



Test Report No.: RF200421N040-4



TEST REPORT

Applicant	YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD.
Address	309, 3rd Floor, No.16, Yun Ding North Road, Huli District, Xiamen City, Fujian, P.R. China

Manufacturer or Supplier	YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD.
Address	309, 3rd Floor, No.16, Yun Ding North Road, Huli District, Xiamen City, Fujian, P.R. China
Product Name	Video Conferencing Endpoint
Brand Name	YEALINK
Model	MeetingEye 400
Additional Model & Model Difference	PVT940; see item 2.1
Date of tests	Apr. 21, 2020 ~ Jun. 17, 2020

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

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Project Engineer / EMC Department

Approved by Glyn He
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Date: Jun. 23, 2020

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF200421N040-4	Original release.	Jun. 23, 2020



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	2.70dB
Radiated emissions	9KHz ~ 30MHz	2.16dB
	30MHz ~ 1GMHz	3.60dB
	1GHz ~ 18GHz	4.82dB
	18GHz ~ 40GHz	5.00dB

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	Video Conferencing Endpoint
BRAND	YEALINK
MODEL NO.	MeetingEye 400
ADDITIONAL NO.	PVT940
FCC ID	T2C-ME400
POWER SUPPLY	DC 48V from Adapter Input AC 100-240V, 50/60hz
MODULATION TYPE	OFDM
MODULATION TECHNOLOGY	256QAM, 64QAM, 16QAM, QPSK, BPSK for 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 150Mbps 802.11ac: up to 433.3Mbps
OPERATING FREQUENCY	5180 ~ 5240MHz, 5260 ~ 5320MHz 5500 ~ 5700MHz, 5745 ~ 5825MHz
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: 11 channels for 802.11a, 802.11n (20MHz) 5 channels for 802.11n (40MHz) 2 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	23.605mW for 5180 ~ 5240MHz (Maximum AVG Power) 22.029mW for 5260 ~ 5320MHz (Maximum AVG Power) 27.353mW for 5500 ~ 5700MHz (Maximum AVG Power) 23.388mW for 5745 ~ 5825MHz (Maximum AVG Power)
ANTENNA TYPE	5180 ~ 5240MHz: PCB Antenna, with 3dBi gain 5260 ~ 5320MHz: PCB Antenna, with 3dBi gain 5500 ~ 5700MHz: PCB Antenna, with 3dBi gain 5745 ~ 5825MHz: PCB Antenna, with 3dBi gain
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	RJ45 Line: Shielded, Detachable, 3.0m. HDMI Line: Shielded, Detachable, 1.8m with two cores

NOTES:

1. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.
2. Please refer to the EUT photo document (Reference No.: 200421N040) for detailed product photo.
3. Additional model PVT940 is identical with the test model MeetingEye 400 except the model number for marketing purpose.
4. The EUT have SISO function, provides 1 completed transmitter and 1 receiver.

MODULATION MODE	FUNCTION
802.11a	1TX/1RX
802.11n (HT20), 802.11ac (VHT20)	1TX/1RX
802.11n (HT40), 802.11ac (VHT40)	1TX/1RX
802.11ac (VHT80)	1TX/1RX

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.

5. The EUT were powered by the following Adapter:

ADAPTER	
BRAND:	YEALINK
MODEL:	YLPS480700C
INPUT:	AC 100-240V, 50/60Hz 1.0A
OUTPUT:	DC 48V, 0.7A
AC LINE:	Unshielded, Non-detachable, 2m.
DC LINE:	Unshielded, Non-detachable, 1.45m.



2.2 DESCRIPTION OF TEST MODES

FOR 5150 ~ 5250MHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

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

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
42	5210MHz	--	--

FOR 5250 ~ 5350MHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

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

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
58	5290MHz	--	--



FOR 5470 ~ 5725MHz

11 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

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 802.11n (HT40), 802.11ac (VHT40):

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

2 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
106	5530MHz	122	5610MHz

FOR 5725 ~ 5850MHz

5 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

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

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755MHz	159	5795MHz

1 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
155	5775MHz	--	--



2.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	√	Powered by Adapter with wifi(5G) link

Where **RE≥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)
A	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, 122	106, 122	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)
A	802.11a	5150-5250 5250-5350 5470-5725 5725-5850	36 to 48 52 to 64 100 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	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5150-5250 5250-5350 5470-5725 5725-5850	36 to 48 52 to 64 100 to 140 149 to 165	36	OFDM	BPSK	6.0

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)
A	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, 122	106, 122	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(Adapter)	TESTED BY
RE<1G	24deg. C, 55%RH	DC 48V from Adapter	Hu
RE≥1G	24deg. C, 55%RH	DC 48V from Adapter	Hu
PLC	20deg. C, 56%RH	DC 48V from Adapter	Daniel
APCM	20deg. C, 55%RH	DC 48V from Adapter	Daniel



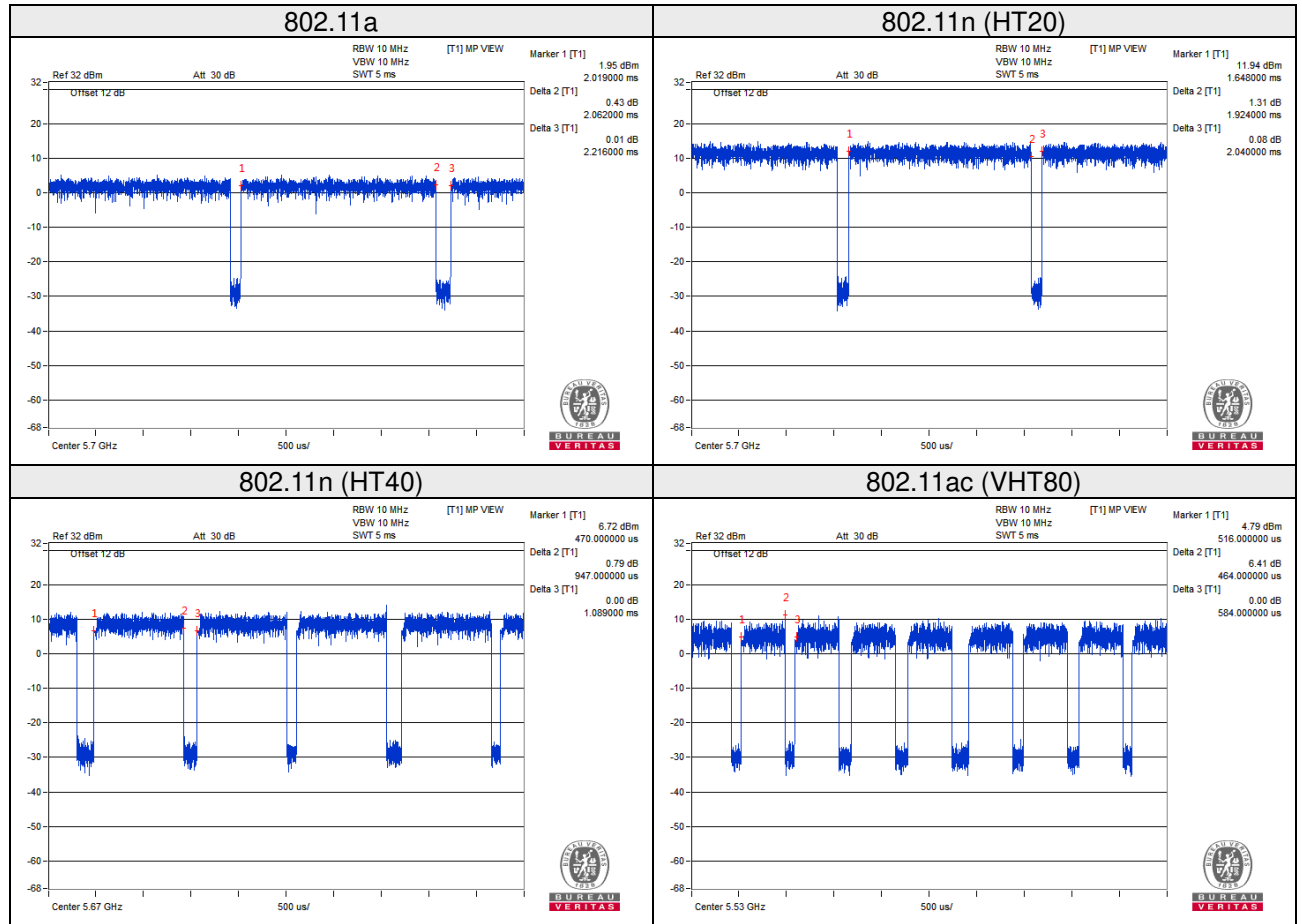
2.3 DUTY CYCLE OF TEST SIGNAL

802.11a: Duty cycle = 2.062/2.216 = 0.931, Duty factor = 10 * log(1/0.931) = 0.311

802.11n (HT20): Duty cycle = 1.924/2.04 = 0.943, Duty factor = 10 * log(1/0.943) = 0.255

802.11n (HT40): Duty cycle = 0.947/1.089 = 0.870, Duty factor = 10 * log(1/0.870) = 0.605

802.11ac (VHT80): Duty cycle = 0.464/0.584 = 0.795, Duty factor = 10 * log(1/0.795) = 0.996





2.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent 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	N/A	N/A	N/A	N/A	N/A

NO.	DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	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)

789033 D02 General UNII Test Procedures New Rules 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 v02r01	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:

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



3.1.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESU40	100449	Mar. 18,20	Mar. 17,21
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV7	102331	May 22,20	May 21,21
Active Loop Antenna (9KHz -30MHz)	SCHWARZBECK	FMZB 1519B	1519B-045	May 28,20	May 27,21
Amplifier (9KHz -1GHz)	Burgeon	BPA-530	100210	Mar. 15,20	Mar. 14,21
Bilog Antenna (20MHz -2GHz)	Teseq	CBL 6111D	30643	Jun. 23,19	Jun. 22,20
Horn Antenna (1GHz -18GHz)	ETS -Lindgren	3117	00062558	Jun. 23,19	Jun. 22,20
Horn Antenna (18GHz -40GHz)	SCHWARZBECK	BBHA 9170	BBHA9170147	Jun. 23,19	Jun. 22,20
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	NSEMC003	Apr. 21,20	Apr. 20,21
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A	N/A
Broadband Preamplifier (1GHz~18GHz)	SCHWARZBECK	BBV9718	305	Apr. 21,20	Apr. 20,21
Pre-Amplifier (18GHz-40GHz)	EMCI	EMC 184045	980102	Mar. 04,20	Mar. 03,21
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A	N/A

NOTES:

1. The calibration interval of the above test instruments are 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
3. 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.

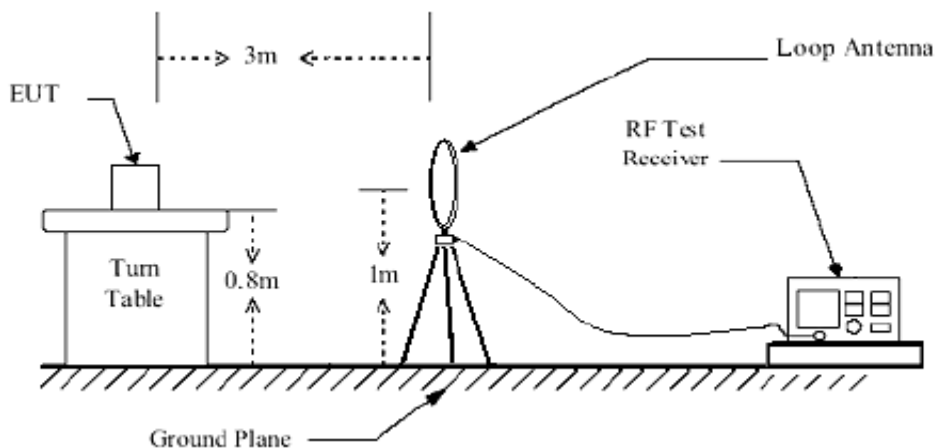
3.1.5 DEVIATION FROM TEST STANDARD

No deviation.

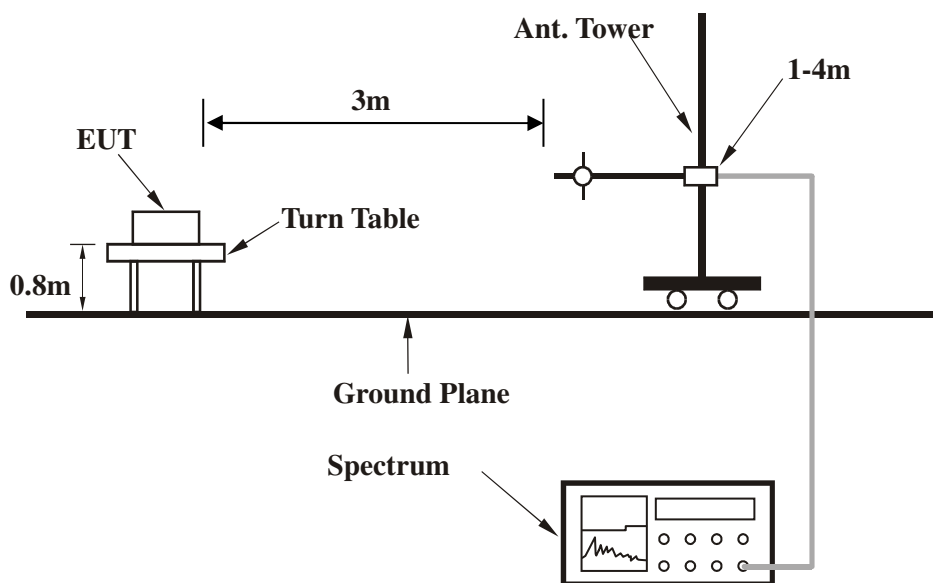


3.1.6 TEST SETUP

Below 30MHz



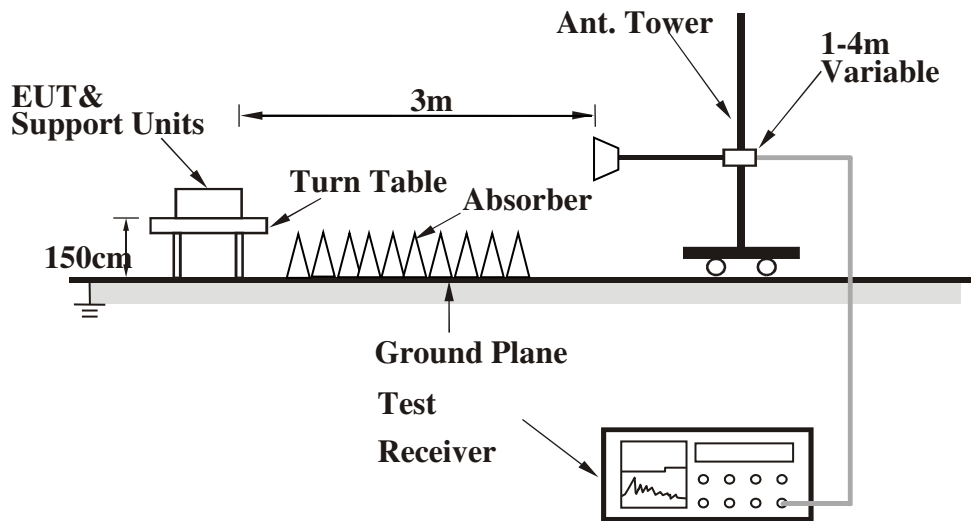
Below 1GHz test setup



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).

3.1.7 EUT OPERATING CONDITION

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



3.1.8 TEST RESULTS

BELOW 1GHz WORST-CASE DATA

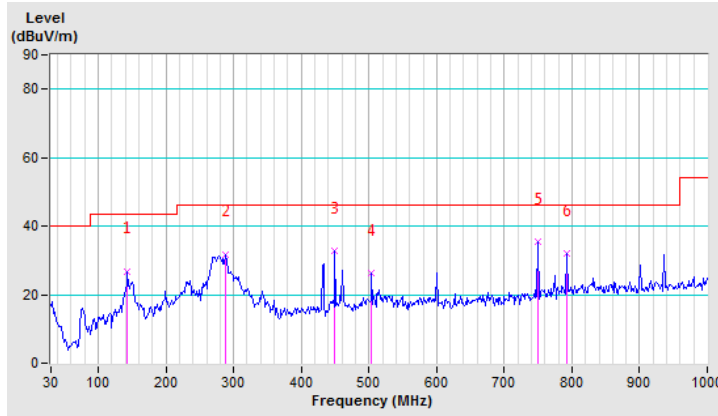
802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9KHz ~ 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	143.48	26.86 QP	43.50	-16.64	1.00 H	152	44.63	-17.77
2	288.04	31.81 QP	46.00	-14.19	1.00 H	303	47.79	-15.98
3	449.71	32.87 QP	46.00	-13.13	1.00 H	179	44.49	-11.62
4	504.12	26.13 QP	46.00	-19.87	1.00 H	204	36.94	-10.81
5	749.73	35.31 QP	46.00	-10.69	1.00 H	82	41.74	-6.43
6	791.70	32.12 QP	46.00	-13.88	1.00 H	77	37.94	-5.82

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 greater than 20dB margin.
4. 9KHz~30MHz have been test and test data more than 20dB margin.
5. Margin value = Emission level – Limit value.





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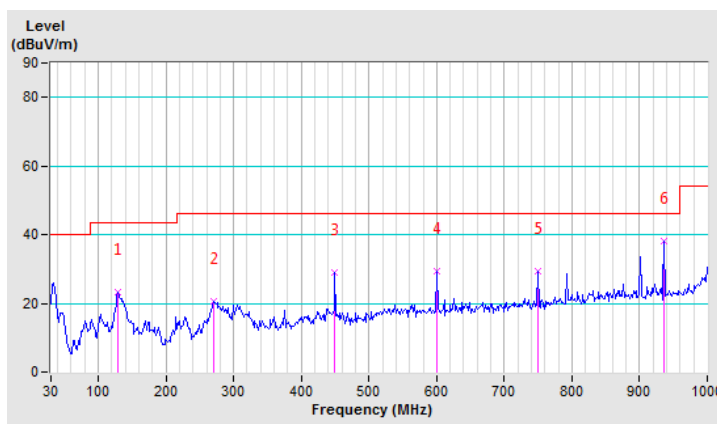
Test Report No.: RF200421N040-4

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9KHz ~ 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	129.49	23.24 QP	43.50	-20.26	1.00 V	61	41.09	-17.85
2	270.95	20.69 QP	46.00	-25.31	1.00 V	46	37.94	-17.25
3	449.71	29.09 QP	46.00	-16.91	1.00 V	34	40.71	-11.62
4	600.50	29.20 QP	46.00	-16.80	1.00 V	23	38.19	-8.99
5	749.73	29.33 QP	46.00	-16.67	1.00 V	12	35.76	-6.43
6	936.27	38.15 QP	46.00	-7.85	1.00 V	2	42.20	-4.05

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 greater than 20dB margin.
4. 9KHz~30MHz have been test and test data more than 20dB margin.
5. Margin value = Emission level – Limit value.





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	5140.00	53.48 PK	74.00	-20.52	1.00 H	114	45.27	8.21
2	5140.00	36.60 AV	54.00	-17.40	1.00 H	114	28.39	8.21
3	5147.00	57.59 PK	74.00	-16.41	1.00 H	114	49.36	8.23
4	5147.00	38.50 AV	54.00	-15.50	1.00 H	114	30.27	8.23
5	5150.00	50.76 PK	74.00	-23.24	1.00 H	114	42.53	8.23
6	5150.00	39.25 AV	54.00	-14.75	1.00 H	114	31.02	8.23
7	*5180.00	95.93 PK			1.00 H	114	87.64	8.29
8	*5180.00	82.14 AV			1.00 H	114	73.85	8.29
9	#10360.00	57.48 PK	68.20	-10.72	1.00 H	0	39.62	17.86
10	15540.00	63.23 PK	74.00	-10.77	1.00 H	0	38.96	24.27
11	15540.00	46.35 AV	54.00	-7.65	1.00 H	0	22.08	24.27

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	5147.44	70.32 PK	74.00	-3.68	1.00 V	106	62.09	8.23
2	5147.44	43.68 AV	54.00	-10.32	1.00 V	106	35.45	8.23
3	5150.00	69.79 PK	74.00	-4.21	1.00 V	106	61.56	8.23
4	5150.00	44.87 AV	54.00	-9.13	1.00 V	106	36.64	8.23
5	*5180.00	109.66 PK			1.00 V	106	101.37	8.29
6	*5180.00	95.55 AV			1.00 V	106	87.26	8.29
7	#10360.00	59.07 PK	68.20	-9.13	1.00 V	0	41.21	17.86
8	15540.00	64.61 PK	74.00	-9.39	1.00 V	0	40.34	24.27
9	15540.00	47.28 AV	54.00	-6.72	1.00 V	0	23.01	24.27

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

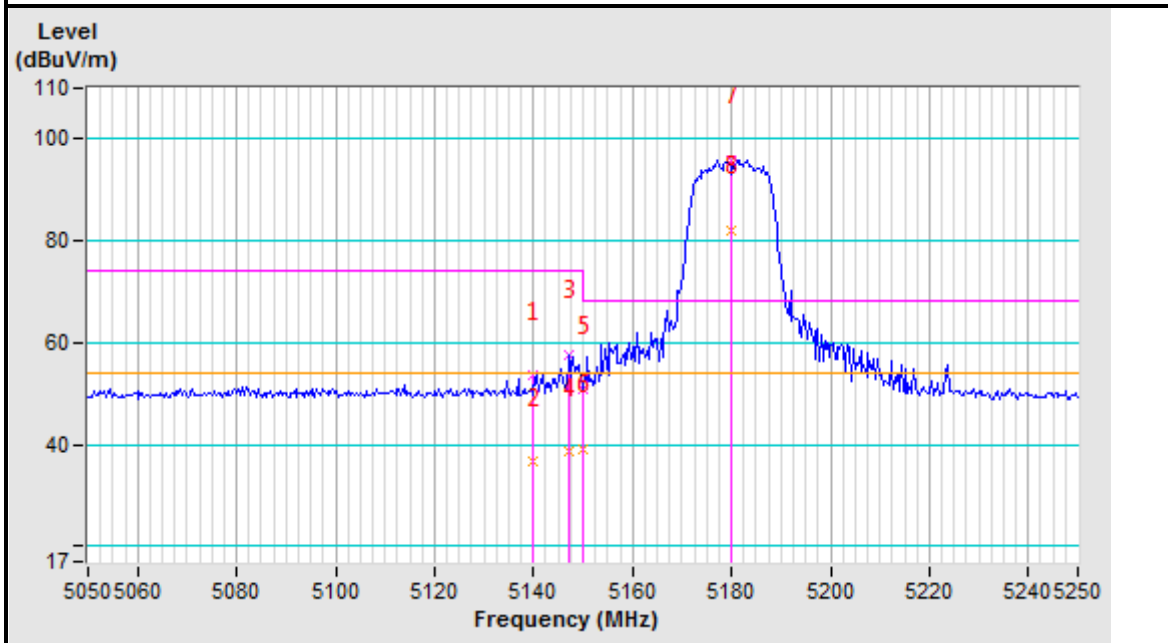


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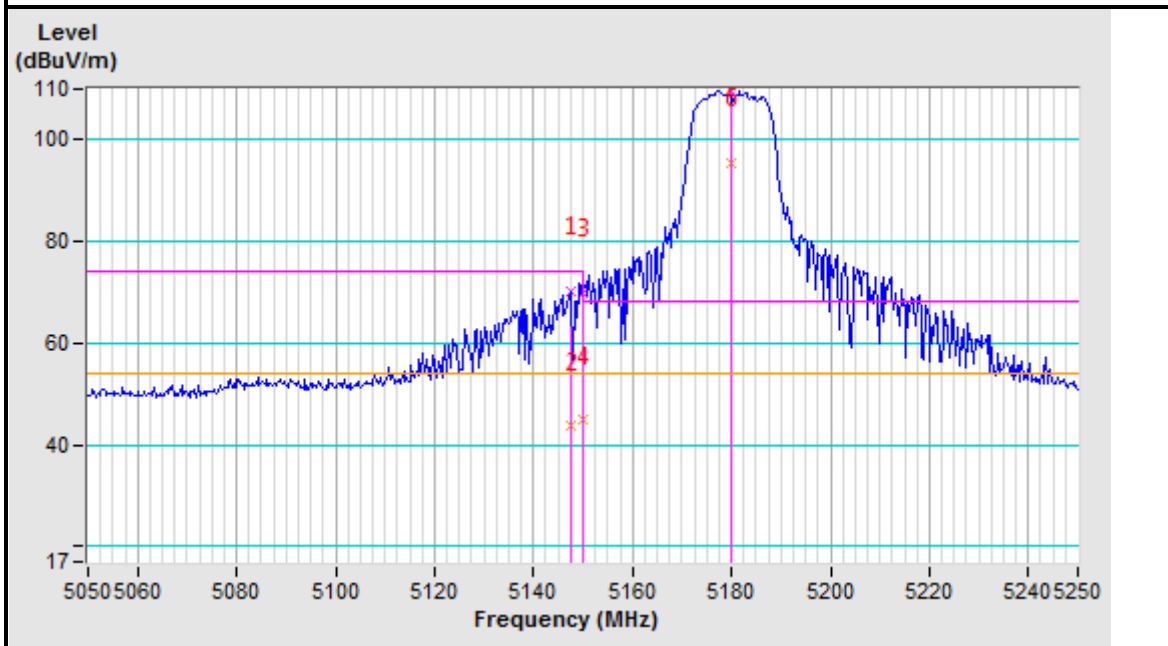
Test Report No.: RF200421N040-4

Band edge Plot

5180MHz Horizontal



5180MHz Vertical





BUREAU VERITAS

Test Report No.: RF200421N040-4

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	56.23 PK	74.00	-17.77	1.00 H	40	48.01	8.22
2	5145.00	37.40 AV	54.00	-16.60	1.00 H	40	29.18	8.22
3	5150.00	57.71 PK	74.00	-16.29	1.00 H	40	49.48	8.23
4	5150.00	38.60 AV	54.00	-15.40	1.00 H	40	30.37	8.23
5	*5200.00	102.18 PK			1.00 H	40	93.84	8.34
6	*5200.00	88.42 AV			1.00 H	40	80.08	8.34
7	#10400.00	56.48 PK	68.20	-11.72	1.00 H	0	38.53	17.95
8	15600.00	63.32 PK	74.00	-10.68	1.00 H	0	38.92	24.40
9	15600.00	45.65 AV	54.00	-8.35	1.00 H	0	21.25	24.40

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	5144.00	67.41 PK	74.00	-6.59	1.00 V	111	59.19	8.22
2	5144.00	41.23 AV	54.00	-12.77	1.00 V	111	33.01	8.22
3	5150.00	68.10 PK	74.00	-5.90	1.00 V	111	59.87	8.23
4	5150.00	43.33 AV	54.00	-10.67	1.00 V	111	35.10	8.23
5	*5200.00	113.50 PK			1.00 V	111	105.16	8.34
6	*5200.00	99.35 AV			1.00 V	111	91.01	8.34
7	#10400.00	59.40 PK	68.20	-8.80	1.00 V	0	41.45	17.95
8	15600.00	64.32 PK	74.00	-9.68	1.00 V	0	39.92	24.40
9	15600.00	46.60 AV	54.00	-7.40	1.00 V	0	22.20	24.40

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 greater than 20dB margin.
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	5147.00	49.36 PK	74.00	-24.64	1.00 H	30	41.13	8.23
2	5147.00	37.80 AV	54.00	-16.20	1.00 H	30	29.57	8.23
3	5150.00	49.82 PK	74.00	-24.18	1.00 H	30	41.59	8.23
4	5150.00	38.10 AV	54.00	-15.90	1.00 H	30	29.87	8.23
5	*5240.00	103.63 PK			1.00 H	30	95.20	8.43
6	*5240.00	88.84 AV			1.00 H	30	80.41	8.43
7	5350.00	50.73 PK	74.00	-23.27	1.00 H	30	42.07	8.66
8	5350.00	39.20 AV	54.00	-14.80	1.00 H	30	30.54	8.66
9	5355.00	50.86 PK	74.00	-23.14	1.00 H	30	42.19	8.67
10	5355.00	38.40 AV	54.00	-15.60	1.00 H	30	29.73	8.67
11	#10480.00	55.18 PK	68.20	-13.02	1.00 H	0	37.05	18.13
12	15720.00	62.20 PK	74.00	-11.80	1.00 H	0	37.54	24.66
13	15720.00	46.38 AV	54.00	-7.62	1.00 H	0	21.72	24.66

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	5146.00	54.25 PK	74.00	-19.75	1.00 V	104	46.03	8.22
2	5146.00	40.58 AV	54.00	-13.42	1.00 V	104	32.36	8.22
3	5150.00	52.86 PK	74.00	-21.14	1.00 V	104	44.63	8.23
4	5150.00	40.10 AV	54.00	-13.90	1.00 V	104	31.87	8.23
5	*5240.00	114.16 PK			1.00 V	104	105.73	8.43
6	*5240.00	100.19 AV			1.00 V	104	91.76	8.43
7	5350.00	50.63 PK	74.00	-23.37	1.00 V	104	41.97	8.66
8	5350.00	39.12 AV	54.00	-14.88	1.00 V	104	30.46	8.66
9	5380.00	54.70 PK	74.00	-19.30	1.00 V	104	45.98	8.72
10	5380.00	41.16 AV	54.00	-12.84	1.00 V	104	32.44	8.72
11	#10480.00	58.23 PK	68.20	-9.97	1.00 V	0	40.10	18.13
12	15720.00	64.06 PK	74.00	-9.94	1.00 V	0	39.40	24.66
13	15720.00	47.50 AV	54.00	-6.50	1.00 V	0	22.84	24.66

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 greater than 20dB margin.
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	15540.00	46.27 AV	54.00	-7.73	1.00 H	0	22.00	24.27
2	5144.00	53.48 PK	74.00	-20.52	1.00 H	114	45.26	8.22
3	5144.00	36.80 AV	54.00	-17.20	1.00 H	114	28.58	8.22
4	5150.00	55.48 PK	74.00	-18.52	1.00 H	114	47.25	8.23
5	5150.00	38.60 AV	54.00	-15.40	1.00 H	114	30.37	8.23
6	*5180.00	94.29 PK			1.00 H	114	86.00	8.29
7	*5180.00	80.06 AV			1.00 H	114	71.77	8.29
8	15540.00	63.24 PK	74.00	-10.76	1.00 H	0	38.97	24.27
9	#10360.00	55.94 PK	68.20	-12.26	1.00 H	0	38.08	17.86

