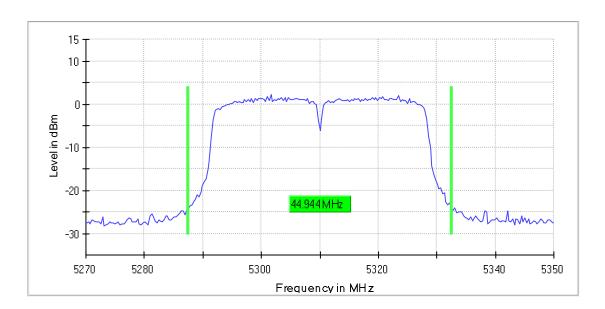


DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
5310.000000	44.943820			5287.528090	5332.471910	2.2

DUT Frequency (MHz)	Result
5310.000000	PASS

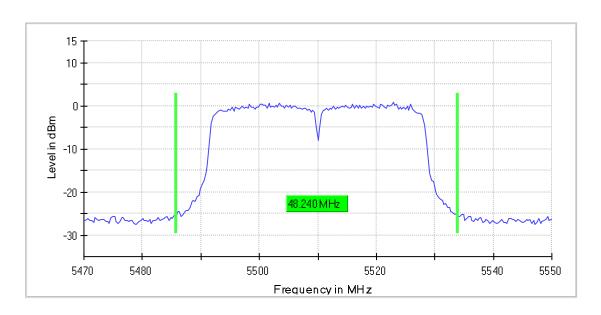




6.2.9.3. UNII-2C BAND

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
5510.000000	48.239700			5485.730337	5533.970037	0.9

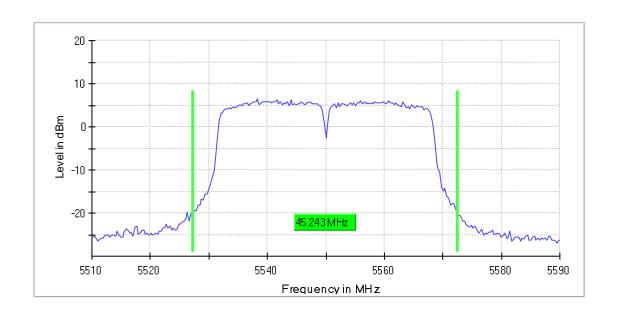
DUT Frequency (MHz)	Result
5510.000000	PASS





DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right	Max Level
					(MHz)	(dBm)
5550.000000	45.243446			5527.228464	5572.471910	6.4

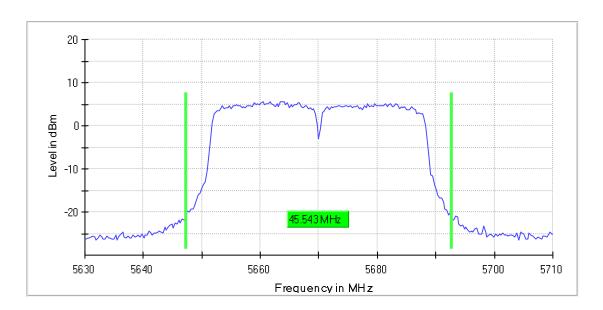
DUT Frequency (MHz)	Result
5550.000000	PASS





DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right	Max Level
					(MHz)	(dBm)
5670.000000	45.543072			5647.228464	5692.771536	5.6

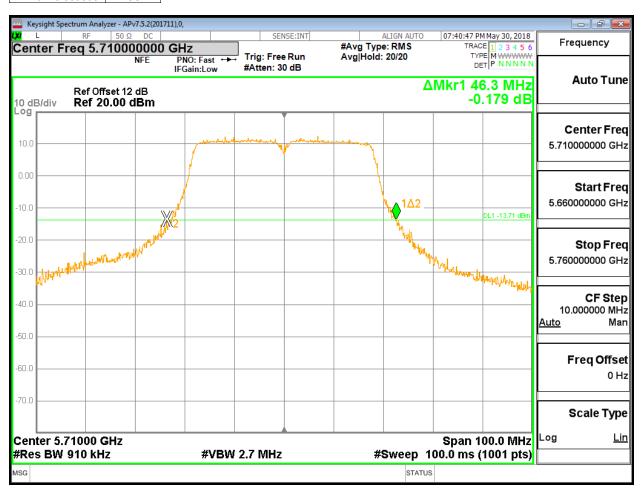
DUT Frequency (MHz)	Result
5670.000000	PASS





DUT Frequency	Bandwidth
(MHz)	(MHz)
5710.000000	46.300000

DUT Frequency (MHz)	Result
5710.000000	PASS

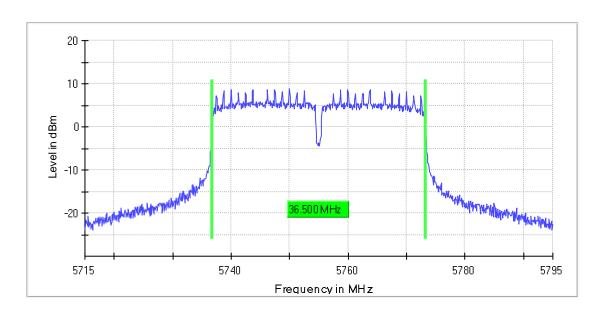




## 6.2.9.4. UNII-3 BAND

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
5755.000000	36.500000	0.500000		5736.750000	5773.250000	8.9

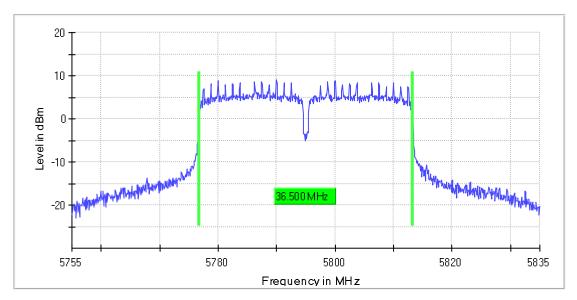
DUT Frequency (MHz)	Result
5755.000000	PASS





DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right	Max Level
, ,	` ,	, ,	, ,	, ,	(MHz)	(dBm)
5795.000000	36.500000	0.500000		5776.750000	5813.250000	9.0

DUT Frequency (MHz)	Result
5795.000000	PASS



DUT Frequency	Bandwidth	Limit Min	Result
(MHz)	(MHz)	(MHz)	
5710.000000	3.14	0.500000	PASS

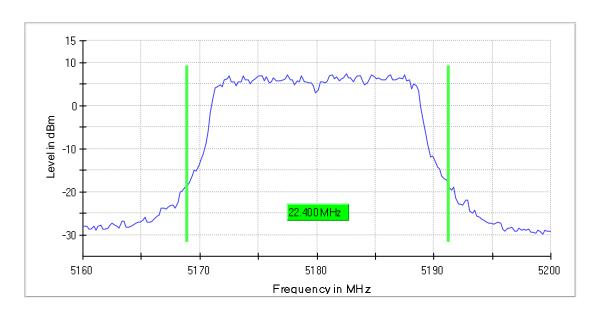




# 6.2.10. 802.11ac HT20 MIMO MODE 6.2.10.1. UNII-1 BAND

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
					(141172)	(ubili)
5180.000000	22.400000			5168.900000	5191.300000	7.3

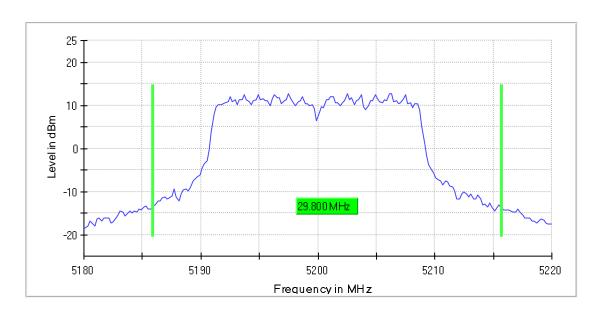
DUT Frequency (MHz)	Result
5180.000000	PASS





DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right	Max Level
					(MHz)	(dBm)
5200.000000	29.800000			5185.900000	5215.700000	12.8

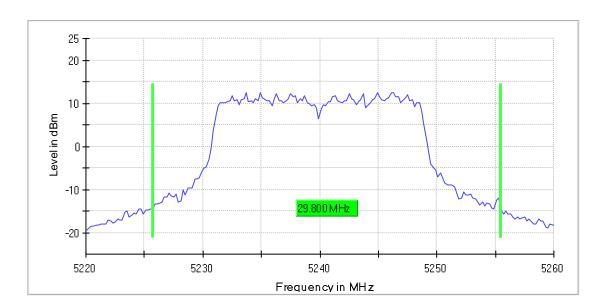
DUT Frequency (MHz)	Result
5200.000000	PASS





DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right	Max Level
` '	` '	, ,	, ,	, ,	(MHz)	(dBm)
5240.000000	29.800000			5225.700000	5255.500000	12.5

DUT Frequency (MHz)	Result
5240.000000	PASS

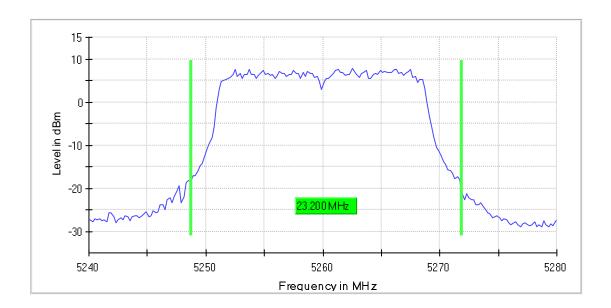




6.2.10.2. UNII-2A BAND

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
5260.000000	23.200000			5248.700000	5271.900000	7.7

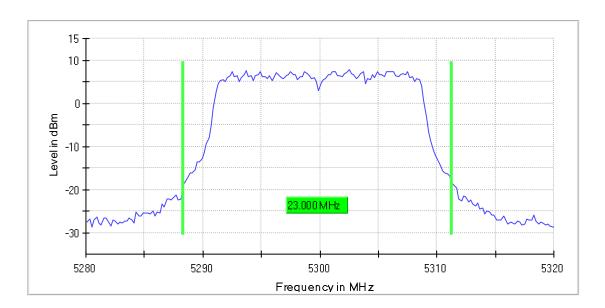
DUT Frequency (MHz)	Result
5260,000000	PASS





DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right	Max Level
					(MHz)	(dBm)
5300.000000	23.000000			5288.300000	5311.300000	7.7

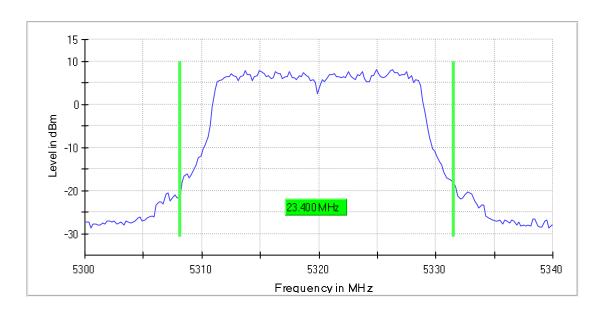
DUT Frequency (MHz)	Result
5300.000000	PASS





DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right	Max Level
					(MHz)	(dBm)
5320.000000	23.400000			5308.100000	5331.500000	7.9

DUT Frequency (MHz)	Result
5320.000000	PASS

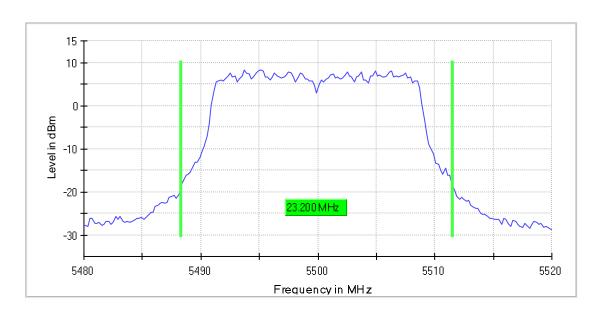




## 6.2.10.3. UNII-2C BAND

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right	Max Level
(WIF12)	(WIF12)	(IVITIZ)	(IVITIZ)	(IVIF12)	(MHz)	(dBm)
5500.000000	23.200000			5488.300000	5511.500000	8.3

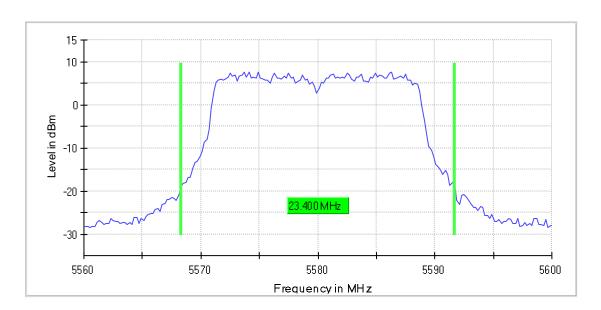
DUT Frequency (MHz)	Result
5500.000000	PASS





DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
5580.000000	23.400000			5568.300000	5591.700000	7.6

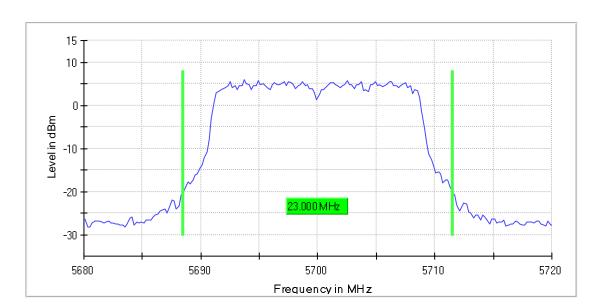
DUT Frequency (MHz)	Result
5580.000000	PASS





DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right	Max Level
					(MHz)	(dBm)
5700.000000	23.000000			5688.500000	5711.500000	5.9

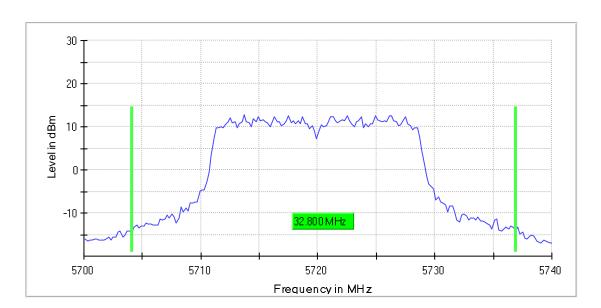
DUT Frequency (MHz)	Result
5700.000000	PASS





DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right	Max Level
					(MHz)	(dBm)
5720.000000	32.800000			5704.100000	5736.900000	12.7

DUT Frequency (MHz)	Result
5720.000000	PASS

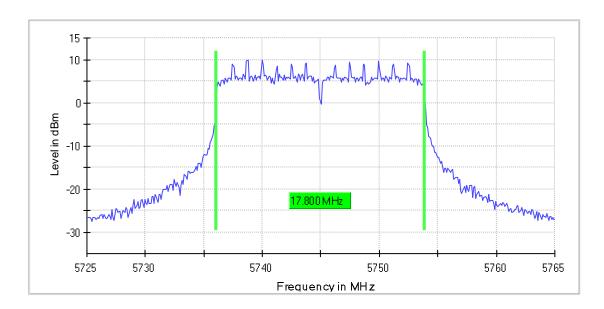




#### 6.2.10.4. UNII-3 BAND

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right	Max Level
					(MHz)	(dBm)
5745.000000	17.800000	0.500000		5736.050000	5753.850000	9.9

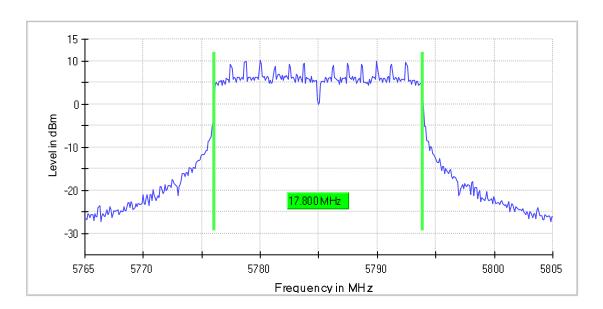
DUT Frequency (MHz)	Result
5745.000000	PASS





DUT Frequency	Bandwidth	Limit Min	Limit Max	Band Edge Left	Band Edge	Max
(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	Right	Level
					(MHz)	(dBm)
5785.000000	17.800000	0.500000		5776.050000	5793.850000	10.0

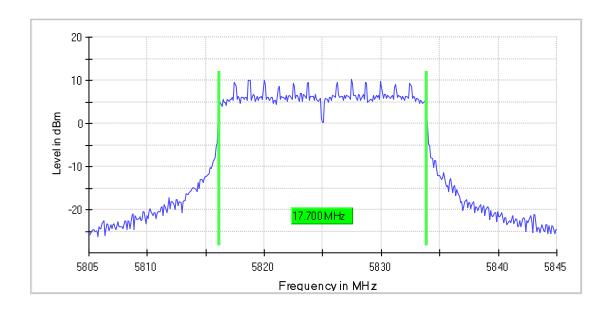
DUT Frequency (MHz)	Result
5785.000000	PASS



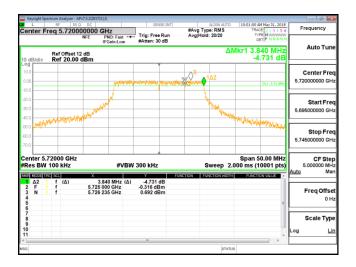


DUT Frequency	Bandwidth	Limit Min	Limit Max	Band Edge Left	Band Edge	Max
(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	Right	Level
					(MHz)	(dBm)
5825.000000	17.700000	0.500000		5816.150000	5833.850000	10.1

DUT Frequency (MHz)	Result
5825.000000	PASS



DUT Frequency	Bandwidth	Limit Min	Result
(MHz)	(MHz)	(MHz)	
5720.000000	3.84	0.500000	PASS



Note: All the modes and antenna ports had been tested, only the worst data recorded in the report.

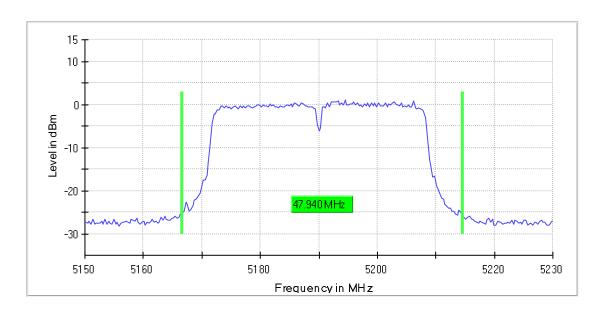
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6.2.11. 802.11ac HT40 MIMO MODE 6.2.11.1. UNII-1 BAND

DUT Frequency	Bandwidth	Limit Min	Limit Max	Band Edge Left	Band Edge	Max
(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	Right	Level
					(MHz)	(dBm)
5190.000000	47.940075			5166.629213	5214.569288	0.9

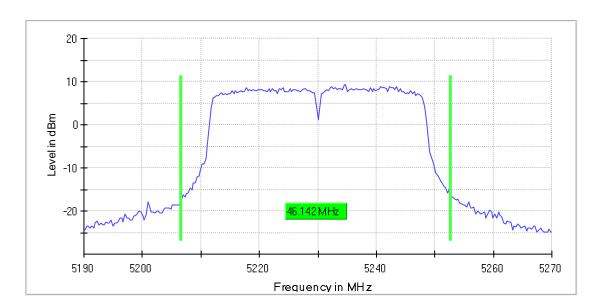
DUT Frequency (MHz)	Result
5190.000000	PASS





DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
5230,000000	46.142323			5206.629213	5252.771536	9.4

DUT Frequency (MHz)	Result
5230.000000	PASS

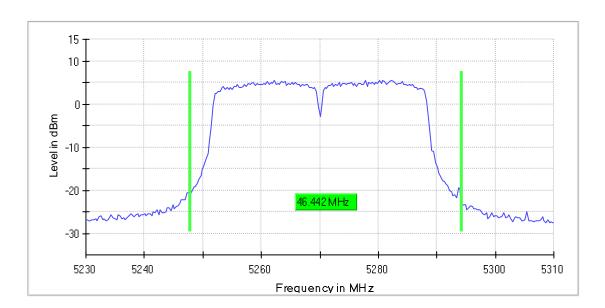




## 6.2.11.2. UNII-2A BAND

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right	Max Level
(141112)	(141112)	(141112)	(141112)	(141112)	(MHz)	(dBm)
5270.000000	46.441948			5247.827715	5294.269663	5.5

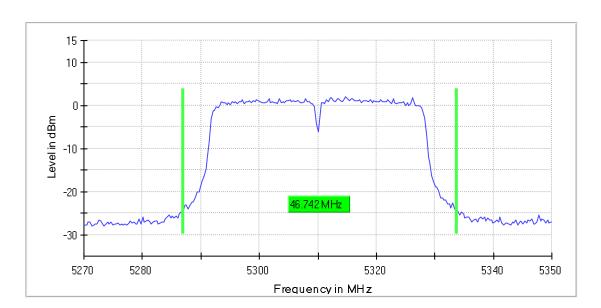
DUT Frequency (MHz)	Result
5270,000000	PASS





DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right	Max Level
, ,					(MHz)	(dBm)
5310.000000	46.741573			5286.928839	5333.670412	1.9

DUT Frequency (MHz)	Result
5310.000000	PASS

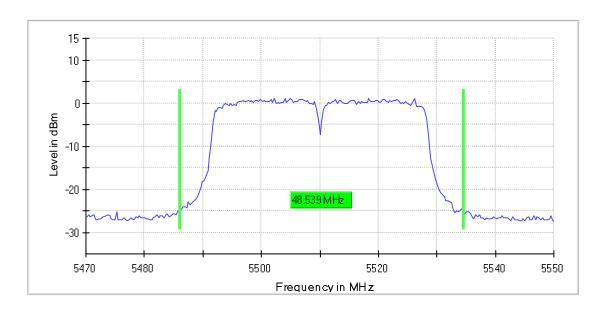




## 6.2.11.3. UNII-2C BAND

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right	Max Level
` ,	, ,	, ,	, ,	, ,	(MHz)	(dBm)
5510.000000	48.539325			5486.029963	5534.569288	1.1

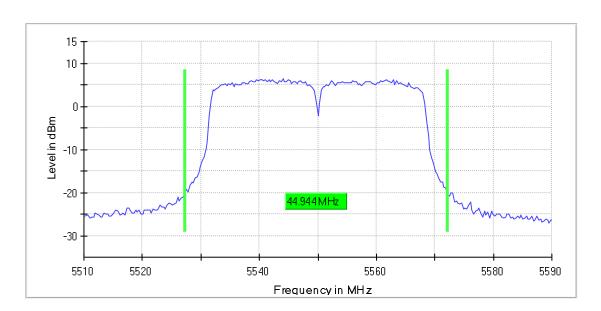
DUT Frequency (MHz)	Result
5510.000000	PASS





	DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)
ſ	5550.000000	44.943821			5527.228464	5572.172285	6.4

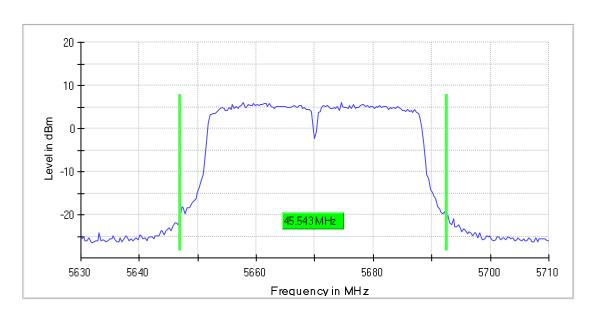
DUT Frequency (MHz)	Result
5550.000000	PASS

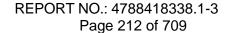




DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right	Max Level
, ,	` '	, ,	, ,	, ,	(MHz)	(dBm)
5670.000000	45.543071			5646.928839	5692.471910	6.0

DUT Frequency (MHz)	Result
5670.000000	PASS







DUT Frequency	Bandwidth
(MHz)	(MHz)
5710.000000	48.000

DUT Frequency (MHz)	Result
5710.000000	PASS

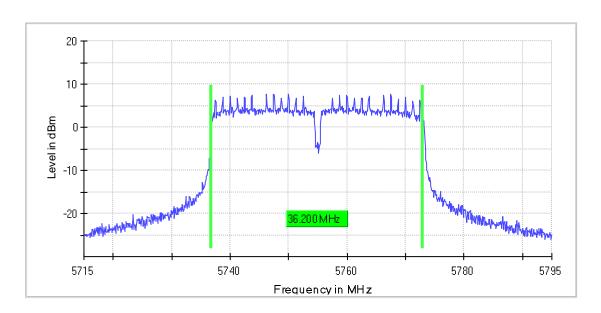




## 6.2.11.4. UNII-3 BAND

DUT Frequency	Bandwidth	Limit Min	Limit Max	Band Edge Left	Band Edge	Max
(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	Right	Level
` ′		, ,			(MHz)	(dBm)
5755.000000	36.200000	0.500000		5736.750000	5772.950000	7.8

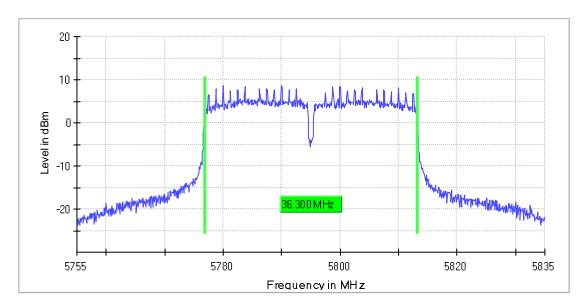
DUT Frequency (MHz)	Result
5755.000000	PASS





DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right	Max Level
, ,	` ,	, ,	, ,	, ,	(MHz)	(dBm)
5795.000000	36.300000	0.500000		5776.950000	5813.250000	8.7

DUT Frequency (MHz)	Result
5795.000000	PASS



DUT Frequency Bandwidth (MHz) (MHz)		Limit Min (MHz)	Result
5710.000000	3.27	0.500000	PASS



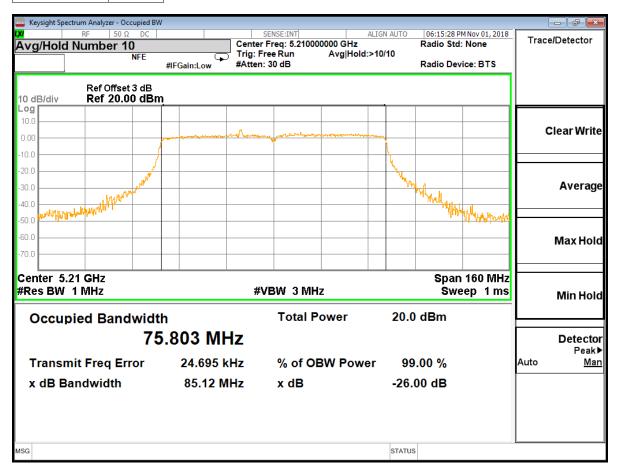
Note: All the modes and antenna ports had been tested, only the worst data recorded in the report.



