



Test Report No.: RF2203WDG0011-4



TEST REPORT

Applicant	DEI Sales Inc., dba Polk Audio
Address	5541 Fermi Court Carlsbad CA 92008 United States Of America

Manufacturer or Supplier	Sound United, LLC
Address	5541 Fermi Court Carlsbad, CA 92008, USA
Product	MAGNIFI MAX AX SR SOUND BAR SYSTEM
Additional Product	MAGNIFI MAX AX SOUND BAR SYSTEM
Brand Name	POLK
Model	MAGNIFI MAX AX SOUND BAR
Additional Model & Model Difference	N/A
Date of tests	Apr. 19, 2022 ~ Jun. 07, 2022

The tests have been carried out according to the requirements of the following standard:

☒ **FCC Part 15, Subpart E, Section 15.407**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Tested by Lucas Chen Project Engineer / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	
	Date: Jun. 30, 2022

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Test Report No.: RF2203WDG0011-4

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF2203WDG0011-4	Original release.	Jun. 30, 2022



1. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E (SECTION 15.407 UNDER NEW RULE)			
STANDARD SECTION	TEST TYPE	RESULT	REMARK
15.407(b)(6)	AC Power Conducted Emissions	PASS	Meet the requirement of limit.
15.407(b) (1/2/3/4/6)	Radiated Emissions & Band Edge Measurement	PASS	Meet the requirement of limit.
15.407(a)(1/2/3)	Max Average Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(1/2/3)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	Antenna connector is i-pex not a standard connector.

1.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	3.05dB
Radiated emissions	9KHz ~ 30MHz	2.16dB
	30MHz ~ 1GMHz	3.63dB
	1GHz ~ 18GHz	4.96dB
	18GHz ~ 40GHz	4.37dB

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



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	MAGNIFI MAX AX SR SOUND BAR SYSTEM
ADDITIONAL PRODUCT	MAGNIFI MAX AX SOUND BAR SYSTEM
MODEL NO.	MAGNIFI MAX AX SOUND BAR
FCC ID	WLQMAXXSB
POWER SUPPLY	AC 100-240V 50/60Hz
MODULATION TYPE	256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	OFDM
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 300.0Mbps 802.11ac : up to 866.7Mbps
OPERATING FREQUENCY	5150 ~ 5250MHz, 5260 ~ 5320MHz 5500 ~ 5700MHz, (without open 5600~5650MHz) 5725 ~ 5850MHz
NUMBER OF CHANNEL	5180 ~ 5240MHz: 4 channels for 802.11a, 802.11n, 11ac (20MHz) 2 channels for 802.11n, 11ac (40MHz): 1 channel for 802.11ac 80MHz 5260 ~ 5320MHz: 4 channels for 802.11a, 802.11n (20MHz) 2 channels for 802.11n, 11ac (40MHz) 1 channel for 802.11ac (80MHz) 5500 ~ 5700MHz: (Without open 5600~5650MHz) 11 channels for 802.11a, 802.11n (20MHz) 5 channels for 802.11n (40MHz) 1 channel for 802.11ac (80MHz) 5745 ~ 5825MHz: 5 channels for 802.11a, 802.11n, 11ac (20MHz) 2 channels for 802.11n, 11ac (40MHz) 1 channel for 802.11ac (80MHz)
CONDUCTED OUTPUT POWER	13.305mW for 5180 ~ 5240MHz (Maximum AVG Power) 12.359mW for 5260 ~ 5320MHz (Maximum AVG Power) 13.305mW for 5500 ~ 5700MHz (Maximum AVG Power) 8.591mW for 5745 ~ 5825MHz (Maximum AVG Power)
ANTENNA TYPE	5180 ~ 5240MHz: Chain 0: FPCB antenna with 0.72dBi gain Chain 1: FPCB antenna with 2.77dBi gain 5260 ~ 5320MHz: Chain 0: FPCB antenna with 1.37dBi gain Chain 1: FPCB antenna with 3.75dBi gain 5500 ~ 5700MHz: Chain 0: FPCB antenna with 0.76dBi gain Chain 1: FPCB antenna with 3.69dBi gain 5745 ~ 5825MHz: Chain 0: FPCB antenna with 0.60dBi gain Chain 1: FPCB antenna with 2.94dBi gain
I/O PORTS	Refer to user's manual

**CABLE SUPPLIED**

Refer to user's manual

NOTES:

1. The working status of the two antennas is as follows.

MODULATION MODE	TX FUNCTION
802.11a	2 Chains(SISO)
802.11n (HT20), 802.11ac (VHT20)	2 Chains(MIMO)
802.11n (HT40), 802.11ac (VHT40)	2 Chains(MIMO)
802.11ac (VHT80)	2 Chains(MIMO)

*The modulation and bandwidth are similar for 802.11n mode for HT20 / HT40 and 802.11ac mode for VHT20 / VHT40, therefore investigated worst case for final test were chosen 802.11n (HT20/HT40) and record in the report.

* 802.11a provided a SISO function, the radiated emission above 1GHz test item is carried out on the maximum power "chain 1" antenna.

2. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
4. Please refer to the EUT photo document (Reference No.: 2203WDG0011-1) for detailed product photo.



2.2 DESCRIPTION OF TEST MODES

FOR 5150 ~ 5250MHz

4 channels are provided for 802.11a, 802.11ac 20MHz, 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180 MHz	40	5200 MHz
44	5220 MHz	48	5240 MHz

2 channels are provided for 802.11a c 40MHz, 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
42	5210MHz	--	--

FOR 5250 ~ 5350MHz

4 channels are provided for 802.11a, 802.11a c 20MHz, 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
52	5260 MHz	56	5280 MHz
60	5300 MHz	64	5320 MHz

2 channels are provided for 802.11a c 40MHz, 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
58	5290MHz	--	--

**FOR 5470 ~ 5725MHz**

11 channels are provided for 802.11a, 802.11a c 20MHz, 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	104	5520 MHz
108	5540 MHz	112	5560 MHz
116	5580 MHz	120	5600 MHz
124	5620 MHz	128	5640 MHz
132	5660 MHz	136	5680 MHz
140	5700 MHz	--	--

5 channels are provided for 802.11ac 40MHz, 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	110	5550 MHz
118	5590 MHz	126	5630 MHz
134	5670 MHz	--	--

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
106	5530MHz	/	/

FOR 5725 ~ 5850MHz

5 channels are provided for 802.11a, 802.11ac 20MHz, 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
149	5745MHz	153	5765MHz
157	5785MHz	161	5805MHz
165	5825MHz	--	--

2 channels are provided for 802.11ac 40MHz, 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755MHz	159	5795MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
155	5775MHz	--	--



2.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE $\geq$ 1G	RE<1G	PLC	APCM	
-	√	√	√	√	AC 120V 60Hz with wifi (5G) link

Where **RE $\geq$ 1G**: Radiated Emission above 1GHz**RE<1G**: Radiated Emission below 1GHz**PLC**: Power Line Conducted Emission**APCM**: Antenna Port Conducted Measurement**NOTE:**1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane**.**NOTE**: "-" means no effect.**RADIATED EMISSION TEST (ABOVE 1GHz):**

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	5150-5250	36 to 48	36, 40, 48	OFDM	BPSK	6.0
-	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
-	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	13.5
-	802.11ac 80MHz		42	42	OFDM	BPSK	29.3
-	802.11a	5250-5350	52 to 64	52, 60, 64	OFDM	BPSK	6.0
-	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
-	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	13.5
-	802.11ac 80MHz		58	58	OFDM	BPSK	29.3
-	802.11a	5470-5725	100 to 140	100, 116, 140	OFDM	BPSK	6.0
-	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	6.5
-	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	13.5
-	802.11ac 80MHz		106	106	OFDM	BPSK	29.3
-	802.11a	5725-5850	149 to 165	149, 157, 165	OFDM	BPSK	6.0
-	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
-	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	13.5
-	802.11ac 80MHz		155	155	OFDM	BPSK	29.3

RADIATED EMISSION TEST (BELOW 1GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	5150-5250 5470-5725 5725-5850	36 to 48 100 to 140 149 to 165	36	OFDM	BPSK	6.0

**POWER LINE CONDUCTED EMISSION TEST:**

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	TESTED CONDITION
-	WIFI (5G) Link

ANTENNA PORT CONDUCTED MEASUREMENT:

- ☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	5150-5250	36 to 48	36, 40, 48	OFDM	BPSK	6.0
-	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
-	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	13.5
-	802.11ac 80MHz		42	42	OFDM	BPSK	29.3
-	802.11a	5250-5350	52 to 64	52, 60, 64	OFDM	BPSK	6.0
-	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
-	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	13.5
-	802.11ac 80MHz		58	58	OFDM	BPSK	29.3
-	802.11a	5470-5725	100 to 140	100, 116, 140	OFDM	BPSK	6.0
-	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	6.5
-	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	13.5
-	802.11ac 80MHz		106	106	OFDM	BPSK	29.3
-	802.11a	5725-5850	149 to 165	149, 157, 165	OFDM	BPSK	6.0
-	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
-	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	13.5
-	802.11ac 80MHz		155	155	OFDM	BPSK	29.3

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	25deg. C, 54%RH	AC 120V 60Hz	Jelly
RE≥1G	25deg. C, 54%RH	AC 120V 60Hz	Jelly
PLC	23deg. C, 56%RH	AC 120V 60Hz	Summer
APCM	25deg. C, 58%RH	AC 120V 60Hz	Vincent



2.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as a dependent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Dummy Load	N/A	N/A	N/A	N/A
2	USB Driver	Kingston	DataTraveler	3RJD8-68DC4U-3VFUW	N/A
3	iPhone X	Apple	MQA52CH/A	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	Optical Cable: Unshielded, detachable, 1.5m. HDMI Cable: Shielded, detachable, 200cm with two cores; 2*HDMI Cable: Shielded, detachable, 150cm
2	N/A
3	N/A

2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specification of the EUT declared by the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart E (15.407)

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

ANSI C63.10-2013

All test items have been performed and recorded as per the above standards.



3. TEST TYPES AND RESULTS

3.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

3.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

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

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTES:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 30dB under any condition of modulation.



3.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

APPLICABLE TO	LIMIT	
789033 D02 General UNII Test Procedures New Rules v01r03	FIELD STRENGTH AT 3m	
	PK: 74 (dBμV/m)	AV: 54 (dBμV/m)
APPLICABLE TO	EIRP LIMIT	EQUIVALENT FIELD STRENGTH AT 3m
15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)
15.407(b)(2)		
15.407(b)(3)		
15.407(b)(4)	Note	Note

NOTE: For transmitters operating in the 5.725-5.85 GHz band:

Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). An alternative to the band emissions mask is specified in Section 15.407(b)(4)(ii). The alternative limits are based on the highest antenna gain specified in the filing. There are also marketing and importation restrictions for the alternative limit.

15.407(b)(4)(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where } P \text{ is the eirp (Watts).}$$



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3.1.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESU40	100449	Feb. 22, 23
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV7	102331	May 09, 23
Active Loop Antenna (9KHz -30MHz)	SCHWARZBECK	FMZB 1519B	1519B-045	May 20, 23
Amplifier (9KHz -1GHz)	Burgeon	BPA-530	100210	Mar. 08, 23
Trilog-Broadband Antenna(20M-2G)	SCHWARZBECK	VULB 9168	01263	Sep. 30, 22
Horn Antenna (1GHz -18GHz)	ETS -Lindgren	3117	00062558	May 21, 23
Horn Antenna (18GHz -40GHz)	SCHWARZBECK	BBHA 9170	BBHA9170147	May 14, 23
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	NSEMC003	May 22, 23
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A
Broadband Preamplifier (1GHz~18GHz)	SCHWARZBECK	BBV9718	305	May 12, 23
Pre-Amplifier (18GHz-40GHz)	EMCI	EMC 184045	980102	Jan. 10, 23
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A
BLUETOOTH TESTER	Rohde&Schwarz	CBT32	100811	N/A

NOTES:

1. The test was performed in 966 Chamber. (Chenwu)
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GREGT/CHINA and NIM/CHINA.
3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 749762.



3.1.4 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 1.5 meters (above 1GHz) and 0.8 meters (below 1GHz) above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTES:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

3.1.5 DEVIATION FROM TEST STANDARD

No deviation.

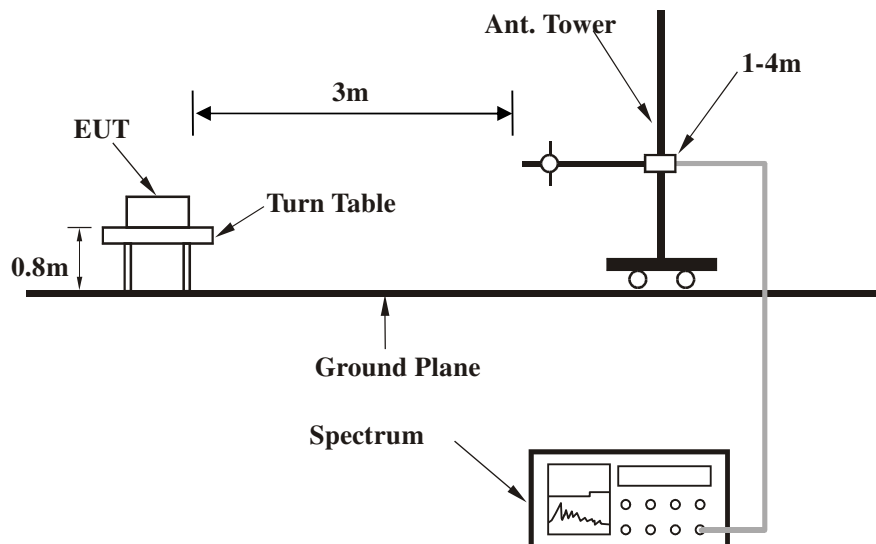


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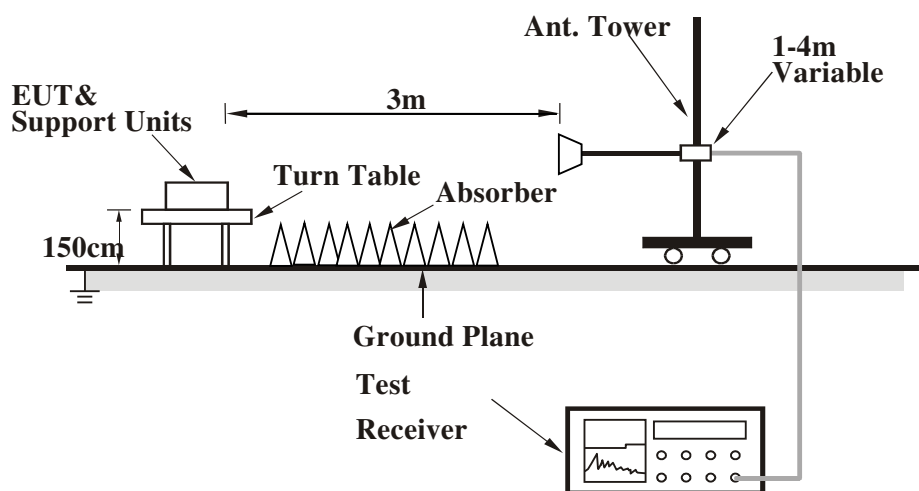
3.1.6 TEST SETUP

Below 1GHz test setup



Note: For the actual test configuration, please refer to the attached file (Test Setup Photo).

Above 1GHz test setup



Note: For the actual test configuration, please refer to the attached file (Test Setup Photo).



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3.1.7 EUT OPERATING CONDITION

- a. Set the EUT under full load condition and placed them on a testing table.
- b. Set the transmitter part of EUT under transmission condition continuously at specific channel frequency.
- c. The necessary accessories enable the EUT in full functions.



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Test Report No.: RF2203WDG0011-4

3.1.8 FTEST RESULTS

BELOW 1GHz WORST-CASE DATA

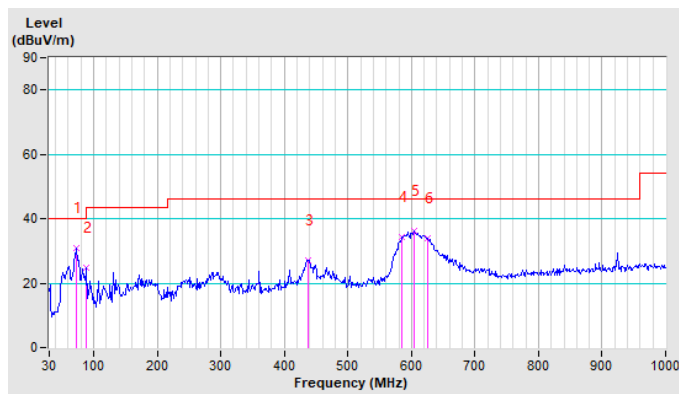
802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	72.17	30.9 QP	40.0	-9.1	1.00 H	308	46.7	-15.8
2	89.04	24.7 QP	43.5	-18.8	1.00 H	144	43.6	-18.9
3	437.68	27.1 QP	46.0	-18.9	1.00 H	276	37.2	-10.1
4	585.29	34.4 QP	46.0	-11.6	2.00 H	20	41.4	-7.0
5	603.57	36.3 QP	46.0	-9.7	2.00 H	73	42.8	-6.5
6	626.06	34.1 QP	46.0	-11.9	1.00 H	19	40.3	-6.2

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. 9KHz~30MHz have been test and test data more than 20dB margin.
5. Margin value = Emission level – Limit value.



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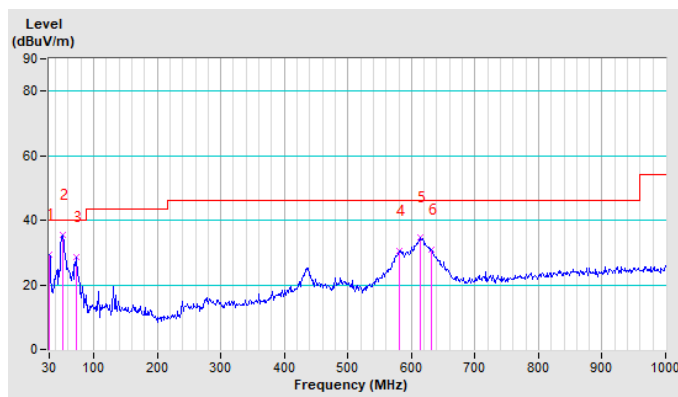
Test Report No.: RF2203WDG0011-4

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	30.00	29.3 QP	40.0	-10.7	1.00 V	309	46.0	-16.7
2	51.09	35.4 QP	40.0	-4.6	1.00 V	156	49.4	-14.1
3	72.17	28.7 QP	40.0	-11.3	1.00 V	301	44.6	-15.8
4	581.07	30.6 QP	46.0	-15.4	1.00 V	18	37.7	-7.1
5	613.41	34.6 QP	46.0	-11.5	1.00 V	171	40.9	-6.4
6	631.68	31.0 QP	46.0	-15.0	1.00 V	233	37.1	-6.2

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. 9KHz~30MHz have been test and test data more than 20dB margin.
5. Margin value = Emission level – Limit value.



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Test Report No.: RF2203WDG0011-4

Band 1 (5150-5250MHz):

ABOVE 1GHz DATA

802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	49.64 PK	74.00	-24.36	1.54 H	360	43.95	5.69
2	5145.00	37.92 AV	54.00	-16.08	1.54 H	360	32.23	5.69
3	5150.00	49.62 PK	74.00	-24.38	1.54 H	360	43.92	5.70
4	5150.00	37.00 AV	54.00	-17.00	1.54 H	360	31.30	5.70
5	*5180.00	102.00 PK			1.54 H	360	96.29	5.71
6	*5180.00	92.57 AV			1.54 H	360	86.86	5.71
7	#10360.00	52.12 PK	68.20	-16.08	1.00 H	125	38.55	13.57
8	15540.00	54.05 PK	74.00	-19.95	1.20 H	154	35.07	18.98
9	15540.00	44.05 AV	54.00	-9.95	1.20 H	154	25.07	18.98
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	48.00 PK	74.00	-26.00	1.00 V	267	42.31	5.69
2	5145.00	36.25 AV	54.00	-17.75	1.00 V	267	30.56	5.69
3	5150.00	47.96 PK	74.00	-26.04	1.00 V	267	42.26	5.70
4	5150.00	36.54 AV	54.00	-17.46	1.00 V	267	30.84	5.70
5	*5180.00	95.01 PK			1.00 V	267	89.30	5.71
6	*5180.00	94.96 AV			1.00 V	267	89.25	5.71
7	#10360.00	52.38 PK	68.20	-15.82	1.00 V	125	38.81	13.57
8	15540.00	54.22 PK	74.00	-19.78	1.20 V	150	35.24	18.98
9	15540.00	44.83 AV	54.00	-9.17	1.20 V	150	25.85	18.98

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

Bureau Veritas Shenzhen Co., Ltd.
Dongguan Branch

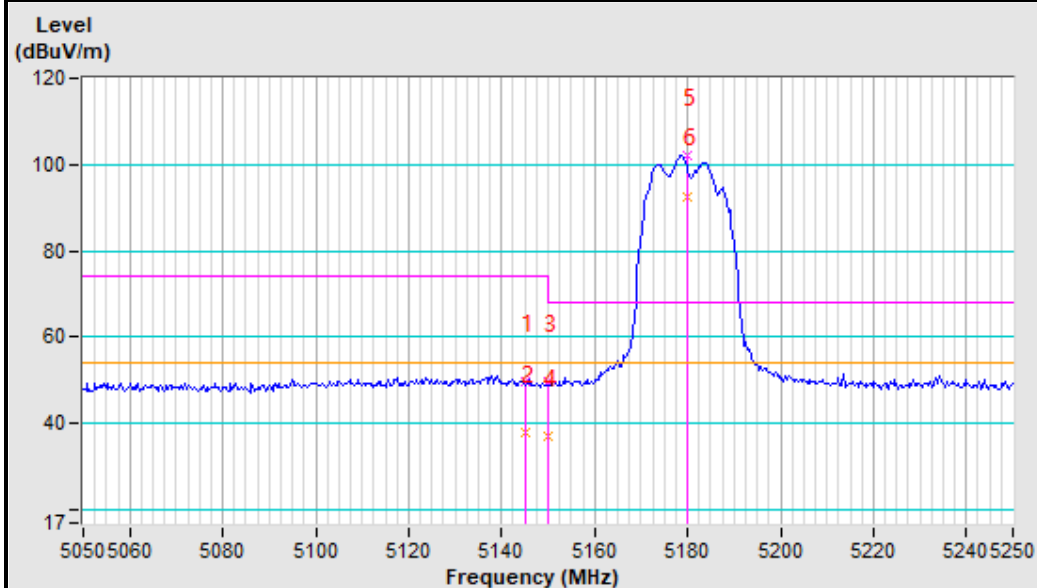
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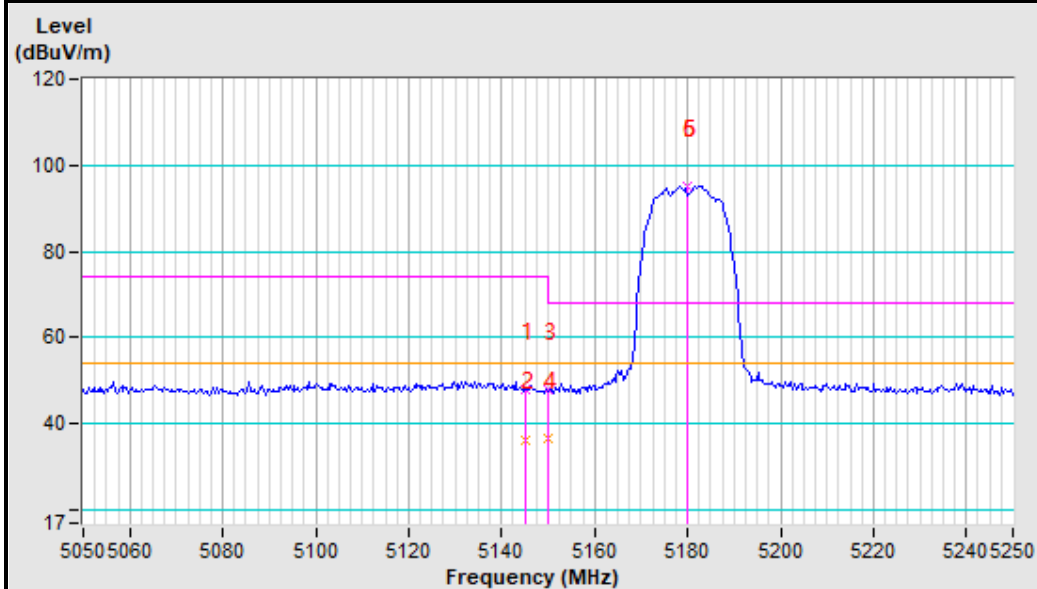


Band edge Plot

5180MHz Horizontal



5180MHz Vertical





CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	47.25 PK	74.00	-26.75	1.00 H	145	41.56	5.69
2	5145.00	35.59 AV	54.00	-18.41	1.00 H	145	29.90	5.69
3	5150.00	48.21 PK	74.00	-25.79	1.00 H	145	42.51	5.70
4	5150.00	36.51 AV	54.00	-17.49	1.00 H	145	30.81	5.70
5	*5200.00	102.11 PK			1.00 H	145	96.39	5.72
6	*5200.00	92.35 AV			1.00 H	145	86.63	5.72
7	#10400.00	51.32 PK	68.20	-16.88	1.36 H	189	37.70	13.62
8	15600.00	54.17 PK	74.00	-19.83	1.20 H	128	35.10	19.07
9	15600.00	44.97 AV	54.00	-9.03	1.20 H	128	25.90	19.07
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	57.33 PK	74.00	-16.67	1.00 V	125	51.64	5.69
2	5145.00	36.00 AV	54.00	-18.00	1.00 V	125	30.31	5.69
3	5150.00	47.96 PK	74.00	-26.04	1.00 V	125	42.26	5.70
4	5150.00	38.54 AV	54.00	-15.46	1.00 V	125	32.84	5.70
5	*5200.00	95.91 PK			1.00 V	125	90.19	5.72
6	*5200.00	85.33 AV			1.00 V	125	79.61	5.72
7	#10400.00	52.35 PK	68.20	-15.85	1.25 V	147	38.73	13.62
8	15600.00	54.65 PK	74.00	-19.35	1.00 V	180	35.58	19.07
9	15600.00	45.11 AV	54.00	-8.89	1.00 V	180	26.04	19.07

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	48.21 PK	74.00	-25.79	1.47 H	136	42.52	5.69
2	5145.00	39.14 AV	54.00	-14.86	1.47 H	136	33.45	5.69
3	5150.00	48.00 PK	74.00	-26.00	1.47 H	136	42.30	5.70
4	5150.00	38.47 AV	54.00	-15.53	1.47 H	136	32.77	5.70
5	*5240.00	102.22 PK			1.47 H	136	96.48	5.74
6	*5240.00	92.83 AV			1.47 H	136	87.09	5.74
7	5350.00	48.79 PK	74.00	-25.21	1.47 H	136	43.01	5.78
8	5350.00	37.44 AV	54.00	-16.56	1.47 H	136	31.66	5.78
9	5355.00	48.71 PK	74.00	-25.29	1.47 H	136	42.92	5.79
10	5355.00	39.54 AV	54.00	-14.46	1.47 H	136	33.75	5.79
11	#10480.00	52.17 PK	68.20	-16.03	1.00 H	148	38.43	13.74
12	15720.00	54.76 PK	74.00	-19.24	1.00 H	159	35.52	19.24
13	15720.00	45.00 AV	54.00	-9.00	1.00 H	159	25.76	19.24
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	46.89 PK	74.00	-27.11	1.00 V	160	41.20	5.69
2	5145.00	36.77 AV	54.00	-17.23	1.00 V	160	31.08	5.69
3	5150.00	48.21 PK	74.00	-25.79	1.00 V	160	42.51	5.70
4	5150.00	38.09 AV	54.00	-15.91	1.00 V	160	32.39	5.70
5	*5240.00	96.00 PK			1.00 V	160	90.26	5.74
6	*5240.00	86.40 AV			1.00 V	160	80.66	5.74
7	5350.00	48.33 PK	74.00	-25.67	1.00 V	160	42.55	5.78
8	5350.00	37.95 AV	54.00	-16.05	1.00 V	160	32.17	5.78
9	5355.00	47.92 PK	74.00	-26.08	1.00 V	160	42.13	5.79
10	5355.00	36.58 AV	54.00	-17.42	1.00 V	160	30.79	5.79
11	#10480.00	52.11 PK	68.20	-16.09	1.22 V	135	38.37	13.74
12	15720.00	54.33 PK	74.00	-19.67	1.27 V	159	35.09	19.24
13	15720.00	42.36 AV	54.00	-11.64	1.27 V	159	23.12	19.24

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



802.11n (20MHz)

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	48.75 PK	74.00	-25.25	1.52 H	0	43.06	5.69
2	5145.00	36.54 AV	54.00	-17.46	1.52 H	0	30.85	5.69
3	5150.00	48.73 PK	74.00	-25.27	1.52 H	0	43.03	5.70
4	5150.00	36.85 AV	54.00	-17.15	1.52 H	0	31.15	5.70
5	*5180.00	98.14 PK			1.52 H	0	92.43	5.71
6	*5180.00	88.75 AV			1.52 H	0	83.04	5.71
7	#10360.00	52.75 PK	68.20	-15.45	1.74 H	185	39.18	13.57
8	15540.00	54.72 PK	74.00	-19.28	1.52 H	139	35.74	18.98
9	15540.00	45.11 AV	54.00	-8.89	1.52 H	139	26.13	18.98
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	48.31 PK	74.00	-25.69	1.00 V	296	42.62	5.69
2	5145.00	36.24 AV	54.00	-17.76	1.00 V	296	30.55	5.69
3	5150.00	47.87 PK	74.00	-26.13	1.00 V	296	42.17	5.70
4	5150.00	36.55 AV	54.00	-17.45	1.00 V	296	30.85	5.70
5	*5180.00	91.27 PK			1.00 V	296	85.56	5.71
6	*5180.00	81.56 AV			1.00 V	296	75.85	5.71
7	#10360.00	52.31 PK	68.20	-15.89	1.20 V	155	38.74	13.57
8	15540.00	54.93 PK	74.00	-19.07	1.22 V	130	35.95	18.98
9	15540.00	45.74 AV	54.00	-8.26	1.22 V	130	26.76	18.98

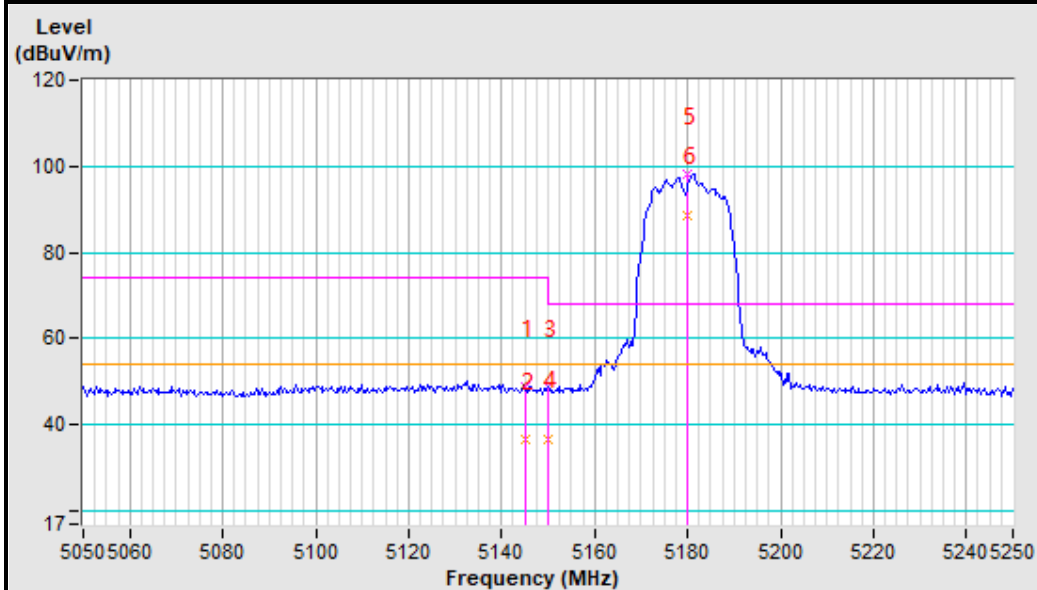
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

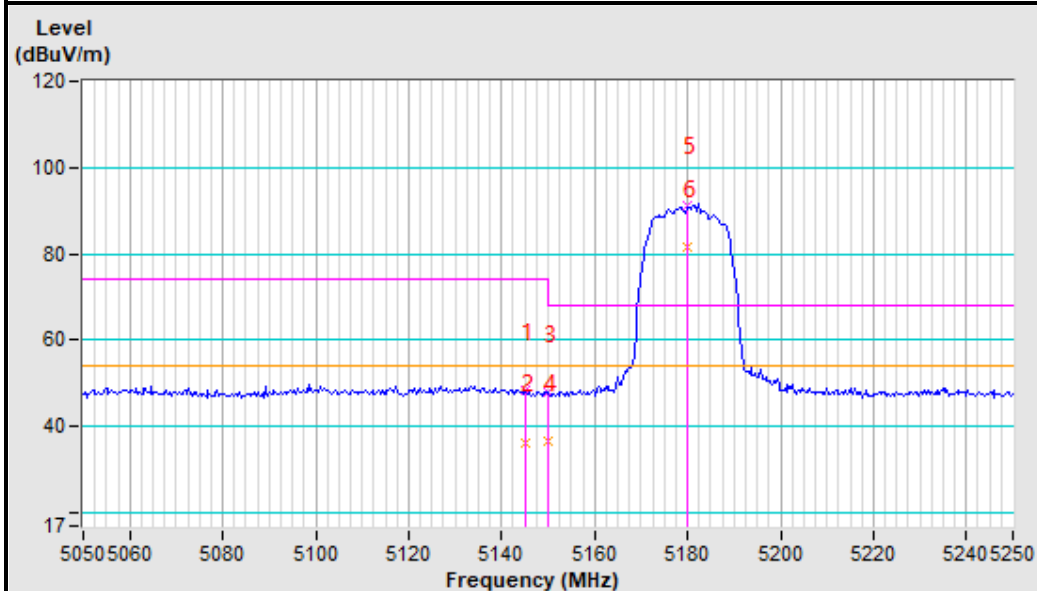


Band edge Plot

5180MHz Horizontal



5180MHz Vertical





CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	48.02 PK	74.00	-25.98	1.00 H	125	42.33	5.69
2	5145.00	37.46 AV	54.00	-16.54	1.00 H	125	31.77	5.69
3	5150.00	47.85 PK	74.00	-26.15	1.00 H	125	42.15	5.70
4	5150.00	36.54 AV	54.00	-17.46	1.00 H	125	30.84	5.70
5	*5200.00	98.36 PK			1.00 H	125	92.64	5.72
6	*5200.00	88.54 AV			1.00 H	125	82.82	5.72
7	#10400.00	51.93 PK	68.20	-16.27	1.00 H	158	38.31	13.62
8	15600.00	54.63 PK	74.00	-19.37	1.00 H	126	35.56	19.07
9	15600.00	44.62 AV	54.00	-9.38	1.00 H	126	25.55	19.07
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	47.69 PK	74.00	-26.31	1.00 V	200	42.00	5.69
2	5145.00	36.05 AV	54.00	-17.95	1.00 V	200	30.36	5.69
3	5150.00	48.36 PK	74.00	-25.64	1.00 V	200	42.66	5.70
4	5150.00	37.00 AV	54.00	-17.00	1.00 V	200	31.30	5.70
5	*5200.00	91.55 PK			1.00 V	200	85.83	5.72
6	*5200.00	81.36 AV			1.00 V	200	75.64	5.72
7	#10400.00	52.12 PK	68.20	-16.08	1.25 V	144	38.50	13.62
8	15600.00	54.83 PK	74.00	-19.17	1.00 V	156	35.76	19.07
9	15600.00	44.71 AV	54.00	-9.29	1.00 V	156	25.64	19.07

