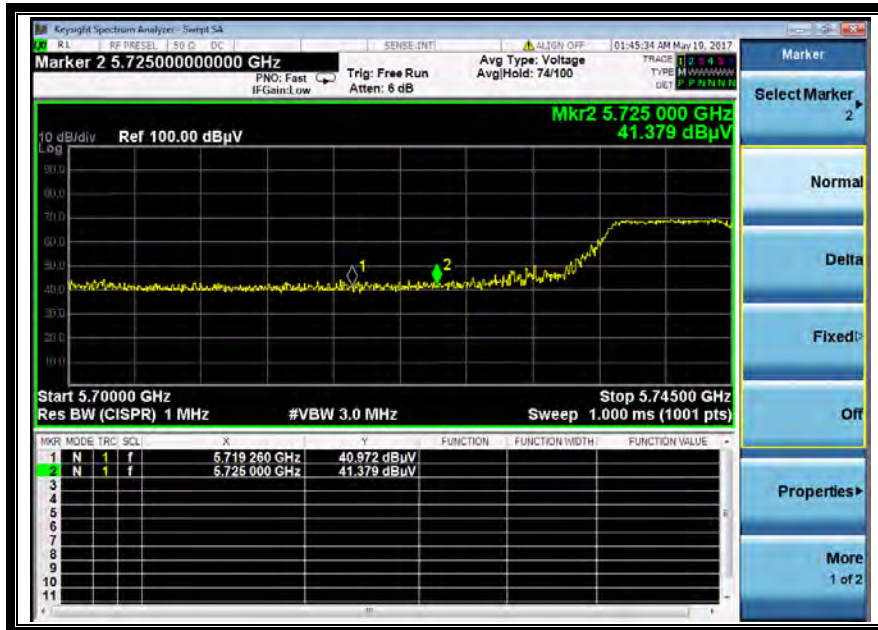


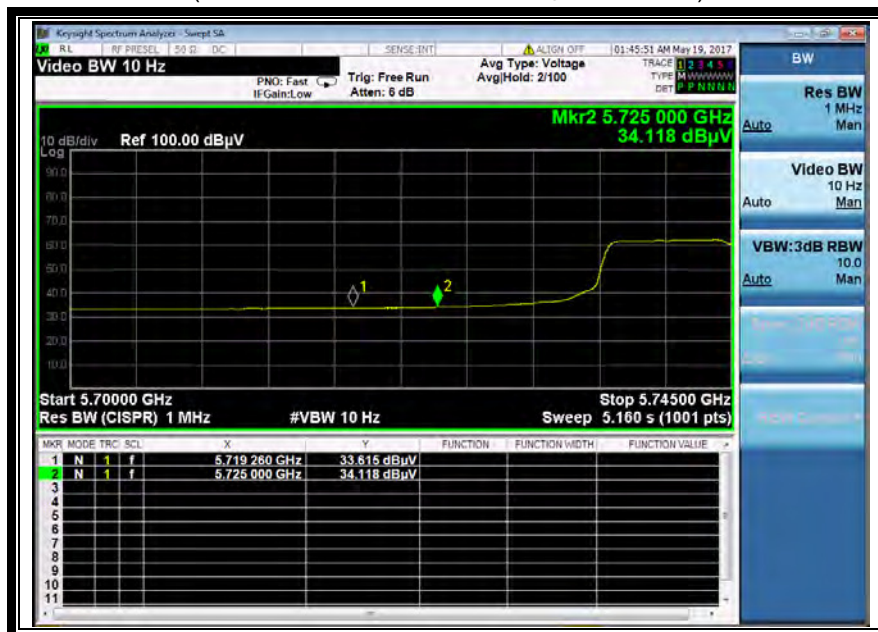


Plots for Channel = 149

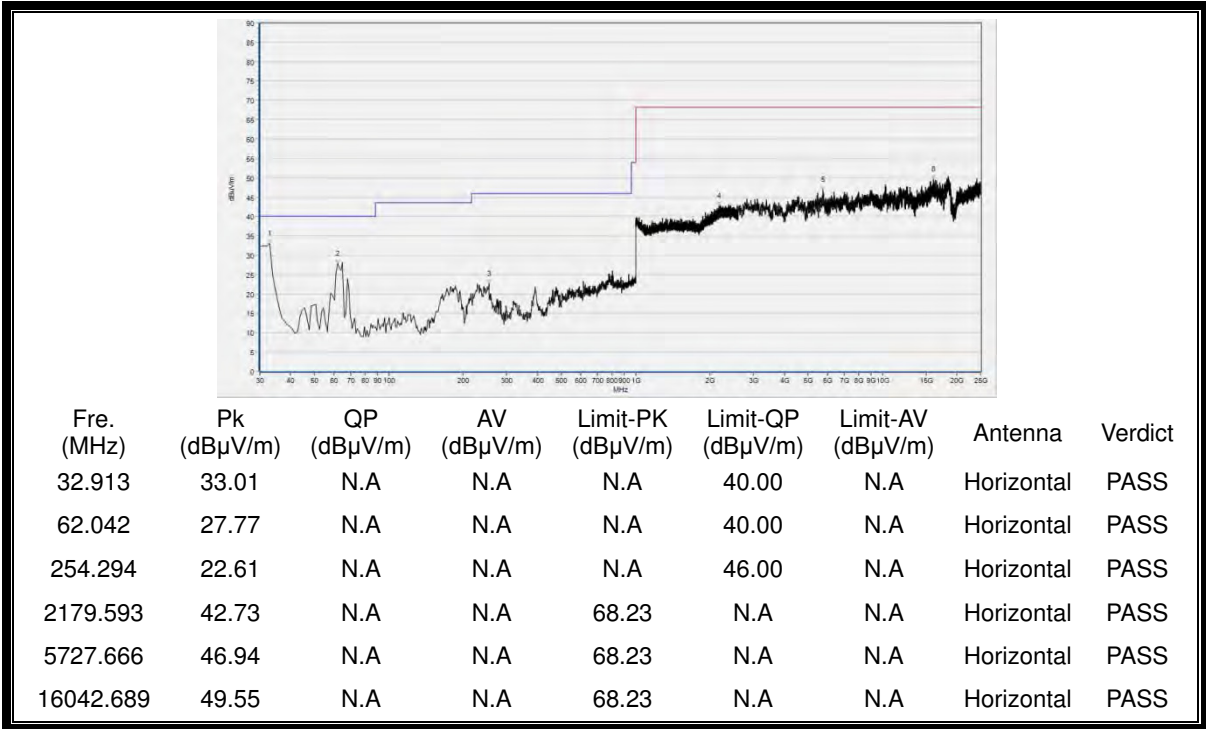
Channel	Frequency (MHz)	Antenna	Receiver Reading	A <sub>T</sub> (dB)	A <sub>Factor</sub> (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		Horiz./ Vert.	U <sub>R</sub> (dBuV)					
149	5719.26	Horizontal	40.97	-50.65	32.11	22.43	78.2	Pass
149	5719.26	Vertical	33.62	-50.65	32.11	15.08	78.2	Pass



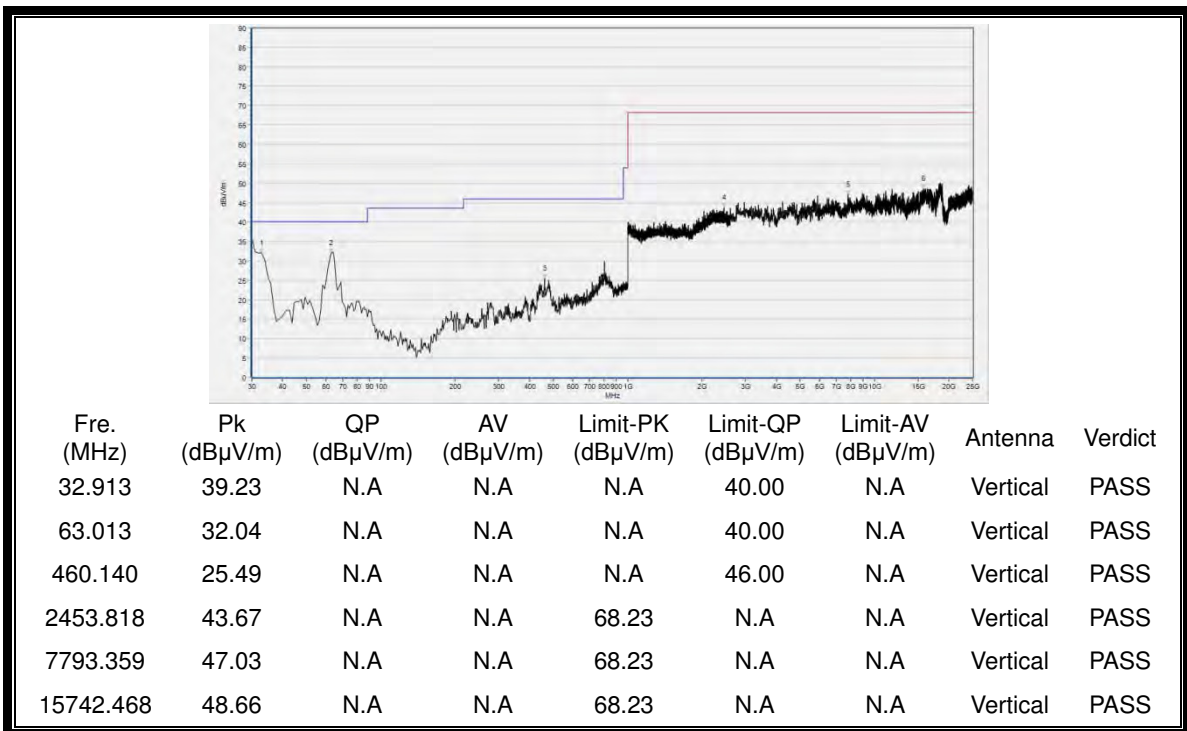
(Channel = 149 Horizontal @ 802.11ac)



(Channel = 149 Vertical @ 802.11ac)



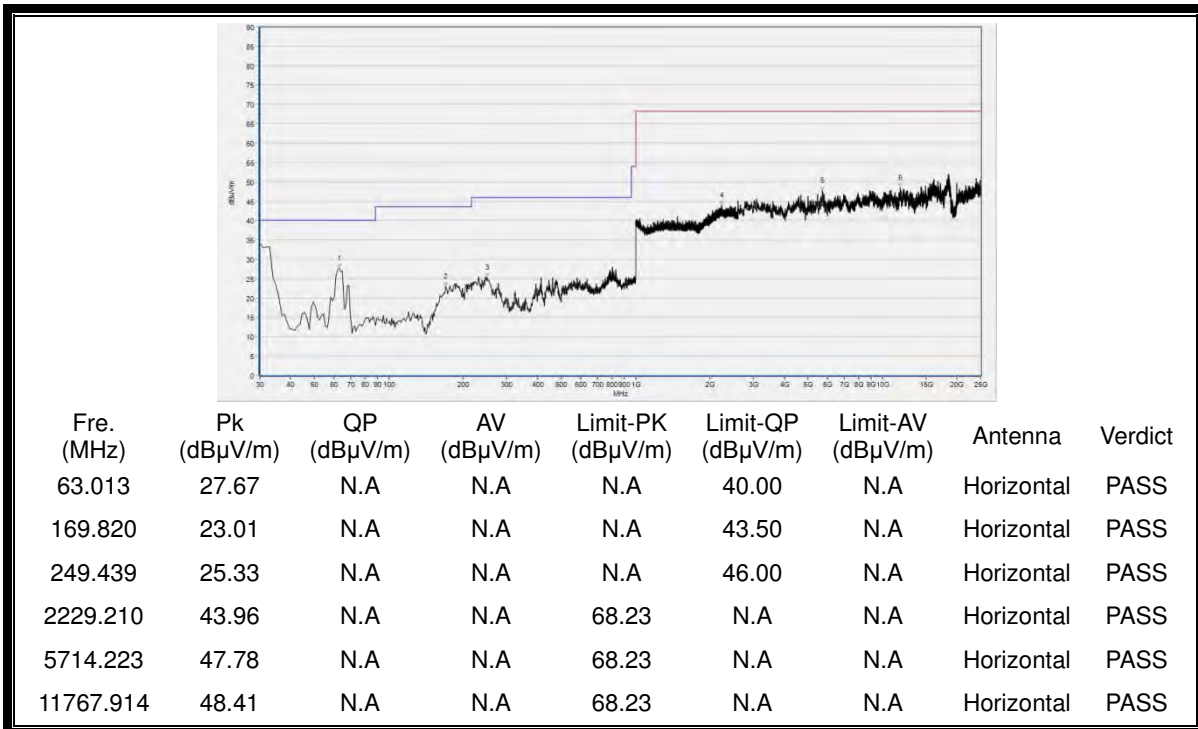
(Antenna Horizontal, 30MHz to 40GHz)



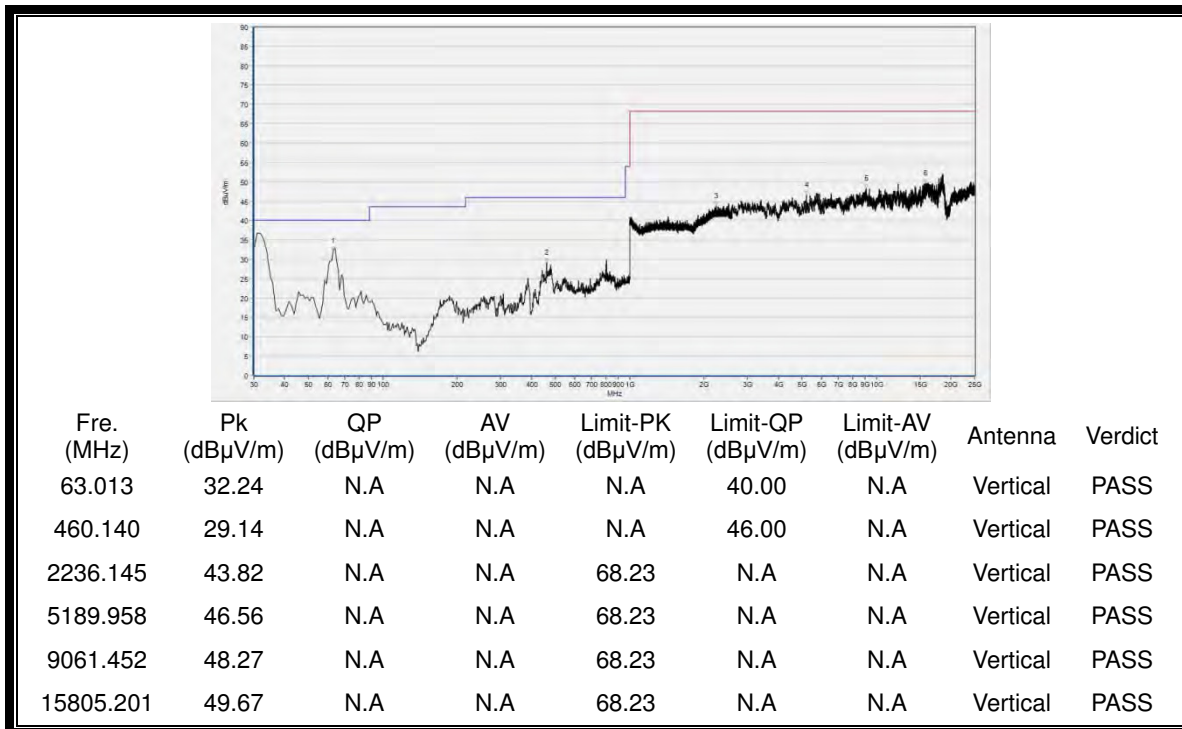
(Antenna Vertical, 30MHz to 40GHz)



Plot for Channel = 157



(Antenna Horizontal, 30MHz to 25GHz)



(Antenna Vertical, 30MHz to 25GHz)



Plot for Channel = 165

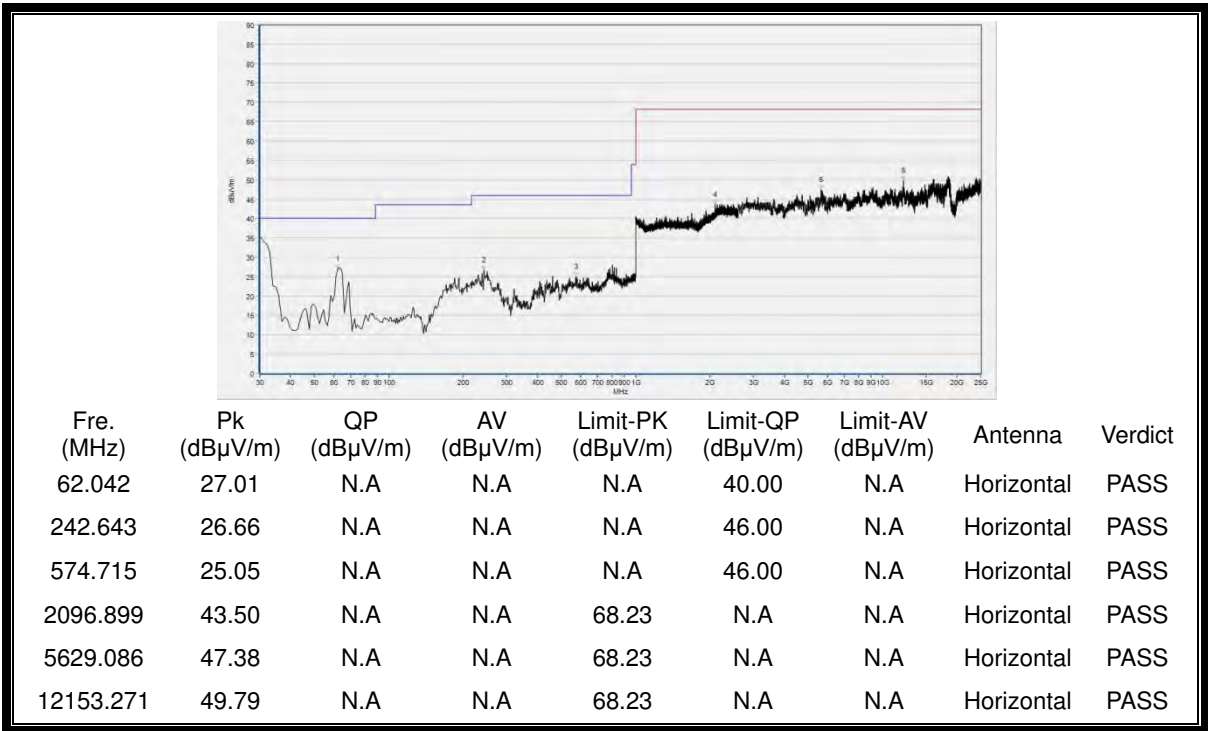
Channel	Frequency (MHz)	Antenna	Receiver Reading	A <sub>T</sub> (dB)	A <sub>Factor</sub> (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		Horiz./ Vert.	U <sub>R</sub> (dBuV)					
165	5860.00	Horizontal	41.25	-50.65	32.11	22.71	78.2	Pass
165	5860.00	Vertical	33.51	-50.65	32.11	14.97	78.2	Pass



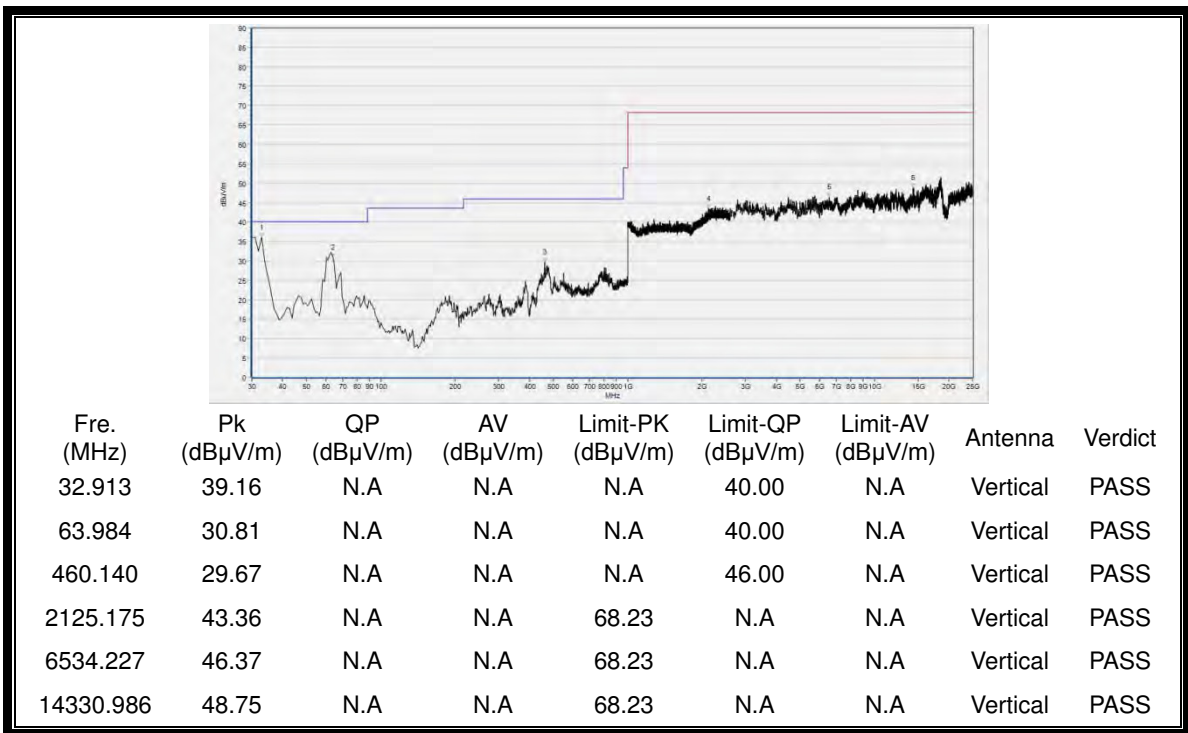
(Channel = 165 Horizontal @ 802.11ac)



(Channel = 165 Vertical @ 802.11ac)



(Antenna Horizontal, 30MHz to 40GHz)



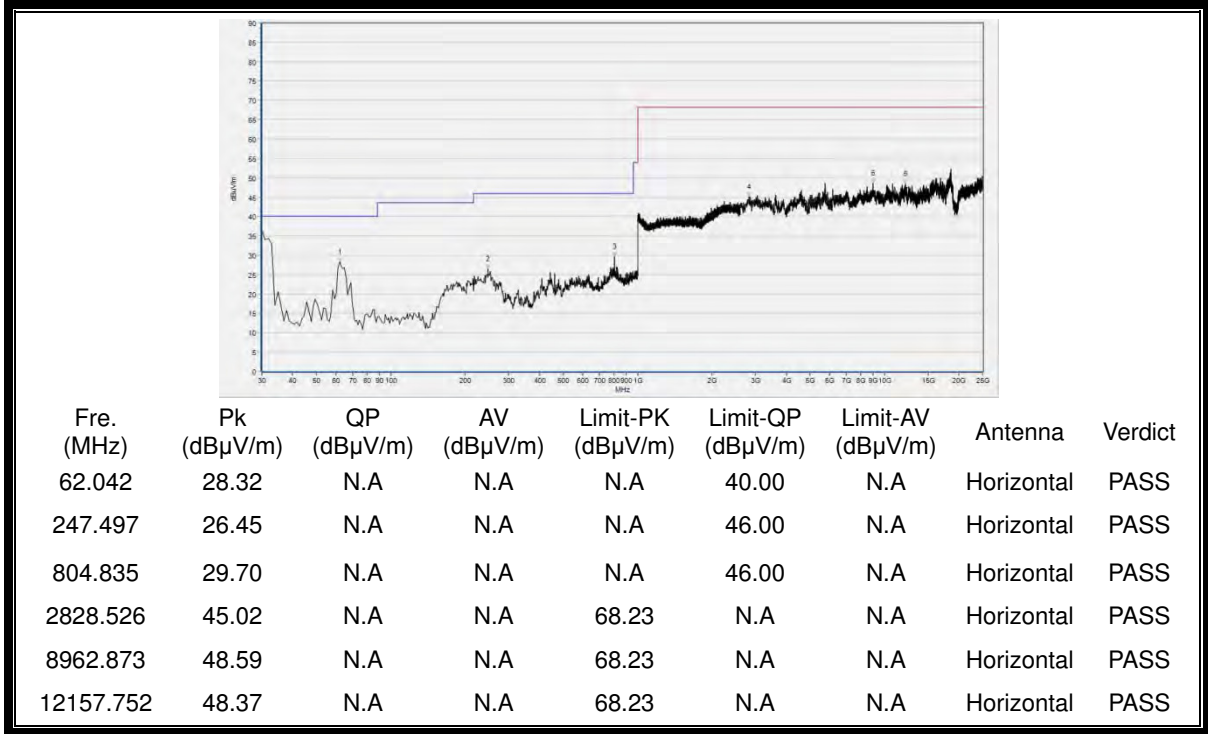
(Antenna Vertical, 30MHz to 40GHz)



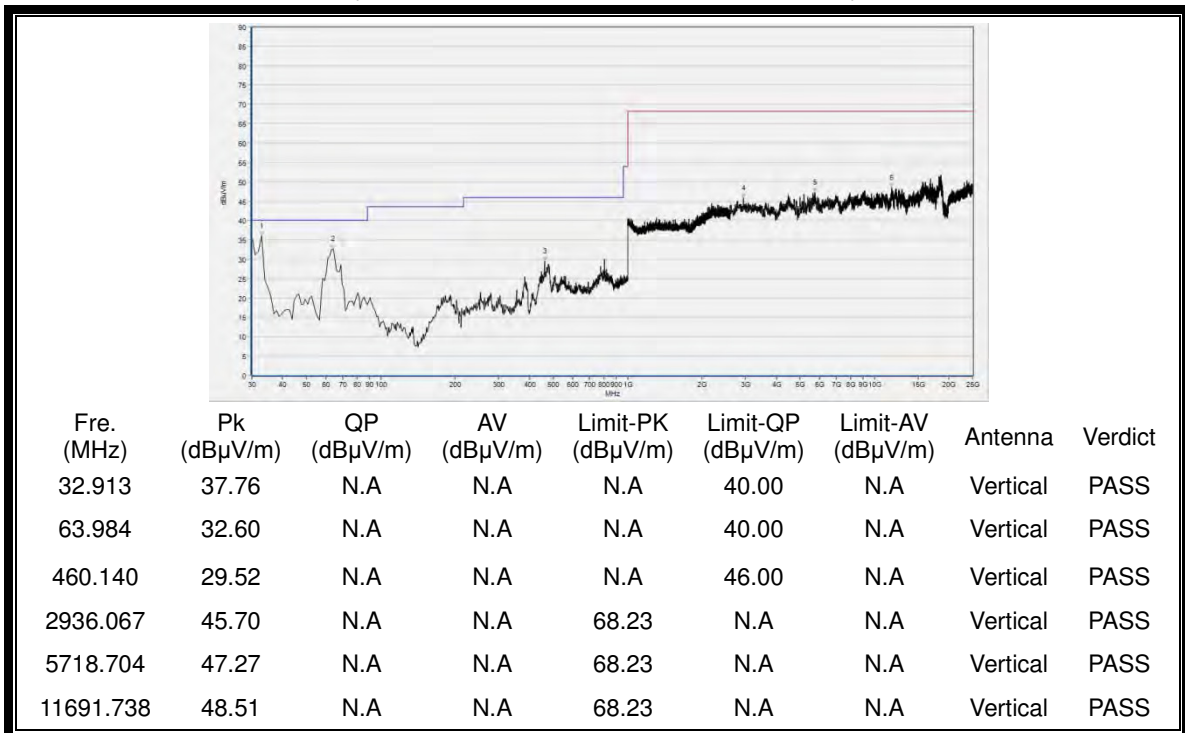
2.9.3.2 802.11ac-40MHz Test mode

A. Test Plots for the Whole Measurement Frequency Range:

Plots for Channel = 38



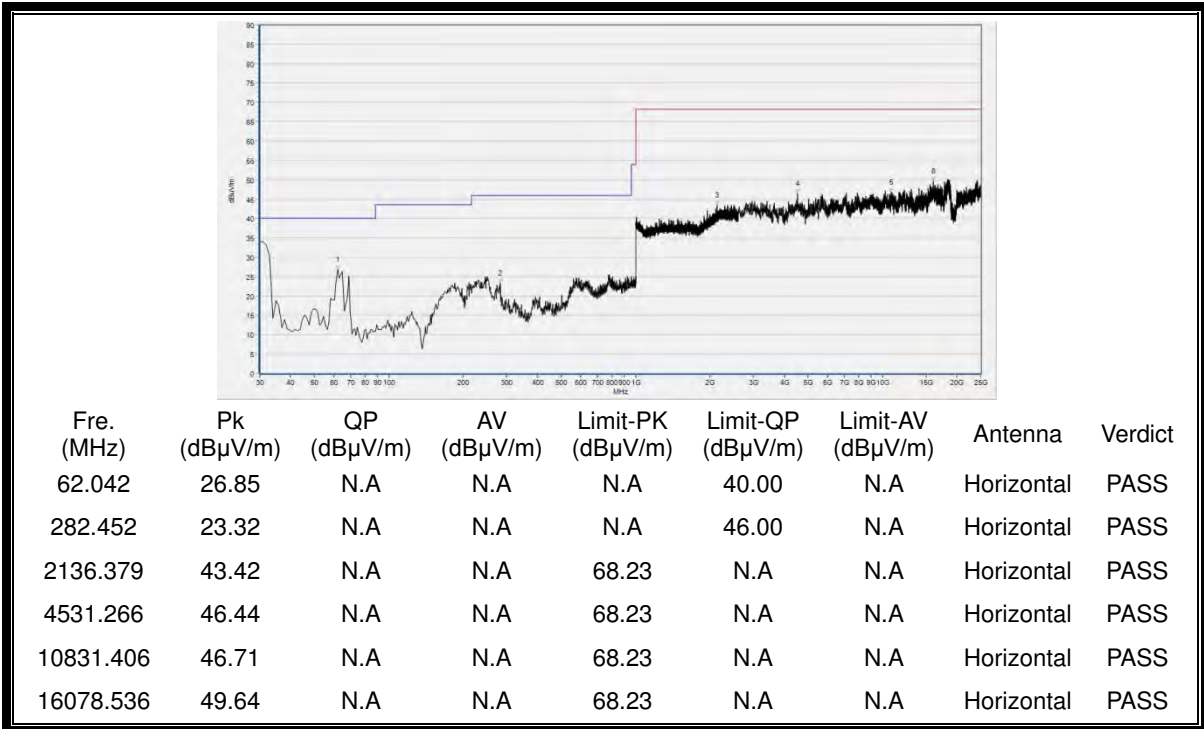
(Antenna Horizontal, 30MHz to 40GHz)



