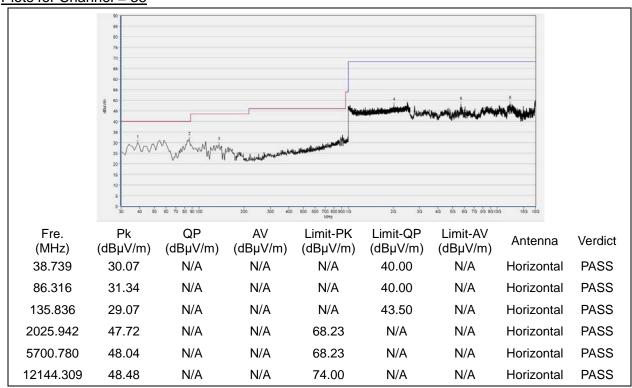
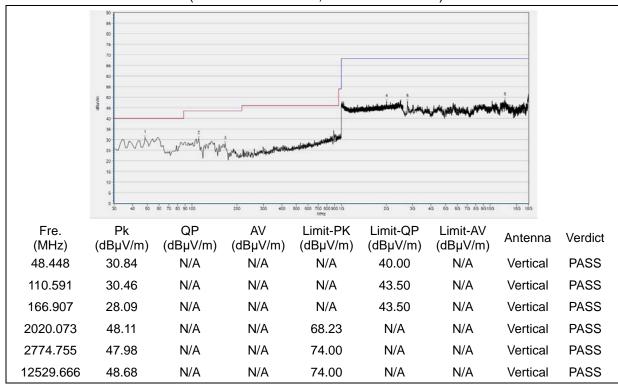


## 802.11n (HT40) Test mode

## Plots for Channel = 38



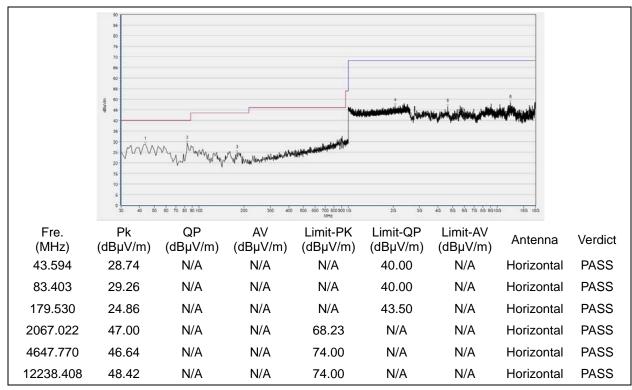
#### (Antenna Horizontal, 30MHz to 18GHz)



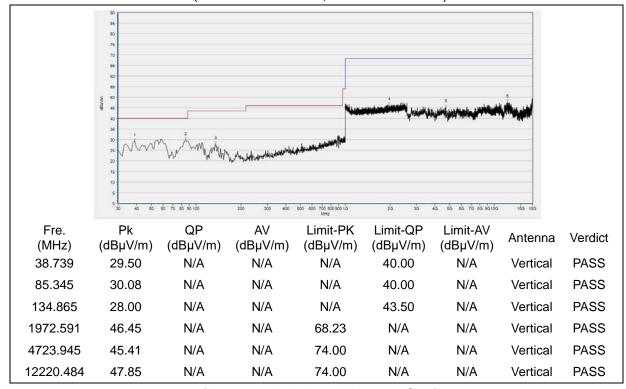








(Antenna Horizontal, 30MHz to 18GHz)

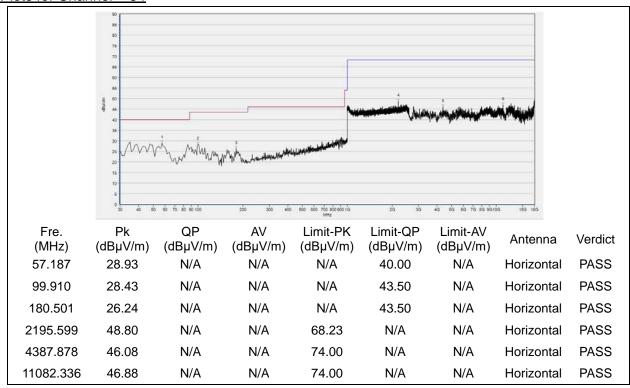


(Antenna Vertical, 30MHz to 18GHz)

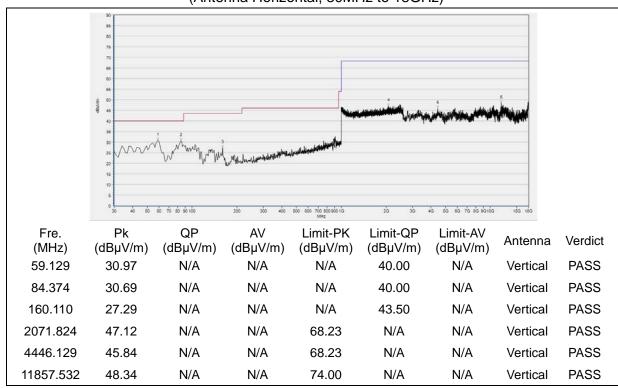




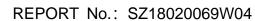




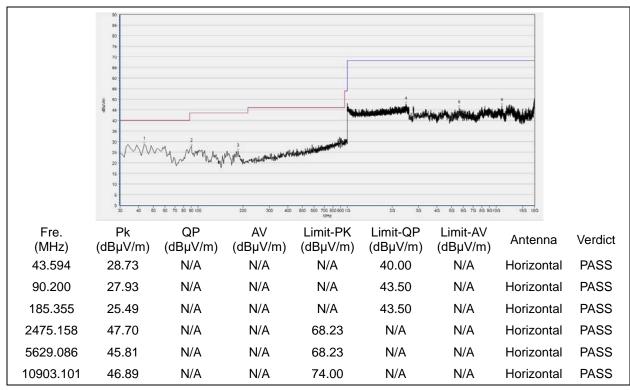
#### (Antenna Horizontal, 30MHz to 18GHz)



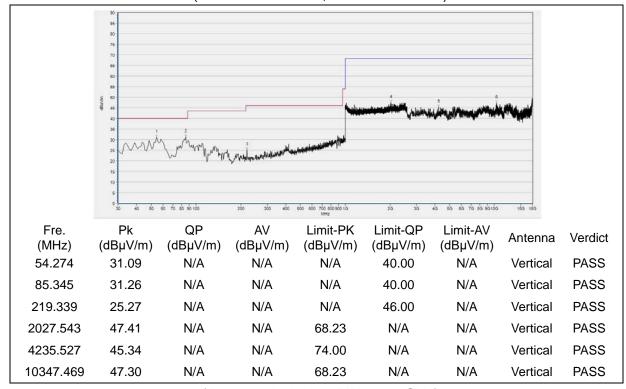








(Antenna Horizontal, 30MHz to 18GHz)

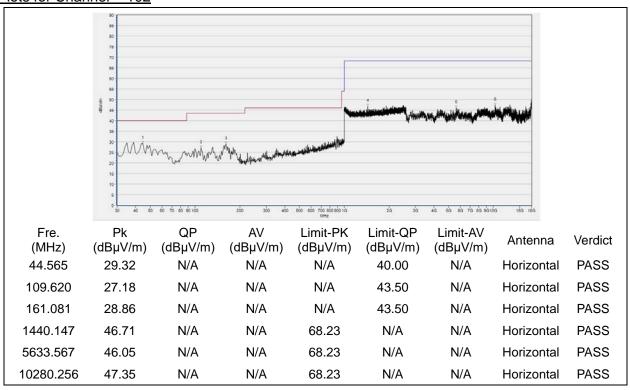


(Antenna Vertical, 30MHz to 18GHz)

