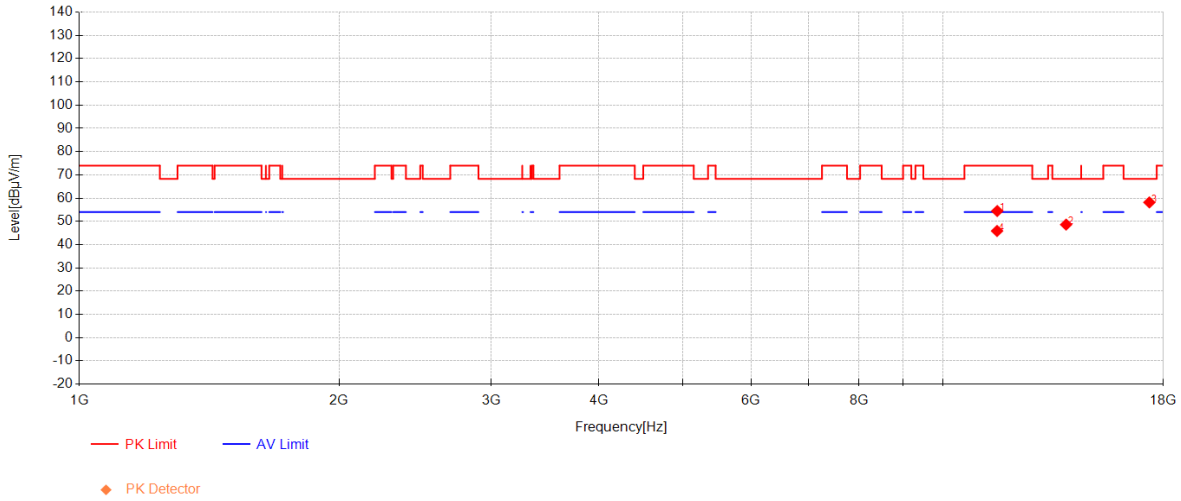
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11487.916	45.32	38.40	-29.97	53.75	74.00	20.25	Horizontal
2	13832.5	38.01	40.18	-28.98	49.21	68.30	19.09	Horizontal
3	17242.916	42.48	39.48	-25.23	56.73	68.30	11.57	Horizontal
4	11488.75	37.24	38.40	-29.98	45.66	54.00	8.34	Horizontal

802.11n20_Channel 149



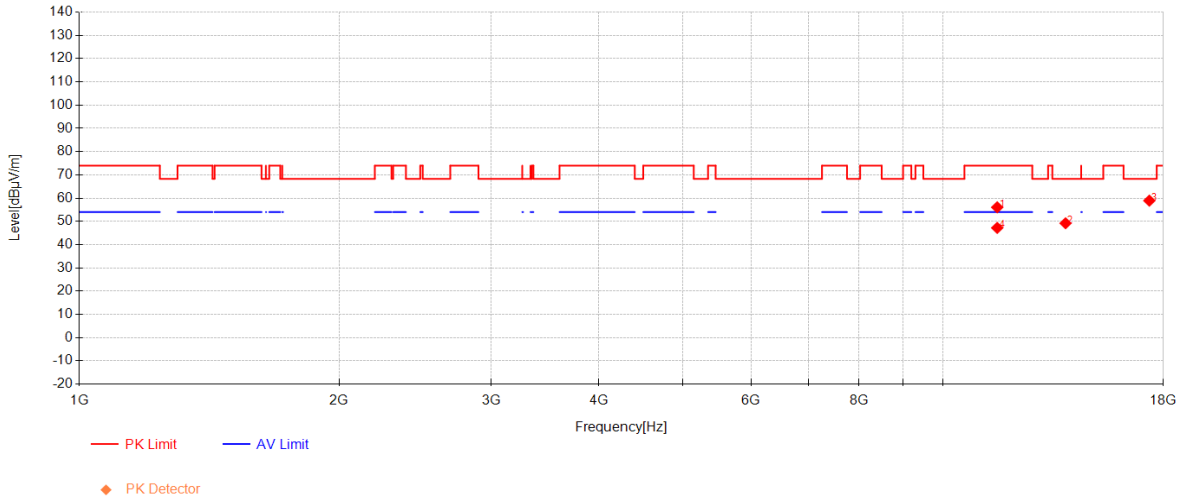
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11489.583	47.15	38.40	-29.98	55.57	74.00	18.43	Vertical
2	14241.25	40.96	40.25	-29.51	51.70	68.30	16.60	Vertical
3	17240.416	47.56	39.48	-25.21	61.83	68.30	6.47	Vertical
4	11490.833	38.64	38.40	-29.98	47.06	54.00	6.94	Vertical

802.11n20_Channel 157



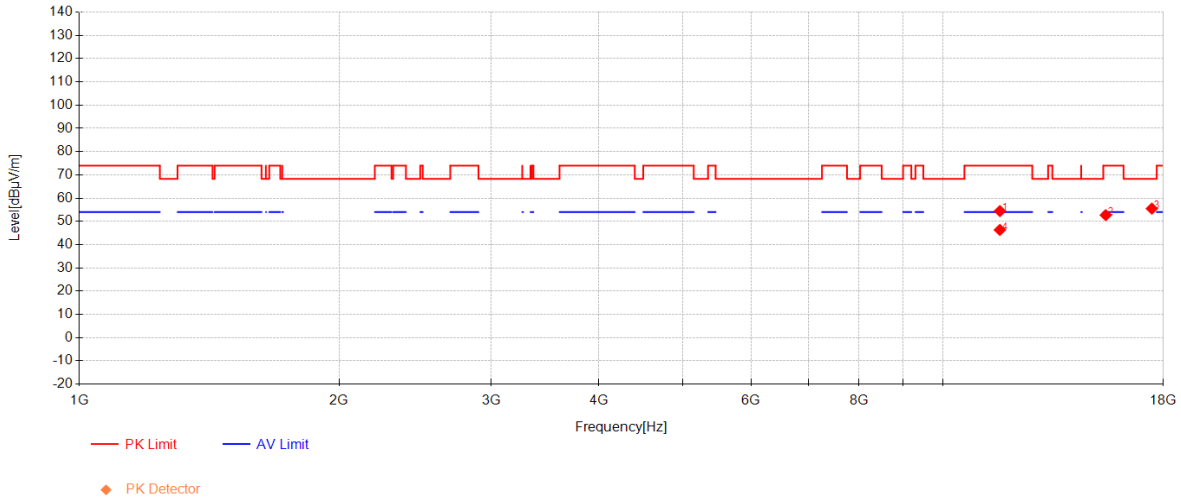
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11567.916	45.78	38.40	-29.72	54.46	74.00	19.54	Horizontal
2	13901.666	36.82	40.23	-28.43	48.62	68.30	19.68	Horizontal
3	17356.666	43.82	39.76	-25.41	58.16	68.30	10.14	Horizontal
4	11563.333	37.22	38.40	-29.74	45.88	54.00	8.12	Horizontal

802.11n20_Channel 157



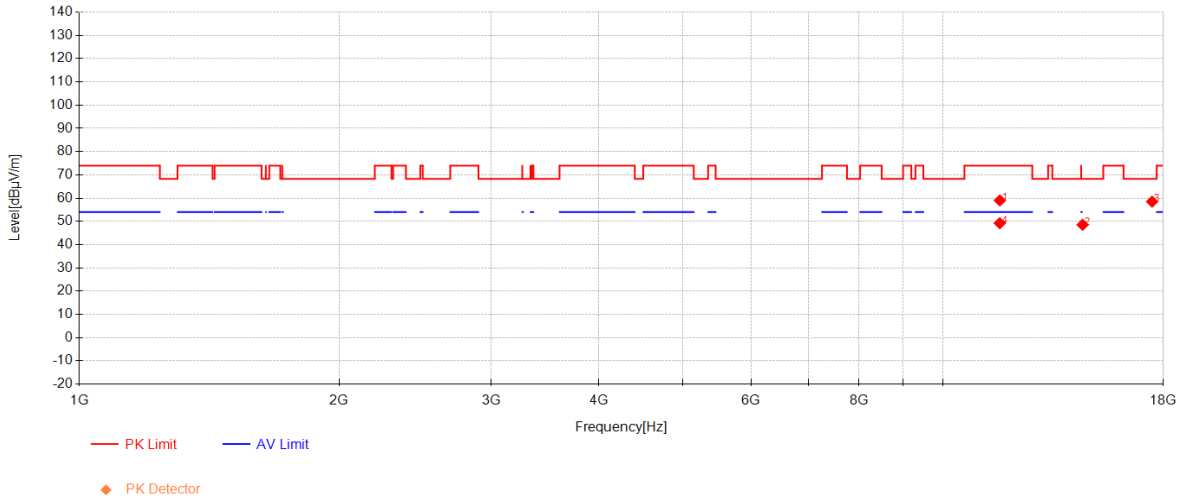
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11567.5	47.38	38.40	-29.72	56.06	74.00	17.94	Vertical
2	13880.416	37.56	40.22	-28.58	49.20	68.30	19.10	Vertical
3	17356.25	44.58	39.75	-25.42	58.92	68.30	9.38	Vertical
4	11568.75	38.53	38.40	-29.72	47.21	54.00	6.79	Vertical

802.11n20_Channel 165



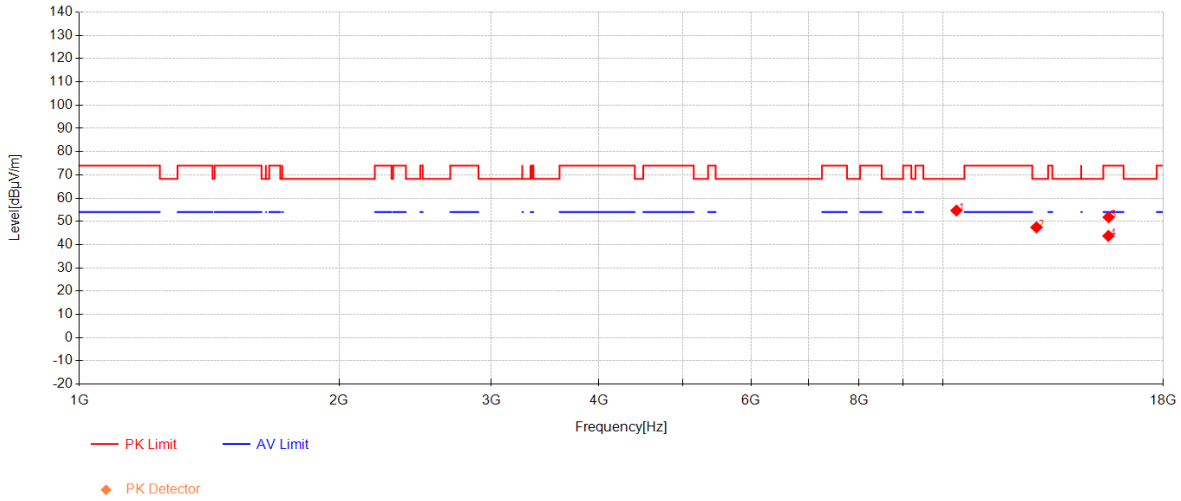
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11651.666	45.62	38.40	-29.60	54.42	74.00	19.58	Horizontal
2	15450	41.04	39.25	-27.60	52.69	74.00	21.31	Horizontal
3	17470.833	39.67	40.03	-24.21	55.49	68.30	12.81	Horizontal
4	11648.333	37.52	38.40	-29.59	46.33	54.00	7.67	Horizontal

802.11n20_Channel 165



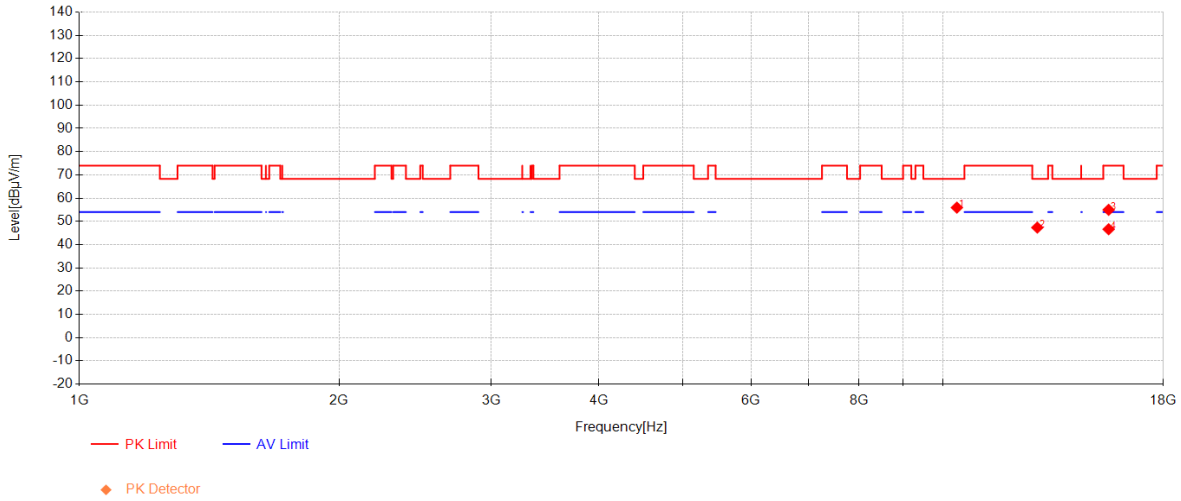
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11650	50.20	38.40	-29.59	59.01	74.00	14.99	Vertical
2	14525.416	37.33	40.19	-28.99	48.54	68.30	19.76	Vertical
3	17483.333	42.49	40.06	-24.05	58.50	68.30	9.80	Vertical
4	11646.666	40.41	38.40	-29.59	49.22	54.00	4.78	Vertical

802.11n40_Channel 38



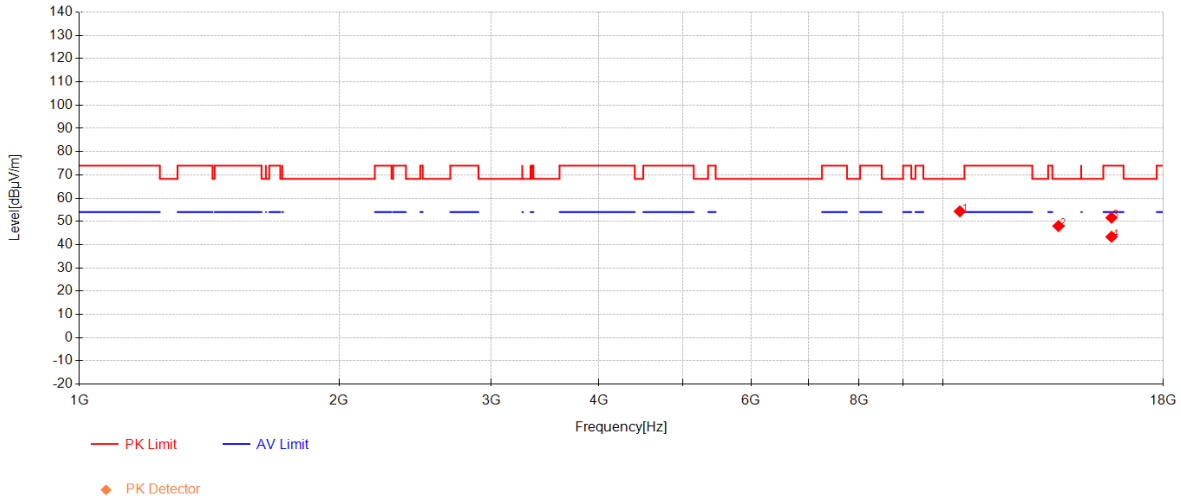
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10376.25	47.93	38.09	-31.35	54.67	68.30	13.63	Horizontal
2	12842.916	37.71	39.41	-29.69	47.43	68.30	20.87	Horizontal
3	15570.416	40.30	39.02	-27.52	51.80	74.00	22.20	Horizontal
4	15560.416	32.24	39.04	-27.54	43.74	54.00	10.26	Horizontal

802.11n40_Channel 38



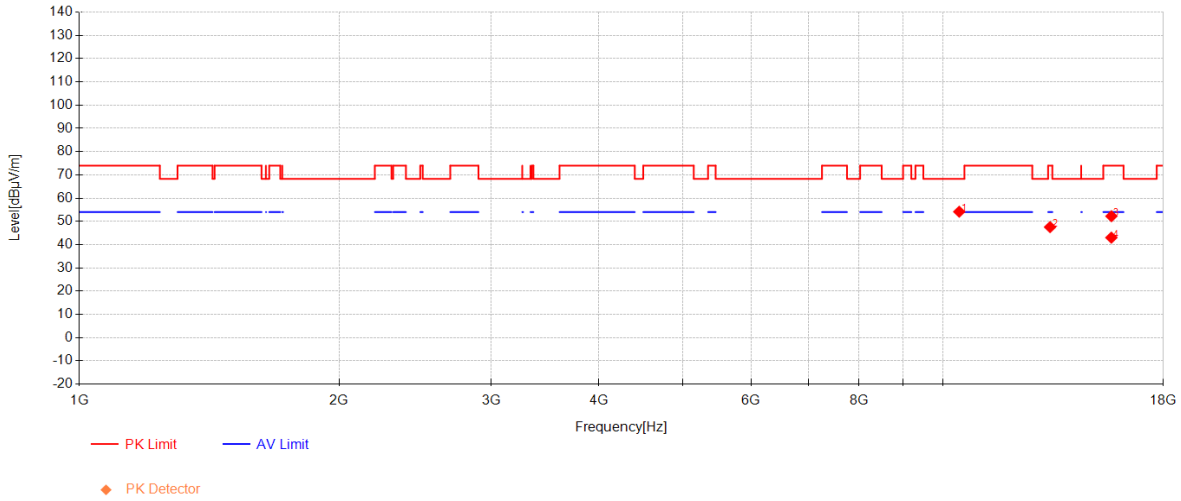
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10387.5	49.08	38.09	-31.26	55.91	68.30	12.39	Vertical
2	12872.5	37.43	39.45	-29.54	47.34	68.30	20.96	Vertical
3	15570.833	43.47	39.02	-27.51	54.97	74.00	19.03	Vertical
4	15571.25	35.12	39.01	-27.51	46.62	54.00	7.38	Vertical

802.11n40_Channel 46



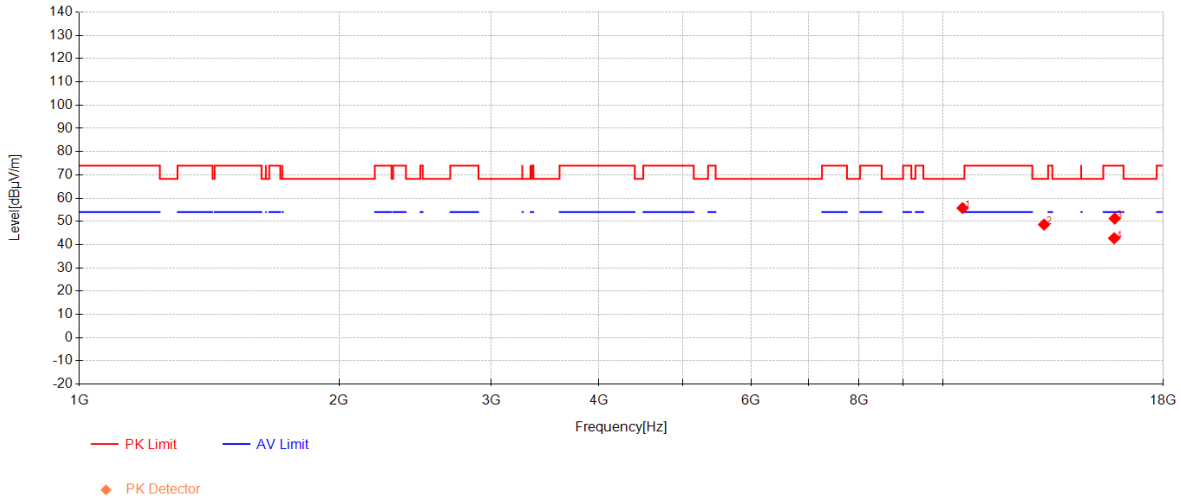
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10470.416	47.23	38.14	-31.07	54.30	68.30	14.00	Horizontal
2	13622.083	35.96	40.04	-27.99	48.00	68.30	20.30	Horizontal
3	15690.416	40.70	38.79	-27.90	51.59	74.00	22.41	Horizontal
4	15690.416	32.48	38.79	-27.90	43.37	54.00	10.63	Horizontal

802.11n40_Channel 46



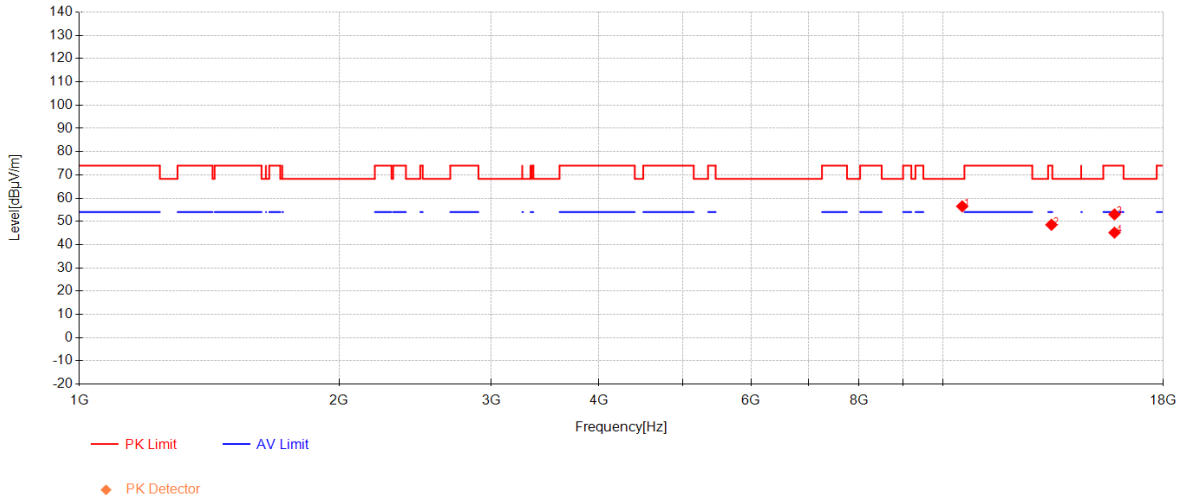
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10452.916	47.11	38.13	-31.09	54.15	68.30	14.15	Vertical
2	13318.333	37.05	39.82	-29.33	47.55	74.00	26.45	Vertical
3	15686.666	41.32	38.80	-27.88	52.23	74.00	21.77	Vertical
4	15682.5	32.07	38.80	-27.86	43.01	54.00	10.99	Vertical