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

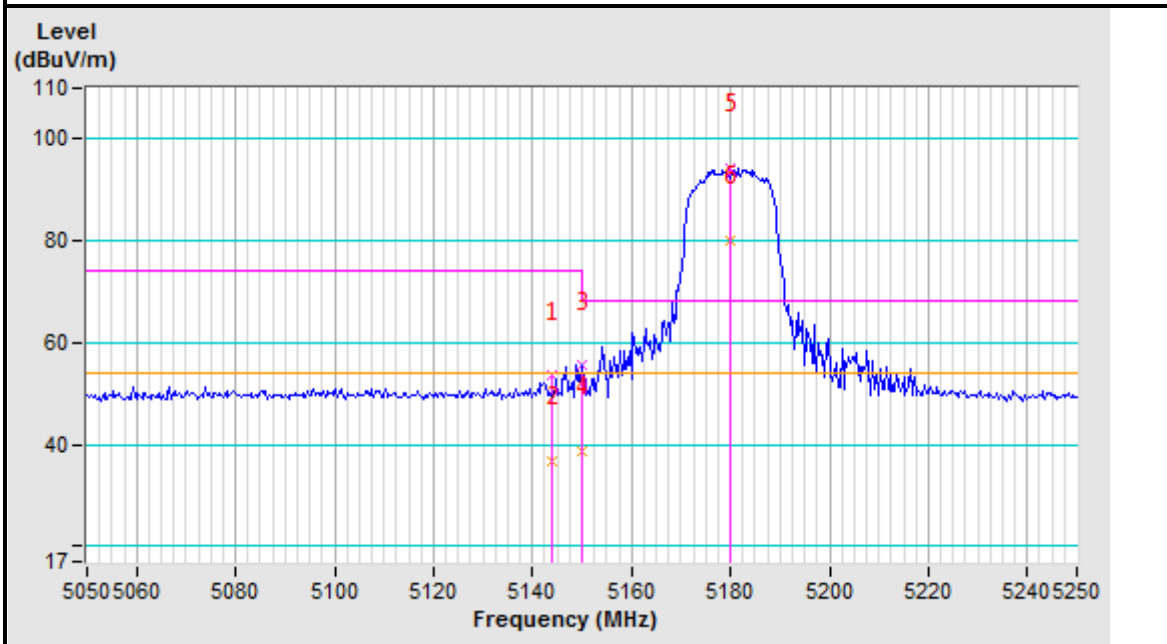
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	15540.00	47.30 AV	54.00	-6.70	1.00 V	0	23.03	24.27
2	5145.51	69.47 PK	74.00	-4.53	1.00 V	107	61.25	8.22
3	5145.51	43.89 AV	54.00	-10.11	1.00 V	107	35.67	8.22
4	5150.00	70.57 PK	74.00	-3.43	1.00 V	107	62.34	8.23
5	5150.00	43.49 AV	54.00	-10.51	1.00 V	107	35.26	8.23
6	*5180.00	108.00 PK			1.00 V	107	99.71	8.29
7	*5180.00	93.57 AV			1.00 V	107	85.28	8.29
8	15540.00	63.95 PK	74.00	-10.05	1.00 V	0	39.68	24.27
9	#10360.00	58.60 PK	68.20	-9.60	1.00 V	0	40.74	17.86

REMARKS:

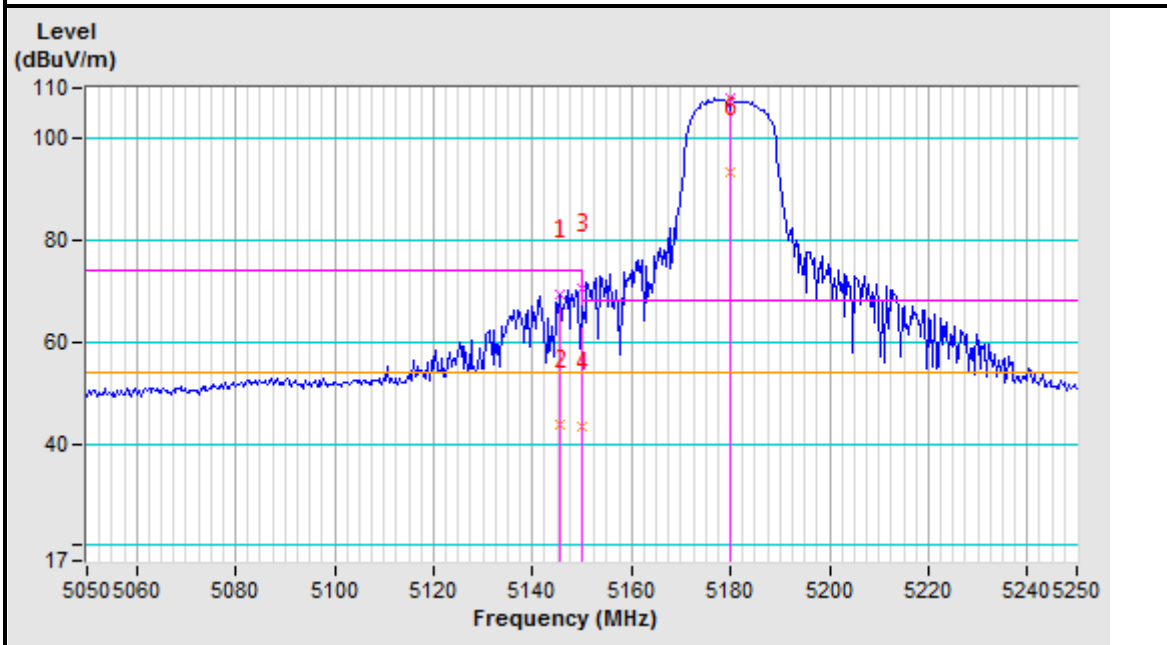
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.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

Band edge Plot

5180MHz Horizontal



5180MHz Vertical





BUREAU VERITAS

Test Report No.: RF200421N040-4

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	5148.00	54.81 PK	74.00	-19.19	1.00 H	0	46.58	8.23
2	5148.00	37.10 AV	54.00	-16.90	1.00 H	0	28.87	8.23
3	5150.00	55.44 PK	74.00	-18.56	1.00 H	0	47.21	8.23
4	5150.00	37.60 AV	54.00	-16.40	1.00 H	0	29.37	8.23
5	*5200.00	100.23 PK			1.00 H	0	91.89	8.34
6	*5200.00	85.10 AV			1.00 H	0	76.76	8.34
7	#10400.00	56.28 PK	68.20	-11.92	1.00 H	0	38.33	17.95
8	15600.00	62.90 PK	74.00	-11.10	1.00 H	0	38.50	24.40
9	15600.00	45.80 AV	54.00	-8.20	1.00 H	0	21.40	24.40

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	5149.00	64.35 PK	74.00	-9.65	1.00 V	45	56.12	8.23
2	5149.00	40.80 AV	54.00	-13.20	1.00 V	45	32.57	8.23
3	5150.00	67.06 PK	74.00	-6.94	1.00 V	45	58.83	8.23
4	5150.00	51.59 AV	54.00	-2.41	1.00 V	45	43.36	8.23
5	*5200.00	112.29 PK			1.00 V	45	103.95	8.34
6	*5200.00	97.65 AV			1.00 V	45	89.31	8.34
7	#10400.00	60.01 PK	68.20	-8.19	1.00 V	0	42.06	17.95
8	15600.00	64.27 PK	74.00	-9.73	1.00 V	0	39.87	24.40
9	15600.00	46.60 AV	54.00	-7.40	1.00 V	0	22.20	24.40

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 greater than 20dB margin.
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.: RF200421N040-4

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	5144.00	49.03 PK	74.00	-24.97	1.00 H	20	40.81	8.22
2	5144.00	37.90 AV	54.00	-16.10	1.00 H	20	29.68	8.22
3	5150.00	49.65 PK	74.00	-24.35	1.00 H	20	41.42	8.23
4	5150.00	38.50 AV	54.00	-15.50	1.00 H	20	30.27	8.23
5	*5240.00	102.69 PK			1.00 H	20	94.26	8.43
6	*5240.00	91.52 AV			1.00 H	20	83.09	8.43
7	5350.00	51.40 PK	74.00	-22.60	1.00 H	20	42.74	8.66
8	5350.00	39.03 AV	54.00	-14.97	1.00 H	20	30.37	8.66
9	5369.00	51.80 PK	74.00	-22.20	1.00 H	20	43.11	8.69
10	5369.00	38.45 AV	54.00	-15.55	1.00 H	20	29.76	8.69
11	#10480.00	56.94 PK	68.20	-11.26	1.00 H	0	38.81	18.13
12	15720.00	63.26 PK	74.00	-10.74	1.00 H	0	38.60	24.66
13	15720.00	45.53 AV	54.00	-8.47	1.00 H	0	20.87	24.66

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	5146.00	54.20 PK	74.00	-19.80	1.00 V	60	45.98	8.22
2	5146.00	40.05 AV	54.00	-13.95	1.00 V	60	31.83	8.22
3	5150.00	53.52 PK	74.00	-20.48	1.00 V	60	45.29	8.23
4	5150.00	40.22 AV	54.00	-13.78	1.00 V	60	31.99	8.23
5	*5240.00	114.30 PK			1.00 V	60	105.87	8.43
6	*5240.00	100.01 AV			1.00 V	60	91.58	8.43
7	5350.00	51.59 PK	74.00	-22.41	1.00 V	60	42.93	8.66
8	5350.00	39.94 AV	54.00	-14.06	1.00 V	60	31.28	8.66
9	5384.00	52.76 PK	74.00	-21.24	1.00 V	60	44.03	8.73
10	5384.00	39.50 AV	54.00	-14.50	1.00 V	60	30.77	8.73
11	#10480.00	60.02 PK	68.20	-8.18	1.00 V	0	41.89	18.13
12	15720.00	64.29 PK	74.00	-9.71	1.00 V	0	39.63	24.66
13	15720.00	47.18 AV	54.00	-6.82	1.00 V	0	22.52	24.66

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 greater than 20dB margin.
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	57.16 PK	74.00	-16.84	1.00 H	59	48.94	8.22
2	5145.00	39.00 AV	54.00	-15.00	1.00 H	59	30.78	8.22
3	5150.00	54.37 PK	74.00	-19.63	1.00 H	59	46.14	8.23
4	5150.00	38.20 AV	54.00	-15.80	1.00 H	59	29.97	8.23
5	*5190.00	90.38 PK			1.00 H	59	82.06	8.32
6	*5190.00	75.65 AV			1.00 H	59	67.33	8.32
7	#10380.00	56.94 PK	68.20	-11.26	1.00 H	358	39.04	17.90
8	15570.00	62.29 PK	74.00	-11.71	1.00 H	358	37.96	24.33
9	15570.00	45.93 AV	54.00	-8.07	1.00 H	358	21.60	24.33

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

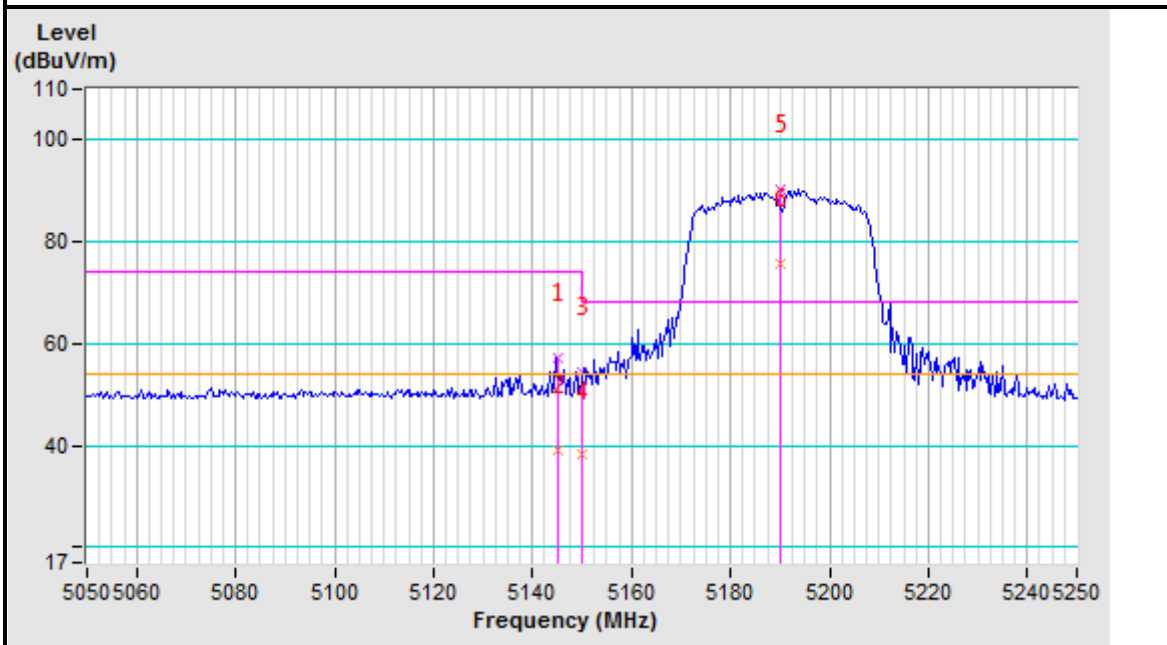
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5147.44	68.92 PK	74.00	-5.08	1.00 V	109	60.69	8.23
2	5147.44	43.25 AV	54.00	-10.75	1.00 V	109	35.02	8.23
3	5150.00	68.16 PK	74.00	-5.84	1.00 V	109	59.93	8.23
4	5150.00	43.17 AV	54.00	-10.83	1.00 V	109	34.94	8.23
5	*5190.00	103.38 PK			1.00 V	109	95.06	8.32
6	*5190.00	86.29 AV			1.00 V	109	77.97	8.32
7	#10380.00	59.34 PK	68.20	-8.86	1.00 V	263	41.44	17.90
8	15570.00	64.52 PK	74.00	-9.48	1.00 V	263	40.19	24.33
9	15570.00	47.30 AV	54.00	-6.70	1.00 V	263	22.97	24.33

REMARKS:

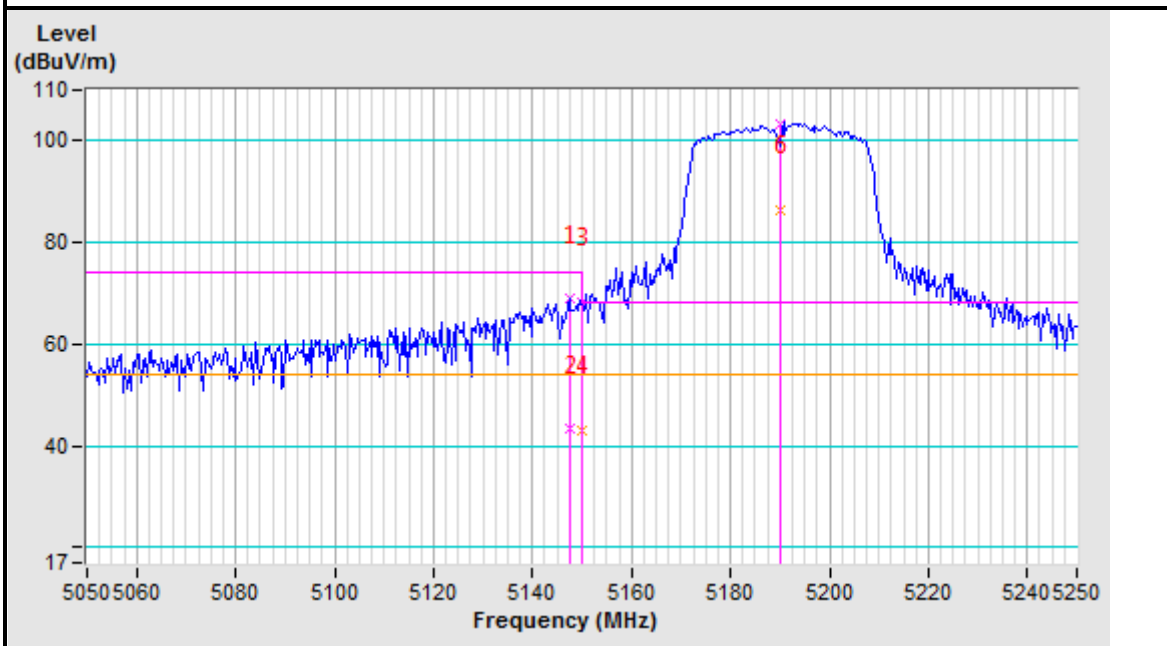
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
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	5147.00	56.76 PK	74.00	-17.24	1.00 H	30	48.53	8.23
2	5147.00	39.60 AV	54.00	-14.40	1.00 H	30	31.37	8.23
3	5150.00	55.90 PK	74.00	-18.10	1.00 H	30	47.67	8.23
4	5150.00	40.30 AV	54.00	-13.70	1.00 H	30	32.07	8.23
5	*5230.00	100.47 PK			1.00 H	30	92.07	8.40
6	*5230.00	82.99 AV			1.00 H	30	74.59	8.40
7	#10460.00	56.24 PK	68.20	-11.96	1.00 H	0	38.16	18.08
8	15690.00	62.84 PK	74.00	-11.16	1.00 H	0	38.25	24.59
9	15690.00	45.77 AV	54.00	-8.23	1.00 H	0	21.18	24.59

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	5146.00	67.85 PK	74.00	-6.15	1.00 V	225	59.63	8.22
2	5146.00	44.23 AV	54.00	-9.77	1.00 V	225	36.01	8.22
3	5150.00	66.44 PK	74.00	-7.56	1.00 V	225	58.21	8.23
4	5150.00	45.15 AV	54.00	-8.85	1.00 V	225	36.92	8.23
5	*5230.00	112.03 PK			1.00 V	225	103.63	8.40
6	*5230.00	95.83 AV			1.00 V	225	87.43	8.40
7	#10460.00	59.35 PK	68.20	-8.85	1.00 V	0	41.27	18.08
8	15690.00	64.29 PK	74.00	-9.71	1.00 V	0	39.70	24.59
9	15690.00	47.06 AV	54.00	-6.94	1.00 V	0	22.47	24.59

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 greater than 20dB margin.
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	5143.00	55.16 PK	74.00	-18.84	1.00 H	360	46.94	8.22
2	5143.00	38.50 AV	54.00	-15.50	1.00 H	360	30.28	8.22
3	5150.00	57.13 PK	74.00	-16.87	1.00 H	360	48.90	8.23
4	5150.00	39.60 AV	54.00	-14.40	1.00 H	360	31.37	8.23
5	*5210.00	92.63 PK			1.00 H	360	84.26	8.37
6	*5210.00	69.74 AV			1.00 H	360	61.37	8.37
7	#10420.00	56.98 PK	68.20	-11.22	1.00 H	0	38.99	17.99
8	15630.00	63.34 PK	74.00	-10.66	1.00 H	0	38.88	24.46
9	15630.00	46.12 AV	54.00	-7.88	1.00 H	0	21.66	24.46

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	5147.44	68.99 PK	74.00	-5.01	1.00 V	150	60.76	8.23
2	5147.44	47.12 AV	54.00	-6.88	1.00 V	150	38.89	8.23
3	5150.00	67.25 PK	74.00	-6.75	1.00 V	150	59.02	8.23
4	5150.00	46.94 AV	54.00	-7.06	1.00 V	150	38.71	8.23
5	*5210.00	102.47 PK			1.00 V	150	94.10	8.37
6	*5210.00	79.35 AV			1.00 V	150	70.98	8.37
7	#10420.00	60.30 PK	68.20	-7.90	1.00 V	0	42.31	17.99
8	15630.00	64.28 PK	74.00	-9.72	1.00 V	0	39.82	24.46
9	15630.00	46.79 AV	54.00	-7.21	1.00 V	0	22.33	24.46

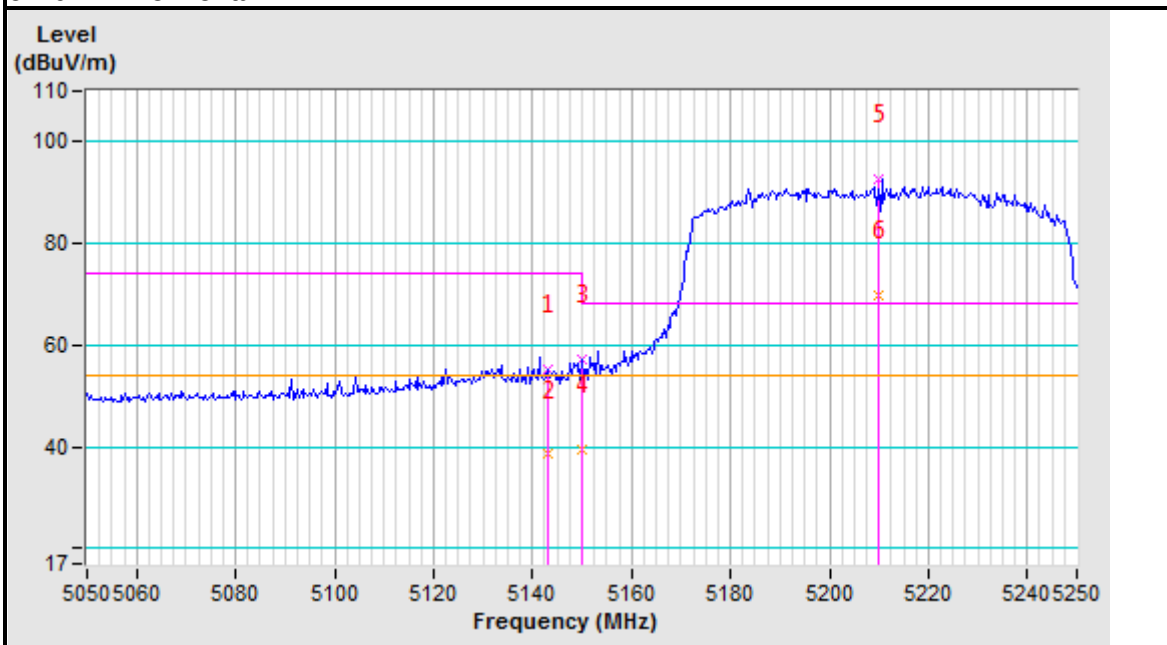
REMARKS:

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

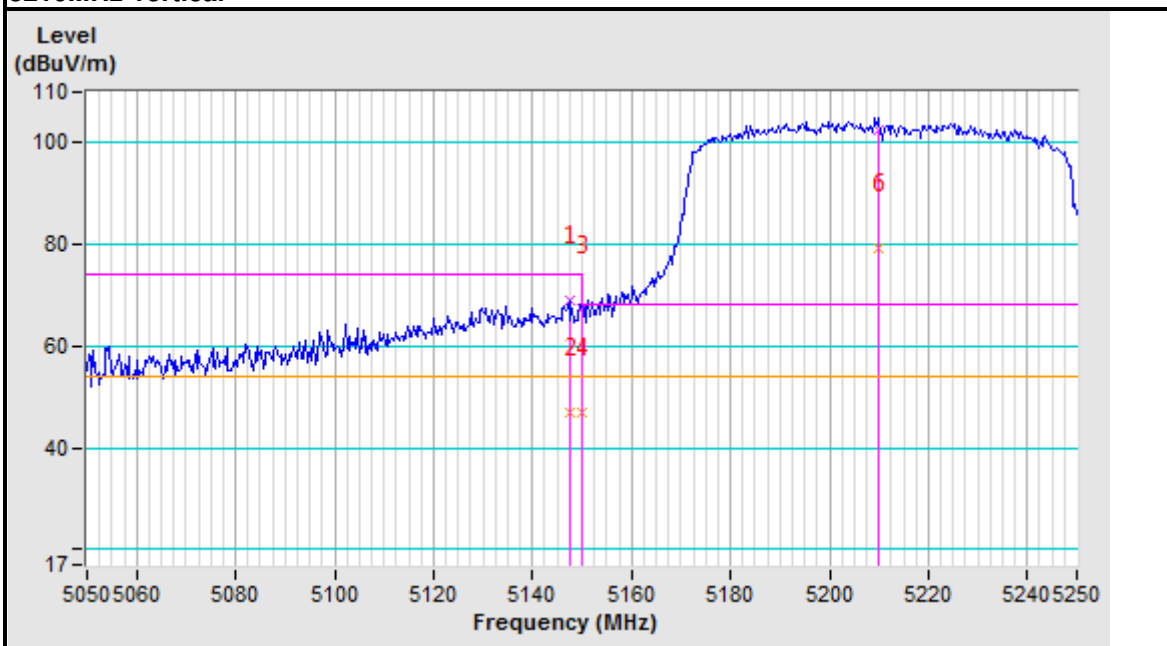


Band edge Plot

5210MHz Horizontal



5210MHz Vertical





BUREAU VERITAS

Test Report No.: RF200421N040-4

Band 2 (5250-5350MHz): ABOVE 1GHz DATA 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	5149.00	49.33 PK	74.00	-24.67	1.00 H	0	41.10	8.23
2	5149.00	36.26 AV	54.00	-17.74	1.00 H	0	28.03	8.23
3	5150.00	49.50 PK	74.00	-24.50	1.00 H	0	41.27	8.23
4	5150.00	36.35 AV	54.00	-17.65	1.00 H	0	28.12	8.23
5	*5260.00	103.40 PK			1.00 H	0	94.94	8.46
6	*5260.00	89.34 AV			1.00 H	0	80.88	8.46
7	5350.00	52.14 PK	74.00	-21.86	1.00 H	0	43.48	8.66
8	5350.00	40.80 AV	54.00	-13.20	1.00 H	0	32.14	8.66
9	5355.00	52.33 PK	74.00	-21.67	1.00 H	0	43.66	8.67
10	5355.00	40.72 AV	54.00	-13.28	1.00 H	0	32.05	8.67
11	#10520.00	57.16 PK	68.20	-11.04	1.00 H	0	38.95	18.21
12	15780.00	62.36 PK	74.00	-11.64	1.00 H	0	37.58	24.78
13	15780.00	45.56 AV	54.00	-8.44	1.00 H	0	20.78	24.78

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	51.25 PK	74.00	-22.75	1.00 V	55	43.02	8.23
2	5147.00	37.96 AV	54.00	-16.04	1.00 V	55	29.73	8.23
3	5150.00	50.28 PK	74.00	-23.72	1.00 V	55	42.05	8.23
4	5150.00	37.99 AV	54.00	-16.01	1.00 V	55	29.76	8.23
5	*5260.00	114.25 PK			1.00 V	55	105.79	8.46
6	*5260.00	100.33 AV			1.00 V	55	91.87	8.46
7	5350.00	53.62 PK	74.00	-20.38	1.00 V	55	44.96	8.66
8	5350.00	41.55 AV	54.00	-12.45	1.00 V	55	32.89	8.66
9	5356.00	54.27 PK	74.00	-19.73	1.00 V	55	45.60	8.67
10	5356.00	41.88 AV	54.00	-12.12	1.00 V	55	33.21	8.67
11	#10520.00	60.03 PK	68.20	-8.17	1.00 V	0	41.82	18.21
12	15780.00	64.16 PK	74.00	-9.84	1.00 V	0	39.38	24.78
13	15780.00	47.89 AV	54.00	-6.11	1.00 V	0	23.11	24.78

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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BUREAU VERITAS

Test Report No.: RF200421N040-4

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	103.47 PK			1.00 H	0	94.92	8.55
2	*5300.00	97.88 AV			1.00 H	0	89.33	8.55
3	5350.00	59.09 PK	74.00	-14.91	1.00 H	0	50.43	8.66
4	5350.00	40.20 AV	54.00	-13.80	1.00 H	0	31.54	8.66
5	5356.00	60.02 PK	74.00	-13.98	1.00 H	0	51.35	8.67
6	5356.00	41.30 AV	54.00	-12.70	1.00 H	0	32.63	8.67
7	10600.00	57.26 PK	74.00	-16.74	1.00 H	0	38.92	18.34
8	10600.00	43.50 AV	54.00	-10.50	1.00 H	0	25.16	18.34
9	15900.00	62.09 PK	74.00	-11.91	1.00 H	0	37.05	25.04
10	15900.00	45.70 AV	54.00	-8.30	1.00 H	0	20.66	25.04

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	114.14 PK			1.00 V	108	105.59	8.55
2	*5300.00	100.28 AV			1.00 V	108	91.73	8.55
3	5350.00	68.85 PK	74.00	-5.15	1.00 V	108	60.19	8.66
4	5350.00	45.74 AV	54.00	-8.26	1.00 V	108	37.08	8.66
5	5356.00	53.86 PK	74.00	-20.14	1.00 V	108	45.19	8.67
6	5356.00	41.78 AV	54.00	-12.22	1.00 V	108	33.11	8.67
7	10600.00	60.05 PK	74.00	-13.95	1.00 V	0	41.71	18.34
8	10600.00	44.95 AV	54.00	-9.05	1.00 V	0	26.61	18.34
9	15900.00	64.27 PK	74.00	-9.73	1.00 V	0	39.23	25.04
10	15900.00	47.20 AV	54.00	-6.80	1.00 V	0	22.16	25.04

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

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BUREAU VERITAS

Test Report No.: RF200421N040-4

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	98.35 PK			1.00 H	200	89.75	8.60
2	*5320.00	84.11 AV			1.00 H	200	75.51	8.60
3	5350.00	59.07 PK	74.00	-14.93	1.00 H	200	50.41	8.66
4	5350.00	40.33 AV	54.00	-13.67	1.00 H	200	31.67	8.66
5	5360.00	55.30 PK	74.00	-18.70	1.00 H	200	46.62	8.68
6	5360.00	36.50 AV	54.00	-17.50	1.00 H	200	27.82	8.68
7	10640.00	58.91 PK	74.00	-15.09	1.00 H	0	40.50	18.41
8	10640.00	42.66 AV	54.00	-11.34	1.00 H	0	24.25	18.41
9	15960.00	62.05 PK	74.00	-11.95	1.00 H	0	36.88	25.17
10	15960.00	44.80 AV	54.00	-9.20	1.00 H	0	19.63	25.17

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	109.11 PK			1.00 V	109	100.51	8.60
2	*5320.00	95.18 AV			1.00 V	109	86.58	8.60
3	5350.00	71.18 PK	74.00	-2.82	1.00 V	109	62.52	8.66
4	5350.00	45.11 AV	54.00	-8.89	1.00 V	109	36.45	8.66
5	5353.53	70.23 PK	74.00	-3.77	1.00 V	109	61.56	8.67
6	5353.53	45.21 AV	54.00	-8.79	1.00 V	109	36.54	8.67
7	10640.00	60.24 PK	74.00	-13.76	1.00 V	0	41.83	18.41
8	10640.00	44.62 AV	54.00	-9.38	1.00 V	0	26.21	18.41
9	15960.00	65.16 PK	74.00	-8.84	1.00 V	0	39.99	25.17
10	15960.00	48.17 AV	54.00	-5.83	1.00 V	0	23.00	25.17

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

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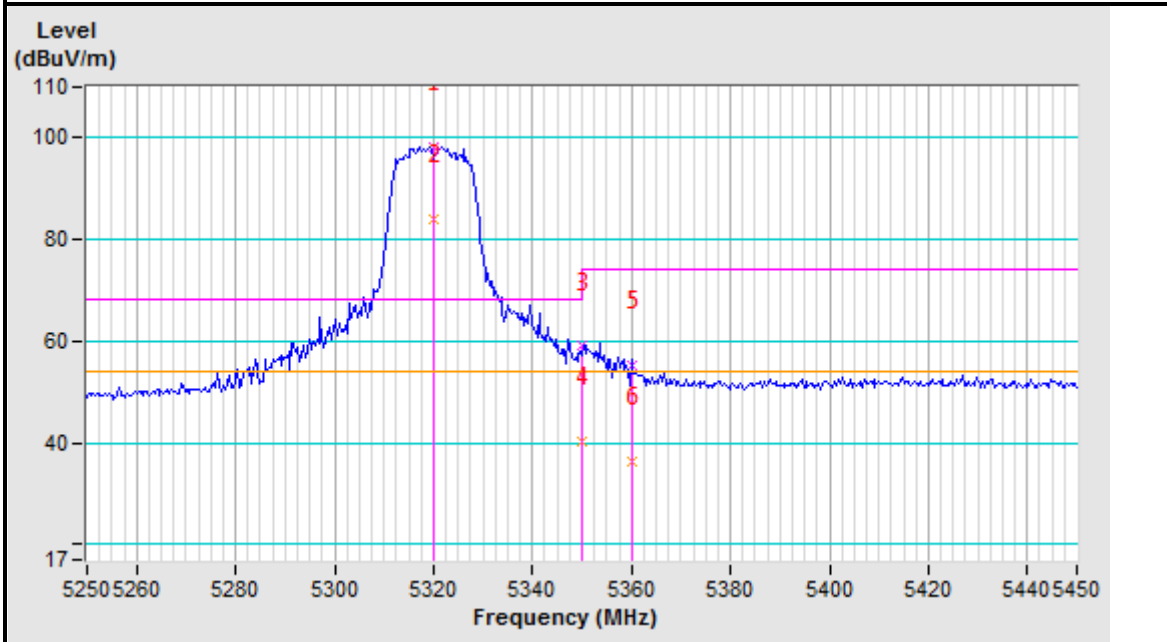