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



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Test Report No.: RF2203WDG0011-4

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	49.77 PK	74.00	-24.23	1.20 H	140	44.08	5.69
2	5145.00	38.92 AV	54.00	-15.08	1.20 H	140	33.23	5.69
3	5150.00	48.35 PK	74.00	-25.65	1.20 H	140	42.65	5.70
4	5150.00	37.98 AV	54.00	-16.02	1.20 H	140	32.28	5.70
5	*5240.00	98.41 PK			1.20 H	140	92.67	5.74
6	*5240.00	88.32 AV			1.20 H	140	82.58	5.74
7	5350.00	46.22 PK	74.00	-27.78	1.20 H	140	40.44	5.78
8	5350.00	38.45 AV	54.00	-15.55	1.20 H	140	32.67	5.78
9	5355.00	49.36 PK	74.00	-24.64	1.20 H	140	43.57	5.79
10	5355.00	38.96 AV	54.00	-15.04	1.20 H	140	33.17	5.79
11	#10480.00	52.00 PK	68.20	-16.20	2.00 H	254	38.26	13.74
12	15720.00	54.00 PK	74.00	-20.00	1.54 H	136	34.76	19.24
13	15720.00	45.02 AV	54.00	-8.98	1.54 H	136	25.78	19.24
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	49.31 PK	74.00	-24.69	1.00 V	147	43.62	5.69
2	5145.00	37.85 AV	54.00	-16.15	1.00 V	147	32.16	5.69
3	5150.00	48.95 PK	74.00	-25.05	1.00 V	147	43.25	5.70
4	5150.00	38.75 AV	54.00	-15.25	1.00 V	147	33.05	5.70
5	*5240.00	91.72 PK			1.00 V	147	85.98	5.74
6	*5240.00	81.68 AV			1.00 V	147	75.94	5.74
7	5350.00	48.39 PK	74.00	-25.61	1.00 V	147	42.61	5.78
8	5350.00	39.00 AV	54.00	-15.00	1.00 V	147	33.22	5.78
9	5355.00	54.22 PK	74.00	-19.78	1.00 V	147	48.43	5.79
10	5355.00	44.16 AV	54.00	-9.84	1.00 V	147	38.37	5.79
11	#10480.00	51.97 PK	68.20	-16.23	1.57 V	162	38.23	13.74
12	15720.00	54.87 PK	74.00	-19.13	1.05 V	154	35.63	19.24
13	15720.00	42.39 AV	54.00	-11.61	1.05 V	154	23.15	19.24

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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802.11n (40MHz)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	46.52 PK	74.00	-27.48	1.00 H	360	40.83	5.69
2	5145.00	36.05 AV	54.00	-17.95	1.00 H	360	30.36	5.69
3	5150.00	47.00 PK	74.00	-27.00	1.00 H	360	41.30	5.70
4	5150.00	36.58 AV	54.00	-17.42	1.00 H	360	30.88	5.70
5	*5190.00	94.00 PK			1.00 H	360	88.28	5.72
6	*5190.00	84.56 AV			1.00 H	360	78.84	5.72
7	#10380.00	51.98 PK	68.20	-16.22	1.00 H	158	38.39	13.59
8	15570.00	53.92 PK	74.00	-20.08	1.00 H	157	34.90	19.02
9	15570.00	43.97 AV	54.00	-10.03	1.00 H	157	24.95	19.02
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	46.00 PK	74.00	-28.00	1.00 V	125	40.31	5.69
2	5145.00	36.25 AV	54.00	-17.75	1.00 V	125	30.56	5.69
3	5150.00	45.93 PK	74.00	-28.07	1.00 V	125	40.23	5.70
4	5150.00	36.00 AV	54.00	-18.00	1.00 V	125	30.30	5.70
5	*5190.00	88.76 PK			1.00 V	125	83.04	5.72
6	*5190.00	78.96 AV			1.00 V	125	73.24	5.72
7	#10380.00	52.14 PK	68.20	-16.06	1.00 V	136	38.55	13.59
8	15570.00	53.08 PK	74.00	-20.92	1.00 V	120	34.06	19.02
9	15570.00	43.51 AV	54.00	-10.49	1.00 V	120	24.49	19.02

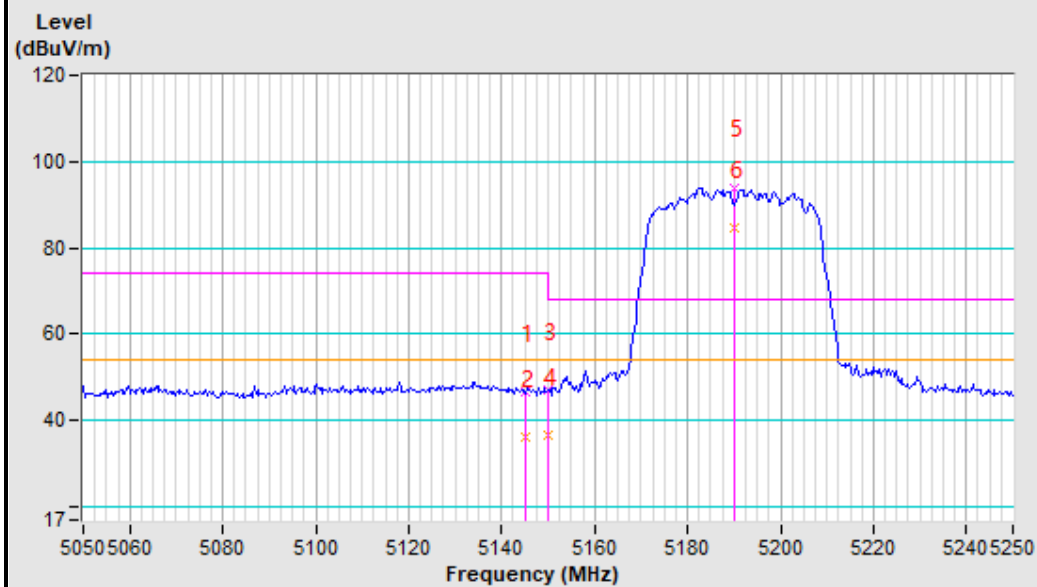
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

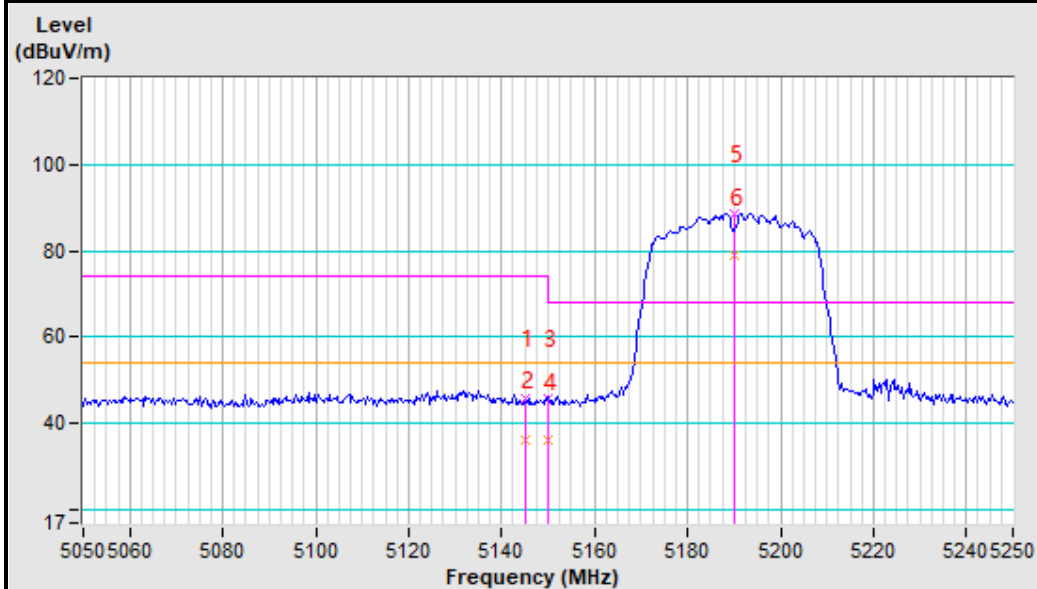


Band edge Plot

5190MHz Horizontal



5190MHz Vertical





CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	48.09 PK	74.00	-25.91	1.00 H	145	42.40	5.69
2	5145.00	39.05 AV	54.00	-14.95	1.00 H	145	33.36	5.69
3	5150.00	47.88 PK	74.00	-26.12	1.00 H	155	42.18	5.70
4	5150.00	38.09 AV	54.00	-15.91	1.00 H	155	32.39	5.70
5	*5230.00	94.56 PK			1.00 H	155	88.83	5.73
6	*5230.00	84.23 AV			1.00 H	155	78.50	5.73
7	#10460.00	52.09 PK	68.20	-16.11	1.00 H	147	38.38	13.71
8	15690.00	54.82 PK	74.00	-19.18	1.67 H	189	35.63	19.19
9	15690.00	44.71 AV	54.00	-9.29	1.67 H	189	25.52	19.19
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	47.32 PK	74.00	-26.68	1.00 V	149	41.63	5.69
2	5145.00	37.45 AV	54.00	-16.55	1.00 V	149	31.76	5.69
3	5150.00	47.99 PK	74.00	-26.01	1.00 V	149	42.29	5.70
4	5150.00	39.20 AV	54.00	-14.80	1.00 V	149	33.50	5.70
5	*5230.00	88.78 PK			1.00 V	149	83.05	5.73
6	*5230.00	78.95 AV			1.00 V	149	73.22	5.73
7	#10460.00	53.22 PK	68.20	-14.98	1.25 V	360	39.51	13.71
8	15690.00	54.89 PK	74.00	-19.11	1.65 V	136	35.70	19.19
9	15690.00	45.00 AV	54.00	-9.00	1.65 V	136	25.81	19.19

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



802.11ac (80MHz)

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	48.99 PK	74.00	-25.01	1.00 H	125	43.30	5.69
2	5145.00	36.58 AV	54.00	-17.42	1.00 H	125	30.89	5.69
3	5150.00	48.52 PK	74.00	-25.48	1.00 H	125	42.82	5.70
4	5150.00	38.25 AV	54.00	-15.75	1.00 H	125	32.55	5.70
5	*5210.00	94.00 PK	68.20	25.80	1.00 H	125	88.28	5.72
6	*5210.00	84.36 AV	54.00	30.36	1.00 H	125	78.64	5.72
7	#10420.00	51.40 PK	68.20	-16.80	1.00 H	145	37.74	13.66
8	15630.00	54.77 PK	74.00	-19.23	1.25 H	158	35.66	19.11
9	15630.00	44.75 AV	54.00	-9.25	1.25 H	158	25.64	19.11
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	46.38 PK	74.00	-27.62	1.00 V	170	40.69	5.69
2	5145.00	36.75 AV	54.00	-17.25	1.00 V	170	31.06	5.69
3	5150.00	47.13 PK	74.00	-26.87	1.00 V	170	41.43	5.70
4	5150.00	36.05 AV	54.00	-17.95	1.00 V	170	30.35	5.70
5	*5210.00	88.13 PK	68.20	19.93	1.00 V	170	82.41	5.72
6	*5210.00	78.25 AV	54.00	24.25	1.00 V	170	72.53	5.72
7	#10420.00	51.20 PK	68.20	-17.00	1.00 V	127	37.54	13.66
8	15630.00	54.31 PK	74.00	-19.69	1.79 V	132	35.20	19.11
9	15630.00	44.86 AV	54.00	-9.14	1.79 V	132	25.75	19.11

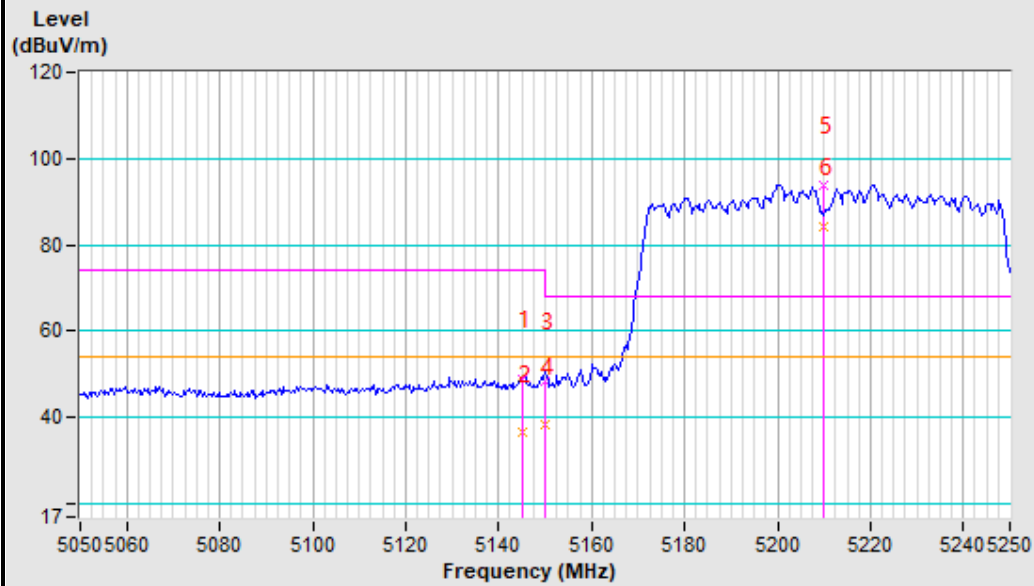
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

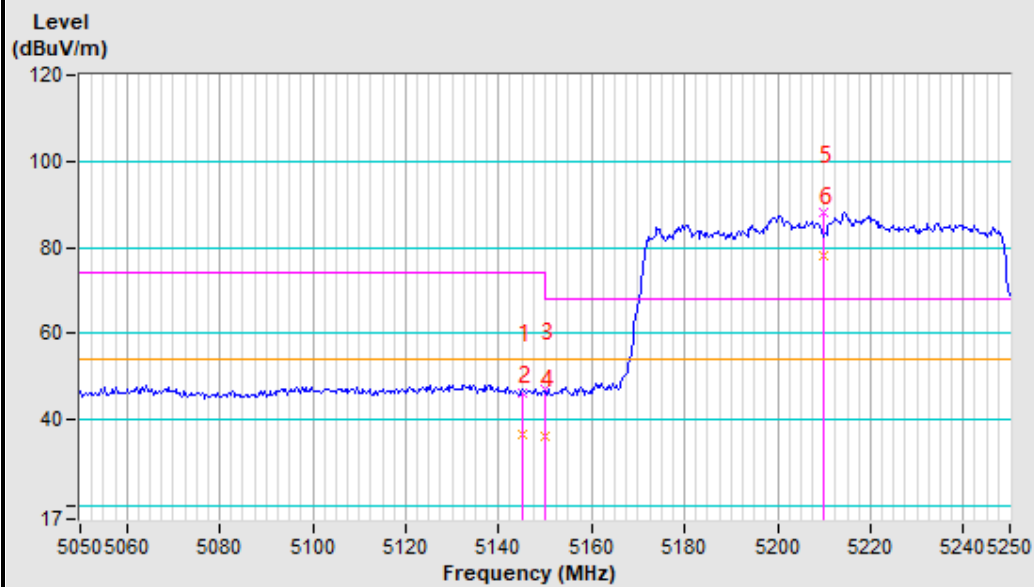


Band edge Plot

5210MHz Horizontal



5210MHz Vertical





Band 2 (5250-5350MHz):802.11a

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.96	47.26 PK	74.00	-26.74	1.02 H	60	41.56	5.70
2	5145.96	37.48 AV	54.00	-16.52	1.02 H	60	31.78	5.70
3	5150.00	46.81 PK	74.00	-27.19	1.02 H	60	41.11	5.70
4	5150.00	37.10 AV	54.00	-16.90	1.02 H	60	31.40	5.70
5	*5260.00	101.99 PK			1.02 H	60	96.25	5.74
6	*5260.00	92.18 AV			1.02 H	60	86.44	5.74
7	5350.00	48.02 PK	74.00	-25.98	1.02 H	60	42.24	5.78
8	5350.00	38.32 AV	54.00	-15.68	1.02 H	60	32.54	5.78
9	5354.00	47.69 PK	74.00	-26.31	1.02 H	60	41.91	5.78
10	5354.00	37.10 AV	54.00	-16.90	1.02 H	60	31.32	5.78
11	#10520.00	52.26 PK	68.20	-15.94	1.00 H	204	38.43	13.83
12	15780.00	54.18 PK	74.00	-19.82	1.00 H	196	34.87	19.31
13	15780.00	44.36 AV	54.00	-9.64	1.00 H	196	25.05	19.31
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5147.20	47.21 PK	74.00	-26.79	1.00 V	125	41.51	5.70
2	5147.20	37.36 AV	54.00	-16.64	1.00 V	125	31.66	5.70
3	5150.00	46.54 PK	74.00	-27.46	1.00 V	125	40.84	5.70
4	5150.00	36.90 AV	54.00	-17.10	1.00 V	125	31.20	5.70
5	*5260.00	102.15 PK			1.00 V	125	96.41	5.74
6	*5260.00	92.59 AV			1.00 V	125	86.85	5.74
7	5350.00	47.39 PK	74.00	-26.61	1.00 V	125	41.61	5.78
8	5350.00	38.16 AV	54.00	-15.84	1.00 V	125	32.38	5.78
9	5352.69	47.10 PK	74.00	-26.90	1.00 V	125	41.32	5.78
10	5352.69	37.96 AV	54.00	-16.04	1.00 V	125	32.18	5.78
11	#10520.00	53.69 PK	68.20	-14.51	1.20 V	69	39.86	13.83
12	15780.00	58.23 PK	74.00	-15.77	1.03 V	269	38.92	19.31
13	15780.00	45.16 AV	54.00	-8.84	1.03 V	269	25.85	19.31

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.



CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	102.85 PK			1.03 H	36	97.09	5.76
2	*5300.00	92.54 AV			1.03 H	36	86.78	5.76
3	5350.00	47.25 PK	74.00	-26.75	1.03 H	36	41.47	5.78
4	5350.00	36.91 AV	54.00	-17.09	1.03 H	36	31.13	5.78
5	5356.00	48.26 PK	74.00	-25.74	1.03 H	36	42.47	5.79
6	5356.00	38.25 AV	54.00	-15.75	1.03 H	36	32.46	5.79
7	10600.00	53.36 PK	74.00	-20.64	1.00 H	84	39.30	14.06
8	10600.00	43.96 AV	54.00	-10.04	1.00 H	84	29.90	14.06
9	15900.00	56.36 PK	74.00	-17.64	1.00 H	258	36.88	19.48
10	15900.00	47.51 AV	54.00	-6.49	1.00 H	258	28.03	19.48
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	98.69 PK			1.00 V	251	92.93	5.76
2	*5300.00	88.74 AV			1.00 V	251	82.98	5.76
3	5350.00	46.69 PK	74.00	-27.31	1.00 V	251	40.91	5.78
4	5350.00	36.84 AV	54.00	-17.16	1.00 V	251	31.06	5.78
5	5354.00	48.36 PK	74.00	-25.64	1.00 V	251	42.58	5.78
6	5354.00	38.61 AV	54.00	-15.39	1.00 V	251	32.83	5.78
7	10600.00	53.36 PK	74.00	-20.64	1.00 V	96	39.30	14.06
8	10600.00	44.18 AV	54.00	-9.82	1.00 V	96	30.12	14.06
9	15900.00	55.69 PK	74.00	-18.31	1.05 V	51	36.21	19.48
10	15900.00	45.29 AV	54.00	-8.71	1.05 V	51	25.81	19.48

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.



CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	102.54 PK			1.05 H	51	96.77	5.77
2	*5320.00	92.14 AV			1.05 H	51	86.37	5.77
3	5350.00	49.95 PK	74.00	-24.05	1.05 H	51	44.17	5.78
4	5350.00	39.42 AV	54.00	-14.58	1.05 H	51	33.64	5.78
5	5351.60	51.30 PK	74.00	-22.70	1.05 H	51	45.52	5.78
6	5351.60	41.27 AV	54.00	-12.73	1.05 H	51	35.49	5.78
7	10640.00	54.10 PK	74.00	-19.90	1.00 H	56	39.93	14.17
8	10640.00	44.36 AV	54.00	-9.64	1.00 H	56	30.19	14.17
9	15960.00	56.84 PK	74.00	-17.16	1.00 H	247	37.27	19.57
10	15960.00	45.90 AV	54.00	-8.10	1.00 H	247	26.33	19.57
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	99.66 PK			1.00 V	108	93.89	5.77
2	*5320.00	89.41 AV			1.00 V	108	83.64	5.77
3	5350.00	48.77 PK	74.00	-25.23	1.00 V	108	42.99	5.78
4	5350.00	39.51 AV	54.00	-14.49	1.00 V	108	33.73	5.78
5	5354.48	48.76 PK	74.00	-25.24	1.00 V	108	42.98	5.78
6	5354.48	38.59 AV	54.00	-15.41	1.00 V	108	32.81	5.78
7	10640.00	53.36 PK	74.00	-20.64	1.00 V	189	39.19	14.17
8	10640.00	43.18 AV	54.00	-10.82	1.00 V	189	29.01	14.17
9	15960.00	56.62 PK	74.00	-17.38	1.20 V	51	37.05	19.57
10	15960.00	45.71 AV	54.00	-8.29	1.20 V	51	26.14	19.57

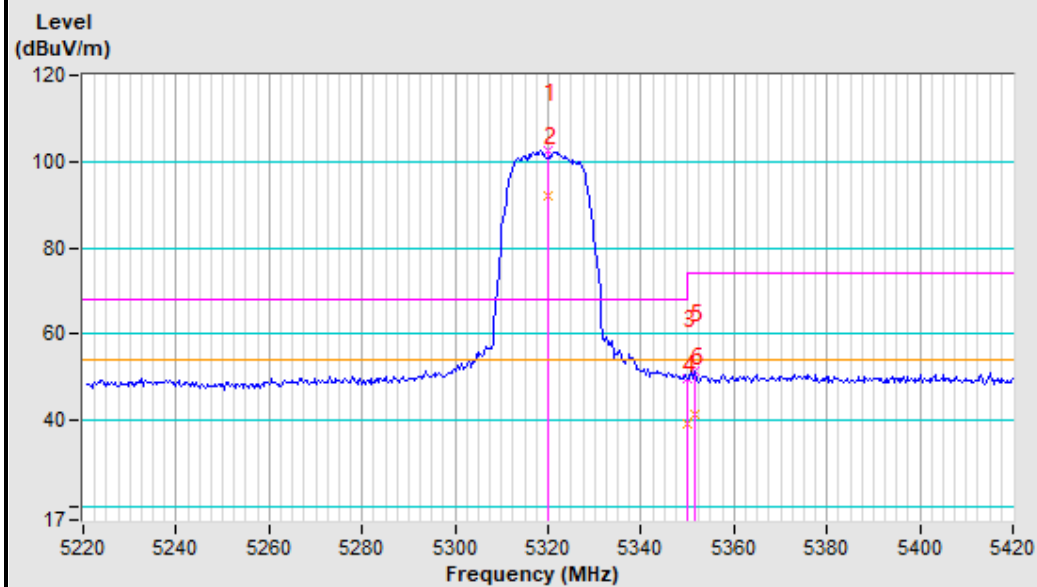
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

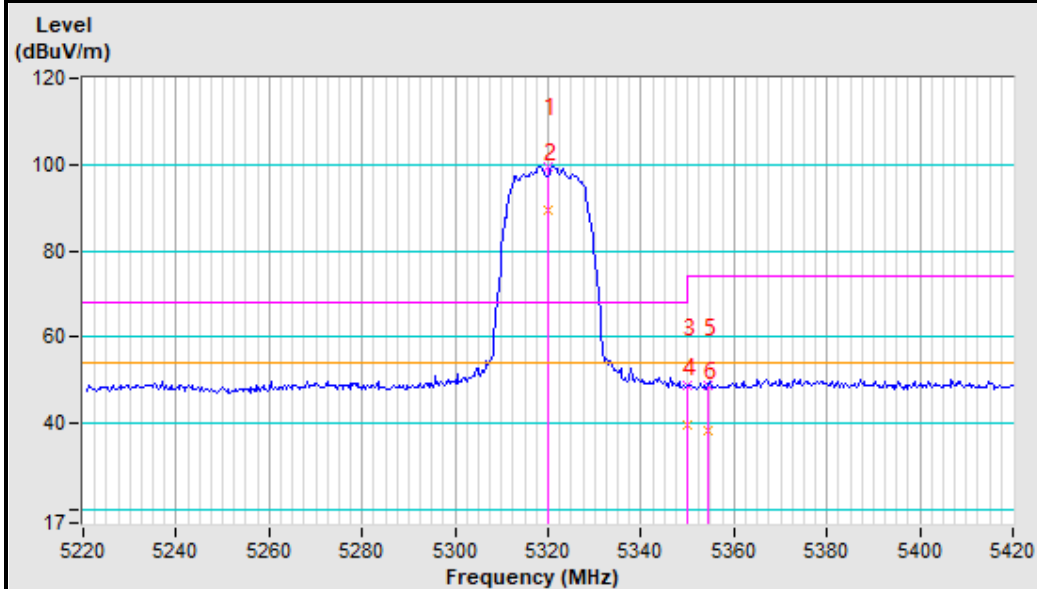


Band edge Plot

5320MHz Horizontal



5320MHz Vertical





Test Report No.: RF2203WDG0011-4

802.11n (20MHz)

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5146.00	48.36 PK	74.00	-25.64	1.05 H	59	42.66	5.70
2	5146.00	38.69 AV	54.00	-15.31	1.05 H	59	32.99	5.70
3	5150.00	47.16 PK	74.00	-26.84	1.05 H	59	41.46	5.70
4	5150.00	37.59 AV	54.00	-16.41	1.05 H	59	31.89	5.70
5	*5260.00	100.73 PK			1.05 H	59	94.99	5.74
6	*5260.00	90.26 AV			1.05 H	59	84.52	5.74
7	5350.00	48.36 PK	74.00	-25.64	1.05 H	59	42.58	5.78
8	5350.00	37.69 AV	54.00	-16.31	1.05 H	59	31.91	5.78
9	5353.00	47.41 PK	74.00	-26.59	1.05 H	59	41.63	5.78
10	5353.00	37.46 AV	54.00	-16.54	1.05 H	59	31.68	5.78
11	#10520.00	56.10 PK	68.20	-12.10	1.00 H	109	42.27	13.83
12	15780.00	58.32 PK	74.00	-15.68	1.00 H	47	39.01	19.31
13	15780.00	49.10 AV	54.00	-4.90	1.00 H	47	29.79	19.31
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5147.00	49.63 PK	74.00	-24.37	1.00 V	96	43.93	5.70
2	5147.00	39.26 AV	54.00	-14.74	1.00 V	96	33.56	5.70
3	5150.00	47.20 PK	74.00	-26.80	1.00 V	96	41.50	5.70
4	5150.00	37.88 AV	54.00	-16.12	1.00 V	96	32.18	5.70
5	*5260.00	97.65 PK			1.00 V	96	91.91	5.74
6	*5260.00	87.19 AV			1.00 V	96	81.45	5.74
7	5350.00	48.36 PK	74.00	-25.64	1.00 V	96	42.58	5.78
8	5350.00	38.59 AV	54.00	-15.41	1.00 V	96	32.81	5.78
9	5356.00	47.58 PK	74.00	-26.42	1.00 V	96	41.79	5.79
10	5356.00	37.36 AV	54.00	-16.64	1.00 V	96	31.57	5.79
11	#10520.00	54.69 PK	68.20	-13.51	1.00 V	103	40.86	13.83
12	15780.00	57.36 PK	74.00	-16.64	1.40 V	207	38.05	19.31
13	15780.00	47.19 AV	54.00	-6.81	1.40 V	207	27.88	19.31

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

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CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	102.13 PK			1.20 H	55	96.37	5.76
2	*5300.00	92.59 AV			1.20 H	55	86.83	5.76
3	5350.00	47.69 PK	74.00	-26.31	1.20 H	55	41.91	5.78
4	5350.00	37.59 AV	54.00	-16.41	1.20 H	55	31.81	5.78
5	5353.62	48.58 PK	74.00	-25.42	1.20 H	55	42.80	5.78
6	5353.62	38.61 AV	54.00	-15.39	1.20 H	55	32.83	5.78
7	10600.00	55.69 PK	74.00	-18.31	1.00 H	96	41.63	14.06
8	10600.00	45.17 AV	54.00	-8.83	1.00 H	96	31.11	14.06
9	15900.00	57.65 PK	74.00	-16.35	1.00 H	125	38.17	19.48
10	15900.00	47.21 AV	54.00	-6.79	1.00 H	125	27.73	19.48
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	98.20 PK			1.02 V	208	92.44	5.76
2	*5300.00	88.69 AV			1.02 V	208	82.93	5.76
3	5350.00	48.52 PK	74.00	-25.48	1.02 V	208	42.74	5.78
4	5350.00	38.47 AV	54.00	-15.53	1.02 V	208	32.69	5.78
5	5352.00	49.36 PK	74.00	-24.64	1.02 V	208	43.58	5.78
6	5352.00	38.79 AV	54.00	-15.21	1.02 V	208	33.01	5.78
7	10600.00	55.26 PK	74.00	-18.74	1.00 V	71	41.20	14.06
8	10600.00	45.19 AV	54.00	-8.81	1.00 V	71	31.13	14.06
9	15900.00	56.63 PK	74.00	-17.37	1.08 V	236	37.15	19.48
10	15900.00	46.59 AV	54.00	-7.41	1.08 V	236	27.11	19.48

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.



CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	102.08 PK			1.00 H	71	96.31	5.77
2	*5320.00	92.36 AV			1.00 H	71	86.59	5.77
3	5350.00	50.78 PK	74.00	-23.22	1.00 H	71	45.00	5.78
4	5350.00	40.31 AV	54.00	-13.69	1.00 H	71	34.53	5.78
5	5373.07	52.16 PK	74.00	-21.84	1.00 H	71	46.38	5.78
6	5373.07	42.36 AV	54.00	-11.64	1.00 H	71	36.58	5.78
7	10640.00	54.71 PK	74.00	-19.29	1.06 H	169	40.54	14.17
8	10640.00	44.69 AV	54.00	-9.31	1.06 H	169	30.52	14.17
9	15960.00	57.10 PK	74.00	-16.90	1.00 H	69	37.53	19.57
10	15960.00	47.12 AV	54.00	-6.88	1.00 H	69	27.55	19.57
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	99.66 PK			1.06 V	288	93.89	5.77
2	*5320.00	89.74 AV			1.06 V	288	83.97	5.77
3	5350.00	48.71 PK	74.00	-25.29	1.06 V	288	42.93	5.78
4	5350.00	38.59 AV	54.00	-15.41	1.06 V	288	32.81	5.78
5	5352.88	49.67 PK	74.00	-24.33	1.06 V	288	43.89	5.78
6	5352.88	39.58 AV	54.00	-14.42	1.06 V	288	33.80	5.78
7	10640.00	54.52 PK	74.00	-19.48	1.00 V	203	40.35	14.17
8	10640.00	44.10 AV	54.00	-9.90	1.00 V	203	29.93	14.17
9	15960.00	56.41 PK	74.00	-17.59	1.03 V	57	36.84	19.57
10	15960.00	45.85 AV	54.00	-8.15	1.03 V	57	26.28	19.57

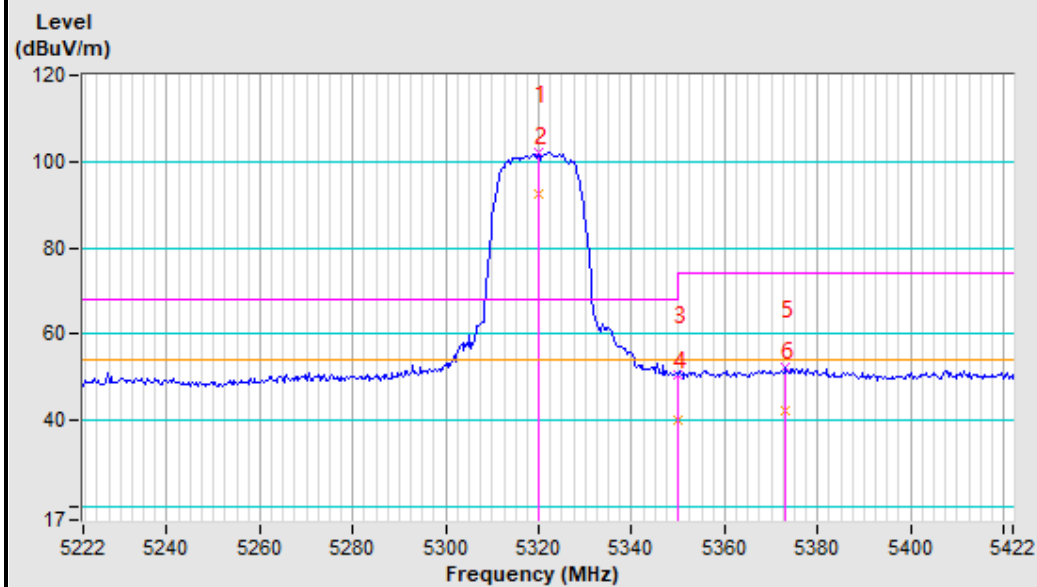
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

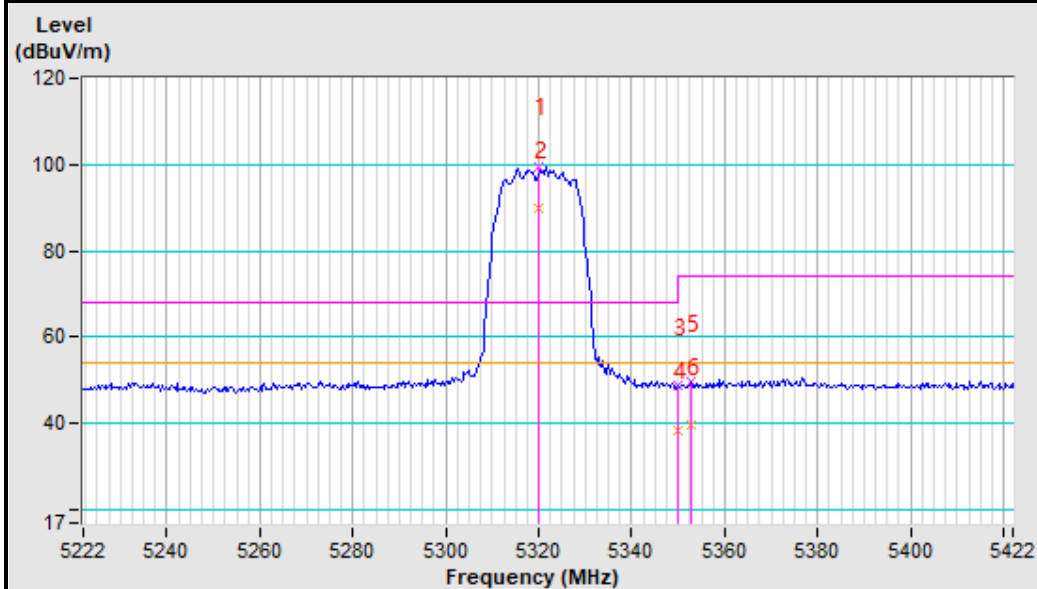


Band edge Plot

5320MHz Horizontal



5320MHz Vertical





802.11n (40MHz)

CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	102.69 PK			1.00 H	104	96.94	5.75
2	*5270.00	92.58 AV			1.00 H	104	86.83	5.75
3	5350.00	50.26 PK	74.00	-23.74	1.00 H	104	44.48	5.78
4	5350.00	40.15 AV	54.00	-13.85	1.00 H	104	34.37	5.78
5	5355.10	49.68 PK	74.00	-24.32	1.00 H	104	43.89	5.79
6	5355.10	39.55 AV	54.00	-14.45	1.00 H	104	33.76	5.79
7	#10540.00	55.15 PK	68.20	-13.05	1.00 H	120	41.27	13.88
8	10810.00	56.36 PK	74.00	-17.64	1.20 H	96	41.70	14.66
9	10810.00	46.25 AV	54.00	-7.75	1.20 H	96	31.59	14.66
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	99.36 PK			1.02 V	215	93.61	5.75
2	*5270.00	89.41 AV			1.02 V	215	83.66	5.75
3	5350.00	50.26 PK	74.00	-23.74	1.02 V	215	44.48	5.78
4	5350.00	40.18 AV	54.00	-13.82	1.02 V	215	34.40	5.78
5	5357.12	51.26 PK	74.00	-22.74	1.02 V	215	45.48	5.78
6	5357.12	41.57 AV	54.00	-12.43	1.02 V	215	35.79	5.78
7	#10540.00	54.15 PK	68.20	-14.05	1.00 V	126	40.27	13.88
8	15810.00	55.47 PK	74.00	-18.53	1.00 V	36	36.11	19.36
9	15810.00	45.12 AV	54.00	-8.88	1.00 V	36	25.76	19.36

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.



CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	92.68 PK			1.00 H	55	86.92	5.76
2	*5310.00	82.47 AV			1.00 H	55	76.71	5.76
3	5350.00	49.58 PK	74.00	-24.42	1.00 H	55	43.80	5.78
4	5350.00	39.54 PK	74.00	-34.46	1.00 H	55	33.76	5.78
5	5357.69	48.62 PK	74.00	-25.38	1.00 H	55	42.84	5.78
6	5357.69	38.61 AV	54.00	-15.39	1.00 H	55	32.83	5.78
7	10620.00	55.25 PK	74.00	-18.75	1.00 H	285	41.13	14.12
8	10620.00	44.75 AV	54.00	-9.25	1.00 H	285	30.63	14.12
9	15930.00	56.95 PK	74.00	-17.05	1.40 H	209	37.42	19.53
10	15930.00	47.10 AV	54.00	-6.90	1.40 H	209	27.57	19.53
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	92.80 PK			1.05 V	107	87.04	5.76
2	*5310.00	82.45 AV			1.05 V	107	76.69	5.76
3	5350.00	48.61 PK	74.00	-25.39	1.05 V	107	42.83	5.78
4	5350.00	38.63 AV	54.00	-15.37	1.05 V	107	32.85	5.78
5	5355.00	48.71 PK	74.00	-25.29	1.05 V	107	42.92	5.79
6	5355.00	38.26 AV	54.00	-15.74	1.05 V	107	32.47	5.79
7	10620.00	54.58 PK	74.00	-19.42	1.00 V	213	40.46	14.12
8	10620.00	44.25 AV	54.00	-9.75	1.00 V	213	30.13	14.12
9	15930.00	56.36 PK	74.00	-17.64	1.02 V	70	36.83	19.53
10	15930.00	46.28 AV	54.00	-7.72	1.02 V	70	26.75	19.53

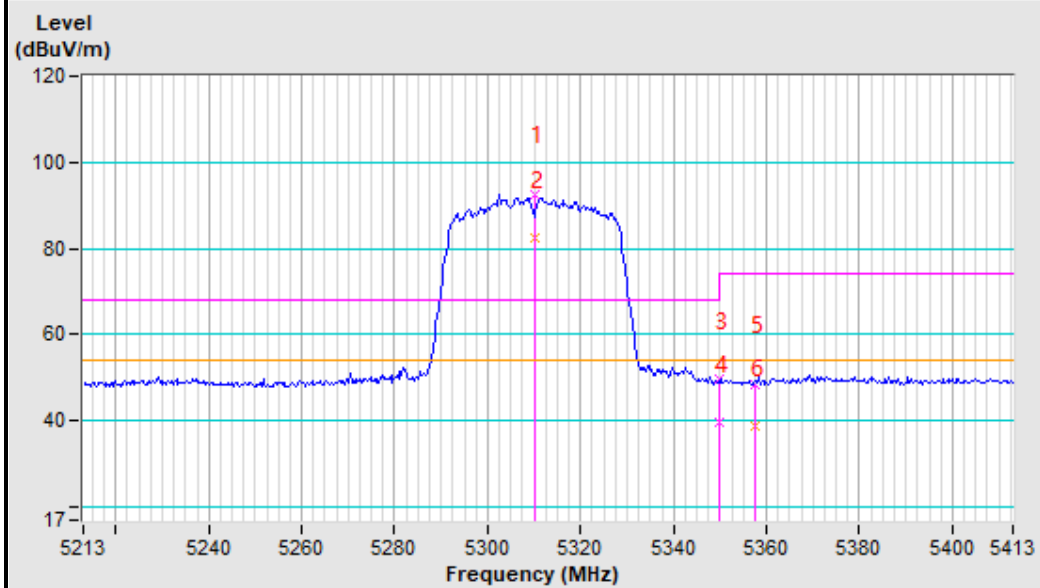
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

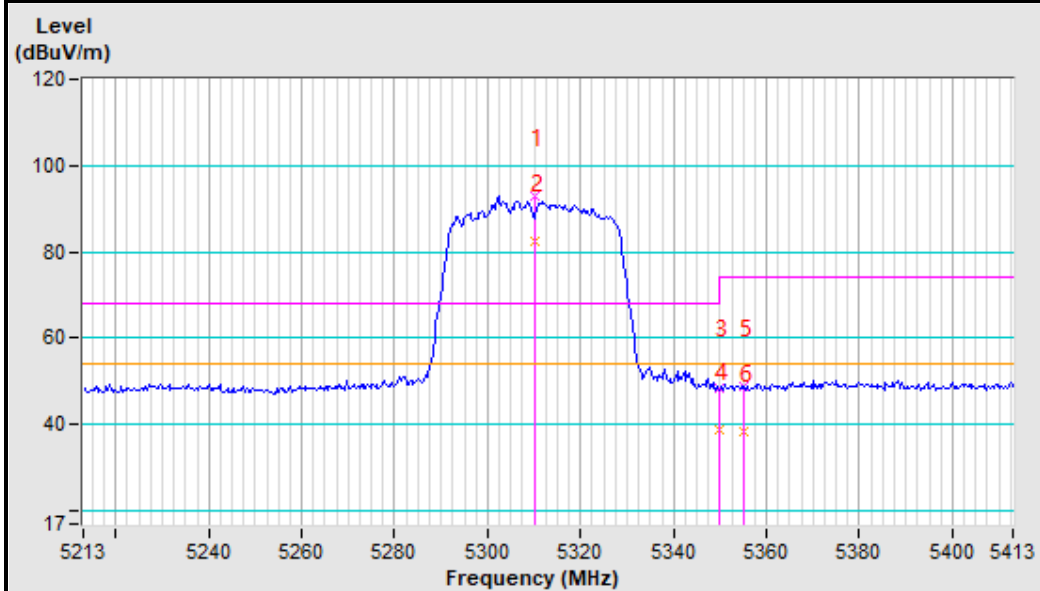


Band edge Plot

5310MHz Horizontal



5310MHz Vertical





802.11ac 80MHz

CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5290.00	94.25 PK			1.00 H	108	88.49	5.76
2	*5290.00	84.71 AV			1.00 H	108	78.95	5.76
3	5350.00	51.47 PK	74.00	-22.53	1.00 H	108	45.69	5.78
4	5350.00	41.62 AV	54.00	-12.38	1.00 H	108	35.84	5.78
5	5356.00	50.36 PK	74.00	-23.64	1.00 H	108	44.57	5.79
6	5356.00	40.82 AV	54.00	-13.18	1.00 H	108	35.03	5.79
7	#10580.00	55.81 PK	68.20	-12.39	1.02 H	256	41.82	13.99
8	15870.00	56.77 PK	74.00	-17.23	1.52 H	80	37.33	19.44
9	15870.00	46.24 AV	54.00	-7.76	1.52 H	80	26.80	19.44
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5290.00	90.81 PK			1.40 V	251	85.05	5.76
2	*5290.00	80.54 AV			1.40 V	251	74.78	5.76
3	5350.00	49.17 PK	74.00	-24.83	1.40 V	251	43.39	5.78
4	5350.00	40.51 AV	54.00	-13.49	1.40 V	251	34.73	5.78
5	5354.80	49.76 PK	74.00	-24.24	1.40 V	251	43.98	5.78
6	5354.80	39.81 AV	54.00	-14.19	1.40 V	251	34.03	5.78
7	#10580.00	55.26 PK	68.20	-12.94	1.00 V	206	41.27	13.99
8	15870.00	56.62 PK	74.00	-17.38	1.00 V	147	37.18	19.44
9	15870.00	46.17 AV	54.00	-7.83	1.00 V	147	26.73	19.44

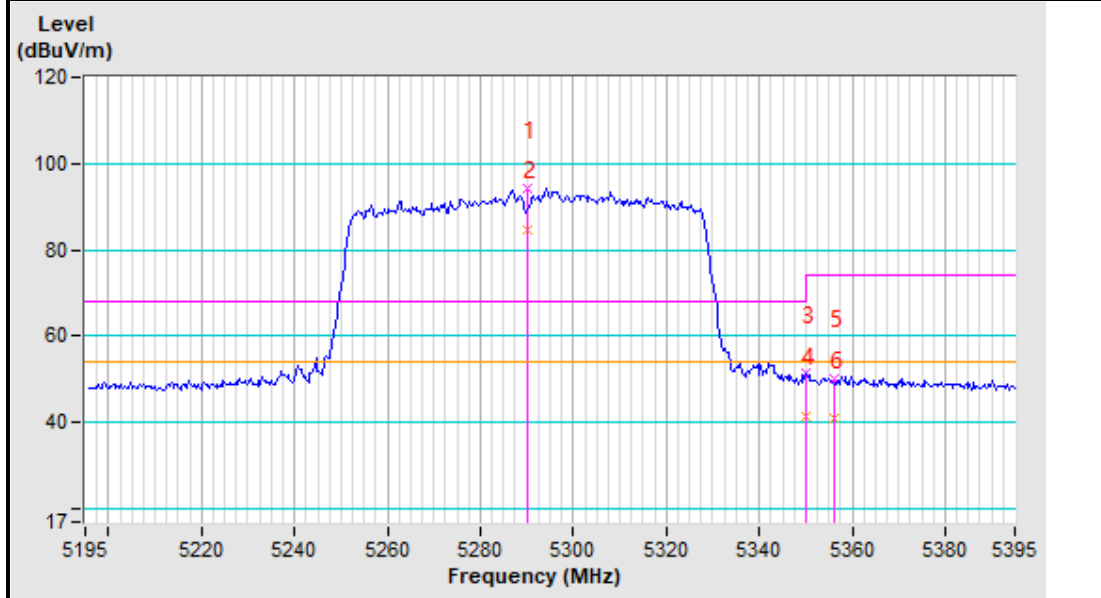
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

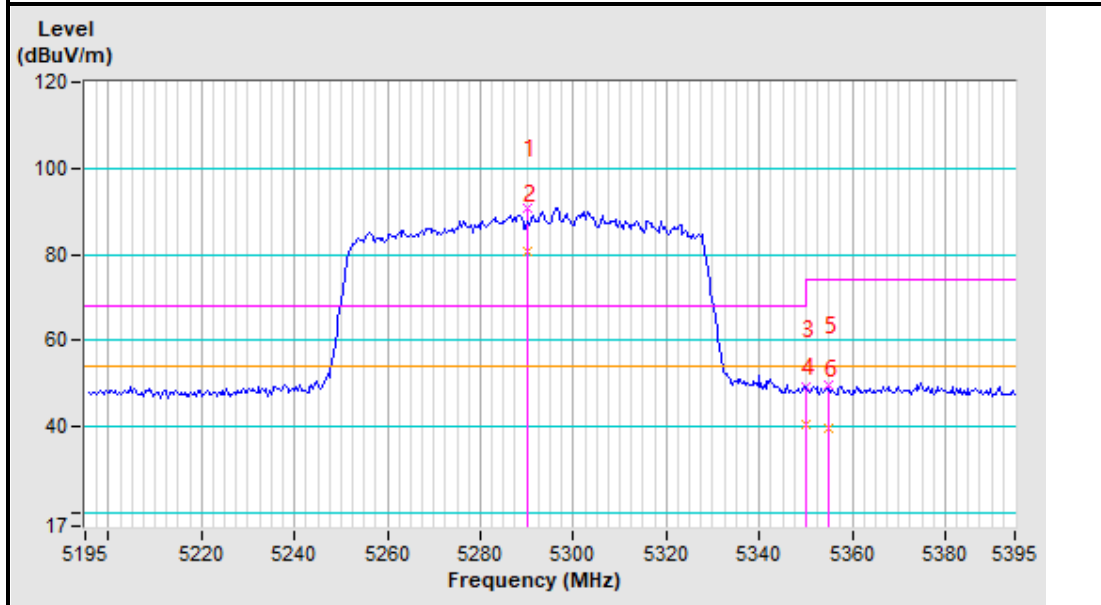


Band edge Plot

5290MHz Horizontal



5290MHz Vertical





Band 3 (5470-5725MHz):

ABOVE 1GHz DATA

802.11a

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

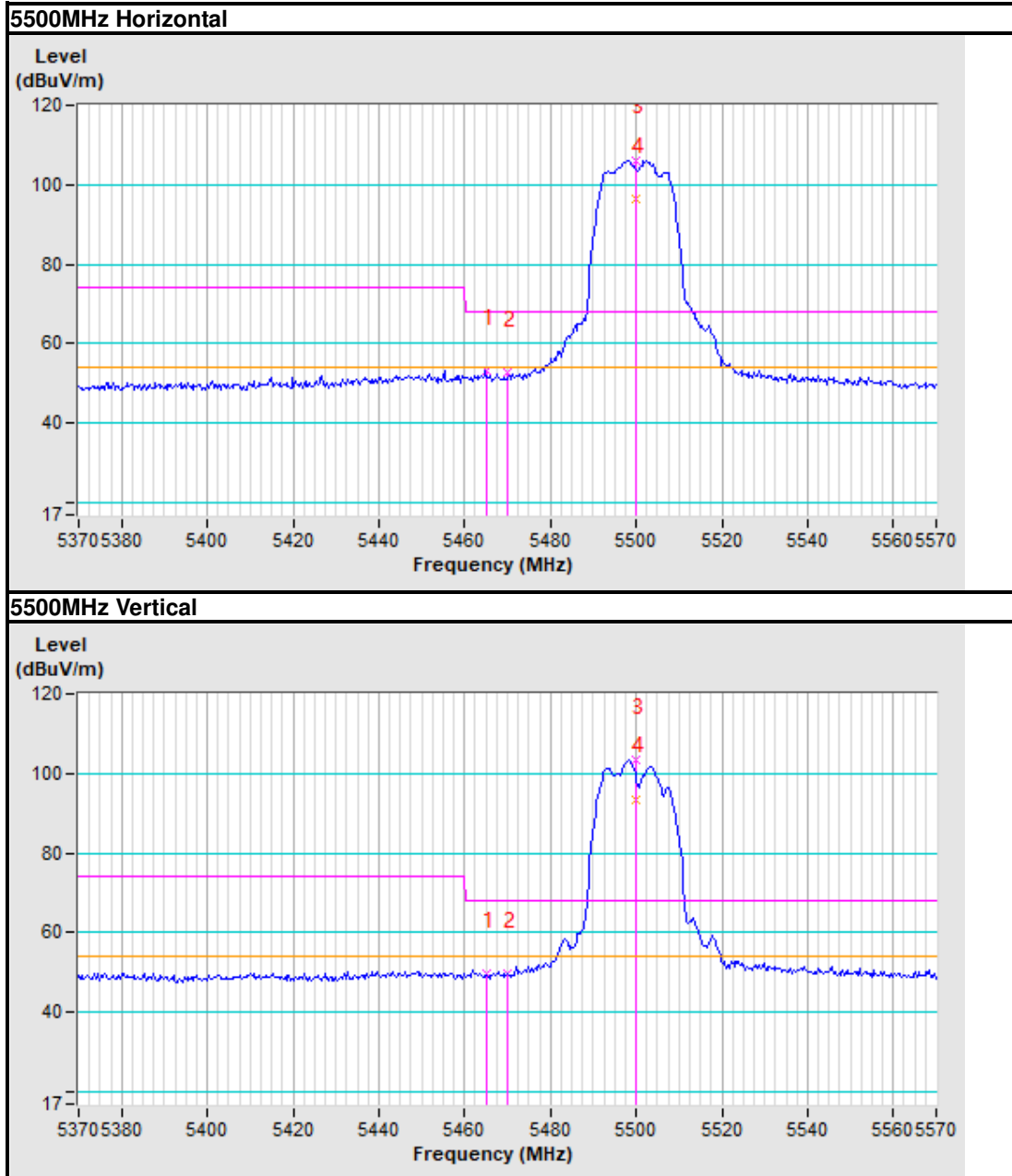
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5465.00	53.05 PK	68.20	-15.15	1.00 H	185	47.23	5.82
2	#5470.00	52.71 PK	68.20	-15.49	1.00 H	185	46.88	5.83
3	*5500.00	106.21 PK			1.00 H	185	100.37	5.84
4	*5500.00	96.38 AV			1.00 H	185	90.54	5.84
5	11000.00	52.63 PK	74.00	-21.37	1.14 H	133	37.43	15.20
6	11000.00	40.75 AV	54.00	-13.25	1.14 H	133	25.55	15.20
7	#16500.00	55.28 PK	68.20	-12.92	1.00 H	180	34.98	20.30
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5465.00	49.59 PK	68.20	-18.61	1.00 V	125	43.77	5.82
2	#5470.00	49.64 PK	68.20	-18.56	1.00 V	125	43.81	5.83
3	*5500.00	103.29 PK			1.00 V	125	97.45	5.84
4	*5500.00	93.54 AV			1.00 V	125	87.70	5.84
5	11000.00	52.84 PK	74.00	-21.16	1.45 V	126	37.64	15.20
6	11000.00	40.52 AV	54.00	-13.48	1.45 V	126	25.32	15.20
7	#16500.00	55.30 PK	68.20	-12.90	1.00 V	180	35.00	20.30

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



Band edge Plot





CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	50.86 PK	68.20	-17.34	1.25 H	145	45.03	5.83
2	*5580.00	106.11 PK			1.25 H	145	99.94	6.17
3	*5580.00	96.42 AV			1.55 H	170	90.25	6.17
4	11160.00	52.52 PK	74.00	-21.48	1.55 H	170	37.07	15.45
5	11160.00	41.20 AV	54.00	-12.80	1.55 H	170	25.75	15.45
6	#16740.00	54.36 PK	68.20	-13.84	1.00 H	187	33.36	21.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	50.24 PK	68.20	-17.96	1.00 V	145	44.41	5.83
2	*5580.00	103.12 PK			1.00 V	145	96.95	6.17
3	*5580.00	93.35 AV			1.00 V	145	87.18	6.17
4	11160.00	52.10 PK	74.00	-21.90	1.26 V	186	36.65	15.45
5	11160.00	41.00 AV	54.00	-13.00	1.26 V	186	25.55	15.45
6	#16740.00	54.32 PK	68.20	-13.88	1.00 V	120	33.32	21.00

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



**BUREAU
VERITAS**

Test Report No.: RF2203WDG0011-4

CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	106.28 PK			1.44 H	125	99.61	6.67
2	*5700.00	96.54 AV			1.44 H	125	89.87	6.67
3	#5725.00	52.83 PK	68.20	-15.37	1.27 H	139	46.06	6.77
4	#5730.00	51.43 PK	68.20	-16.77	1.00 H	125	44.64	6.79
5	11400.00	51.85 PK	74.00	-22.15	1.00 H	156	36.02	15.83
6	11400.00	41.09 AV	54.00	-12.91	1.00 H	156	25.26	15.83
7	#17100.00	54.32 PK	68.20	-13.88	1.00 H	159	32.48	21.84
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	103.14 PK			1.00 V	148	96.47	6.67
2	*5700.00	93.88 AV			1.00 V	148	87.21	6.67
3	#5725.00	50.35 PK	68.20	-17.85	1.00 V	148	43.58	6.77
4	#5730.00	50.39 PK	68.20	-17.81	1.00 V	148	43.60	6.79
5	11400.00	51.72 PK	74.00	-22.28	1.00 V	156	35.89	15.83
6	11400.00	41.36 AV	54.00	-12.64	1.00 V	156	25.53	15.83
7	#17100.00	54.88 PK	68.20	-13.32	1.00 V	159	33.04	21.84

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

Bureau Veritas Shenzhen Co., Ltd.
Dongguan Branch

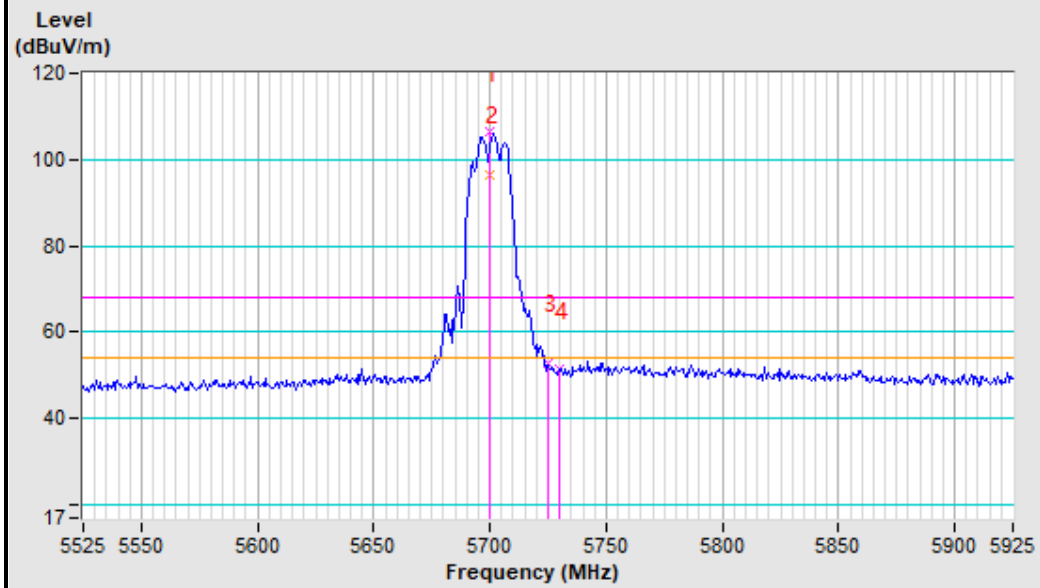
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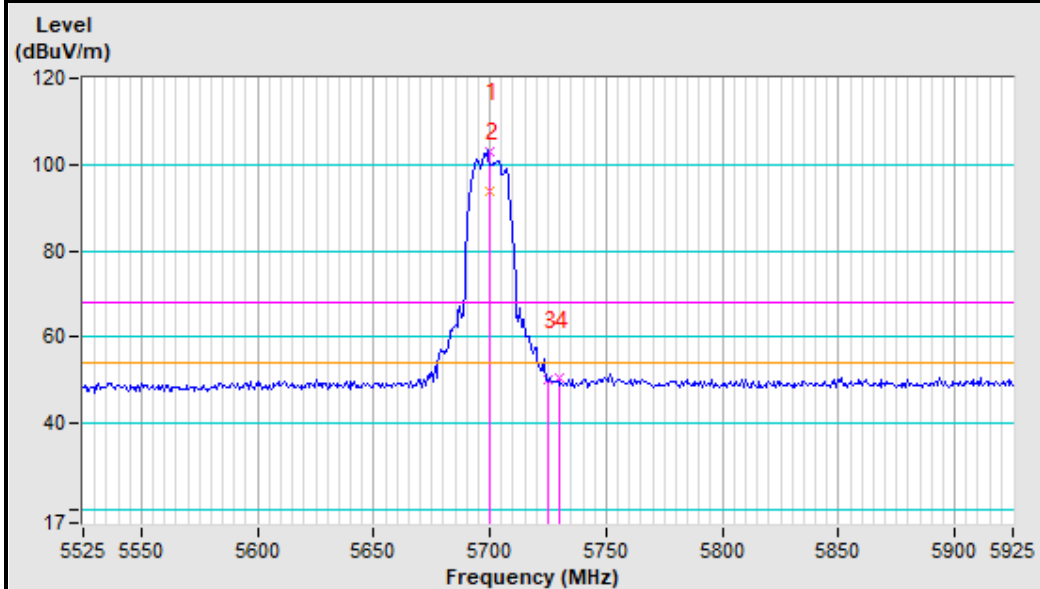


Band edge Plot

5700MHz Horizontal



5700MHz Vertical





802.11n (20MHz)

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

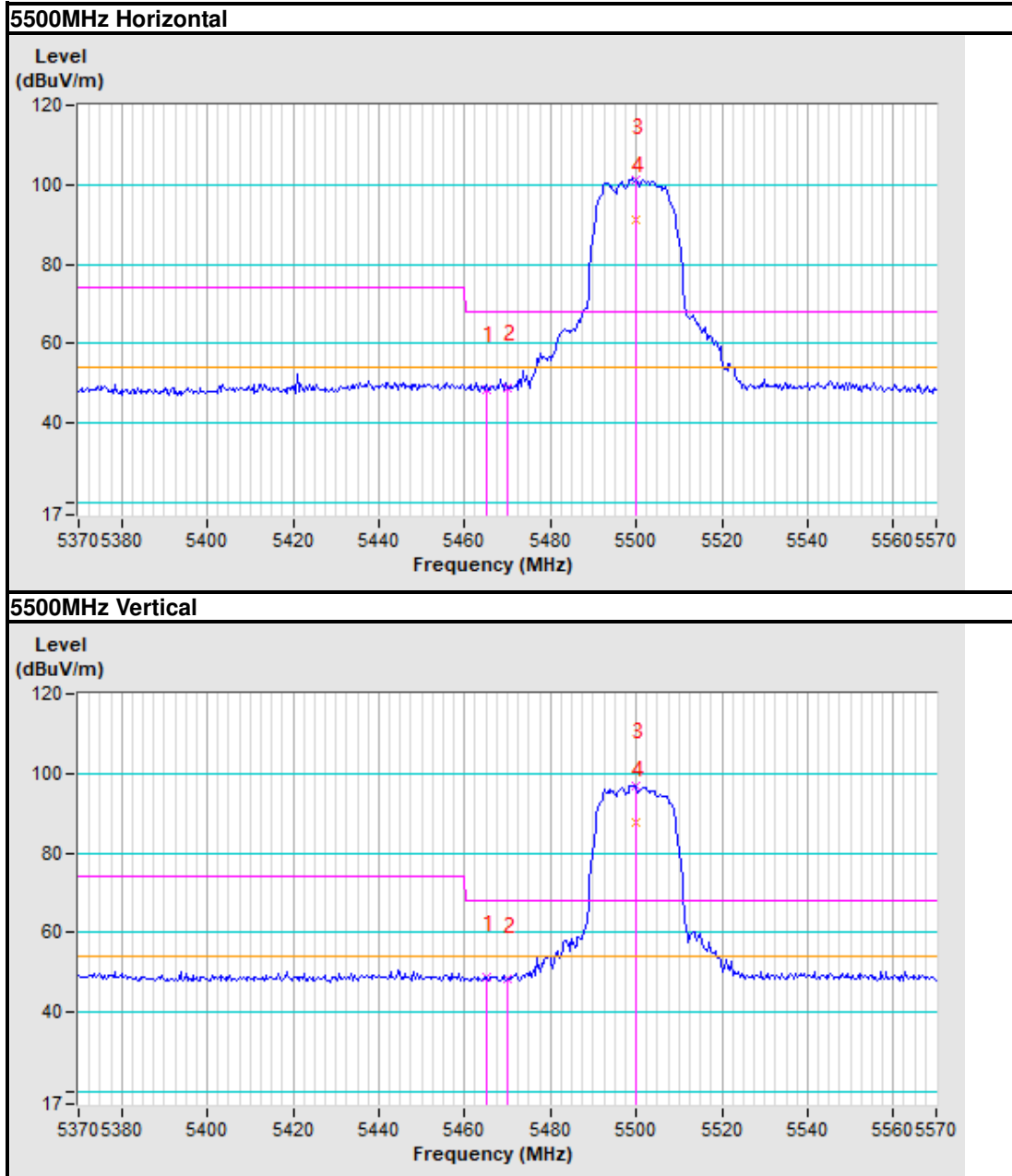
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5465.00	48.53 PK	68.20	-19.67	1.00 H	125	42.71	5.82
2	#5470.00	49.02 PK	68.20	-19.18	1.00 H	125	43.19	5.83
3	*5500.00	101.25 PK			1.00 H	145	95.41	5.84
4	*5500.00	91.36 AV			1.00 H	145	85.52	5.84
5	11000.00	52.00 PK	74.00	-22.00	1.36 H	158	36.80	15.20
6	11000.00	41.58 AV	54.00	-12.42	1.36 H	158	26.38	15.20
7	#16500.00	54.32 PK	68.20	-13.88	1.20 H	156	34.02	20.30
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5465.00	48.75 PK	68.20	-19.45	1.00 V	125	42.93	5.82
2	#5470.00	48.25 PK	68.20	-19.95	1.00 V	125	42.42	5.83
3	*5500.00	97.00 PK			1.00 V	125	91.16	5.84
4	*5500.00	87.59 AV			1.00 V	125	81.75	5.84
5	11000.00	51.47 PK	74.00	-22.53	1.17 V	120	36.27	15.20
6	11000.00	41.73 AV	54.00	-12.27	1.17 V	120	26.53	15.20
7	#16500.00	54.08 PK	68.20	-14.12	1.20 V	133	33.78	20.30

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



Band edge Plot





CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	53.16 PK	68.20	-15.04	1.00 H	190	47.33	5.83
2	*5580.00	103.00 PK			1.00 H	190	96.83	6.17
3	*5580.00	93.52 AV			1.00 H	190	87.35	6.17
4	11160.00	54.33 PK	74.00	-19.67	1.00 H	125	38.88	15.45
5	11160.00	42.00 AV	54.00	-12.00	1.00 H	125	26.55	15.45
6	#16740.00	55.26 PK	68.20	-12.94	1.54 H	136	34.26	21.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	54.34 PK	68.20	-13.86	1.30 V	152	48.51	5.83
2	*5580.00	99.35 PK			1.30 V	152	93.18	6.17
3	*5580.00	89.48 AV			1.30 V	152	83.31	6.17
4	11160.00	52.14 PK	74.00	-21.86	1.00 V	196	36.69	15.45
5	11160.00	42.31 AV	54.00	-11.69	1.00 V	196	26.86	15.45
6	#16740.00	53.11 PK	68.20	-15.09	1.00 V	125	32.11	21.00

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



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Test Report No.: RF2203WDG0011-4

CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	102.73 PK			1.00 H	161	96.06	6.67
2	*5700.00	93.54 AV			1.00 H	161	86.87	6.67
3	#5725.00	50.50 PK	68.20	-17.70	1.45 H	138	43.73	6.77
4	#5730.00	50.23 PK	68.20	-17.97	1.47 H	165	43.44	6.79
5	11400.00	51.82 PK	74.00	-22.18	1.73 H	186	35.99	15.83
6	11400.00	41.37 AV	54.00	-12.63	1.55 H	48	25.54	15.83
7	#17100.00	54.56 PK	68.20	-13.64	1.55 H	48	32.72	21.84
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	97.21 PK			1.00 V	0	90.54	6.67
2	*5700.00	87.32 AV			1.00 V	0	80.65	6.67
3	#5725.00	48.88 PK	68.20	-19.32	1.00 V	0	42.11	6.77
4	#5730.00	49.27 PK	68.20	-18.93	1.00 V	0	42.48	6.79
5	11400.00	51.36 PK	74.00	-22.64	1.52 V	179	35.53	15.83
6	11400.00	41.02 AV	54.00	-12.98	1.52 V	179	25.19	15.83
7	#17100.00	54.80 PK	68.20	-13.40	1.28 V	33	32.96	21.84

