

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	Smart Business Phone
Brand Name	YEALINK
Model	MP56
Additional Model & Model Difference	N/A
Date of tests	Feb. 26, 2020 ~ Apr. 23, 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

Tested by Lucas Chen Project Engineer / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	 Date: May 08, 2020

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Test Report No.: RF200226N025-4

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF200226N025-4	Original release.	May 08, 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	Smart Business Phone
BRAND	YEALINK
MODEL NO.	MP56
FCC ID	T2C-MP56
POWER SUPPLY	DC 5V from Adapter Input AC 100-240V 50/60Hz 0.5A or POE 48Vdc 0.27A
MODULATION TYPE	256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	OFDM
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 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	24.774mW for 5180 ~ 5240MHz (Maximum AVG Power) 24.547mW for 5260 ~ 5320MHz (Maximum AVG Power) 29.992mW for 5500 ~ 5700MHz (Maximum AVG Power) 24.21mW 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	Handset Line: Unshielded, Detachable, 330cm. Network Line: Shielded, Detachable, 190cm

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.: 200226N025) for detailed product photo.
3. The EUT incorporates a SISO function. Physically, the EUT 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.

4. The EUT were powered by POE and the following adapter, but POE is not available for sale, only the worst case was shown in test report.

ADAPTER 1	
BRAND:	Yealink
MODEL:	YLPS052000C1-US
INPUT:	AC 100-240V 50/60Hz 0.5A
OUTPUT:	DC 5V, 2A
DC LINE:	Unshielded, Non-detachable, 180cm.

ADAPTER 2	
BRAND:	Yealink
MODEL:	YLPS052000B1-US
INPUT:	AC 100-240V 50/60Hz 0.5A
OUTPUT:	DC 5V, 2A
DC LINE:	Unshielded, Non-detachable, 180cm.

Remark: The worst case was tested under Adapter2.

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 5470-5725 5725-5850	36 to 48 100 to 140 149 to 165	36	OFDM	BPSK	6.0

POWER LINE CONDUCTED EMISSION TEST:

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5150-5250 5470-5725 5725-5850	36 to 48 100 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 5V from Adapter	Hu
RE≥1G	24deg. C, 55%RH	DC 5V from Adapter	Hu
PLC	20deg. C, 56%RH	DC 5V from Adapter	Ming Bai
APCM	20deg. C, 55%RH	DC 5V from Adapter	Robert Cheng



BUREAU
VERITAS

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2.3 DUTY CYCLE OF TEST SIGNAL

802.11a: Duty cycle = $2.027/2.195 = 0.923$, Duty factor = $10 * \log(1/0.923) = 0.348$

802.11n (HT20): Duty cycle = $1.886/2.030 = 0.929$, Duty factor = $10 * \log(1/0.929) = 0.920$

802.11n (HT40): Duty cycle = $0.927/1.097 = 0.845$, Duty factor = $10 * \log(1/0.845) = 0.731$

802.11ac (VHT80): Duty cycle = $0.455/0.598 = 0.761$, Duty factor = $10 * \log(1/0.761) = 1.186$



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	POE Power	Yealink	YLPOE30	N/A	N/A

NO.	DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	AC Line: Unshielded, detachable 1.75m; RJ45 Line: Shielded, detachable 10m

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 v01r03

ANSI C63.10-2013

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

3. TEST TYPES AND RESULTS

3.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

3.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

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

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

NOTES:

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

3.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

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

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

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

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

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

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

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 22,19	May 21,20
Active Loop Antenna (9KHz -30MHz)	SCHWARZBECK	FMZB 1519B	1519B-045	May 28,19	May 27,20
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. 20,19	Apr. 19, 20
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A	N/A
Broadband Preamplifier (1GHz~18GHz)	SCHWARZBECK	BBV9718	305	Apr. 20,19	Apr. 19, 20
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
BLUETOOTH TESTER	Rohde&Schwarz	CBT32	100811	May 20,19	May 19,20

NOTES:

1. The test was performed in 966 Chamber.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GREGT/CHINA and NIM/CHINA.
3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 749762.
5. Test date: Mar. 20, 2020~ Apr. 15, 2020

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:

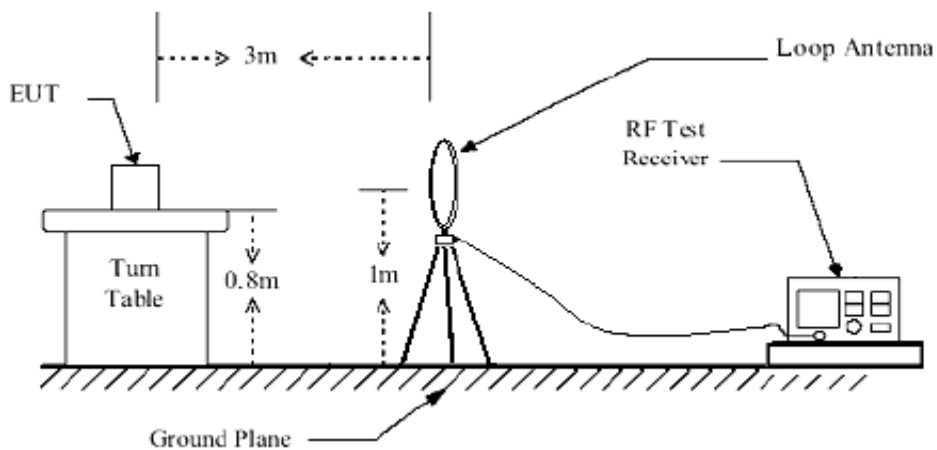
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution 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

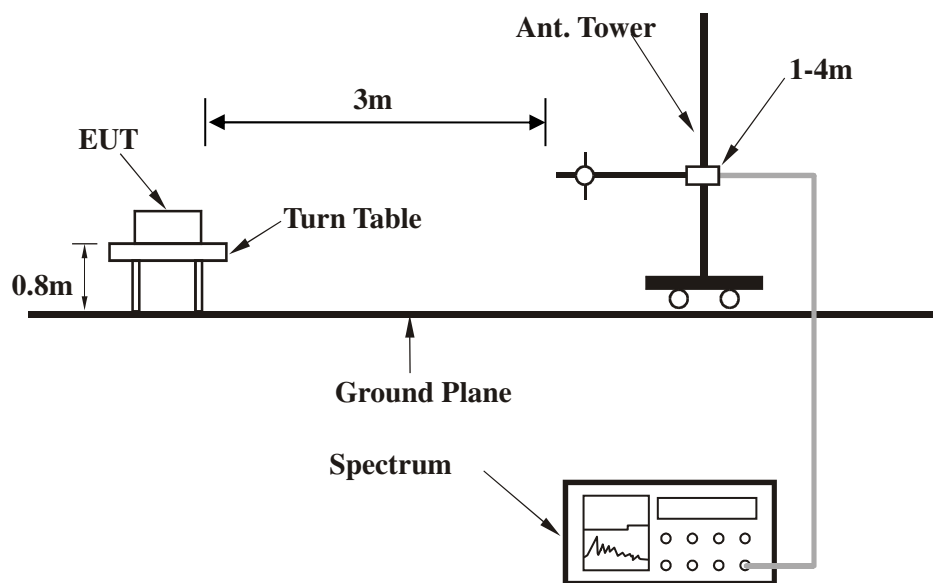
No deviation.

3.1.6 TEST SETUP

Below 30MHz

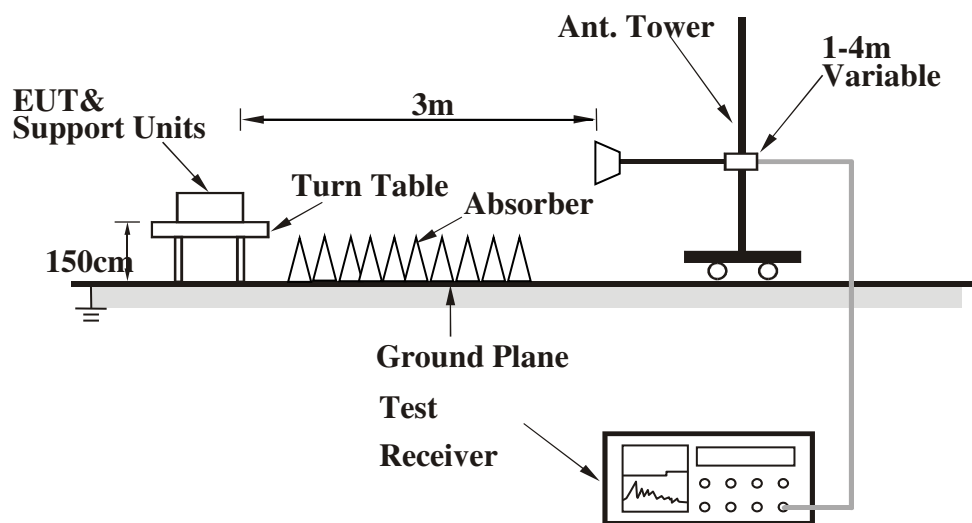


Below 1GHz test setup



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

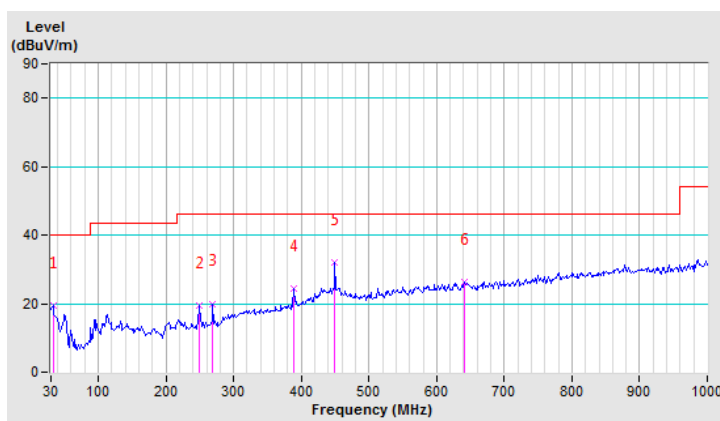
802.11a

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	33.11	19.53 QP	40.00	-20.47	1.00 H	152	31.64	-12.11
2	249.18	19.38 QP	46.00	-26.62	1.00 H	303	35.15	-15.77
3	269.39	20.01 QP	46.00	-25.99	1.00 H	179	34.63	-14.62
4	389.09	24.30 QP	46.00	-21.70	1.00 H	204	33.48	-9.18
5	449.71	32.08 QP	46.00	-13.92	1.00 H	82	39.65	-7.57
6	640.91	26.21 QP	46.00	-19.79	1.00 H	77	29.37	-3.16

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.

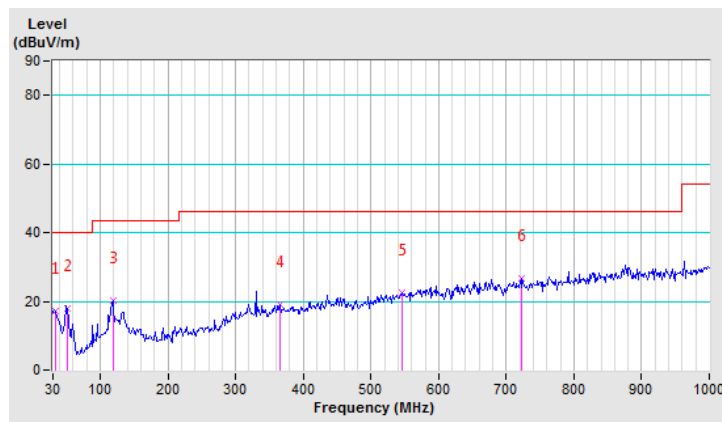


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9KHz ~ 1GHz		

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	33.11	17.14 QP	40.00	-22.86	1.00 V	61	29.25	-12.11
2	51.76	18.03 QP	40.00	-21.97	1.00 V	46	39.59	-21.56
3	118.61	20.25 QP	43.50	-23.25	1.00 V	34	37.40	-17.15
4	365.77	18.98 QP	46.00	-27.02	1.00 V	23	28.95	-9.97
5	546.09	22.53 QP	46.00	-23.47	1.00 V	12	27.46	-4.93
6	723.30	26.61 QP	46.00	-19.39	1.00 V	2	28.80	-2.19

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were 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	5139.74	60.22 PK	74.00	-13.78	1.00 H	320	52.01	8.21
2	5139.74	38.29 AV	54.00	-15.71	1.00 H	320	30.08	8.21
3	5148.40	62.96 PK	74.00	-11.04	1.00 H	320	54.73	8.23
4	5148.40	40.95 AV	54.00	-13.05	1.00 H	320	32.72	8.23
5	5150.00	62.81 PK	74.00	-11.19	1.00 H	320	54.58	8.23
6	5150.00	40.88 AV	54.00	-13.12	1.00 H	320	32.65	8.23
7	*5180.00	108.03 PK			1.00 H	123	99.74	8.29
8	*5180.00	93.97 AV			1.00 H	123	85.68	8.29
9	#10360.00	59.58 PK	68.20	-8.62	1.00 H	0	41.72	17.86
10	15540.00	66.85 PK	74.00	-7.15	1.00 H	0	42.58	24.27
11	15540.00	45.63 AV	54.00	-8.37	1.00 H	0	21.36	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	5142.95	59.76 PK	74.00	-14.24	1.00 V	209	51.54	8.22
2	5142.95	37.56 AV	54.00	-16.44	1.00 V	209	29.34	8.22
3	5147.12	60.75 PK	74.00	-13.25	1.00 V	209	52.52	8.23
4	5147.12	38.41 AV	54.00	-15.59	1.00 V	209	30.18	8.23
5	5150.00	61.57 PK	74.00	-12.43	1.00 V	209	53.34	8.23
6	5150.00	39.99 AV	54.00	-14.01	1.00 V	209	31.76	8.23
7	*5180.00	104.70 PK			1.00 V	108	96.41	8.29
8	*5180.00	89.64 AV			1.00 V	108	81.35	8.29
9	#10360.00	58.67 PK	68.20	-9.53	1.00 V	0	40.81	17.86
10	15540.00	65.34 PK	74.00	-8.66	1.00 V	0	41.07	24.27
11	15540.00	44.99 AV	54.00	-9.01	1.00 V	0	20.72	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.

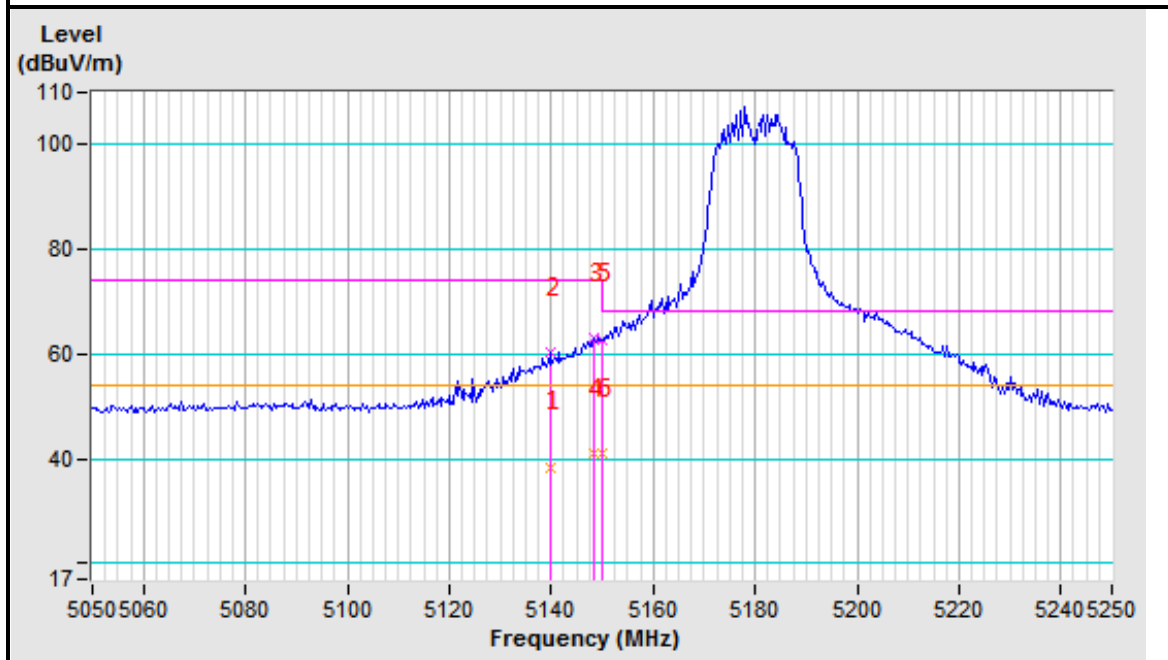


BUREAU
VERITAS

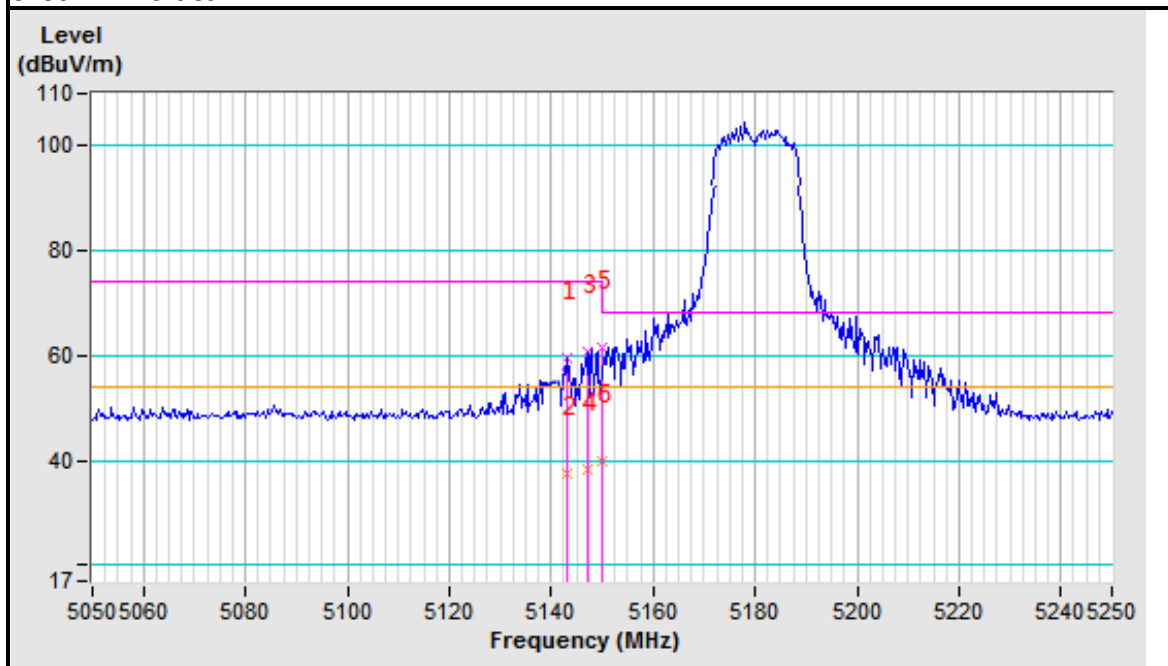
Test Report No.: RF200226N025-4

Band edge Plot

5180MHz Horizontal



5180MHz Vertical



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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5143.00	63.03 PK	74.00	-10.97	1.00 H	148	54.81	8.22
2	5143.00	40.20 AV	54.00	-13.80	1.00 H	148	31.98	8.22
3	5150.00	62.94 PK	74.00	-11.06	1.00 H	148	54.71	8.23
4	5150.00	40.11 AV	54.00	-13.89	1.00 H	148	31.88	8.23
5	*5200.00	110.49 PK			1.00 H	148	102.15	8.34
6	*5200.00	95.49 AV			1.00 H	148	87.15	8.34
7	#10400.00	60.28 PK	68.20	-7.92	1.00 H	0	42.33	17.95
8	15600.00	67.36 PK	74.00	-6.64	1.00 H	0	42.96	24.40
9	15600.00	46.05 AV	54.00	-7.95	1.00 H	0	21.65	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	5142.00	60.49 PK	74.00	-13.51	1.00 V	155	52.27	8.22
2	5142.00	38.23 AV	54.00	-15.77	1.00 V	155	30.01	8.22
3	5150.00	61.81 PK	74.00	-12.19	1.00 V	155	53.58	8.23
4	5150.00	39.68 AV	54.00	-14.32	1.00 V	155	31.45	8.23
5	*5200.00	106.70 PK			1.00 V	155	98.36	8.34
6	*5200.00	91.42 AV			1.00 V	155	83.08	8.34
7	#10400.00	59.23 PK	68.20	-8.97	1.00 V	0	41.28	17.95
8	15600.00	64.29 PK	74.00	-9.71	1.00 V	0	39.89	24.40
9	15600.00	43.87 AV	54.00	-10.13	1.00 V	0	19.47	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	50.20 PK	74.00	-23.80	1.00 H	106	41.97	8.23
2	5147.00	38.30 AV	54.00	-15.70	1.00 H	106	30.07	8.23
3	5150.00	49.70 PK	74.00	-24.30	1.00 H	106	41.47	8.23
4	5150.00	38.40 AV	54.00	-15.60	1.00 H	106	30.17	8.23
5	*5240.00	109.08 PK			1.00 H	106	100.65	8.43
6	*5240.00	94.03 AV			1.00 H	106	85.60	8.43
7	5350.00	50.97 PK	74.00	-23.03	1.00 H	106	42.31	8.66
8	5350.00	39.13 AV	54.00	-14.87	1.00 H	106	30.47	8.66
9	5359.00	51.23 PK	74.00	-22.77	1.00 H	106	42.56	8.67
10	5359.00	39.48 AV	54.00	-14.52	1.00 H	106	30.81	8.67
11	#10480.00	61.22 PK	68.20	-6.98	1.00 H	0	43.09	18.13
12	15720.00	67.32 PK	74.00	-6.68	1.00 H	0	42.66	24.66
13	15720.00	46.30 AV	54.00	-7.70	1.00 H	0	21.64	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	5142.00	49.96 PK	74.00	-24.04	1.00 V	335	41.74	8.22
2	5142.00	38.02 AV	54.00	-15.98	1.00 V	335	29.80	8.22
3	5150.00	49.61 PK	74.00	-24.39	1.00 V	335	41.38	8.23
4	5150.00	38.76 AV	54.00	-15.24	1.00 V	335	30.53	8.23
5	*5240.00	104.37 PK			1.00 V	335	95.94	8.43
6	*5240.00	88.92 AV			1.00 V	335	80.49	8.43
7	5350.00	50.36 PK	74.00	-23.64	1.00 V	335	41.70	8.66
8	5350.00	39.64 AV	54.00	-14.36	1.00 V	335	30.98	8.66
9	5360.00	49.67 PK	74.00	-24.33	1.00 V	335	40.99	8.68
10	5360.00	38.77 AV	54.00	-15.23	1.00 V	335	30.09	8.68
11	#10480.00	60.02 PK	68.20	-8.18	1.00 V	0	41.89	18.13
12	15720.00	66.46 PK	74.00	-7.54	1.00 V	0	41.80	24.66
13	15720.00	45.20 AV	54.00	-8.80	1.00 V	0	20.54	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)

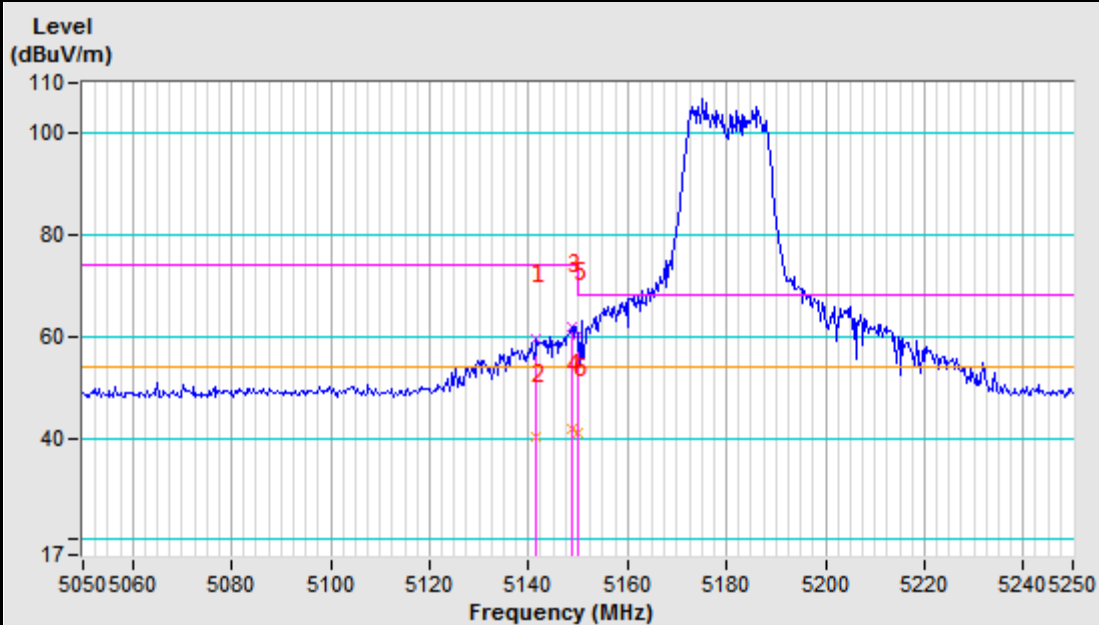
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5141.67	59.65 PK	74.00	-14.35	1.00 H	329	51.43	8.22
2	5141.67	40.13 AV	54.00	-13.87	1.00 H	329	31.91	8.22
3	5148.72	61.83 PK	74.00	-12.17	1.00 H	329	53.60	8.23
4	5148.72	42.02 AV	54.00	-11.98	1.00 H	329	33.79	8.23
5	5150.00	60.23 PK	74.00	-13.77	1.00 H	329	52.00	8.23
6	5150.00	41.05 AV	54.00	-12.95	1.00 H	329	32.82	8.23
7	*5180.00	107.96 PK			1.00 H	165	99.67	8.29
8	*5180.00	93.38 AV			1.00 H	165	85.09	8.29
9	#10360.00	59.63 PK	68.20	-8.57	1.00 H	0	41.77	17.86
10	15540.00	67.43 PK	74.00	-6.57	1.00 H	0	43.16	24.27
11	15540.00	46.32 AV	54.00	-7.68	1.00 H	0	22.05	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	5146.15	58.18 PK	74.00	-15.82	1.00 V	188	49.96	8.22
2	5146.15	40.01 AV	54.00	-13.99	1.00 V	188	31.79	8.22
3	5148.40	60.14 PK	74.00	-13.86	1.00 V	188	51.91	8.23
4	5148.40	42.08 AV	54.00	-11.92	1.00 V	188	33.85	8.23
5	5150.00	58.44 PK	74.00	-15.56	1.00 V	188	50.21	8.23
6	5150.00	40.12 AV	54.00	-13.88	1.00 V	188	31.89	8.23
7	*5180.00	102.26 PK			1.00 V	188	93.97	8.29
8	*5180.00	87.44 AV			1.00 V	188	79.15	8.29
9	#10360.00	58.63 PK	68.20	-9.57	1.00 V	0	40.77	17.86
10	15540.00	65.75 PK	74.00	-8.25	1.00 V	0	41.48	24.27
11	15540.00	46.30 AV	54.00	-7.70	1.00 V	0	22.03	24.27

REMARKS:

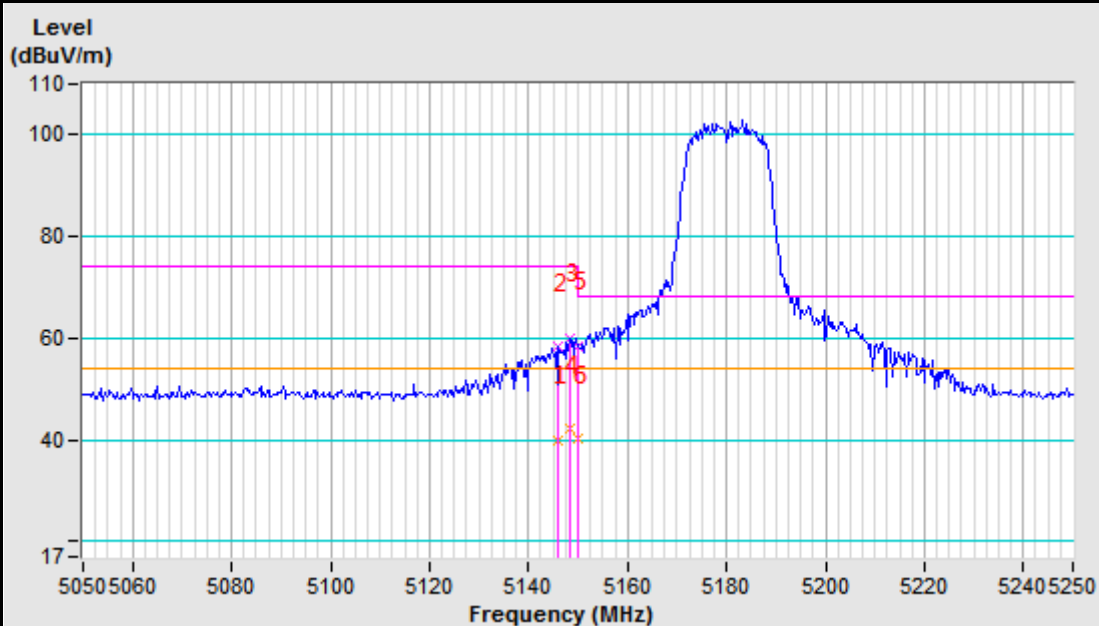
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.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