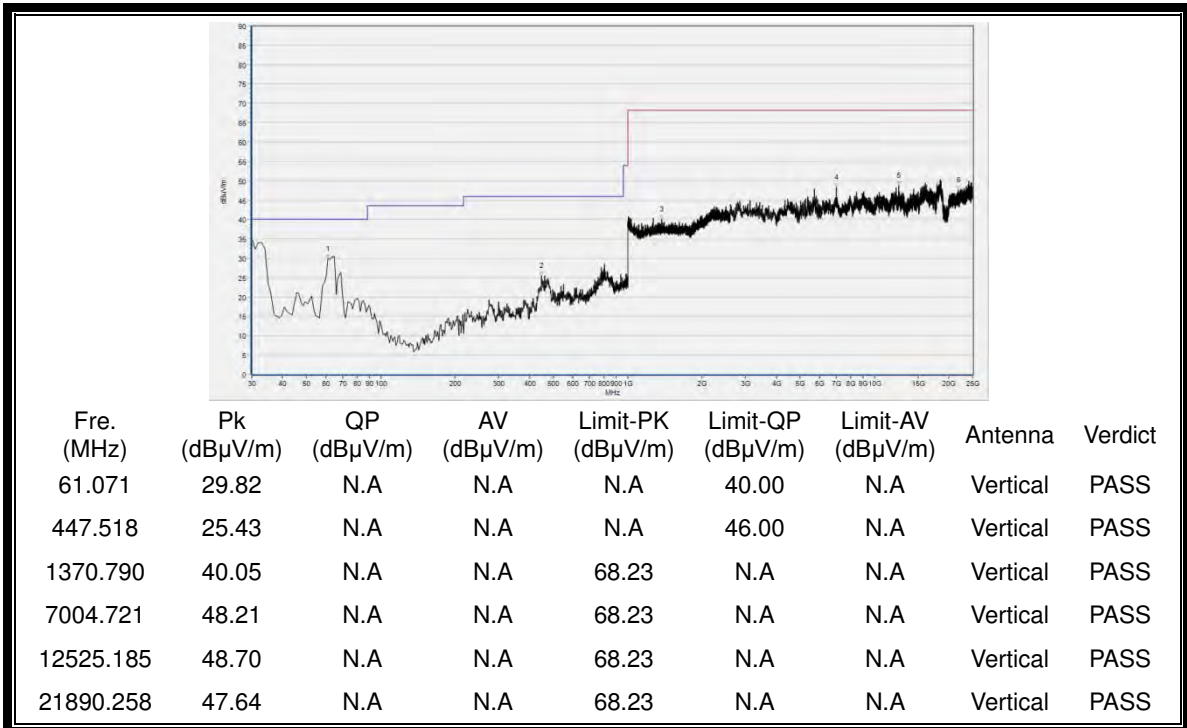
(Antenna Vertical, 30MHz to 40GHz)



Plot for Channel = 46



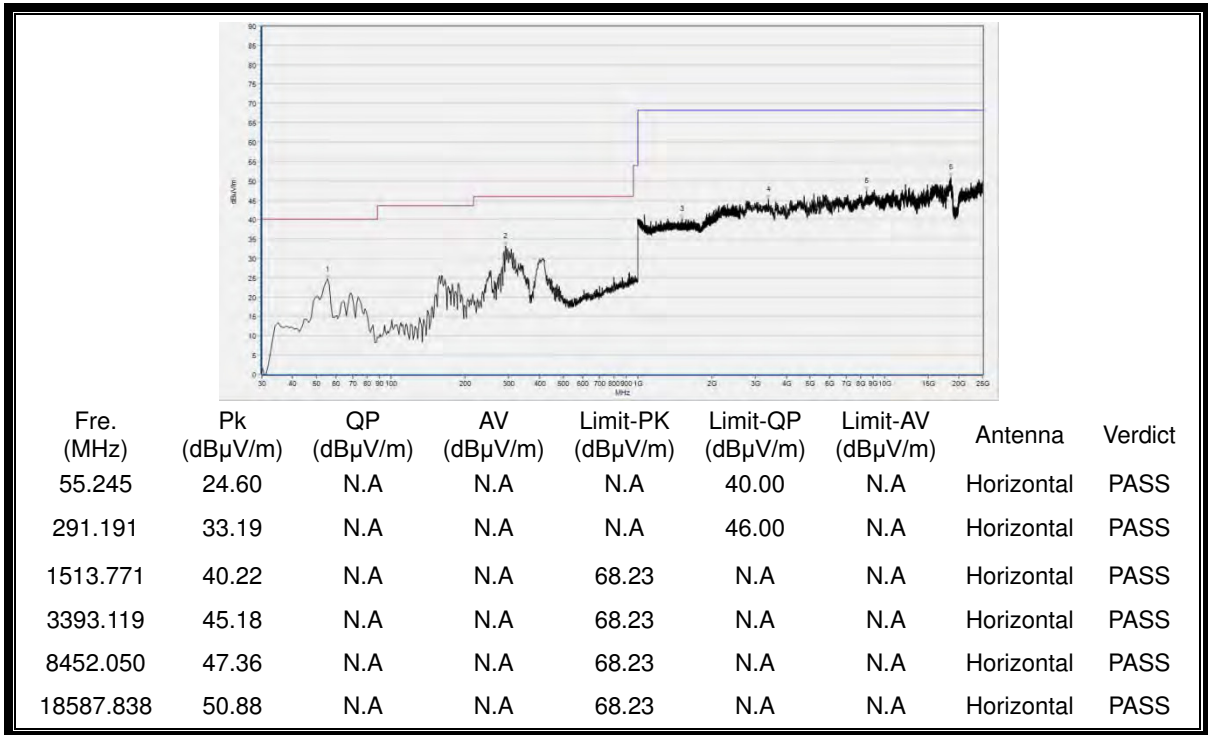
(Antenna Horizontal, 30MHz to 25GHz)



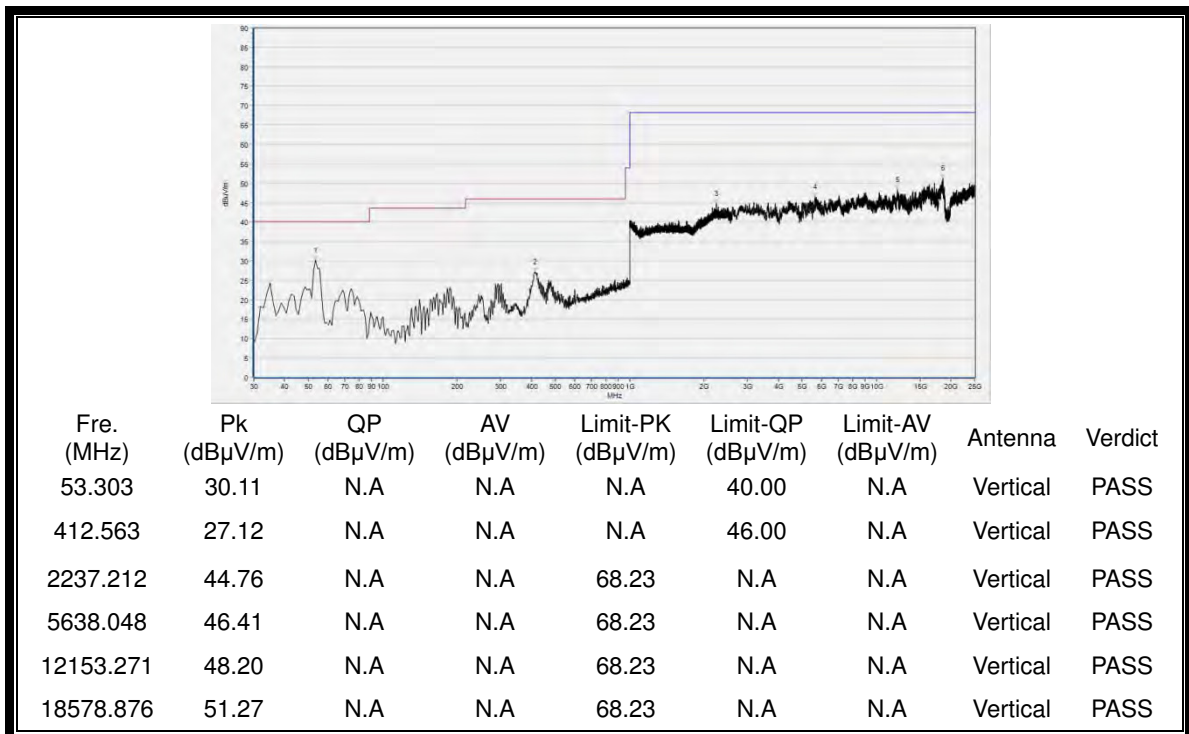
(Antenna Vertical, 30MHz to 40GHz)



Plots for Channel = 54



(Antenna Horizontal, 30MHz to 40GHz)

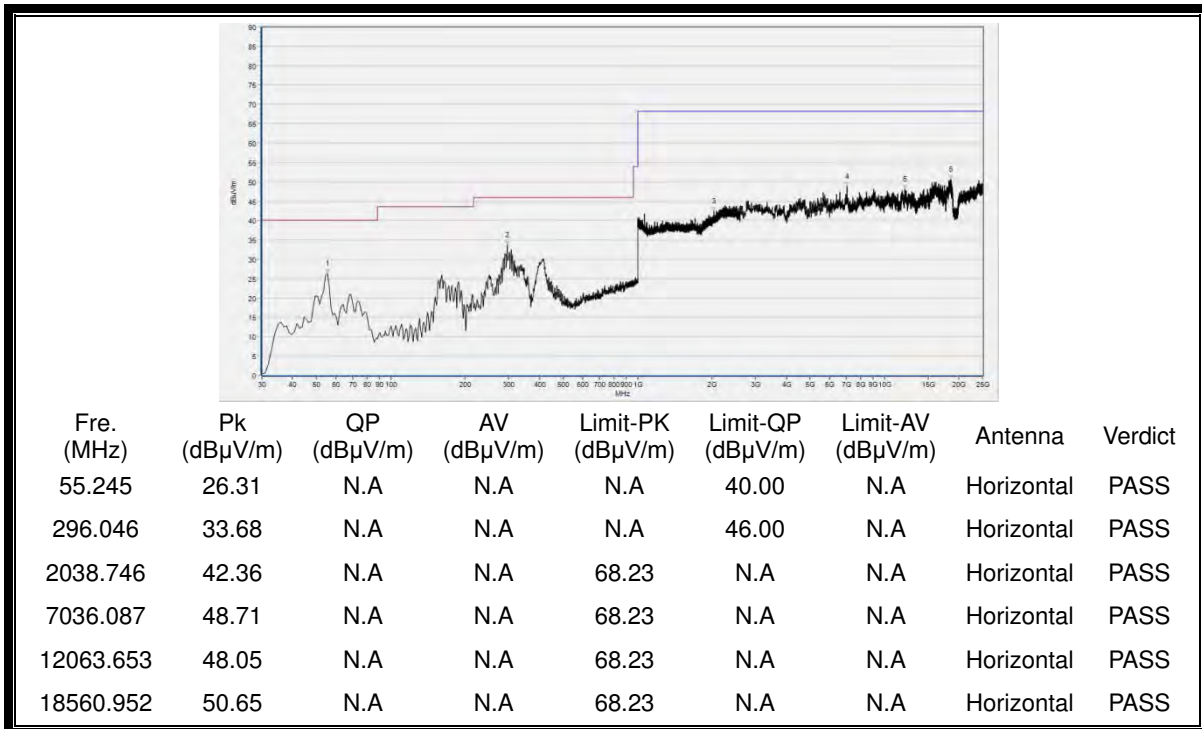


(Antenna Vertical, 30MHz to 40GHz)

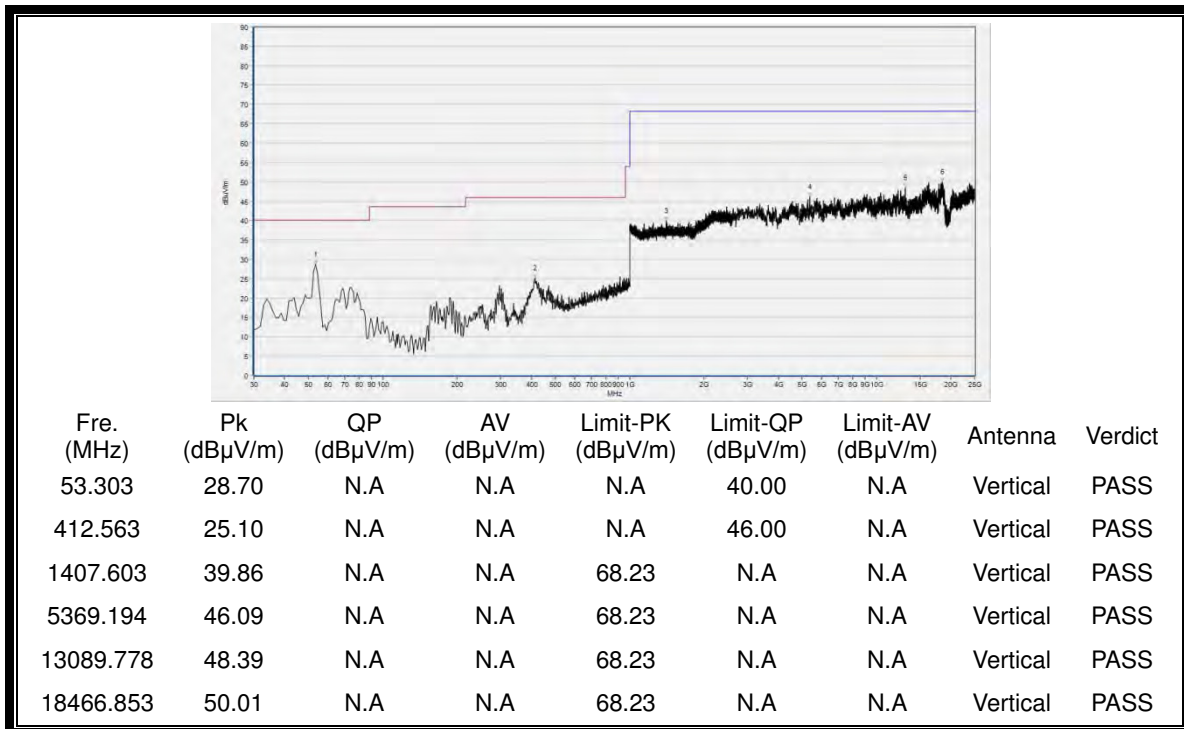




Plot for Channel = 62



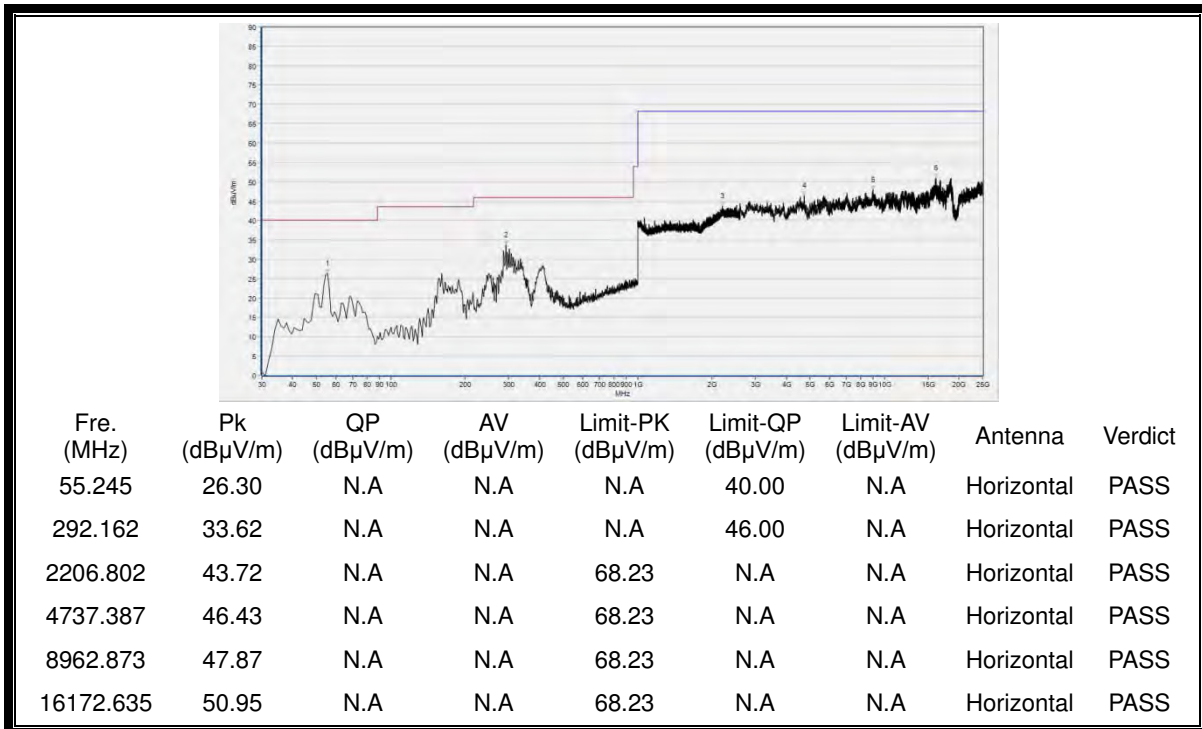
(Antenna Horizontal, 30MHz to 25GHz)



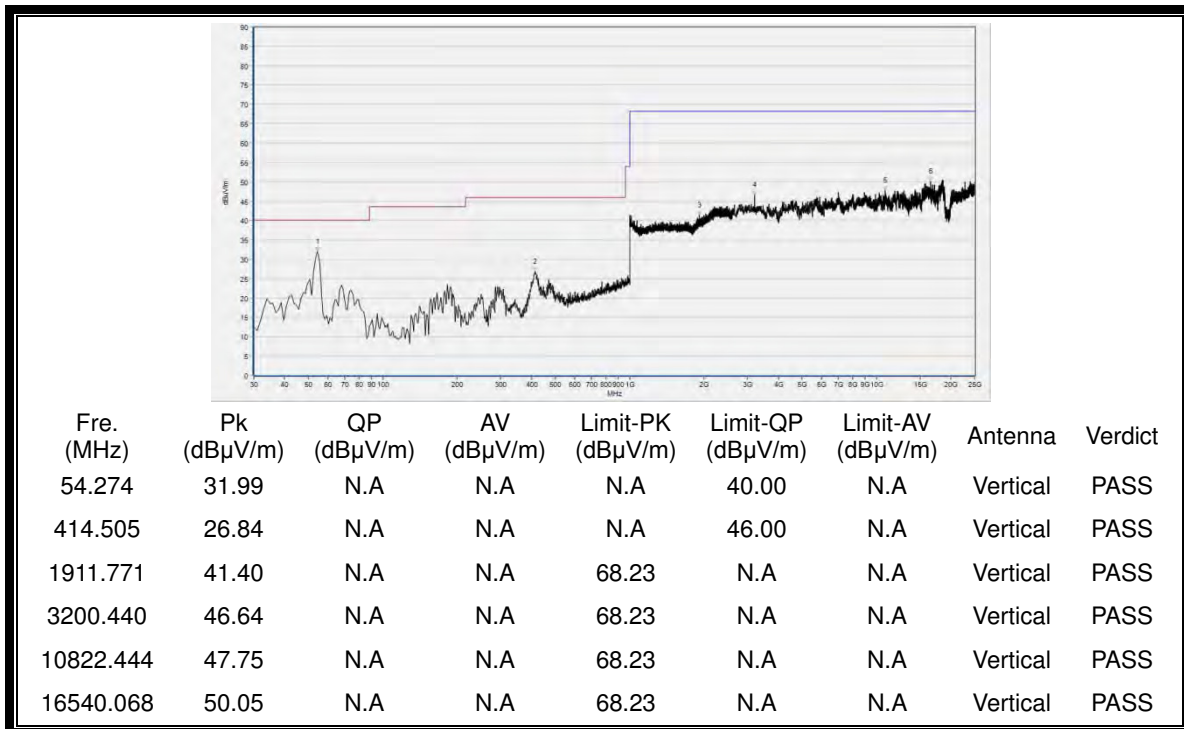
(Antenna Vertical, 30MHz to 40GHz)



Plot for Channel = 102



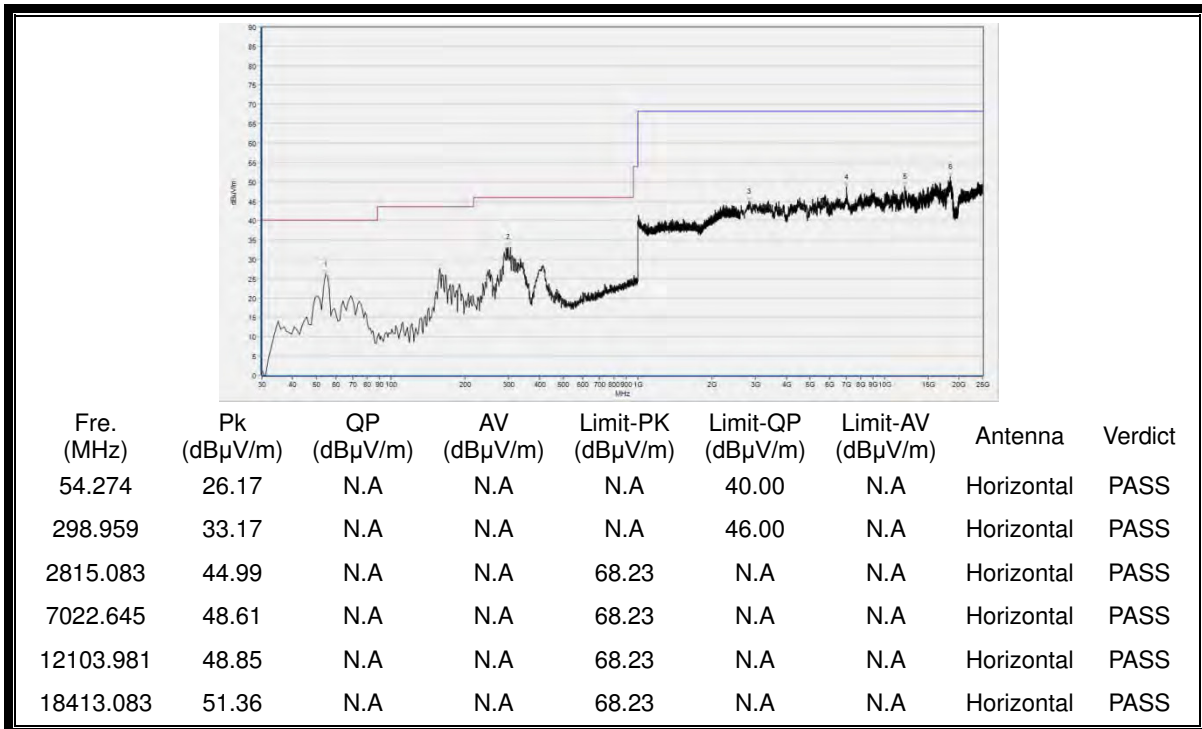
(Antenna Horizontal, 30MHz to 25GHz)



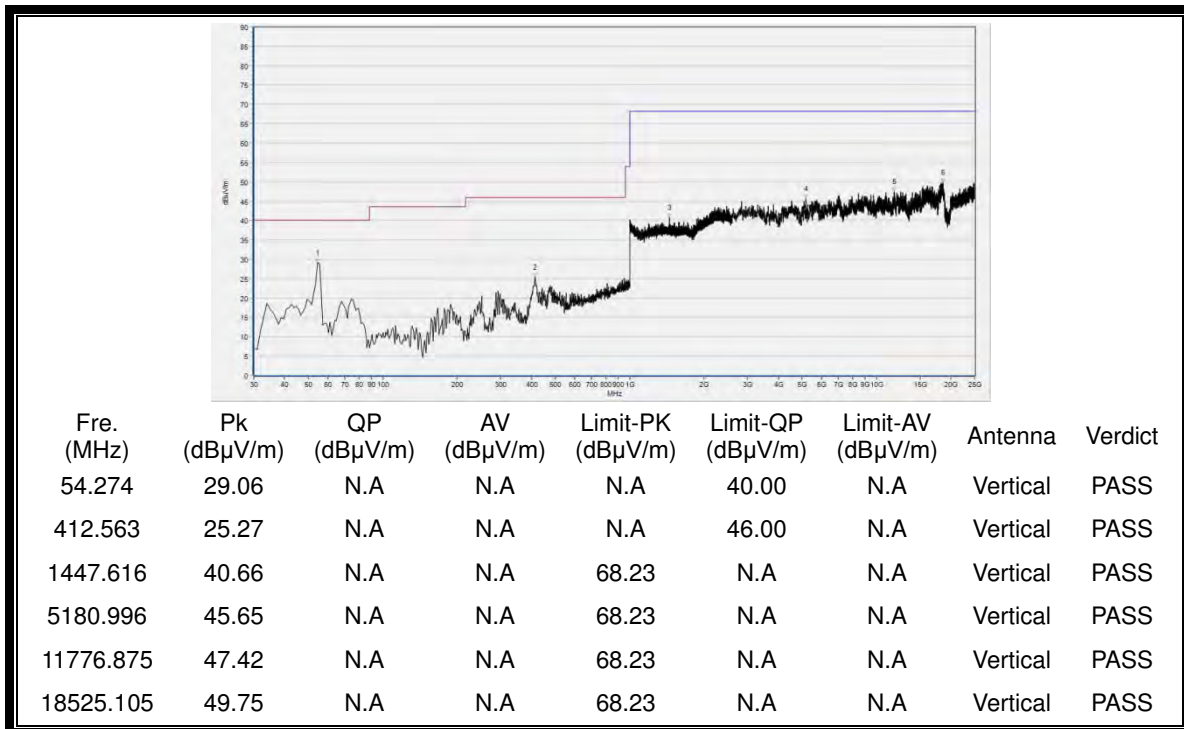
(Antenna Vertical, 30MHz to 40GHz)



Plot for Channel = 126



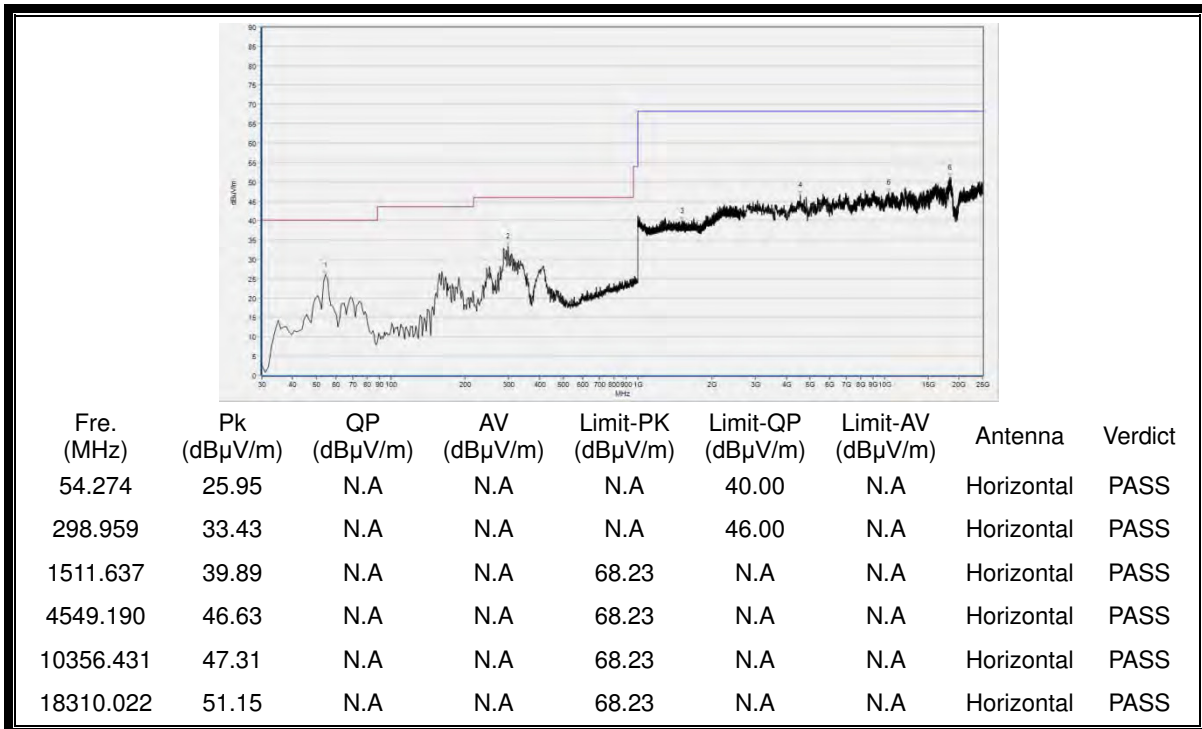
(Antenna Horizontal, 30MHz to 25GHz)