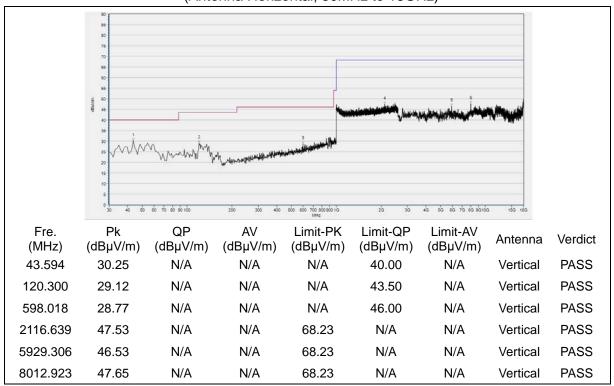




#### Plots for Channel = 102



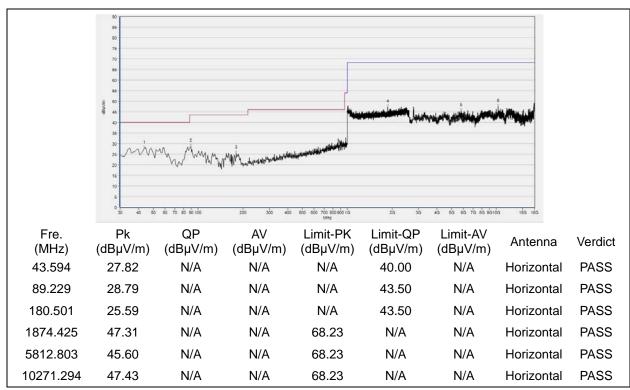
#### (Antenna Horizontal, 30MHz to 18GHz)



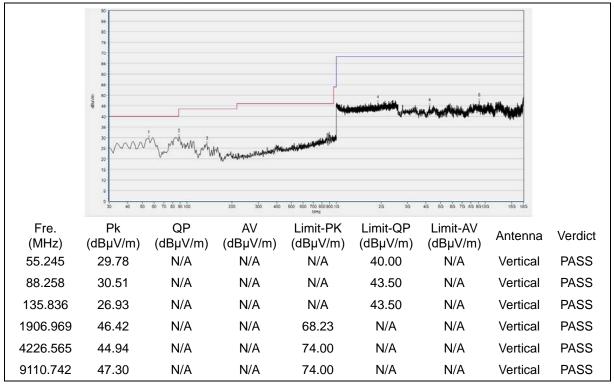




#### Plot for Channel = 126



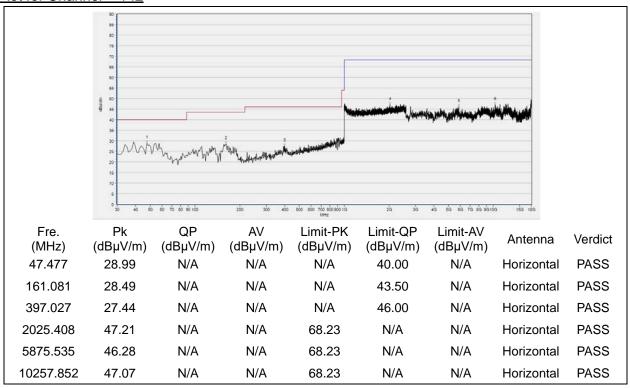
#### (Antenna Horizontal, 30MHz to 18GHz)



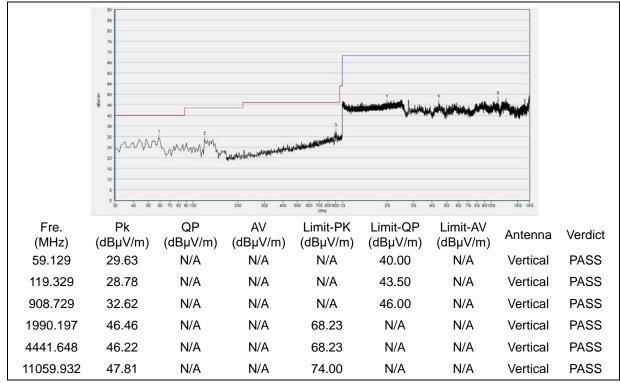








(Antenna Horizontal, 30MHz to 18GHz)

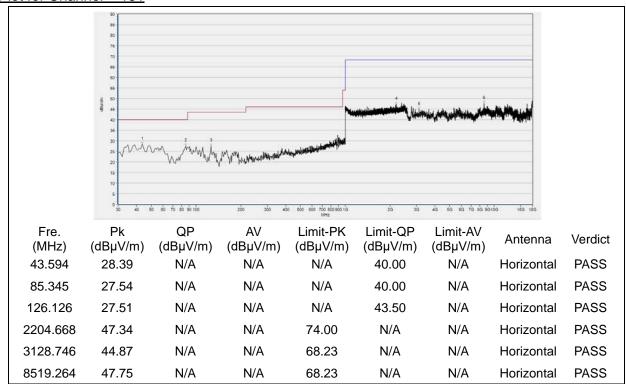


(Antenna Vertical, 30MHz to 18GHz)

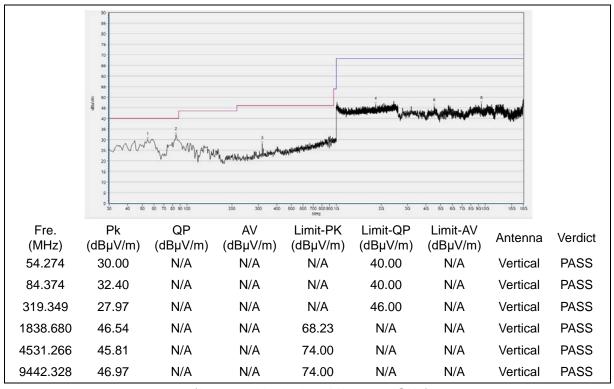








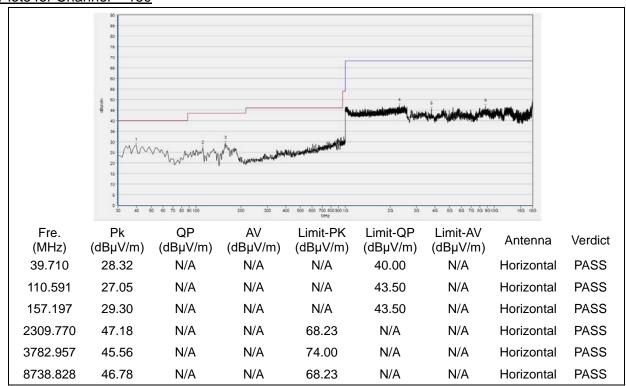
(Antenna Horizontal, 30MHz to 18GHz)



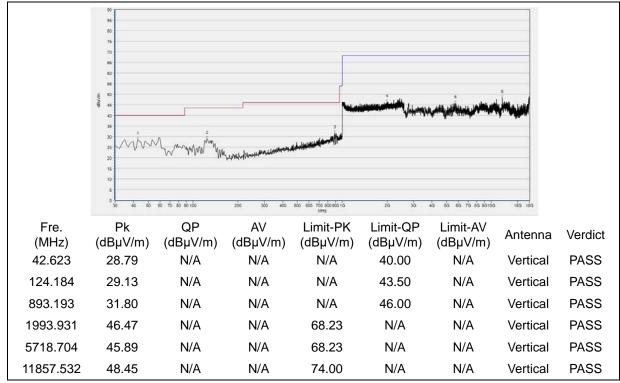








(Antenna Horizontal, 30MHz to 18GHz)



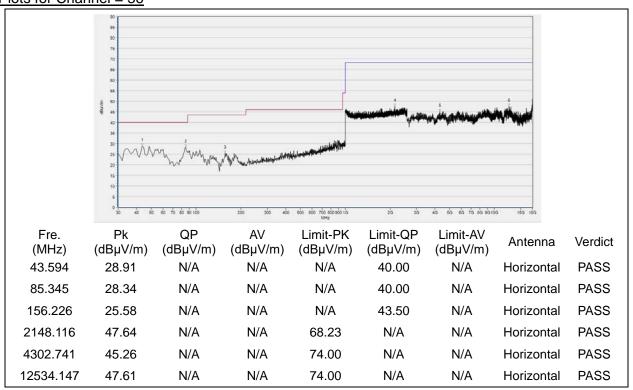
(Antenna Vertical, 30MHz to 18GHz)



