Certificate # 2951.01

TEST REPORT

Applicant	Fujian Newland Auto-ID Tech.Co., Ltd.
Address	Newland Science & Technology Park, No.1 Rujiang West Rd, Mawei, Fuzhou, P.R. China

Manufacturer or Supplier	Fujian Newland Auto-ID Tech.Co., Ltd.
Address	Newland Science & Technology Park, No.1 Rujiang West Rd, Mawei, Fuzhou, P.R. China
Product Name	Wearable Data Collector
Brand Name	Newland
Model	NLS-WD1
Additional Model & Model Difference	WD1, NLS-NW10, NW10, NLS-NW20, NW20, Smart Watch, Watch Pro, Smart Watch Lite, See item 3.1
Date of tests	Sep. 06, 2023 ~ Oct. 12, 2023

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 Andy Zhu Supervisor / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	 Date: Mar. 22, 2024

TABLE OF CONTENTS

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF2309WDG0035-4	Original release	Mar. 22, 2024

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(e)	6dB bandwidth	PASS	Meet the requirement of limit. (U-NII-3 Band only)
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	No antenna connector is used

2. 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	2.68dB
Radiated emissions	9KHz ~ 30MHz	2.80dB
	30MHz ~ 1GMHz	4.24dB
	1GHz ~ 18GHz	4.76dB
	18GHz ~ 40GHz	4.50dB

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT NAME	Wearable Data Collector
MODEL NO.	NLS-WD1
ADDITIONAL NO.	WD1, NLS-NW10, NW10, NLS-NW20, NW20, Smart Watch, Watch Pro, Smart Watch Lite,
FCC ID	SL9NLS-WD1
POWER SUPPLY	5V/9V/12V (adapter or host equipment) 3.8Vdc (Li-ion Polyme, battery)
MODULATION TECHNOLOGY	OFDM,
MODULATION TYPE	256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM
TRANSFER RATE	Refer to user's manual
OPERATING FREQUENCY	5180 ~ 5240MHz, 5260 ~ 5320MHz 5500 ~ 5700MHz, 5745 ~ 5825MHz
NUMBER OF CHANNEL	See section 2.2
CONDUCTED OUTPUT POWER	35.81 mW for 5150 ~ 5250MHz (Maximum AVG Power) 34.435 mW for 5250 ~ 5350MHz (Maximum AVG Power) 35.81 mW for 5470 ~ 5725MHz (Maximum AVG Power) 22.699 mW for 5725 ~ 5850MHz (Maximum AVG Power)
ANTENNA TYPE	5180 ~ 5240MHz: LDS Antenna, 1.74dBi Gain 5260 ~ 5320MHz: LDS Antenna, 1.01dBi Gain 5500 ~ 5700MHz: LDS Antenna, -1.01dBi Gain 5745 ~ 5825MHz: LDS Antenna, 1.70dBi Gain
CABLE SUPPLIED	USB Line: Shielded, Detachable 0.95m
ACCESSORY	Adapter

NOTES:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
3. The EUT incorporates a SISO function. Physically, the EUT provides 1 completed transmitter and 1 receiver.

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

* The modulation and bandwidth are similar for 802.11n mode for HT20 / HT40 and 802.11ac mode for VHT20 / VHT40, therefore investigated worst case to representative mode in test report. (Final test mode refer section 2.2.1)

4. Please refer to the EUT photo document (Reference No.: 2309WDG0035) for detailed product

photo.

5. Additional models (see above table) are identical with the test model NLS-WD1 except model number for trading purpose.
6. Details of the Adapter are as follows:

Adapter	Brand:	ACT
	Model:	QC18W-G
	Input:	100-240V ~ 50/60Hz 0.5A Max.
	Output:	DC 5V/3A, 9V2A, 12V/1.5A

3.2 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	--	--

3.2.1. CONFIGURATION OF SYSTEM UNDER TEST

Please see section 5 photograph of the test configuration for reference.

3.2.2. TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	√	**Wi-Fi(5G) Function**

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(HT20)		36 to 48	36, 40, 48	OFDM	BPSK	MCS0
	802.11n(HT40)		38 to 46	38, 46	OFDM	BPSK	MCS0
	802.11n(VHT80)		42	42	OFDM	BPSK	MCS0
	802.11a	5250-5350	52 to 64	52, 60, 64	OFDM	BPSK	6.0
	802.11n(HT20)		52 to 64	52, 60, 64	OFDM	BPSK	MCS0
	802.11n(HT40)		54 to 62	54, 62	OFDM	BPSK	MCS0
	802.11n(VHT80)		58	58	OFDM	BPSK	MCS0
	802.11a	5470-5725	100 to 140	100, 116, 140	OFDM	BPSK	6.0
	802.11n(HT20)		100 to 140	100, 116, 140	OFDM	BPSK	MCS0
	802.11n(HT40)		102 to 134	102, 110, 134	OFDM	BPSK	MCS0
	802.11n(VHT80)		106, 122	106, 122	OFDM	BPSK	MCS0
	802.11a	5725-5850	149 to 165	149, 157, 165	OFDM	BPSK	6.0
	802.11n(HT20)		149 to 165	149, 157, 165	OFDM	BPSK	MCS0
	802.11n(HT40)		151 to 159	151, 159	OFDM	BPSK	MCS0
	802.11n(VHT80)		155	155	OFDM	BPSK	MCS0

RADIATED EMISSION TEST (BELOW 1GHz):

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5150-5250 5250-5350	36 to 48 52 to 64	36	OFDM	BPSK	6.0

		5470-5725 5725-5850	100 to 140 149 to 165				

POWER LINE CONDUCTED EMISSION TEST:

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

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

EUT CONFIGURE MODE	TESTED CONDITION
A	Wi-Fi (5G) Link

ANTENNA PORT CONDUCTED MEASUREMENT:

☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5150-5250	36 to 48	36, 40, 48	OFDM	BPSK	6.0
	802.11n(HT20)		36 to 48	36, 40, 48	OFDM	BPSK	MCS0
	802.11n(HT40)		38 to 46	38, 46	OFDM	BPSK	MCS0
	802.11n(VHT80)		42	42	OFDM	BPSK	MCS0
	802.11a	5250-5350	52 to 64	52, 60, 64	OFDM	BPSK	6.0
	802.11n(HT20)		52 to 64	52, 60, 64	OFDM	BPSK	MCS0
	802.11n(HT40)		54 to 62	54, 62	OFDM	BPSK	MCS0
	802.11n(VHT80)		58	58	OFDM	BPSK	MCS0
	802.11a	5470-5725	100 to 140	100, 116, 140	OFDM	BPSK	6.0
	802.11n(HT20)		100 to 140	100, 116, 140	OFDM	BPSK	MCS0
	802.11n(HT40)		102 to 134	102, 110, 134	OFDM	BPSK	MCS0
	802.11n(VHT80)		106, 122	106, 122	OFDM	BPSK	MCS0
	802.11a	5725-5850	149 to 165	149, 157, 165	OFDM	BPSK	6.0
	802.11n(HT20)		149 to 165	149, 157, 165	OFDM	BPSK	MCS0
	802.11n(HT40)		151 to 159	151, 159	OFDM	BPSK	MCS0
	802.11n(VHT80)		155	155	OFDM	BPSK	MCS0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	TEST VOLTAGE (Adapter)	TESTED BY
RE<1G	24deg. C, 55%RH	AC 120V 60Hz	Jelly
RE≥1G	24deg. C, 55%RH	AC 120V 60Hz	Jelly
PLC	20deg. C, 56%RH	AC 120V 60Hz	Ming Bai
APCM	20deg. C, 55%RH	AC 120V 60Hz	Vincent

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart E (15.407)
KDB 789033 D02 General UNII Test Procedures New Rules v02r01
ANSI C63.10-2013

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

NOTE: It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B(sDoC). The test report has been issued separately.

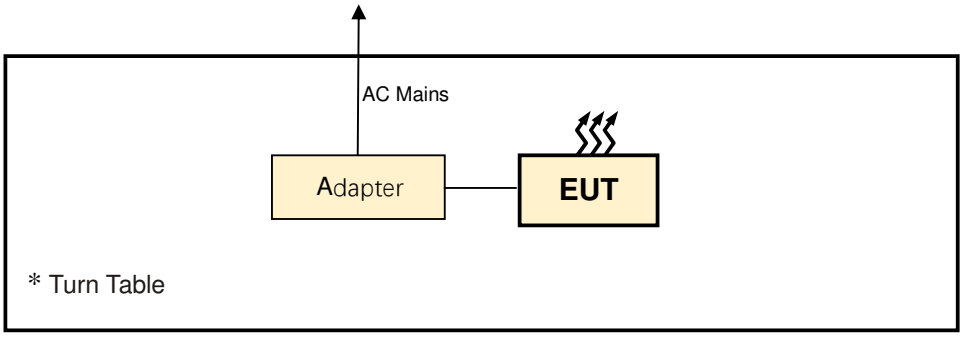
3.4 DESCRIPTION OF SUPPORT UNITS

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

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	N/A	N/A	N/A	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
2	N/A

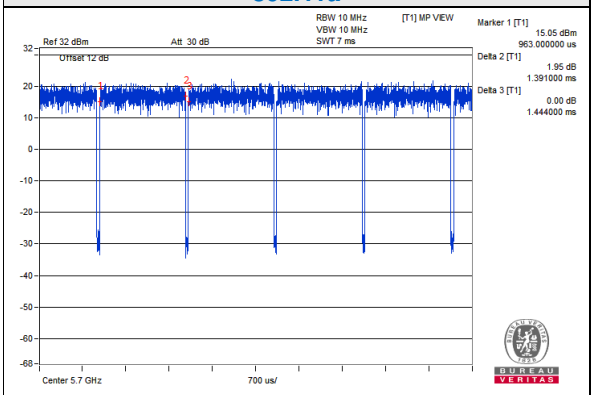
3.5 CONFIGURATION OF SYSTEM UNDER TEST



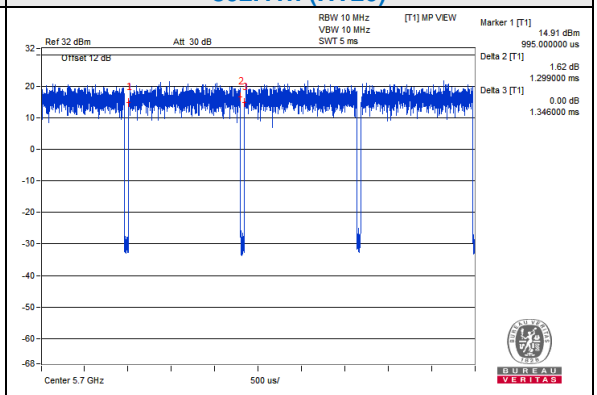
3.6 DUTY CYCLE OF TESET SIGNAL

Test Mode	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty factor (dB)	1/T Min. VBW (KHz)	VBW Setting
802.11a	1.391	1.444	96.3	0.16	0.719	1KHz
802.11n (HT20)	1.299	1.346	96.5	0.15	0.770	1KHz
802.11n (HT40)	0.647	0.692	93.5	0.29	1.546	2KHz
802.11ac (VHT80)	0.323	0.368	87.8	0.57	3.096	5KHz

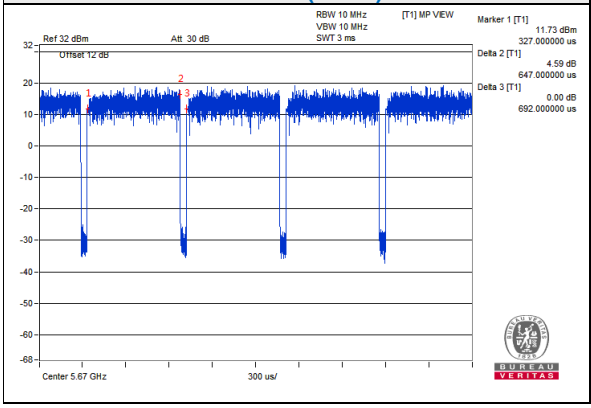
802.11a



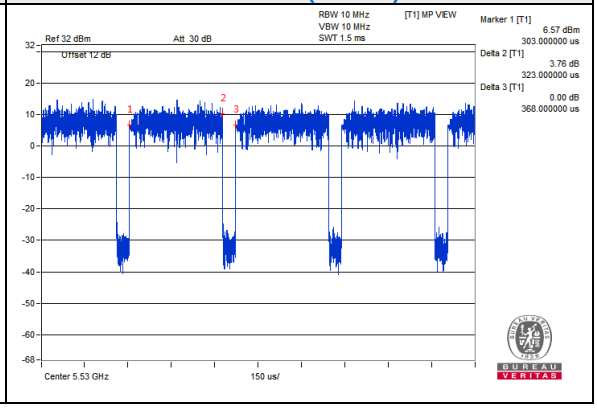
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



4. TEST TYPES AND RESULTS

4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

4.1.1 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

NOTE:
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.

4.1.2 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:

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

4.1.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESU40	100449	Jan. 10, 24
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV7	102331	May. 09, 24
Active Loop Antenna (9KHz -30MHz)	SCHWARZBECK	FMZB 1519B	1519B-045	Apr. 27, 24
Amplifier (9KHz -1GHz)	Burgeon	BPA-530	100210	Mar. 06, 24
Trilog-Broadband Antenna(20M-2G)	SCHWARZBECK	VULB 9168	01282	Aug. 21, 24
Horn Antenna (1GHz -18GHz)	ETS -Lindgren	3117	00062558	Apr. 27, 24
Horn Antenna (18GHz -40GHz)	SCHWARZBECK	BBHA 9170	BBHA9170147	Apr. 28, 24
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	NSEMC003	May 22, 24
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A
Broadband Preamplifier (1GHz~18GHz)	SCHWARZBECK	BBV9718	305	Apr. 26, 24
Pre-Amplifier (18GHz-40GHz)	EMCI	EMC 184045	980102	Jan. 16, 24
BLUETOOTH TESTER	Rohde&Schwarz	CBT32	100811	N/A

NOTES:

1. The calibration interval of the above test instruments are 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The horn antenna is used only for the measurement of emission frequency above1GHz if tested.
3. The FCC Site Registration No. is 749762.

4.1.4 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:

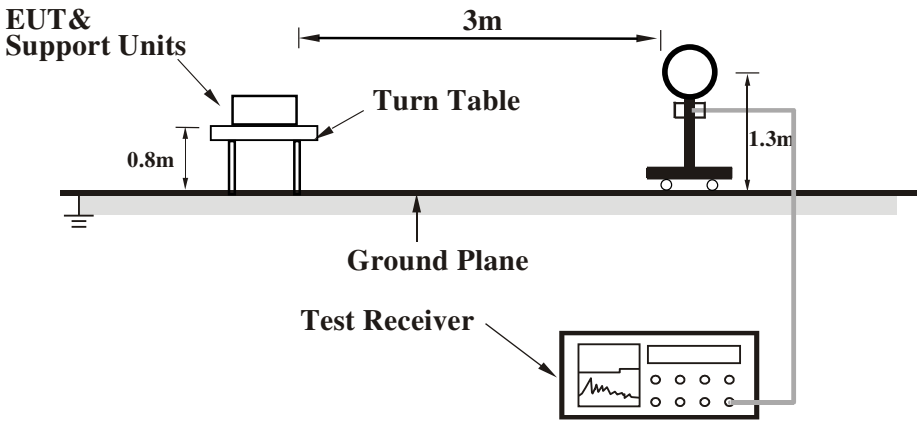
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution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

4.1.5 DEVIATION FROM TEST STANDARD

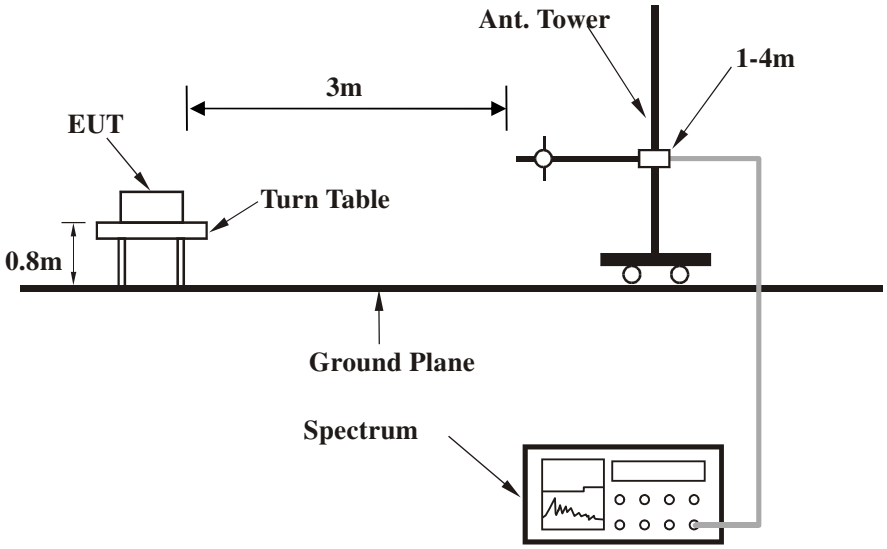
No deviation.

4.1.6 TEST SETUP

Below 30MHz test setup

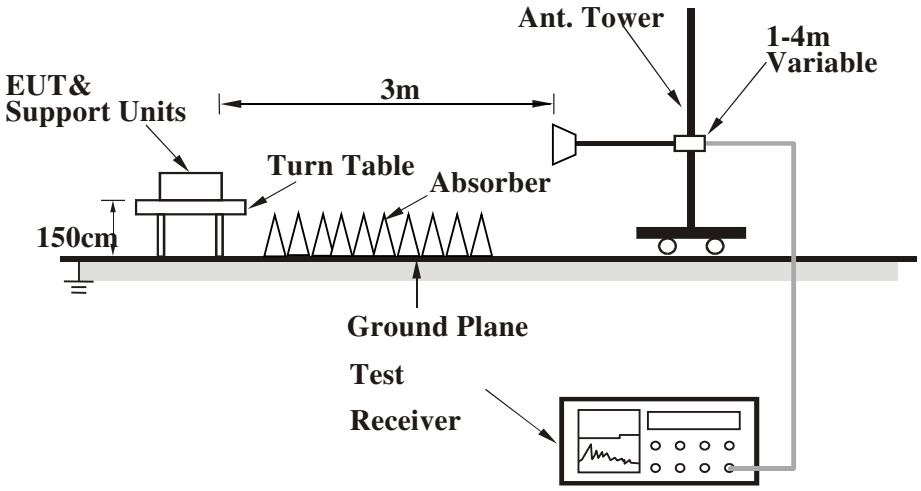


Below 1GHz test setup



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

Above 1GHz test setup



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

4.1.7 EUT OPERATING CONDITION

a. Set the EUT under full load condition and placed them on a testing table.

b. Set the transmitter part of EUT under transmission condition continuously at specific channel frequency.

c. The necessary accessories enable the EUT in full functions.

4.1.8 TEST RESULTS

BELOW 1GHz WORST-CASE DATA

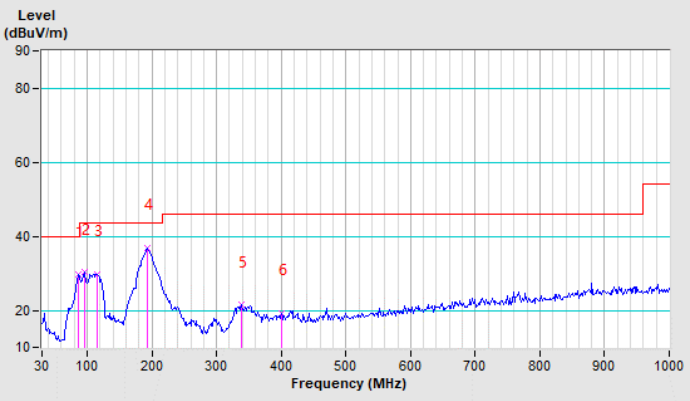
802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	85.96	29.57 QP	40.00	-10.43	1.00 H	245	51.17	-21.60
2	95.29	30.20 QP	43.50	-13.30	1.01 H	259	51.53	-21.33
3	115.50	29.76 QP	43.50	-13.74	1.08 H	273	48.80	-19.04
4	**193.22**	**36.73 QP**	**43.50**	**-6.77**	**1.24 H**	**289**	**55.28**	**-18.55**
5	337.79	21.41 QP	46.00	-24.59	1.00 H	229	35.76	-14.35
6	399.97	19.28 QP	46.00	-26.72	1.00 H	216	32.14	-12.86

REMARKS:

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

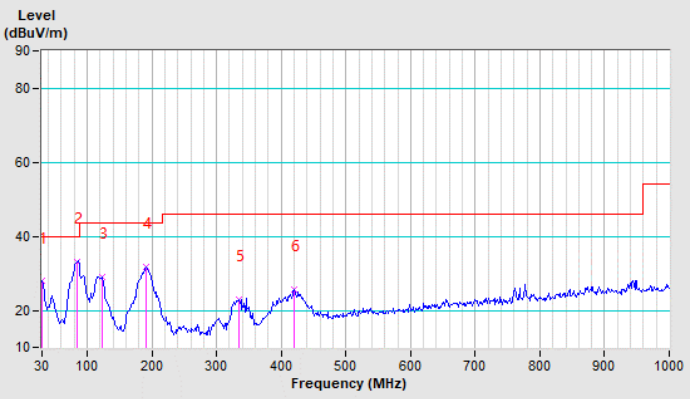


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	30.00	27.83 QP	40.00	-12.17	2.00 V	244	46.49	-18.66
2	84.41	33.00 QP	40.00	-7.00	1.53 V	290	54.63	-21.63
3	123.27	28.99 QP	43.50	-14.51	1.67 V	276	47.39	-18.40
4	191.67	31.77 QP	43.50	-11.73	1.82 V	261	50.10	-18.33
5	334.68	23.03 QP	46.00	-22.97	2.22 V	222	37.47	-14.44
6	420.18	25.76 QP	46.00	-20.24	2.36 V	208	38.10	-12.34

REMARKS:

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



Band 1 (5150-5250MHz):

ABOVE 1GHz DATA

802.11a

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

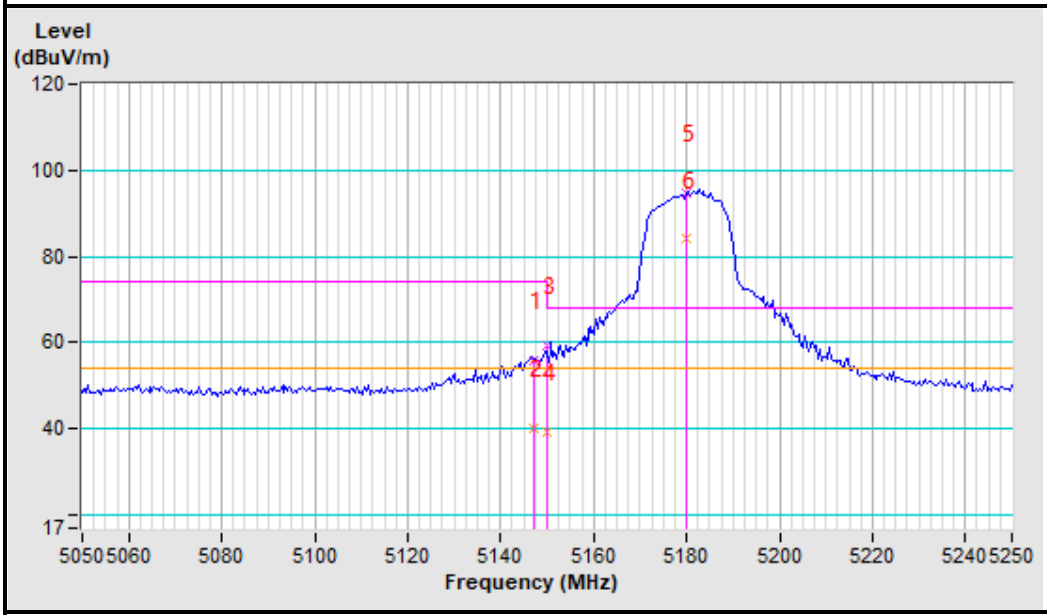
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5147.00	56.00 PK	74.00	-18.00	1.00 H	142	47.95	8.05
2	5147.00	40.23 AV	54.00	-13.77	1.00 H	142	32.18	8.05
3	5150.00	59.42 PK	74.00	-14.58	1.00 H	142	51.38	8.04
4	5150.00	39.47 AV	54.00	-14.53	1.00 H	147	31.43	8.04
5	*5180.00	94.80 PK			1.50 H	100	86.81	7.99
6	*5180.00	84.12 AV			1.50 H	100	76.13	7.99
7	#10360.00	55.12 PK	68.20	-13.08	1.00 H	109	39.48	15.64
8	15540.00	59.37 PK	74.00	-14.63	1.00 H	50	36.37	23.00
9	15540.00	47.33 AV	54.00	-6.67	1.00 H	50	24.33	23.00
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5147.00	59.21 PK	74.00	-14.79	1.00 V	124	51.16	8.05
2	5147.00	42.91 AV	54.00	-11.09	1.00 V	124	34.86	8.05
3	5150.00	58.98 PK	74.00	-15.02	1.00 V	124	50.94	8.04
4	5150.00	41.96 AV	54.00	-12.04	1.00 V	124	33.92	8.04
5	*5180.00	96.87 PK			1.00 V	124	88.88	7.99
6	*5180.00	85.90 AV			1.00 V	124	77.91	7.99
7	#10360.00	54.54 PK	68.20	-13.66	1.00 V	360	38.90	15.64
8	15540.00	59.37 PK	74.00	-14.63	1.00 V	352	36.37	23.00
9	15540.00	48.37 AV	54.00	-5.63	1.00 V	50	25.37	23.00

REMARKS:

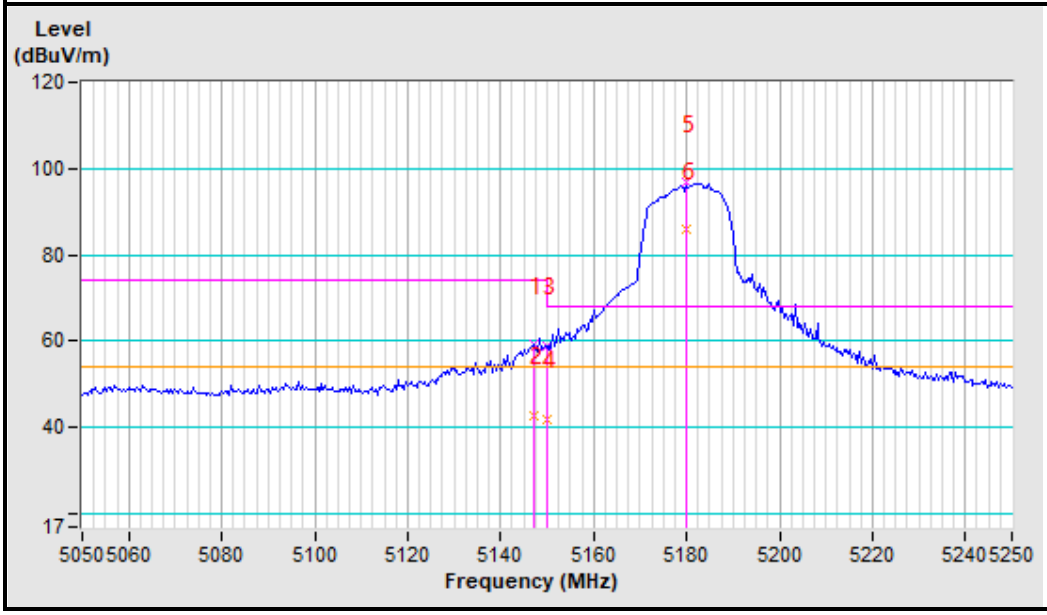
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5180MHz Horizontal



5180MHz Vertical



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

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.37	50.33 PK	74.00	-23.67	1.00 H	320	42.28	8.05
2	5145.37	40.10 AV	54.00	-13.90	1.00 H	320	32.05	8.05
3	5150.00	50.29 PK	74.00	-23.71	1.00 H	320	42.25	8.04
4	5150.00	40.29 AV	54.00	-13.71	1.00 H	320	32.25	8.04
5	*5200.00	94.74 PK			1.00 H	325	86.78	7.96
6	*5200.00	84.26 AV			1.00 H	325	76.30	7.96
7	#10400.00	54.19 PK	68.20	-14.01	1.00 H	320	38.22	15.97
8	15600.00	57.29 PK	74.00	-16.71	1.00 H	311	34.37	22.92
9	15600.00	47.50 AV	54.00	-6.50	1.00 H	311	24.58	22.92
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	49.37 PK	74.00	-24.63	1.00 V	250	41.32	8.05
2	5145.00	38.00 AV	54.00	-16.00	1.00 V	250	29.95	8.05
3	5150.00	49.06 PK	74.00	-24.94	1.00 V	250	41.02	8.04
4	5150.00	37.55 AV	54.00	-16.45	1.00 V	250	29.51	8.04
5	*5200.00	96.78 PK			1.00 V	250	88.82	7.96
6	*5200.00	87.34 AV			1.00 V	250	79.38	7.96
7	#10400.00	53.29 PK	68.20	-14.91	1.00 V	300	37.32	15.97
8	15600.00	59.29 PK	74.00	-14.71	1.00 V	200	36.37	22.92
9	15600.00	48.32 AV	54.00	-5.68	1.00 V	200	25.40	22.92