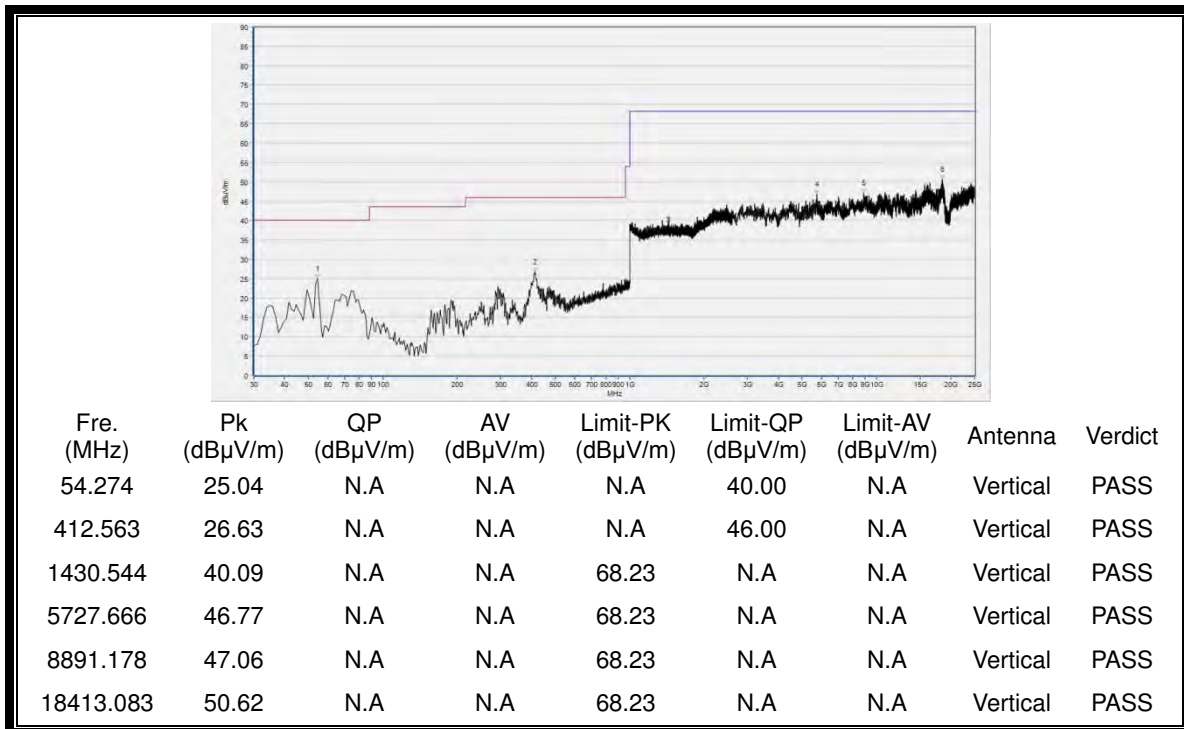
(Antenna Vertical, 30MHz to 40GHz)



Plot for Channel = 142



(Antenna Horizontal, 30MHz to 25GHz)

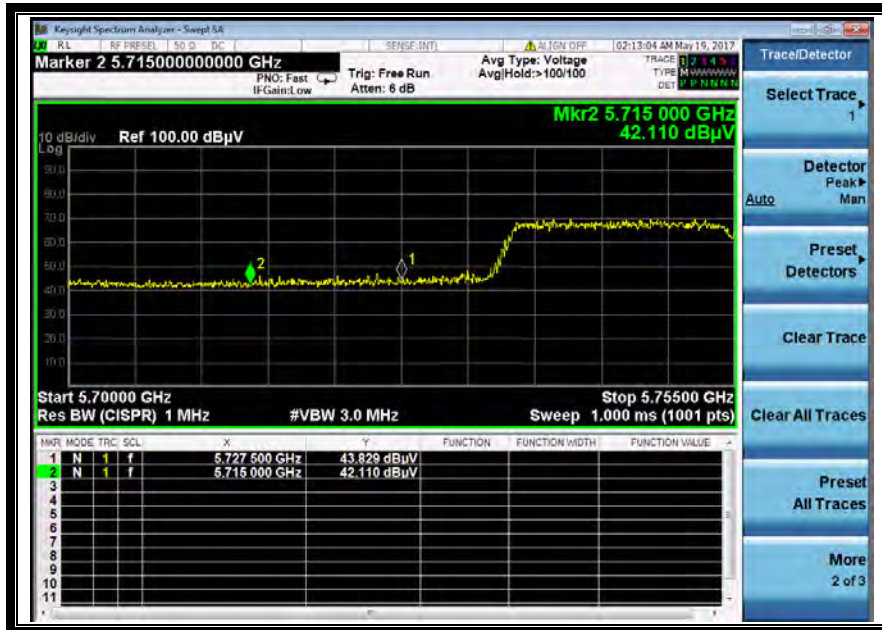


(Antenna Vertical, 30MHz to 40GHz)



Plot for Channel = 151

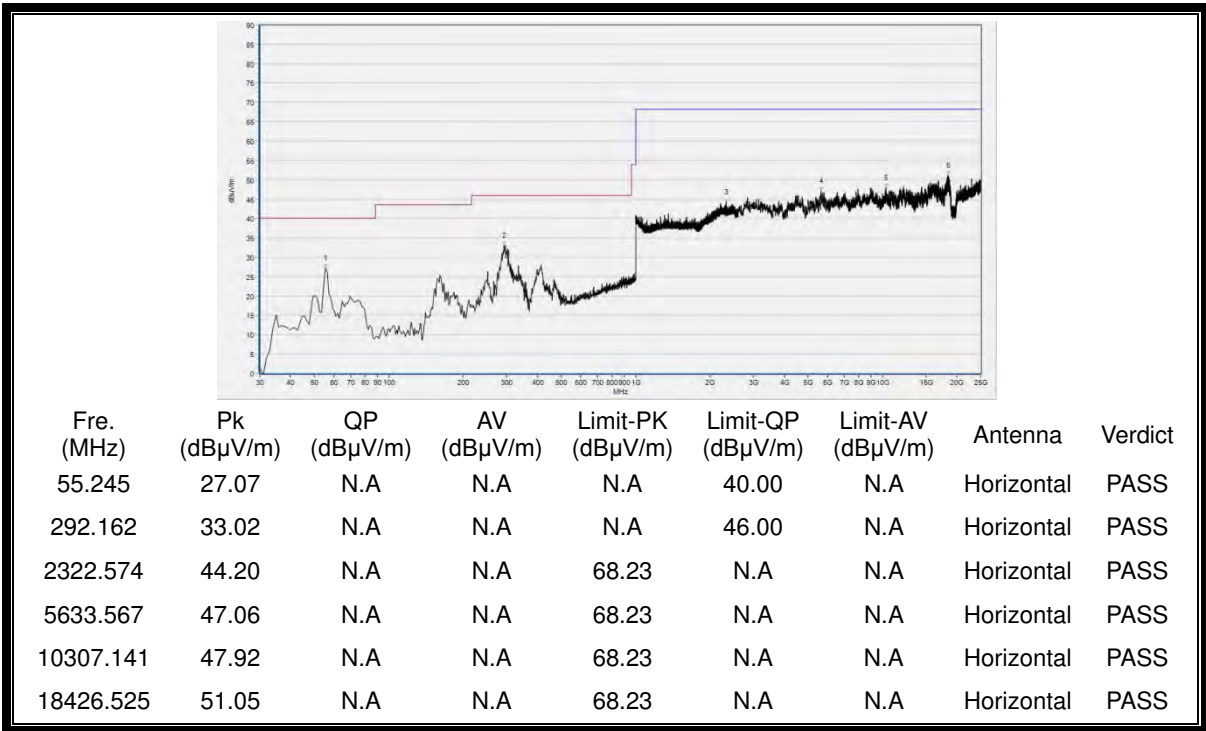
Channel	Frequency (MHz)	Antenna	Receiver Reading	A <sub>T</sub> (dB)	A <sub>Factor</sub> (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		Horiz./ Vert.	U <sub>R</sub> (dBuV)					
151	5715.00	Horizontal	42.11	-50.65	32.11	23.57	78.2	Pass
151	5715.00	Vertical	33.83	-50.65	32.11	15.29	78.2	Pass



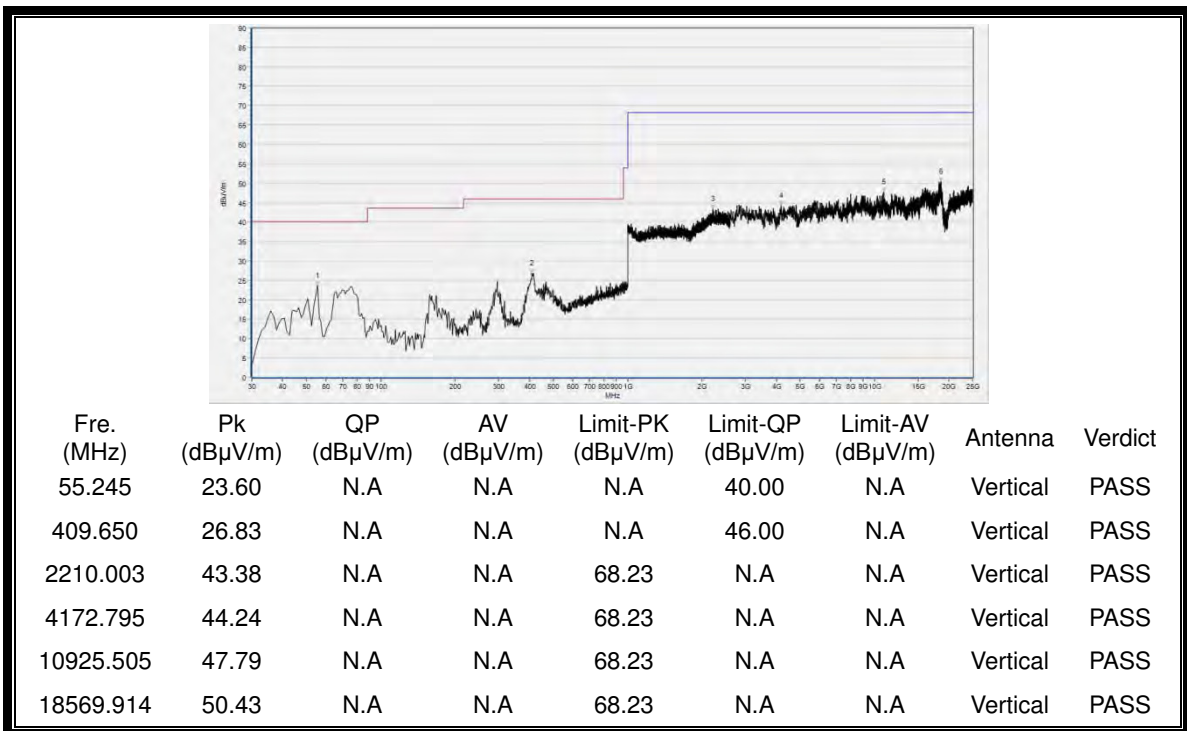
(Channel = 151 Horizontal @ 802.11ac)



(Channel = 151 Vertical @ 802.11ac)



(Antenna Horizontal, 30MHz to 40GHz)



(Antenna Vertical, 30MHz to 40GHz)

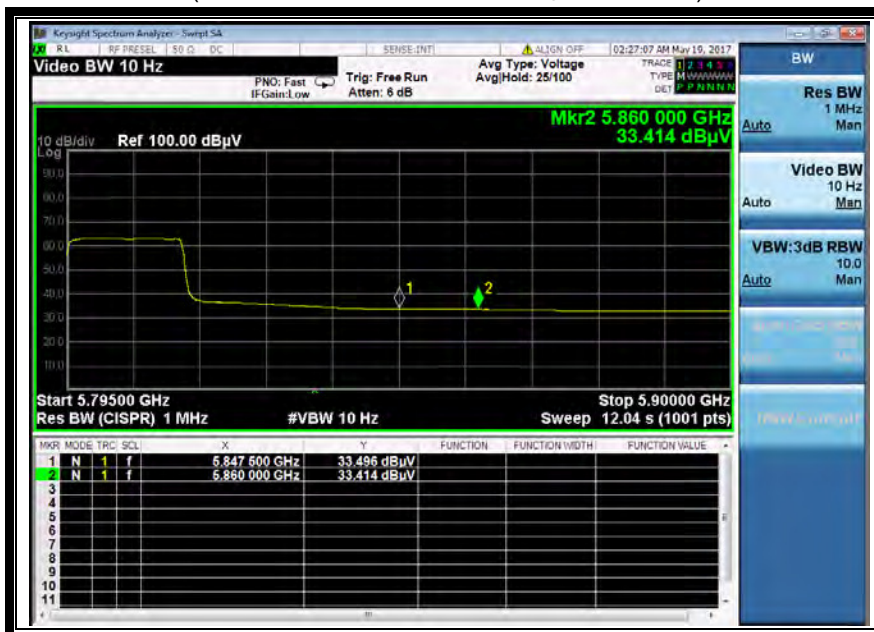


Plots for Channel = 159

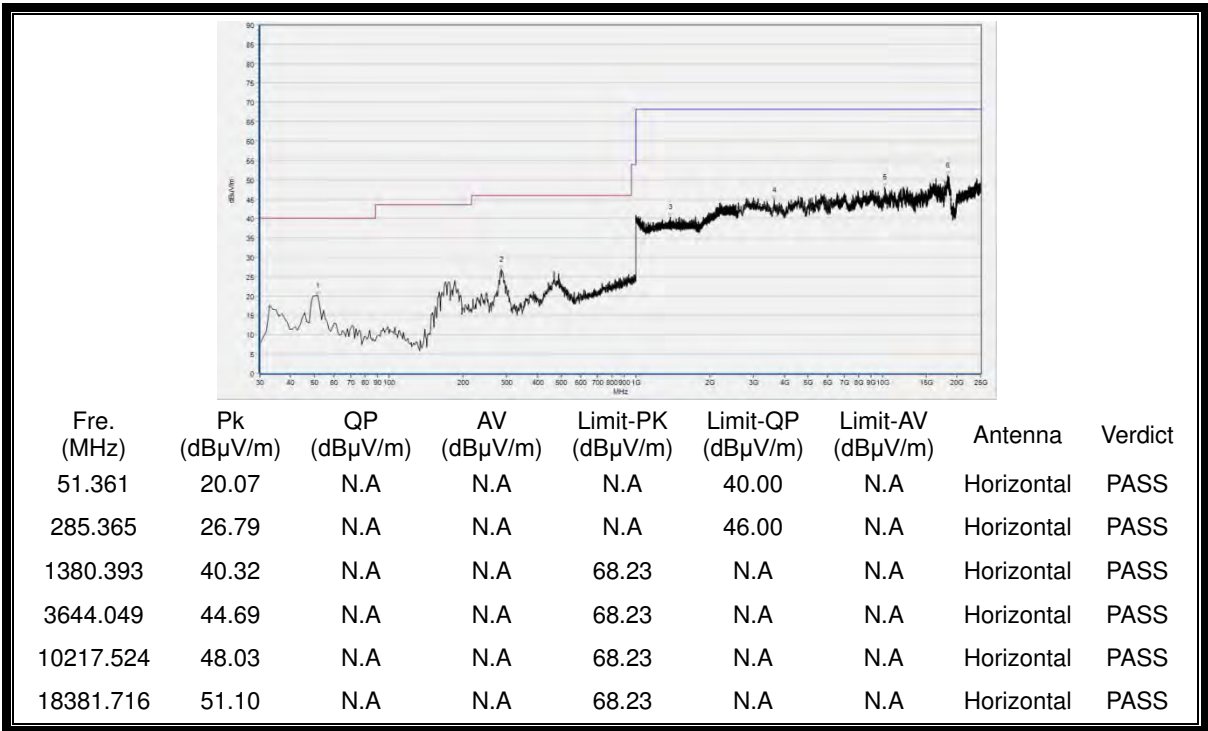
Channel	Frequency (MHz)	Antenna	Receiver Reading	A <sub>T</sub> (dB)	A <sub>Factor</sub> (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		Horiz./ Vert.	U <sub>R</sub> (dBuV)					
159	5860.00	Horizontal	42.25	-50.65	32.11	23.71	78.2	Pass
159	5860.00	Vertical	33.41	-50.65	32.11	14.87	78.2	Pass



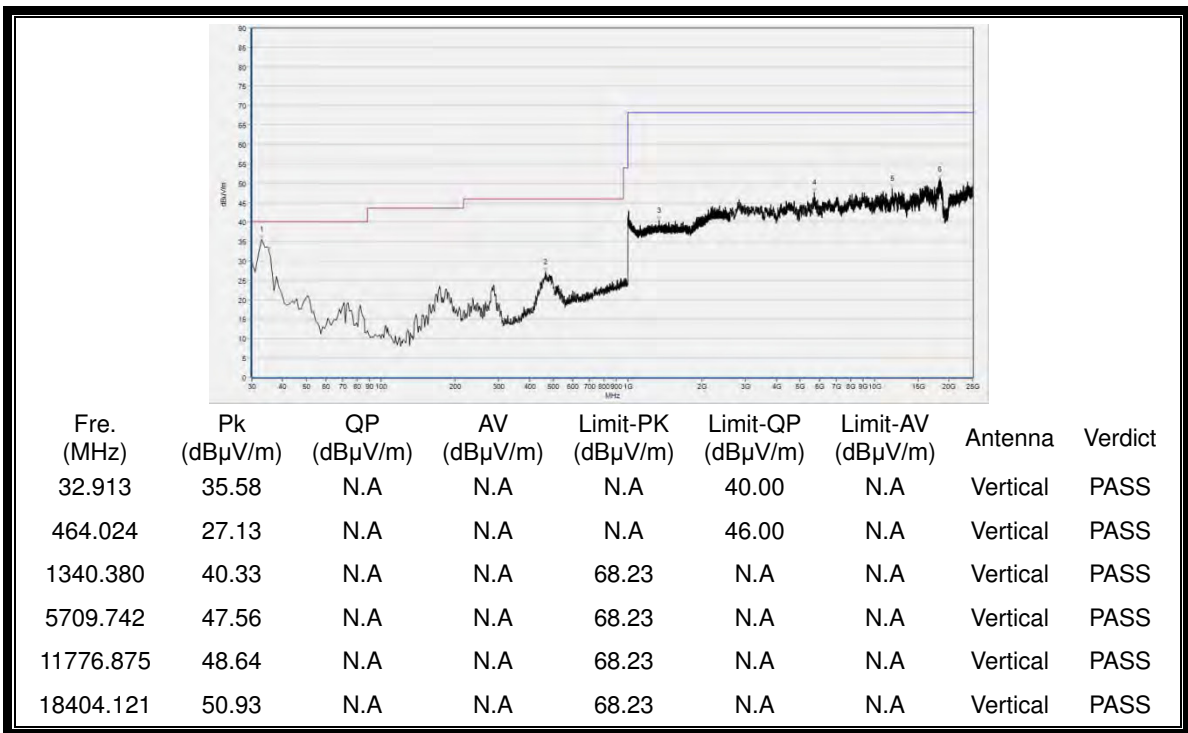
(Channel = 151 Horizontal @ 802.11ac)



(Channel = 151 Vertical @ 802.11ac)



(Antenna Horizontal, 30MHz to 40GHz)



(Antenna Vertical, 30MHz to 40GHz)

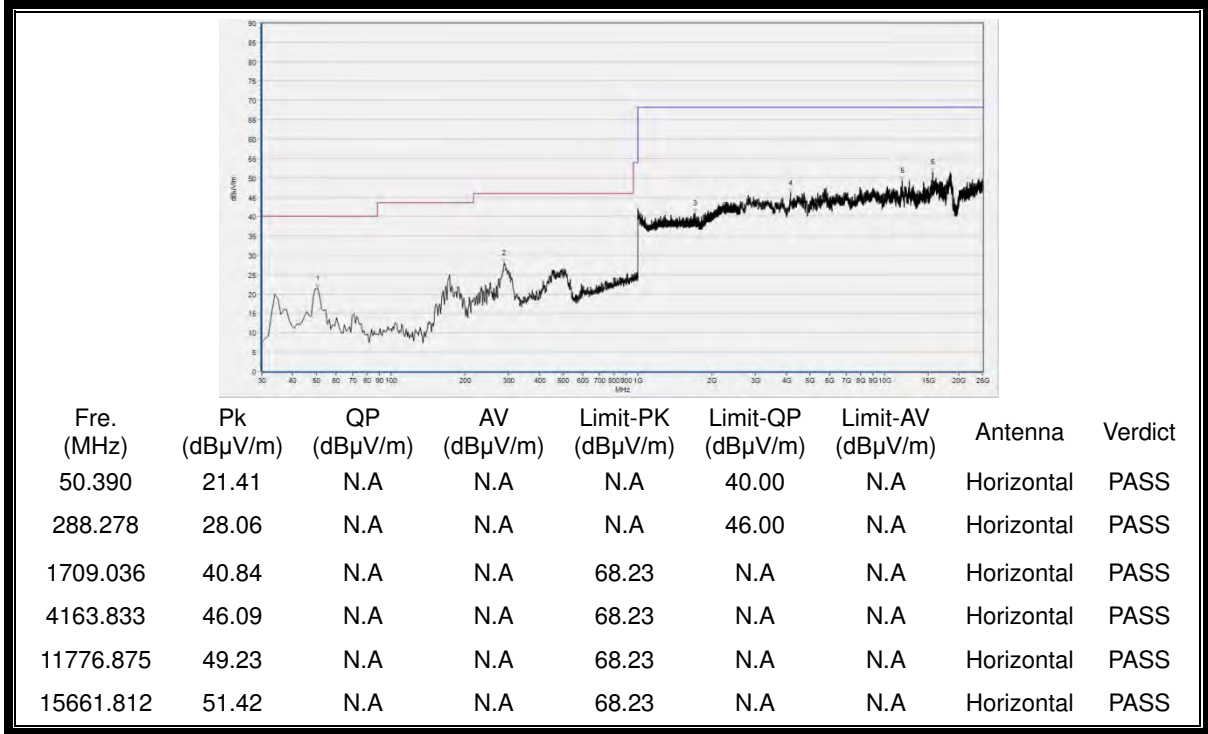




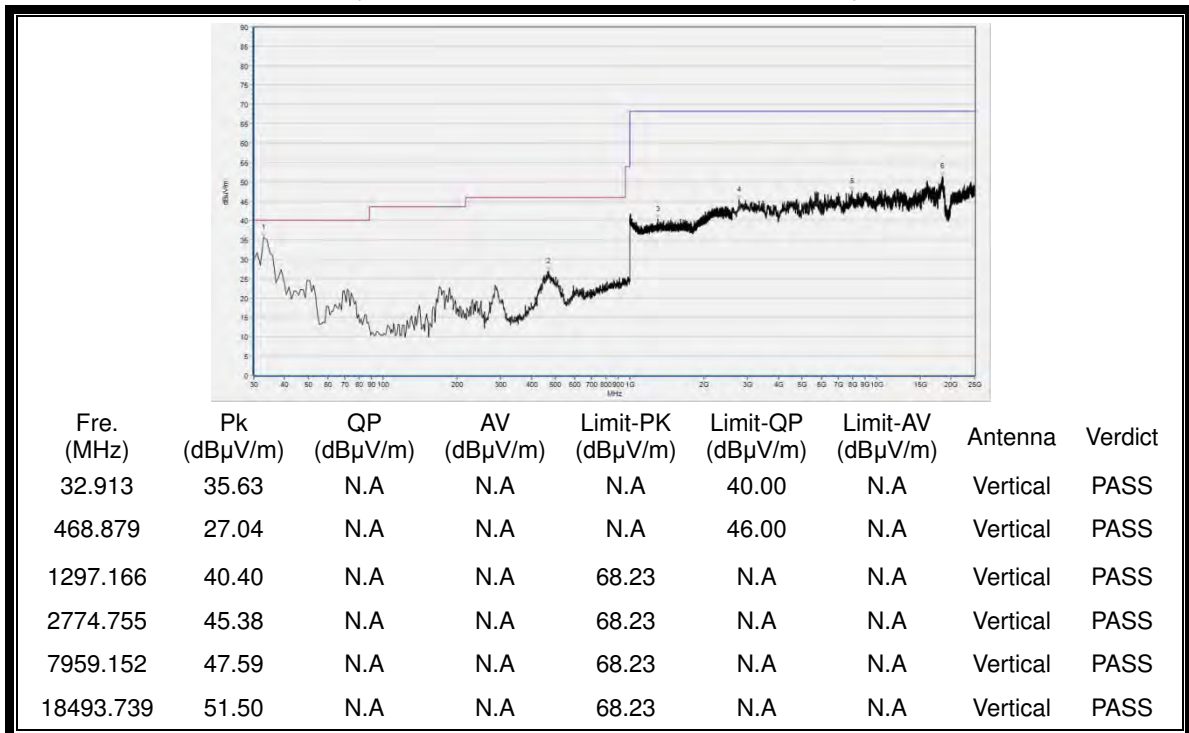
2.9.3.3 802.11ac-80MHz Test mode

A. Test Plots for the Whole Measurement Frequency Range:

Plots for Channel = 42



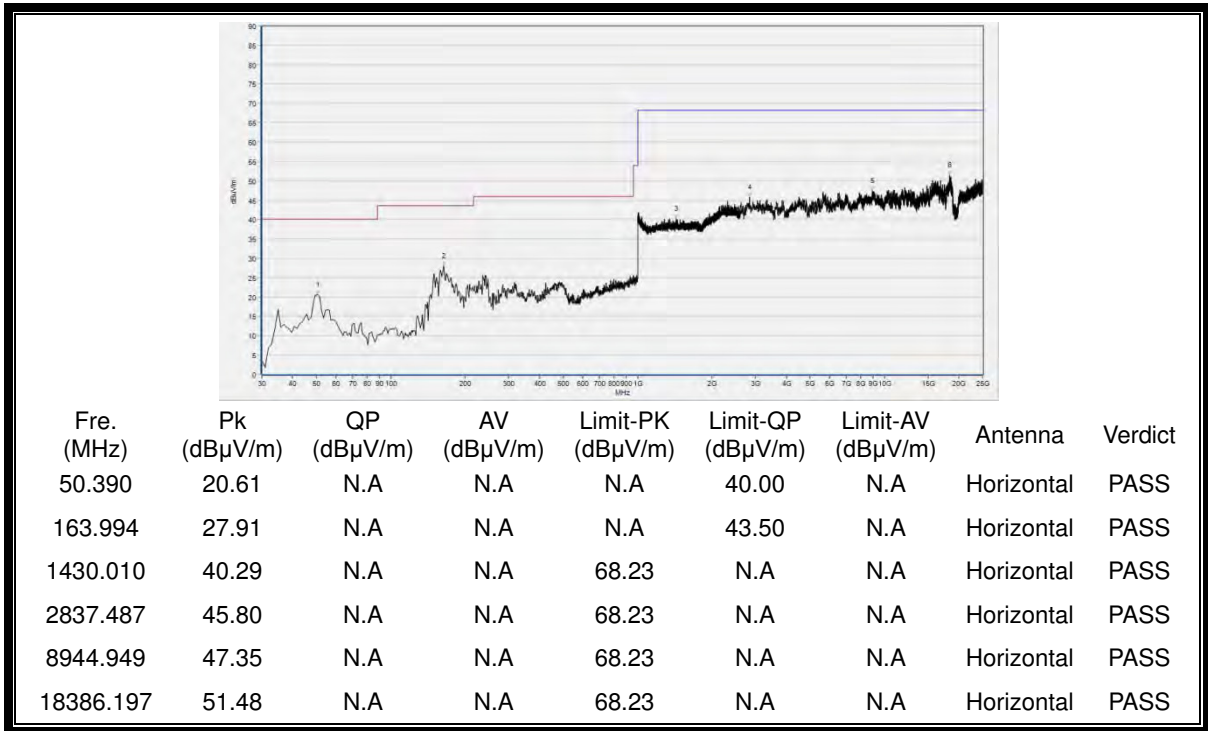
(Antenna Horizontal, 30MHz to 40GHz)



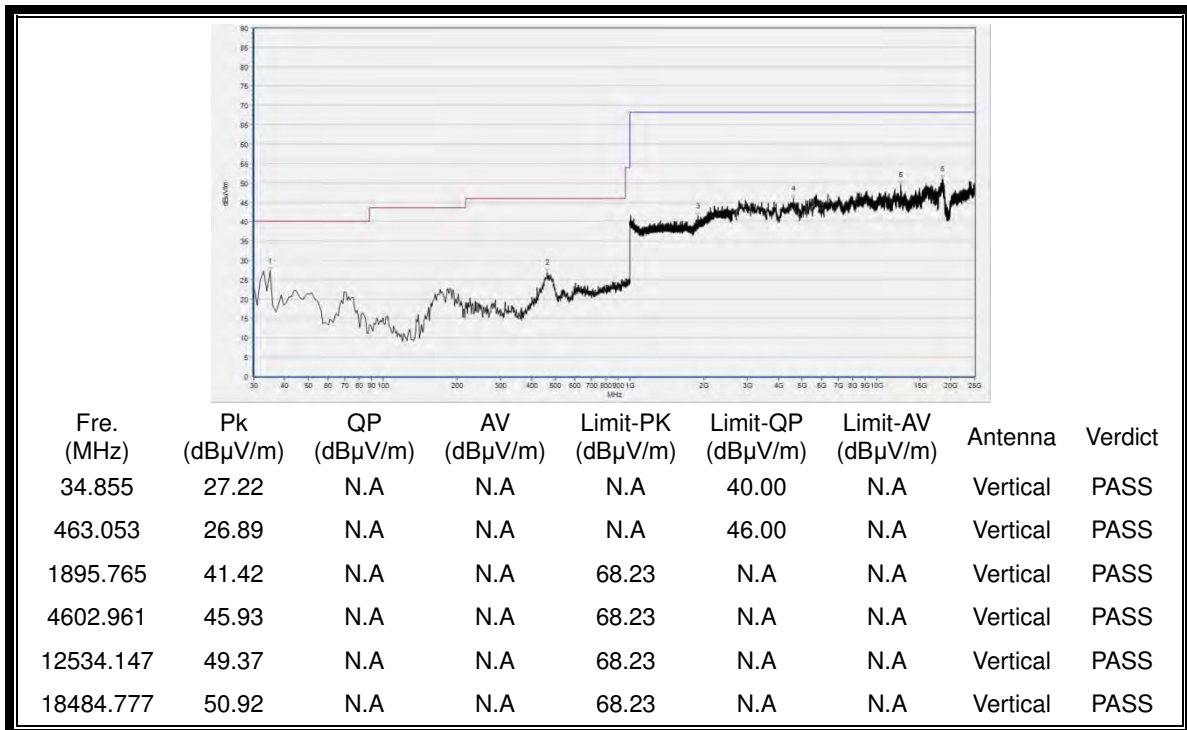
(Antenna Vertical, 30MHz to 40GHz)