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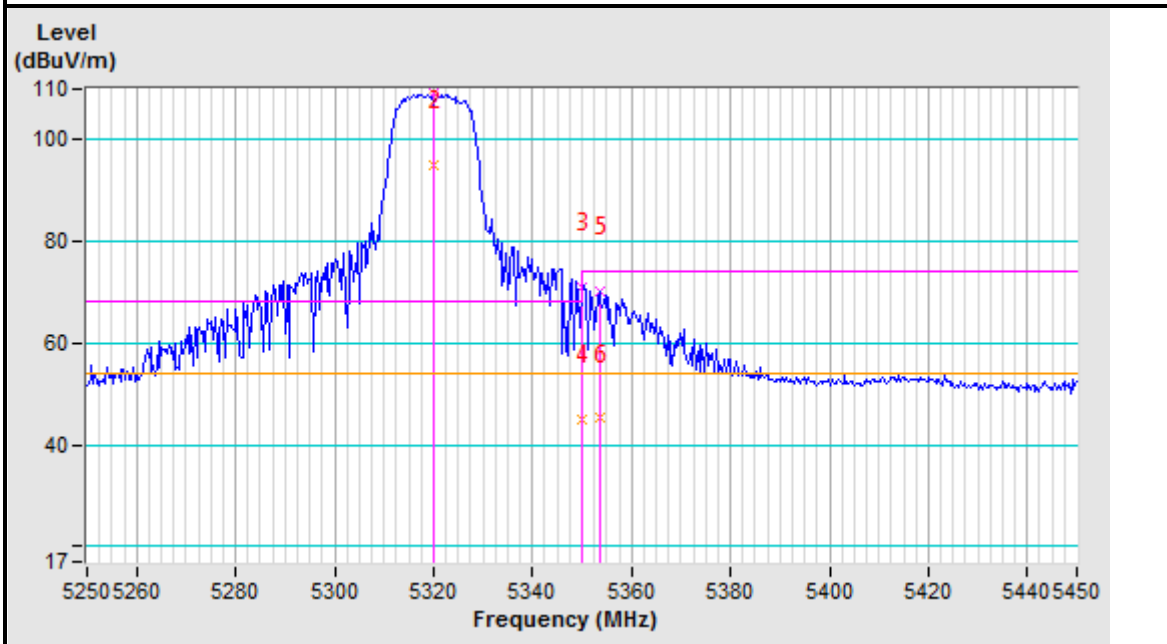
Test Report No.: RF200421N040-4

Band edge Plot

5320MHz Horizontal



5320MHz Vertical





BUREAU VERITAS

Test Report No.: RF200421N040-4

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	5149.00	49.05 PK	74.00	-24.95	1.00 H	0	40.82	8.23
2	5149.00	36.37 AV	54.00	-17.63	1.00 H	0	28.14	8.23
3	5150.00	49.17 PK	74.00	-24.83	1.00 H	0	40.94	8.23
4	5150.00	36.40 AV	54.00	-17.60	1.00 H	0	28.17	8.23
5	*5260.00	103.72 PK			1.00 H	0	95.26	8.46
6	*5260.00	90.19 AV			1.00 H	0	81.73	8.46
7	5350.00	50.78 PK	74.00	-23.22	1.00 H	0	42.12	8.66
8	5350.00	39.81 AV	54.00	-14.19	1.00 H	0	31.15	8.66
9	5354.00	50.64 PK	74.00	-23.36	1.00 H	0	41.97	8.67
10	5354.00	39.66 AV	54.00	-14.34	1.00 H	0	30.99	8.67
11	#10520.00	57.31 PK	68.20	-10.89	1.00 H	0	39.10	18.21
12	15780.00	63.35 PK	74.00	-10.65	1.00 H	0	38.57	24.78
13	15780.00	45.30 AV	54.00	-8.70	1.00 H	0	20.52	24.78

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	5144.00	48.26 PK	74.00	-25.74	1.00 V	115	40.04	8.22
2	5144.00	37.33 AV	54.00	-16.67	1.00 V	115	29.11	8.22
3	5150.00	48.37 PK	74.00	-25.63	1.00 V	115	40.14	8.23
4	5150.00	37.42 AV	54.00	-16.58	1.00 V	115	29.19	8.23
5	*5260.00	112.19 PK			1.00 V	115	103.73	8.46
6	*5260.00	98.38 AV			1.00 V	115	89.92	8.46
7	5350.00	54.40 PK	74.00	-19.60	1.00 V	115	45.74	8.66
8	5350.00	40.04 AV	54.00	-13.96	1.00 V	115	31.38	8.66
9	5355.00	53.70 PK	74.00	-20.30	1.00 V	115	45.03	8.67
10	5355.00	40.10 AV	54.00	-13.90	1.00 V	115	31.43	8.67
11	#10520.00	59.06 PK	68.20	-9.14	1.00 V	0	40.85	18.21
12	15780.00	65.16 PK	74.00	-8.84	1.00 V	0	40.38	24.78
13	15780.00	47.48 AV	54.00	-6.52	1.00 V	0	22.70	24.78

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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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	105.19 PK			1.00 H	44	96.64	8.55
2	*5300.00	90.30 AV			1.00 H	44	81.75	8.55
3	5350.00	57.32 PK	74.00	-16.68	1.00 H	44	48.66	8.66
4	5350.00	40.10 AV	54.00	-13.90	1.00 H	44	31.44	8.66
5	5353.00	56.74 PK	74.00	-17.26	1.00 H	44	48.08	8.66
6	5353.00	39.80 AV	54.00	-14.20	1.00 H	44	31.14	8.66
7	10600.00	56.29 PK	74.00	-17.71	1.00 H	0	37.95	18.34
8	10600.00	42.22 AV	54.00	-11.78	1.00 H	0	23.88	18.34
9	15900.00	63.19 PK	74.00	-10.81	1.00 H	0	38.15	25.04
10	15900.00	46.05 AV	54.00	-7.95	1.00 H	0	21.01	25.04

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	113.31 PK			1.00 V	152	104.76	8.55
2	*5300.00	98.32 AV			1.00 V	152	89.77	8.55
3	5350.00	66.64 PK	74.00	-7.36	1.00 V	152	57.98	8.66
4	5350.00	42.46 AV	54.00	-11.54	1.00 V	152	33.80	8.66
5	5352.00	66.14 PK	74.00	-7.86	1.00 V	152	57.48	8.66
6	5352.00	42.21 AV	54.00	-11.79	1.00 V	152	33.55	8.66
7	10600.00	59.02 PK	74.00	-14.98	1.00 V	0	40.68	18.34
8	10600.00	44.15 AV	54.00	-9.85	1.00 V	0	25.81	18.34
9	15900.00	54.16 PK	74.00	-19.84	1.00 V	0	29.12	25.04
10	15900.00	46.92 AV	54.00	-7.08	1.00 V	0	21.88	25.04

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 greater than 20dB margin.
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	97.39 PK			1.00 H	23	88.79	8.60
2	*5320.00	83.44 AV			1.00 H	23	74.84	8.60
3	5350.00	56.14 PK	74.00	-17.86	1.00 H	23	47.48	8.66
4	5350.00	40.28 AV	54.00	-13.72	1.00 H	23	31.62	8.66
5	5351.28	59.45 PK	74.00	-14.55	1.00 H	23	50.79	8.66
6	5351.28	40.89 AV	54.00	-13.11	1.00 H	23	32.23	8.66
7	10640.00	57.33 PK	74.00	-16.67	1.00 H	0	38.92	18.41
8	10640.00	43.86 AV	54.00	-10.14	1.00 H	0	25.45	18.41
9	15960.00	63.55 PK	74.00	-10.45	1.00 H	0	38.38	25.17
10	15960.00	46.22 AV	54.00	-7.78	1.00 H	0	21.05	25.17

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	108.31 PK			1.00 V	98	99.71	8.60
2	*5320.00	94.07 AV			1.00 V	98	85.47	8.60
3	5350.00	70.12 PK	74.00	-3.88	1.00 V	98	61.46	8.66
4	5350.00	44.82 AV	54.00	-9.18	1.00 V	98	36.16	8.66
5	5358.01	67.58 PK	74.00	-6.42	1.00 V	98	58.91	8.67
6	5358.01	43.66 AV	54.00	-10.34	1.00 V	98	34.99	8.67
7	10640.00	60.03 PK	74.00	-13.97	1.00 V	0	41.62	18.41
8	10640.00	44.85 AV	54.00	-9.15	1.00 V	0	26.44	18.41
9	15960.00	64.16 PK	74.00	-9.84	1.00 V	0	38.99	25.17
10	15960.00	47.24 AV	54.00	-6.76	1.00 V	0	22.07	25.17

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

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	99.24 PK			1.00 H	0	90.75	8.49
2	*5270.00	88.17 AV			1.00 H	0	79.68	8.49
3	5350.00	58.41 PK	74.00	-15.59	1.00 H	0	49.75	8.66
4	5350.00	41.32 AV	54.00	-12.68	1.00 H	0	32.66	8.66
5	5356.00	47.94 PK	74.00	-26.06	1.00 H	0	39.27	8.67
6	5356.00	41.20 AV	54.00	-12.80	1.00 H	0	32.53	8.67
7	#10540.00	55.16 PK	68.20	-13.04	1.00 H	0	36.92	18.24
8	15810.00	62.06 PK	74.00	-11.94	1.00 H	0	37.21	24.85
9	15810.00	45.53 AV	54.00	-8.47	1.00 H	0	20.68	24.85

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	111.78 PK			1.00 V	155	103.29	8.49
2	*5270.00	91.50 AV			1.00 V	155	83.01	8.49
3	5350.00	67.72 PK	74.00	-6.28	1.00 V	155	59.06	8.66
4	5350.00	40.30 AV	54.00	-13.70	1.00 V	155	31.64	8.66
5	5353.00	67.24 PK	74.00	-6.76	1.00 V	155	58.58	8.66
6	5353.00	40.03 AV	54.00	-13.97	1.00 V	155	31.37	8.66
7	#10540.00	60.11 PK	68.20	-8.09	1.00 V	0	41.87	18.24
8	15810.00	65.16 PK	74.00	-8.84	1.00 V	0	40.31	24.85
9	15810.00	47.21 AV	54.00	-6.79	1.00 V	0	22.36	24.85

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 greater than 20dB margin.
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.: RF200421N040-4

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	90.98 PK			1.00 H	110	82.41	8.57
2	*5310.00	75.48 AV			1.00 H	222	66.91	8.57
3	5350.00	58.69 PK	74.00	-15.31	1.00 H	55	50.03	8.66
4	5350.00	39.55 AV	54.00	-14.45	1.00 H	0	30.89	8.66
5	10620.00	57.12 PK	74.00	-16.88	1.00 H	53	38.74	18.38
6	10620.00	40.02 AV	54.00	-13.98	1.00 H	0	21.64	18.38
7	15930.00	63.94 PK	74.00	-10.06	1.00 H	88	38.83	25.11
8	15930.00	44.12 AV	54.00	-9.88	1.00 H	156	19.01	25.11
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	*5310.00	102.71 PK			1.00 V	102	94.14	8.57
2	*5310.00	86.15 AV			1.00 V	102	77.58	8.57
3	5350.00	69.93 PK	74.00	-4.07	1.00 V	250	61.27	8.66
4	5350.00	45.59 AV	54.00	-8.41	1.00 V	102	36.93	8.66
5	11020.00	60.14 PK	74.00	-13.86	1.00 V	0	41.07	19.07
6	11020.00	42.90 AV	54.00	-11.10	1.00 V	99	23.83	19.07
7	15930.00	63.29 PK	74.00	-10.71	1.00 V	248	38.18	25.11
8	15930.00	44.80 AV	54.00	-9.20	1.00 V	0	19.69	25.11

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

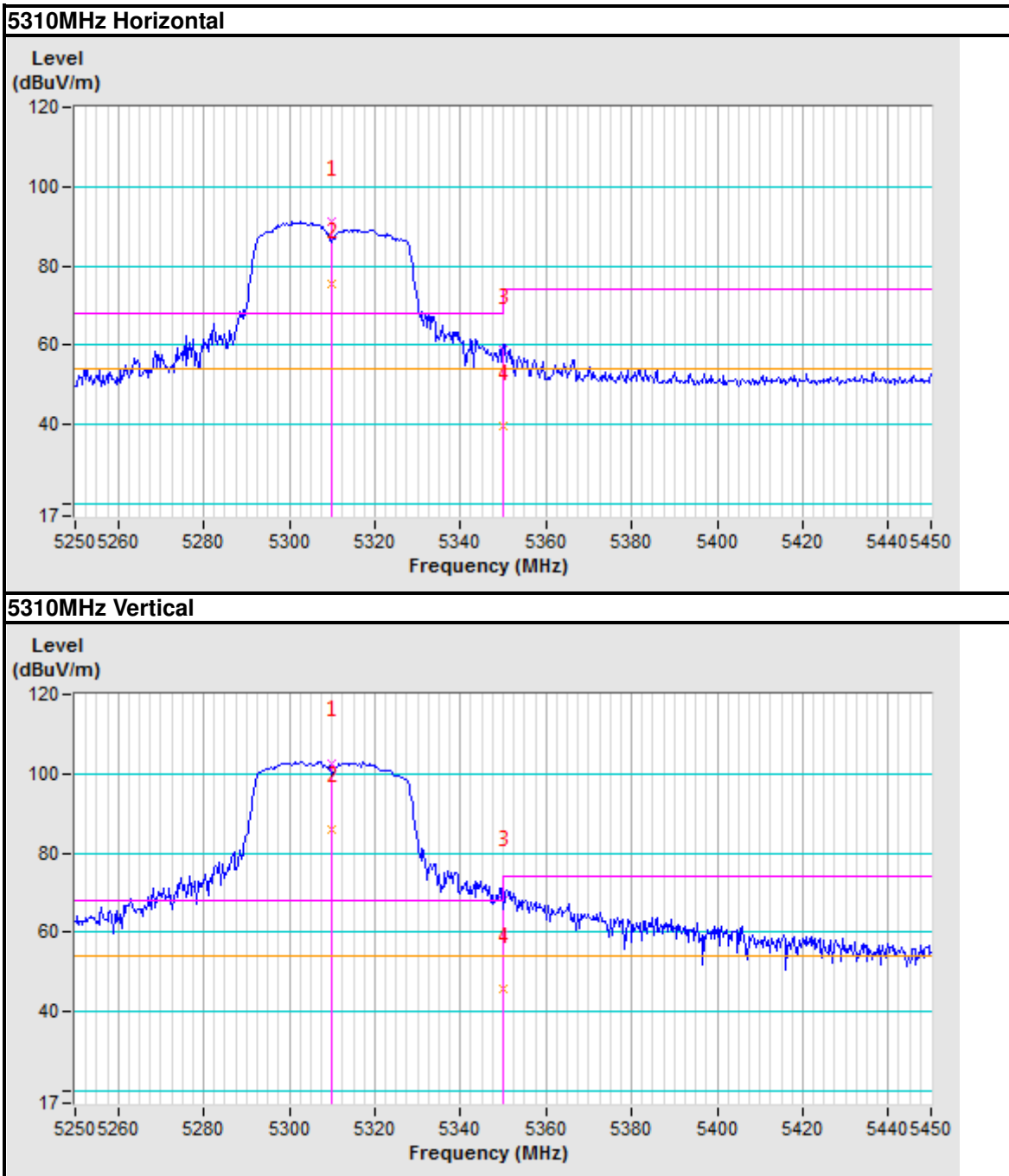
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Band edge Plot





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	94.91 PK			1.00 H	0	86.39	8.52
2	*5290.00	70.64 AV			1.00 H	0	62.12	8.52
3	5350.00	55.46 PK	74.00	-18.54	1.00 H	0	46.80	8.66
4	5350.00	41.23 AV	54.00	-12.77	1.00 H	0	32.57	8.66
5	5355.00	54.40 PK	74.00	-19.60	1.00 H	0	45.73	8.67
6	5355.00	40.10 AV	54.00	-13.90	1.00 H	0	31.43	8.67
7	#10580.00	56.92 PK	68.20	-11.28	1.00 H	0	38.61	18.31
8	15870.00	63.35 PK	74.00	-10.65	1.00 H	0	38.37	24.98
9	15870.00	46.25 AV	54.00	-7.75	1.00 H	0	21.27	24.98

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	*5290.00	106.24 PK			1.00 V	39	97.72	8.52
2	*5290.00	81.36 AV			1.00 V	39	72.84	8.52
3	5350.00	69.71 PK	74.00	-4.29	1.00 V	39	61.05	8.66
4	5350.00	47.11 AV	54.00	-6.89	1.00 V	39	38.45	8.66
5	5354.81	69.69 PK	74.00	-4.31	1.00 V	39	61.02	8.67
6	5354.81	47.35 AV	54.00	-6.65	1.00 V	39	38.68	8.67
7	#10580.00	60.11 PK	68.20	-8.09	1.00 V	0	41.80	18.31
8	15870.00	63.16 PK	74.00	-10.84	1.00 V	0	38.18	24.98
9	15870.00	47.36 AV	54.00	-6.64	1.00 V	0	22.38	24.98

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

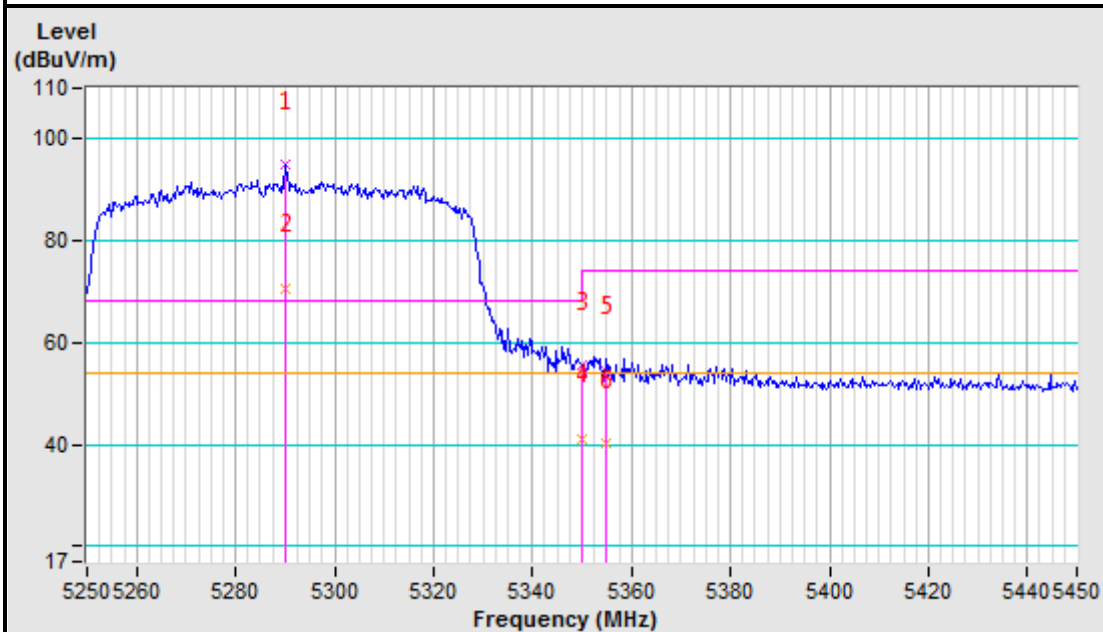


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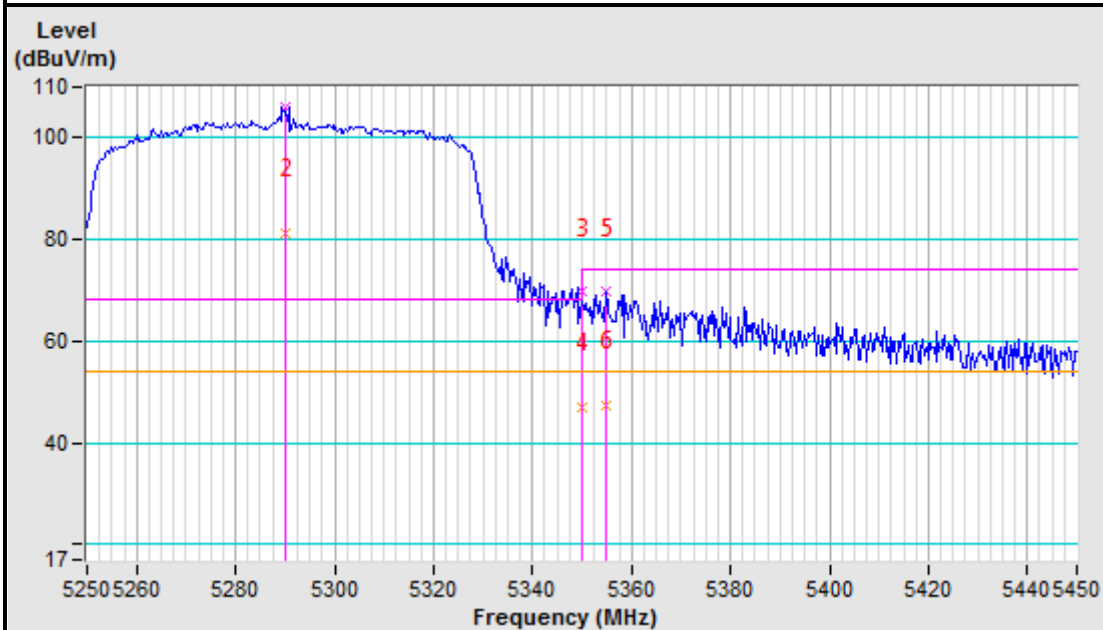
Test Report No.: RF200421N040-4

Band edge Plot

5290MHz Horizontal



5290MHz Vertical





BUREAU VERITAS

Test Report No.: RF200421N040-4

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	#5460.00	53.80 PK	68.20	-14.40	1.00 H	330	44.91	8.89
2	#5470.00	54.31 PK	68.20	-13.89	1.00 H	330	45.40	8.91
3	*5500.00	93.06 PK			1.00 H	330	84.09	8.97
4	*5500.00	79.57 AV			1.00 H	330	70.60	8.97
5	11000.00	57.86 PK	74.00	-16.14	1.00 H	0	38.82	19.04
6	11000.00	43.52 AV	54.00	-10.48	1.00 H	0	24.48	19.04
7	#16500.00	62.39 PK	68.20	-5.81	1.00 H	0	36.83	25.56

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	#5462.31	62.93 PK	68.20	-5.27	1.00 V	0	54.04	8.89
2	#5467.44	65.37 PK	68.20	-2.83	1.00 V	0	56.47	8.90
3	#5470.00	64.44 PK	68.20	-3.76	1.00 V	0	55.53	8.91
4	*5500.00	104.47 PK			1.00 V	0	95.50	8.97
5	*5500.00	90.85 AV			1.00 V	0	81.88	8.97
6	11000.00	60.02 PK	74.00	-13.98	1.00 V	0	40.98	19.04
7	11000.00	44.28 AV	54.00	-9.72	1.00 V	0	25.24	19.04
8	#16500.00	63.19 PK	68.20	-5.01	1.00 V	0	37.63	25.56

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

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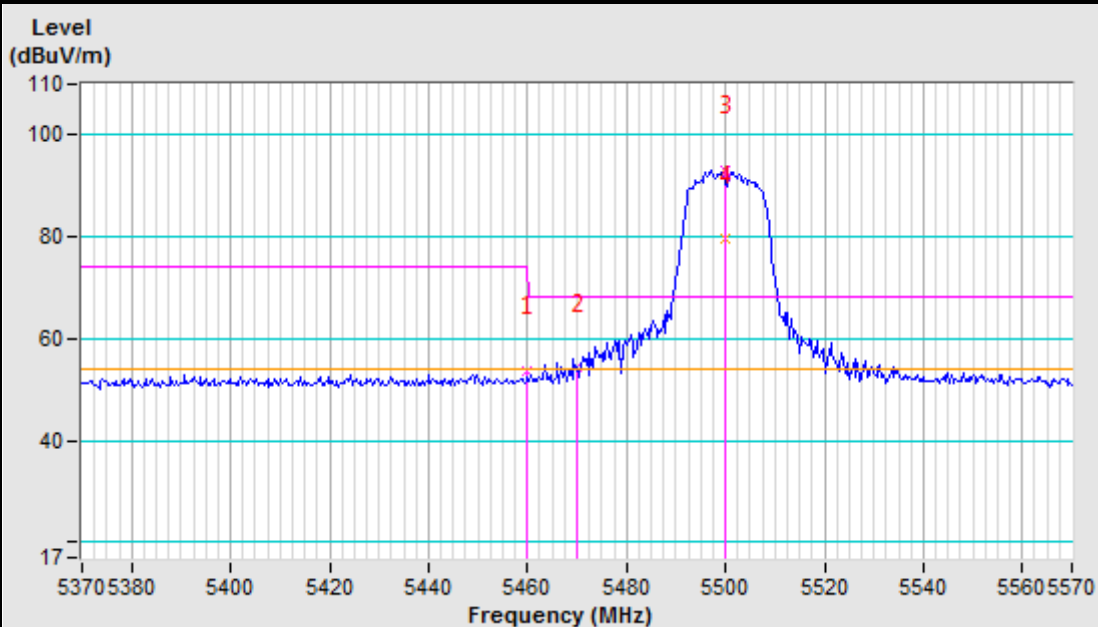


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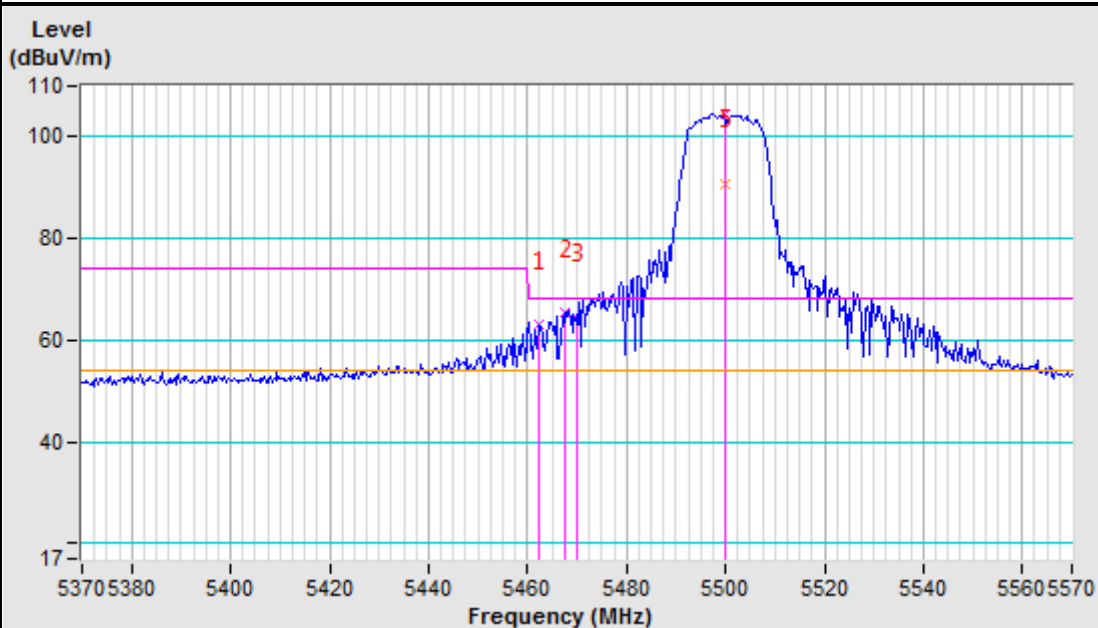
Test Report No.: RF200421N040-4

Band edge Plot

5500MHz Horizontal



5500MHz Vertical





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	52.87 PK	68.20	-15.33	1.00 H	110	43.96	8.91
2	*5580.00	106.51 PK			1.00 H	110	97.33	9.18
3	*5580.00	92.54 AV			1.00 H	110	83.36	9.18
4	11160.00	56.29 PK	74.00	-17.71	1.00 H	0	37.06	19.23
5	11160.00	42.13 AV	54.00	-11.87	1.00 H	0	22.90	19.23
6	#16740.00	62.21 PK	68.20	-5.99	1.00 H	0	35.91	26.30

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	#5470.00	60.10 PK	68.20	-8.10	1.00 V	0	51.19	8.91
2	*5580.00	116.52 PK			1.00 V	0	107.34	9.18
3	*5580.00	102.54 AV			1.00 V	0	93.36	9.18
4	11160.00	60.09 PK	74.00	-13.91	1.00 V	0	40.86	19.23
5	11160.00	44.63 AV	54.00	-9.37	1.00 V	0	25.40	19.23
6	#16740.00	63.29 PK	68.20	-4.91	1.00 V	0	36.99	26.30

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 greater than 20dB margin.
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.: RF200421N040-4

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	89.31 PK			1.00 H	50	79.81	9.50
2	*5700.00	75.27 AV			1.00 H	50	65.77	9.50
3	#5725.00	53.46 PK	68.20	-14.74	1.00 H	50	43.90	9.56
4	#5730.00	52.66 PK	68.20	-15.54	1.00 H	50	43.08	9.58
5	11400.00	57.85 PK	74.00	-16.15	1.00 H	0	38.32	19.53
6	11400.00	43.46 AV	54.00	-10.54	1.00 H	0	23.93	19.53
7	#17100.00	63.22 PK	68.20	-4.98	1.00 H	0	36.02	27.20

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	102.06 PK			1.00 V	103	92.56	9.50
2	*5700.00	88.32 AV			1.00 V	103	78.82	9.50
3	#5725.00	66.94 PK	68.20	-1.26	1.00 V	103	57.38	9.56
4	#5732.05	63.67 PK	68.20	-4.53	1.00 V	0	54.10	9.57
5	11400.00	59.24 PK	74.00	-14.76	1.00 V	0	39.71	19.53
6	11400.00	44.51 AV	54.00	-9.49	1.00 V	0	24.98	19.53
7	#17100.00	64.42 PK	68.20	-3.78	1.00 V	0	37.22	27.20

REMARKS:

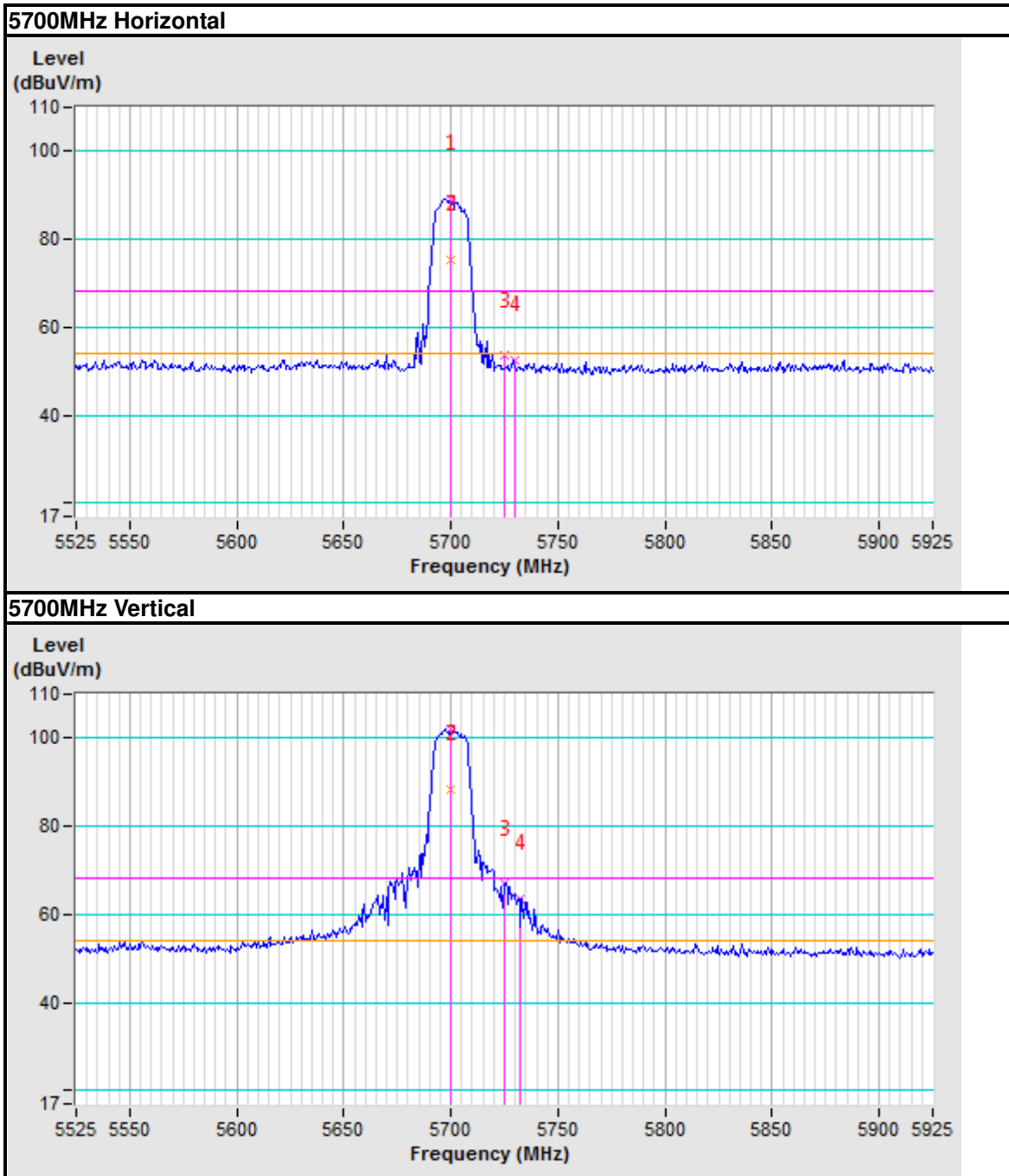
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.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