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	48.29 PK	74.00	-25.71	1.00 H	301	40.24	8.05
2	5145.00	37.20 AV	54.00	-16.80	1.00 H	301	29.15	8.05
3	5150.00	47.23 PK	74.00	-26.77	1.00 H	301	39.19	8.04
4	5150.00	37.26 AV	54.00	-16.74	1.00 H	301	29.22	8.04
5	*5240.00	94.00 PK			1.00 H	301	86.12	7.88
6	*5240.00	84.35 AV			1.00 H	301	76.47	7.88
7	5350.00	49.63 PK	74.00	-24.37	1.00 H	301	41.94	7.69
8	5350.00	38.33 AV	54.00	-15.67	1.00 H	301	30.64	7.69
9	5355.00	49.32 PK	74.00	-24.68	1.00 H	301	41.64	7.68
10	5355.00	38.35 AV	54.00	-15.65	1.00 H	301	30.67	7.68
11	#10480.00	54.38 PK	68.20	-13.82	1.00 H	20	37.74	16.64
12	15720.00	58.29 PK	74.00	-15.71	1.00 H	201	35.53	22.76
13	15720.00	47.82 AV	54.00	-6.18	1.00 H	201	25.06	22.76
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	47.56 PK	74.00	-26.44	1.00 V	149	39.51	8.05
2	5145.00	38.29 AV	54.00	-15.71	1.00 V	149	30.24	8.05
3	5150.00	47.77 PK	74.00	-26.23	1.00 V	149	39.73	8.04
4	5150.00	38.27 AV	54.00	-15.73	1.00 V	149	30.23	8.04
5	*5240.00	96.07 PK			1.00 V	149	88.19	7.88
6	*5240.00	87.70 AV			1.00 V	149	79.82	7.88
7	5350.00	49.23 PK	74.00	-24.77	1.00 V	149	41.54	7.69
8	5350.00	38.29 AV	54.00	-15.71	1.00 V	149	30.60	7.69
9	5355.00	51.29 PK	74.00	-22.71	1.00 V	149	43.61	7.68
10	5355.00	39.37 AV	54.00	-14.63	1.00 V	149	31.69	7.68
11	#10480.00	54.37 PK	68.20	-13.83	1.00 V	30	37.73	16.64
12	15720.00	58.29 PK	74.00	-15.71	1.00 V	320	35.53	22.76
13	15720.00	48.09 AV	54.00	-5.91	1.00 V	320	25.33	22.76

REMARKS:

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

802.11n (20MHz)

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

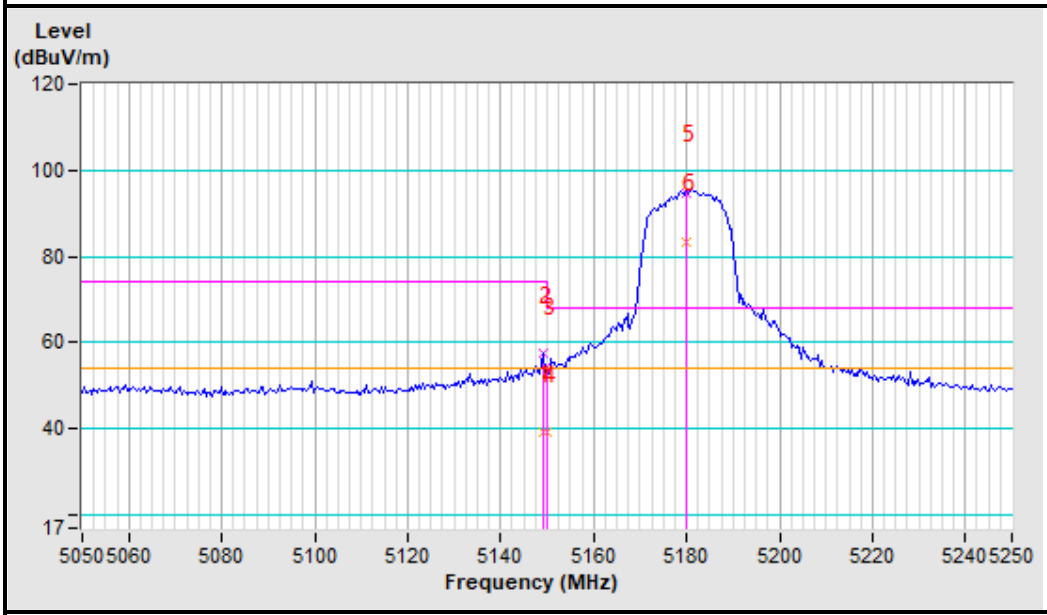
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5149.26	39.08 PK	74.00	-14.92	1.00 H	144	31.04	8.04
2	5149.26	57.51 AV	54.00	-16.49	1.00 H	145	49.47	8.04
3	5150.00	54.70 PK	74.00	-19.30	1.00 H	145	46.66	8.04
4	5150.00	39.07 AV	54.00	-14.93	1.00 H	144	31.03	8.04
5	*5180.00	94.83 PK			1.00 H	144	86.84	7.99
6	*5180.00	83.54 AV			1.00 H	144	75.55	7.99
7	#10360.00	54.26 PK	68.20	-13.94	1.00 H	102	38.62	15.64
8	15540.00	58.80 PK	74.00	-15.20	1.00 H	330	35.80	23.00
9	15540.00	47.95 AV	54.00	-6.05	1.00 H	330	24.95	23.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5148.16	56.15 PK	74.00	-17.85	1.00 V	148	48.11	8.04
2	5148.16	40.60 AV	54.00	-13.40	1.00 V	148	32.56	8.04
3	5150.00	57.19 PK	74.00	-16.81	1.00 V	148	49.15	8.04
4	5150.00	41.42 AV	54.00	-12.58	1.00 V	148	33.38	8.04
5	*5180.00	95.70 PK			1.00 V	148	87.71	7.99
6	*5180.00	41.42 AV	54.00	-12.58	1.00 V	148	33.43	7.99
7	#10360.00	54.39 PK	68.20	-13.81	1.00 V	32	38.75	15.64
8	15540.00	60.29 PK	74.00	-13.71	1.00 V	201	37.29	23.00
9	15540.00	47.99 AV	54.00	-6.01	1.00 V	201	24.99	23.00

REMARKS:

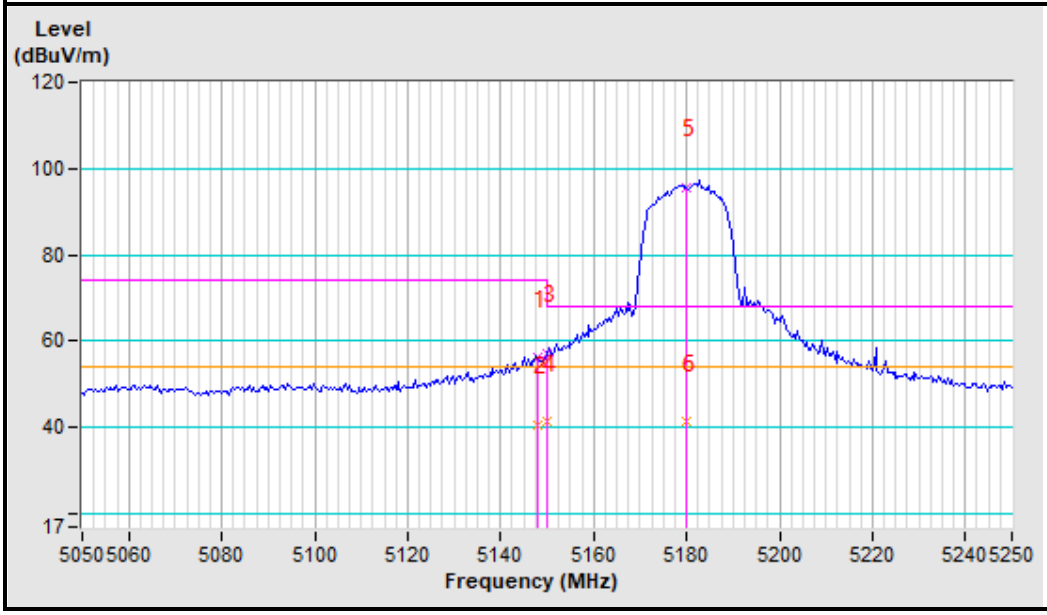
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5180MHz Horizontal



5180MHz Vertical



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

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	47.50 PK	74.00	-26.50	1.00 H	132	39.45	8.05
2	5145.00	36.47 AV	54.00	-17.53	1.00 H	132	28.42	8.05
3	5150.00	47.16 PK	74.00	-26.84	1.00 H	132	39.12	8.04
4	5150.00	36.23 AV	54.00	-17.77	1.00 H	132	28.19	8.04
5	*5200.00	95.14 PK			1.00 H	132	87.18	7.96
6	*5200.00	85.13 AV			1.00 H	132	77.17	7.96
7	#10400.00	54.96 PK	68.20	-13.24	1.00 H	30	38.99	15.97
8	15600.00	58.94 PK	74.00	-15.06	1.00 H	33	36.02	22.92
9	15600.00	48.77 AV	54.00	-5.23	1.00 H	33	25.85	22.92
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	47.59 PK	74.00	-26.41	1.00 V	321	39.54	8.05
2	5145.00	38.02 AV	54.00	-15.98	1.00 V	321	29.97	8.05
3	5150.00	46.94 PK	74.00	-27.06	1.00 V	321	38.90	8.04
4	5150.00	36.84 AV	54.00	-17.16	1.00 V	321	28.80	8.04
5	*5200.00	96.76 PK			1.00 V	321	88.80	7.96
6	*5200.00	87.98 AV			1.00 V	321	80.02	7.96
7	#10400.00	55.69 PK	68.20	-12.51	1.00 V	214	39.72	15.97
8	15600.00	61.32 PK	74.00	-12.68	1.00 V	183	38.40	22.92
9	15600.00	49.02 AV	54.00	-4.98	1.00 V	183	26.10	22.92

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5145.00	49.32 PK	74.00	-24.68	1.00 H	246	41.27	8.05
2	5145.00	35.72 AV	54.00	-18.28	1.00 H	246	27.67	8.05
3	5150.00	48.93 PK	74.00	-25.07	1.00 H	246	40.89	8.04
4	5150.00	35.75 AV	54.00	-18.25	1.00 H	246	27.71	8.04
5	*5240.00	93.76 PK			1.00 H	246	85.88	7.88
6	*5240.00	84.97 AV			1.00 H	246	77.09	7.88
7	5350.00	50.86 PK	74.00	-23.14	1.00 H	246	43.17	7.69
8	5350.00	37.25 AV	54.00	-16.75	1.00 H	246	29.56	7.69
9	5355.00	50.21 PK	74.00	-23.79	1.00 H	246	42.53	7.68
10	5355.00	38.42 AV	54.00	-15.58	1.00 H	246	30.74	7.68
11	#10480.00	55.44 PK	68.20	-12.76	1.00 H	210	38.80	16.64
12	15720.00	59.42 PK	74.00	-14.58	1.00 H	235	36.66	22.76
13	15720.00	49.03 AV	54.00	-4.97	1.00 H	235	26.27	22.76
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	5145.35	47.55 PK	74.00	-26.45	1.00 V	187	39.50	8.05
2	5145.35	38.77 AV	54.00	-15.23	1.00 V	187	30.72	8.05
3	5150.00	47.29 PK	74.00	-26.71	1.00 V	187	39.25	8.04
4	5150.00	38.77 AV	54.00	-15.23	1.00 V	187	30.73	8.04
5	*5240.00	96.87 PK			1.00 V	187	88.99	7.88
6	*5240.00	87.78 AV			1.00 V	187	79.90	7.88
7	5350.00	49.79 PK	74.00	-24.21	1.00 V	187	42.10	7.69
8	5350.00	38.79 AV	54.00	-15.21	1.00 V	187	31.10	7.69
9	5355.29	49.35 PK	74.00	-24.65	1.00 V	187	41.67	7.68
10	5355.29	38.79 AV	54.00	-15.21	1.00 V	187	31.11	7.68
11	#10480.00	56.50 PK	68.20	-11.70	1.00 V	317	39.86	16.64
12	15720.00	59.37 PK	74.00	-14.63	1.00 V	301	36.61	22.76
13	15720.00	47.89 AV	54.00	-6.11	1.00 V	301	25.13	22.76

REMARKS:

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

802.11n (40MHz)

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

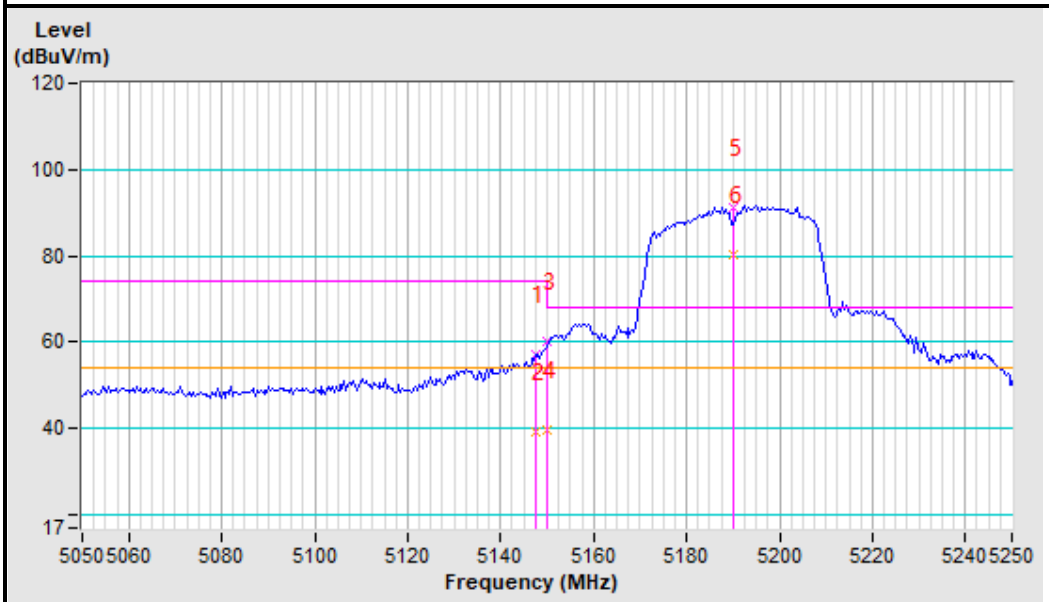
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5147.42	57.25 PK	74.00	-16.75	1.00 H	144	49.20	8.05
2	5147.42	39.36 AV	54.00	-14.64	1.00 H	144	31.31	8.05
3	5150.00	60.36 PK	74.00	-13.64	1.00 H	144	52.32	8.04
4	5150.00	39.82 AV	54.00	-14.18	1.00 H	144	31.78	8.04
5	*5190.00	91.34 PK			1.00 H	144	83.36	7.98
6	*5190.00	80.35 AV			1.00 H	144	72.37	7.98
7	#10380.00	54.29 PK	68.20	-13.91	1.00 H	30	38.49	15.80
8	15570.00	59.28 PK	74.00	-14.72	1.00 H	101	36.32	22.96
9	15570.00	46.70 AV	54.00	-7.30	1.00 H	101	23.74	22.96
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	5143.73	40.05 PK	74.00	-13.95	1.19 V	130	32.00	8.05
2	5143.73	60.81 AV	54.00	-13.19	1.19 V	130	52.76	8.05
3	5150.00	61.69 PK	74.00	-12.31	1.19 V	130	53.65	8.04
4	5150.00	41.43 AV	54.00	-12.57	1.19 V	130	33.39	8.04
5	*5190.00	93.47 PK			1.19 V	130	85.49	7.98
6	*5190.00	83.20 AV			1.19 V	130	75.22	7.98
7	#10380.00	56.74 PK	68.20	-11.46	1.00 V	301	40.94	15.80
8	15570.00	60.92 PK	74.00	-13.08	1.00 V	300	37.96	22.96
9	15570.00	48.70 AV	54.00	-5.30	1.00 V	300	25.74	22.96

REMARKS:

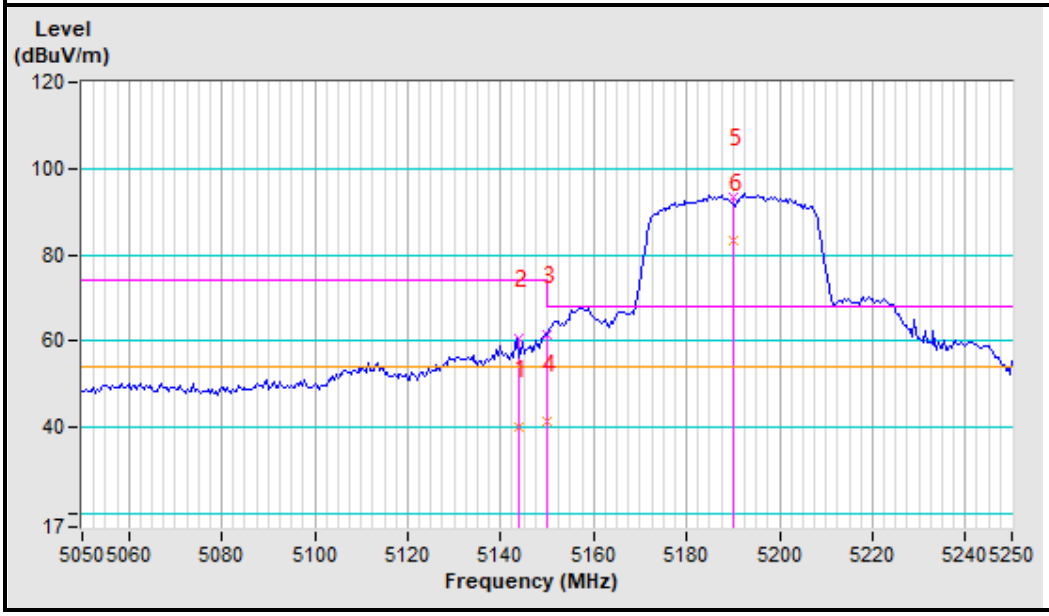
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5190MHz Horizontal



5190MHz Vertical



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

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5148.00	51.67 PK	74.00	-22.33	1.00 H	201	43.63	8.04
2	5148.00	39.80 AV	54.00	-14.20	1.00 H	201	31.76	8.04
3	5150.00	47.21 PK	74.00	-26.79	1.00 H	201	39.17	8.04
4	5150.00	36.80 AV	54.00	-17.20	1.00 H	201	28.76	8.04
5	*5230.00	92.33 PK			1.00 H	201	84.43	7.90
6	*5230.00	81.29 AV			1.00 H	201	73.39	7.90
7	#10460.00	54.56 PK	68.20	-13.64	1.00 H	51	38.09	16.47
8	15690.00	60.66 PK	74.00	-13.34	1.00 H	210	37.86	22.80
9	15690.00	48.77 AV	54.00	-5.23	1.00 H	210	25.97	22.80
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	5148.00	54.31 PK	74.00	-19.69	1.00 V	210	46.27	8.04
2	5148.00	39.12 AV	54.00	-14.88	1.00 V	210	31.08	8.04
3	5150.00	50.19 PK	74.00	-23.81	1.00 V	210	42.15	8.04
4	5150.00	38.98 AV	54.00	-15.02	1.00 V	210	30.94	8.04
5	*5230.00	94.97 PK			1.00 V	210	87.07	7.90
6	*5230.00	83.29 AV			1.00 V	210	75.39	7.90
7	#10460.00	55.47 PK	68.20	-12.73	1.00 V	37	39.00	16.47
8	15690.00	60.15 PK	74.00	-13.85	1.00 V	330	37.35	22.80
9	15690.00	48.20 AV	54.00	-5.80	1.00 V	330	25.40	22.80

REMARKS:

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

802.11ac (80MHz)

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

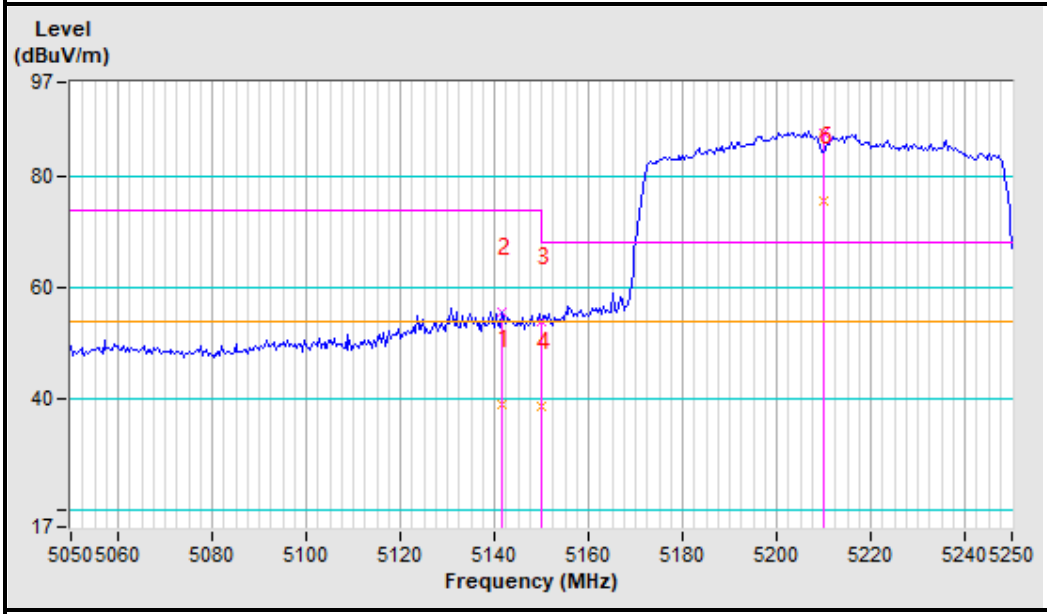
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5141.52	39.17 PK	74.00	-14.83	1.54 H	87	31.11	8.06
2	5141.52	55.79 AV	54.00	-18.21	1.54 H	87	47.73	8.06
3	5150.00	53.95 PK	74.00	-20.05	1.54 H	87	45.91	8.04
4	5150.00	38.80 AV	54.00	-15.20	1.54 H	87	30.76	8.04
5	5210.00	87.70 PK			1.54 H	87	79.76	7.94
6	*5210.00	75.78 AV			1.54 H	87	67.84	7.94
7	#10420.00	55.24 PK	68.20	-12.96	1.00 H	210	39.10	16.14
8	15630.00	59.38 PK	74.00	-14.62	1.00 H	210	36.50	22.88
9	15630.00	48.38 AV	54.00	-5.62	1.00 H	210	25.50	22.88
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	5132.68	56.08 PK	74.00	-17.92	1.03 V	132	48.01	8.07
2	5132.68	39.96 AV	54.00	-14.04	1.03 V	132	31.89	8.07
3	5150.00	56.39 PK	74.00	-17.61	1.03 V	132	48.35	8.04
4	5150.00	41.41 AV	54.00	-12.59	1.03 V	131	33.37	8.04
5	5210.00	90.45 PK			1.03 V	131	82.51	7.94
6	*5210.00	77.74 AV			1.03 V	131	69.80	7.94
7	#10420.00	56.64 PK	68.20	-11.56	1.00 V	210	40.50	16.14
8	15630.00	58.70 PK	74.00	-15.30	1.00 V	100	35.82	22.88
9	15630.00	48.70 PK	54.00	-5.30	1.00 V	100	25.82	22.88

REMARKS:

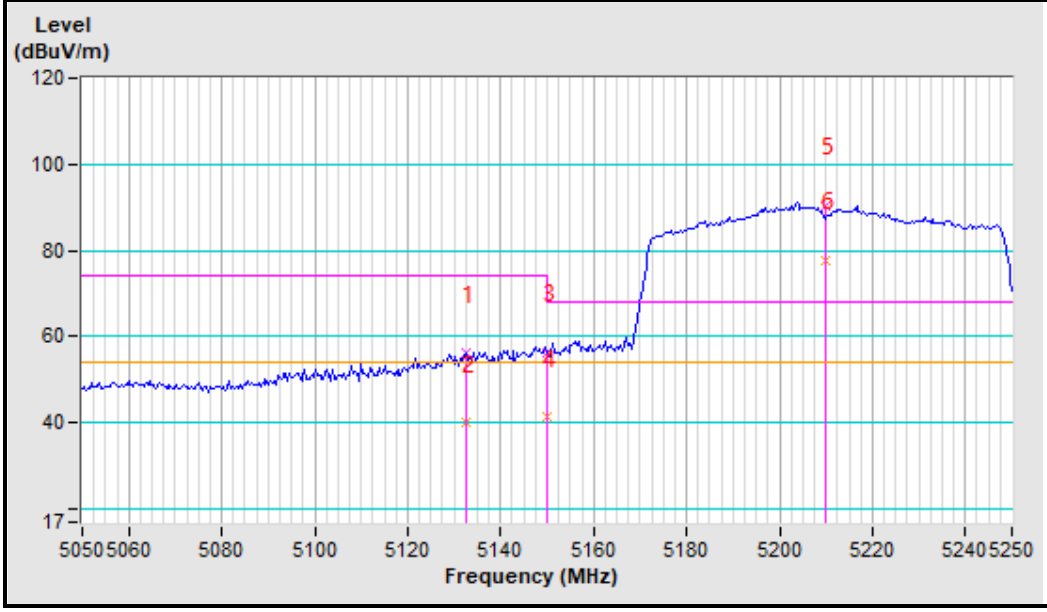
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5210MHz Horizontal



5210MHz Vertical



Band 2 (5250-5350MHz):

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	5145.29	48.21 PK	74.00	-25.79	1.00 H	186	40.16	8.05
2	5145.29	37.60 AV	54.00	-16.40	1.00 H	186	29.55	8.05
3	5150.00	47.88 PK	74.00	-26.12	1.00 H	186	39.84	8.04
4	5150.00	37.20 AV	54.00	-16.80	1.00 H	186	29.16	8.04
5	*5260.00	95.37 PK			1.00 H	186	87.52	7.85
6	*5260.00	84.37 AV			1.00 H	186	76.52	7.85
7	5350.00	48.63 PK	74.00	-25.37	1.00 H	186	40.94	7.69
8	5350.00	39.21 AV	54.00	-14.79	1.00 H	186	31.52	7.69
9	5355.29	49.62 PK	74.00	-24.38	1.00 H	186	41.94	7.68
10	5355.29	38.80 AV	54.00	-15.20	1.00 H	186	31.12	7.68
11	#10250.00	54.57 PK	68.20	-13.63	1.00 H	186	39.85	14.72
12	15780.00	60.10 PK	74.00	-13.90	1.00 H	204	37.43	22.67
13	15780.00	48.08 AV	54.00	-5.92	1.00 H	204	25.41	22.67
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	47.92 PK	74.00	-26.08	1.00 V	210	39.87	8.05
2	5144.00	37.01 AV	54.00	-16.99	1.00 V	210	28.96	8.05
3	5150.00	47.62 PK	74.00	-26.38	1.00 V	210	39.58	8.04
4	5150.00	36.70 AV	54.00	-17.30	1.00 V	210	28.66	8.04
5	*5260.00	98.62 PK			1.00 V	210	90.77	7.85
6	*5260.00	87.21 AV			1.00 V	210	79.36	7.85
7	5350.00	48.84 PK	74.00	-25.16	1.00 V	210	41.15	7.69
8	5350.00	37.87 AV	54.00	-16.13	1.00 V	210	30.18	7.69
9	5354.20	48.97 PK	74.00	-25.03	1.00 V	210	41.29	7.68
10	5354.20	37.80 AV	54.00	-16.20	1.00 V	210	30.12	7.68
11	#10250.00	53.18 PK	68.20	-15.02	1.00 V	301	38.46	14.72
12	15780.00	59.78 PK	74.00	-14.22	1.00 V	301	37.11	22.67
13	15780.00	47.98 AV	54.00	-6.02	1.00 V	301	25.31	22.67

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

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

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	94.91 PK			1.00 H	210	87.14	7.77
2	*5300.00	85.12 AV			1.00 H	210	77.35	7.77
3	5350.00	48.30 PK	74.00	-25.70	1.00 H	210	40.61	7.69
4	5350.00	37.26 AV	54.00	-16.74	1.00 H	210	29.57	7.69
5	5354.02	49.46 PK	74.00	-24.54	1.00 H	210	41.78	7.68
6	5354.02	37.94 AV	54.00	-16.06	1.00 H	210	30.26	7.68
7	10600.00	54.59 PK	74.00	-19.41	1.00 H	290	37.85	16.74
8	10600.00	43.59 AV	54.00	-10.41	1.00 H	290	26.85	16.74
9	15900.00	59.48 PK	74.00	-14.52	1.00 H	236	36.97	22.51
10	15900.00	47.71 AV	54.00	-6.29	1.00 H	236	25.20	22.51
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	97.17 PK			1.00 V	210	89.40	7.77
2	*5300.00	87.10 AV			1.00 V	210	79.33	7.77
3	5350.00	48.21 PK	74.00	-25.79	1.00 V	210	40.52	7.69
4	5350.00	38.10 AV	54.00	-15.90	1.00 V	210	30.41	7.69
5	5354.02	49.48 PK	74.00	-24.52	1.00 V	210	41.80	7.68
6	5354.02	37.80 AV	54.00	-16.20	1.00 V	210	30.12	7.68
7	10600.00	56.50 PK	74.00	-17.50	1.00 V	135	39.76	16.74
8	10600.00	44.11 AV	54.00	-9.89	1.00 V	135	27.37	16.74
9	15900.00	58.87 PK	74.00	-15.13	1.00 V	320	36.36	22.51
10	15900.00	47.77 AV	54.00	-6.23	1.00 V	320	25.26	22.51