Plot for Channel = 58



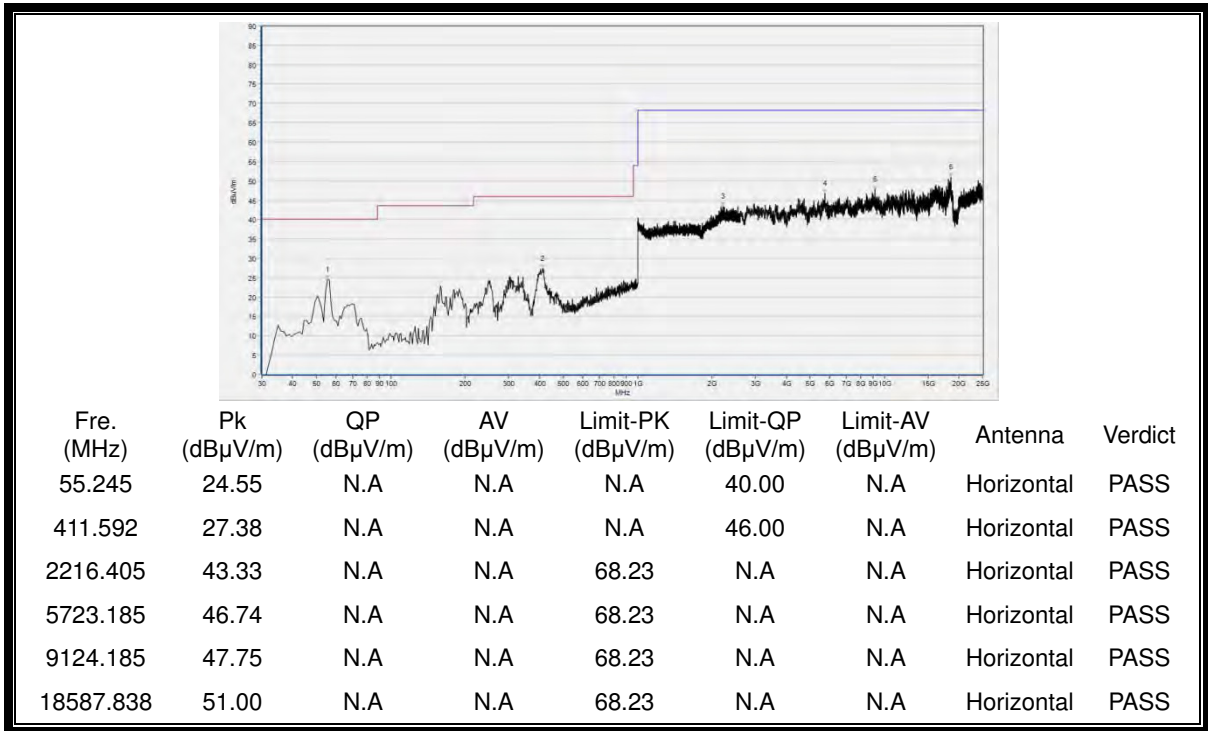
(Antenna Horizontal, 30MHz to 25GHz)



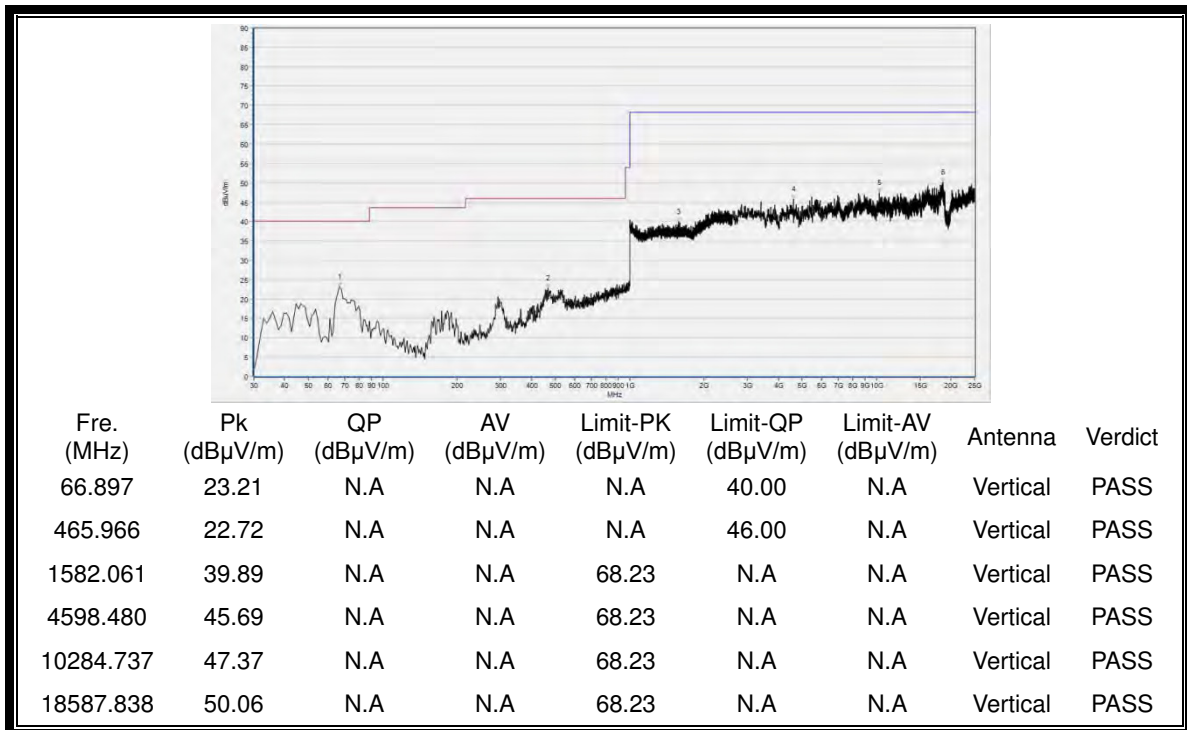
(Antenna Vertical, 30MHz to 25GHz)



Plot for Channel = 106



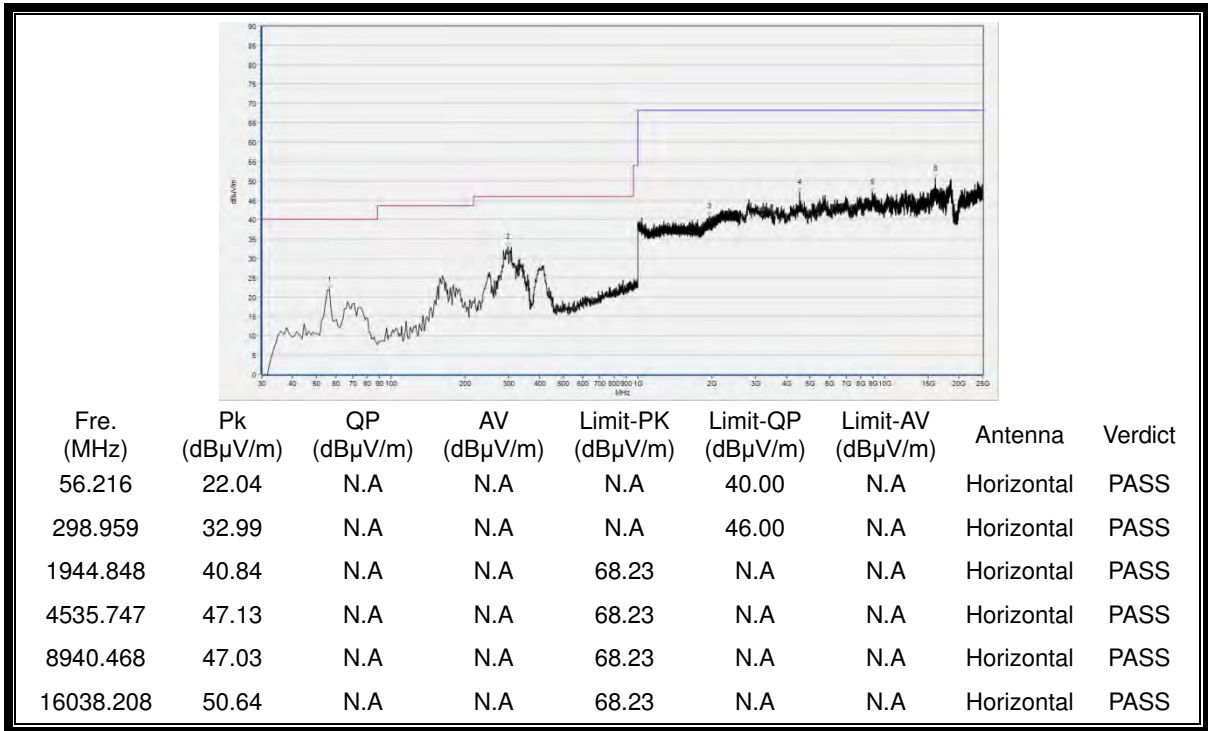
(Antenna Horizontal, 30MHz to 25GHz)



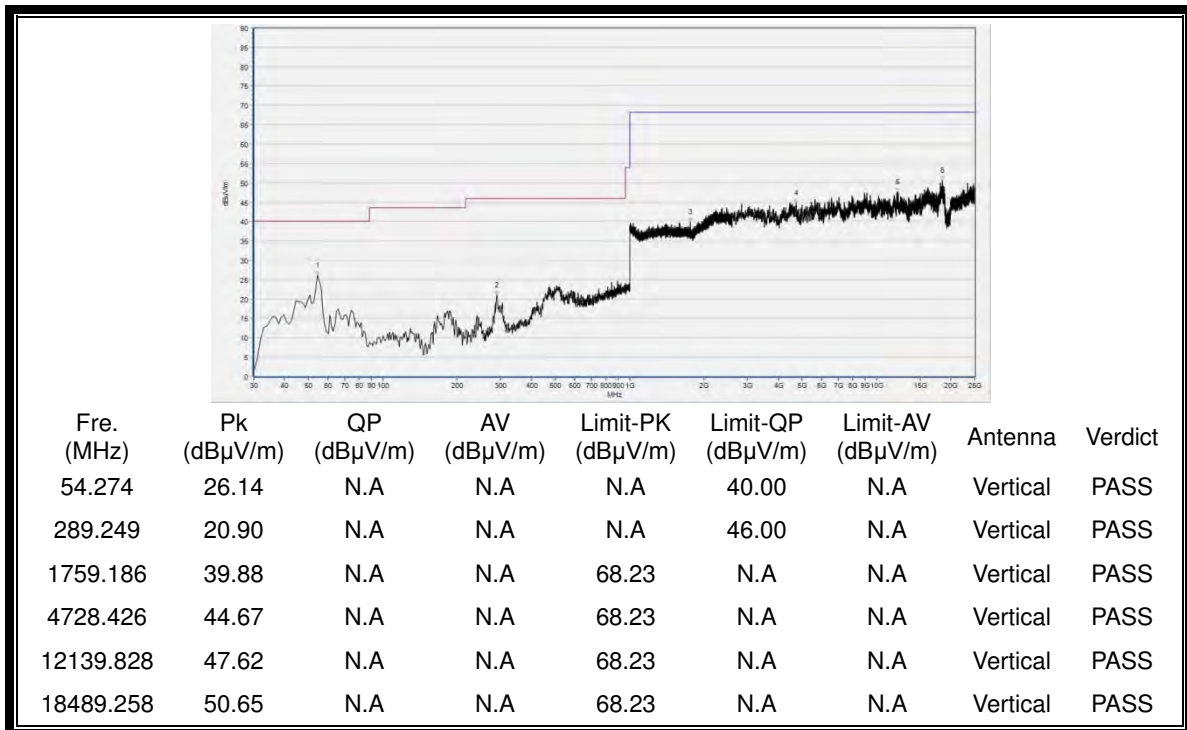
(Antenna Vertical, 30MHz to 25GHz)



Plot for Channel = 138



(Antenna Horizontal, 30MHz to 25GHz)



(Antenna Vertical, 30MHz to 25GHz)



Plot for Channel = 155

Channel	Frequency (MHz)	Antenna	Receiver Reading	A <sub>T</sub> (dB)	A <sub>Factor</sub> (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		Horiz./ Vert.	U <sub>R</sub> (dBuV)					
155	5852.00	Horizontal	51.74	-50.65	32.11	33.20	78.2	Pass
155	5851.60	Vertical	38.88	-50.65	32.11	20.34	78.2	Pass



(Channel = 155 Horizontal @ 802.11ac)



(Channel = 155 Vertical @ 802.11ac)



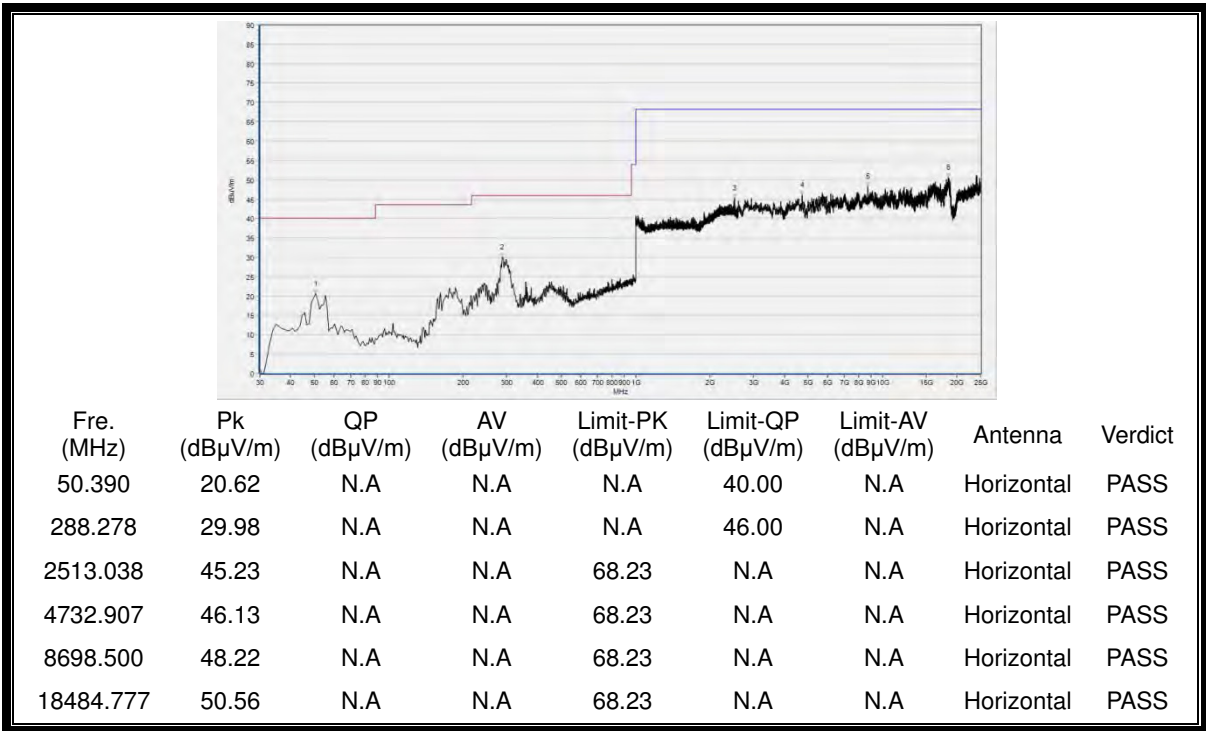
Channel	Frequency (MHz)	Antenna	Receiver Reading	A <sub>T</sub> (dB)	A <sub>Factor</sub> (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		Horiz./ Vert.	U <sub>R</sub> (dBuV)					
155	5717.63	Horizontal	53.74	-50.65	32.11	35.20	78.2	Pass
155	5722.46	Vertical	35.64	-50.65	32.11	17.10	78.2	Pass



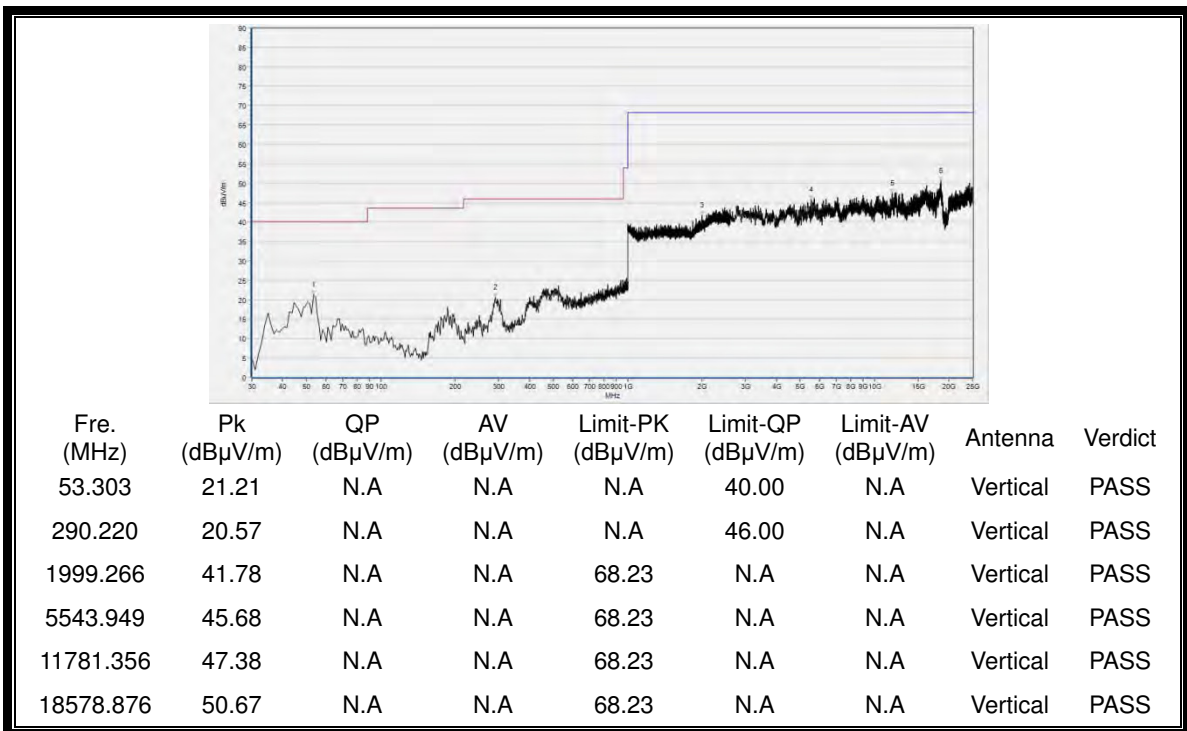
(Channel = 155 Horizontal @ 802.11ac)



(Channel = 155 Vertical @ 802.11ac)



(Antenna Horizontal, 30MHz to 25GHz)



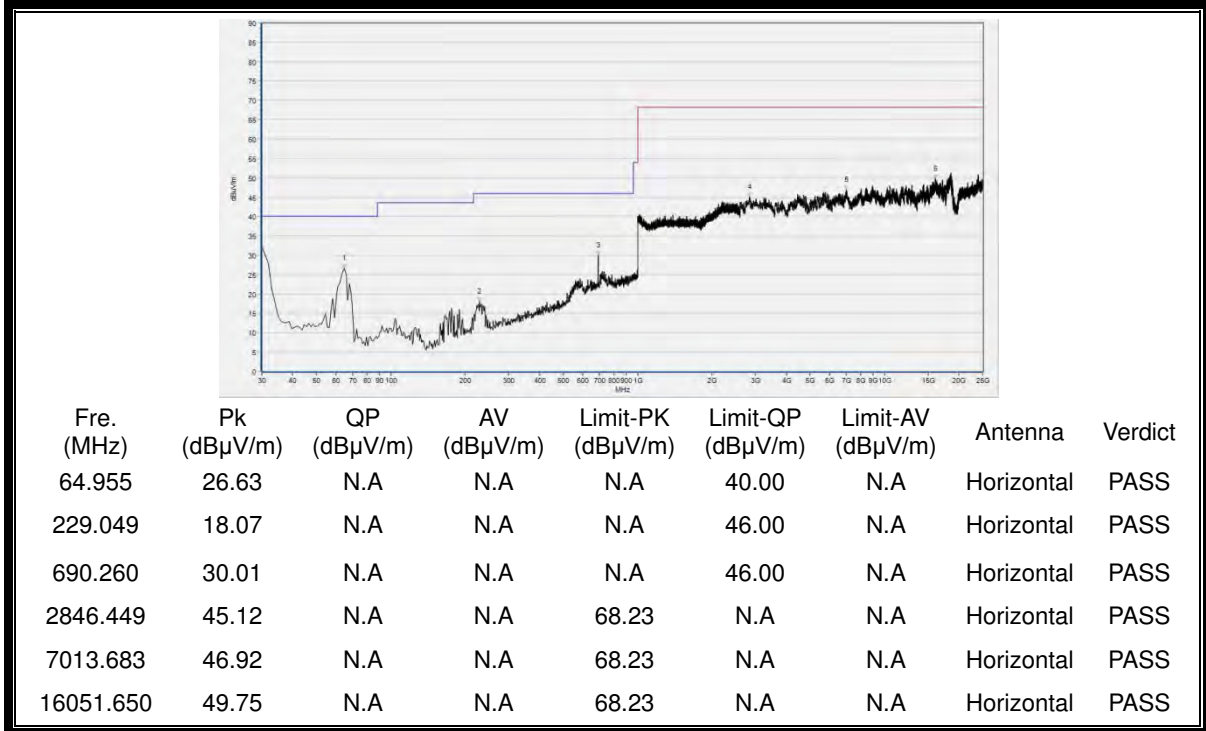
(Antenna Vertical, 30MHz to 25GHz)



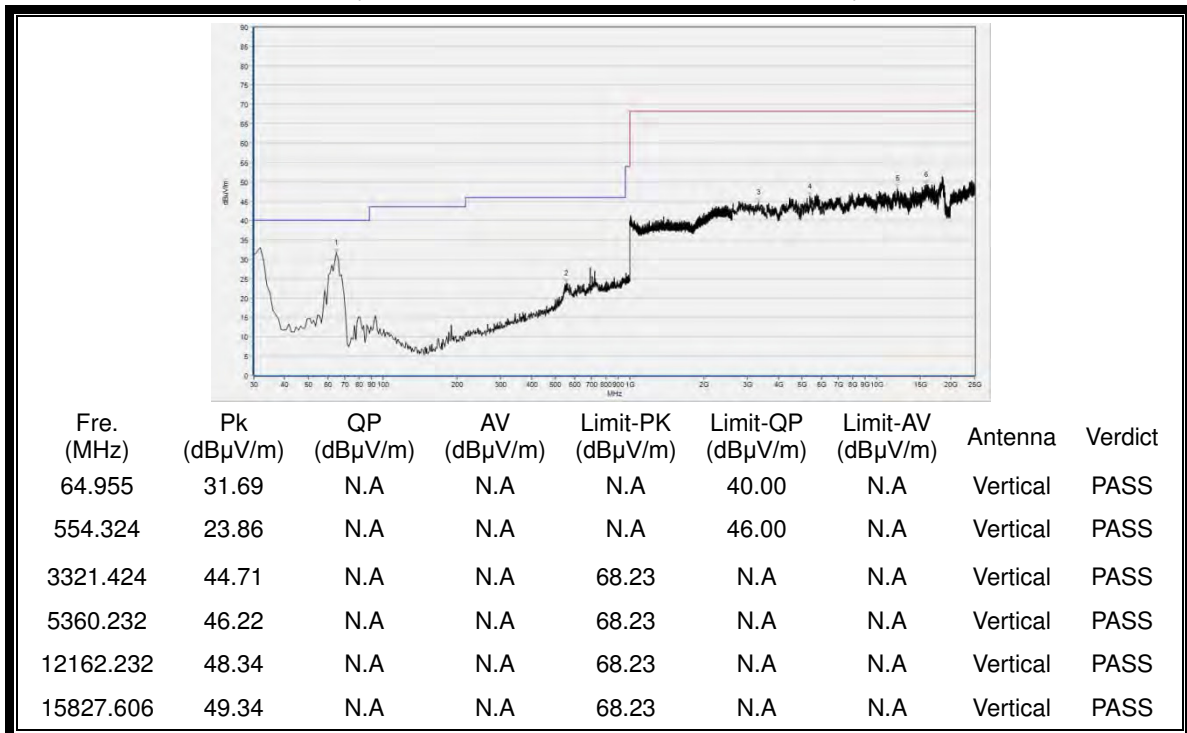
2.9.3.4 802.11n-20MHz Test mode

A. Test Plots for the Whole Measurement Frequency Range:

Plots for Channel = 36



(Antenna Horizontal, 30MHz to 25GHz)

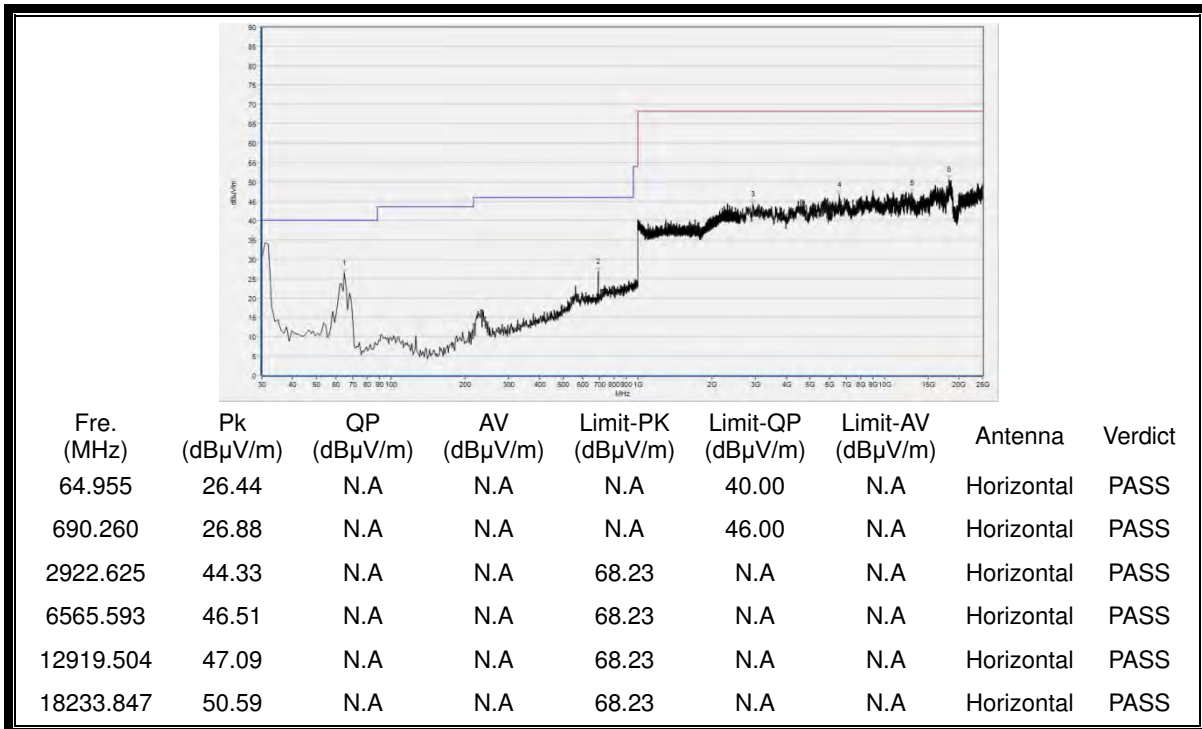


(Antenna Vertical, 30MHz to 25GHz)

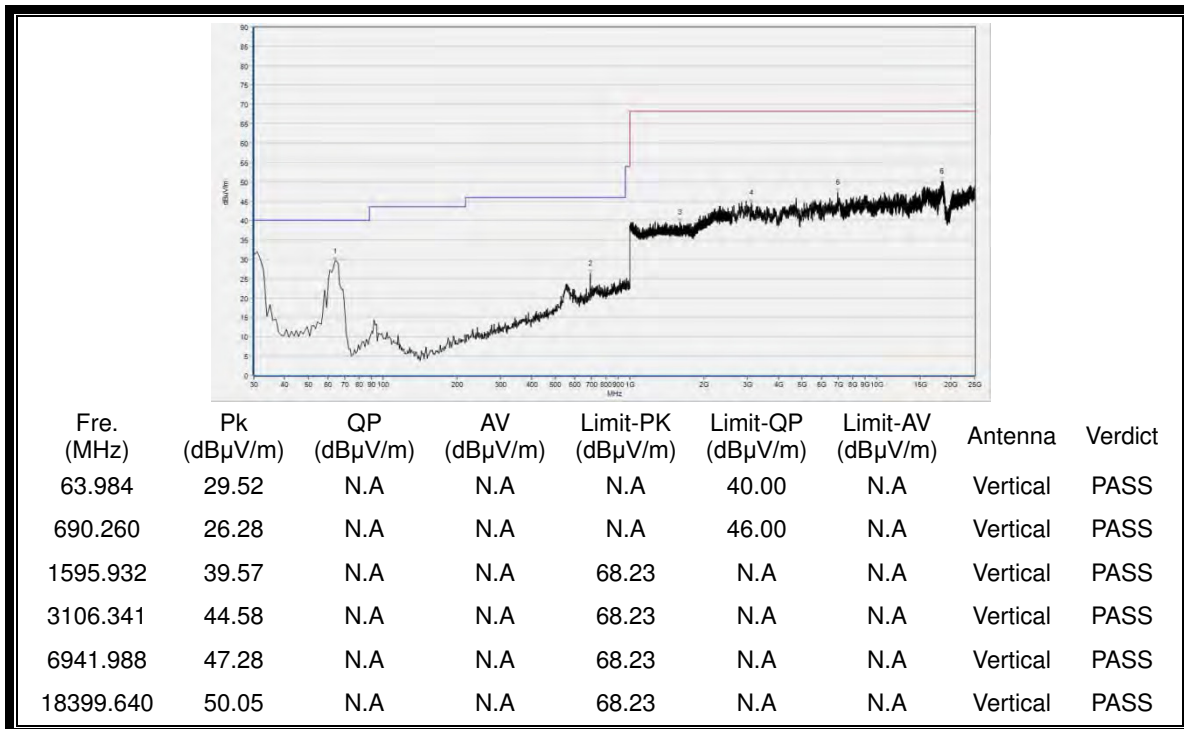




Plot for Channel = 44



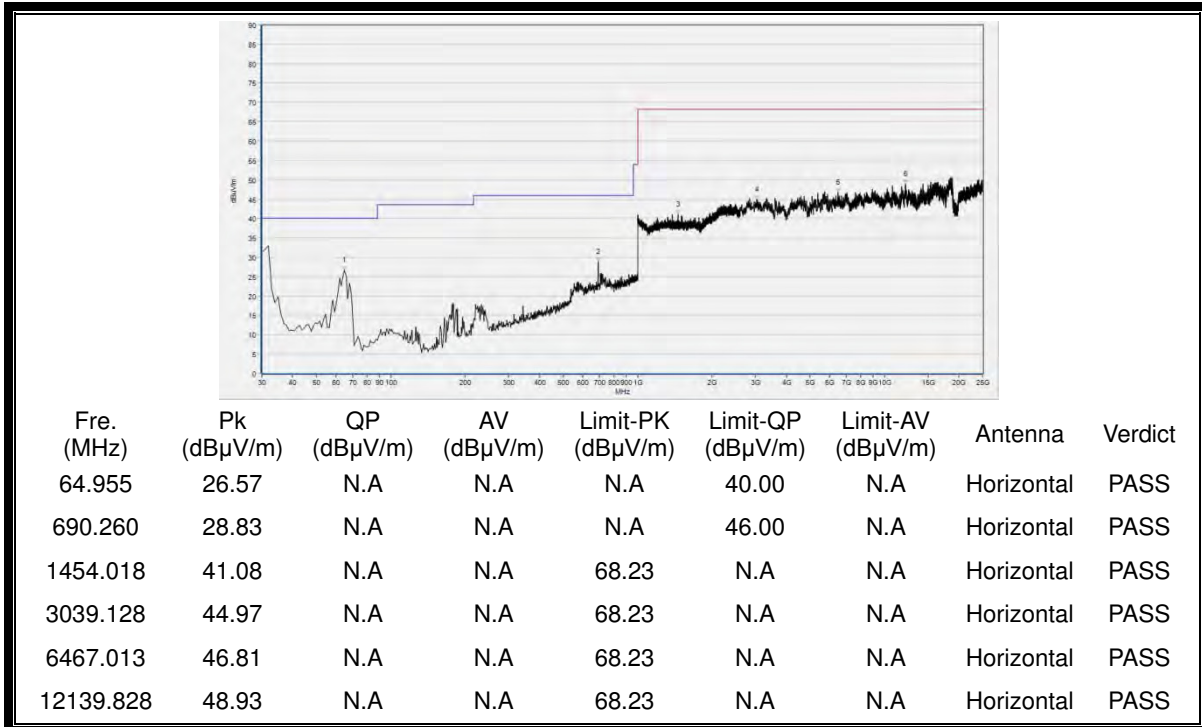
(Antenna Horizontal, 30MHz to 25GHz)