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

Bureau Veritas Shenzhen Co., Ltd.
Dongguan Branch

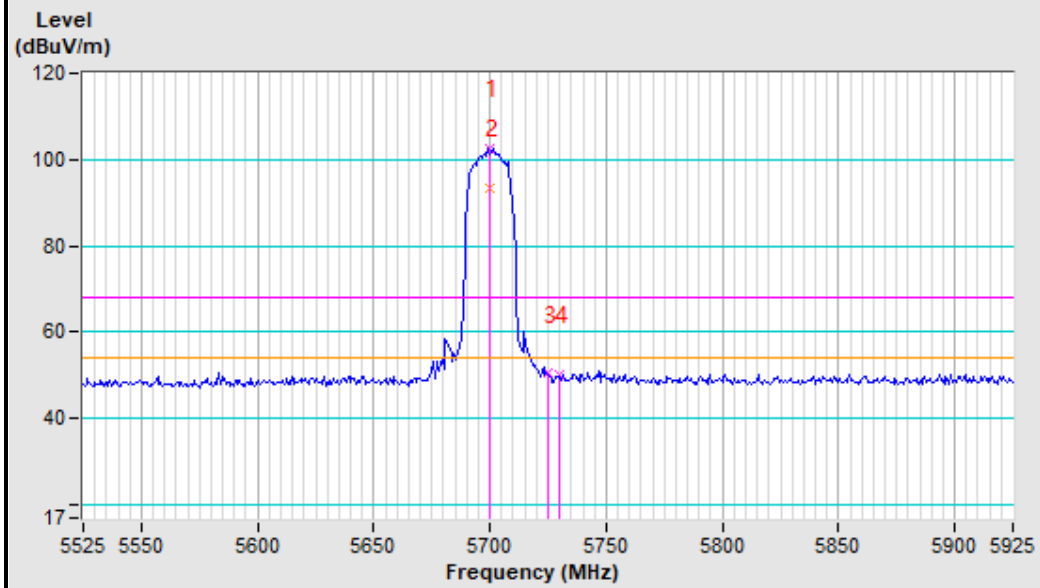
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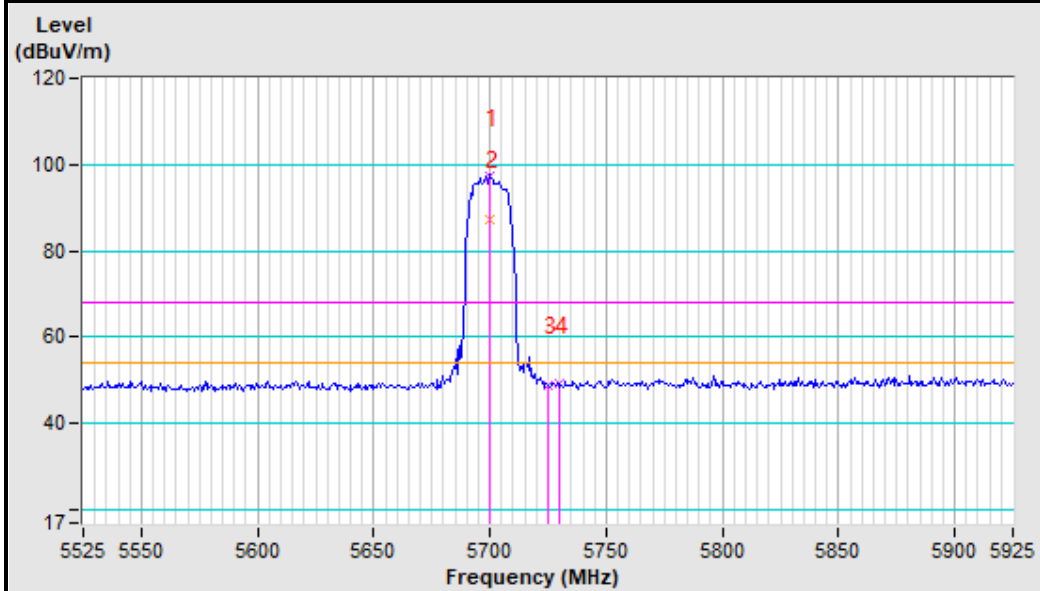


Band edge Plot

5700MHz Horizontal



5700MHz Vertical





802.11n (40MHz)

CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

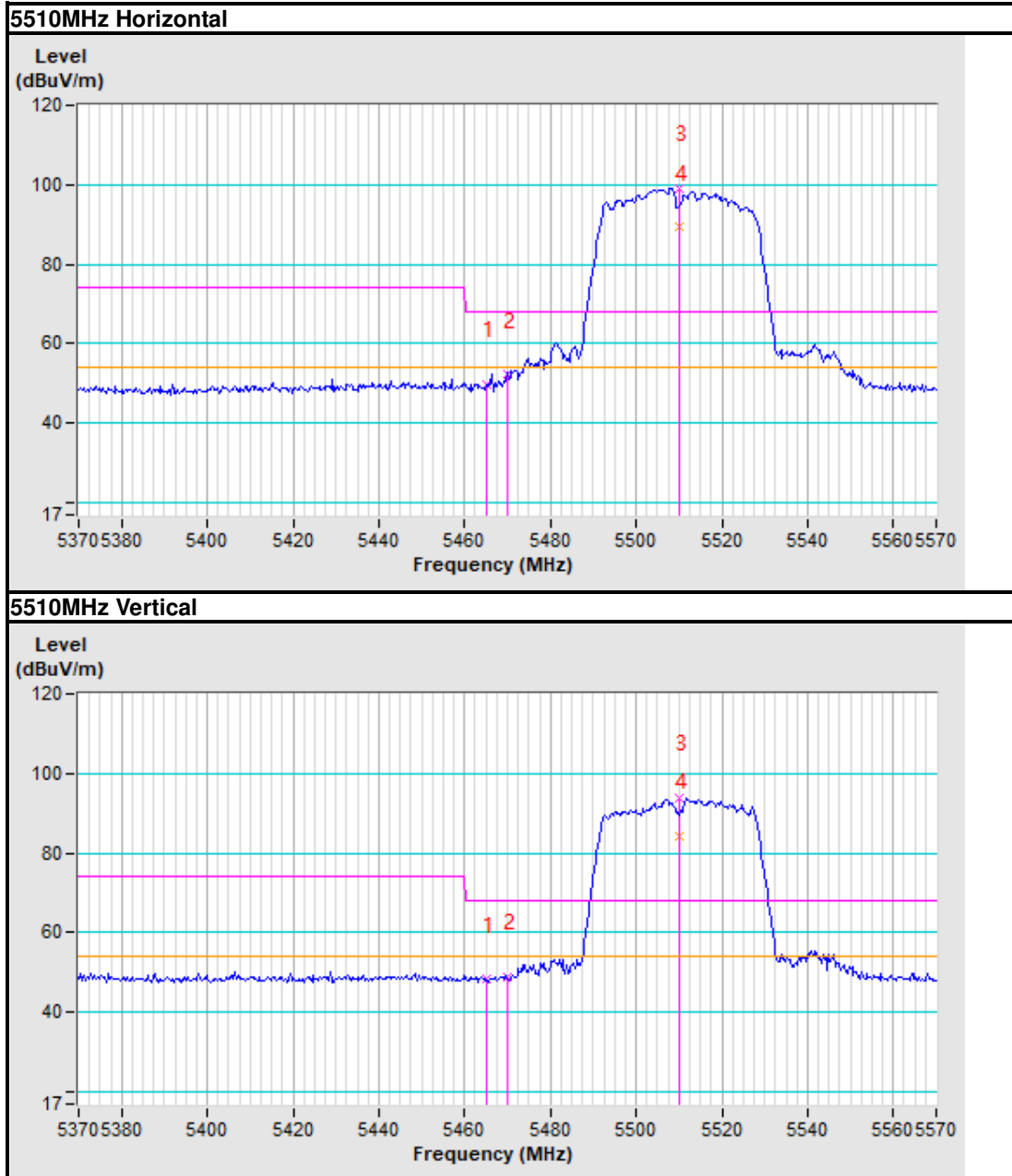
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5465.00	49.88 PK	68.20	-18.32	1.00 H	125	44.06	5.82
2	#5470.00	52.30 PK	68.20	-15.90	1.00 H	125	46.47	5.83
3	*5510.00	99.20 PK			1.00 H	125	93.32	5.88
4	*5510.00	89.36 AV			1.00 H	125	83.48	5.88
5	11020.00	52.84 PK	74.00	-21.16	1.45 H	277	37.61	15.23
6	11020.00	41.71 AV	54.00	-12.29	1.45 H	277	26.48	15.23
7	#16530.00	54.91 PK	68.20	-13.29	1.00 H	160	34.52	20.39
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5465.00	48.42 PK	68.20	-19.78	1.00 V	136	42.60	5.82
2	#5470.00	49.00 PK	68.20	-19.20	1.00 V	136	43.17	5.83
3	*5510.00	94.00 PK			1.00 V	136	88.12	5.88
4	*5510.00	84.25 AV			1.00 V	136	78.37	5.88
5	11020.00	52.72 PK	74.00	-21.28	1.80 V	136	37.49	15.23
6	11020.00	41.52 AV	54.00	-12.48	1.80 V	136	26.29	15.23
7	#16530.00	54.89 PK	68.20	-13.31	1.00 V	152	34.50	20.39

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



Band edge Plot





CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	52.39 PK	68.20	-15.81	1.00 H	155	46.56	5.83
2	*5550.00	100.56 PK			1.00 H	155	94.52	6.04
3	*5550.00	90.52 AV			1.00 H	155	84.48	6.04
4	11100.00	52.40 PK	74.00	-21.60	2.00 H	254	37.05	15.35
5	11100.00	41.55 AV	54.00	-12.45	2.00 H	254	26.20	15.35
6	#16650.00	54.37 PK	68.20	-13.83	1.20 H	159	33.63	20.74
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	52.30 PK	68.20	-15.90	1.00 V	120	46.47	5.83
2	*5550.00	95.34 PK			1.00 V	120	89.30	6.04
3	*5550.00	85.21 AV			1.00 V	120	79.17	6.04
4	11100.00	52.15 PK	74.00	-21.85	2.00 V	230	36.80	15.35
5	11100.00	41.79 AV	54.00	-12.21	2.00 V	230	26.44	15.35
6	#16650.00	54.18 PK	68.20	-14.02	1.20 V	230	33.44	20.74

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



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Test Report No.: RF2203WDG0011-4

CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	101.00 PK			1.00 H	125	94.46	6.54
2	*5670.00	91.00 AV			1.00 H	125	84.46	6.54
3	#5725.00	51.20 PK	68.20	-17.00	1.00 H	125	44.43	6.77
4	#5730.00	50.88 PK	68.20	-17.32	1.00 H	125	44.09	6.79
5	11340.00	52.83 PK	74.00	-21.17	1.25 H	156	37.10	15.73
6	11340.00	41.72 AV	54.00	-12.28	1.25 H	156	25.99	15.73
7	#17010.00	55.32 PK	68.20	-12.88	1.00 H	150	33.55	21.77
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	94.00 PK			1.00 V	125	87.46	6.54
2	*5670.00	84.36 AV			1.00 V	125	77.82	6.54
3	#5725.00	50.14 PK	68.20	-18.06	1.00 V	125	43.37	6.77
4	#5730.00	49.10 PK	68.20	-19.10	1.00 V	125	42.31	6.79
5	11340.00	52.41 PK	74.00	-21.59	1.25 V	147	36.68	15.73
6	11340.00	41.95 AV	54.00	-12.05	1.25 V	147	26.22	15.73
7	#17010.00	55.08 PK	68.20	-13.12	1.00 V	145	33.31	21.77

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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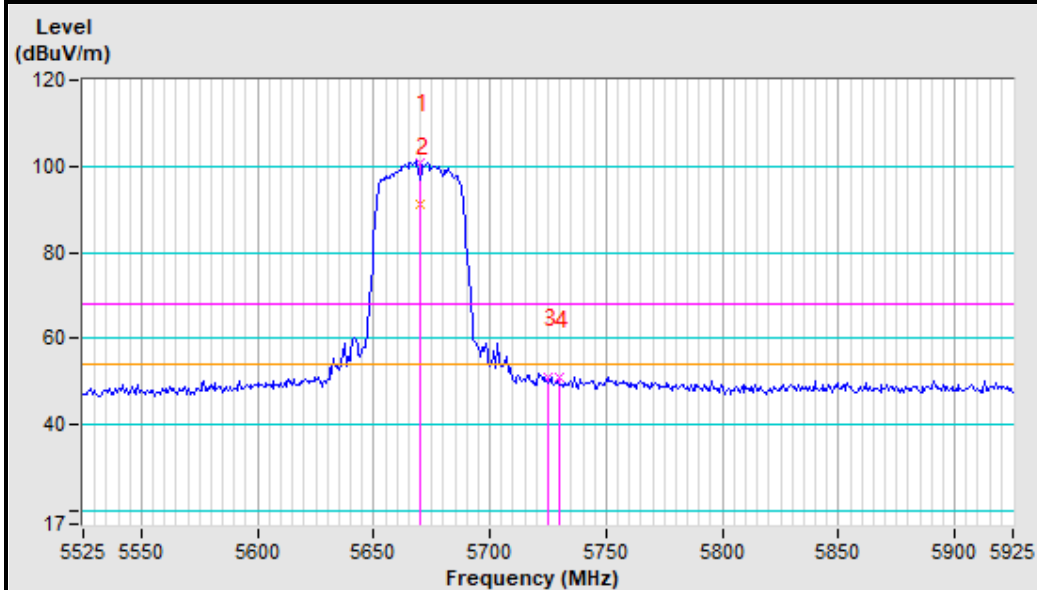


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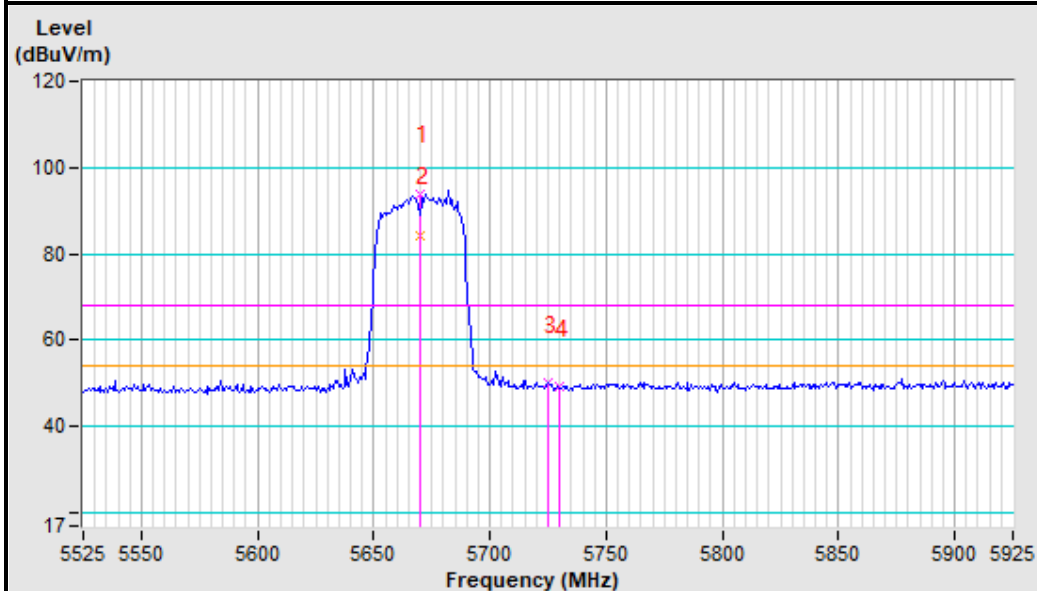
Test Report No.: RF2203WDG0011-4

Band edge Plot

5670MHz Horizontal



5670MHz Vertical





802.11ac 80MHz

CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5465.00	53.92 PK	68.20	-14.28	1.00 H	13	48.10	5.82
2	#5470.00	53.41 PK	68.20	-14.79	1.00 H	13	47.58	5.83
3	*5530.00	97.54 PK			1.00 H	13	91.58	5.96
4	*5530.00	87.32 AV			1.00 H	13	81.36	5.96
5	11060.00	52.10 PK	74.00	-21.90	1.25 H	139	36.81	15.29
6	11060.00	41.88 AV	54.00	-12.12	1.25 H	139	26.59	15.29
7	#16590.00	55.05 PK	68.20	-13.15	1.71 H	159	34.48	20.57
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5465.00	49.75 PK	68.20	-18.45	1.00 V	360	43.93	5.82
2	#5470.00	49.85 PK	68.20	-18.35	1.00 V	360	44.02	5.83
3	*5530.00	93.64 PK			1.00 V	360	87.68	5.96
4	*5530.00	82.65 AV			1.00 V	360	76.69	5.96
5	11060.00	52.83 PK	74.00	-21.17	1.76 V	180	37.54	15.29
6	11060.00	41.75 AV	54.00	-12.25	1.76 V	180	26.46	15.29
7	#16590.00	55.26 PK	68.20	-12.94	1.33 V	120	34.69	20.57

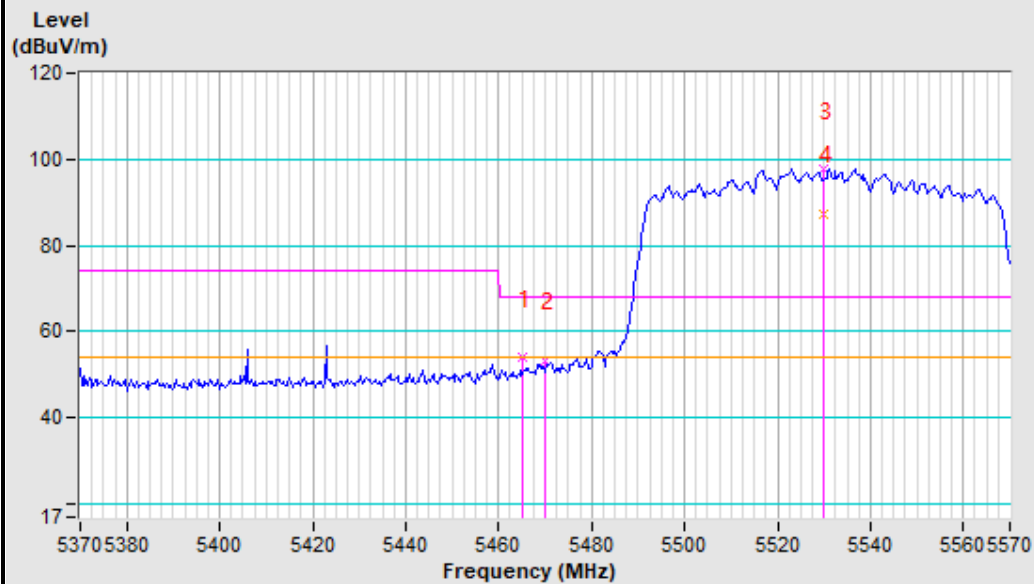
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

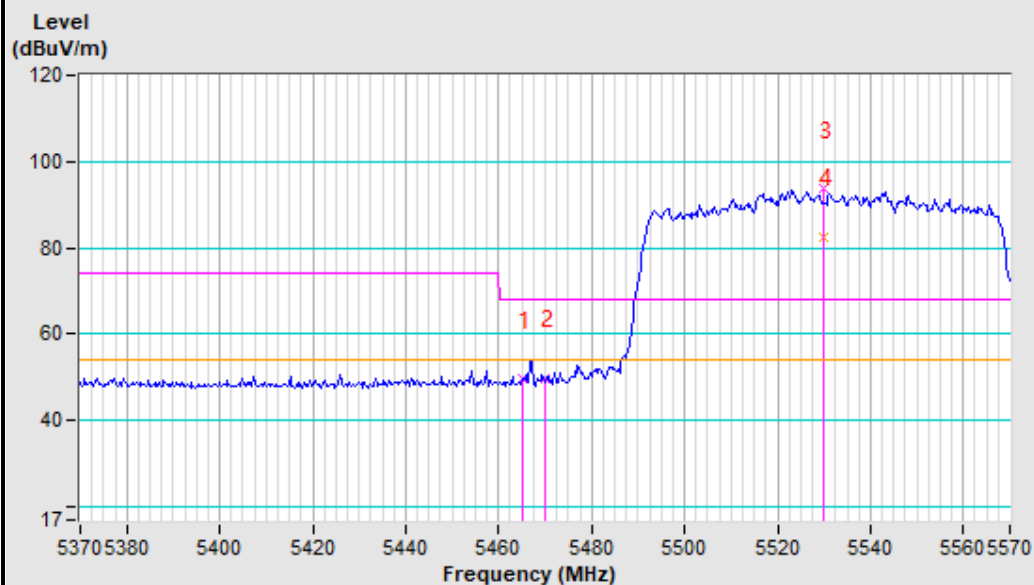


Band edge Plot

5530MHz Horizontal



5530MHz Vertical





Test Report No.: RF2203WDG0011-4

Band 4 (5725-5850MHz):

ABOVE 1GHz DATA

802.11a

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5619.66	49.33 PK	68.20	-18.87	1.00 H	206	42.54	6.79
2	#5725.00	51.43 PK	122.20	-70.77	1.00 H	206	44.33	7.10
3	*5745.00	102.56 PK			1.00 H	206	95.40	7.16
4	*5745.00	92.43 AV			1.00 H	206	85.27	7.16
5	#5965.09	47.39 PK	68.20	-20.81	1.00 H	206	39.59	7.80
6	11490.00	52.46 PK	74.00	-21.54	1.52 H	216	37.14	15.32
7	11490.00	41.13 AV	54.00	-12.87	1.52 H	216	25.81	15.32
8	#17235.00	54.59 PK	68.20	-13.61	1.00 H	281	33.52	21.07
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	49.01 PK	122.20	-73.19	1.00 V	47	41.91	7.10
2	*5745.00	97.49 PK			1.00 V	47	90.33	7.16
3	*5745.00	87.86 AV			1.00 V	47	80.70	7.16
4	#5989.04	53.41 PK	68.20	-14.79	1.00 V	47	45.54	7.87
5	#5996.64	52.88 PK	68.20	-15.32	1.00 V	47	44.99	7.89
6	11490.00	51.08 PK	74.00	-22.92	2.00 V	311	35.76	15.32
7	11490.00	40.34 AV	54.00	-13.66	2.00 V	311	25.02	15.32
8	#17235.00	53.15 PK	68.20	-15.05	1.00 V	250	32.08	21.07

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

Bureau Veritas Shenzhen Co., Ltd.
Dongguan Branch

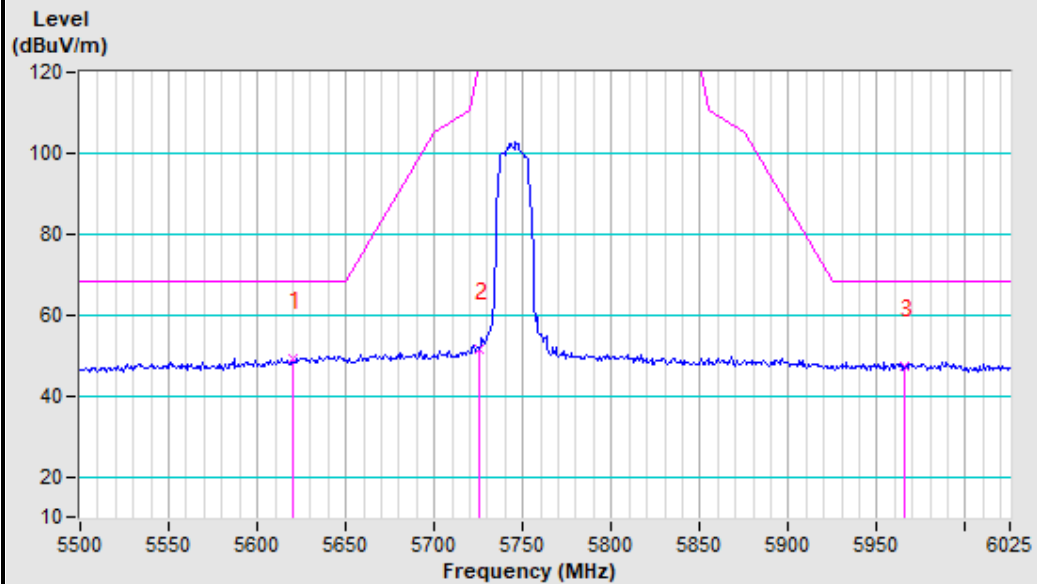
No. 96, Guantai Road (Houjie Section), Houjie
Town, Dongguan City, Guangdong Province.
523942. People's Republic of China.

Tel: +86 769 8998 2098
Fax: +86 769 8593 1080
Email: customerservice.dg@bureauveritas.com

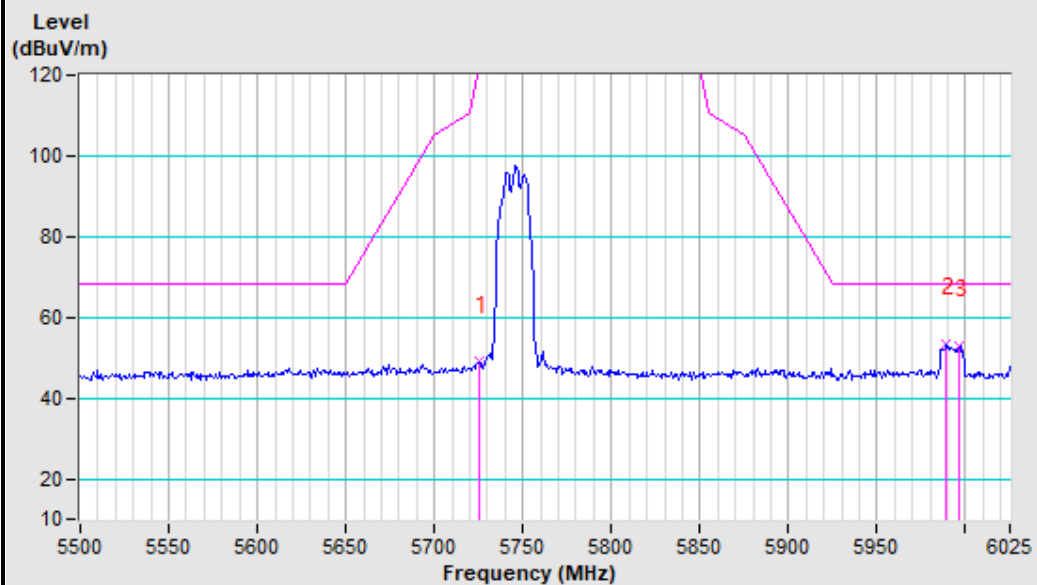


Band edge Plot

5745MHz Horizontal



5745MHz Vertical





CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5624.98	48.87 PK	68.20	-19.33	1.53 H	304	42.07	6.80
2	#5633.34	49.26 PK	68.20	-18.94	1.53 H	304	42.43	6.83
3	*5785.00	103.21 PK			1.53 H	304	95.94	7.27
4	*5785.00	93.44 AV			1.53 H	304	86.17	7.27
5	#5966.88	48.09 PK	68.20	-20.11	1.53 H	304	40.29	7.80
6	11570.00	53.29 PK	74.00	-20.71	1.36 H	211	37.77	15.52
7	11570.00	42.09 AV	54.00	-11.91	1.36 H	211	26.57	15.52
8	#17355.00	55.46 PK	68.20	-12.74	1.00 H	74	34.37	21.09
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5631.82	47.68 PK	68.20	-20.52	1.00 V	0	40.86	6.82
2	*5785.00	97.96 PK			1.00 V	16	90.69	7.27
3	*5785.00	87.63 AV			1.00 V	16	80.36	7.27
4	#5986.63	54.03 PK	68.20	-14.17	1.00 V	0	46.17	7.86
5	#5992.71	53.29 PK	68.20	-14.91	1.00 V	0	45.42	7.87
6	11570.00	52.05 PK	74.00	-21.95	1.29 V	305	36.53	15.52
7	11570.00	41.24 AV	54.00	-12.76	1.29 V	305	25.72	15.52
8	#17355.00	54.13 PK	68.20	-14.07	1.00 V	40	33.04	21.09

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

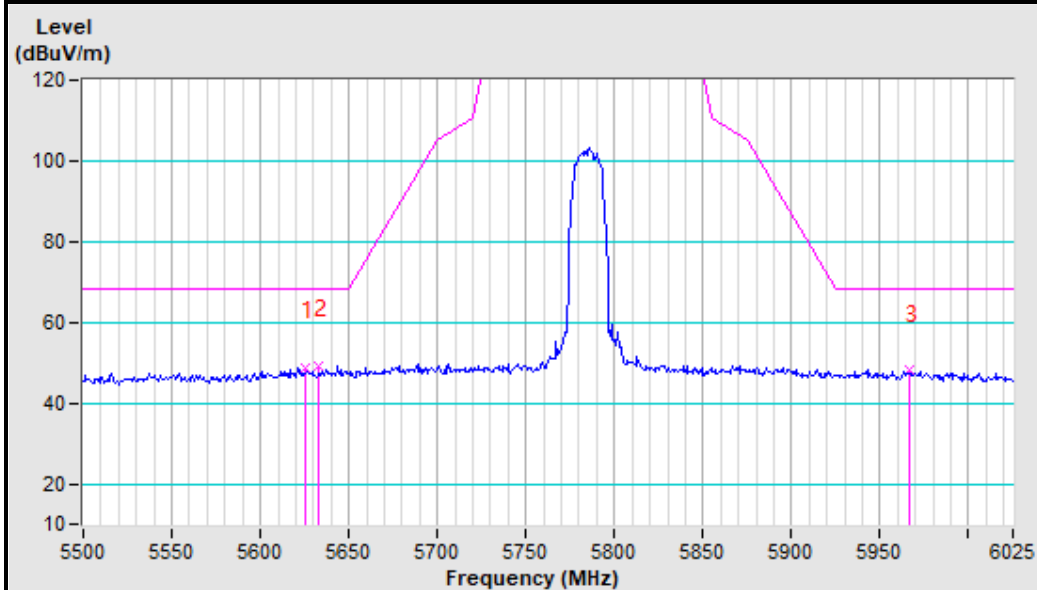


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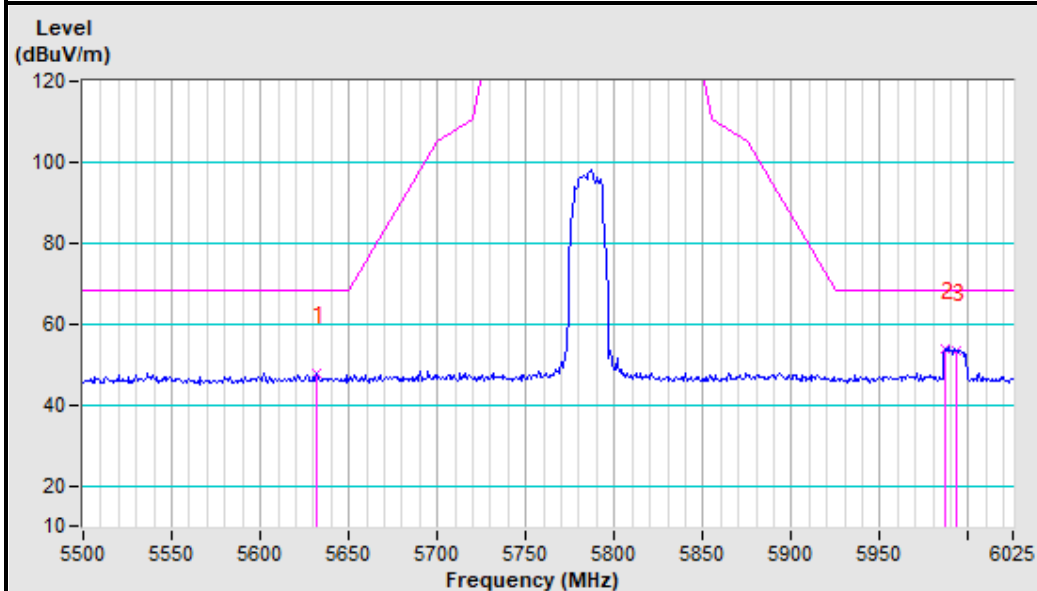
Test Report No.: RF2203WDG0011-4

Band edge Plot

5785MHz Horizontal



5785MHz Vertical





CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5640.30	48.75 PK	68.20	-19.45	1.34 H	25	41.90	6.85
2	*5825.00	103.15 PK			1.34 H	25	95.76	7.39
3	*5825.00	93.34 AV			1.34 H	25	85.95	7.39
4	#5850.00	49.18 PK	122.20	-73.02	1.34 H	25	41.72	7.46
5	#5961.69	48.98 PK	68.20	-19.22	1.34 H	25	41.19	7.79
6	11650.00	52.48 PK	74.00	-21.52	2.00 H	194	36.75	15.73
7	11650.00	42.33 AV	54.00	-11.67	2.00 H	194	26.60	15.73
8	#17475.00	55.69 PK	68.20	-12.51	1.00 H	218	34.58	21.11
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	98.59 PK			1.05 V	69	91.20	7.39
2	*5825.00	88.63 AV			1.05 V	69	81.24	7.39
3	#5850.00	46.90 PK	122.20	-75.30	1.05 V	69	39.44	7.46
4	#5988.91	53.30 PK	68.20	-14.90	1.05 V	69	45.43	7.87
5	#5992.71	53.18 PK	68.20	-15.02	1.05 V	69	45.31	7.87
6	11650.00	51.79 PK	74.00	-22.21	1.00 V	204	36.06	15.73
7	11650.00	41.37 AV	54.00	-12.63	1.00 V	204	25.64	15.73
8	#17475.00	54.46 PK	68.20	-13.74	1.50 V	186	33.35	21.11

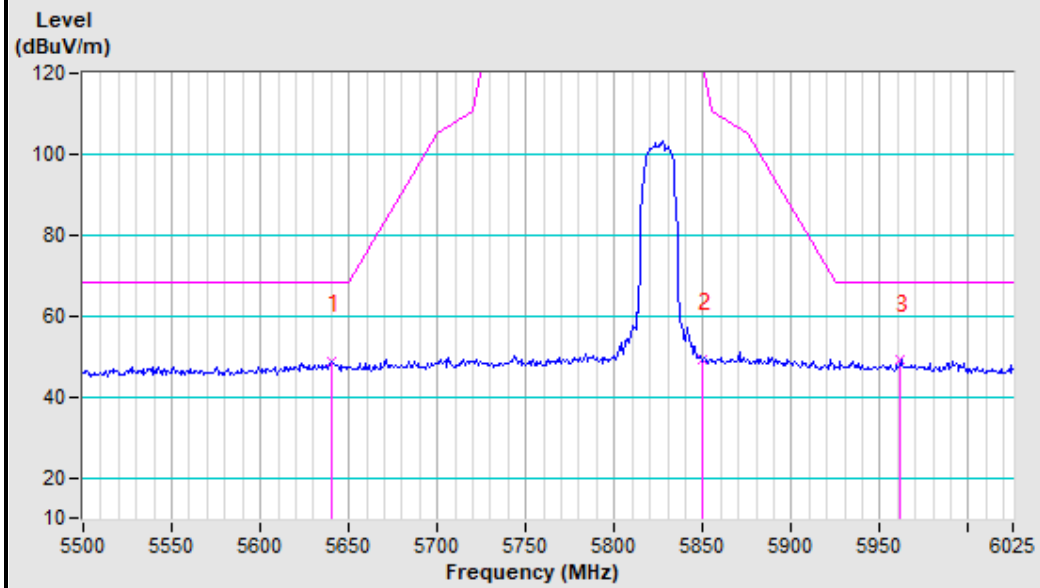
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