REMARKS:

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

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

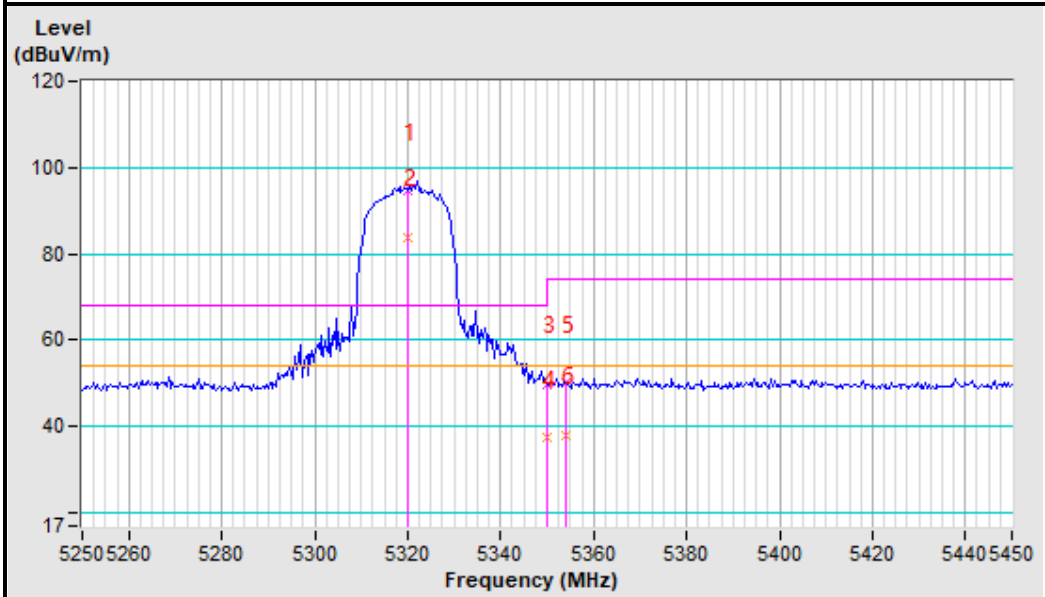
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	94.66 PK			1.00 H	91	86.92	7.74
2	*5320.00	83.83 AV			1.00 H	91	76.09	7.74
3	5350.00	49.91 PK	74.00	-24.09	1.00 H	91	42.22	7.69
4	5350.00	37.52 AV	54.00	-16.48	1.00 H	91	29.83	7.69
5	5354.17	50.15 PK	74.00	-23.85	1.00 H	91	42.47	7.68
6	5354.17	38.10 AV	54.00	-15.90	1.00 H	91	30.42	7.68
7	10640.00	55.23 PK	74.00	-18.77	1.00 H	299	38.51	16.72
8	10640.00	43.98 AV	54.00	-10.02	1.00 H	299	27.26	16.72
9	15960.00	58.49 PK	74.00	-15.51	1.00 H	17	36.06	22.43
10	15960.00	48.40 AV	54.00	-5.60	1.00 H	17	25.97	22.43
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	96.26 PK			1.00 V	107	88.52	7.74
2	*5320.00	86.42 AV			1.00 V	107	78.68	7.74
3	5350.00	56.16 PK	74.00	-17.84	1.00 V	107	48.47	7.69
4	5350.00	38.47 AV	54.00	-15.53	1.00 V	107	30.78	7.69
5	5355.13	54.75 PK	74.00	-19.25	1.00 V	107	47.07	7.68
6	5355.13	38.15 AV	54.00	-15.85	1.00 V	106	30.47	7.68
7	10640.00	60.92 PK	74.00	-13.08	1.00 V	20	44.20	16.72
8	10640.00	42.39 AV	54.00	-11.61	1.00 V	20	25.67	16.72
9	15960.00	59.23 PK	74.00	-14.77	1.00 V	210	36.80	22.43
10	15960.00	48.10 AV	54.00	-5.90	1.00 V	210	25.67	22.43

REMARKS:

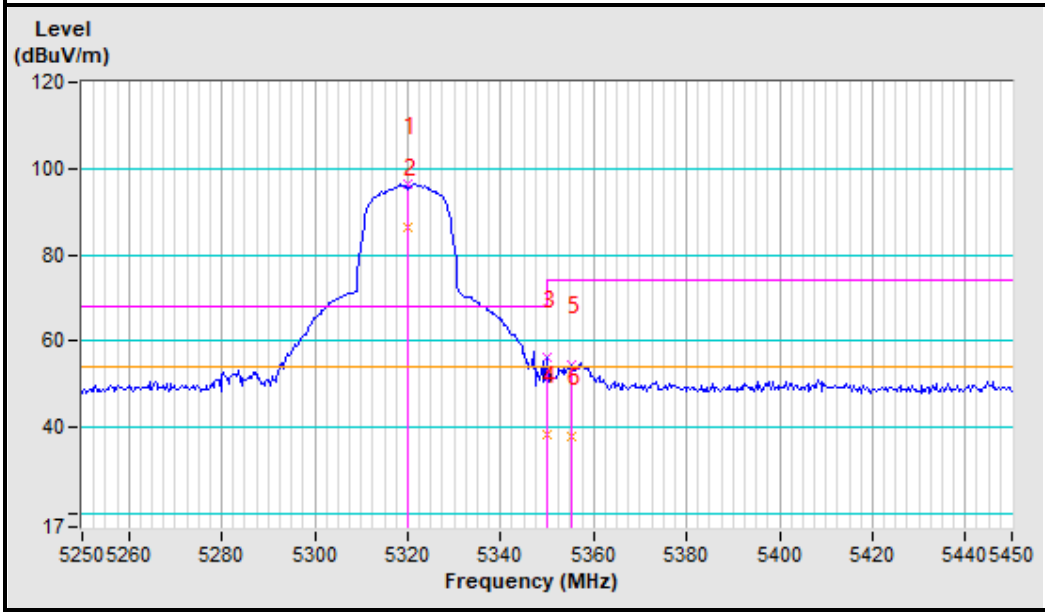
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5320MHz Horizontal



5320MHz Vertical



802.11n (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5146.26	47.36 PK	74.00	-26.64	1.00 H	237	39.31	8.05
2	5146.26	37.31 AV	54.00	-16.69	1.00 H	237	29.26	8.05
3	5150.00	47.60 PK	74.00	-26.40	1.00 H	237	39.56	8.04
4	5150.00	36.49 AV	54.00	-17.51	1.00 H	237	28.45	8.04
5	*5260.00	97.64 PK			1.00 H	237	89.79	7.85
6	*5260.00	86.79 AV			1.00 H	237	78.94	7.85
7	5350.00	48.46 PK	74.00	-25.54	1.00 H	237	40.77	7.69
8	5350.00	38.44 AV	54.00	-15.56	1.00 H	237	30.75	7.69
9	5355.00	48.98 PK	74.00	-25.02	1.00 H	237	41.30	7.68
10	5355.00	39.01 AV	54.00	-14.99	1.00 H	237	31.33	7.68
11	#10520.00	56.86 PK	68.20	-11.34	1.00 H	123	40.07	16.79
12	15780.00	59.32 PK	74.00	-14.68	1.00 H	210	36.65	22.67
13	15780.00	48.21 AV	54.00	-5.79	1.00 H	210	25.54	22.67
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	47.24 PK	74.00	-26.76	1.00 V	201	39.18	8.06
2	5142.00	38.12 AV	54.00	-15.88	1.00 V	201	30.06	8.06
3	5150.00	48.71 PK	74.00	-25.29	1.00 V	213	40.67	8.04
4	5150.00	37.39 AV	54.00	-16.61	1.00 V	213	29.35	8.04
5	*5260.00	96.62 PK			1.00 V	139	88.77	7.85
6	*5260.00	85.79 AV			1.00 V	139	77.94	7.85
7	5350.00	48.37 PK	74.00	-25.63	1.00 V	200	40.68	7.69
8	5350.00	38.29 AV	54.00	-15.71	1.00 V	200	30.60	7.69
9	5351.28	48.62 PK	74.00	-25.38	1.00 V	201	40.93	7.69
10	5351.28	38.19 AV	54.00	-15.81	1.00 V	201	30.50	7.69
11	#10520.00	57.22 PK	68.20	-10.98	1.00 V	50	40.43	16.79
12	15780.00	59.17 PK	74.00	-14.83	1.00 V	152	36.50	22.67
13	15780.00	48.99 AV	54.00	-5.01	1.00 V	152	26.32	22.67

REMARKS:

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

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

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	93.55 PK			1.00 H	201	85.78	7.77
2	*5300.00	83.37 AV			1.00 H	201	75.60	7.77
3	5350.00	47.89 PK	74.00	-26.11	1.00 H	210	40.20	7.69
4	5350.00	38.19 AV	54.00	-15.81	1.00 H	210	30.50	7.69
5	5353.52	48.43 PK	74.00	-25.57	1.00 H	201	40.75	7.68
6	5353.52	37.90 AV	54.00	-16.10	1.00 H	201	30.22	7.68
7	10600.00	56.59 PK	74.00	-17.41	1.00 H	200	39.85	16.74
8	10600.00	44.03 AV	54.00	-9.97	1.00 H	200	27.29	16.74
9	15900.00	57.59 PK	74.00	-16.41	1.00 H	15	35.08	22.51
10	15900.00	47.57 AV	54.00	-6.43	1.00 H	15	25.06	22.51
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	96.58 PK			1.00 V	300	88.81	7.77
2	*5300.00	85.19 AV			1.00 V	300	77.42	7.77
3	5350.00	48.67 PK	74.00	-25.33	1.00 V	102	40.98	7.69
4	5350.00	38.77 AV	54.00	-15.23	1.00 V	102	31.08	7.69
5	5355.48	48.76 PK	74.00	-25.24	1.00 V	103	41.08	7.68
6	5355.48	38.21 AV	54.00	-15.79	1.00 V	103	30.53	7.68
7	10600.00	54.40 PK	74.00	-19.60	1.00 V	210	37.66	16.74
8	10600.00	43.34 AV	54.00	-10.66	1.00 V	210	26.60	16.74
9	15900.00	58.24 PK	74.00	-15.76	1.01 V	1	35.73	22.51
10	15900.00	47.78 AV	54.00	-6.22	1.01 V	1	25.27	22.51

REMARKS:

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

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

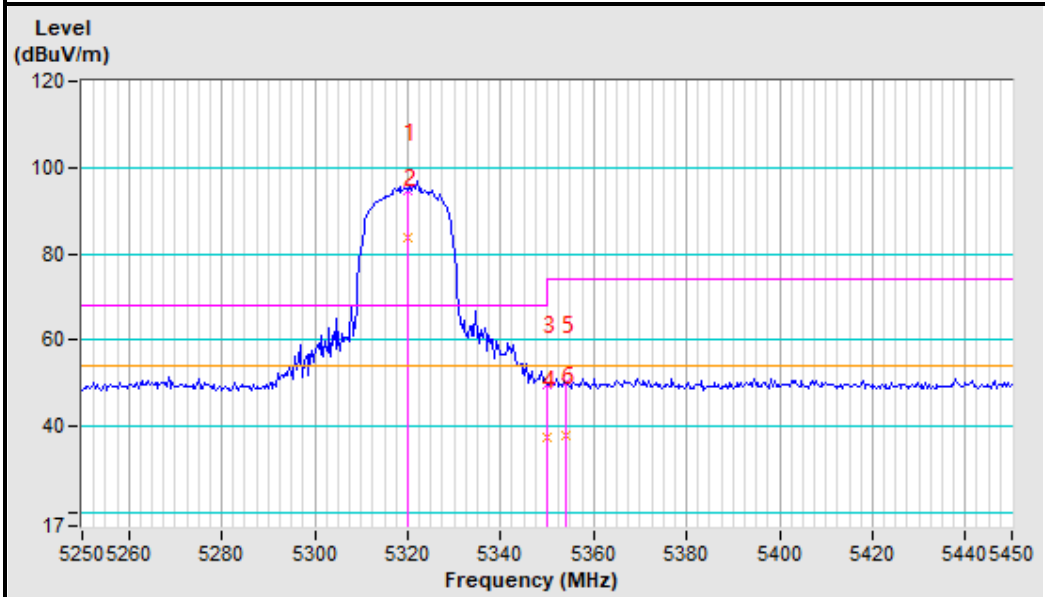
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	94.66 PK			1.00 H	91	86.92	7.74
2	*5320.00	83.83 AV			1.00 H	91	76.09	7.74
3	5350.00	49.91 PK	74.00	-24.09	1.00 H	91	42.22	7.69
4	5350.00	37.52 AV	54.00	-16.48	1.00 H	91	29.83	7.69
5	5354.17	50.15 PK	74.00	-23.85	1.00 H	91	42.47	7.68
6	5354.17	38.10 AV	54.00	-15.90	1.00 H	91	30.42	7.68
7	10640.00	54.90 PK	74.00	-19.10	1.00 H	210	38.18	16.72
8	10640.00	43.89 AV	54.00	-10.11	1.00 H	210	27.17	16.72
9	15960.00	59.22 PK	74.00	-14.78	1.00 H	310	36.79	22.43
10	15960.00	48.63 AV	54.00	-5.37	1.00 H	310	26.20	22.43
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	97.04 PK			1.00 V	120	89.30	7.74
2	*5320.00	87.13 AV			1.00 V	120	79.39	7.74
3	5350.00	50.28 PK	74.00	-23.72	1.00 V	120	42.59	7.69
4	5350.00	38.42 AV	54.00	-15.58	1.00 V	120	30.73	7.69
5	5351.28	38.30 PK	74.00	-15.70	1.00 V	120	30.61	7.69
6	5351.28	52.18 AV	54.00	-21.82	1.00 V	120	44.49	7.69
7	10640.00	55.09 PK	74.00	-18.91	1.00 V	20	38.37	16.72
8	10640.00	46.17 AV	54.00	-7.83	1.00 V	20	29.45	16.72
9	15960.00	59.60 PK	74.00	-14.40	1.00 V	208	37.17	22.43
10	15960.00	48.60 AV	54.00	-5.40	1.00 V	208	26.17	22.43

REMARKS:

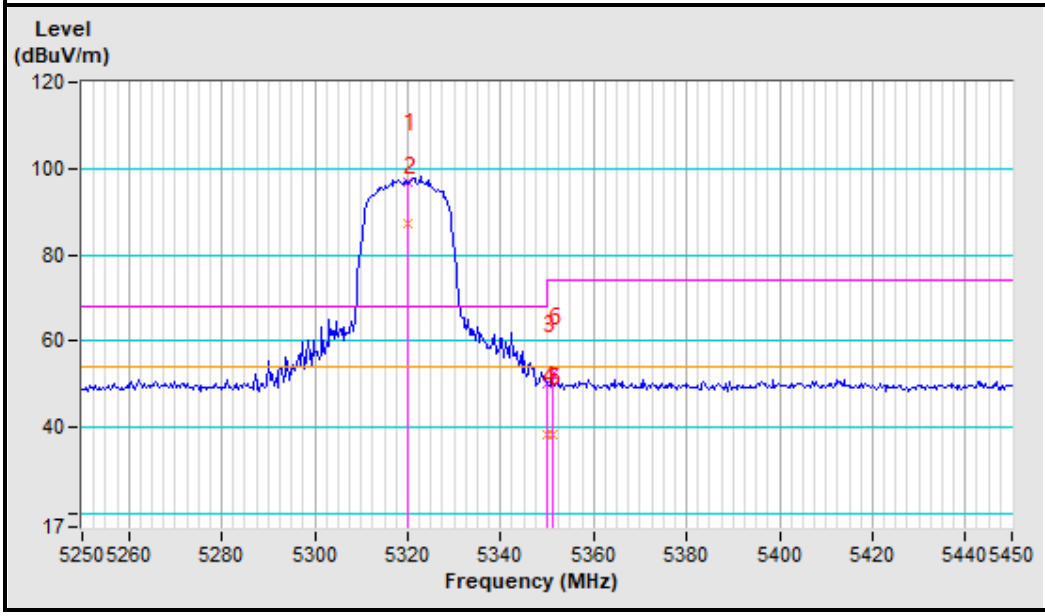
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5320MHz Horizontal



5320MHz Vertical



802.11n (40MHz)

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

ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	93.58 PK			1.00 H	109	85.75	7.83
2	*5270.00	81.00 AV			1.00 H	109	73.17	7.83
3	5350.00	48.62 PK	74.00	-25.38	1.00 H	210	40.93	7.69
4	5350.00	38.91 AV	54.00	-15.09	1.00 H	210	31.22	7.69
5	5352.56	49.78 PK	74.00	-24.22	1.00 H	15	42.10	7.68
6	5352.56	38.63 AV	54.00	-15.37	1.00 H	15	30.95	7.68
7	#10540.00	56.00 PK	68.20	-12.20	1.00 H	32	39.22	16.78
8	15810.00	58.71 PK	74.00	-15.29	1.00 H	37	36.08	22.63
9	15810.00	48.53 AV	54.00	-5.47	1.00 H	37	25.90	22.63
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	94.75 PK			1.00 V	10	86.92	7.83
2	*5270.00	83.94 AV			1.00 V	10	76.11	7.83
3	5350.00	48.35 PK	74.00	-25.65	1.00 V	12	40.66	7.69
4	5350.00	37.28 AV	54.00	-16.72	1.00 V	12	29.59	7.69
5	5353.84	48.75 PK	74.00	-25.25	1.00 V	210	41.07	7.68
6	5353.84	37.28 AV	54.00	-16.72	1.00 V	210	29.60	7.68
7	#10540.00	57.29 PK	68.20	-10.91	1.00 V	102	40.51	16.78
8	15810.00	59.54 PK	74.00	-14.46	1.00 V	34	36.91	22.63
9	15810.00	48.52 AV	54.00	-5.48	1.00 V	34	25.89	22.63

REMARKS:

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

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

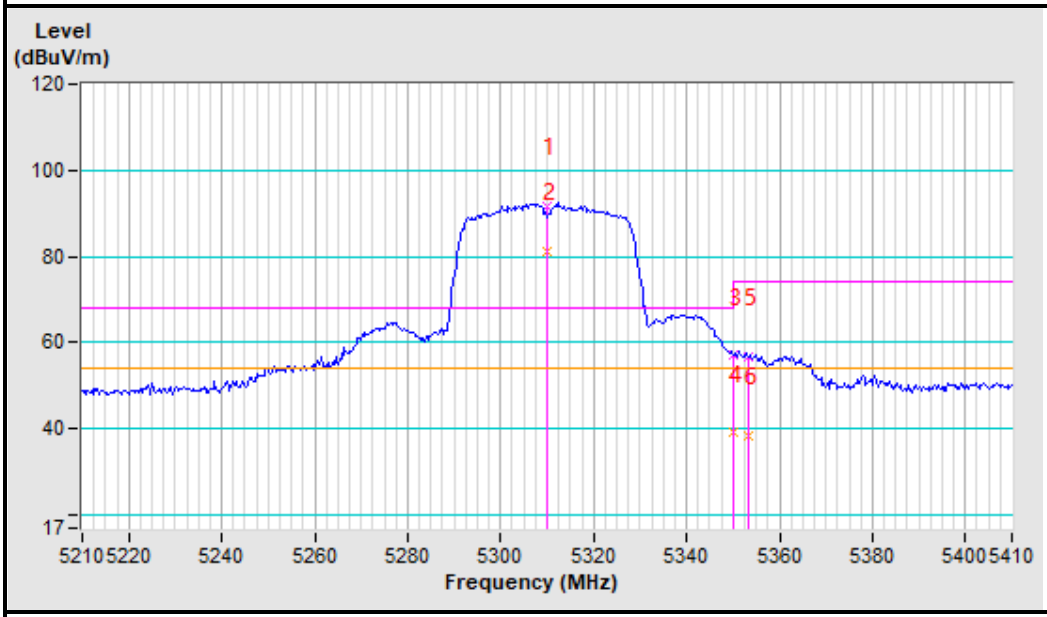
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	91.69 PK			1.00 H	90	83.94	7.75
2	*5310.00	81.31 AV			1.00 H	90	73.56	7.75
3	5350.00	57.10 PK	74.00	-16.90	1.00 H	90	49.41	7.69
4	5350.00	39.17 AV	54.00	-14.83	1.00 H	90	31.48	7.69
5	5353.21	56.85 PK	74.00	-17.15	1.00 H	90	49.17	7.68
6	5353.21	38.57 AV	54.00	-15.43	1.00 H	90	30.89	7.68
7	10620.00	54.85 PK	74.00	-19.15	1.00 H	72	38.12	16.73
8	10620.00	44.36 AV	54.00	-9.64	1.00 H	72	27.63	16.73
9	15930.00	61.08 PK	74.00	-12.92	1.00 H	201	38.61	22.47
10	15930.00	47.94 AV	54.00	-6.06	1.00 H	201	25.47	22.47
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	95.13 PK			1.00 V	121	87.38	7.75
2	*5310.00	84.84 AV			1.00 V	121	77.09	7.75
3	5350.00	59.52 PK	74.00	-14.48	1.00 V	121	51.83	7.69
4	5350.00	40.24 AV	54.00	-13.76	1.00 V	121	32.55	7.69
5	5352.24	59.39 PK	74.00	-14.61	1.00 V	121	51.71	7.68
6	5352.24	39.49 AV	54.00	-14.51	1.00 V	210	31.81	7.68
7	10620.00	54.39 PK	74.00	-19.61	1.00 V	210	37.66	16.73
8	10620.00	42.98 AV	54.00	-11.02	1.00 V	210	26.25	16.73
9	15930.00	59.54 PK	74.00	-14.46	1.00 V	109	37.07	22.47
10	**15930.00**	**48.36 AV**	**54.00**	**-5.64**	**1.00 V**	**109**	**25.89**	**22.47**

REMARKS:

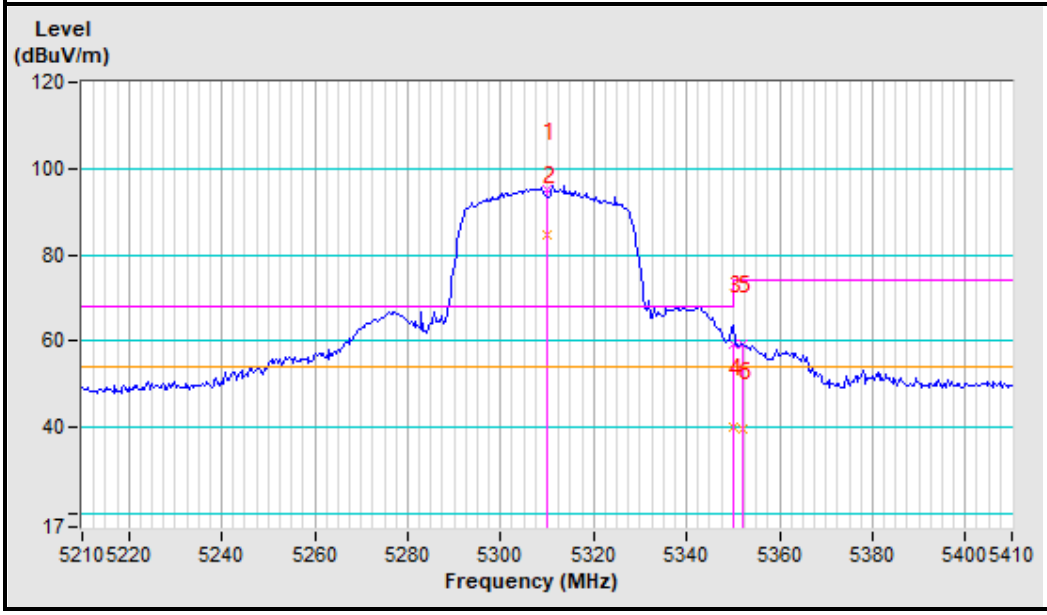
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5310MHz Horizontal



5310MHz Vertical



802.11ac 80MHz

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

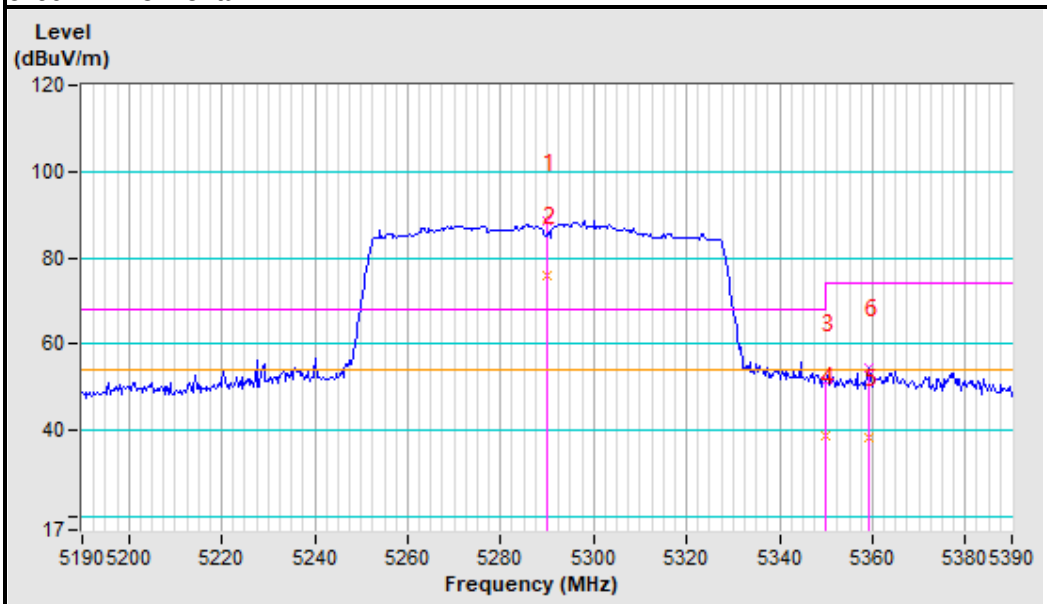
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5290.00	88.47 PK			1.00 H	96	80.68	7.79
2	*5290.00	76.11 AV			1.00 H	96	68.32	7.79
3	5350.00	51.33 PK	74.00	-22.67	1.00 H	96	43.64	7.69
4	5350.00	38.99 AV	54.00	-15.01	1.00 H	96	31.30	7.69
5	5359.29	38.43 PK	74.00	-15.57	1.00 H	96	30.76	7.67
6	5359.29	54.67 AV	54.00	-19.33	1.00 H	96	47.00	7.67
7	#10580.00	56.73 PK	68.20	-11.47	1.00 H	125	39.98	16.75
8	15870.00	61.96 PK	74.00	-12.04	1.00 H	82	39.41	22.55
9	15870.00	49.06 AV	54.00	-4.94	1.00 H	82	26.51	22.55
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5290.00	90.14 PK			1.00 V	130	82.35	7.79
2	*5290.00	77.83 AV			1.00 V	130	70.04	7.79
3	5350.00	52.38 PK	74.00	-21.62	1.00 V	130	44.69	7.69
4	5350.00	39.48 AV	54.00	-14.52	1.00 V	130	31.79	7.69
5	5351.92	39.06 PK	74.00	-14.94	1.00 V	130	31.37	7.69
6	5351.92	58.01 AV	54.00	-15.99	1.00 V	130	50.32	7.69
7	#10580.00	56.32 PK	68.20	-11.88	1.50 V	354	39.57	16.75
8	15870.00	58.19 PK	74.00	-15.81	1.04 V	210	35.64	22.55
9	15870.00	48.83 AV	54.00	-5.17	1.04 V	210	26.28	22.55

REMARKS:

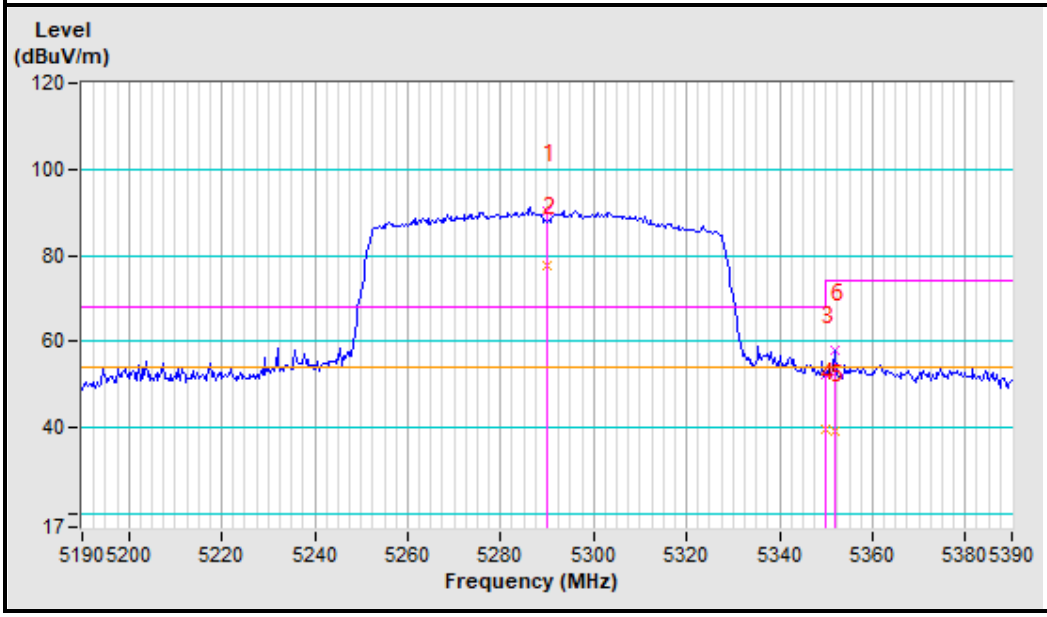
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5290MHz Horizontal