Band edge Plot

5180MHz Horizontal



5180MHz Vertical



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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5140.00	62.49 PK	74.00	-11.51	1.00 H	147	54.28	8.21
2	5140.00	39.62 AV	54.00	-14.38	1.00 H	147	31.41	8.21
3	5150.00	63.35 PK	74.00	-10.65	1.00 H	147	55.12	8.23
4	5150.00	40.23 AV	54.00	-13.77	1.00 H	147	32.00	8.23
5	*5200.00	109.70 PK			1.00 H	147	101.36	8.34
6	*5200.00	95.34 AV			1.00 H	147	87.00	8.34
7	#10400.00	59.38 PK	68.20	-8.82	1.00 H	0	41.43	17.95
8	15540.00	67.49 PK	74.00	-6.51	1.00 H	0	43.22	24.27
9	15540.00	46.30 AV	54.00	-7.70	1.00 H	0	22.03	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	5145.00	60.47 PK	74.00	-13.53	1.00 V	125	52.25	8.22
2	5145.00	39.98 AV	54.00	-14.02	1.00 V	125	31.76	8.22
3	5150.00	62.48 PK	74.00	-11.52	1.00 V	125	54.25	8.23
4	5150.00	40.22 AV	54.00	-13.78	1.00 V	125	31.99	8.23
5	*5200.00	103.64 PK			1.00 V	125	95.30	8.34
6	*5200.00	90.67 AV			1.00 V	125	82.33	8.34
7	#10400.00	58.64 PK	68.20	-9.56	1.00 V	0	40.69	17.95
8	15600.00	66.92 PK	74.00	-7.08	1.00 V	0	42.52	24.40
9	15600.00	45.36 AV	54.00	-8.64	1.00 V	0	20.96	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	5142.00	50.36 PK	74.00	-23.64	1.00 H	105	42.14	8.22
2	5142.00	39.03 AV	54.00	-14.97	1.00 H	105	30.81	8.22
3	5150.00	49.91 PK	74.00	-24.09	1.00 H	105	41.68	8.23
4	5150.00	39.42 AV	54.00	-14.58	1.00 H	105	31.19	8.23
5	*5240.00	108.93 PK			1.00 H	105	100.50	8.43
6	*5240.00	94.49 AV			1.00 H	105	86.06	8.43
7	5350.00	50.78 PK	74.00	-23.22	1.00 H	105	42.12	8.66
8	5350.00	40.10 AV	54.00	-13.90	1.00 H	105	31.44	8.66
9	5360.00	49.98 PK	74.00	-24.02	1.00 H	105	41.30	8.68
10	5360.00	39.68 AV	54.00	-14.32	1.00 H	105	31.00	8.68
11	#10480.00	60.33 PK	68.20	-7.87	1.00 H	0	42.20	18.13
12	15720.00	67.26 PK	74.00	-6.74	1.00 H	0	42.60	24.66
13	15720.00	46.30 AV	54.00	-7.70	1.00 H	0	21.64	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	5144.00	48.67 PK	74.00	-25.33	1.00 V	0	40.45	8.22
2	5144.00	37.97 AV	54.00	-16.03	1.00 V	0	29.75	8.22
3	5150.00	49.67 PK	74.00	-24.33	1.00 V	0	41.44	8.23
4	5150.00	39.79 AV	54.00	-14.21	1.00 V	0	31.56	8.23
5	*5240.00	104.55 PK			1.00 V	0	96.12	8.43
6	*5240.00	90.75 AV			1.00 V	0	82.32	8.43
7	5350.00	50.19 PK	74.00	-23.81	1.00 V	0	41.53	8.66
8	5350.00	39.93 AV	54.00	-14.07	1.00 V	0	31.27	8.66
9	5355.00	51.36 PK	74.00	-22.64	1.00 V	0	42.69	8.67
10	5355.00	38.76 AV	54.00	-15.24	1.00 V	0	30.09	8.67
11	#10480.00	59.06 PK	68.20	-9.14	1.00 V	0	40.93	18.13
12	15720.00	67.34 PK	74.00	-6.66	1.00 V	0	42.68	24.66
13	15720.00	46.22 AV	54.00	-7.78	1.00 V	0	21.56	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 (40MHz)

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

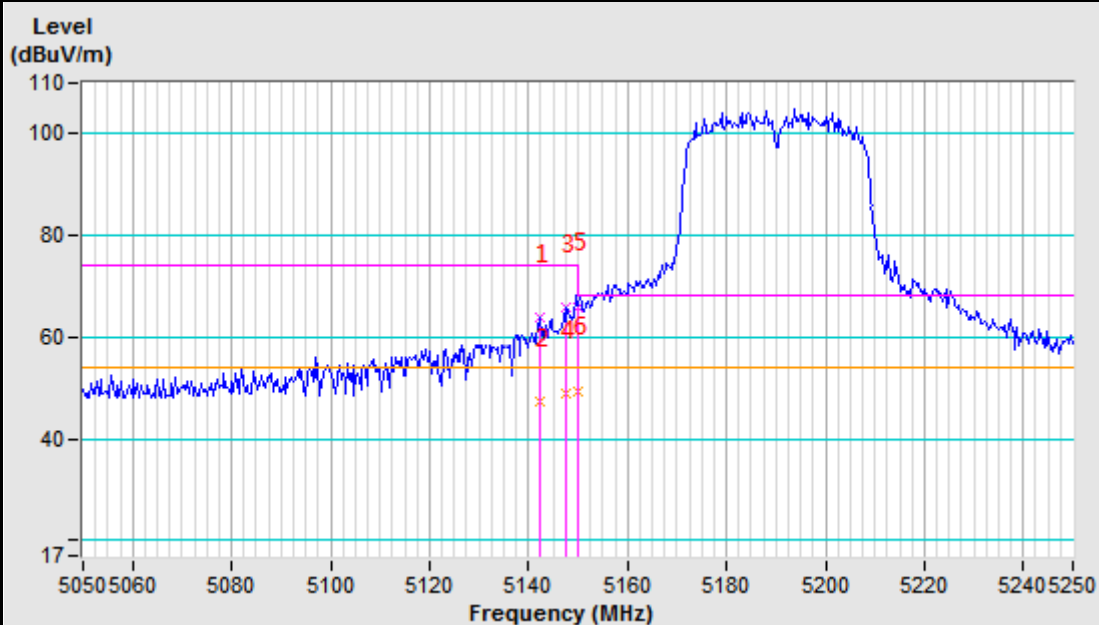
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5142.31	63.72 PK	74.00	-10.28	1.00 H	166	55.50	8.22
2	5142.31	47.16 AV	54.00	-6.84	1.00 H	166	38.94	8.22
3	5147.44	65.79 PK	74.00	-8.21	1.00 H	166	57.56	8.23
4	5147.44	48.74 AV	54.00	-5.26	1.00 H	166	40.51	8.23
5	5150.00	65.93 PK	74.00	-8.07	1.00 H	166	57.70	8.23
6	5150.00	49.29 AV	54.00	-4.71	1.00 H	166	41.06	8.23
7	*5190.00	103.24 PK			1.00 H	166	94.92	8.32
8	*5190.00	85.69 AV			1.00 H	166	77.37	8.32
9	#10380.00	60.33 PK	68.20	-7.87	1.00 H	0	42.43	17.90
10	15570.00	67.95 PK	74.00	-6.05	1.00 H	0	43.62	24.33
11	15570.00	45.30 AV	54.00	-8.70	1.00 H	0	20.97	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	5144.55	62.56 PK	74.00	-11.44	1.00 V	130	54.34	8.22
2	5144.55	46.03 AV	54.00	-7.97	1.00 V	130	37.81	8.22
3	5148.40	64.23 PK	74.00	-9.77	1.00 V	130	56.00	8.23
4	5148.40	47.99 AV	54.00	-6.01	1.00 V	130	39.76	8.23
5	5150.00	63.83 PK	74.00	-10.17	1.00 V	130	55.60	8.23
6	5150.00	47.97 AV	54.00	-6.03	1.00 V	130	39.74	8.23
7	*5190.00	99.42 PK			1.00 V	130	91.10	8.32
8	*5190.00	84.11 AV			1.00 V	130	75.79	8.32
9	#10380.00	58.44 PK	68.20	-9.76	1.00 V	0	40.54	17.90
10	15570.00	66.34 PK	74.00	-7.66	1.00 V	0	42.01	24.33
11	15570.00	44.92 AV	54.00	-9.08	1.00 V	0	20.59	24.33

REMARKS:

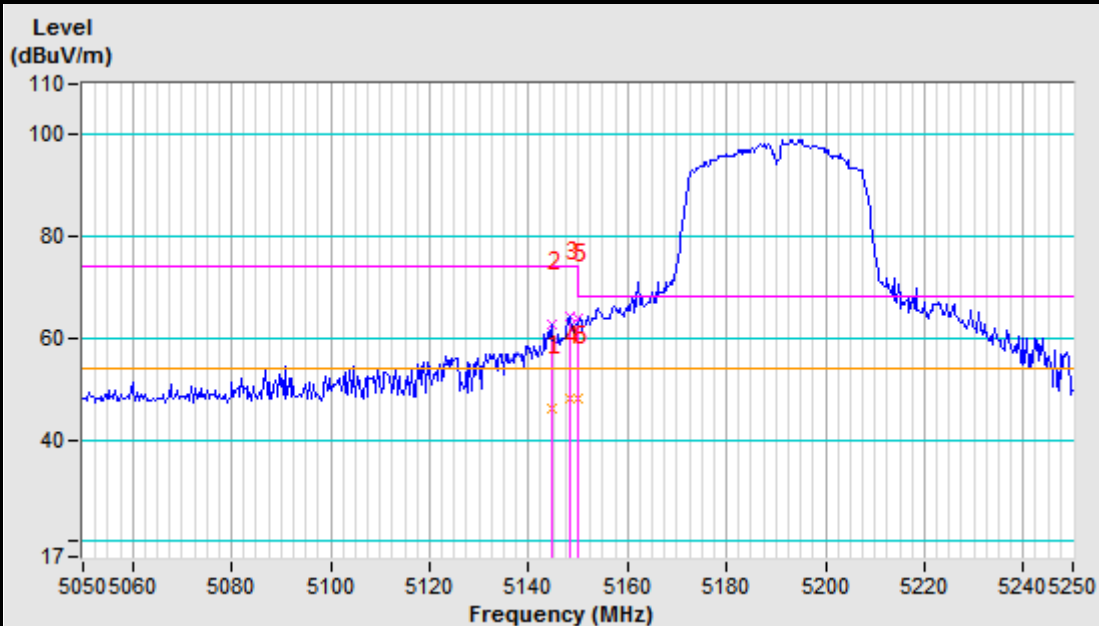
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
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	5143.00	58.66 PK	74.00	-15.34	1.00 H	100	50.44	8.22
2	5143.00	37.55 AV	54.00	-16.45	1.00 H	100	29.33	8.22
3	5150.00	59.75 PK	74.00	-14.25	1.00 H	100	51.52	8.23
4	5150.00	39.69 AV	54.00	-14.31	1.00 H	100	31.46	8.23
5	*5230.00	106.14 PK			1.00 H	100	97.74	8.40
6	*5230.00	88.35 AV			1.00 H	100	79.95	8.40
7	#10460.00	61.28 PK	68.20	-6.92	1.00 H	0	43.20	18.08
8	15690.00	67.64 PK	74.00	-6.36	1.00 H	0	43.05	24.59
9	15690.00	46.33 AV	54.00	-7.67	1.00 H	0	21.74	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	5140.00	59.42 PK	74.00	-14.58	1.00 V	360	51.21	8.21
2	5140.00	38.60 AV	54.00	-15.40	1.00 V	360	30.39	8.21
3	5150.00	60.23 PK	74.00	-13.77	1.00 V	360	52.00	8.23
4	5150.00	40.10 AV	54.00	-13.90	1.00 V	360	31.87	8.23
5	*5230.00	101.77 PK			1.00 V	360	93.37	8.40
6	*5230.00	83.24 AV			1.00 V	360	74.84	8.40
7	#10460.00	59.42 PK	68.20	-8.78	1.00 V	0	41.34	18.08
8	15690.00	66.63 PK	74.00	-7.37	1.00 V	0	42.04	24.59
9	15690.00	45.92 AV	54.00	-8.08	1.00 V	0	21.33	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)

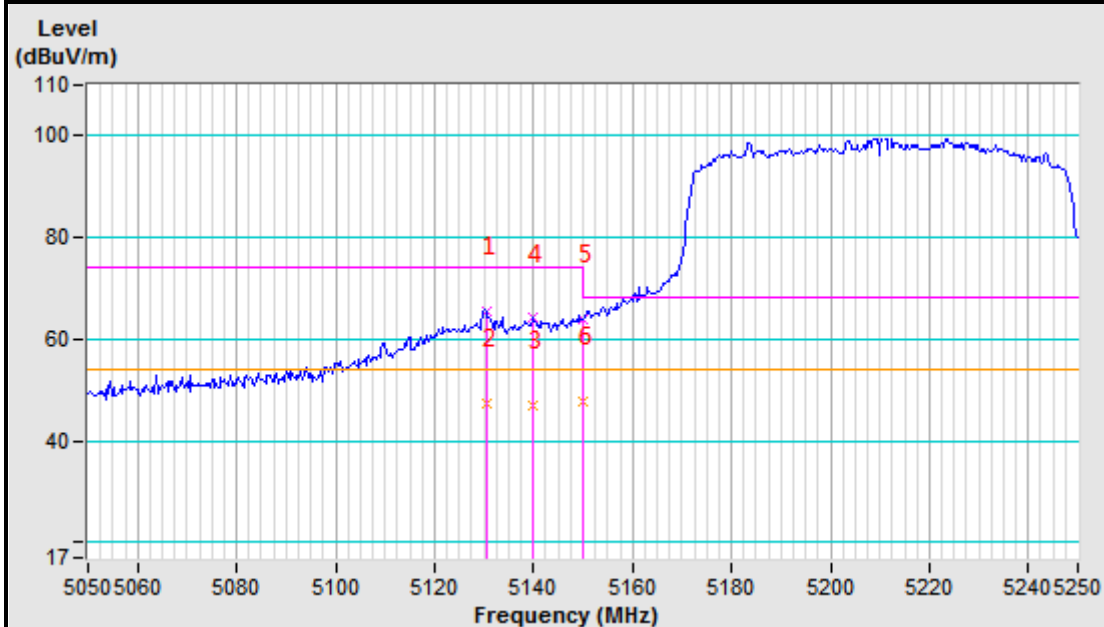
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5130.45	65.65 PK	74.00	-8.35	1.00 H	166	57.45	8.20
2	5130.45	47.51 AV	54.00	-6.49	1.00 H	166	39.31	8.20
3	5140.06	64.15 PK	74.00	-9.85	1.00 H	166	55.94	8.21
4	5140.06	47.01 AV	54.00	-6.99	1.00 H	166	38.80	8.21
5	5150.00	63.85 PK	74.00	-10.15	1.00 H	166	55.62	8.23
6	5150.00	47.92 AV	54.00	-6.08	1.00 H	166	39.69	8.23
7	*5210.00	100.82 PK			1.00 H	166	92.45	8.37
8	*5210.00	79.58 AV			1.00 H	166	71.21	8.37
9	#10420.00	61.17 PK	68.20	-7.03	1.00 H	0	43.18	17.99
10	15630.00	67.49 PK	74.00	-6.51	1.00 H	0	43.03	24.46
11	15630.00	45.58 AV	54.00	-8.42	1.00 H	0	21.12	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	5139.42	46.82 AV	54.00	-7.18	1.00 V	144	38.61	8.21
2	5139.42	63.17 PK	74.00	-10.83	1.00 V	144	54.96	8.21
3	5146.15	63.59 PK	74.00	-10.41	1.00 V	144	55.37	8.22
4	5146.15	46.93 AV	54.00	-7.07	1.00 V	144	38.71	8.22
5	5150.00	61.69 PK	74.00	-12.31	1.00 V	144	53.46	8.23
6	5150.00	46.97 AV	54.00	-7.03	1.00 V	144	38.74	8.23
7	*5210.00	95.73 PK			1.00 V	144	87.36	8.37
8	*5210.00	74.85 AV			1.00 V	144	66.48	8.37
9	#10420.00	58.64 PK	68.20	-9.56	1.00 V	0	40.65	17.99
10	15630.00	65.65 PK	74.00	-8.35	1.00 V	0	41.19	24.46
11	15630.00	45.05 AV	54.00	-8.95	1.00 V	0	20.59	24.46

REMARKS:

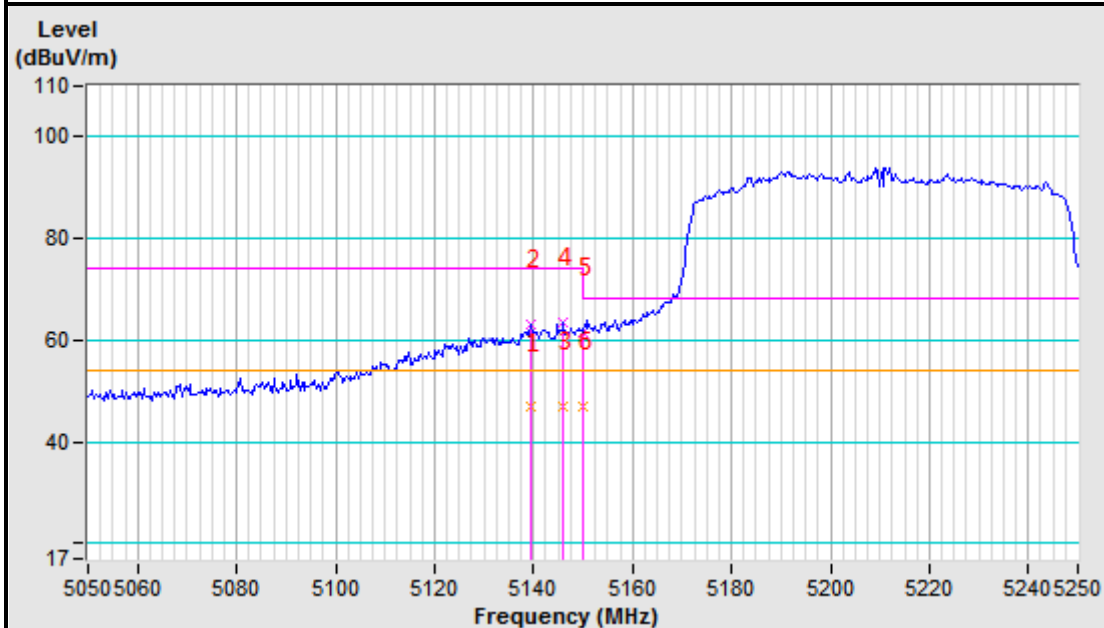
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.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

Band edge Plot

5210MHz Horizontal



5210MHz Vertical





**BUREAU
VERITAS**

Test Report No.: RF200226N025-4

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	5148.00	49.14 PK	74.00	-24.86	1.00 H	163	40.91	8.23
2	5148.00	37.11 AV	54.00	-16.89	1.00 H	163	28.88	8.23
3	5150.00	49.15 PK	74.00	-24.85	1.00 H	163	40.92	8.23
4	5150.00	37.29 AV	54.00	-16.71	1.00 H	163	29.06	8.23
5	*5260.00	111.24 PK			1.00 H	163	102.78	8.46
6	*5260.00	96.85 AV			1.00 H	163	88.39	8.46
7	5350.00	52.43 PK	74.00	-21.57	1.00 H	163	43.77	8.66
8	5350.00	40.35 AV	54.00	-13.65	1.00 H	163	31.69	8.66
9	5358.00	52.79 PK	74.00	-21.21	1.00 H	163	44.12	8.67
10	5358.00	40.27 AV	54.00	-13.73	1.00 H	163	31.60	8.67
11	#10520.00	61.75 PK	68.20	-6.45	1.00 H	0	43.54	18.21
12	15780.00	66.44 PK	74.00	-7.56	1.00 H	0	41.66	24.78
13	15780.00	45.58 AV	54.00	-8.42	1.00 H	0	20.80	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	5145.00	49.02 PK	74.00	-24.98	1.00 V	180	40.80	8.22
2	5145.00	37.02 AV	54.00	-16.98	1.00 V	180	28.80	8.22
3	5150.00	49.38 PK	74.00	-24.62	1.00 V	180	41.15	8.23
4	5150.00	37.10 AV	54.00	-16.90	1.00 V	180	28.87	8.23
5	*5260.00	105.80 PK			1.00 V	180	97.34	8.46
6	*5260.00	91.46 AV			1.00 V	180	83.00	8.46
7	5350.00	51.58 PK	74.00	-22.42	1.00 V	180	42.92	8.66
8	5350.00	39.44 AV	54.00	-14.56	1.00 V	180	30.78	8.66
9	5360.00	51.03 PK	74.00	-22.97	1.00 V	180	42.35	8.68
10	5360.00	40.21 AV	54.00	-13.79	1.00 V	180	31.53	8.68
11	#10520.00	58.33 PK	68.20	-9.87	1.00 V	0	40.12	18.21
12	15780.00	65.15 PK	74.00	-8.85	1.00 V	0	40.37	24.78
13	15780.00	64.29 AV			1.00 V	0	39.51	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	110.99 PK			1.00 H	160	102.44	8.55
2	*5300.00	97.05 AV			1.00 H	160	88.50	8.55
3	5350.00	65.18 PK	74.00	-8.82	1.00 H	160	56.52	8.66
4	5350.00	41.60 AV	54.00	-12.40	1.00 H	160	32.94	8.66
5	5358.00	64.23 PK	74.00	-9.77	1.00 H	160	55.56	8.67
6	5358.00	41.12 AV	54.00	-12.88	1.00 H	160	32.45	8.67
7	10600.00	59.42 PK	74.00	-14.58	1.00 H	0	41.08	18.34
8	10600.00	40.20 AV	54.00	-13.80	1.00 H	0	21.86	18.34
9	15900.00	66.92 PK	74.00	-7.08	1.00 H	0	41.88	25.04
10	15900.00	45.30 AV	54.00	-8.70	1.00 H	0	20.26	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	105.10 PK			1.00 V	230	96.55	8.55
2	*5300.00	101.64 AV			1.00 V	230	93.09	8.55
3	5350.00	63.18 PK	74.00	-10.82	1.00 V	230	54.52	8.66
4	5350.00	40.20 AV	54.00	-13.80	1.00 V	230	31.54	8.66
5	5355.00	60.47 PK	74.00	-13.53	1.00 V	230	51.80	8.67
6	5355.00	39.98 AV	54.00	-14.02	1.00 V	230	31.31	8.67
7	10600.00	58.64 PK	74.00	-15.36	1.00 V	0	40.30	18.34
8	10600.00	39.96 AV	54.00	-14.04	1.00 V	0	21.62	18.34
9	15900.00	65.72 PK	74.00	-8.28	1.00 V	0	40.68	25.04
10	15900.00	44.88 AV	54.00	-9.12	1.00 V	0	19.84	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	108.78 PK			1.00 H	166	100.18	8.60
2	*5320.00	94.13 AV			1.00 H	166	85.53	8.60
3	5350.00	63.31 PK	74.00	-10.69	1.00 H	166	54.65	8.66
4	5350.00	43.05 AV	54.00	-10.95	1.00 H	166	34.39	8.66
5	5353.53	64.78 PK	74.00	-9.22	1.00 H	166	56.11	8.67
6	5353.53	42.96 AV	54.00	-11.04	1.00 H	166	34.29	8.67
7	5357.05	62.38 PK	74.00	-11.62	1.00 H	166	53.71	8.67
8	5357.05	42.55 AV	54.00	-11.45	1.00 H	166	33.88	8.67
9	10640.00	62.22 PK	74.00	-11.78	1.00 H	0	43.81	18.41
10	10640.00	41.30 AV	54.00	-12.70	1.00 H	0	22.89	18.41
11	15960.00	67.92 PK	74.00	-6.08	1.00 H	0	42.75	25.17
12	15960.00	46.10 AV	54.00	-7.90	1.00 H	0	20.93	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	102.49 PK			1.00 V	124	93.89	8.60
2	*5320.00	89.01 AV			1.00 V	124	80.41	8.60
3	5350.00	61.53 PK	74.00	-12.47	1.00 V	124	52.87	8.66
4	5350.00	41.22 AV	54.00	-12.78	1.00 V	124	32.56	8.66
5	5351.60	60.75 PK	74.00	-13.25	1.00 V	124	52.09	8.66
6	5351.60	40.51 AV	54.00	-13.49	1.00 V	124	31.85	8.66
7	5353.21	59.30 PK	74.00	-14.70	1.00 V	124	50.64	8.66
8	5353.21	39.12 AV	54.00	-14.88	1.00 V	124	30.46	8.66
9	10640.00	58.31 PK	74.00	-15.69	1.00 V	0	39.90	18.41
10	10640.00	40.20 AV	54.00	-13.80	1.00 V	0	21.79	18.41
11	15960.00	65.03 PK	74.00	-8.97	1.00 V	0	39.86	25.17
12	15960.00	45.02 AV	54.00	-8.98	1.00 V	0	19.85	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.

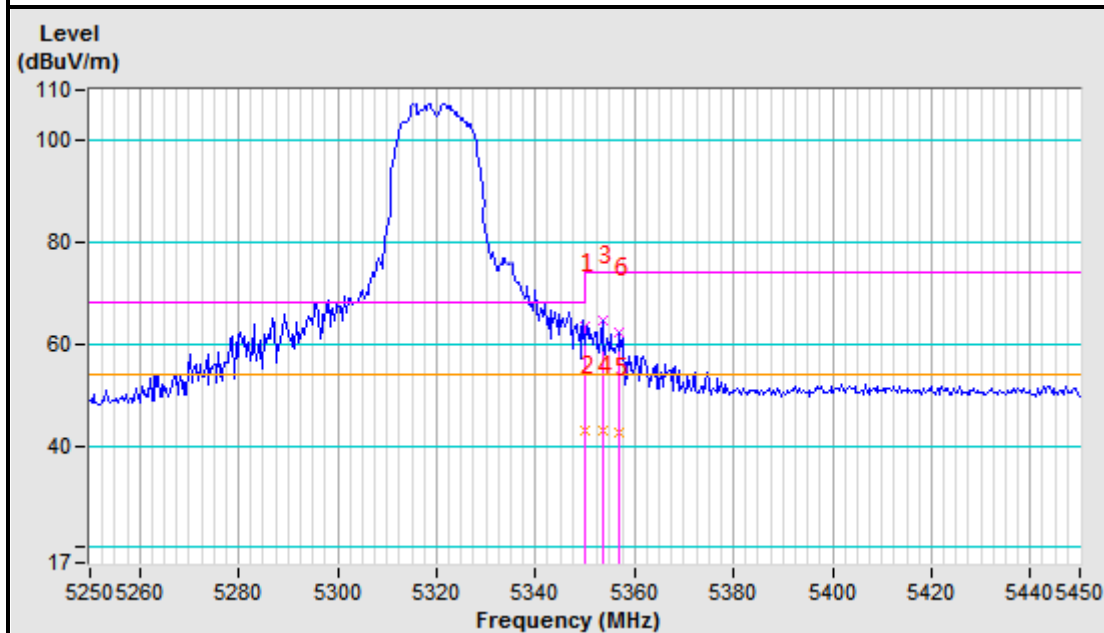


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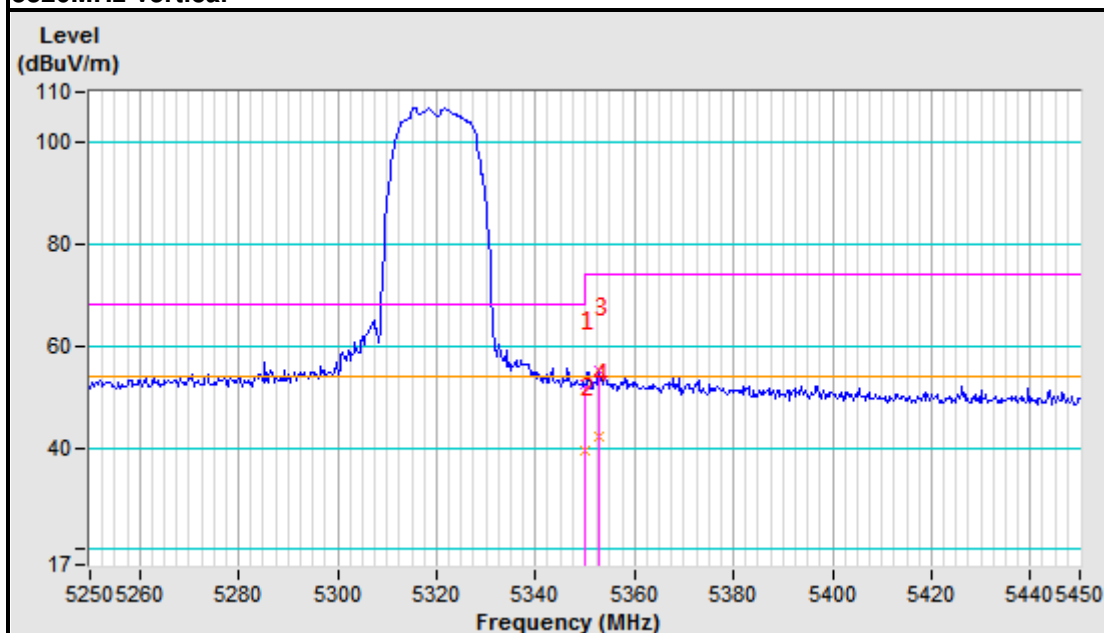
Test Report No.: RF200226N025-4

Band edge Plot

5320MHz Horizontal



5320MHz Vertical





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Test Report No.: RF200226N025-4

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	5147.00	49.03 PK	74.00	-24.97	1.00 H	151	40.80	8.23
2	5147.00	37.12 AV	54.00	-16.88	1.00 H	151	28.89	8.23
3	5150.00	49.19 PK	74.00	-24.81	1.00 H	151	40.96	8.23
4	5150.00	37.25 AV	54.00	-16.75	1.00 H	151	29.02	8.23
5	*5260.00	110.47 PK			1.00 H	151	102.01	8.46
6	*5260.00	95.56 AV			1.00 H	151	87.10	8.46
7	5350.00	53.28 PK	74.00	-20.72	1.00 H	151	44.62	8.66
8	5350.00	40.10 AV	54.00	-13.90	1.00 H	151	31.44	8.66
9	5354.00	52.17 PK	74.00	-21.83	1.00 H	151	43.50	8.67
10	5354.00	40.05 AV	54.00	-13.95	1.00 H	151	31.38	8.67
11	#10520.00	59.63 PK	68.20	-8.57	1.00 H	0	41.42	18.21
12	15780.00	66.42 PK	74.00	-7.58	1.00 H	0	41.64	24.78
13	15780.00	45.50 AV	54.00	-8.50	1.00 H	0	20.72	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	5142.00	48.85 PK	74.00	-25.15	1.00 V	154	40.63	8.22
2	5142.00	36.90 AV	54.00	-17.10	1.00 V	154	28.68	8.22
3	5150.00	49.30 PK	74.00	-24.70	1.00 V	154	41.07	8.23
4	5150.00	37.10 AV	54.00	-16.90	1.00 V	154	28.87	8.23
5	*5260.00	106.99 PK			1.00 V	154	98.53	8.46
6	*5260.00	91.76 AV			1.00 V	154	83.30	8.46
7	5350.00	51.63 PK	74.00	-22.37	1.00 V	154	42.97	8.66
8	5350.00	39.98 AV	54.00	-14.02	1.00 V	154	31.32	8.66
9	5359.00	51.98 PK	74.00	-22.02	1.00 V	154	43.31	8.67
10	5359.00	39.48 AV	54.00	-14.52	1.00 V	154	30.81	8.67
11	#10520.00	61.05 PK	68.20	-7.15	1.00 V	0	42.84	18.21
12	15780.00	64.34 PK	74.00	-9.66	1.00 V	0	39.56	24.78
13	15780.00	44.92 AV	54.00	-9.08	1.00 V	0	20.14	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	112.18 PK			1.00 H	155	103.63	8.55
2	*5300.00	97.48 AV			1.00 H	155	88.93	8.55
3	5350.00	67.09 PK	74.00	-6.91	1.00 H	155	58.43	8.66
4	5350.00	41.91 AV	54.00	-12.09	1.00 H	155	33.25	8.66
5	5356.00	66.71 PK	74.00	-7.29	1.00 H	155	58.04	8.67
6	5356.00	40.70 AV	54.00	-13.30	1.00 H	155	32.03	8.67
7	10600.00	60.22 PK	74.00	-13.78	1.00 H	0	41.88	18.34
8	10600.00	40.41 AV	54.00	-13.59	1.00 H	0	22.07	18.34
9	15900.00	66.34 PK	74.00	-7.66	1.00 H	0	41.30	25.04
10	15900.00	44.98 AV	54.00	-9.02	1.00 H	0	19.94	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	108.17 PK			1.00 V	200	99.62	8.55
2	*5300.00	93.05 AV			1.00 V	200	84.50	8.55
3	5350.00	62.38 PK	74.00	-11.62	1.00 V	200	53.72	8.66
4	5350.00	40.67 AV	54.00	-13.33	1.00 V	200	32.01	8.66
5	5352.00	62.11 PK	74.00	-11.89	1.00 V	200	53.45	8.66
6	5352.00	40.10 AV	54.00	-13.90	1.00 V	200	31.44	8.66
7	10600.00	58.34 PK	74.00	-15.66	1.00 V	0	40.00	18.34
8	10600.00	39.60 AV	54.00	-14.40	1.00 V	0	21.26	18.34
9	15900.00	67.15 PK	74.00	-6.85	1.00 V	0	42.11	25.04
10	15900.00	44.20 AV	54.00	-9.80	1.00 V	0	19.16	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.