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Band edge Plot



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	#5470.00	54.45 PK	68.20	-13.75	1.00 H	100	45.54	8.91
2	*5500.00	93.04 PK			1.00 H	100	84.07	8.97
3	*5500.00	79.01 AV			1.00 H	100	70.04	8.97
4	11000.00	56.12 PK	74.00	-17.88	1.00 H	0	37.08	19.04
5	11000.00	41.26 AV	54.00	-12.74	1.00 H	0	22.22	19.04
6	#16500.00	62.09 PK	68.20	-6.11	1.00 H	0	36.53	25.56
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	#5467.12	65.61 PK	68.20	-2.59	1.00 V	104	56.71	8.90
2	#5468.40	66.09 PK	68.20	-2.11	1.00 V	104	57.18	8.91
3	#5470.00	64.91 PK	68.20	-3.29	1.00 V	104	56.00	8.91
4	*5500.00	103.24 PK			1.00 V	104	94.27	8.97
5	*5500.00	89.21 AV			1.00 V	104	80.24	8.97
6	11000.00	60.02 PK	74.00	-13.98	1.00 V	0	40.98	19.04
7	11000.00	44.80 AV	54.00	-9.20	1.00 V	0	25.76	19.04
8	#16500.00	63.93 PK	68.20	-4.27	1.00 V	0	38.37	25.56

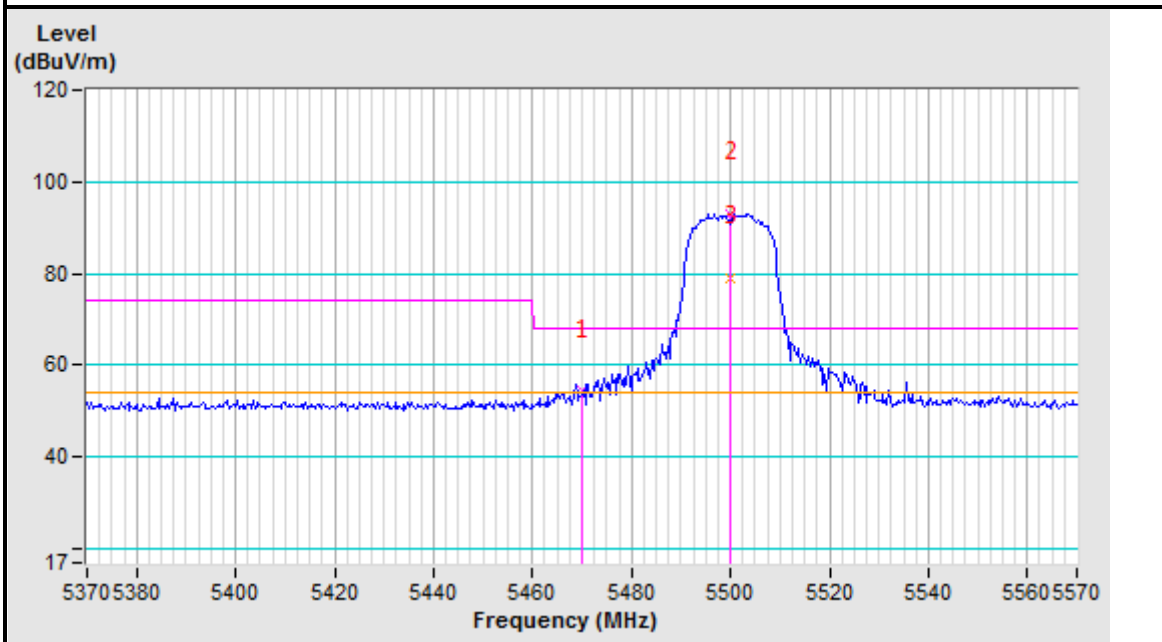
REMARKS:

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

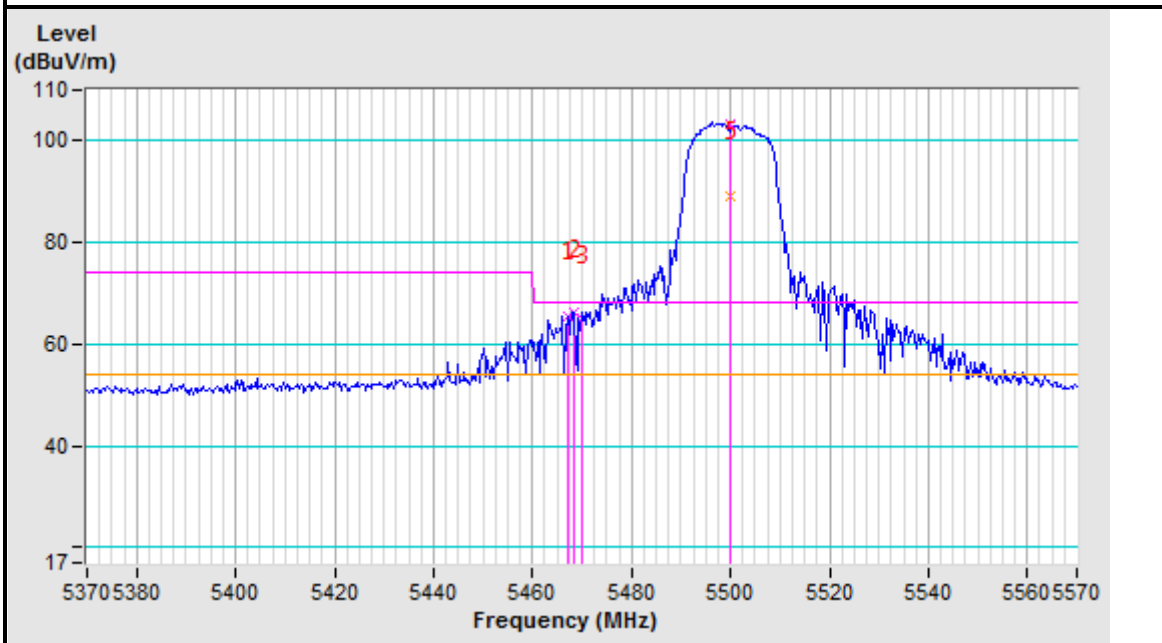


Band edge Plot

5500MHz Horizontal



5500MHz Vertical





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	52.21 PK	68.20	-15.99	1.00 H	20	43.30	8.91
2	*5580.00	99.83 PK			1.00 H	20	90.65	9.18
3	*5580.00	85.14 AV			1.00 H	20	75.96	9.18
4	11160.00	56.27 PK	74.00	-17.73	1.00 H	0	37.04	19.23
5	11160.00	41.08 AV	54.00	-12.92	1.00 H	0	21.85	19.23
6	#16740.00	60.86 PK	68.20	-7.34	1.00 H	0	34.56	26.30
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	#5470.00	51.13 PK	68.20	-17.07	1.00 V	300	42.22	8.91
2	*5580.00	106.22 PK			1.00 V	300	97.04	9.18
3	*5580.00	91.28 AV			1.00 V	300	82.10	9.18
4	11160.00	58.99 PK	74.00	-15.01	1.00 V	0	39.76	19.23
5	11160.00	43.26 AV	54.00	-10.74	1.00 V	0	24.03	19.23
6	#16740.00	62.77 PK	68.20	-5.43	1.00 V	0	36.47	26.30

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 greater than 20dB margin.
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.: RF200421N040-4

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	94.90 PK			1.00 H	60	85.40	9.50
2	*5700.00	78.54 AV			1.00 H	60	69.04	9.50
3	#5725.00	53.50 PK	68.20	-14.70	1.00 H	60	43.94	9.56
4	#5730.00	52.90 PK	68.20	-15.30	1.00 H	60	43.32	9.58
5	11400.00	57.44 PK	74.00	-16.56	1.00 H	0	37.91	19.53
6	11400.00	41.00 AV	54.00	-13.00	1.00 H	0	21.47	19.53
7	#17100.00	61.39 PK	68.20	-6.81	1.00 H	0	34.19	27.20

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	101.97 PK			1.00 V	153	92.47	9.50
2	*5700.00	91.62 AV			1.00 V	153	82.12	9.50
3	#5725.00	64.45 PK	68.20	-3.75	1.00 V	153	54.89	9.56
4	#5728.21	63.30 PK	68.20	-4.90	1.00 V	0	53.73	9.57
5	#5733.97	62.13 PK	68.20	-6.07	1.00 V	0	52.55	9.58
6	11400.00	59.79 PK	74.00	-14.21	1.00 V	0	40.26	19.53
7	11400.00	42.54 AV	54.00	-11.46	1.00 V	0	23.01	19.53
8	#17100.00	63.16 PK	68.20	-5.04	1.00 V	0	35.96	27.20

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

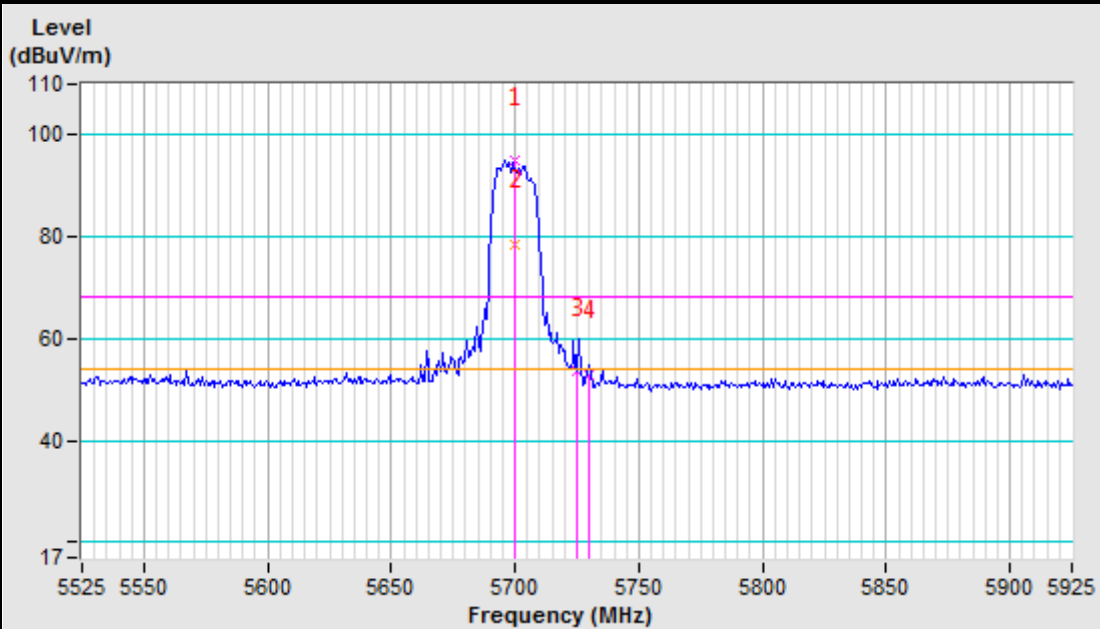
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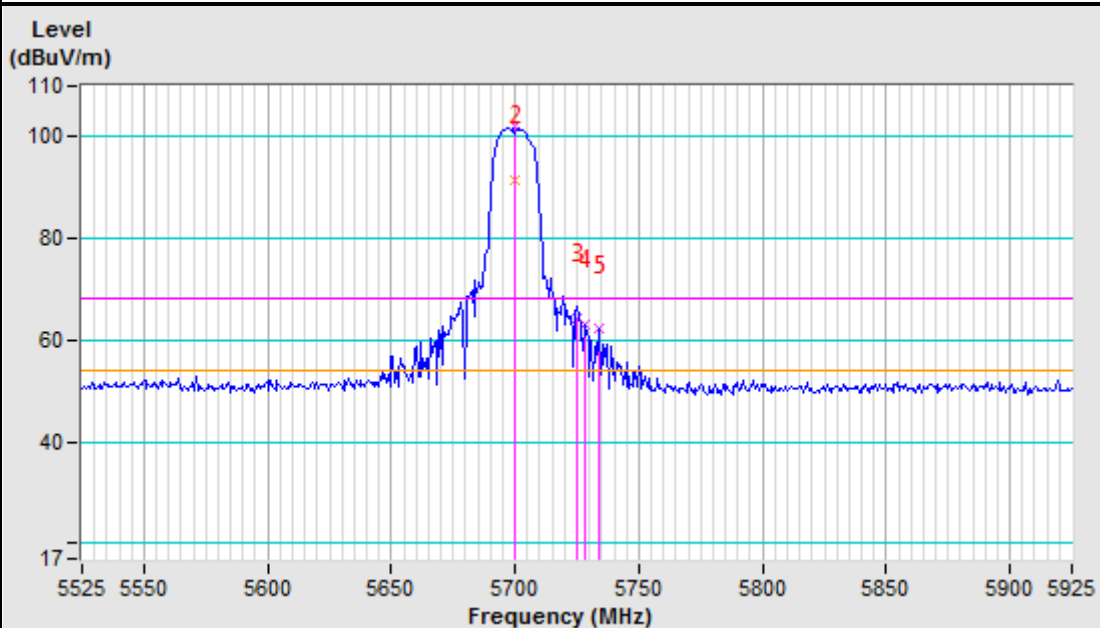
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Band edge Plot

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	#5463.00	50.46 PK	68.20	-17.74	1.00 H	55	41.56	8.90
2	#5470.00	51.10 PK	68.20	-17.10	1.00 H	55	42.19	8.91
3	*5510.00	86.47 PK			1.00 H	55	77.48	8.99
4	*5510.00	70.61 AV			1.00 H	55	61.62	8.99
5	11020.00	56.35 PK	74.00	-17.65	1.00 H	0	37.28	19.07
6	11020.00	40.87 AV	54.00	-13.13	1.00 H	0	21.80	19.07
7	#16530.00	62.20 PK	68.20	-6.00	1.00 H	0	36.55	25.65

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	#5464.55	64.70 PK	68.20	-3.50	1.00 V	98	55.80	8.90
2	#5468.40	66.24 PK	68.20	-1.96	1.00 V	98	57.33	8.91
3	#5470.00	64.58 PK	68.20	-3.62	1.00 V	98	55.67	8.91
4	*5510.00	98.44 PK			1.00 V	98	89.45	8.99
5	*5510.00	82.16 AV			1.00 V	98	73.17	8.99
6	11020.00	58.00 PK	74.00	-16.00	1.00 V	0	38.93	19.07
7	11020.00	43.30 AV	54.00	-10.70	1.00 V	0	24.23	19.07
8	#16530.00	63.40 PK	68.20	-4.80	1.00 V	0	37.75	25.65

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

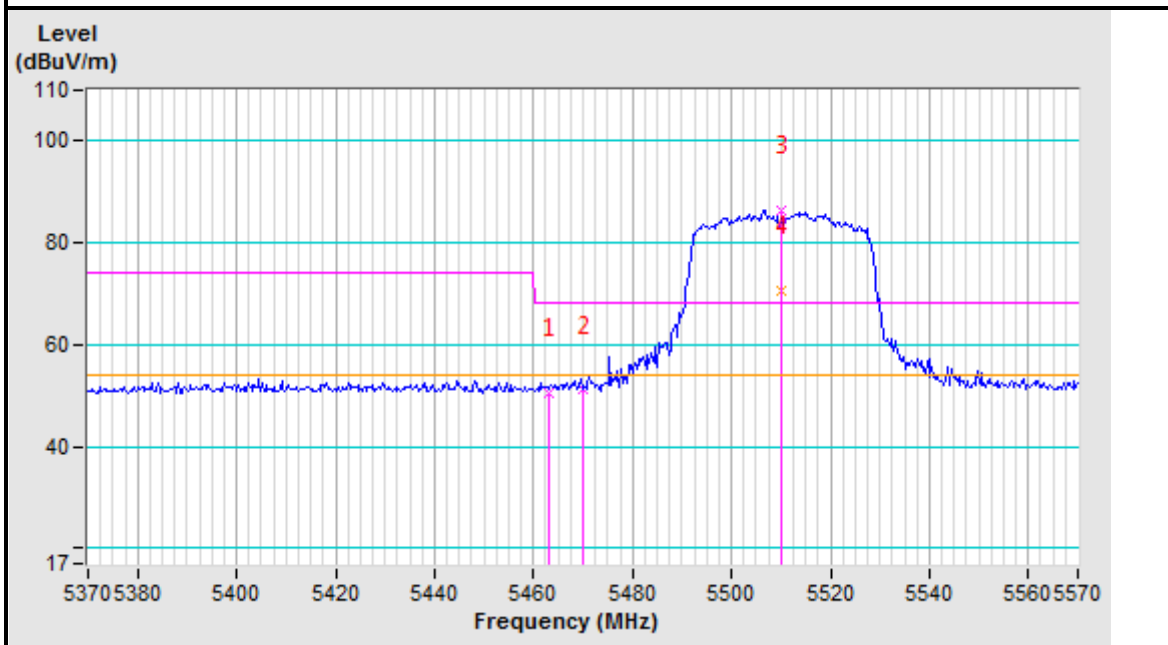


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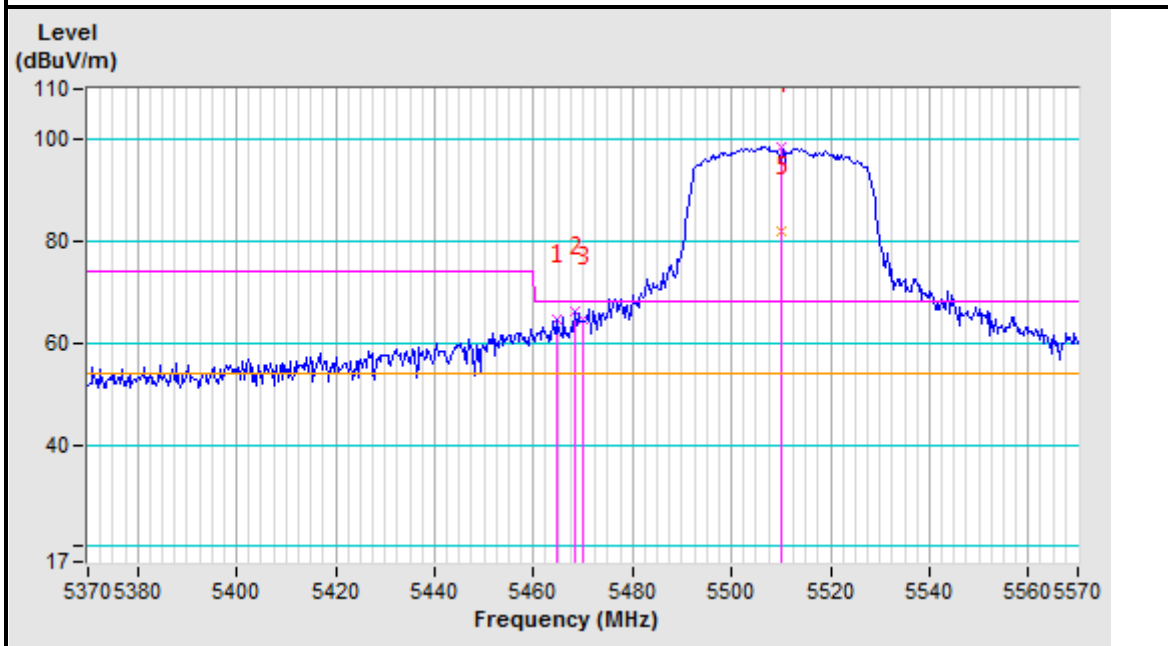
Test Report No.: RF200421N040-4

Band edge Plot

5510MHz Horizontal



5510MHz Vertical





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Test Report No.: RF200421N040-4

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	51.61 PK	68.20	-16.59	1.00 H	180	42.70	8.91
2	*5550.00	96.95 PK			1.00 H	180	87.85	9.10
3	*5550.00	80.04 AV			1.00 H	180	70.94	9.10
4	11100.00	56.18 PK	74.00	-17.82	1.00 H	0	37.02	19.16
5	11100.00	41.09 AV	54.00	-12.91	1.00 H	0	21.93	19.16
6	#16650.00	61.07 PK	68.20	-7.13	1.00 H	0	35.05	26.02

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	#5470.00	63.43 PK	68.20	-4.77	1.00 V	112	54.52	8.91
2	*5550.00	106.60 PK			1.00 V	112	97.50	9.10
3	*5550.00	90.35 AV			1.00 V	112	81.25	9.10
4	11100.00	59.93 PK	74.00	-14.07	1.00 V	0	40.77	19.16
5	11100.00	44.08 AV	54.00	-9.92	1.00 V	0	24.92	19.16
6	#16650.00	63.17 PK	68.20	-5.03	1.00 V	0	37.15	26.02

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 greater than 20dB margin.
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.: RF200421N040-4

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	89.22 PK			1.00 H	197	79.81	9.41
2	*5670.00	72.48 AV			1.00 H	197	63.07	9.41
3	#5725.00	52.10 PK	68.20	-16.10	1.00 H	197	42.54	9.56
4	#5728.00	51.63 PK	68.20	-16.57	1.00 H	197	42.06	9.57
5	11340.00	57.22 PK	74.00	-16.78	1.00 H	0	37.76	19.46
6	11340.00	42.80 AV	54.00	-11.20	1.00 H	0	23.34	19.46
7	#17010.00	60.34 PK	68.20	-7.86	1.00 H	0	33.23	27.11

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	*5670.00	103.01 PK			1.00 V	0	93.60	9.41
2	*5670.00	86.18 AV			1.00 V	0	76.77	9.41
3	#5725.00	64.24 PK	68.20	-3.96	1.00 V	0	54.68	9.56
4	#5733.33	64.77 PK	68.20	-3.43	1.00 V	0	55.19	9.58
5	#5746.79	62.42 PK	68.20	-5.78	1.00 V	0	52.81	9.61
6	11340.00	60.05 PK	74.00	-13.95	1.00 V	0	40.59	19.46
7	11340.00	41.06 AV	54.00	-12.94	1.00 V	0	21.60	19.46
8	#17010.00	62.97 PK	68.20	-5.23	1.00 V	0	35.86	27.11

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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Dongguan Branch

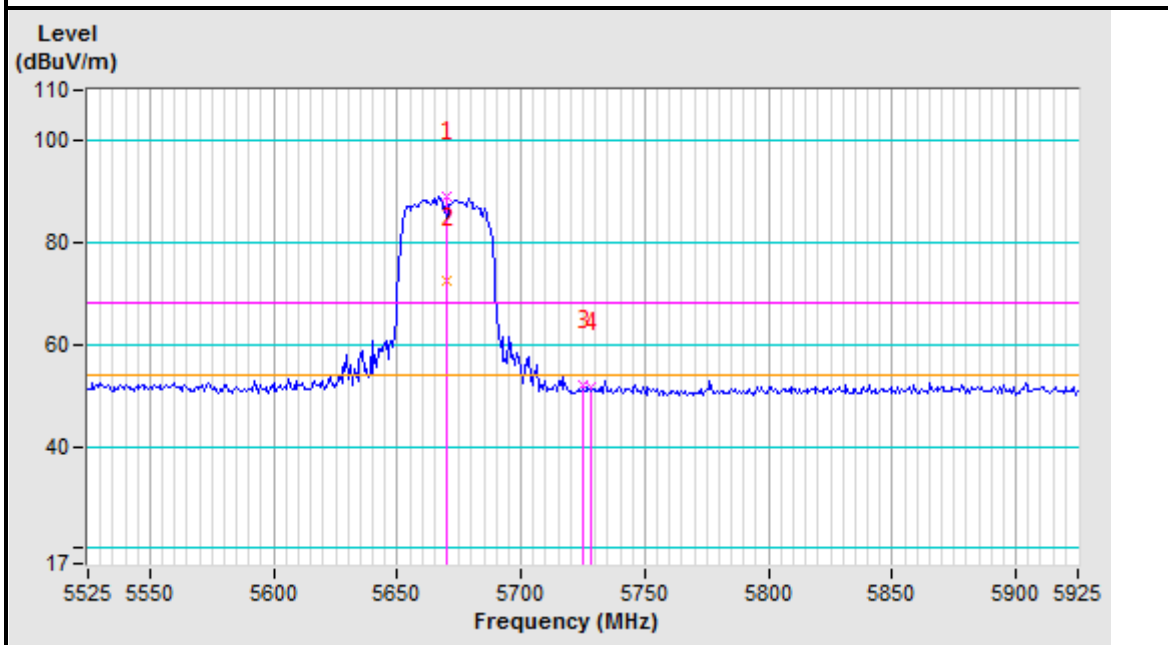
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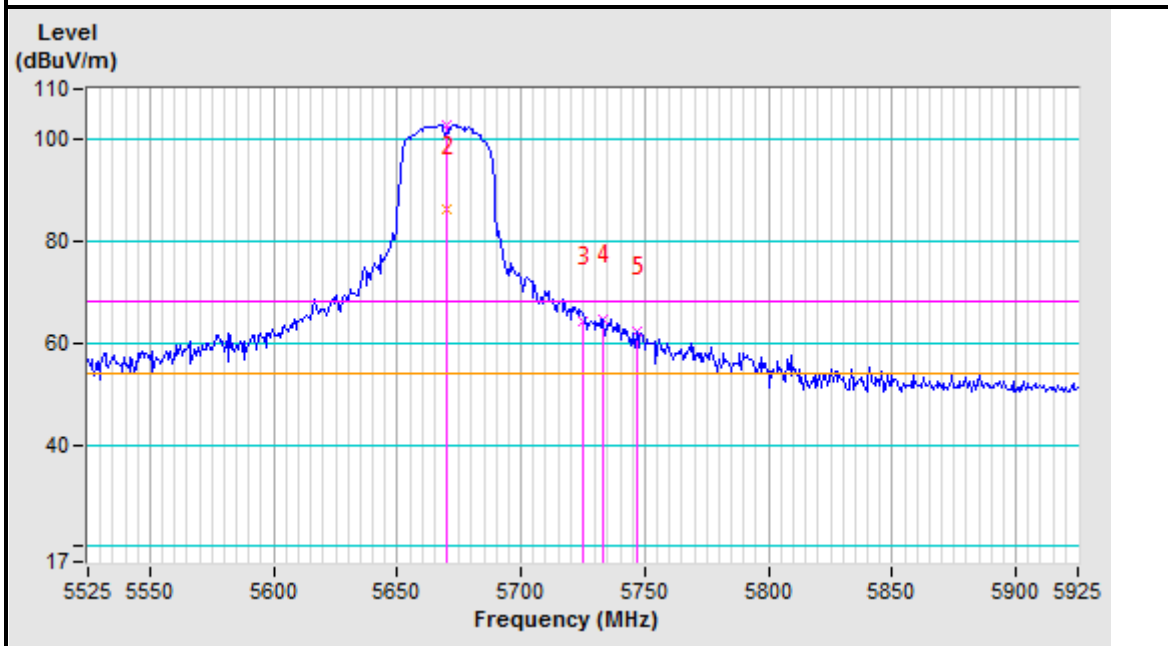


Band edge Plot

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	#5462.00	50.42 PK	68.20	-17.78	1.00 H	50	41.53	8.89
2	#5470.00	51.94 PK	68.20	-16.26	1.00 H	50	43.03	8.91
3	*5530.00	89.71 PK			1.00 H	50	80.66	9.05
4	*5530.00	65.18 AV			1.00 H	50	56.13	9.05
5	11060.00	56.08 PK	74.00	-17.92	1.00 H	0	36.97	19.11
6	11060.00	40.11 AV	54.00	-13.89	1.00 H	0	21.00	19.11
7	#16590.00	60.72 PK	68.20	-7.48	1.00 H	0	34.88	25.84

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	#5460.71	64.11 PK	68.20	-4.09	1.00 V	0	55.22	8.89
2	#5467.12	64.13 PK	68.20	-4.07	1.00 V	0	55.23	8.90
3	#5470.00	64.81 PK	68.20	-3.39	1.00 V	98	55.90	8.91
4	*5530.00	102.14 PK			1.00 V	98	93.09	9.05
5	*5530.00	78.28 AV			1.00 V	98	69.23	9.05
6	11060.00	59.12 PK	74.00	-14.88	1.00 V	0	40.01	19.11
7	11060.00	43.29 AV	54.00	-10.71	1.00 V	0	24.18	19.11
8	#16590.00	63.60 PK	68.20	-4.60	1.00 V	0	37.76	25.84