802.11n40_Channel 54



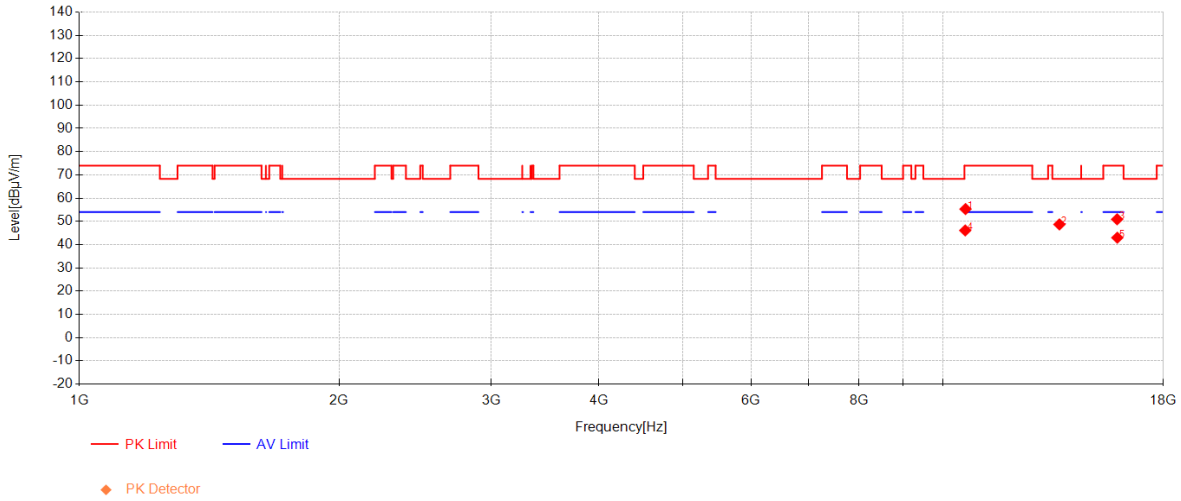
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10546.666	48.67	38.17	-31.11	55.73	68.30	12.57	Horizontal
2	13106.25	37.86	39.67	-28.91	48.62	68.30	19.68	Horizontal
3	15827.916	39.89	38.53	-27.17	51.25	74.00	22.75	Horizontal
4	15802.5	31.23	38.58	-27.06	42.74	54.00	11.26	Horizontal

802.11n40_Channel 54



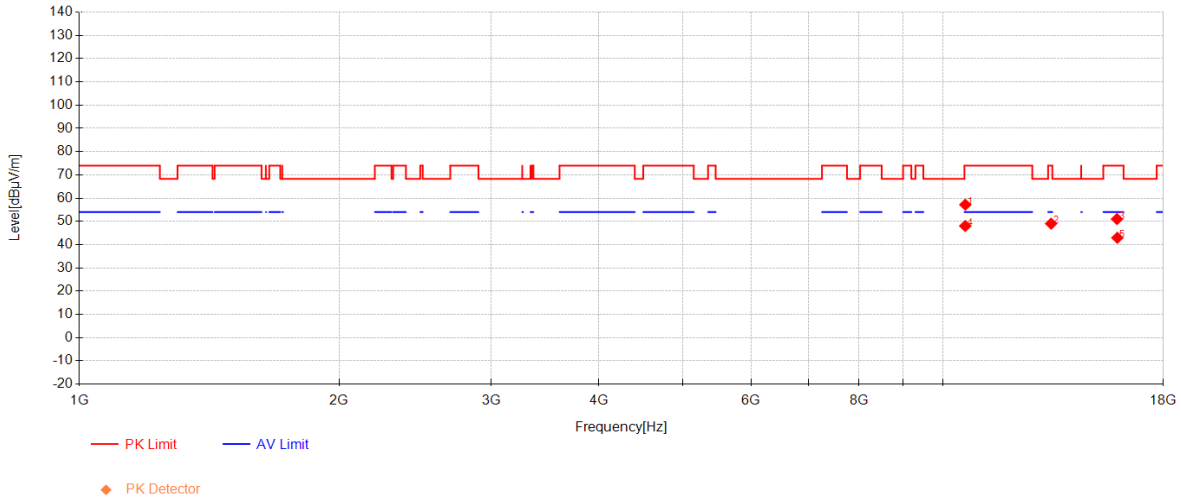
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10536.666	49.39	38.17	-31.09	56.47	68.30	11.83	Vertical
2	13368.333	37.75	39.86	-29.07	48.54	74.00	25.46	Vertical
3	15815.416	41.59	38.55	-27.12	53.02	74.00	20.98	Vertical
4	15815.416	33.72	38.55	-27.12	45.15	54.00	8.85	Vertical

802.11n40_Channel 62



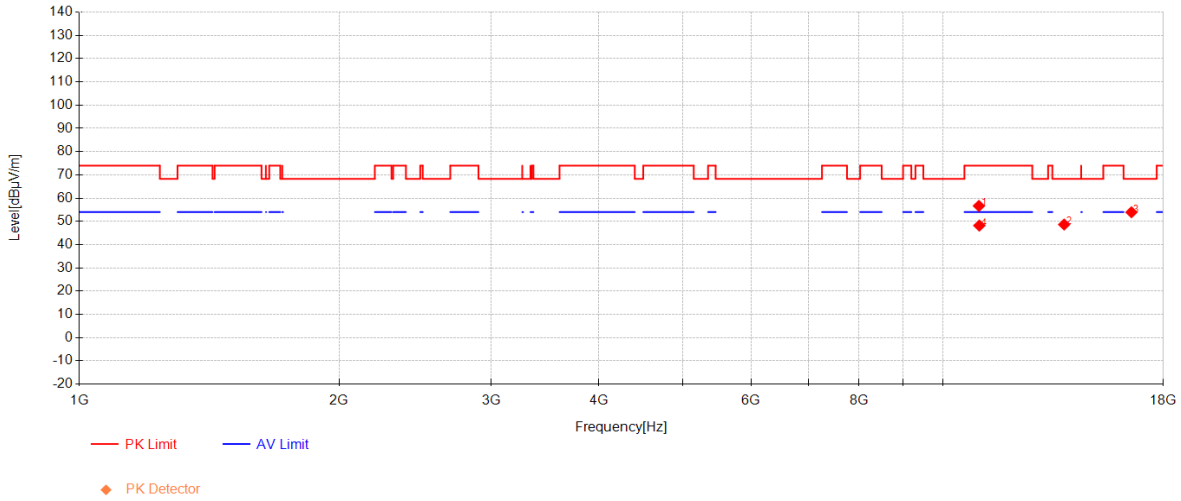
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10630.416	48.01	38.22	-30.93	55.30	74.00	18.70	Horizontal
2	13655.833	37.16	40.06	-28.52	48.70	68.30	19.60	Horizontal
3	15926.25	40.03	38.34	-27.47	50.90	74.00	23.10	Horizontal
4	10621.666	38.90	38.21	-31.01	46.11	54.00	7.89	Horizontal
5	15935	32.13	38.32	-27.46	42.99	54.00	11.01	Horizontal

802.11n40_Channel 62



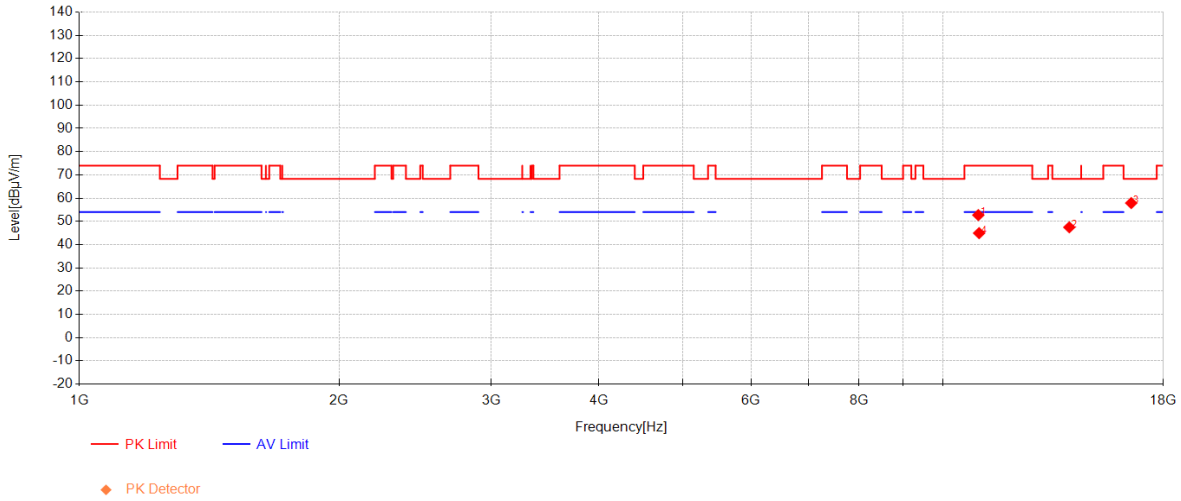
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10623.75	49.95	38.21	-30.99	57.18	74.00	16.82	Vertical
2	13356.25	38.30	39.85	-29.13	49.02	74.00	24.98	Vertical
3	15921.25	40.13	38.35	-27.47	51.01	74.00	22.99	Vertical
4	10622.916	40.80	38.21	-30.99	48.02	54.00	5.98	Vertical
5	15936.666	32.09	38.32	-27.46	42.95	54.00	11.05	Vertical

802.11n40_Channel 102



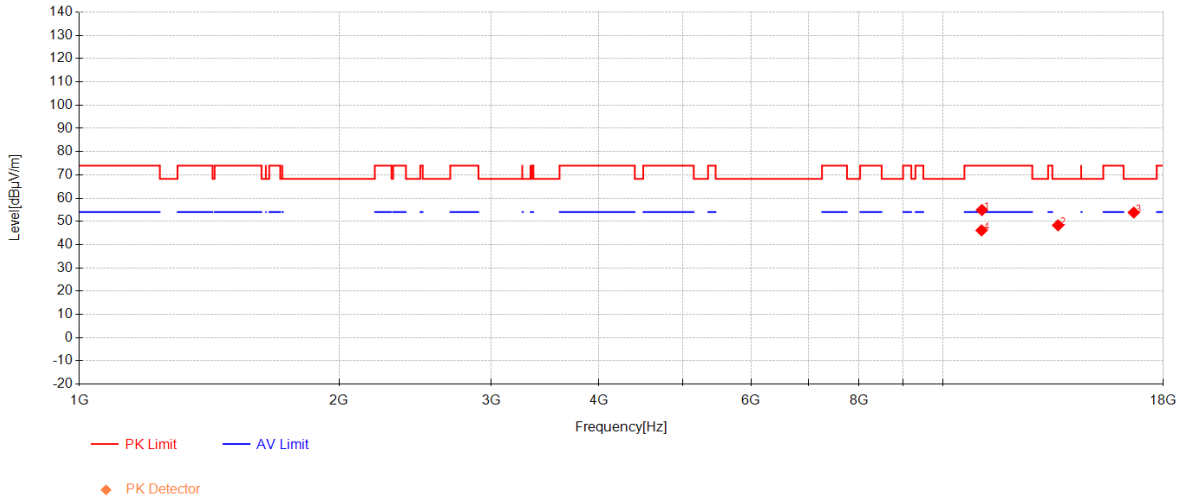
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11016.25	48.72	38.40	-30.47	56.65	74.00	17.35	Horizontal
2	13827.916	37.50	40.18	-29.02	48.66	68.30	19.64	Horizontal
3	16547.5	41.89	38.58	-26.54	53.93	68.30	14.37	Horizontal
4	11027.5	40.25	38.40	-30.45	48.20	54.00	5.80	Horizontal

802.11n40_Channel 102



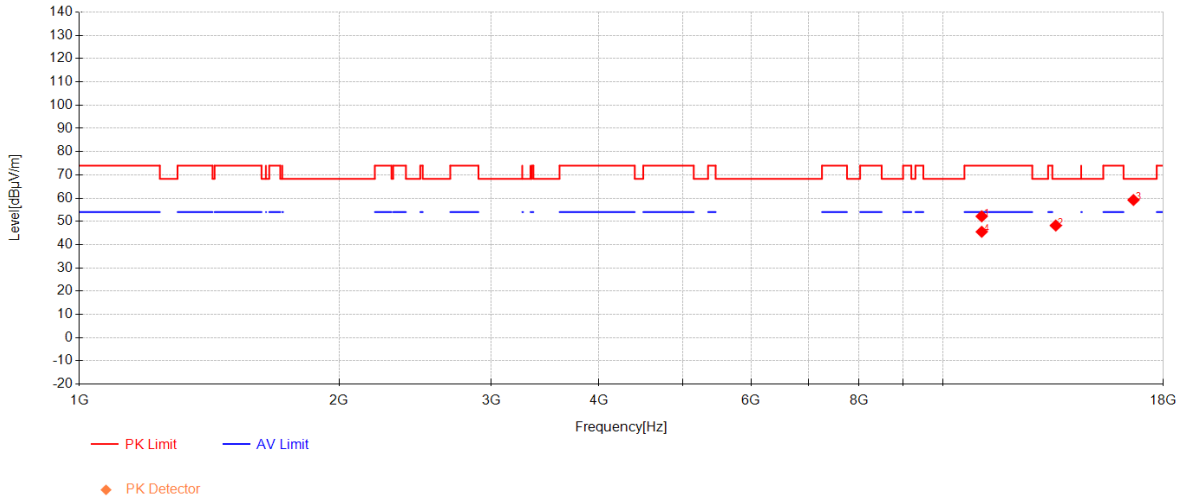
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10999.166	44.81	38.40	-30.50	52.71	74.00	21.29	Vertical
2	14019.583	36.73	40.30	-29.58	47.45	68.30	20.85	Vertical
3	16537.083	45.86	38.58	-26.55	57.88	68.30	10.42	Vertical
4	11021.25	37.01	38.40	-30.46	44.95	54.00	9.05	Vertical

802.11n40_Channel 110



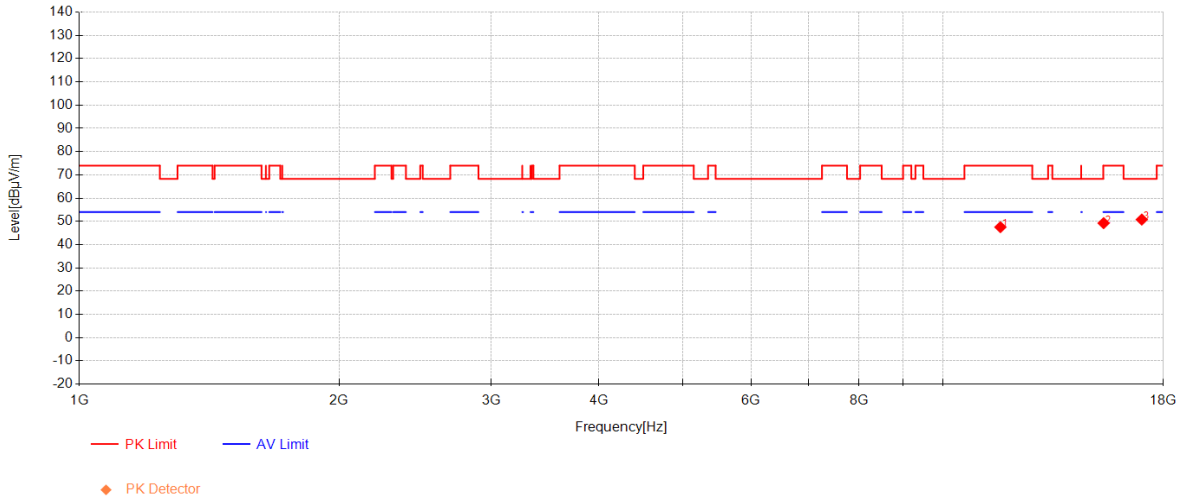
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11104.583	46.78	38.40	-30.30	54.88	74.00	19.12	Horizontal
2	13605.833	36.03	40.02	-27.74	48.31	68.30	19.99	Horizontal
3	16650.833	41.79	38.66	-26.61	53.83	68.30	14.47	Horizontal
4	11094.166	38.05	38.40	-30.33	46.12	54.00	7.88	Horizontal

802.11n40_Channel 110



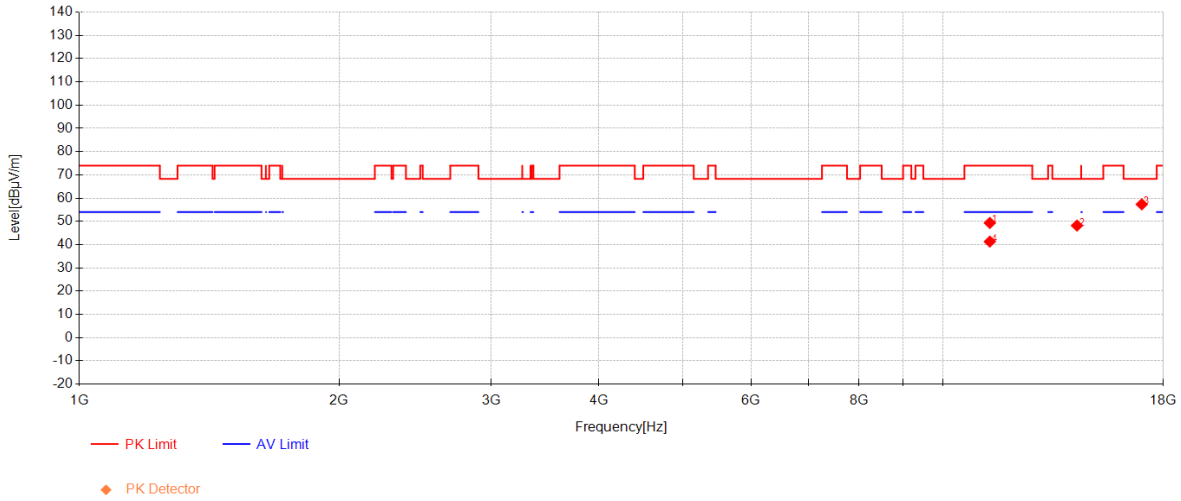
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11098.333	44.09	38.40	-30.32	52.17	74.00	21.83	Vertical
2	13522.5	37.37	39.97	-29.11	48.22	68.30	20.08	Vertical
3	16635.833	47.12	38.65	-26.57	59.19	68.30	9.11	Vertical
4	11099.166	37.44	38.40	-30.32	45.52	54.00	8.48	Vertical

802.11n40_Channel 134



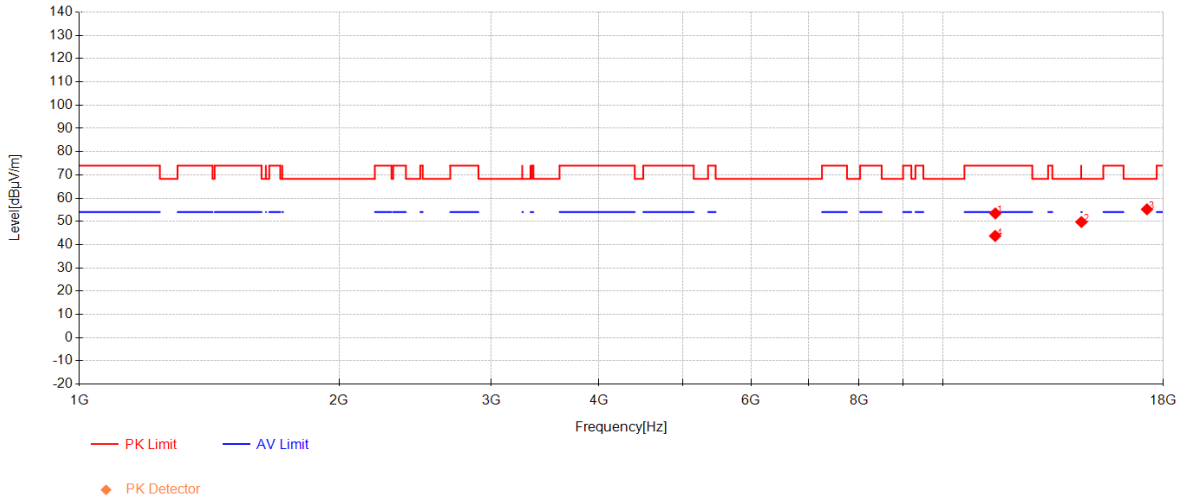
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11666.666	38.73	38.40	-29.60	47.53	74.00	26.47	Horizontal
2	15363.75	37.37	39.41	-27.53	49.25	74.00	24.75	Horizontal
3	17008.75	37.17	38.92	-25.31	50.78	68.30	17.52	Horizontal