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	107.60 PK			1.00 H	140	99.00	8.60
2	*5320.00	93.10 AV			1.00 H	140	84.50	8.60
3	5350.00	63.35 PK	74.00	-10.65	1.00 H	140	54.69	8.66
4	5350.00	42.72 AV	54.00	-11.28	1.00 H	140	34.06	8.66
5	5352.56	63.53 PK	74.00	-10.47	1.00 H	140	54.87	8.66
6	5352.56	42.10 AV	54.00	-11.90	1.00 H	140	33.44	8.66
7	5358.33	61.18 PK	74.00	-12.82	1.00 H	140	52.51	8.67
8	5358.33	41.57 AV	54.00	-12.43	1.00 H	140	32.90	8.67
9	10640.00	59.46 PK	74.00	-14.54	1.00 H	0	41.05	18.41
10	10640.00	41.20 AV	54.00	-12.80	1.00 H	0	22.79	18.41
11	15960.00	66.47 PK	74.00	-7.53	1.00 H	0	41.30	25.17
12	15960.00	44.81 AV	54.00	-9.19	1.00 H	0	19.64	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	102.70 PK			1.00 V	106	94.10	8.60
2	*5320.00	87.43 AV			1.00 V	106	78.83	8.60
3	5350.00	60.11 PK	74.00	-13.89	1.00 V	106	51.45	8.66
4	5350.00	40.05 AV	54.00	-13.95	1.00 V	106	31.39	8.66
5	5353.53	60.60 PK	74.00	-13.40	1.00 V	106	51.93	8.67
6	5353.53	39.98 AV	54.00	-14.02	1.00 V	106	31.31	8.67
7	5355.77	60.72 PK	74.00	-13.28	1.00 V	106	52.05	8.67
8	5355.77	39.74 AV	54.00	-14.26	1.00 V	106	31.07	8.67
9	10640.00	59.11 PK	74.00	-14.89	1.00 V	0	40.70	18.41
10	10640.00	40.08 AV	54.00	-13.92	1.00 V	0	21.67	18.41
11	15960.00	65.84 PK	74.00	-8.16	1.00 V	0	40.67	25.17
12	15960.00	44.72 AV	54.00	-9.28	1.00 V	0	19.55	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.

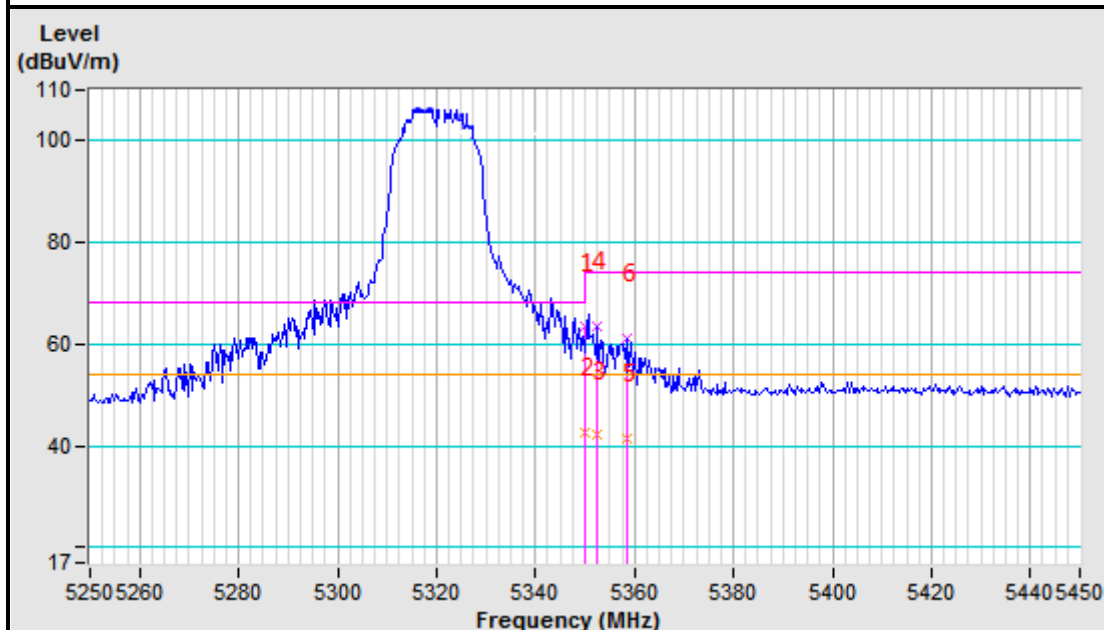


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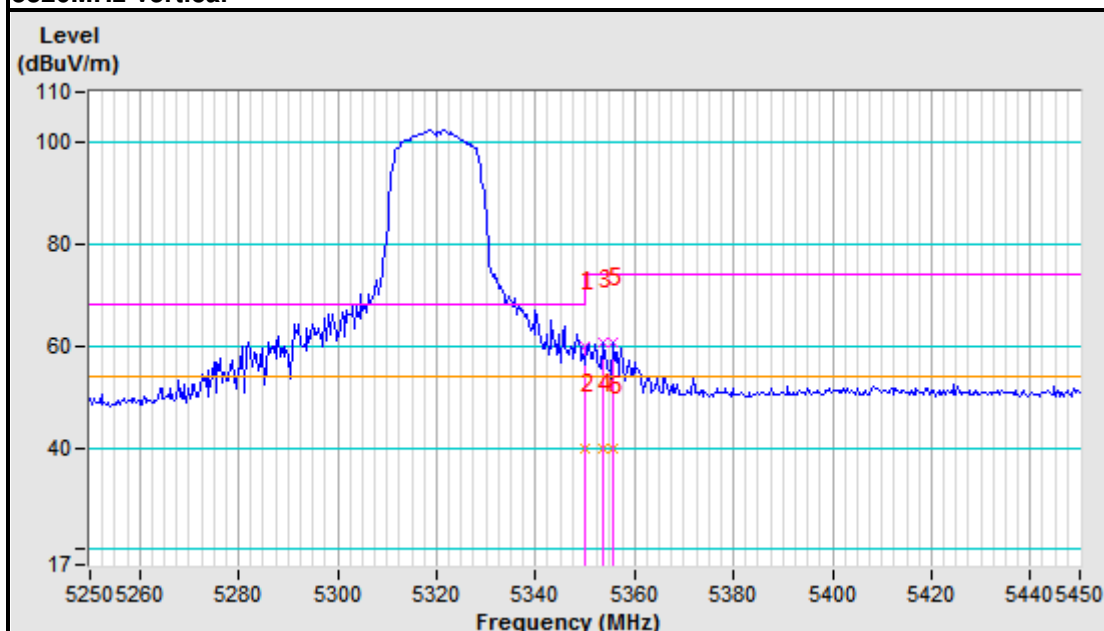
Test Report No.: RF200226N025-4

Band edge Plot

5320MHz Horizontal



5320MHz Vertical



802.11n (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	107.64 PK			1.00 H	107	99.15	8.49
2	*5270.00	90.38 AV			1.00 H	107	81.89	8.49
3	5350.00	67.27 PK	74.00	-6.73	1.00 H	107	58.61	8.66
4	5350.00	43.62 AV	54.00	-10.38	1.00 H	107	34.96	8.66
5	5351.00	67.40 PK	74.00	-6.60	1.00 H	107	58.74	8.66
6	5351.00	43.38 AV	54.00	-10.62	1.00 H	107	34.72	8.66
7	#10540.00	61.08 PK	68.20	-7.12	1.00 H	0	42.84	18.24
8	15810.00	65.34 PK	74.00	-8.66	1.00 H	0	40.49	24.85
9	15810.00	45.36 AV	54.00	-8.64	1.00 H	0	20.51	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	103.29 PK			1.00 V	136	94.80	8.49
2	*5270.00	86.78 AV			1.00 V	136	78.29	8.49
3	5350.00	62.11 PK	74.00	-11.89	1.00 V	136	53.45	8.66
4	5350.00	40.39 AV	54.00	-13.61	1.00 V	136	31.73	8.66
5	5352.00	62.23 PK	74.00	-11.77	1.00 V	136	53.57	8.66
6	5352.00	40.18 AV	54.00	-13.82	1.00 V	136	31.52	8.66
7	#10540.00	61.20 PK	68.20	-7.00	1.00 V	0	42.96	18.24
8	15810.00	64.44 PK	74.00	-9.56	1.00 V	0	39.59	24.85
9	15810.00	44.19 AV	54.00	-9.81	1.00 V	0	19.34	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.

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	103.63 PK			1.00 H	165	95.06	8.57
2	*5310.00	85.75 AV			1.00 H	165	77.18	8.57
3	5350.00	65.91 PK	74.00	-8.09	1.00 H	165	57.25	8.66
4	5350.00	48.22 AV	54.00	-5.78	1.00 H	165	39.56	8.66
5	5351.28	68.56 PK	74.00	-5.44	1.00 H	165	59.90	8.66
6	5351.28	48.15 AV	54.00	-5.85	1.00 H	165	39.49	8.66
7	5357.37	46.97 AV	54.00	-7.03	1.00 H	165	38.30	8.67
8	5357.37	65.35 PK	74.00	-8.65	1.00 H	165	56.68	8.67
9	10620.00	61.23 PK	74.00	-12.77	1.00 H	0	42.85	18.38
10	10620.00	40.88 AV	54.00	-13.12	1.00 H	0	22.50	18.38
11	15930.00	65.55 PK	74.00	-8.45	1.00 H	0	40.44	25.11
12	15930.00	45.35 AV	54.00	-8.65	1.00 H	0	20.24	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	97.47 PK			1.00 V	167	88.90	8.57
2	*5310.00	79.57 AV			1.00 V	167	71.00	8.57
3	5350.00	63.47 PK	74.00	-10.53	1.00 V	167	54.81	8.66
4	5350.00	46.62 AV	54.00	-7.38	1.00 V	167	37.96	8.66
5	5356.09	61.35 PK	74.00	-12.65	1.00 V	167	52.68	8.67
6	5356.09	45.27 AV	54.00	-8.73	1.00 V	167	36.60	8.67
7	5361.86	60.19 PK	74.00	-13.81	1.00 V	167	51.51	8.68
8	5361.86	45.05 AV	54.00	-8.95	1.00 V	167	36.37	8.68
9	10620.00	60.18 PK	74.00	-13.82	1.00 V	0	41.80	18.38
10	10620.00	40.17 AV	54.00	-13.83	1.00 V	0	21.79	18.38
11	15930.00	64.39 PK	74.00	-9.61	1.00 V	0	39.28	25.11
12	15930.00	44.36 AV	54.00	-9.64	1.00 V	0	19.25	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.

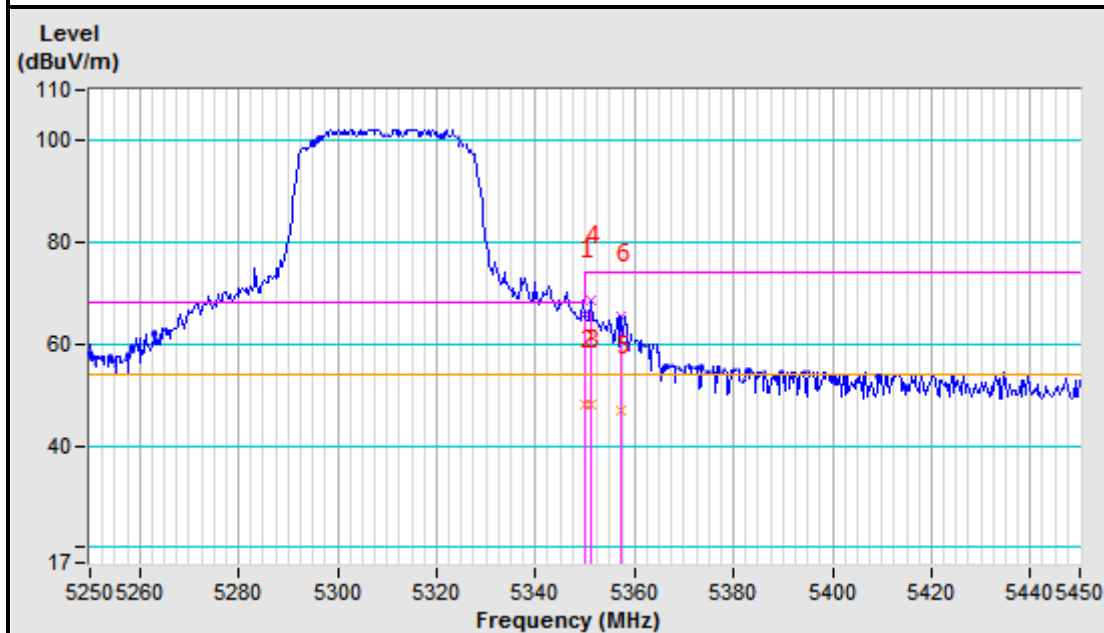


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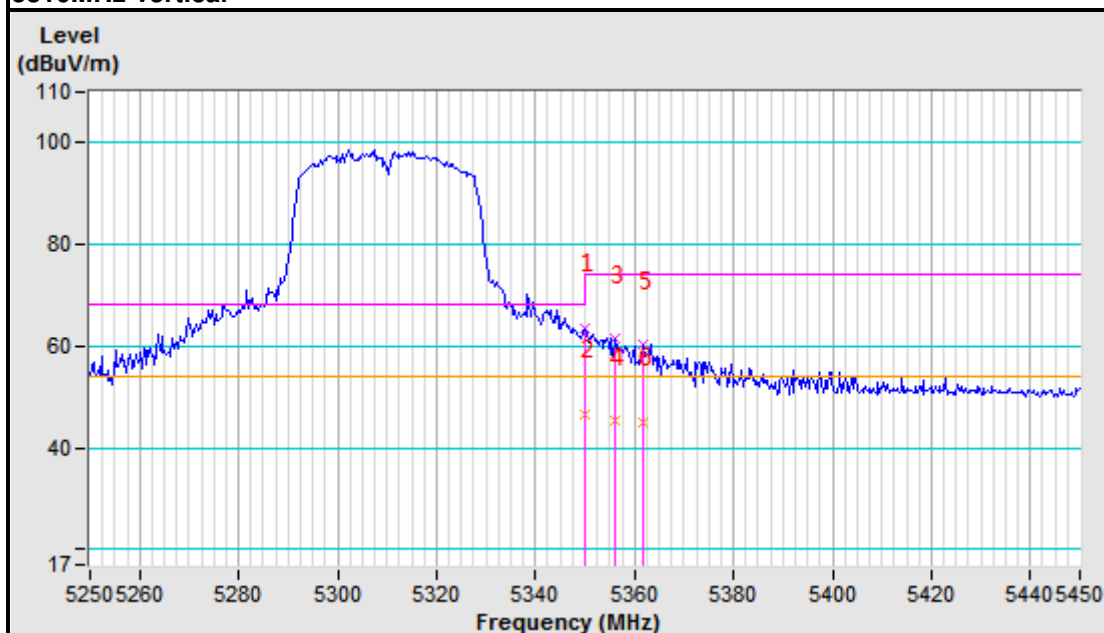
Test Report No.: RF200226N025-4

Band edge Plot

5310MHz Horizontal



5310MHz Vertical



802.11ac 80MHz

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5290.00	103.49 PK			1.00 H	158	94.97	8.52
2	*5290.00	80.28 AV			1.00 H	158	71.76	8.52
3	5350.00	66.72 PK	74.00	-7.28	1.00 H	158	58.06	8.66
4	5350.00	50.73 AV	54.00	-3.27	1.00 H	158	42.07	8.66
5	5356.09	68.26 PK	74.00	-5.74	1.00 H	158	59.59	8.67
6	5356.09	50.52 AV	54.00	-3.48	1.00 H	158	41.85	8.67
7	5358.97	67.31 PK	74.00	-6.69	1.00 H	158	58.64	8.67
8	5358.97	50.02 AV	54.00	-3.98	1.00 H	158	41.35	8.67
9	#10580.00	61.23 PK	68.20	-6.97	1.00 H	0	42.92	18.31
10	15870.00	65.29 PK	74.00	-8.71	1.00 H	0	40.31	24.98
11	15870.00	45.03 AV	54.00	-8.97	1.00 H	0	20.05	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	98.41 PK			1.00 V	178	89.89	8.52
2	*5290.00	75.89 AV			1.00 V	178	67.37	8.52
3	5350.00	64.38 PK	74.00	-9.62	1.00 V	178	55.72	8.66
4	5350.00	48.10 AV	54.00	-5.90	1.00 V	178	39.44	8.66
5	5352.88	64.17 PK	74.00	-9.83	1.00 V	178	55.51	8.66
6	5352.88	47.24 AV	54.00	-6.76	1.00 V	178	38.58	8.66
7	5355.77	64.08 PK	74.00	-9.92	1.00 V	178	55.41	8.67
8	5355.77	46.96 AV	54.00	-7.04	1.00 V	178	38.29	8.67
9	#10580.00	60.06 PK	68.20	-8.14	1.00 V	0	41.75	18.31
10	15870.00	64.66 PK	74.00	-9.34	1.00 V	0	39.68	24.98
11	15870.00	44.19 AV	54.00	-9.81	1.00 V	0	19.21	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.

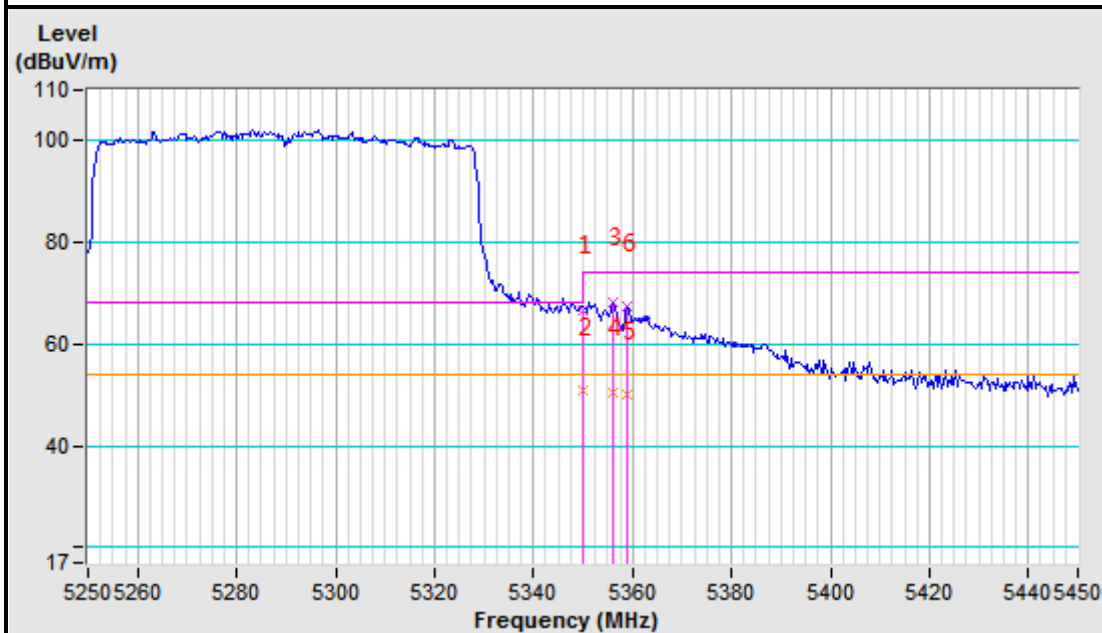


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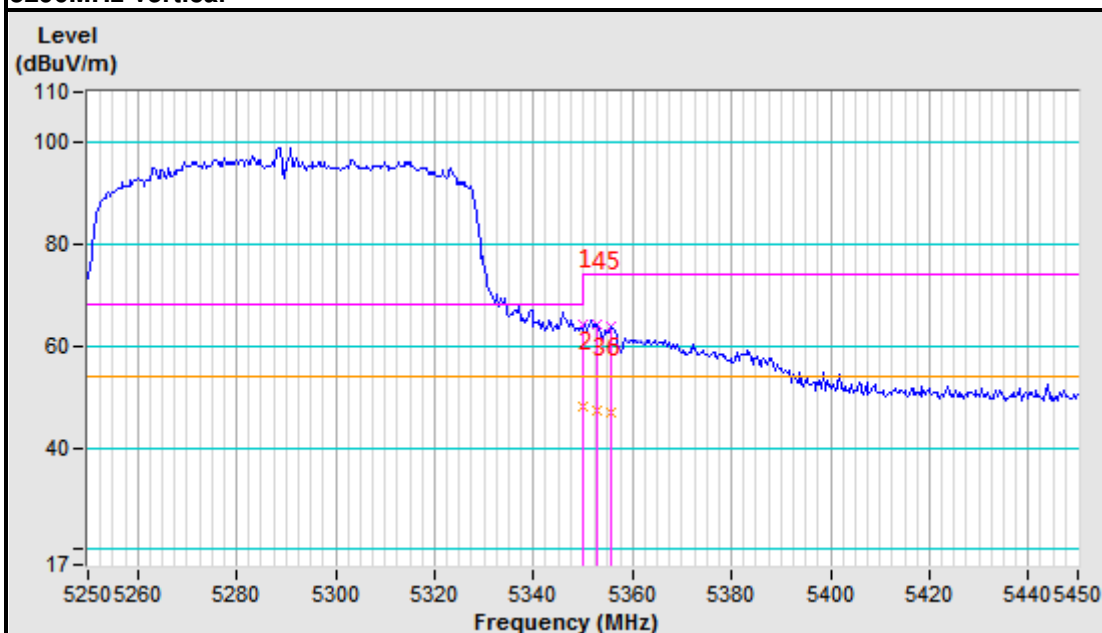
Test Report No.: RF200226N025-4

Band edge Plot

5290MHz Horizontal



5290MHz Vertical



Band 3 (5470-5725MHz): ABOVE 1GHz DATA 802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5457.50	63.08 PK	74.00	-10.92	1.00 H	180	54.20	8.88
2	5457.50	45.69 AV	54.00	-8.31	1.00 H	180	36.81	8.88
3	#5467.12	67.41 PK	68.20	-0.79	1.00 H	180	58.51	8.90
4	#5468.40	67.35 PK	68.20	-0.85	1.00 H	180	58.44	8.91
5	#5470.00	65.10 PK	68.20	-3.10	1.00 H	180	56.19	8.91
6	*5500.00	103.81 PK			1.00 H	180	94.84	8.97
7	*5500.00	89.97 AV			1.00 H	180	81.00	8.97
8	11000.00	61.32 PK	74.00	-12.68	1.00 H	0	42.28	19.04
9	11000.00	41.35 AV	54.00	-12.65	1.00 H	0	22.31	19.04
10	#16500.00	65.28 PK	68.20	-2.92	1.00 H	0	39.72	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	5454.29	57.72 PK	74.00	-16.28	1.00 V	161	48.85	8.87
2	5454.29	42.08 AV	54.00	-11.92	1.00 V	161	33.21	8.87
3	#5461.67	60.55 PK	68.20	-7.65	1.00 V	161	51.66	8.89
4	#5467.76	61.54 PK	68.20	-6.66	1.00 V	161	52.64	8.90
5	#5470.00	61.46 PK	68.20	-6.74	1.00 V	161	52.55	8.91
6	*5500.00	100.39 PK			1.00 V	161	91.42	8.97
7	*5500.00	85.18 AV			1.00 V	161	76.21	8.97
8	11000.00	59.68 PK	74.00	-14.32	1.00 V	0	40.64	19.04
9	11000.00	39.49 AV	54.00	-14.51	1.00 V	0	20.45	19.04
10	#16500.00	64.77 PK	68.20	-3.43	1.00 V	0	39.21	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.

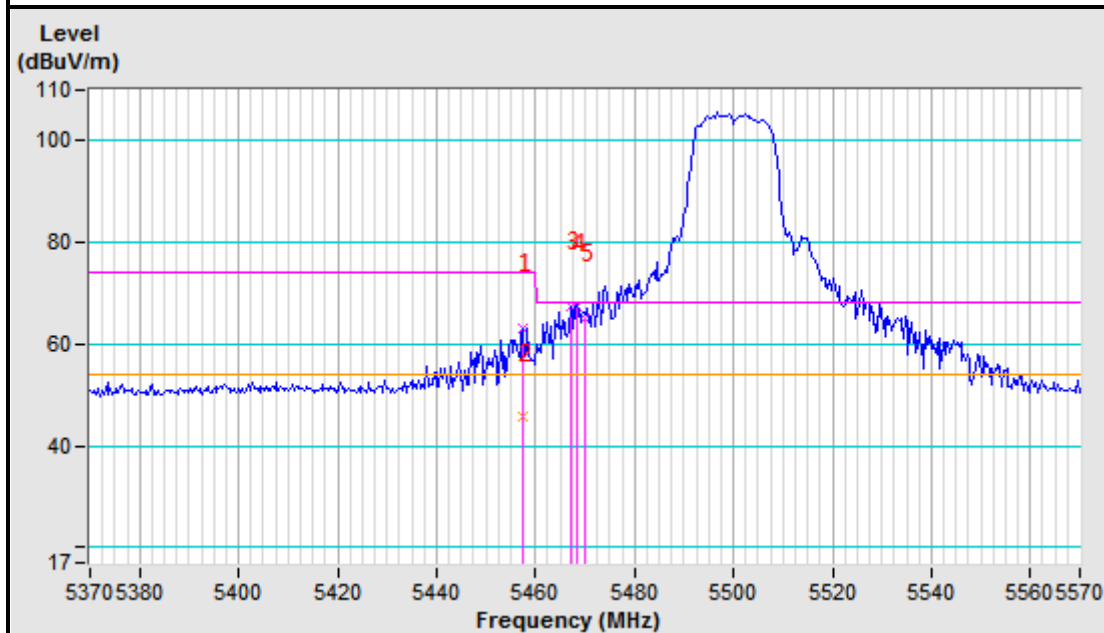


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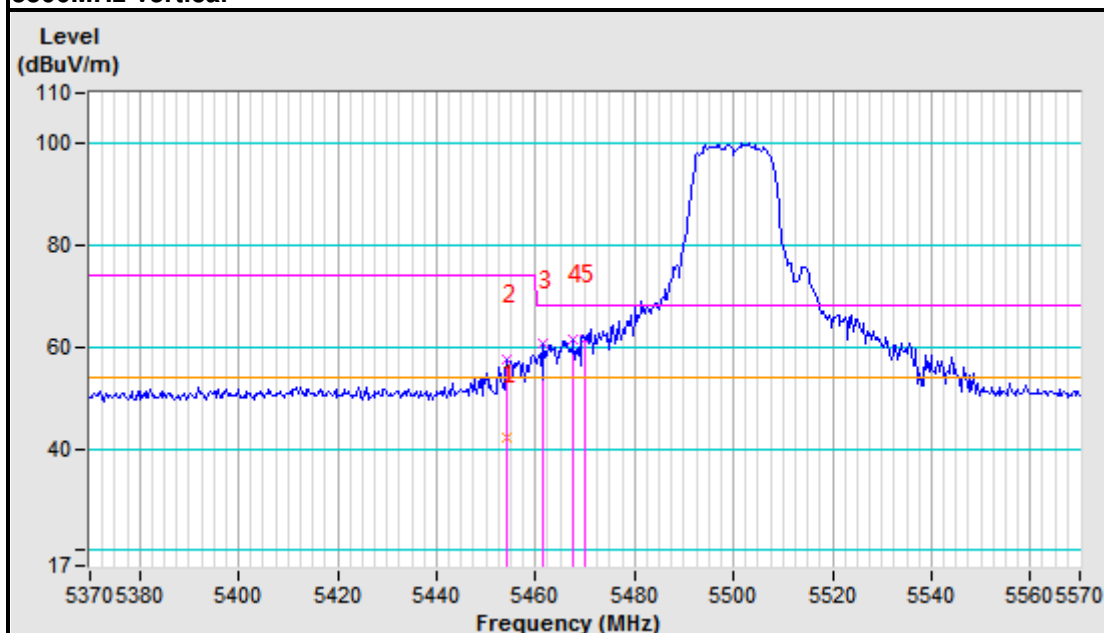
Test Report No.: RF200226N025-4

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	52.57 PK	68.20	-15.63	1.00 H	124	43.66	8.91
2	*5580.00	112.71 PK			1.00 H	124	103.53	9.18
3	*5580.00	98.44 AV			1.00 H	124	89.26	9.18
4	11160.00	65.29 PK	74.00	-8.71	1.00 H	0	46.06	19.23
5	11160.00	41.70 AV	54.00	-12.30	1.00 H	0	22.47	19.23
6	#16740.00	64.19 PK	68.20	-4.01	1.00 H	0	37.89	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	50.67 PK	68.20	-17.53	1.00 V	121	41.76	8.91
2	*5580.00	107.00 PK			1.00 V	121	97.82	9.18
3	*5580.00	93.49 AV			1.00 V	121	84.31	9.18
4	11160.00	64.92 PK	74.00	-9.08	1.00 V	0	45.69	19.23
5	11160.00	40.77 AV	54.00	-13.23	1.00 V	0	21.54	19.23
6	#16740.00	63.90 PK	68.20	-4.30	1.00 V	0	37.60	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.