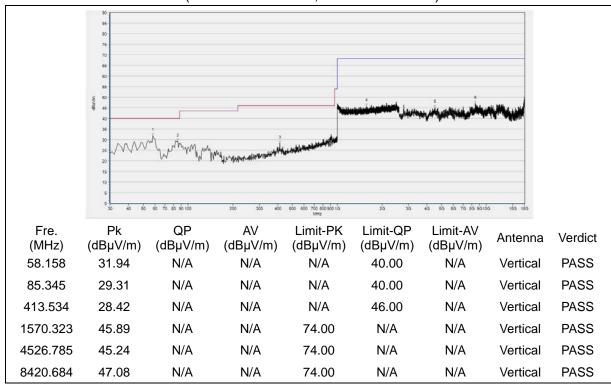


# 802.11ac (VHT20) Test mode

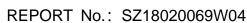
### Plots for Channel = 36



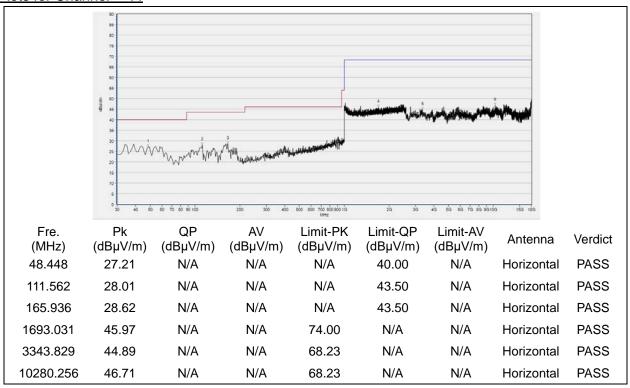
#### (Antenna Horizontal, 30MHz to 18GHz)



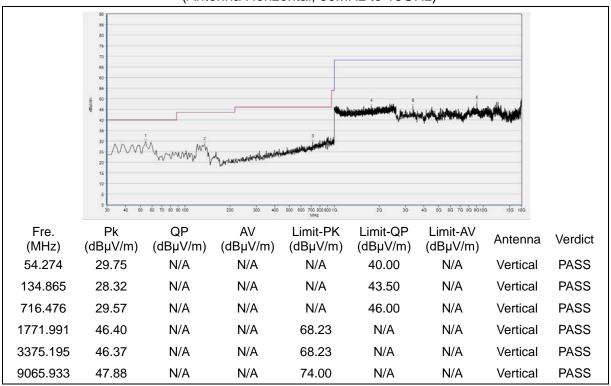








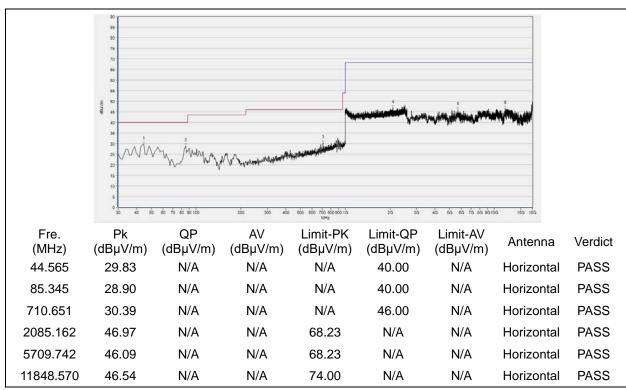
#### (Antenna Horizontal, 30MHz to 18GHz)



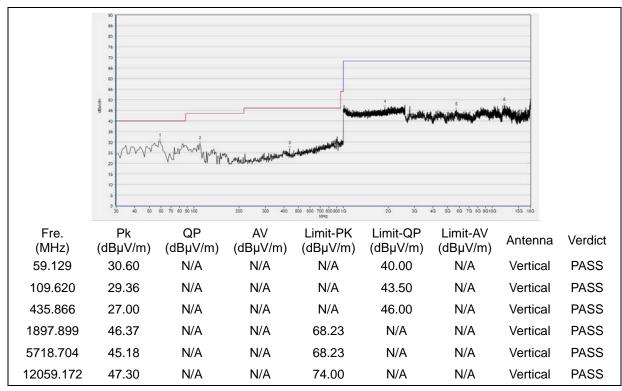








(Antenna Horizontal, 30MHz to 18GHz)

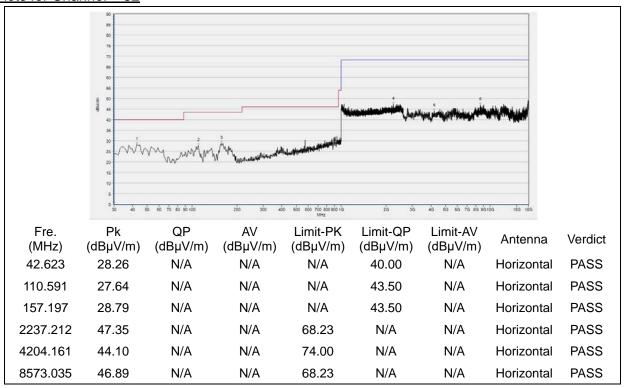


(Antenna Vertical, 30MHz to 18GHz)

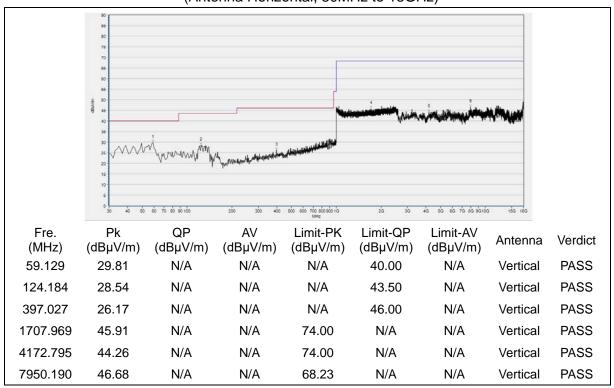




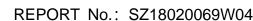




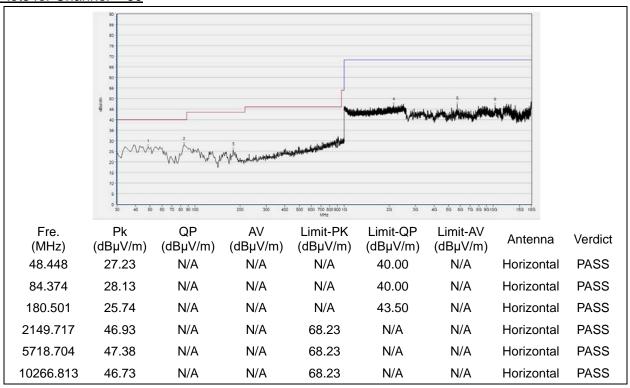
#### (Antenna Horizontal, 30MHz to 18GHz)



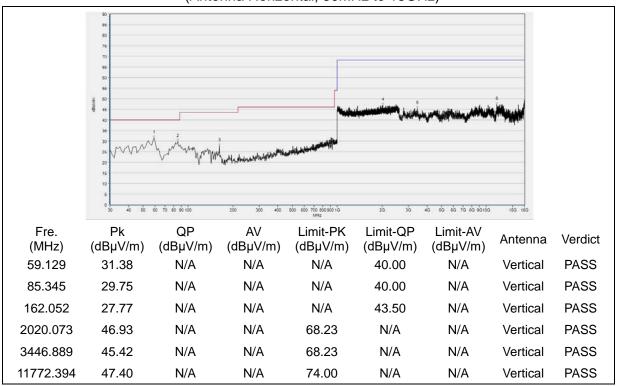








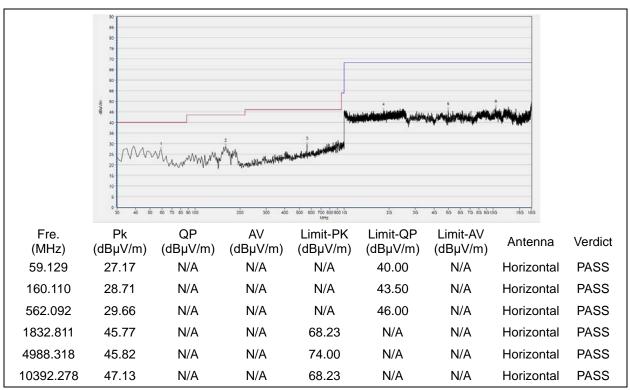
#### (Antenna Horizontal, 30MHz to 18GHz)



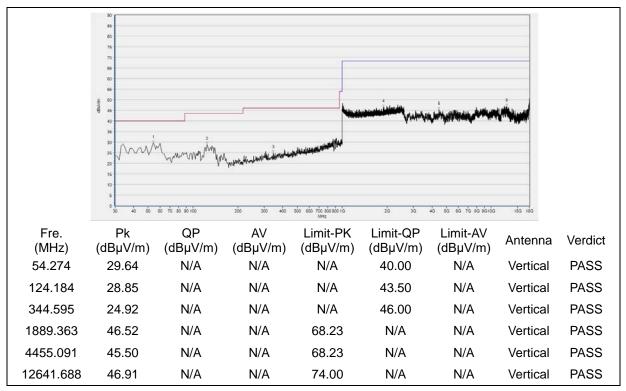






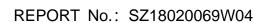


(Antenna Horizontal, 30MHz to 18GHz)