## 6.2.12. 802.11ac HT80 MIMO MODE 6.2.12.1. UNII-1 BAND

DUT Frequency	Bandwidth	Limit Min	Limit Max
(MHz)	(MHz)	(MHz)	(MHz)
5210.000000	75.803		

DUT Frequency (MHz)	Result
5210.000000	PASS

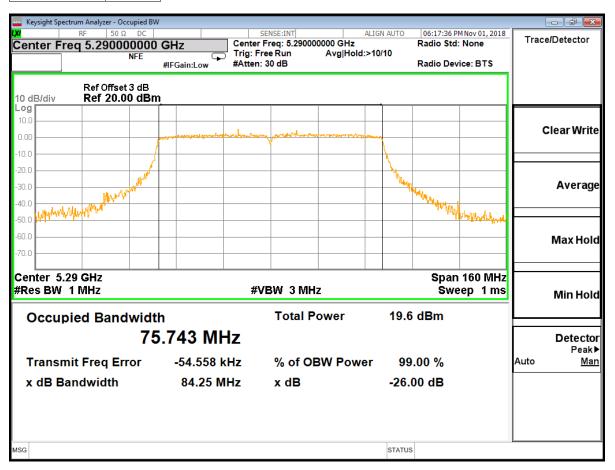




#### 6.2.12.2. UNII-2A BAND

DUT Frequency	Bandwidth	Limit Min	Limit Max
(MHz)	(MHz)	(MHz)	(MHz)
5290.000000	75.743		

DUT Frequency (MHz)	Result
5290.000000	PASS

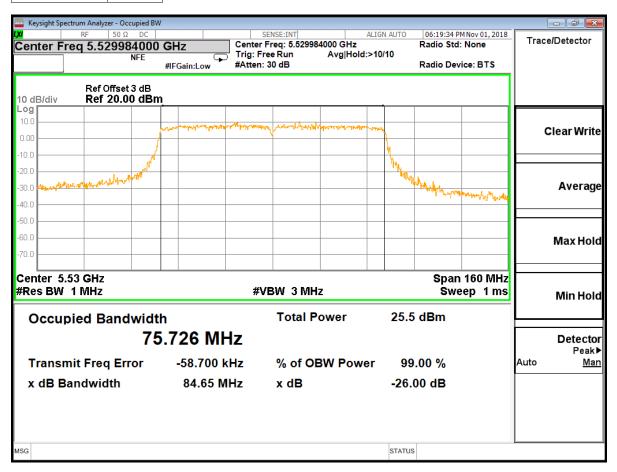


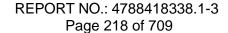


#### 6.2.12.3. UNII-2C BAND

DUT Frequency	Bandwidth	Limit Min	Limit Max
(MHz)	(MHz)	(MHz)	(MHz)
5530.000000	84.65		

DUT Frequency (MHz)	Result
5530.000000	PASS

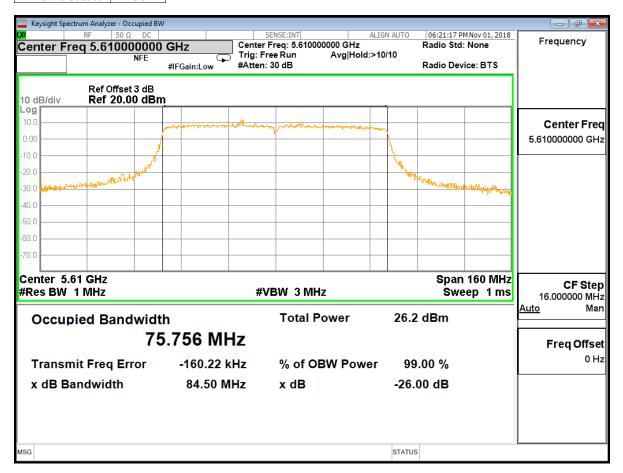


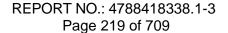




DUT Frequency	Bandwidth	Limit Min	Limit Max
(MHz)	(MHz)	(MHz)	(MHz)
5610.000000	84.500		

DUT Frequency (MHz)	Result
5610.000000	PASS

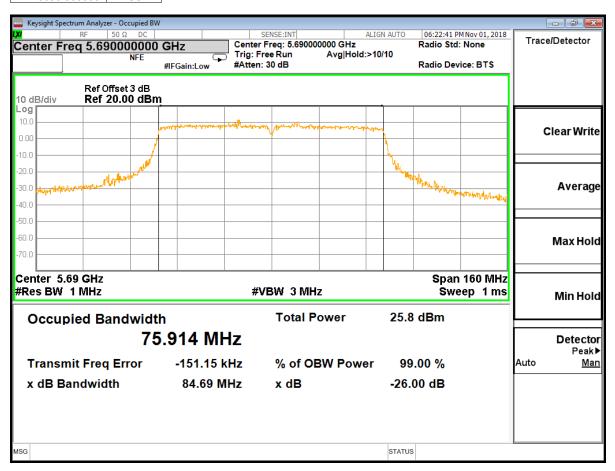


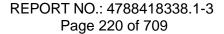




DUT Frequency	Bandwidth	Limit Min	Limit Max
(MHz)	(MHz)	(MHz)	(MHz)
5690.000000	84.69		

DUT Frequency (MHz)	Result
5690.000000	PASS

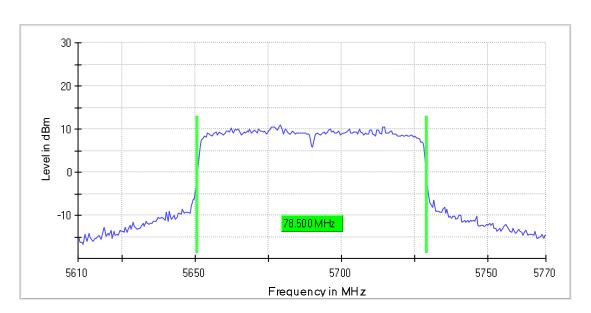






99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Result
5690.000000	78.500000			5650.750000	5729.250000	PASS



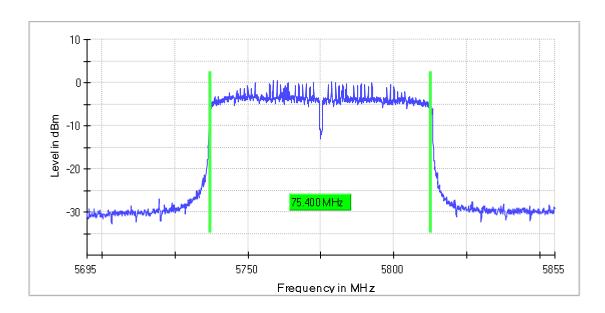


## 6.2.12.4. UNII-3 BAND

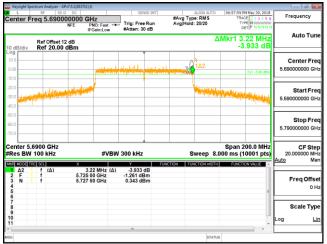
## 6 dB Bandwidth

DUT Frequency	Bandwidth	Limit Min	Limit Max	Band Edge Left	Band Edge	Max
(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	Right	Level
					(MHz)	(dBm)
5775.000000	75.400000	0.500000		5737.150000	5812.550000	0.6

DUT Frequency (MHz)	Result
5775.000000	PASS



DUT Frequency	Bandwidth	Limit Min	Result
(MHz)	(MHz)	(MHz)	
5690,000000	3.22	0.500000	PASS



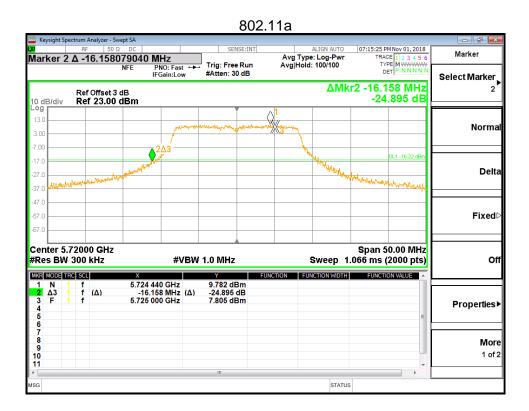
Note: All the modes and antenna ports had been tested, only the worst data recorded in the report.



## 6.2.13. STRADDLE CHANNEL falls in UNII-2A band 26dB bandwidth

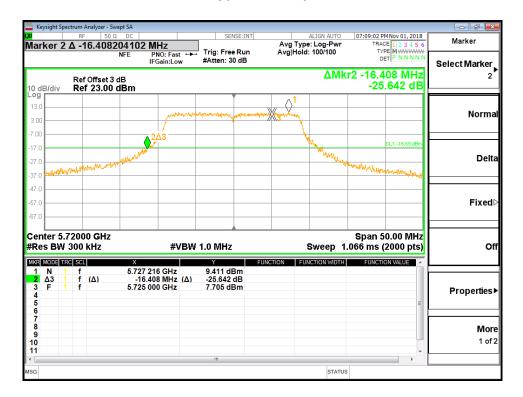
Mode	FREQUENCY	Channel	Min 26 dB BW (MHz))	Power limit (dBm)	RESULT
802.11a	5720	144	16.158	23.08	PASS
802.11n HT20	5720	144	16.408	23.15	PASS
802.11 HT40	5720	144	16.408	23.15	PASS

Note: All the modes and antenna ports had been tested, MIMO mode Antenna 2 is the worst data recorded in the report.

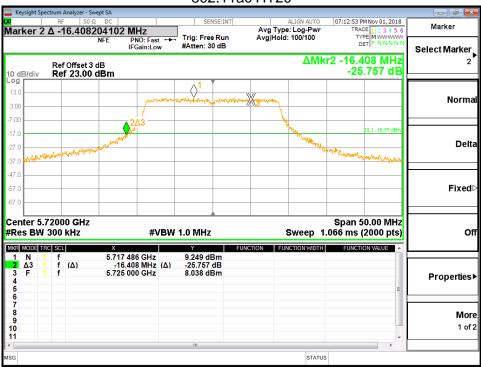




## 802.11n HT20



## 802.11ac HT20





6.3. MAXIMUM CONDUCTED OUTPUT POWER

## **LIMITS**

FCC Part15, Subpart E/ RSS-247						
Test Item	Limit	Frequency Range (MHz)				
Conducted	FCC: For an indoor access point :1W (30dBm) FCC:For client devices: 250mw (24dBm)					
	For RSS:e.i.r.p. power: not exceed 200 mW(23dBm) or 10 + 10 log10 B, B is the 99% emission bandwidth in megahertz	5150-5250				
Output Power	250mW (24dBm)	5250-5350				
	250mW (24dBm)	For FCC:5470-5725 For IC:5470-5600 5650-5725				
	1 Watt (30dBm)	5725-5850				

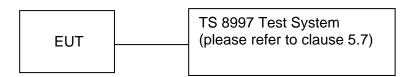
Note: If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

## **TEST PROCEDURE**

Refer to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Connect the EUT to the a broadband average RF power meter, the power meter shall have a video bandwidth that is greater than or equal to the bandwidth and shall utilize a fast-responding diode detector.

For MIMO: The power signal of each Chain is measured, Transfer the measured date to a computer, where summation be performed.

## **TEST SETUP**





## **RESULTS**

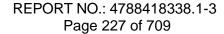
6.3.1.1. SISO Mode

Mode	DUT Frequency (MHz)	Antenna	CONDUCTED POWER (dBm)	Limit (dBm)	Result
	5180	2	19.7	30	PASS
	5200	2	25.3	30	PASS
	5240	2	23.4	30	PASS
	5260	2	22.0	24	PASS
	5300	2	22.4	24	PASS
	5320	2	21.1	24	PASS
а	5500	2	19.0	24	PASS
	5580	2	21.8	24	PASS
	5700	2	18.6	24	PASS
	5720	2	21.4	23.08	PASS
	5745	2	23.2	30	PASS
	5785	2	22.7	30	PASS
	5825	2	22.9	30	PASS
	5180	2	20.5	30	PASS
	5200	2	25.3	30	PASS
	5240	2	23.4	30	PASS
	5260	2	23.1	24	PASS
	5300	2	23.2	24	PASS
	5320	2	21.0	24	PASS
n20	5500	2	19.3	24	PASS
	5580	2	22.2	24	PASS
	5700	2	18.5	24	PASS
	5720	2	21.9	23.15	PASS
	5745	2	23.2	30	PASS
	5785	2	22.7	30	PASS
	5825	2	22.9	30	PASS



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	5180	2	20.5	30	PASS
	5200	2	25.4	30	PASS
	5240	2	23.4	30	PASS
	5260	2	22.61	24	PASS
	5300	2	23.2	24	PASS
	5320	2	21.0	24	PASS
ac20	5500	2	19.2	24	PASS
	5580	2	22.2	24	PASS
	5700	2	18.4	24	PASS
	5720	2	21.9	23.15	PASS
	5745	2	23.1	30	PASS
	5785	2	22.7	30	PASS
	5825	2	22.9	30	PASS
	5190	2	17.1	30	PASS
	5230	2	22.6	30	PASS
	5270	2	22.7	24	PASS
	5310	2	21.0	24	PASS
4O	5510	2	17.1	24	PASS
n40	5550	2	21.9	24	PASS
	5670	2	19.8	24	PASS
	5710	2	22	24	PASS
	5755	2	23.8	30	PASS
	5795	2	23.1	30	PASS
	5190	2	17.1	30	PASS
	5230	2	22.6	30	PASS
	5270	2	22.7	24	PASS
	5310	2	20.0	24	PASS
0040	5510	2	16.5	24	PASS
ac40	5550	2	21.9	24	PASS
	5670	2	20.3	24	PASS
-	5710	2	21.9	24	PASS
	5755	2	23.8	30	PASS
	5795	2	23.1	30	PASS

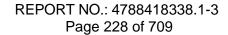




	5210	2	15.8	30	PASS
	5290	2	18.9	24	PASS
ac80	5530	2	16.3	24	PASS
acoo	5610	2	21.7	24	PASS
	5690	2	21.7	24	PASS
	5775	2	22.7	30	PASS

Note: 1. All the antennas ports had been tested, but only the worst data recorded in the report.

<sup>2.</sup> The setting value means the power setting level in the software and these values will use for all the tests in the report.



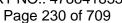


## 6.3.1.2. MIMO Mode

Mode	DUT Frequency (MHz)	Antenna	CONDUCTED POWER (dBm)	Limit (dBm)	Result
	5180	0+1+2	24.1	30	PASS
	5200	0+1+2	27.4	30	PASS
	5240	0+1+2	26.9	30	PASS
	5260	0+1+2	23.6	24	PASS
	5300	0+1+2	23.5	24	PASS
	5320	0+1+2	23.4	24	PASS
а	5500	0+1+2	23.7	24	PASS
	5580	0+1+2	23.5	24	PASS
	5700	0+1+2	21.9	24	PASS
	5720	0+1+2	23.05	23.08	PASS
	5745	0+1+2	27.2	30	PASS
	5785	0+1+2	27.5	30	PASS
	5825	0+1+2	27.5	30	PASS
	5180	0+1+2	23.4	30	PASS
	5200	0+1+2	28.1	30	PASS
	5240	0+1+2	27.7	30	PASS
	5260	0+1+2	22.0	24	PASS
	5300	0+1+2	23.4	24	PASS
	5320	0+1+2	23.3	24	PASS
n20	5500	0+1+2	23.7	24	PASS
	5580	0+1+2	23.4	24	PASS
	5700	0+1+2	20.6	24	PASS
	5720	0+1+2	23.10	23.15	PASS
	5745	0+1+2	26.1	30	PASS
	5785	0+1+2	26.8	30	PASS
	5825	0+1+2	26.8	30	PASS



	5180	0+1+2	23.5	30	PASS
	5200	0+1+2	28.1	30	PASS
	5240	0+1+2	27.7	30	PASS
	5260	0+1+2	23.6	24	PASS
	5300	0+1+2	23.4	24	PASS
	5320	0+1+2	23.4	24	PASS
ac20	5500	0+1+2	23.6	24	PASS
	5580	0+1+2	23.4	24	PASS
	5700	0+1+2	21.8	24	PASS
	5720	0+1+2	23.10	23.15	PASS
	5745	0+1+2	26.4	30	PASS
	5785	0+1+2	26.8	30	PASS
	5825	0+1+2	26.8	30	PASS
	5190	0+1+2	18.1	30	PASS
	5230	0+1+2	25.9	30	PASS
	5270	0+1+2	23.5	24	PASS
	5310	0+1+2	19.0	24	PASS
n40	5510	0+1+2	18.0	24	PASS
1140	5550	0+1+2	23.4	24	PASS
	5670	0+1+2	23.3	24	PASS
	5710	0+1+2	23.1	24	PASS
	5755	0+1+2	27.2	30	PASS
	5795	0+1+2	28.1	30	PASS
	5190	0+1+2	20.2	30	PASS
	5230	0+1+2	25.9	30	PASS
	5270	0+1+2	23.8	24	PASS
	5310	0+1+2	19.0	24	PASS
ac40	5510	0+1+2	17.5	24	PASS
4070	5550	0+1+2	23.4	24	PASS
	5670	0+1+2	22.7	24	PASS
	5710	0+1+2	23.1	24	PASS
	5755	0+1+2	26.9	30	PASS
	5795	0+1+2	28.5	30	PASS



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	5210	0+1+2	17.4	30	PASS
	5290	0+1+2	17.1	24	PASS
ac80	5530	0+1+2	15.2	24	PASS
acou	5610	0+1+2	23.4	24	PASS
	5690	0+1+2	22.7	24	PASS
	5775	0+1+2	23.3	30	PASS

Note: 1. All the antennas ports had been tested, but only the worst data recorded in the report.

<sup>2.</sup> The setting value means the power setting level in the software and these values will use for all the tests in the report.



6.4. POWER SPECTRAL DENSITY

## **LIMITS**

FCC Part15, Subpart E/ RSS-247						
Test Item	Limit	Frequency Range (MHz)				
	For FCC: Other than Mobile and portable:17dBm/MHz Mobile and portable:11dBm/MHz	5150-5250				
	For RSS:10dBm/MHz					
Power Spectral Density	11dBm/MHz	5250-5350				
	11dBm/MHz	For FCC:5470-5725 For IC:5470-5600 5650-5725				
	30dBm/500kHz	5725-5850				

Note: 1. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. Directional gain = Gant + 10 log(Nant) dBi, where NANT is the number of outputs, Gant is the Antenna gain.

## **TEST PROCEDURE**

Connect the UUT to the spectrum analyser and use the following settings:

#### For U-NII-1, U-NII-2A and U-NII-2C band:

or or thir 1, or thir Er taria or thir 20 barra.				
Center Frequency	The center frequency of the channel under test			
Detector	RMS			
RBW	1MHz			
VBW	≥3 × RBW			
Span	Encompass the entire emissions bandwidth (EBW) of the signal			
Trace	Max hold			
Sweep time	Auto			

## For U-NII-3:

Center Frequency The center frequency of the channel under test		
Detector	RMS	
RBW	500KHz	
VBW	≥3 × RBW	

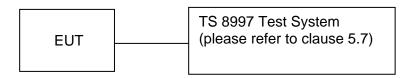


Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

For MIMO Mode: The spectrum of each Chain is measured, Transfer the measured spectra to a computer, where the bin-by-bin summation be performed.

Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.

## **TEST SETUP**



## **RESULTS**



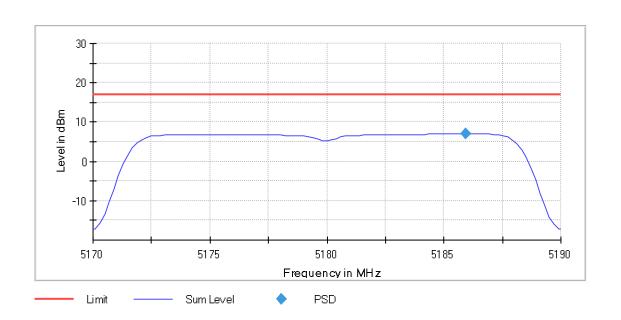
## **6.4.1. SISO MODE**

Note: All the antenna ports had been tested, but only the worst data recorded in the report.

## **TEST PLOT FOR ANTENNA 2**

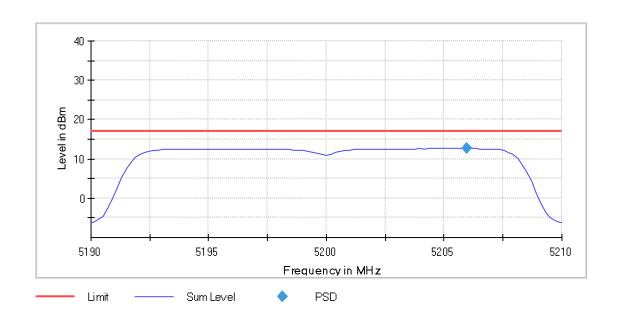
802.11a Mode

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5180.000000	5185.940594	7.024	17.0	PASS

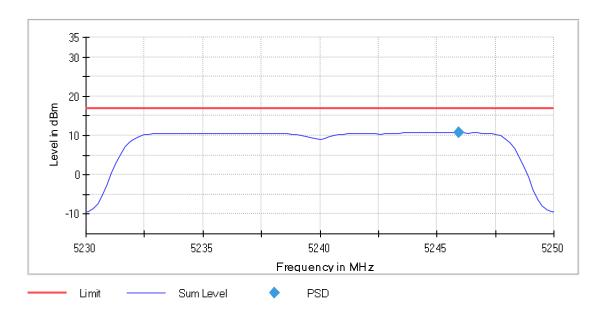




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5200.000000	5205.940594	12.650	17.0	PASS



DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5240.000000	5245.940594	10.774	17.0	PASS



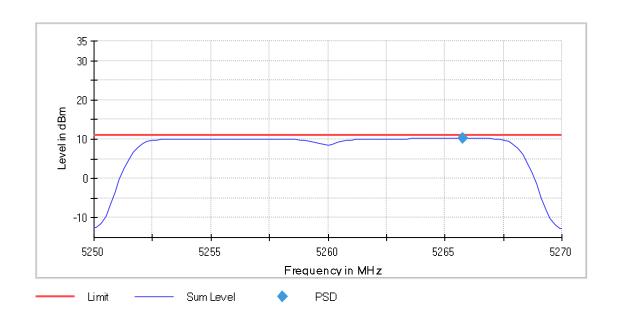
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Ltd, Song Shan Lake Branch.