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	103.30 PK			1.00 H	0	93.80	9.50
2	*5700.00	89.23 AV			1.00 H	0	79.73	9.50
3	#5725.00	66.82 PK	68.20	-1.38	1.00 H	0	57.26	9.56
4	#5730.13	63.68 PK	68.20	-4.52	1.00 H	0	54.10	9.58
5	#5733.33	62.83 PK	68.20	-5.37	1.00 H	0	53.25	9.58
6	11400.00	60.45 PK	74.00	-13.55	1.00 H	0	40.92	19.53
7	11400.00	40.47 AV	54.00	-13.53	1.00 H	0	20.94	19.53
8	#17100.00	64.69 PK	68.20	-3.51	1.00 H	0	37.49	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	97.31 PK			1.00 V	153	87.81	9.50
2	*5700.00	86.14 AV			1.00 V	153	76.64	9.50
3	#5725.00	63.54 PK	68.20	-4.66	1.00 V	153	53.98	9.56
4	#5726.92	63.80 PK	68.20	-4.40	1.00 V	153	54.23	9.57
5	#5730.77	62.07 PK	68.20	-6.13	1.00 V	153	52.50	9.57
6	11400.00	60.22 PK	74.00	-13.78	1.00 V	0	40.69	19.53
7	11400.00	40.58 AV	54.00	-13.42	1.00 V	0	21.05	19.53
8	#17100.00	64.36 PK	68.20	-3.84	1.00 V	0	37.16	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.

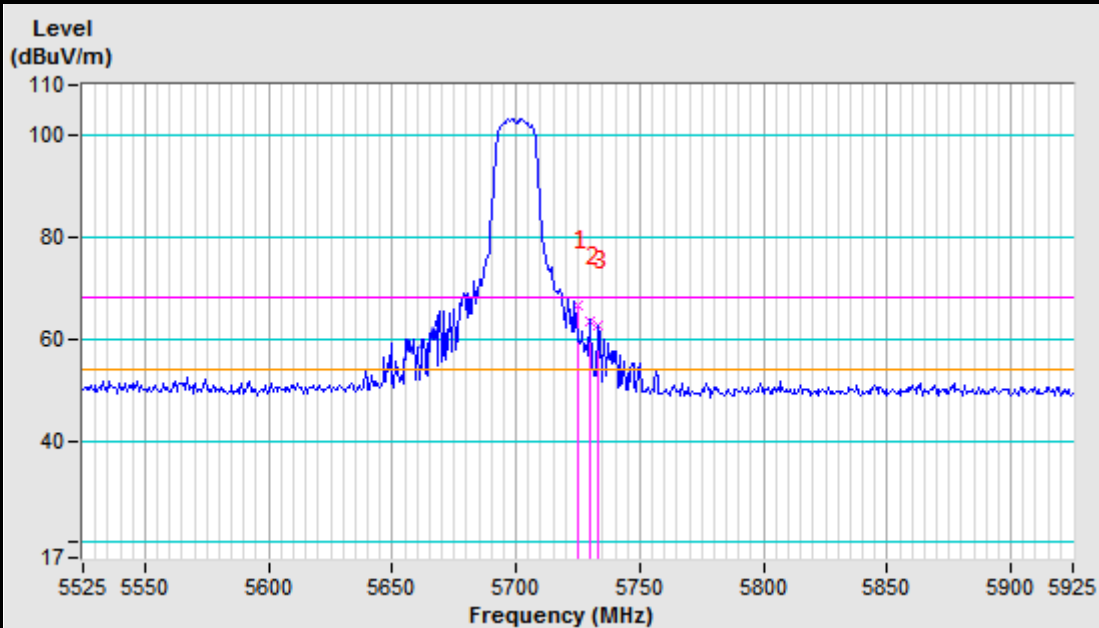


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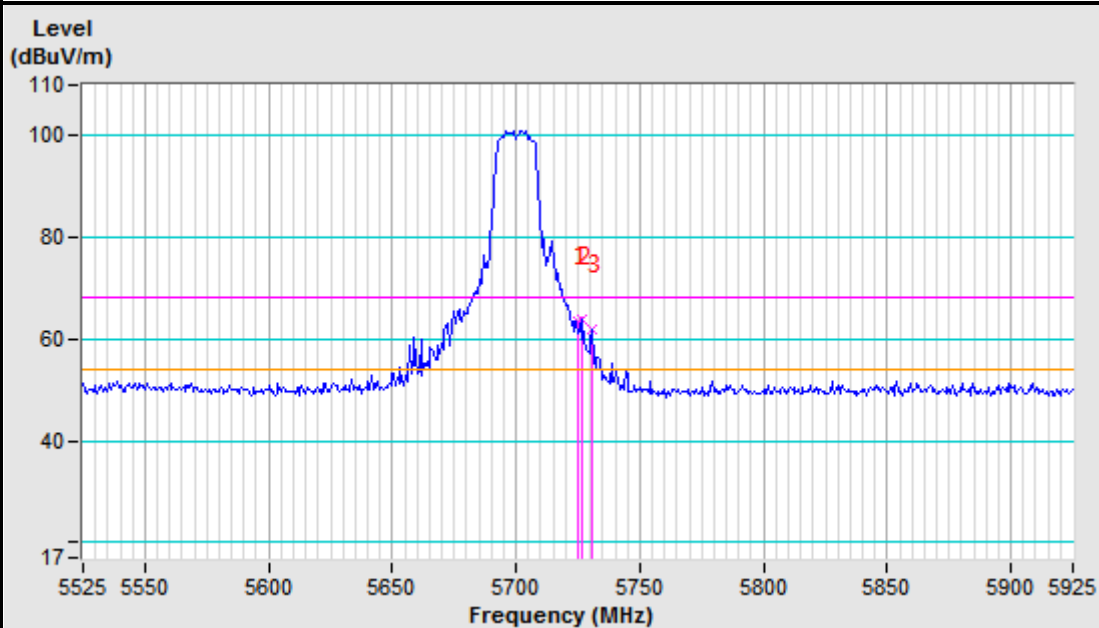
Test Report No.: RF200226N025-4

Band edge Plot

5700MHz Horizontal



5700MHz Vertical





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Test Report No.: RF200226N025-4

802.11n (20MHz)

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

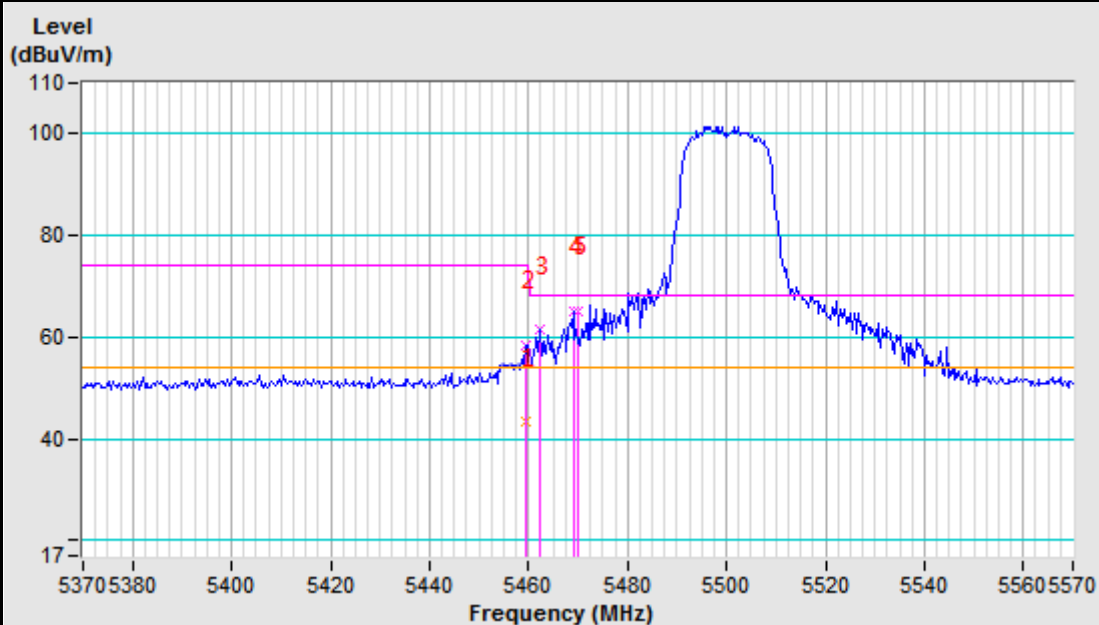
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5459.42	58.37 PK	74.00	-15.63	1.00 H	0	49.48	8.89
2	5459.42	43.25 AV	54.00	-10.75	1.00 H	0	34.36	8.89
3	#5462.31	61.42 PK	68.20	-6.78	1.00 H	0	52.53	8.89
4	#5469.04	65.03 PK	68.20	-3.17	1.00 H	0	56.12	8.91
5	#5470.00	65.03 PK	68.20	-3.17	1.00 H	0	56.12	8.91
6	*5500.00	103.03 PK			1.00 H	0	94.06	8.97
7	*5500.00	88.89 AV			1.00 H	0	79.92	8.97
8	11000.00	60.23 PK	74.00	-13.77	1.00 H	0	41.19	19.04
9	11000.00	40.47 AV	54.00	-13.53	1.00 H	0	21.43	19.04
10	#16500.00	63.37 PK	68.20	-4.83	1.00 H	0	37.81	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	5459.10	57.88 PK	74.00	-16.12	1.00 V	156	48.99	8.89
2	5459.10	43.51 AV	54.00	-10.49	1.00 V	156	34.62	8.89
3	#5461.67	58.43 PK	68.20	-9.77	1.00 V	156	49.54	8.89
4	#5468.72	60.16 PK	68.20	-8.04	1.00 V	156	51.25	8.91
5	#5470.00	62.40 PK	68.20	-5.80	1.00 V	156	53.49	8.91
6	*5500.00	97.15 PK			1.00 V	156	88.18	8.97
7	*5500.00	82.84 AV			1.00 V	156	73.87	8.97
8	11000.00	59.67 PK	74.00	-14.33	1.00 V	0	40.63	19.04
9	11000.00	39.48 AV	54.00	-14.52	1.00 V	0	20.44	19.04
10	#16500.00	63.47 PK	68.20	-4.73	1.00 V	0	37.91	25.56

REMARKS:

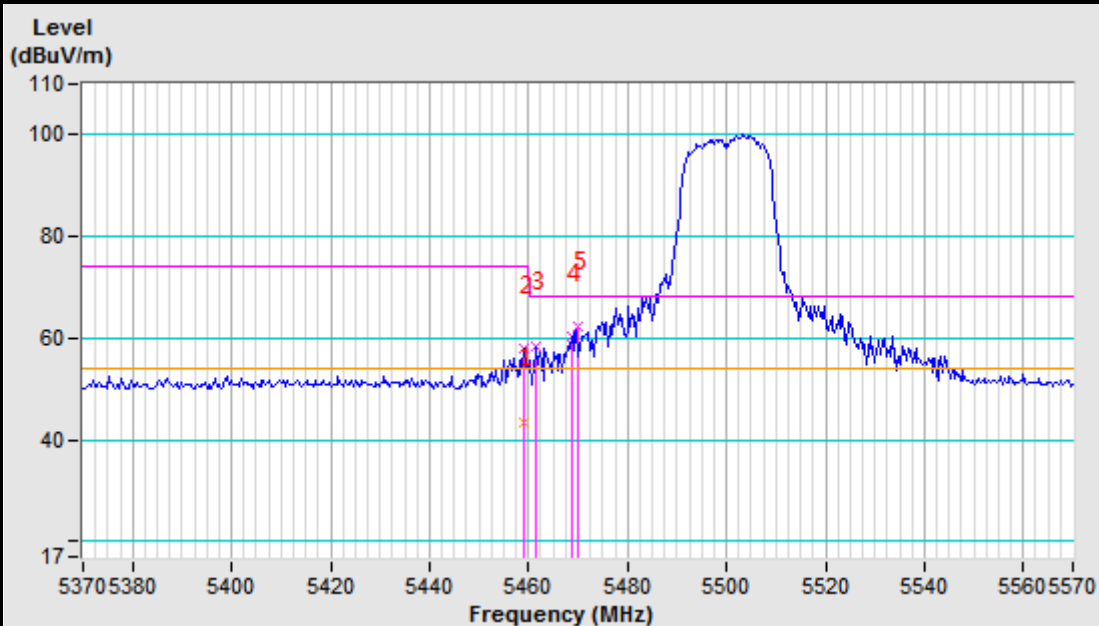
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
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	51.66 PK	68.20	-16.54	1.00 H	170	42.75	8.91
2	*5580.00	111.15 PK			1.00 H	170	101.97	9.18
3	*5580.00	96.44 AV			1.00 H	170	87.26	9.18
4	11160.00	62.23 PK	74.00	-11.77	1.00 H	0	43.00	19.23
5	11160.00	42.25 AV	54.00	-11.75	1.00 H	0	23.02	19.23
6	#16740.00	64.59 PK	68.20	-3.61	1.00 H	0	38.29	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	52.01 PK	68.20	-16.19	1.00 V	187	43.10	8.91
2	*5580.00	106.82 PK			1.00 V	187	97.64	9.18
3	*5580.00	91.35 AV			1.00 V	187	82.17	9.18
4	11160.00	60.08 PK	74.00	-13.92	1.00 V	0	40.85	19.23
5	11160.00	39.77 AV	54.00	-14.23	1.00 V	0	20.54	19.23
6	#16740.00	63.22 PK	68.20	-4.98	1.00 V	0	36.92	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.

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

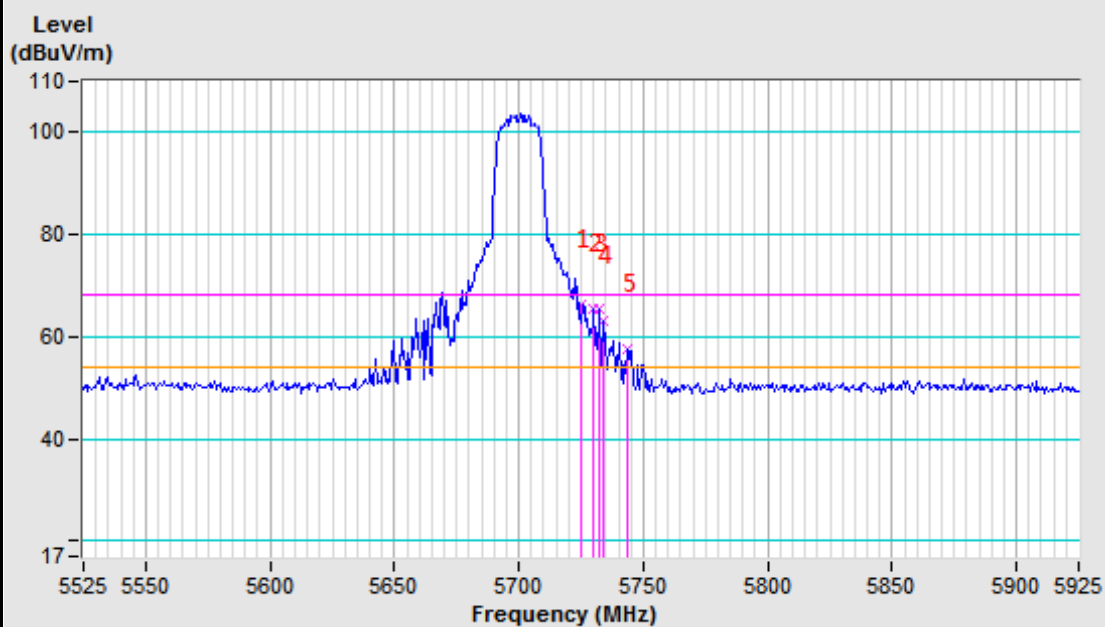
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	102.59 PK			1.00 H	172	93.09	9.50
2	*5700.00	88.17 AV			1.00 H	172	78.67	9.50
3	#5725.00	66.36 PK	68.20	-1.84	1.00 H	172	56.80	9.56
4	#5730.13	65.55 PK	68.20	-2.65	1.00 H	172	55.97	9.58
5	#5732.69	65.64 PK	68.20	-2.56	1.00 H	172	56.06	9.58
6	#5733.97	63.22 PK	68.20	-4.98	1.00 H	172	53.64	9.58
7	#5743.59	57.66 PK	68.20	-10.54	1.00 H	172	48.06	9.60
8	11400.00	60.48 PK	74.00	-13.52	1.00 H	0	40.95	19.53
9	11400.00	41.80 AV	54.00	-12.20	1.00 H	0	22.27	19.53
10	#17100.00	63.47 PK	68.20	-4.73	1.00 H	0	36.27	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	96.96 PK			1.00 V	153	87.46	9.50
2	*5700.00	80.15 AV			1.00 V	153	70.65	9.50
3	#5725.00	64.99 PK	68.20	-3.21	1.00 V	153	55.43	9.56
4	#5727.56	65.04 PK	68.20	-3.16	1.00 V	153	55.47	9.57
5	#5739.10	60.31 PK	68.20	-7.89	1.00 V	153	50.71	9.60
6	#5745.51	54.76 PK	68.20	-13.44	1.00 V	153	45.15	9.61
7	11400.00	59.26 PK	74.00	-14.74	1.00 V	0	39.73	19.53
8	11400.00	38.90 AV	54.00	-15.10	1.00 V	0	19.37	19.53
9	#17100.00	62.25 PK	68.20	-5.95	1.00 V	N/A	35.05	27.20

REMARKS:

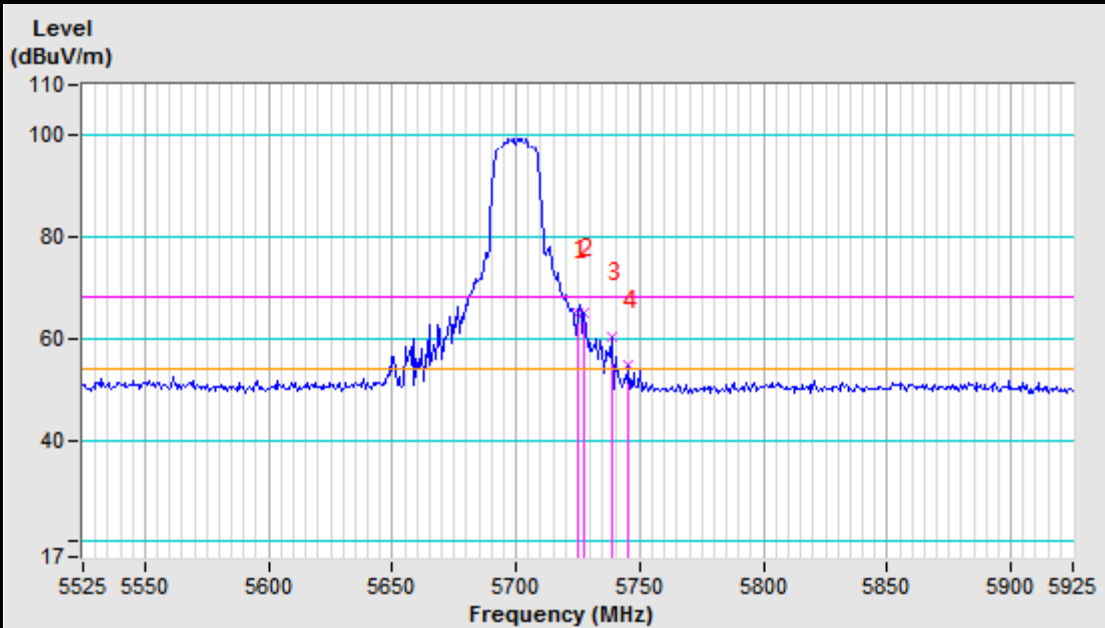
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.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

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	5445.64	60.92 PK	74.00	-13.08	1.00 H	185	52.06	8.86
2	5445.64	43.51 AV	54.00	-10.49	1.00 H	185	34.65	8.86
3	5450.45	61.11 PK	74.00	-12.89	1.00 H	185	52.25	8.86
4	5450.45	43.85 AV	54.00	-10.15	1.00 H	185	34.99	8.86
5	#5460.06	63.78 PK	70.28	-6.50	1.00 H	185	54.89	8.89
6	#5468.72	64.51 PK	68.20	-3.69	1.00 H	185	55.60	8.91
7	#5470.00	66.16 PK	68.20	-2.04	1.00 H	185	57.25	8.91
8	*5510.00	98.22 PK			1.00 H	185	89.23	8.99
9	*5510.00	82.47 AV			1.00 H	185	73.48	8.99
10	11020.00	61.75 PK	74.00	-12.25	1.00 H	0	42.68	19.07
11	11020.00	40.78 AV	54.00	-13.22	1.00 H	0	21.71	19.07
12	#16530.00	65.02 PK	68.20	-3.18	1.00 H	0	39.37	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	5455.90	59.13 PK	74.00	-14.87	1.00 V	220	50.26	8.87
2	5455.90	42.27 AV	54.00	-11.73	1.00 V	220	33.40	8.87
3	#5465.19	60.87 PK	68.20	-7.33	1.00 V	220	51.97	8.90
4	#5469.36	64.04 PK	68.20	-4.16	1.00 V	220	55.13	8.91
5	#5470.00	64.04 PK	68.20	-4.16	1.00 V	220	55.13	8.91
6	*5510.00	93.07 PK			1.00 V	220	84.08	8.99
7	*5510.00	77.24 AV			1.00 V	220	68.25	8.99
8	11020.00	61.20 PK	74.00	-12.80	1.00 V	0	42.13	19.07
9	11020.00	40.30 AV	54.00	-13.70	1.00 V	0	21.23	19.07
10	#16530.00	64.70 PK	68.20	-3.50	1.00 V	0	39.05	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.

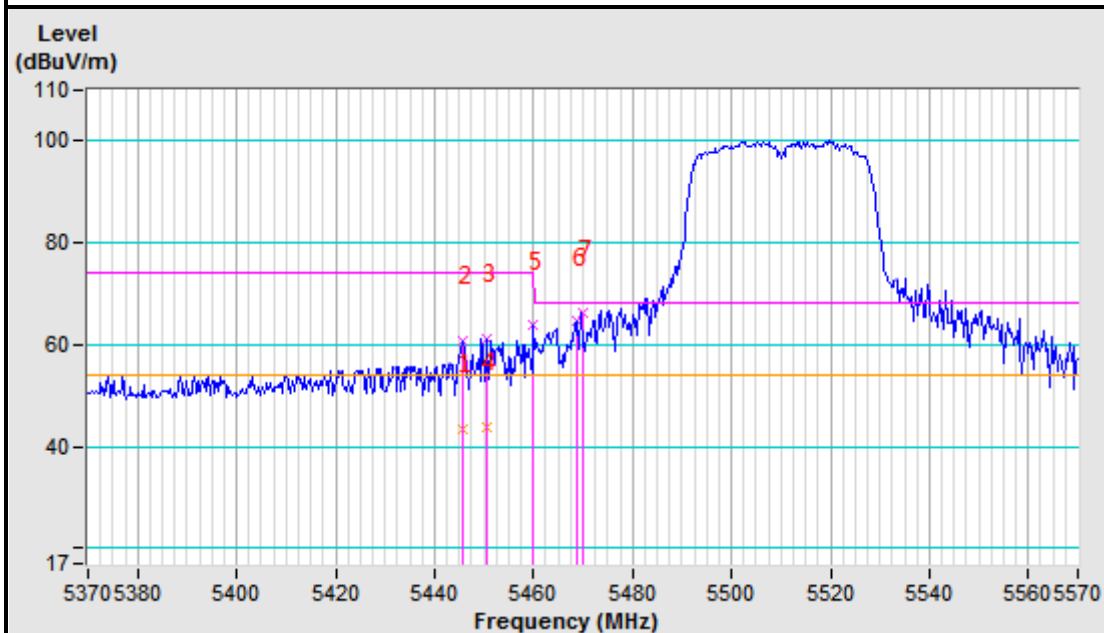


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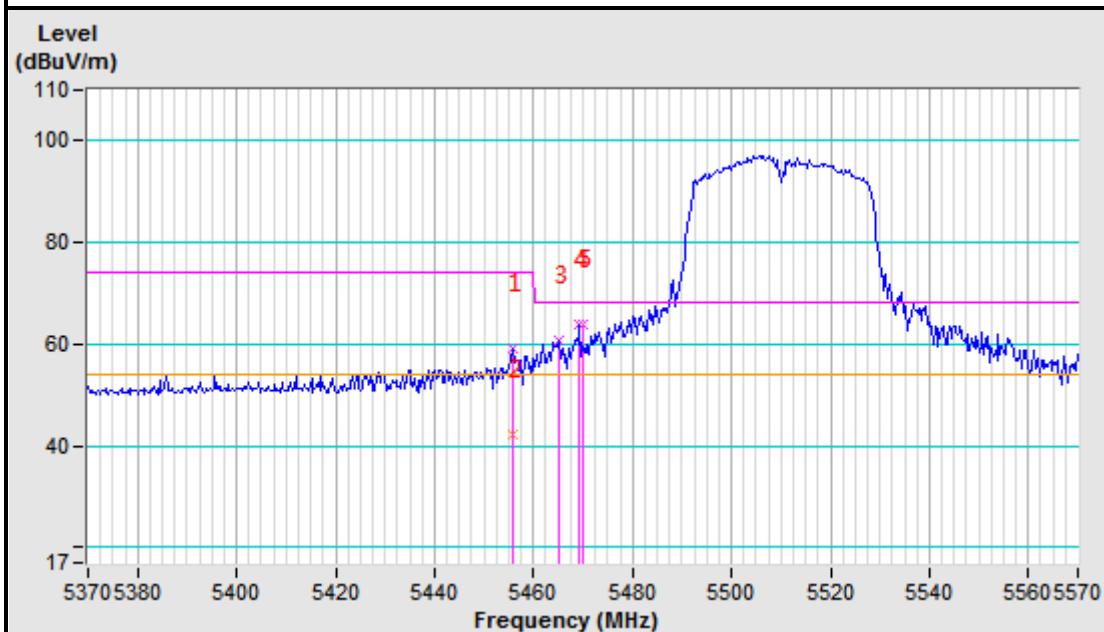
Test Report No.: RF200226N025-4

Band edge Plot

5510MHz Horizontal



5510MHz Vertical



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	63.42 PK	68.20	-4.78	1.00 H	345	54.51	8.91
2	#5500.00	106.32 PK			1.00 H	345	97.35	8.97
3	#5500.00	90.72 AV			1.00 H	345	81.75	8.97
4	11100.00	60.48 PK	74.00	-13.52	1.00 H	0	41.32	19.16
5	11100.00	40.33 AV	54.00	-13.67	1.00 H	0	21.17	19.16
6	#16650.00	64.00 PK	68.20	-4.20	1.00 H	0	37.98	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	58.29 PK	68.20	-9.91	1.00 V	146	49.38	8.91
2	#5500.00	100.27 PK			1.00 V	146	91.30	8.97
3	#5500.00	86.94 AV			1.00 V	146	77.97	8.97
4	11100.00	59.05 PK	74.00	-14.95	1.00 V	0	39.89	19.16
5	11100.00	39.89 AV	54.00	-14.11	1.00 V	0	20.73	19.16
6	#16650.00	63.62 PK	68.20	-4.58	1.00 V	0	37.60	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.