5290MHz Vertical



Band 3 (5470-5725MHz):

ABOVE 1GHz DATA

802.11a

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

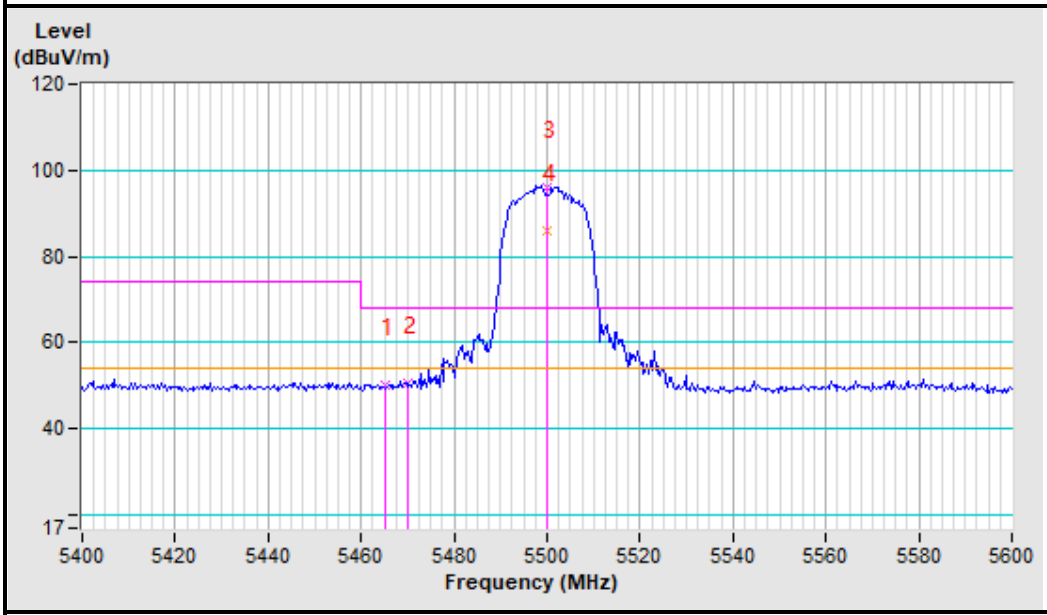
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	#5465.00	50.10 PK	68.20	-18.10	1.00 H	177	42.61	7.49
2	#5470.00	50.59 PK	68.20	-17.61	1.00 H	177	43.11	7.48
3	*5500.00	95.95 PK			1.00 H	177	88.53	7.42
4	*5500.00	85.80 AV			1.00 H	177	78.38	7.42
5	11000.00	54.31 PK	74.00	-19.69	1.00 H	210	37.80	16.51
6	11000.00	43.29 AV	54.00	-10.71	1.00 H	210	26.78	16.51
7	#16500.00	58.73 PK	68.20	-9.47	1.00 H	30	35.56	23.17
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	#5466.79	49.00 PK	68.20	-19.20	1.00 V	201	41.52	7.48
2	#5470.00	49.90 PK	68.20	-18.30	1.00 V	201	42.42	7.48
3	*5500.00	94.72 PK			1.00 V	201	87.30	7.42
4	*5500.00	84.70 AV			1.00 V	201	77.28	7.42
5	11000.00	53.79 PK	74.00	-20.21	1.00 V	201	37.28	16.51
6	11000.00	43.79 AV	54.00	-10.21	1.00 V	201	27.28	16.51
7	#16500.00	59.72 PK	68.20	-8.48	1.00 V	21	36.55	23.17

REMARKS:

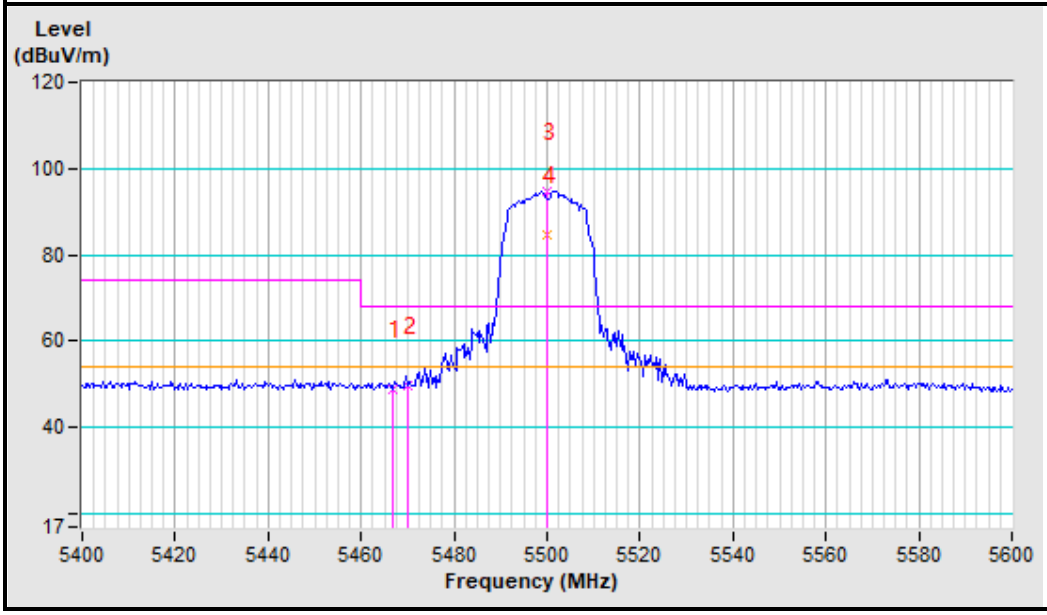
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

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	47.16 PK	68.20	-21.04	1.00 H	310	39.68	7.48
2	*5580.00	91.73 PK			1.00 H	310	84.22	7.51
3	*5580.00	80.89 AV			1.00 H	310	73.38	7.51
4	11160.00	53.30 PK	74.00	-20.70	1.00 H	20	36.74	16.56
5	11160.00	42.32 AV	54.00	-11.68	1.00 H	20	25.76	16.56
6	#16740.00	61.31 PK	68.20	-6.89	1.00 H	29	37.48	23.83
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	48.16 PK	68.20	-20.04	1.00 V	214	40.68	7.48
2	#5470.00	36.70 AV	54.00	-17.30	1.00 V	214	29.22	7.48
3	*5580.00	93.43 PK			1.00 V	214	85.92	7.51
4	*5580.00	83.17 AV			1.00 V	214	75.66	7.51
5	11160.00	53.76 PK	74.00	-20.24	1.00 V	214	37.20	16.56
6	11160.00	43.20 AV	54.00	-10.80	1.00 V	214	26.64	16.56
7	#16740.00	61.32 PK	68.20	-6.88	1.00 V	214	37.49	23.83

REMARKS:

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

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

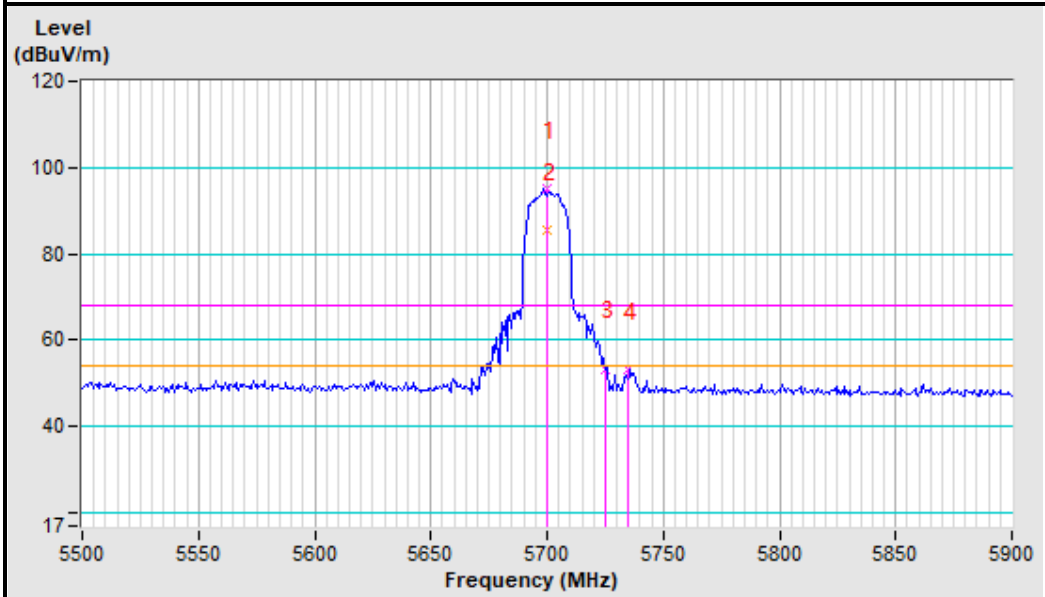
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	95.04 PK			1.00 H	183	87.41	7.63
2	*5700.00	85.51 AV			1.00 H	183	77.88	7.63
3	#5725.00	53.29 PK	68.20	-14.91	1.00 H	21	45.64	7.65
4	#5735.00	53.05 PK	68.20	-15.15	1.00 H	0	45.39	7.66
5	11400.00	53.79 PK	74.00	-20.21	1.00 H	21	37.18	16.61
6	11400.00	42.35 AV	54.00	-11.65	1.00 H	21	25.74	16.61
7	#17100.00	62.48 PK	68.20	-5.72	1.00 H	39	38.02	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	*5700.00	94.61 PK			1.00 V	232	86.98	7.63
2	*5700.00	85.46 AV			1.00 V	232	77.83	7.63
3	#5725.00	54.61 PK	68.20	-13.59	1.00 V	123	46.96	7.65
4	#5734.00	54.02 PK	68.20	-14.18	1.00 V	0	46.36	7.66
5	11400.00	53.35 PK	74.00	-20.65	1.00 V	0	36.74	16.61
6	11400.00	42.64 AV	54.00	-11.36	1.00 V	0	26.03	16.61
7	#17100.00	61.89 PK	68.20	-6.31	1.00 V	20	37.43	24.46

REMARKS:

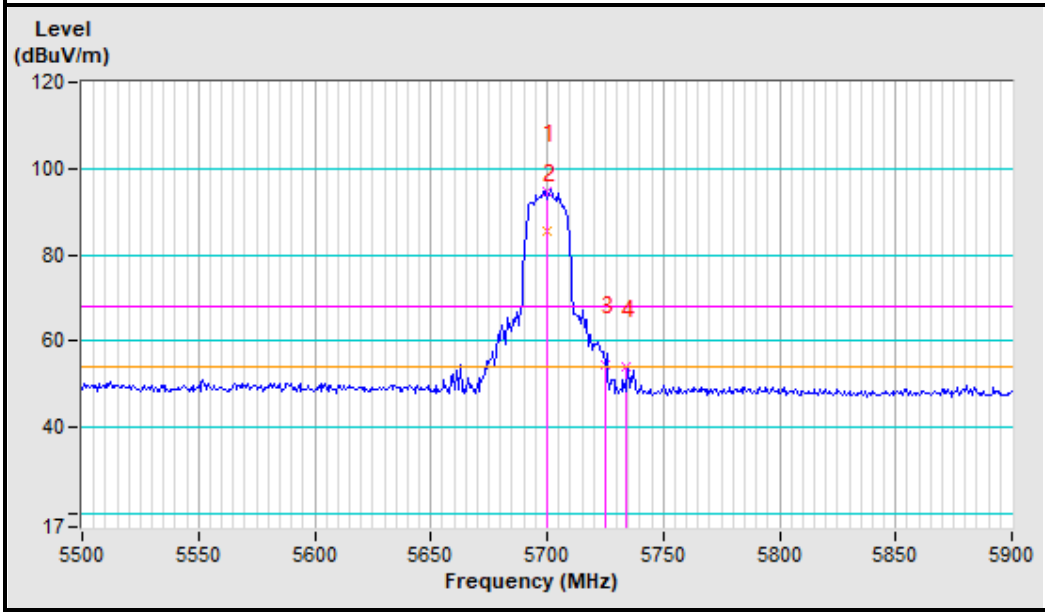
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5700MHz Horizontal



5700MHz Vertical



802.11n (20MHz)

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

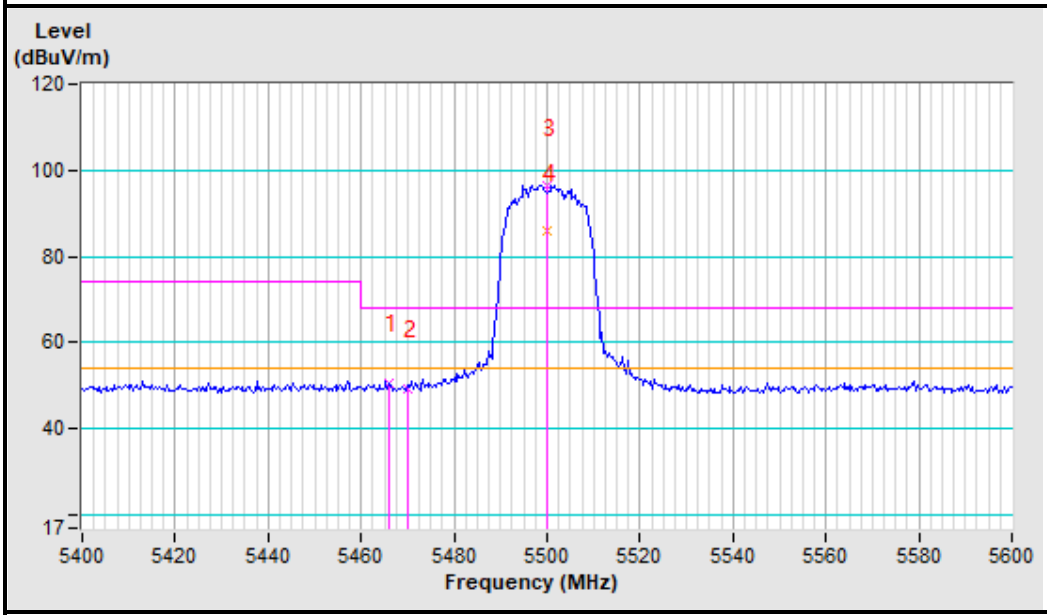
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5466.15	50.69 PK	68.20	-17.51	1.00 H	0	43.21	7.48
2	#5470.00	49.34 PK	68.20	-18.86	1.00 H	0	41.86	7.48
3	*5500.00	96.31 PK			1.00 H	123	88.89	7.42
4	*5500.00	85.79 AV			1.00 H	123	78.37	7.42
5	11000.00	53.41 PK	74.00	-20.59	1.00 H	201	36.90	16.51
6	11000.00	43.29 AV	54.00	-10.71	1.00 H	201	26.78	16.51
7	#16500.00	60.02 PK	68.20	-8.18	1.00 H	10	36.85	23.17
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	#5467.11	49.28 PK	68.20	-18.92	1.00 V	3	41.80	7.48
2	#5470.00	49.49 PK	68.20	-18.71	1.00 V	208	42.01	7.48
3	*5500.00	96.11 PK			1.00 V	208	88.69	7.42
4	*5500.00	86.12 AV			1.00 V	208	78.70	7.42
5	11000.00	53.77 PK	74.00	-20.23	1.00 V	2	37.26	16.51
6	11000.00	36.88 AV	54.00	-17.12	1.00 V	2	20.37	16.51
7	#16500.00	59.50 PK	68.20	-8.70	1.00 V	33	36.33	23.17

REMARKS:

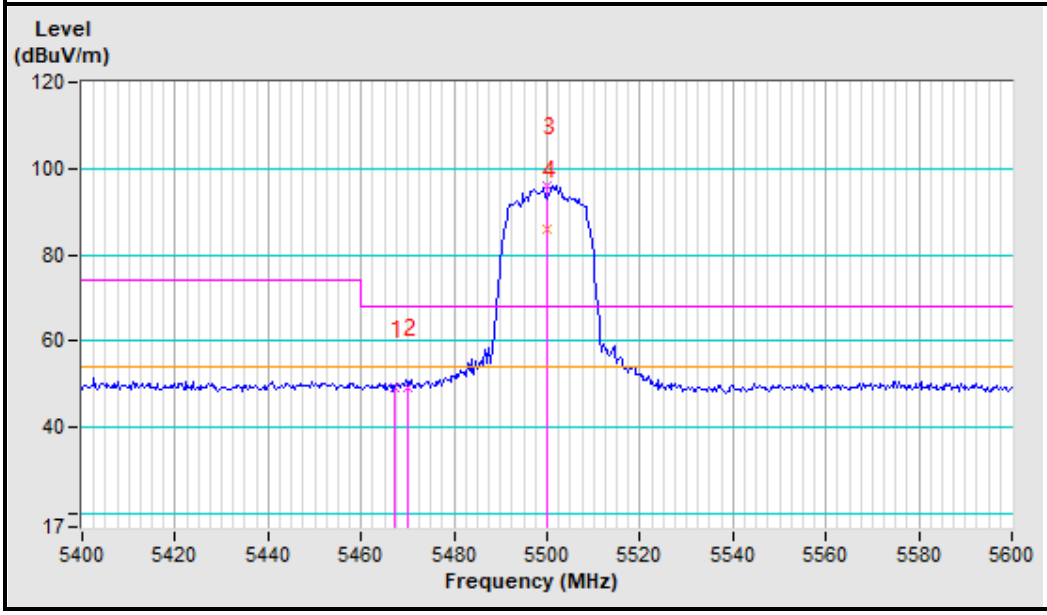
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

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	48.88 PK	68.20	-19.32	1.00 H	210	41.40	7.48
2	*5580.00	96.03 PK			1.00 H	300	88.52	7.51
3	*5580.00	86.70 AV			1.00 H	300	79.19	7.51
4	11160.00	49.46 PK	74.00	-24.54	1.00 H	0	32.90	16.56
5	11160.00	37.90 AV	54.00	-16.10	1.00 H	0	21.34	16.56
6	#16740.00	59.78 PK	68.20	-8.42	1.00 H	3	35.95	23.83
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	49.24 PK	68.20	-18.96	1.00 V	25	41.76	7.48
2	*5580.00	92.90 PK			1.00 V	183	85.39	7.51
3	*5580.00	83.14 AV			1.00 V	183	75.63	7.51
4	11160.00	53.66 PK	74.00	-20.34	1.00 V	20	37.10	16.56
5	11160.00	38.19 AV	54.00	-15.81	1.00 V	20	21.63	16.56
6	#16740.00	60.20 PK	68.20	-8.00	1.00 V	0	36.37	23.83

REMARKS:

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

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

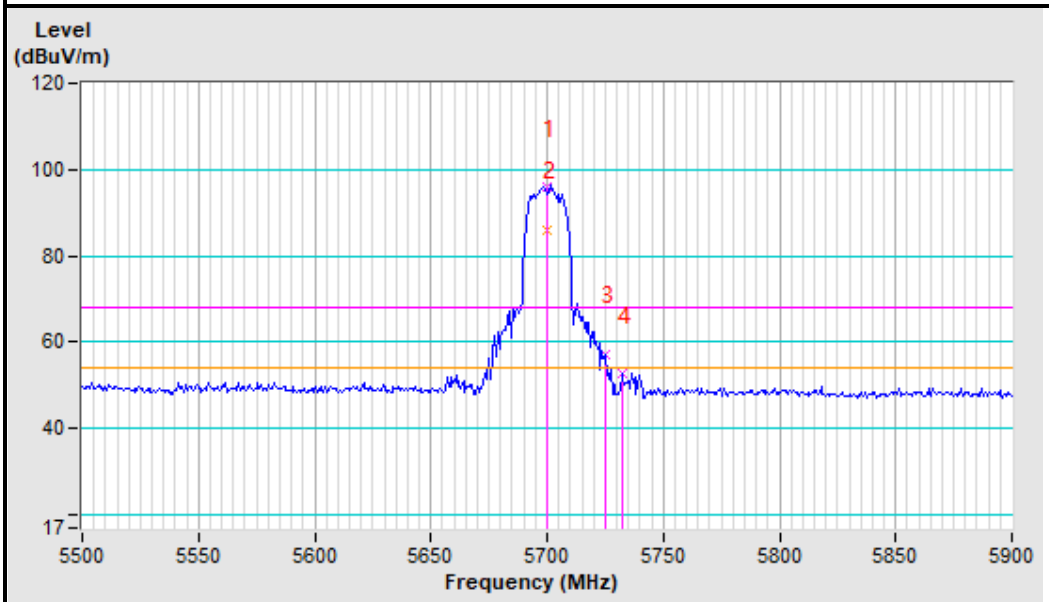
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	95.90 PK			1.00 H	300	88.27	7.63
2	*5700.00	86.11 AV			1.00 H	300	78.48	7.63
3	#5725.00	57.20 PK	68.20	-11.00	1.00 H	1	49.55	7.65
4	#5732.00	52.68 PK	68.20	-15.52	1.00 H	0	45.03	7.65
5	11400.00	54.55 PK	74.00	-19.45	1.00 H	20	37.94	16.61
6	11400.00	43.65 AV	54.00	-10.35	1.00 H	20	27.04	16.61
7	#17100.00	59.29 PK	68.20	-8.91	1.00 H	210	34.83	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	*5700.00	93.39 PK			1.00 V	12	85.76	7.63
2	*5700.00	84.27 AV			1.00 V	12	76.64	7.63
3	#5725.00	55.48 PK	68.20	-12.72	1.00 V	0	47.83	7.65
4	#5735.00	51.77 PK	68.20	-16.43	1.00 V	0	44.11	7.66
5	11400.00	53.81 PK	74.00	-20.19	1.00 V	12	37.20	16.61
6	11400.00	43.19 AV	54.00	-10.81	1.00 V	12	26.58	16.61
7	#17100.00	61.55 PK	68.20	-6.65	1.00 V	200	37.09	24.46

REMARKS:

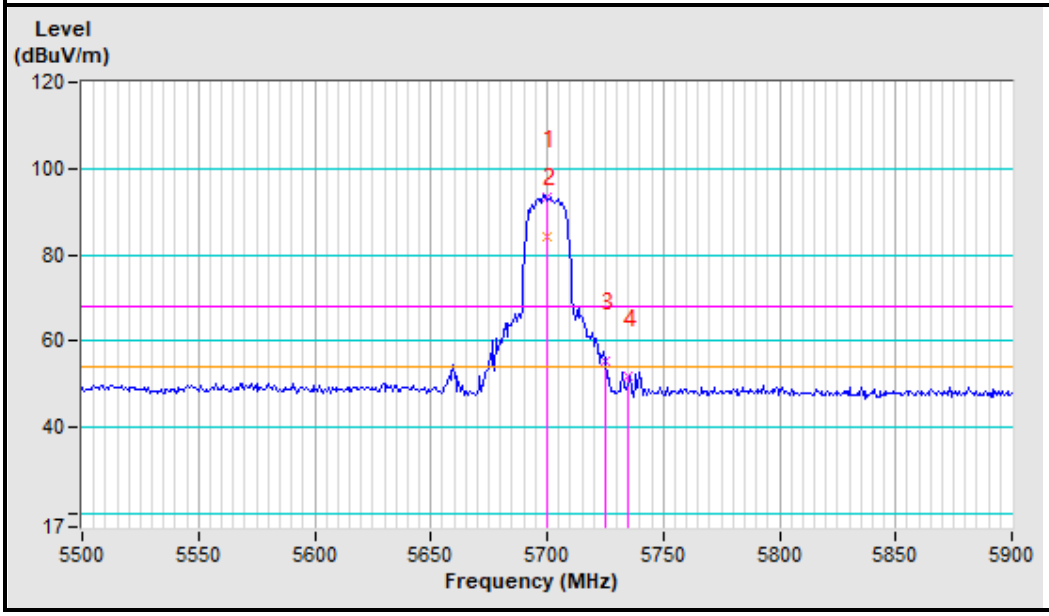
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5700MHz Horizontal



5700MHz Vertical



802.11n (40MHz)

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

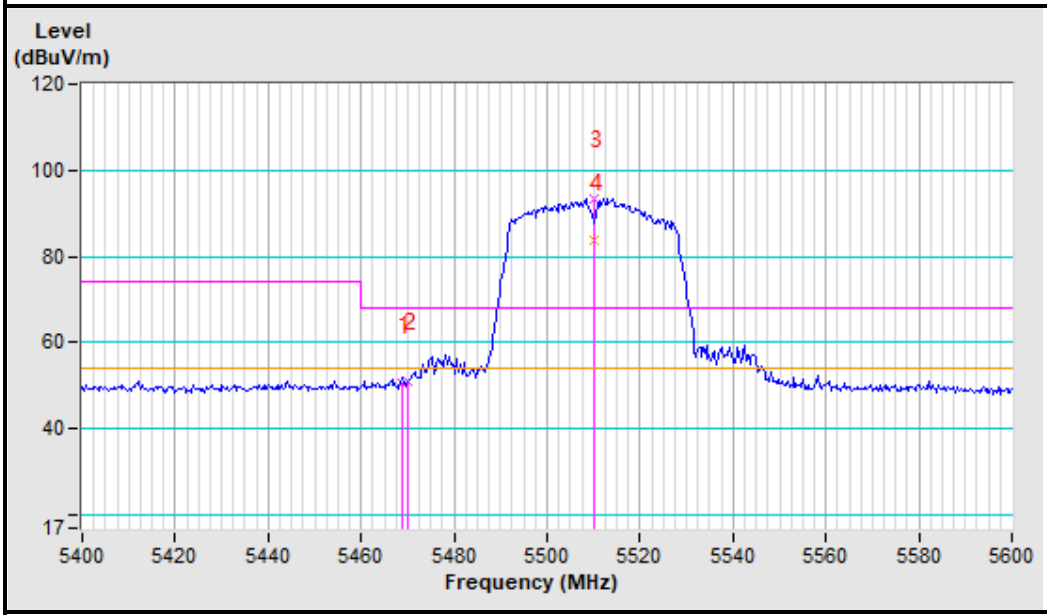
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5468.71	50.59 PK	68.20	-17.61	1.00 H	0	43.11	7.48
2	#5470.00	51.12 PK	68.20	-17.08	1.00 H	0	43.64	7.48
3	*5510.00	93.41 PK			1.00 H	19	85.98	7.43
4	*5510.00	83.76 AV			1.00 H	19	76.33	7.43
5	11020.00	53.41 PK	74.00	-20.59	1.00 H	1	36.90	16.51
6	11020.00	43.40 AV	54.00	-10.60	1.00 H	1	26.89	16.51
7	#16530.00	59.46 PK	68.20	-8.74	1.00 H	29	36.21	23.25
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	#5468.20	49.96 PK	68.20	-18.24	1.00 V	2	42.48	7.48
2	#5470.00	51.48 PK	68.20	-16.72	1.00 V	0	44.00	7.48
3	*5510.00	91.88 PK			1.00 V	251	84.45	7.43
4	*5510.00	81.78 AV			1.00 V	251	74.35	7.43
5	11020.00	53.75 PK	74.00	-20.25	1.00 V	0	37.24	16.51
6	11020.00	37.19 AV	54.00	-16.81	1.00 V	0	20.68	16.51
7	#16530.00	60.08 PK	68.20	-8.12	1.00 V	100	36.83	23.25

REMARKS:

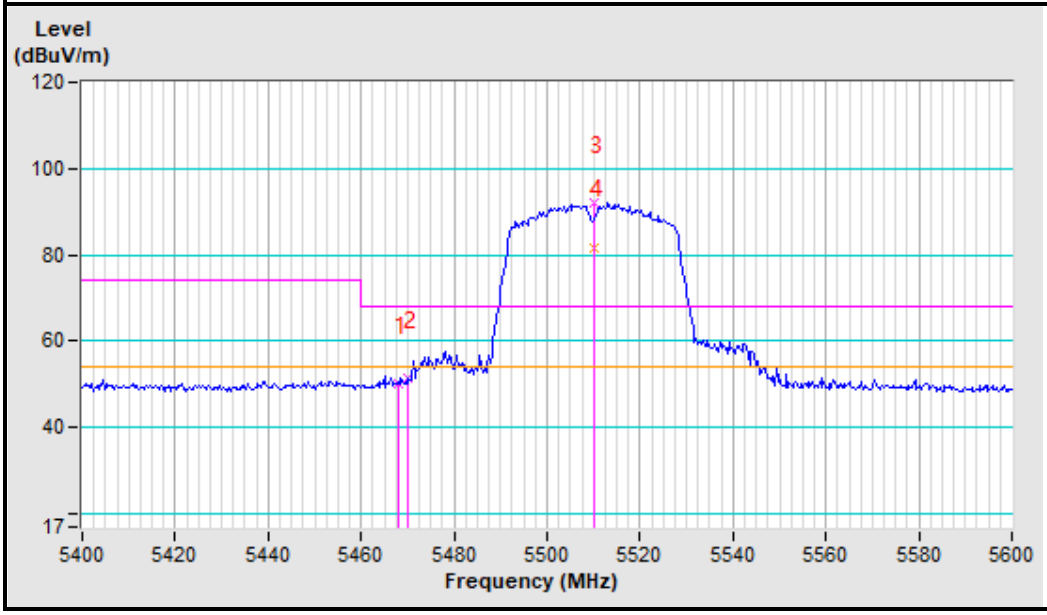
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5510MHz Horizontal