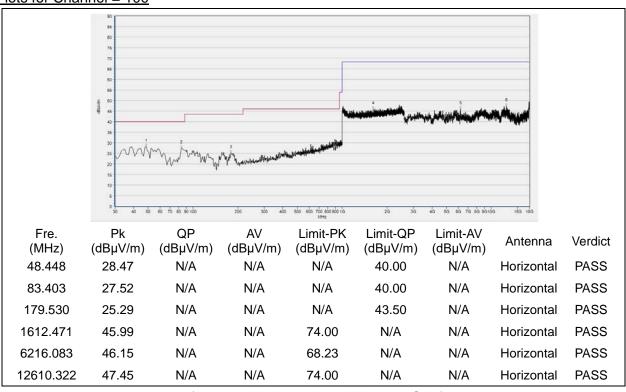


(Antenna Vertical, 30MHz to 18GHz)

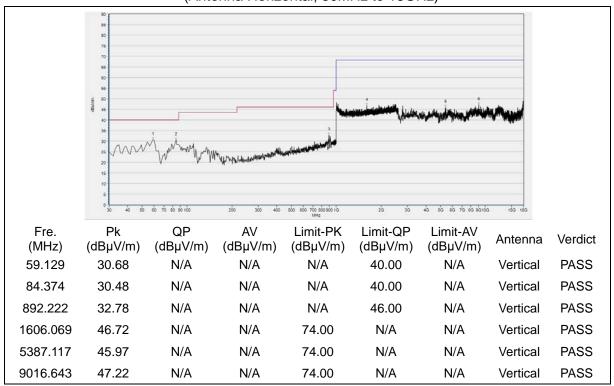








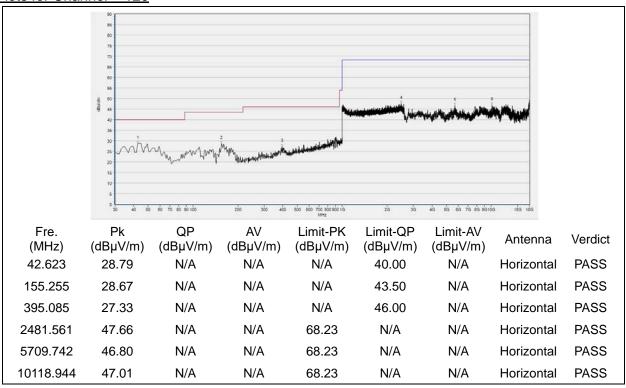
#### (Antenna Horizontal, 30MHz to 18GHz)



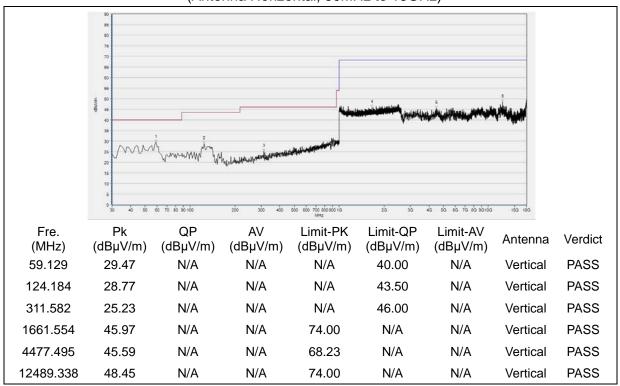








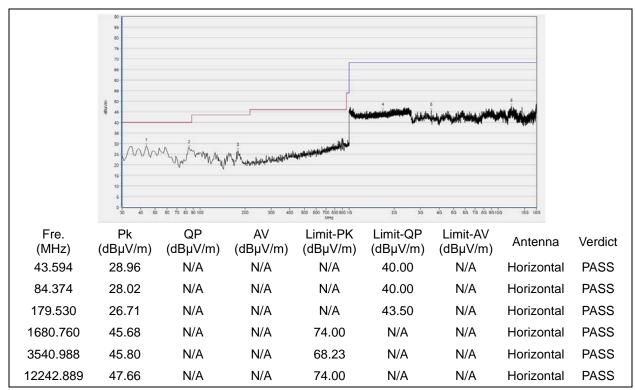
#### (Antenna Horizontal, 30MHz to 18GHz)



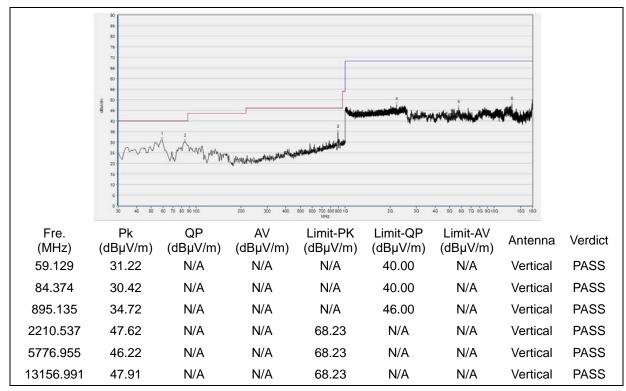








(Antenna Horizontal, 30MHz to 18GHz)



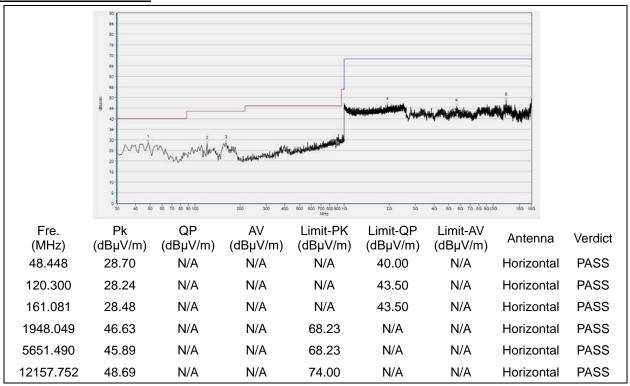
(Antenna Vertical, 30MHz to 18GHz)



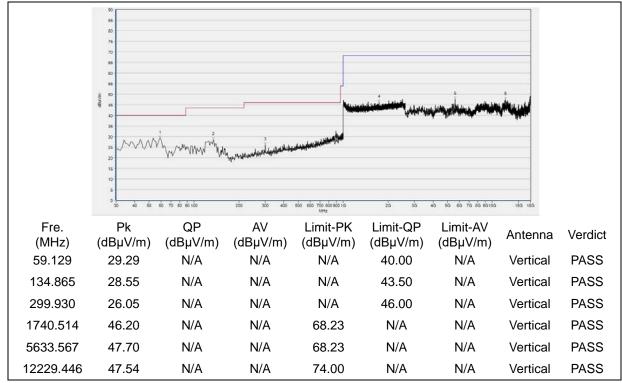
Tel: 86-755-36698555







(Antenna Horizontal, 30MHz to 18GHz)



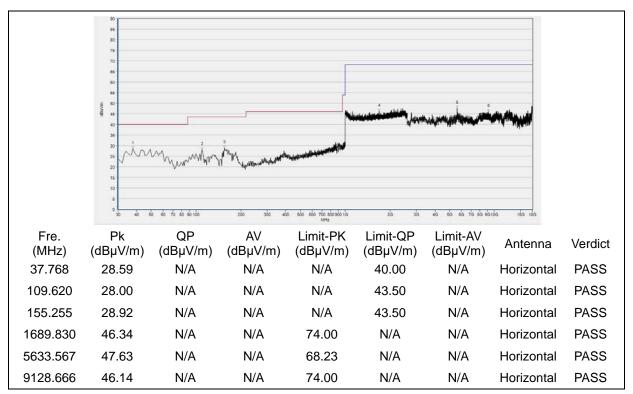
(Antenna Vertical, 30MHz to 18GHz)