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

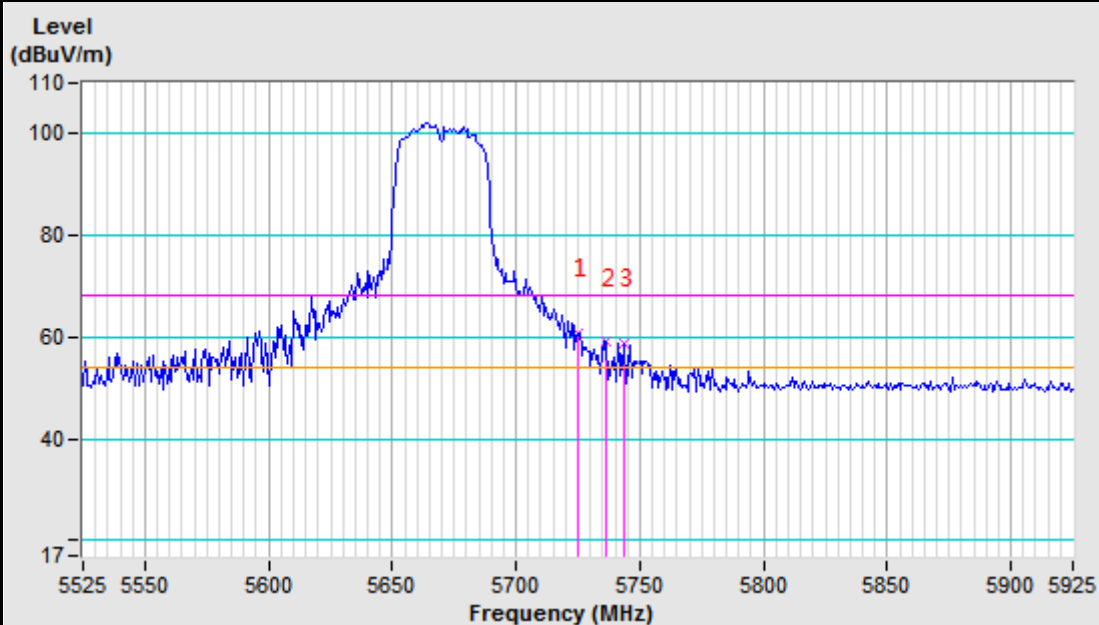
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	104.37 PK			1.00 H	351	94.96	9.41
2	*5670.00	86.85 AV			1.00 H	351	77.44	9.41
3	#5725.00	60.77 PK	68.20	-7.43	1.00 H	351	51.21	9.56
4	#5736.54	59.08 PK	68.20	-9.12	1.00 H	351	49.49	9.59
5	#5743.59	58.74 PK	68.20	-9.46	1.00 H	351	49.14	9.60
6	11340.00	61.09 PK	74.00	-12.91	1.00 H	0	41.63	19.46
7	11340.00	42.30 AV	54.00	-11.70	1.00 H	0	22.84	19.46
8	#17010.00	64.28 PK	68.20	-3.92	1.00 H	0	37.17	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	101.83 PK			1.00 V	144	92.42	9.41
2	*5670.00	83.46 AV			1.00 V	144	74.05	9.41
3	#5725.00	60.19 PK	68.20	-8.01	1.00 V	144	50.63	9.56
4	#5732.69	56.55 PK	68.20	-11.65	1.00 V	144	46.97	9.58
5	#5741.03	57.23 PK	68.20	-10.97	1.00 V	144	47.63	9.60
6	11340.00	60.05 PK	74.00	-13.95	1.00 V	0	40.59	19.46
7	11340.00	39.79 AV	54.00	-14.21	1.00 V	0	20.33	19.46
8	#17010.00	63.80 PK	68.20	-4.40	1.00 V	0	36.69	27.11

REMARKS:

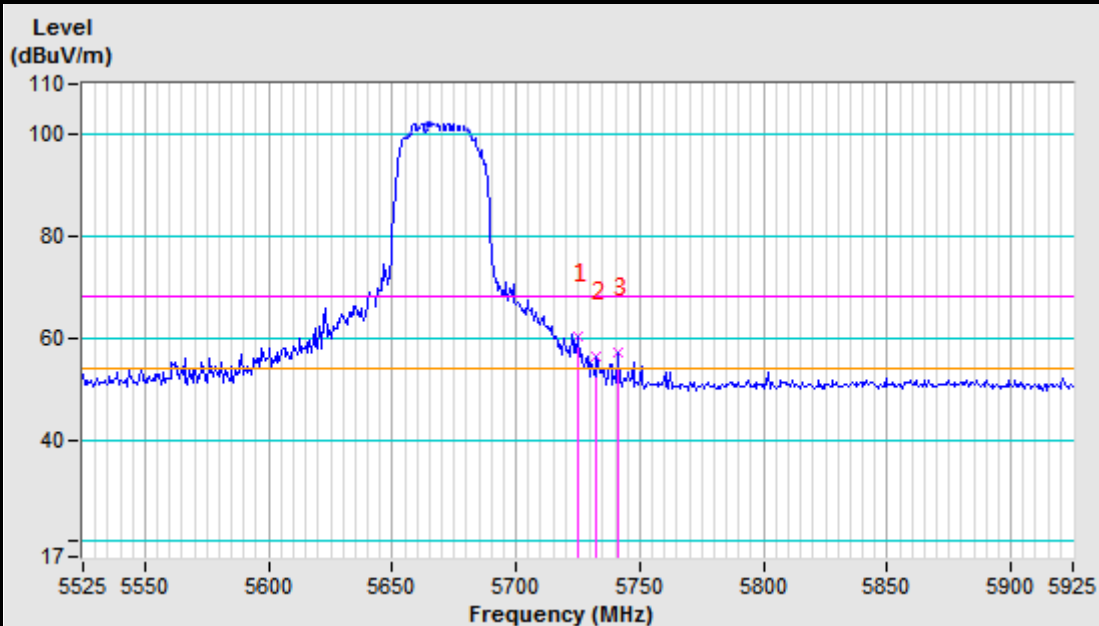
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.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

Band edge Plot

5670MHz Horizontal



5670MHz Vertical



802.11ac 80MHz

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

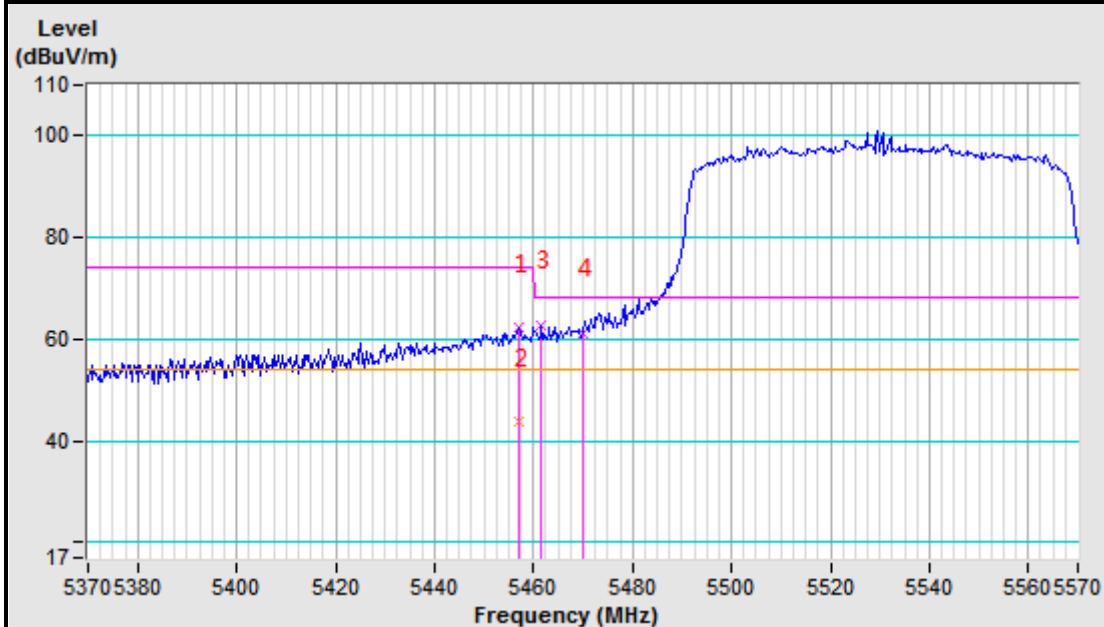
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5456.86	62.23 PK	74.00	-11.77	1.00 H	331	53.36	8.87
2	5456.86	43.65 AV	54.00	-10.35	1.00 H	331	34.78	8.87
3	#5461.67	62.81 PK	68.20	-5.39	1.00 H	331	53.92	8.89
4	#5470.00	61.18 PK	68.20	-7.02	1.00 H	331	52.27	8.91
5	*5530.00	100.01 PK			1.00 H	331	90.96	9.05
6	*5530.00	77.42 AV			1.00 H	331	68.37	9.05
7	11060.00	60.95 PK	74.00	-13.05	1.00 H	0	41.84	19.11
8	11060.00	40.25 AV	54.00	-13.75	1.00 H	0	21.14	19.11
9	#16590.00	63.75 PK	68.20	-4.45	1.00 H	0	37.91	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	5449.81	58.07 PK	74.00	-15.93	1.00 V	128	49.21	8.86
2	5449.81	42.67 AV	54.00	-11.33	1.00 V	128	33.81	8.86
3	5454.62	58.30 PK	74.00	-15.70	1.00 V	128	49.43	8.87
4	5454.62	43.01 AV	54.00	-10.99	1.00 V	128	34.14	8.87
5	#5464.55	58.34 PK	68.20	-9.86	1.00 V	128	49.44	8.90
6	#5468.72	58.88 PK	68.20	-9.32	1.00 V	128	49.97	8.91
7	#5470.00	57.15 PK	68.20	-11.05	1.00 V	128	48.24	8.91
8	*5530.00	92.80 PK			1.00 V	128	83.75	9.05
9	*5530.00	71.06 AV			1.00 V	128	62.01	9.05
10	11060.00	60.33 PK	74.00	-13.67	1.00 V	0	41.22	19.11
11	11060.00	40.10 AV	54.00	-13.90	1.00 V	0	20.99	19.11
12	#16590.00	63.30 PK	68.20	-4.90	1.00 V	0	37.46	25.84

REMARKS:

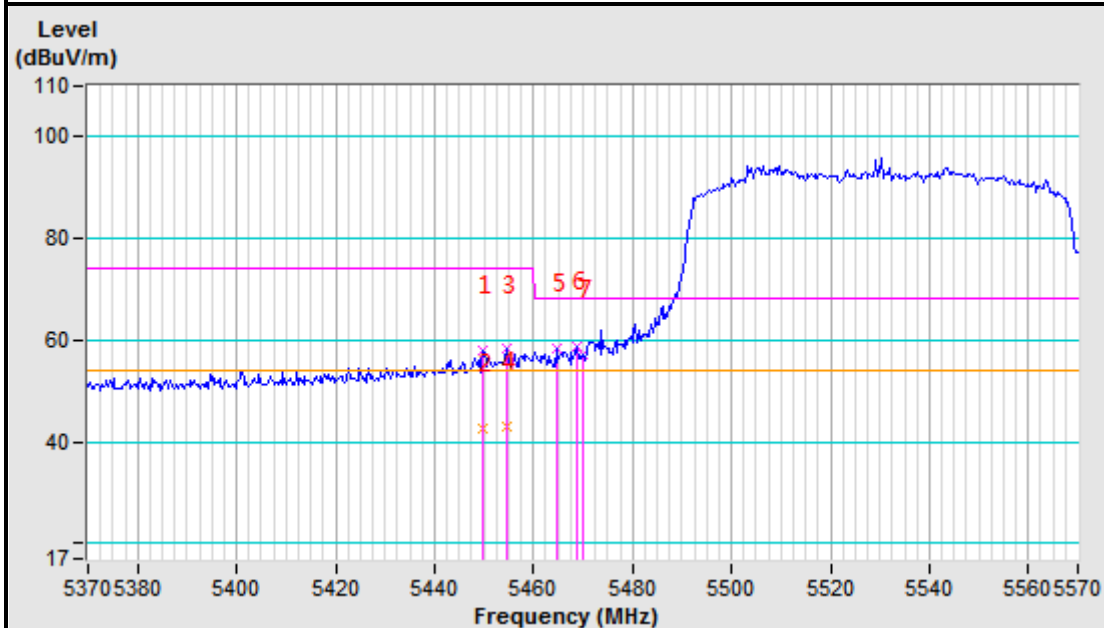
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.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

Band edge Plot

5530MHz Horizontal



5530MHz Vertical



CHANNEL	TX Channel 122	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

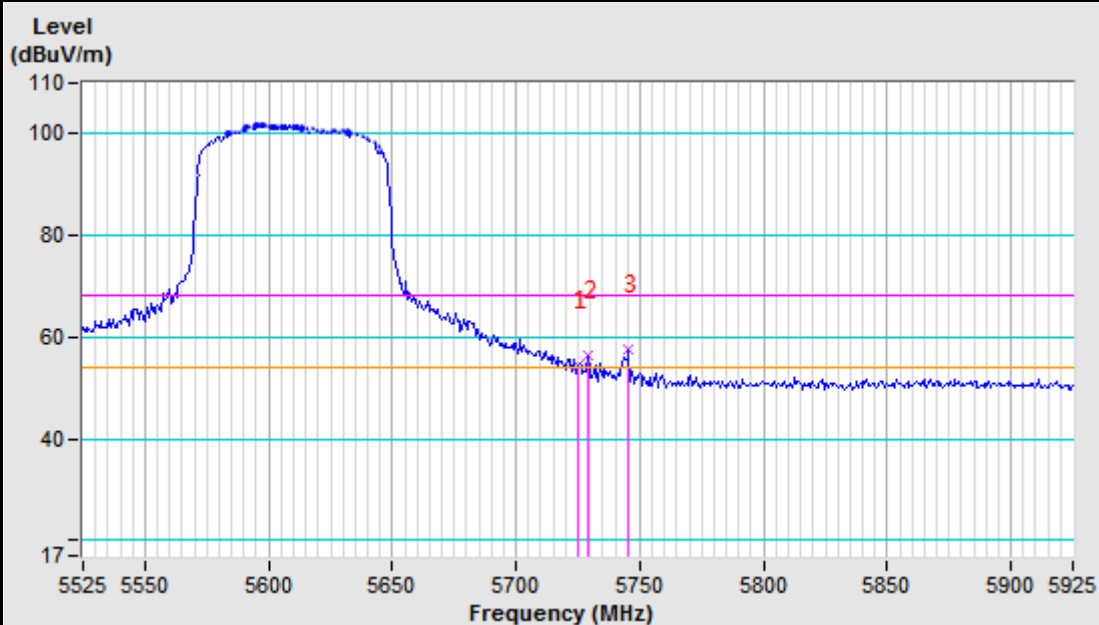
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5610.00	104.57 PK			1.00 H	350	95.31	9.26
2	*5610.00	81.27 AV			1.00 H	350	72.01	9.26
3	#5725.00	54.63 PK	68.20	-13.57	1.00 H	350	45.07	9.56
4	#5728.85	56.51 PK	68.20	-11.69	1.00 H	350	46.94	9.57
5	#5745.51	57.64 PK	68.20	-10.56	1.00 H	350	48.03	9.61
6	11220.00	61.20 PK	74.00	-12.80	1.00 H	0	41.89	19.31
7	11220.00	40.90 AV	54.00	-13.10	1.00 H	0	21.59	19.31
8	#16830.00	63.40 PK	68.20	-4.80	1.00 H	0	36.83	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	96.83 PK			1.00 V	126	87.57	9.26
2	*5610.00	76.29 AV			1.00 V	126	67.03	9.26
3	#5725.00	50.81 PK	68.20	-17.39	1.00 V	126	41.25	9.56
4	11220.00	60.09 PK	74.00	-13.91	1.00 V	0	40.78	19.31
5	11220.00	40.25 AV	54.00	-13.75	1.00 V	0	20.94	19.31
6	#16830.00	63.10 PK	68.20	-5.10	1.00 V	0	36.53	26.57

REMARKS:

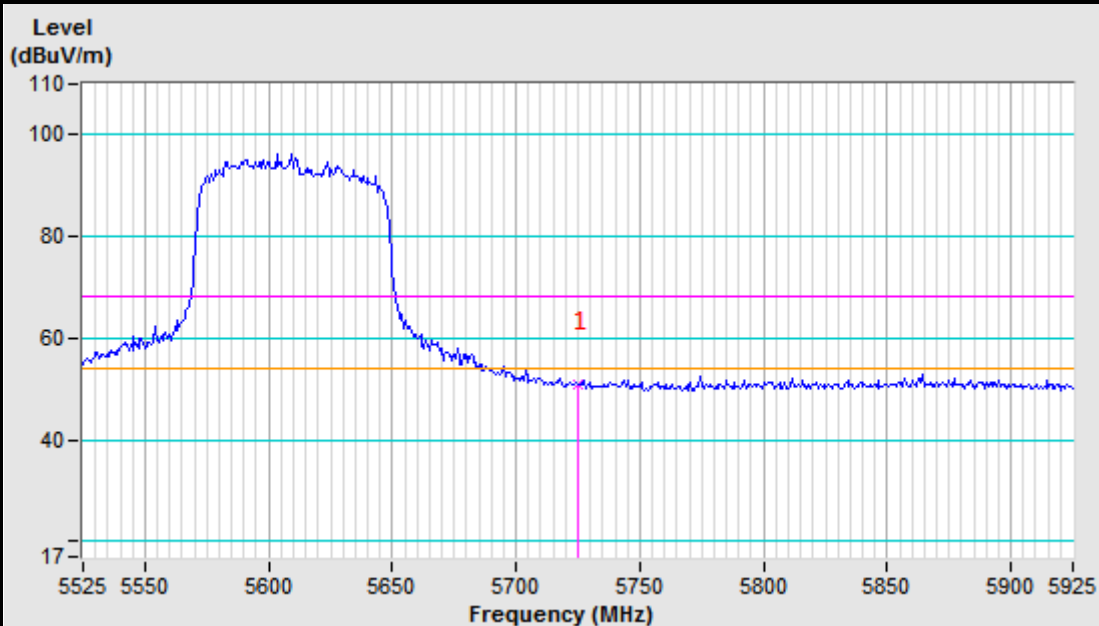
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.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

Band edge Plot

5610MHz Horizontal



5610MHz Vertical



Band 4 (5725-5850MHz):

ABOVE 1GHz DATA

802.11a

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

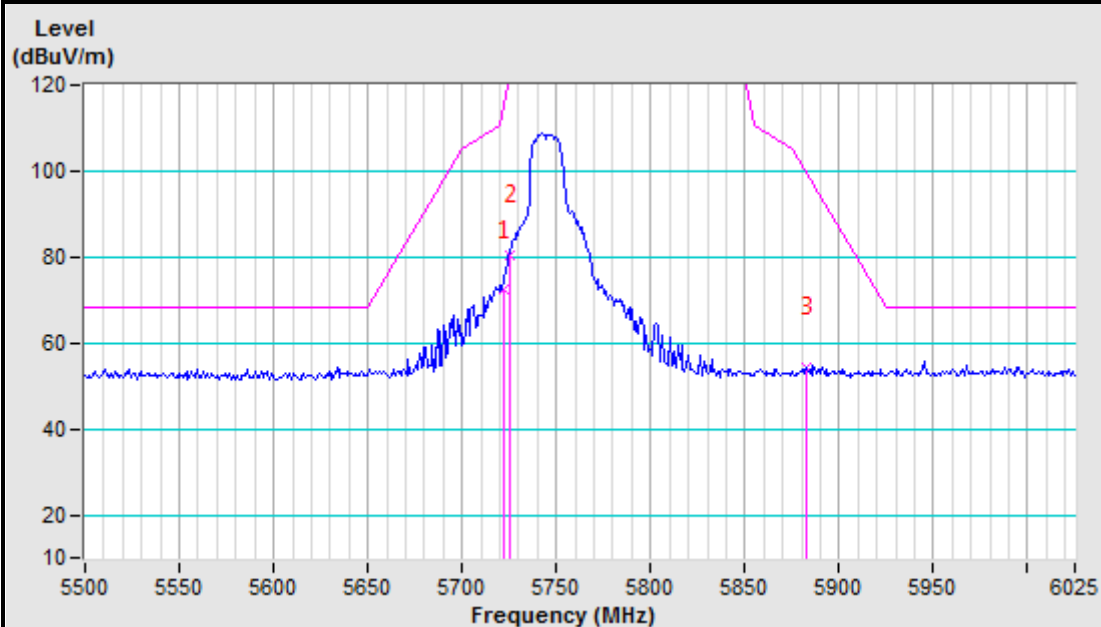
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5721.63	72.32 PK	114.53	-42.21	1.38 H	0	62.77	9.55
2	#5725.00	80.43 PK	122.20	-41.77	1.38 H	0	70.87	9.56
3	*5745.00	108.79 PK			1.00 H	240	99.18	9.61
4	*5745.00	94.84 AV			1.00 H	240	85.23	9.61
5	#5882.81	54.37 PK	99.40	-45.03	1.38 H	0	44.40	9.97
6	11490.00	59.89 PK	74.00	-14.11	1.00 H	0	40.25	19.64
7	11490.00	39.34 AV	54.00	-14.66	1.00 H	0	19.70	19.64
8	#17235.00	63.38 PK	68.20	-4.82	1.00 H	0	36.03	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	#5720.79	67.59 PK	112.61	-45.02	1.00 V	0	58.04	9.55
2	#5725.00	72.29 PK	122.20	-49.91	1.00 V	0	62.73	9.56
3	*5745.00	101.02 PK			1.00 V	0	91.41	9.61
4	*5745.00	88.91 AV			1.00 V	0	79.30	9.61
5	#5865.99	53.81 PK	107.72	-53.91	1.00 V	0	43.88	9.93
6	11490.00	57.11 PK	74.00	-16.89	1.00 V	0	37.47	19.64
7	11490.00	38.04 AV	54.00	-15.96	1.00 V	0	18.40	19.64
8	#17235.00	62.34 PK	68.20	-5.86	1.00 V	0	34.99	27.35

REMARKS:

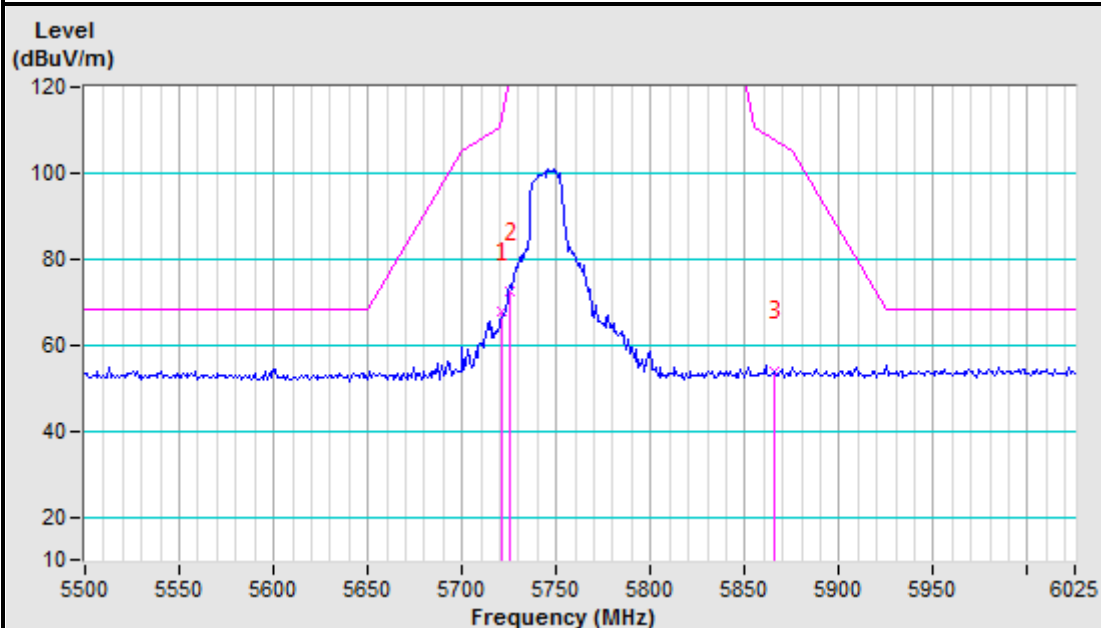
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.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

Band edge Plot

5745MHz Horizontal



5745MHz Vertical



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

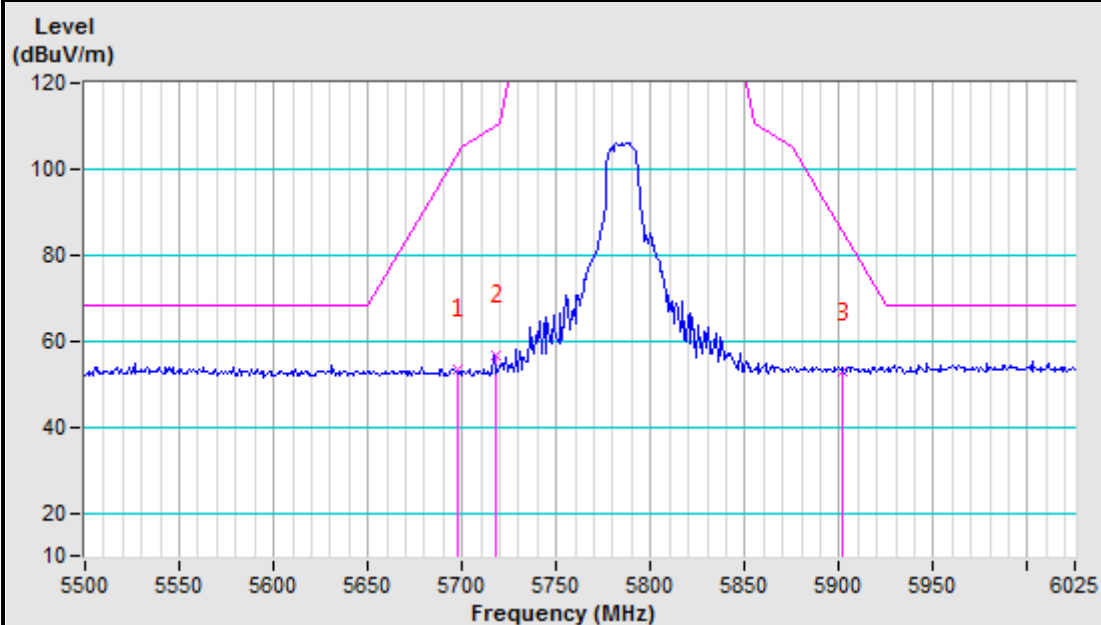
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5697.24	53.41 PK	103.16	-49.75	1.56 H	0	43.92	9.49
2	#5717.43	56.51 PK	110.08	-53.57	1.56 H	0	46.98	9.53
3	*5785.00	107.24 PK			1.00 H	0	97.53	9.71
4	*5785.00	93.58 AV			1.00 H	0	83.87	9.71
5	#5902.16	52.66 PK	85.06	-32.40	1.56 H	0	42.64	10.02
6	11570.00	61.04 PK	74.00	-12.96	1.00 H	0	41.24	19.80
7	11570.00	40.47 AV	54.00	-13.53	1.00 H	0	20.67	19.80
8	#17355.00	64.39 PK	68.20	-3.81	1.00 H	0	36.91	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	#5689.66	53.81 PK	97.58	-43.77	1.00 V	0	44.34	9.47
2	#5713.22	53.39 PK	108.90	-55.51	1.00 V	0	43.86	9.53
3	*5785.00	100.37 PK			1.00 V	260	90.66	9.71
4	*5785.00	86.45 AV			1.00 V	260	76.74	9.71
5	#5894.59	55.65 PK	90.67	-35.02	1.00 V	0	45.65	10.00
6	11570.00	58.06 PK	74.00	-15.94	1.00 V	0	38.26	19.80
7	11570.00	38.30 AV	54.00	-15.70	1.00 V	0	18.50	19.80
8	#17355.00	64.09 PK	68.20	-4.11	1.00 V	0	36.61	27.48

REMARKS:

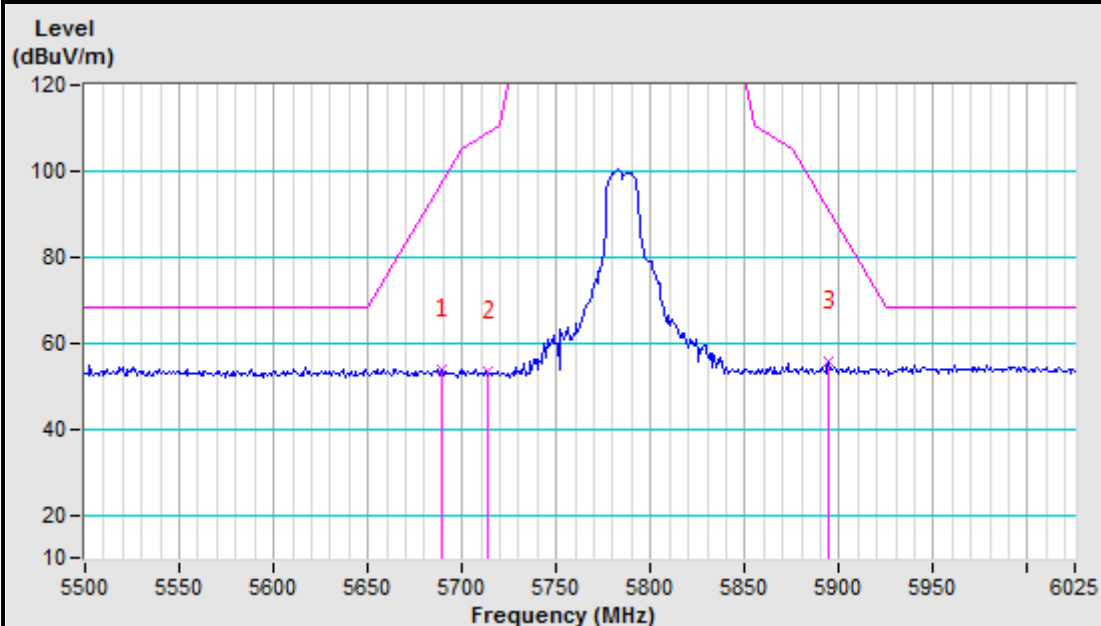
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.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

Band edge Plot

5785MHz Horizontal



5785MHz Vertical



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

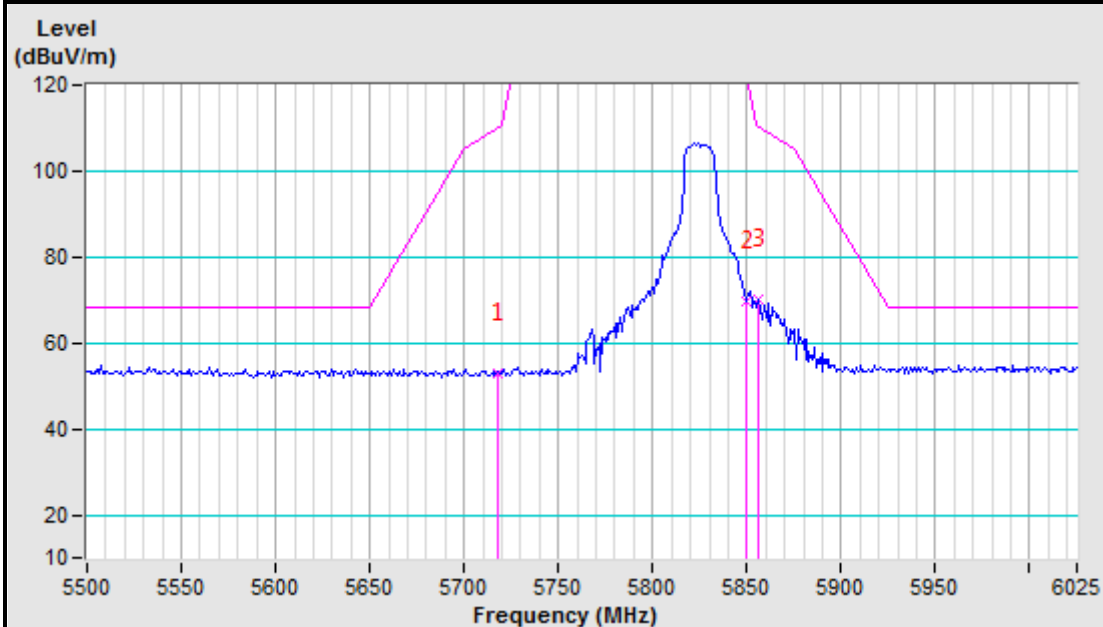
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5717.43	53.08 PK	110.08	-57.00	1.19 H	0	43.55	9.53
2	*5825.00	106.41 PK			1.00 H	25	96.59	9.82
3	*5825.00	92.14 AV			1.00 H	25	82.32	9.82
4	#5850.00	69.80 PK	122.20	-52.40	1.19 H	0	59.92	9.88
5	#5855.89	70.32 PK	110.55	-40.23	1.19 H	0	60.42	9.90
6	11650.00	59.39 PK	74.00	-14.61	1.00 H	0	39.41	19.98
7	11650.00	39.65 AV	54.00	-14.35	1.00 H	0	19.67	19.98
8	#17475.00	63.71 PK	68.20	-4.49	1.00 H	0	36.09	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	#5682.09	53.11 PK	91.99	-38.88	1.00 V	0	43.66	9.45
2	*5825.00	99.76 PK			1.00 V	360	89.94	9.82
3	*5825.00	84.50 AV			1.00 V	360	74.68	9.82
4	#5850.00	65.94 PK	122.20	-56.26	1.00 V	0	56.06	9.88
5	#5855.05	65.17 PK	110.79	-45.62	1.00 V	0	55.27	9.90
6	11650.00	58.72 PK	74.00	-15.28	1.00 V	0	38.74	19.98
7	11650.00	38.50 AV	54.00	-15.50	1.00 V	0	18.52	19.98
8	#17475.00	62.77 PK	68.20	-5.43	1.00 V	0	35.15	27.62

REMARKS:

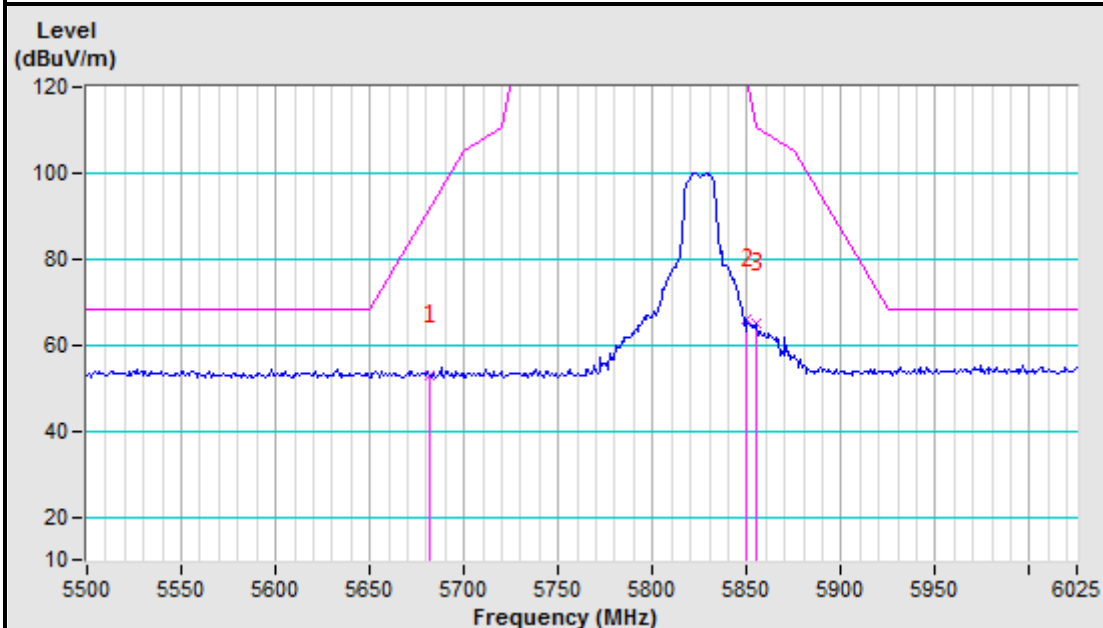
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.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