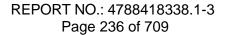


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5260.000000	5265.742574	10.273	11.0	PASS



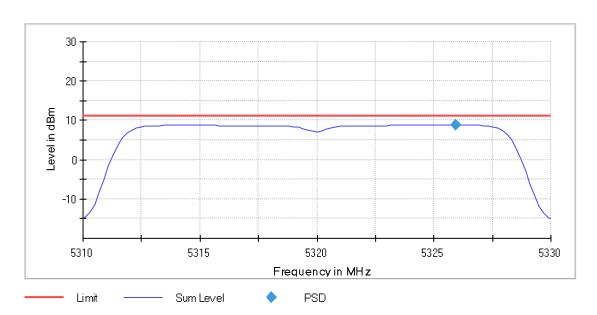
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5300.000000	5305.742574	10.711	11.0	PASS





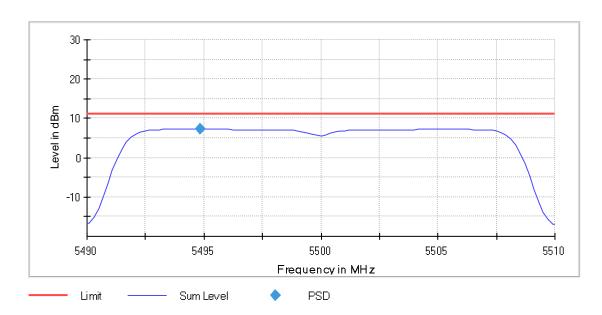


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5320.000000	5325.940594	8.868	11.0	PASS

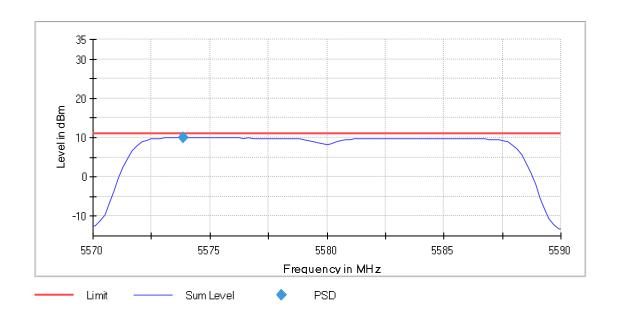




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5500.000000	5494.851485	7.271	11.0	PASS

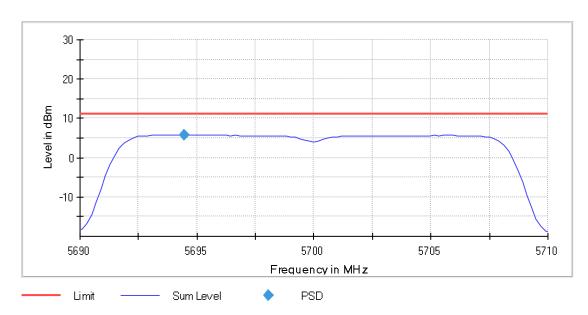


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5580.000000	5573.861386	10.032	11.0	PASS



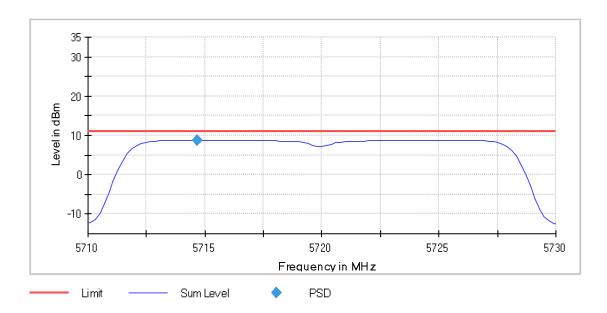


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5700.000000	5694.455446	5.799	11.0	PASS



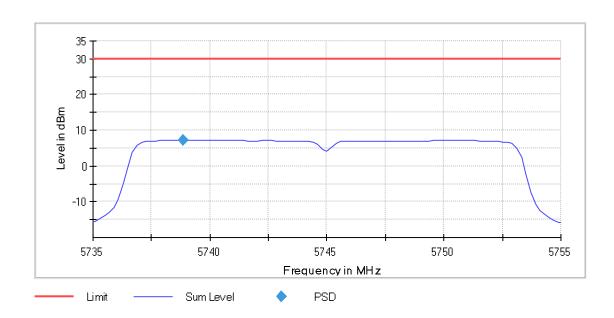
# Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5720.000000	5714.653465	8.806	11.0	PASS

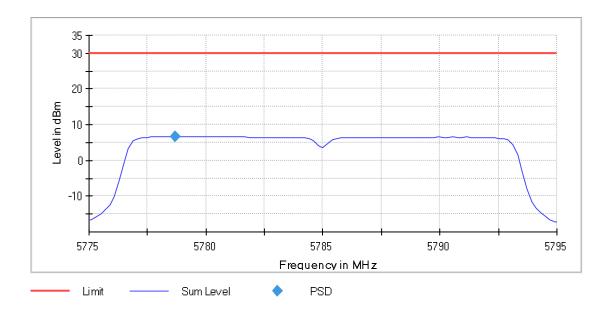


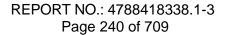


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5745.000000	5738.861386	7.265	30.0	PASS



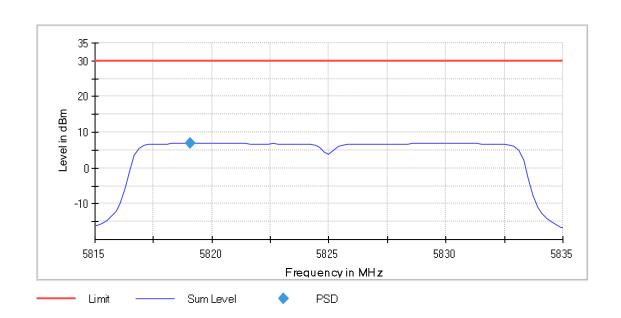
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5785.000000	5778.663366	6.727	30.0	PASS







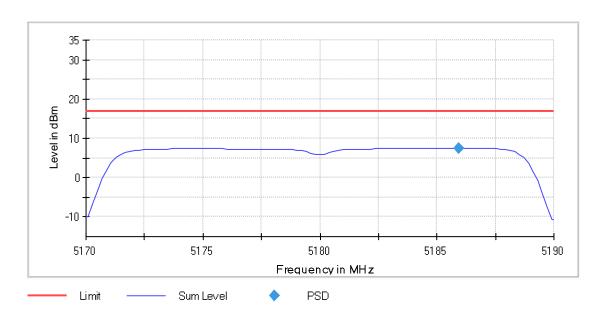
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5825.000000	5819.059406	6.968	30.0	PASS



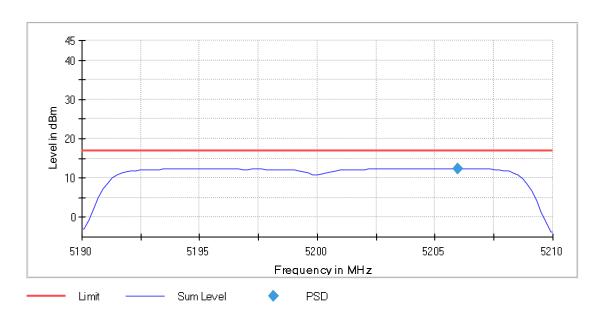


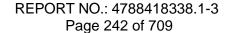
## 802.11n20 Mode

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5180.000000	5185.940594	7.574	17.0	PASS



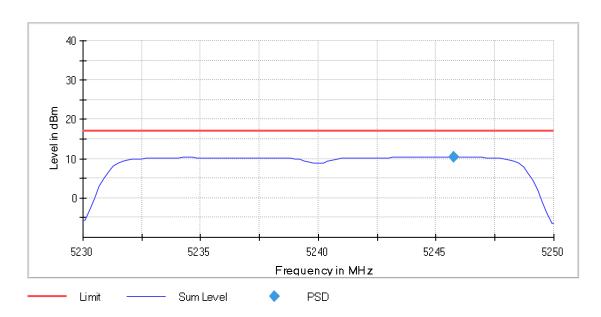
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5200.000000	5205.940594	12.458	17.0	PASS



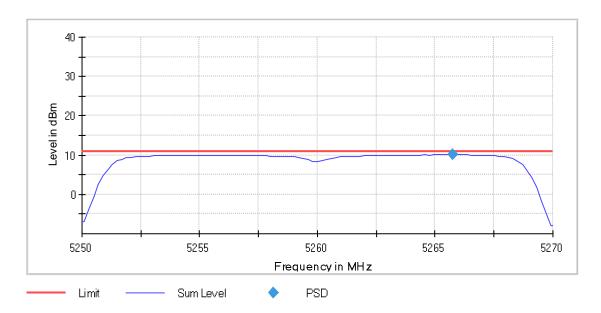


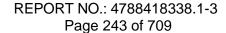


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5240.000000	5245 742574	10.447	17.0	PASS



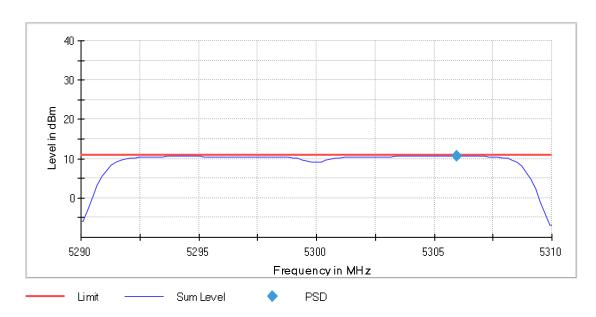
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5260.000000	5265.742574	10.062	11.0	PASS



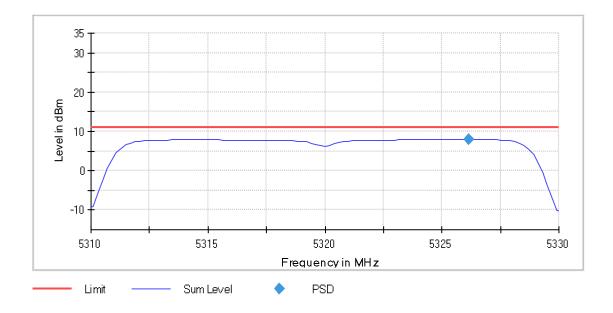




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5300.000000	5305.940594	10.677	11.0	PASS

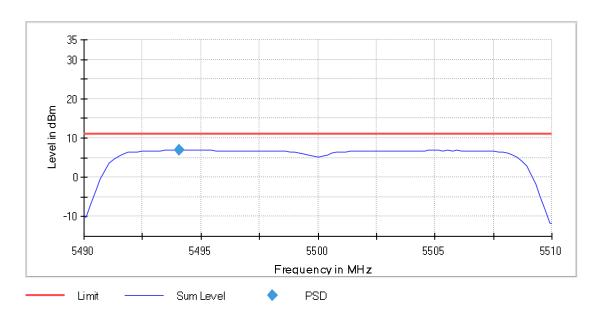


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5320.000000	5326.138614	7.996	11.0	PASS

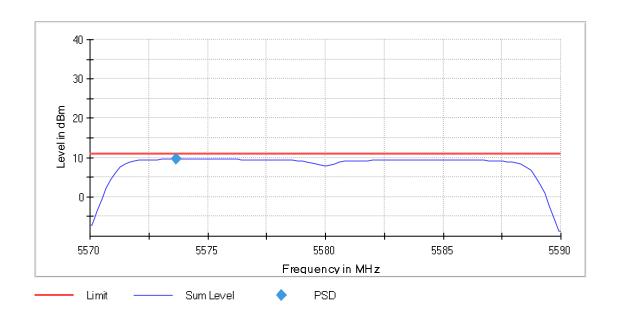




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5500.000000	5494.059406	6.866	11.0	PASS

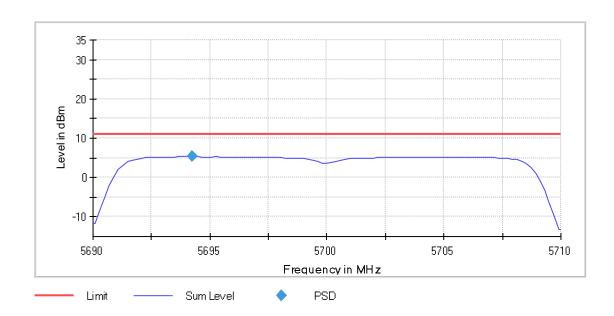


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5580.000000	5573.663366	9.652	11.0	PASS

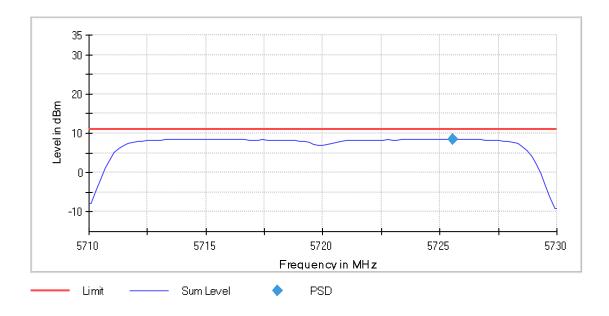




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5700.000000	5694.257426	5.326	11.0	PASS

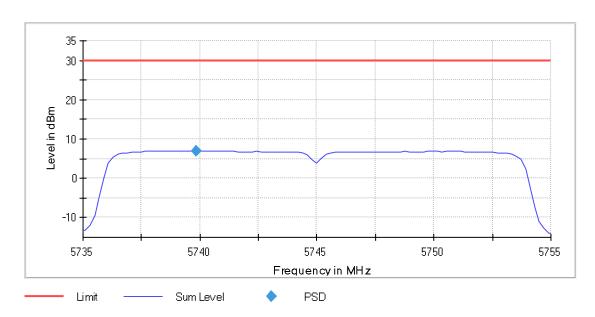


DUT	Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
	5720.000000	5725.544554	8.471	11.0	PASS

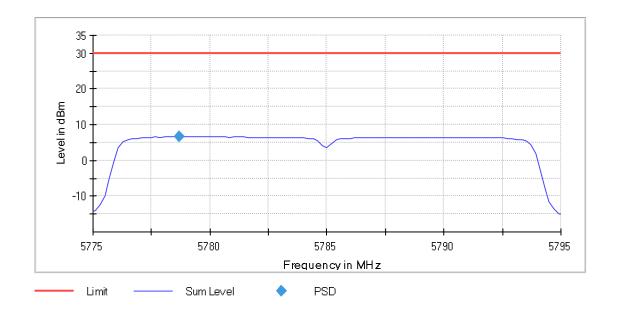


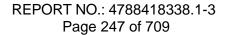


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5745.000000	5739.851485	7.011	30.0	PASS



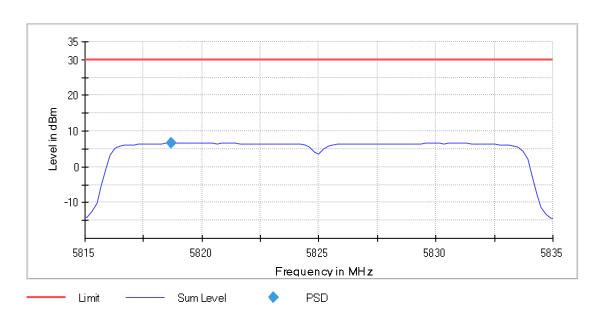
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5785.000000	5778.663366	6.763	30.0	PASS







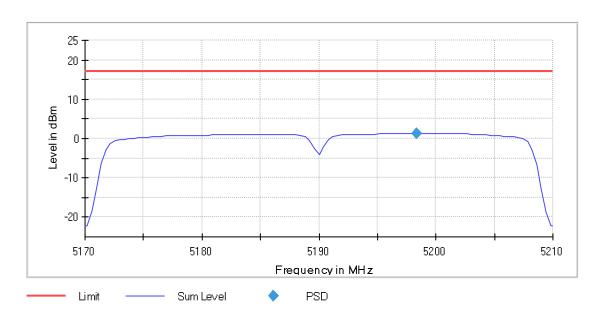
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5825,000000	5818 663366	6.659	30.0	PASS



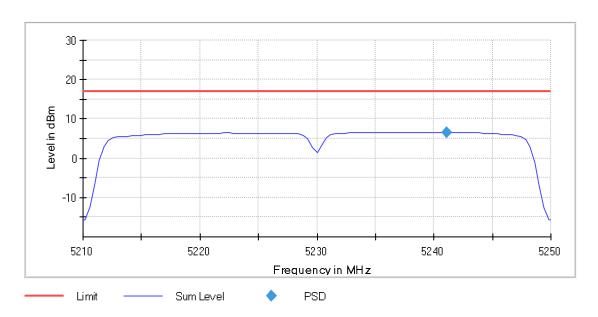


## 802.11n40 Mode

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5190.000000	5198.316832	1.274	17.0	PASS



DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
				PASS



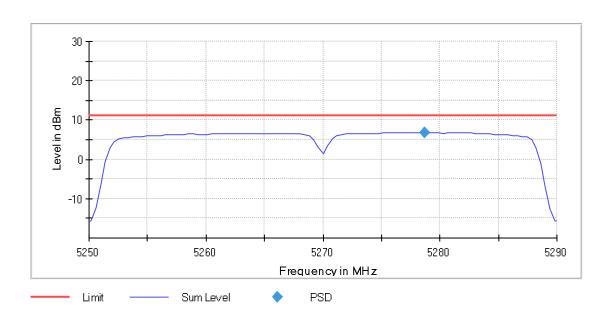
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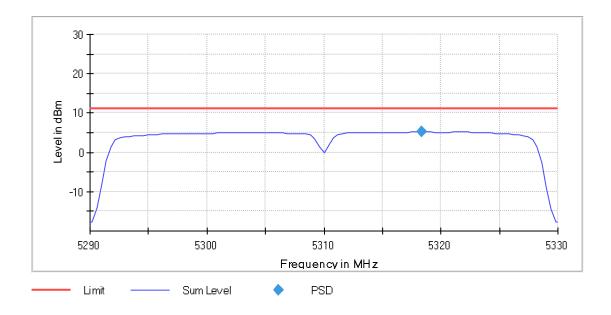
Ltd, Song Shan Lake Branch.



DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5270.000000	5278.712871	6.757	11.0	PASS

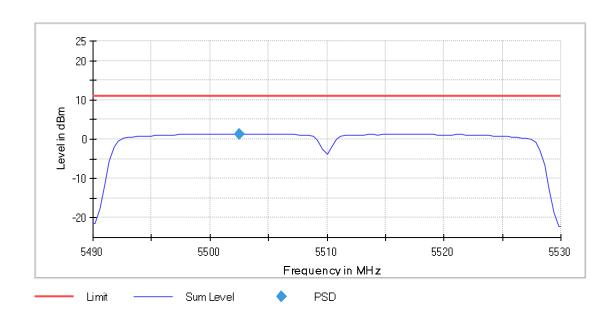


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5310.000000	5318.316832	5.175	11.0	PASS

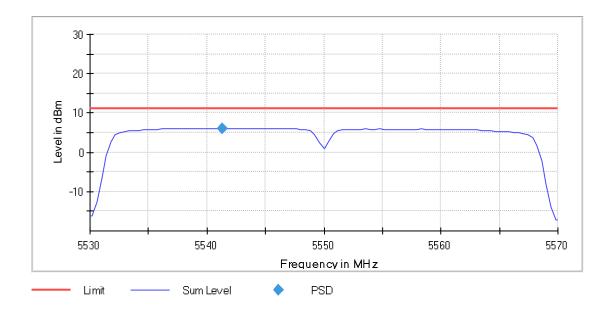




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5510.000000	5502.475248	1.301	11.0	PASS

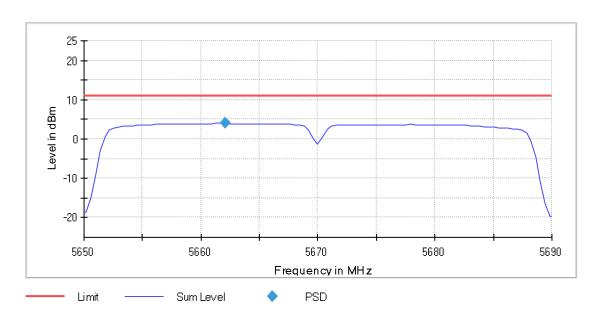


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5550.000000	5541.287129	6.141	11.0	PASS

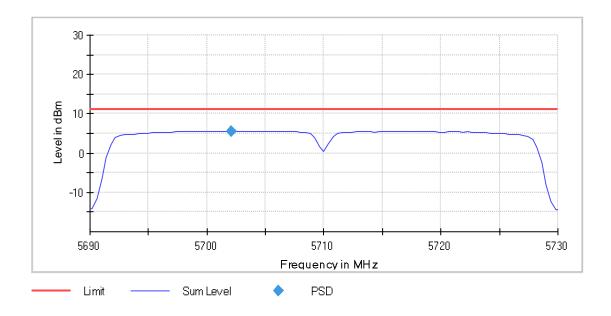




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5670.000000	5662.079208	3.964	11.0	PASS

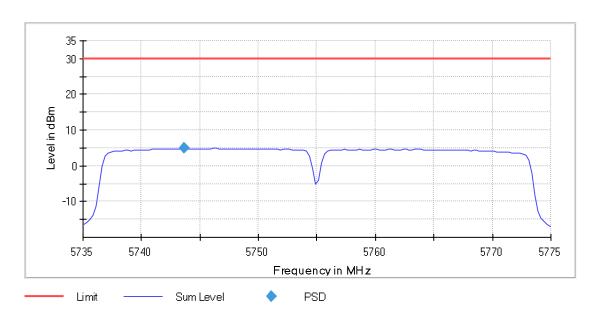


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5710.000000	5702.079208	5.509	11.0	PASS

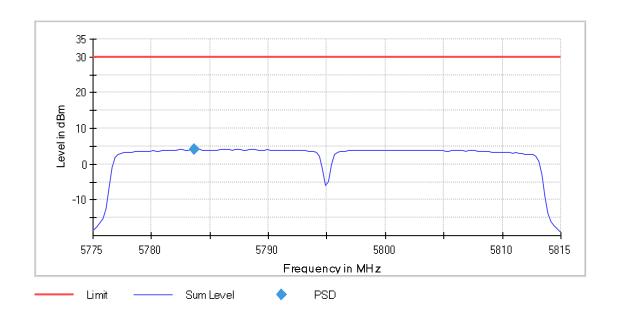




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5755.000000	5743.625000	4.863	30.0	PASS



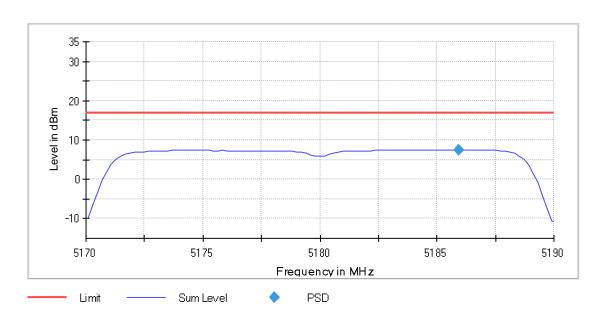
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5795.000000	5783.625000	4.103	30.0	PASS