802.11n40_Channel 134



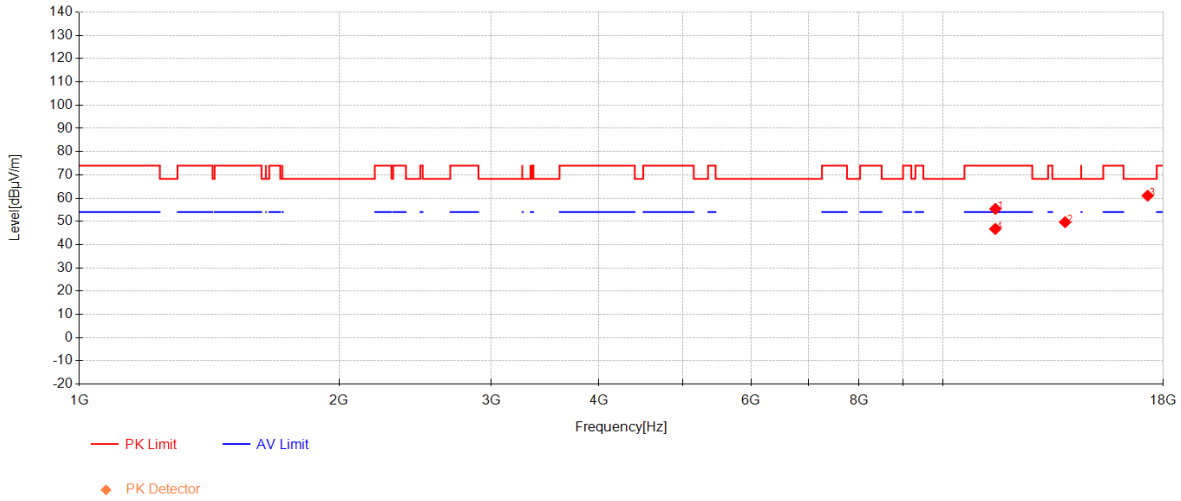
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11342.083	41.16	38.40	-30.23	49.33	74.00	24.67	Vertical
2	14311.666	37.25	40.24	-29.29	48.20	68.30	20.10	Vertical
3	17007.5	43.74	38.92	-25.31	57.35	68.30	10.95	Vertical
4	11341.25	33.15	38.40	-30.24	41.31	54.00	12.69	Vertical

802.11n40_Channel 151



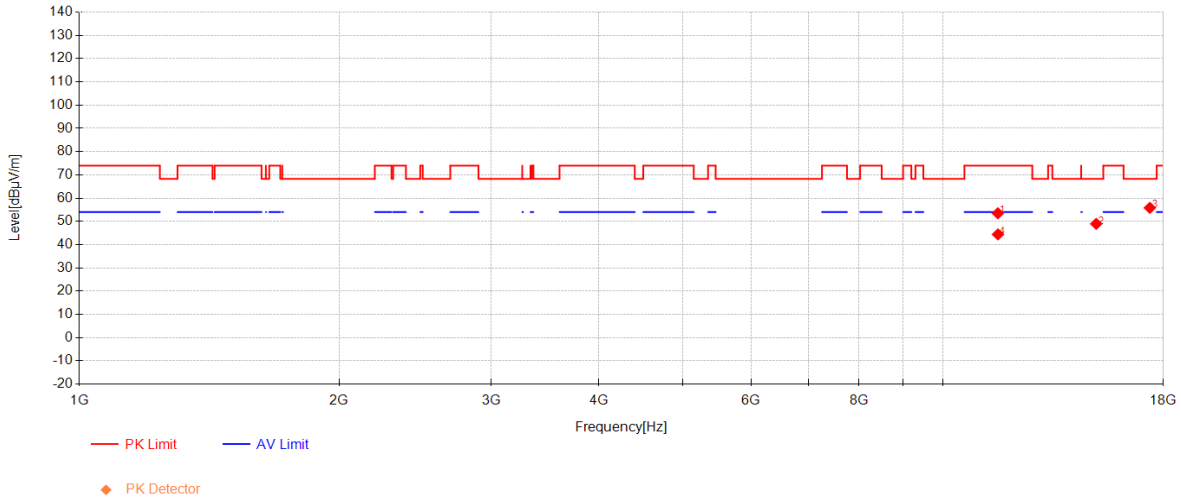
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11510	44.98	38.40	-29.95	53.43	74.00	20.57	Horizontal
2	14479.583	38.42	40.20	-28.90	49.72	74.00	24.28	Horizontal
3	17247.083	40.97	39.49	-25.28	55.19	68.30	13.11	Horizontal
4	11504.166	35.30	38.40	-29.97	43.73	54.00	10.27	Horizontal

802.11n40_Channel 151



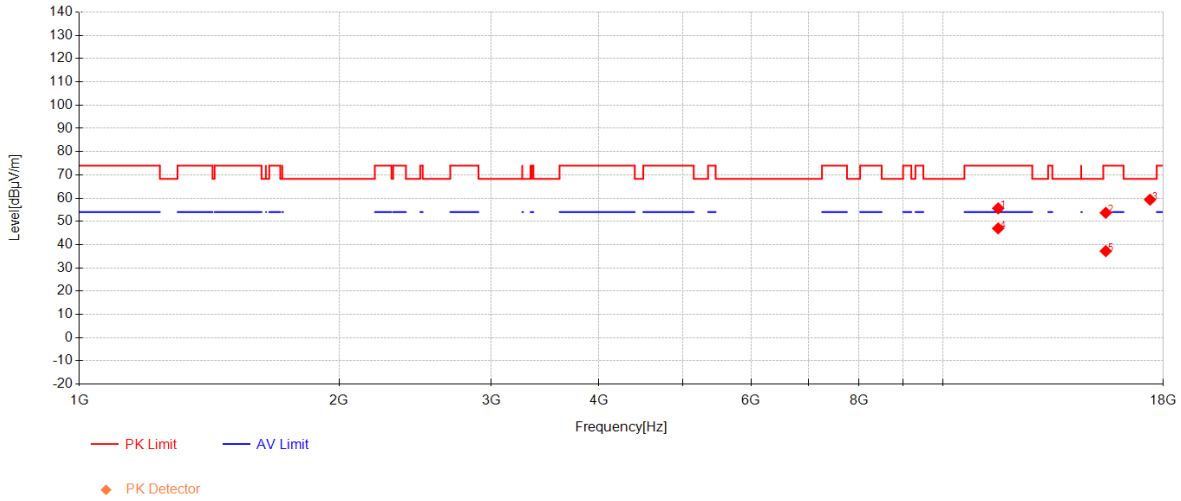
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11512.5	46.93	38.40	-29.94	55.39	74.00	18.61	Vertical
2	13863.75	38.16	40.20	-28.72	49.65	68.30	18.65	Vertical
3	17279.583	47.08	39.57	-25.60	61.05	68.30	7.25	Vertical
4	11508.75	38.32	38.40	-29.96	46.76	54.00	7.24	Vertical

802.11n40_Channel 159



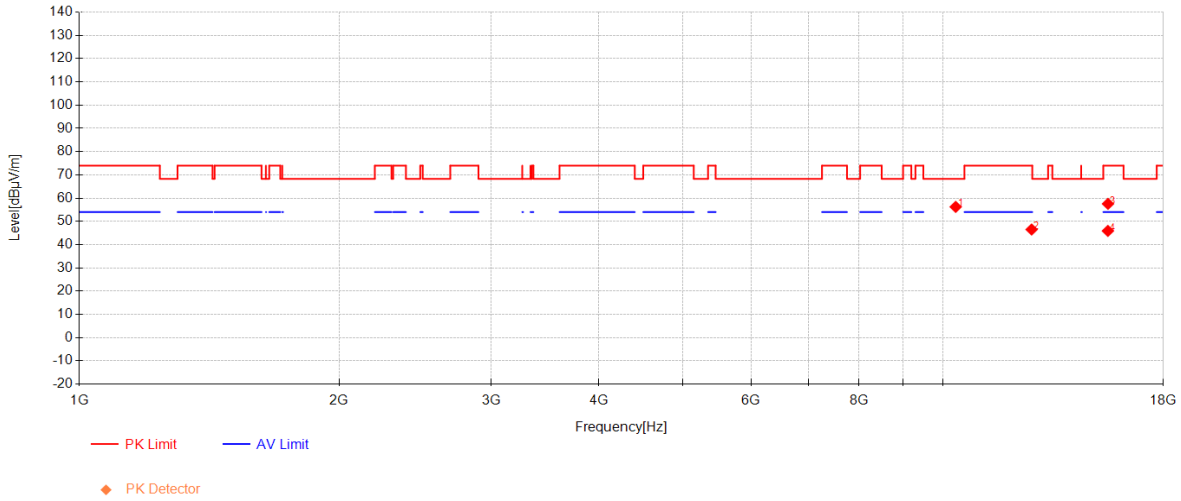
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11587.5	44.73	38.40	-29.64	53.49	74.00	20.51	Horizontal
2	15062.916	37.44	39.98	-28.47	48.95	68.30	19.35	Horizontal
3	17378.333	41.29	39.81	-25.27	55.83	68.30	12.47	Horizontal
4	11590.416	35.64	38.40	-29.63	44.41	54.00	9.59	Horizontal

802.11n40_Channel 159



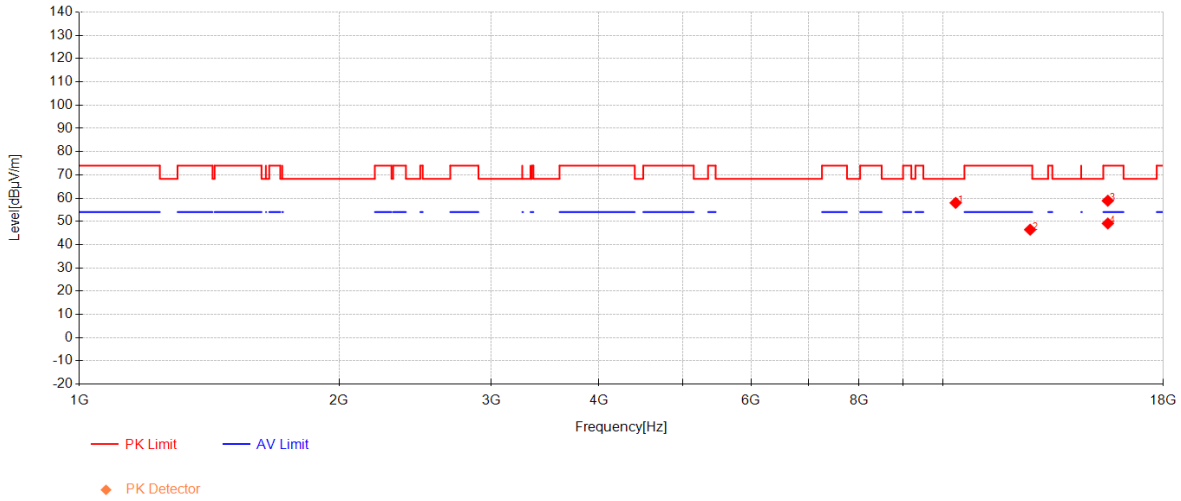
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11597.5	46.81	38.40	-29.60	55.61	74.00	18.39	Vertical
2	15450.416	42.06	39.24	-27.60	53.70	74.00	20.30	Vertical
3	17386.666	44.72	39.83	-25.21	59.34	68.30	8.96	Vertical
4	11596.25	38.20	38.40	-29.61	46.99	54.00	7.01	Vertical
5	15450.416	25.56	39.24	-27.60	37.20	54.00	16.80	Vertical

802.11ax20_Channel 36



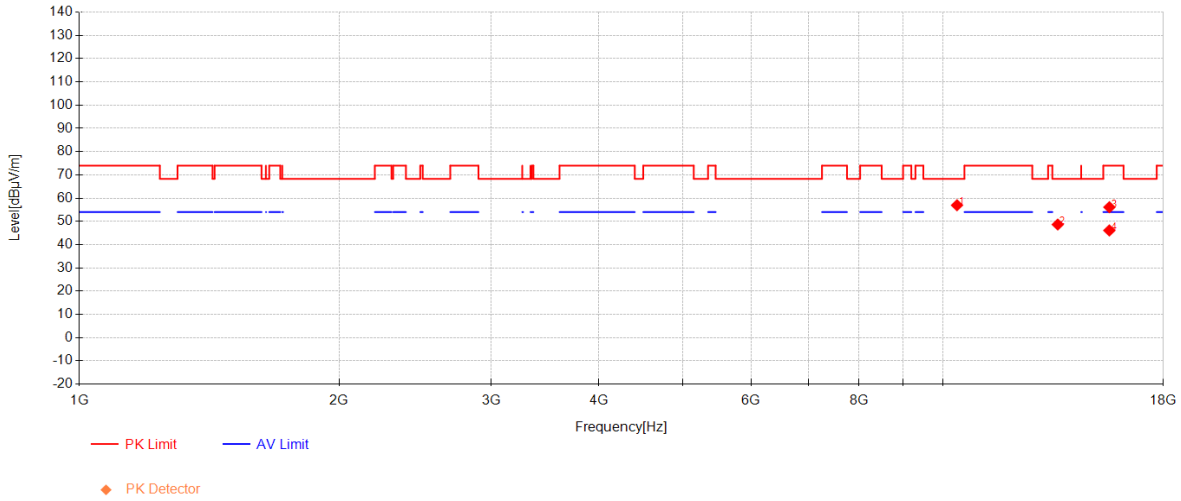
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10355	49.69	38.08	-31.52	56.24	68.30	12.06	Horizontal
2	12678.333	36.90	39.21	-29.61	46.51	74.00	27.49	Horizontal
3	15543.333	46.06	39.07	-27.57	57.55	74.00	16.45	Horizontal
4	15538.75	34.42	39.08	-27.58	45.91	54.00	8.09	Horizontal

802.11ax20_Channel 36



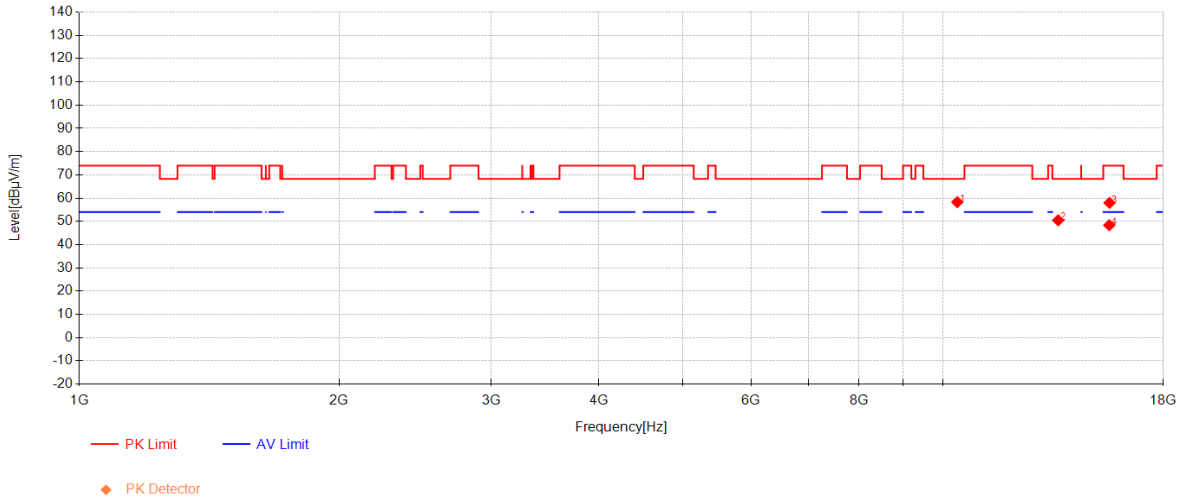
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10354.583	51.42	38.08	-31.53	57.97	68.30	10.33	Vertical
2	12628.75	37.04	39.15	-29.76	46.43	74.00	27.57	Vertical
3	15535	47.39	39.08	-27.59	58.88	74.00	15.12	Vertical
4	15536.666	37.61	39.08	-27.59	49.10	54.00	4.90	Vertical

802.11ax20_Channel 40



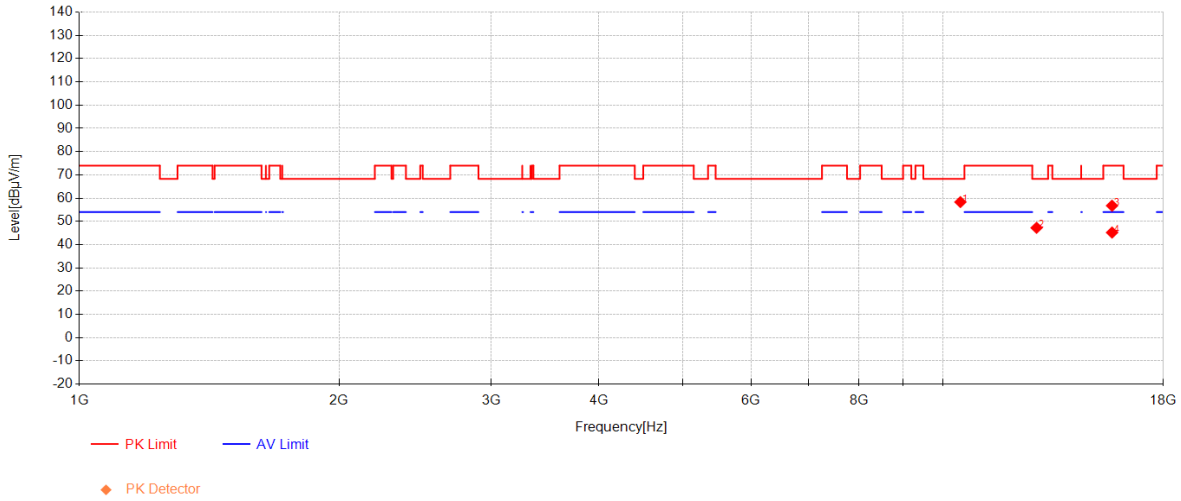
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10391.666	50.07	38.10	-31.23	56.94	68.30	11.36	Horizontal
2	13594.583	36.40	40.02	-27.75	48.66	68.30	19.64	Horizontal
3	15601.25	44.61	38.96	-27.46	56.11	74.00	17.89	Horizontal
4	15599.583	34.60	38.96	-27.45	46.11	54.00	7.89	Horizontal

802.11ax20_Channel 40



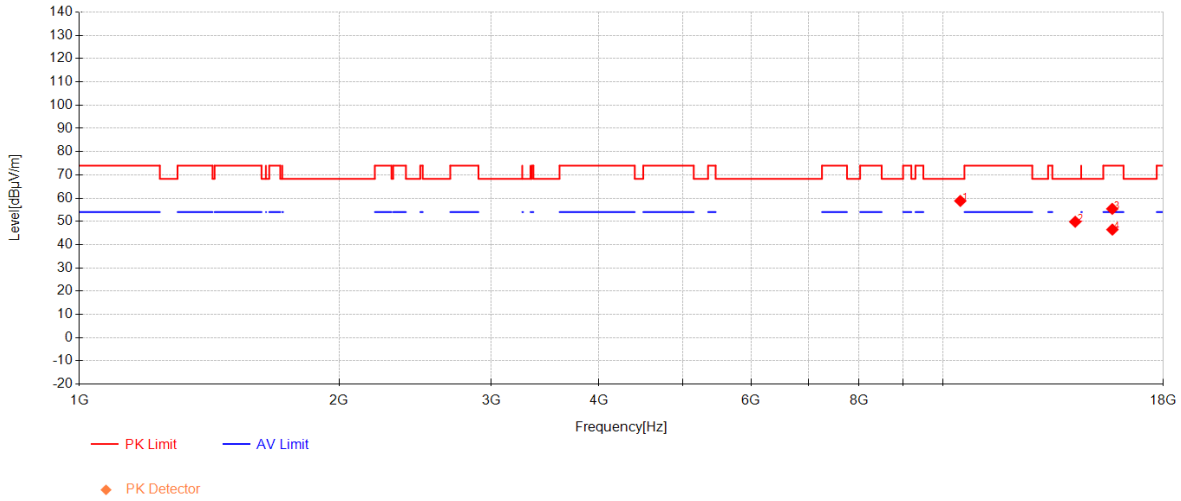
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10401.25	51.33	38.10	-31.16	58.27	68.30	10.03	Vertical
2	13608.333	38.22	40.03	-27.78	50.47	68.30	17.83	Vertical
3	15607.5	46.51	38.95	-27.49	57.97	74.00	16.03	Vertical
4	15595	36.84	38.97	-27.46	48.35	54.00	5.65	Vertical

802.11ax20_Channel 48



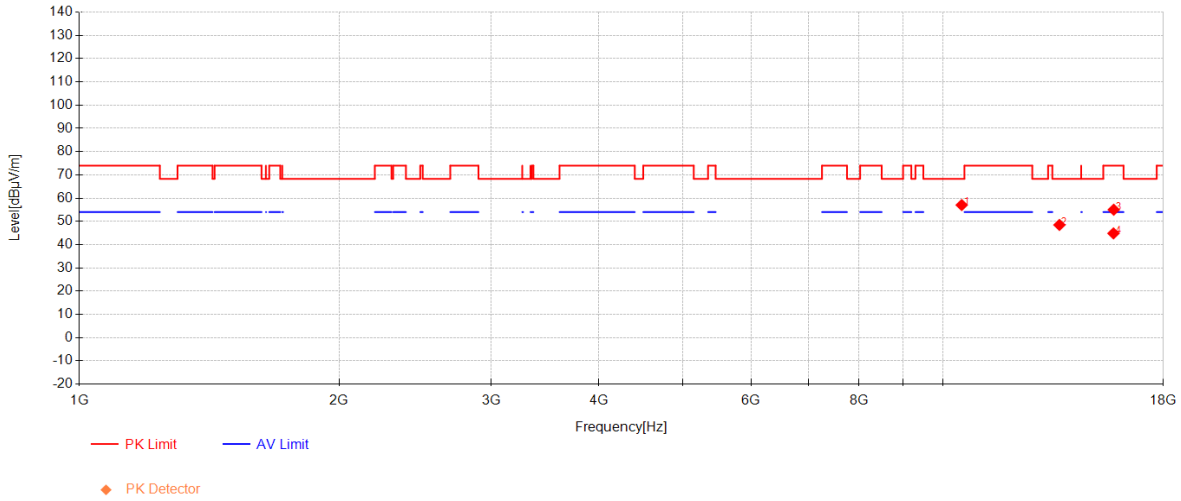
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10485.833	51.22	38.14	-31.05	58.31	68.30	9.99	Horizontal
2	12848.75	37.49	39.42	-29.66	47.25	68.30	21.05	Horizontal
3	15711.666	45.85	38.75	-27.85	56.75	74.00	17.25	Horizontal
4	15711.666	34.30	38.75	-27.85	45.20	54.00	8.80	Horizontal