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

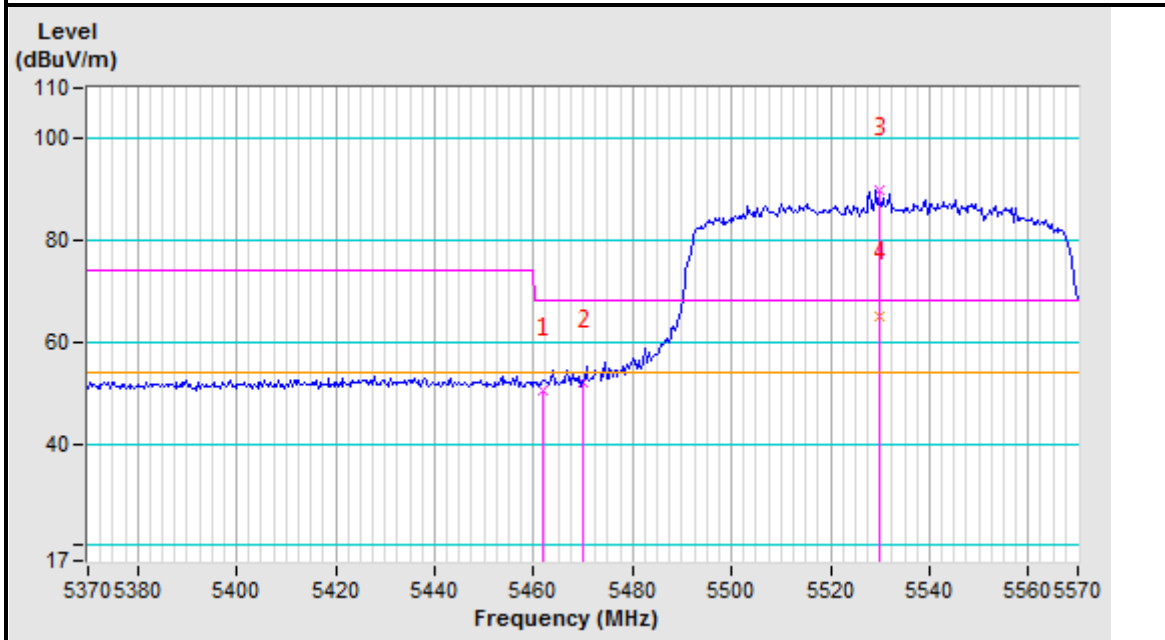


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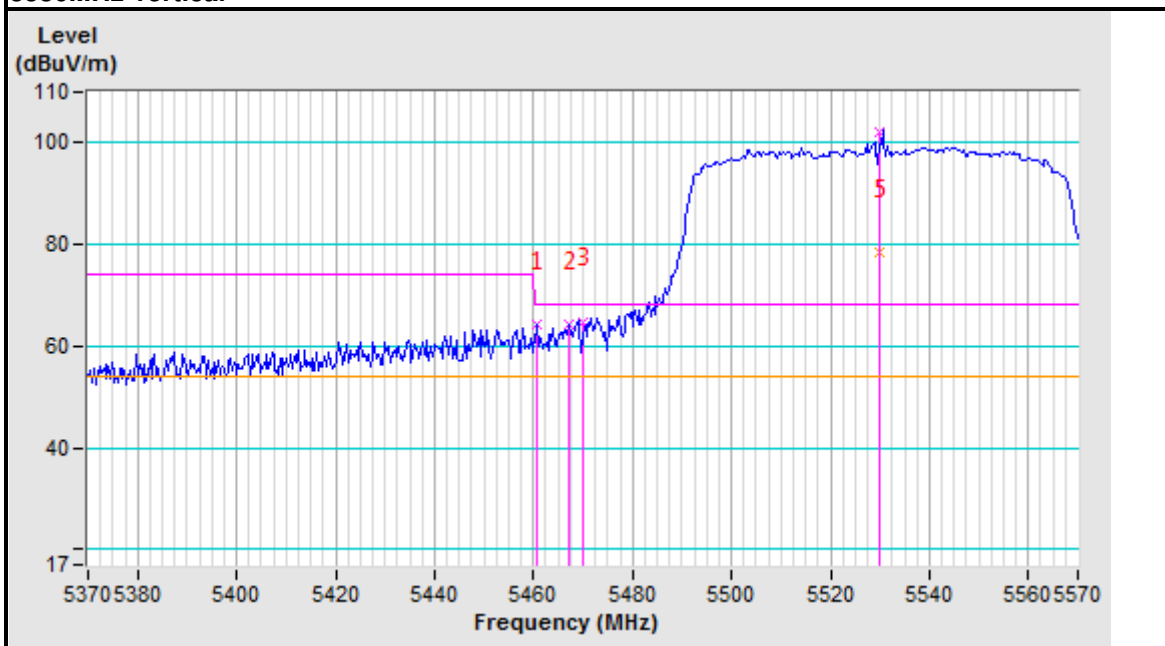
Test Report No.: RF200421N040-4

Band edge Plot

5530MHz Horizontal



5530MHz Vertical





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Test Report No.: RF200421N040-4

CHANNEL	TX Channel 122	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	*5610.00	95.18 PK			1.00 H	40	85.92	9.26
2	*5610.00	70.67 AV			1.00 H	40	61.41	9.26
3	#5725.00	51.75 PK	68.20	-16.45	1.00 H	40	42.19	9.56
4	#5728.00	50.78 PK	68.20	-17.42	1.00 H	40	41.21	9.57
5	11220.00	55.84 PK	74.00	-18.16	1.00 H	0	36.53	19.31
6	11220.00	40.63 AV	54.00	-13.37	1.00 H	0	21.32	19.31
7	#16830.00	60.30 PK	68.20	-7.90	1.00 H	0	33.73	26.57

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	*5610.00	102.96 PK			1.00 V	147	93.70	9.26
2	*5610.00	78.66 AV			1.00 V	147	69.40	9.26
3	#5725.00	60.55 PK	68.20	-7.65	1.00 V	147	50.99	9.56
4	#5736.54	58.59 PK	68.20	-9.61	1.00 V	147	49.00	9.59
5	11220.00	59.47 PK	74.00	-14.53	1.00 V	0	40.16	19.31
6	11220.00	43.65 AV	54.00	-10.35	1.00 V	0	24.34	19.31
7	#16830.00	63.15 PK	68.20	-5.05	1.00 V	0	36.58	26.57

REMARKS:

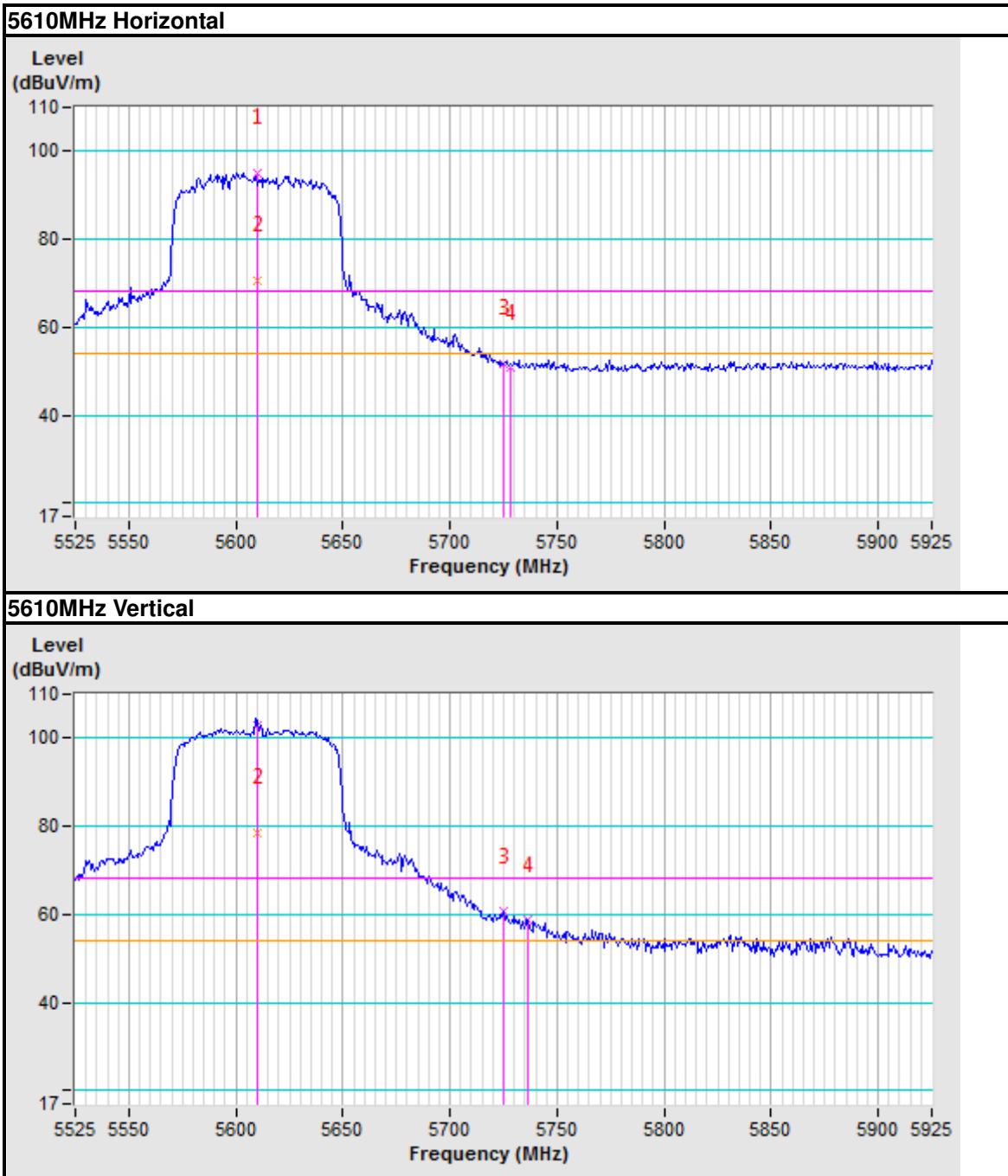
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.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

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Band edge Plot





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Test Report No.: RF200421N040-4

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	#5710.70	66.83 PK	108.20	-41.37	2.00 H	0	57.31	9.52
2	#5725.00	72.98 PK	122.20	-49.22	2.00 H	0	63.42	9.56
3	*5745.00	103.04 PK			1.00 H	50	93.43	9.61
4	*5745.00	90.49 AV			1.00 H	50	80.88	9.61
5	#5865.14	51.24 PK	107.96	-56.72	2.00 H	0	41.32	9.92
6	11490.00	59.22 PK	74.00	-14.78	1.00 H	0	39.58	19.64
7	11490.00	45.17 AV	54.00	-8.83	1.00 H	0	25.53	19.64
8	#17235.00	64.20 PK	68.20	-4.00	1.00 H	0	36.85	27.35

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	#5722.48	76.11 PK	116.45	-40.34	2.02 V	0	66.56	9.55
2	#5725.00	82.16 PK	122.20	-40.04	2.02 V	0	72.60	9.56
3	*5745.00	109.23 PK			1.00 V	0	99.62	9.61
4	*5745.00	96.19 AV			1.00 V	0	86.58	9.61
5	#5895.43	52.84 PK	90.04	-37.20	2.02 V	0	42.83	10.01
6	11490.00	61.03 PK	74.00	-12.97	1.00 V	0	41.39	19.64
7	11490.00	43.07 AV	54.00	-10.93	1.00 V	0	23.43	19.64
8	#17235.00	64.19 PK	68.20	-4.01	1.00 V	0	36.84	27.35

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

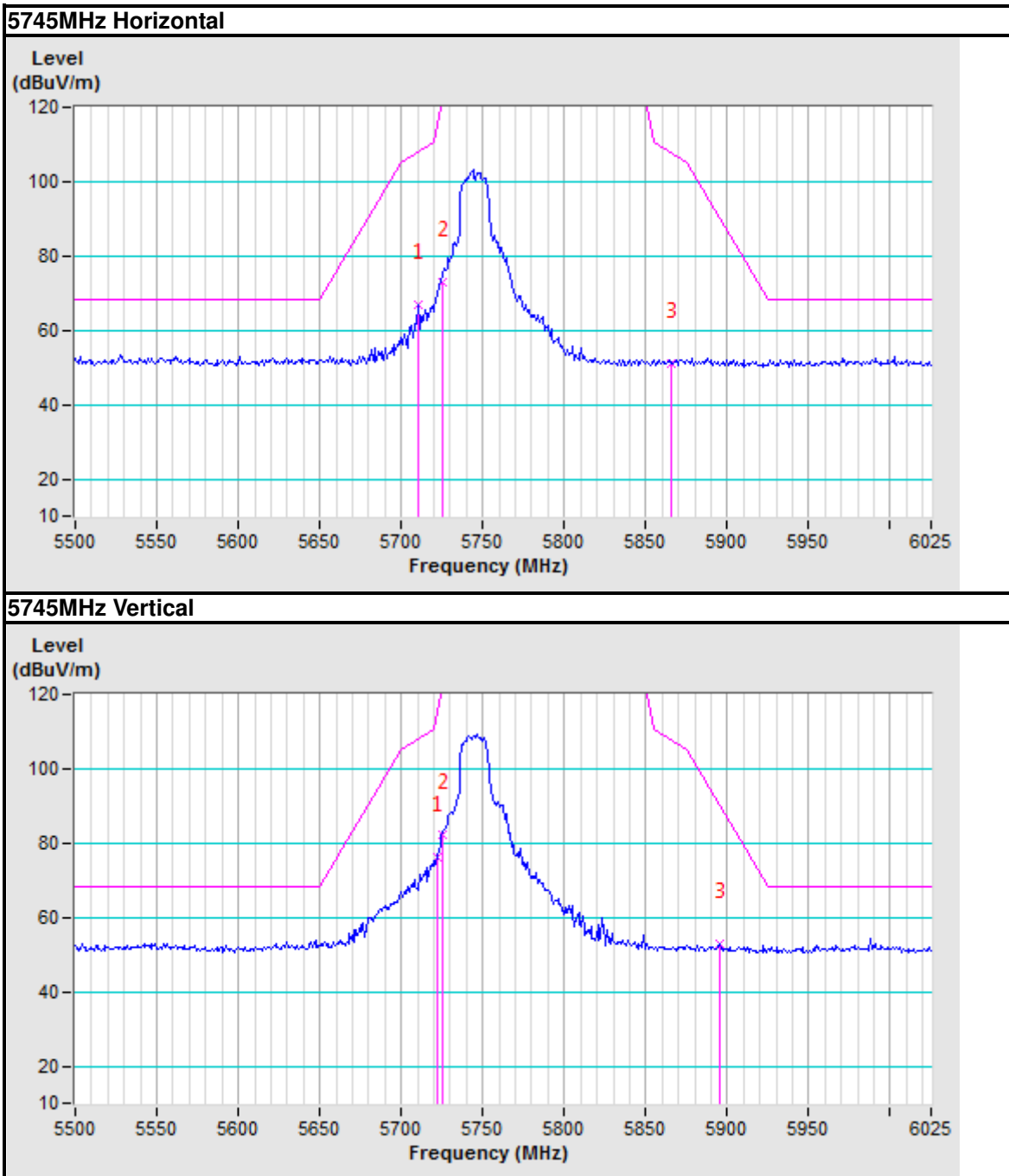
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Band edge Plot





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Test Report No.: RF200421N040-4

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	#5652.64	52.82 PK	70.16	-17.34	1.64 H	0	43.45	9.37
2	#5713.22	52.44 PK	108.90	-56.46	1.64 H	0	42.91	9.53
3	*5785.00	102.02 PK			1.00 H	53	92.31	9.71
4	*5785.00	89.24 AV			1.00 H	53	79.53	9.71
5	#5858.41	52.61 PK	109.84	-57.23	1.64 H	0	42.70	9.91
6	11570.00	57.33 PK	74.00	-16.67	1.00 H	0	37.53	19.80
7	11570.00	42.00 AV	54.00	-12.00	1.00 H	0	22.20	19.80
8	#17355.00	62.89 PK	68.20	-5.31	1.00 H	0	35.41	27.48
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	#5720.79	53.93 PK	112.61	-58.68	1.90 V	0	44.38	9.55
2	*5785.00	108.63 PK			1.00 V	60	98.92	9.71
3	*5785.00	95.01 AV			1.00 V	60	85.30	9.71
4	#5853.37	54.68 PK	114.53	-59.85	1.90 V	0	44.79	9.89
5	#5862.62	53.13 PK	108.66	-55.53	1.90 V	0	43.21	9.92
6	11570.00	59.91 PK	74.00	-14.09	1.00 V	0	40.11	19.80
7	11570.00	44.38 AV	54.00	-9.62	1.00 V	0	24.58	19.80
8	#17355.00	63.18 PK	68.20	-5.02	1.00 V	0	35.70	27.48

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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Dongguan Branch**

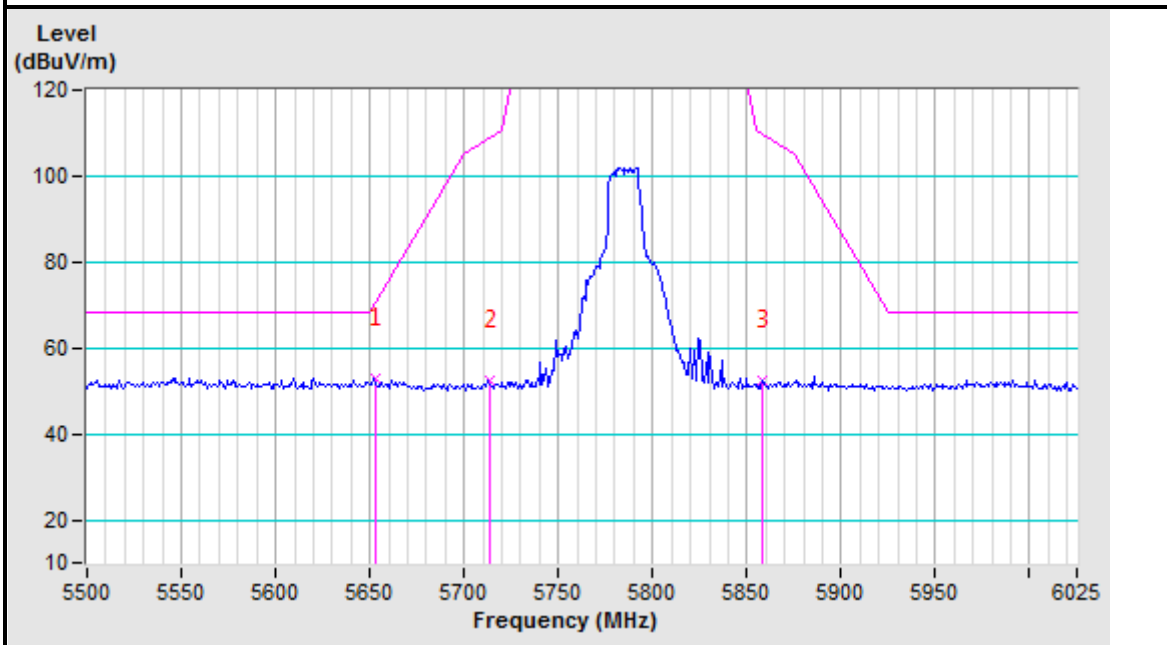
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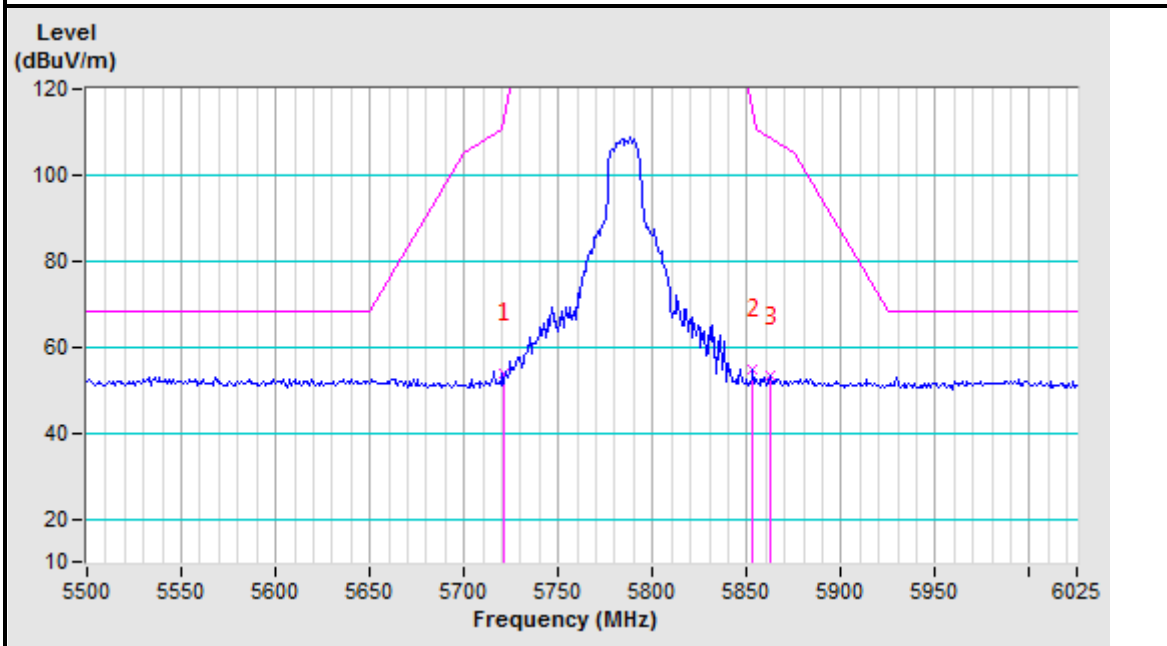


Band edge Plot

5785MHz Horizontal



5785MHz Vertical





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Test Report No.: RF200421N040-4

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	#5702.28	51.40 PK	105.84	-54.44	2.00 H	0	41.90	9.50
2	*5825.00	104.31 PK			1.00 H	330	94.49	9.82
3	*5825.00	91.07 AV			1.00 H	330	81.25	9.82
4	#5850.00	66.18 PK	122.20	-56.02	2.00 H	0	56.30	9.88
5	#5852.52	67.04 PK	116.44	-49.40	2.00 H	0	57.15	9.89
6	11650.00	56.94 PK	74.00	-17.06	1.00 H	0	36.96	19.98
7	11650.00	40.34 AV	54.00	-13.66	1.00 H	0	20.36	19.98
8	#17475.00	62.32 PK	68.20	-5.88	1.00 H	0	34.70	27.62

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	#5696.39	52.36 PK	102.54	-50.18	1.99 V	0	42.88	9.48
2	*5825.00	108.89 PK			1.00 V	144	99.07	9.82
3	*5825.00	95.38 AV			1.00 V	144	85.56	9.82
4	#5850.00	71.84 PK	122.20	-50.36	1.99 V	0	61.96	9.88
5	#5855.05	73.91 PK	110.79	-36.88	1.99 V	0	64.01	9.90
6	11650.00	58.66 PK	74.00	-15.34	1.00 V	0	38.68	19.98
7	11650.00	42.70 AV	54.00	-11.30	1.00 V	0	22.72	19.98
8	#17475.00	63.10 PK	68.20	-5.10	1.00 V	0	35.48	27.62

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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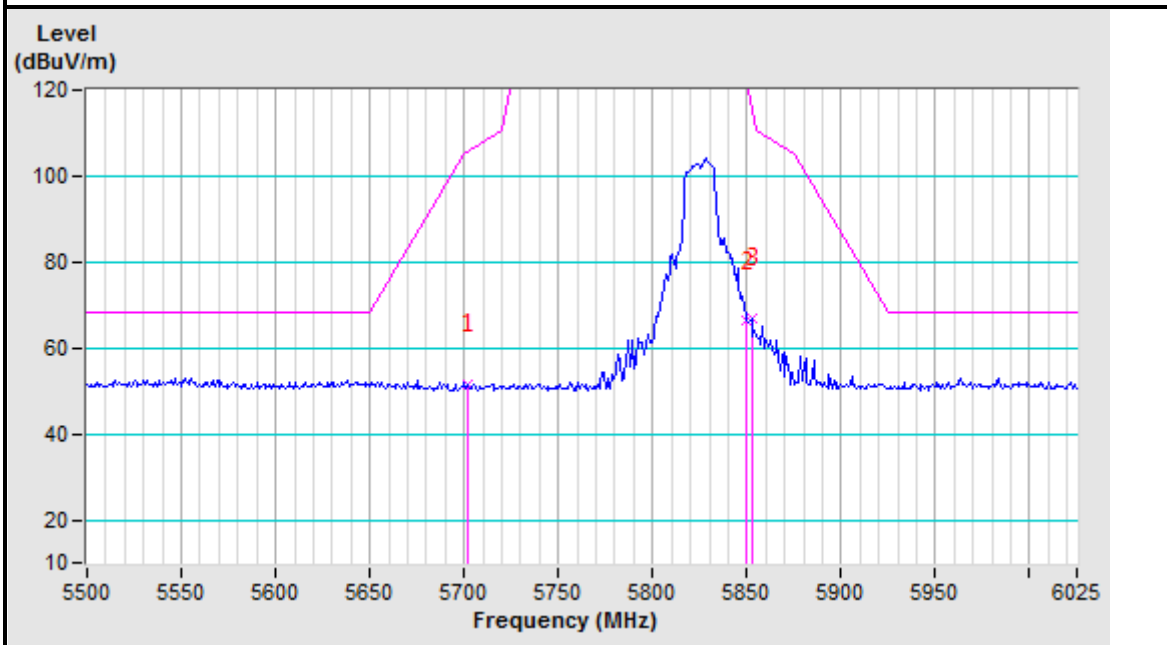


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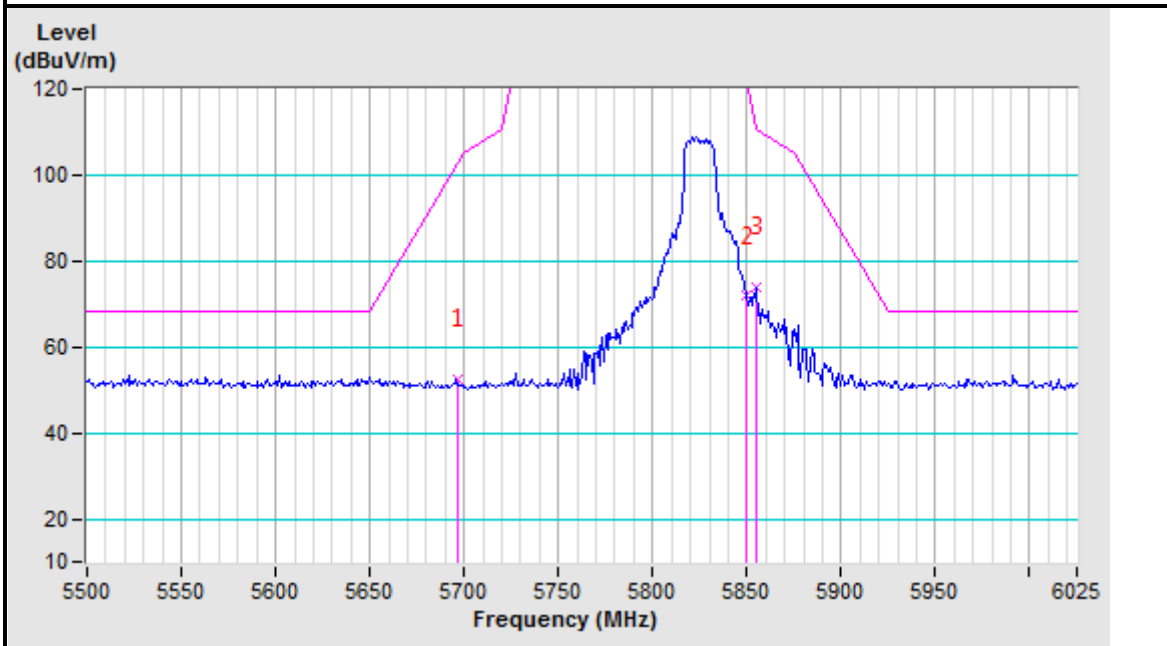
Test Report No.: RF200421N040-4

Band edge Plot

5825MHz Horizontal



5825MHz Vertical





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Test Report No.: RF200421N040-4

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	#5717.43	65.68 PK	110.08	-44.40	1.99 H	0	56.15	9.53
2	#5725.00	73.63 PK	122.20	-48.57	1.99 H	0	64.07	9.56
3	*5745.00	102.66 PK			1.00 H	0	93.05	9.61
4	*5745.00	88.97 AV			1.00 H	0	79.36	9.61
5	#5857.57	50.78 PK	110.08	-59.30	1.99 H	0	40.87	9.91
6	11490.00	56.46 PK	74.00	-17.54	1.00 H	0	36.82	19.64
7	11490.00	41.27 AV	54.00	-12.73	1.00 H	0	21.63	19.64
8	#17235.00	60.25 PK	68.20	-7.95	1.00 H	0	32.90	27.35

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	#5717.43	71.22 PK	110.08	-38.86	2.00 V	0	61.69	9.53
2	#5725.00	82.29 PK	122.20	-39.91	2.00 V	0	72.73	9.56
3	*5745.00	109.69 PK			1.00 V	190	100.08	9.61
4	*5745.00	96.02 AV			1.00 V	190	86.41	9.61
5	#5876.92	52.24 PK	103.77	-51.53	2.00 V	0	42.29	9.95
6	11490.00	59.20 PK	74.00	-14.80	1.00 V	0	39.56	19.64
7	11490.00	44.90 AV	54.00	-9.10	1.00 V	0	25.26	19.64
8	#17235.00	63.19 PK	68.20	-5.01	1.00 V	0	35.84	27.35

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
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Dongguan Branch**

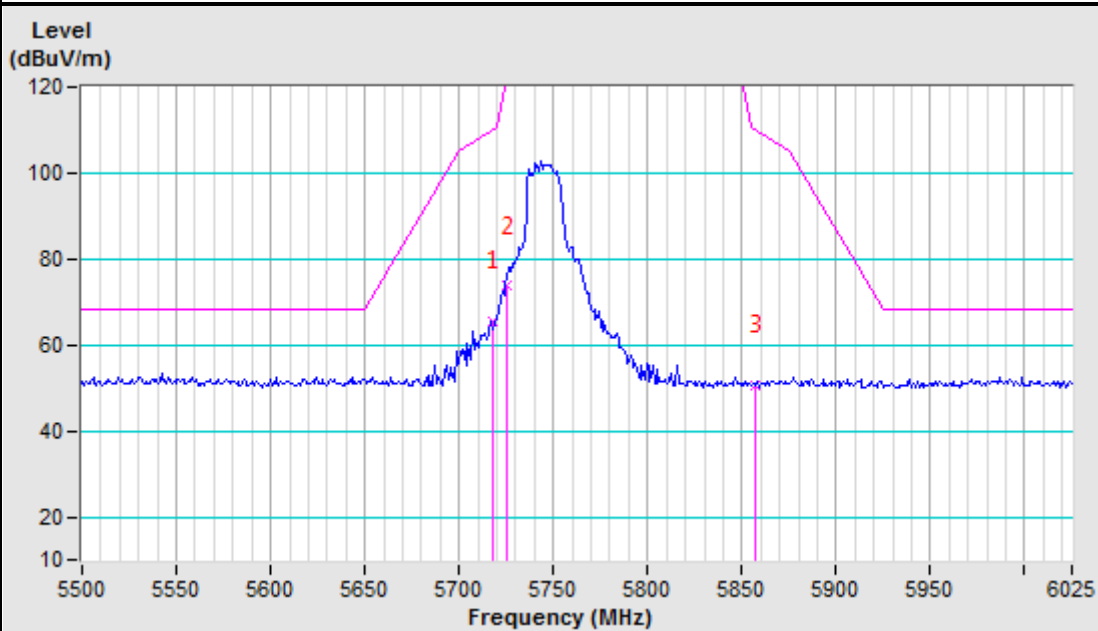
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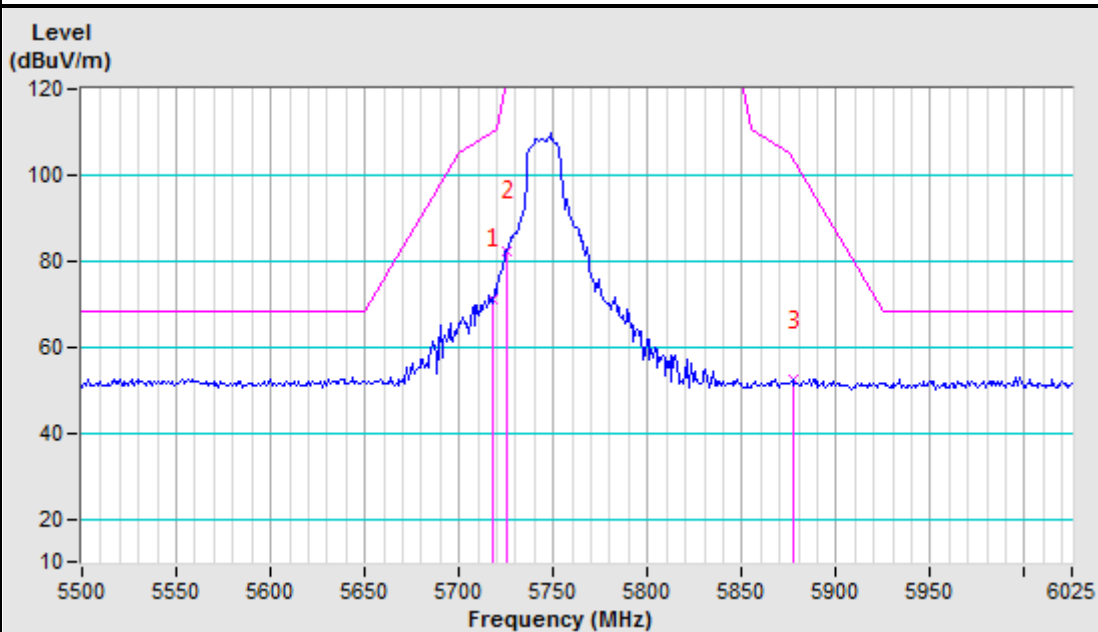


Band edge Plot

5745MHz Horizontal



5745MHz Vertical





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Test Report No.: RF200421N040-4

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	#5667.79	52.71 PK	81.40	-28.69	1.64 H	0	43.30	9.41
2	#5715.75	52.80 PK	109.61	-56.81	1.64 H	0	43.26	9.54
3	*5785.00	103.83 PK			1.00 H	41	94.12	9.71
4	*5785.00	90.22 AV			1.00 H	41	80.51	9.71
5	#5871.03	53.33 PK	106.31	-52.98	1.64 H	0	43.39	9.94
6	11570.00	55.96 PK	74.00	-18.04	1.00 H	0	36.16	19.80
7	11570.00	40.89 AV	54.00	-13.11	1.00 H	0	21.09	19.80
8	#17235.00	62.63 PK	68.20	-5.57	1.00 H	0	35.28	27.35

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	#5717.43	57.57 PK	110.08	-52.51	1.36 V	0	48.04	9.53
2	#5720.79	65.43 PK	112.61	-47.18	1.36 V	0	55.88	9.55
3	*5785.00	114.85 PK			1.00 V	0	105.14	9.71
4	*5785.00	91.54 AV			1.00 V	0	81.83	9.71
5	#5851.68	63.95 PK	118.36	-54.41	1.36 V	0	54.06	9.89
6	11570.00	58.72 PK	74.00	-15.28	1.00 V	0	38.92	19.80
7	11570.00	42.67 AV	54.00	-11.33	1.00 V	0	22.87	19.80
8	#17235.00	63.45 PK	68.20	-4.75	1.00 V	0	36.10	27.35

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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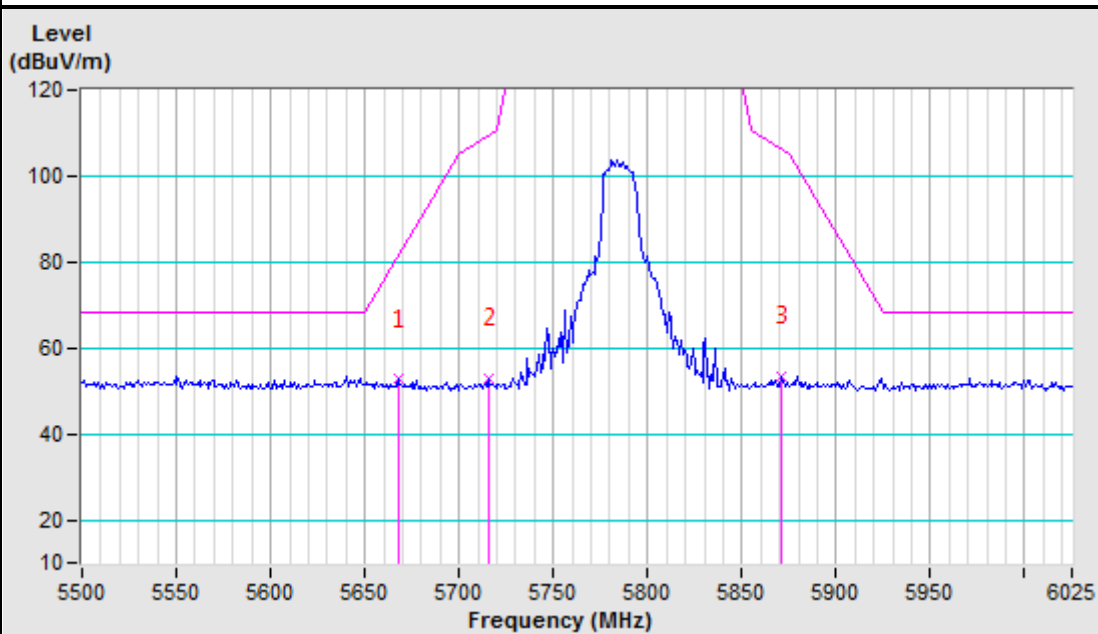
No. 96, Guantai Road (Houjie Section), Houjie Town, Dongguan City, Guangdong Province. 523942. People's Republic of China.