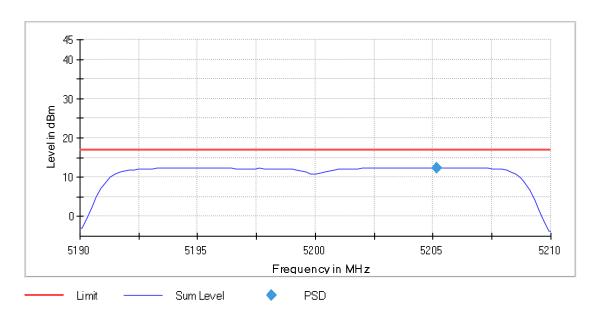


## 802.11ac20 Mode

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5180.000000	5185.940594	7.565	17.0	PASS



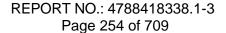
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5200.000000	5205.148515	12.468	17.0	PASS



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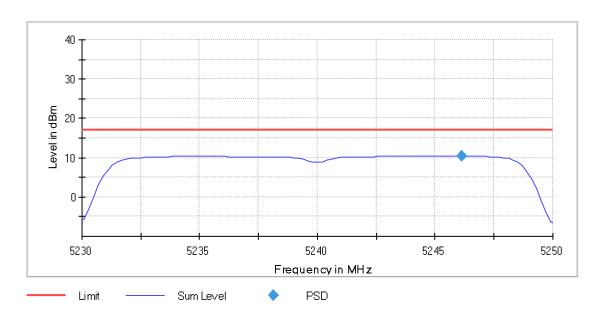
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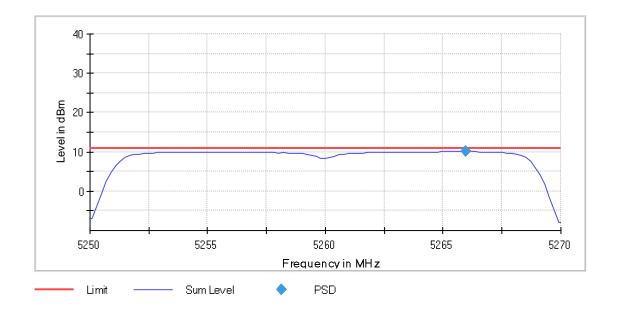




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5240.000000	5246.138614	10.484	17.0	PASS

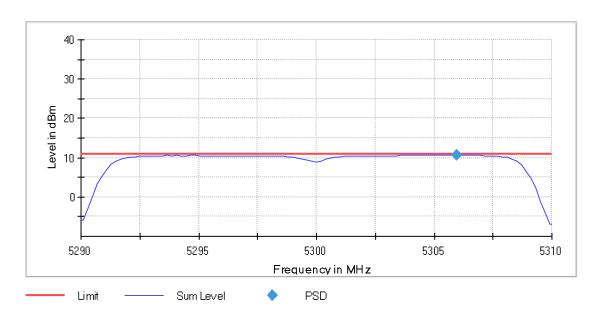


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5260.000000	5265.940594	10.085	11.0	PASS

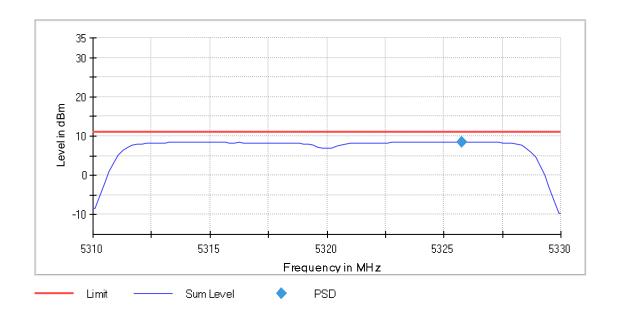




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5300.000000	5305.940594	10.652	11.0	PASS

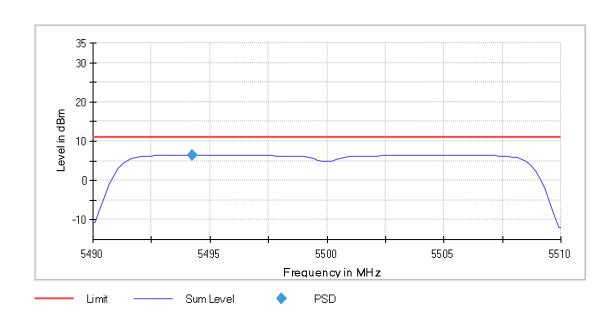


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5320.000000	5325.742574	8.534	11.0	PASS

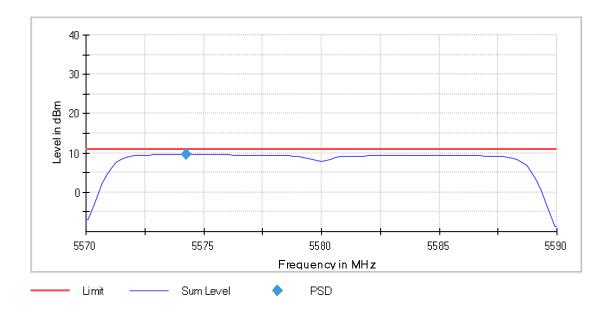




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5500.000000	5494.257426	6.519	11.0	PASS

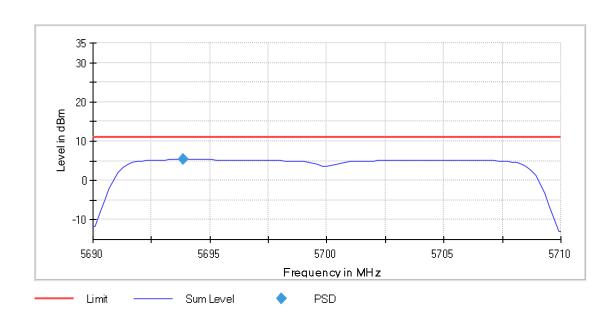


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5580.000000	5574.257426	9.663	11.0	PASS

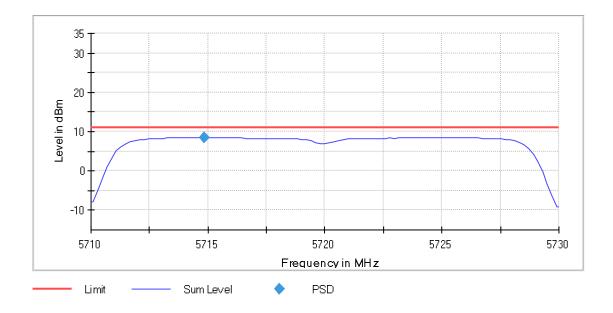




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5700.000000	5693.861386	5.338	11.0	PASS

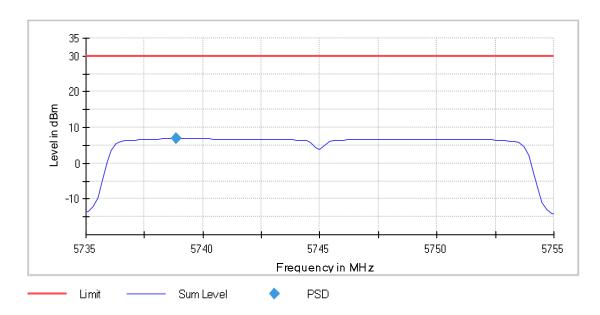


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5720.000000	5714.851485	8.458	11.0	PASS

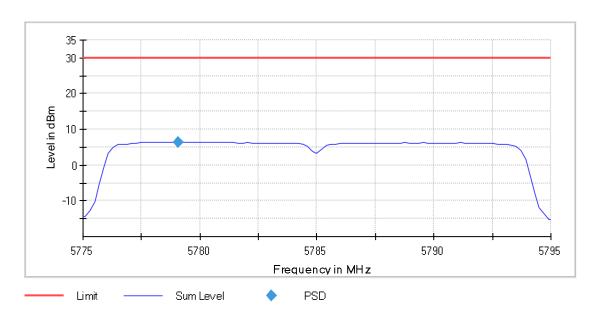




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5745.000000	5738.861386	6.922	30.0	PASS

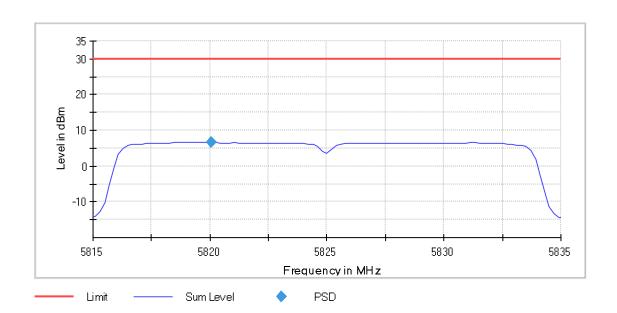


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5785.000000	5779.059406	6.515	30.0	PASS





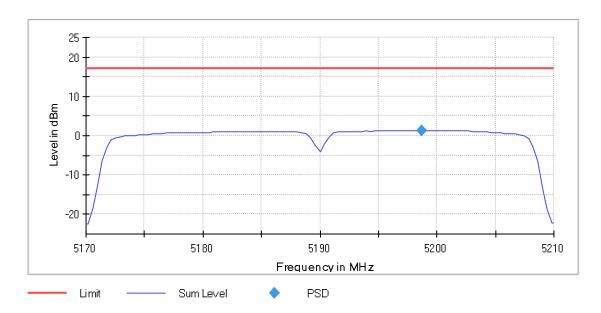
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5825.000000	5820.049505	6.611	30.0	PASS



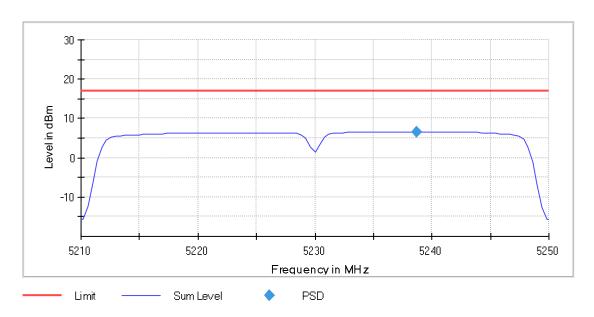


# 802.11ac40 Mode

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5190.000000	5198.712871	1.290	17.0	PASS

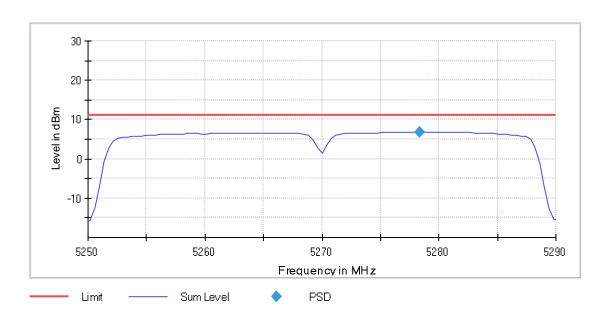


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5230.000000	5238.712871	6.625	17.0	PASS

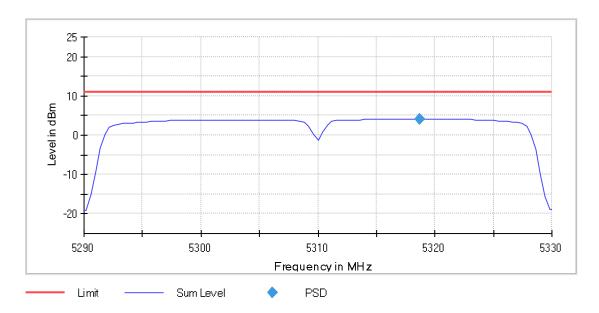




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5270.000000	5278.316832	6.780	11.0	PASS

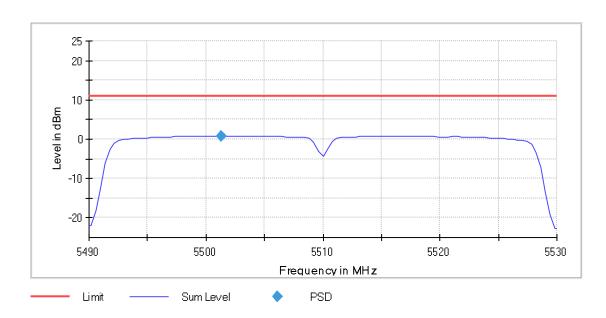


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5310.000000	5318.712871	4.124	11.0	PASS

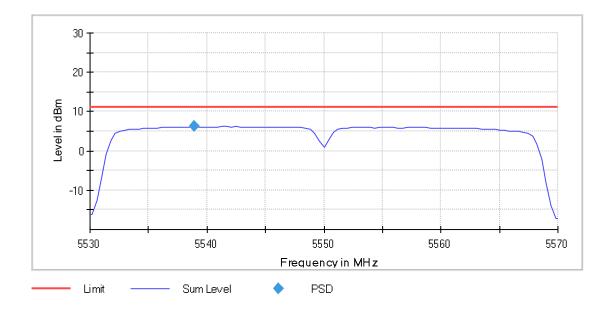




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5510.000000	5501.287129	0.804	11.0	PASS

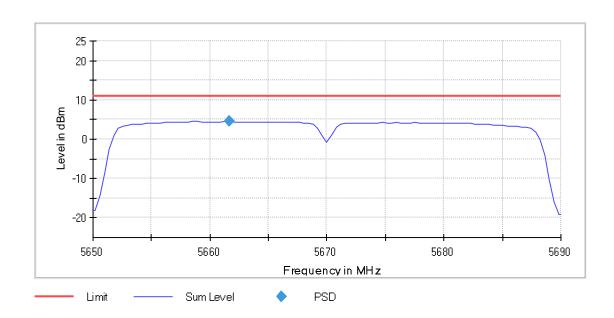


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5550.000000	5538.910891	6.161	11.0	PASS

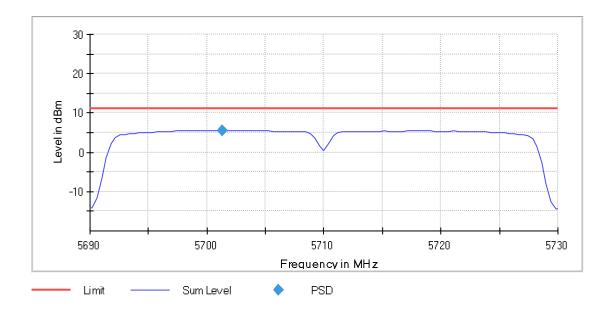




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5670.000000	5661.683168	4.491	11.0	PASS

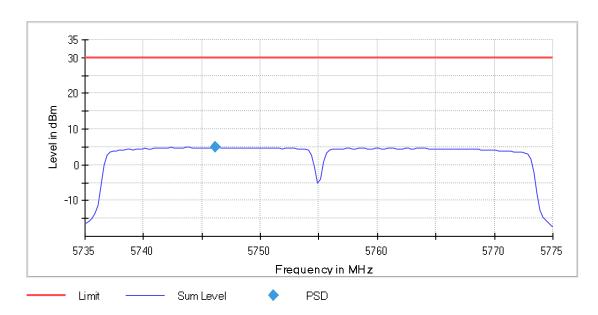


	DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
ſ	5710.000000	5701.287129	5.475	11.0	PASS

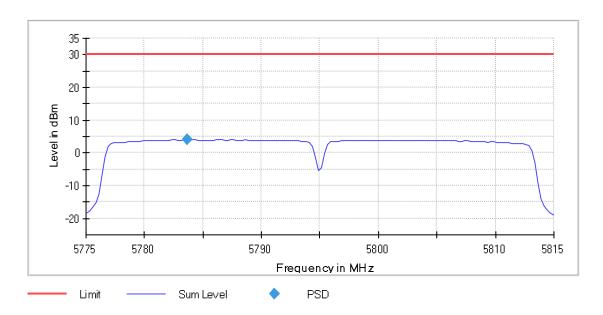




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5755.000000	5746.125000	4.899	30.0	PASS



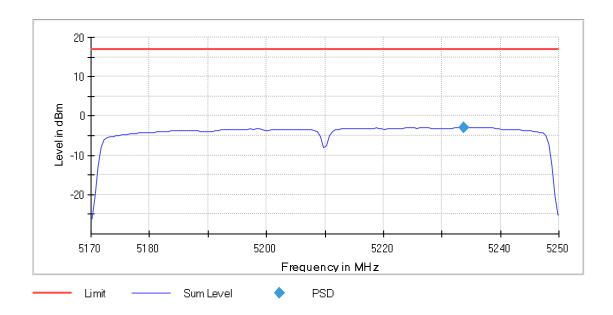
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5795.000000	5783.625000	4.065	30.0	PASS



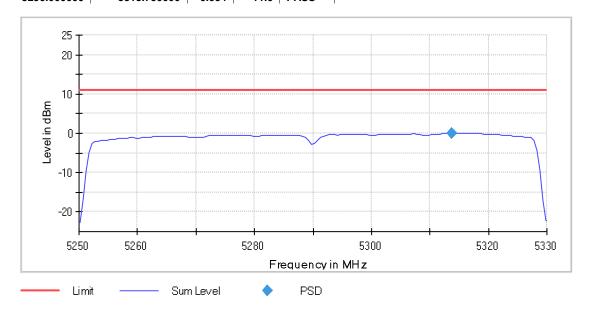


# 802.11ac80 Mode

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5210.000000	5233.750000	-2.865	17.0	PASS



DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5290.000000	5313.750000	0.054	11.0	PASS



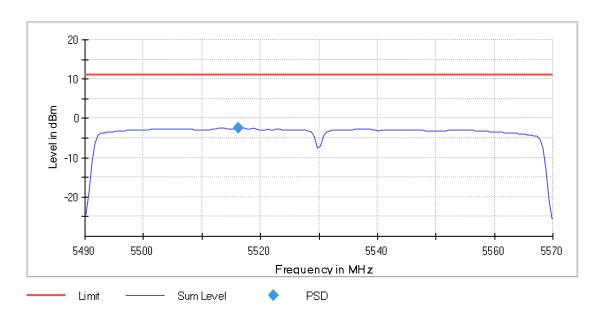
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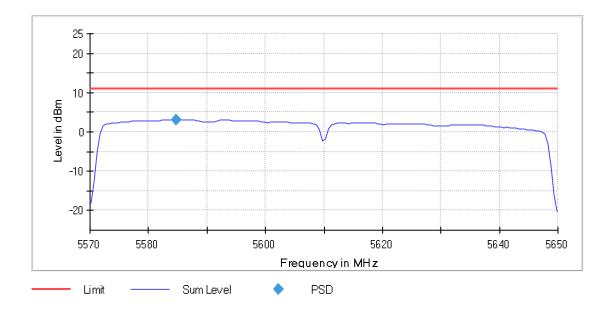
Ltd, Song Shan Lake Branch.



DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5530.000000	5516.250000	-2.534	11.0	PASS

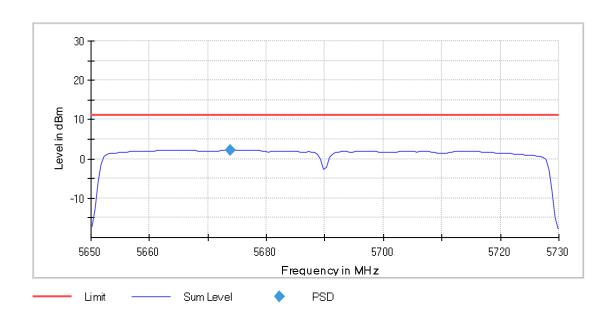


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5610.000000	5584.750000	3.035	11.0	PASS

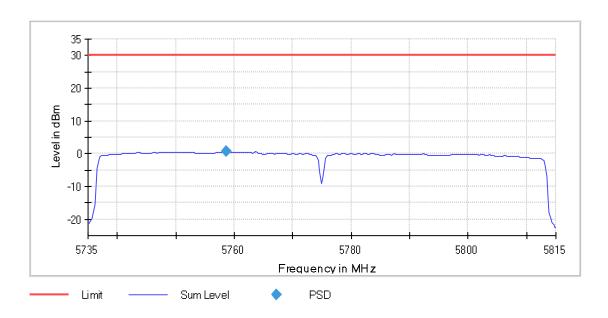




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5690.000000	5673.750000	2.244	11.0	PASS



DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5775.000000	5758.625000	0.576	30.0	PASS



Note: All transmission modes and channels had been tested, but only the worst data recorded in the report.

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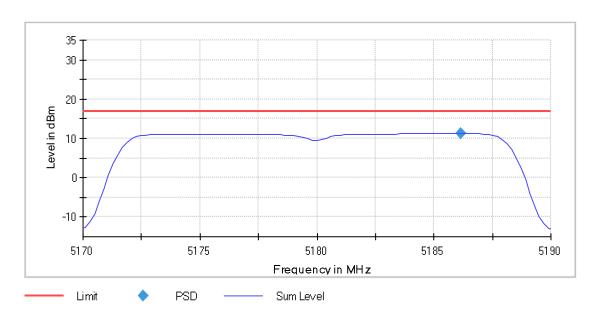


# **6.4.2. MIMO MODE**

# **TEST PLOT AND RESULT**

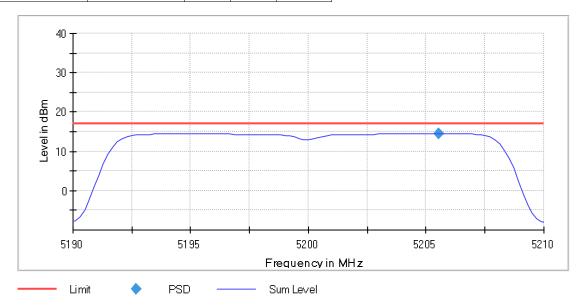
# 802.11a Mode

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5180.000000	5186.138614	11.315	16.22	PASS

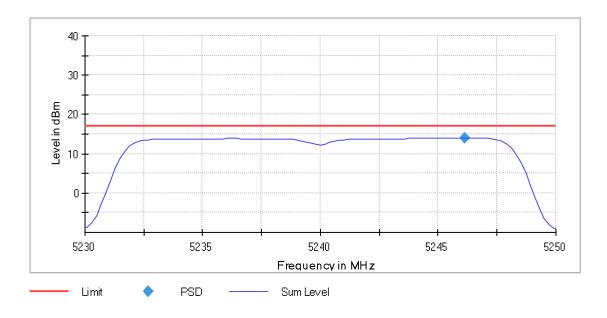




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5200.000000	5205.544554	14.612	16.22	PASS

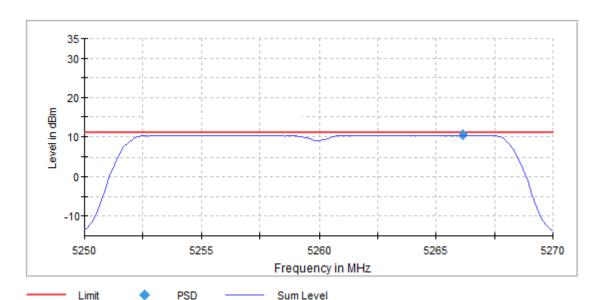


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5240.000000	5246.138614	14.061	16.22	PASS

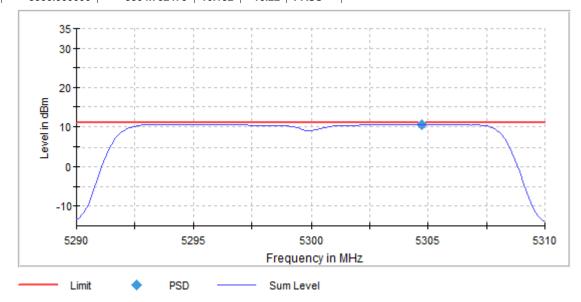




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5260.000000	5266.138614	10.105	10.22	PASS

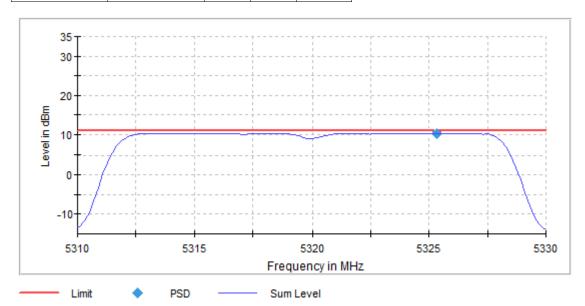


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5300.000000	5304.752475	10.192	10.22	PASS

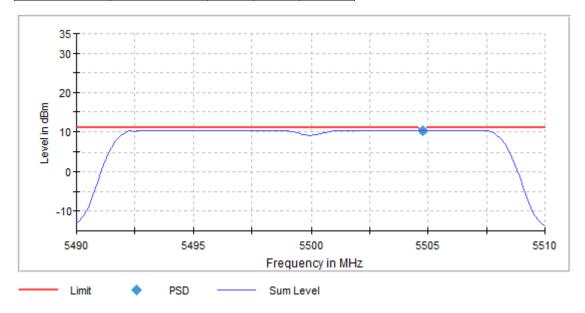




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5320.000000	5325.346535	10.121	10.22	PASS

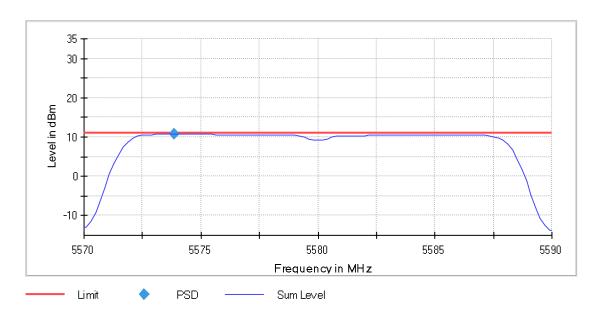


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5500.000000	5505.742574	10.045	10.22	PASS

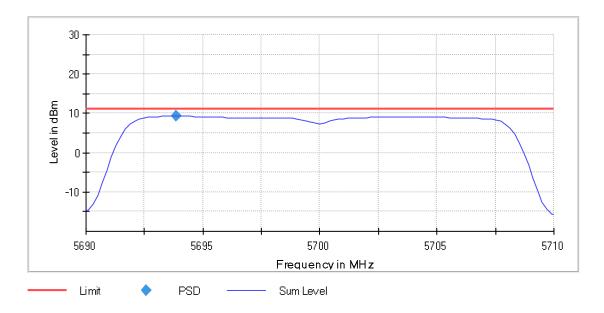




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5580.000000	5573.861386	10.145	10.22	PASS



DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5700.000000	5693.861386	9.271	10.22	PASS



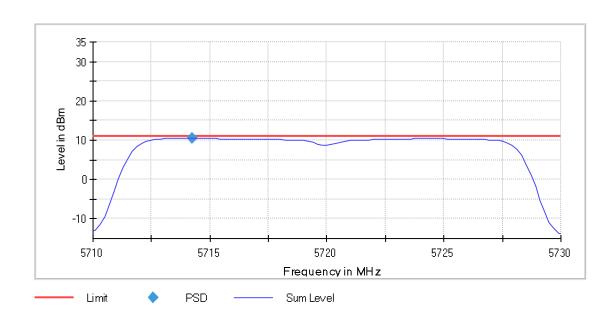
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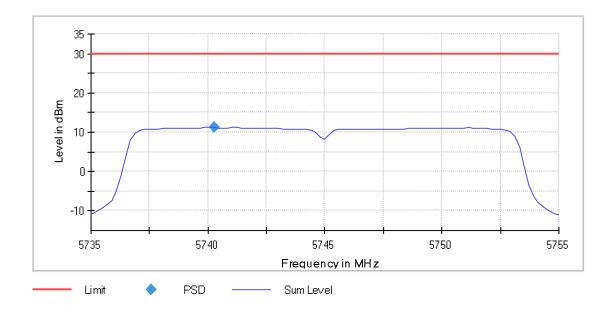
Ltd, Song Shan Lake Branch.



DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5720.000000	5714.257426	10.152	10.22	PASS



DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5745.000000	5740.247525	11.174	29.22	PASS



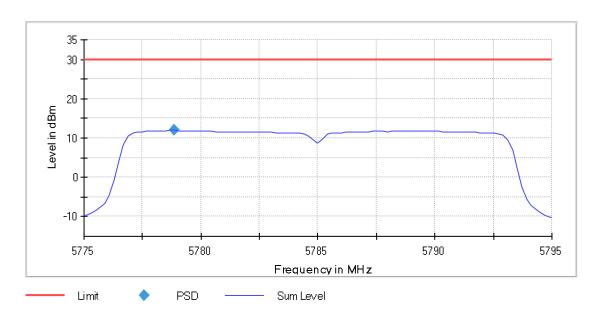
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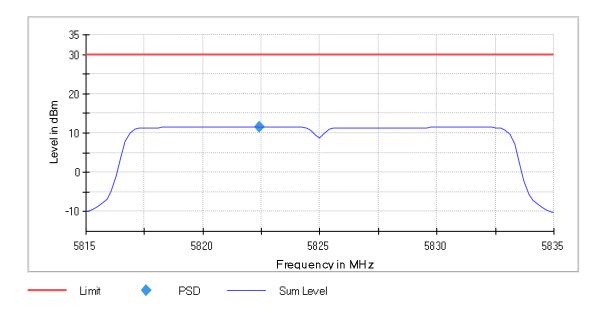
Ltd, Song Shan Lake Branch.



DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5785.000000	5778.861386	11.918	29.22	PASS



DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5825.000000	5822.425743	11.640	29.22	PASS



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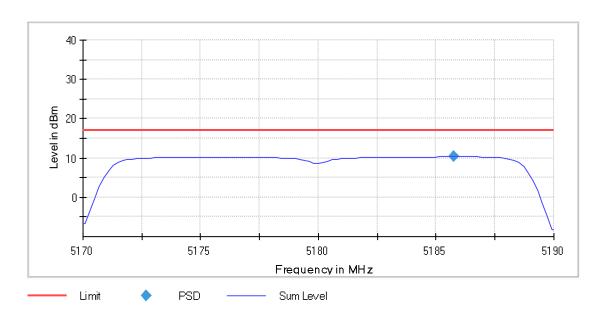
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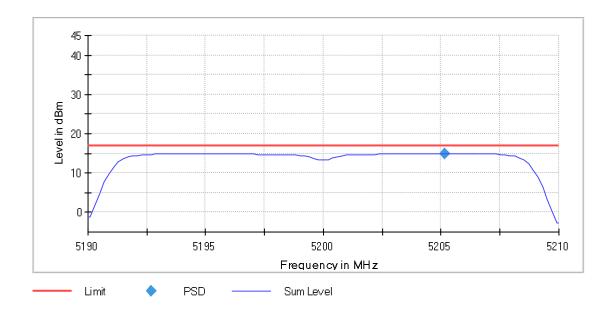


# 802.11n20 Mode

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5180.000000	5185.742574	10.348	16.22	PASS



DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5200.000000	5205.148515	14.996	16.22	PASS



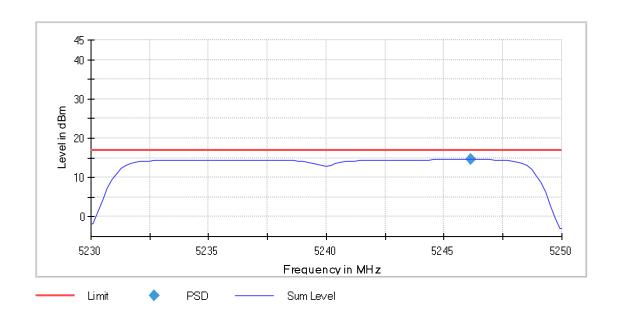
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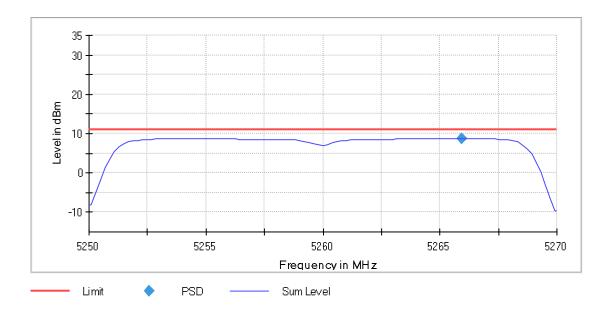
Ltd, Song Shan Lake Branch.



DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5240.000000	5246.138614	14.617	16.22	PASS

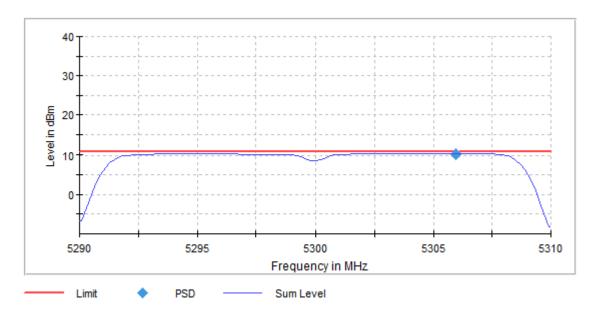


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5260.000000	5265.940594	8.808	10.22	PASS

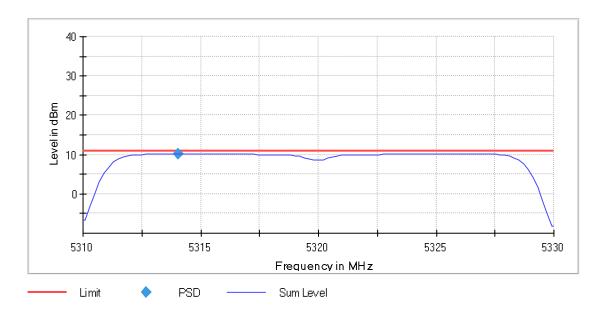




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5300.000000	5305.940594	10.142	10.22	PASS

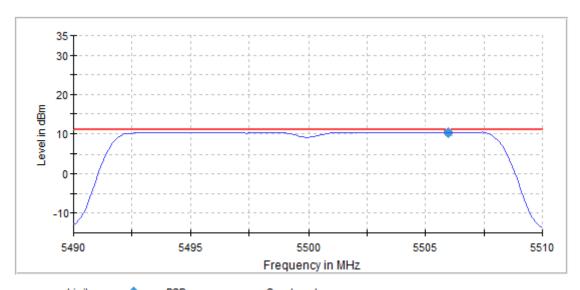


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5320.000000	5314.059406	10.061	10.22	PASS

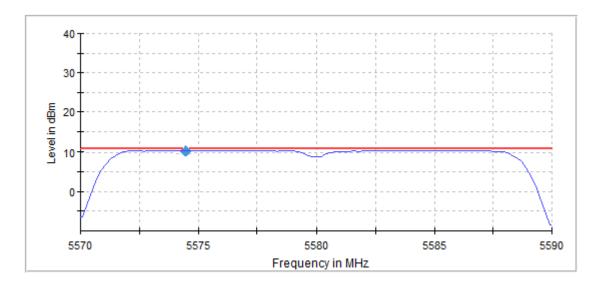




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5500.000000	5506.138614	10.044	10.22	PASS

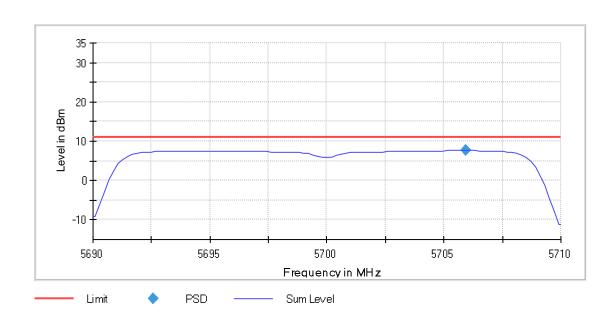


Limit	PSD	Sum Level		
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5580.000000	5574.455446	10.077	10.22	PASS

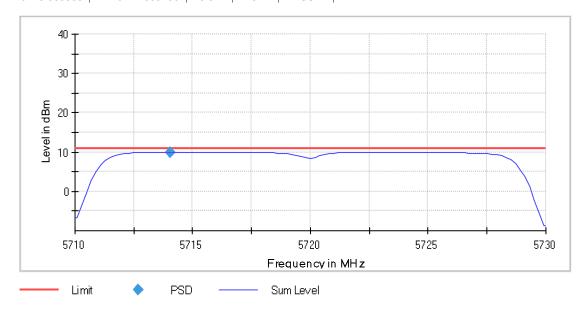




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5700.000000	5705.940594	7.617	10.22	PASS

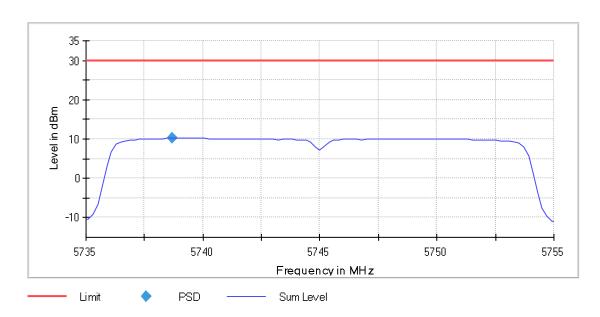


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5720.000000	5714.059406	10.021	10.22	PASS

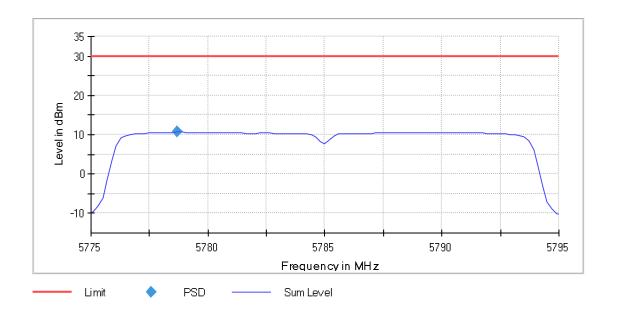


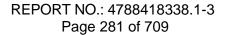


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5745.000000	5738.663366	10.217	29.22	PASS



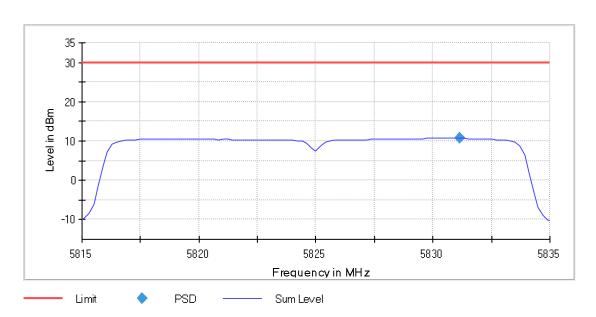
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5785.000000	5778.663366	10.645	29.22	PASS







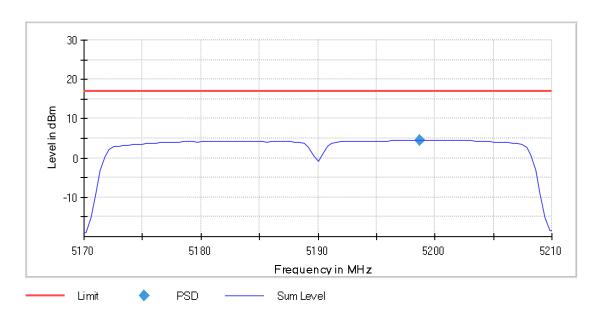
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5825.000000	5831.138614	10.711	29.22	PASS



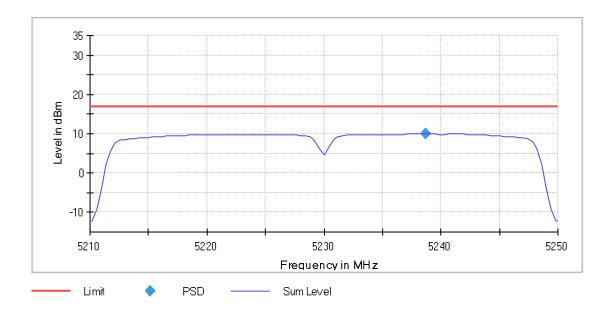


# 802.11n40 Mode

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5190.000000	5198.712871	4.539	16.22	PASS

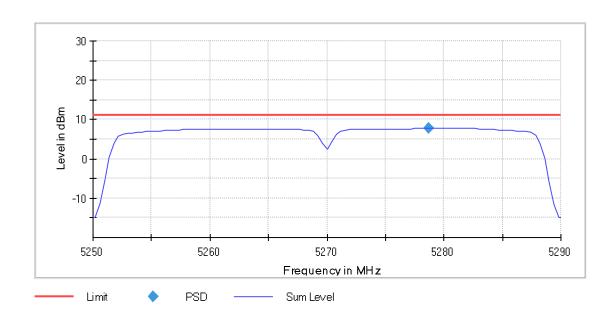


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5230.000000	5238.712871	9.967	16.22	PASS

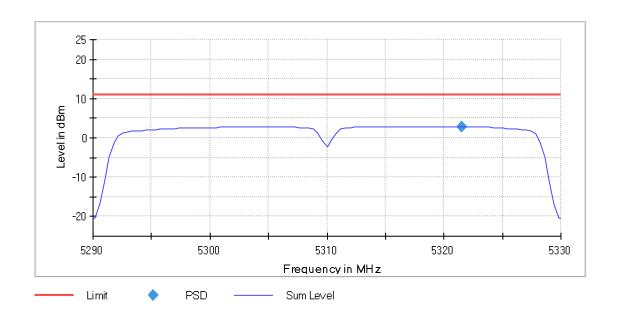




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5270.000000	5278.712871	7.784	10.22	PASS

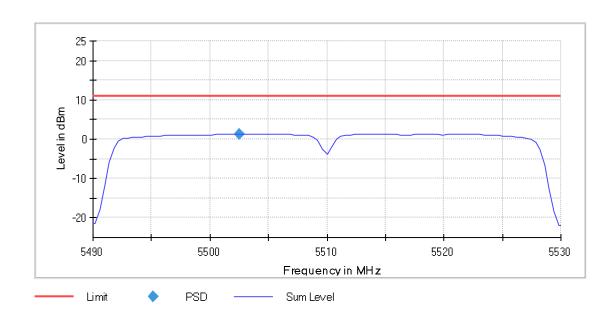


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5310.000000	5321.485149	2.905	10.22	PASS

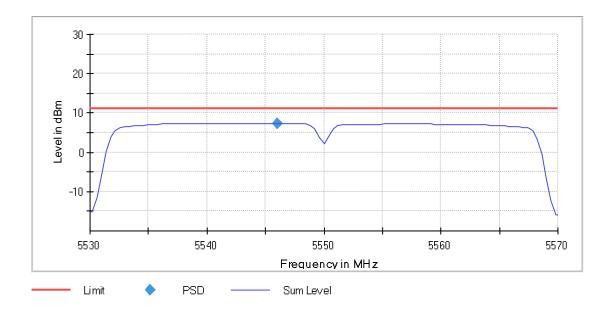




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5510.000000	5502.475248	1.330	10.22	PASS

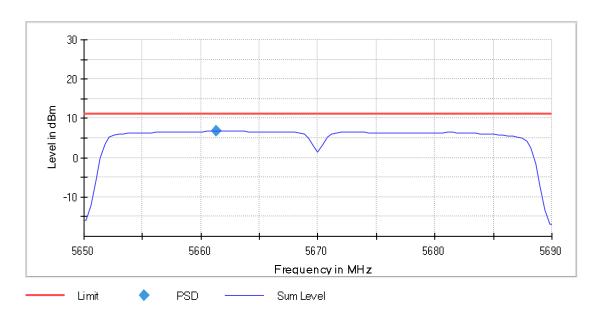


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5550.000000	5546.039604	7.415	10.22	PASS

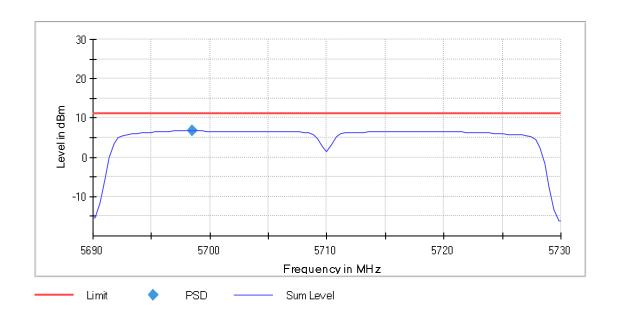




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5670.000000	5661.287129	6.767	10.22	PASS

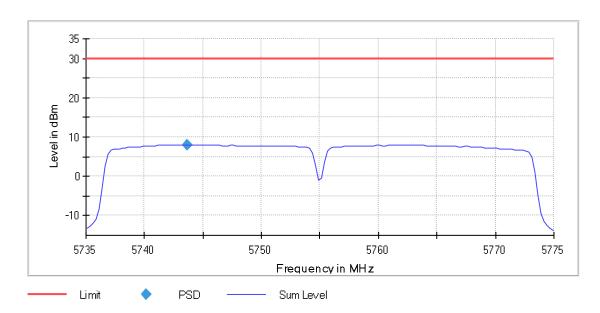


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5710.000000	5698.514851	6.778	10.22	PASS

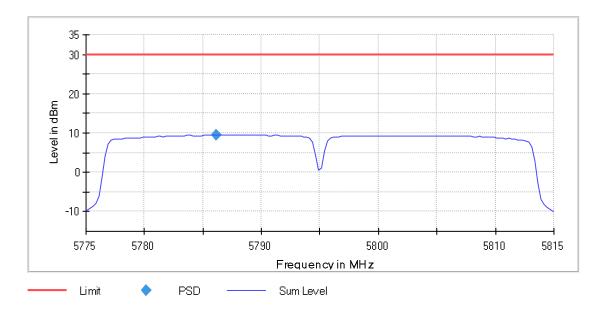




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5755.000000	5743.625000	8.073	29.22	PASS



DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5795.000000	5786.125000	9.552	29.22	PASS



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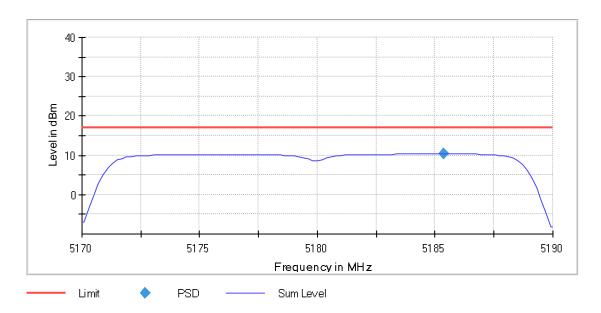
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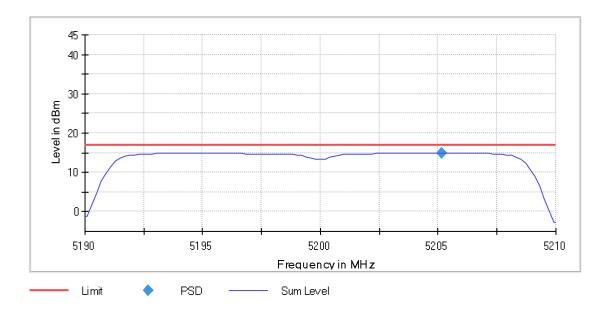


# 802.11ac20 Mode

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5180.000000	5185.346535	10.414	16.22	PASS



DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5200.000000	5205.148515	14.984	16.22	PASS



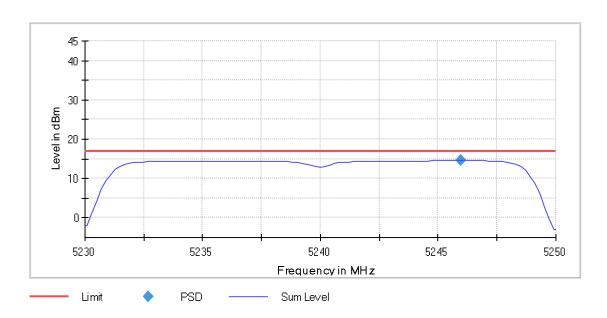
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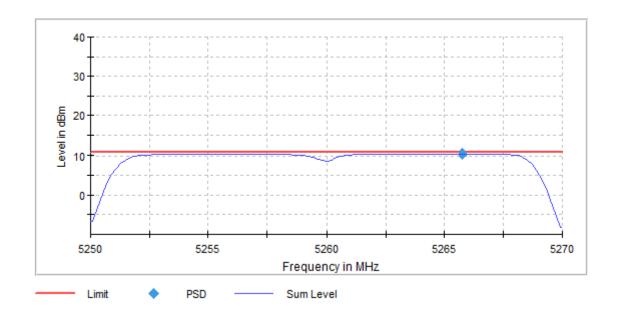
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DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5240.000000	5245.940594	14.609	16.22	PASS