802.11ax20_Channel 48



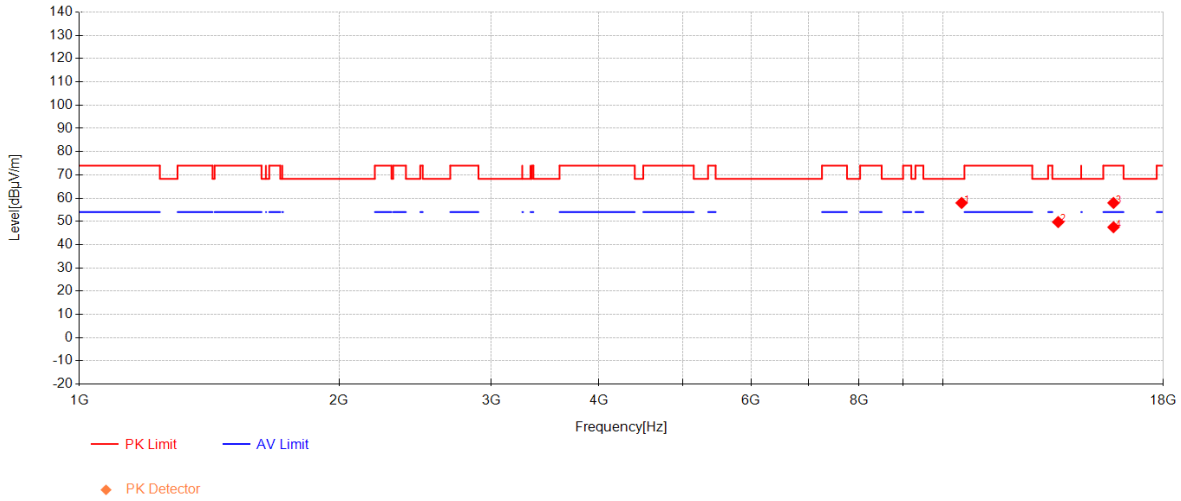
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10483.75	51.71	38.14	-31.05	58.80	68.30	9.50	Vertical
2	14242.5	39.10	40.25	-29.51	49.84	68.30	18.46	Vertical
3	15721.25	44.42	38.73	-27.76	55.39	74.00	18.61	Vertical
4	15725.833	35.47	38.72	-27.72	46.47	54.00	7.53	Vertical

802.11ax20_Channel 52



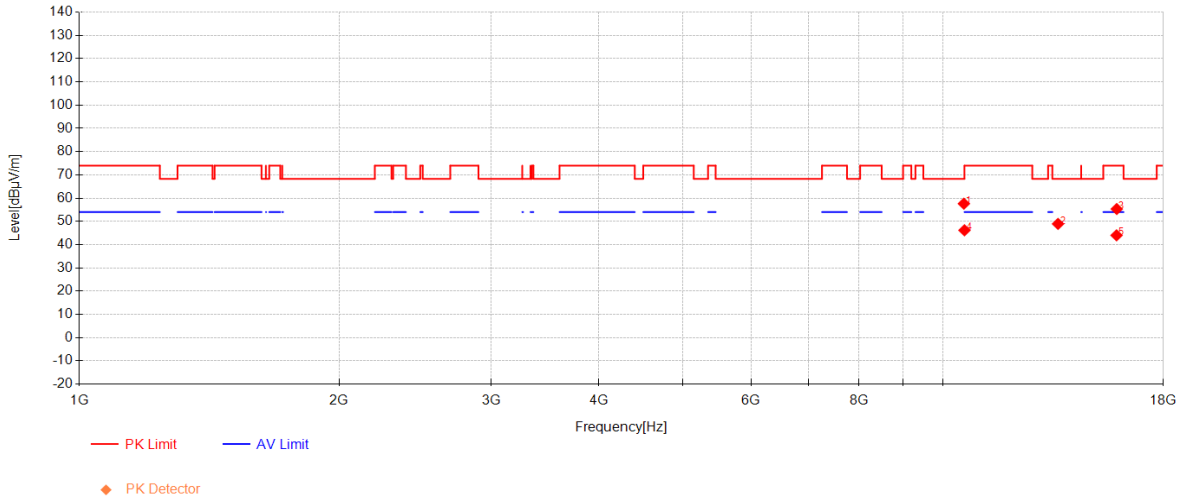
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10522.083	49.93	38.16	-31.07	57.02	68.30	11.28	Horizontal
2	13655	36.92	40.06	-28.51	48.47	68.30	19.83	Horizontal
3	15784.166	43.60	38.61	-27.19	55.02	74.00	18.98	Horizontal
4	15771.666	33.51	38.63	-27.31	44.84	54.00	9.16	Horizontal

802.11ax20_Channel 52



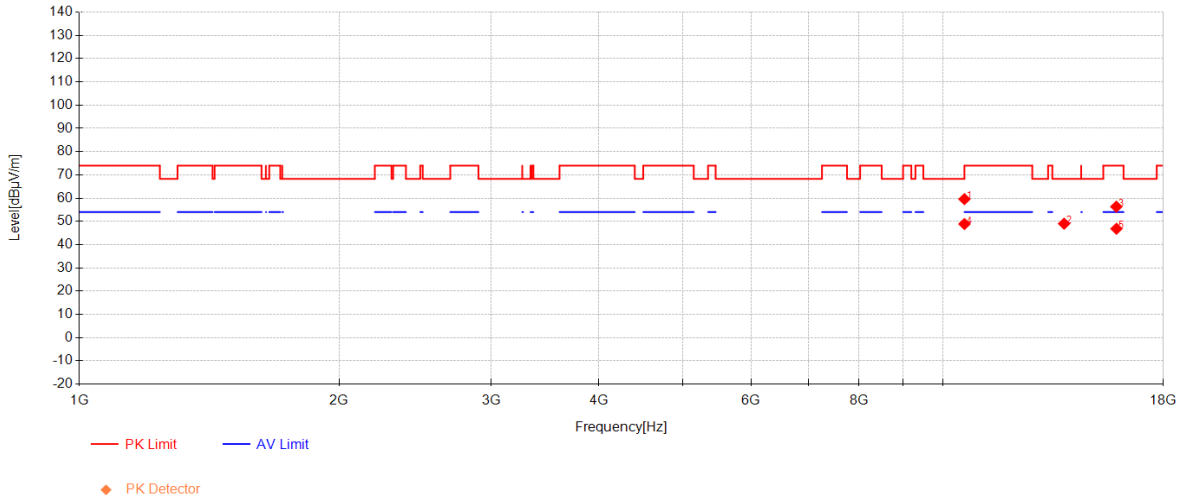
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10519.166	50.84	38.16	-31.06	57.94	68.30	10.36	Vertical
2	13610	37.50	40.03	-27.81	49.72	68.30	18.58	Vertical
3	15772.5	46.61	38.63	-27.30	57.94	74.00	16.06	Vertical
4	15772.5	36.16	38.63	-27.30	47.49	54.00	6.51	Vertical

802.11ax20_Channel 60



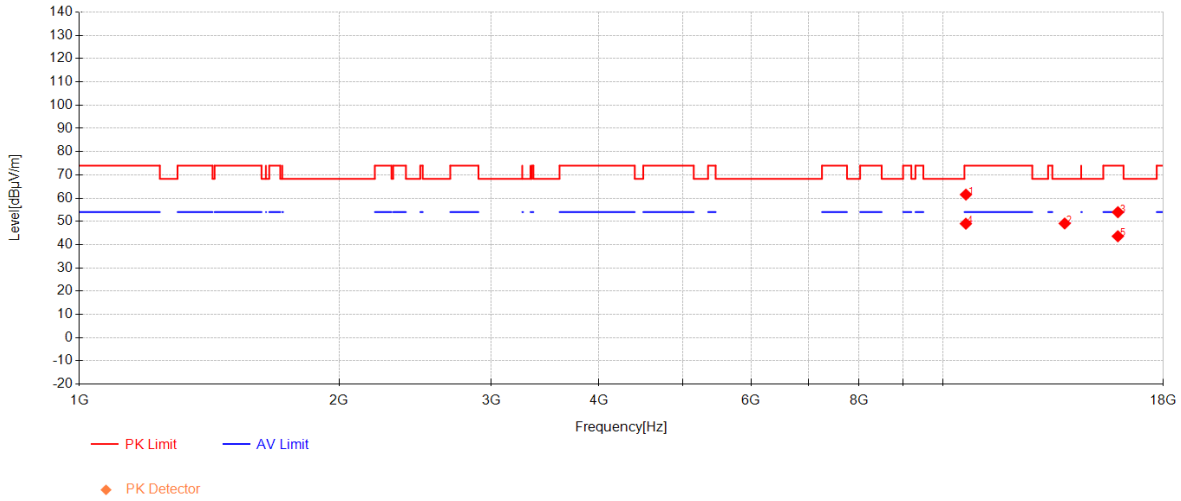
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10583.75	50.60	38.19	-31.17	57.62	68.30	10.68	Horizontal
2	13603.75	36.61	40.02	-27.71	48.92	68.30	19.38	Horizontal
3	15910.416	44.43	38.37	-27.47	55.33	74.00	18.67	Horizontal
4	10600	39.17	38.20	-31.20	46.17	54.00	7.83	Horizontal
5	15902.5	33.09	38.39	-27.48	44.00	54.00	10.00	Horizontal

802.11ax20_Channel 60



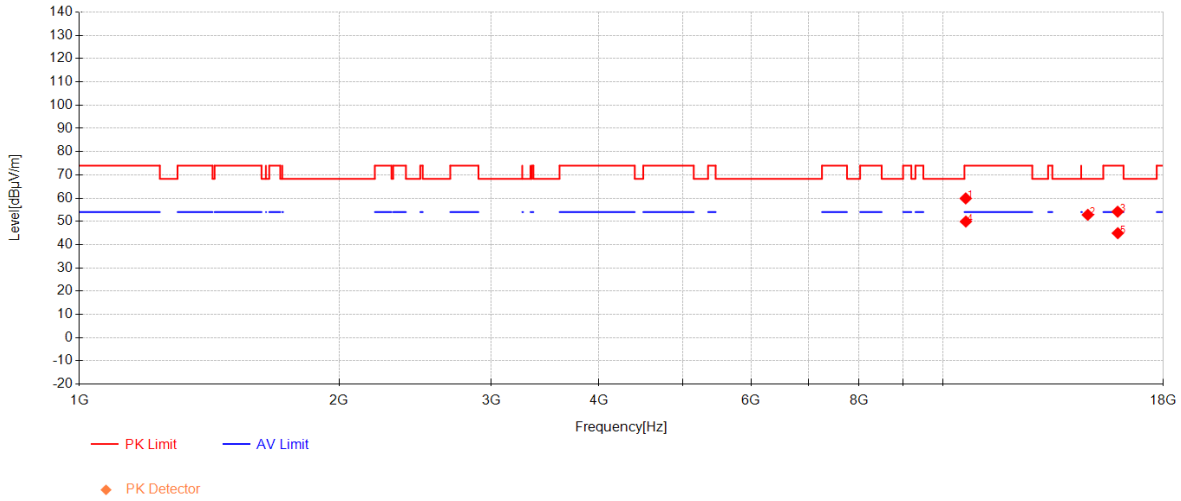
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10598.75	52.58	38.20	-31.20	59.58	68.30	8.72	Vertical
2	13825.833	37.88	40.18	-29.04	49.02	68.30	19.28	Vertical
3	15892.916	45.38	38.40	-27.45	56.33	74.00	17.67	Vertical
4	10600	41.86	38.20	-31.20	48.86	54.00	5.14	Vertical
5	15899.166	35.91	38.39	-27.48	46.83	54.00	7.17	Vertical

802.11ax20_Channel 64



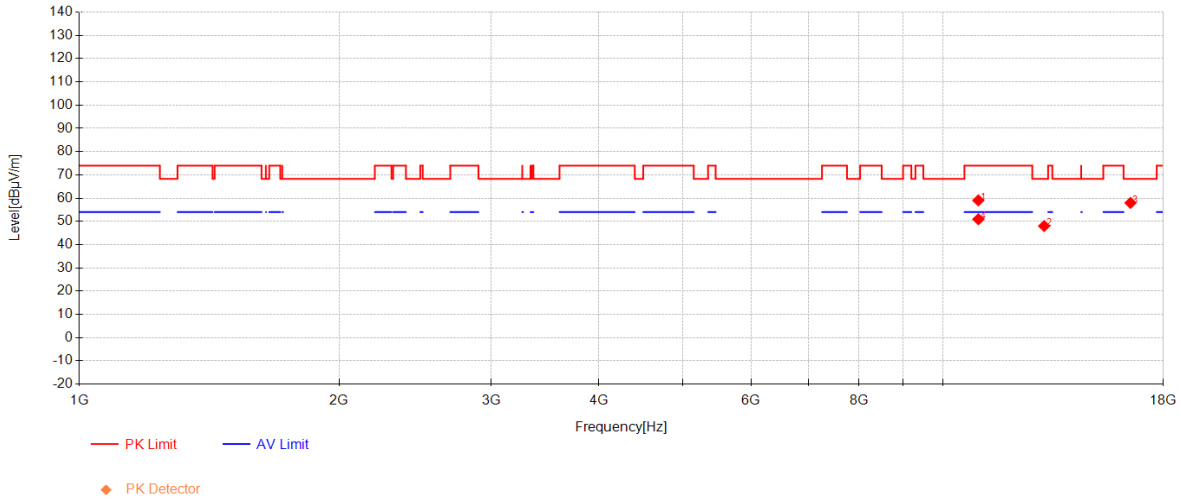
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10642.083	54.11	38.22	-30.82	61.51	74.00	12.49	Horizontal
2	13848.333	37.76	40.19	-28.85	49.10	68.30	19.20	Horizontal
3	15959.166	43.13	38.28	-27.45	53.96	74.00	20.04	Horizontal
4	10639.583	41.62	38.22	-30.84	49.00	54.00	5.00	Horizontal
5	15959.583	32.77	38.28	-27.45	43.60	54.00	10.40	Horizontal

802.11ax20_Channel 64



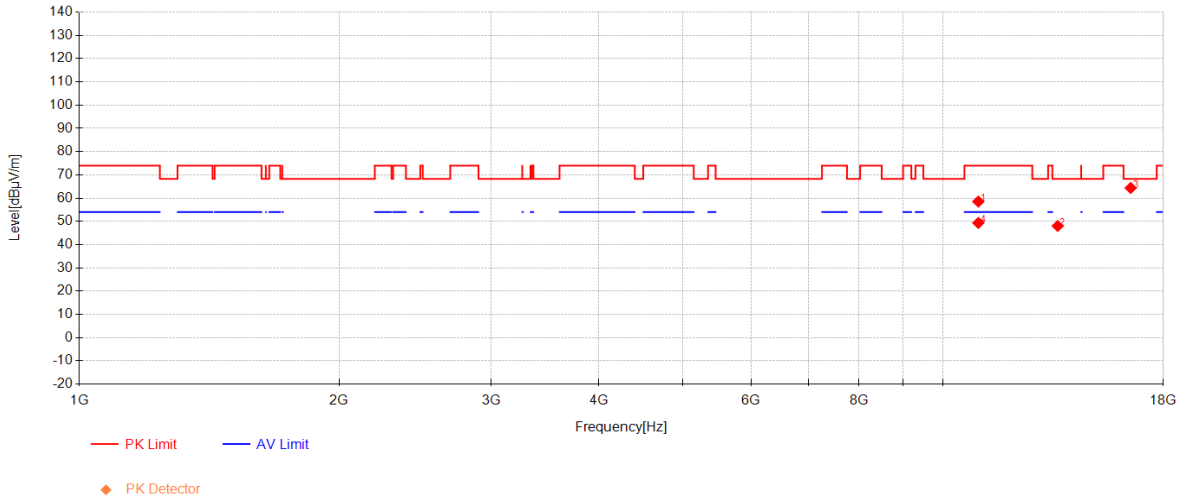
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10635.833	52.54	38.22	-30.88	59.88	74.00	14.12	Vertical
2	14728.333	40.83	40.15	-28.16	52.82	68.30	15.48	Vertical
3	15950.416	43.33	38.29	-27.45	54.17	74.00	19.83	Vertical
4	10639.583	42.55	38.22	-30.84	49.93	54.00	4.07	Vertical
5	15955.416	34.09	38.28	-27.45	44.92	54.00	9.08	Vertical

802.11ax20_Channel 100



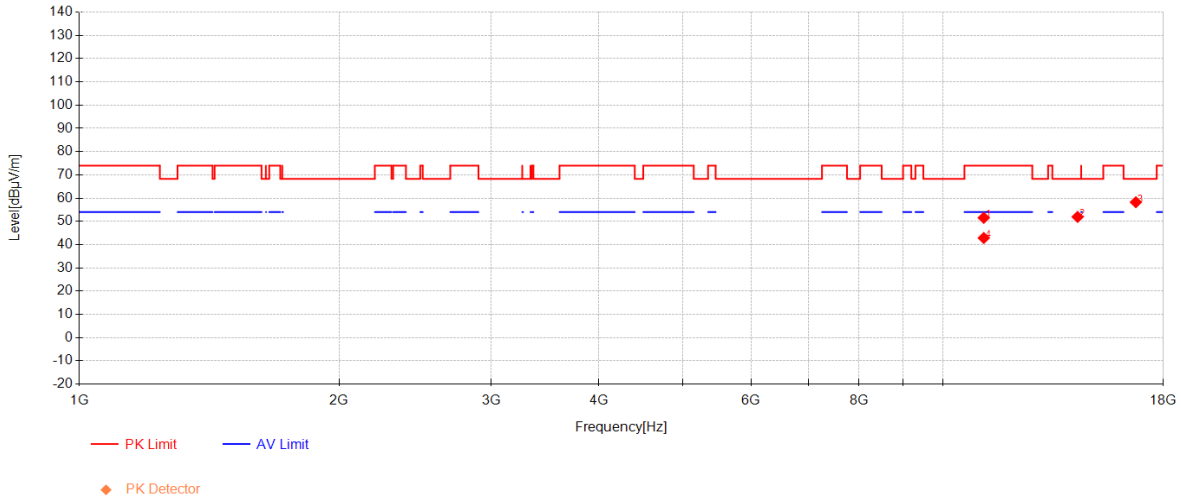
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10998.75	51.14	38.40	-30.50	59.04	74.00	14.96	Horizontal
2	13109.583	37.25	39.68	-28.92	48.01	68.30	20.29	Horizontal
3	16506.25	46.01	38.55	-26.59	57.97	68.30	10.33	Horizontal
4	11001.25	43.03	38.40	-30.50	50.93	54.00	3.07	Horizontal

802.11ax20_Channel 100



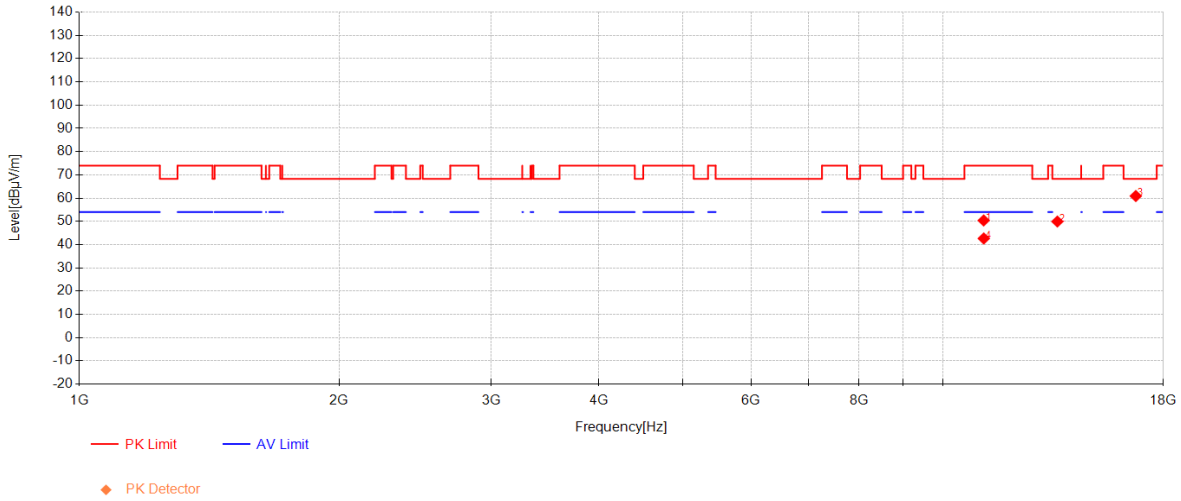
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10998.75	50.64	38.40	-30.50	58.54	74.00	15.46	Vertical
2	13592.083	35.84	40.01	-27.80	48.05	68.30	20.25	Vertical
3	16513.333	52.40	38.56	-26.58	64.38	68.30	3.92	Vertical
4	10998.75	41.44	38.40	-30.50	49.34	54.00	4.66	Vertical