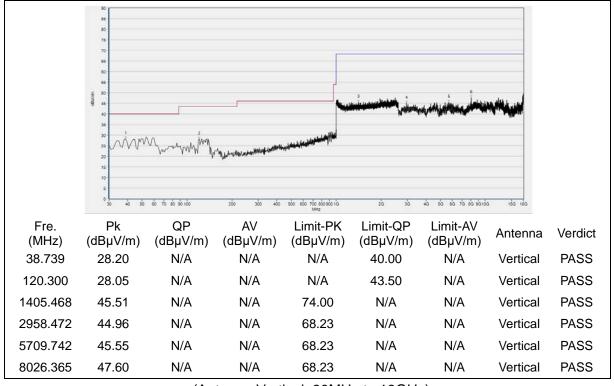
Tel: 86-755-36698555







(Antenna Horizontal, 30MHz to 18GHz)



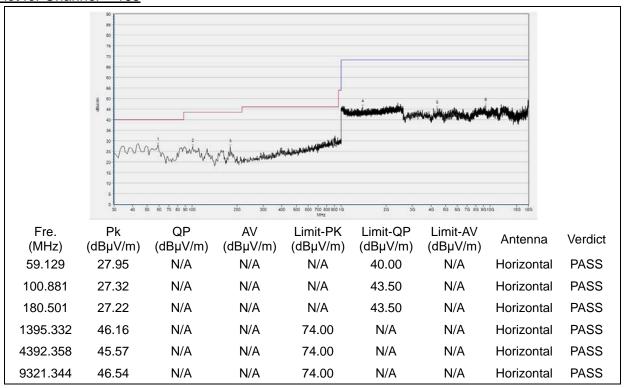
(Antenna Vertical, 30MHz to 18GHz)



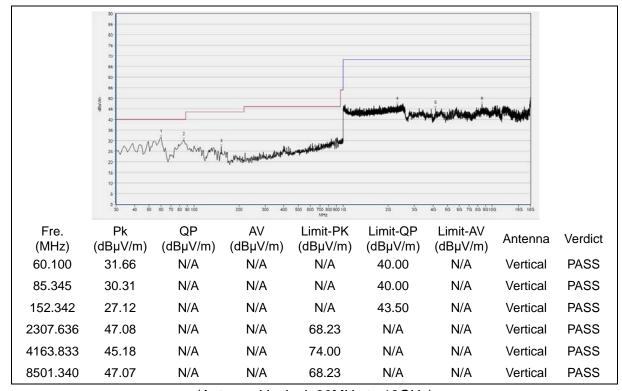
Tel: 86-755-36698555







(Antenna Horizontal, 30MHz to 18GHz)



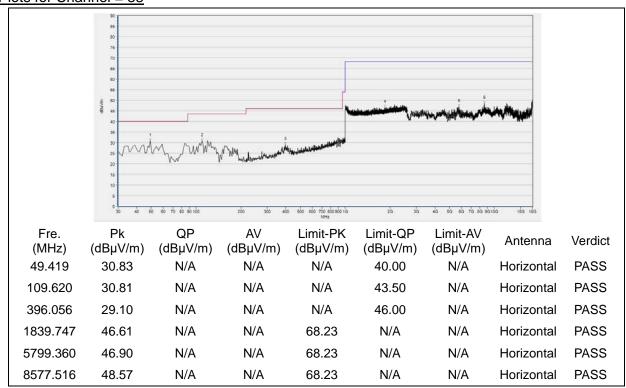
(Antenna Vertical, 30MHz to 18GHz)



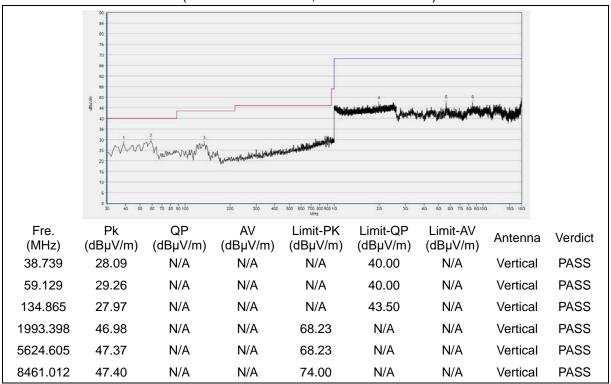


# 802.11ac (VHT40) Test mode

## Plots for Channel = 38



#### (Antenna Horizontal, 30MHz to 18GHz)



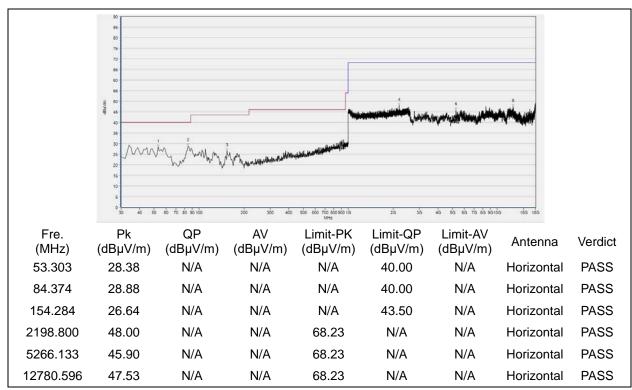
(Antenna Vertical, 30MHz to 18GHz)



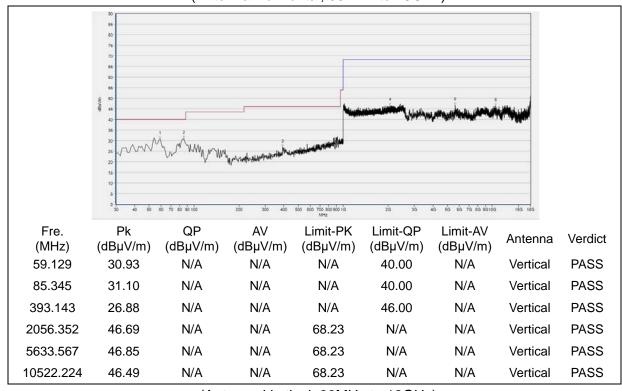
Tel: 86-755-36698555



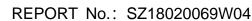




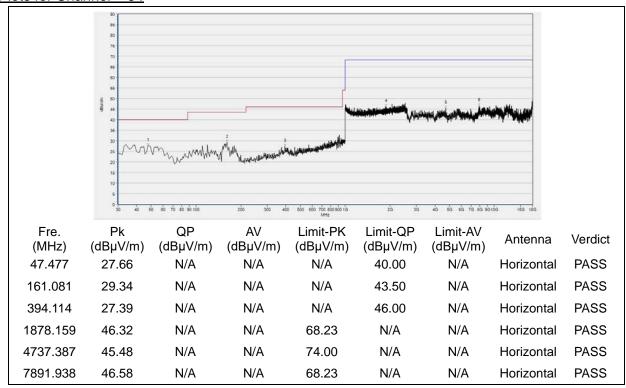
(Antenna Horizontal, 30MHz to 18GHz)



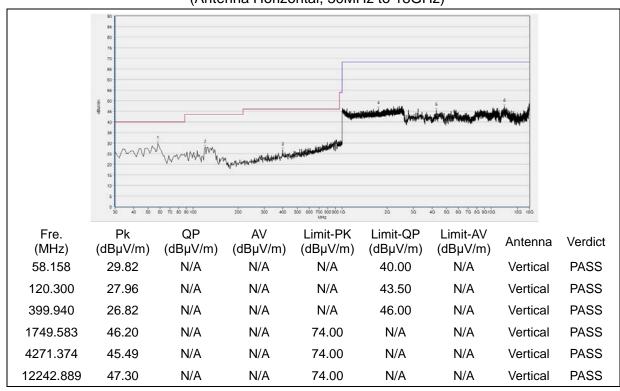








#### (Antenna Horizontal, 30MHz to 18GHz)



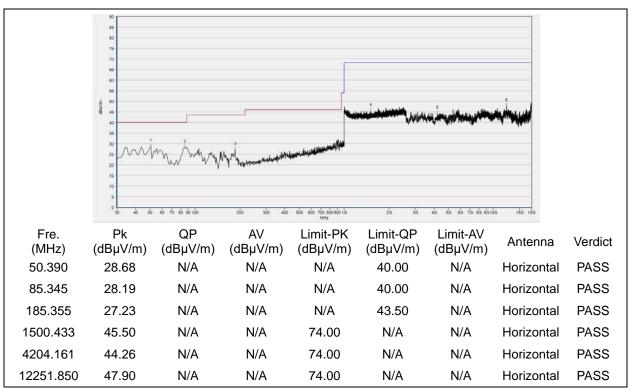
(Antenna Vertical, 30MHz to 18GHz)