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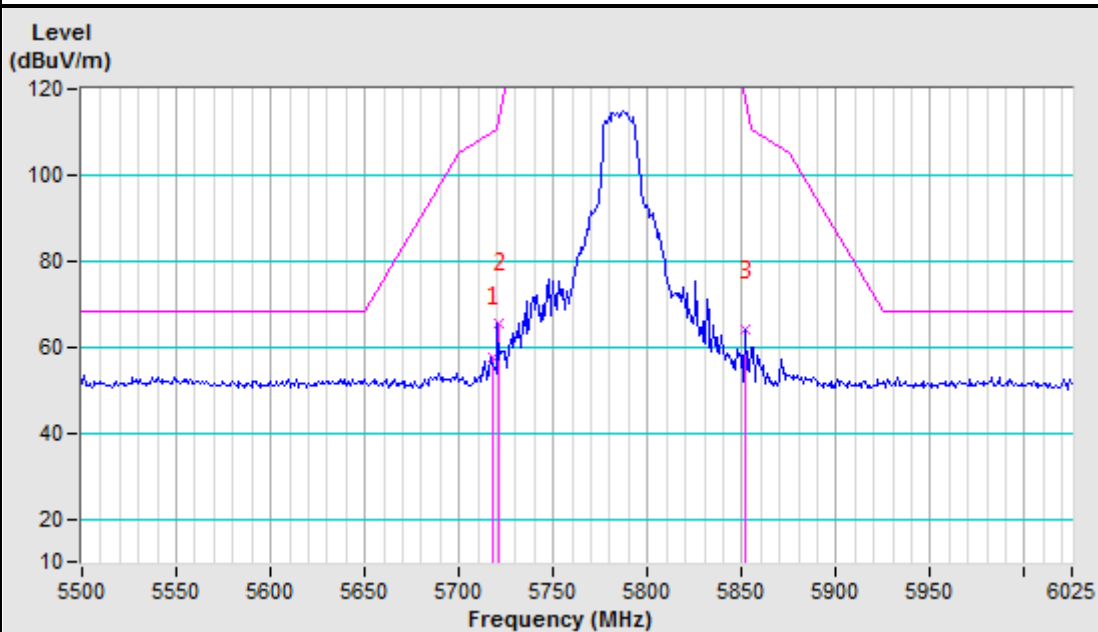


Band edge Plot

5785MHz Horizontal



5785MHz Vertical





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VERITAS**

Test Report No.: RF200421N040-4

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	#5717.43	51.71 PK	110.08	-58.37	1.60 H	0	42.18	9.53
2	*5825.00	103.17 PK			1.00 H	90	93.35	9.82
3	*5825.00	89.72 AV			1.00 H	90	79.90	9.82
4	#5850.00	65.90 PK	122.20	-56.30	1.60 H	0	56.02	9.88
5	#5857.57	62.90 PK	110.08	-47.18	1.60 H	0	52.99	9.91
6	11650.00	55.19 PK	74.00	-18.81	1.00 H	0	35.21	19.98
7	11650.00	40.80 AV	54.00	-13.20	1.00 H	0	20.82	19.98
8	#17475.00	61.78 PK	68.20	-6.42	1.00 H	0	34.16	27.62
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	#5703.97	52.79 PK	106.31	-53.52	2.00 V	0	43.29	9.50
2	*5825.00	108.16 PK			1.00 V	30	98.34	9.82
3	*5825.00	92.68 AV			1.00 V	30	82.86	9.82
4	#5850.00	73.50 PK	122.20	-48.70	2.00 V	0	63.62	9.88
5	#5855.89	69.46 PK	110.55	-41.09	2.00 V	0	59.56	9.90
6	11650.00	56.65 PK	74.00	-17.35	1.00 V	0	36.67	19.98
7	11650.00	42.60 AV	54.00	-11.40	1.00 V	0	22.62	19.98
8	#17475.00	62.99 PK	68.20	-5.21	1.00 V	0	35.37	27.62

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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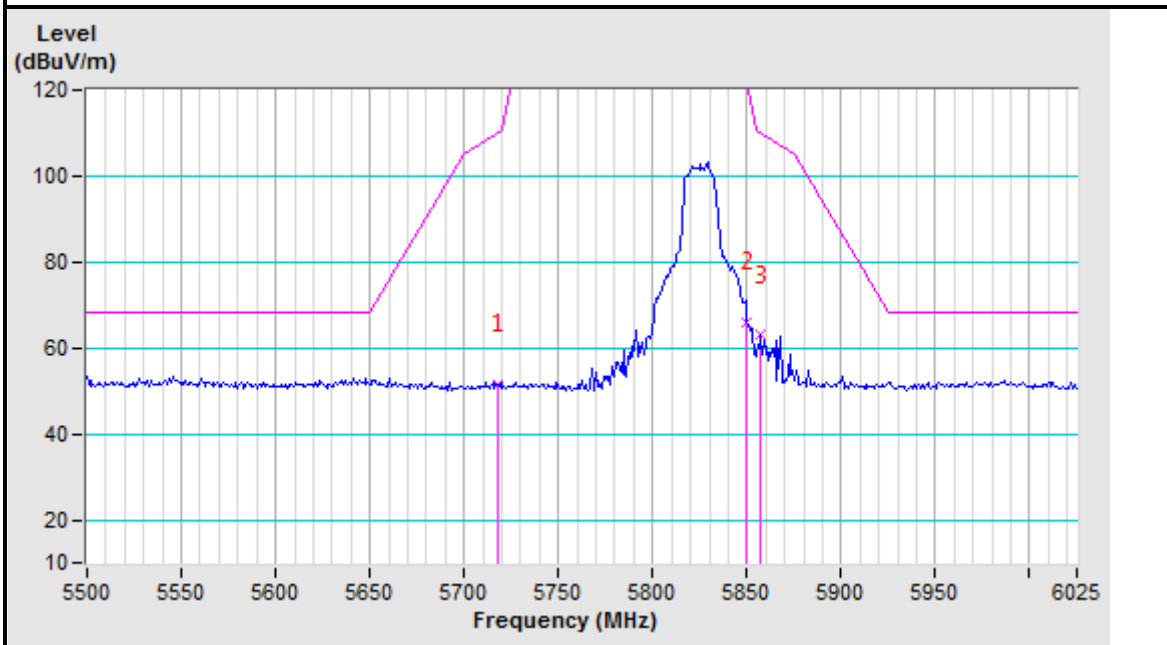


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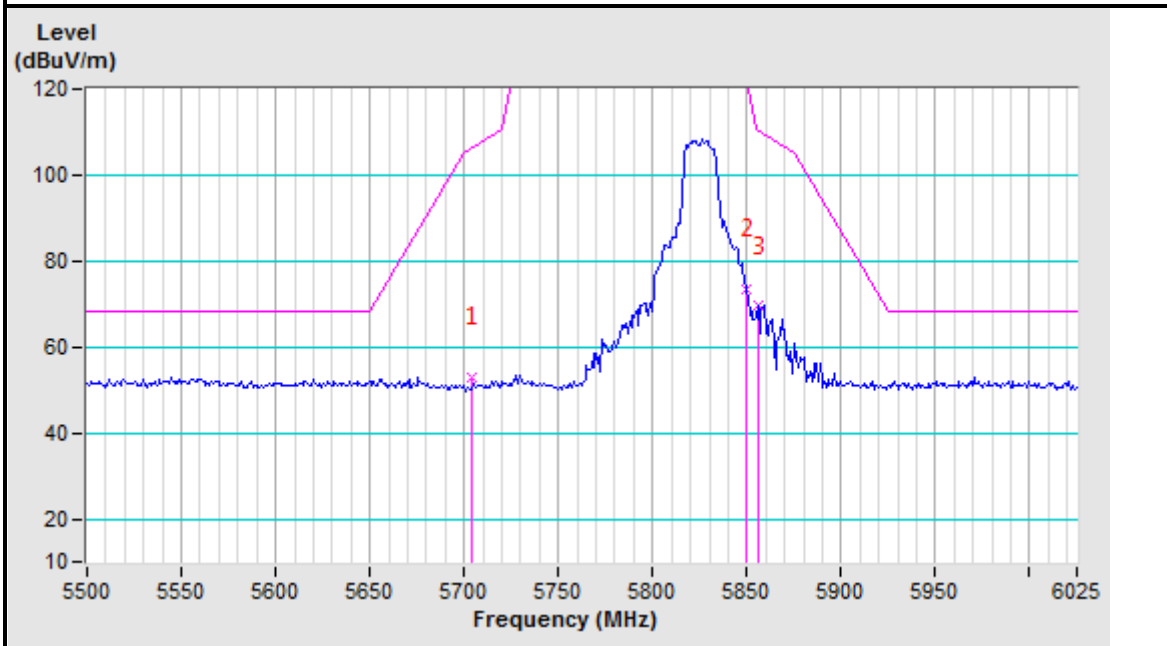
Test Report No.: RF200421N040-4

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	#5717.43	73.38 PK	110.08	-36.70	2.00 H	0	63.85	9.53
2	#5725.00	75.91 PK	122.20	-46.29	2.00 H	0	66.35	9.56
3	*5755.00	106.41 PK			1.00 H	0	96.77	9.64
4	*5755.00	90.04 AV			1.00 H	0	80.40	9.64
5	#5857.57	60.78 PK	110.08	-49.30	2.00 H	0	50.87	9.91
6	11510.00	56.63 PK	74.00	-17.37	1.00 H	0	36.96	19.67
7	11510.00	42.85 AV	54.00	-11.15	1.00 H	0	23.18	19.67
8	#17265.00	62.76 PK	68.20	-5.44	1.00 H	0	35.38	27.38

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

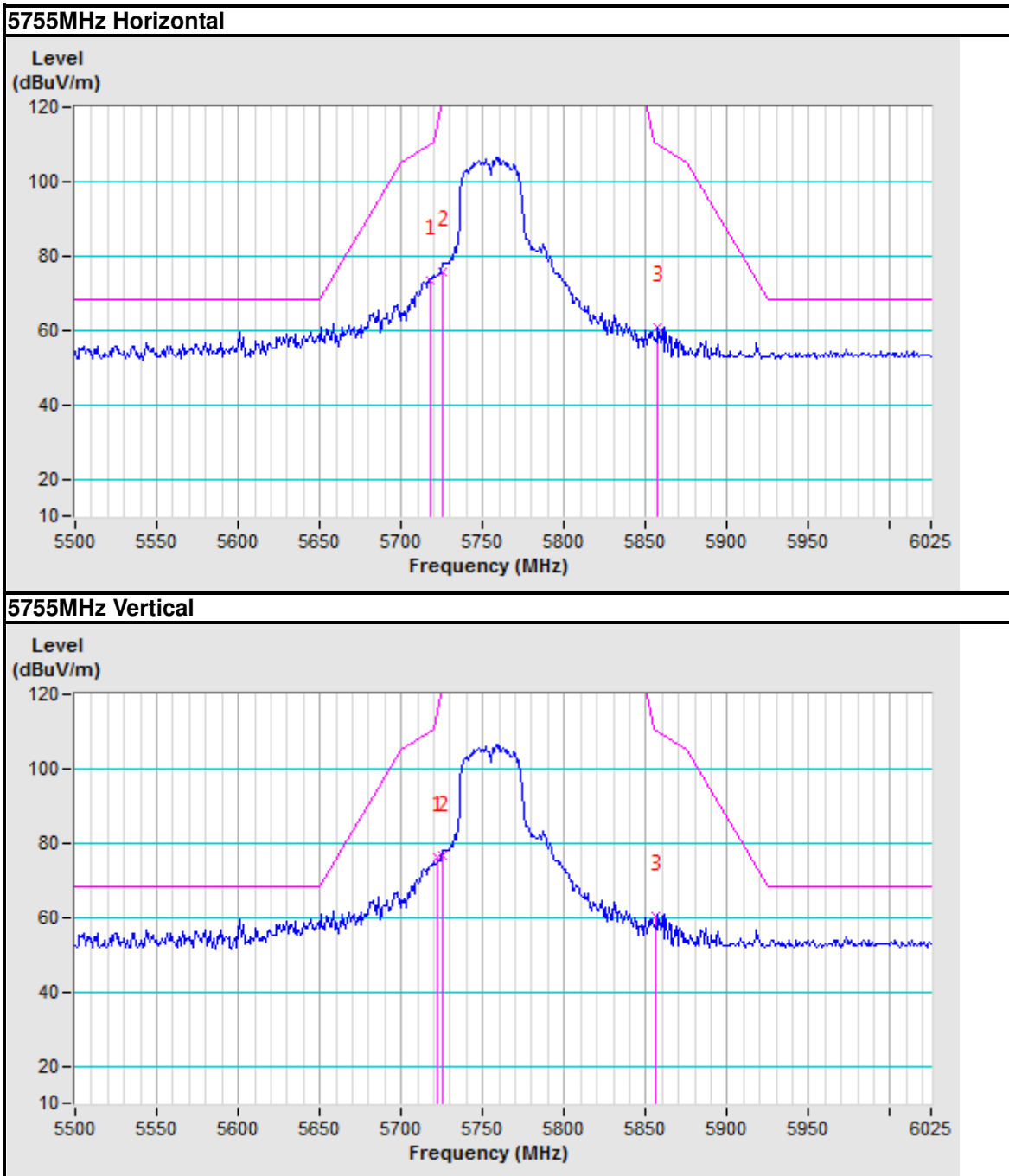
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5722.48	76.23 PK	116.45	-40.22	2.00 V	0	66.68	9.55
2	#5725.00	76.45 PK	122.20	-45.75	2.00 V	0	66.89	9.56
3	*5755.00	108.37 PK			1.00 V	80	98.73	9.64
4	*5755.00	92.12 AV			1.00 V	80	82.48	9.64
5	#5855.89	60.27 PK	110.55	-50.28	2.00 V	0	50.37	9.90
6	11510.00	58.44 PK	74.00	-15.56	1.00 V	0	38.77	19.67
7	11510.00	44.00 AV	54.00	-10.00	1.00 V	0	24.33	19.67
8	#17265.00	63.22 PK	68.20	-4.98	1.00 V	0	35.84	27.38

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



Band edge Plot





BUREAU VERITAS

Test Report No.: RF200421N040-4

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	#5719.11	57.71 PK	110.55	-52.84	1.65 H	0	48.17	9.54
2	*5795.00	99.39 PK			1.00 H	70	89.64	9.75
3	*5795.00	85.11 AV			1.00 H	70	75.36	9.75
4	#5850.00	58.28 PK	122.20	-63.92	1.65 H	0	48.40	9.88
5	#5855.05	62.89 PK	110.79	-47.90	1.65 H	0	52.99	9.90
6	11590.00	57.26 PK	74.00	-16.74	1.00 H	0	37.42	19.84
7	11590.00	42.05 AV	54.00	-11.95	1.00 H	0	22.21	19.84
8	#17385.00	61.49 PK	68.20	-6.71	1.00 H	0	33.97	27.52

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	#5711.54	68.34 PK	108.43	-40.09	1.35 V	0	58.81	9.53
2	#5718.27	70.18 PK	110.32	-40.14	1.35 V	0	60.64	9.54
3	*5795.00	112.66 PK			1.00 V	114	102.91	9.75
4	*5795.00	95.57 AV			1.00 V	114	85.82	9.75
5	#5850.00	69.31 PK	122.20	-52.89	1.35 V	0	59.43	9.88
6	11590.00	58.79 PK	74.00	-15.21	1.00 V	0	38.95	19.84
7	11590.00	44.61 AV	54.00	-9.39	1.00 V	0	24.77	19.84
8	#17385.00	63.84 PK	68.20	-4.36	1.00 V	0	36.32	27.52

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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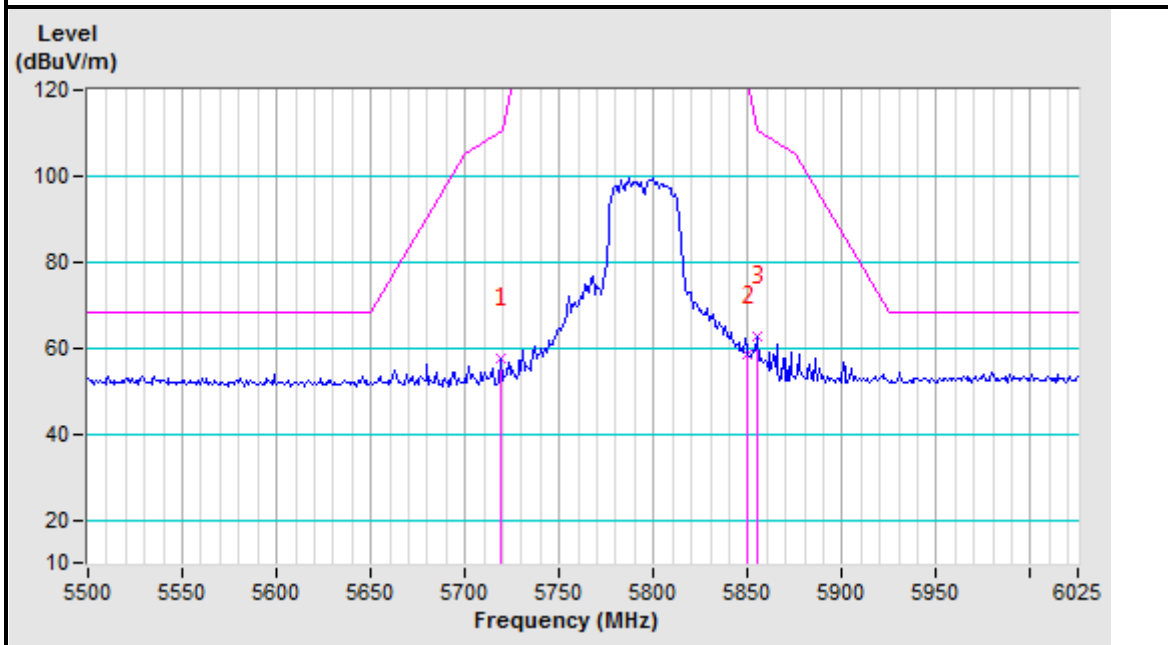


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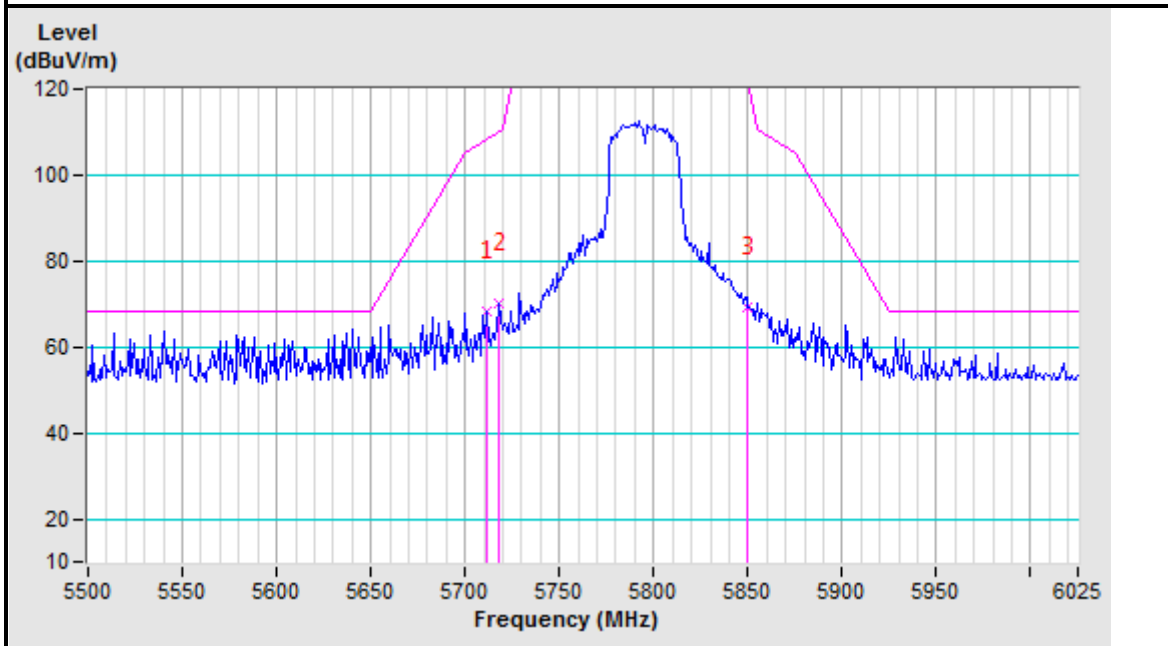
Test Report No.: RF200421N040-4

Band edge Plot

5795MHz Horizontal



5795MHz Vertical





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	#5716.59	86.73 PK	109.85	-23.12	2.01 H	0	77.19	9.54
2	#5725.00	94.27 PK	122.20	-27.93	2.01 H	0	84.71	9.56
3	*5775.00	96.36 PK			1.00 H	0	86.67	9.69
4	*5775.00	72.84 AV			1.00 H	0	63.15	9.69
5	#5850.00	68.11 PK	122.20	-54.09	2.01 H	0	58.23	9.88
6	11550.00	56.62 PK	74.00	-17.38	1.00 H	0	36.86	19.76
7	11550.00	40.77 AV	54.00	-13.23	1.00 H	0	21.01	19.76
8	#17325.00	61.07 PK	68.20	-7.13	1.00 H	0	33.62	27.45

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	#5715.75	87.28 PK	109.61	-22.33	2.00 V	153	77.74	9.54
2	#5725.00	100.82 PK	122.20	-21.38	2.00 V	153	91.26	9.56
3	*5775.00	105.44 PK			1.00 V	335	95.75	9.69
4	*5775.00	82.18 AV			1.00 V	335	72.49	9.69
5	#5850.00	74.48 PK	122.20	-47.72	2.00 V	153	64.60	9.88
6	11550.00	59.08 PK	74.00	-14.92	1.00 V	0	39.32	19.76
7	11550.00	45.01 AV	54.00	-8.99	1.00 V	0	25.25	19.76
8	#17325.00	63.94 PK	68.20	-4.26	1.00 V	0	36.49	27.45

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 greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

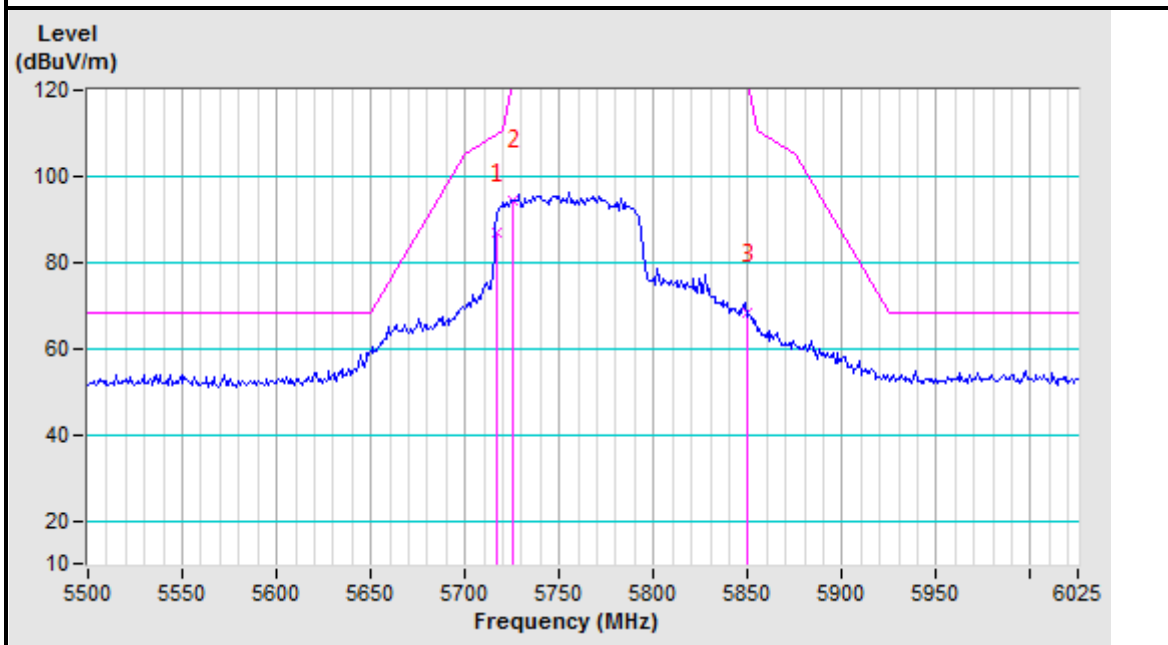


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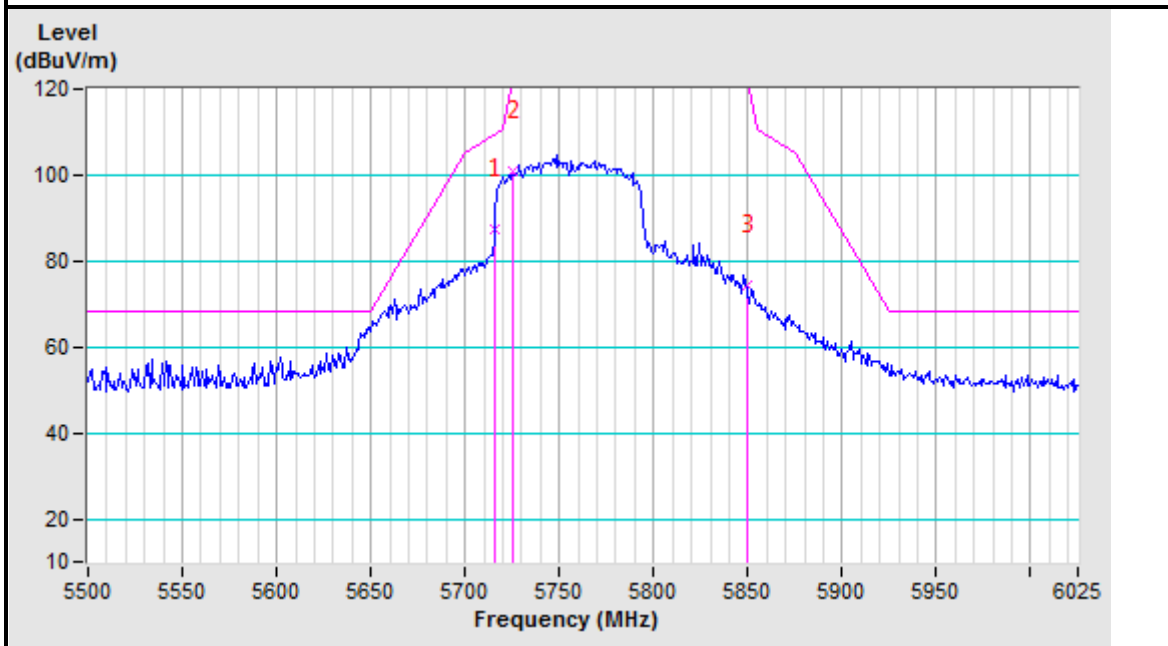
Test Report No.: RF200421N040-4

Band edge Plot

5775MHz Horizontal



5775MHz Vertical





3.2 CONDUCTED EMISSION MEASUREMENT

3.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

- NOTES:**
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.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101494	Mar. 12,20	Mar. 11,21
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Mar. 12,20	Mar. 11,21
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Mar. 12,20	Mar. 11,21
Voltage probe	SCHWARZBECK	TK 9421	TK 9421-176	Sep. 24,19	Sep. 23,20
Test software	ADT	ADT_Cond_V7.3.7	N/A	N/A	N/A

- NOTES:**
1. The test was performed in shielded room 553.
 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

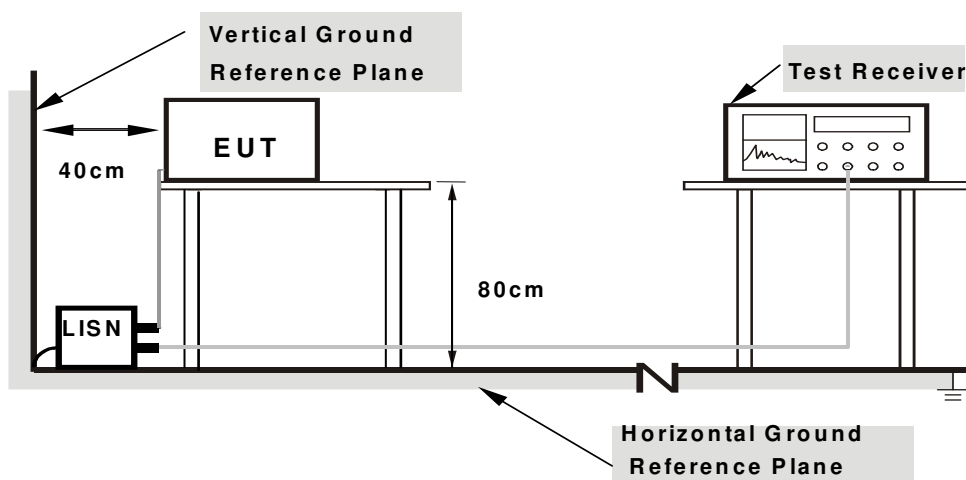
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. 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 3.1.7

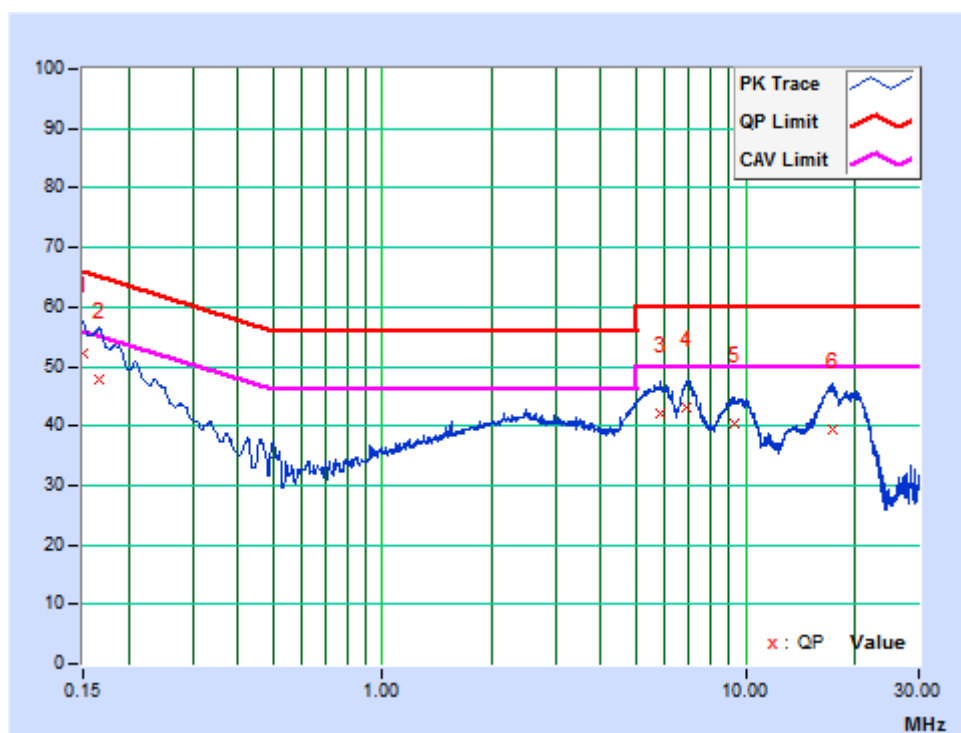
3.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA: 802.11a CH36

PHASE	Line	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	10.21	41.92	23.45	52.13	33.66	66.00	56.00	-13.87	-22.34
2	0.16575	10.21	37.73	16.92	47.94	27.13	65.17	55.17	-17.23	-28.04
3	5.82450	10.24	31.75	22.16	41.99	32.40	60.00	50.00	-18.01	-17.60
4	6.88650	10.25	32.81	23.81	43.06	34.06	60.00	50.00	-16.94	-15.94
5	9.26475	10.27	30.02	22.46	40.29	32.73	60.00	50.00	-19.71	-17.27
6	17.32650	10.32	29.15	21.27	39.47	31.59	60.00	50.00	-20.53	-18.41

- 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.