802.11ax20_Channel 116



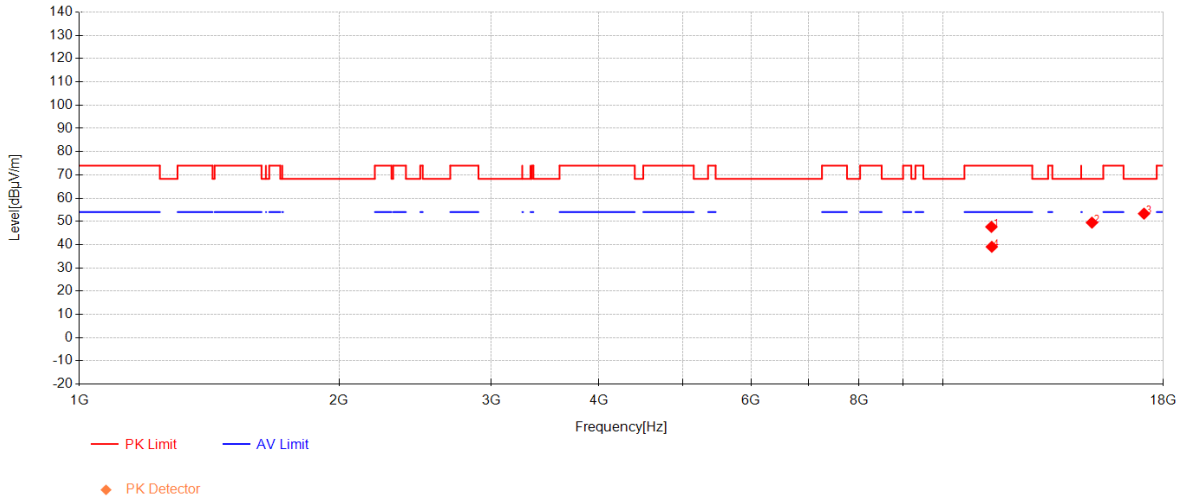
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11160	43.24	38.40	-30.10	51.54	74.00	22.46	Horizontal
2	14333.333	40.78	40.23	-29.07	51.94	68.30	16.36	Horizontal
3	16742.083	46.02	38.72	-26.50	58.24	68.30	10.06	Horizontal
4	11160.416	34.56	38.40	-30.10	42.86	54.00	11.14	Horizontal

802.11ax20_Channel 116



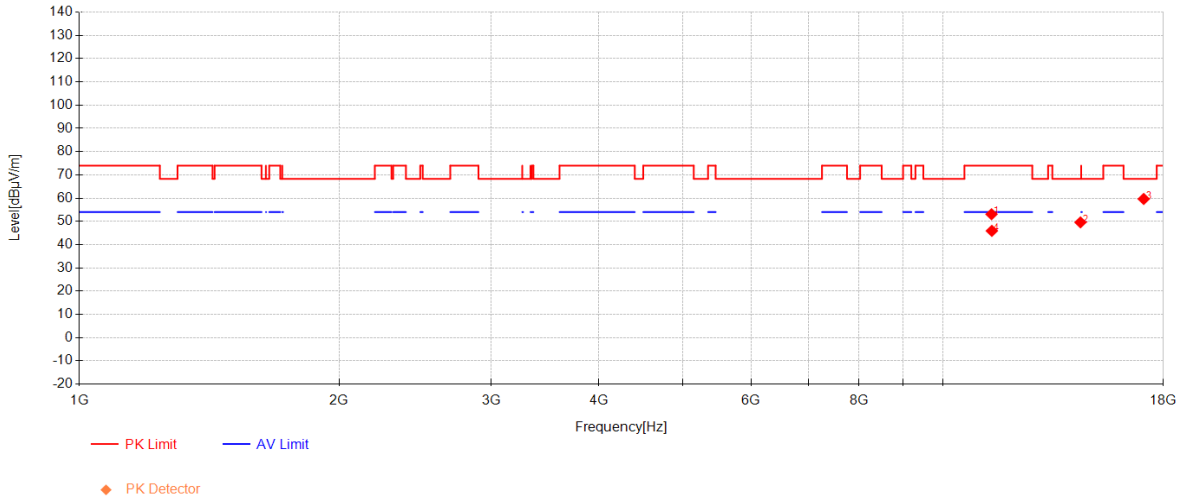
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11157.916	42.12	38.40	-30.11	50.41	74.00	23.59	Vertical
2	13580.833	37.94	40.01	-28.01	49.93	68.30	18.37	Vertical
3	16739.583	48.71	38.72	-26.52	60.91	68.30	7.39	Vertical
4	11160	34.36	38.40	-30.10	42.66	54.00	11.34	Vertical

802.11ax20_Channel 140



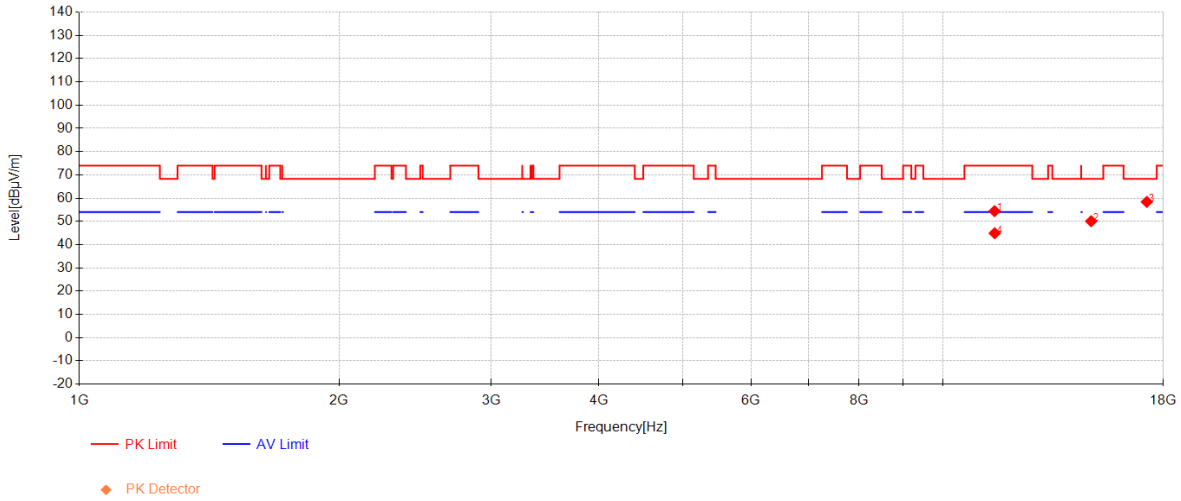
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11388.75	39.17	38.40	-29.93	47.64	74.00	26.36	Horizontal
2	14891.666	37.25	40.12	-27.92	49.45	68.30	18.85	Horizontal
3	17110.833	40.02	39.17	-25.86	53.32	68.30	14.98	Horizontal
4	11401.666	30.52	38.40	-29.86	39.06	54.00	14.94	Horizontal

802.11ax20_Channel 140



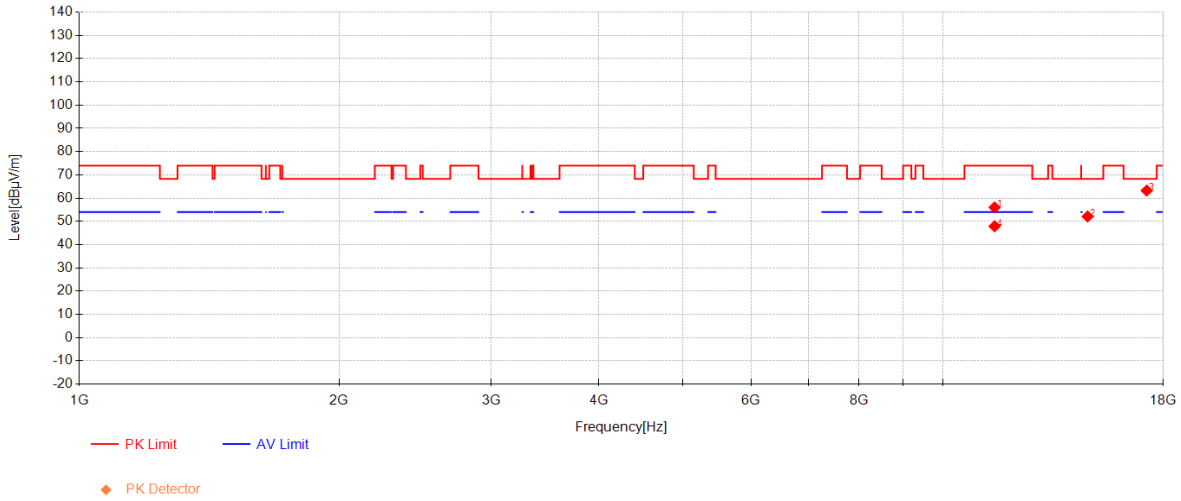
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11392.916	44.58	38.40	-29.91	53.07	74.00	20.93	Vertical
2	14443.333	38.04	40.21	-28.67	49.58	68.30	18.72	Vertical
3	17097.083	46.48	39.13	-25.97	59.64	68.30	8.66	Vertical
4	11402.083	37.38	38.40	-29.86	45.92	54.00	8.08	Vertical

802.11ax20_Channel 149



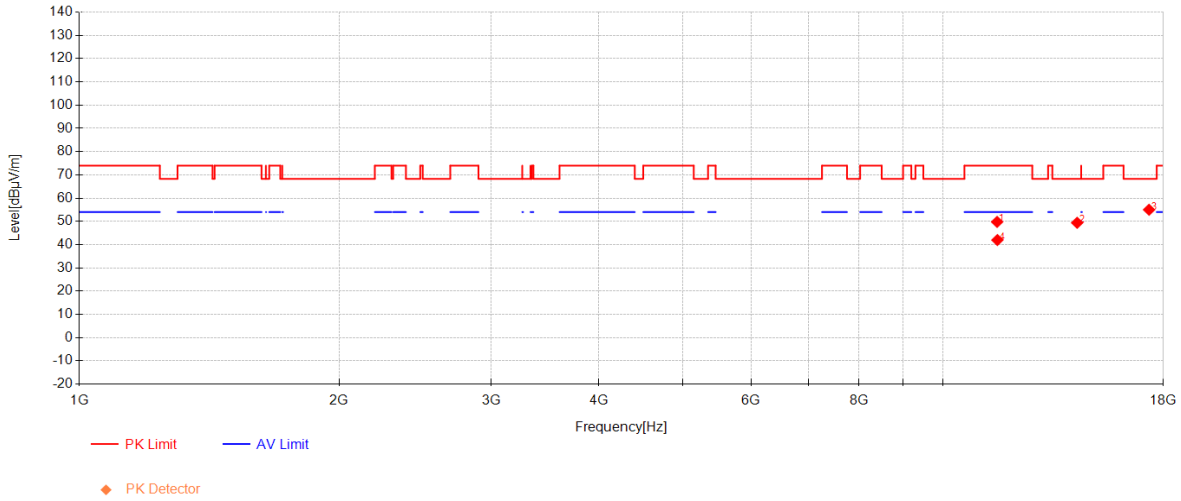
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11486.25	45.98	38.40	-29.97	54.41	74.00	19.59	Horizontal
2	14860	37.65	40.13	-27.70	50.07	68.30	18.23	Horizontal
3	17239.583	44.12	39.47	-25.20	58.39	68.30	9.91	Horizontal
4	11490.416	36.47	38.40	-29.98	44.89	54.00	9.11	Horizontal

802.11ax20_Channel 149



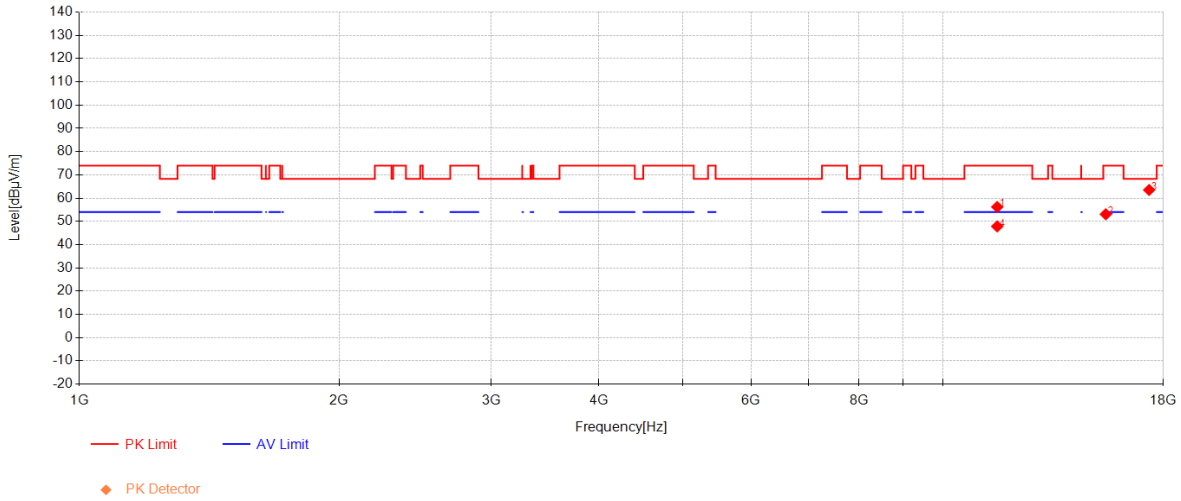
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11486.666	47.57	38.40	-29.97	56.00	74.00	18.00	Vertical
2	14722.5	40.20	40.16	-28.24	52.12	68.30	16.18	Vertical
3	17234.166	48.96	39.46	-25.15	63.27	68.30	5.03	Vertical
4	11487.083	39.45	38.40	-29.97	47.88	54.00	6.12	Vertical

802.11ax20_Channel 157



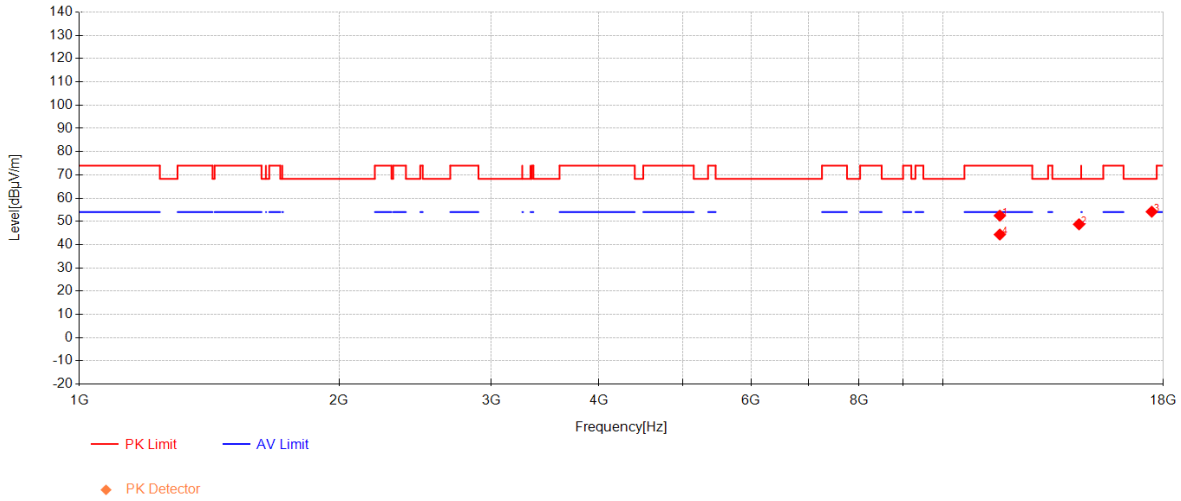
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11563.75	41.12	38.40	-29.74	49.78	74.00	24.22	Horizontal
2	14315.416	38.42	40.24	-29.25	49.40	68.30	18.90	Horizontal
3	17341.666	40.80	39.72	-25.52	55.00	68.30	13.30	Horizontal
4	11573.75	33.29	38.40	-29.70	41.99	54.00	12.01	Horizontal

802.11ax20_Channel 157



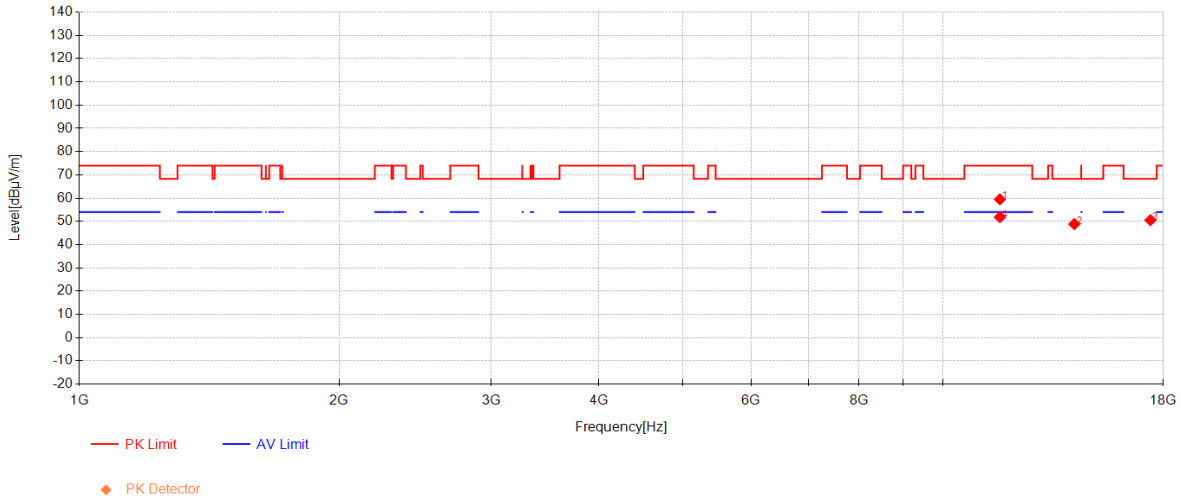
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11568.75	47.52	38.40	-29.72	56.20	74.00	17.80	Vertical
2	15452.083	41.43	39.24	-27.60	53.07	74.00	20.93	Vertical
3	17346.25	49.27	39.73	-25.49	63.52	68.30	4.78	Vertical
4	11567.5	39.15	38.40	-29.72	47.83	54.00	6.17	Vertical

802.11ax20_Channel 165



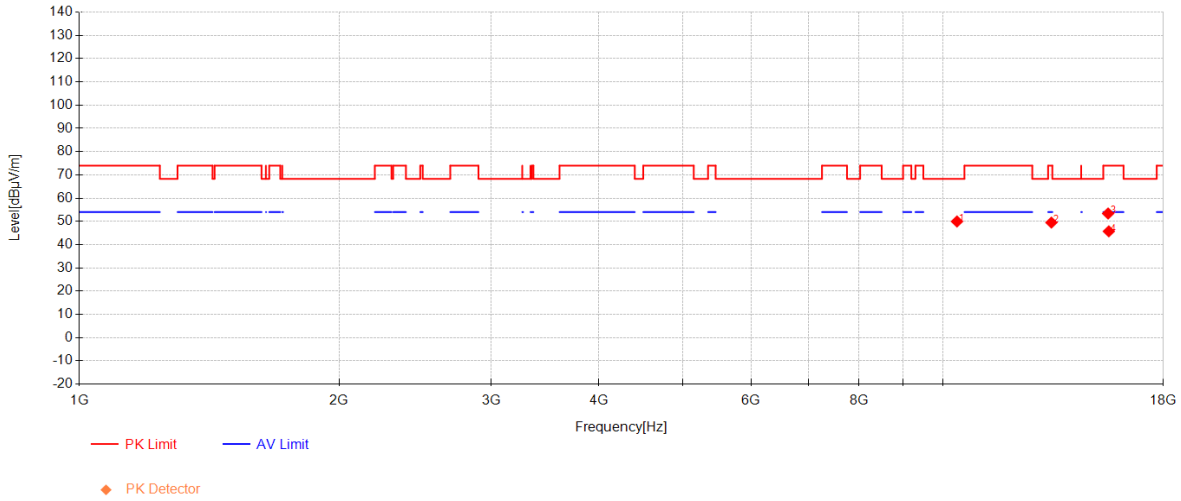
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11648.75	43.64	38.40	-29.59	52.45	74.00	21.55	Horizontal
2	14388.333	37.04	40.22	-28.51	48.75	68.30	19.55	Horizontal
3	17466.25	38.42	40.02	-24.27	54.17	68.30	14.13	Horizontal
4	11647.916	35.54	38.40	-29.59	44.35	54.00	9.65	Horizontal

802.11ax20_Channel 165



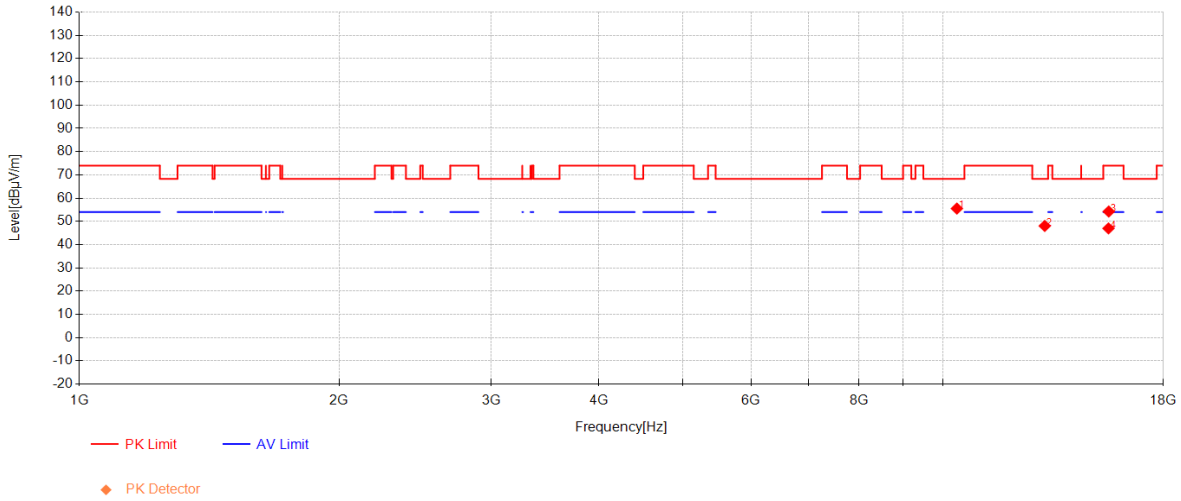
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11650	50.67	38.40	-29.59	59.48	74.00	14.52	Vertical
2	14209.166	38.16	40.26	-29.56	48.85	68.30	19.45	Vertical
3	17405	35.71	39.87	-25.06	50.53	68.30	17.77	Vertical
4	11650.416	43.00	38.40	-29.60	51.80	54.00	2.20	Vertical