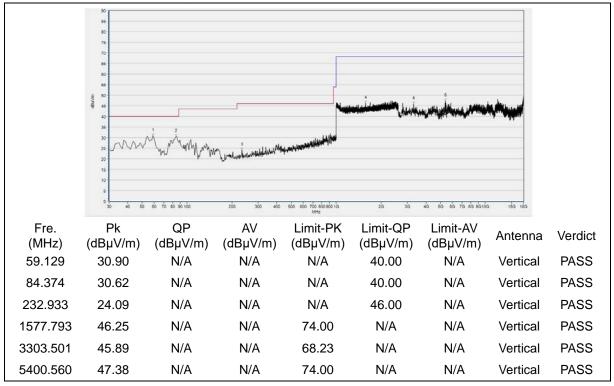
Tel: 86-755-36698555







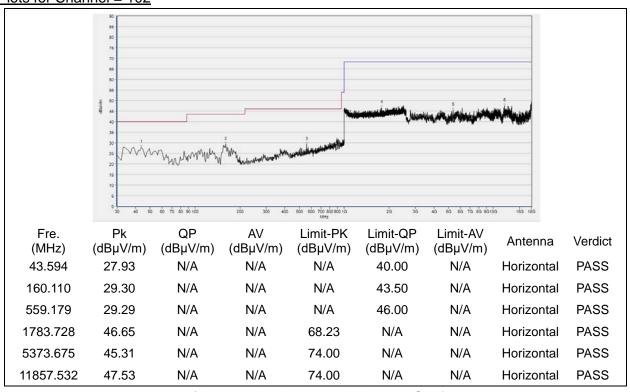
#### (Antenna Horizontal, 30MHz to 18GHz)



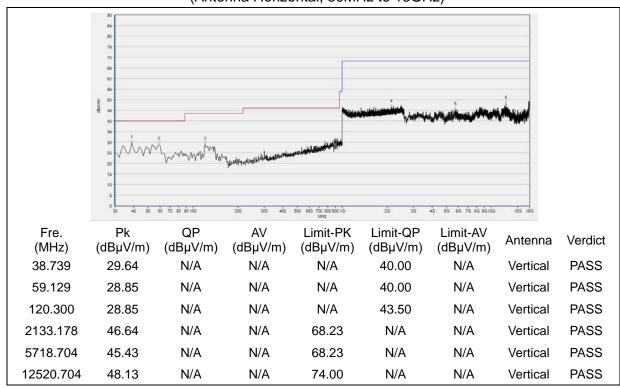




#### Plots for Channel = 102



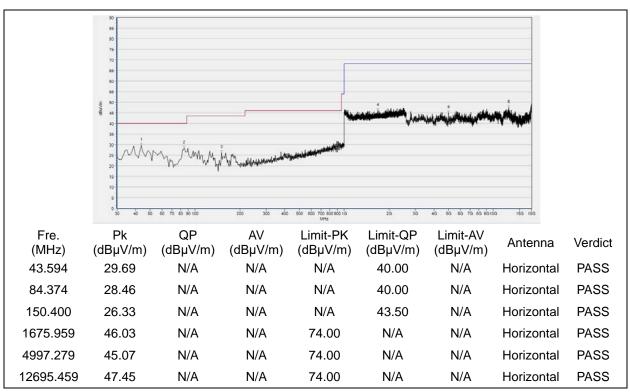
#### (Antenna Horizontal, 30MHz to 18GHz)



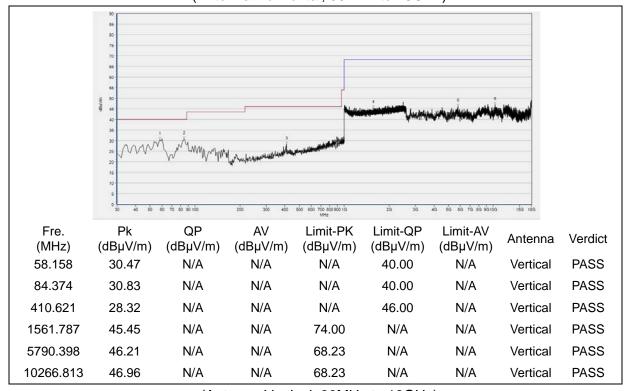




#### Plot for Channel = 126



#### (Antenna Horizontal, 30MHz to 18GHz)



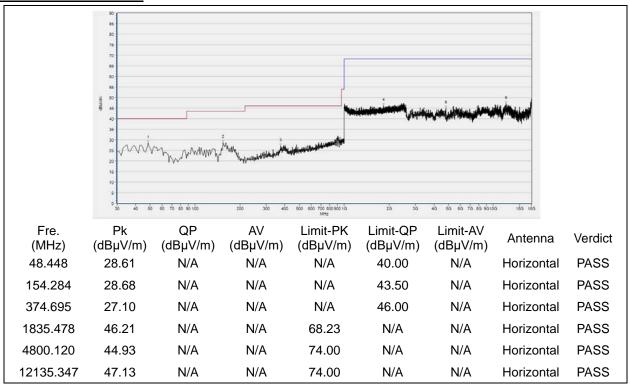
(Antenna Vertical, 30MHz to 18GHz)



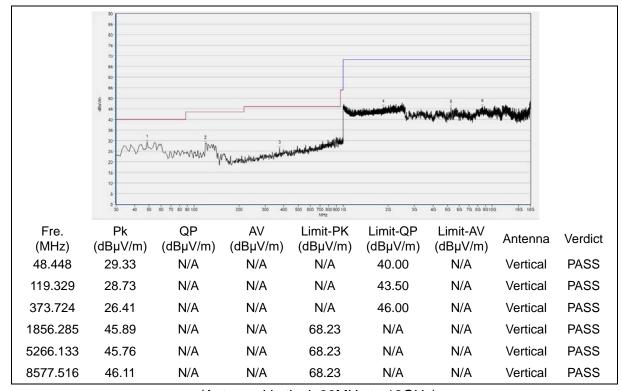
Tel: 86-755-36698555







(Antenna Horizontal, 30MHz to 18GHz)

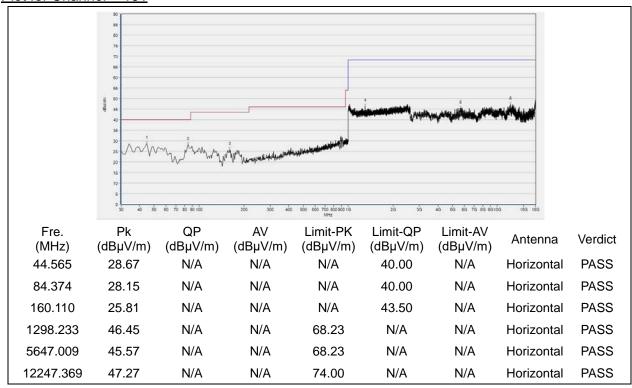


(Antenna Vertical, 30MHz to 18GHz)

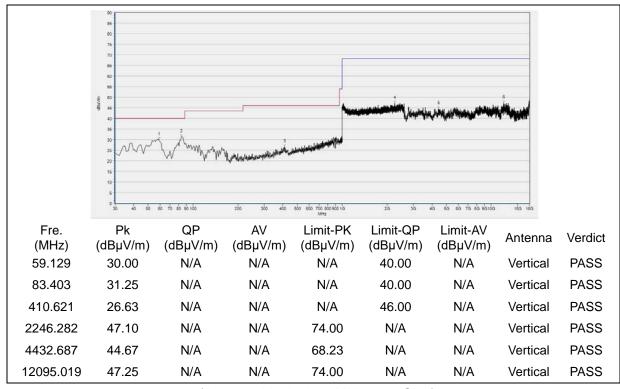








(Antenna Horizontal, 30MHz to 18GHz)

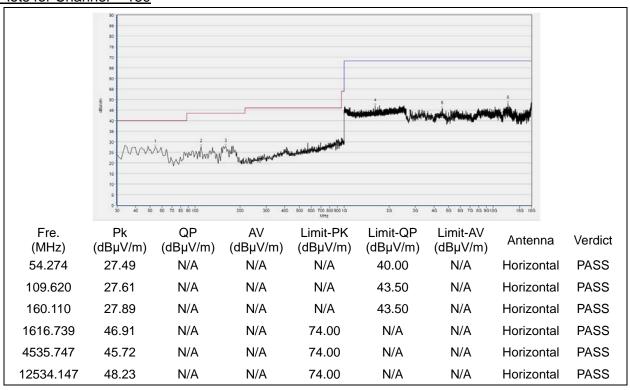


(Antenna Vertical, 30MHz to 18GHz)