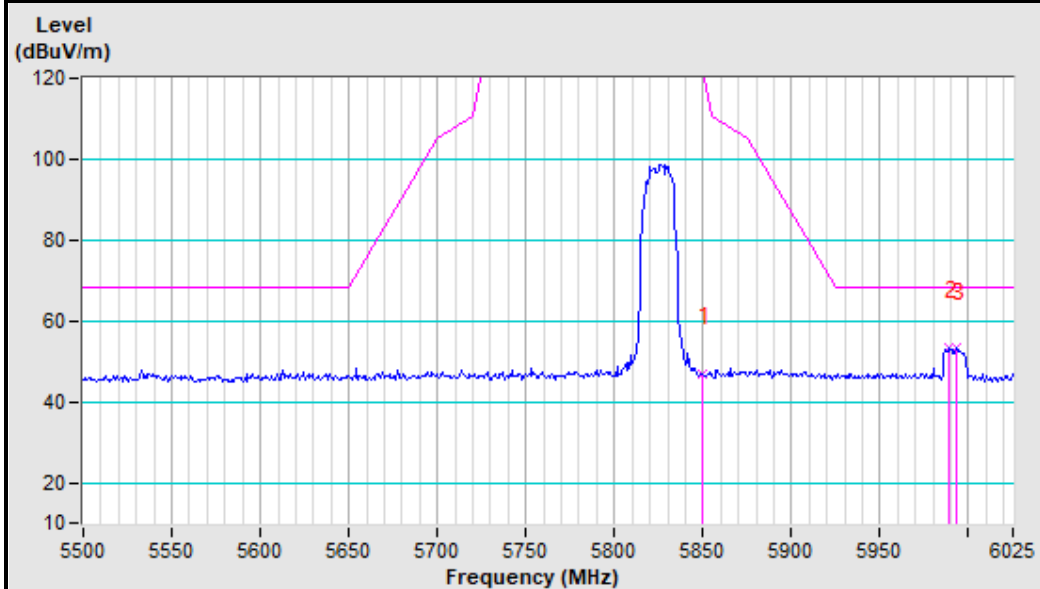


Band edge Plot

5825MHz Horizontal



5825MHz Vertical





802.11n (20MHz)

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

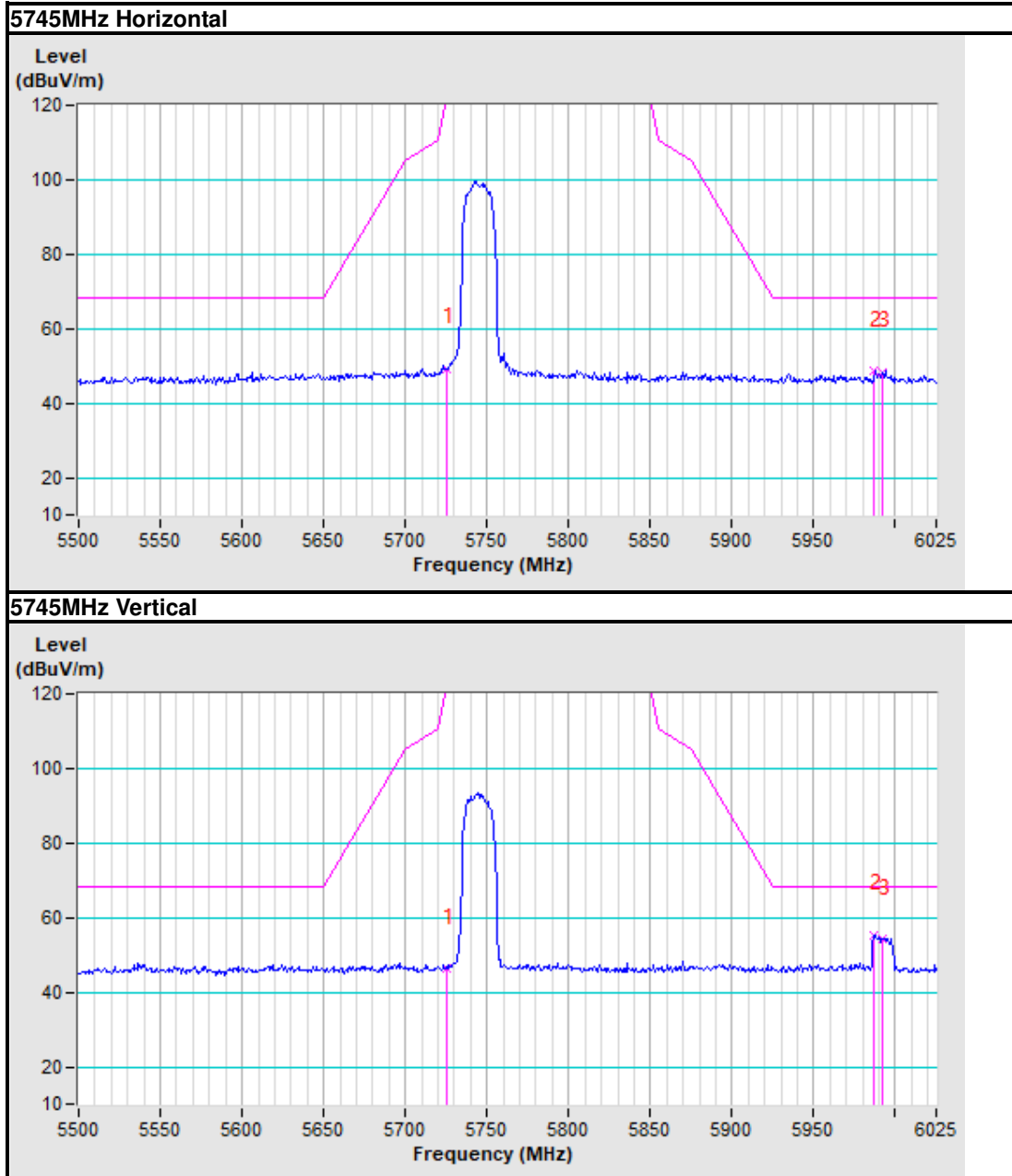
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	49.34 PK	122.20	-72.86	1.25 H	331	42.24	7.10
2	*5745.00	99.72 PK			1.25 H	331	92.56	7.16
3	*5745.00	89.26 AV			1.25 H	331	82.10	7.16
4	#5987.12	48.51 PK	68.20	-19.69	1.25 H	331	40.65	7.86
5	#5991.68	48.21 PK	68.20	-19.99	1.25 H	331	40.34	7.87
6	11490.00	52.74 PK	74.00	-21.26	1.05 H	343	37.42	15.32
7	11490.00	42.19 AV	54.00	-11.81	1.05 H	343	26.87	15.32
8	#17235.00	55.37 PK	68.20	-12.83	1.00 H	206	34.30	21.07
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	46.25 PK	122.20	-75.95	1.00 V	98	39.15	7.10
2	*5745.00	93.55 PK			1.00 V	98	86.39	7.16
3	*5745.00	83.71 AV			1.00 V	98	76.55	7.16
4	#5986.36	55.35 PK	68.20	-12.85	1.00 V	98	47.49	7.86
5	#5992.44	54.11 PK	68.20	-14.09	1.00 V	98	46.24	7.87
6	11490.00	51.09 PK	74.00	-22.91	1.56 V	49	35.77	15.32
7	11490.00	41.25 AV	54.00	-12.75	1.56 V	49	25.93	15.32
8	#17235.00	54.39 PK	68.20	-13.81	1.00 V	26	33.32	21.07

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



Band edge Plot





CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5624.98	48.26 PK	68.20	-19.94	1.04 H	28	41.46	6.80
2	#5644.74	48.48 PK	68.20	-19.72	1.04 H	28	41.62	6.86
3	*5785.00	99.75 PK			1.04 H	28	92.48	7.27
4	*5785.00	89.38 AV			1.04 H	28	82.11	7.27
5	#5988.91	48.04 PK	68.20	-20.16	1.04 H	28	40.17	7.87
6	11570.00	52.66 PK	74.00	-21.34	1.13 H	96	37.14	15.52
7	11570.00	42.54 AV	54.00	-11.46	1.13 H	96	27.02	15.52
8	#17355.00	55.47 PK	68.20	-12.73	1.00 H	108	34.38	21.09
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5607.51	47.03 PK	68.20	-21.17	1.00 V	0	40.28	6.75
2	*5785.00	93.89 PK			1.00 V	3	86.62	7.27
3	*5785.00	83.64 AV			1.00 V	3	76.37	7.27
4	#5989.67	53.03 PK	68.20	-15.17	1.00 V	0	45.16	7.87
5	#5995.75	53.47 PK	68.20	-14.73	1.00 V	0	45.58	7.89
6	11570.00	51.93 PK	74.00	-22.07	1.02 V	309	36.41	15.52
7	11570.00	41.64 AV	54.00	-12.36	1.02 V	309	26.12	15.52
8	#17355.00	54.22 PK	68.20	-13.98	1.00 V	248	33.13	21.09

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

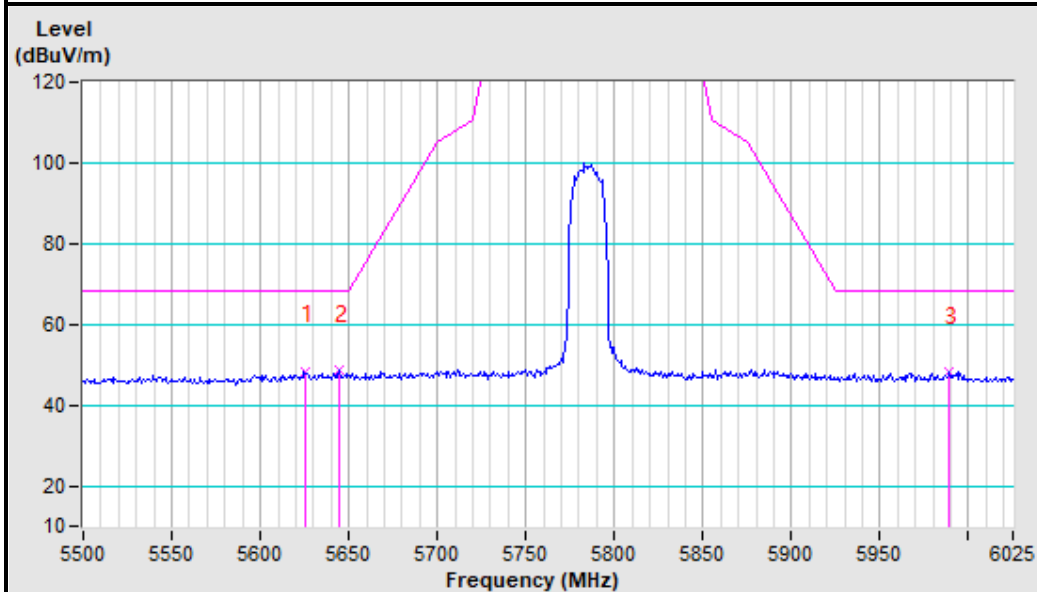


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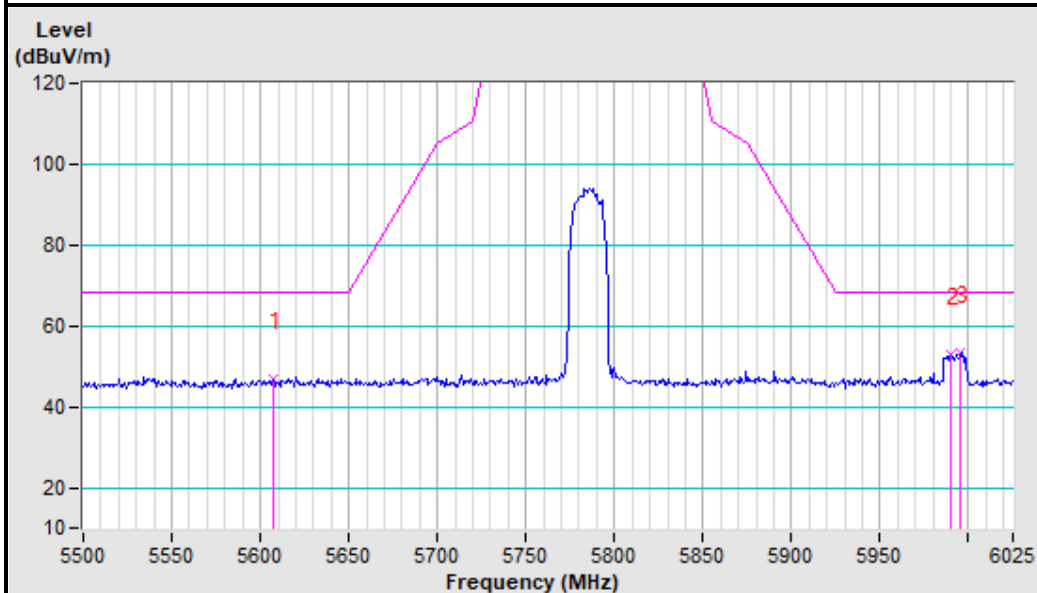
Test Report No.: RF2203WDG0011-4

Band edge Plot

5785MHz Horizontal



5785MHz Vertical





CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5612.19	47.59 PK	68.20	-20.61	1.53 H	95	40.83	6.76
2	*5825.00	99.78 PK			1.53 H	95	92.39	7.39
3	*5825.00	89.59 AV			1.53 H	95	82.20	7.39
4	#5850.00	46.97 PK	122.20	-75.23	1.53 H	95	39.51	7.46
5	#5988.28	48.57 PK	68.20	-19.63	1.53 H	95	40.70	7.87
6	11650.00	52.47 PK	74.00	-21.53	1.05 H	49	36.74	15.73
7	11650.00	42.84 AV	54.00	-11.16	1.05 H	49	27.11	15.73
8	#17475.00	55.63 PK	68.20	-12.57	1.00 H	136	34.52	21.11
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	96.03 PK			1.12 V	354	88.64	7.39
2	*5825.00	86.43 AV			1.12 V	354	79.04	7.39
3	#5850.00	45.71 PK	122.20	-76.49	1.12 V	354	38.25	7.46
4	#5989.04	55.12 PK	68.20	-13.08	1.12 V	354	47.25	7.87
5	#5995.12	53.48 PK	68.20	-14.72	1.12 V	354	45.59	7.89
6	11650.00	51.81 PK	74.00	-22.19	1.63 V	254	36.08	15.73
7	11650.00	41.09 AV	54.00	-12.91	1.63 V	254	25.36	15.73
8	#17475.00	54.35 PK	68.20	-13.85	1.00 V	91	33.24	21.11

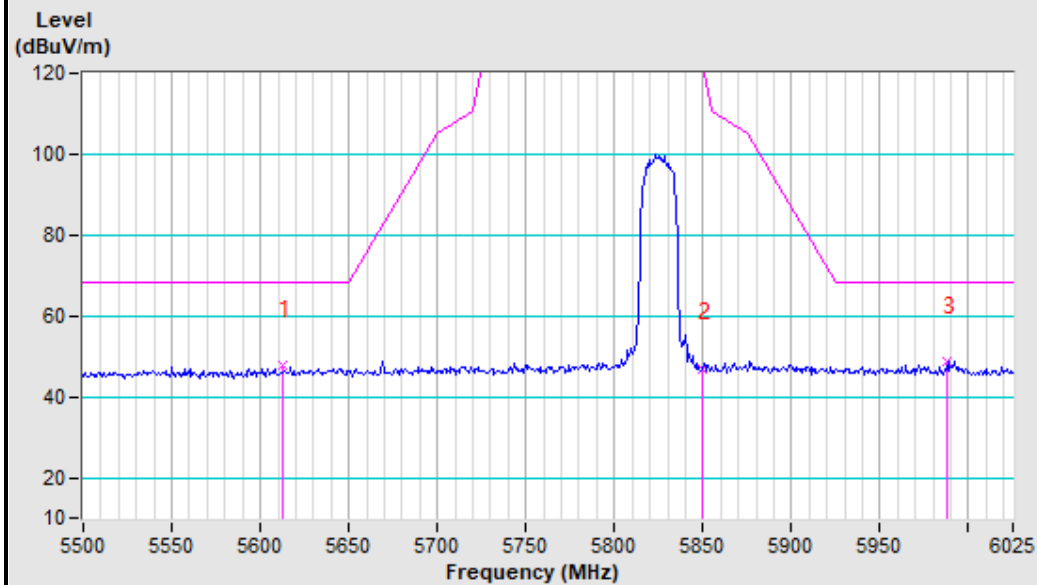
REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

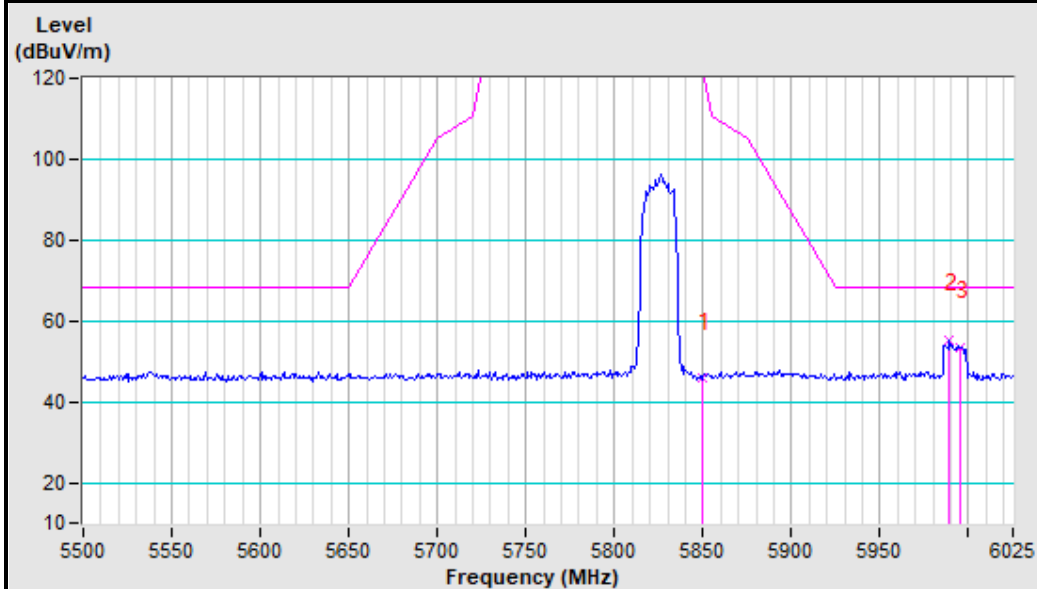


Band edge Plot

5825MHz Horizontal



5825MHz Vertical





802.11n (40MHz)

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

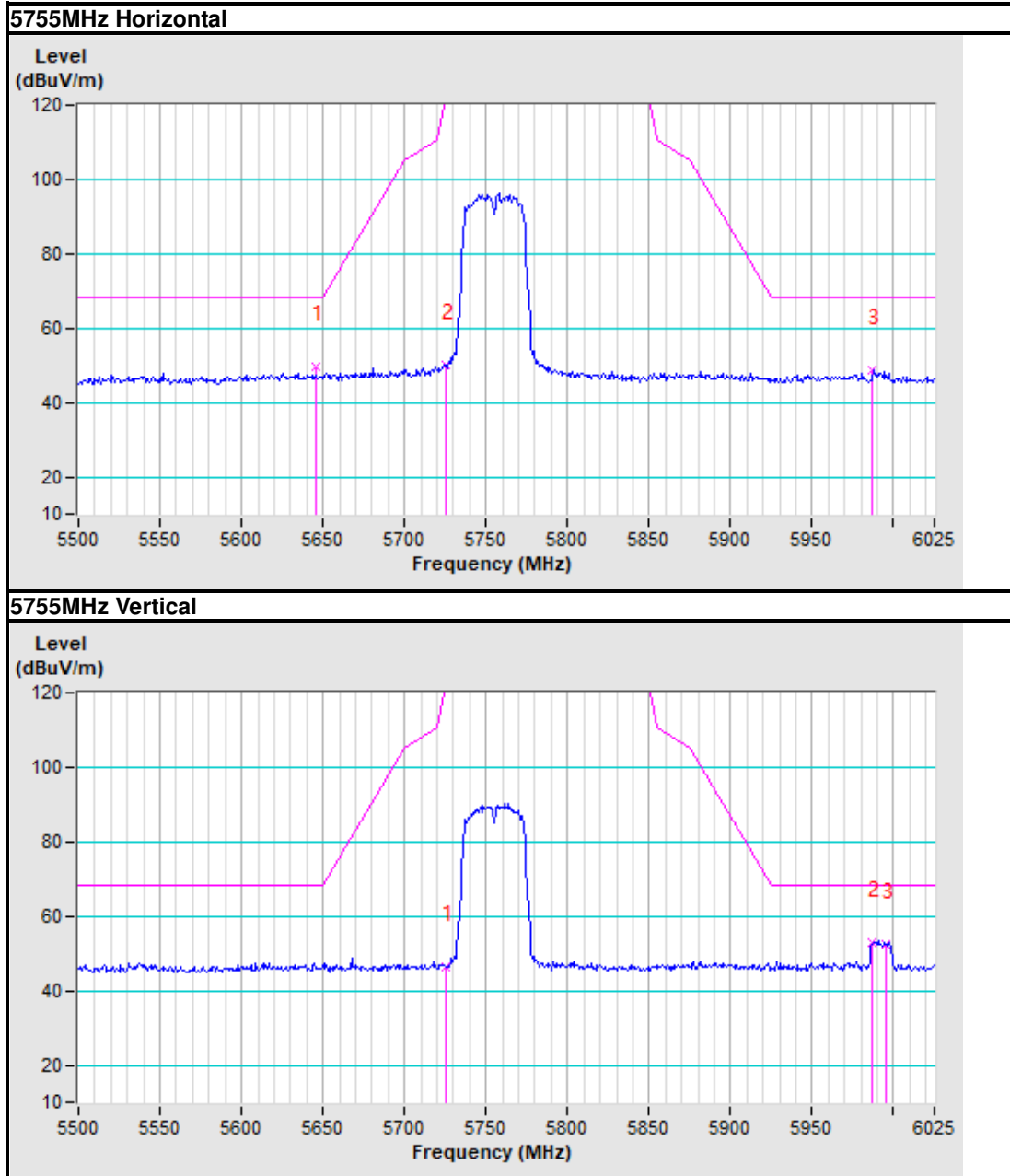
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5645.98	49.61 PK	68.20	-18.59	1.02 H	309	42.75	6.86
2	#5725.00	50.11 PK	122.20	-72.09	1.02 H	309	43.01	7.10
3	*5755.00	98.24 PK			1.02 H	309	91.06	7.18
4	*5755.00	88.16 AV			1.02 H	309	80.98	7.18
5	#5987.12	48.71 PK	68.20	-19.49	1.02 H	309	40.85	7.86
6	11510.00	53.05 PK	74.00	-20.95	1.02 H	277	37.68	15.37
7	11510.00	42.91 AV	54.00	-11.09	1.02 H	277	27.54	15.37
8	#17265.00	55.74 PK	68.20	-12.46	1.00 H	85	34.67	21.07
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	46.41 PK	122.20	-75.79	1.00 V	53	39.31	7.10
2	*5755.00	90.22 PK			1.00 V	53	83.04	7.18
3	*5755.00	80.54 AV			1.00 V	53	73.36	7.18
4	#5987.12	52.98 PK	68.20	-15.22	1.00 V	53	45.12	7.86
5	#5994.72	52.39 PK	68.20	-15.81	1.00 V	53	44.50	7.89
6	11510.00	52.11 PK	74.00	-21.89	1.36 V	204	36.74	15.37
7	11510.00	41.09 AV	54.00	-12.91	1.36 V	204	25.72	15.37
8	#17265.00	54.27 PK	68.20	-13.93	1.00 V	201	33.20	21.07

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



Band edge Plot





CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5609.03	47.29 PK	68.20	-20.91	1.04 H	27	40.53	6.76
2	*5795.00	98.86 PK			1.04 H	27	91.56	7.30
3	*5795.00	88.43 AV			1.04 H	27	81.13	7.30
4	#5850.00	46.79 PK	122.20	-75.41	1.04 H	27	39.33	7.46
5	#5970.04	46.90 PK	68.20	-21.30	1.04 H	27	39.09	7.81
6	11590.00	53.25 PK	74.00	-20.75	1.50 H	195	37.68	15.57
7	11590.00	42.76 AV	54.00	-11.24	1.50 H	195	27.19	15.57
8	#17385.00	55.91 PK	68.20	-12.29	1.00 H	252	34.81	21.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	90.90 PK			1.57 V	39	83.60	7.30
2	*5795.00	80.87 AV			1.57 V	39	73.57	7.30
3	#5850.00	45.82 PK	122.20	-76.38	1.57 V	39	38.36	7.46
4	#5986.76	53.94 PK	68.20	-14.26	1.57 V	39	46.08	7.86
5	#5990.56	54.37 PK	68.20	-13.83	1.57 V	39	46.50	7.87
6	11590.00	52.49 PK	74.00	-21.51	1.00 V	206	36.92	15.57
7	11590.00	41.22 AV	54.00	-12.78	1.00 V	206	25.65	15.57
8	#17385.00	54.38 PK	68.20	-13.82	1.00 V	86	33.28	21.10

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

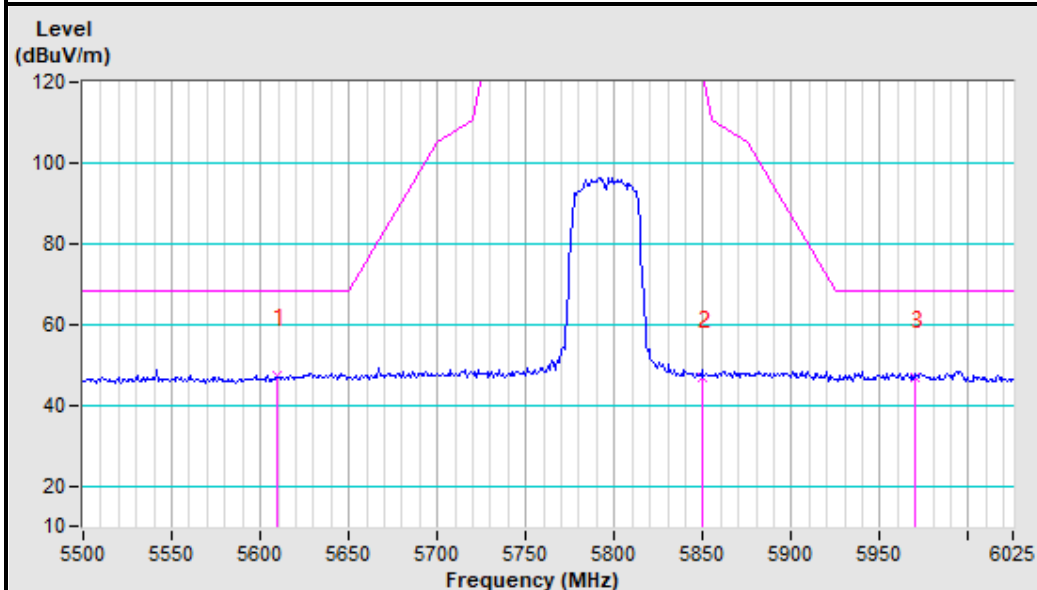


BUREAU
VERITAS

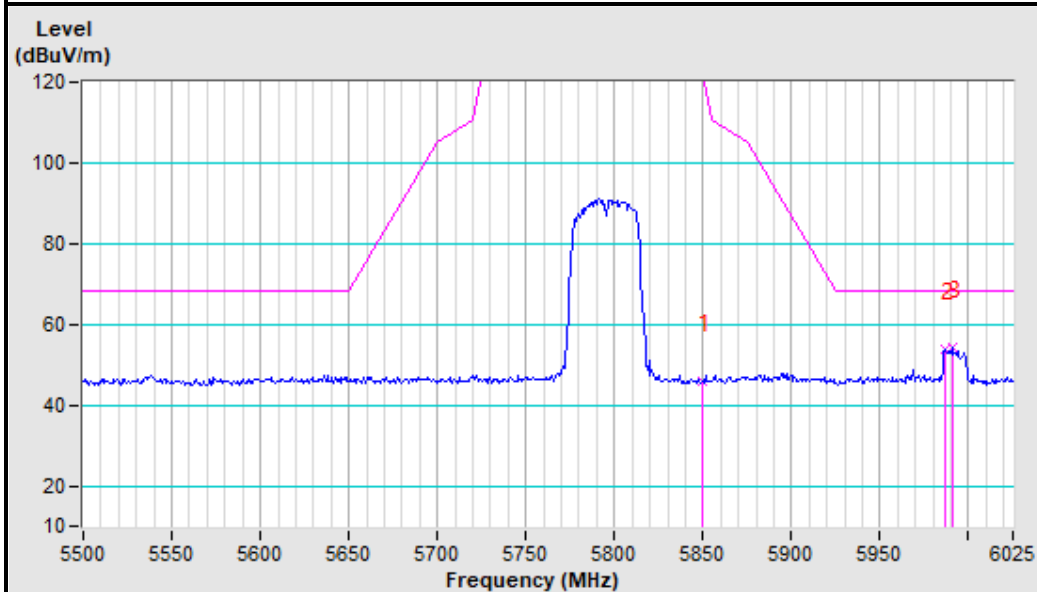
Test Report No.: RF2203WDG0011-4

Band edge Plot

5795MHz Horizontal



5795MHz Vertical





**BUREAU
VERITAS**

Test Report No.: RF2203WDG0011-4

802.11ac 80MHz

CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5606.11	47.56 PK	68.20	-20.64	1.00 H	205	40.81	6.75
2	#5725.00	52.85 PK	122.20	-69.35	1.00 H	205	45.75	7.10
3	*5775.00	97.24 PK			1.00 H	205	90.00	7.24
4	*5775.00	87.02 AV			1.00 H	205	79.78	7.24
5	#5850.00	47.79 PK	122.20	-74.41	1.00 H	205	40.33	7.46
6	11550.00	53.89 PK	74.00	-20.11	1.34 H	69	38.42	15.47
7	11550.00	42.91 AV	54.00	-11.09	1.34 H	69	27.44	15.47
8	#17325.00	55.44 PK	68.20	-12.76	1.00 H	52	34.36	21.08
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	47.10 PK	122.20	-75.10	2.00 V	56	40.00	7.10
2	*5775.00	90.52 PK			2.00 V	56	83.28	7.24
3	*5775.00	80.44 AV			2.00 V	56	73.20	7.24
4	#5850.00	46.34 PK	122.20	-75.86	2.00 V	56	38.88	7.46
5	#5987.52	54.93 PK	68.20	-13.27	2.00 V	56	47.07	7.86
6	11550.00	52.51 PK	74.00	-21.49	1.05 V	326	37.04	15.47
7	11550.00	41.70 AV	54.00	-12.30	1.05 V	326	26.23	15.47
8	#17325.00	54.09 PK	68.20	-14.11	1.00 V	87	33.01	21.08

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

Bureau Veritas Shenzhen Co., Ltd.
Dongguan Branch

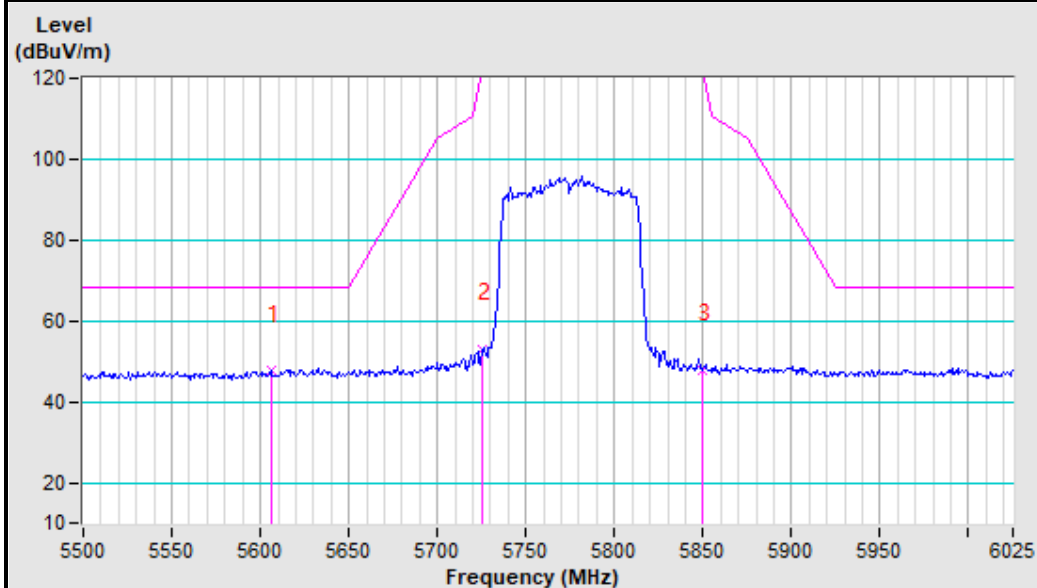
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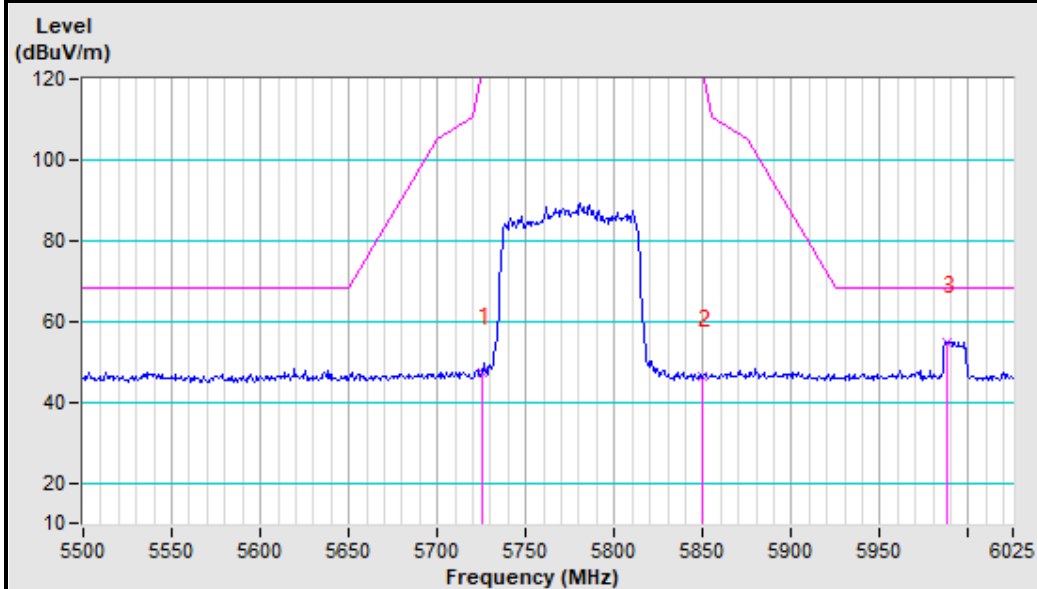


Band edge Plot

5775MHz Horizontal



5795MHz Vertical





3.2 CONDUCTED EMISSION MEASUREMENT

3.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB μ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

- NOTE:** 1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.
3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

3.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101494	Mar. 07,23
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Mar. 07,23
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Mar. 07,23
Voltage probe	SCHWARZBECK	TK 9421	TK 9421-176	Aug. 05,22
Coaxial RF Cable	/	CE CABLE	C2310066D G	Jul. 27,22
Test software	ADT	ADT_Cond_V7.3.7	N/A	N/A

NOTES:

1. The test was performed in shielded room 553. (Chenwu)
2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.



3.2.3 TEST PROCEDURES

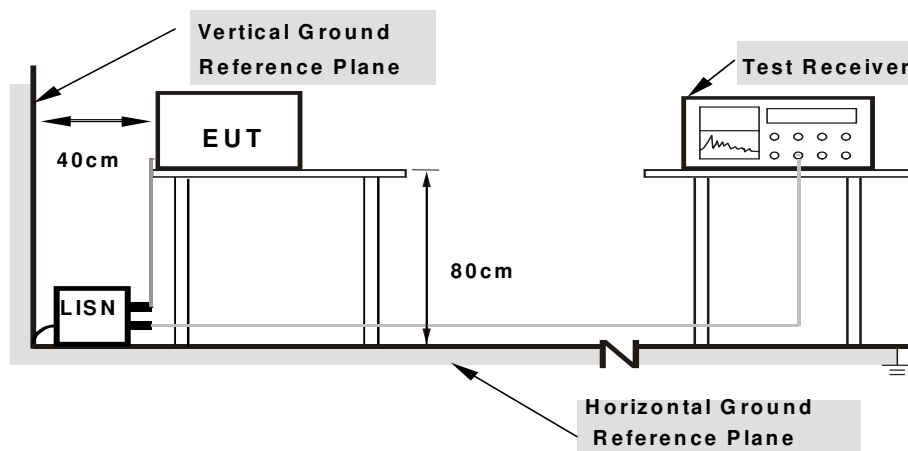
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) were not recorded.