802.11ax40_Channel 38



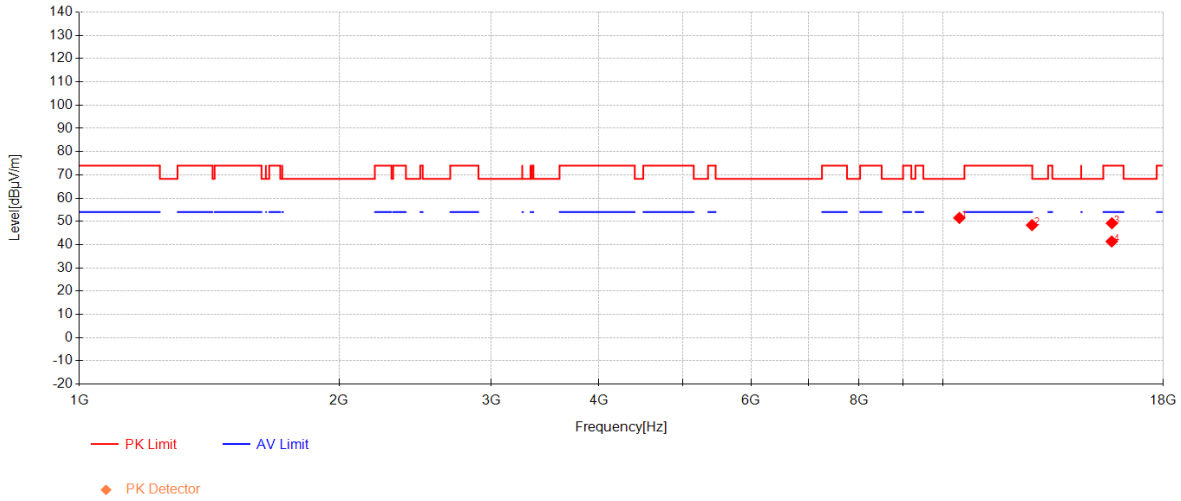
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10392.083	43.09	38.10	-31.22	49.96	68.30	18.34	Horizontal
2	13366.666	38.70	39.86	-29.08	49.48	74.00	24.52	Horizontal
3	15549.583	41.90	39.06	-27.56	53.39	74.00	20.61	Horizontal
4	15577.5	34.21	39.00	-27.50	45.71	54.00	8.29	Horizontal

802.11ax40_Channel 38



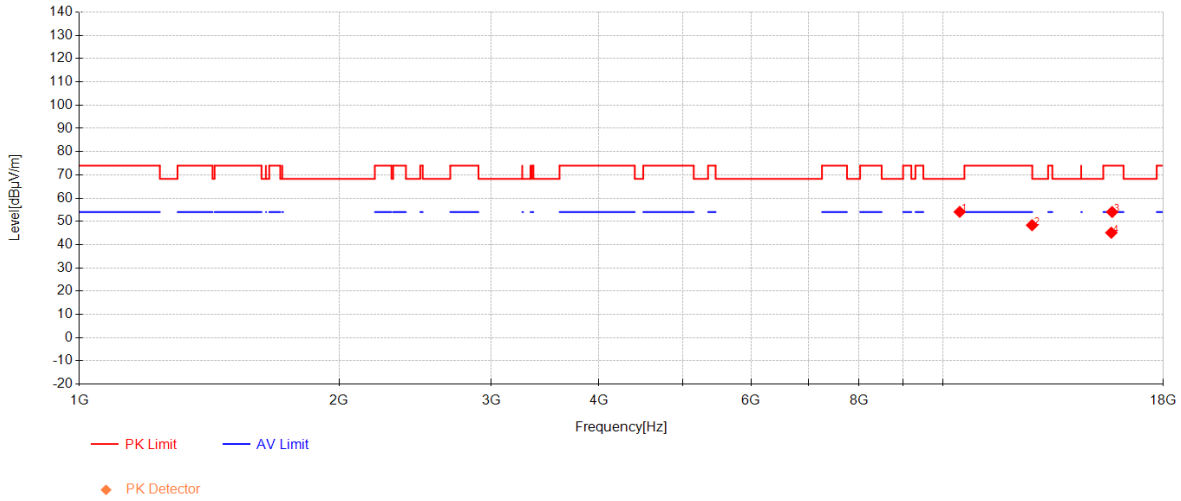
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10387.916	48.68	38.09	-31.26	55.52	68.30	12.78	Vertical
2	13130.833	37.35	39.69	-28.99	48.05	68.30	20.25	Vertical
3	15576.25	42.75	39.01	-27.50	54.25	74.00	19.75	Vertical
4	15563.333	35.48	39.03	-27.53	46.98	54.00	7.02	Vertical

802.11ax40_Channel 46



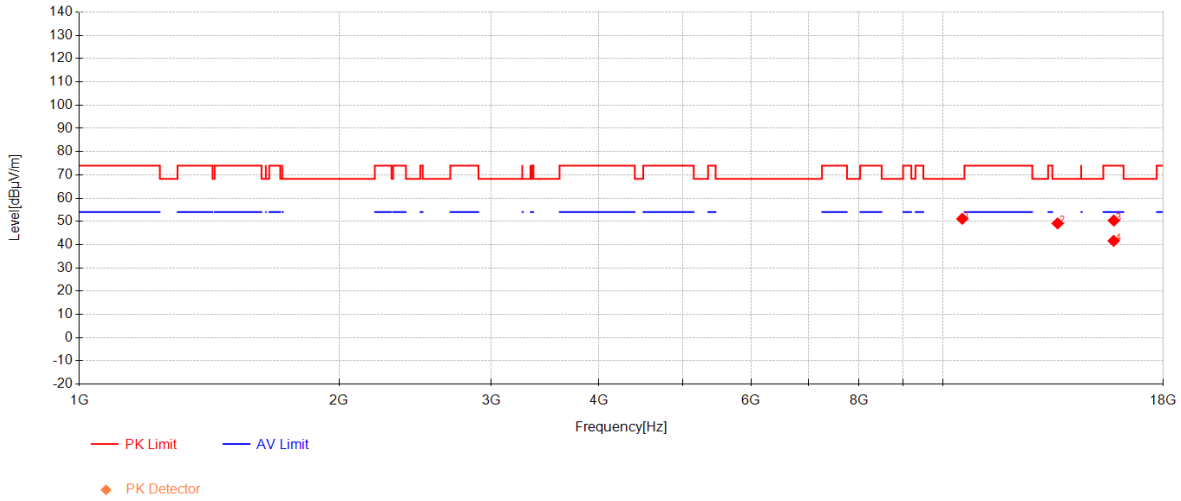
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10457.5	44.45	38.13	-31.09	51.49	68.30	16.81	Horizontal
2	12692.083	38.72	39.23	-29.56	48.39	74.00	25.61	Horizontal
3	15706.25	38.33	38.76	-27.89	49.19	74.00	24.81	Horizontal
4	15697.916	30.51	38.77	-27.94	41.34	54.00	12.66	Horizontal

802.11ax40_Channel 46



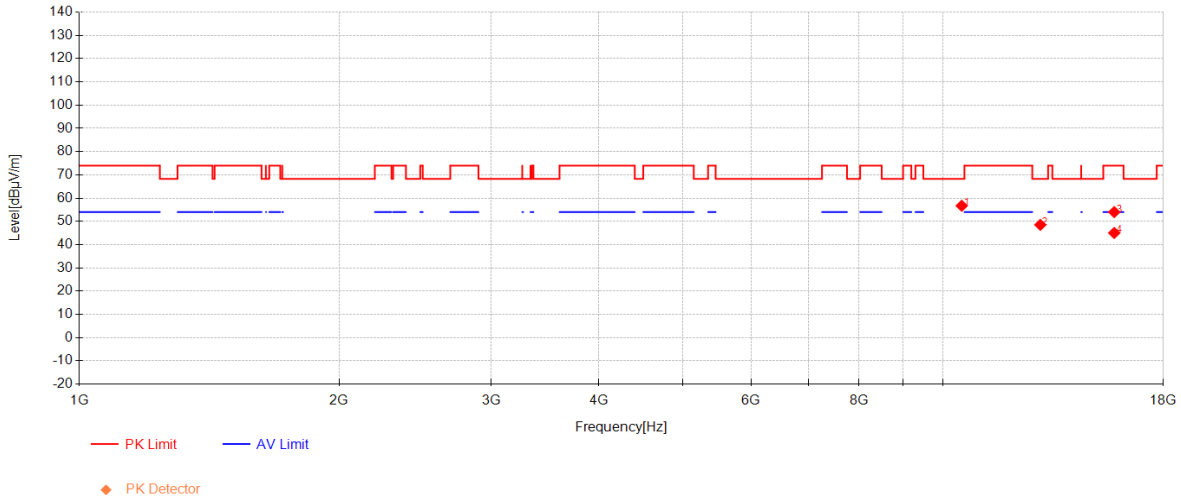
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10466.25	47.03	38.13	-31.07	54.09	68.30	14.21	Vertical
2	12693.75	38.68	39.23	-29.56	48.35	74.00	25.65	Vertical
3	15715.833	43.10	38.74	-27.81	54.03	74.00	19.97	Vertical
4	15680.833	34.16	38.81	-27.85	45.11	54.00	8.89	Vertical

802.11ax40_Channel 54



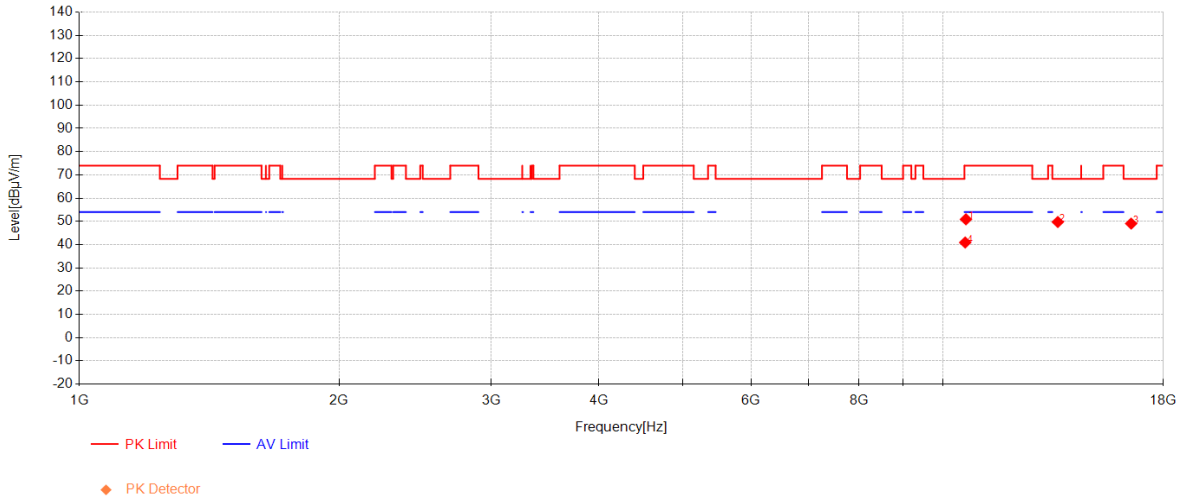
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10540	44.06	38.17	-31.10	51.13	68.30	17.17	Horizontal
2	13590.416	36.95	40.01	-27.83	49.13	68.30	19.17	Horizontal
3	15786.666	38.93	38.61	-27.17	50.37	74.00	23.63	Horizontal
4	15779.583	30.24	38.62	-27.23	41.63	54.00	12.37	Horizontal

802.11ax40_Channel 54



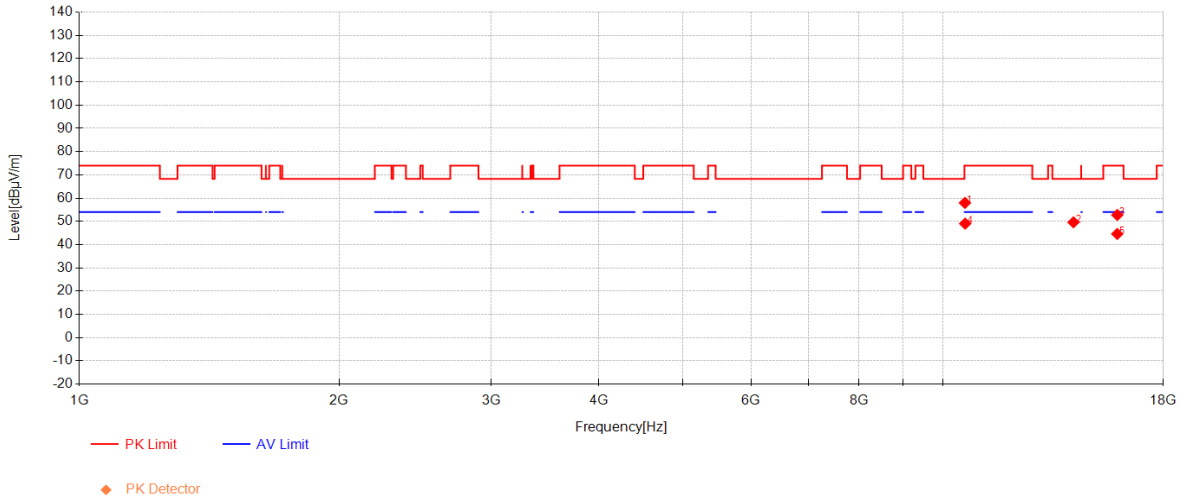
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10523.75	49.62	38.16	-31.07	56.71	68.30	11.59	Vertical
2	12977.083	38.68	39.57	-29.75	48.50	68.30	19.80	Vertical
3	15804.166	42.51	38.57	-27.07	54.01	74.00	19.99	Vertical
4	15803.333	33.51	38.57	-27.06	45.02	54.00	8.98	Vertical

802.11ax40_Channel 62



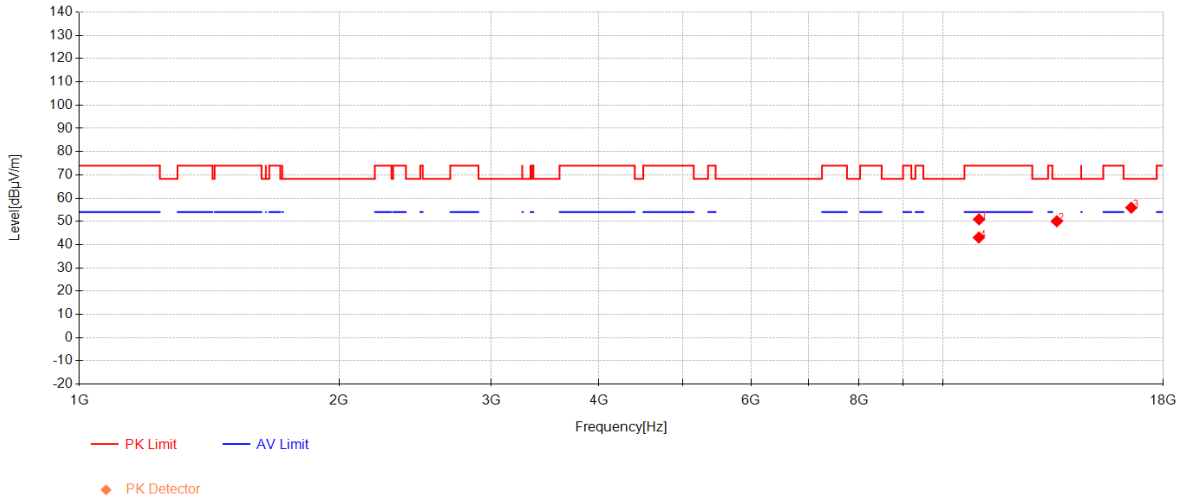
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10641.666	43.49	38.22	-30.83	50.89	74.00	23.11	Horizontal
2	13595.833	37.44	40.02	-27.73	49.73	68.30	18.57	Horizontal
3	16534.583	37.02	38.57	-26.56	49.04	68.30	19.26	Horizontal
4	10620	33.73	38.21	-31.02	40.92	54.00	13.08	Horizontal

802.11ax40_Channel 62



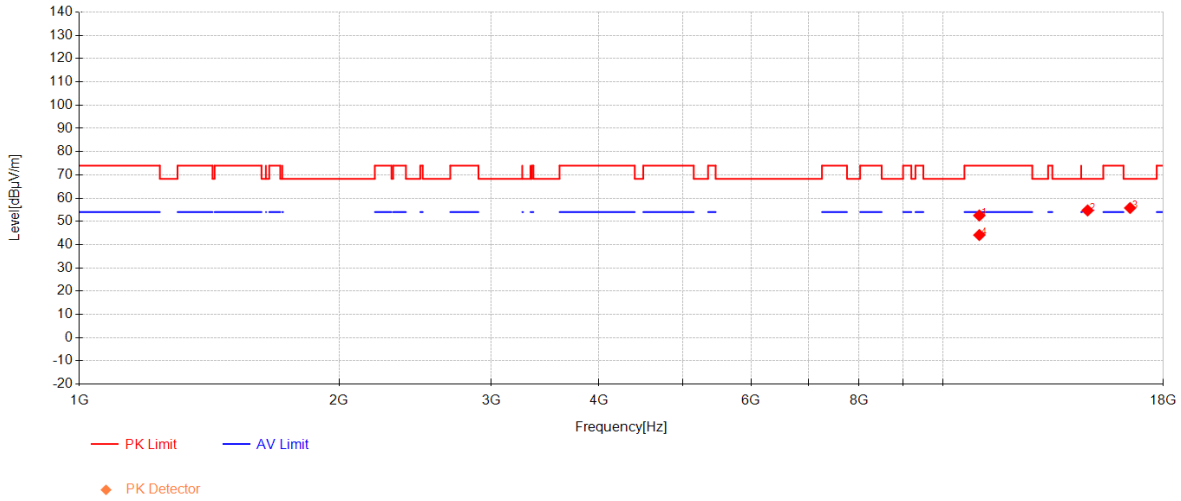
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	10612.083	50.85	38.21	-31.09	57.96	74.00	16.04	Vertical
2	14177.083	38.78	40.26	-29.43	49.61	68.30	18.69	Vertical
3	15934.166	41.91	38.33	-27.46	52.77	74.00	21.23	Vertical
4	10620	41.84	38.21	-31.02	49.03	54.00	4.97	Vertical
5	15930.833	33.74	38.33	-27.46	44.61	54.00	9.39	Vertical

802.11ax40_Channel 102



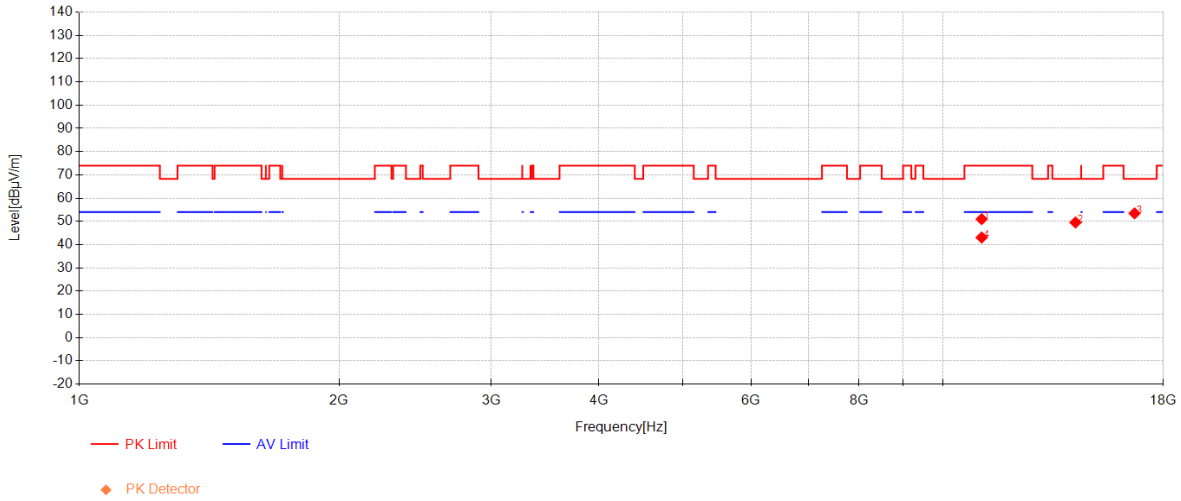
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11020.833	42.94	38.40	-30.46	50.88	74.00	23.12	Horizontal
2	13559.583	38.47	39.99	-28.41	50.05	68.30	18.25	Horizontal
3	16542.083	43.85	38.58	-26.55	55.88	68.30	12.42	Horizontal
4	11015	35.14	38.40	-30.47	43.07	54.00	10.93	Horizontal

802.11ax40_Channel 102



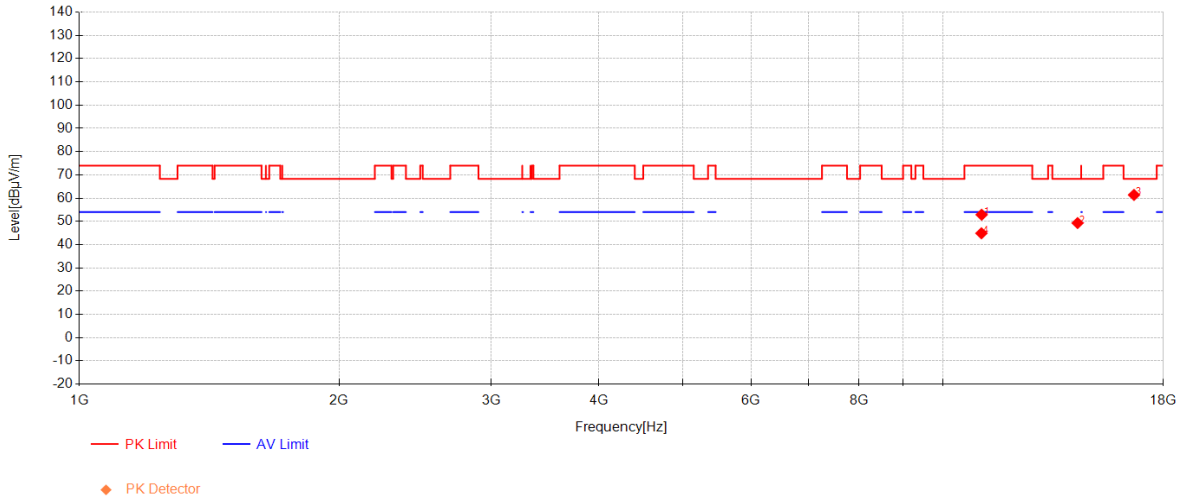
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11028.75	44.58	38.40	-30.45	52.53	74.00	21.47	Vertical
2	14720.833	42.80	40.16	-28.26	54.70	68.30	13.60	Vertical
3	16487.916	43.81	38.54	-26.59	55.76	68.30	12.54	Vertical
4	11029.166	36.18	38.40	-30.45	44.13	54.00	9.87	Vertical