Band edge Plot

5825MHz Horizontal



5825MHz Vertical



802.11n (20MHz)

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

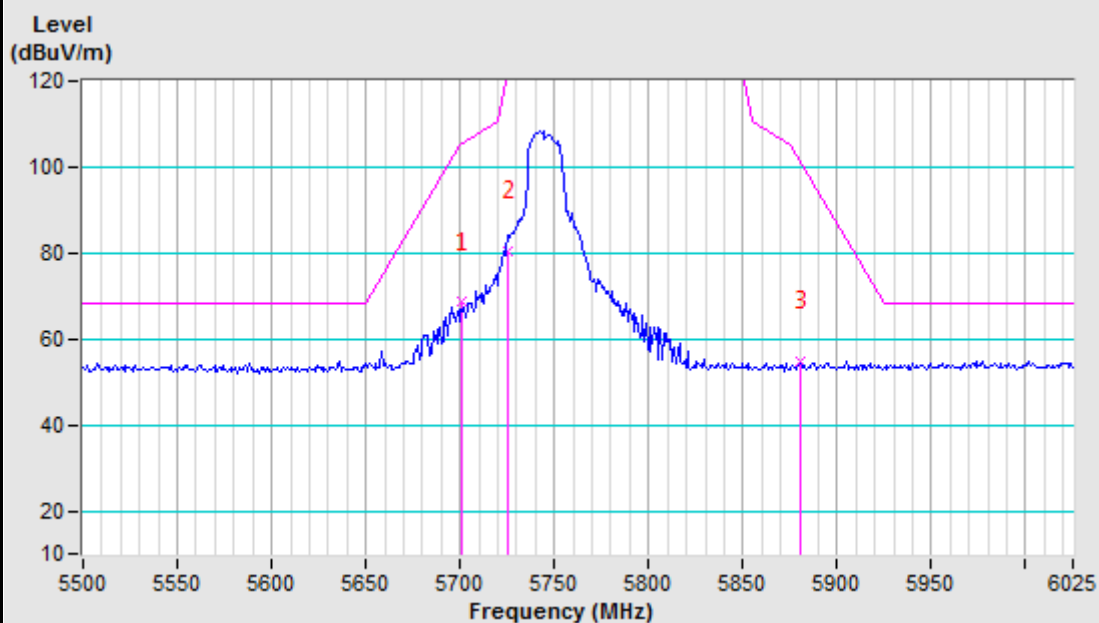
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5700.60	68.59 PK	105.37	-36.78	1.35 H	0	59.09	9.50
2	#5725.00	80.52 PK	122.20	-41.68	1.35 H	0	70.96	9.56
3	*5745.00	108.32 PK			1.00 H	110	98.71	9.61
4	*5745.00	95.11 AV			1.00 H	110	85.50	9.61
5	#5880.29	54.94 PK	101.27	-46.33	1.35 H	0	44.97	9.97
6	11490.00	60.22 PK	74.00	-13.78	1.00 H	0	40.58	19.64
7	11490.00	40.57 AV	54.00	-13.43	1.00 H	0	20.93	19.64
8	#17325.00	64.03 PK	68.20	-4.17	1.00 H	0	36.58	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	#5714.06	66.76 PK	109.14	-42.38	1.08 V	0	57.23	9.53
2	#5725.00	77.07 PK	122.20	-45.13	1.08 V	0	67.51	9.56
3	*5745.00	100.47 PK			1.00 V	30	90.86	9.61
4	*5745.00	87.93 AV			1.00 V	30	78.32	9.61
5	#5891.23	53.37 PK	93.16	-39.79	1.08 V	0	43.38	9.99
6	11490.00	59.81 PK	74.00	-14.19	1.00 V	0	40.17	19.64
7	11490.00	38.79 AV	54.00	-15.21	1.00 V	0	19.15	19.64
8	#17325.00	62.52 PK	68.20	-5.68	1.00 V	0	35.07	27.45

REMARKS:

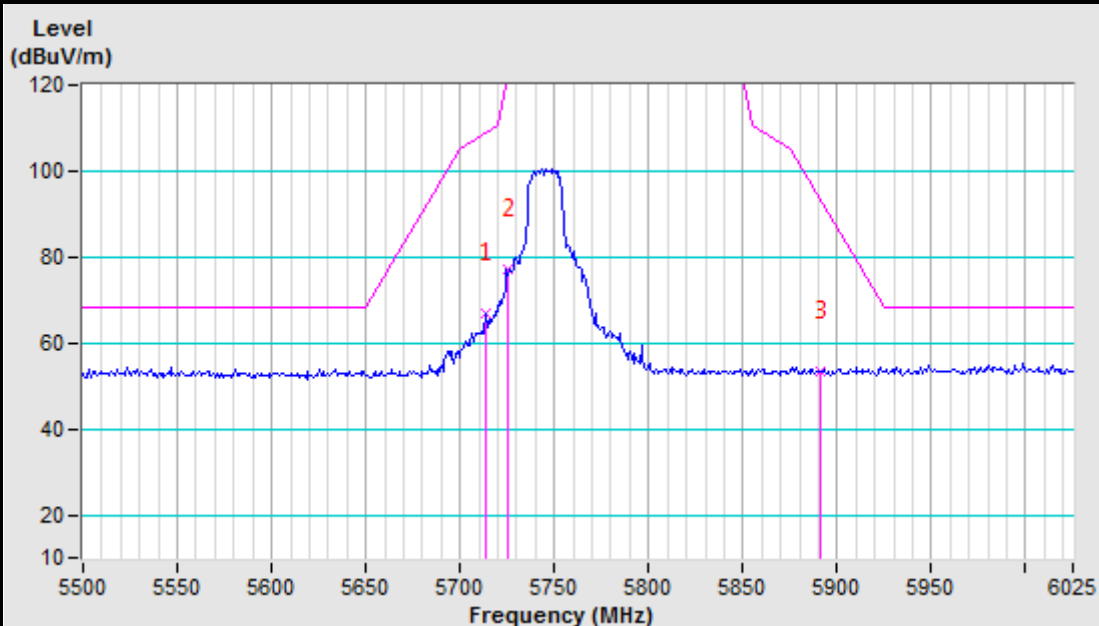
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.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

Band edge Plot

5745MHz Horizontal



5745MHz Vertical



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

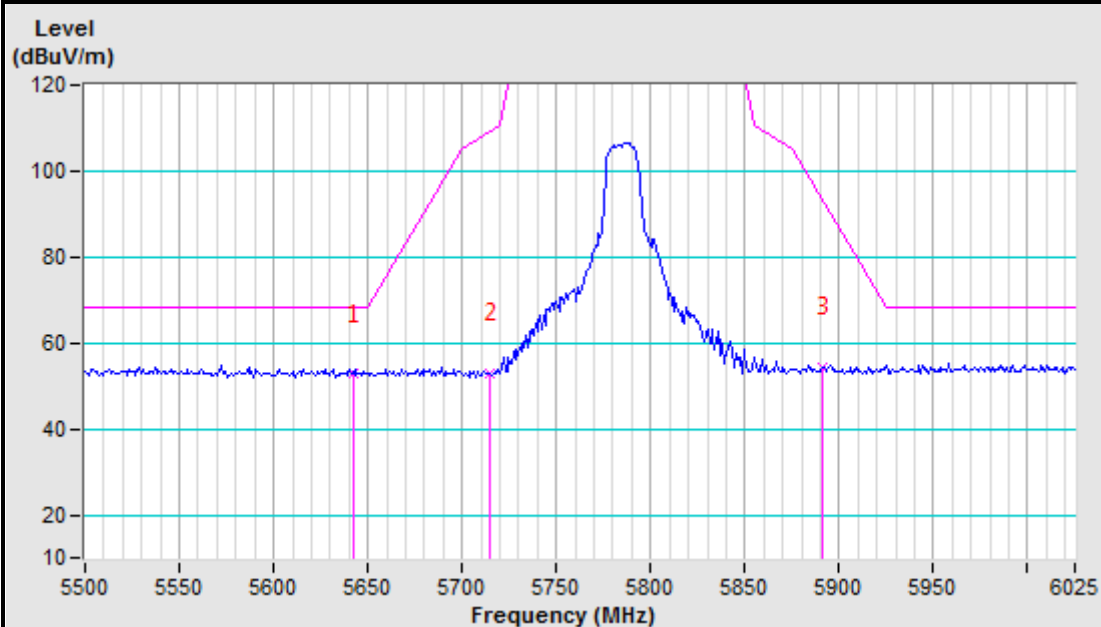
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5642.55	52.73 PK	68.20	-15.47	1.35 H	0	43.39	9.34
2	#5714.90	52.96 PK	109.37	-56.41	1.35 H	0	43.42	9.54
3	*5785.00	106.39 PK			1.00 H	28	96.68	9.71
4	*5785.00	94.28 AV			1.00 H	28	84.57	9.71
5	#5891.23	54.43 PK	93.16	-38.73	1.35 H	0	44.44	9.99
6	11570.00	61.72 PK	74.00	-12.28	1.00 H	0	41.92	19.80
7	11570.00	40.80 AV	54.00	-13.20	1.00 H	0	21.00	19.80
8	#17355.00	64.69 PK	68.20	-3.51	1.00 H	0	37.21	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	#5682.93	53.25 PK	92.61	-39.36	1.00 V	0	43.80	9.45
2	#5705.65	52.40 PK	106.78	-54.38	1.00 V	0	42.89	9.51
3	*5785.00	99.98 PK			1.00 V	275	90.27	9.71
4	*5785.00	86.19 AV			1.00 V	275	76.48	9.71
5	#5864.30	53.46 PK	108.19	-54.73	1.00 V	0	43.54	9.92
6	11570.00	59.18 PK	74.00	-14.82	1.00 V	0	39.38	19.80
7	11570.00	38.11 AV	54.00	-15.89	1.00 V	0	18.31	19.80
8	#17355.00	62.39 PK	68.20	-5.81	1.00 V	0	34.91	27.48

REMARKS:

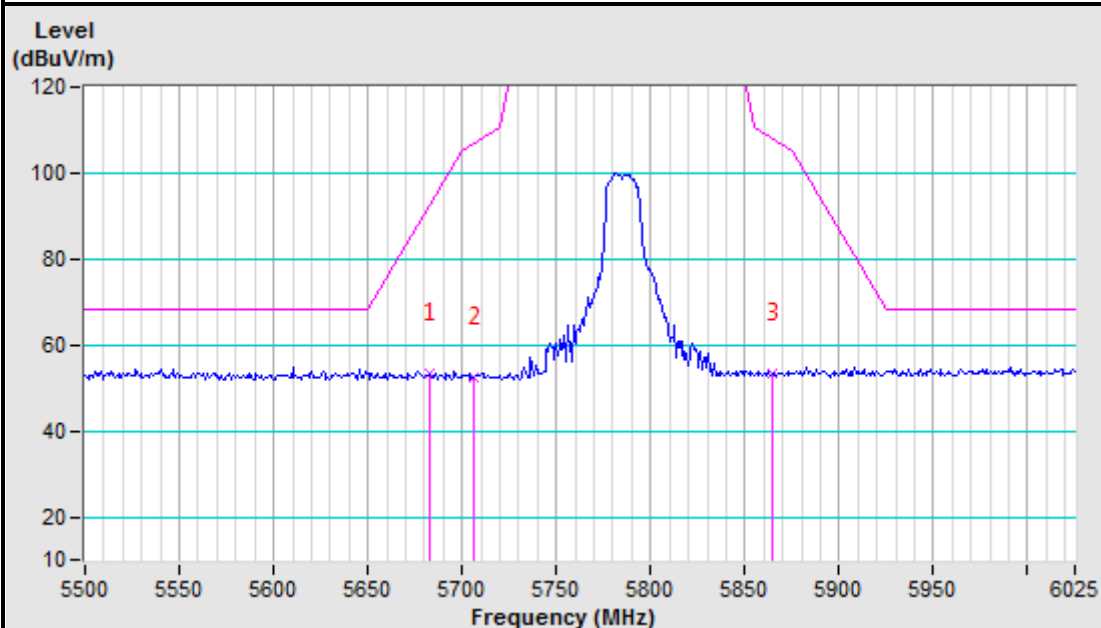
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.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

Band edge Plot

5785MHz Horizontal



5785MHz Vertical



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

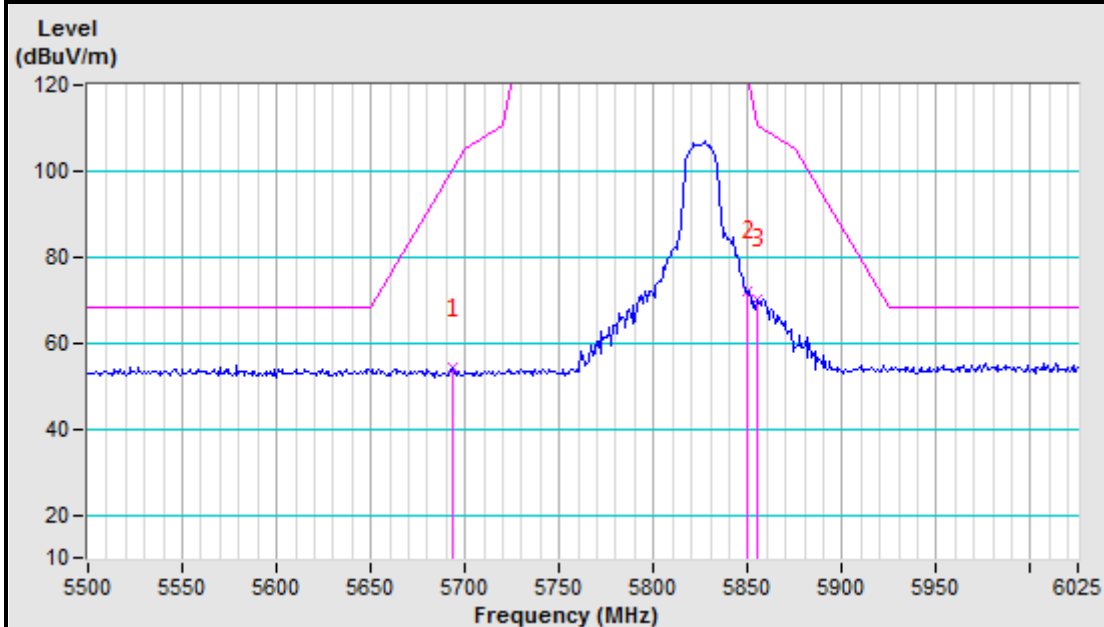
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5693.87	54.06 PK	100.68	-46.62	1.88 H	0	44.58	9.48
2	*5825.00	106.87 PK			1.00 H	223	97.05	9.82
3	*5825.00	94.39 AV			1.00 H	223	84.57	9.82
4	#5850.00	72.09 PK	122.20	-50.11	1.88 H	0	62.21	9.88
5	#5855.05	70.31 PK	110.79	-40.48	1.88 H	0	60.41	9.90
6	11650.00	61.20 PK	74.00	-12.80	1.00 H	0	41.22	19.98
7	11650.00	41.50 AV	54.00	-12.50	1.00 H	0	21.52	19.98
8	#17475.00	64.34 PK	68.20	-3.86	1.00 H	0	36.72	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	#5709.01	52.58 PK	107.73	-55.15	1.00 V	0	43.06	9.52
2	*5825.00	99.31 PK			1.00 V	144	89.49	9.82
3	*5825.00	85.97 AV			1.00 V	144	76.15	9.82
4	#5850.00	62.10 PK	122.20	-60.10	1.00 V	0	52.22	9.88
5	#5852.52	65.53 PK	116.44	-50.91	1.00 V	0	55.64	9.89
6	11650.00	60.03 PK	74.00	-13.97	1.00 V	0	40.05	19.98
7	11650.00	39.20 AV	54.00	-14.80	1.00 V	0	19.22	19.98
8	#17475.00	62.95 PK	68.20	-5.25	1.00 V	0	35.33	27.62

REMARKS:

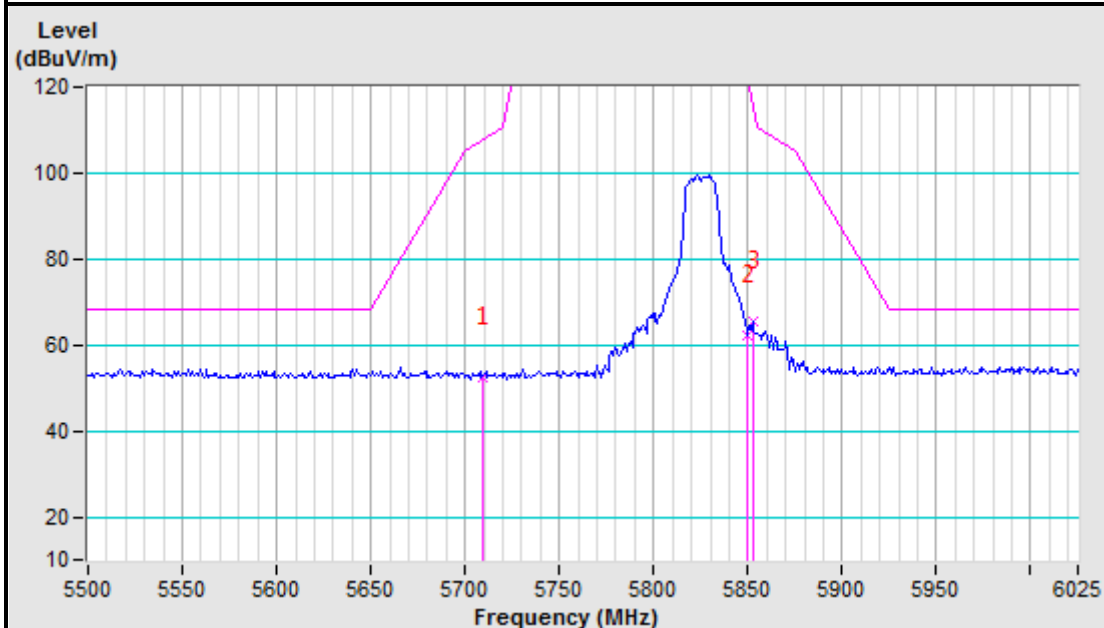
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.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

Band edge Plot

5825MHz Horizontal



5825MHz Vertical



802.11n (40MHz)

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

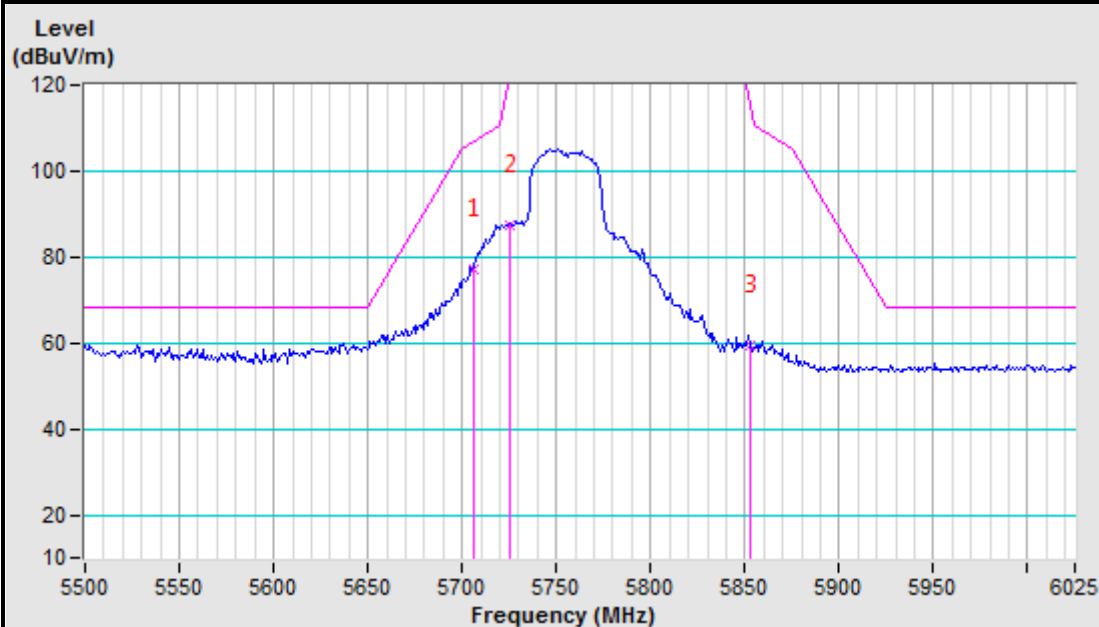
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5705.65	77.25 PK	106.78	-29.53	1.26 H	0	67.74	9.51
2	#5725.00	87.54 PK	122.20	-34.66	1.26 H	0	77.98	9.56
3	*5755.00	105.08 PK			1.00 H	0	95.44	9.64
4	*5755.00	87.45 AV			1.00 H	0	77.81	9.64
5	#5853.37	59.47 PK	114.53	-55.06	1.26 H	0	49.58	9.89
6	#15100.00	60.59 PK	68.20	-7.61	1.00 H	0	36.46	24.13
7	#15100.00	40.58 AV	54.00	-13.42	1.00 H	0	16.45	24.13
8	#17265.00	64.36 PK	68.20	-3.84	1.00 H	0	36.98	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	#5708.17	70.24 PK	107.49	-37.25	1.00 V	0	60.73	9.51
2	#5725.00	80.49 PK	122.20	-41.71	1.00 V	0	70.93	9.56
3	*5755.00	98.13 PK			1.00 V	190	88.49	9.64
4	*5755.00	81.25 AV			1.00 V	190	71.61	9.64
5	#5856.73	55.48 PK	110.31	-54.83	1.00 V	0	45.57	9.91
6	11510.00	59.36 PK	74.00	-14.64	1.00 V	0	39.69	19.67
7	11510.00	38.70 AV	54.00	-15.30	1.00 V	0	19.03	19.67
8	#17265.00	63.64 PK	68.20	-4.56	1.00 V	0	36.26	27.38

REMARKS:

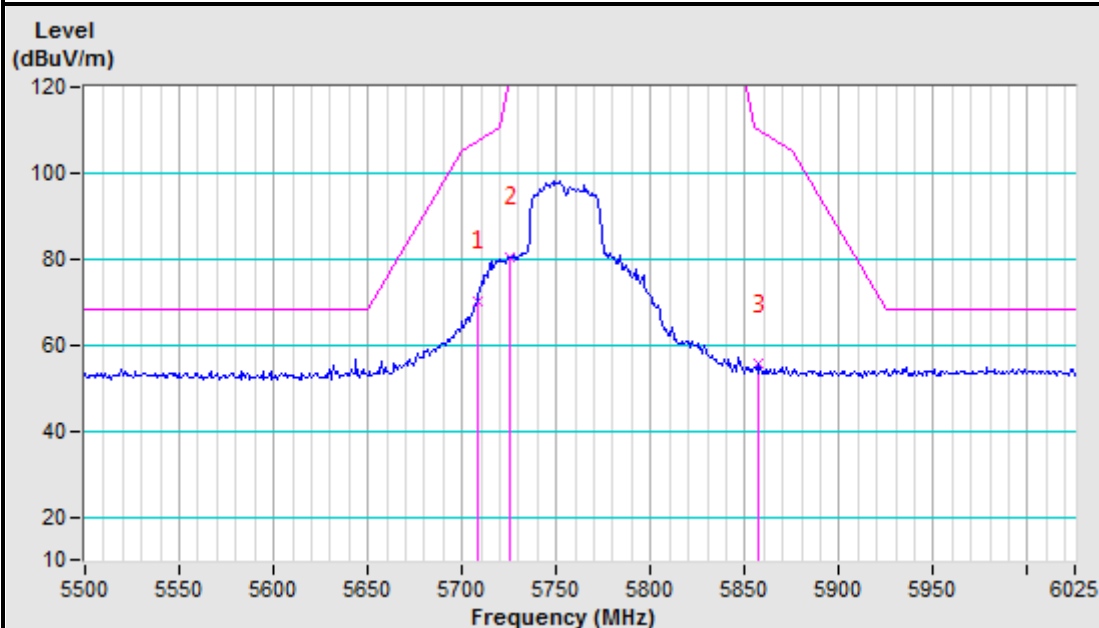
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.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

Band edge Plot

5755MHz Horizontal



5755MHz Vertical



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

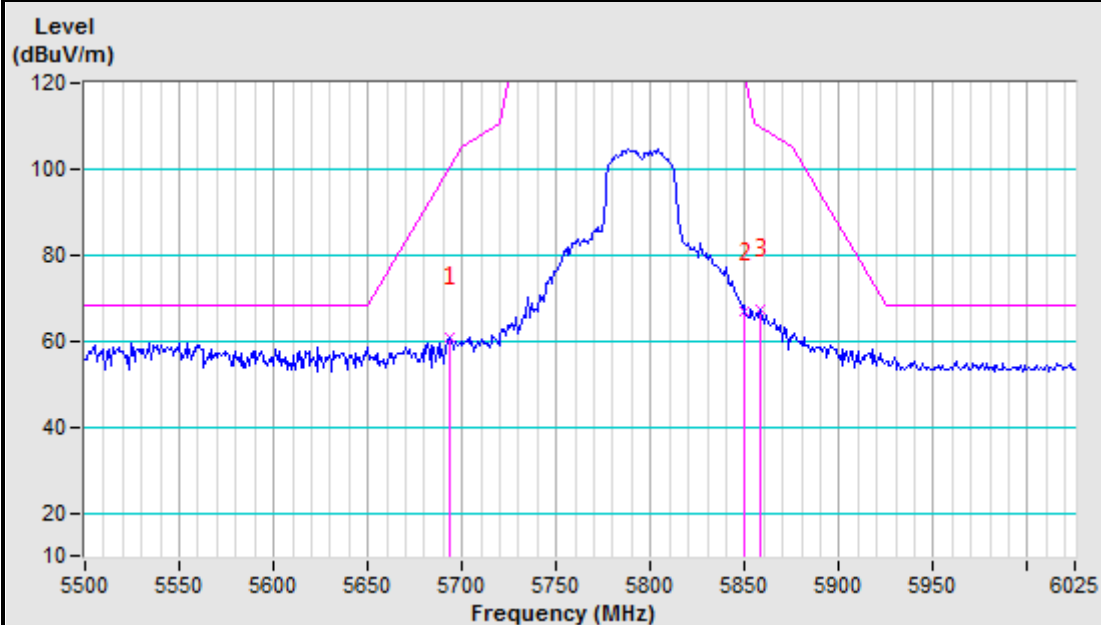
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5693.87	60.72 PK	100.68	-39.96	1.35 H	0	51.24	9.48
2	*5795.00	104.68 PK			1.00 H	360	94.93	9.75
3	*5795.00	86.63 AV			1.00 H	360	76.88	9.75
4	#5850.00	66.70 PK	122.20	-55.50	1.35 H	0	56.82	9.88
5	#5858.41	67.54 PK	109.84	-42.30	1.35 H	0	57.63	9.91
6	11590.00	60.50 PK	74.00	-13.50	1.00 H	0	40.66	19.84
7	11590.00	39.70 AV	54.00	-14.30	1.00 H	0	19.86	19.84
8	#17385.00	63.48 PK	68.20	-4.72	1.00 H	0	35.96	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	#5714.90	56.45 PK	109.37	-52.92	1.00 V	0	46.91	9.54
2	*5795.00	98.47 PK			1.00 V	255	88.72	9.75
3	*5795.00	81.74 AV			1.00 V	255	71.99	9.75
4	#5850.00	60.09 PK	122.20	-62.11	1.00 V	0	50.21	9.88
5	#5860.94	60.25 PK	109.14	-48.89	1.00 V	0	50.33	9.92
6	11590.00	60.01 PK	74.00	-13.99	1.00 V	0	40.17	19.84
7	11590.00	39.60 AV	54.00	-14.40	1.00 V	0	19.76	19.84
8	#17385.00	63.70 PK	68.20	-4.50	1.00 V	0	36.18	27.52

REMARKS:

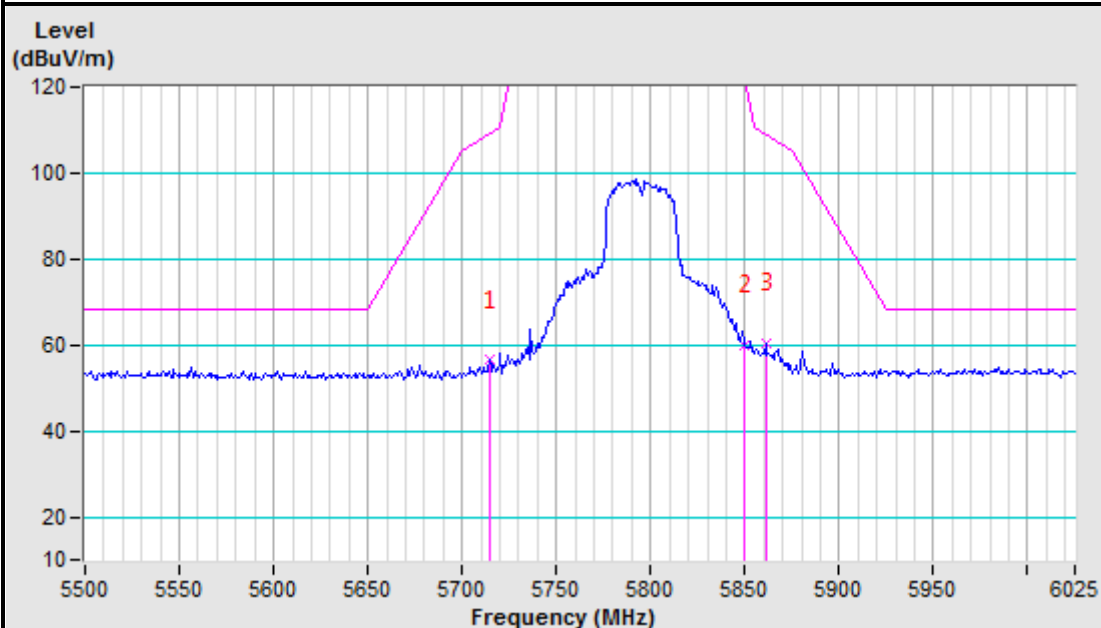
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.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

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	#5725.00	81.76 PK	122.20	-40.44	1.24 H	0	72.20	9.56
2	*5775.00	102.03 PK			1.00 H	225	92.34	9.69
3	*5775.00	80.40 AV			1.00 H	225	70.71	9.69
4	#5850.00	76.53 PK	122.20	-45.67	1.24 H	0	66.65	9.88
5	#5853.37	78.33 PK	114.53	-36.20	1.24 H	0	68.44	9.89
6	11550.00	60.85 PK	74.00	-13.15	1.00 H	0	41.09	19.76
7	11550.00	40.50 AV	54.00	-13.50	1.00 H	0	20.74	19.76
8	#17325.00	64.06 PK	68.20	-4.14	1.00 H	0	36.61	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	#5721.63	77.41 PK	114.53	-37.12	1.03 V	0	67.86	9.55
2	#5725.00	76.72 PK	122.20	-45.48	1.03 V	0	67.16	9.56
3	*5775.00	95.94 PK			1.00 V	0	86.25	9.69
4	*5775.00	73.96 AV			1.00 V	0	64.27	9.69
5	#5850.00	70.14 PK	122.20	-52.06	1.03 V	0	60.26	9.88
6	11550.00	60.05 PK	74.00	-13.95	1.00 V	0	40.29	19.76
7	11550.00	39.60 AV	54.00	-14.40	1.00 V	0	19.84	19.76
8	#17325.00	63.40 PK	68.20	-4.80	1.00 V	0	35.95	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.