NOTE: All modes of operation were investigated and the worst-case emissions are reported.

3.2.4 DEVIATION FROM TEST STANDARD

No deviation.

3.2.5 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80
from other units and other metal planes

For the actual test configuration, please refer to the attached file (Test Setup Photo).

3.2.6 EUT OPERATING CONDITIONS

Same as 3.1.6



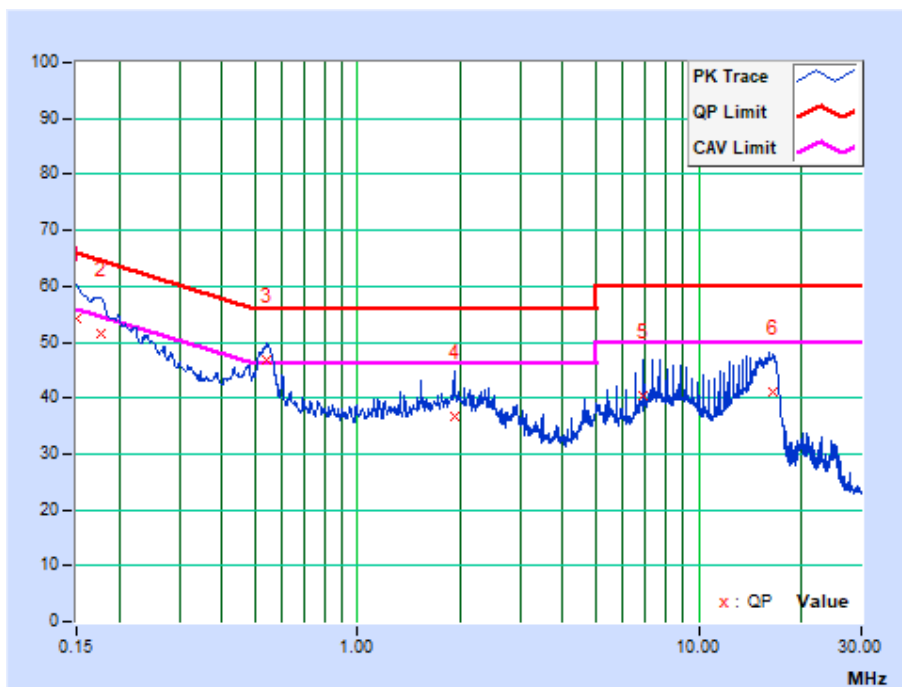
3.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA: WIFI Link

PHASE	Line	6dB BANDWIDTH	9kHz
-------	------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.90	44.47	35.86	54.37	45.76	66.00	56.00	-11.63	-10.24
2	0.17605	9.91	41.56	33.23	51.47	43.14	64.67	54.67	-13.20	-11.53
3	0.54357	9.97	36.80	28.68	46.77	38.65	56.00	46.00	-9.23	-7.35
4	1.92075	10.10	26.65	19.94	36.75	30.04	56.00	46.00	-19.25	-15.96
5	6.91125	10.25	30.31	24.24	40.56	34.49	60.00	50.00	-19.44	-15.51
6	16.41300	10.42	30.49	23.53	40.91	33.95	60.00	50.00	-19.09	-16.05

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

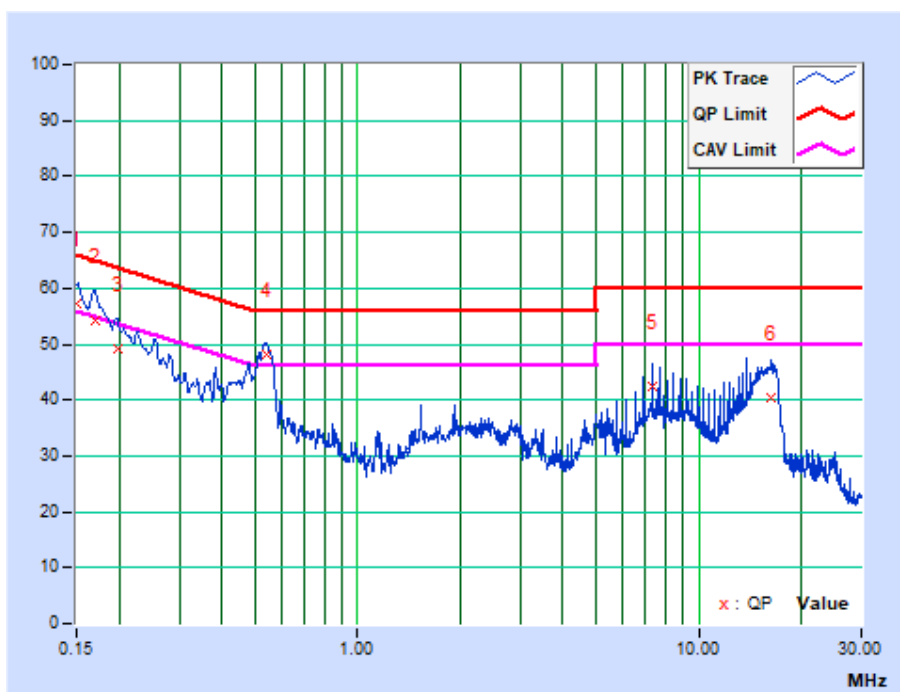




PHASE	Neutral	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.84	47.51	36.67	57.35	46.51	66.00	56.00	-8.65	-9.49
2	0.16966	9.84	44.37	33.46	54.21	43.30	64.98	54.98	-10.76	-11.67
3	0.19721	9.85	39.21	28.14	49.06	37.99	63.73	53.73	-14.67	-15.74
4	0.53786	9.86	38.30	31.16	48.16	41.02	56.00	46.00	-7.84	-4.98
5	7.29600	10.07	32.24	26.37	42.31	36.44	60.00	50.00	-17.69	-13.56
6	16.30275	10.27	30.25	22.73	40.52	33.00	60.00	50.00	-19.48	-17.00

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.





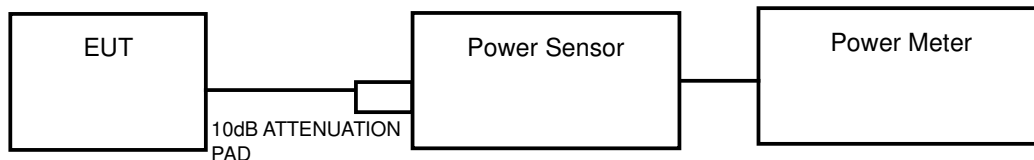
3.3 TRANSMIT POWER MEASUREMENT

3.3.1 LIMITS OF TRANSMIT POWER MEASUREMENT

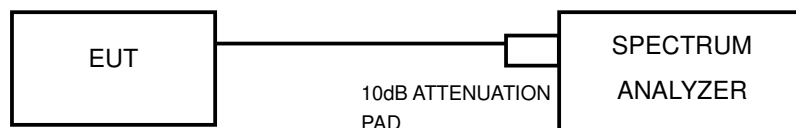
Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Mobile and Portable client device	250mW (24 dBm)
U-NII-2A	√		250mW(24dBm) or 11 dBm+10LogB*
U-NII-2C	√		250mW(24dBm) or 11 dBm+10LogB*
U-NII-3	√		1 Watt (30 dBm)

NOTE: 1. Where B is the 26dB emission bandwidth in MHz.

3.3.2 TEST SETUP



FOR 6/26dB BANDWIDTH





3.3.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
Power Sensor	Keysight	U2021XA	MY57320002	Feb. 23, 23
Power Sensor	Keysight	U2021XA	MY55060018	May 09, 23
Digital Multimeter	FLUKE	15B	A1220010DG	N/A
Humid & Temp Programmable Tester	Haida	HD-225T	110807201	Nov. 03, 22
Oscilloscope	Agilent	DSO9254A	MY51260160	Aug. 11, 22
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV40	101094	Jan. 16, 23
Signal Generator	Agilent	N5183A	MY50140980	Sep. 18, 22
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY56200288	Sep. 14, 22
BLUETOOTH TESTER	Rohde&Schwarz	CBT32	100811	N/A
Attenuator	MINI	BW-S10W2+	S130129FGE2	N/A
DC Source	Keysight	E3642A	MY56146098	N/A
Test software	ADT	ADT_RF Test Software V6.6.5.3	N/A	N/A

NOTES:

1. The test was performed in RF Oven room. (Chenwu)
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

3.3.4 TEST PROCEDURE

FOR AVERAGE POWER MEASUREMENT

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

FOR 26dB BANDWIDTH

- 1) Set RBW = approximately 1% of the emission bandwidth.
- 2) Set the VBW > RBW.
- 3) Detector = RMS.
- 4) Trace mode = max hold.
- 5) Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

FOR 6dB BANDWIDTH

- 1) Set RBW = 100 kHz.
- 2) Set the video bandwidth (VBW) ≥ 3 RBW.
- 3) Detector = Peak.
- 4) Trace mode = max hold.
- 5) Sweep = auto couple.
- 6) Allow the trace to stabilize.
- 7) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

3.3.5 DEVIATION FROM TEST STANDARD

No deviation.

3.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.



Test Report No.: RF2203WDG0011-4

3.3.7 TEST RESULTS

OUTPUT POWER:

802.11a

Chain 0

CHANNEL NUMBER	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	AVG. CONDUCTED POWER (mW)	LIMIT (dBm)	PASS /FAIL
36	5180	11.24	13.305	24.00	PASS
40	5200	10.91	12.331	24.00	PASS
48	5240	10.74	11.858	24.00	PASS
52	5260	10.58	11.429	24.00	PASS
60	5300	10.32	10.765	24.00	PASS
64	5320	10.24	10.568	24.00	PASS
100	5500	10.88	12.246	24.00	PASS
116	5580	10.83	12.106	24.00	PASS
140	5700	10.46	11.117	24.00	PASS
149	5745	8.61	7.261	30.00	PASS
157	5785	8.71	7.43	30.00	PASS
165	5825	8.74	7.482	30.00	PASS

For Band 2~Band 3: Limit = $11\text{dBm} + 10\log(26\text{ BW}) = 11 + 10\log(20.15) = 24.04\text{dBm} > 24\text{dBm}$

20.15MHz Calculated results correspond to the worst limiting results.

**Chain 1**

CHANNEL NUMBER	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	AVG. CONDUCTED POWER (mW)	LIMIT (dBm)	PASS /FAIL
36	5180	10.41	10.99	24.00	PASS
40	5200	10.28	10.666	24.00	PASS
48	5240	10.18	10.423	24.00	PASS
52	5260	10.68	11.695	23.96	PASS
60	5300	10.74	11.858	23.96	PASS
64	5320	10.92	12.359	23.96	PASS
100	5500	11.24	13.305	23.96	PASS
116	5580	10.83	12.106	23.96	PASS
140	5700	10.27	10.641	23.96	PASS
149	5745	8.51	7.096	30.00	PASS
157	5785	8.81	7.603	30.00	PASS
165	5825	9.08	8.091	30.00	PASS

For Band 2~Band 3: Limit = 11dBm+10log(26 BW)=11+10log(19.77)=23.96dBm > 24dBm

19.77MHz Calculated results correspond to the worst limiting results.



802.11n (20MHz)

Channel Number	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)		AVG. CONDUCTED POWER (mW)		Total Max. power output		LIMIT (dBm)	PASS /FAIL
		Chain 0	Chain 1	Chain 0	Chain 1	mW	dBm		
36	5180	6.68	6.49	4.656	4.457	9.113	9.60	24.00	PASS
40	5200	6.56	6.48	4.529	4.446	8.975	9.53	24.00	PASS
48	5240	6.39	6.39	4.355	4.355	8.710	9.40	24.00	PASS
52	5260	6.38	6.89	4.345	4.887	9.232	9.65	23.24	PASS
60	5300	6.28	6.87	4.246	4.864	9.110	9.60	23.24	PASS
64	5320	6.31	6.93	4.276	4.932	9.208	9.64	23.24	PASS
100	5500	6.86	7.34	4.853	5.42	10.273	10.12	23.30	PASS
116	5580	6.99	7.04	5.000	5.058	10.058	10.03	23.30	PASS
140	5700	6.63	6.41	4.603	4.375	8.978	9.53	23.30	PASS
149	5745	5.98	5.68	3.963	3.698	7.661	8.84	30.00	PASS
157	5785	6.05	5.98	4.027	3.963	7.990	9.03	30.00	PASS
165	5825	6.18	6.27	4.15	4.236	8.386	9.24	30.00	PASS

For Band 2~Band 3: Limit = 11dBm+10log(26 BW)=11+10log(20.14)=24.04dBm > 24dBm

20.14MHz Calculated results correspond to the worst limiting results.

Notes:

For U-NII-1

1. Directional gain= 2.77 + 10*log(2) =5.78dBi, less than 6dBi, so the power density limit no need to reduce.

For U-NII-2A

2. Directional gain= 3.75 + 10*log(2) =6.76dBi, more than 6dBi, so the power density limit need to reduce 0.76dBi.

For U-NII-2C

3. Directional gain= 3.69 + 10*log(2) =6.70dBi, more than 6dBi, so the power density limit need to reduce 0.70dBi.

For U-NII-3

Directional gain= 2.94 + 10*log(2) =5.95dBi, less than 6dBi, so the power density limit no need to reduce.



802.11n (40MHz)

Channel Number	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)		AVG. CONDUCTED POWER (mW)		Total Max. power output		LIMIT (dBm)	PASS /FAIL
		Chain 0	Chain 1	Chain 0	Chain 1	mW	dBm		
38	5190	7.11	6.78	5.140	4.764	9.904	9.96	24.00	PASS
46	5230	6.94	6.61	4.943	4.581	9.524	9.79	24.00	PASS
54	5270	6.86	7.14	4.853	5.176	10.029	10.01	27.20	PASS
62	5310	6.74	7.13	4.721	5.164	9.885	9.95	27.20	PASS
102	5510	7.48	7.56	5.598	5.702	11.300	10.53	27.20	PASS
110	5550	7.53	7.34	5.662	5.420	11.082	10.45	27.20	PASS
134	5670	7.28	6.81	5.346	4.797	10.143	10.06	27.20	PASS
151	5755	6.21	6.05	4.178	4.027	8.205	9.14	30.00	PASS
159	5795	6.38	6.28	4.345	4.246	8.591	9.34	30.00	PASS

For Band 2~Band 3: Limit = 11dBm+10log(26 BW)=11+10log(41.32)=27.16dBm > 24dBm

41.32MHz Calculated results correspond to the worst limiting results.

Notes:

For U-NII-1

1. Directional gain= 2.77 + 10*log(2) =5.78dBi, less than 6dBi, so the power density limit no need to reduce.

For U-NII-2A

2. Directional gain= 3.75 + 10*log(2) =6.76dBi, more than 6dBi, so the power density limit need to reduce 0.76dBi.

For U-NII-2C

3. Directional gain= 3.69 + 10*log(2) =6.70dBi, more than 6dBi, so the power density limit need to reduce 0.70dBi.

For U-NII-3

4. Directional gain= 2.94 + 10*log(2) =5.95dBi, less than 6dBi, so the power density limit no need to reduce.



802.11ac (80MHz)

Channel Number	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)		AVG. CONDUCTED POWER (mW)		Total Max. power output		LIMIT (dBm)	PASS /FAIL
		Chain 0	Chain 1	Chain 0	Chain 1	mW	dBm		
42	5210	7.69	5.81	5.875	3.811	9.686	9.86	24.00	PASS
58	5290	7.29	5.98	5.358	3.963	9.321	9.69	24.00	PASS
106	5530	8.08	6.54	6.427	4.508	10.935	10.39	24.00	PASS
155	5775	5.89	4.61	3.882	2.891	6.773	8.31	30.00	PASS

For Band 2~Band 3: Limit = $11\text{dBm} + 10\log(26\text{ BW}) = 11 + 10\log(80.67) = 30.07\text{dBm} > 24\text{dBm}$

80.67MHz Calculated results correspond to the worst limiting results.

Notes:

For U-NII-1

4. Directional gain = $2.77 + 10 \cdot \log(2) = 5.78\text{dBi}$, less than 6dBi , so the power density limit no need to reduce.

For U-NII-2A

5. Directional gain = $3.75 + 10 \cdot \log(2) = 6.76\text{dBi}$, more than 6dBi , so the power density limit need to reduce 0.76dBi .

For U-NII-2C

6. Directional gain = $3.69 + 10 \cdot \log(2) = 6.70\text{dBi}$, more than 6dBi , so the power density limit need to reduce 0.70dBi .

For U-NII-3

7. Directional gain = $2.94 + 10 \cdot \log(2) = 5.95\text{dBi}$, less than 6dBi , so the power density limit no need to reduce.

**26dB BANDWIDTH:****802.11a**

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)		PASS /FAIL
		Chain 0	Chain 1	
36	5180	20.22	19.92	PASS
40	5200	20.22	19.86	PASS
48	5240	20.24	19.74	PASS
52	5260	20.21	19.88	PASS
60	5300	20.25	19.94	PASS
64	5320	20.18	19.88	PASS
100	5500	20.15	19.88	PASS
116	5580	20.28	19.77	PASS
140	5700	20.29	19.96	PASS

802.11n (20MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)		PASS /FAIL
		Chain 0	Chain 1	
36	5180	20.62	20.10	PASS
40	5200	20.53	20.12	PASS
48	5240	20.58	20.14	PASS
52	5260	20.55	20.19	PASS
60	5300	20.57	20.28	PASS
64	5320	20.59	20.20	PASS
100	5500	20.60	20.17	PASS
116	5580	20.60	20.14	PASS
140	5700	20.53	20.16	PASS



802.11n (40MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)		PASS /FAIL
		Chain 0	Chain 1	
38	5190	41.74	41.52	PASS
46	5230	41.95	41.46	PASS
54	5270	41.74	41.58	PASS
62	5310	41.79	41.58	PASS
102	5510	41.93	41.32	PASS
110	5550	41.89	41.58	PASS
134	5670	41.71	41.54	PASS

802.11ac (80MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)		PASS /FAIL
		Chain 0	Chain 1	
42	5210	82.21	80.61	PASS
58	5290	82.34	80.82	PASS
106	5530	82.23	80.67	PASS

**6dB BANDWIDTH For 5725-5850MHz****802.11a**

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)		PASS /FAIL
		Chain 0	Chain 1	
149	5745	15.16	15.16	PASS
157	5785	15.14	15.19	PASS
165	5825	15.18	15.18	PASS

802.11n (20M)

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)		PASS /FAIL
		Chain 0	Chain 1	
149	5745	15.18	16.35	PASS
157	5785	15.19	16.36	PASS
165	5825	15.18	16.36	PASS

802.11n (40M)

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)		PASS /FAIL
		Chain 0	Chain 1	
151	5755	35.26	35.24	PASS
159	5795	35.27	35.19	PASS

802.11ac (80MHz)

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)		PASS /FAIL
		Chain 0	Chain 1	
155	5775	75.37	75.38	PASS

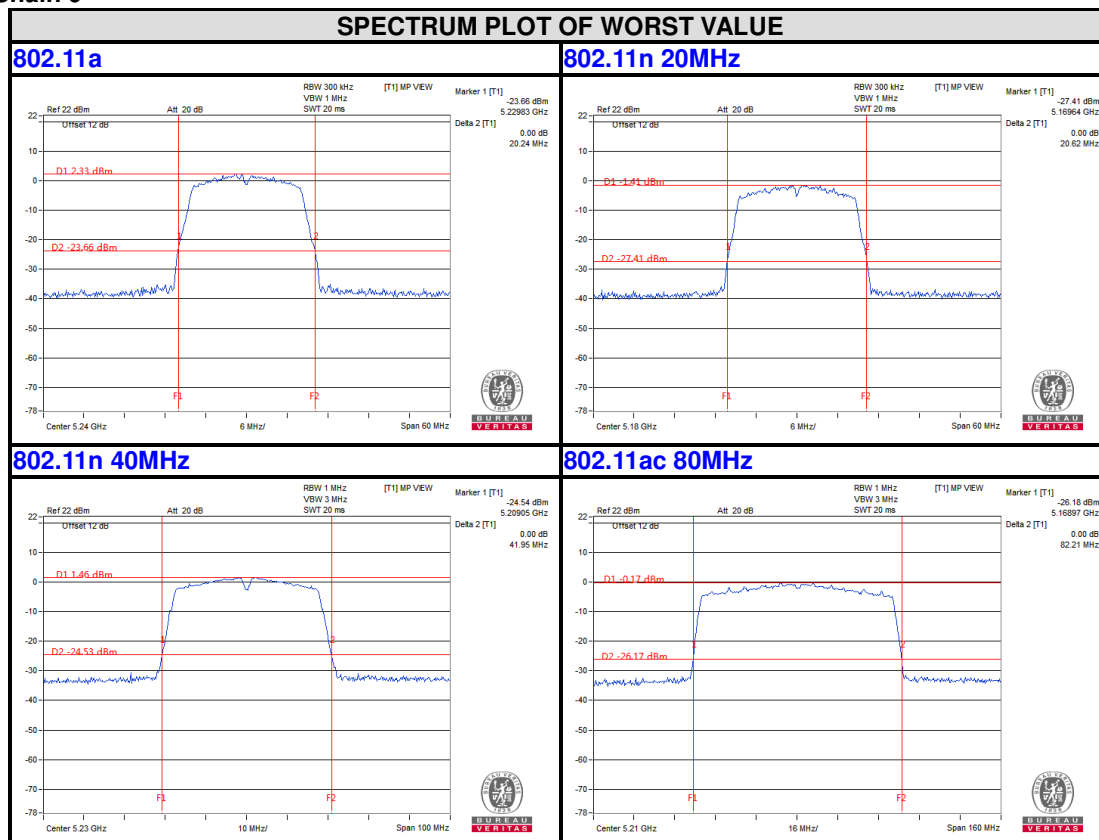


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26dB bandwidth Test Plot
For 5150-5250MHz worst plot

Chain 0



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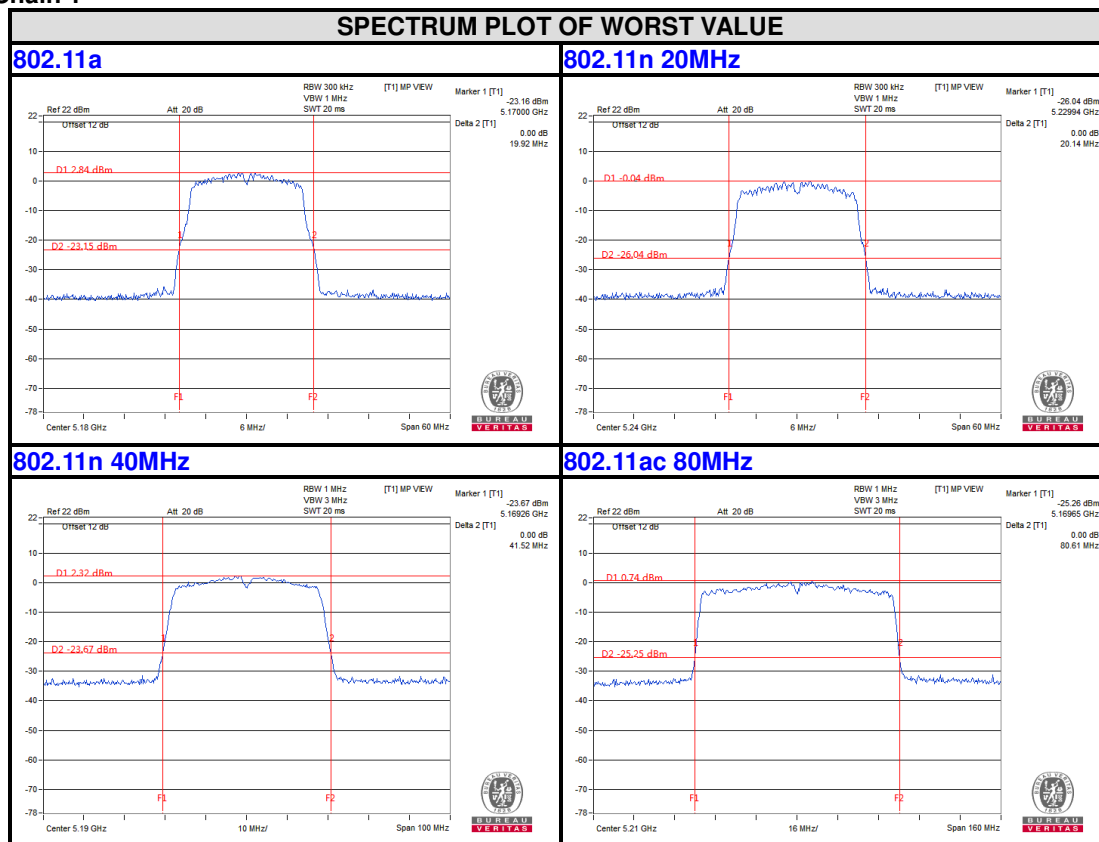
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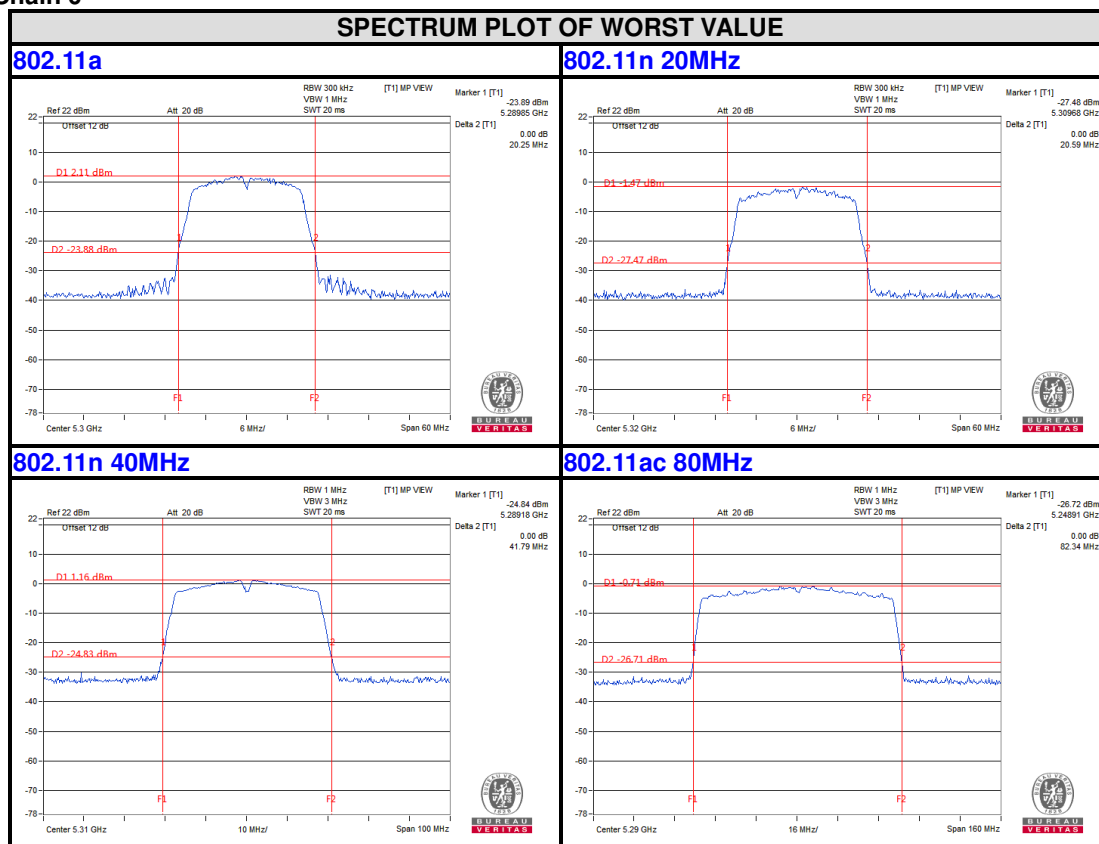


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For 5250-5350MHz

Chain 0



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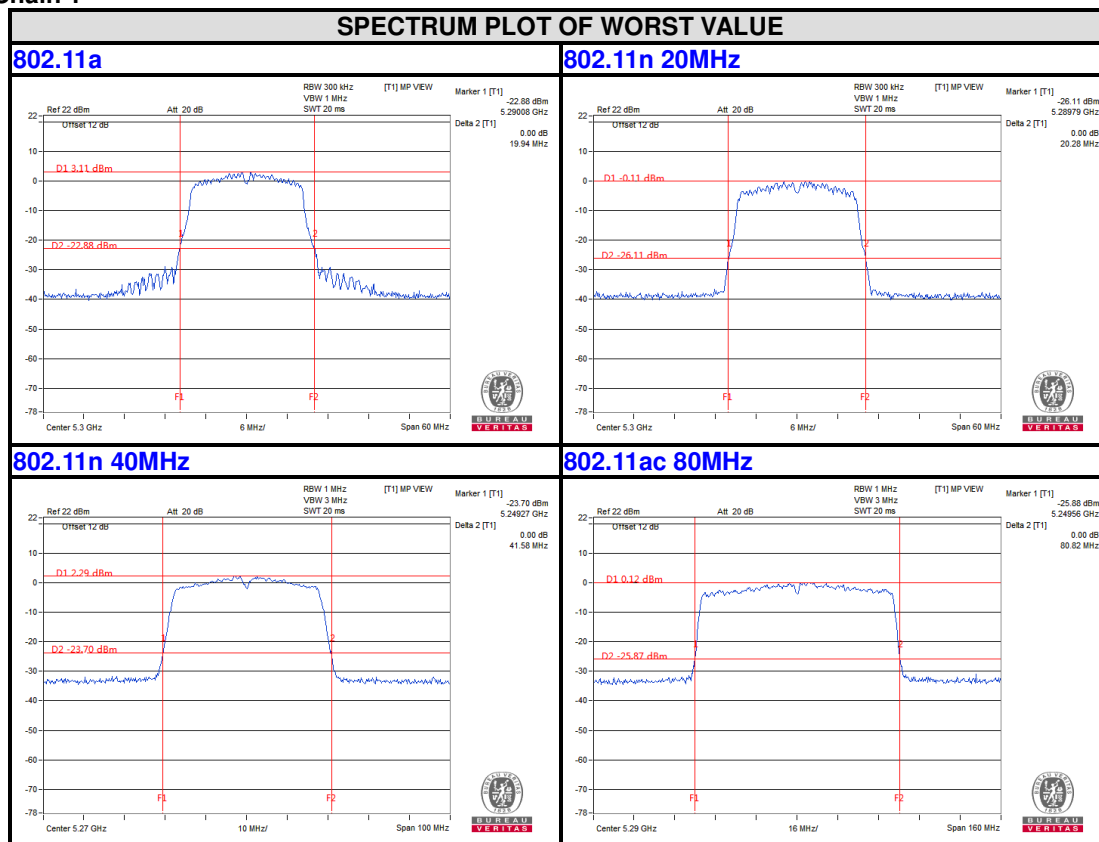
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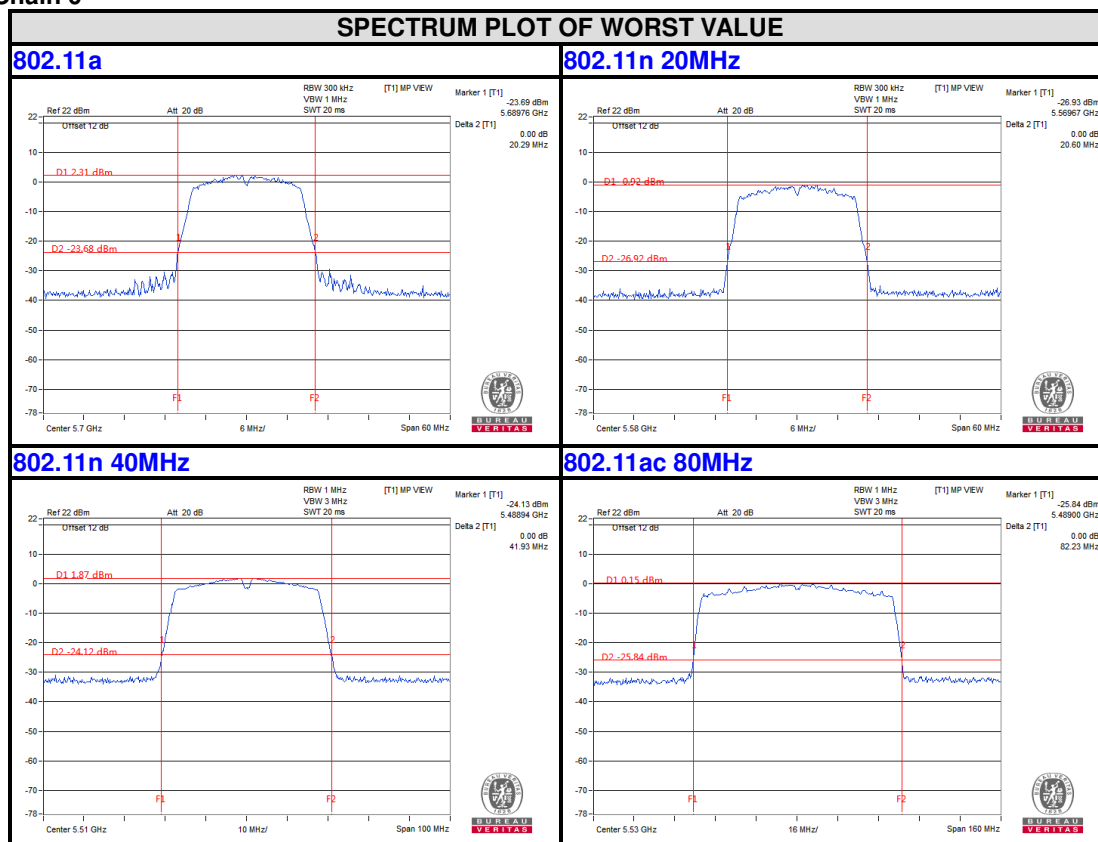