5510MHz Vertical



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

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	48.15 PK	68.20	-20.05	1.00 H	32	40.67	7.48
2	*5550.00	90.31 PK			1.00 H	60	82.84	7.47
3	*5550.00	80.21 AV			1.00 H	60	72.74	7.47
4	11100.00	54.43 PK	74.00	-19.57	1.00 H	60	37.89	16.54
5	11100.00	44.21 AV	54.00	-9.79	1.00 H	60	27.67	16.54
6	#16650.00	59.53 PK	68.20	-8.67	1.00 H	0	35.94	23.59
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	#5470.00	49.17 PK	68.20	-19.03	1.00 V	21	41.69	7.48
2	*5550.00	92.30 PK			1.00 V	92	84.83	7.47
3	*5550.00	82.31 AV			1.00 V	92	74.84	7.47
4	11100.00	53.90 PK	74.00	-20.10	1.00 V	11	37.36	16.54
5	11100.00	43.20 AV	54.00	-10.80	1.00 V	11	26.66	16.54
6	#16650.00	61.29 PK	68.20	-6.91	1.00 V	30	37.70	23.59

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

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

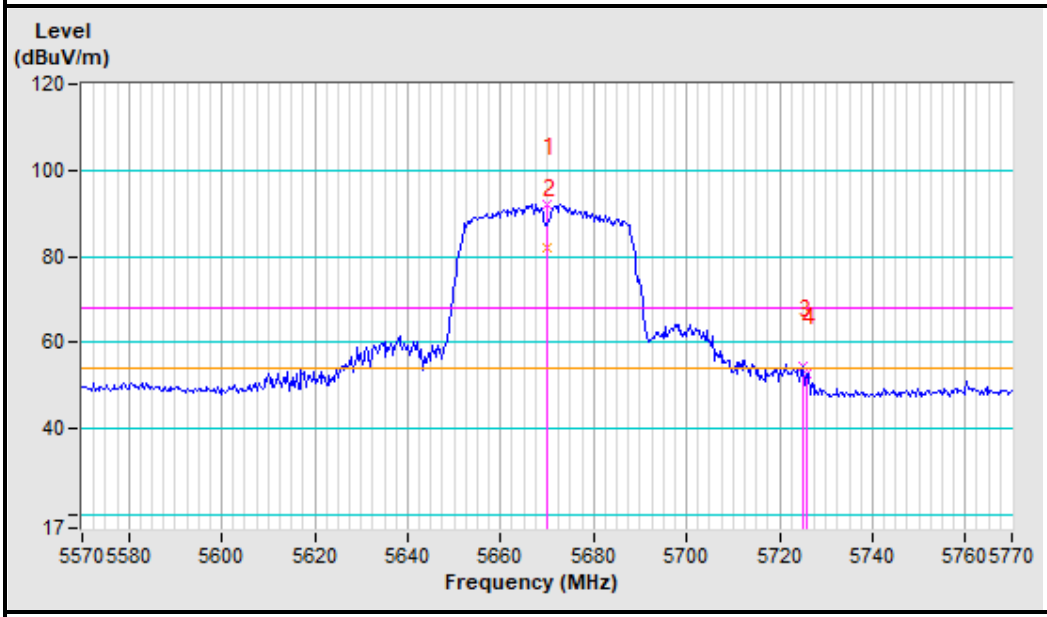
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	92.08 PK			1.00 H	120	84.49	7.59
2	*5670.00	82.19 AV			1.00 H	120	74.60	7.59
3	#5725.00	54.39 PK	68.20	-13.81	1.00 H	15	46.74	7.65
4	#5726.00	52.57 PK	68.20	-15.63	1.00 H	25	44.92	7.65
5	11340.00	54.10 PK	74.00	-19.90	1.00 H	21	37.51	16.59
6	11340.00	42.84 AV	54.00	-11.16	1.00 H	21	26.25	16.59
7	#17010.00	59.28 PK	68.20	-8.92	1.00 H	20	34.73	24.55
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	91.58 PK			1.00 V	162	83.99	7.59
2	*5670.00	81.29 AV			1.00 V	162	73.70	7.59
3	#5725.00	53.21 PK	68.20	-14.99	1.00 V	10	45.56	7.65
4	#5726.96	49.68 PK	68.20	-18.52	1.00 V	0	42.03	7.65
5	11340.00	54.08 PK	74.00	-19.92	1.00 V	100	37.49	16.59
6	11340.00	44.00 AV	54.00	-10.00	1.00 V	100	27.41	16.59
7	#17010.00	62.62 PK	68.20	-5.58	1.00 V	20	38.07	24.55

REMARKS:

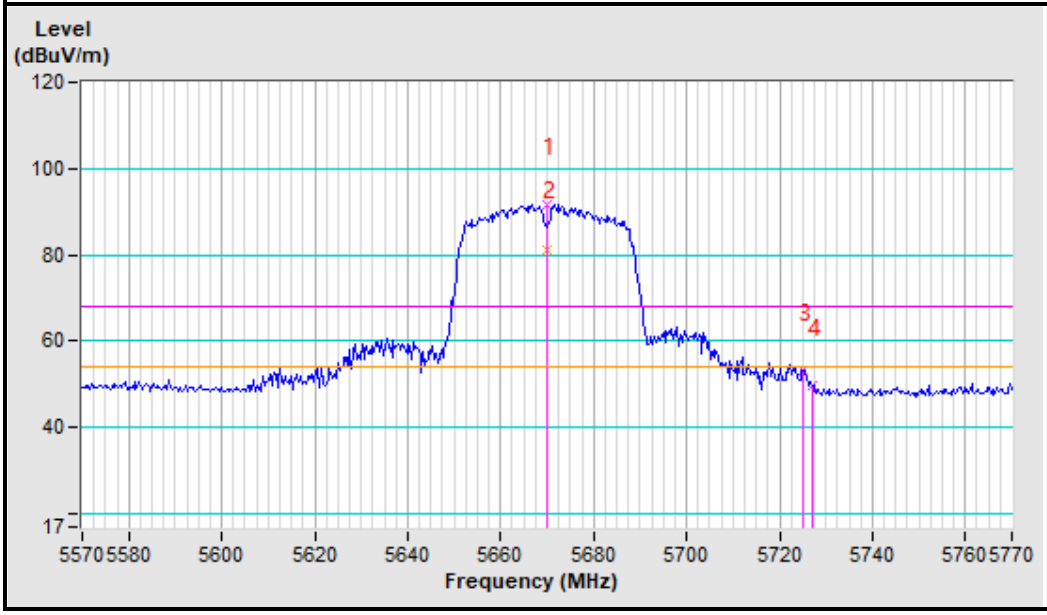
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5670MHz Horizontal



5670MHz Vertical



802.11ac 80MHz

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

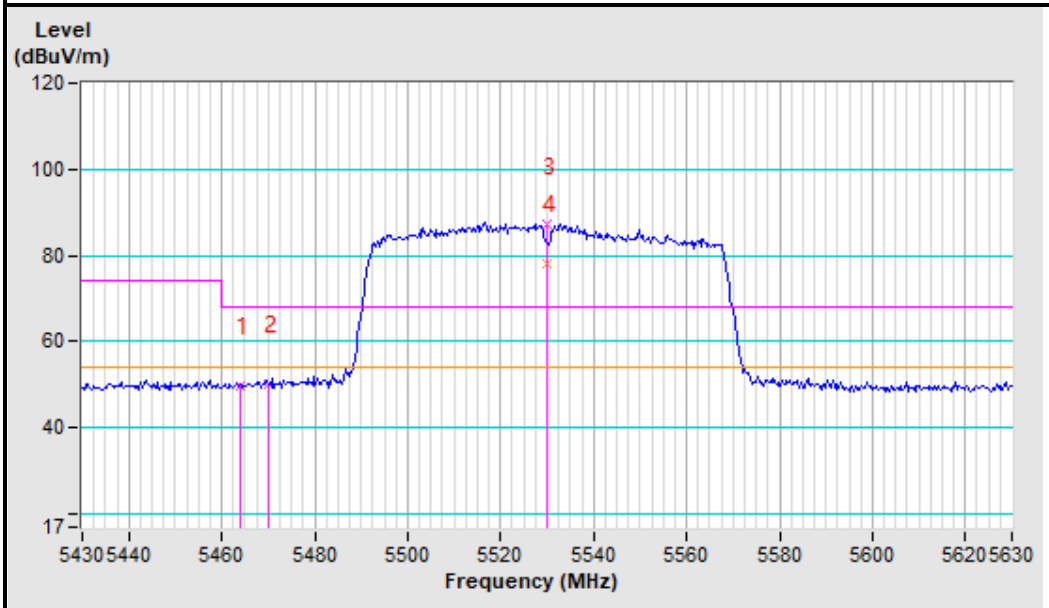
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5464.00	49.93 PK	68.20	-18.27	1.00 H	1	42.44	7.49
2	#5470.00	50.26 PK	68.20	-17.94	1.00 H	21	42.78	7.48
3	*5530.00	87.22 PK			1.00 H	210	79.77	7.45
4	*5530.00	78.29 AV			1.00 H	210	70.84	7.45
5	11060.00	53.72 PK	74.00	-20.28	1.00 H	232	37.19	16.53
6	11060.00	42.10 AV	54.00	-11.90	1.00 H	232	25.57	16.53
7	#16590.00	59.09 PK	68.20	-9.11	1.00 H	252	35.67	23.42
8	#16590.00	47.33 AV	54.00	-6.67	1.00 H	252	23.91	23.42
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5465.00	49.98 PK	68.20	-18.22	1.00 V	0	42.49	7.49
2	#5470.00	49.09 PK	68.20	-19.11	1.00 V	21	41.61	7.48
3	*5530.00	86.42 PK			1.00 V	100	78.97	7.45
4	*5530.00	77.49 AV			1.00 V	100	70.04	7.45
5	11060.00	53.07 PK	74.00	-20.93	1.00 V	21	36.54	16.53
6	11060.00	42.87 AV	54.00	-11.13	1.00 V	21	26.34	16.53
7	#16590.00	60.14 PK	68.20	-8.06	1.00 V	21	36.72	23.42
8	#16590.00	48.70 AV	54.00	-5.30	1.00 V	21	25.28	23.42

REMARKS:

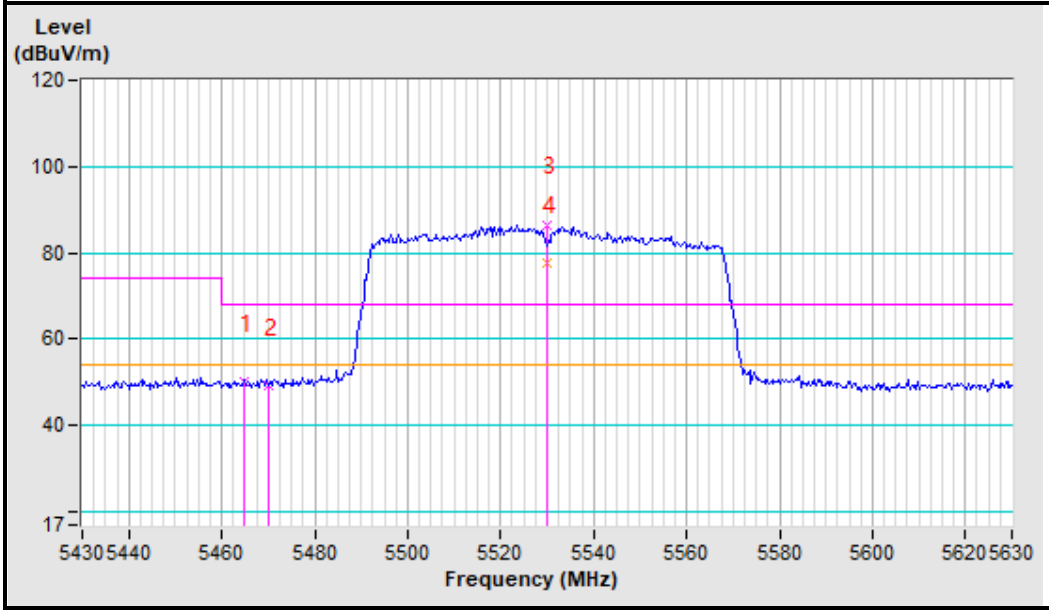
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5530MHz Horizontal



5530MHz Vertical



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

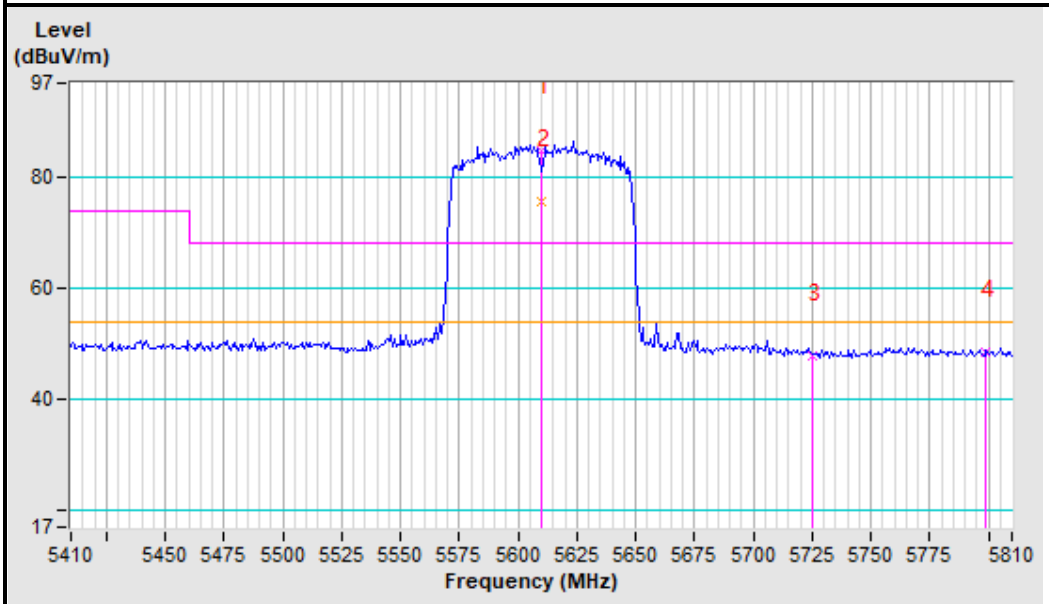
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5610.00	84.87 PK			1.00 H	264	77.34	7.53
2	*5610.00	75.49 AV			1.00 H	264	67.96	7.53
3	#5725.00	47.76 PK	68.20	-20.44	1.00 H	320	40.11	7.65
4	#5799.00	48.41 PK	68.20	-19.79	1.00 H	10	40.69	7.72
5	11220.00	53.08 PK	74.00	-20.92	1.00 H	18	36.51	16.57
6	11220.00	42.48 AV	54.00	-11.52	1.00 H	18	25.91	16.57
7	#16830.00	62.10 PK	68.20	-6.10	1.00 H	201	38.01	24.09
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5610.00	88.72 PK			1.00 V	100	81.19	7.53
2	*5610.00	79.21 AV			1.00 V	100	71.68	7.53
3	#5725.00	46.81 PK	68.20	-21.39	1.00 V	3	39.16	7.65
4	#5744.00	48.61 PK	68.20	-19.59	1.00 V	3	40.94	7.67
5	11220.00	54.02 PK	74.00	-19.98	1.00 V	32	37.45	16.57
6	11220.00	10.00 AV	54.00	-44.00	1.00 V	32	-6.57	16.57
7	#16830.00	62.53 PK	68.20	-5.67	1.00 V	20	38.44	24.09

REMARKS:

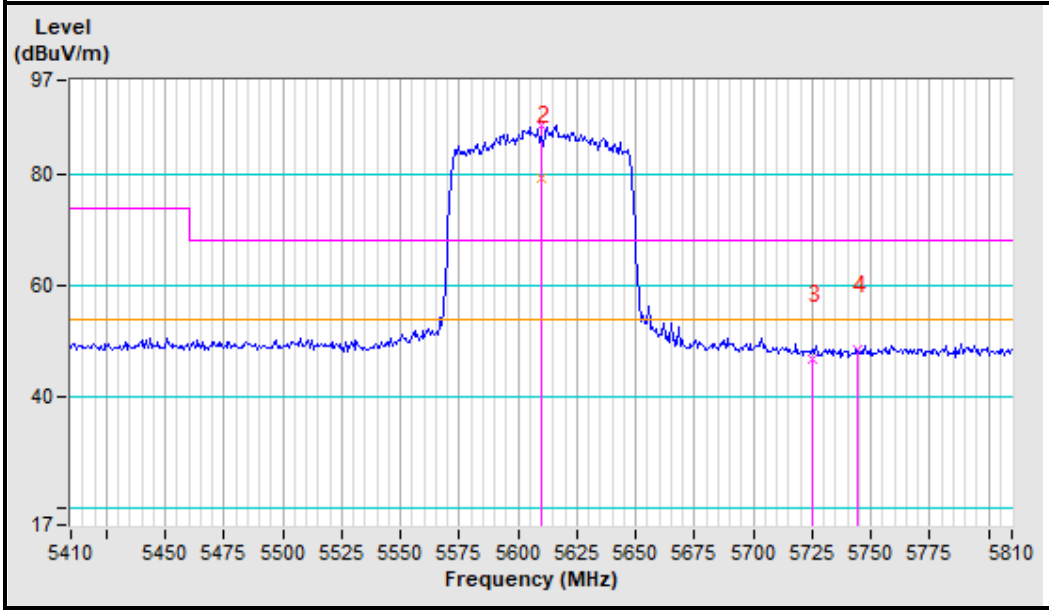
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5610MHz Horizontal



5610MHz Vertical



Band 4 (5725-5850MHz):

ABOVE 1GHz DATA

802.11a

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

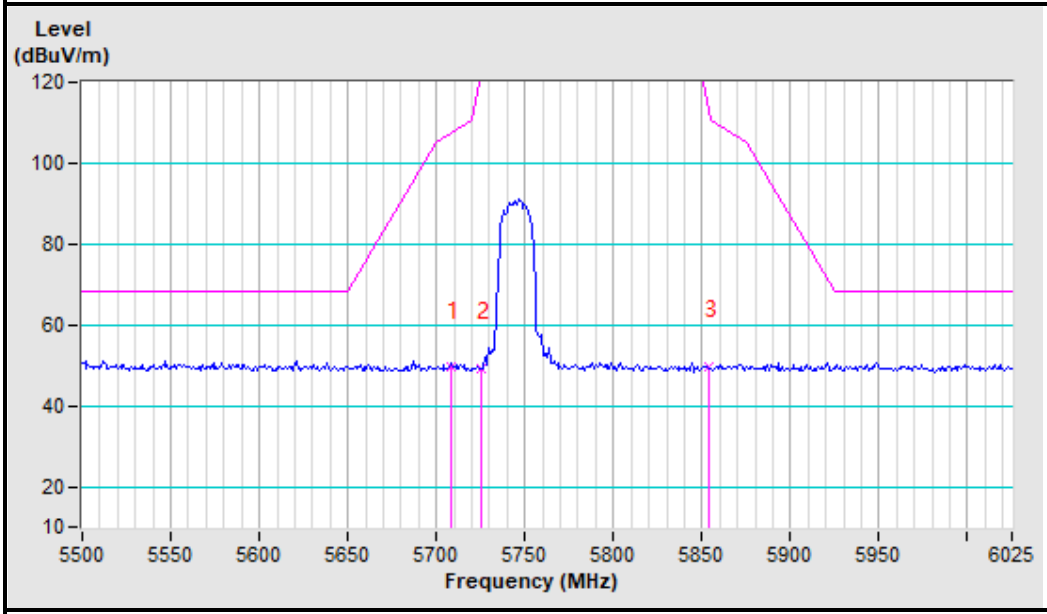
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5708.00	49.47 PK	107.44	-57.97	1.10 H	10	41.84	7.63
2	#5725.00	49.34 PK	122.20	-72.86	1.00 H	19	41.69	7.65
3	*5745.00	90.98 PK			1.00 H	31	83.31	7.67
4	*5745.00	81.02 AV			1.00 H	31	73.35	7.67
5	#5853.52	49.71 PK	114.17	-64.46	1.00 H	30	41.92	7.79
6	11490.00	53.81 PK	74.00	-20.19	1.00 H	201	37.17	16.64
7	11490.00	42.19 AV	54.00	-11.81	1.00 H	201	25.55	16.64
8	#17235.00	61.01 PK	68.20	-7.19	1.00 H	33	36.69	24.32
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5722.24	49.52 PK	115.91	-66.39	1.00 V	0	41.87	7.65
2	#5725.00	50.79 PK	122.20	-71.41	1.00 V	10	43.14	7.65
3	*5745.00	89.91 PK			1.00 V	30	82.24	7.67
4	*5745.00	80.10 AV			1.00 V	30	72.43	7.67
5	#5853.36	49.61 PK	114.54	-64.93	1.00 V	10	41.83	7.78
6	11490.00	52.71 PK	74.00	-21.29	1.00 V	20	36.07	16.64
7	11490.00	42.21 AV	54.00	-11.79	1.00 V	20	25.57	16.64
8	#17235.00	61.29 PK	68.20	-6.91	1.00 V	30	36.97	24.32

REMARKS:

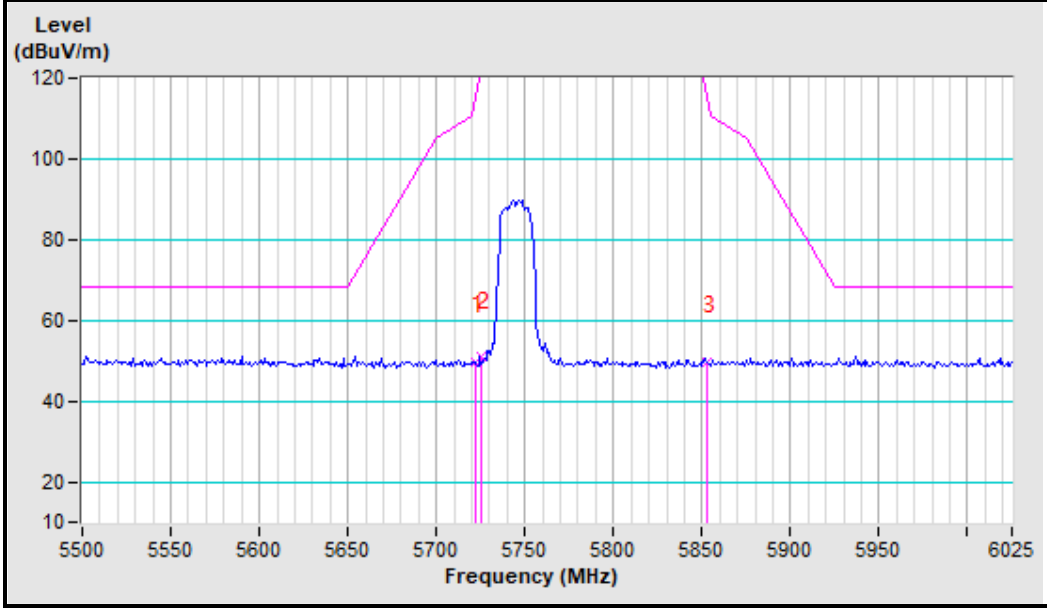
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5745MHz Horizontal



5745MHz Vertical



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

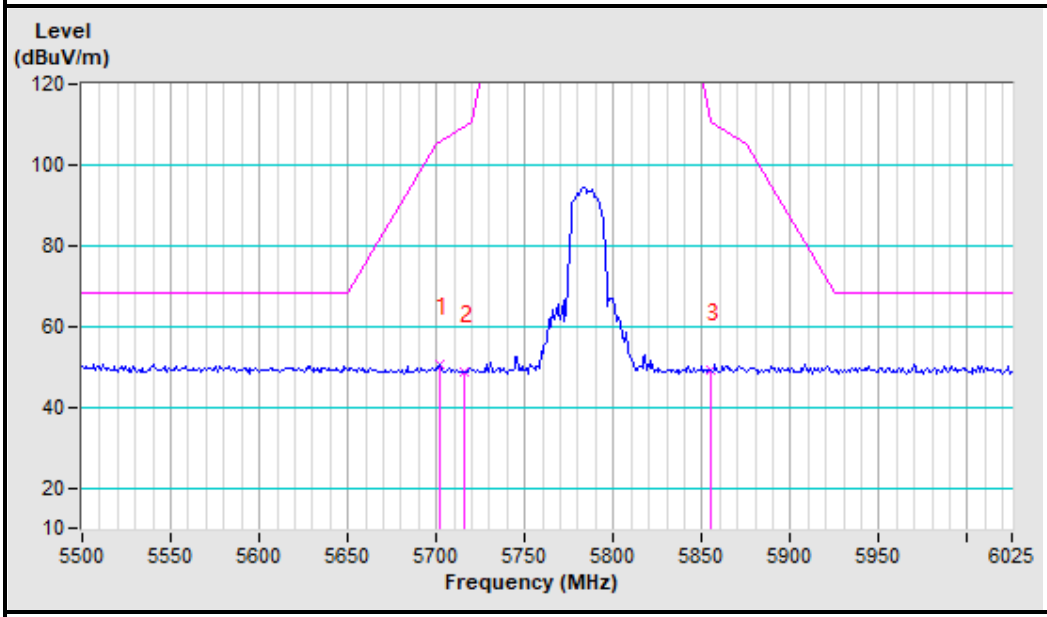
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5702.00	50.58 PK	105.76	-55.18	1.00 H	10	42.95	7.63
2	#5716.25	48.64 PK	109.75	-61.11	1.00 H	32	40.99	7.65
3	*5785.00	92.42 PK			1.00 H	21	84.70	7.72
4	*5785.00	83.19 AV			1.00 H	21	75.47	7.72
5	#5855.35	49.17 PK	110.70	-61.53	1.00 H	10	41.38	7.79
6	11570.00	53.29 PK	74.00	-20.71	1.00 H	30	36.66	16.63
7	11570.00	43.09 AV	54.00	-10.91	1.00 H	30	26.46	16.63
8	#17355.00	60.29 PK	68.20	-7.91	1.00 H	30	36.09	24.20
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	#5707.98	48.29 PK	107.44	-59.15	1.00 V	10	40.66	7.63
2	#5719.95	48.92 PK	110.79	-61.87	1.00 V	2	41.27	7.65
3	*5785.00	91.85 PK			1.00 V	10	84.13	7.72
4	*5785.00	82.03 AV			1.00 V	10	74.31	7.72
5	#5854.52	49.02 PK	111.89	-62.87	1.00 V	100	41.23	7.79
6	11570.00	54.25 PK	74.00	-19.75	1.00 V	100	37.62	16.63
7	11570.00	42.39 AV	54.00	-11.61	1.00 V	100	25.76	16.63
8	#17355.00	61.29 PK	68.20	-6.91	1.00 V	32	37.09	24.20

REMARKS:

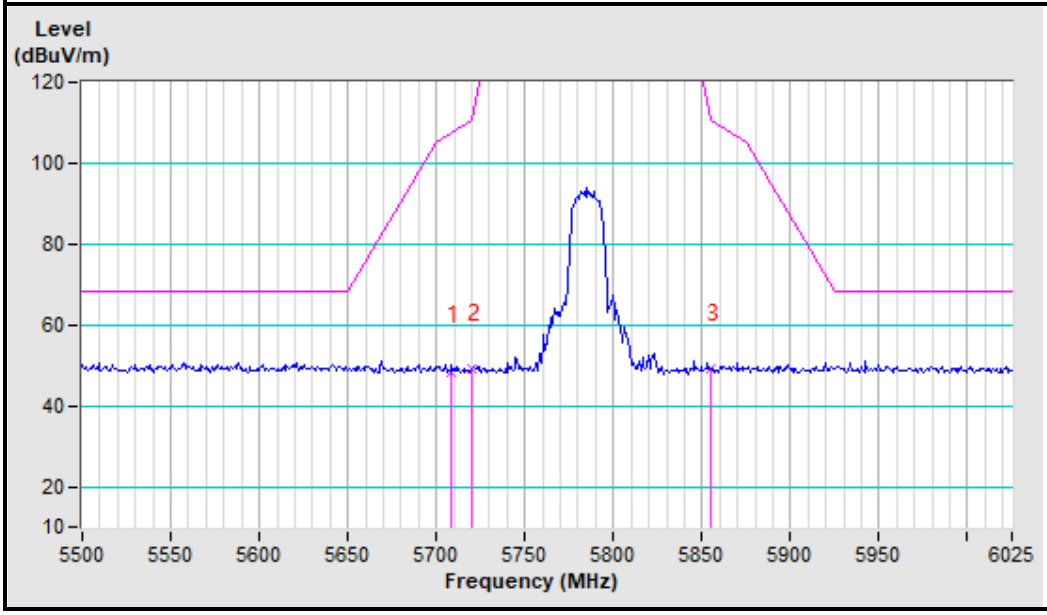
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5785MHz Horizontal