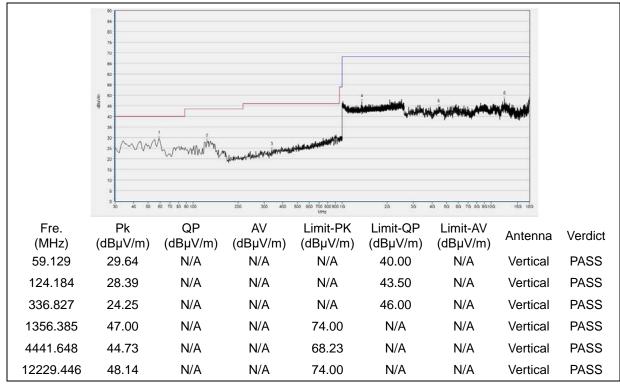








(Antenna Horizontal, 30MHz to 18GHz)



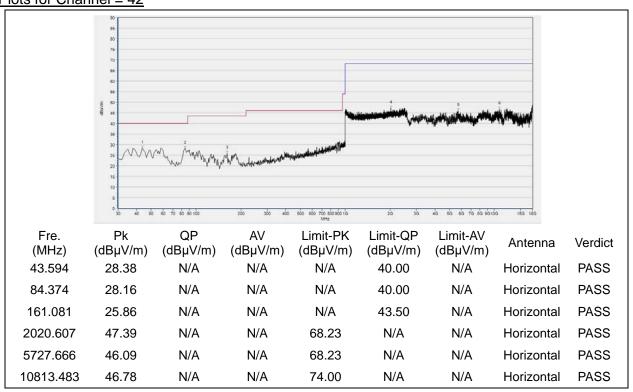
(Antenna Vertical, 30MHz to 18GHz)



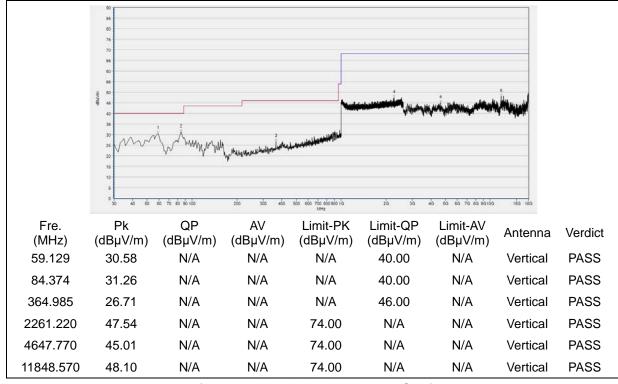


# 802.11ac (VHT80) Test mode

## Plots for Channel = 42



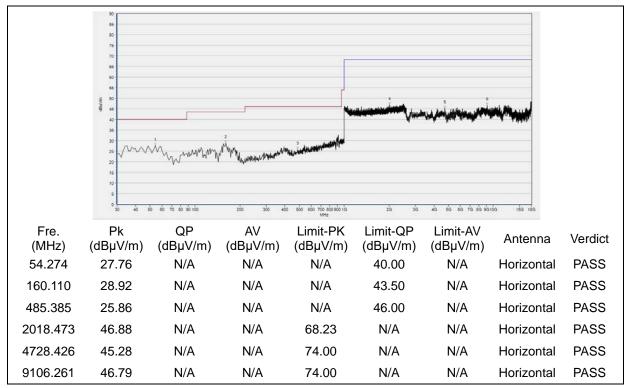
#### (Antenna Horizontal, 30MHz to 18GHz)



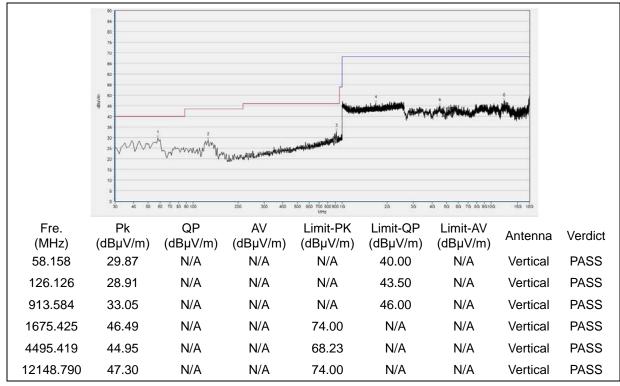








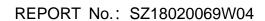
#### (Antenna Horizontal, 30MHz to 18GHz)



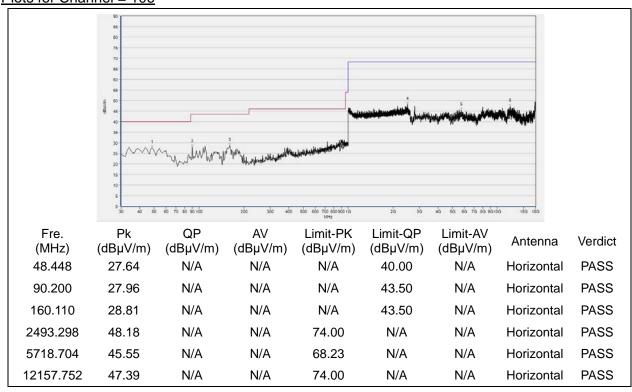
(Antenna Vertical, 30MHz to 18GHz)



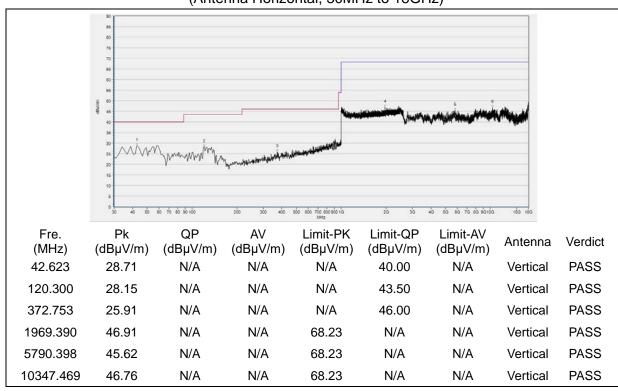
Tel: 86-755-36698555







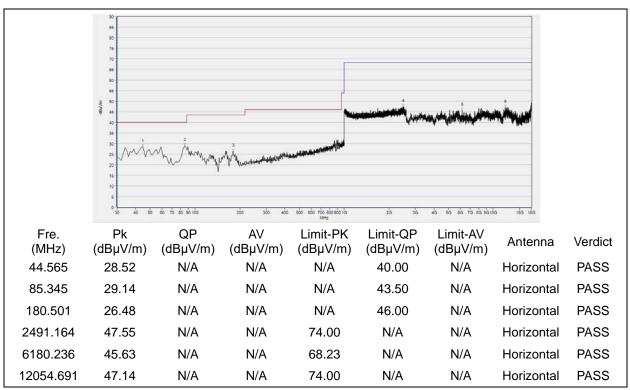
#### (Antenna Horizontal, 30MHz to 18GHz)



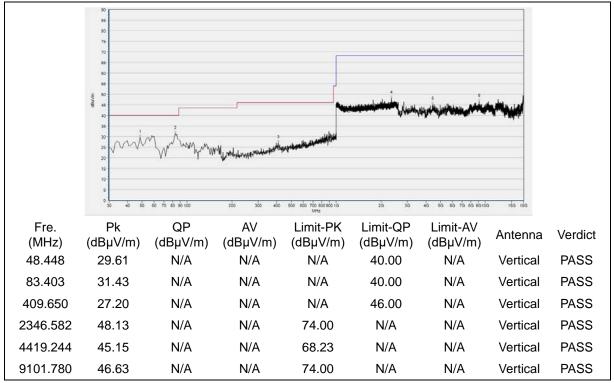






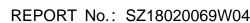


#### (Antenna Horizontal, 30MHz to 18GHz)

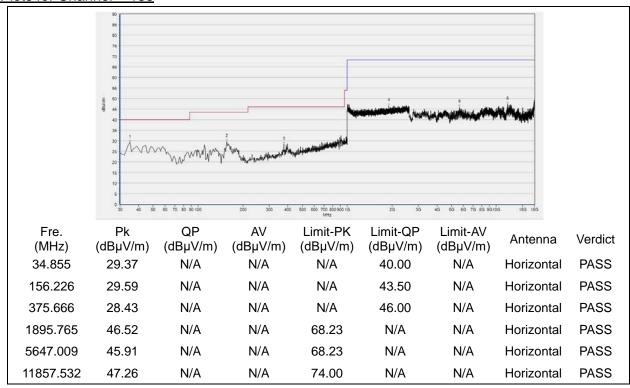


(Antenna Vertical, 30MHz to 18GHz)