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For 5470-5725MHz

Chain 0



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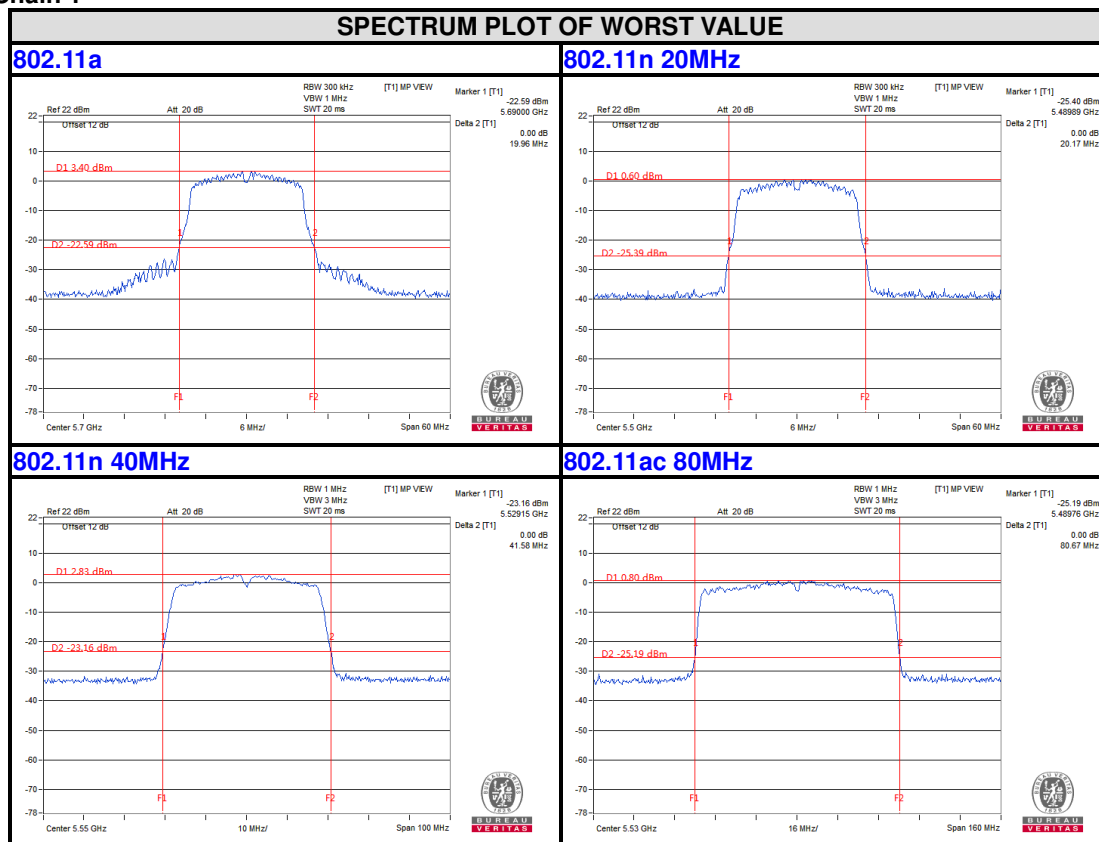
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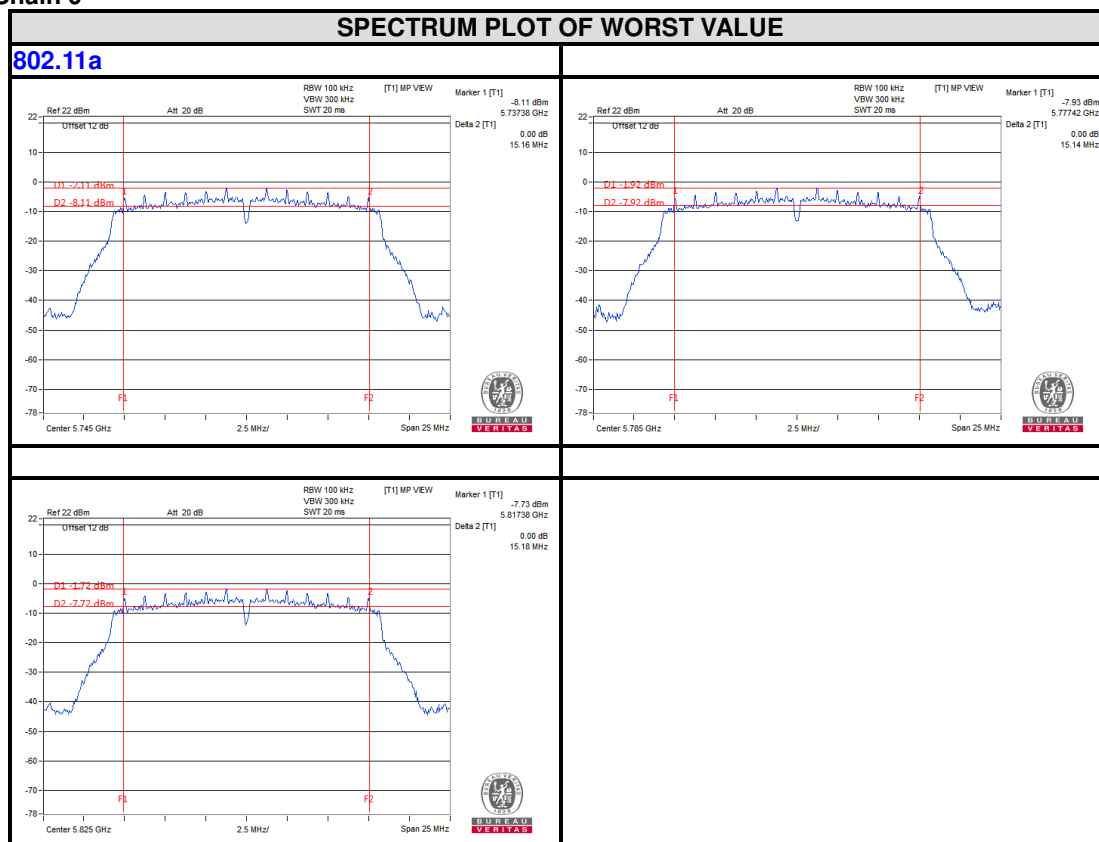


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6dB BANDWIDTH For 5725-5850MHz

Chain 0



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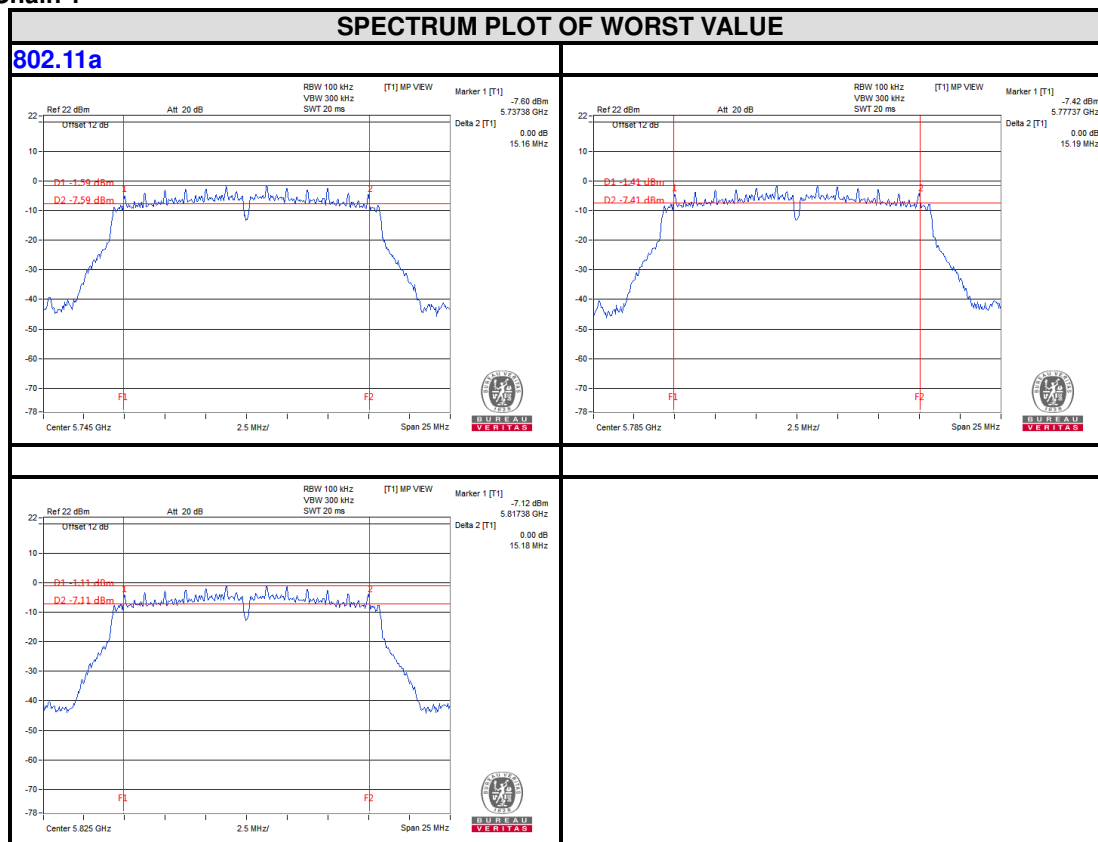
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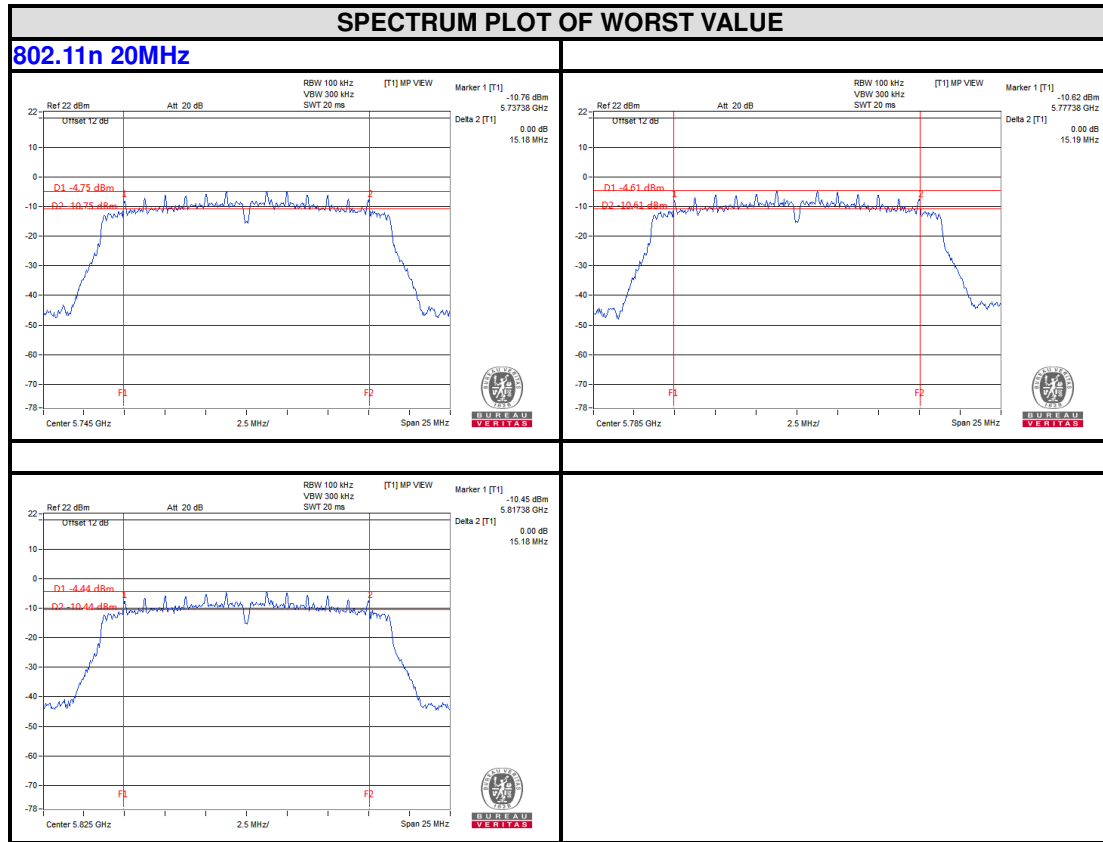
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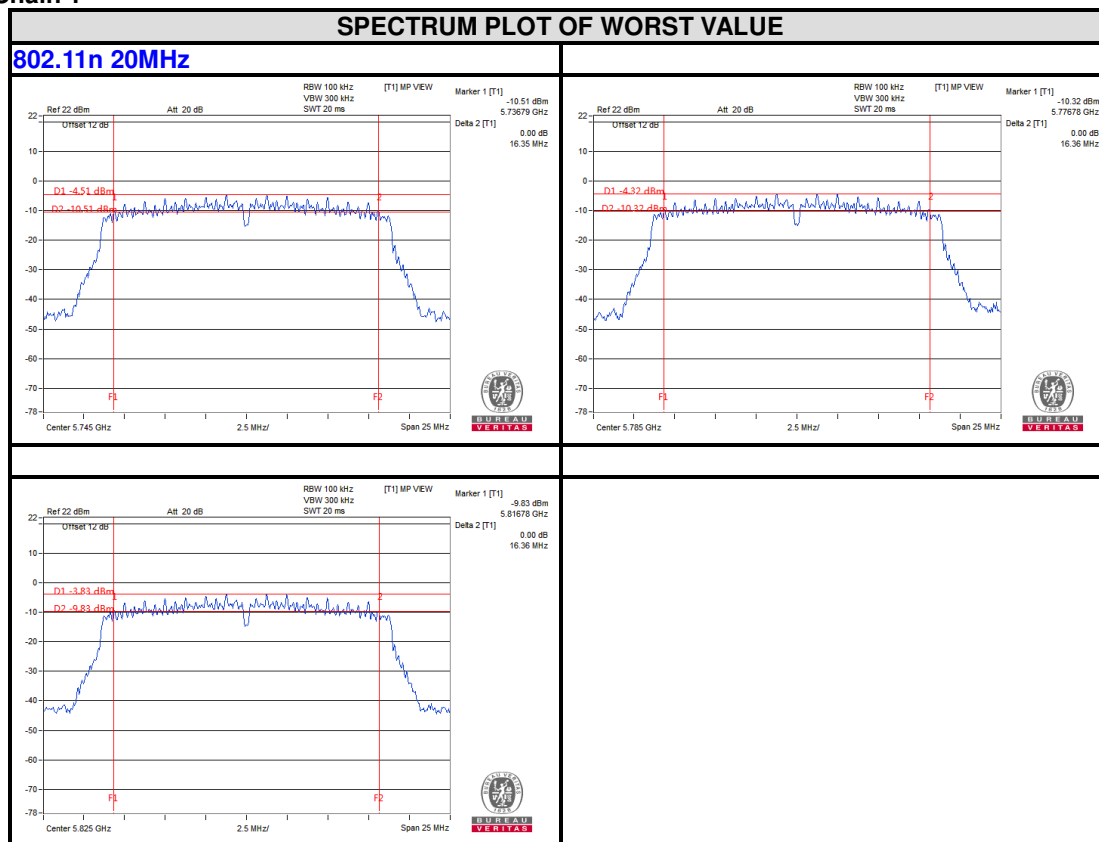
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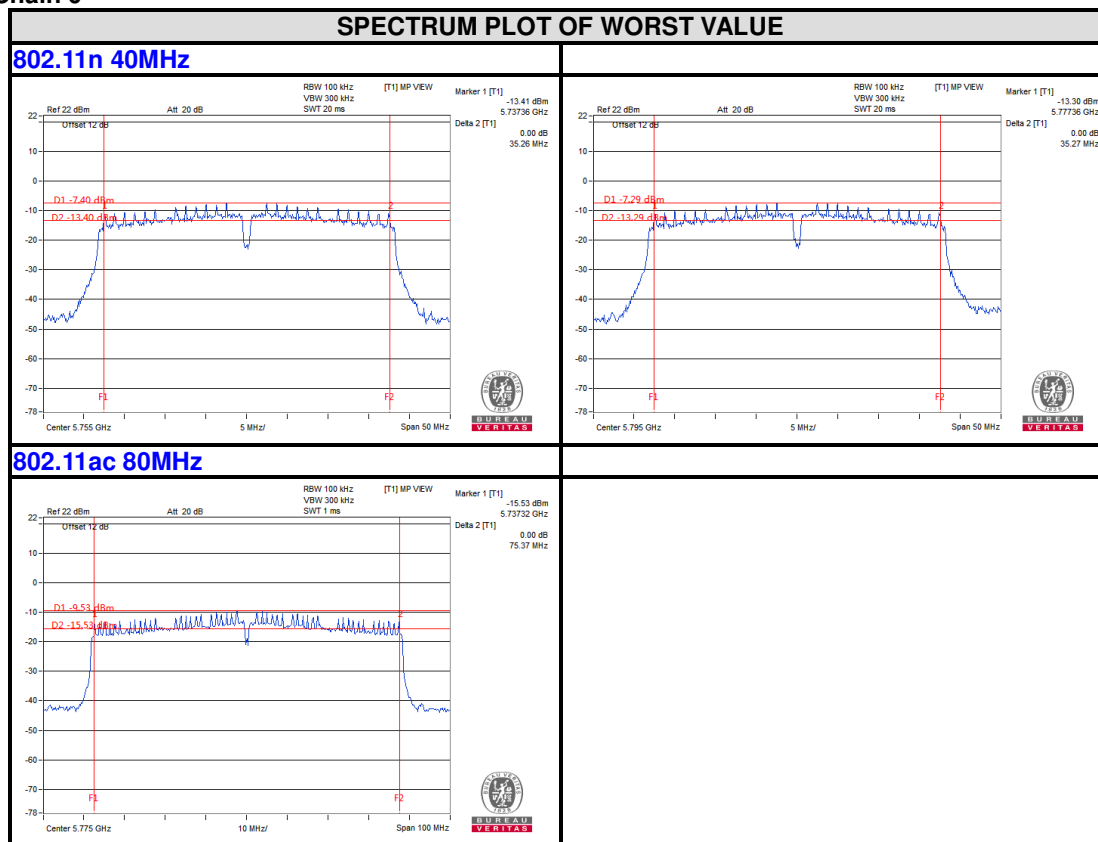
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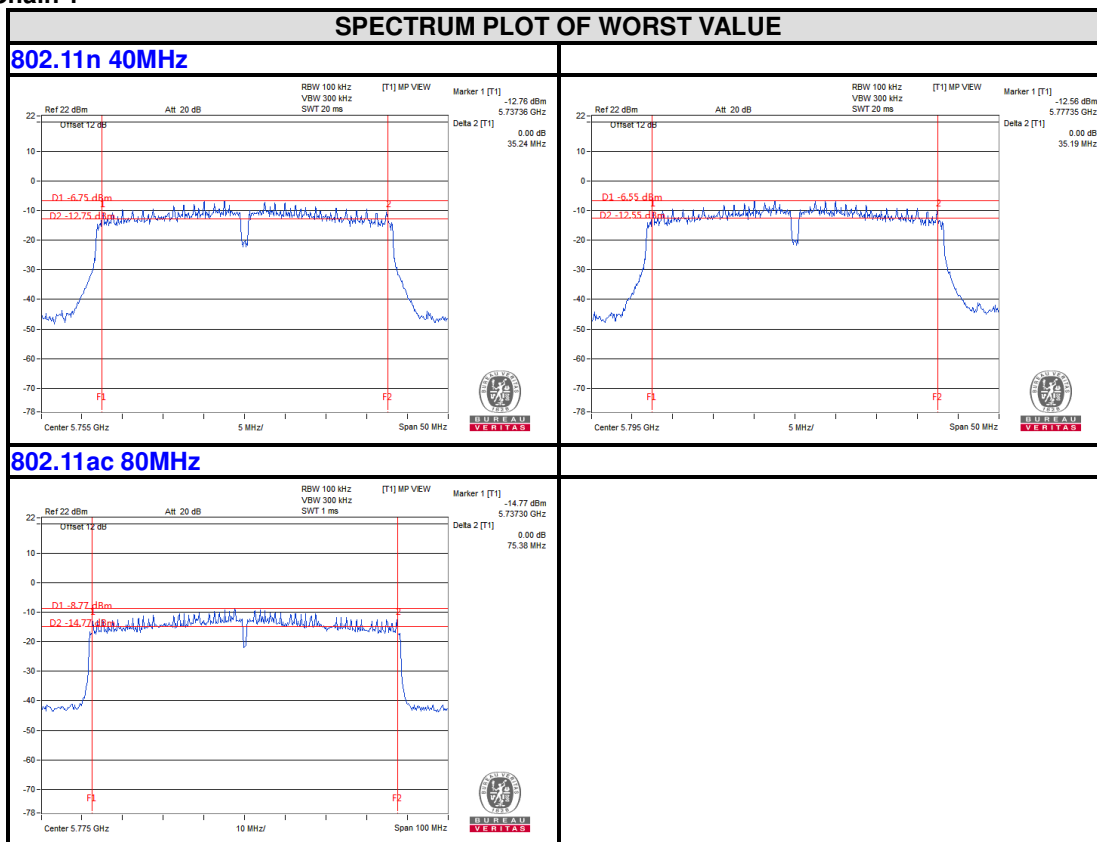
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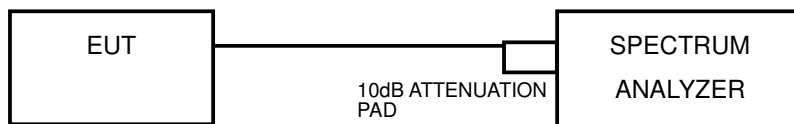


3.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

3.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	17dBm/ MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
	√	Mobile and Portable client device	11dBm/ MHz
U-NII-2A	√		11dBm/ MHz
U-NII-2C	√		11dBm/ MHz
U-NII-3	√		30dBm/ 500kHz

3.4.2 TEST SETUP



3.4.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.

3.4.4 TEST PROCEDURES

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

Using method SA-2

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 1MHz, Set VBW =3 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = auto, trigger set to “free run”.
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Record the max value and add 10 log (1/duty cycle)



For U-NII-3 band:

Using method SA-2

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 300 kHz, Set VBW = 1 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = auto, trigger set to "free run".
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Record the max value and add 10 log (1/duty cycle)

3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

3.4.6 EUT OPERATING CONDITIONS

Same as 3.3.6



3.4.7 TEST RESULTS

For U-NII-1, U-NII-2A & U-NII-2C, For U-NII-3:
802.11a

Channel Number	Frequency (MHz)	RF Power Level in 1MHz BW (dBm)		RF Power Level in 1MHz BW (mW)		Final result (PSD) (dBm)		MAX. Limit (dBm)	PASS / FAIL
		Chain 0	Chain 1	Chain 0	Chain 1	Chain 0	Chain 1		
36	5180	-1.28	-1.39	0.745	0.726	-1.11	-1.20	11.00	PASS
40	5200	-1.41	-1.42	0.723	0.721	-1.24	-1.23	11.00	PASS
48	5240	-1.62	-1.65	0.689	0.684	-1.45	-1.46	11.00	PASS
52	5260	-1.72	-1.63	0.673	0.687	-1.55	-1.44	11.00	PASS
60	5300	-1.91	-1.57	0.644	0.697	-1.74	-1.38	11.00	PASS
64	5320	-2.02	-1.16	0.628	0.766	-1.85	-0.97	11.00	PASS
100	5500	-1.17	-0.74	0.764	0.843	-1.00	-0.55	11.00	PASS
116	5580	-1.19	-1.16	0.760	0.766	-1.02	-0.97	11.00	PASS
140	5700	-1.71	-1.21	0.675	0.757	-1.54	-1.02	11.00	PASS

Notes: 1. Refer to section 2.3 for duty cycle spectrum plot.

2. Final result (PSD) = RF Power Level in 1MHz BW (dBm) + Duty factor

Channel Number	Frequency (MHz)	RF Power Level in 500kHz BW (dBm)		Final result (PSD) (dBm)		MAX. Limit (dBm/500k)	PASS / FAIL
		Chain 0	Chain 1	Chain 0	Chain 1		
149	5745	-4.94	-4.40	-4.77	-4.21	30.00	PASS
157	5785	-4.95	-4.50	-4.78	-4.31	30.00	PASS
165	5825	-4.78	-4.10	-4.61	-3.91	30.00	PASS

Notes: 1. Refer to section 2.3 for duty cycle spectrum plot.

2. Final result (PSD) = RF Power Level in 500kHz BW (dBm) + Duty factor



802.11n (20MHz)

Channel Number	Frequency (MHz)	RF Power Level in 1MHz BW (dBm)		Duty Factor (dB)		Final result (Total PSD)		MAX. Limit (dBm)	PASS / FAIL
		Chain 0	Chain 1	Chain 0	Chain 1	mW	dBm		
36	5180	-5.30	-5.44	0.168	0.186	0.605	-2.18	11.00	PASS
40	5200	-5.26	-5.33	0.168	0.186	0.616	-2.11	11.00	PASS
48	5240	-5.47	-5.32	0.168	0.186	0.602	-2.21	11.00	PASS
52	5260	-5.97	-5.39	0.168	0.186	0.565	-2.48	10.24	PASS
60	5300	-5.67	-5.12	0.168	0.186	0.603	-2.20	10.24	PASS
64	5320	-5.74	-5.14	0.168	0.186	0.597	-2.24	10.24	PASS
100	5500	-5.22	-4.53	0.168	0.186	0.680	-1.67	10.30	PASS
116	5580	-4.97	-5.01	0.168	0.186	0.660	-1.80	10.30	PASS
140	5700	-5.26	-5.17	0.168	0.186	0.627	-2.03	10.30	PASS

Notes: Refer to section 2.3 for duty cycle spectrum plot.

For U-NII-1

1. Directional gain= $2.77 + 10 \cdot \log(2) = 5.78\text{dBi}$, less than 6dBi, so the power density limit no need to reduce.

For U-NII-2A

2. Directional gain= $3.75 + 10 \cdot \log(2) = 6.76\text{dBi}$, more than 6dBi, so the power density limit need to reduce 0.76dBi.

For U-NII-2C

3. Directional gain= $3.69 + 10 \cdot \log(2) = 6.70\text{dBi}$, more than 6dBi, so the power density limit need to reduce 0.70dBi.

Channel Number	Frequency (MHz)	RF Power Level in 500kHz BW (dBm)		Duty Factor (dB)		Final result (Total PSD)		MAX. Limit (dBm/500k)	PASS / FAIL
		Chain 0	Chain 1	Chain 0	Chain 1	mW	dBm		
149	5745	-8.57	-7.54	0.168	0.186	0.328	-4.84	30.00	PASS
157	5785	-7.80	-7.10	0.168	0.186	0.376	-4.25	30.00	PASS
165	5825	-7.81	-6.82	0.168	0.186	0.389	-4.10	30.00	PASS

Note: Refer to section 2.3 for duty cycle spectrum plot.

For U-NII-3

1. Directional gain= $2.94 + 10 \cdot \log(2) = 5.95\text{dBi}$, less than 6dBi, so the power density limit no need to reduce.



802.11n (40MHz)

Channel Number	Frequency (MHz)	RF Power Level in 1MHz BW (dBm)		Duty Factor (dB)		Final result (Total PSD)		MAX. Limit (dBm)	PASS / FAIL
		Chain 0	Chain 1	Chain 0	Chain 1	mW	dBm		
38	5190	-8.39	-8.38	0.168	0.186	0.302	-5.20	11.00	PASS
46	5230	-8.48	-8.51	0.168	0.186	0.295	-5.31	11.00	PASS
54	5270	-8.75	-8.60	0.168	0.186	0.283	-5.49	10.24	PASS
62	5310	-8.88	-8.40	0.168	0.186	0.285	-5.45	10.24	PASS
102	5510	-8.02	-7.85	0.168	0.186	0.335	-4.75	10.30	PASS
110	5550	-8.06	-7.86	0.168	0.186	0.333	-4.77	10.30	PASS
134	5670	-8.28	-8.21	0.168	0.186	0.312	-5.06	10.30	PASS

Notes: Refer to section 2.3 for duty cycle spectrum plot.

For U-NII-1

1. Directional gain= $2.77 + 10 \cdot \log(2) = 5.78\text{dBi}$, less than 6dBi, so the power density limit no need to reduce.

For U-NII-2A

2. Directional gain= $3.75 + 10 \cdot \log(2) = 6.76\text{dBi}$, more than 6dBi, so the power density limit need to reduce 0.76dBi.

For U-NII-2C

3. Directional gain= $3.69 + 10 \cdot \log(2) = 6.70\text{dBi}$, more than 6dBi, so the power density limit need to reduce 0.70dBi.

Channel Number	Frequency (MHz)	RF Power Level in 500kHz BW (dBm)		Duty Factor (dB)		Final result (Total PSD)		MAX. Limit (dBm/500k)	PASS / FAIL
		Chain 0	Chain 1	Chain 0	Chain 1	mW	dBm		
151	5755	-11.06	-10.43	0.168	0.186	0.176	-7.55	30.00	PASS
159	5795	-10.90	-10.15	0.168	0.186	0.185	-7.32	30.00	PASS

Note: Refer to section 2.3 for duty cycle spectrum plot.

For U-NII-3

1. Directional gain= $2.94 + 10 \cdot \log(2) = 5.95\text{dBi}$, less than 6dBi, so the power density limit no need to reduce.



802.11ac (80MHz)

Channel Number	Frequency (MHz)	RF Power Level in 1MHz BW (dBm)		Duty Factor (dB)		Final result (Total PSD)		MAX. Limit (dBm)	PASS / FAIL
		Chain 0	Chain 1	Chain 0	Chain 1	mW	dBm		
42	5210	-10.95	-10.78	0.168	0.186	0.171	-7.68	11.00	PASS
58	5290	-11.35	-10.91	0.168	0.186	0.161	-7.94	10.24	PASS
106	5530	-10.56	-10.27	0.168	0.186	0.189	-7.22	10.30	PASS

Notes: Refer to section 2.3 for duty cycle spectrum plot.

For U-NII-1

1. Directional gain= $2.77 + 10 \cdot \log(2) = 5.78\text{dBi}$, less than 6dBi, so the power density limit no need to reduce.

For U-NII-2A

2. Directional gain= $3.75 + 10 \cdot \log(2) = 6.76\text{dBi}$, more than 6dBi, so the power density limit need to reduce 0.76dBi.

For U-NII-2C

3. Directional gain= $3.69 + 10 \cdot \log(2) = 6.70\text{dBi}$, more than 6dBi, so the power density limit need to reduce 0.70dBi.

Channel Number	Frequency (MHz)	RF Power Level in 500kHz BW (dBm)		Duty Factor (dB)		Final result (Total PSD)		MAX. Limit (dBm/500k)	PASS / FAIL
		Chain 0	Chain 1	Chain 0	Chain 1	mW	dBm		
155	5775	-14.20	-13.61	0.168	0.186	0.085	-10.71	30.00	PASS

Note: Refer to section 2.3 for duty cycle spectrum plot.

For U-NII-3

1. Directional gain= $2.94 + 10 \cdot \log(2) = 5.95\text{dBi}$, less than 6dBi, so the power density limit no need to reduce.