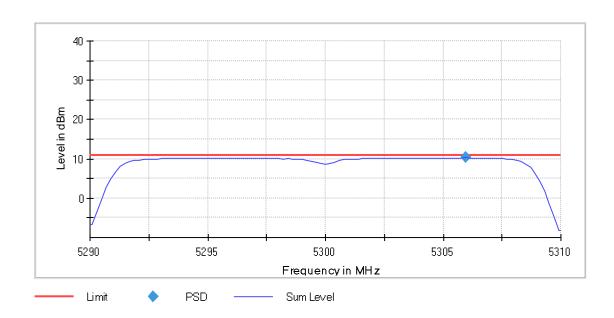


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5260.000000	5265.742574	10.047	10.22	PASS

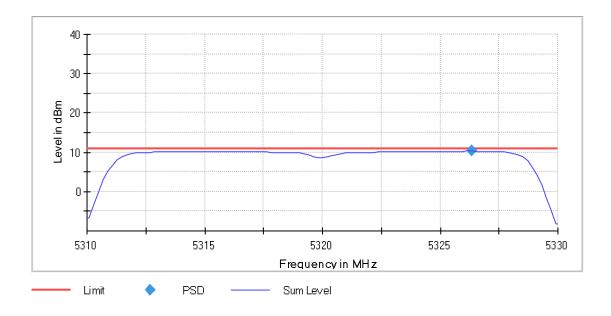




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5300.000000	5305.940594	10.182	10.22	PASS

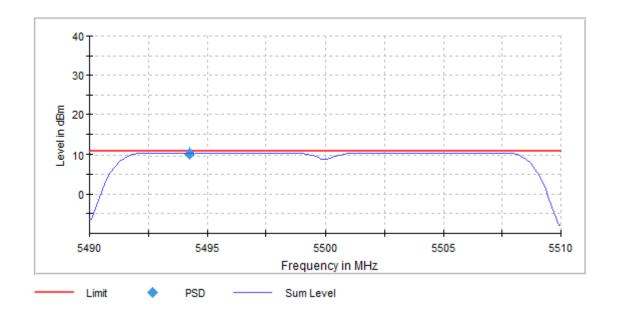


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5320.000000	5326.336634	10.194	10.22	PASS

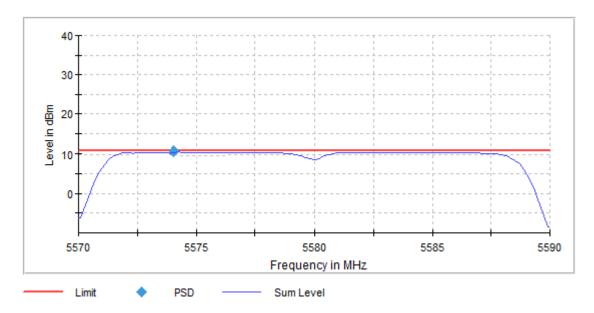




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5500.000000	5494.257426	10.099	10.22	PASS

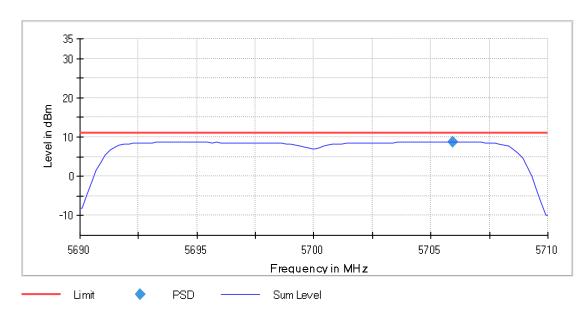


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5580.000000	5574.059406	10.046	10.22	PASS

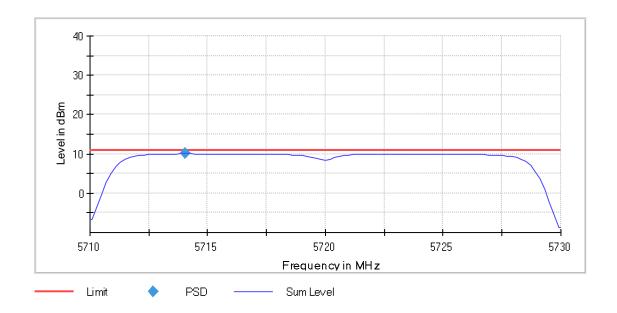




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5700.000000	5705.940594	8.792	10.22	PASS

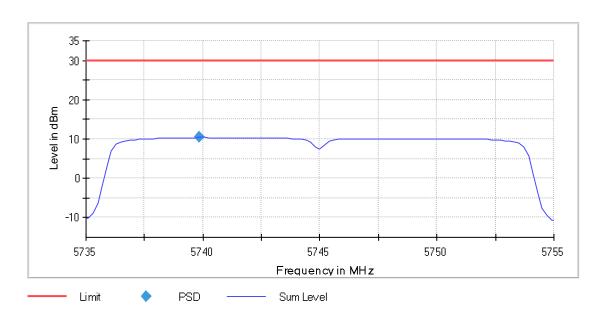


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5720.000000	5714.059406	10.043	10.22	PASS

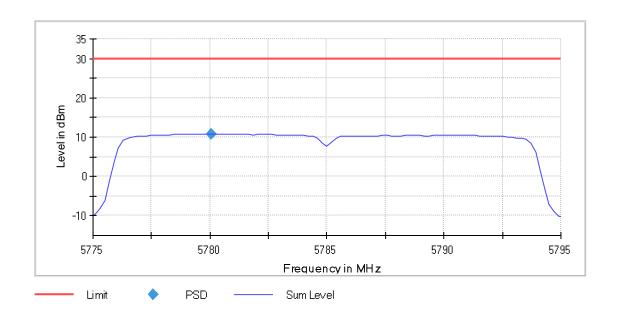


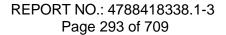


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5745.000000	5739.851485	10.394	29.22	PASS



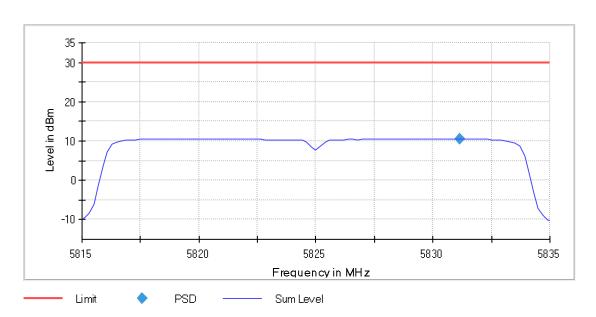
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5785.000000	5780.049505	10.822	29.22	PASS







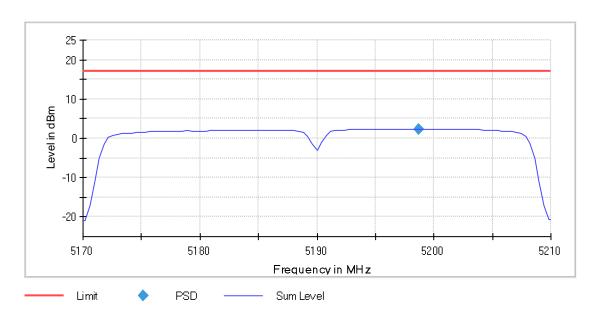
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5825.000000	5831.138614	10.618	29.22	PASS



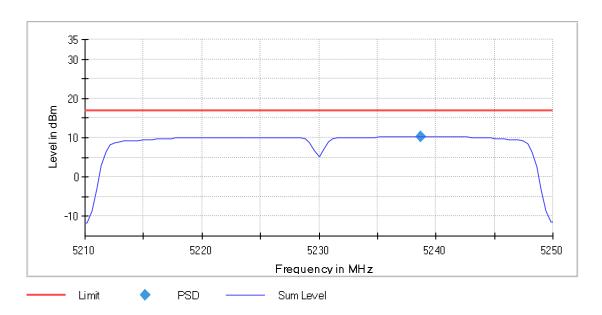


### 802.11ac40 Mode

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5190.000000	5198.712871	2.319	16.22	PASS



DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5230.000000	5238.712871	10.279	16.22	PASS



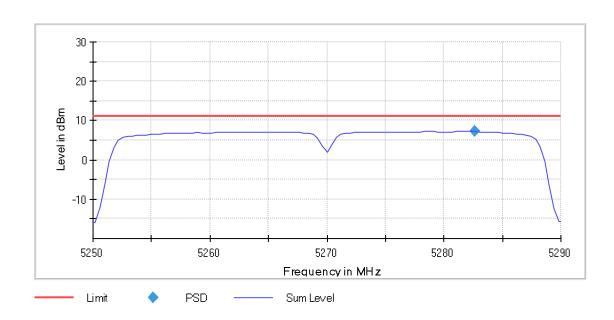
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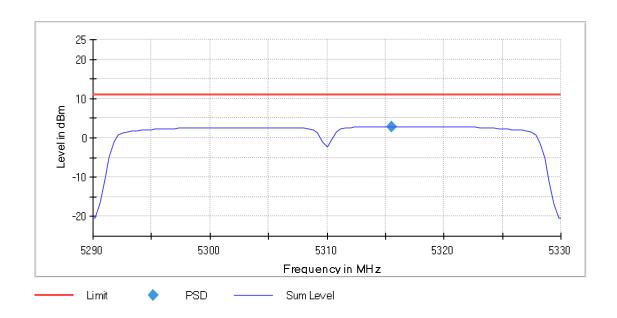
Ltd, Song Shan Lake Branch.



UT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5270.000000	5282.673267	7.224	10.22	PASS

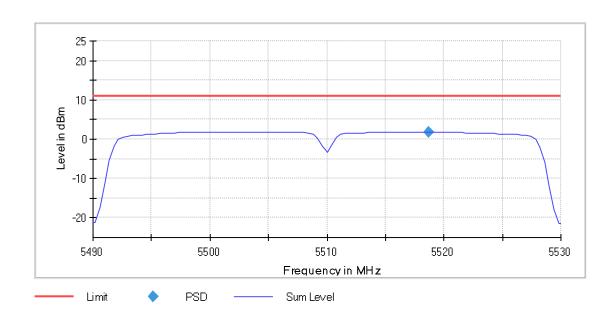


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5310.000000	5315.544554	2.872	10.22	PASS

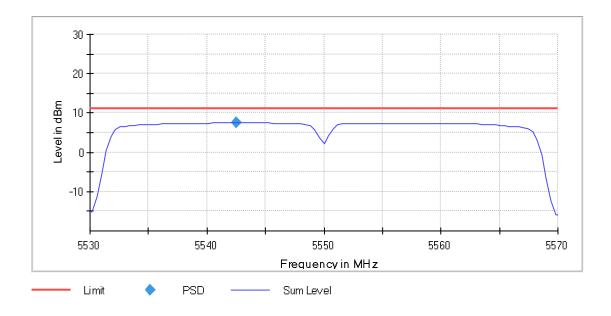




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5510.000000	5518.712871	1.828	10.22	PASS

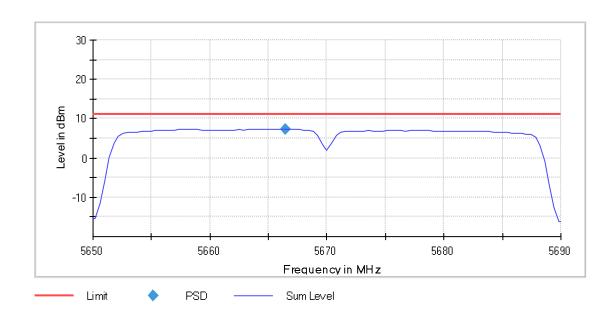


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5550.000000	5542.475248	7.537	10.22	PASS

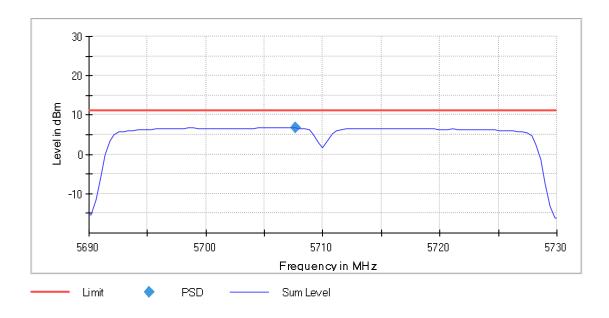




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5670.000000	5666.435644	7.274	10.22	PASS

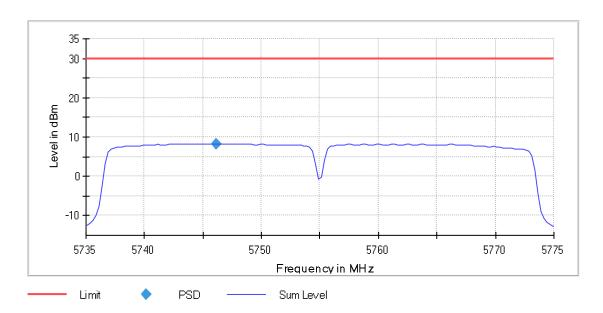


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5710.000000	5707.623762	6.705	10.22	PASS

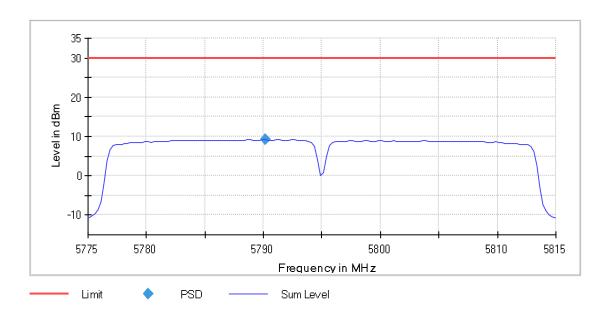




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5755.000000	5746.125000	8.339	29.22	PASS



DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5795.000000	5790.125000	9.186	29.22	PASS



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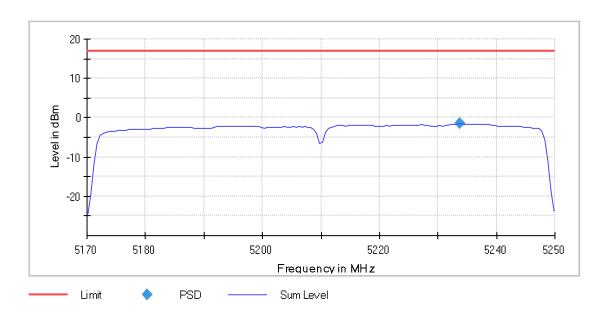
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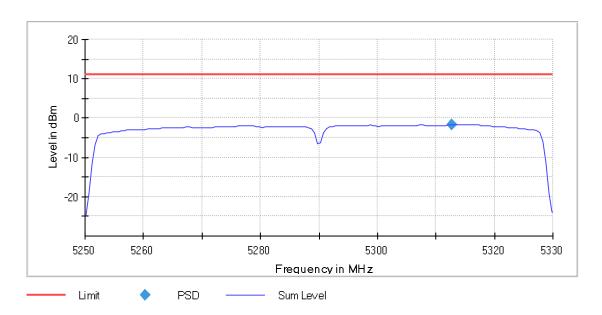


### 802.11ac80 Mode

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5210.000000	5233.750000	-1.551	16.22	PASS



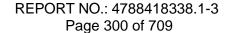
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5290.000000	5312.750000	-1.712	10.22	PASS



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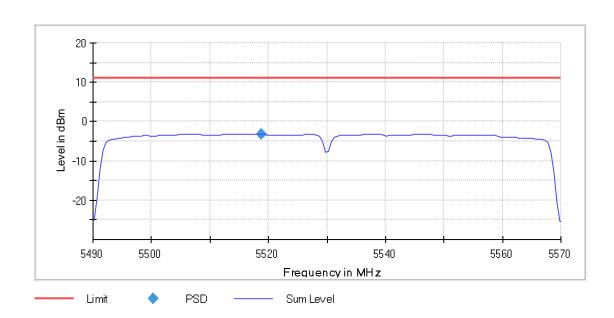
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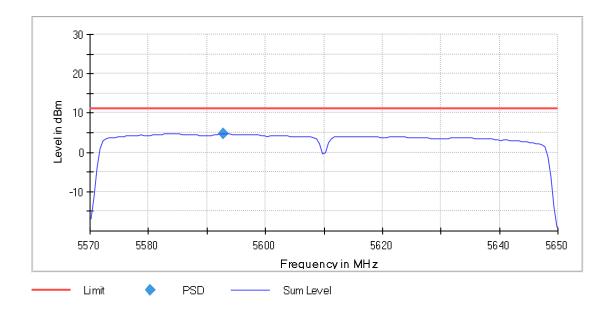




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5530 000000	5518.750000	-3.088	10.22	PASS

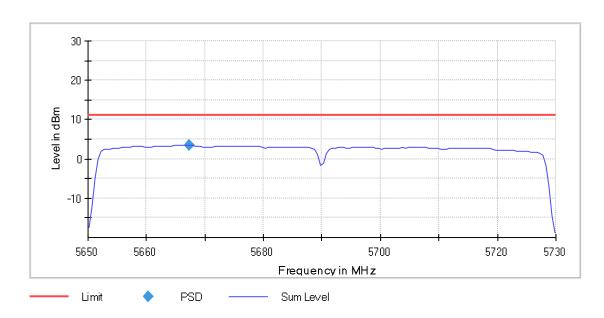


DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5610.000000	5592.750000	4.693	10.22	PASS

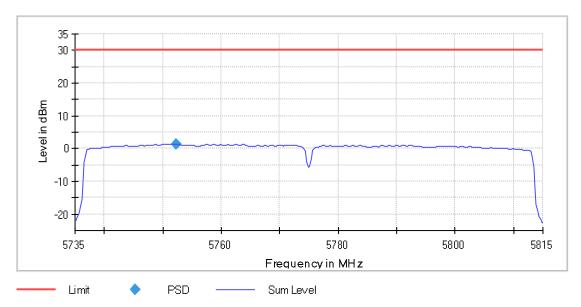




DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5690.000000	5667.250000	3.528	10.22	PASS



DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
5775.000000	5752.375000	1.457	29.22	PASS



Note: All transmission modes and channels had been tested, but only the worst data recorded in the report.



### 7. RADIATED TEST RESULTS

#### **LIMITS**

Please refer to FCC §15.205, §15.209 and §15.407(b) (4)

Please refer to RSS-GEN Clause 8.9 (Transmitter)

Radiation Disturbance Test Limit for FCC (Class B)(9KHz-1GHz)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

Note: 1) At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

(2) At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). This paragraph (f) shall not apply to Access BPL devices operating below 30 MHz.



Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

LIMITS OF RADIATED EMISSION MEASUREMENT (Below 1GHz)						
		Field Stre	ength Limit			
Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	(dBuV/m) at 3 m				
(1411 12)	(61111) 61 6 111	Quasi-Peak				
30 - 88	100	40				
88 - 216	150	43.5				
216 - 960	200	46				
Above 960	500	5	54			
Above 1000	500	Peak Average				
Above 1000	500	74	54			

#### Limits of unwanted emission out of the restricted bands

LIMITS OF RADIATED EMISSION MEASUREMENT ( Above 1GHz)						
Frequency Range		Field Strength Limit				
(MHz) 30 - 88	EIRP Limit	(dBuV/m) at 3 m				
5150~5250 MHz						
5250~5350 MHz	PK:-27 (dBm/MHz)	PK:68.2(dBµV/m)				
5470~5725 MHz						
	PK:-27 (dBm/MHz) *1	PK: 68.2(dBµV/m) *1				
5705 5050 MH-	PK:10 (dBm/MHz) *2	PK:105.2 (dBµV/m) *2				
5725~5850 MHz	PK:15.6 (dBm/MHz) *3	PK: 110.8(dBµV/m) *3				
	PK:27 (dBm/MHz) *4	PK:122.2 (dBµV/m) *4				

#### Note:

<sup>\*1</sup> beyond 75 MHz or more above of the band edge.

<sup>\*2</sup> below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.

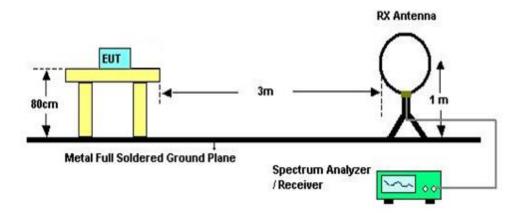
<sup>\*3</sup> below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

<sup>\*4</sup> from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.



#### **TEST SETUP AND PROCEDURE**

Below 30MHz



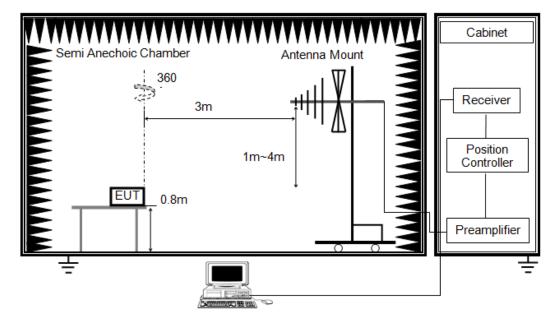
The setting of the spectrum analyser

RBW	200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz)
VBW	200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz)
Sweep	Auto
Detector	Peak/QP/ Average
Trace	Max hold

- 1. The testing follows the guidelines in ANSI C63.10-2013
- 2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 3. The EUT was placed on a turntable with 0.8 meter above ground.
- 4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 5. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
- 6. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)



Below 1G

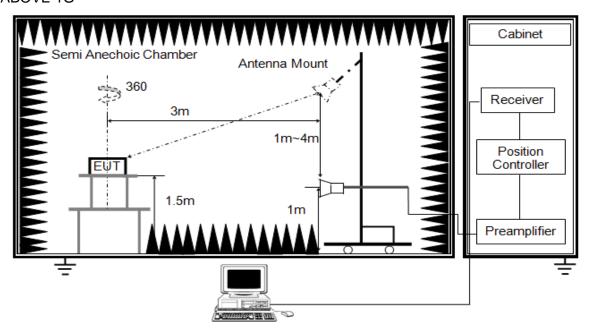


The setting of the spectrum analyser

RBW	120K
VBW	300K
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

- 1. The testing follows the guidelines in ANSI C63.10-2013.
- 2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 3. The EUT was placed on a turntable with 0.8 meter above ground.
- 4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 5. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
- 6. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)

ABOVE 1G



The setting of the spectrum analyser

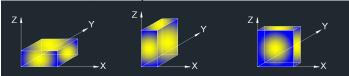
RBW	1M
VBW	PEAK: 3M AVG: see note 6
Sweep	Auto
Detector	Peak
Trace	Max hold

- 1. The testing follows the guidelines in ANSI C63.10-2013.
- 2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 3. The EUT was placed on a turntable with 1.5m above ground.
- 4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 5. For measurement above 1GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.
- 6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector. For the Duty Cycle and Correction Factor please refer to clause 6.1.ON TIME AND DUTY CYCLE. If the EUT is configured to transmit with  $D \ge 98\%$ , then set VBW  $\le RBW / 100$ , but not less than 10 Hz. If the EUT D is < 98%, then setVBW  $\ge 1 / T$ .



7. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)

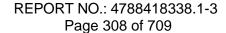
X axis, Y axis, Z axis positions:



Note1: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

Note3: The 2.4GHz and 5GHz simultaneous transmission modes have been evaluated, the test results have not changed even worse for the independent transmission mode, and no spurious emissions are caused by the simultaneous operation of two devices, related data is no longer displayed in the report.

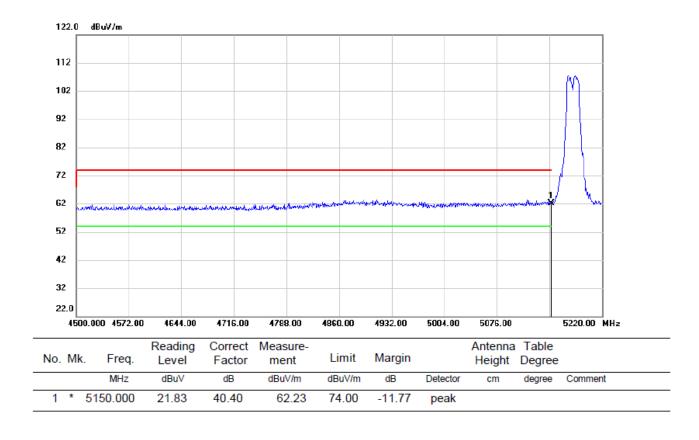
Note4: The 2.4GHz and 5GHz simultaneous transmission modes have been evaluated, the test results have not changed even worse for the independent transmission mode, and no spurious emissions are caused by the simultaneous operation of two devices.