802.11ax40_Channel 110



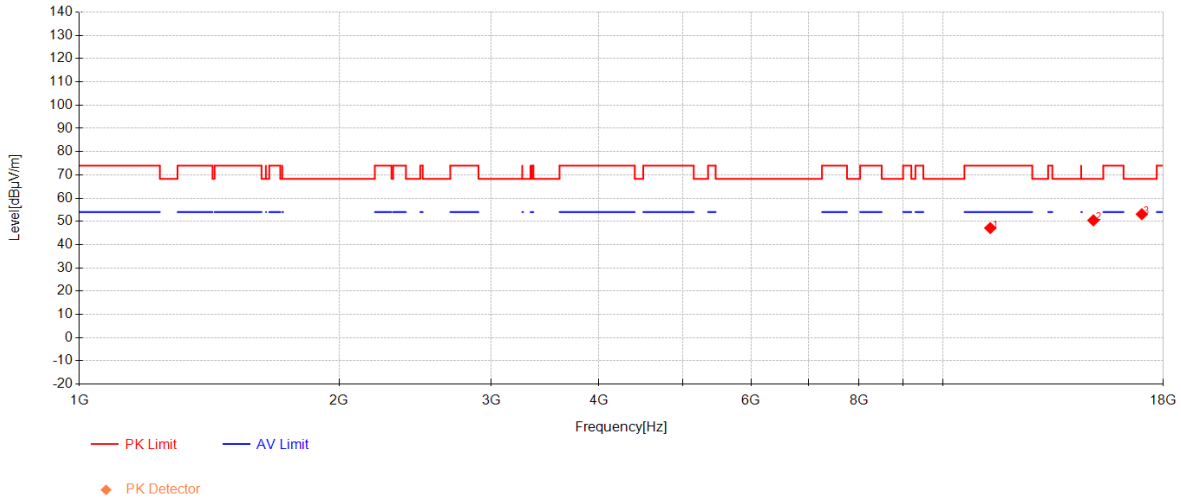
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11097.5	42.87	38.40	-30.32	50.95	74.00	23.05	Horizontal
2	14253.75	38.78	40.25	-29.49	49.54	68.30	18.76	Horizontal
3	16684.583	41.48	38.68	-26.71	53.45	68.30	14.85	Horizontal
4	11097.916	34.99	38.40	-30.32	43.07	54.00	10.93	Horizontal

802.11ax40_Channel 110



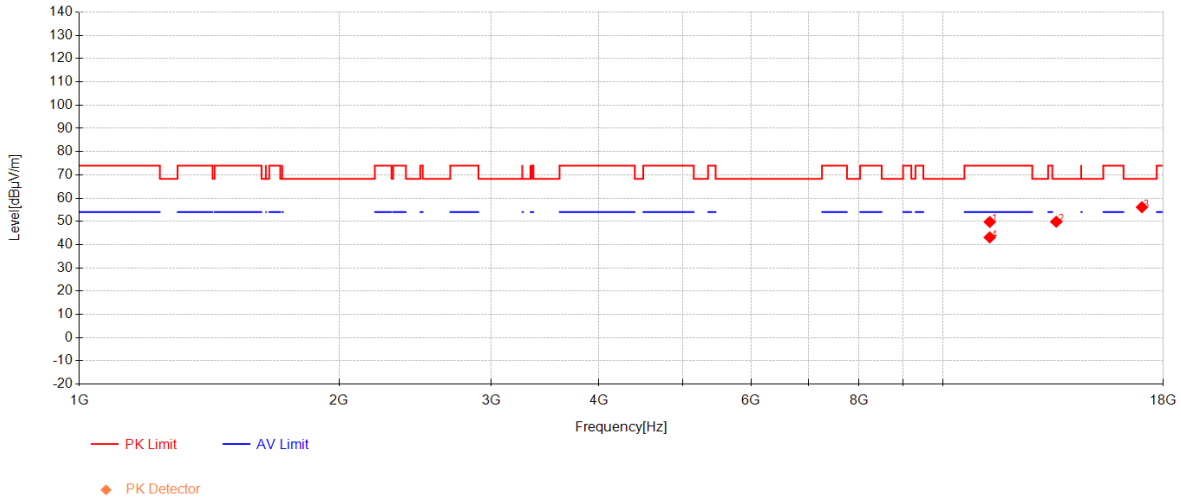
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11097.083	44.79	38.40	-30.33	52.86	74.00	21.14	Vertical
2	14332.5	38.13	40.23	-29.08	49.28	68.30	19.02	Vertical
3	16658.333	49.35	38.66	-26.63	61.38	68.30	6.92	Vertical
4	11090.833	36.82	38.40	-30.34	44.88	54.00	9.12	Vertical

802.11ax40_Channel 134



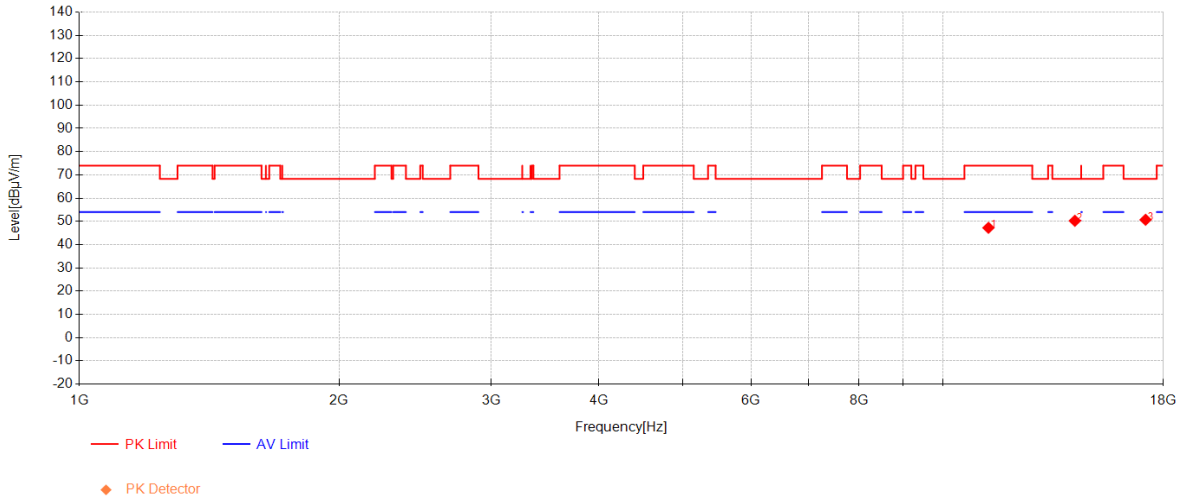
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11356.25	38.87	38.40	-30.14	47.13	74.00	26.87	Horizontal
2	14949.583	38.37	40.11	-28.04	50.44	68.30	17.86	Horizontal
3	17010.833	39.51	38.93	-25.33	53.11	68.30	15.19	Horizontal

802.11ax40_Channel 134



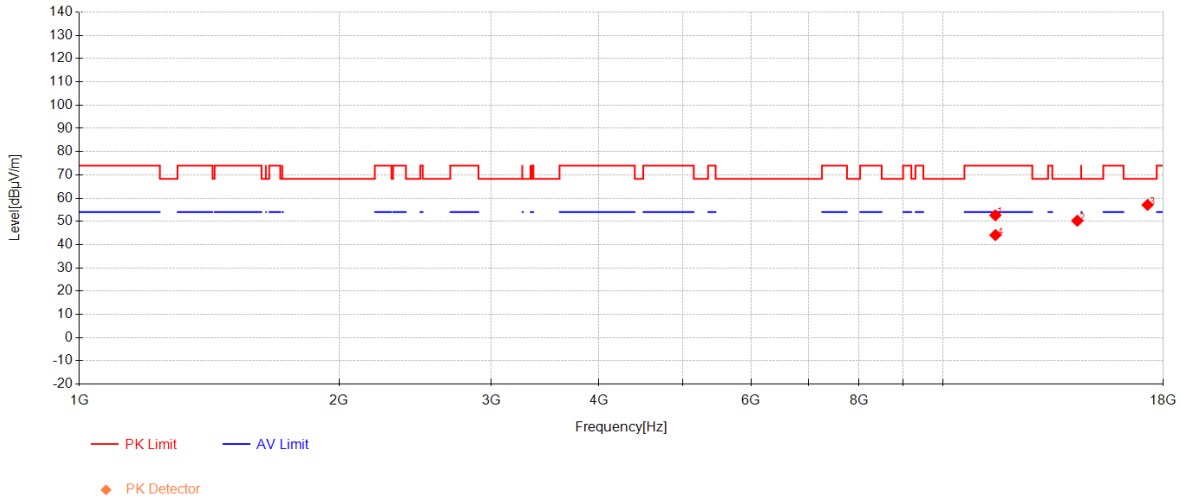
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11339.583	41.60	38.40	-30.25	49.75	74.00	24.25	Vertical
2	13538.75	38.68	39.98	-28.81	49.85	68.30	18.45	Vertical
3	17014.583	42.53	38.93	-25.36	56.11	68.30	12.19	Vertical
4	11339.583	34.97	38.40	-30.25	43.12	54.00	10.88	Vertical

802.11ax40_Channel 151



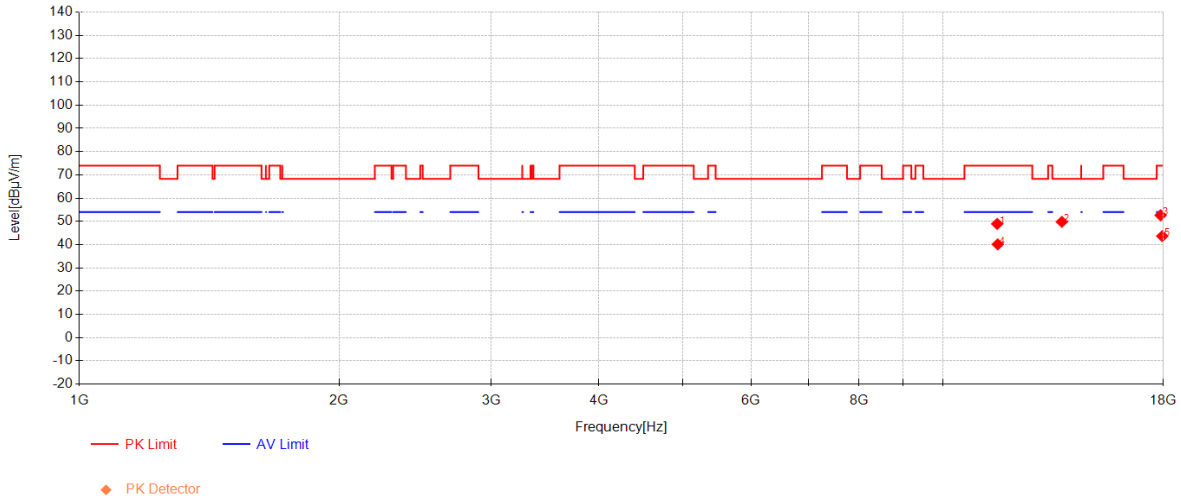
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11300.833	39.34	38.40	-30.49	47.25	74.00	26.75	Horizontal
2	14229.583	39.53	40.25	-29.53	50.25	68.30	18.05	Horizontal
3	17182.083	36.37	39.34	-25.02	50.69	68.30	17.61	Horizontal

802.11ax40_Channel 151



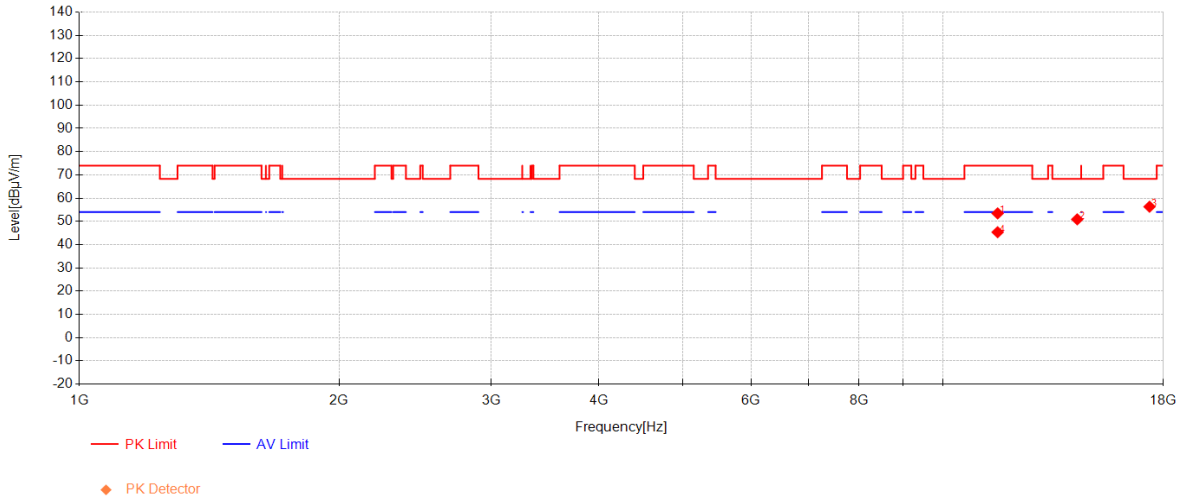
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11509.583	44.16	38.40	-29.95	52.61	74.00	21.39	Vertical
2	14321.666	39.23	40.24	-29.19	50.28	68.30	18.02	Vertical
3	17274.583	43.07	39.56	-25.55	57.08	68.30	11.22	Vertical
4	11512.916	35.65	38.40	-29.94	44.11	54.00	9.89	Vertical

802.11ax40_Channel 159



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11567.083	40.24	38.40	-29.72	48.92	74.00	25.08	Horizontal
2	13742.916	38.92	40.12	-29.23	49.81	68.30	18.49	Horizontal
3	17886.666	36.23	41.03	-24.61	52.65	74.00	21.35	Horizontal
4	11583.333	31.37	38.40	-29.66	40.11	54.00	13.89	Horizontal
5	17963.333	26.77	41.21	-24.31	43.67	54.00	10.33	Horizontal

802.11ax40_Channel 159



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	11579.583	44.71	38.40	-29.67	53.44	74.00	20.56	Vertical
2	14319.166	39.86	40.24	-29.21	50.88	68.30	17.42	Vertical
3	17364.583	41.90	39.77	-25.36	56.31	68.30	11.99	Vertical
4	11580	36.61	38.40	-29.67	45.34	54.00	8.66	Vertical

7.5 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.

7.5.1 E.U.T. Operation

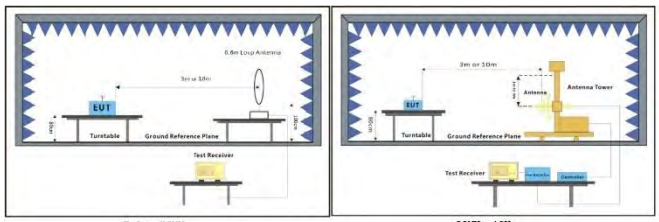
Operating Environment:
Temperature: 23 °C Humidity: 46 % RH Atmospheric Pressure: 1010 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description

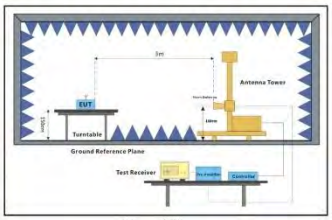
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-2A) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	03	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 found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	04	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.5.3 Test Setup Diagram



Below 30MHz

30MHz-1GHz



Above 1GHz

7.5.4 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.

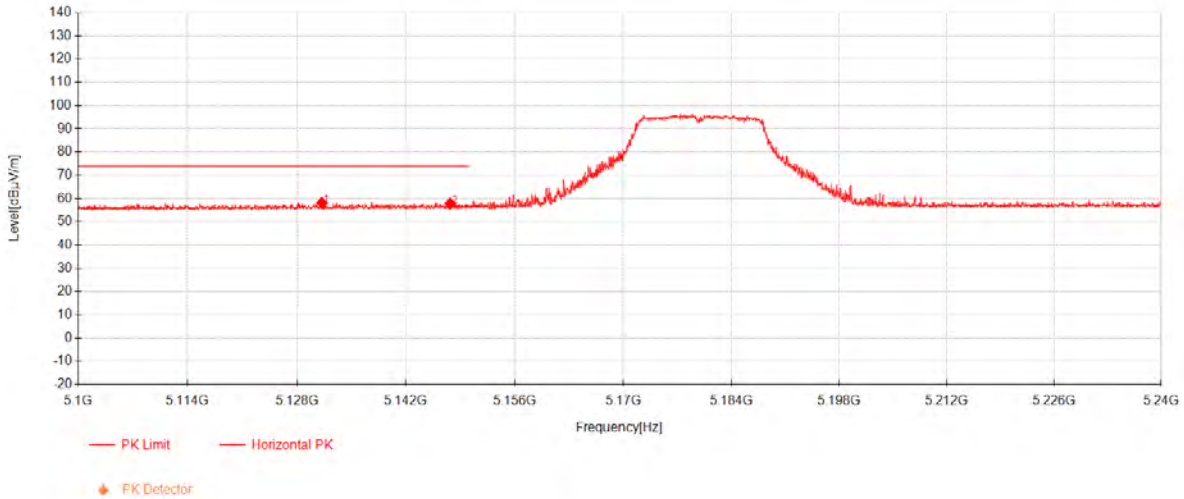
Remark:

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

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.

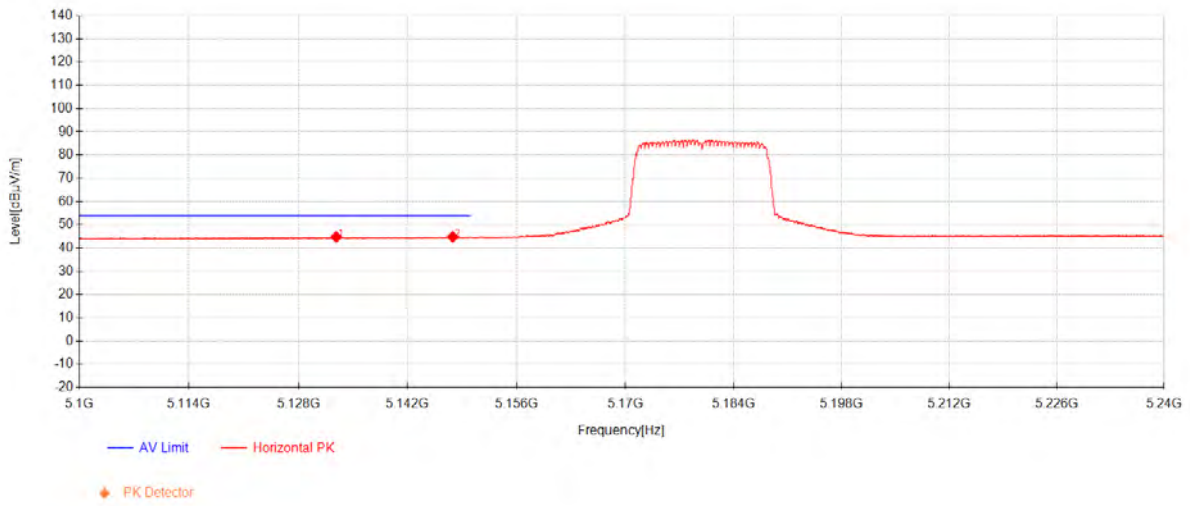
3. For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ⩾1/T (Duty cycle＜98%) or 10Hz (Duty cycle⩾98%) for Average detection (AV) at frequency above 1GHz.