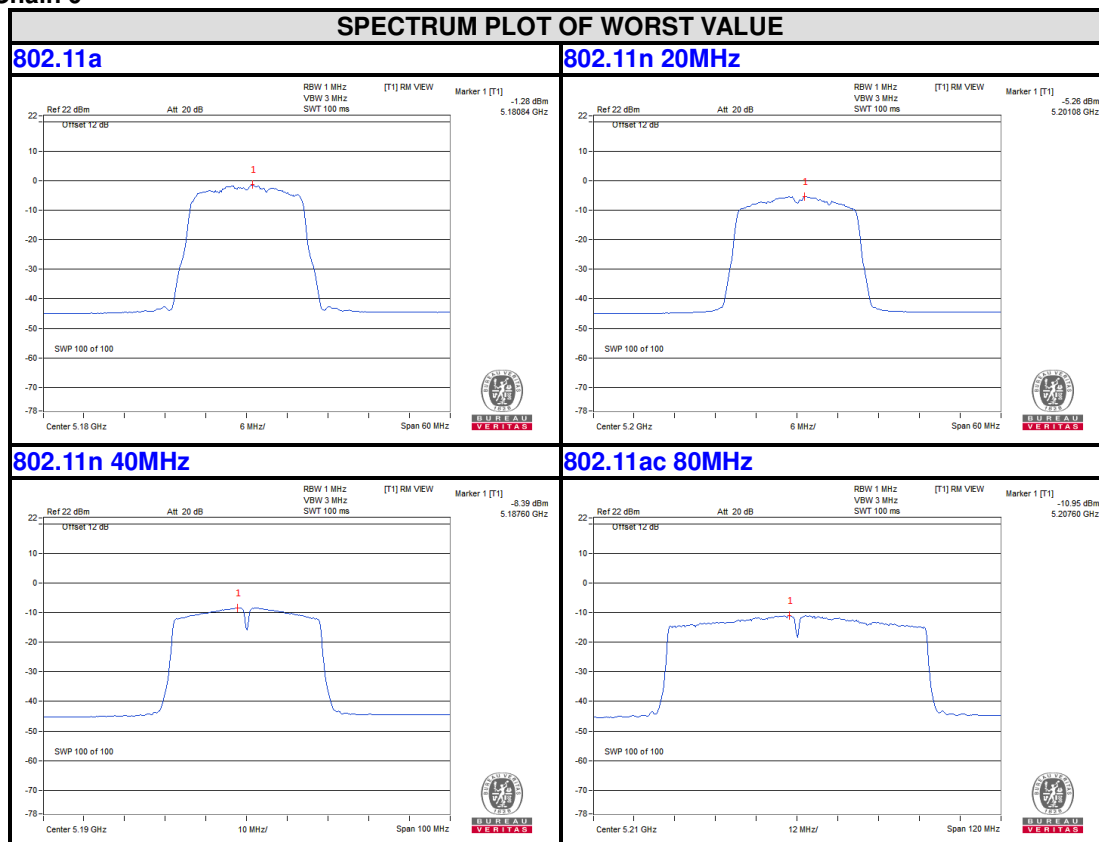


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PSD Test Plot
BAND 1
5150-5250MHz

Chain 0



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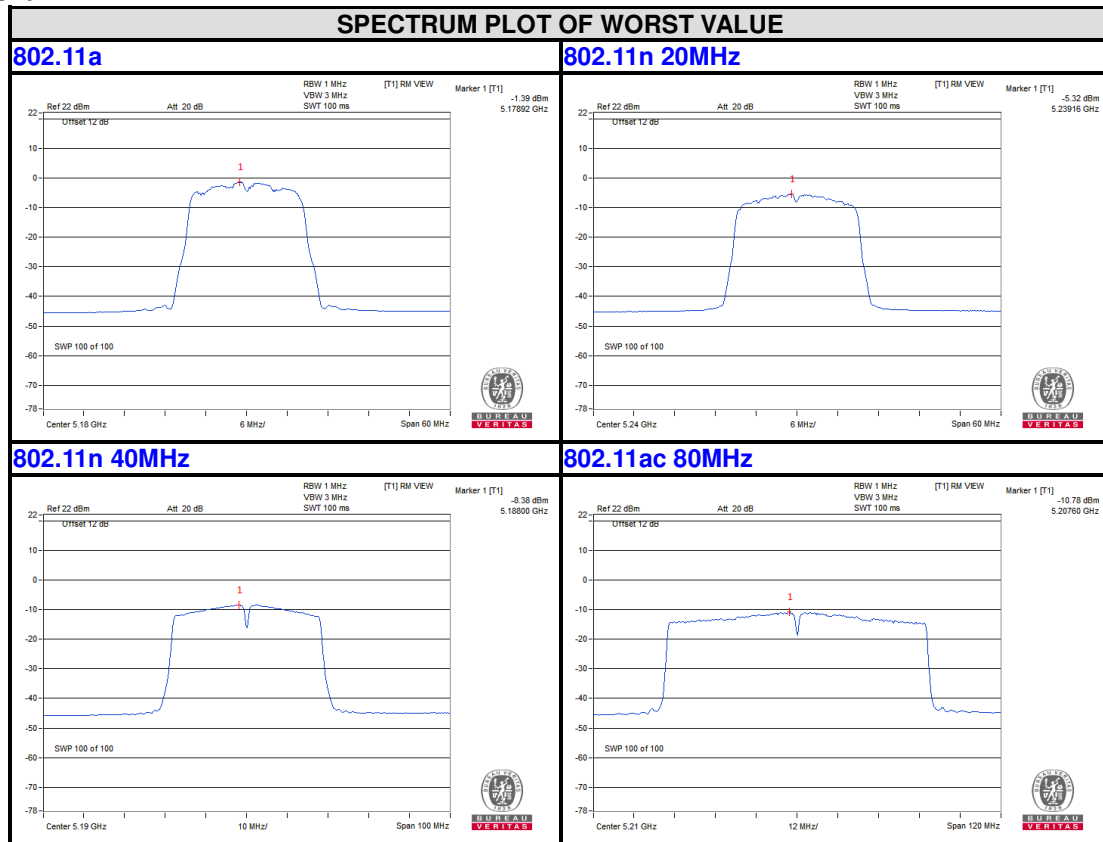
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Chain 1



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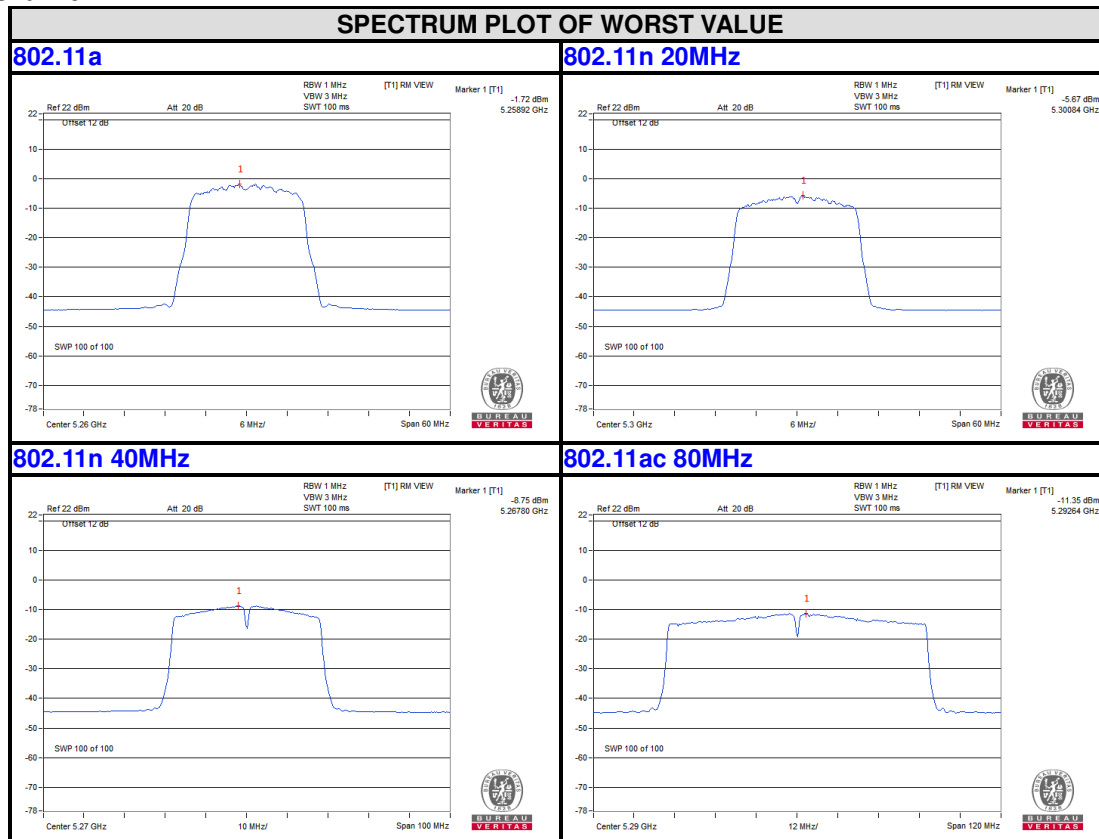
Tel: +86 769 8998 2098
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BAND 2
5250-5350MHz
Chain 0



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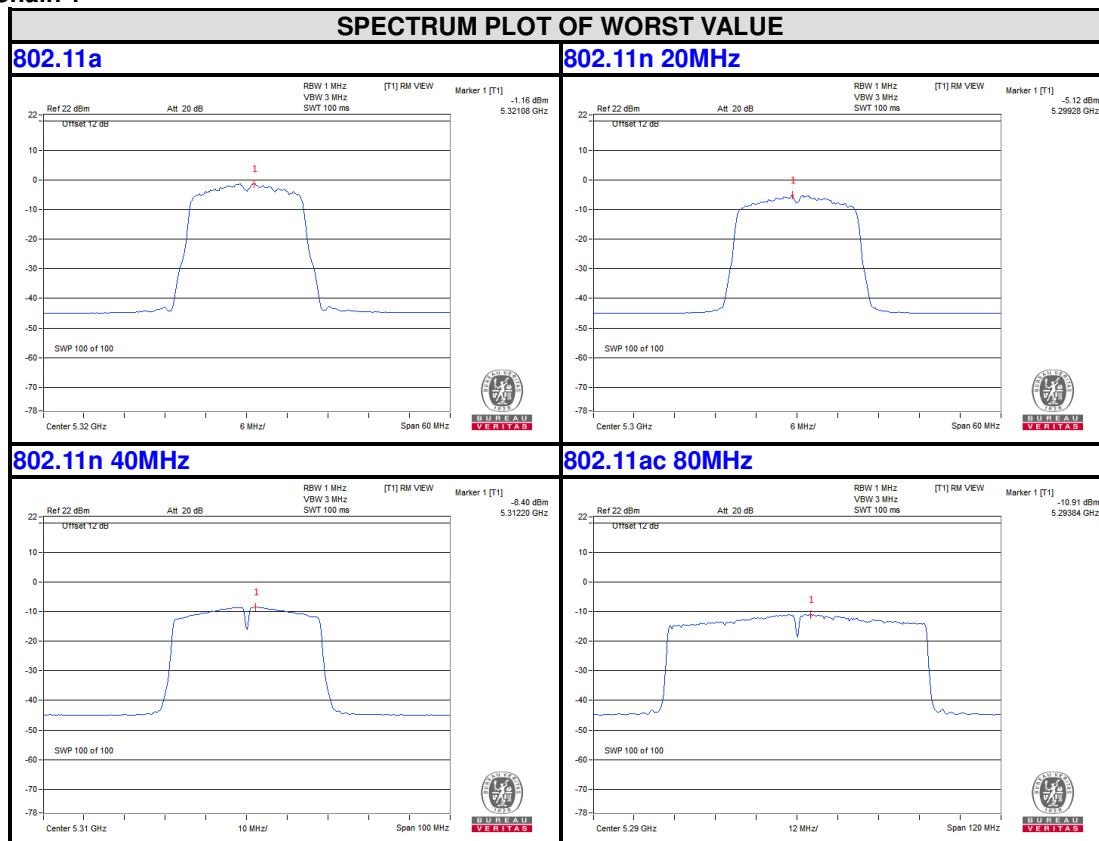
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Chain 1



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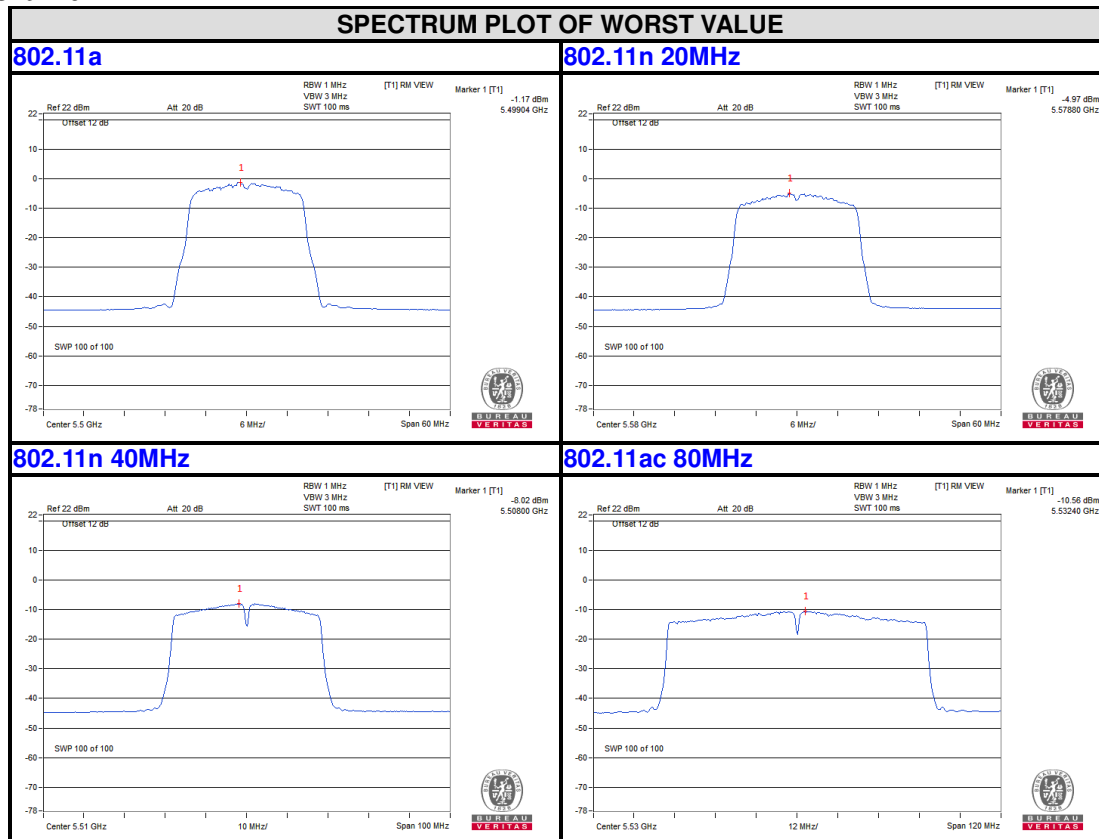
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BAND 3
5470-5725MHz
Chain 0



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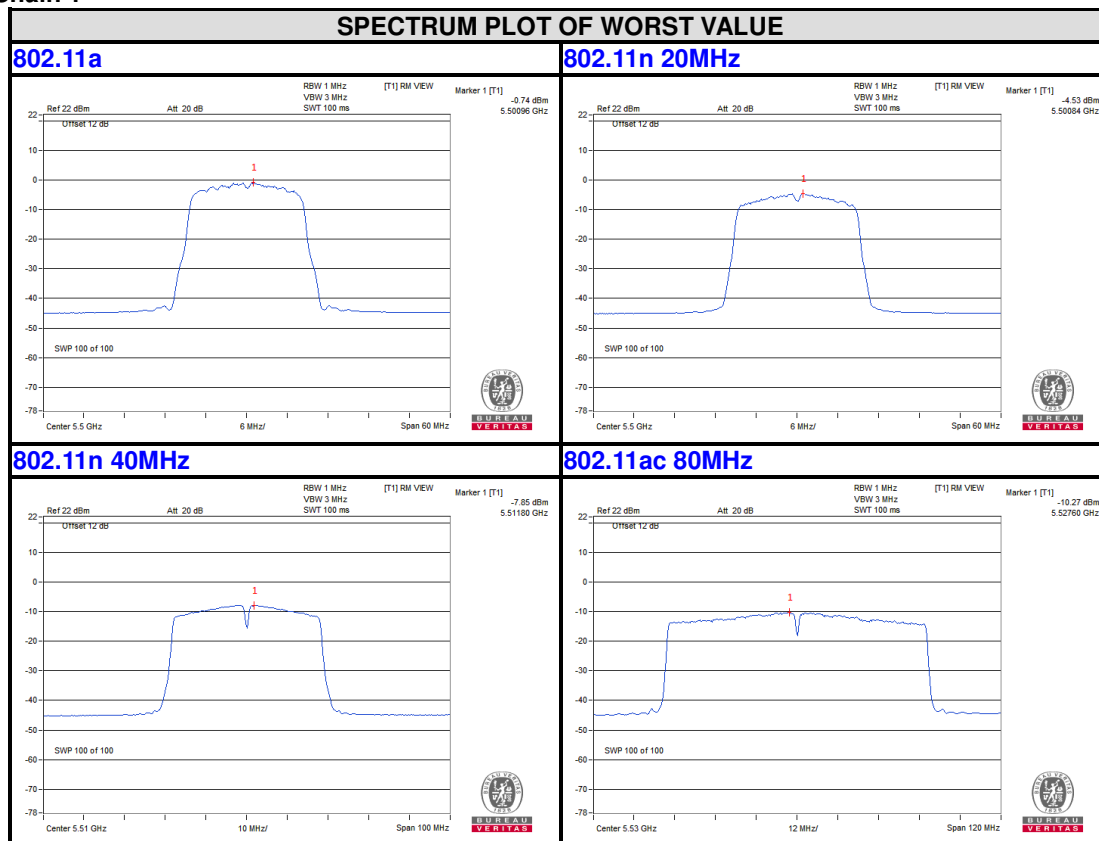
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Chain 1



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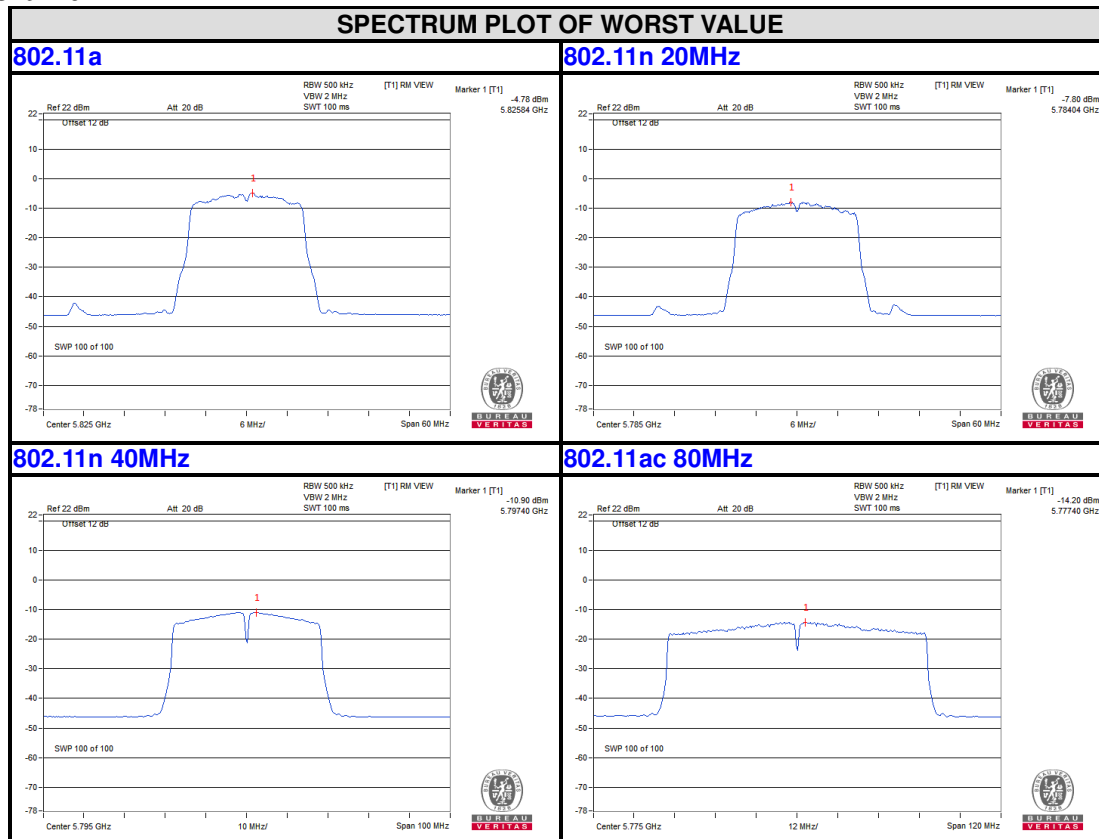
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BAND4
5725-5850MHz
Chain 0



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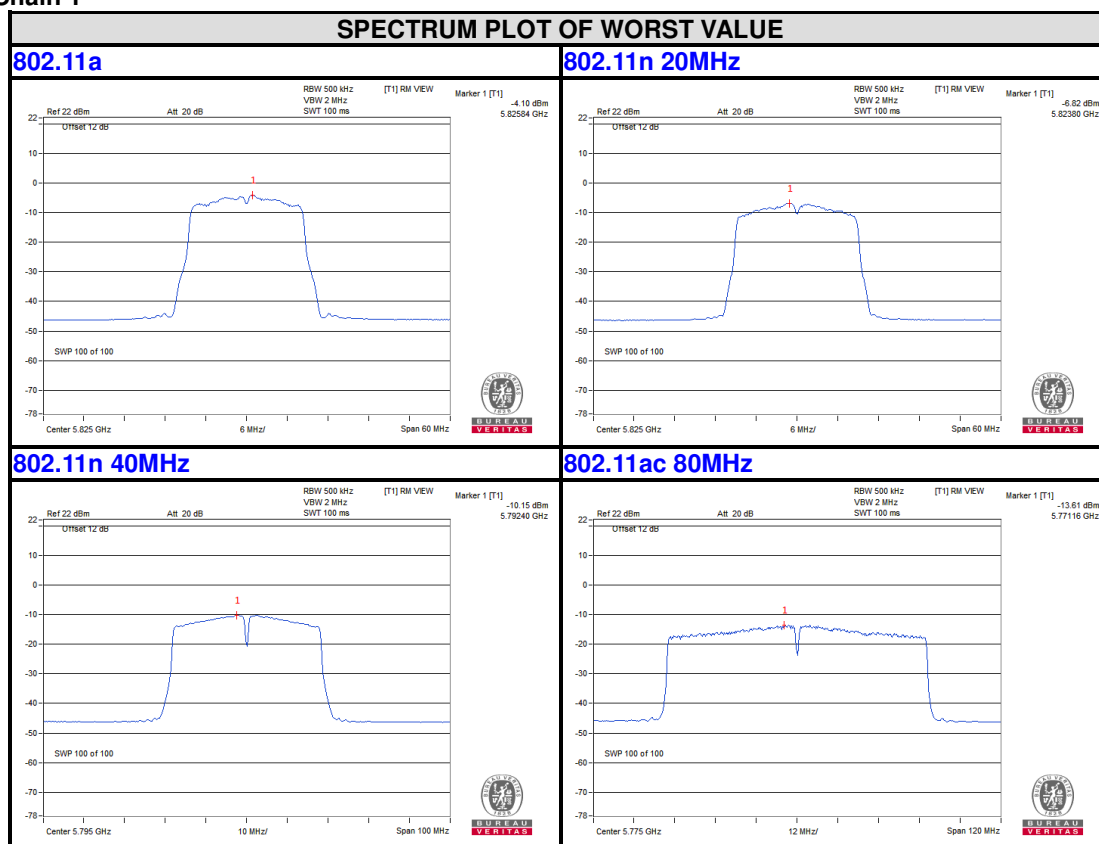
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Chain 1



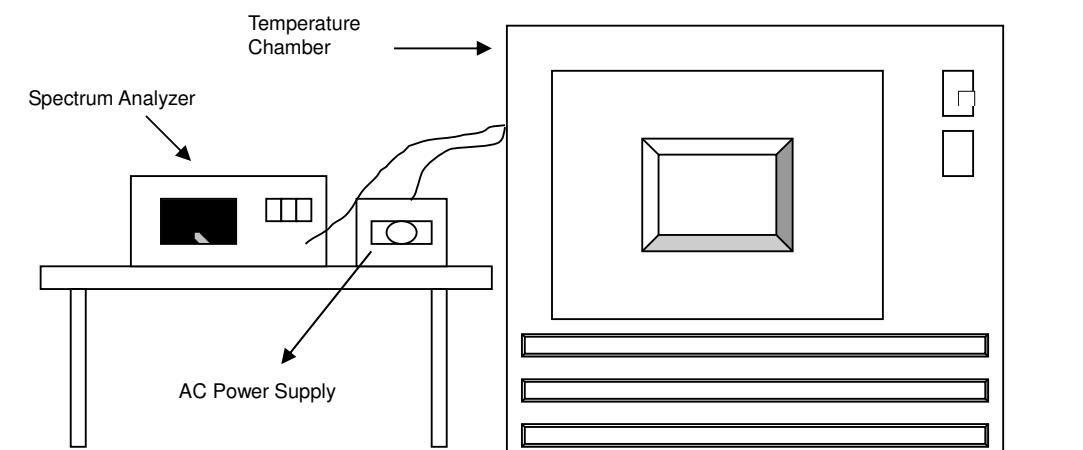


3.5 FREQUENCY STABILITY

3.5.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

The frequency of the carrier signal shall be maintained within band of operation.

3.5.2 TEST SETUP



3.5.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.



3.5.4 TEST PROCEDURE

- a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
- b. Turn the EUT on and couple its output to a spectrum analyzer.
- c. Turn the EUT off and set the chamber to the highest temperature specified.
- d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
- e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
- f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

3.5.5 DEVIATION FROM TEST STANDARD

No deviation.

3.5.6 EUT OPERATING CONDITION

Set the EUT transmit at un-modulation mode to test frequency stability.

**3.5.7 TEST RESULTS**

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift
50	120	5180.0127	0.00025	5180.0141	0.00027	5180.012	0.00023	5180.0155	0.00030
40	120	5180.001	0.00002	5180.0041	0.00008	5180.003	0.00006	5180.0018	0.00003
30	120	5179.9745	-0.00049	5179.9726	-0.00053	5179.9749	-0.00048	5179.9742	-0.00050
20	120	5180.0088	0.00017	5180.0057	0.00011	5180.0061	0.00012	5180.0083	0.00016
10	120	5179.9834	-0.00032	5179.9801	-0.00038	5179.9845	-0.00030	5179.9807	-0.00037
0	120	5180.0163	0.00031	5180.0154	0.00030	5180.0182	0.00035	5180.0146	0.00028
-10	120	5180.0022	0.00004	5180.0014	0.00003	5180.0024	0.00005	5180.0041	0.00008
-20	120	5179.9961	-0.00008	5179.9958	-0.00008	5179.9912	-0.00017	5179.9927	-0.00014
-30	120	5179.9841	-0.00031	5179.9855	-0.00028	5179.9862	-0.00027	5179.9835	-0.00032

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift
20	138	5180.0097	0.00019	5180.0057	0.00011	5180.0062	0.00012	5180.0088	0.00017
	120	5180.0088	0.00017	5180.0057	0.00011	5180.0061	0.00012	5180.0083	0.00016
	102	5180.0093	0.00018	5180.0049	0.00009	5180.0064	0.00012	5180.0092	0.00018



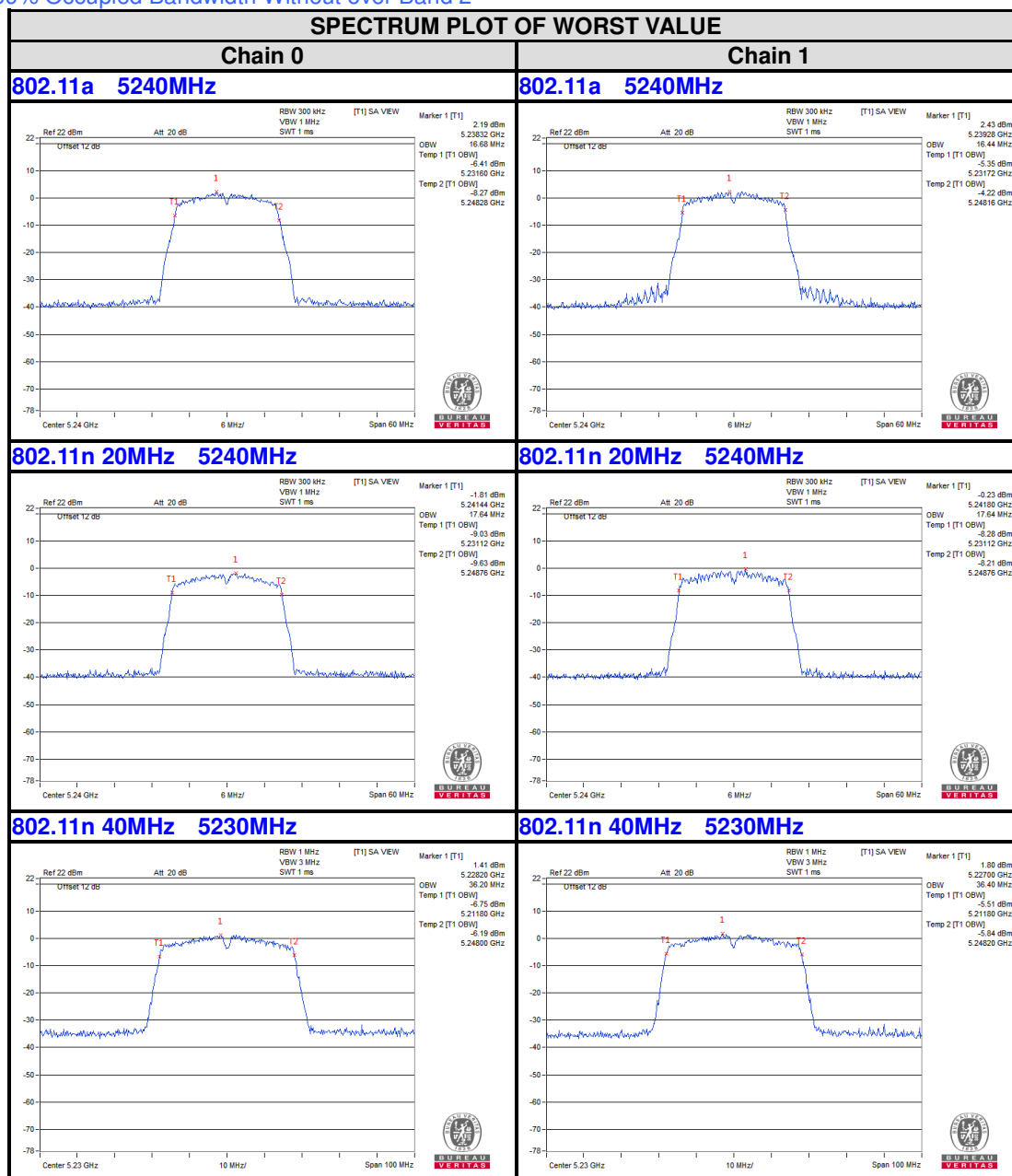
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Band 1

5150-5250MHz

99% Occupied Bandwidth Without over Band 2



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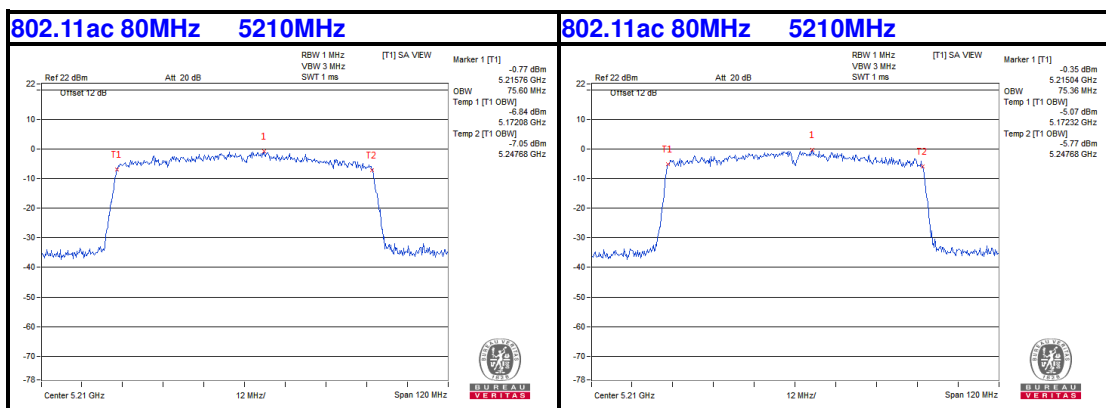
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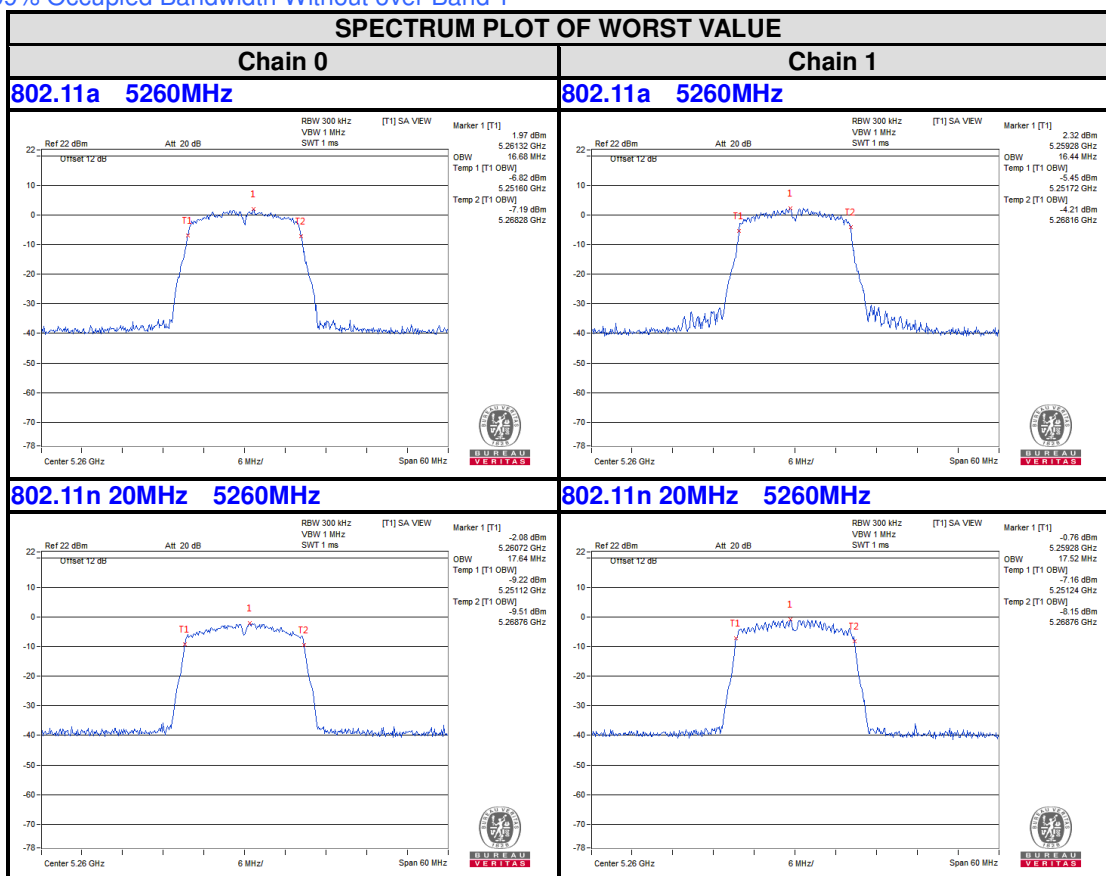


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Band 2
5250-5350MHz
99% Occupied Bandwidth Without over Band 1



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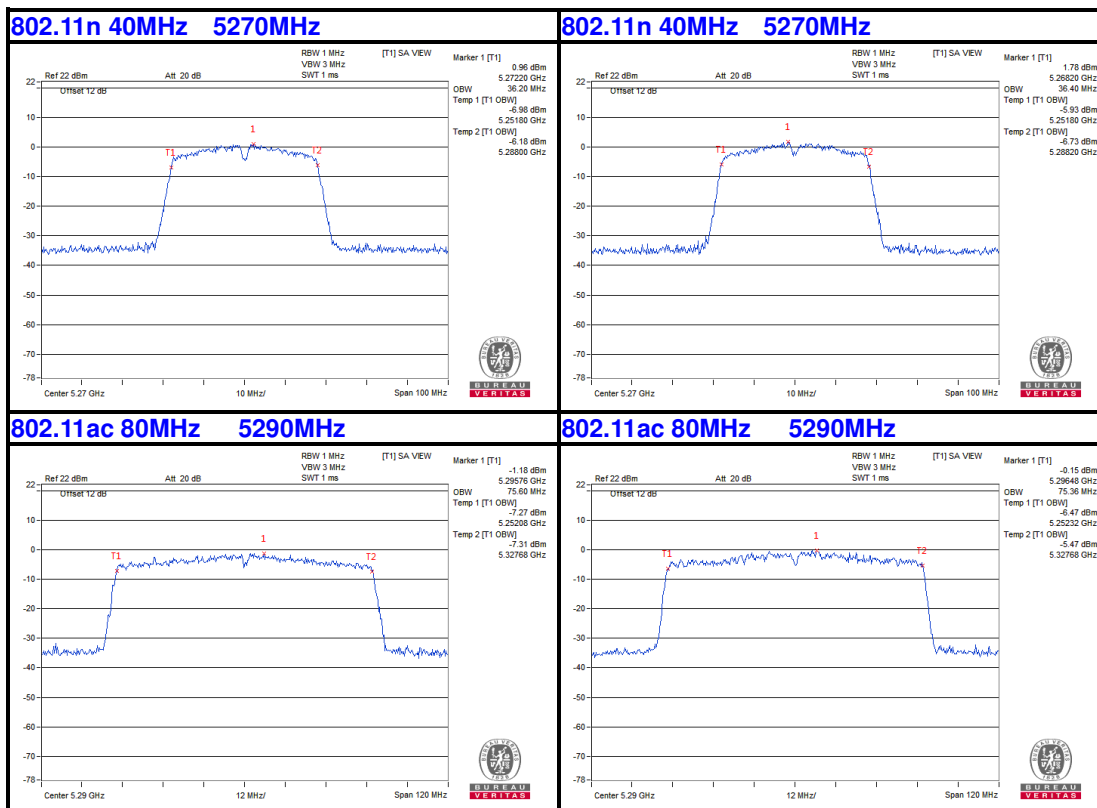
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4. PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).



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5. APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No modifications were made to the EUT by the lab during the test.

---END---