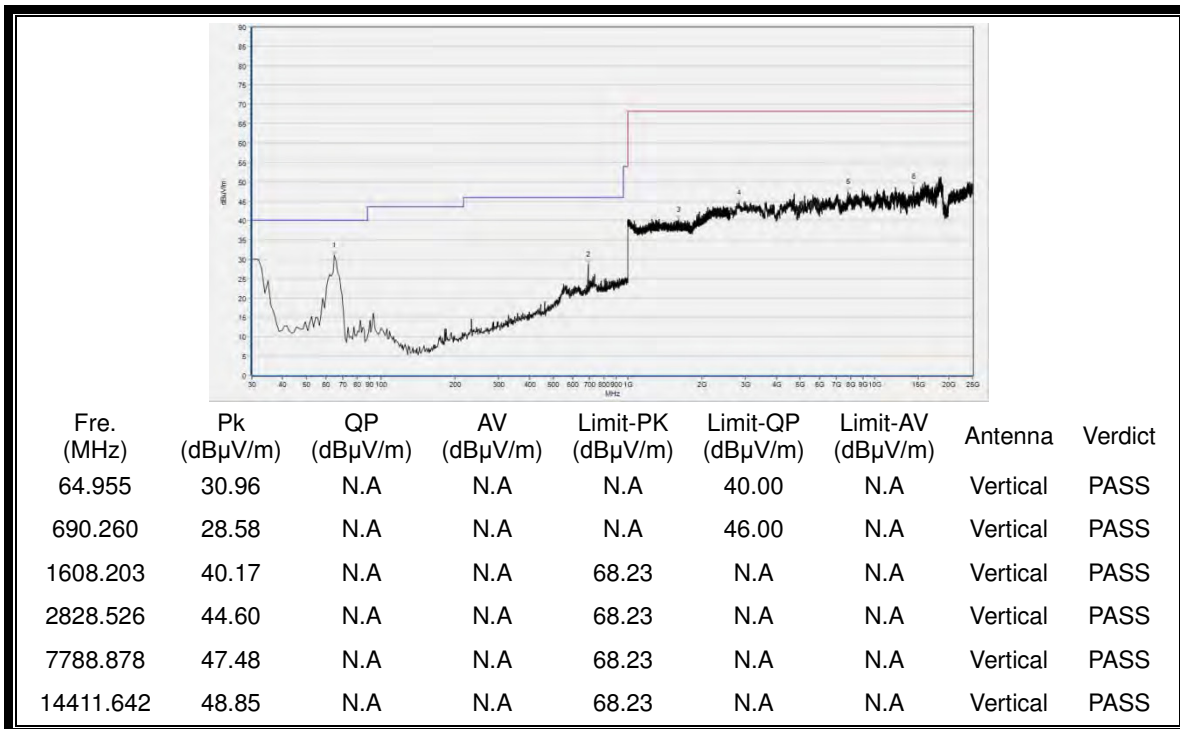
(Antenna Vertical, 30MHz to 25GHz)



Plot for Channel = 48



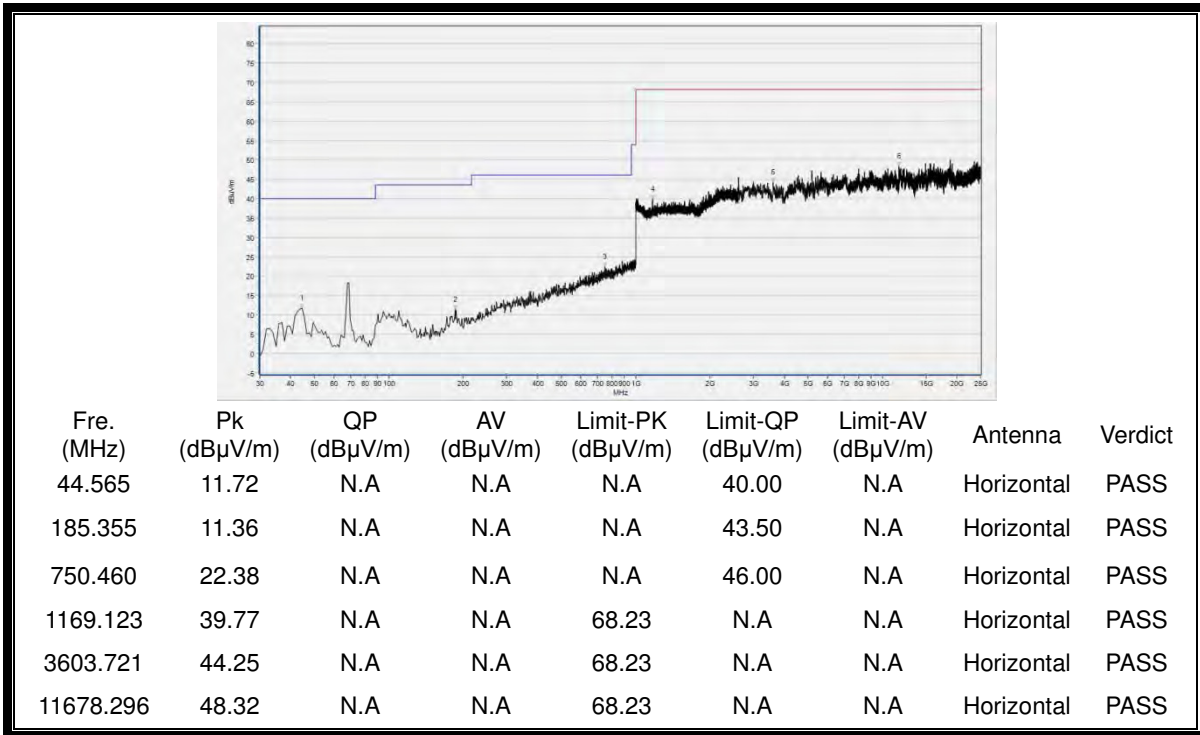
(Antenna Horizontal, 30MHz to 25GHz)



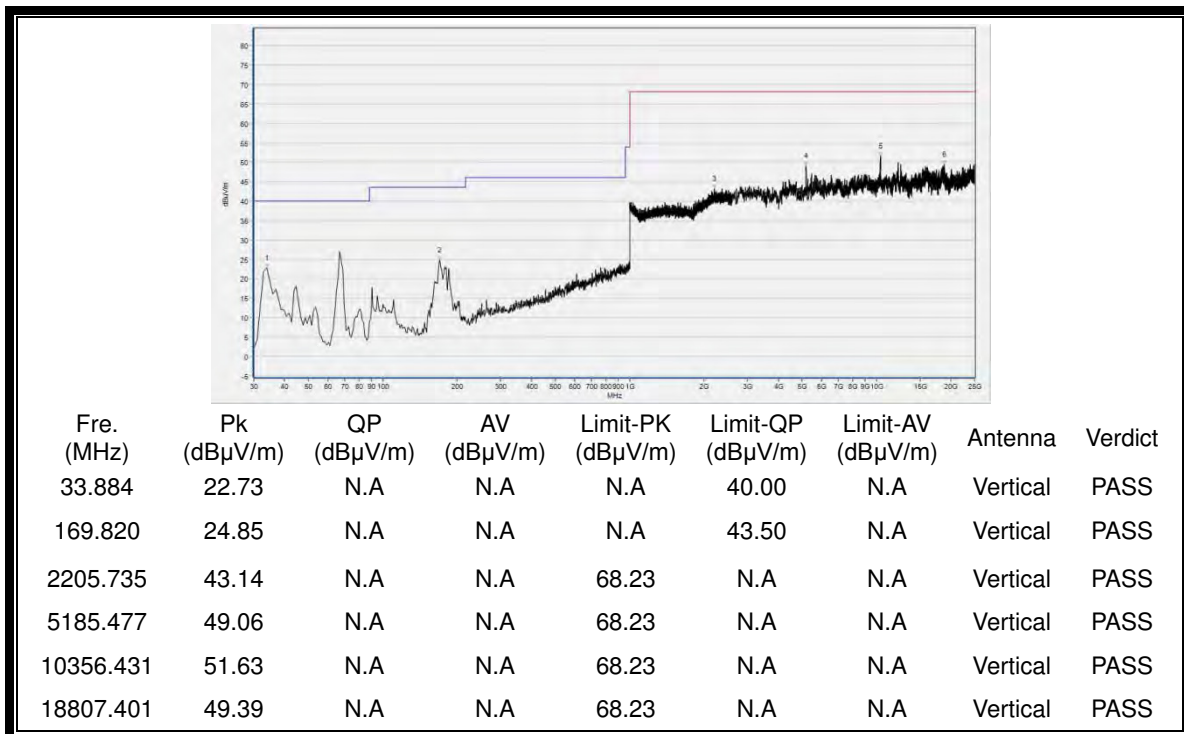
(Antenna Vertical, 30MHz to 25GHz)



Plots for Channel = 52



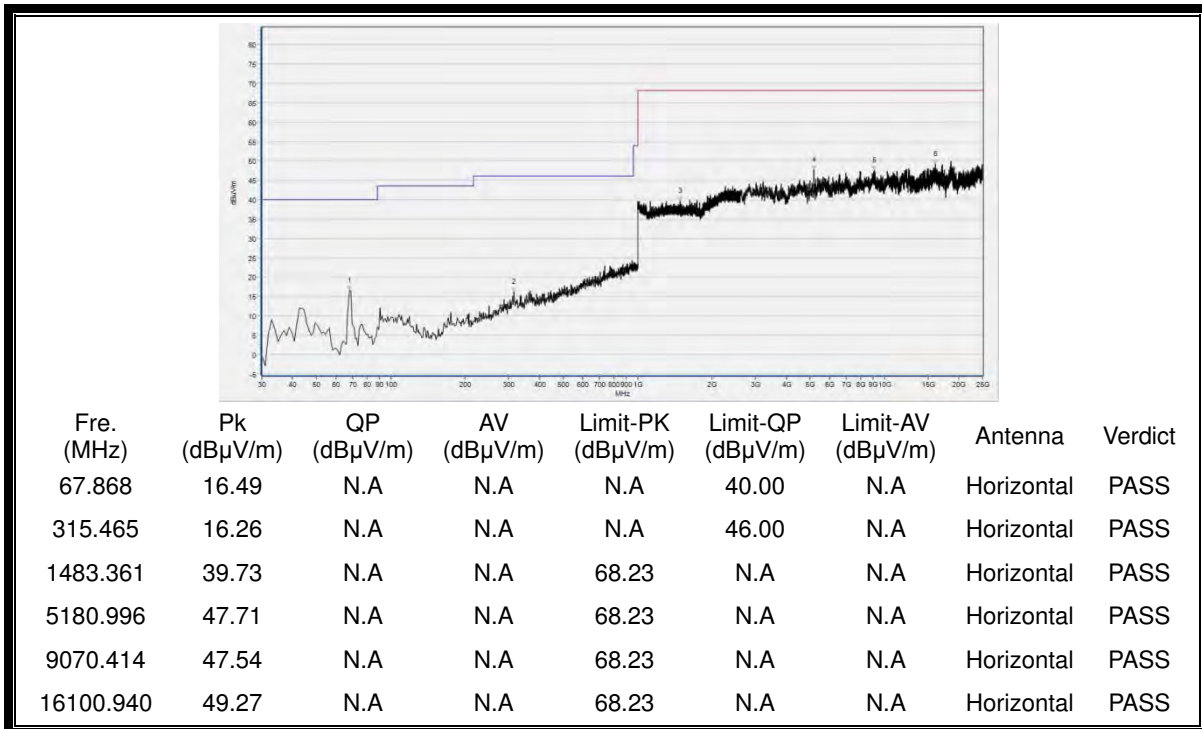
(Antenna Horizontal, 30MHz to 25GHz)



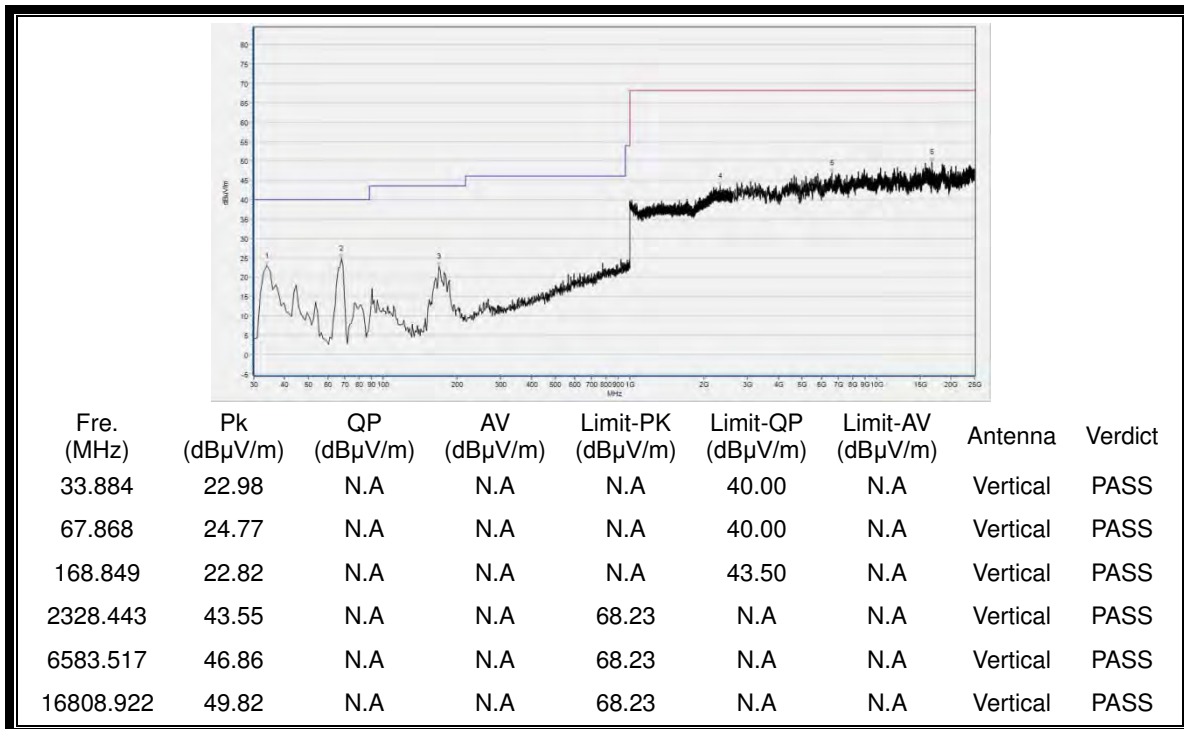
(Antenna Vertical, 30MHz to 25GHz)



Plot for Channel = 60



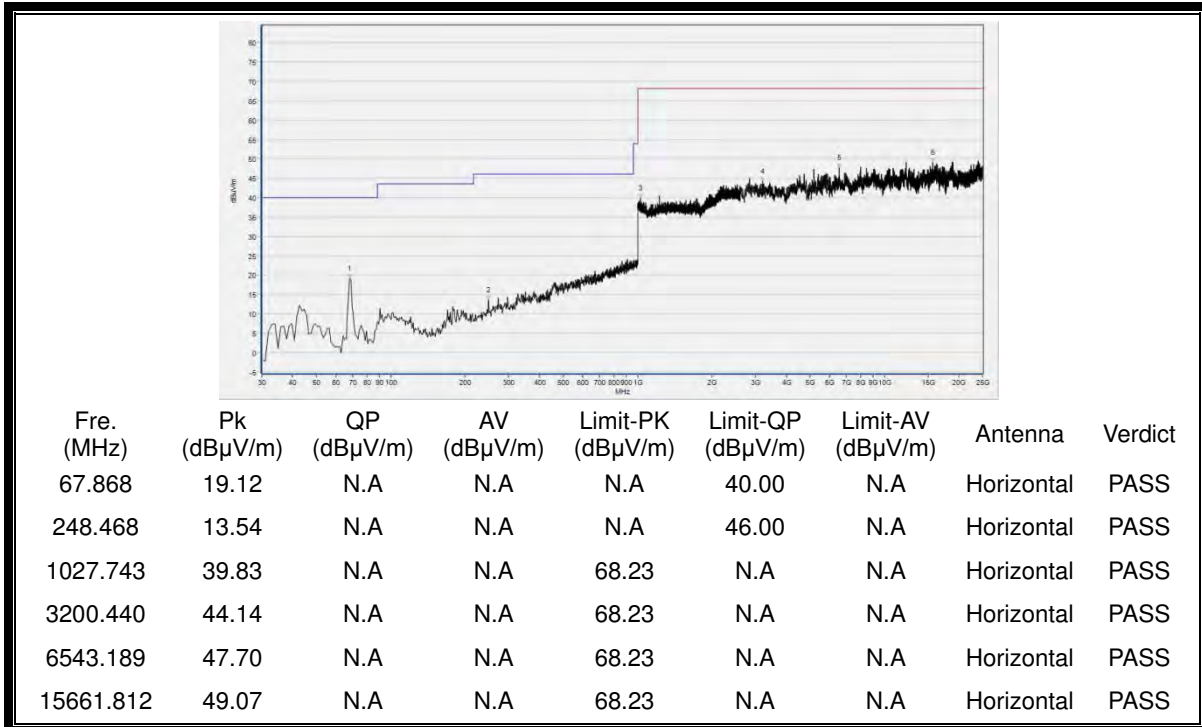
(Antenna Horizontal, 30MHz to 25GHz)



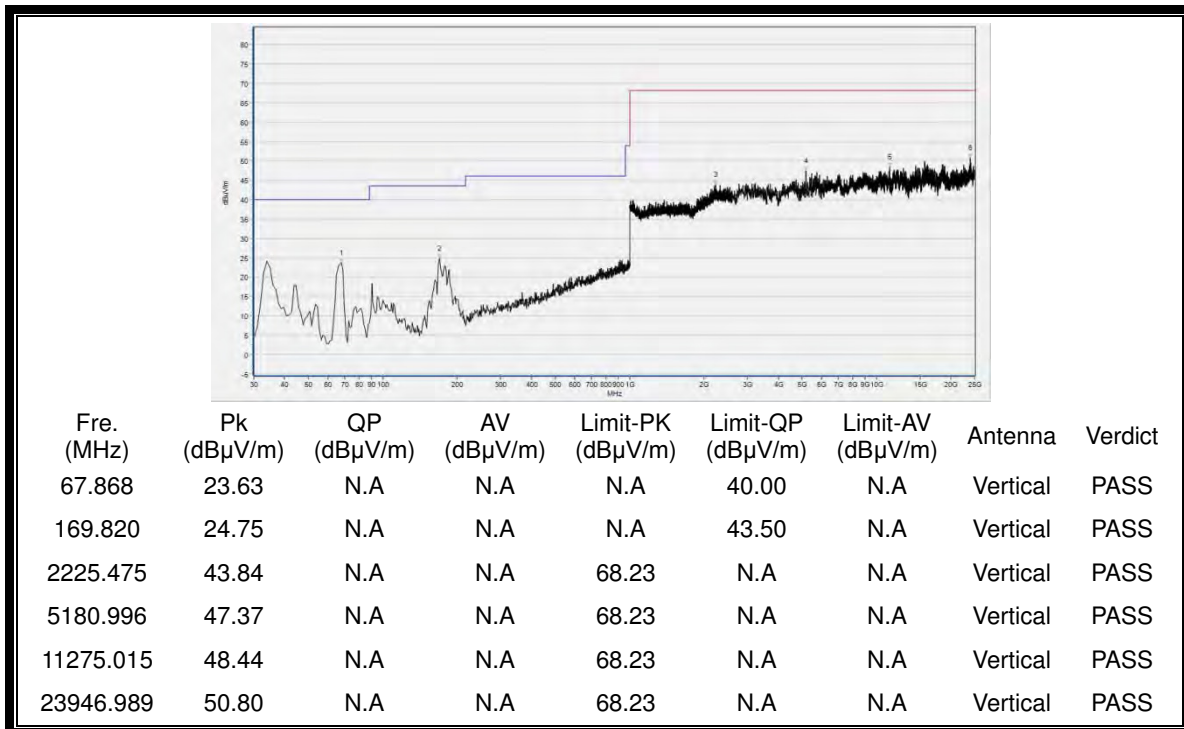
(Antenna Vertical, 30MHz to 25GHz)



Plot for Channel = 64



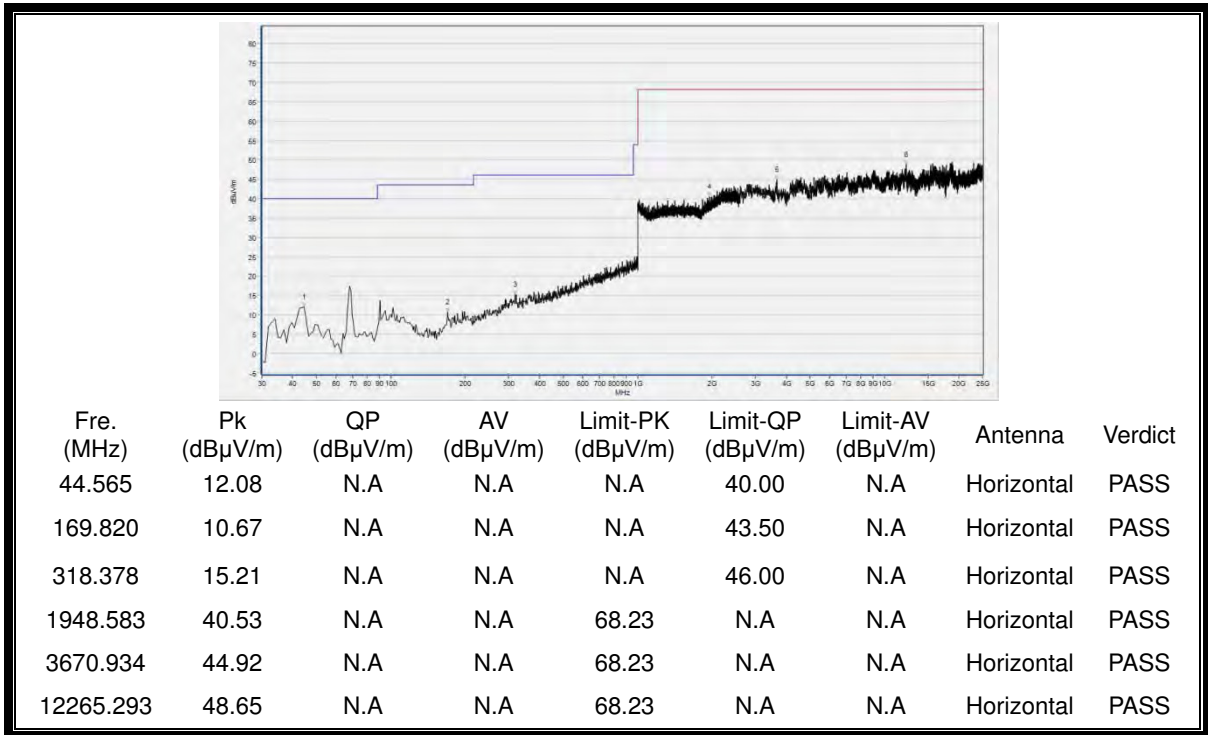
(Antenna Horizontal, 30MHz to 25GHz)



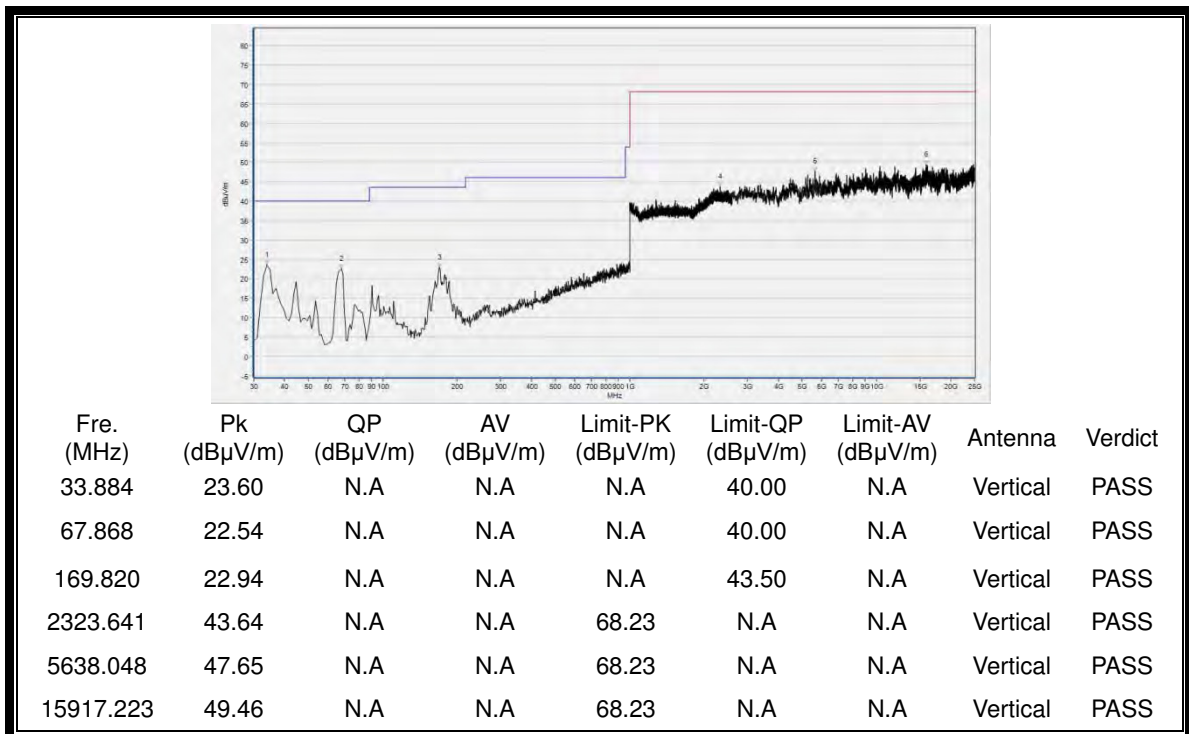
(Antenna Vertical, 30MHz to 25GHz)



Plots for Channel = 100



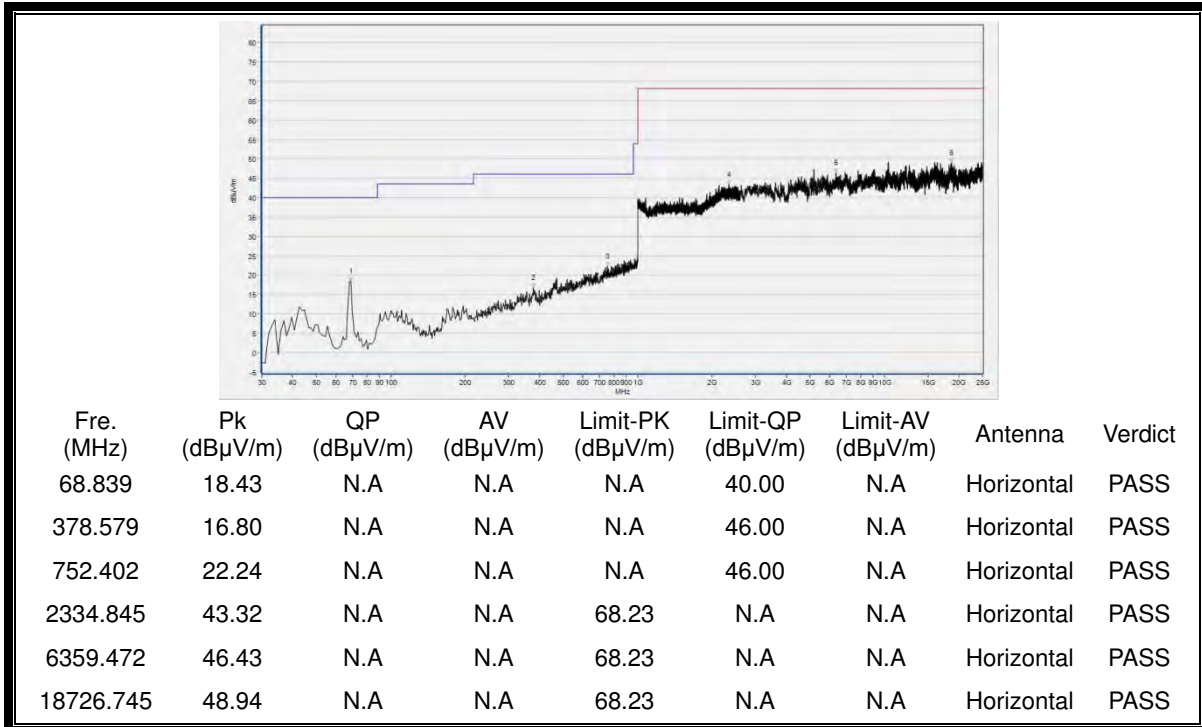
(Antenna Horizontal, 30MHz to 25GHz)