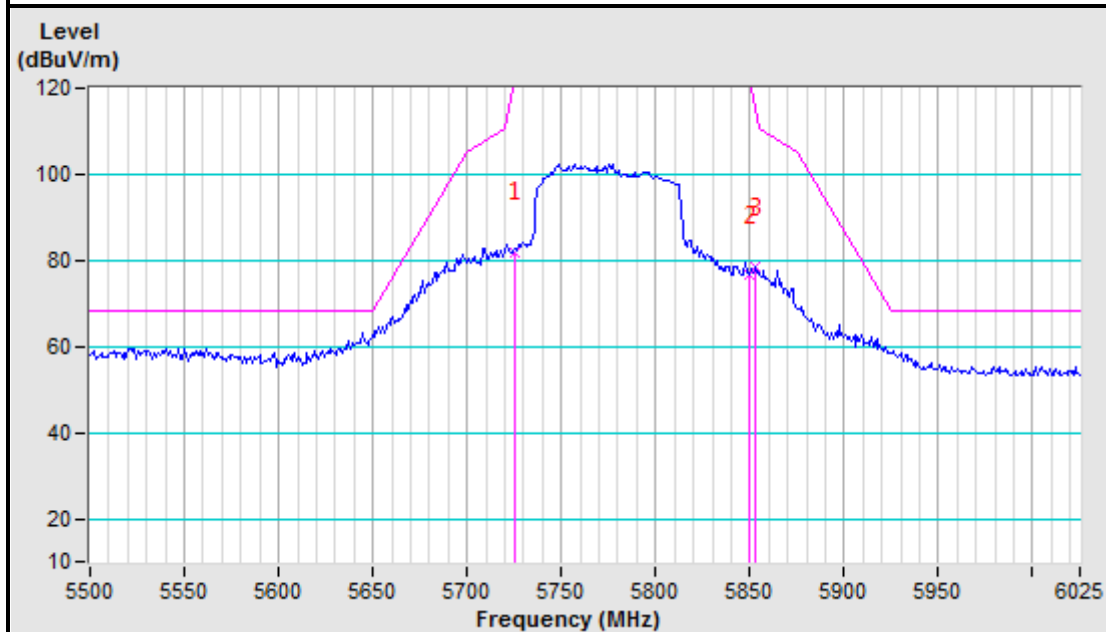


BUREAU
VERITAS

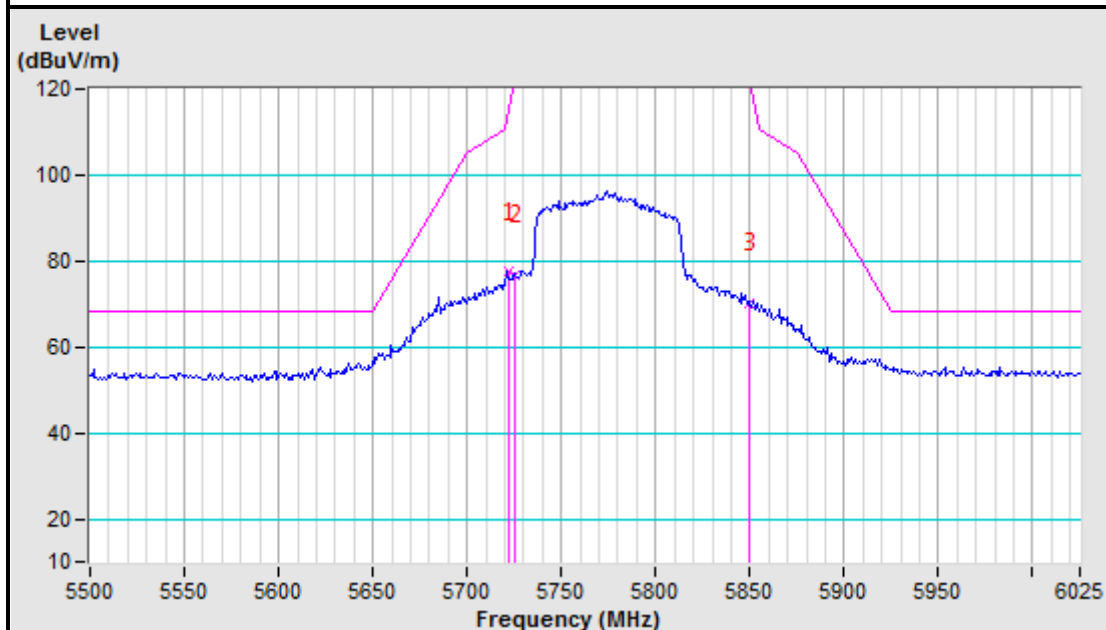
Test Report No.: RF200226N025-4

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 (dB μ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

- 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. 18,20	Mar. 17,21
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Mar. 18,20	Mar. 17,21
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Mar. 18,20	Mar. 17,21
Voltage probe	SCHWARZBECK	TK 9421	TK 9421-176	Sep. 24,19	Sep. 23,20
Test software	ADT	ADT_Conc_V7.3.7	N/A	N/A	N/A

NOTE:

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. Test date: Apr. 02, 2020

3.2.3 TEST PROCEDURES

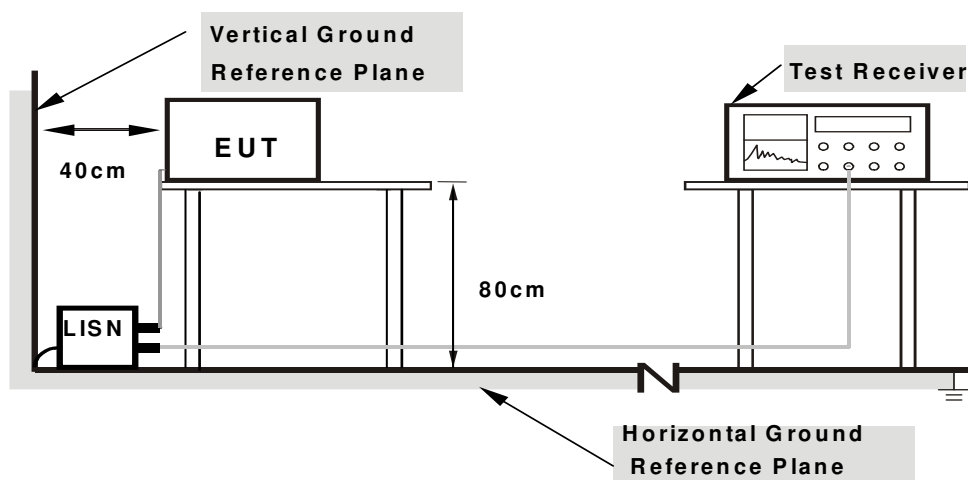
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance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

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

3.2.4 DEVIATION FROM TEST STANDARD

No deviation.

3.2.5 TEST SETUP



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

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

3.2.6 EUT OPERATING CONDITIONS

Same as 3.1.7

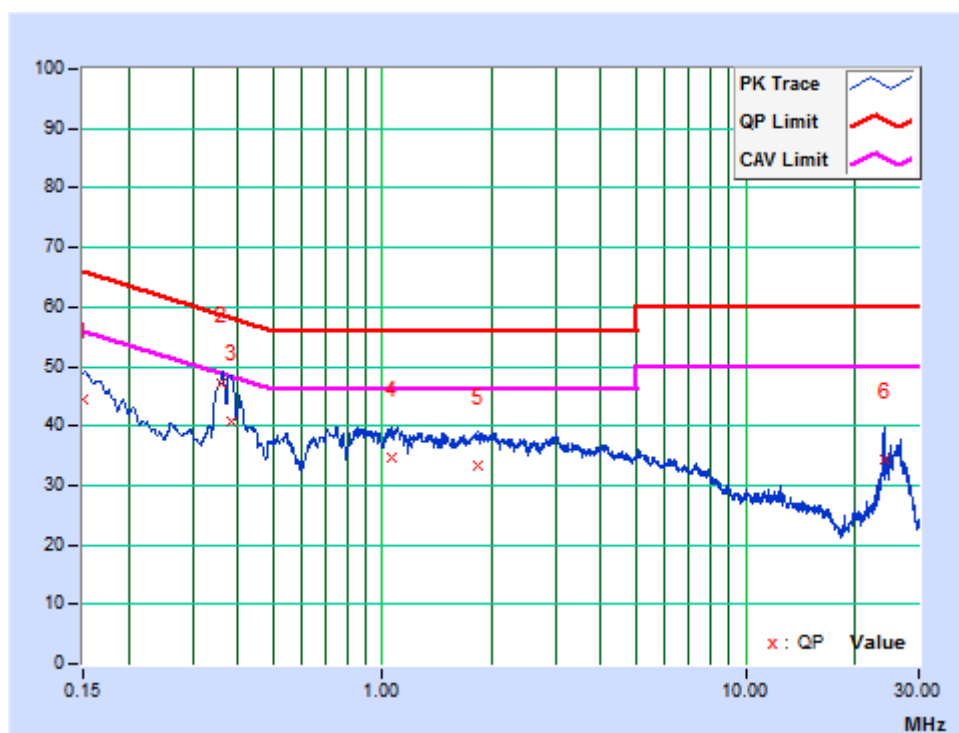
3.2.7 TEST RESULTS

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	34.14	20.71	44.35	30.92	66.00	56.00	-21.65	-25.08
2	0.36101	10.22	36.87	30.23	47.09	40.45	58.71	48.71	-11.62	-8.26
3	0.38260	10.22	30.39	28.63	40.61	38.85	58.22	48.22	-17.61	-9.37
4	1.05675	10.24	24.50	5.93	34.74	16.17	56.00	46.00	-21.26	-29.83
5	1.84425	10.22	23.08	12.38	33.30	22.60	56.00	46.00	-22.70	-23.40
6	24.03825	10.33	24.18	10.31	34.51	20.64	60.00	50.00	-25.49	-29.36

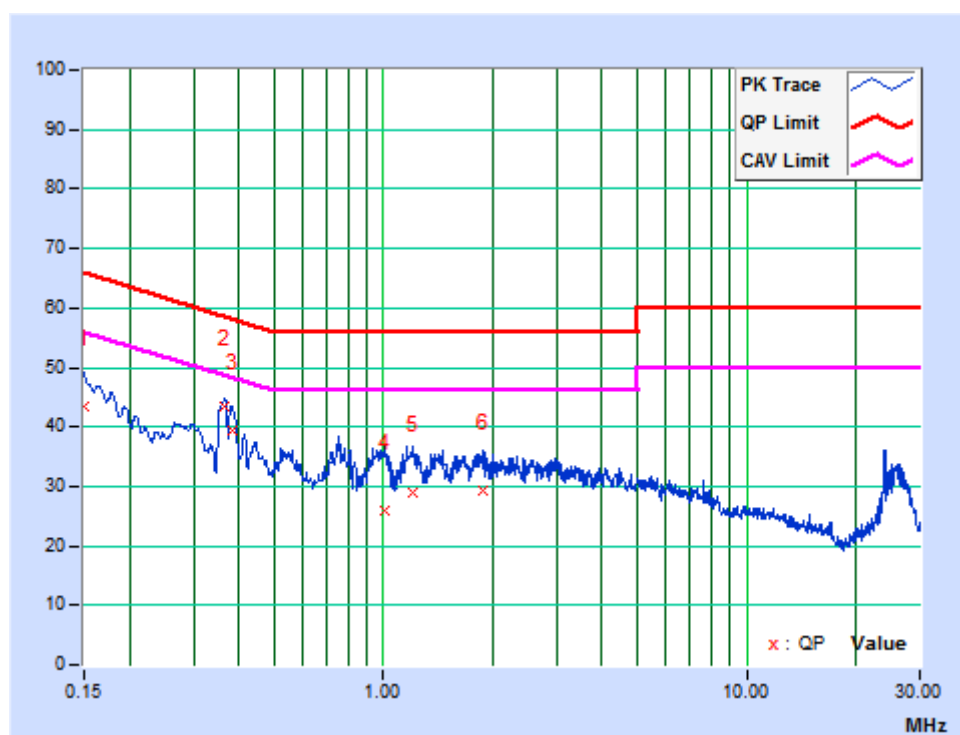
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. The emission levels of other frequencies were very low against the limit.
 3. Margin value = Emission level - Limit value
 4. Correction factor = Insertion loss + Cable loss
 5. Emission Level = Correction Factor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



PHASE	Neutral	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.01	33.44	19.57	43.45	29.58	66.00	56.00	-22.55	-26.42
2	0.36485	10.02	33.40	28.58	43.42	38.60	58.62	48.62	-15.20	-10.02
3	0.38175	10.02	29.36	10.22	39.38	20.24	58.24	48.24	-18.86	-28.00
4	1.00950	10.03	15.91	7.66	25.94	17.69	56.00	46.00	-30.06	-28.31
5	1.20340	10.03	19.03	8.32	29.06	18.35	56.00	46.00	-26.94	-27.65
6	1.87575	10.01	19.17	11.35	29.18	21.36	56.00	46.00	-26.82	-24.64

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



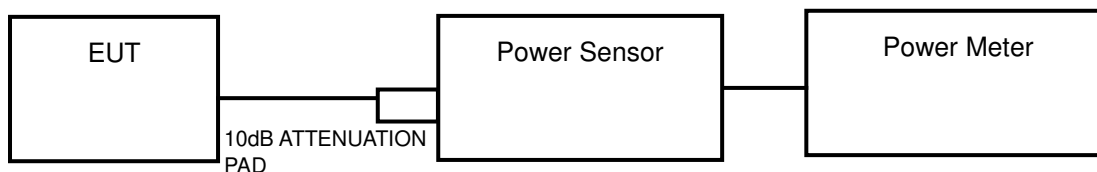
3.3 TRANSMIT POWER MEASUREMENT

3.3.1 LIMITS OF TRANSMIT POWER MEASUREMENT

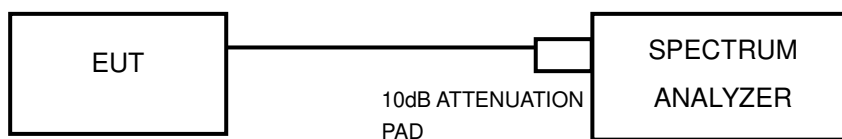
Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Mobile and Portable client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

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

3.3.2 TEST SETUP



FOR 6/26dB BANDWIDTH



3.3.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Power Sensor	Keysight	U2021XA	MY55060016	May 22,19	May 21,20
Power Sensor	Keysight	U2021XA	MY55060018	May 22,19	May 21,20
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
BLUETOOTH TESTER	Rohde&Schwarz	CBT32	100811	May 20,19	May 19,20
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. Test date: Mar. 19, 2020~ Apr. 22, 2020

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	13.54	22.594	24.00	PASS
40	5200	13.85	24.266	24.00	PASS
48	5240	13.94	24.774	24.00	PASS
52	5260	13.09	20.37	24.00	PASS
60	5300	13.59	22.856	24.00	PASS
64	5320	12.65	18.408	24.00	PASS
100	5500	13.59	22.856	24.00	PASS
116	5580	13.42	21.979	24.00	PASS
140	5700	14.77	29.992	24.00	PASS
149	5745	12.35	17.179	30.00	PASS
157	5785	12.86	19.32	30.00	PASS
165	5825	12.92	19.588	30.00	PASS

Note:

For 5260 ~ 5320MHz, 5500 ~ 5700MHz

1. $11\text{dBm} + 10\log(21.66) = 24.36\text{ dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.42) = 24.31\text{ dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(22.06) = 24.44\text{ dBm} > 24\text{dBm}$
4. $11\text{dBm} + 10\log(27.50) = 25.39\text{ dBm} > 24\text{dBm}$
5. $11\text{dBm} + 10\log(20.41) = 24.10\text{ dBm} > 24\text{dBm}$
6. $11\text{dBm} + 10\log(25.94) = 25.14\text{ dBm} > 24\text{dBm}$

802.11n (20MHz)

CHANNEL NUMBER	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	AVG. CONDUCTED POWER (mW)	LIMIT (dBm)	PASS /FAIL
36	5180	13.28	21.281	24.00	PASS
40	5200	13.54	22.594	24.00	PASS
48	5240	13.57	22.751	24.00	PASS
52	5260	13.63	23.067	24.00	PASS
60	5300	13.36	21.677	24.00	PASS
64	5320	13.90	24.547	24.00	PASS
100	5500	14.04	25.351	24.00	PASS
116	5580	13.19	20.845	24.00	PASS
140	5700	14.55	28.51	24.00	PASS
149	5745	13.83	24.155	30.00	PASS
157	5785	13.16	20.701	30.00	PASS
165	5825	13.54	22.594	30.00	PASS

Note:

For 5260 ~ 5320MHz, 5500 ~ 5700MHz

11dBm + 10log (21.61) = 24.35 dBm > 24dBm

11dBm + 10log (21.23) = 24.27 dBm > 24dBm

11dBm + 10log (23.05) = 24.63 dBm > 24dBm

11dBm + 10log (24.68) = 24.93 dBm > 24dBm

11dBm + 10log (21.05) = 24.23 dBm > 24dBm

11dBm + 10log (25.99) = 25.15 dBm > 24dBm

802.11n (40MHz)

CHANNEL NUMBER	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	AVG. CONDUCTED POWER (mW)	LIMIT (dBm)	PASS /FAIL
38	5190	13.32	21.478	24.00	PASS
46	5230	13.58	22.803	24.00	PASS
54	5270	13.13	20.559	24.00	PASS
62	5310	13.07	20.277	24.00	PASS
102	5510	13.16	20.701	24.00	PASS
110	5550	14.10	25.704	24.00	PASS
134	5670	13.72	23.55	24.00	PASS
151	5755	13.84	24.21	30.00	PASS
159	5795	13.75	23.714	30.00	PASS

Note:

For 5260 ~ 5320MHz, 5500 ~ 5700MHz

$11\text{dBm} + 10\log(45.70) = 27.60\text{ dBm} > 24\text{dBm}$

$11\text{dBm} + 10\log(66.67) = 29.24\text{ dBm} > 24\text{dBm}$

$11\text{dBm} + 10\log(55.46) = 28.44\text{ dBm} > 24\text{dBm}$

$11\text{dBm} + 10\log(50.34) = 28.02\text{ dBm} > 24\text{dBm}$

$11\text{dBm} + 10\log(56.02) = 28.48\text{ dBm} > 24\text{dBm}$

802.11ac (80MHz)

CHANNEL NUMBER	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	AVG. CONDUCTED POWER (mW)	LIMIT (dBm)	PASS /FAIL
42	5210	12.69	18.578	24.00	PASS
58	5290	13.53	22.542	24.00	PASS
106	5530	12.94	19.679	24.00	PASS
122	5610	13.18	20.797	24.00	PASS
155	5775	13.77	23.823	30.00	PASS

Note:

For 5260 ~ 5320MHz, 5500 ~ 5700MHz

$11\text{dBm} + 10\log(92.70) = 30.67\text{ dBm} > 24\text{dBm}$

$11\text{dBm} + 10\log(83.34) = 30.21\text{ dBm} > 24\text{dBm}$

$11\text{dBm} + 10\log(82.69) = 30.17\text{ dBm} > 24\text{dBm}$

26dB BANDWIDTH:

802.11a

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
36	5180	23.09	PASS
40	5200	22.53	PASS
48	5240	22.25	PASS
52	5260	21.66	PASS
60	5300	21.42	PASS
64	5320	22.06	PASS
100	5500	27.50	PASS
116	5580	20.41	PASS
140	5700	25.94	PASS

802.11n (20MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
36	5180	22.42	PASS
40	5200	21.89	PASS
48	5240	21.50	PASS
52	5260	21.61	PASS
60	5300	21.23	PASS
64	5320	23.05	PASS
100	5500	24.68	PASS
116	5580	21.05	PASS
140	5700	25.99	PASS

802.11n (40MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
38	5190	46.59	PASS
46	5230	45.26	PASS
54	5270	45.70	PASS
62	5310	66.67	PASS
102	5510	55.46	PASS
110	5550	50.34	PASS
134	5670	56.02	PASS

802.11ac (80MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
42	5210	88.72	PASS
58	5290	92.70	PASS
106	5530	83.34	PASS
122	5610	82.69	PASS

6dB BANDWIDTH For 5725-5850MHz

802.11a

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
149	5745	15.14	PASS
157	5785	15.20	PASS
165	5825	15.22	PASS

802.11n (20M)

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
149	5745	15.19	PASS
157	5785	15.21	PASS
165	5825	15.20	PASS

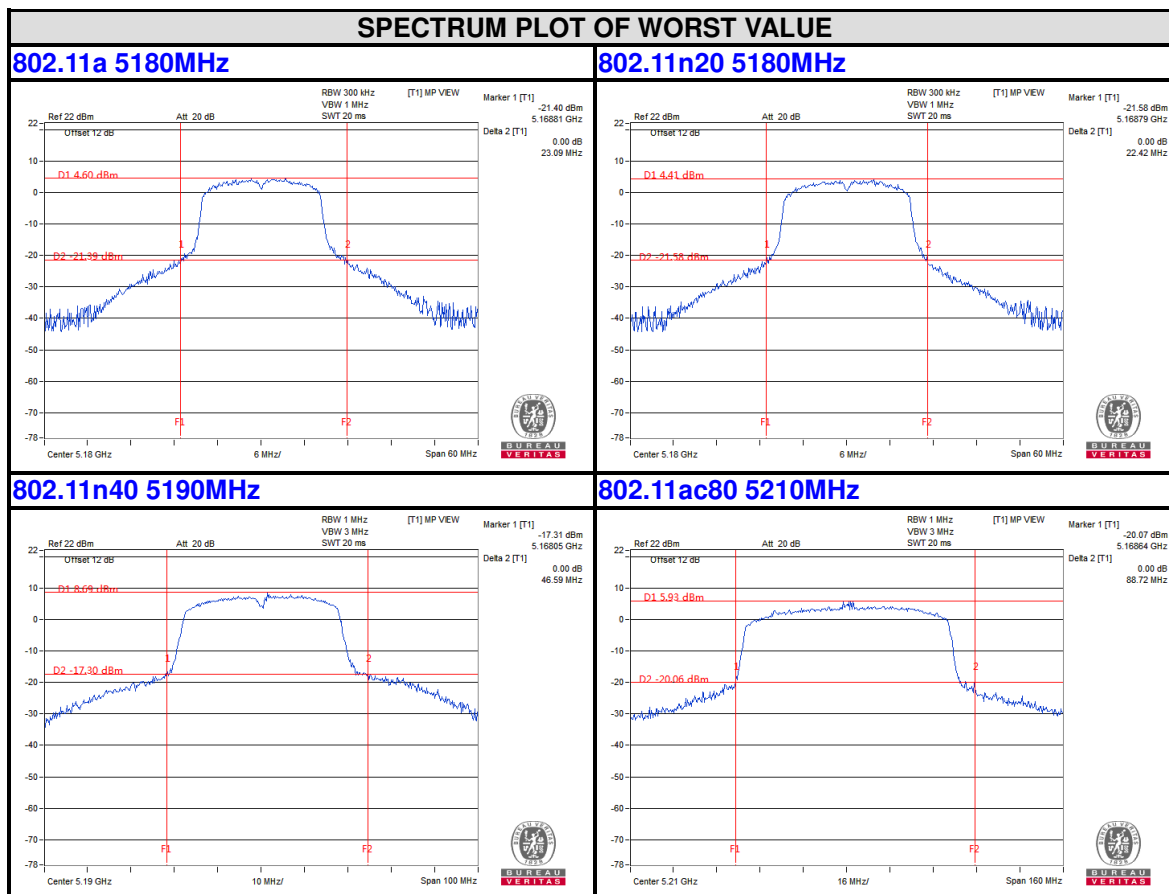
802.11n (40M)

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

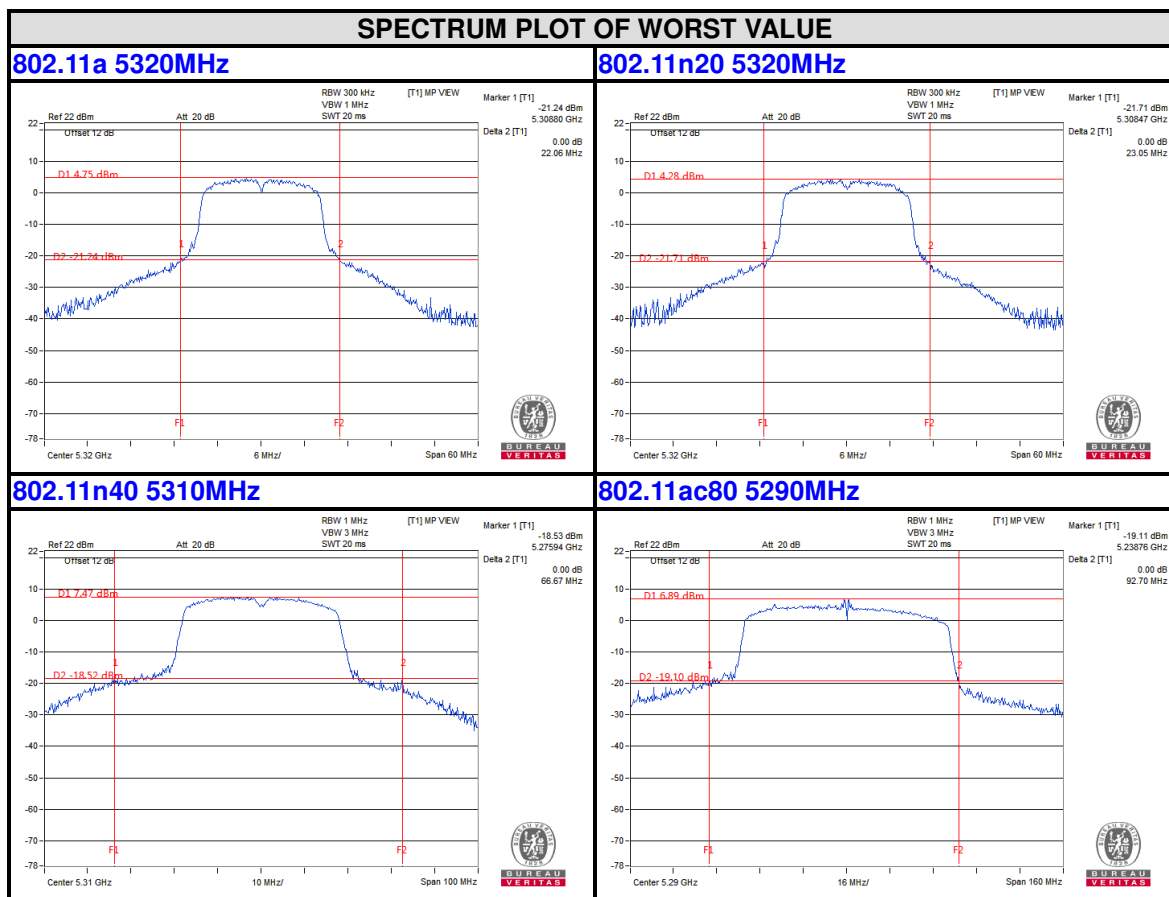
802.11ac (80MHz)

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
155	5775	75.29	PASS

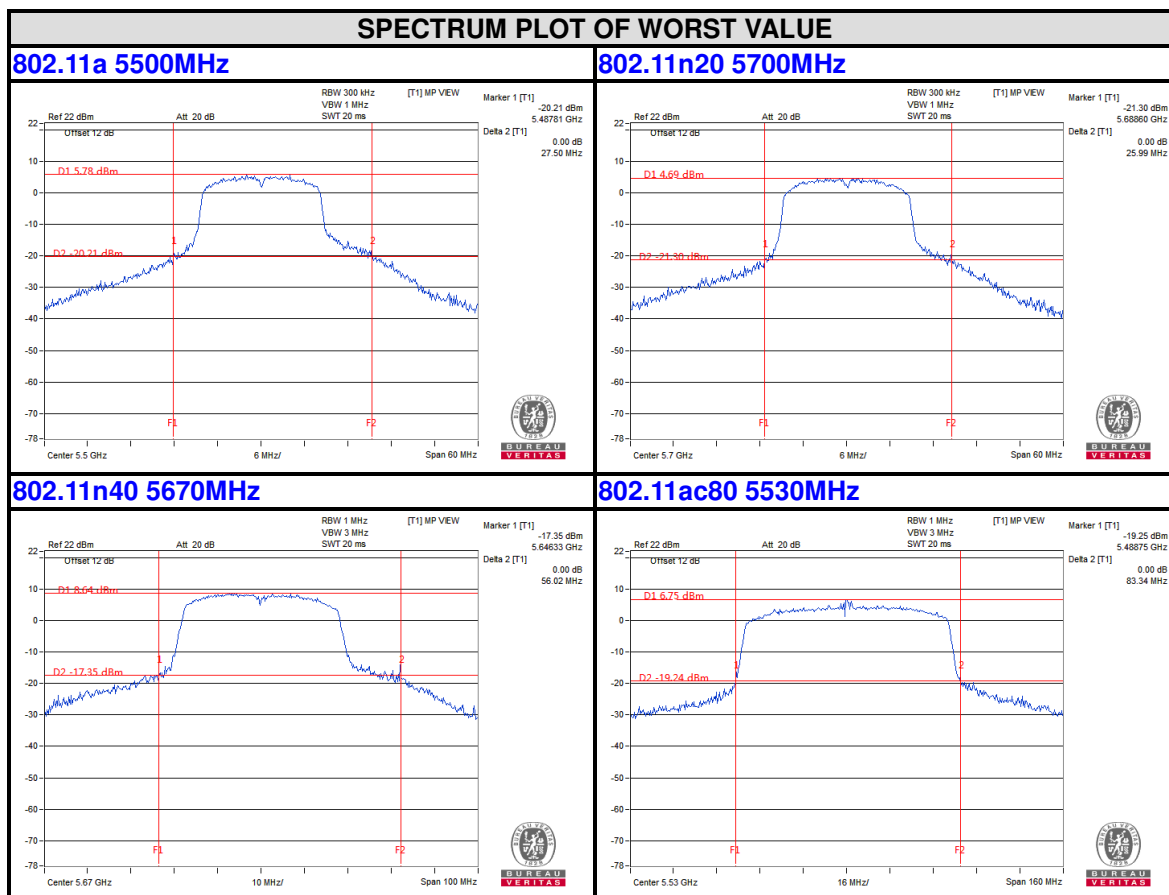
**26dB bandwidth Test Plot
For 5150-5250MHz**