### 7.1. 802.11a MODE

# 7.1.1. UNII-1 BAND MIMO MODE (WORST-CASE CONFIGURATION) HORIZONTAL RESULTS PEAK

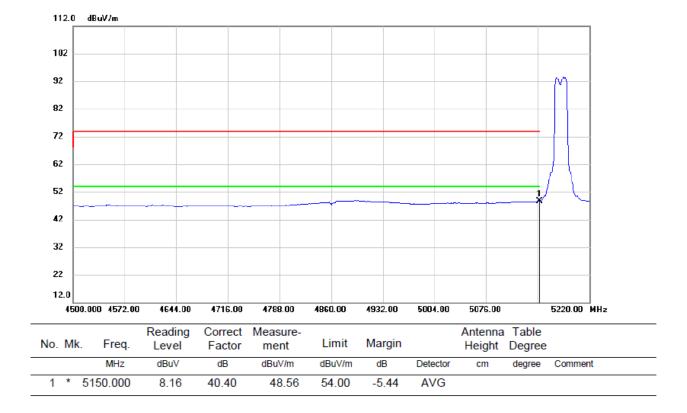


Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



### <u>AVG</u>



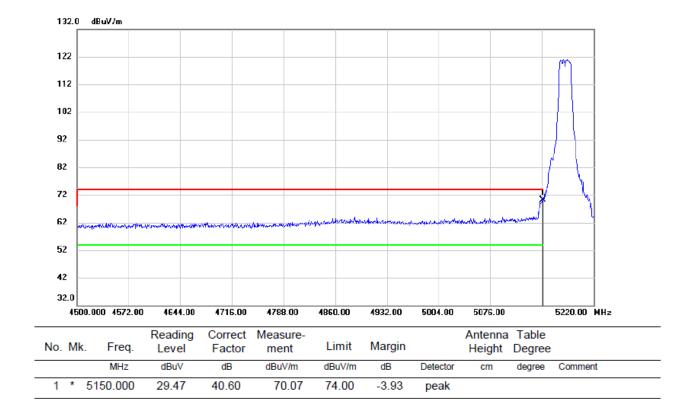
Note: 1. Measurement = Reading Level + Correct Factor

2. AVG:VBW=1/T,(For the value of 1/T, please refer to the table on page 27).

3. For duty cycle, please refer to clause 6.1.



### VERTICAL RESULTS PEAK

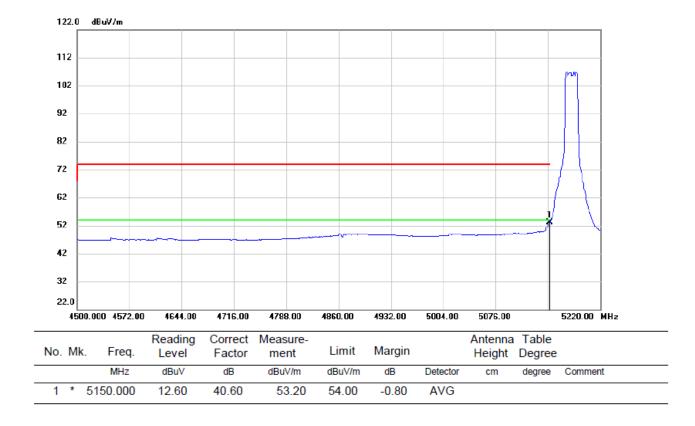


Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.



### **AVG**



Note: 1. Measurement = Reading Level + Correct Factor

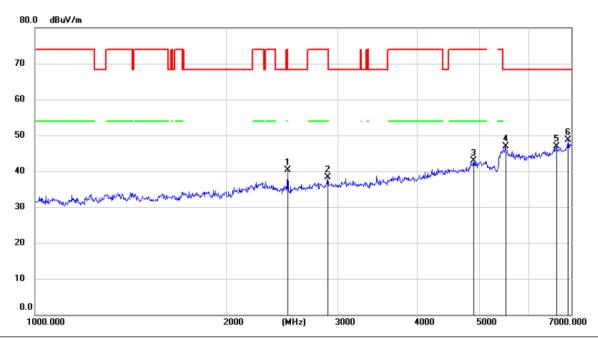
2. AVG:VBW=1/T,(For the value of 1/T, please refer to the table on page 27).

3. For duty cycle, please refer to clause 6.1.



HARMONICS AND SPURIOUS EMISSIONS LOW CHANNEL

### HORIZONTAL RESULTS 1-7GHz



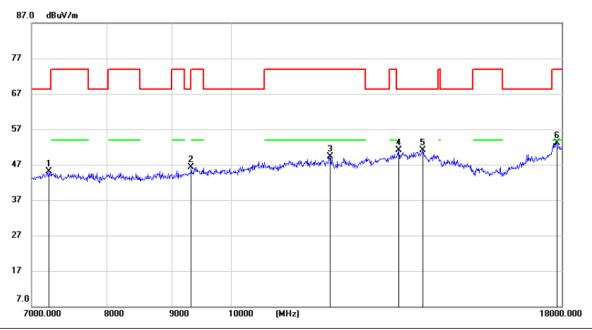
No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2500.582	49.49	-9.28	40.21	68.20	-27.99	peak			
2		2899.136	45.64	-7.28	38.36	74.00	-35.64	peak			
3		4931.515	43.59	-0.74	42.85	74.00	-31.15	peak			
4		5520.725	45.89	1.00	46.89	68.20	-21.31	peak			
5		6628.806	42.66	4.19	46.85	68.20	-21.35	peak			
6	*	6918.747	43.60	5.09	48.69	68.20	-19.51	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



# HORIZONTAL RESULTS 7-18GHz



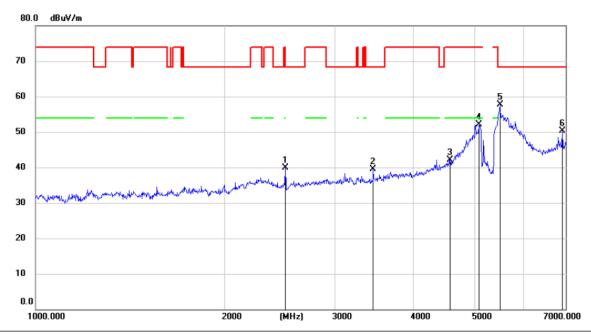
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		7221.606	38.79	6.39	45.18	68.20	-23.02	peak			
2	!	9301.662	37.27	9.04	46.31	74.00	-27.69	peak			
3	,	11913.14	34.26	15.04	49.30	74.00	-24.70	peak			
4	*	13469.42	33.09	18.09	51.18	68.20	-17.02	peak			
5	,	14054.22	32.58	18.47	51.05	68.20	-17.15	peak			
6		17847.64	28.89	24.26	53.15	74.00	-20.85	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



### VERTICAL RESULTS 1-7GHz



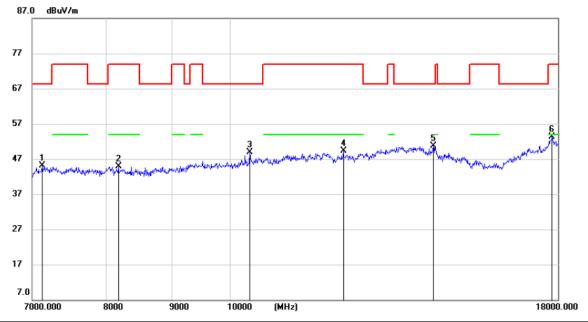
No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2500.582	49.12	-9.18	39.94	68.20	-28.26	peak			
2		3454.041	45.79	-6.29	39.50	68.20	-28.70	peak			
3		4571.109	44.21	-2.02	42.19	74.00	-31.81	peak			
4		5107.309	52.27	-0.26	52.01	74.00	-21.99	peak			
5	*	5499.281	56.64	1.03	57.67	68.20	-10.53	peak			
6		6918.747	45.16	5.16	50.32	68.20	-17.88	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



### 7-18GHz



No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		7126.747	38.70	6.34	45.04	68.20	-23.16	peak			
2		8172.721	37.76	7.08	44.84	74.00	-29.16	peak			
3		10349.28	37.82	11.15	48.97	68.20	-19.23	peak			
4		12255.51	34.83	14.46	49.29	74.00	-24.71	peak			
5	*	14390.01	32.42	18.32	50.74	68.20	-17.46	peak			
6		17813.96	28.95	24.42	53.37	74.00	-20.63	peak			

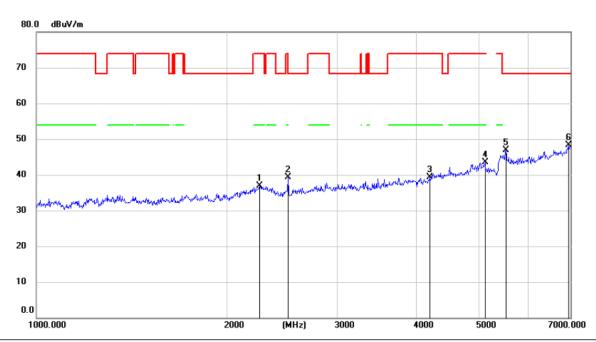
Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



**HARMONICS AND SPURIOUS EMISSIONS MID CHANNEL** 

### HORIZONTAL RESULTS 1-7GHz



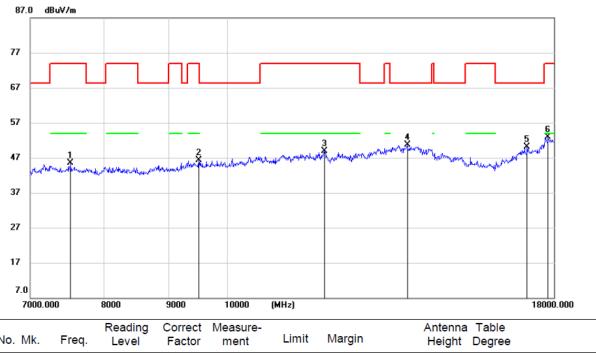
No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2255.542	45.34	-8.37	36.97	74.00	-37.03	peak			
2		2500.582	48.62	-9.28	39.34	68.20	-28.86	peak			
3		4204.190	42.93	-3.63	39.30	74.00	-34.70	peak			
4		5127.225	43.84	-0.36	43.48	74.00	-30.52	peak			
5		5531.478	45.86	0.98	46.84	68.20	-21.36	peak			
6	*	6945.726	43.10	5.19	48.29	68.20	-19.91	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.



# HORIZONTAL RESULTS 7-18GHz



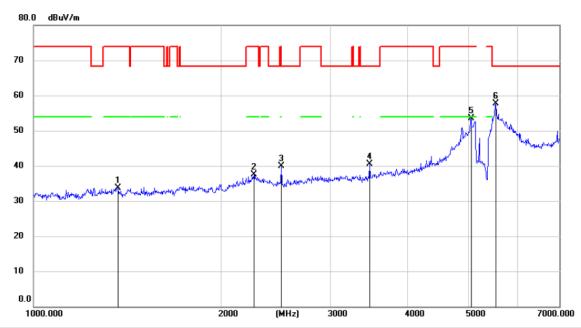
No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		7528.032	38.86	6.71	45.57	74.00	-28.43	peak			
2		9496.955	36.65	9.69	46.34	74.00	-27.66	peak			
3		11901.89	33.64	15.22	48.86	74.00	-25.14	peak			
4	*	13830.37	32.11	18.57	50.68	68.20	-17.52	peak			
5		17169.74	29.56	20.52	50.08	68.20	-18.12	peak			
6		17813.96	28.64	24.25	52.89	74.00	-21.11	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



### VERTICAL RESULTS 1-7GHz



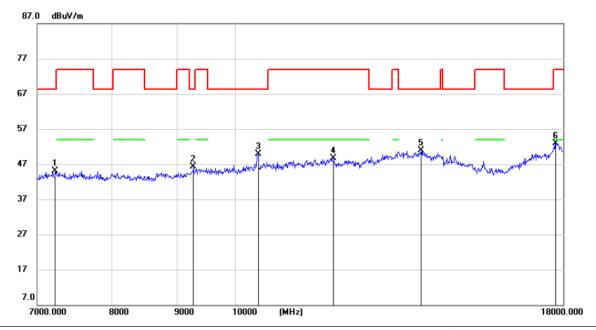
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		1365.261	46.55	-12.80	33.75	74.00	-40.25	peak			
2		2264.338	45.86	-8.31	37.55	74.00	-36.45	peak			
3		2500.582	49.13	-9.18	39.95	68.20	-28.25	peak			
4		3467.509	46.75	-6.20	40.55	68.20	-27.65	peak			
5		5048.026	54.18	-0.59	53.59	74.00	-20.41	peak			
6	*	5531.478	56.79	0.98	57.77	68.20	-10.43	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



### 7-18GHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		7235.260	38.68	6.37	45.05	68.20	-23.15	peak			
2		9266.588	37.20	9.02	46.22	68.20	-21.98	peak			
3		10408.09	38.28	11.55	49.83	68.20	-18.37	peak			
4		11913.14	33.88	14.75	48.63	74.00	-25.37	peak			
5	*	13948.43	32.19	18.65	50.84	68.20	-17.36	peak			
6		17780.34	28.59	24.38	52.97	74.00	-21.03	peak			

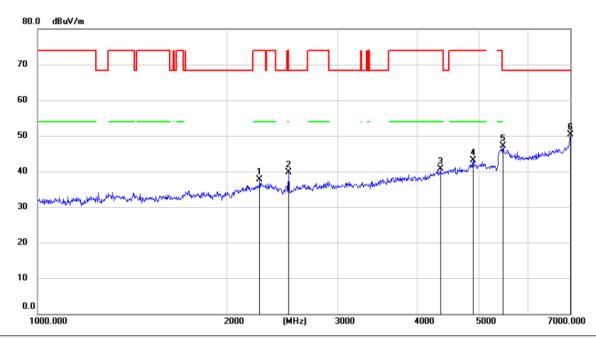
Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.



**HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL** 

### HORIZONTAL RESULTS 1-7GHz



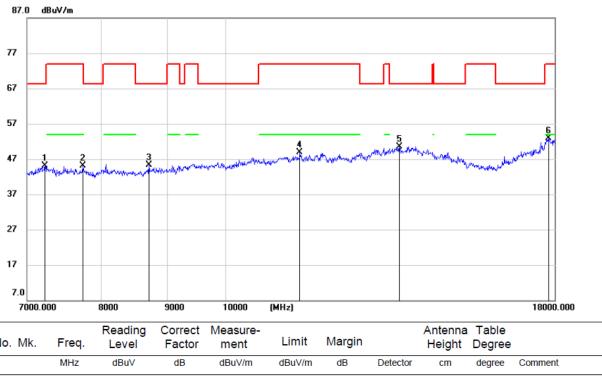
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2251.158	46.13	-8.36	37.77	74.00	-36.23	peak			
2		2500.582	48.89	-9.28	39.61	68.20	-28.59	peak			
3		4354.057	43.48	-2.81	40.67	74.00	-33.33	peak			
4		4912.360	43.89	-0.70	43.19	74.00	-30.81	peak			
5		5477.920	46.20	0.87	47.07	68.20	-21.13	peak			
6	*	7000.000	44.88	5.39	50.27	68.20	-17.93	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



# HORIZONTAL RESULTS 7-18GHz



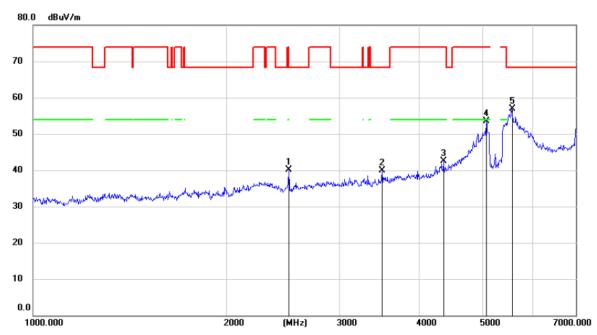
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		7235.260	38.67	6.41	45.08	68.20	-23.12	peak			
2		7737.070	38.71	6.44	45.15	74.00	-28.85	peak			
3		8714.822	37.52	7.81	45.33	68.20	-22.87	peak			
4		11406.65	35.12	13.75	48.87	74.00	-25.13	peak			
5	*	13635.81	32.12	18.42	50.54	68.20	-17.66	peak			
6		17813.96	28.58	24.25	52.83	74.00	-21.17	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.



### VERTICAL RESULTS 1-7GHz



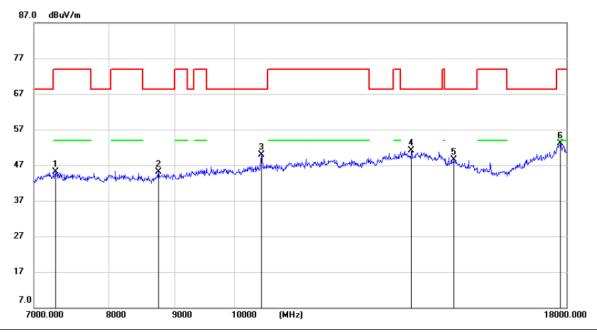
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	2	2500.582	49.21	-9.18	40.03	68.20	-28.17	peak			
2	3	3501.411	45.77	-5.94	39.83	68.20	-28.37	peak			
3	4	1354.057	45.29	-2.71	42.58	74.00	-31.42	peak			
4	5	5077.581	53.90	-0.42	53.48	74.00	-20.52	peak			
5	* 5	5574.701	56.03	0.82	56.85	68.20	-11.35	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.



### 7-18GHz



No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		7269.508	38.71	6.40	45.11	74.00	-28.89	peak			
2		8739.549	37.19	7.99	45.18	68.20	-23.02	peak			
3		10477.13	37.97	11.90	49.87	68.20	-18.33	peak			
4	*	13687.43	32.46	18.55	51.01	68.20	-17.19	peak			
5		14747.74	31.88	16.53	48.41	68.20	-19.79	peak			
6		17813.96	28.75	24.42	53.17	74.00	-20.83	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.

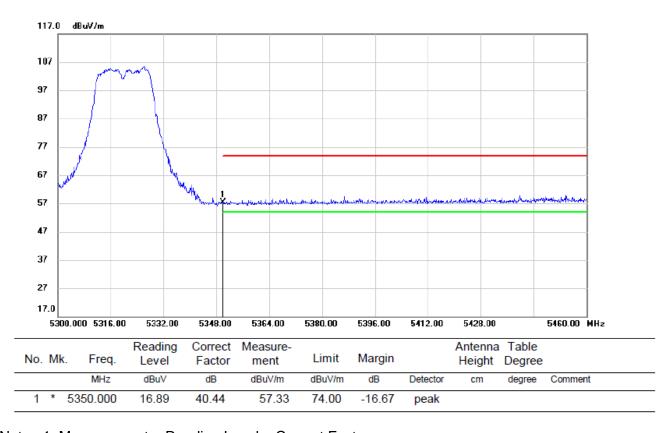
Note: All transmission modes and channels had been tested, but only the worst data recorded in the report.



# 7.1.2. UNII-2A BAND MIMO MODE (WORST-CASE CONFIGURATION)

### RESTRICTED BANDEDGE HIGH CHANNEL

### HORIZONTAL RESULTS PEAK

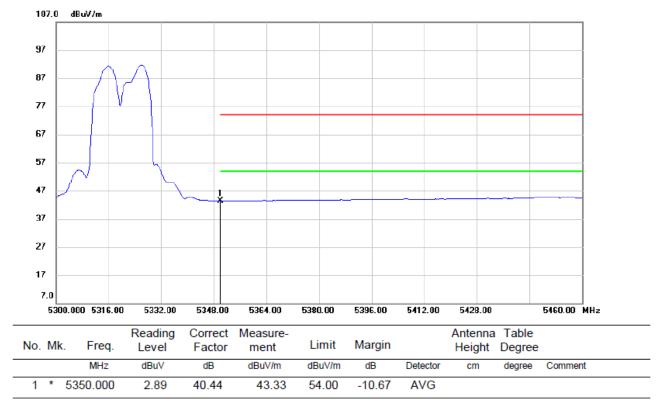


Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



### <u>AVG</u>



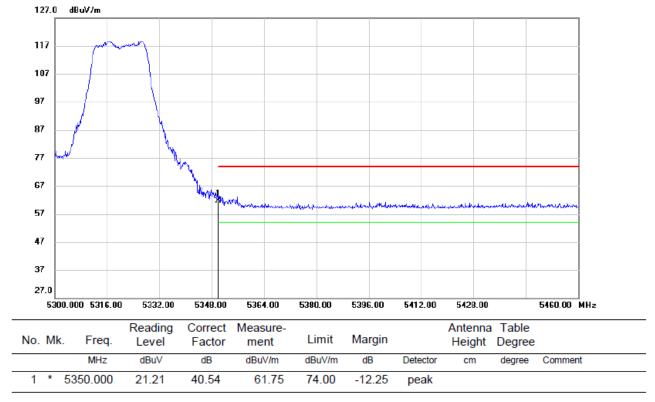
Note: 1. Measurement = Reading Level + Correct Factor

2. AVG:VBW=1/T,(For the value of 1/T, please refer to the table on page 27).

3. For duty cycle, please refer to clause 6.1.



### VERTICAL RESULTS PEAK

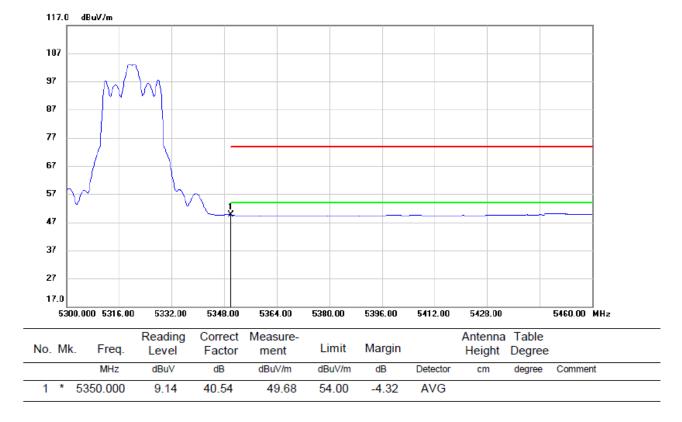


Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



### <u>AVG</u>



Note: 1. Measurement = Reading Level + Correct Factor

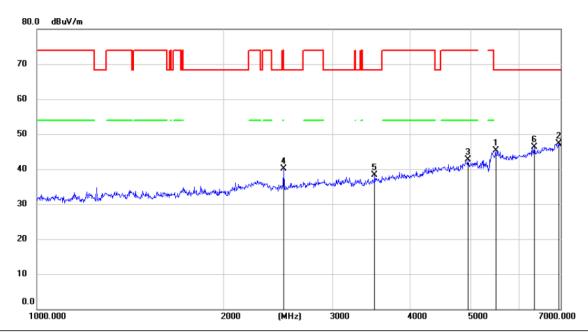
2. AVG:VBW=1/T,(For the value of 1/T, please refer to the table on page 27).

3. For duty cycle, please refer to clause 6.1.



HARMONICS AND SPURIOUS EMISSIONS LOW CHANNEL

### HORIZONTAL RESULTS 1-7GHz



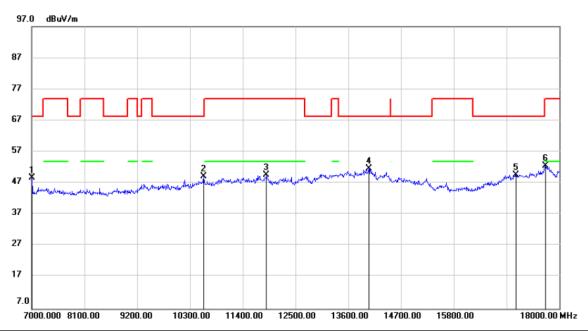
No.	M	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		5499.281	44.37	1.03	45.40	68.20	-22.80	peak			
2	*	6945.726	42.08	5.19	47.27	68.20	-20.93	peak			
3		4960.388	43.46	-0.80	42.66	74.00	-31.34	peak			
4		2500.582	49.34	-9.28	40.06	68.20	-28.14	peak			
5		3508.231	44.36	-6.00	38.36	68.20	-29.84	peak			
6		6351.015	42.97	3.25	46.22	68.20	-21.98	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



# HORIZONTAL RESULTS 7-18GHz



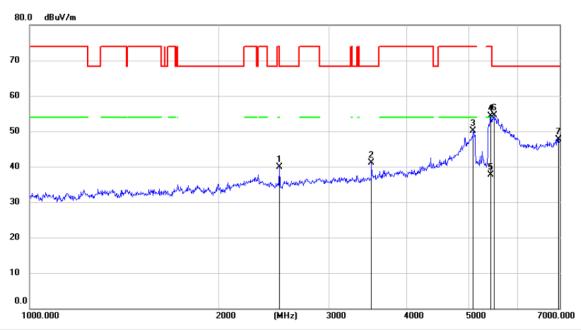
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	-	7011.000	43.24	5.50	48.74	68.20	-19.46	peak			
2		10586.00	37.43	11.81	49.24	68.20	-18.96	peak			
3		11895.00	34.52	15.15	49.67	74.00	-24.33	peak			
4	*	14029.00	33.28	18.47	51.75	68.20	-16.45	peak			
5		17098.00	29.70	20.05	49.75	68.20	-18.45	peak			
6		17714.00	29.06	23.46	52.52	74.00	-21.48	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.