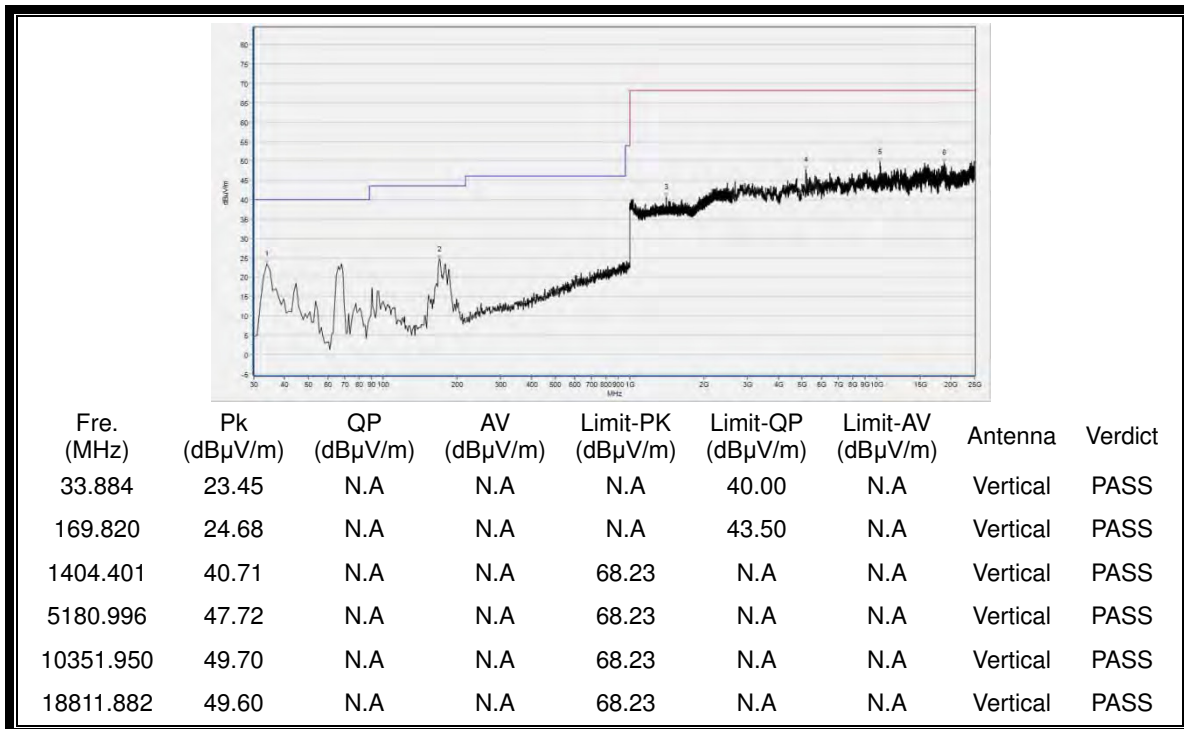
(Antenna Vertical, 30MHz to 25GHz)



Plot for Channel = 120



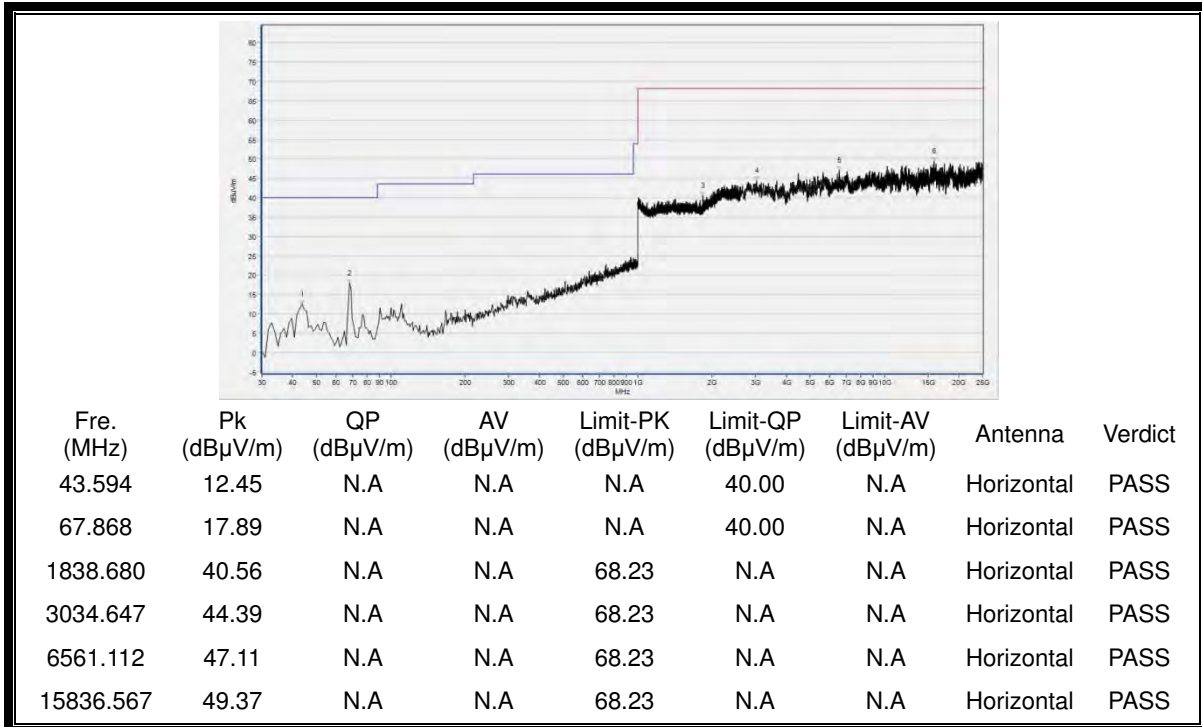
(Antenna Horizontal, 30MHz to 25GHz)



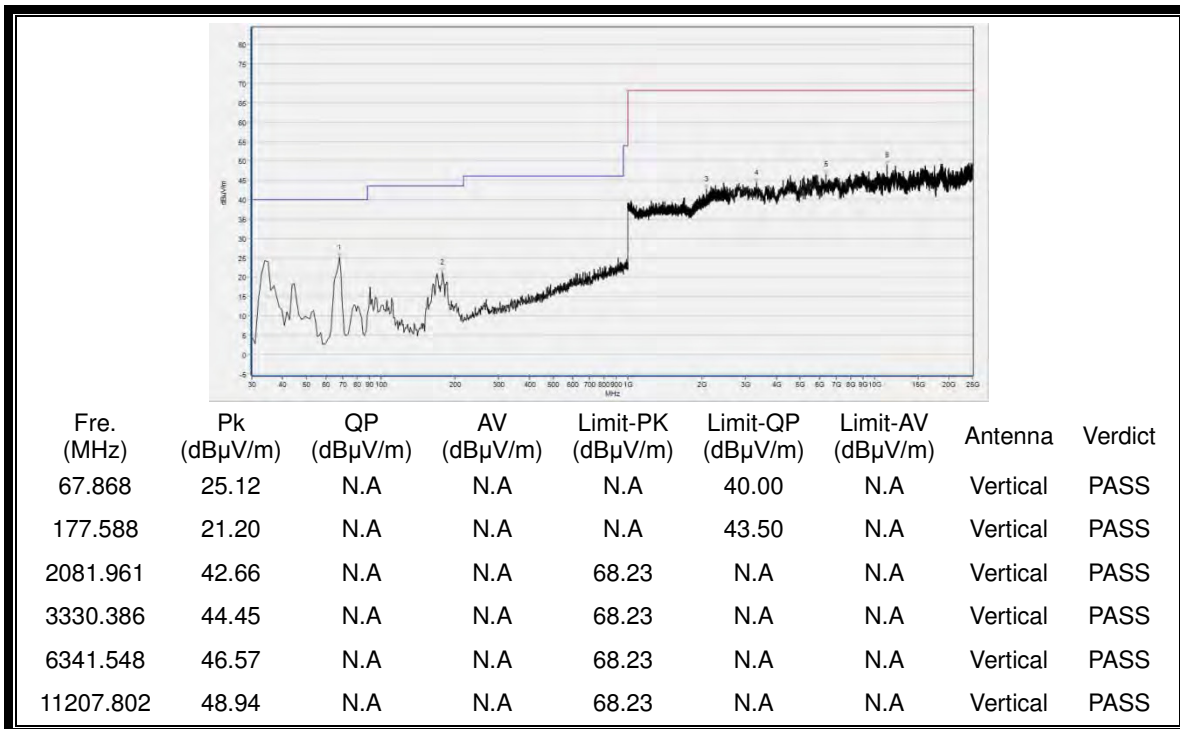
(Antenna Vertical, 30MHz to 25GHz)



Plot for Channel = 140



(Antenna Horizontal, 30MHz to 25GHz)



(Antenna Vertical, 30MHz to 25GHz)



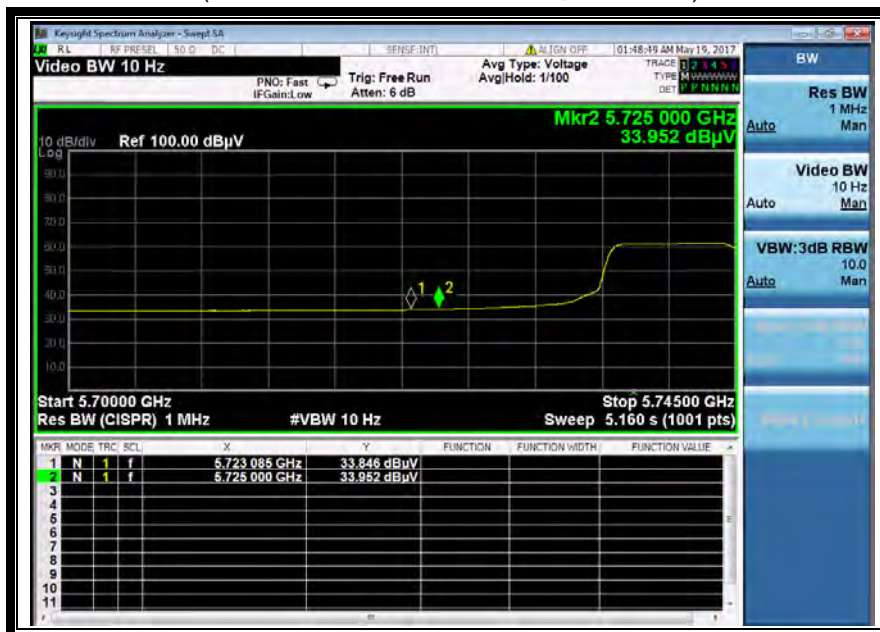


Plots for Channel = 149

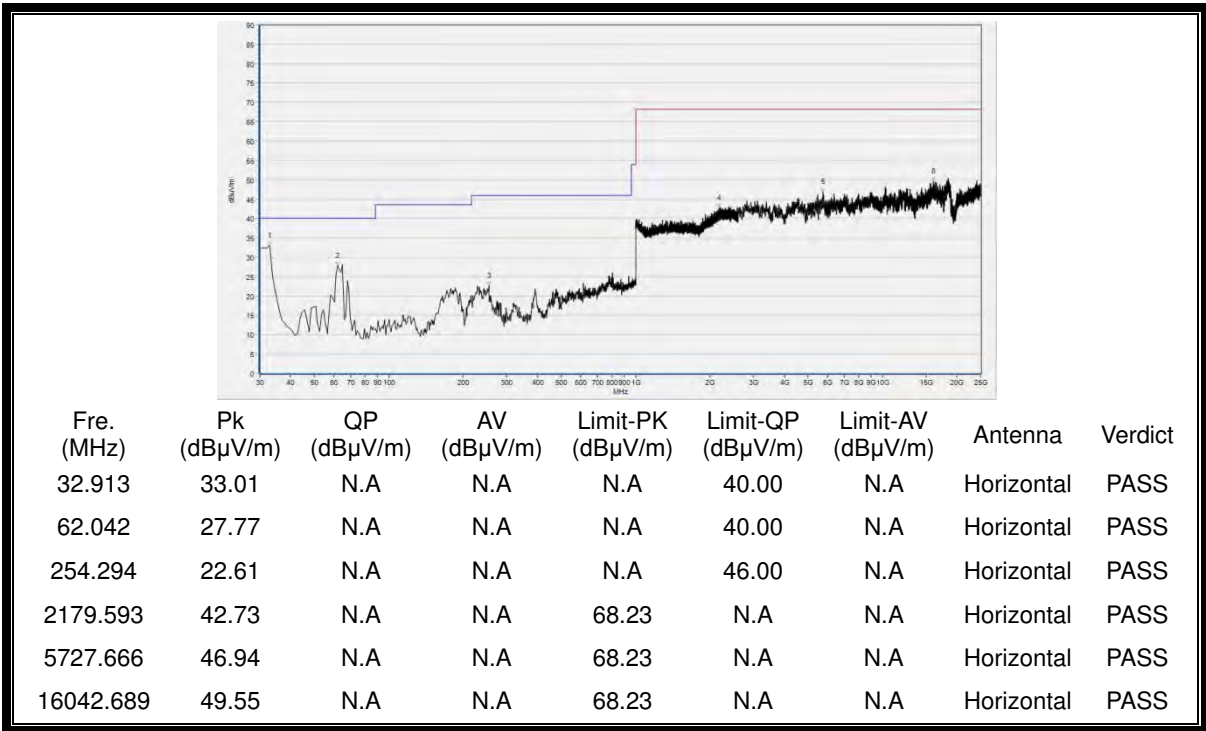
Channel	Frequency (MHz)	Antenna	Receiver Reading	A <sub>T</sub> (dB)	A <sub>Factor</sub> (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		Horiz./ Vert.	U <sub>R</sub> (dBuV)					
149	5723.09	Horizontal	41.71	-50.65	32.11	23.17	78.2	Pass
149	5723.09	Vertical	33.85	-50.65	32.11	15.31	78.2	Pass



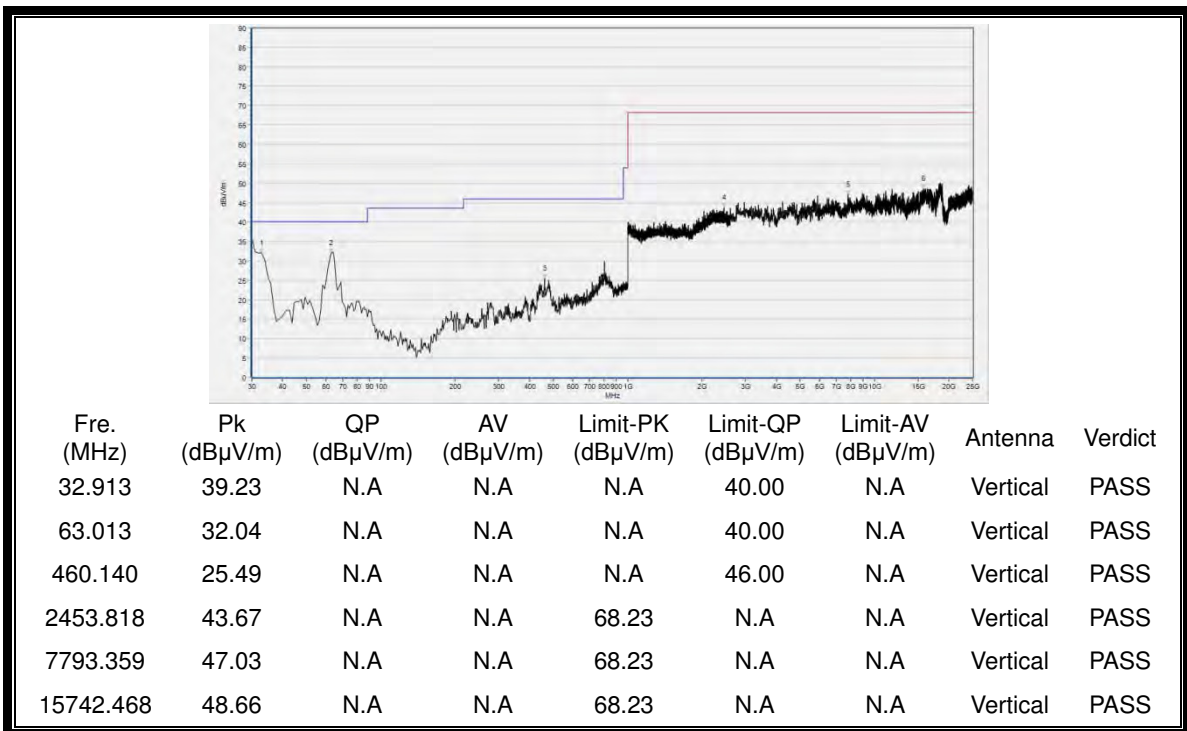
(Channel = 149 Horizontal @ 802.11n)



(Channel = 149 Vertical @ 802.11n)



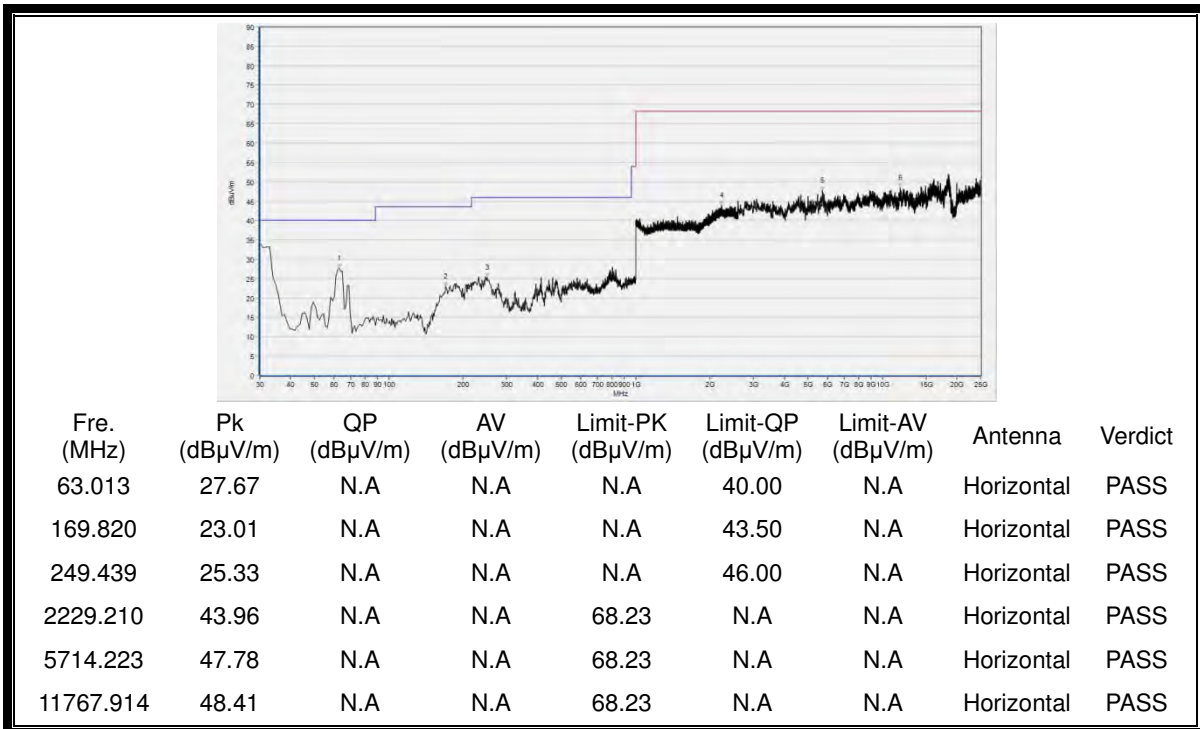
(Antenna Horizontal, 30MHz to 25GHz)



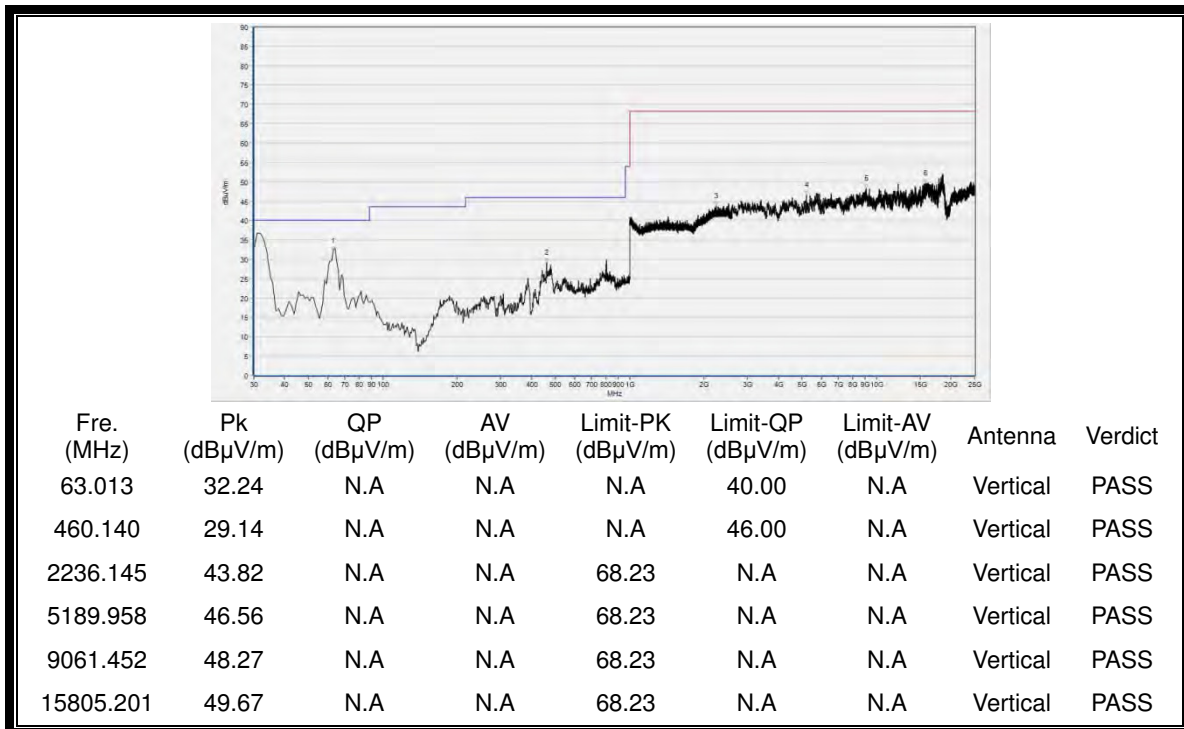
(Antenna Vertical, 30MHz to 25GHz)



Plot for Channel = 157



(Antenna Horizontal, 30MHz to 25GHz)



(Antenna Vertical, 30MHz to 25GHz)



Plot for Channel = 165

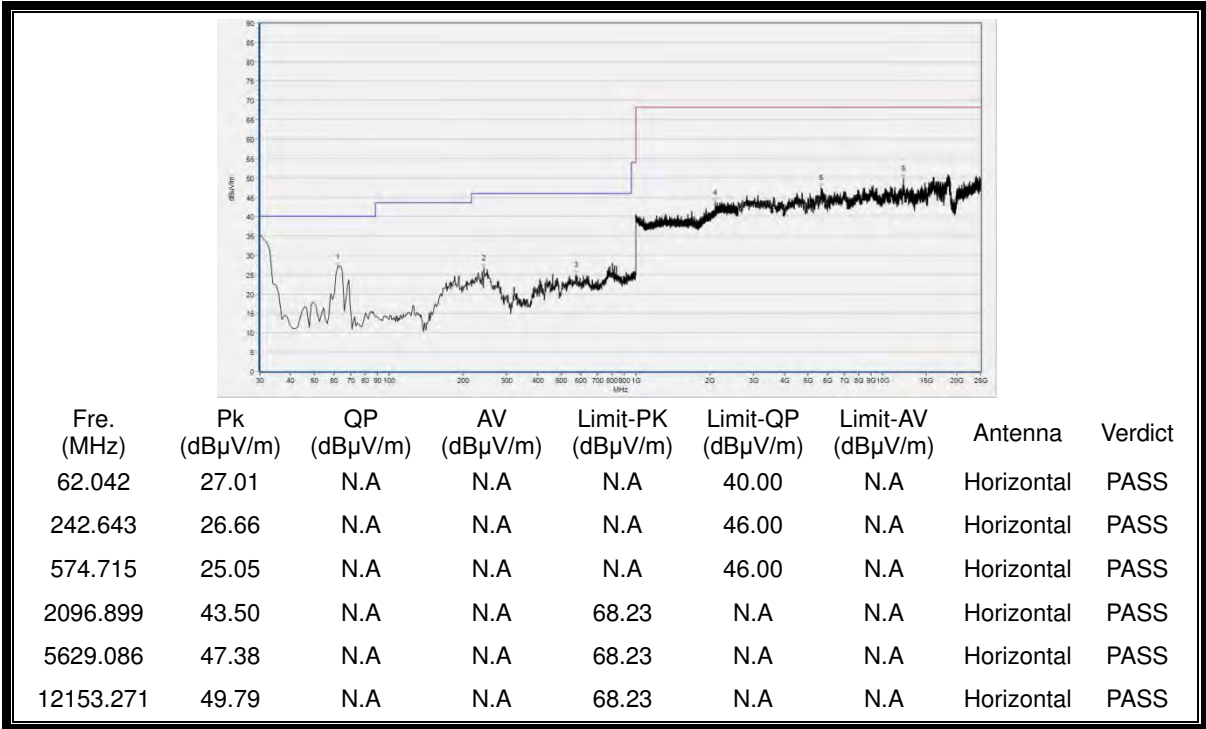
Channel	Frequency (MHz)	Antenna	Receiver Reading	A <sub>T</sub> (dB)	A <sub>Factor</sub> (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		Horiz./ Vert.	U <sub>R</sub> (dBuV)					
165	5723.09	Horizontal	41.71	-50.65	32.11	23.17	78.2	Pass
165	5723.09	Vertical	33.85	-50.65	32.11	15.31	78.2	Pass



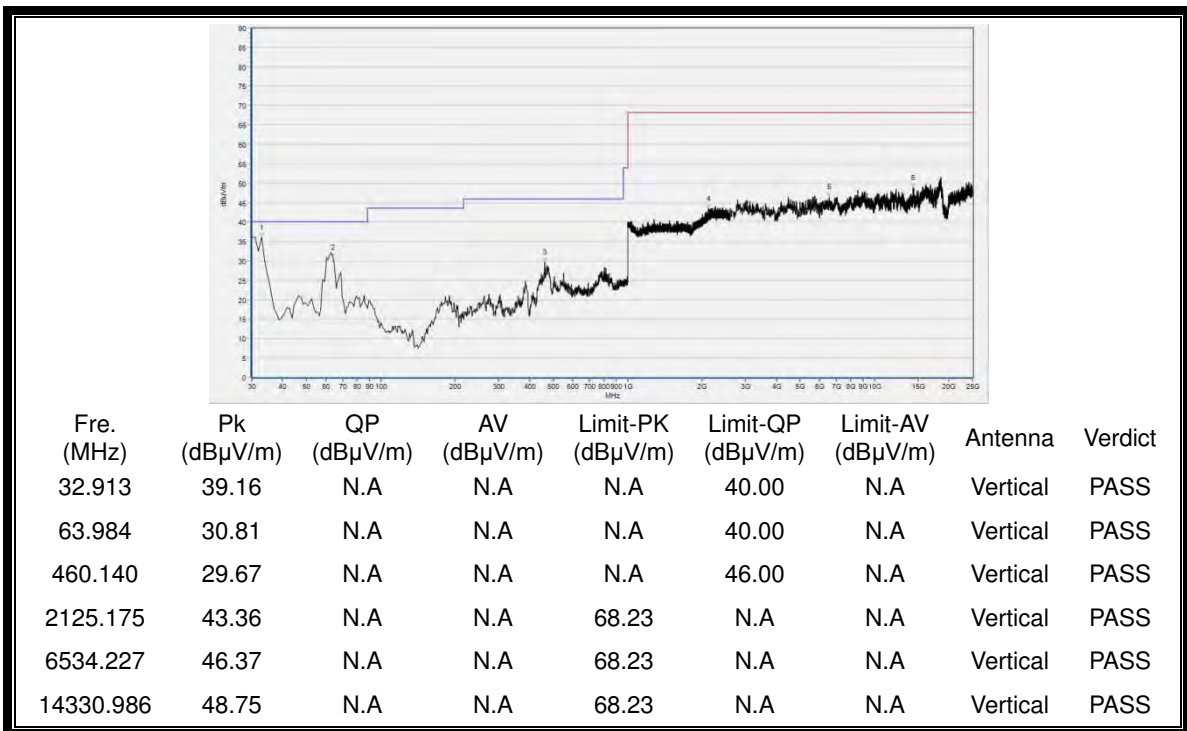
(Channel = 165 Horizontal @ 802.11n)



(Channel = 165 Vertical @ 802.11n)



(Antenna Horizontal, 30MHz to 25GHz)