For 5250-5350MHz



For 5470-5725MHz

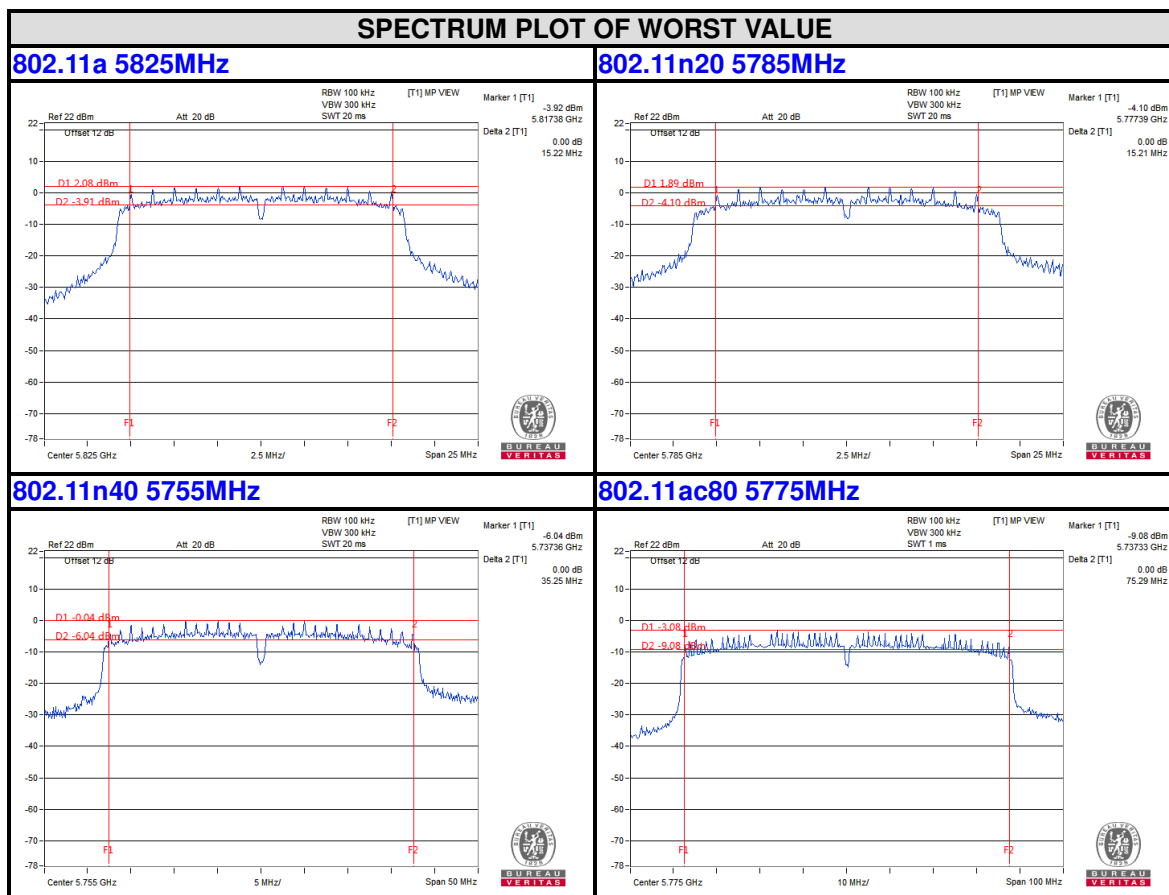




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Test Report No.: RF200226N025-4

6dB BANDWIDTH For 5725-5850MHz

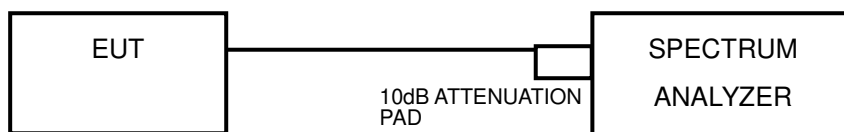


3.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

3.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

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

3.4.2 TEST SETUP



3.4.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.

3.4.4 TEST PROCEDURES

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

Using method SA-2

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

For U-NII-3 band:

Using method SA-2

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

3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

3.4.6 EUT OPERATING CONDITIONS

Same as 3.3.6

3.4.7 TEST RESULTS

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

802.11a

Channel	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	-0.27	0.348	0.078	11.00	PASS
40	5200	0.04	0.348	0.388	11.00	PASS
48	5240	0.71	0.348	1.058	11.00	PASS
52	5260	0.70	0.348	1.048	11.00	PASS
60	5300	-0.08	0.348	0.268	11.00	PASS
64	5320	-0.13	0.348	0.218	11.00	PASS
100	5500	0.73	0.348	1.078	11.00	PASS
116	5580	1.70	0.348	2.048	11.00	PASS
140	5700	0.19	0.348	0.538	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	-8.60	-6.38	0.348	-6.032	30.00	PASS
157	5785	-9.33	-7.11	0.348	-6.762	30.00	PASS
165	5825	-8.77	-6.55	0.348	-6.202	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	-0.57	0.920	0.35	11.00	PASS
40	5200	-0.25	0.920	0.67	11.00	PASS
48	5240	0.39	0.920	1.31	11.00	PASS
52	5260	0.31	0.920	1.23	11.00	PASS
60	5300	-0.54	0.920	0.38	11.00	PASS
64	5320	-0.48	0.920	0.44	11.00	PASS
100	5500	0.46	0.920	1.38	11.00	PASS
116	5580	1.25	0.920	2.17	11.00	PASS
140	5700	0.02	0.920	0.94	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/500kHz)	Limit (dBm/500kHz)	PASS / FAIL
149	5745	-7.94	-5.72	0.920	-4.8	30.00	PASS
157	5785	-9.40	-7.18	0.920	-6.26	30.00	PASS
165	5825	-9.03	-6.81	0.920	-5.89	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	-3.41	0.731	-2.679	11.00	PASS
46	5230	-3.16	0.731	-2.429	11.00	PASS
54	5270	-3.35	0.731	-2.619	11.00	PASS
62	5310	-3.46	0.731	-2.729	11.00	PASS
102	5510	-2.27	0.731	-1.539	11.00	PASS
118	5590	-2.20	0.731	-1.469	11.00	PASS
134	5670	-2.57	0.731	-1.839	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	-11.94	-9.72	0.731	-8.989	30.00	PASS
159	5795	-12.53	-10.31	0.731	-9.579	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	-7.24	1.186	-6.054	11.00	PASS
58	5290	-6.66	1.186	-5.474	11.00	PASS
106	5530	-6.89	1.186	-5.704	11.00	PASS
122	5610	-6.53	1.186	-5.344	11.00	PASS

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

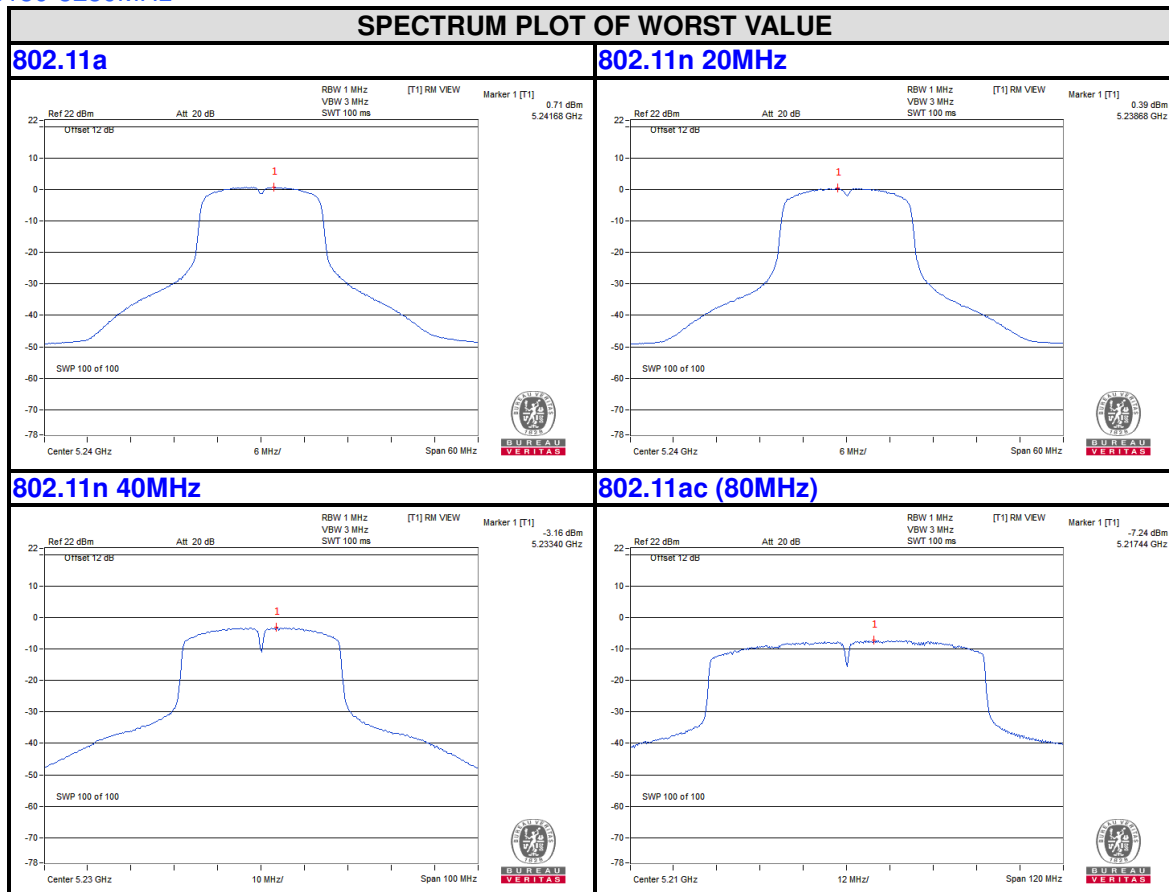
Chan.	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS / FAIL
155	5775	-16.43	-14.21	1.186	-13.024	30.00	PASS

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

PSD Test Plot

BAND 1

5150-5250MHz

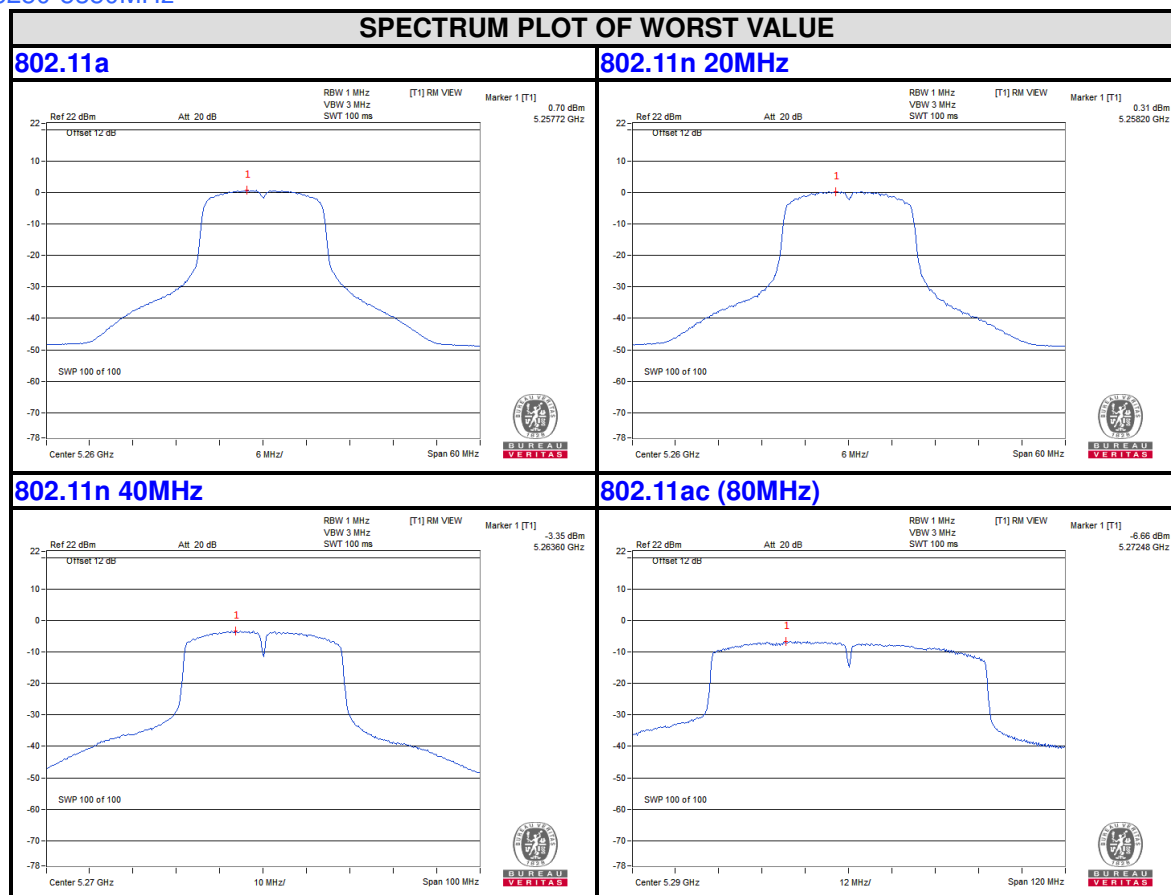




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Test Report No.: RF200226N025-4

BAND 2
5250-5350MHz

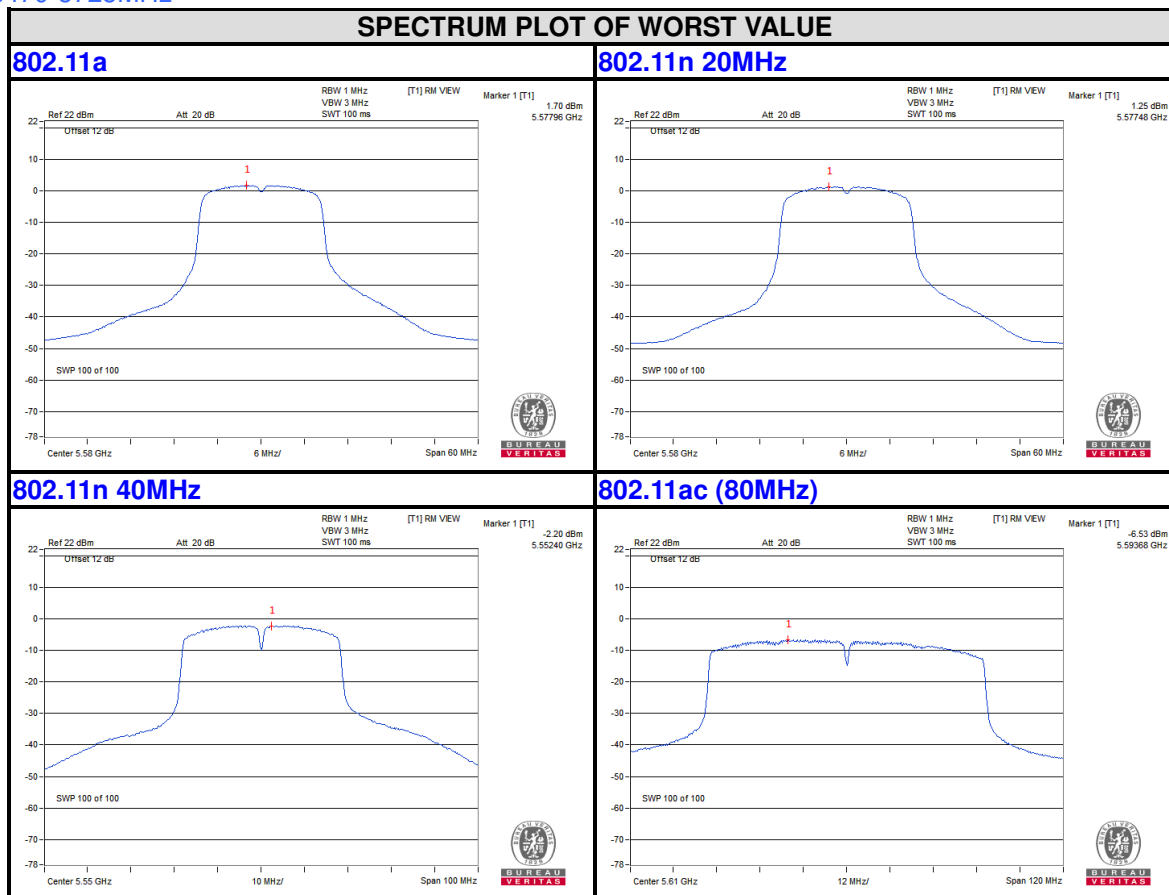


Bureau Veritas Shenzhen Co., Ltd.
Dongguan Branch

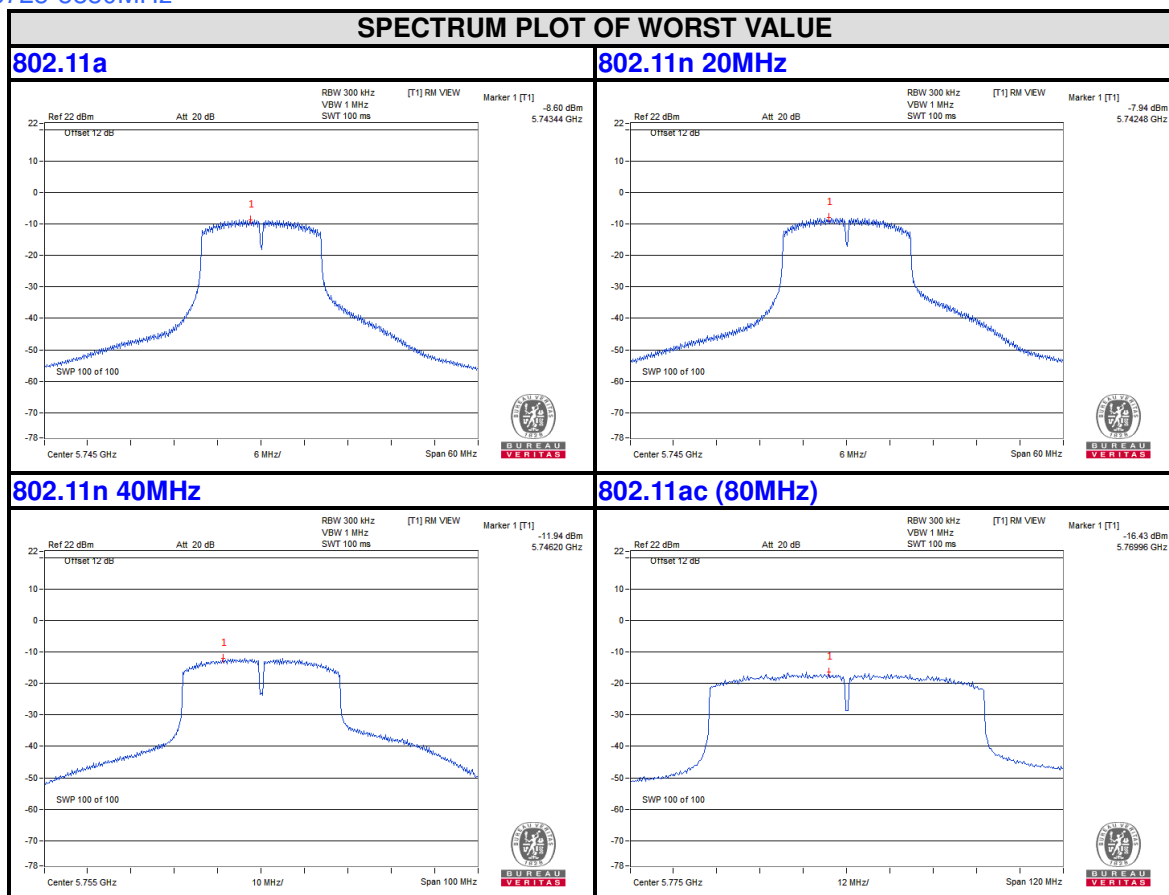
No. 96, Guantai Road (Houjie Section), Houjie
Town, Dongguan City, Guangdong Province.
523942. People's Republic of China.

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

BAND 3
5470-5725MHz



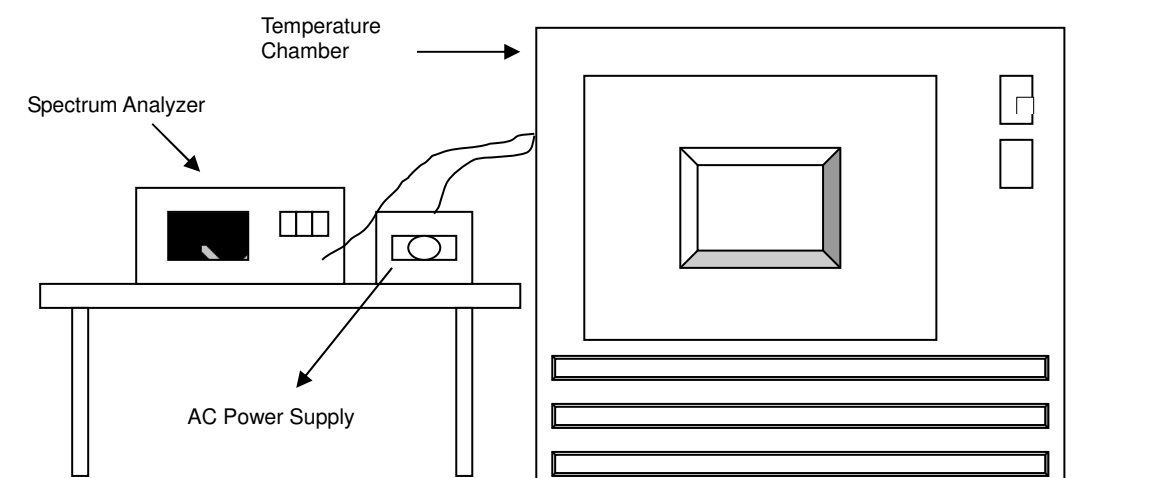
BAND4
5725-5850MHz



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

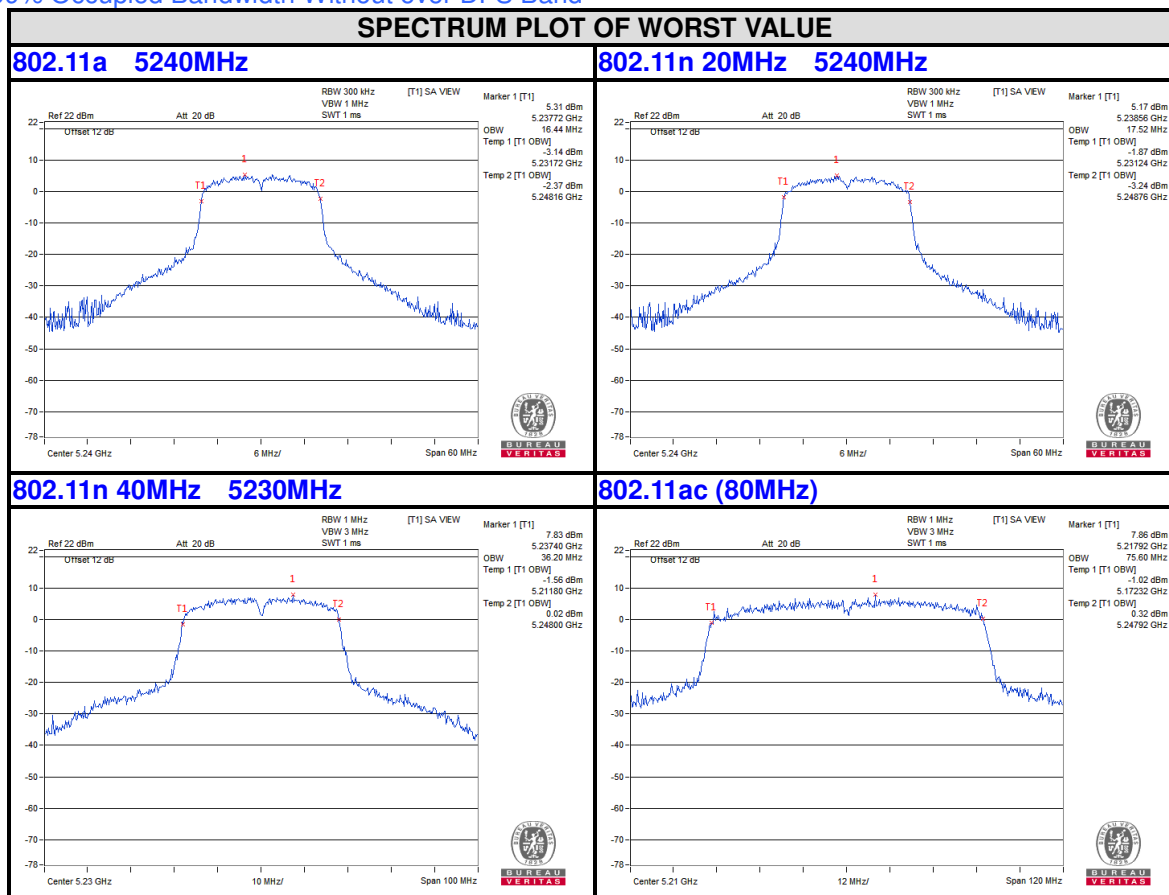
Set the EUT transmit at un-modulation mode to test frequency stability.

3.5.7 TEST RESULTS

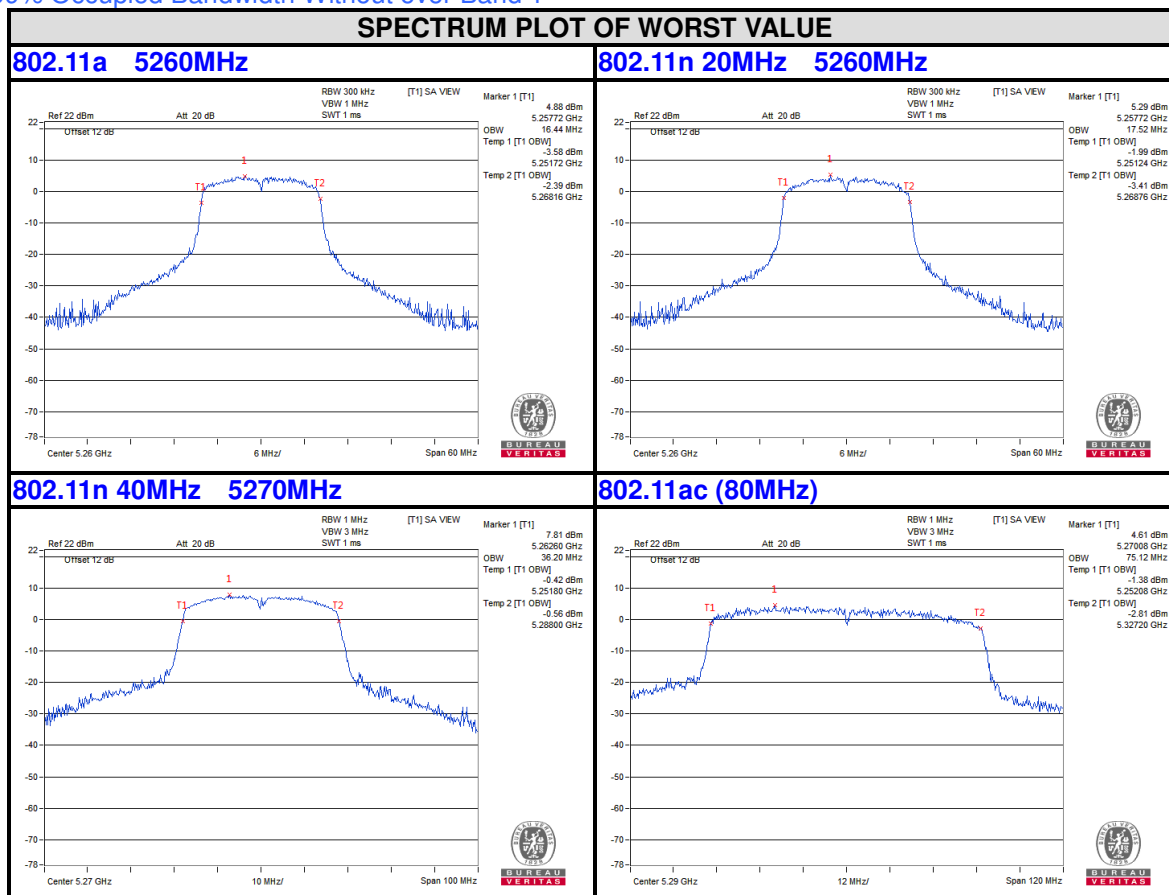
FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift
50	120	5179.9838	-0.00031	5179.9843	-0.00030	5179.9858	-0.00027	5179.9876	-0.00024
40	120	5179.9932	-0.00013	5179.9913	-0.00017	5179.9917	-0.00016	5179.9917	-0.00016
30	120	5180.015	0.00029	5180.0144	0.00028	5180.0143	0.00028	5180.0172	0.00033
20	120	5179.9792	-0.00040	5179.9776	-0.00043	5179.9819	-0.00035	5179.9796	-0.00039
10	120	5180.0084	0.00016	5180.0052	0.00010	5180.0098	0.00019	5180.0054	0.00010
0	120	5179.9963	-0.00007	5179.9942	-0.00011	5179.9966	-0.00007	5179.9924	-0.00015
-10	120	5179.9855	-0.00028	5179.9875	-0.00024	5179.9862	-0.00027	5179.989	-0.00021
-20	120	5179.9943	-0.00011	5179.9917	-0.00016	5179.9953	-0.00009	5179.9959	-0.00008
-30	120	5179.977	-0.00044	5179.9769	-0.00045	5179.9771	-0.00044	5179.9762	-0.00046

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	5179.9792	-0.00040	5179.9786	-0.00041	5179.9821	-0.00035	5179.9797	-0.00039
	120	5179.9792	-0.00040	5179.9776	-0.00043	5179.9819	-0.00035	5179.9796	-0.00039
	102	5179.9802	-0.00038	5179.9779	-0.00043	5179.9814	-0.00036	5179.9786	-0.00041

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



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





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4. PHOTOGRAPHS OF THE TEST CONFIGURATION

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

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.

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