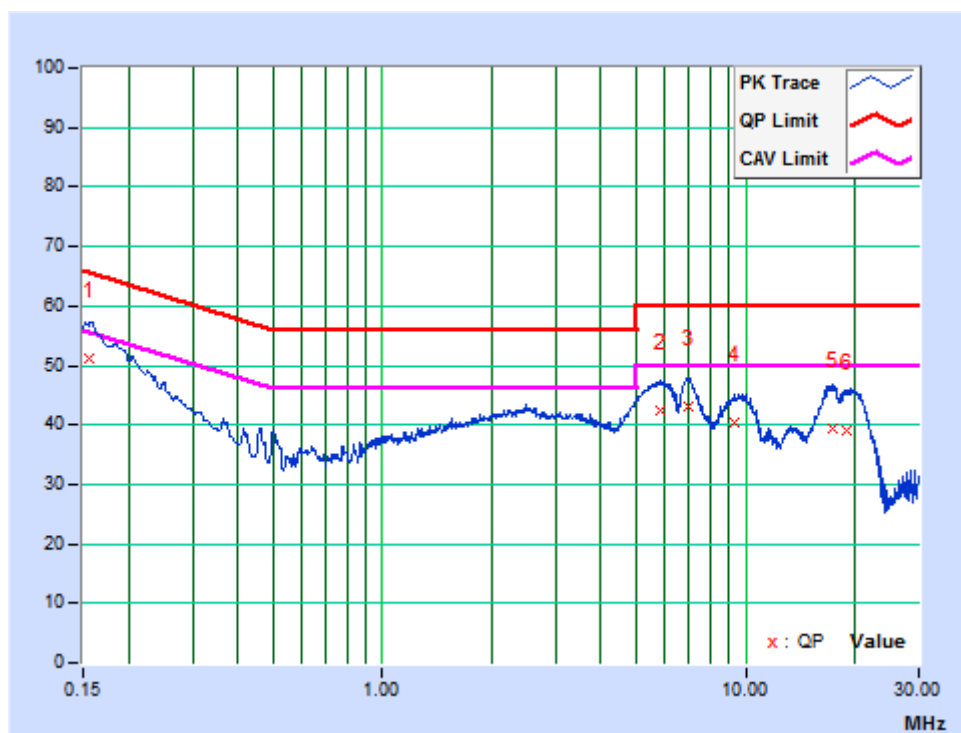
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Test Report No.: RF200421N040-4

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	0.15674	10.01	41.22	20.74	51.23	30.75	65.63	55.63	-14.41	-24.89
2	5.83125	10.04	32.38	22.75	42.42	32.79	60.00	50.00	-17.58	-17.21
3	6.94275	10.05	32.89	23.84	42.94	33.89	60.00	50.00	-17.06	-16.11
4	9.26250	10.13	30.30	22.87	40.43	33.00	60.00	50.00	-19.57	-17.00
5	17.26800	10.20	29.10	21.16	39.30	31.36	60.00	50.00	-20.70	-18.64
6	18.89025	10.21	28.76	21.14	38.97	31.35	60.00	50.00	-21.03	-18.65

- 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.



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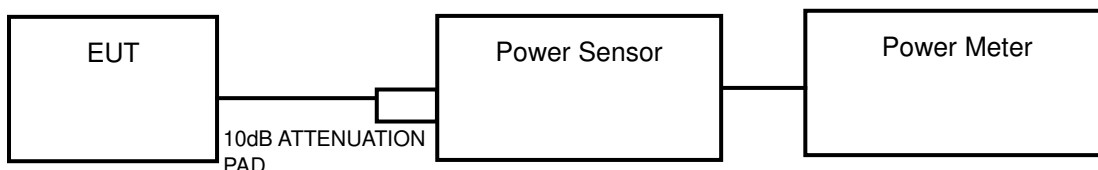
3.3 TRANSMIT POWER MEASUREMENT

3.3.1 LIMITS OF TRANSMIT POWER MEASUREMENT

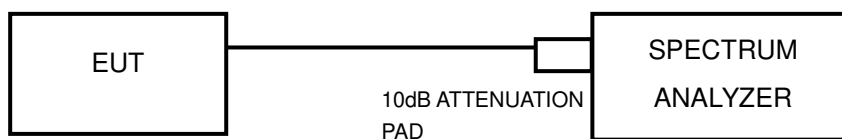
Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p \leq 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Mobile and Portable client 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.	Last Cal.	Next Cal.
Power Sensor	Keysight	U2021XA	MY55060016	May 22,20	May 21,21
Power Sensor	Keysight	U2021XA	MY55060018	May 22,20	May 21,21
Power Meter	Anritsu	ML2495A	1139001	Mar. 18,20	Mar. 17,21
Power Sensor	Anritsu	MA2411B	1531155	Mar. 18,20	Mar. 17,21
Digital Multimeter	FLUKE	15B	A1220010DG	Oct. 17, 19	Oct.16, 20
Humid & Temp Programmable Tester	Haida	HD-225T	110807201	Oct.31,19	Oct. 30,20
Oscilloscope	Agilent	DSO9254A	MY51260160	Sep. 18,19	Sep. 17,20
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV40	101094	Mar. 18,20	Mar. 17,21
Signal Generator	Agilent	N5183A	MY50140980	Sep. 19,19	Sep. 18,20
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY56200288	Sep. 12,19	Sep. 11,20
Attenuator	MINI	BW-S10W2 +	S130129FGE2	N/A	N/A
DC Source	Keysight	E3642A	MY56146098	N/A	N/A

NOTES:

1. The test was performed in RF Oven room.
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.



3.3.7 TEST RESULTS

OUTPUT POWER:

802.11a

CHANNEL NUMBER	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	AVG. CONDUCTED POWER (mW)	LIMIT (dBm)	PASS /FAIL
36	5180	12.27	16.866	24.00	PASS
40	5200	13.21	20.941	24.00	PASS
48	5240	13.73	23.605	24.00	PASS
52	5260	13.43	22.029	23.94	PASS
60	5300	12.51	17.824	24.00	PASS
64	5320	10.11	10.257	23.93	PASS
100	5500	10.25	10.593	23.95	PASS
116	5580	14.37	27.353	23.84	PASS
140	5700	11.53	14.223	23.94	PASS
149	5745	12.83	19.187	30.00	PASS
157	5785	12.27	16.866	30.00	PASS
165	5825	12.82	19.143	30.00	PASS

Note:

5180 ~ 5240MHz Max. Gain = 3dBi < 6dBi, so the limit no ned to be reduced.

5260 ~ 5320MHz Max. Gain = 3dBi < 6dBi, so the limit no ned to be reduced

5500 ~ 5700MHz Max. Gain = 3dBi < 6dBi, so the limit no ned to be reduced

5745 ~ 5825MHz Max. Gain = 3dBi < 6dBi, so the limit no ned to be reduced

For 5260 ~ 5320MHz, 5500 ~ 5700MHz

1. $11\text{dBm} + 10\log(19.67) = 23.94\text{ dBm} < 24\text{dBm}$
2. $11\text{dBm} + 10\log(19.97) = 24.00\text{ dBm} = 24\text{dBm}$
3. $11\text{dBm} + 10\log(19.62) = 23.93\text{ dBm} < 24\text{dBm}$
4. $11\text{dBm} + 10\log(19.73) = 23.95\text{ dBm} < 24\text{dBm}$
5. $11\text{dBm} + 10\log(19.26) = 23.84\text{ dBm} = 24\text{dBm}$
6. $11\text{dBm} + 10\log(19.68) = 23.94\text{ dBm} < 24\text{dBm}$



802.11n (20MHz)

CHANNEL NUMBER	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	AVG. CONDUCTED POWER (mW)	LIMIT (dBm)	PASS /FAIL
36	5180	11.08	12.823	24.00	PASS
40	5200	13.09	20.37	24.00	PASS
48	5240	13.45	22.131	24.00	PASS
52	5260	13.27	21.232	24.00	PASS
60	5300	12.32	17.061	24.00	PASS
64	5320	8.91	7.78	24.00	PASS
100	5500	9.34	8.59	24.00	PASS
116	5580	14.17	26.122	24.00	PASS
140	5700	9.84	9.638	24.00	PASS
149	5745	13.69	23.388	30.00	PASS
157	5785	12.14	16.368	30.00	PASS
165	5825	12.65	18.408	30.00	PASS

Note:

For 5260 ~ 5320MHz, 5500 ~ 5700MHz

11dBm + 10log (20.59) = 24.14 dBm > 24dBm

11dBm + 10log (20.87) = 24.20 dBm > 24dBm

11dBm + 10log (20.78) = 24.18 dBm > 24dBm

11dBm + 10log (20.72) = 24.16 dBm > 24dBm

11dBm + 10log (20.83) = 24.19 dBm > 24dBm

11dBm + 10log (20.69) = 24.16 dBm > 24dBm



802.11n (40MHz)

CHANNEL NUMBER	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	AVG. CONDUCTED POWER (mW)	LIMIT (dBm)	PASS /FAIL
38	5190	9.02	7.98	24.00	PASS
46	5230	13.68	23.335	24.00	PASS
54	5270	13.09	20.37	24.00	PASS
62	5310	11.28	13.428	24.00	PASS
102	5510	8.02	6.339	24.00	PASS
110	5550	13.72	23.55	24.00	PASS
134	5670	9.61	9.141	24.00	PASS
151	5755	13.39	21.827	30.00	PASS
159	5795	12.98	19.861	30.00	PASS

Note:

For 5260 ~ 5320MHz, 5500 ~ 5700MHz

11dBm + 10log (47.93) = 27.81 dBm > 24dBm

11dBm + 10log (49.82) = 27.50 dBm > 24dBm

11dBm + 10log (44.62) = 27.50 dBm > 24dBm

11dBm + 10log (49.84) = 27.98 dBm > 24dBm

11dBm + 10log (44.65) = 27.50 dBm > 24dBm



802.11ac (80MHz)

CHANNEL NUMBER	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	AVG. CONDUCTED POWER (mW)	LIMIT (dBm)	PASS /FAIL
42	5210	12.08	16.144	24.00	PASS
58	5290	9.28	8.472	24.00	PASS
106	5530	8.87	7.709	24.00	PASS
122	5610	13.91	24.604	24.00	PASS
155	5775	13.38	21.777	30.00	PASS

Note:

For 5260 ~ 5320MHz, 5500 ~ 5700MHz

$$11\text{dBm} + 10\log(82.29) = 30.15 \text{ dBm} > 24\text{dBm}$$

$$11\text{dBm} + 10\log(82.16) = 30.15 \text{ dBm} > 24\text{dBm}$$

$$11\text{dBm} + 10\log(83.08) = 30.19 \text{ dBm} > 24\text{dBm}$$



26dB BANDWIDTH:

802.11a

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
36	5180	19.74	PASS
40	5200	19.39	PASS
48	5240	19.65	PASS
52	5260	19.67	PASS
60	5300	19.97	PASS
64	5320	19.62	PASS
100	5500	19.73	PASS
116	5580	19.26	PASS
140	5700	19.68	PASS

802.11n (20MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
36	5180	20.92	PASS
40	5200	20.72	PASS
48	5240	20.91	PASS
52	5260	20.59	PASS
60	5300	20.87	PASS
64	5320	20.78	PASS
100	5500	20.72	PASS
116	5580	20.83	PASS
140	5700	20.69	PASS



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802.11n (40MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
38	5190	43.92	PASS
46	5230	46.66	PASS
54	5270	47.93	PASS
62	5310	49.82	PASS
102	5510	44.62	PASS
110	5550	45.84	PASS
134	5670	46.65	PASS

802.11ac (80MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
42	5210	82.21	PASS
58	5290	82.29	PASS
106	5530	82.16	PASS
122	5610	83.08	PASS



6dB BANDWIDTH For 5725-5850MHz

802.11a

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
149	5745	15.19	PASS
157	5785	15.21	PASS
165	5825	15.21	PASS

802.11n (20M)

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
149	5745	15.19	PASS
157	5785	15.19	PASS
165	5825	15.17	PASS

802.11n (40M)

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
151	5755	35.25	PASS
159	5795	35.25	PASS

802.11ac (80MHz)

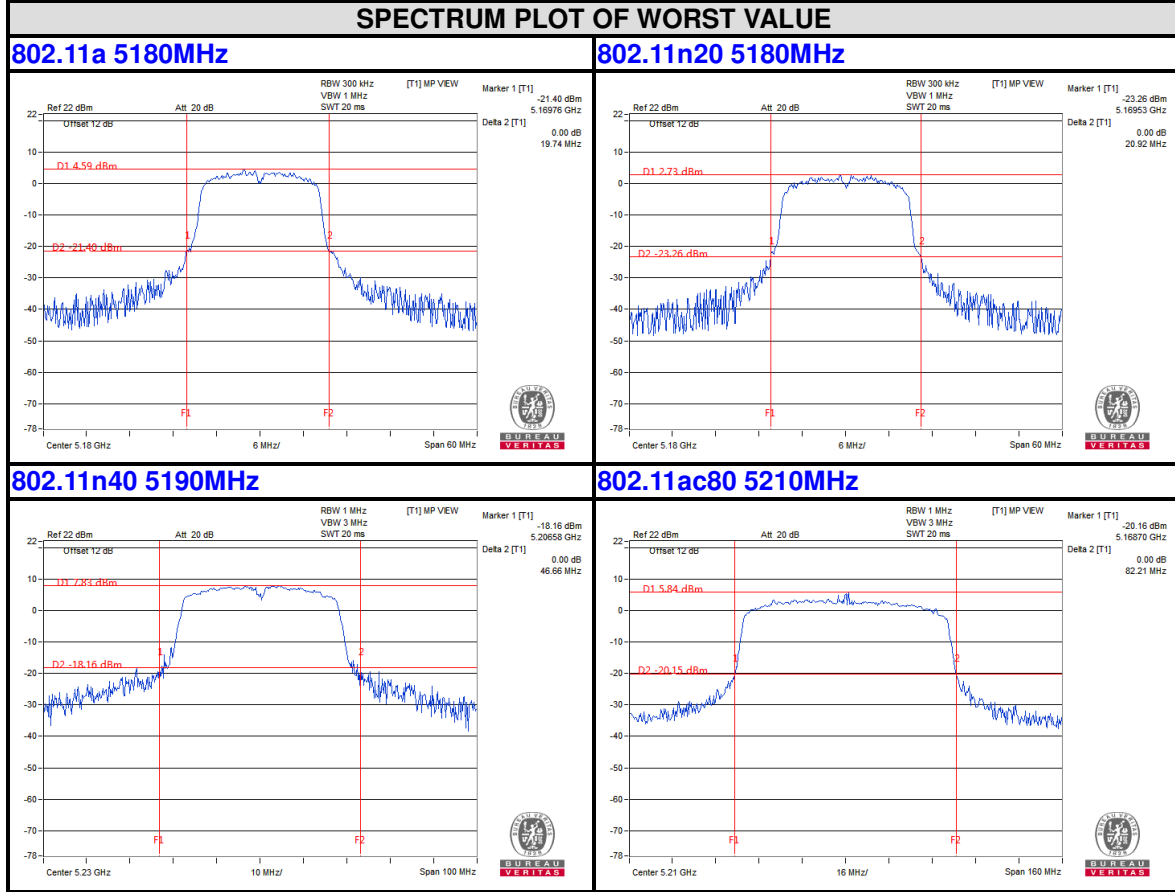
Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
155	5775	75.30	PASS



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26dB bandwidth Test Plot For 5150-5250MHz



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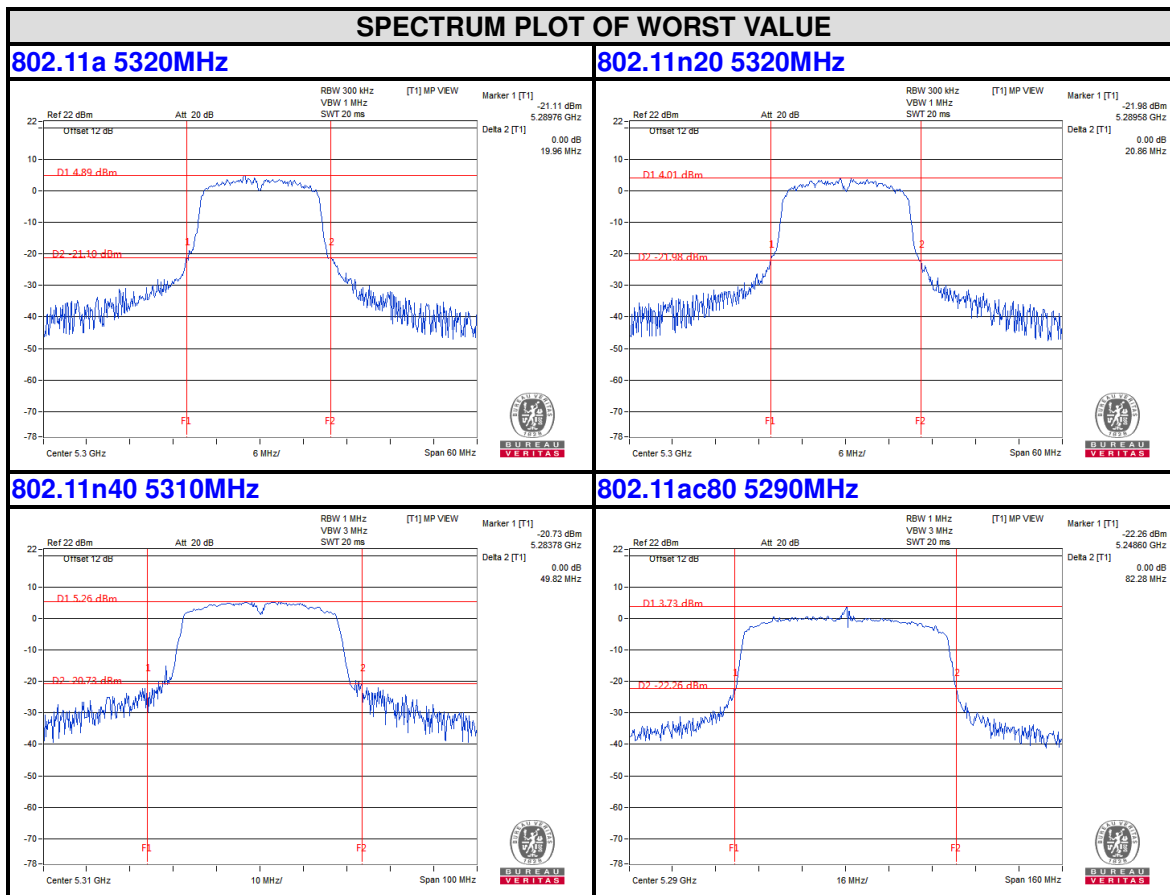
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For 5250-5350MHz



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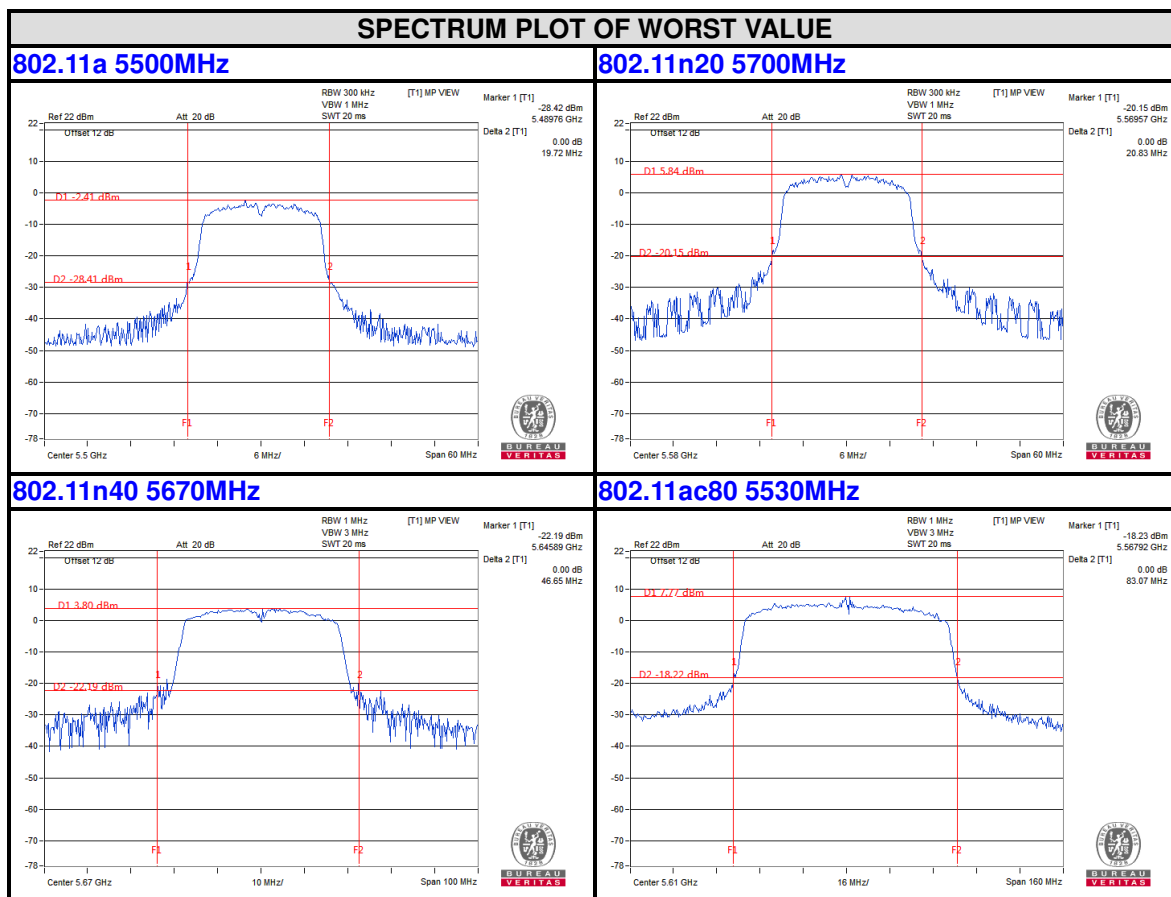
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For 5470-5725MHz



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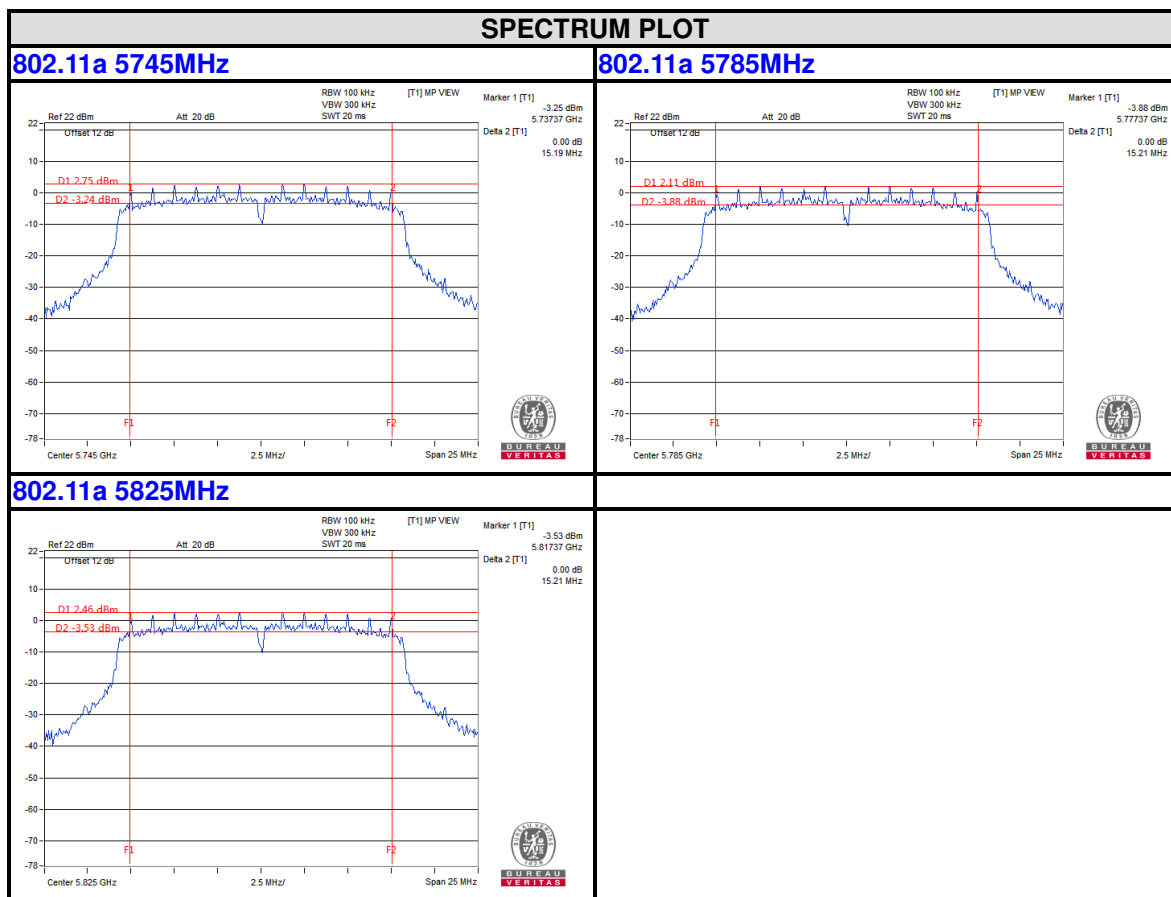
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6dB BANDWIDTH For 5725-5850MHz