5785MHz Vertical



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

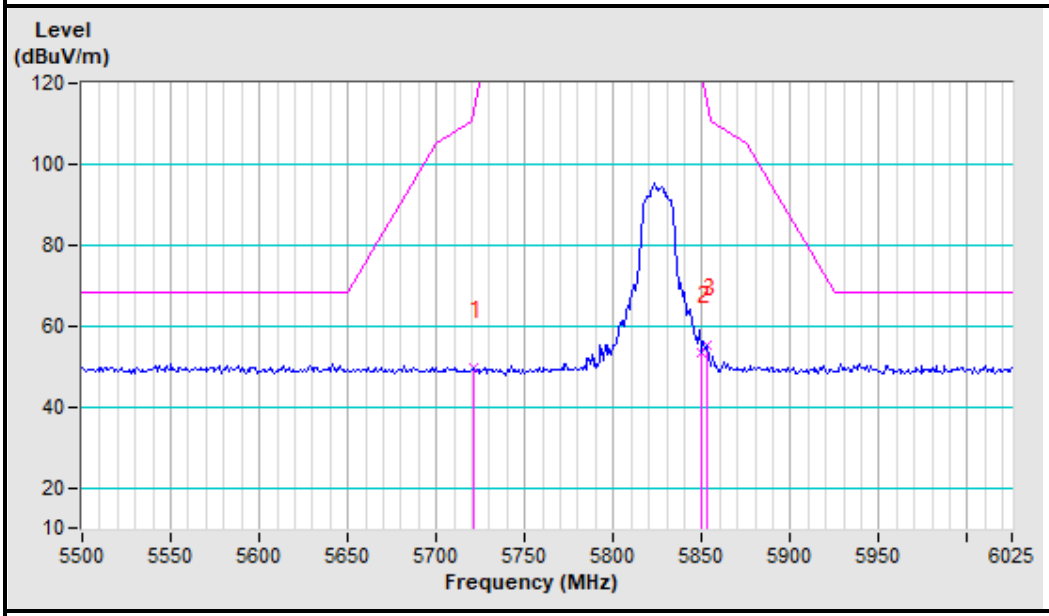
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5721.00	49.68 PK	113.08	-63.40	1.00 H	30	42.03	7.65
2	*5825.00	95.15 PK			1.00 H	209	87.40	7.75
3	*5825.00	85.29 AV			1.00 H	209	77.54	7.75
4	#5850.00	53.28 PK	122.20	-68.92	1.00 H	109	45.51	7.77
5	#5853.13	55.16 PK	115.06	-59.90	1.00 H	30	47.38	7.78
6	11650.00	54.47 PK	74.00	-19.53	1.00 H	30	37.86	16.61
7	11650.00	43.31 AV	54.00	-10.69	1.00 H	30	26.70	16.61
8	#17475.00	60.89 PK	68.20	-7.31	1.00 H	300	36.80	24.09
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5715.29	48.86 PK	109.48	-60.62	1.00 V	301	41.23	7.63
2	*5825.00	93.59 PK			1.00 V	210	85.84	7.75
3	*5825.00	83.45 AV			1.00 V	210	75.70	7.75
4	#5850.00	54.53 PK	122.20	-67.67	1.00 V	2	46.76	7.77
5	#5853.36	53.21 PK	114.54	-61.33	1.00 V	10	45.43	7.78
6	11650.00	53.29 PK	74.00	-20.71	1.00 V	0	36.68	16.61
7	11650.00	43.22 AV	54.00	-10.78	1.00 V	0	26.61	16.61
8	#17475.00	62.56 PK	68.20	-5.64	1.00 V	90	38.47	24.09

REMARKS:

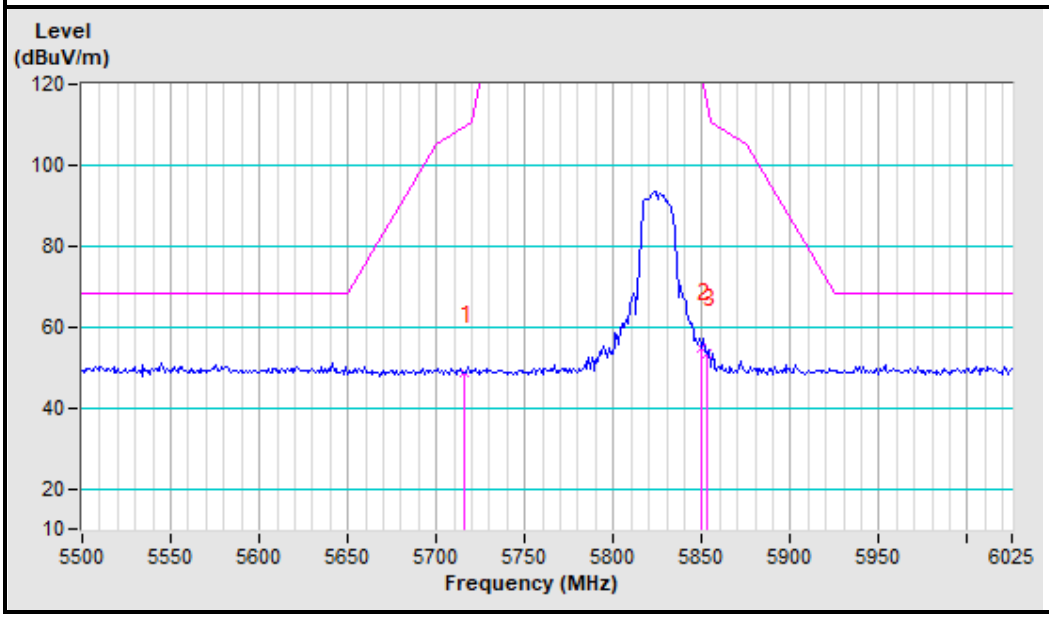
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5825MHz Horizontal



5825MHz Vertical



802.11n (20MHz)

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

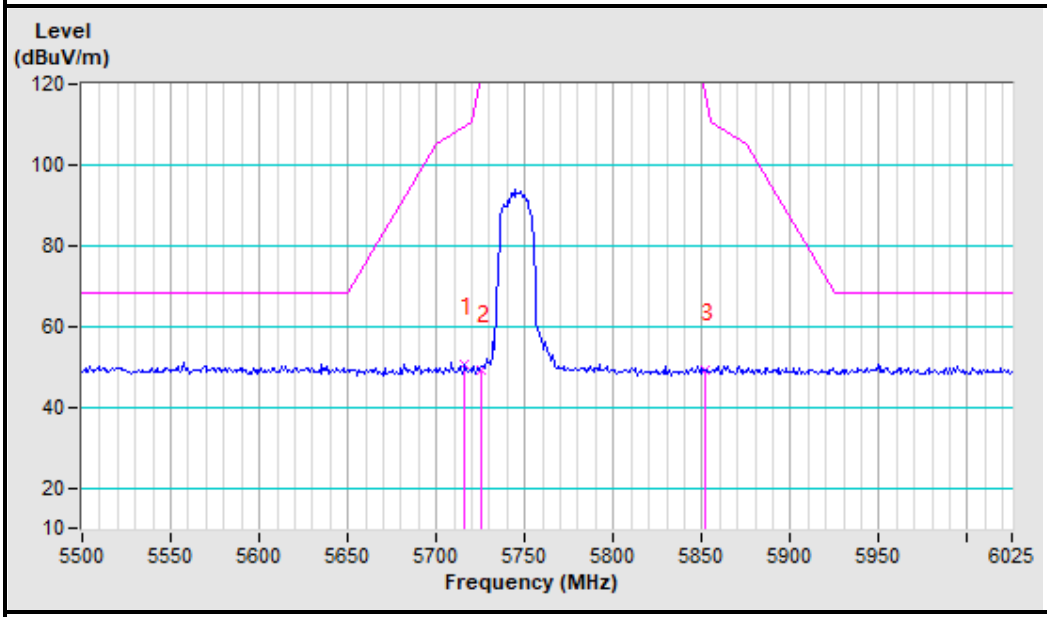
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5716.26	50.76 PK	109.75	-58.99	1.00 H	10	43.11	7.65
2	#5725.00	48.95 PK	122.20	-73.25	1.00 H	103	41.30	7.65
3	*5745.00	92.06 PK			1.00 H	30	84.39	7.67
4	*5745.00	81.20 AV			1.00 H	30	73.53	7.67
5	#5851.68	49.05 PK	118.37	-69.32	1.00 H	190	41.28	7.77
6	11490.00	54.03 PK	74.00	-19.97	1.00 H	301	37.39	16.64
7	11490.00	42.60 AV	54.00	-11.40	1.00 H	301	25.96	16.64
8	#17235.00	59.28 PK	68.20	-8.92	1.00 H	300	34.96	24.32
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	51.41 PK	112.61	-61.20	1.00 V	0	43.76	7.65
2	#5725.00	53.11 PK	122.20	-69.09	1.00 V	0	45.46	7.65
3	*5745.00	91.25 PK			1.00 V	20	83.58	7.67
4	*5745.00	81.49 AV			1.00 V	20	73.82	7.67
5	#5851.68	49.16 PK	118.36	-69.20	1.00 V	0	41.39	7.77
6	11490.00	55.29 PK	74.00	-18.71	1.00 V	320	38.65	16.64
7	11490.00	44.29 AV	54.00	-9.71	1.00 V	320	27.65	16.64
8	#17235.00	61.38 PK	68.20	-6.82	1.00 V	32	37.06	24.32

REMARKS:

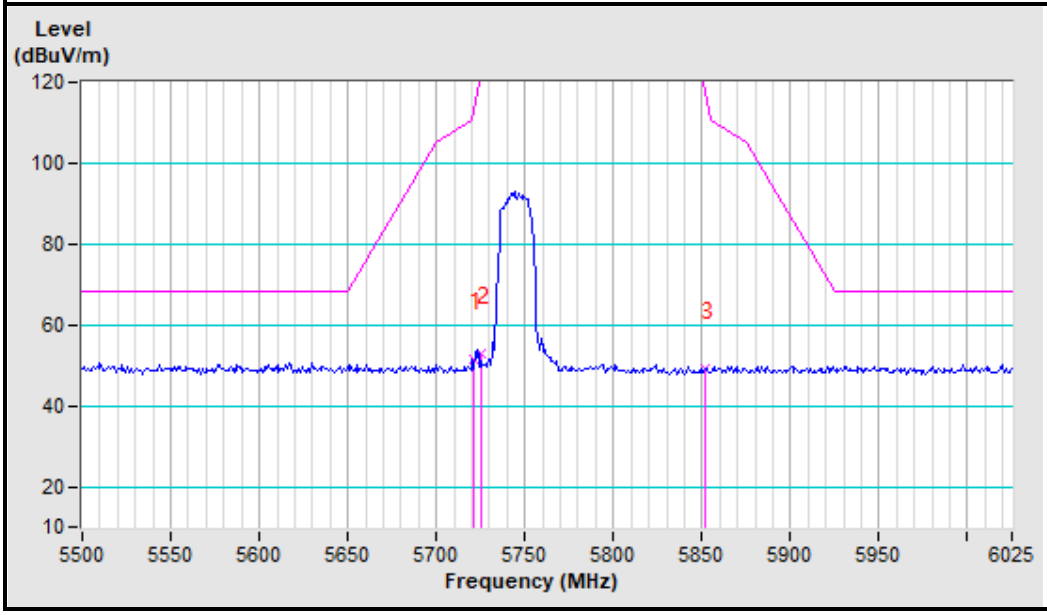
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5745MHz Horizontal



5745MHz Vertical



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

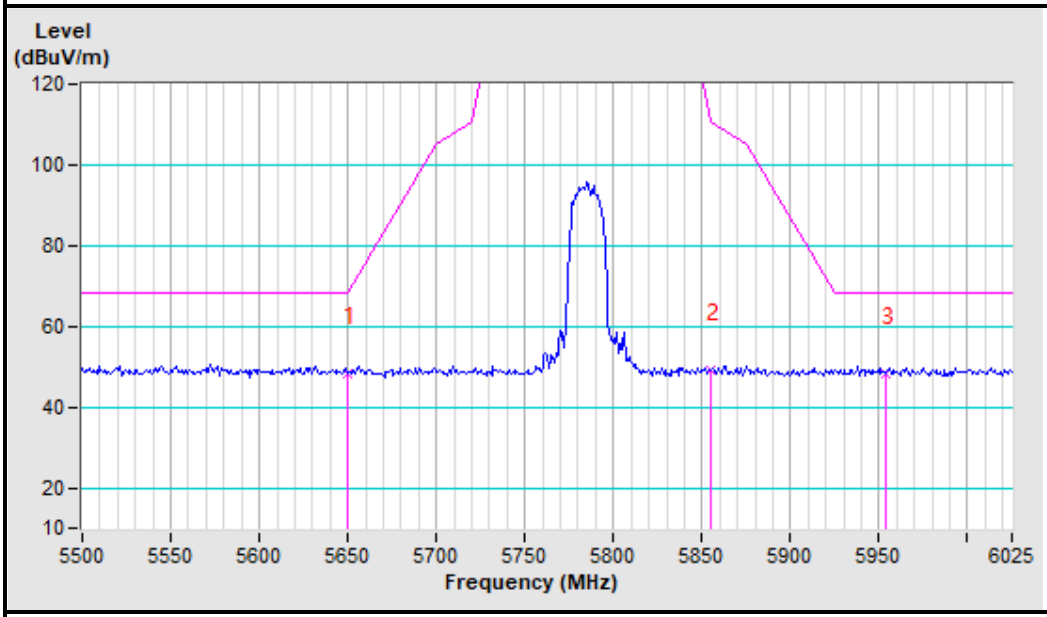
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5650.12	48.42 PK	68.29	-19.87	1.00 H	346	40.84	7.58
2	*5785.00	95.88 PK			1.00 H	320	88.16	7.72
3	*5785.00	86.19 AV			1.00 H	320	78.47	7.72
4	#5855.00	49.06 PK	110.80	-61.74	1.00 H	146	41.27	7.79
5	#5953.44	48.34 PK	68.20	-19.86	1.00 H	237	40.46	7.88
6	11570.00	53.37 PK	74.00	-20.63	1.00 H	30	36.74	16.63
7	11570.00	43.88 AV	54.00	-10.12	1.00 H	30	27.25	16.63
8	#17355.00	59.39 PK	68.20	-8.81	1.00 H	301	35.19	24.20
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	#5715.75	49.47 PK	109.61	-60.14	1.00 V	0	41.83	7.64
2	*5785.00	93.55 PK			1.00 V	31	85.83	7.72
3	*5785.00	84.00 AV			1.00 V	31	76.28	7.72
4	#5883.65	49.08 PK	98.77	-49.69	1.00 V	0	41.27	7.81
5	#5959.37	48.81 PK	68.20	-19.39	1.00 V	0	40.92	7.89
6	11570.00	54.30 PK	74.00	-19.70	1.00 V	90	37.67	16.63
7	11570.00	43.10 AV	54.00	-10.90	1.00 V	90	26.47	16.63
8	#17355.00	61.29 PK	68.20	-6.91	1.00 V	301	37.09	24.20

REMARKS:

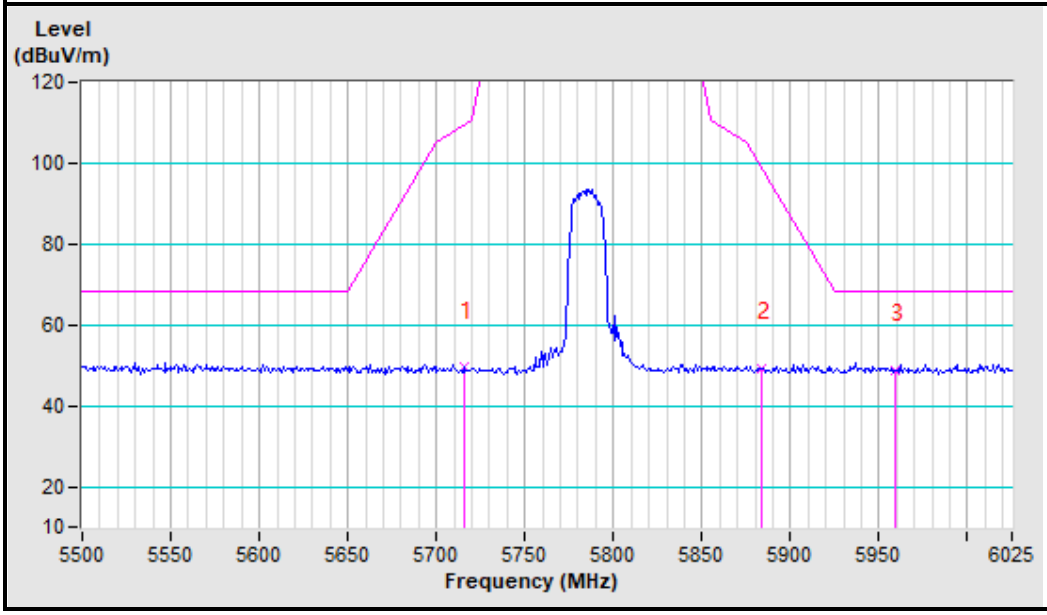
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5785MHz Horizontal



5785MHz Vertical



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

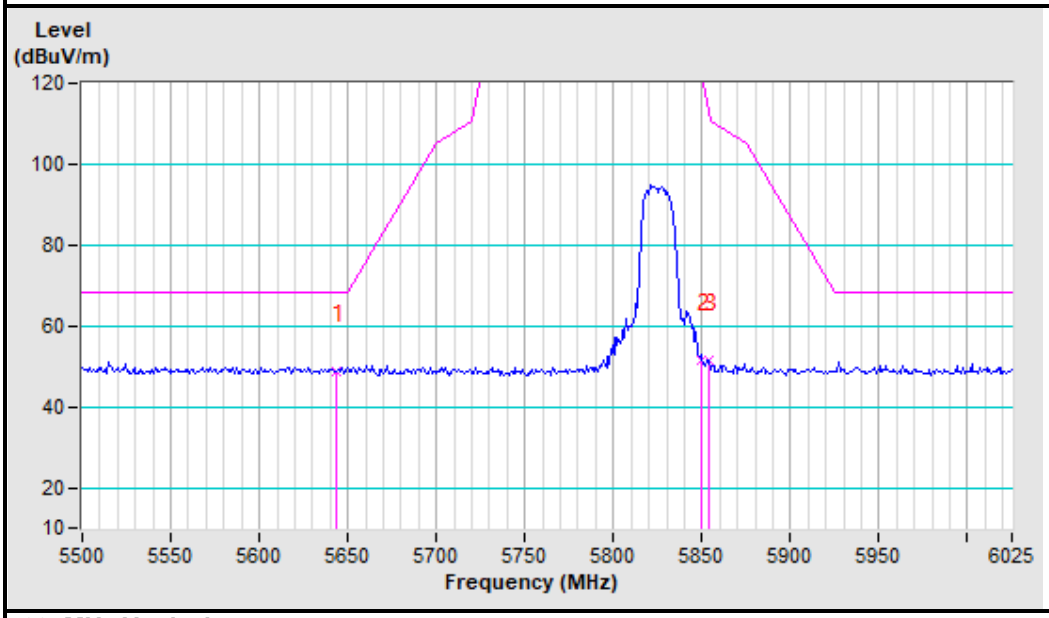
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5643.39	48.85 PK	68.20	-19.35	1.00 H	0	41.29	7.56
2	*5825.00	94.35 PK			1.00 H	301	86.60	7.75
3	*5825.00	85.30 AV			1.00 H	301	77.55	7.75
4	#5850.00	51.70 PK	122.20	-70.50	1.00 H	0	43.93	7.77
5	#5854.21	51.46 PK	112.61	-61.15	1.00 H	0	43.67	7.79
6	11650.00	53.19 PK	74.00	-20.81	1.00 H	30	36.58	16.61
7	11650.00	42.77 AV	54.00	-11.23	1.00 H	30	26.16	16.61
8	#17475.00	61.22 PK	68.20	-6.98	1.00 H	30	37.13	24.09
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5643.39	48.21 PK	68.20	-19.99	1.00 V	172	40.65	7.56
2	*5825.00	91.94 PK			1.00 V	31	84.19	7.75
3	*5825.00	82.39 AV			1.00 V	31	74.64	7.75
4	#5850.00	52.91 PK	122.20	-69.29	1.00 V	245	45.14	7.77
5	#5937.50	49.64 PK	68.20	-18.56	1.00 V	298	41.78	7.86
6	11650.00	53.29 PK	74.00	-20.71	1.00 V	30	36.68	16.61
7	11650.00	43.22 AV	54.00	-10.78	1.00 V	30	26.61	16.61
8	#17475.00	59.37 PK	68.20	-8.83	1.00 V	30	35.28	24.09

REMARKS:

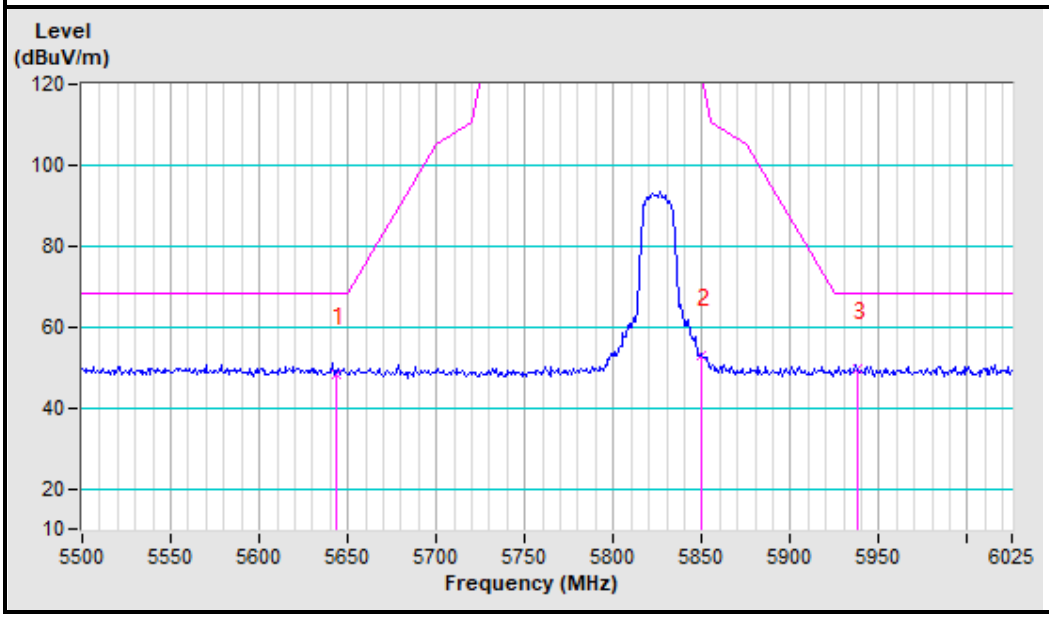
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5825MHz Horizontal



5825MHz Vertical



802.11n (40MHz)

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

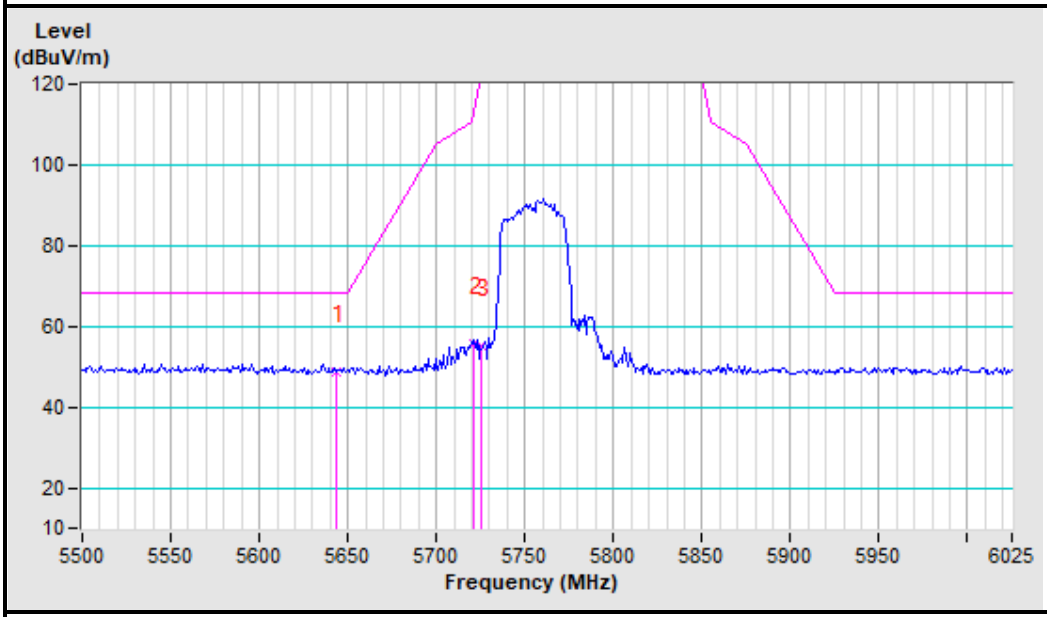
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5643.39	48.73 PK	68.20	-19.47	1.00 H	0	41.17	7.56
2	#5720.79	55.69 PK	112.61	-56.92	1.00 H	0	48.04	7.65
3	#5725.00	55.34 PK	122.20	-66.86	1.00 H	355	47.69	7.65
4	*5755.00	91.53 PK			1.00 H	39	83.85	7.68
5	*5755.00	82.11 AV			1.00 H	39	74.43	7.68
6	11510.00	54.40 PK	74.00	-19.60	1.00 H	30	37.76	16.64
7	11510.00	44.10 AV	54.00	-9.90	1.00 H	30	27.46	16.64
8	#17265.00	61.23 PK	68.20	-6.97	1.00 H	20	36.93	24.30
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	#5647.60	48.91 PK	68.20	-19.29	1.00 V	0	41.34	7.57
2	#5713.22	56.79 PK	108.90	-52.11	1.00 V	0	49.16	7.63
3	#5725.00	55.06 PK	122.20	-67.14	1.00 V	0	47.41	7.65
4	*5755.00	89.43 PK			1.00 V	314	81.75	7.68
5	*5755.00	80.20 AV			1.00 V	314	72.52	7.68
6	11510.00	53.01 PK	74.00	-20.99	1.00 V	30	36.37	16.64
7	11510.00	43.30 AV	54.00	-10.70	1.00 V	30	26.66	16.64
8	#17265.00	59.67 PK	68.20	-8.53	1.00 V	48	35.37	24.30

REMARKS:

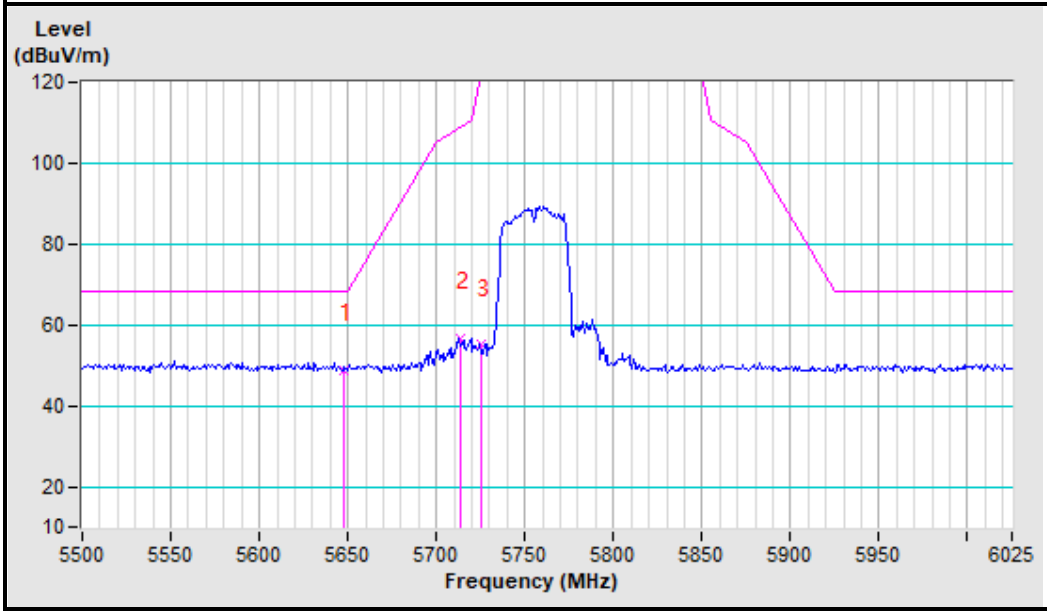
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5755MHz Horizontal



5755MHz Vertical



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

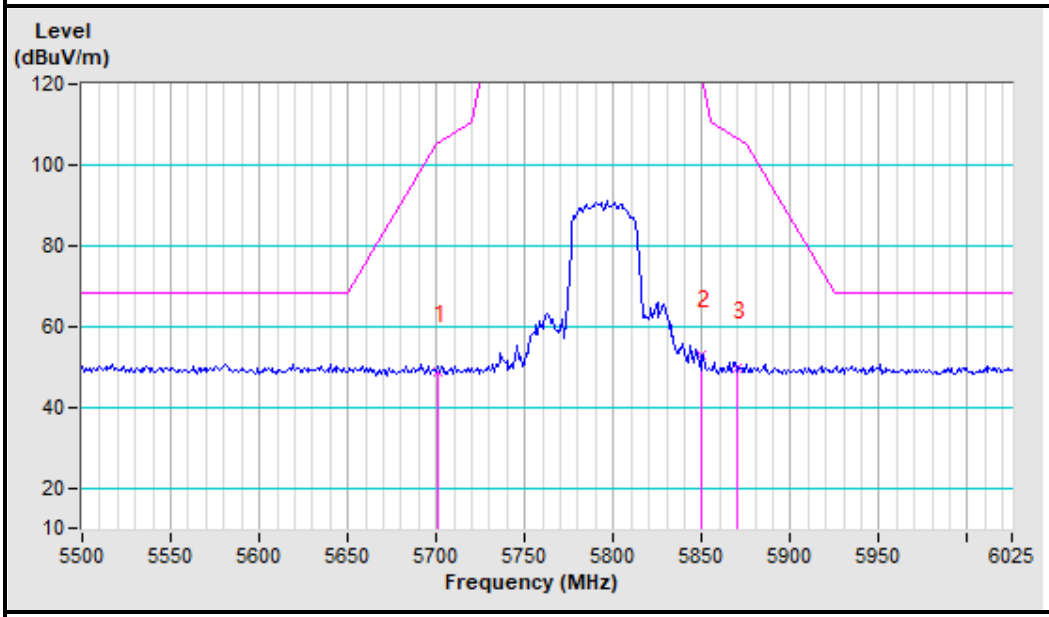
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5700.60	48.84 PK	105.37	-56.53	1.00 H	0	41.21	7.63
2	*5795.00	90.75 PK			1.00 H	300	83.03	7.72
3	*5795.00	81.39 AV			1.00 H	300	73.67	7.72
4	#5850.00	52.67 PK	122.20	-69.53	1.00 H	1	44.90	7.77
5	#5869.35	49.64 PK	106.78	-57.14	1.00 H	0	41.85	7.79
6	11590.00	55.34 PK	74.00	-18.66	1.00 H	320	38.71	16.63
7	11590.00	43.19 AV	54.00	-10.81	1.00 H	320	26.56	16.63
8	#17325.00	61.37 PK	68.20	-6.83	1.00 H	20	37.13	24.24
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5708.17	50.54 PK	107.49	-56.95	1.00 V	0	42.91	7.63
2	*5795.00	88.43 PK			1.00 V	32	80.71	7.72
3	*5795.00	79.13 AV			1.00 V	32	71.41	7.72
4	#5850.00	48.64 PK	122.20	-73.56	1.00 V	212	40.87	7.77
5	#5859.25	48.48 PK	109.61	-61.13	1.00 V	289	40.69	7.79
6	11590.00	53.19 PK	74.00	-20.81	1.00 V	30	36.56	16.63
7	11590.00	42.79 AV	54.00	-11.21	1.00 V	30	26.16	16.63
8	#17326.00	58.70 PK	68.20	-9.50	1.00 V	307	34.46	24.24