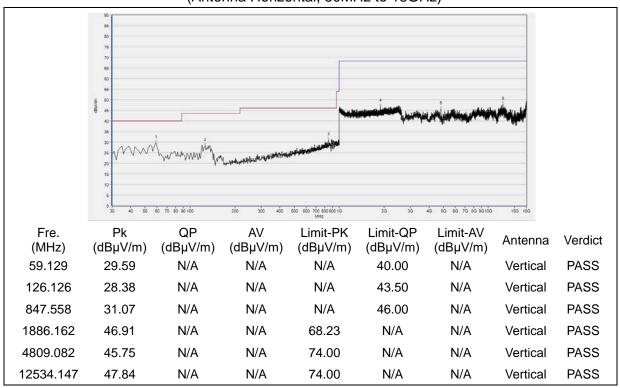








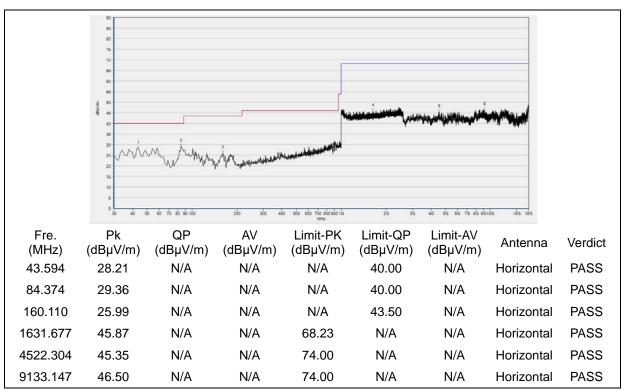
#### (Antenna Horizontal, 30MHz to 18GHz)



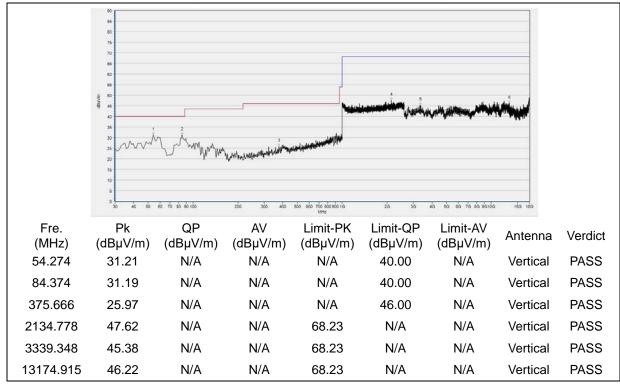




#### Plot for Channel = 155



#### (Antenna Horizontal, 30MHz to 18GHz)







# **Annex A Test 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	±2.22dB
Power spectral density (PSD)	±2.22dB
Bandwidth	±5%
Restricted Frequency Bands	±5%
Radiated Emission	±2.95dB
Conducted Emission	±2.44dB

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





# **Annex B Testing Laboratory Information**

### 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	Mr. Su Fond			
Manager:	Mr. Su Feng			
Telephone:	+86 755 36698555			
Facsimile:	+86 755 36698525			

#### 2. Identification of the Responsible Testing Location

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

#### 3. Facilities and Accreditations

All measurement facilities used to collect the measurement data are located at FL.3, 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 designation number is CN1192, the test firm registration number is 226174.





## 4. Test Equipments Utilized

### **4.1 Conducted Test Equipments**

4.1 Conducted rest Equipments					
Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Cal. Due
Davier Calitter	NIVA/504	45004	Weinschel	2017.05.24	2018.05.23
Power Splitter	NW521	1506A	Weirischei	2018.04.17	2019.04.16
Attonuotor 1	/N1/A \	40 JD	Resnet	2017.05.24	2018.05.23
Attenuator 1	(N/A.)	10dB		2018.04.17	2019.04.16
Attenuator 2	/NI/A \	3dB	Doonet	2017.05.24	2018.05.23
Attenuator 2	(N/A.)	SUD	Resnet	2018.04.17	2019.04.16
EXA Signal	MY53470836 N90 <sup>-</sup>	NICOACA	10A Agilent	0047.40.00	0040 40 00
Analzyer		N9010A		2017.12.03	2018.12.02
USB Wideband	MY54210011	11 U2021XA	Agilent -	2017.05.24	2018.05.23
Power Sensor	W1154210011	02021XA		2018.04.17	2019.04.16
Power Sensor	MY41496306	E9304A	Angilent	2017.05.24	2018.05.23
				2018.04.17	2019.04.16
RF cable	CD04	D04 DE04	Morlab	NI/A	NI/A
(30MHz-26GHz)	CB01	RF01		N/A	N/A
Coaxial cable	CB02	RF02	Morlab	N/A	N/A
SMA connector	CN01	RF03	HUBER-SUHNER	N/A	N/A

# **4.2 Conducted Emission Test Equipments**

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Cal. Due
Receiver	MY56400093	N9038A	KEYSIGHT	2017.07.13	2018.07.12
LISN	812744	NSLK 8127	Schwarzbeck	2017.05.17	2018.05.16
				2018.05.08	2019.05.07
Pulse Limiter	9391	VTSD	0 - 1	2017.05.17	2018.05.16
(20dB)		9561-D	Schwarzbeck	2018.05.08	2019.05.07
Coaxial cable(BNC) (30MHz-26GHz)	CB01	EMC01	Morlab	N/A	N/A

# **4.3Auxiliary Test Equipment**

<b>Equipment Name</b>	Model No.	<b>Brand Name</b>	Manufacturer	Cal.Date	Cal. Due
Computer	T430i	Think Pad	Lenovo	N/A	N/A





### 4.4 List of Software Used

Description	Manufacturer	Software Version
Test system	Tonscend	V2.6
Power Panel	Agilent	V3.8
MORLAB EMCR V1.2	MORLAB	V 1.0

## **4.4 Radiated Test Equipments**

Equipment Name	Serial No.	Туре	Manufacturer	Cal. Date	Cal. Due
Receiver	MY54130016	NOOSOA	A =:1==+	2017.05.17	2018.05.16
Receiver	W154130016	N9038A	Agilent	2018.05.08	2019.05.07
Test Antenna -	9163-519	VULB 9163	Schwarzbeck	2017.05.17	2018.05.16
Bi-Log	9103-319	VOLD 9103	Ochwarzbeck	2018.05.08	2019.05.07
Test Antenna -	9170C-531	BBHA9170	Schwarzbeck	2017.09.13	2018.09.12
Horn	31700-331	DDI IAST 170	Ochwarzbeck	2017.09.13	2010.09.12
Test Antenna -	1519-022	FMZB1519	Schwarzbeck	2018.03.03	2019.03.02
Loop	1010 022	T WZB1010	Ochwarzbeck	2010.00.00	2019.03.02
Test Antenna -	01774	BBHA 9120D	Schwarzbeck	2017.09.13	2018.09.12
Horn	01771	25.17.0.1202	Conwarzsook	2017.00.10	2010.00.12
Coaxial cable					
(N male)	CB04	EMC04	Morlab	N/A	N/A
(9KHz-30MHz)					
Coaxial cable					
(N male)	CB02	EMC02	Morlab	N/A	N/A
(30MHz-26GHz)					
Coaxial cable					
(N male)	CB03	EMC03	Morlab	N/A	N/A
(30MHz-26GHz)					
1-18GHz	MA02	TS-PR18	Rohde&	2017.05.17	2018.05.16
pre-Amplifier	IVIAUZ	13-510	Schwarz	2018.05.08	2019.05.07
18-26.5GHz	MA03	TS-PR18	Rohde&	2017.05.17	2018.05.16
pre-Amplifier	IVIAUS	13-4418	Schwarz	2018.05.08	2019.05.07
Anechoic	NI/A	0m*6m*6m	CDT	2017 11 10	2020 44 40
Chamber	N/A	9m*6m*6m	CRT	2017.11.19	2020.11.18

 END OF REPORT	