802.11a_Channel 36



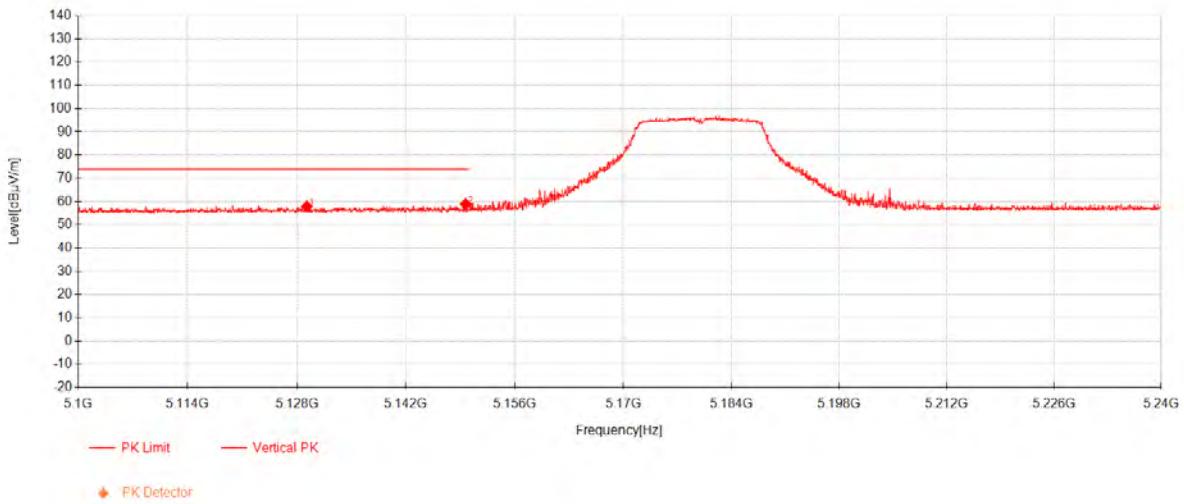
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5131.185	39.79	33.17	-14.87	58.09	74.00	15.91	Horizontal
2	5147.67	39.44	33.17	-14.80	57.81	74.00	16.19	Horizontal

802.11a_Channel 36



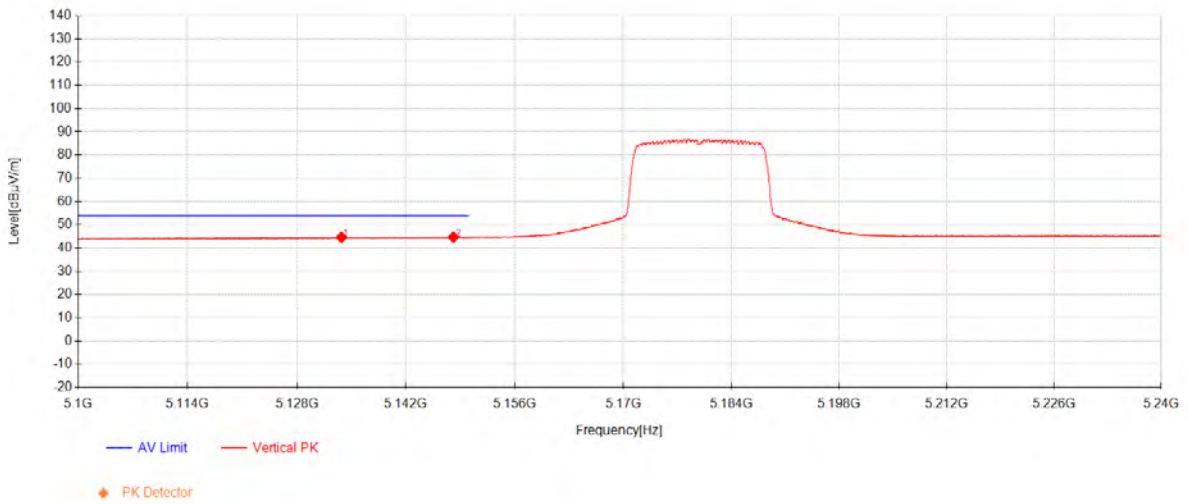
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5132.83	26.50	33.17	-14.87	44.81	54.00	9.19	Horizontal
2	5147.775	26.44	33.17	-14.80	44.81	54.00	9.19	Horizontal

802.11a_Channel 36



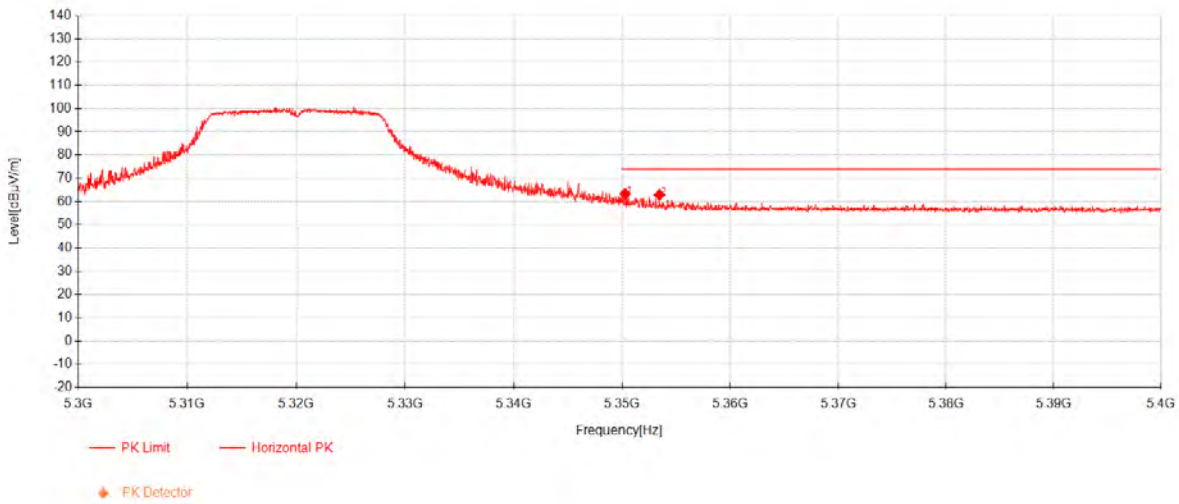
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5129.26	39.54	33.17	-14.88	57.83	74.00	16.17	Vertical
2	5149.665	40.46	33.17	-14.79	58.84	74.00	15.16	Vertical

802.11a_Channel 36



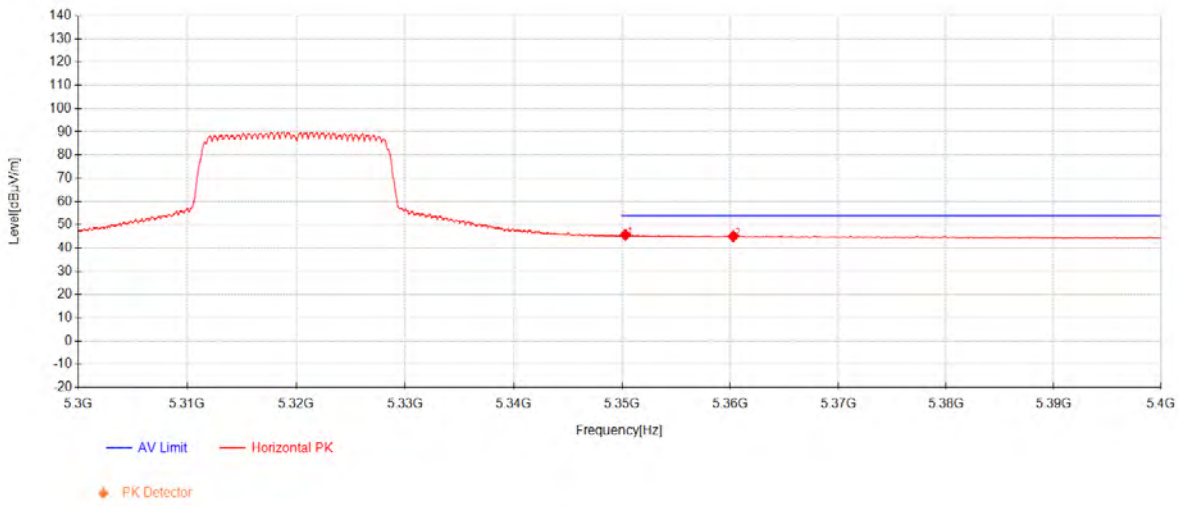
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5133.705	26.33	33.17	-14.86	44.64	54.00	9.36	Vertical
2	5148.09	26.34	33.17	-14.80	44.71	54.00	9.29	Vertical

802.11a_Channel 64



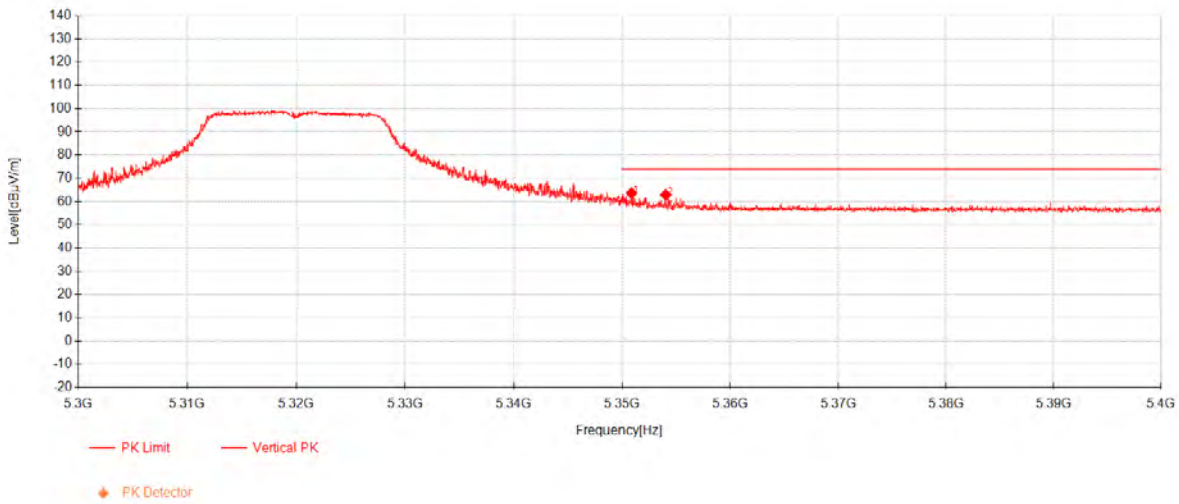
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5350.275	44.35	33.13	-14.10	63.38	74.00	10.62	Horizontal
2	5353.45	43.84	33.13	-14.10	62.87	74.00	11.13	Horizontal

802.11a_Channel 64



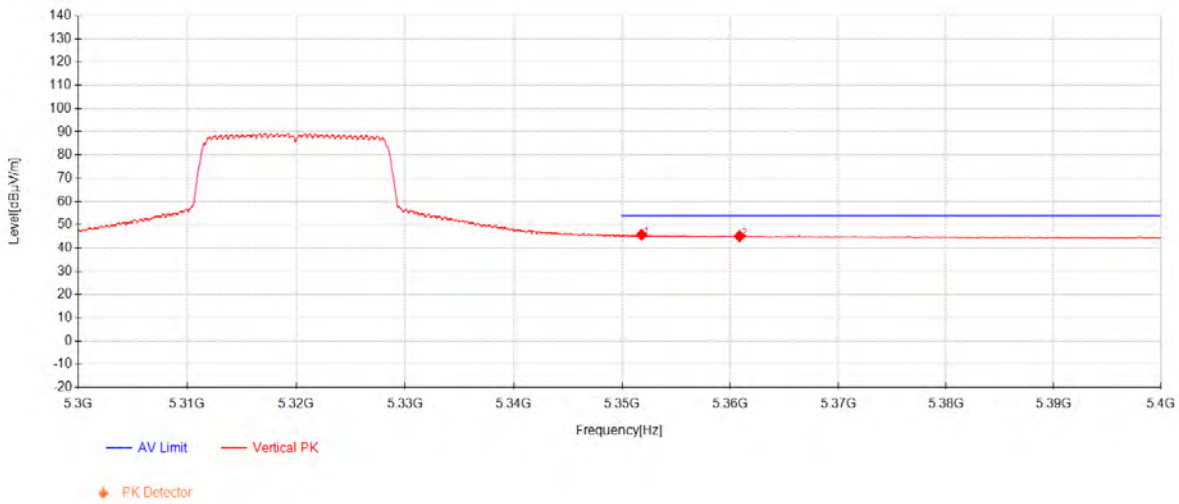
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5350.3	26.63	33.13	-14.10	45.66	54.00	8.34	Horizontal
2	5360.275	26.05	33.13	-14.12	45.06	54.00	8.94	Horizontal

802.11a_Channel 64



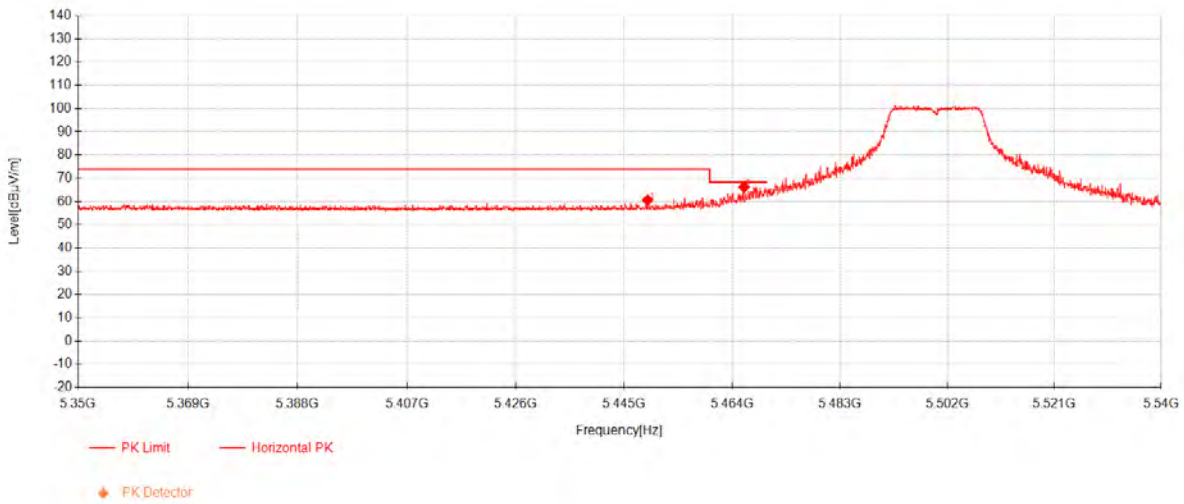
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5350.875	44.61	33.13	-14.10	63.64	74.00	10.36	Vertical
2	5354.025	43.87	33.13	-14.10	62.90	74.00	11.10	Vertical

802.11a_Channel 64



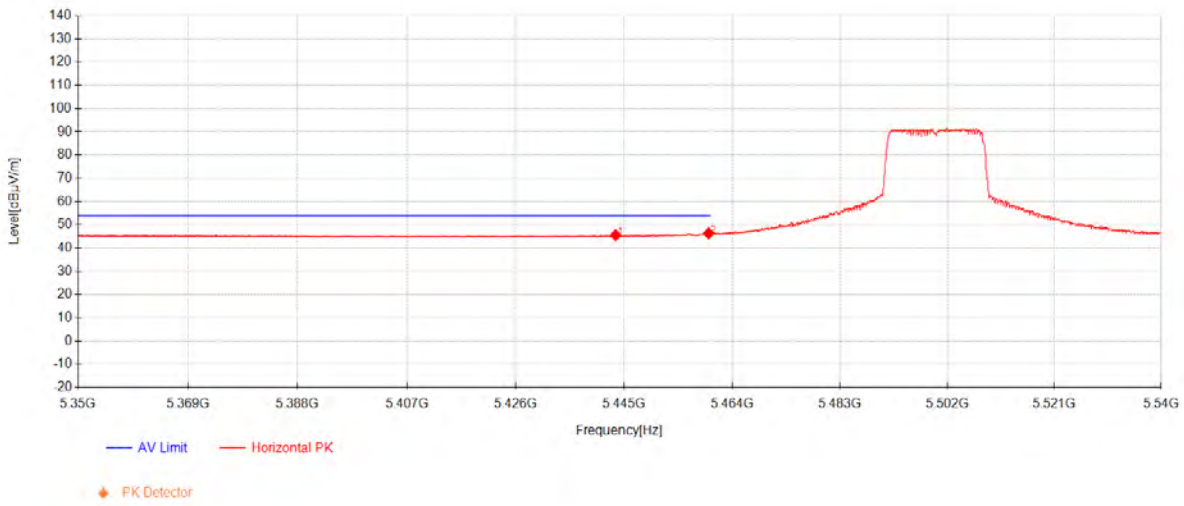
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5351.8	26.68	33.13	-14.10	45.71	54.00	8.29	Vertical
2	5360.85	26.09	33.13	-14.12	45.10	54.00	8.90	Vertical

802.11a_Channel 100



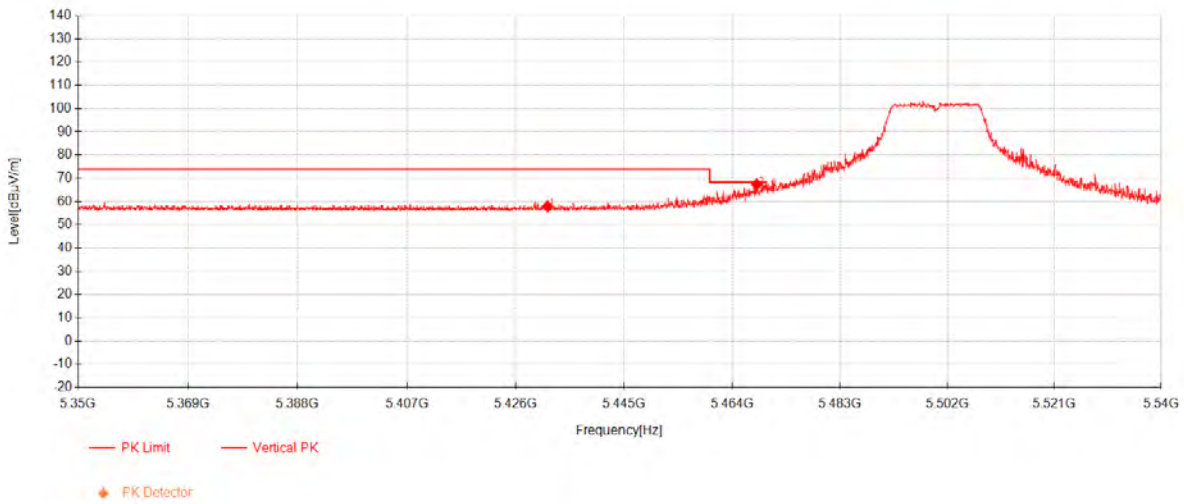
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5449.085	41.51	33.11	-14.03	60.59	74.00	13.41	Horizontal
2	5466.0425	47.09	33.11	-13.98	66.22	68.30	2.08	Horizontal

802.11a_Channel 100



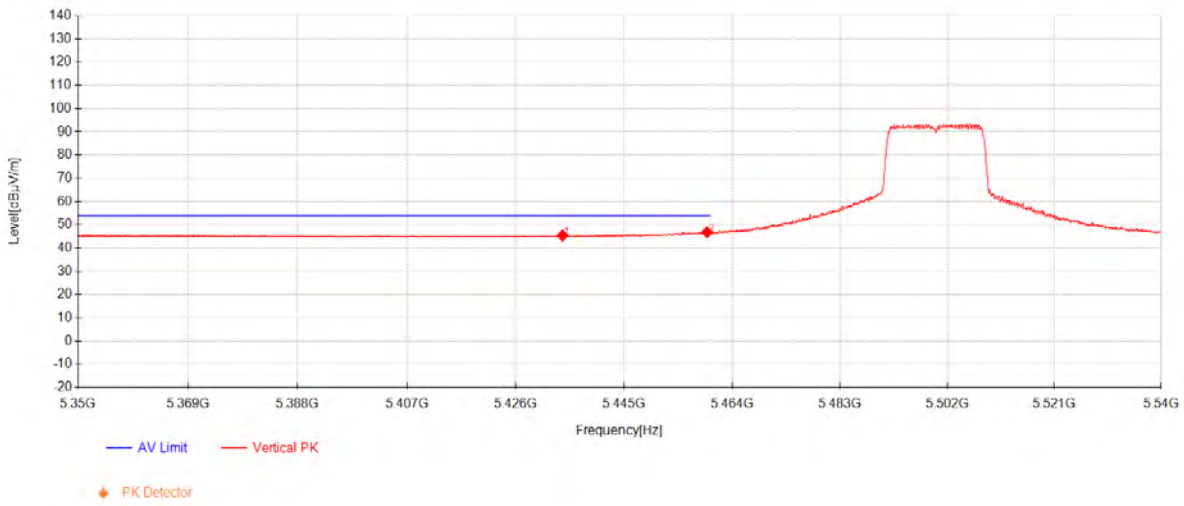
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5443.48	26.47	33.11	-14.05	45.53	54.00	8.47	Horizontal
2	5459.82	27.22	33.11	-14.00	46.33	54.00	7.67	Horizontal

802.11a_Channel 100



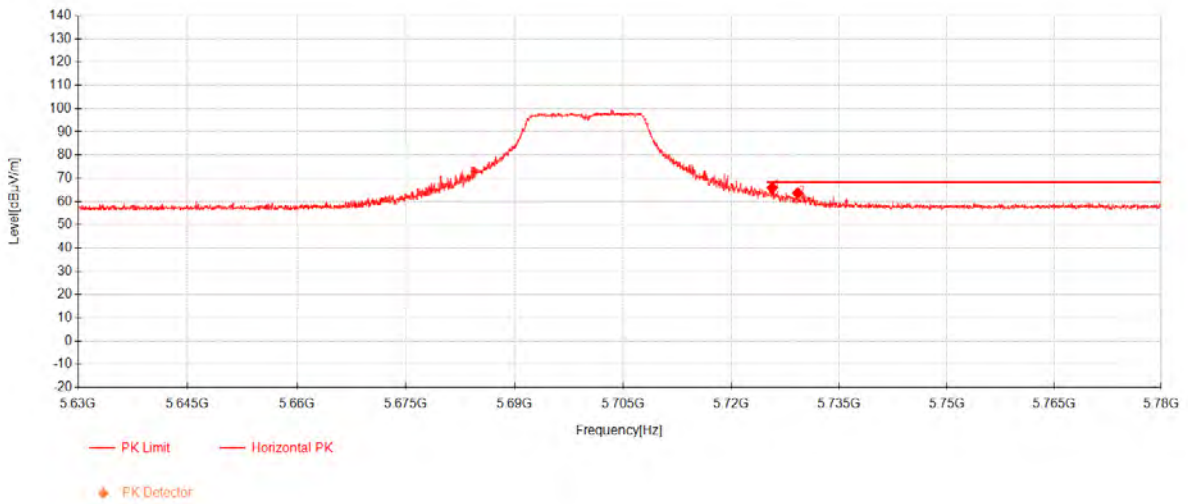
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	5431.5575	38.91	33.11	-14.09	57.93	74.00	16.07	Vertical
2	5468.275	48.21	33.11	-13.97	67.35	68.30	0.95	Vertical

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	5434.17	26.38	33.11	-14.08	45.41	54.00	8.59	Vertical
2	5459.535	27.70	33.11	-14.00	46.81	54.00	7.19	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	5725.7	45.69	33.87	-13.62	65.94	68.30	2.36	Horizontal
2	5729.225	43.41	33.88	-13.61	63.68	68.30	4.62	Horizontal