REMARKS:

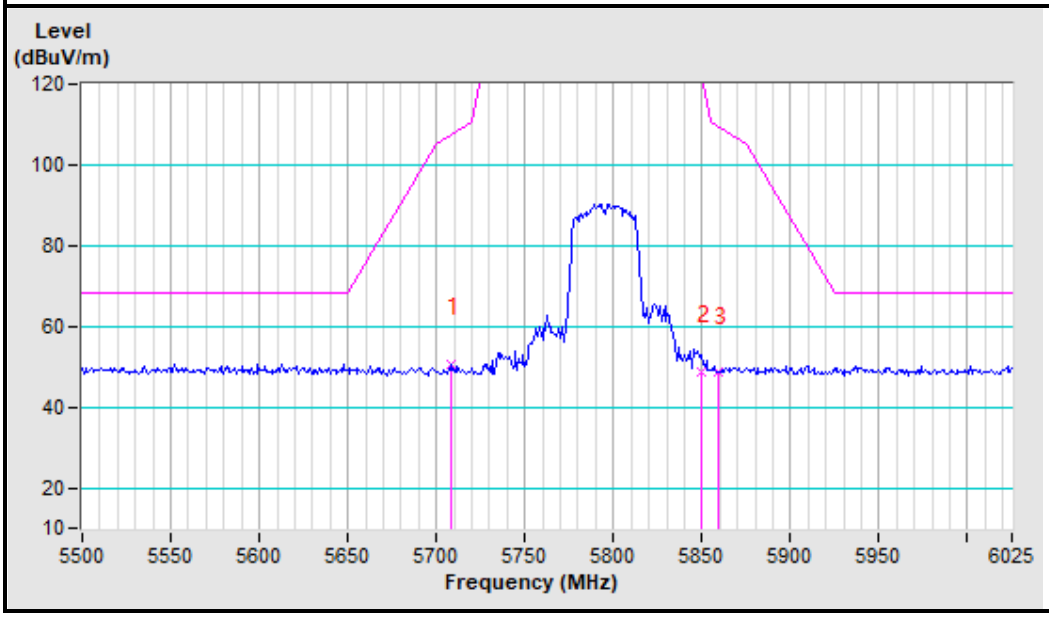
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5795MHz Horizontal



5795MHz Vertical



802.11ac 80MHz

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

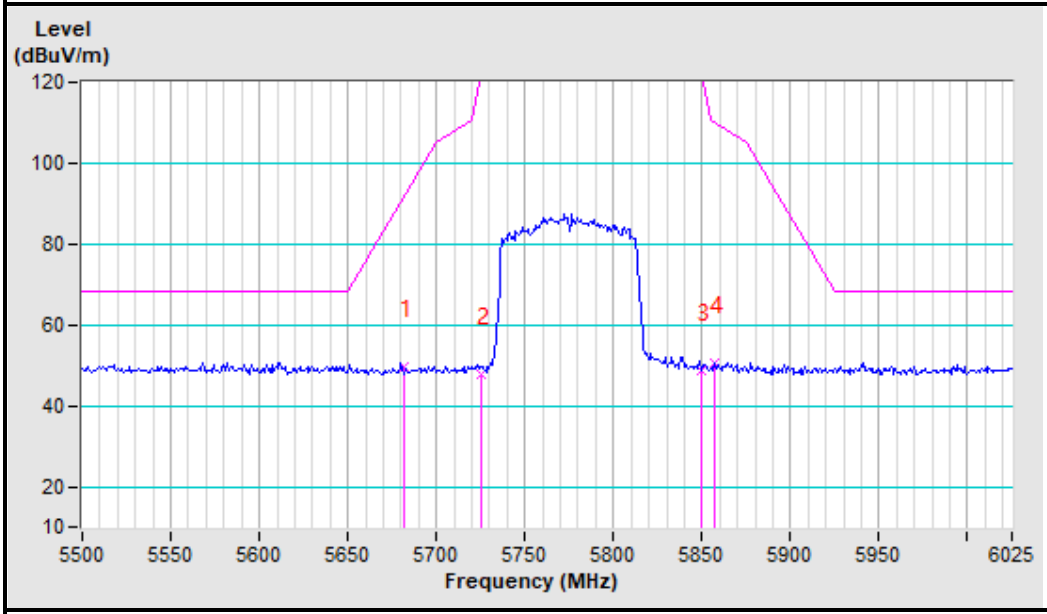
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5681.25	49.79 PK	91.36	-41.57	1.00 H	249	42.18	7.61
2	#5725.00	47.94 PK	122.20	-74.26	1.00 H	78	40.29	7.65
3	*5775.00	87.42 PK			1.00 H	1	79.72	7.70
4	*5775.00	78.15 AV			1.00 H	1	70.45	7.70
5	#5850.00	48.59 PK	122.20	-73.61	1.00 H	132	40.82	7.77
6	#5856.73	50.77 PK	110.31	-59.54	1.00 H	171	42.98	7.79
7	11550.00	53.29 PK	74.00	-20.71	1.00 H	30	36.66	16.63
8	11550.00	42.88 AV	54.00	-11.12	1.00 H	30	26.25	16.63
9	#17325.00	60.15 PK	68.20	-8.05	1.00 H	30	35.91	24.24
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5643.39	49.30 PK	68.20	-18.90	1.00 V	0	41.74	7.56
2	#5725.00	48.96 PK	122.20	-73.24	1.00 V	0	41.31	7.65
3	*5775.00	84.76 PK			1.00 V	30	77.06	7.70
4	*5775.00	75.19 AV			1.00 V	30	67.49	7.70
5	#5850.00	50.41 PK	122.20	-71.79	1.00 V	0	42.64	7.77
6	#5945.91	49.62 PK	68.20	-18.58	1.00 V	0	41.74	7.88
7	11550.00	52.29 PK	74.00	-21.71	1.00 V	309	35.66	16.63
8	11550.00	43.40 AV	54.00	-10.60	1.00 V	309	26.77	16.63
9	#17325.00	61.29 PK	68.20	-6.91	1.00 V	304	37.05	24.24

REMARKS:

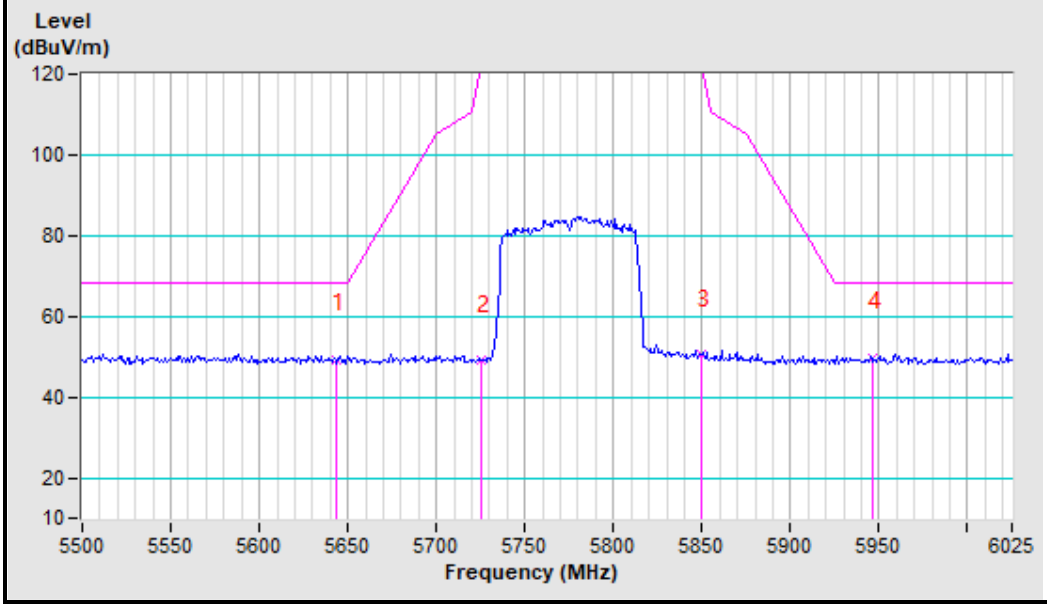
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental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

Band edge Plot

5775MHz Horizontal



5775MHz Vertical



4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

NOTE: 1. The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101494	Jan. 10,24
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Jan. 11,24
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Jan. 10,24
V-LISN (CISPR 25)	SCHWARZBECK	NNBM 8124-200	8124-200 05857	Jun. 14, 24
V-LISN (CISPR 25)	SCHWARZBECK	NNBM 8124-200	8124-200 05858	Jun. 14, 24
Voltage probe	SCHWARZBECK	TK 9421	TK 9421-176	Jul. 27, 24
Coaxial RF Cable	SUHNER	RG 223/U-CE	C2310066DG	Jul. 24, 24
Test software	ADT	ADT_Cond_V7.3.7	N/A	N/A

NOTES:

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

4.2.3 TEST PROCEDURES

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

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

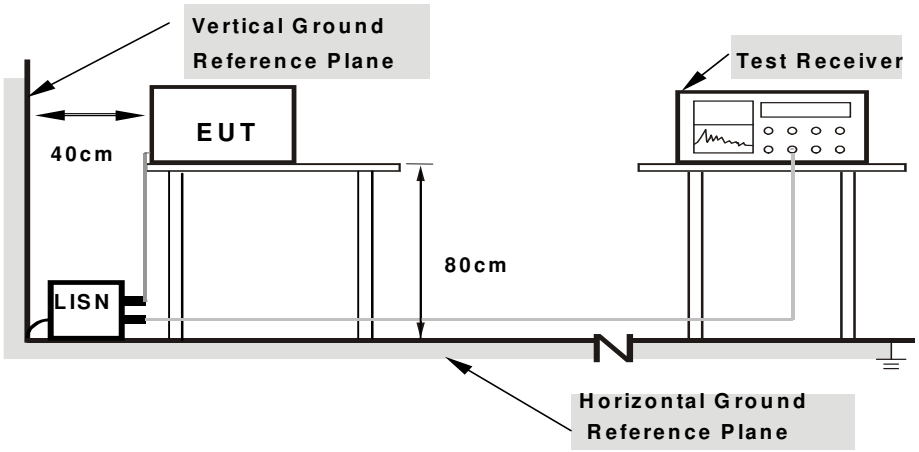
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) were not recorded.

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

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

4.2.5 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).

4.2.6 EUT OPERATING CONDITIONS

Same as 3.1.6

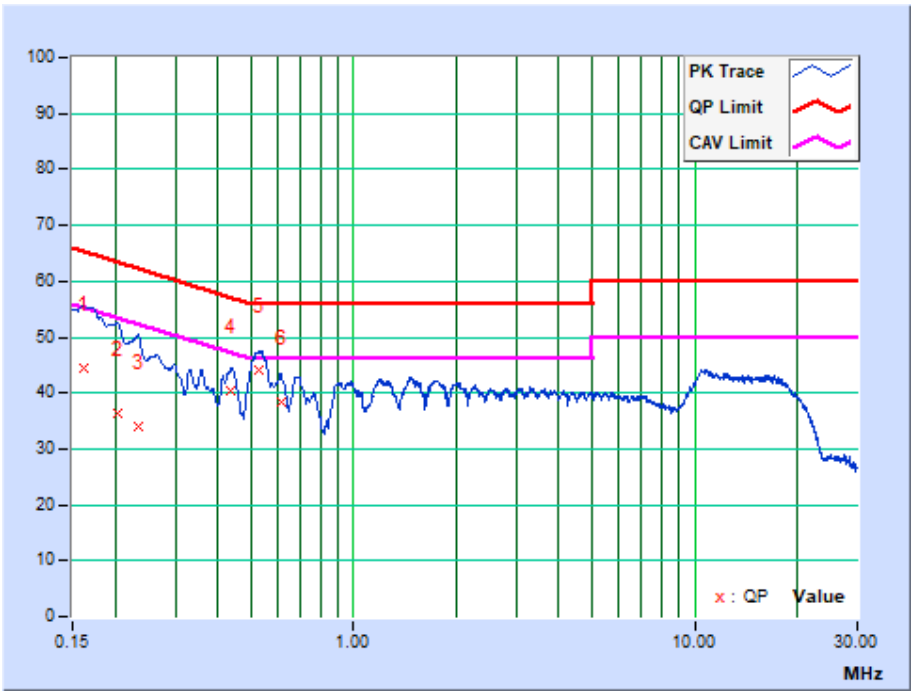
4.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA: 802.11a

PHASE	Line	6dB BANDWIDTH	9kHz

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16093	9.99	34.39	19.19	44.38	29.18	65.42	55.42	-21.03	-26.23
2	0.20249	10.03	26.36	10.29	36.39	20.32	63.51	53.51	-27.12	-33.19
3	0.23325	10.06	23.93	9.88	33.99	19.94	62.33	52.33	-28.35	-32.40
4	0.43800	10.13	30.42	20.62	40.55	30.75	57.10	47.10	-16.55	-16.35
5	0.52801	10.14	33.82	23.69	43.96	33.83	56.00	46.00	-12.04	-12.17
6	0.61215	10.15	28.24	18.05	38.39	28.20	56.00	46.00	-17.61	-17.80

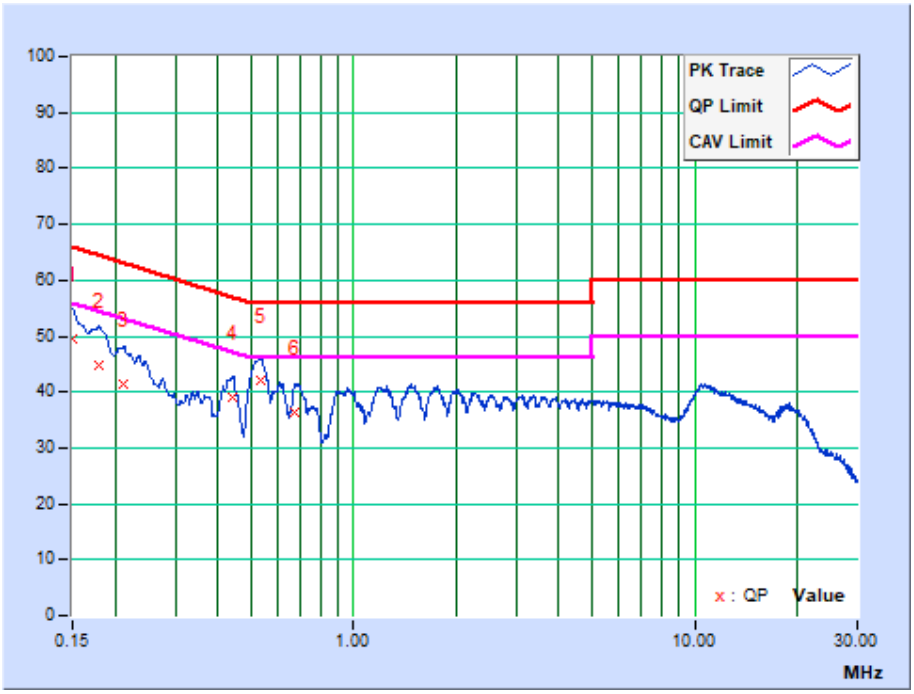
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading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



PHASE	Neutral	6dB BANDWIDTH	9kHz

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.95	39.46	25.55	49.41	35.50	66.00	56.00	-16.59	-20.50
2	0.17886	9.98	34.76	19.38	44.74	29.36	64.54	54.54	-19.79	-25.17
3	0.21067	10.02	31.25	18.58	41.27	28.60	63.18	53.18	-21.91	-24.58
4	0.44007	10.09	29.06	20.25	39.15	30.34	57.06	47.06	-17.91	-16.72
5	0.53221	10.10	32.07	22.99	42.17	33.09	56.00	46.00	-13.83	-12.91
6	0.67142	10.12	26.40	18.65	36.52	28.77	56.00	46.00	-19.48	-17.23

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak an d 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.



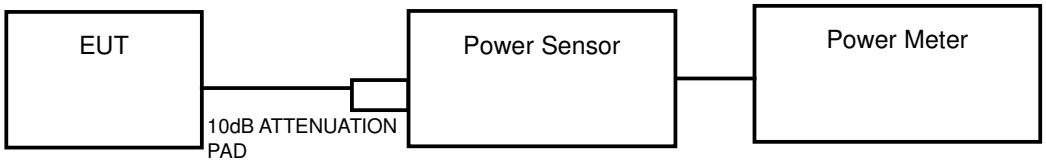
4.3 TRANSMIT POWER MEASUREMENT

4.3.1 LIMITS OF TRANSMIT POWER MEASUREMENT

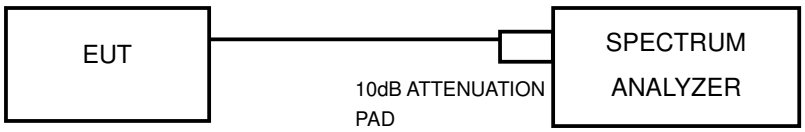
Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p ≦ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Mobile and Portable client 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.

4.3.2 TEST SETUP



FOR 6/26dB BANDWIDTH



4.3.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
Power Sensor	Keysight	U2021XA	MY57320002	Jan. 11, 24
Power Meter	Anritsu	ML2495A	1139001	Aug. 22, 24
Power Sensor	Anritsu	MA2411B	1531155	Aug. 22, 24
Digital Multimeter	FLUKE	15B	A1220010DG	N/A
Humid & Temp Programmable Tester	Haida	HD-225T	110807201	Nov. 02, 23
Oscilloscope	Agilent	DSO9254A	MY51260160	Jul. 27, 24
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV40	101094	Jan. 11, 24
Signal Generator	Agilent	N5183A	MY50140980	Jul. 20, 24
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY56200288	Jul. 20, 24
BLUETOOTH TESTER	Rohde&Schwarz	CBT32	100811	N/A
Attenuator	MINI	BW-S10W2+	S130129FGE2	N/A
DC Source	Keysight	E3642A	MY56146098	N/A
Test software	ADT	ADT_RF Test Software V6.6.5.3	N/A	N/A

NOTES:

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

4.3.4 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.

4.3.5 DEVIATION FROM TEST STANDARD

No deviation.

4.3.6 EUT OPERATING CONDITIONS

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

4.3.7 TEST RESULTS

OUTPUT POWER:

802.11a

CHANNEL NUMBER	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	AVG. CONDUCTED POWER (mW)	LIMIT (dBm)	PASS /FAIL
36	5180	14.86	30.62	24.00	PASS
40	5200	15.11	32.434	24.00	PASS
48	5240	15.54	35.81	24.00	PASS
52	5260	15.32	34.041	24.00	PASS
60	5300	15.37	34.435	24.00	PASS
64	5320	15.27	33.651	24.00	PASS
100	5500	15.54	35.81	24.00	PASS
116	5580	15.08	32.211	24.00	PASS
140	5700	14.83	30.409	24.00	PASS
149	5745	13.56	22.699	30.00	PASS
157	5785	12.52	17.865	30.00	PASS
165	5825	12.23	16.711	30.00	PASS

Note:

For 5260 ~ 5320MHz, 5500 ~ 5700MHz

1. **11dBm + 10log (20.44) = 24.10 dBm > 24dBm**
2. **11dBm + 10log (22.86) = 24.59 dBm > 24dBm**
3. **11dBm + 10log (20.54) = 24.13 dBm > 24dBm**
4. **11dBm + 10log (20.77) = 24.17 dBm > 24dBm**
5. **11dBm + 10log (20.57) = 24.13 dBm > 24dBm**
6. **11dBm + 10log (20.41) = 24.10 dBm > 24dBm**

802.11n (20MHz)

CHANNEL NUMBER	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	AVG. CONDUCTED POWER (mW)	LIMIT (dBm)	PASS /FAIL
36	5180	14.34	27.164	24.00	PASS
40	5200	14.55	28.51	24.00	PASS
48	5240	14.89	30.832	24.00	PASS
52	5260	14.69	29.444	24.00	PASS
60	5300	14.74	29.785	24.00	PASS
64	5320	14.67	29.309	24.00	PASS
100	5500	14.91	30.974	24.00	PASS
116	5580	14.50	28.184	24.00	PASS
140	5700	14.24	26.546	24.00	PASS
149	5745	13.39	21.827	30.00	PASS
157	5785	12.29	16.943	30.00	PASS
165	5825	12.04	15.996	30.00	PASS

Note:

For 5260 ~ 5320MHz, 5500 ~ 5700MHz

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

11dBm + 10log (20.67) = 24.15 dBm > 24dBm

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

11dBm + 10log (21.13) = 24.25 dBm > 24dBm

11dBm + 10log (20.54) = 24.13 dBm > 24dBm

11dBm + 10log (20.56) = 24.13 dBm > 24dBm

802.11n (40MHz)

CHANNEL NUMBER	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	AVG. CONDUCTED POWER (mW)	LIMIT (dBm)	PASS /FAIL
38	5190	14.70	29.512	24.00	PASS
46	5230	15.16	32.81	24.00	PASS
54	5270	15.04	31.915	24.00	PASS
62	5310	15.04	31.915	24.00	PASS
102	5510	15.13	32.584	24.00	PASS
110	5550	14.52	28.314	24.00	PASS
134	5670	14.80	30.2	24.00	PASS
151	5755	12.41	17.418	30.00	PASS
159	5795	12.07	16.106	30.00	PASS

Note:

For 5260 ~ 5320MHz, 5500 ~ 5700MHz

11dBm + 10log (41.66) = 27.20 dBm > 24dBm

11dBm + 10log (42.97) = 27.33 dBm > 24dBm

11dBm + 10log (54.80) = 28.39 dBm > 24dBm

11dBm + 10log (41.78) = 27.21 dBm > 24dBm

11dBm + 10log (41.47) = 27.18 dBm > 24dBm

802.11ac (80MHz)

CHANNEL NUMBER	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	AVG. CONDUCTED POWER (mW)	LIMIT (dBm)	PASS /FAIL
42	5210	13.02	20.045	24.00	PASS
58	5290	13.19	20.845	24.00	PASS
106	5530	13.01	19.999	24.00	PASS
122	5610	12.68	18.535	24.00	PASS
155	5775	10.33	10.789	30.00	PASS

Note:

For 5260 ~ 5320MHz, 5500 ~ 5700MHz

11dBm + 10log (81.36) = 30.10 dBm > 24dBm

11dBm + 10log (81.43) = 30.11 dBm > 24dBm

11dBm + 10log (81.51) = 30.11 dBm > 24dBm

26dB BANDWIDTH:

802.11a

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
36	5180	20.77	PASS
40	5200	21.18	PASS
48	5240	22.16	PASS
52	5260	20.44	PASS
60	5300	22.86	PASS
64	5320	20.54	PASS
100	5500	20.77	PASS
116	5580	20.57	PASS
140	5700	20.41	PASS

802.11n (20MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
36	5180	20.67	PASS
40	5200	20.68	PASS
48	5240	20.67	PASS
52	5260	20.69	PASS
60	5300	20.67	PASS
64	5320	20.59	PASS
100	5500	21.13	PASS
116	5580	20.54	PASS
140	5700	20.56	PASS

802.11n (40MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
38	5190	41.88	PASS
46	5230	41.72	PASS
54	5270	41.66	PASS
62	5310	42.97	PASS
102	5510	54.80	PASS
110	5550	41.78	PASS
134	5670	41.47	PASS

802.11ac (80MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
42	5210	81.60	PASS
58	5290	81.36	PASS
106	5530	81.43	PASS
122	5610	81.51	PASS

6dB BANDWIDTH For 5725-5850MHz

802.11a

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
149	**5745**	15.38	PASS
157	**5785**	15.19	PASS
165	**5825**	15.20	PASS

802.11n (20M)

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

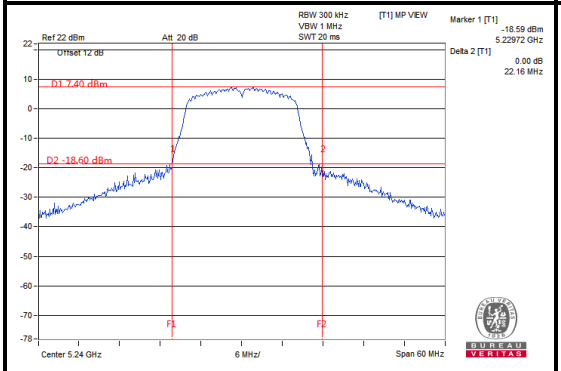
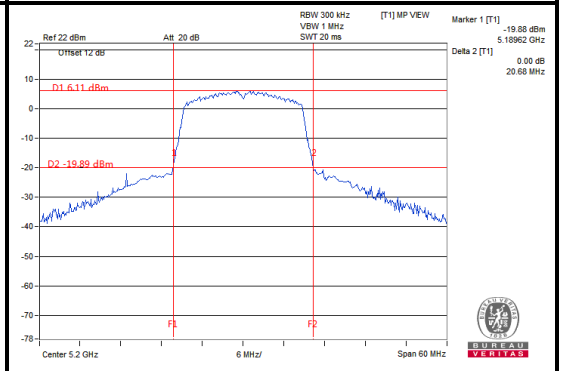
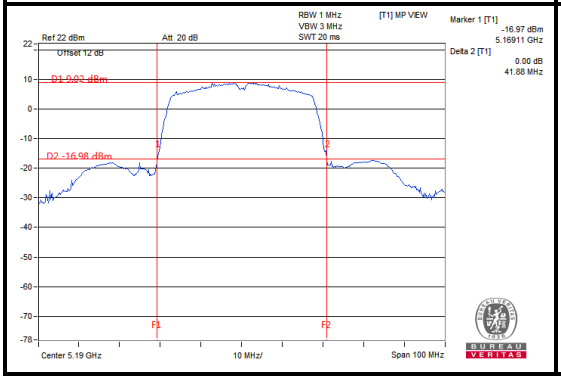
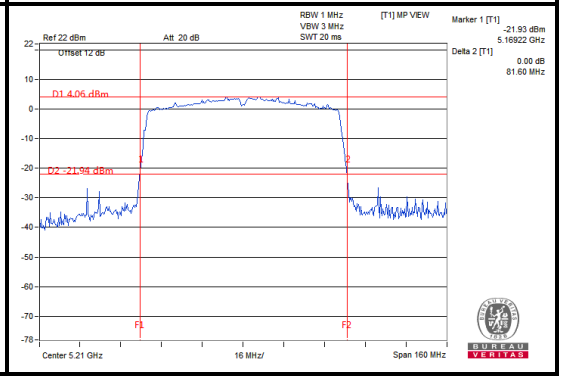
802.11n (40M)

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
151	**5755**	35.25	PASS
159	**5795**	35.20	PASS

802.11ac (80MHz)

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
155	**5775**	75.41	PASS

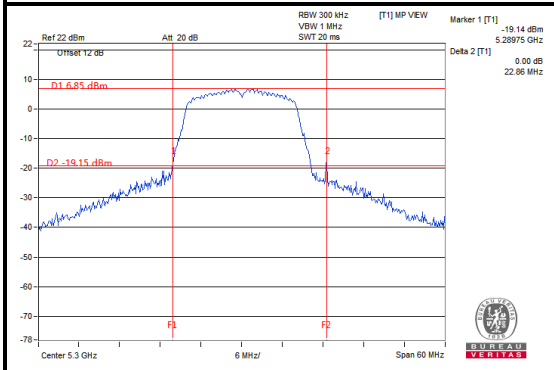
26dB bandwidth Test Plot
For 5150-5250MHz