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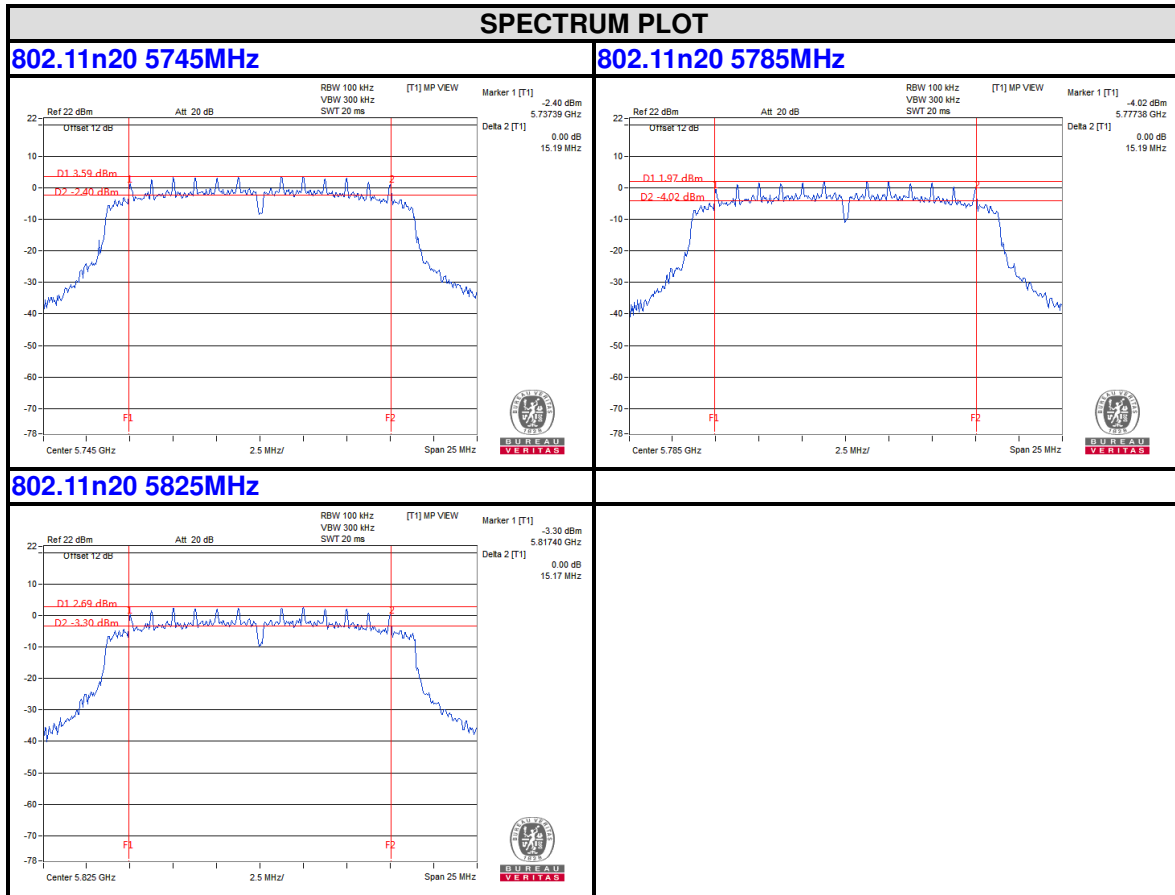
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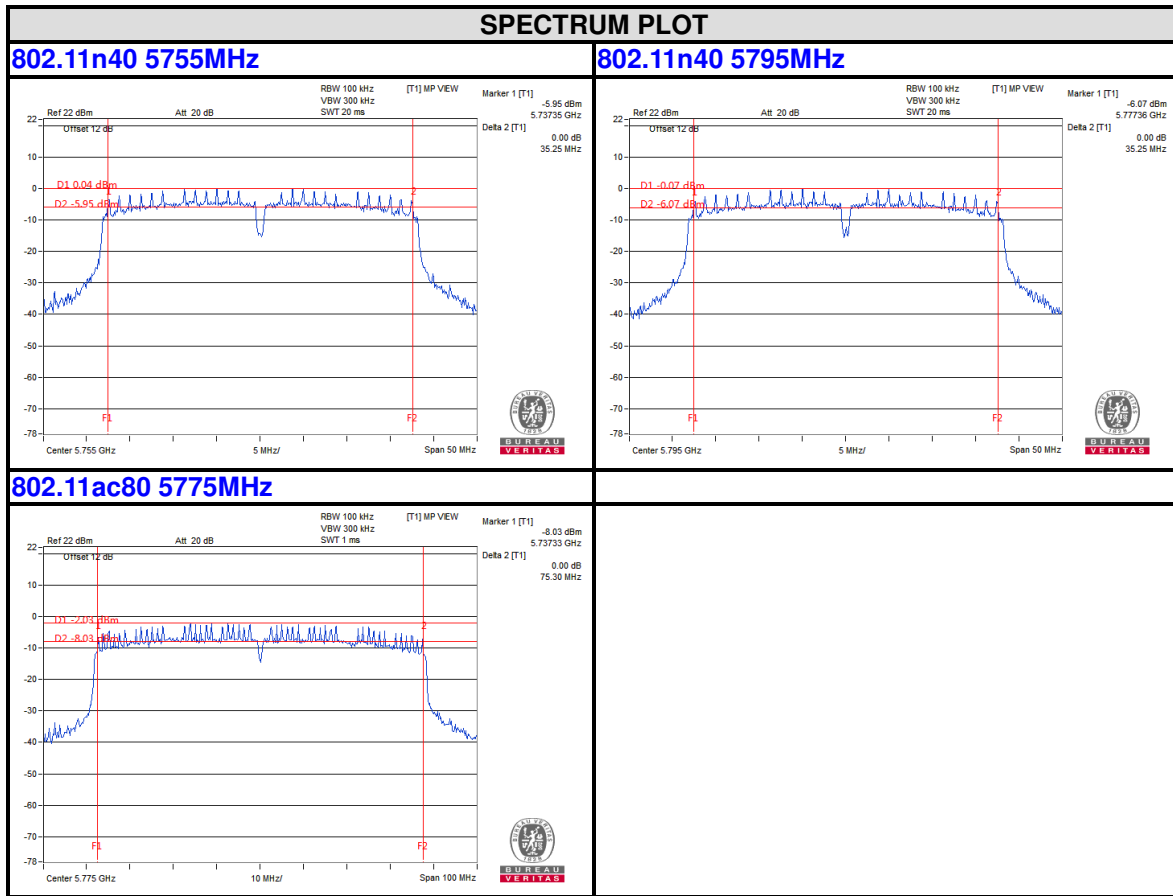
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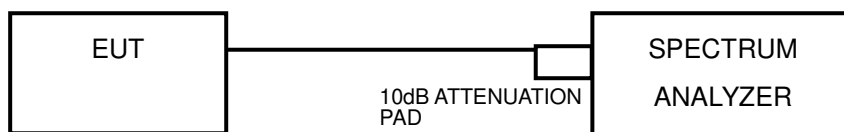
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3.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

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 $10 \log (1/\text{duty cycle})$

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	Frequency (MHz)	PSD W/O Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	MAX. Limit (dBm)	PASS / FAIL
36	5180	-0.56	0.301	0.8790	11.00	PASS
40	5200	0.24	0.301	1.0568	11.00	PASS
48	5240	0.69	0.301	1.1722	11.00	PASS
52	5260	0.39	0.301	1.0940	11.00	PASS
60	5300	-0.51	0.301	0.8892	11.00	PASS
64	5320	-2.98	0.301	0.5035	11.00	PASS
100	5500	-7.91	0.301	0.1618	11.00	PASS
116	5580	1.33	0.301	1.3583	11.00	PASS
140	5700	-13.02	0.301	0.0499	11.00	PASS

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

Chan.	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	Duty Factor (dB)	Total PSD (dBm/500k Hz)	Limit (dBm/500kHz)	PASS / FAIL
149	5745	-8.45	-6.23	0.301	-6.23	30.00	PASS
157	5785	-9.04	-6.82	0.301	-6.82	30.00	PASS
165	5825	-8.37	-6.15	0.301	-6.15	30.00	PASS

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



802.11n (20MHz)

Channel	Frequency (MHz)	PSD W/O Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	MAX. Limit (dBm)	PASS / FAIL
36	5180	-2.85	0.255	-2.595	11.00	PASS
40	5200	-0.28	0.255	-0.025	11.00	PASS
48	5240	0.19	0.255	0.445	11.00	PASS
52	5260	-0.02	0.255	0.235	11.00	PASS
60	5300	-1.10	0.255	-0.845	11.00	PASS
64	5320	-4.61	0.255	-4.355	11.00	PASS
100	5500	-4.03	0.255	-3.775	11.00	PASS
116	5580	0.82	0.255	1.075	11.00	PASS
140	5700	-3.44	0.255	-3.185	11.00	PASS

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

Chan.	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	Duty Factor (dB)	Total PSD (dBm/500k Hz)	Limit (dBm/500kHz)	PASS / FAIL
149	5745	-7.90	-5.68	0.255	-5.425	30.00	PASS
157	5785	-9.39	-7.17	0.255	-6.915	30.00	PASS
165	5825	-9.00	-6.78	0.255	-6.525	30.00	PASS

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

802.11n (40MHz)

Channel	Frequency (MHz)	PSD W/O Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	MAX. Limit (dBm)	PASS / FAIL
38	5190	-7.51	0.605	-6.905	11.00	PASS
46	5230	-2.80	0.605	-2.195	11.00	PASS
54	5270	-3.54	0.605	-2.935	11.00	PASS
62	5310	-5.45	0.605	-4.845	11.00	PASS
102	5510	-10.77	0.605	-10.165	11.00	PASS
118	5590	-2.84	0.605	-2.235	11.00	PASS
134	5670	-6.97	0.605	-6.365	11.00	PASS

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

Chan.	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	Duty Factor (dB)	Total PSD (dBm/500k Hz)	Limit (dBm/500kHz)	PASS / FAIL
151	5755	-11.91	-9.69	0.605	-9.085	30.00	PASS
159	5795	-12.41	-10.19	0.605	-9.585	30.00	PASS

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



802.11ac (80MHz)

Channel	Frequency (MHz)	PSD W/O Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	MAX. Limit (dBm)	PASS / FAIL
42	5210	-8.03	0.996	-7.034	11.00	PASS
58	5290	-10.96	0.996	-9.964	11.00	PASS
106	5530	-11.38	0.996	-10.384	11.00	PASS
122	5610	-6.11	0.996	-5.114	11.00	PASS

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

Chan.	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	Duty Factor (dB)	Total PSD (dBm/500k Hz)	Limit (dBm/500kHz)	PASS / FAIL
155	5775	-15.48	-13.26	0.996	-12.264	30.00	PASS

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

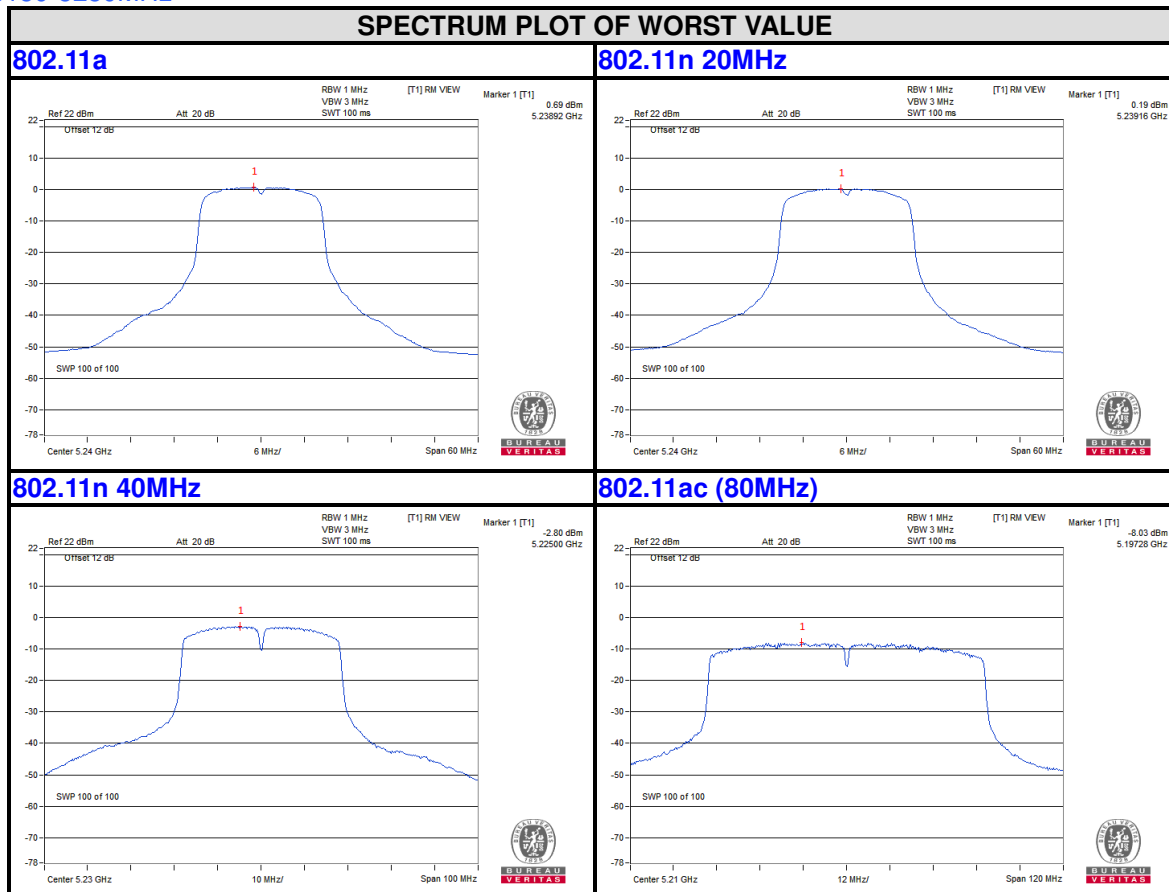


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PSD Test Plot

BAND 1
5150-5250MHz



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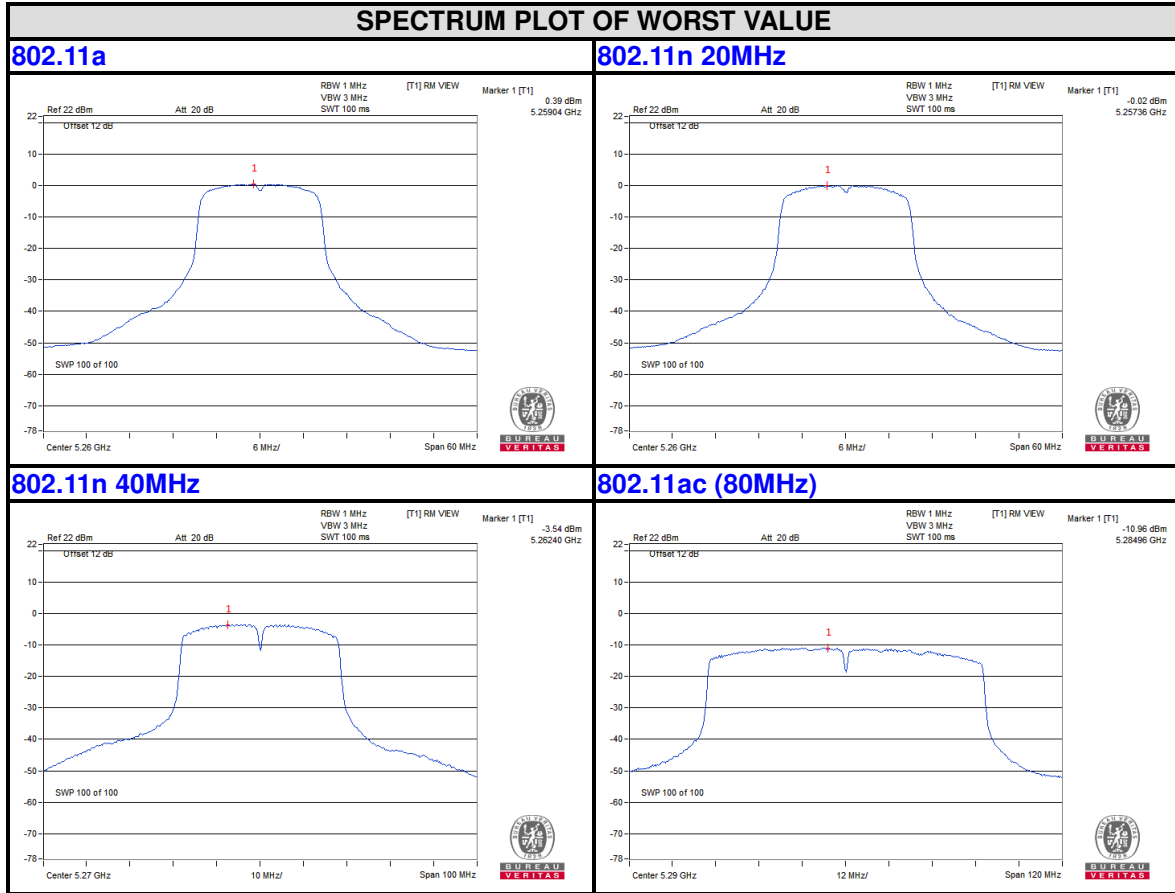
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BAND 2
5250-5350MHz

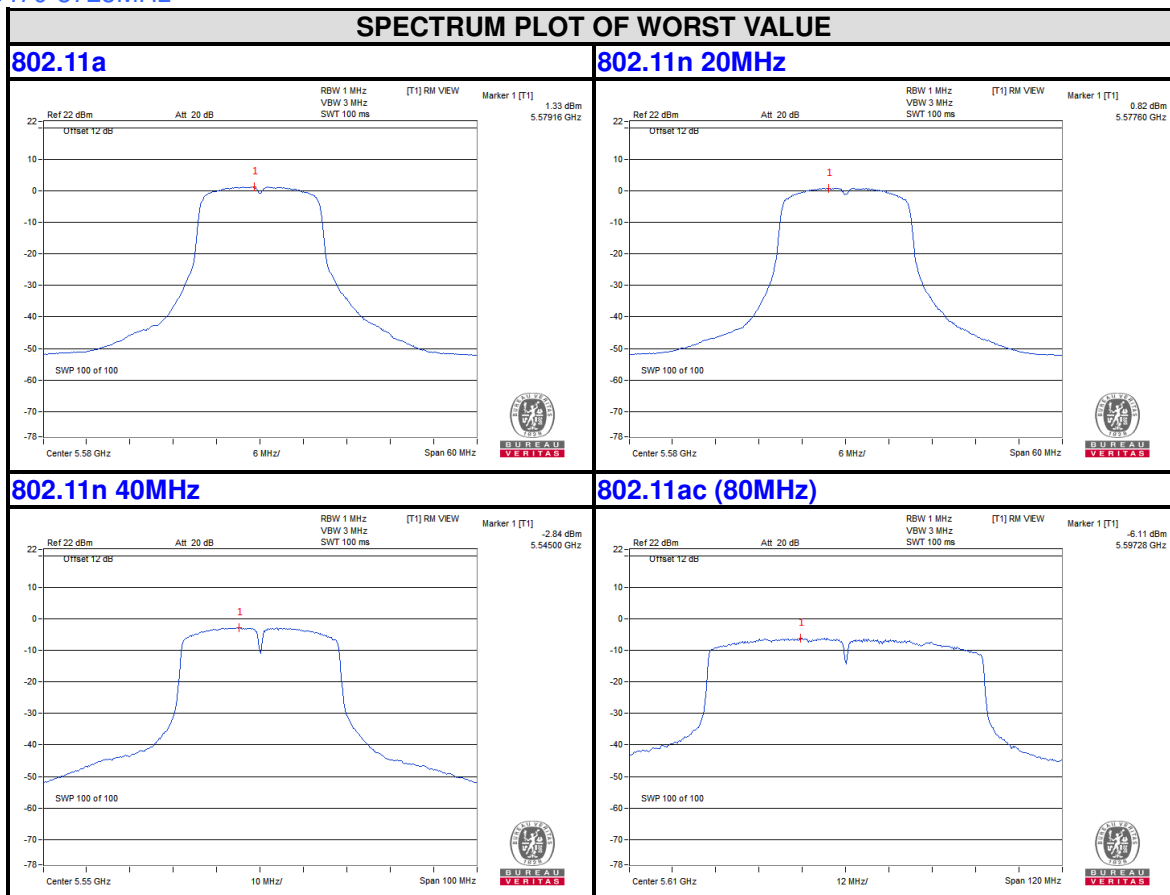




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BAND 3
5470-5725MHz



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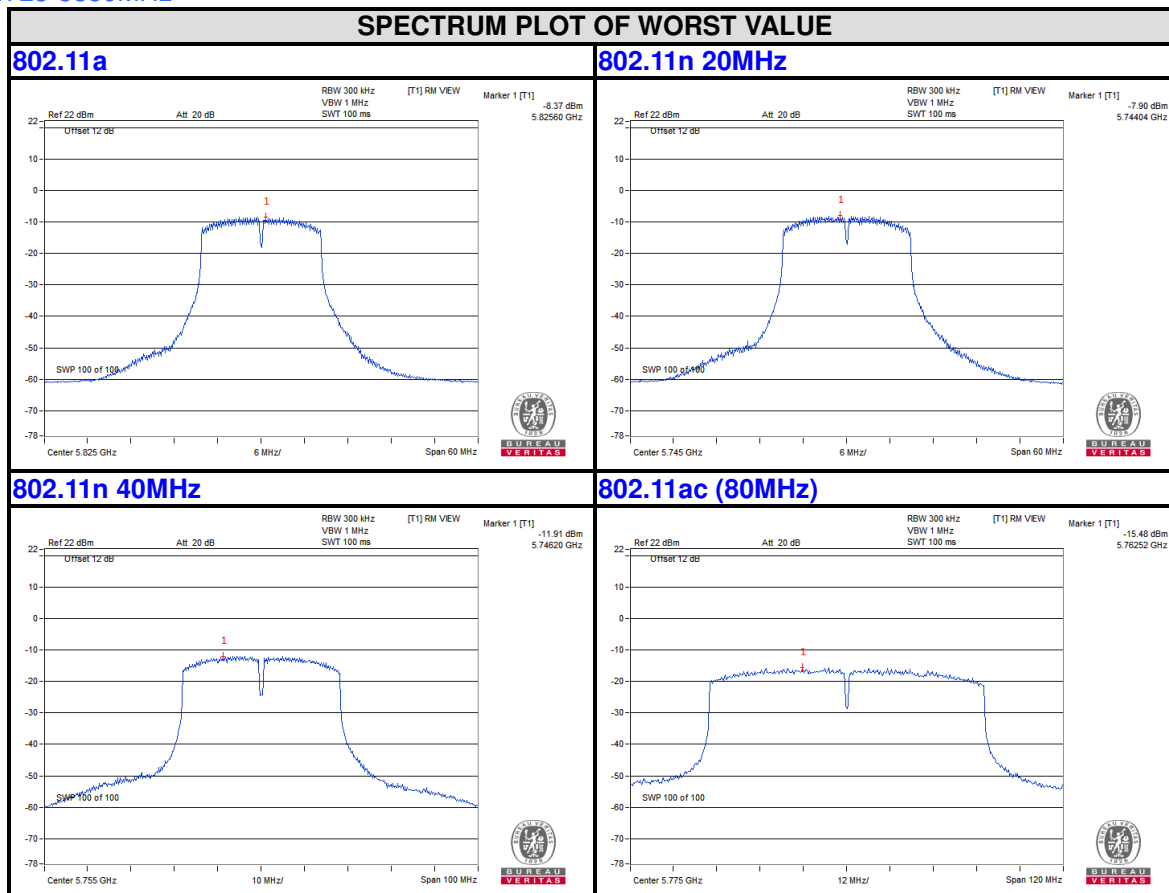
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BAND4
5725-5850MHz



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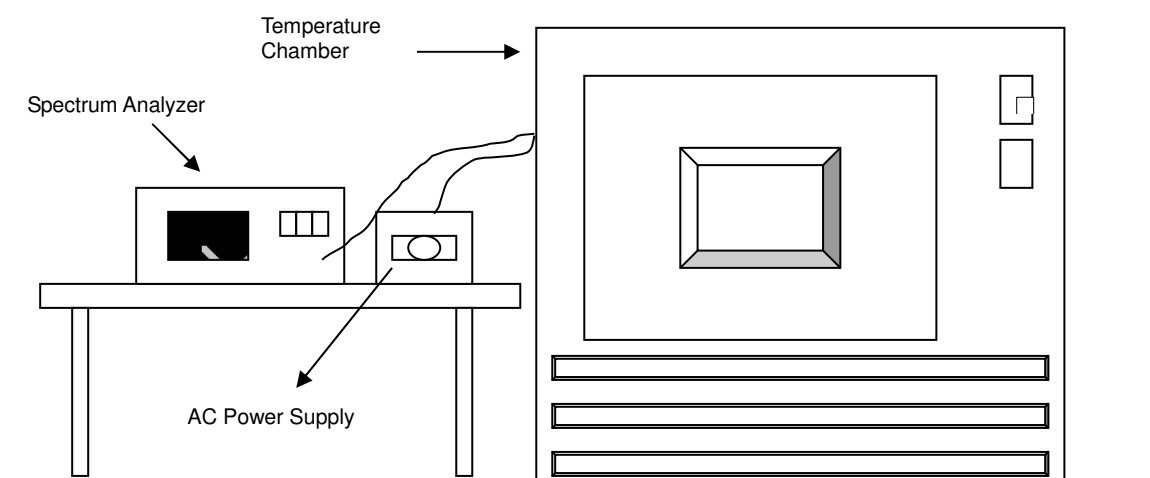
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3.5 FREQUENCY STABILITY

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	5179.9732	-0.00052	5179.9725	-0.00053	5179.9727	-0.00053	5179.9767	-0.00045
40	120	5180.0125	0.00024	5180.0141	0.00027	5180.0148	0.00029	5180.0118	0.00023
30	120	5180.0124	0.00024	5180.0151	0.00029	5180.0123	0.00024	5180.0109	0.00021
20	120	5180.0254	0.00049	5180.0237	0.00046	5180.0247	0.00048	5180.0262	0.00051
10	120	5179.9788	-0.00041	5179.9783	-0.00042	5179.9804	-0.00038	5179.9755	-0.00047
0	120	5179.979	-0.00041	5179.9805	-0.00038	5179.9782	-0.00042	5179.978	-0.00042
-10	120	5180.0185	0.00036	5180.0139	0.00027	5180.0142	0.00027	5180.0179	0.00035
-20	120	5180.0031	0.00006	5180.0009	0.00002	5180.0016	0.00003	5180.0038	0.00007
-30	120	5180.0004	0.00001	5179.9995	-0.00001	5180.0029	0.00006	5179.9995	-0.00001

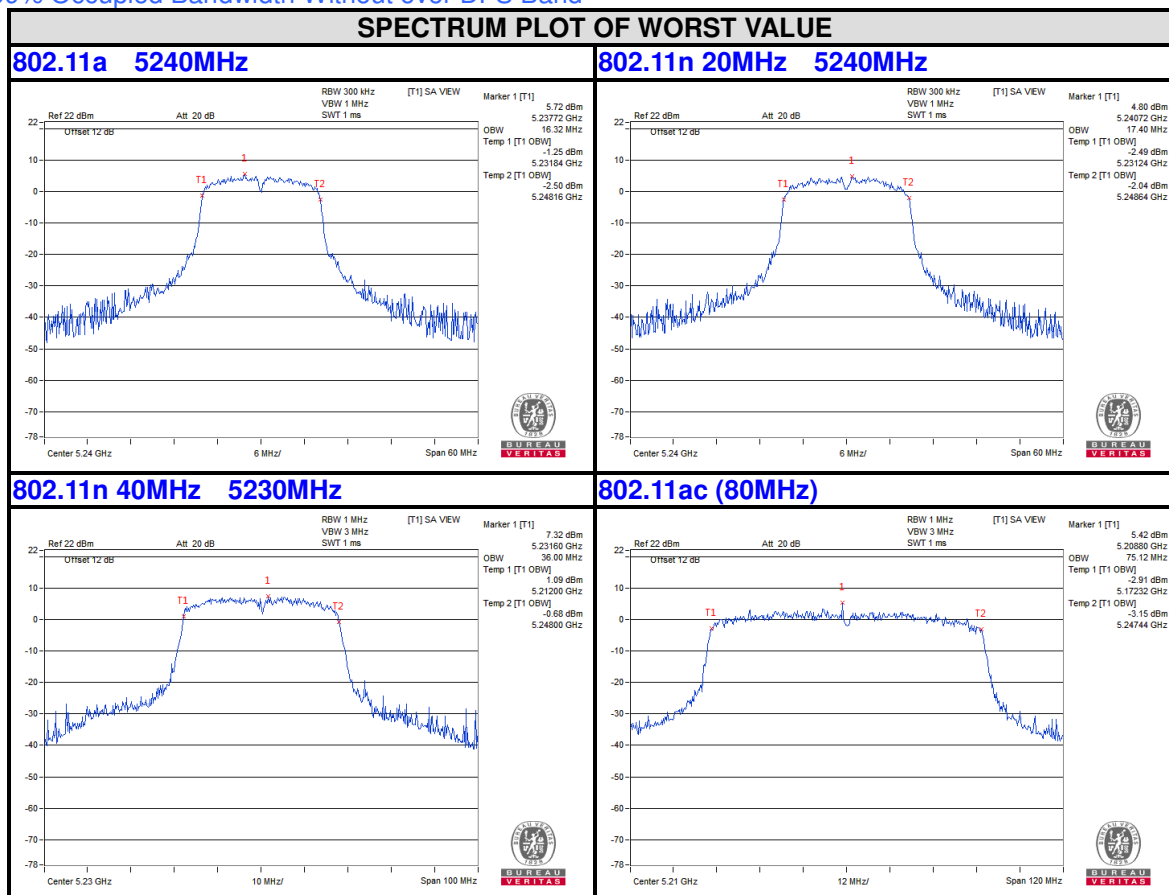
FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift
20	138	5180.0244	0.00047	5180.0232	0.00045	5180.0243	0.00047	5180.027	0.00052
	120	5180.0254	0.00049	5180.0237	0.00046	5180.0247	0.00048	5180.0262	0.00051
	102	5180.0257	0.00050	5180.0242	0.00047	5180.0254	0.00049	5180.0265	0.00051



BUREAU VERITAS

Test Report No.: RF200421N040-4

Band 1
5150-5250MHz
99% Occupied Bandwidth Without over DFS Band



Bureau Veritas Shenzhen Co., Ltd.
Dongguan Branch

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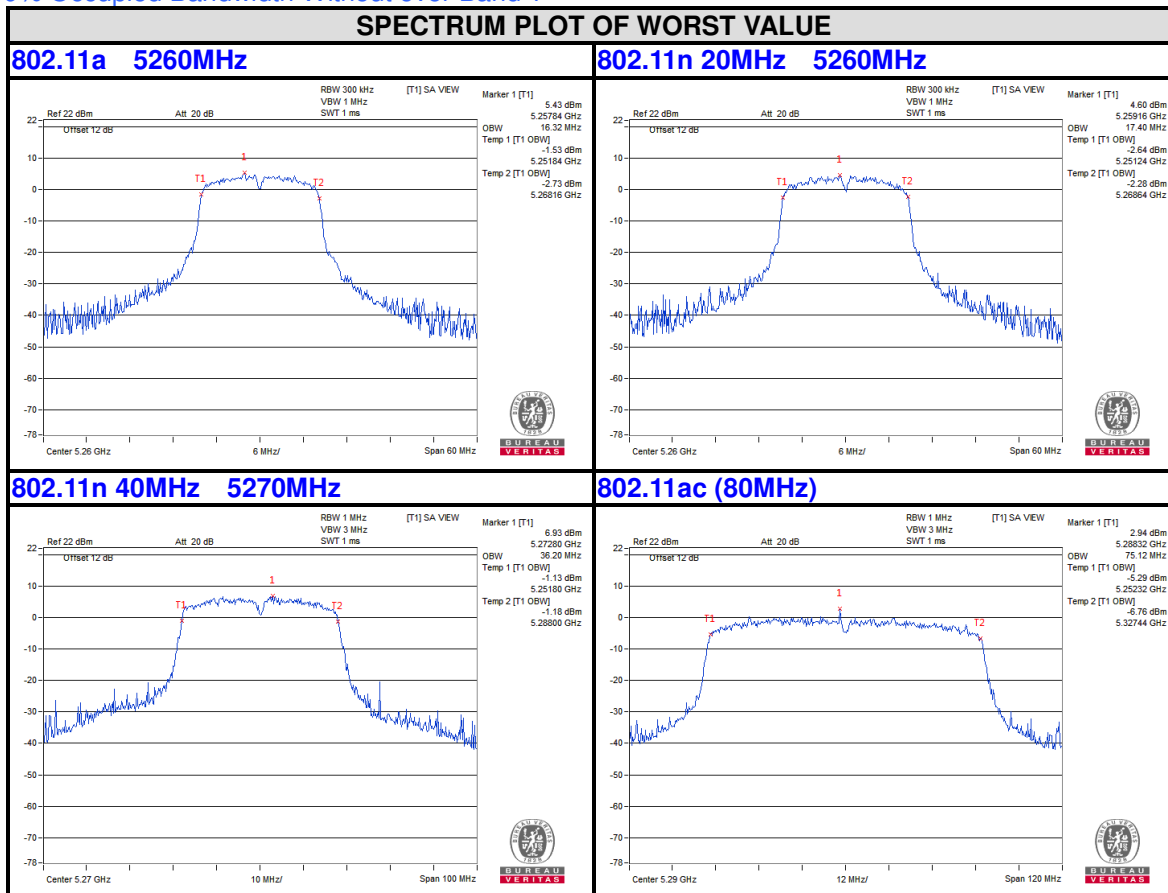
Tel: +86 769 8998 2098
Fax: +86 769 8593 1080
Email: customerservice.dg@cn.bureauveritas.com



BUREAU VERITAS

Test Report No.: RF200421N040-4

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



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Dongguan Branch

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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---