# VERTICAL RESULTS 1-7GHz



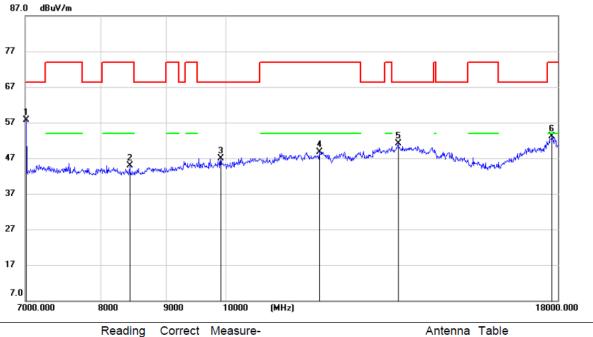
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2500.582	49.10	-9.18	39.92	68.20	-28.28	peak			
2		3508.231	47.06	-5.92	41.14	68.20	-27.06	peak			
3		5107.309	50.41	-0.26	50.15	74.00	-23.85	peak			
4		5446.035	53.76	0.64	54.40	74.00	-19.60	peak			
5		5446.035	36.98	0.64	37.62	54.00	-16.38	AVG	200	360	
6	*	5499.281	53.40	1.03	54.43	68.20	-13.77	peak			
7		6972.810	42.40	5.29	47.69	68.20	-20.51	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



## 7-18GHz



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	7013.235	52.27	5.51	57.78	68.20	-10.42	peak			
2		8423.493	37.94	6.87	44.81	74.00	-29.19	peak			
3		9899.929	36.41	10.45	46.86	68.20	-21.34	peak			
4		11790.01	34.24	14.47	48.71	74.00	-25.29	peak			
5		13571.57	32.42	18.66	51.08	68.20	-17.12	peak			
6		17813.96	28.73	24.42	53.15	74.00	-20.85	peak			

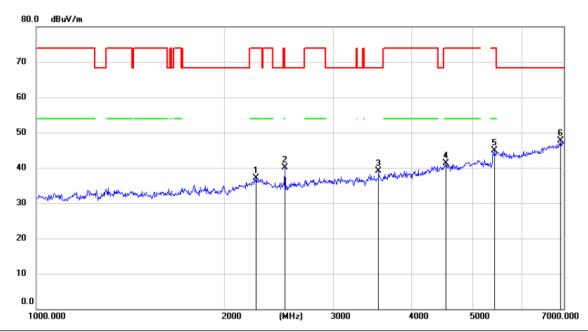
Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.



**HARMONICS AND SPURIOUS EMISSIONS MID CHANNEL** 

#### HORIZONTAL RESULTS 1-7GHz



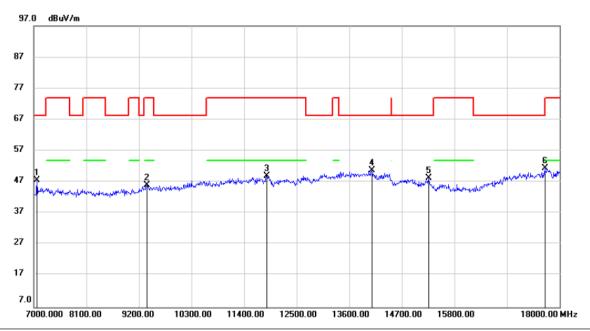
No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2251.158	45.48	-8.36	37.12	74.00	-36.88	peak			
2		2500.582	49.38	-9.28	40.10	68.20	-28.10	peak			
3		3535.645	45.04	-5.85	39.19	68.20	-29.01	peak			
4		4544.502	43.41	-2.18	41.23	74.00	-32.77	peak			
5		5435.447	44.26	0.57	44.83	74.00	-29.17	peak			
6	*	6918.747	42.53	5.09	47.62	68.20	-20.58	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



# HORIZONTAL RESULTS 7-18GHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		7066.000	41.60	5.93	47.53	68.20	-20.67	peak			
2		9365.000	36.59	9.44	46.03	74.00	-27.97	peak			
3		11873.00	34.34	14.69	49.03	74.00	-24.97	peak			
4		14073.00	32.27	18.47	50.74	68.20	-17.46	peak			
5		15261.00	32.80	15.46	48.26	68.20	-19.94	peak			
6	*	17692.00	28.24	23.23	51.47	68.20	-16.73	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

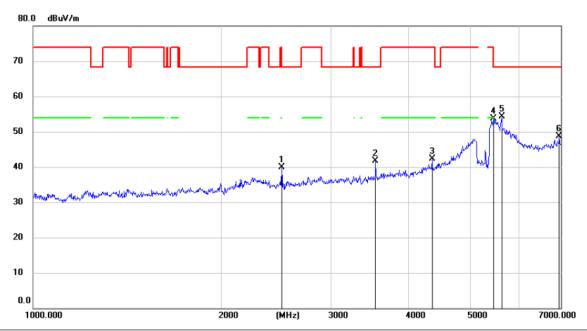
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

.



## VERTICAL RESULTS 1-7GHz



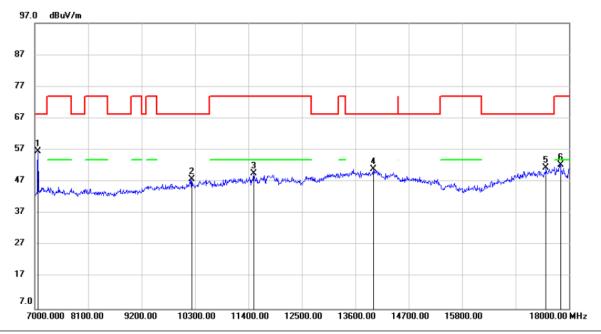
No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2500.582	49.17	-9.18	39.99	68.20	-28.21	peak			
2		3535.645	47.51	-5.82	41.69	68.20	-26.51	peak			
3		4354.057	45.02	-2.71	42.31	74.00	-31.69	peak			
4		5467.271	52.95	0.80	53.75	68.20	-14.45	peak			
5	*	5629.205	53.49	0.77	54.26	68.20	-13.94	peak			
6		6959.255	43.50	5.24	48.74	68.20	-19.46	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.



### 7-18GHz



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	7066.000	50.75	5.96	56.71	68.20	-11.49	peak			
2		10234.00	36.85	11.00	47.85	68.20	-20.35	peak			
3		11510.00	35.50	14.11	49.61	74.00	-24.39	peak			
4		13974.00	32.41	18.61	51.02	68.20	-17.18	peak			
5		17527.00	29.43	21.96	51.39	68.20	-16.81	peak			
6		17824.00	28.02	24.26	52.28	74.00	-21.72	peak			

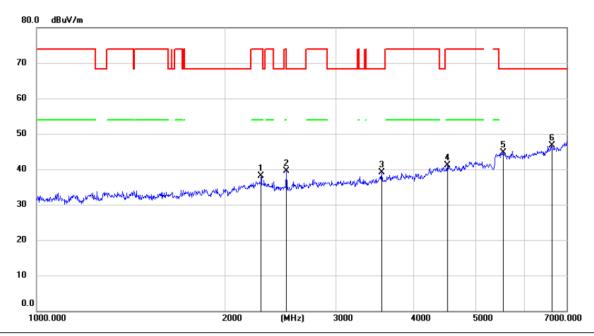
Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



**HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL** 

#### HORIZONTAL RESULTS 1-7GHz



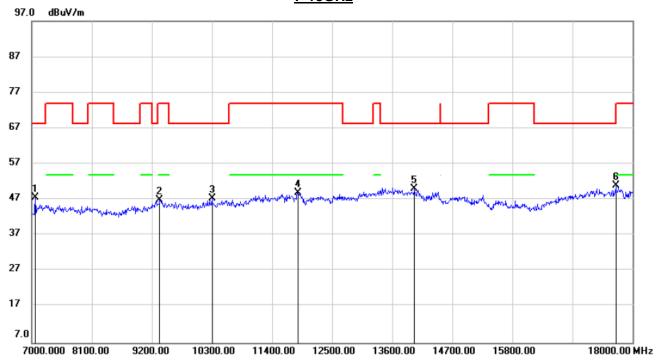
No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2282.031	46.41	-8.36	38.05	74.00	-35.95	peak			
2		2500.582	48.84	-9.28	39.56	68.20	-28.64	peak			
3		3549.432	44.93	-5.76	39.17	68.20	-29.03	peak			
4		4518.050	43.35	-2.22	41.13	74.00	-32.87	peak			
5		5553.047	43.83	0.93	44.76	68.20	-23.44	peak			
6	*	6628.806	42.58	4.19	46.77	68.20	-21.43	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



# HORIZONTAL RESULTS 7-18GHz



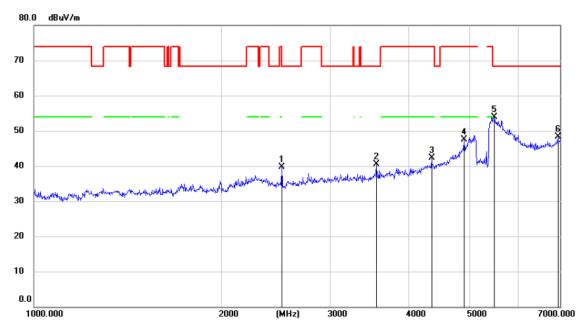
No. M	lk. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	7066.000	41.60	5.93	47.53	68.20	-20.67	peak			
2	9343.000	37.58	9.34	46.92	74.00	-27.08	peak			
3	10300.00	36.46	10.89	47.35	68.20	-20.85	peak			
4	11873.00	34.34	14.69	49.03	74.00	-24.97	peak			
5	14007.00	31.54	18.47	50.01	68.20	-18.19	peak			
6 *	17692.00	27.74	23.23	50.97	68.20	-17.23	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



### VERTICAL RESULTS 1-7GHz



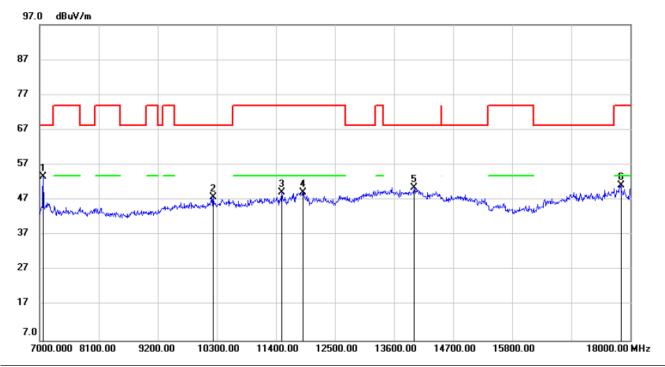
No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2500.582	48.95	-9.18	39.77	68.20	-28.43	peak			
2		3549.432	46.27	-5.76	40.51	68.20	-27.69	peak			
3		4354.057	44.98	-2.71	42.27	74.00	-31.73	peak			
4		4912.360	48.32	-0.78	47.54	74.00	-26.46	peak			
5	*	5488.590	52.89	0.95	53.84	68.20	-14.36	peak			
6		6945.726	43.12	5.20	48.32	68.20	-19.88	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



### 7-18GHz



No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	7066.000	47.75	5.96	53.71	68.20	-14.49	peak			
2		10234.00	36.85	11.00	47.85	68.20	-20.35	peak			
3		11510.00	35.00	14.11	49.11	74.00	-24.89	peak			
4		11906.00	34.36	14.75	49.11	74.00	-24.89	peak			
5		13974.00	31.91	18.61	50.52	68.20	-17.68	peak			
6		17824.00	27.02	24.26	51.28	74.00	-22.72	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

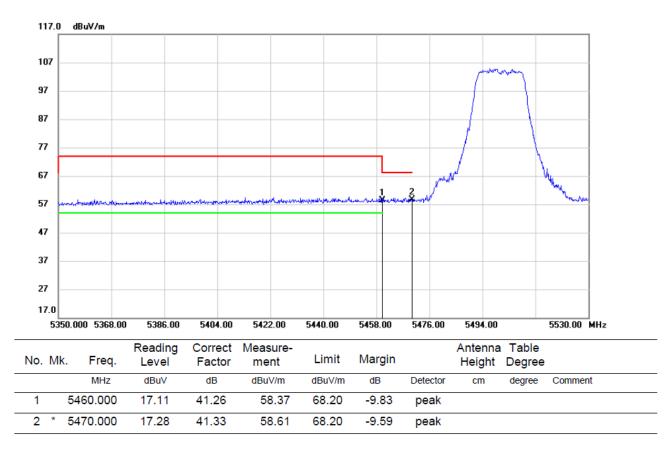
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



# 7.1.3. UNII-2C BAND MIMO MODE (WORST-CASE CONFIGURATION)

#### RESTRICTED BANDEDGE LOW CHANNEL

# HORIZONTAL RESULTS PEAK

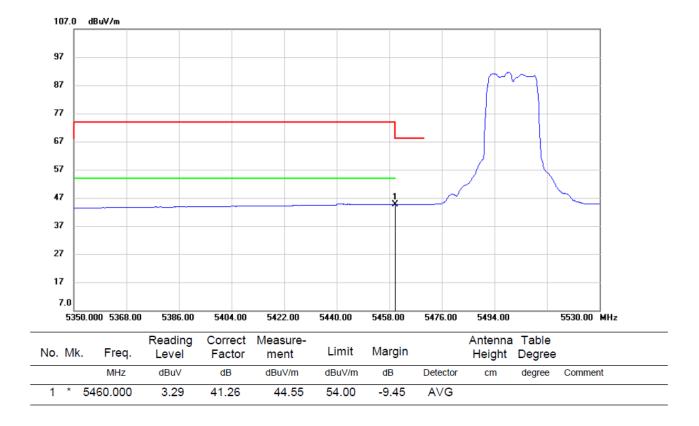


Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



### <u>AVG</u>



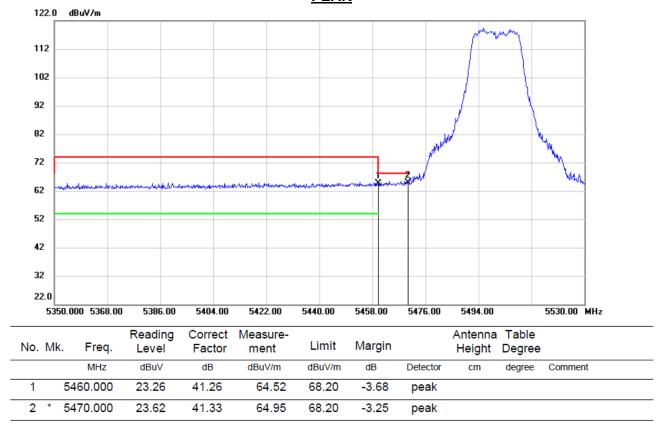
Note: 1. Measurement = Reading Level + Correct Factor

2. AVG:VBW=1/T,(For the value of 1/T, please refer to the table on page 27).

3. For duty cycle, please refer to clause 6.1.



# VERTICAL RESULTS PEAK

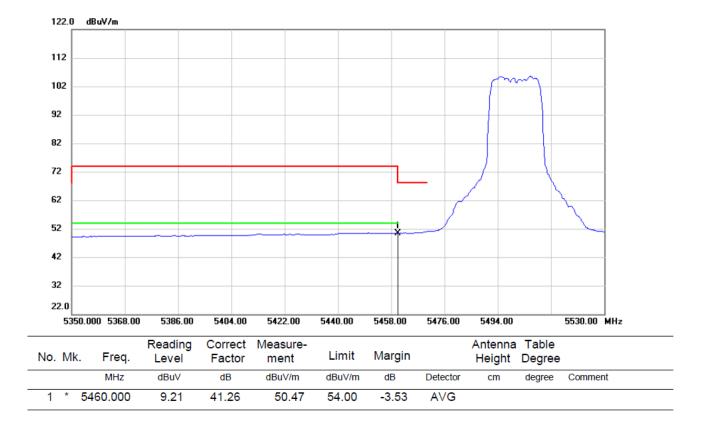


Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



### **AVG**



Note: 1. Measurement = Reading Level + Correct Factor

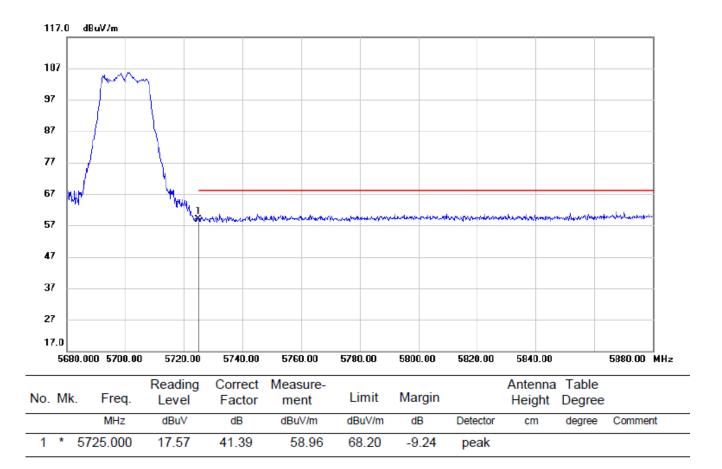
2. AVG:VBW=1/T,(For the value of 1/T, please refer to the table on page 27).

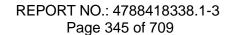
3. For duty cycle, please refer to clause 6.1.



RESTRICTED BANDEDGE HIGH CHANNEL

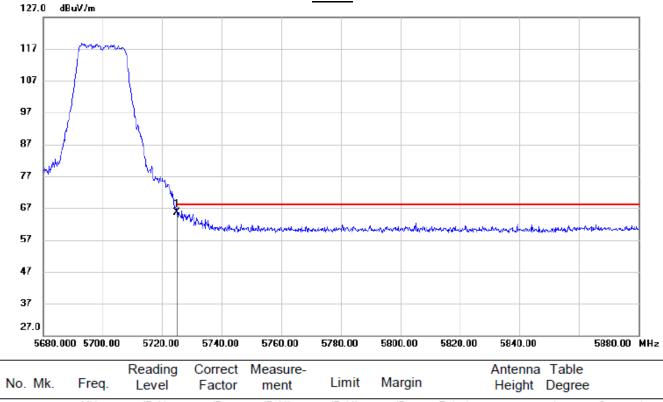
# HORIZONTAL RESULTS PEAK







# VERTICAL RESULTS PEAK

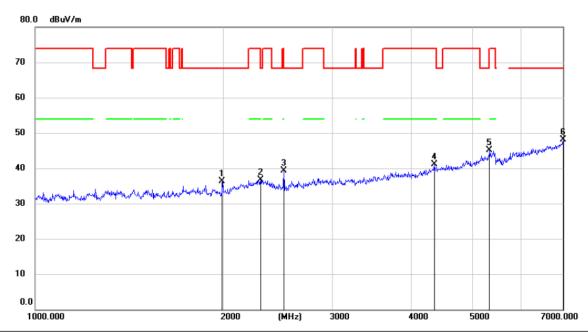


No. Mk.	Freq.	_	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1 * 5	725.000	24.17	41.49	65.66	68.20	-2.54	peak			



HARMONICS AND SPURIOUS EMISSIONS LOW CHANNEL

#### HORIZONTAL RESULTS 1-7GHz



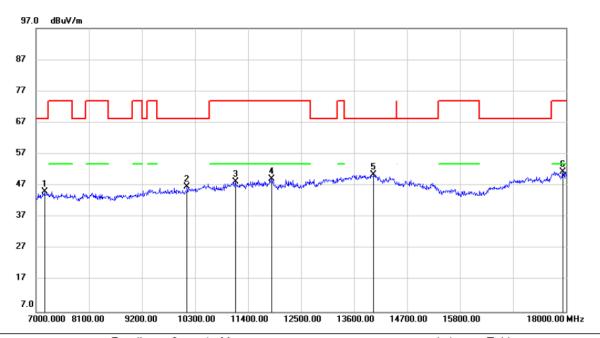
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		1995.307	47.43	-11.22	36.21	68.20	-31.99	peak			
2		2299.863	44.98	-8.36	36.62	74.00	-37.38	peak			
3		2500.582	48.55	-9.28	39.27	68.20	-28.93	peak			
4		4354.057	43.94	-2.81	41.13	74.00	-32.87	peak			
5		5341.084	45.37	-0.17	45.20	68.20	-23.00	peak			
6	*	7000.000	42.65	5.39	48.04	68.20	-20.16	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



# HORIZONTAL RESULTS 7-18GHz



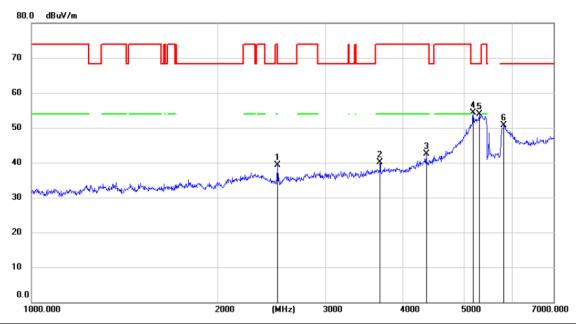
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		7176.000	38.89	6.35	45.24	68.20	-22.96	peak			
2		10135.00	36.16	10.62	46.78	68.20	-21.42	peak			
3		11136.00	35.15	13.12	48.27	74.00	-25.73	peak			
4		11895.00	33.97	15.15	49.12	74.00	-24.88	peak			
5	*	14007.00	32.11	18.47	50.58	68.20	-17.62	peak			
6		17934.00	27.01	24.54	51.55	74.00	-22.45	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



## VERTICAL RESULTS 1-7GHz



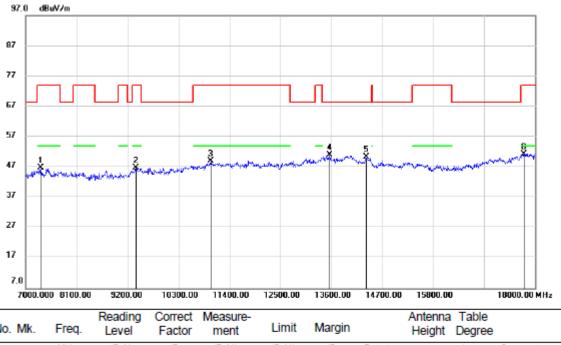
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2500.582	48.46	-9.18	39.28	68.20	-28.92	peak			
2		3668.812	45.17	-5.16	40.01	74.00	-33.99	peak			
3		4354.057	45.20	-2.71	42.49	74.00	-31.51	peak			
4	*	5197.542	54.26	0.01	54.27	68.20	-13.93	peak			
5		5309.995	54.23	-0.31	53.92	68.20	-14.28	peak			
6		5818.536	49.27	1.45	50.72	68.20	-17.48	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.



### 7-18GHz



No. M	lk. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	7330.000	40.50	6.18	46.68	74.00	-27.32	peak			
2	9376.000	37.28	9.52	46.80	74.00	-27.20	peak			
3	10993.00	36.11	12.78	48.89	74.00	-25.11	peak			
4 *	13567.00	32.22	18.71	50.93	68.20	-17.27	peak			
5	14359.00	31.95	18.25	50.20	68.20	-18.00	peak			
6	17758.00	27.21	24.08	51.29	74.00	-22.71	peak			

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.