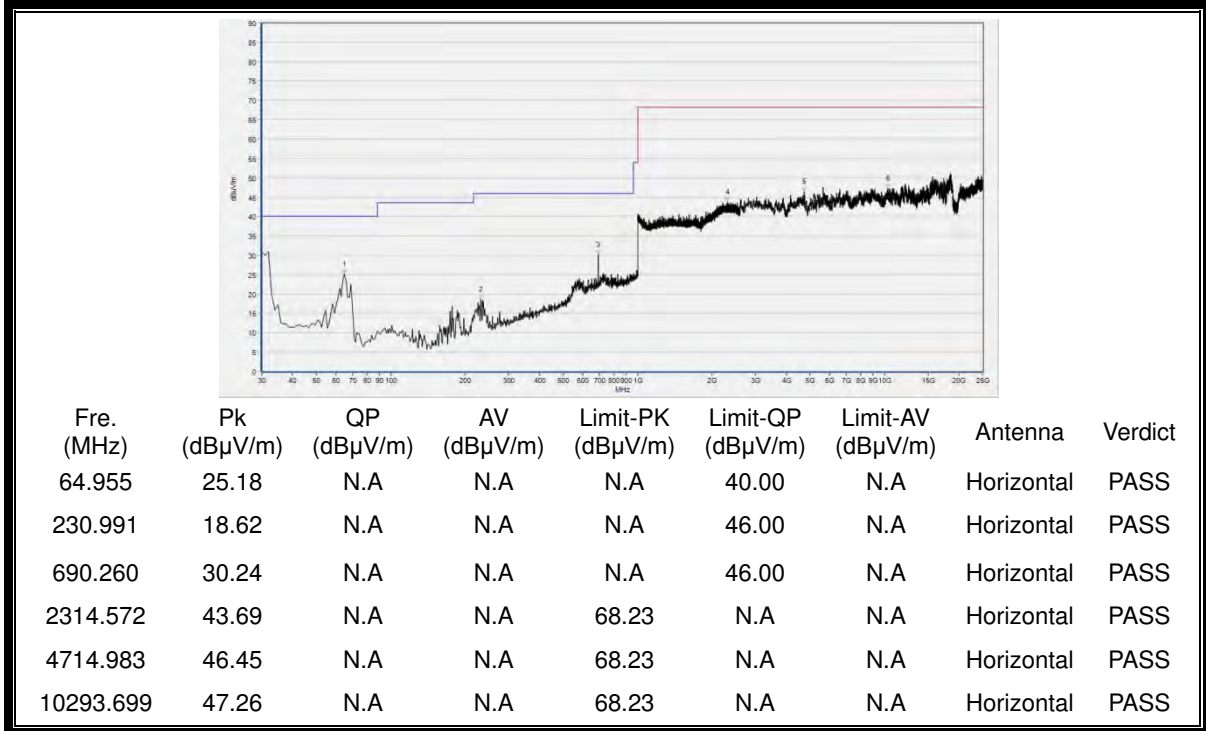
(Antenna Vertical, 30MHz to 25GHz)



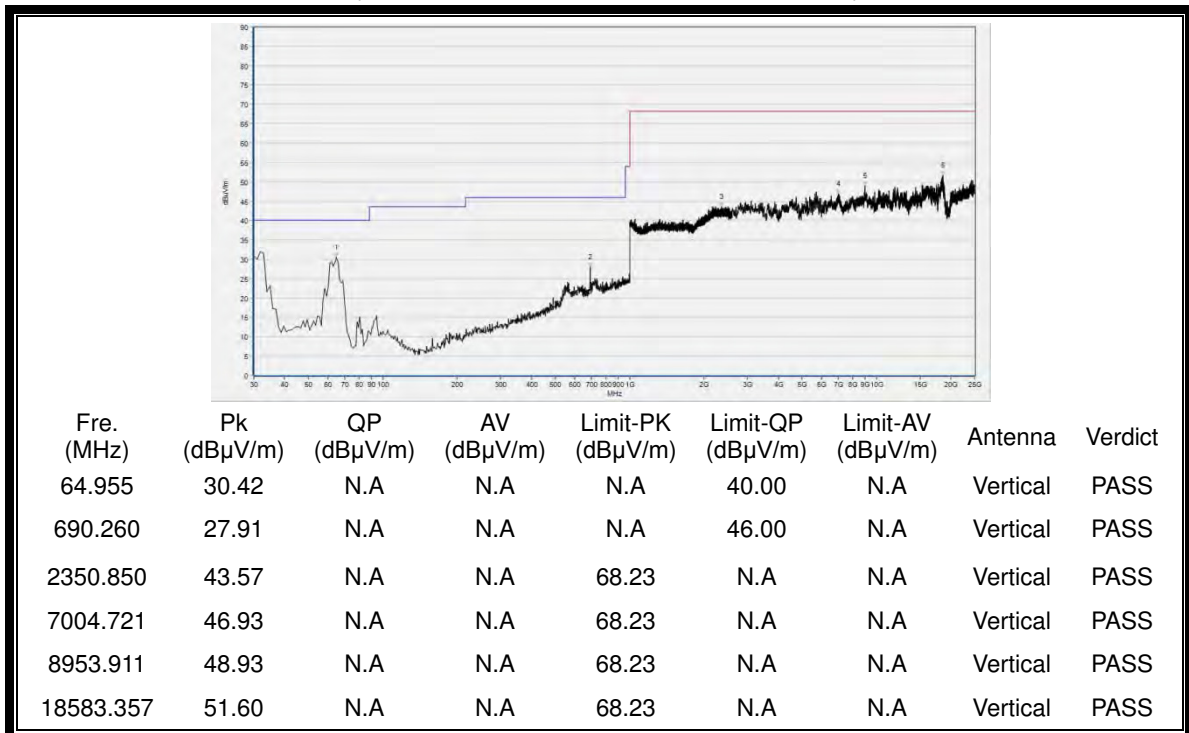
2.9.3.5 802.11n-40MHz Test mode

A. Test Plots for the Whole Measurement Frequency Range:

Plots for Channel = 38



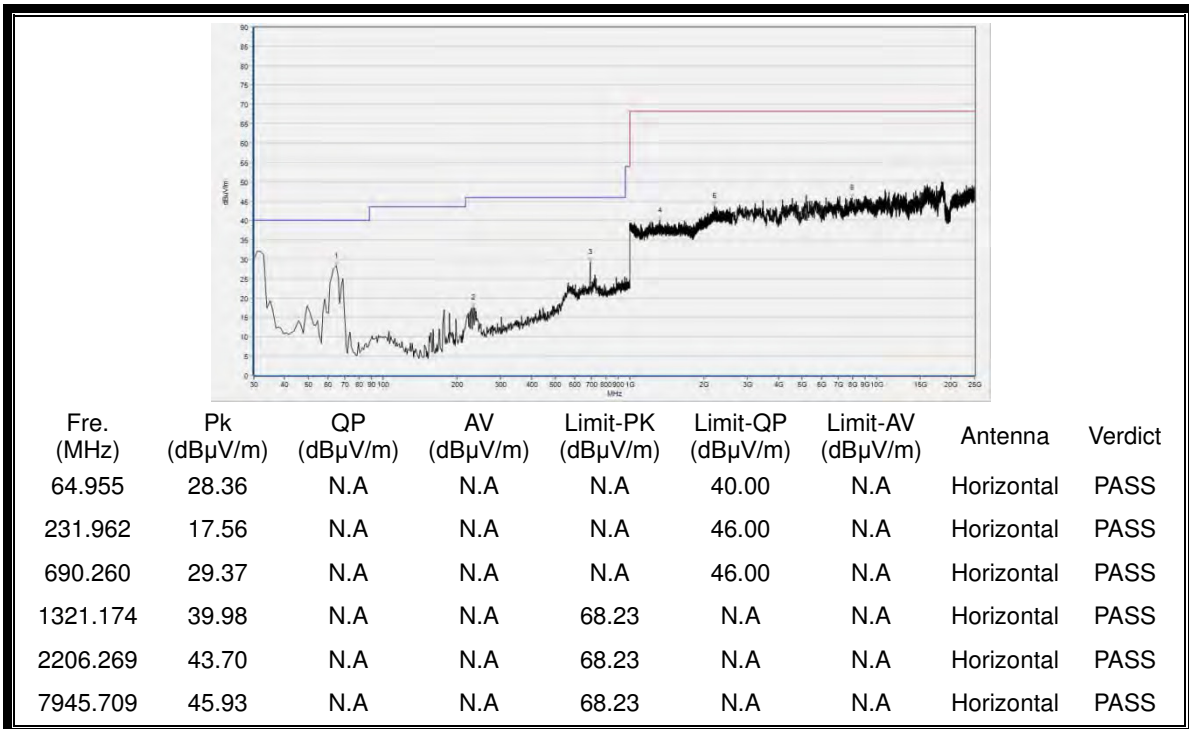
(Antenna Horizontal, 30MHz to 25GHz)



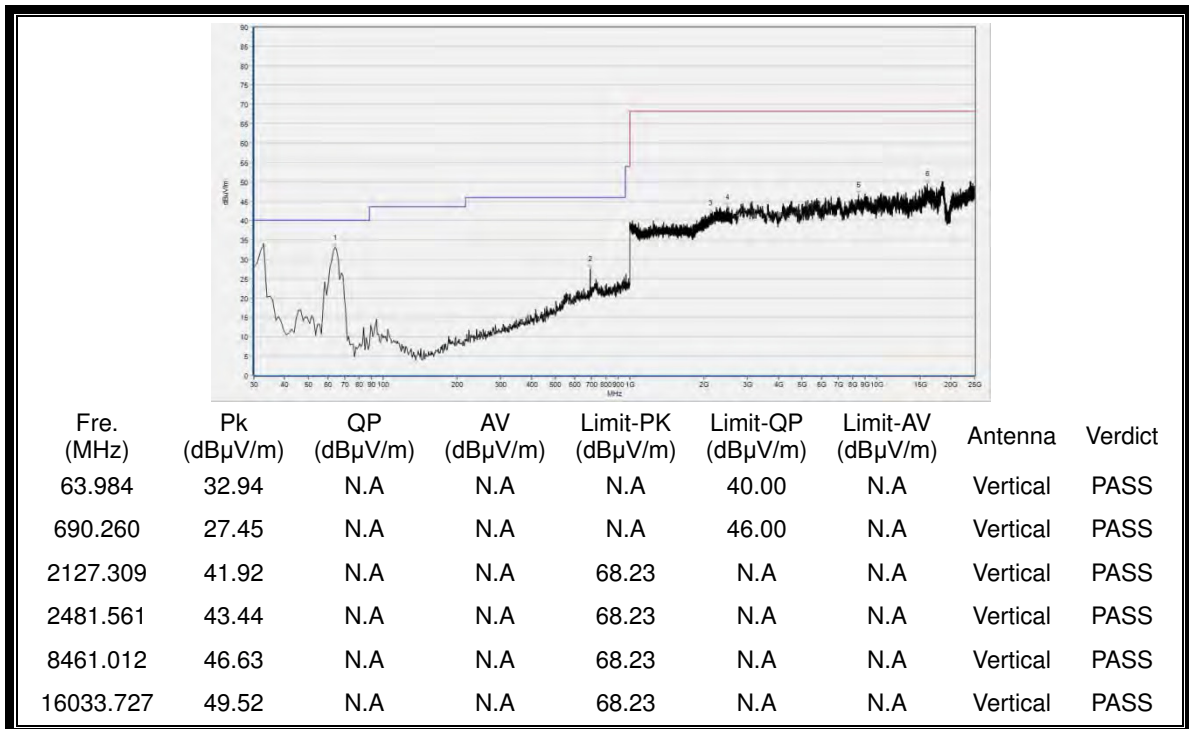
(Antenna Vertical, 30MHz to 25GHz)



Plot for Channel = 46



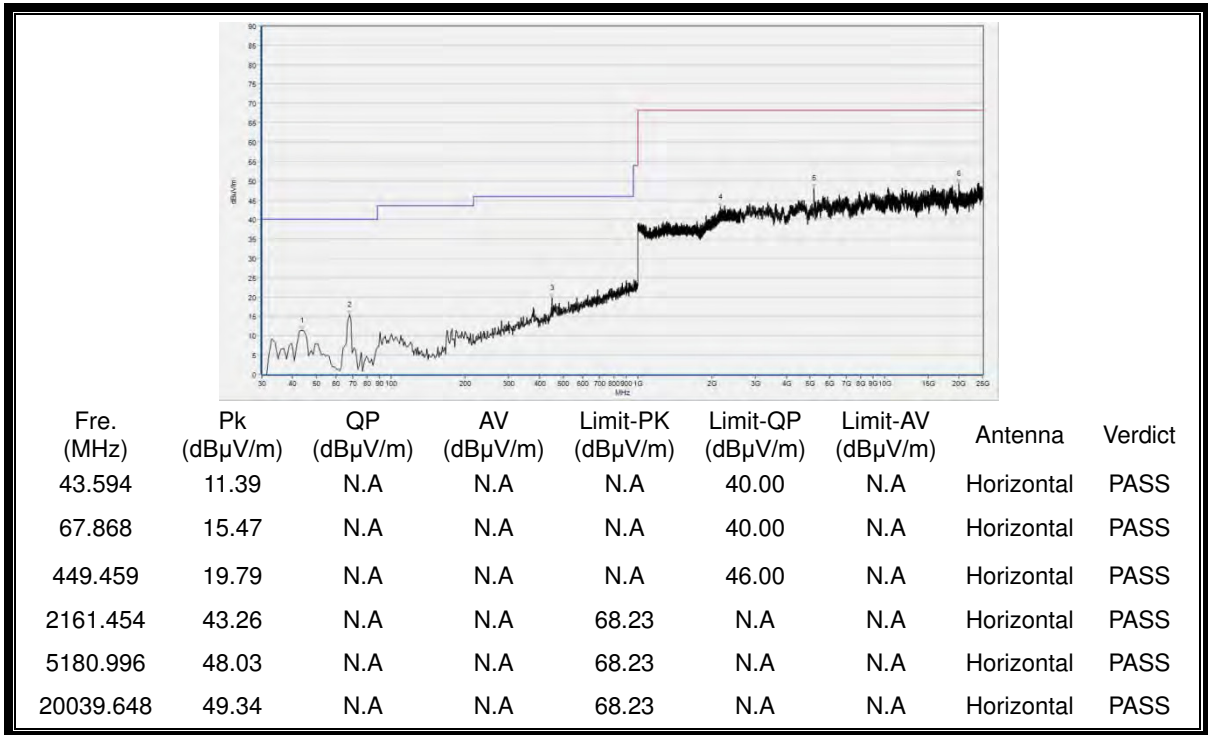
(Antenna Horizontal, 30MHz to 25GHz)



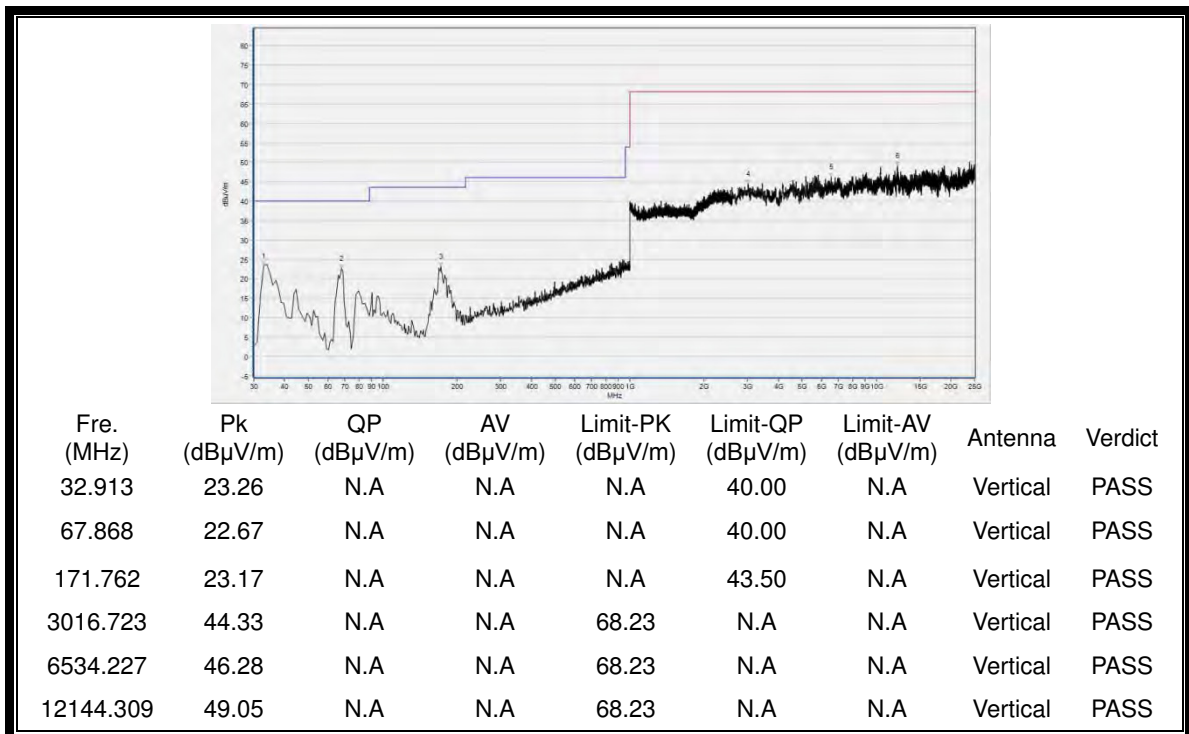
(Antenna Vertical, 30MHz to 25GHz)



Plots for Channel = 54



(Antenna Horizontal, 30MHz to 25GHz)

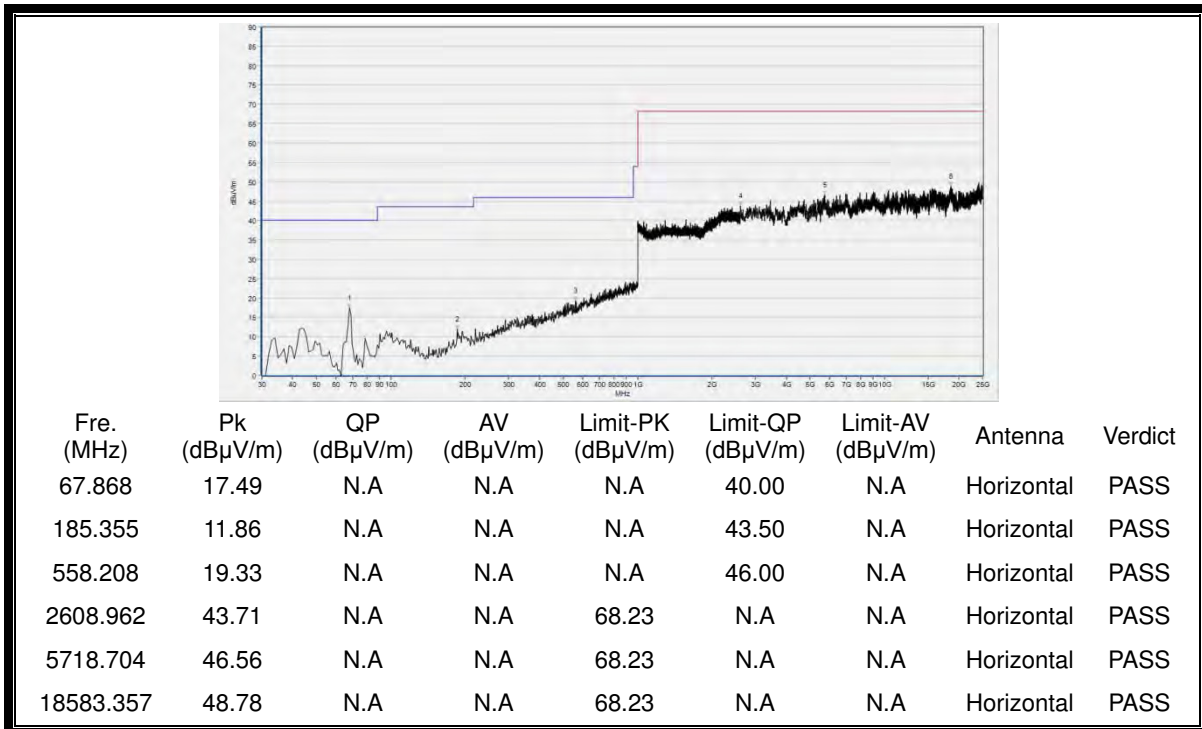


(Antenna Vertical, 30MHz to 25GHz)

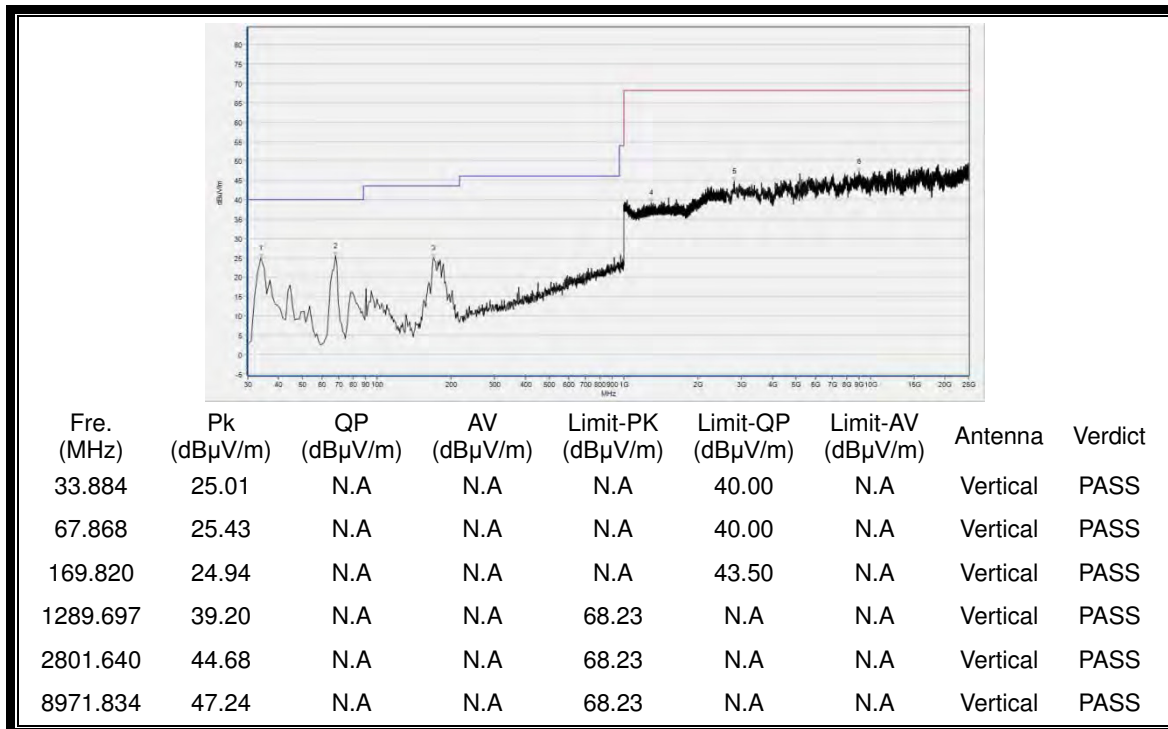




Plot for Channel = 62



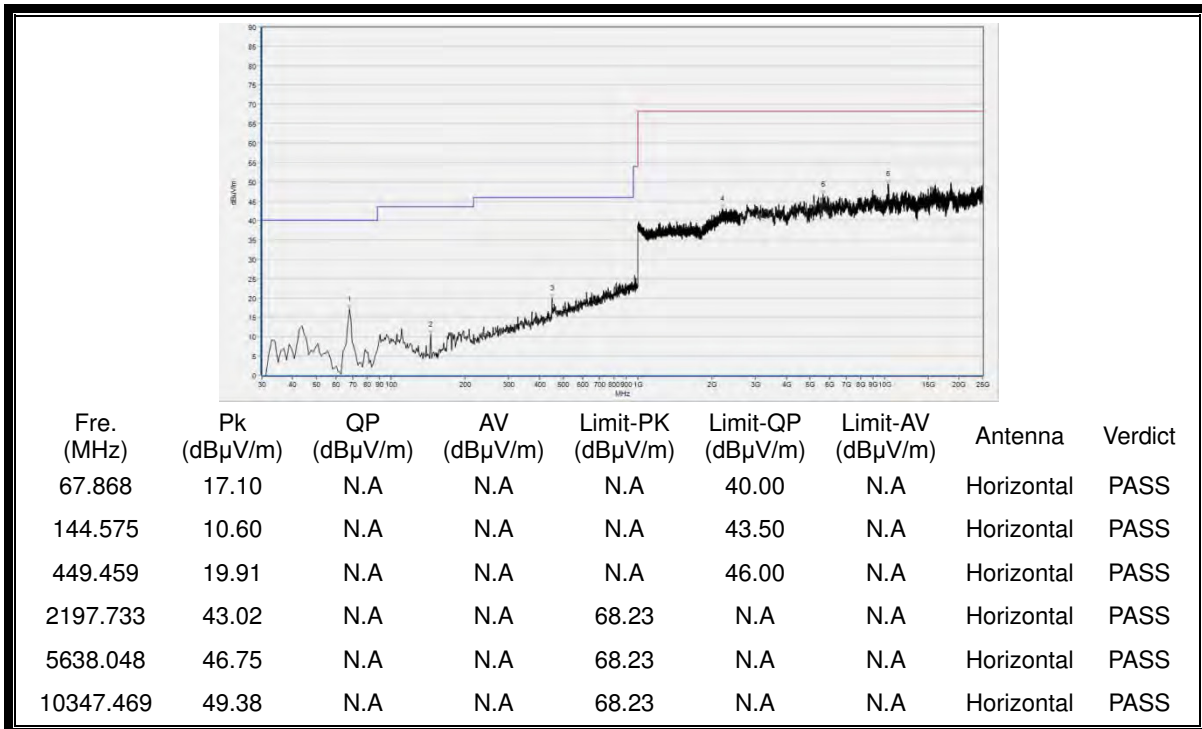
(Antenna Horizontal, 30MHz to 25GHz)



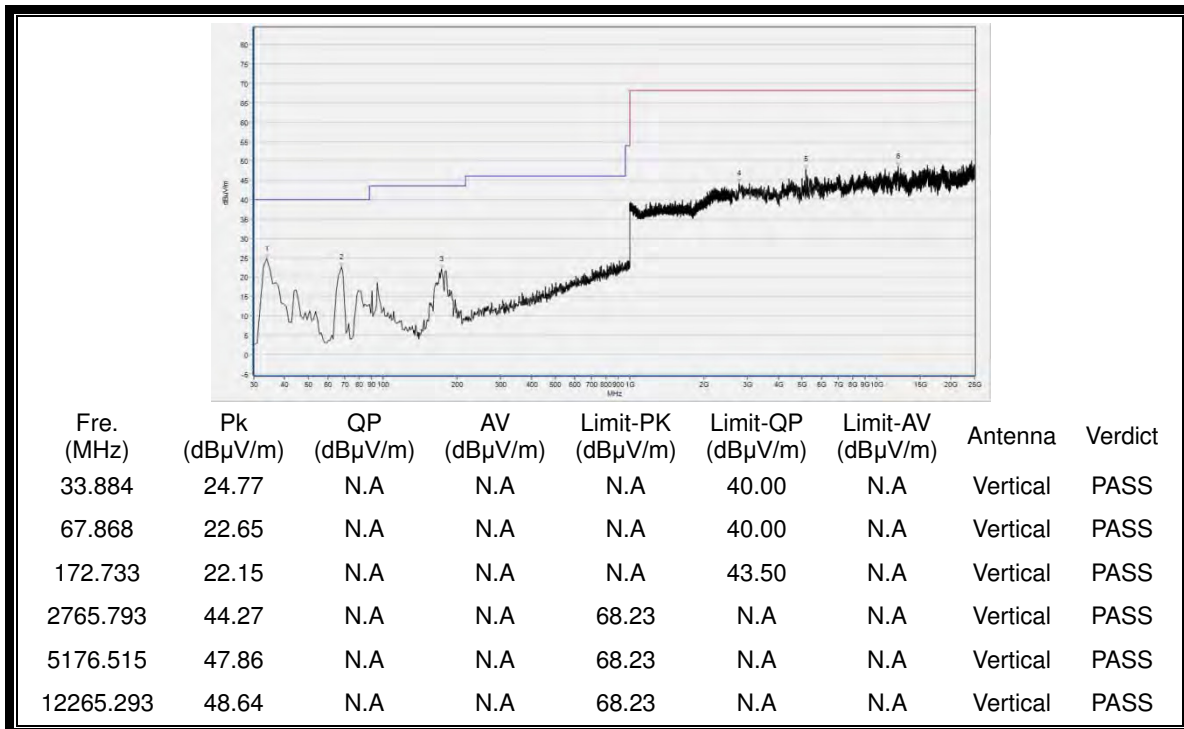
(Antenna Vertical, 30MHz to 25GHz)



Plot for Channel = 102



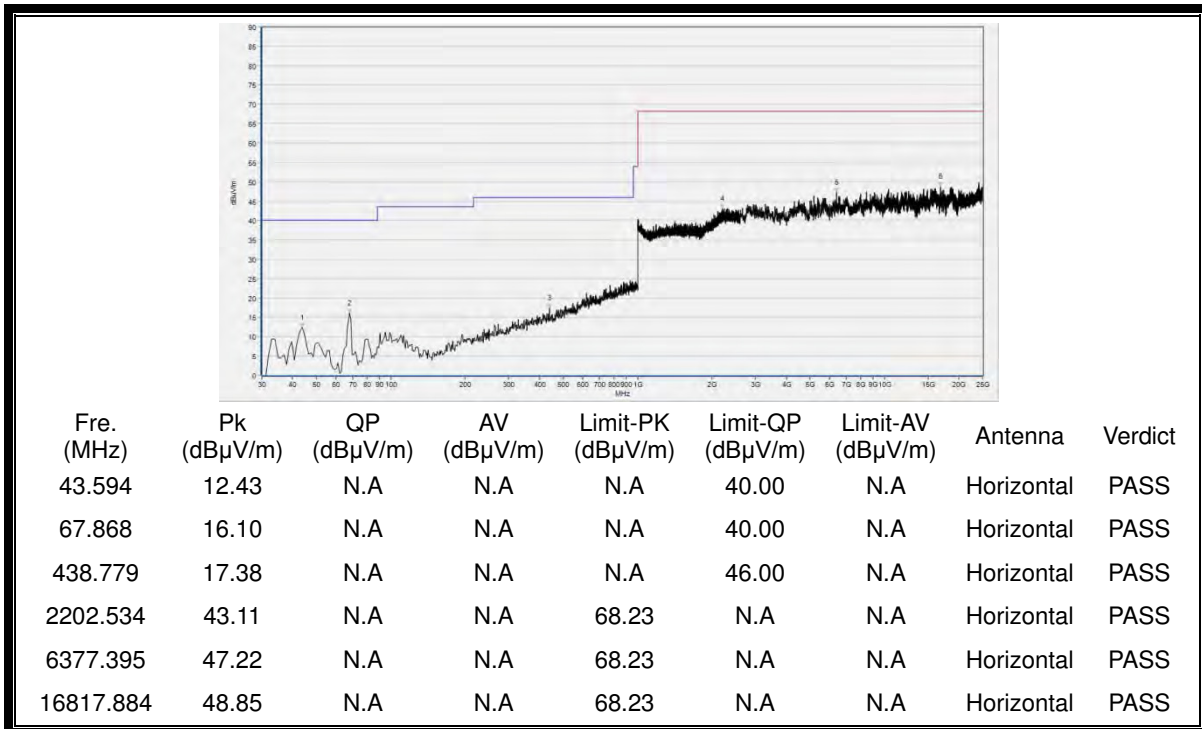
(Antenna Horizontal, 30MHz to 25GHz)



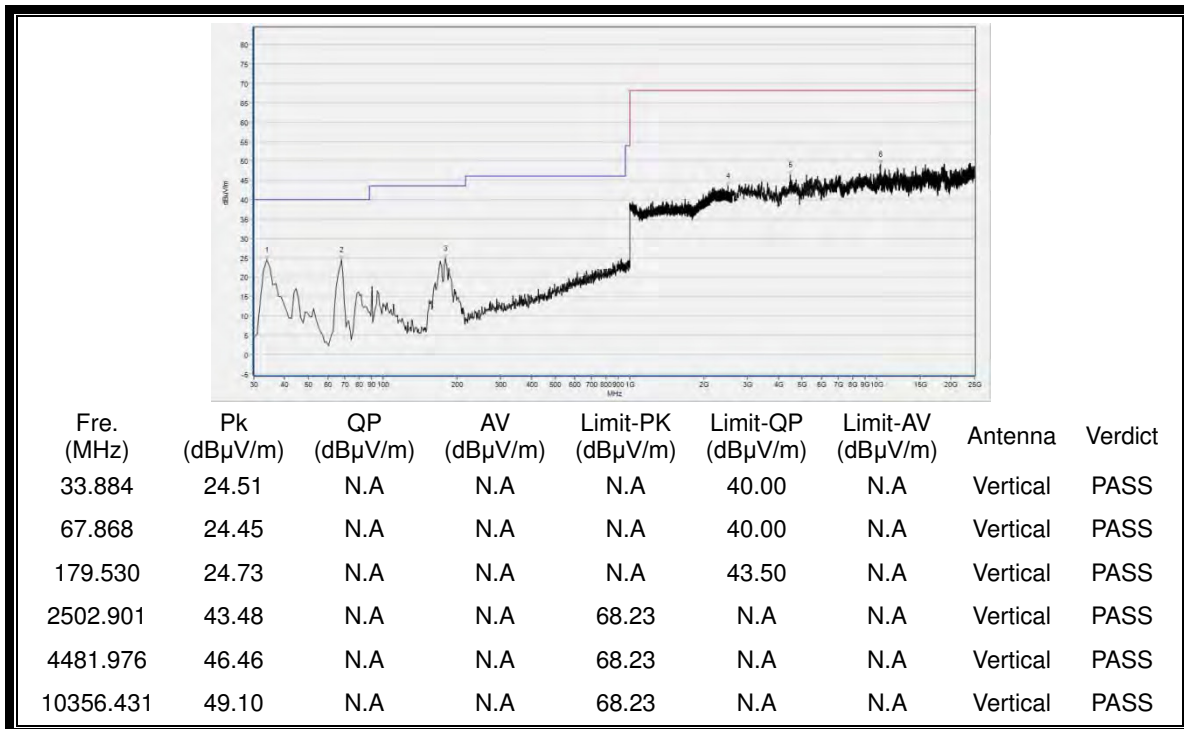
(Antenna Vertical, 30MHz to 25GHz)



Plot for Channel = 126



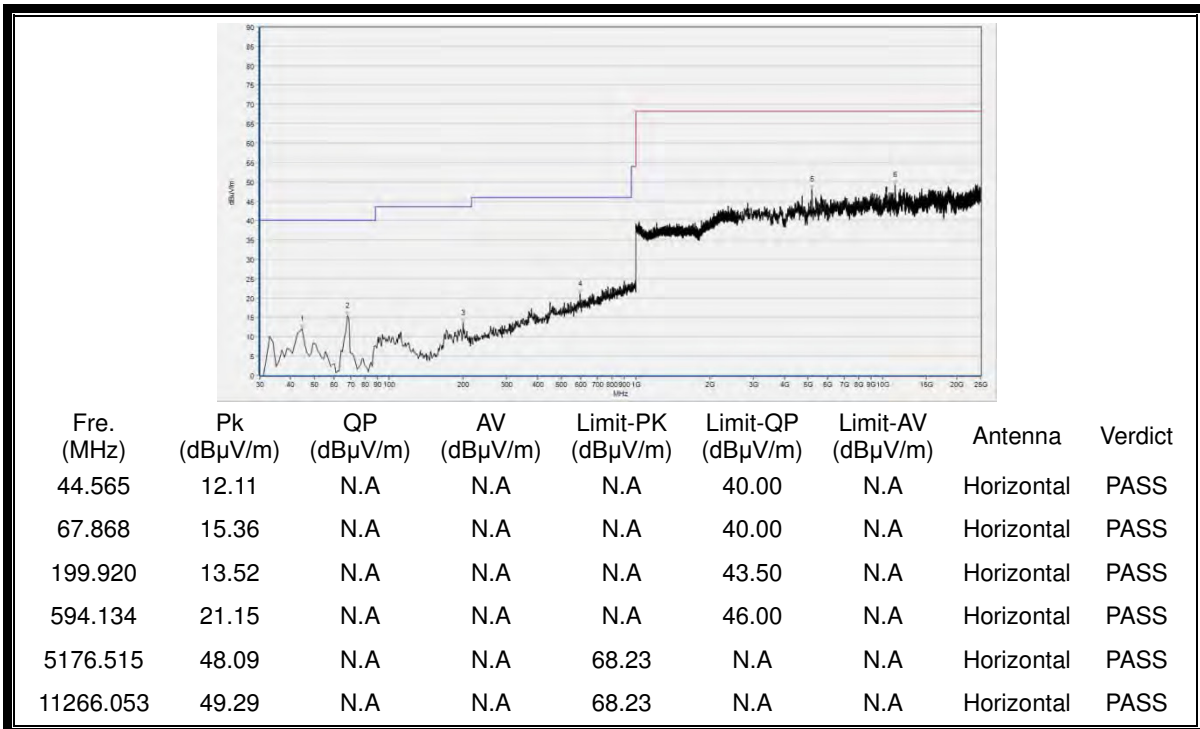
(Antenna Horizontal, 30MHz to 25GHz)



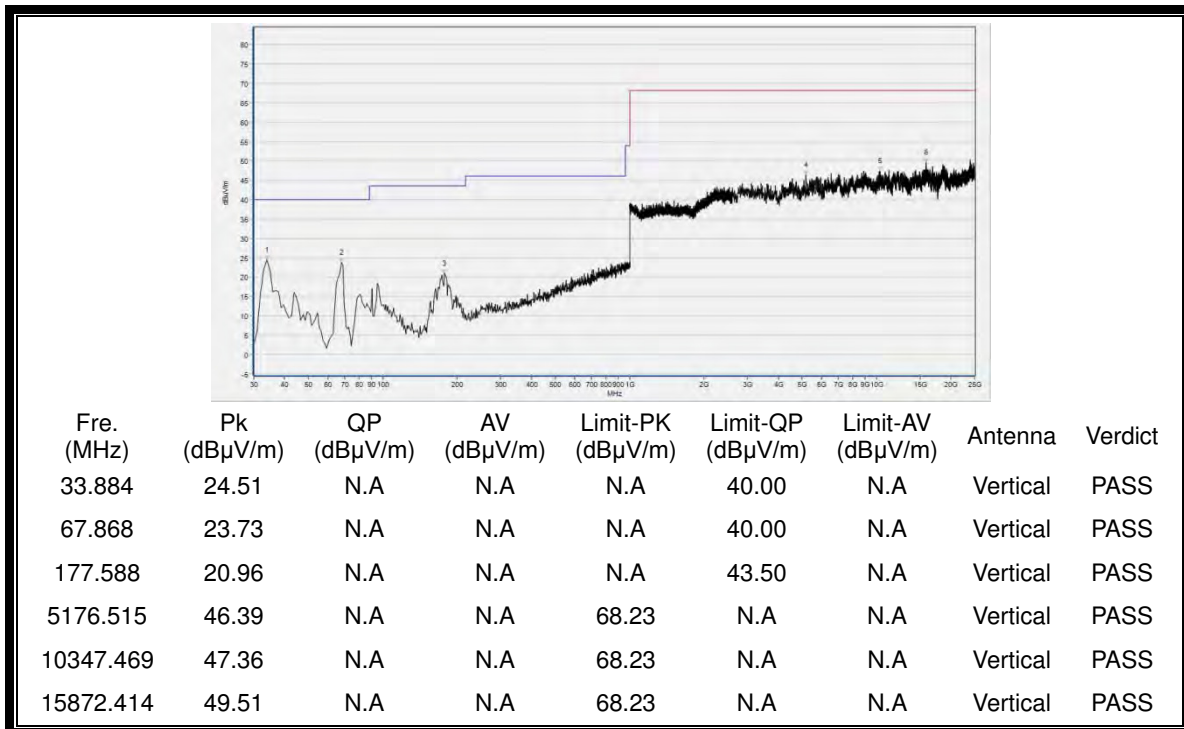
(Antenna Vertical, 30MHz to 25GHz)



Plot for Channel = 142



(Antenna Horizontal, 30MHz to 25GHz)

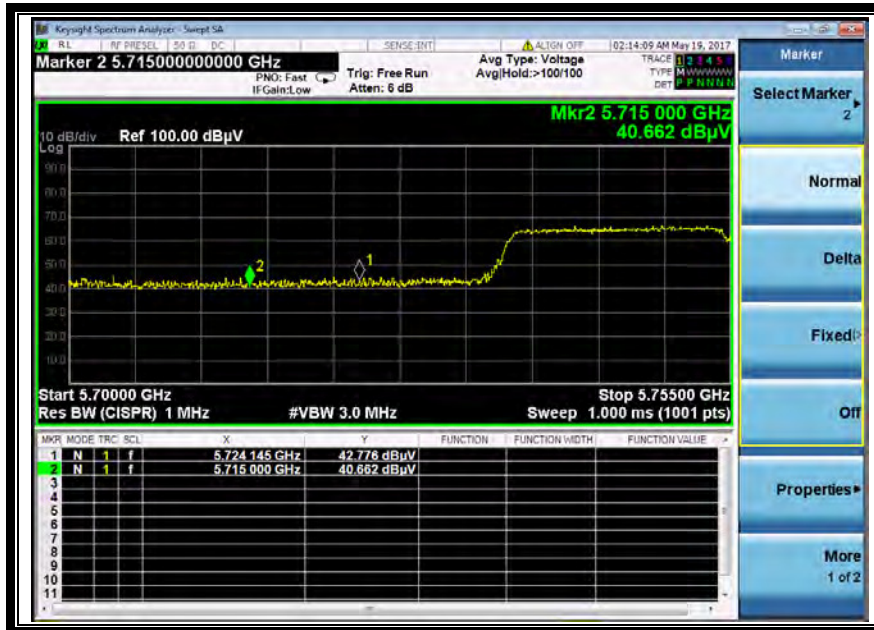


(Antenna Vertical, 30MHz to 25GHz)



Plot for Channel = 151

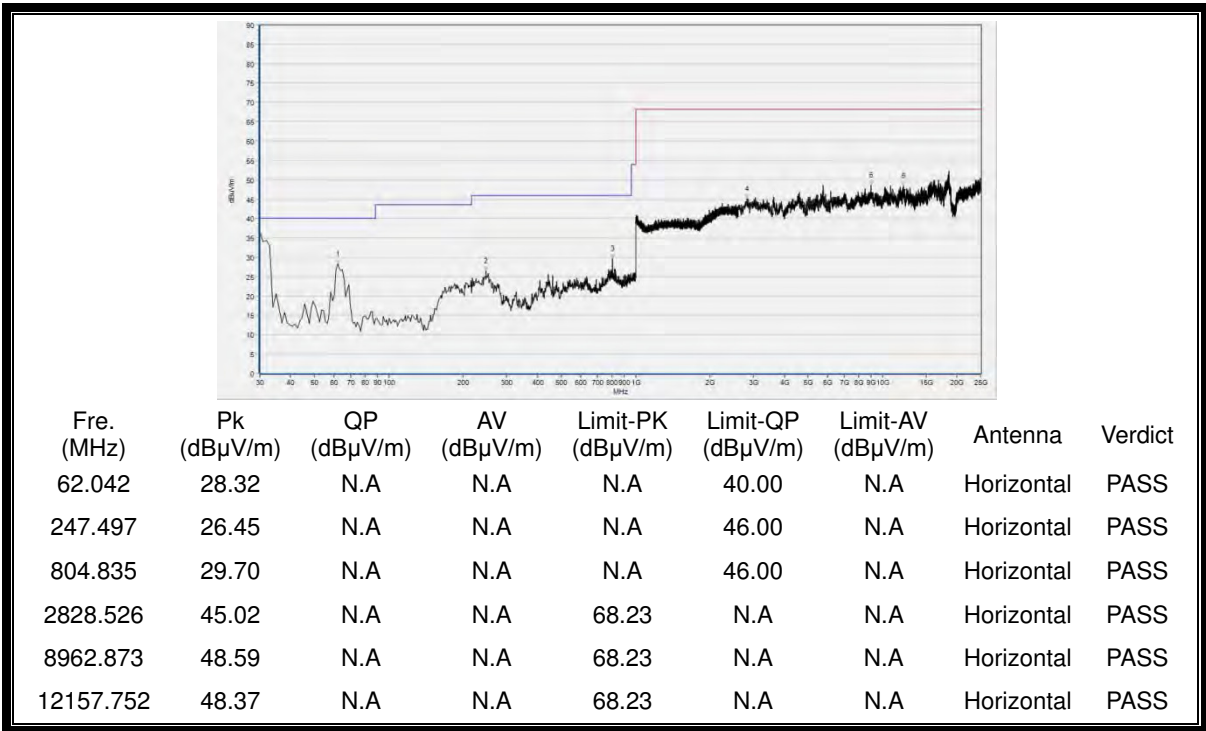
Channel	Frequency (MHz)	Antenna	Receiver Reading	A <sub>T</sub> (dB)	A <sub>Factor</sub> (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		Horiz./ Vert.	U <sub>R</sub> (dBuV)					
151	5715.00	Horizontal	40.66	-50.65	32.11	22.12	78.2	Pass
151	5715.00	Vertical	33.80	-50.65	32.11	15.26	78.2	Pass



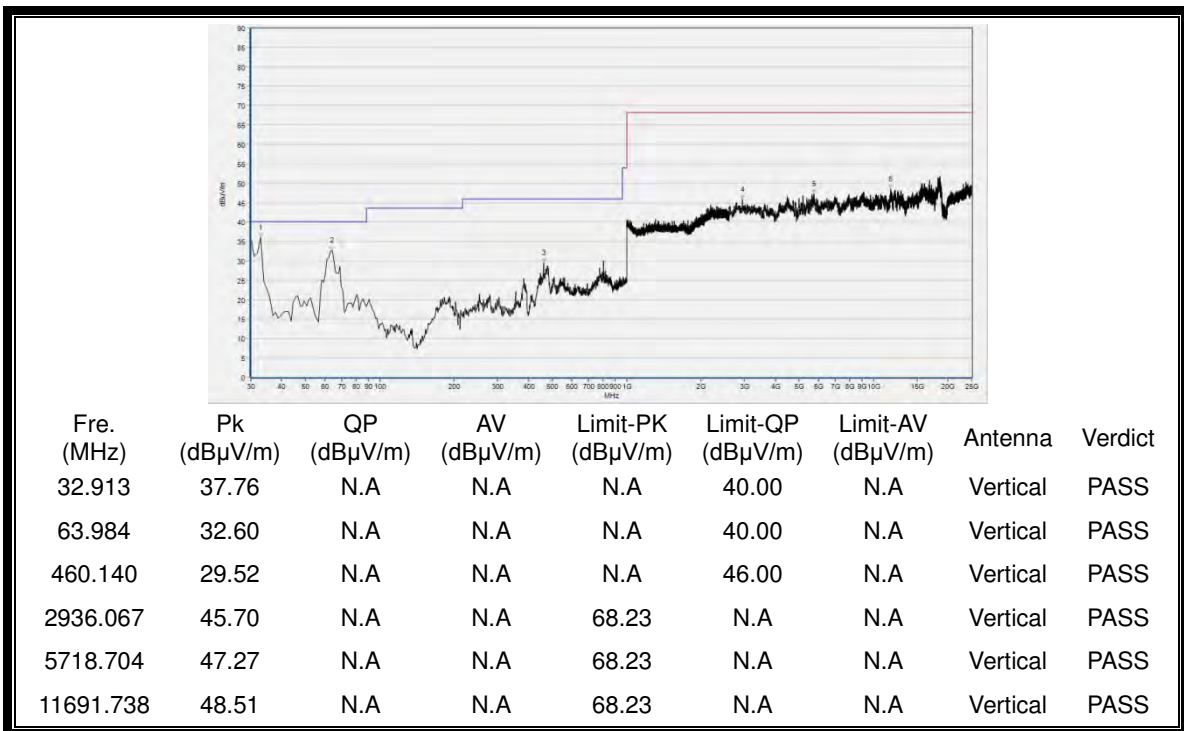
(Channel = 151 Horizontal @ 802.11n)



(Channel = 151 Vertical @ 802.11n)



(Antenna Horizontal, 30MHz to 25GHz)



(Antenna Vertical, 30MHz to 25GHz)



Plots for Channel = 159

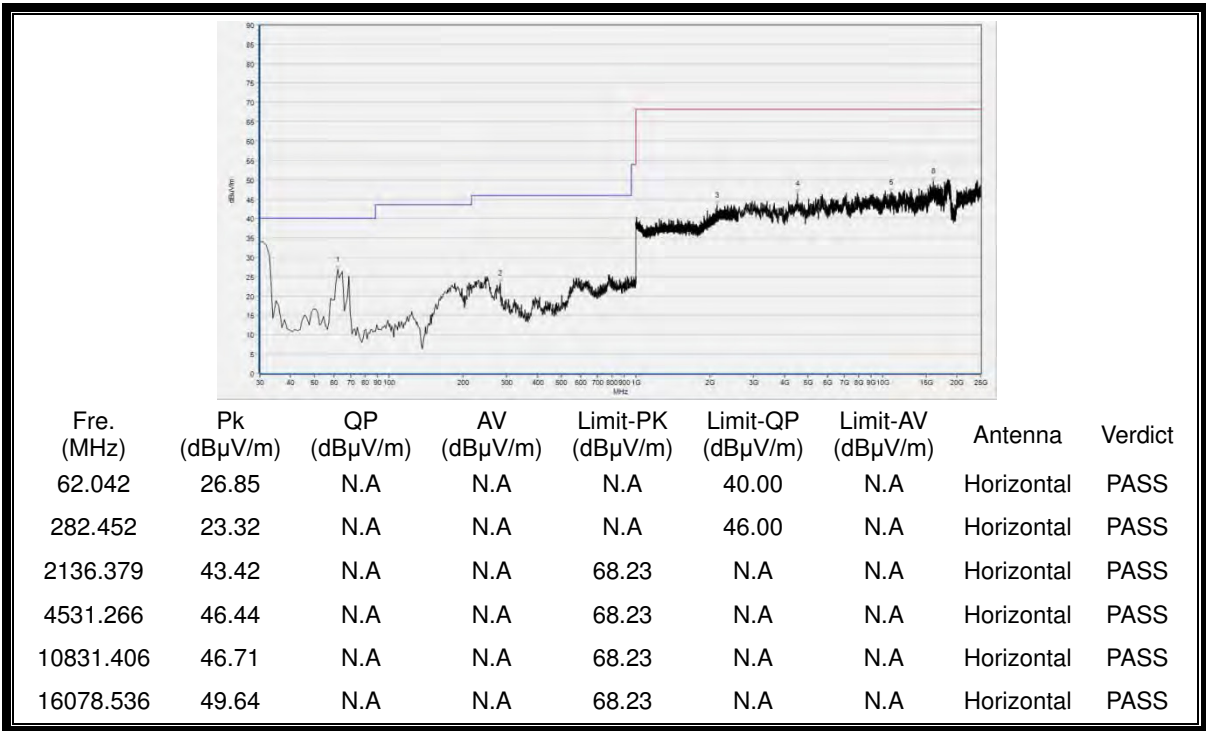
Channel	Frequency (MHz)	Antenna	Receiver Reading	A <sub>T</sub> (dB)	A <sub>Factor</sub> (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		Horiz./ Vert.	U <sub>R</sub> (dBuV)					
159	5860.00	Horizontal	41.71	-50.65	32.11	23.17	78.2	Pass
159	5860.00	Vertical	33.40	-50.65	32.11	14.86	78.2	Pass



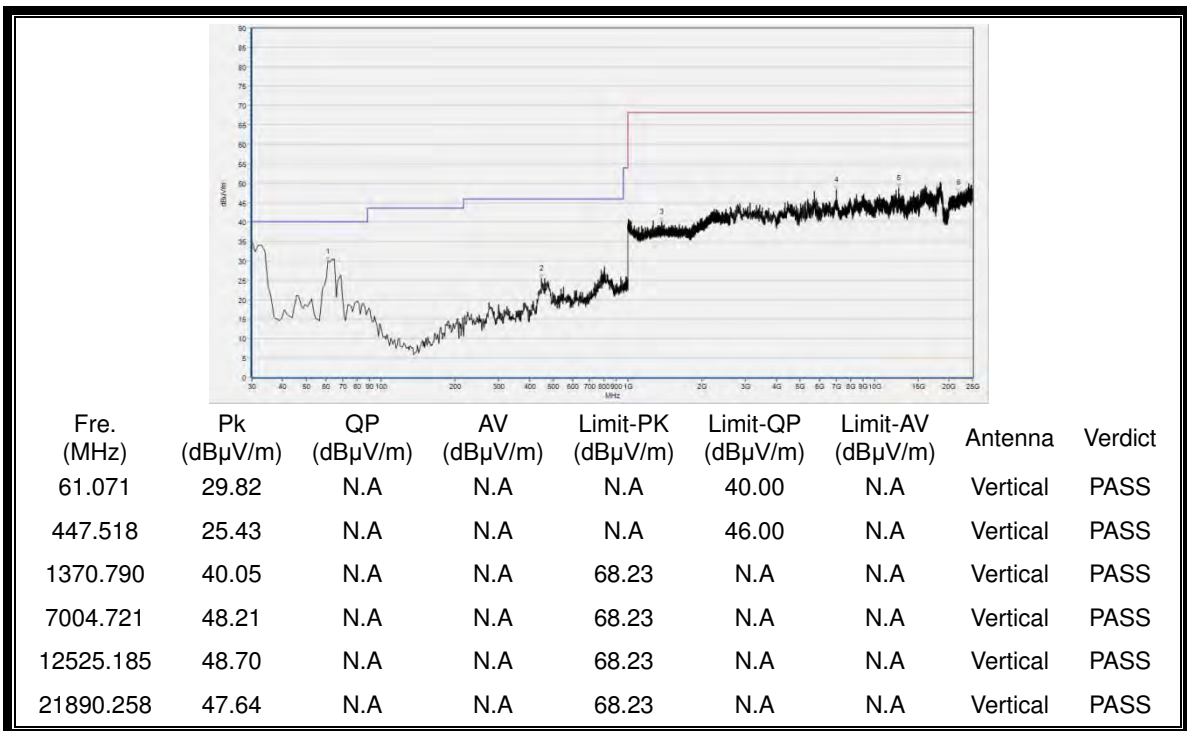
(Channel = 159 Horizontal @ 802.11n)



(Channel = 159 Vertical @ 802.11n)



(Antenna Horizontal, 30MHz to 25GHz)



(Antenna Vertical, 30MHz to 25GHz)





## **2.10 RF exposure evaluation**

### **2.10.1 Requirement**

According to § 1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of Commission's guideline.

### **2.10.2 Result**

Please refer to SAR report.



## ANNEX A GENERAL INFORMATION

### 1.1 Identification of the Responsible Testing Laboratory

Company Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Department:	Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Responsible Test Lab Manager:	Mr. Su Feng
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

### 1.2 Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

### 1.3 Facilities and Accreditations

Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L3572.

All measurement facilities used to collect the measurement data are located at FL.1, Building A, FeiYang Science Park, Block 67, BaoAn District, Shenzhen, 518101 P. R. China. The test site is constructed in conformance with the requirements of ANSI C63.10 2013 and CISPR Publication 22; the FCC registration number is 695796.

### 1.4 Maximum measurement uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for test performed on the EUT as specified in CISPR 16-1-2:

Test items	Uncertainty
Peak Output Power	$\pm 2.22\text{dB}$
Power spectral density (PSD)	$\pm 2.22\text{dB}$
Bandwidth	$\pm 5\%$
Conducted Spurious Emission	$\pm 2.77\text{ dB}$
Restricted Frequency Bands	$\pm 5\%$
Radiated Emission	$\pm 2.95\text{dB}$
Conducted Emission	$\pm 2.44\text{dB}$



This uncertainty represent an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2

## 1.5 Test Equipments Utilized

### 1.5.1 Conducted Test Equipments

Conducted Test Equipment						
No.	Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Cal. Due
1	Spectrum Analyzer	MY45101810	E4407B	Agilent	2016.06.02	2017.06.01
2	Power Splitter	NW521	1506A	Weinschel	2016.06.02	2017.06.01
3	Attenuator 1	(N/A.)	10dB	Resnet	2016.06.02	2017.06.01
4	Attenuator 2	(N/A.)	3dB	Resnet	2016.06.02	2017.06.01
5	EXA Signal Analyzer	MY53470836	N9010A	Agilent	2016.12.07	2017.12.06
6	RF cable (30MHz-26GHz)	CB01	RF01	Morlab	N/A	N/A
7	Coaxial cable	CB02	RF02	Morlab	N/A	N/A
8	SMA connector	CN01	RF03	HUBER-SUHNER	N/A	N/A

### 1.5.2 Conducted Emission Test Equipments

Conducted Emission Test Equipments						
No.	Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Cal. Due
1	Receiver	US44210471	E7405A	Agilent	2016.06.02	2017.06.01
2	LISN	812744	NSLK 8127	Schwarzbeck	2016.06.02	2017.06.01
3	Service Supplier	100448	CMU200	R&S	2016.06.02	2017.06.01
4	Pulse Limiter (20dB)	9391	VTSD 9561-D	Schwarzbeck	2016.06.02	2017.06.01
5	Coaxial cable(BNC) (30MHz-26GHz)	CB01	EMC01	Morlab	N/A	N/A

### 1.5.3 Auxiliary Test Equipment

Auxiliary Test Equipment						
No.	Equipment Name	Model No.	Brand Name	Manufacturer	Cal.Date	Cal.Due Date
1	Computer	T430i	Think Pad	Lenovo	N/A	N/A

**1.5.4 Radiated Test Equipments**

<b>Radiated Test Equipments</b>						
No.	Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Cal.Due Date
1	System Simulator	GB45360846	8960-E5515C	Agilent	2016.06.02	2017.06.01
2	Receiver	MY54130016	N9038A	Agilent	2016.06.02	2017.06.01
3	Test Antenna - Bi-Log	N/A	VULB9163	Schwarzbeck	2016.07.05	2017.07.04
4	Test Antenna - Horn	9170C-531	BBHA9170	Schwarzbeck	2016.07.05	2017.07.04
5	Test Antenna - Loop	1519-022	FMZB1519	Schwarzbeck	2016.07.05	2017.07.04
6	Test Antenna - Horn	71688	BBHA 9120D	Schwarzbeck	2016.07.05	2017.07.04
7	Coaxial cable (N male) (9KHz-30MHz)	CB04	EMC04	Morlab	N/A	N/A
8	Coaxial cable (N male) (30MHz-26GHz)	CB02	EMC02	Morlab	N/A	N/A
9	Coaxial cable(N male) (30MHz-26GHz)	CB03	EMC03	Morlab	N/A	N/A
10	1-18GHz pre-Amplifier	MA02	TS-PR18	Rohde& Schwarz	2016.07.05	2017.07.04
11	18-26.5GHz pre-Amplifier	MA03	TS-PR18	Rohde& Schwarz	2016.07.05	2017.07.04

**1.5.5 Climate Chamber**

<b>Climate Chamber</b>						
No.	Equipment Name	Serial No.	Type	Manufacturer	Cal.Date	Cal.Due Date
1	Climate Chamber	2004012	HL4003T	Yinhe	2017.01.11	2018.01.10

**1.5.6 Vibration Table**

<b>Vibration Table</b>						
No.	Equipment Name	Serial No.	Type	Manufacturer	Cal.Date	Cal.Due Date
1	Vibration Table	N/A	ACT2000-S015L	CMI-COM	2017.01.11	2018.01.10

**1.5.7 Anechoic Chamber**

<b>Anechoic Chamber</b>						
No.	Equipment Name	Serial No.	Type	Manufacturer	Cal.Date	Cal.Due Date
1	Anechoic Chamber	N/A	9m*6m*6m	Changning	2017.01.11	2018.01.10

\*\*\*\*\* END OF REPORT \*\*\*\*\*