SPECTRUM PLOT OF WORST VALUE	
802.11a 5240MHz	802.11n20 5200MHz
	
802.11n40 5190MHz	802.11ac80 5210MHz
	

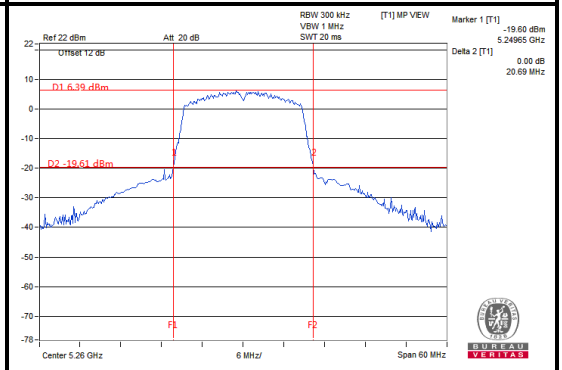
For 5250-5350MHz

SPECTRUM PLOT OF WORST VALUE

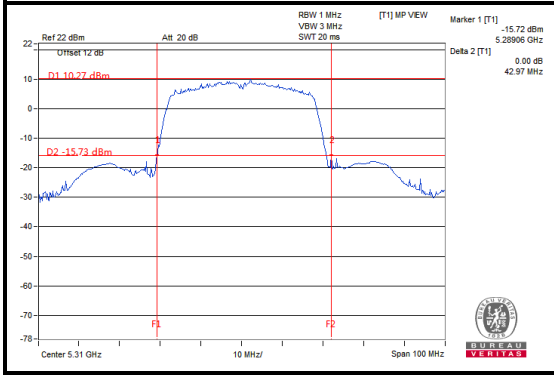
802.11a 5300MHz



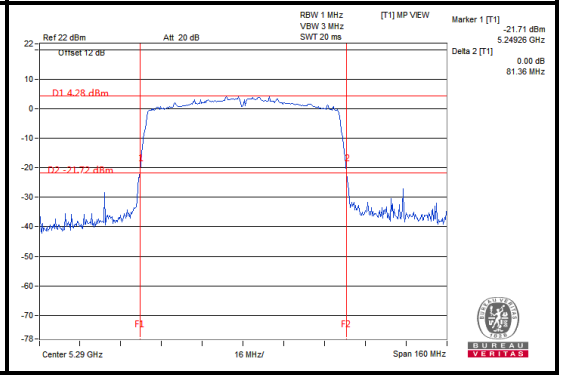
802.11n20 5260MHz



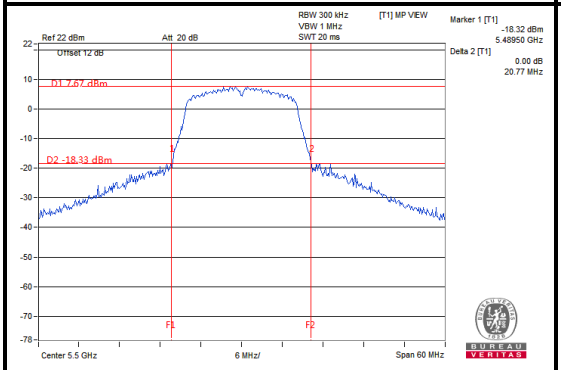
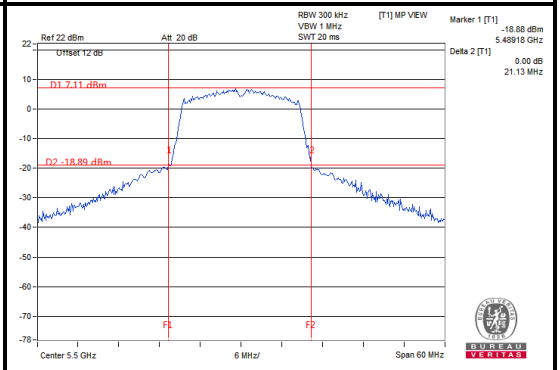
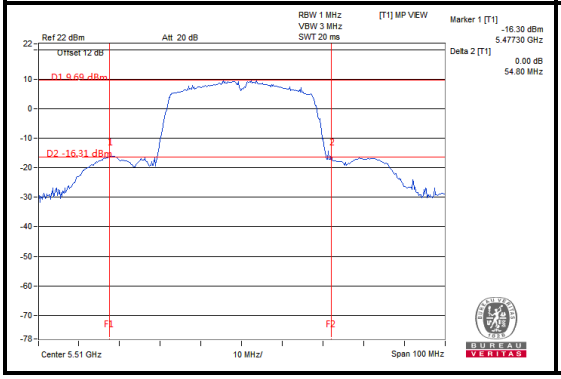
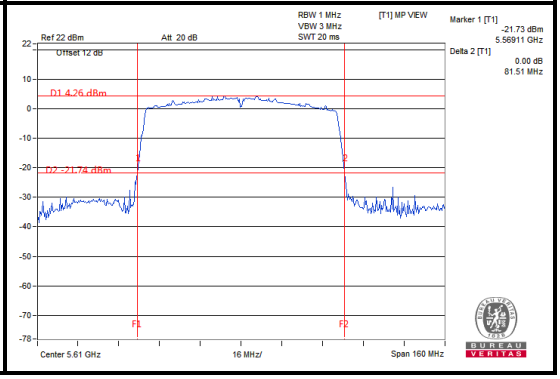
802.11n40 5310MHz



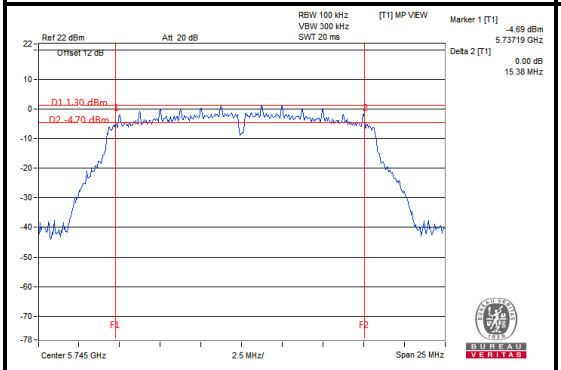
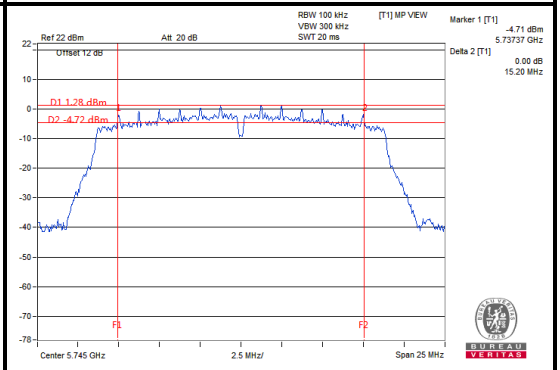
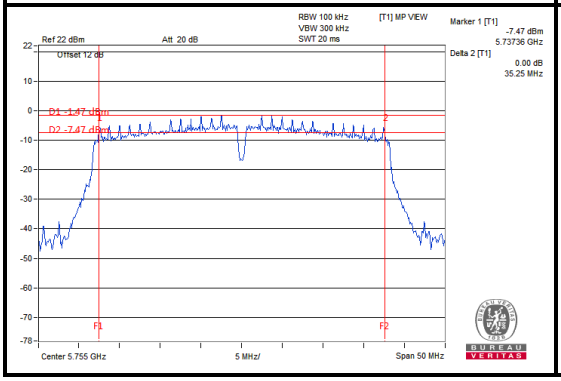
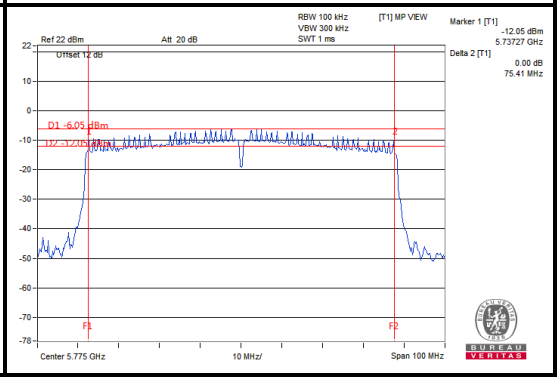
802.11ac80 5290MHz



For 5470-5725MHz

SPECTRUM PLOT OF WORST VALUE	
802.11a 5500MHz	**802.11n20 5500MHz**
	
802.11n40 5510MHz	**802.11ac80 5610MHz**
	

6dB BANDWIDTH For 5725-5850MHz

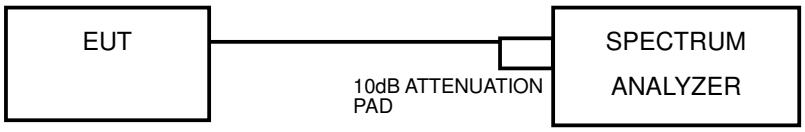
SPECTRUM PLOT OF WORST VALUE	
802.11a 5745MHz	802.11n20 5745MHz
	
802.11n40 5755MHz	802.11ac80 5775MHz
	

4.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.4.1 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

4.4.2 TEST SETUP



4.4.3 TEST INSTRUMENTS

Refer to section 4.3.3 to get information of above instrument.

4.4.4 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)

4.4.5 DEVIATION FROM TEST STANDARD

No deviation.

4.4.6 EUT OPERATING CONDITIONS

Same as 3.3.6

4.4.7 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	2.28	0.16	2.44	11.00	PASS
40	5200	2.37	0.16	2.53	11.00	PASS
48	5240	2.54	0.16	2.70	11.00	PASS
52	5260	2.05	0.16	2.21	11.00	PASS
60	5300	2.16	0.16	2.32	11.00	PASS
64	5320	2.17	0.16	2.33	11.00	PASS
100	5500	2.94	0.16	3.10	11.00	PASS
116	5580	2.58	0.16	2.74	11.00	PASS
140	5700	1.73	0.16	1.89	11.00	PASS

Note: Refer to section 3.6 for duty cycle spectrum plot.

Chan.	Freq. (MHz)	PSD (dBm/500kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS / FAIL
149	5745	-1.61	0.16	-1.45	30.00	PASS
157	5785	-1.93	0.16	-1.77	30.00	PASS
165	5825	-2.20	0.16	-2.04	30.00	PASS

Note: Refer to section 3.6 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	1.87	0.15	2.02	11.00	PASS
40	5200	1.91	0.15	2.06	11.00	PASS
48	5240	2.09	0.15	2.24	11.00	PASS
52	5260	1.73	0.15	1.88	11.00	PASS
60	5300	1.74	0.15	1.89	11.00	PASS
64	5320	1.85	0.15	2.00	11.00	PASS
100	5500	2.40	0.15	2.55	11.00	PASS
116	5580	2.07	0.15	2.22	11.00	PASS
140	5700	1.25	0.15	1.40	11.00	PASS

Note: Refer to section 3.6 for duty cycle spectrum plot.

Chan.	Freq. (MHz)	PSD (dBm/500kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS / FAIL
149	5745	-1.96	0.15	-1.81	30.00	PASS
157	5785	-2.27	0.15	-2.12	30.00	PASS
165	5825	-2.51	0.15	-2.36	30.00	PASS

Note: Refer to section 3.6 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	-1.36	0.29	-1.07	11.00	PASS
46	5230	-1.15	0.29	-0.86	11.00	PASS
54	5270	-1.49	0.29	-1.20	11.00	PASS
62	5310	-1.37	0.29	-1.08	11.00	PASS
102	5510	-0.90	0.29	-0.61	11.00	PASS
118	5590	-1.34	0.29	-1.05	11.00	PASS
134	5670	-1.45	0.29	-1.16	11.00	PASS

Note: Refer to section 3.6 for duty cycle spectrum plot.

Chan.	Freq. (MHz)	PSD (dBm/500kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS / FAIL
151	5755	-5.20	0.29	-4.91	30.00	PASS
159	5795	-5.49	0.29	-5.20	30.00	PASS

Note: Refer to section 3.6 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	-6.48	0.57	-5.91	11.00	PASS
58	5290	-6.64	0.57	-6.07	11.00	PASS
106	5530	-6.35	0.57	-5.78	11.00	PASS
122	5610	-6.44	0.57	-5.87	11.00	PASS

Note: Refer to section 3.6 for duty cycle spectrum plot.

Chan.	Freq. (MHz)	PSD (dBm/500kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS / FAIL
155	5775	-10.53	0.57	-9.96	30.00	PASS

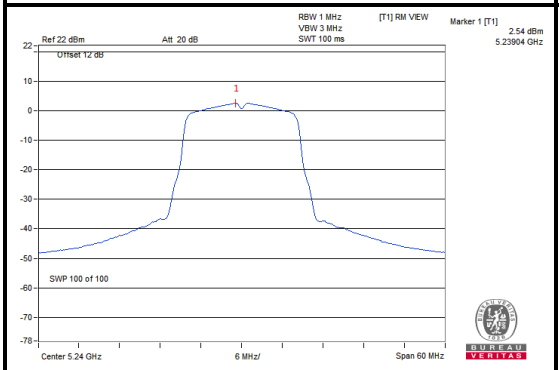
Note: Refer to section 3.6 for duty cycle spectrum plot.

PSD Test Plot

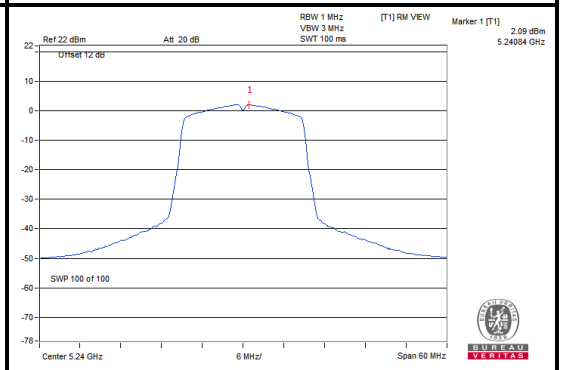
BAND 1
5150-5250MHz

SPECTRUM PLOT OF WORST VALUE

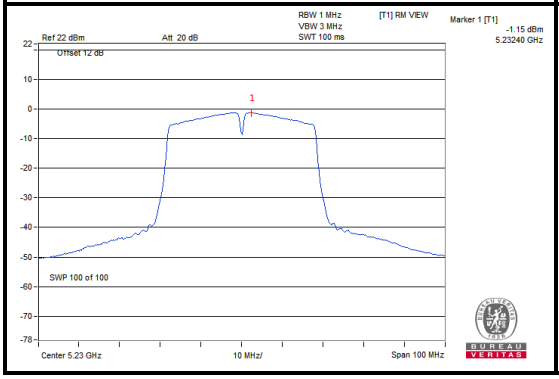
802.11a



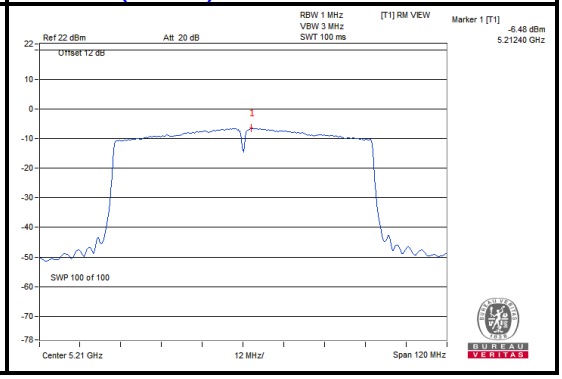
802.11n 20MHz



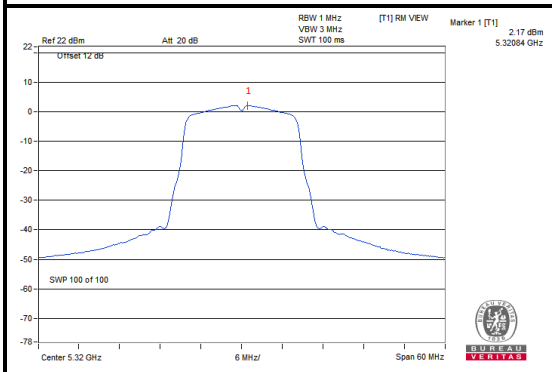
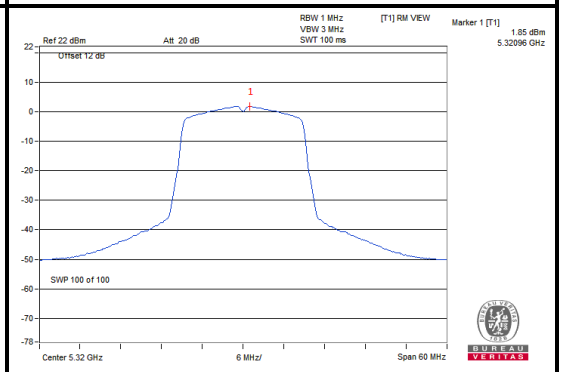
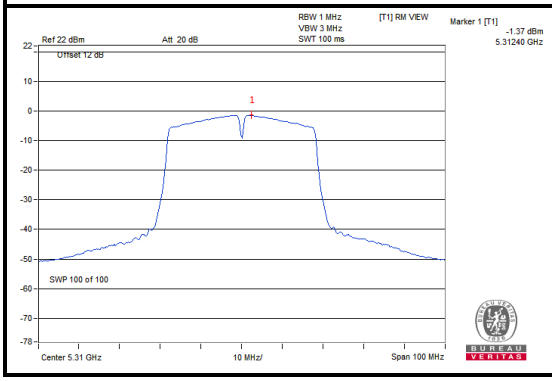
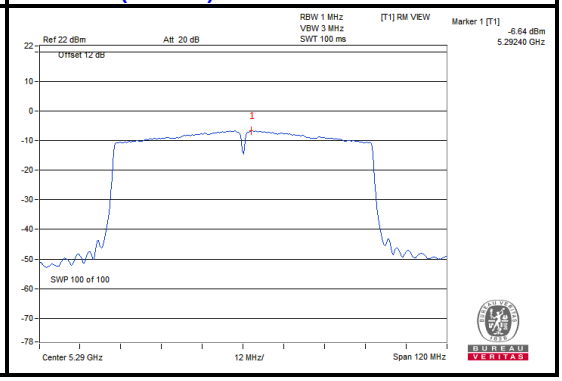
802.11n 40MHz



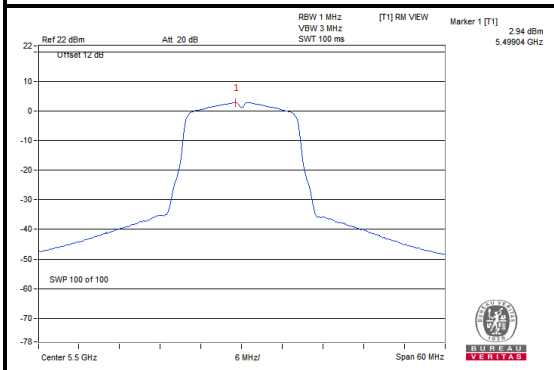
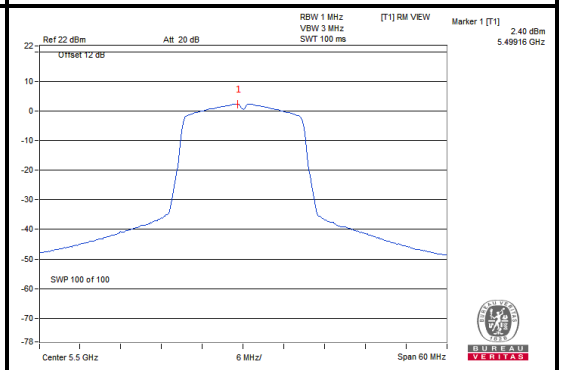
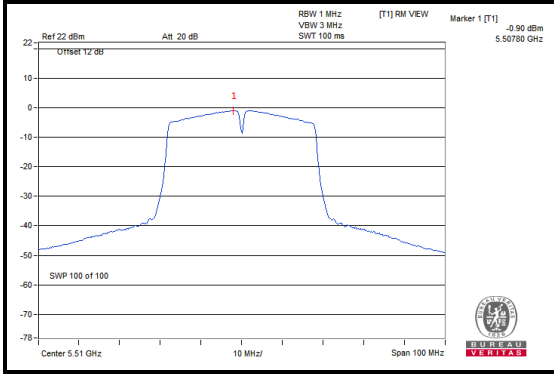
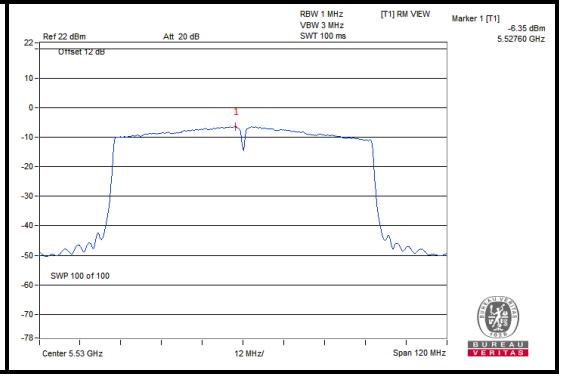
802.11ac (80MHz)



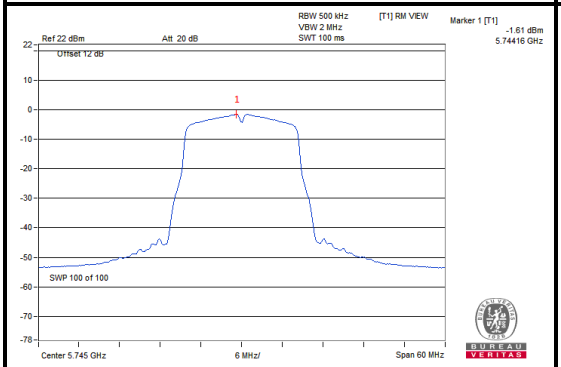
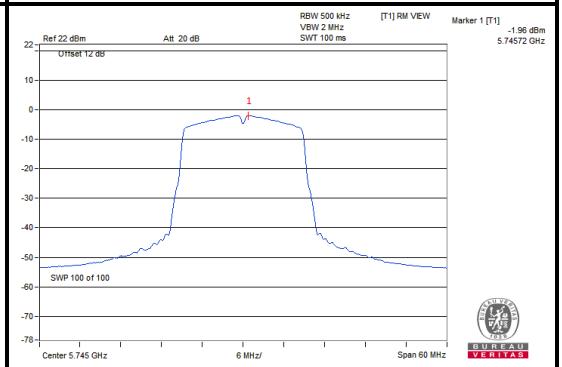
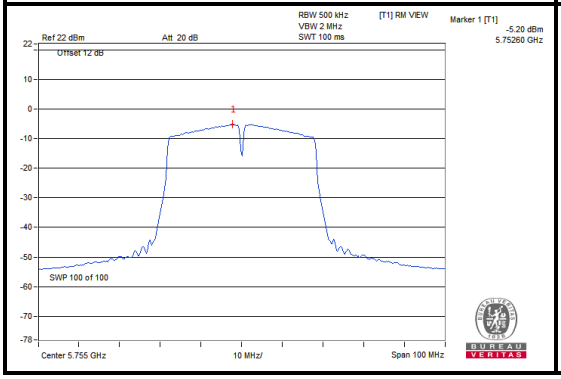
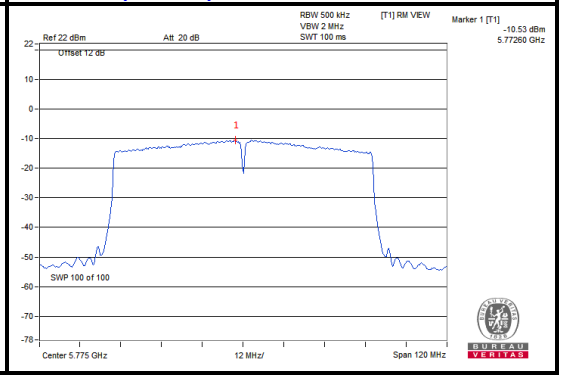
BAND 2
5250-5350MHz

SPECTRUM PLOT OF WORST VALUE	
802.11a	**802.11n 20MHz**
	
802.11n 40MHz	**802.11ac (80MHz)**
	

BAND 3
5470-5725MHz

SPECTRUM PLOT OF WORST VALUE	
802.11a	**802.11n 20MHz**
	
802.11n 40MHz	**802.11ac (80MHz)**
	

BAND4
5725-5850MHz

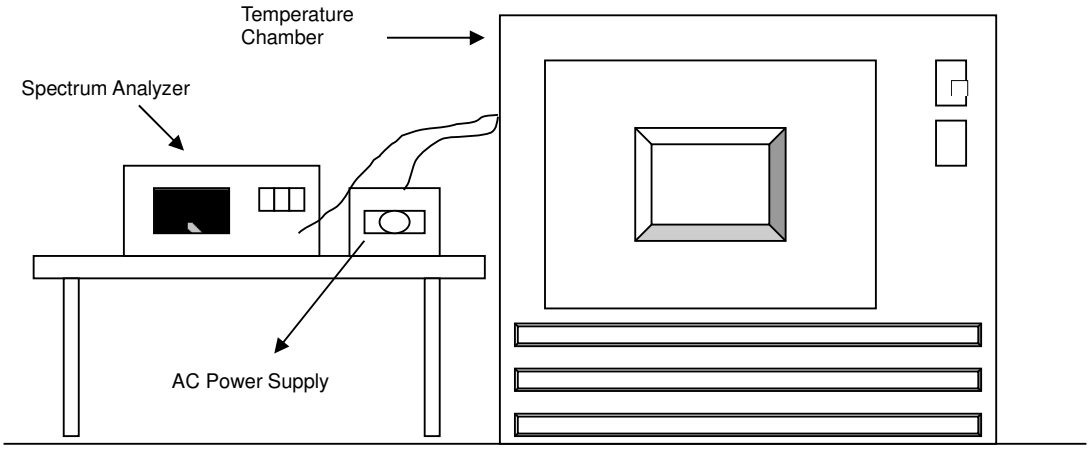
SPECTRUM PLOT OF WORST VALUE	
802.11a	**802.11n 20MHz**
	
802.11n 40MHz	**802.11ac (80MHz)**
	

4.5 FREQUENCY STABILITY

4.5.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

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

4.5.2 TEST SETUP



4.5.3 TEST INSTRUMENTS

Refer to section 4.3.3 to get information of above instrument.

4.5.4 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.

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

4.5.6 EUT OPERATING CONDITION

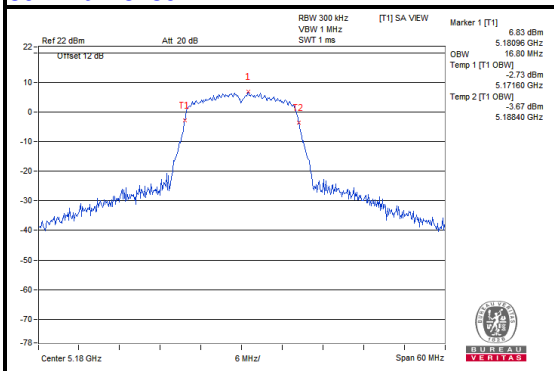
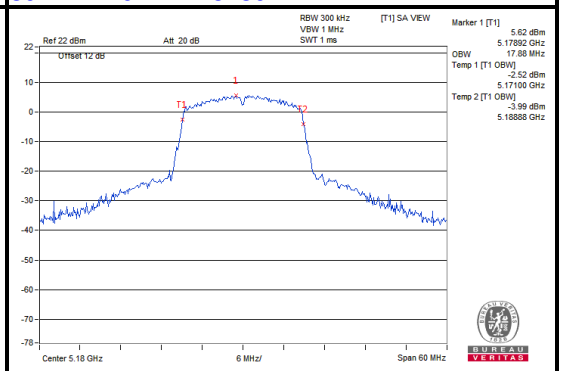
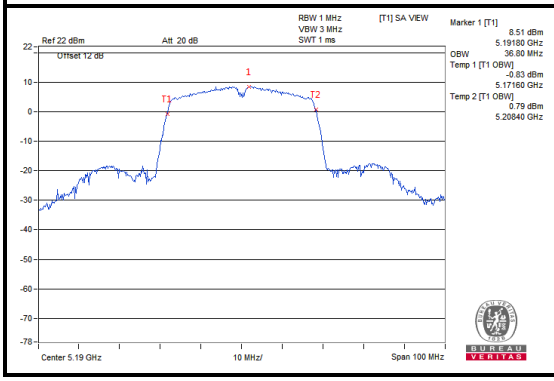
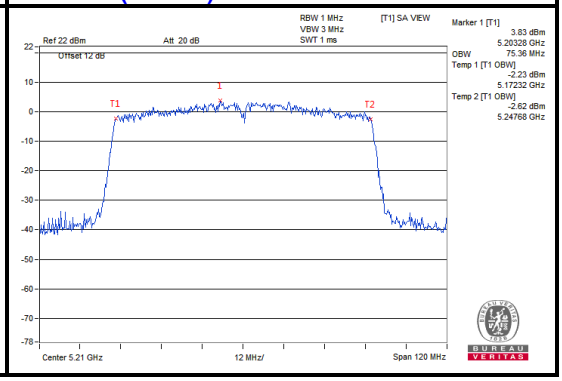
Set the EUT transmit at un-modulation mode to test frequency stability.

4.5.7 TEST RESULTS

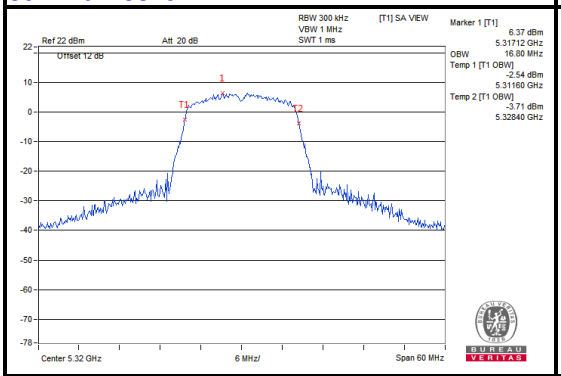
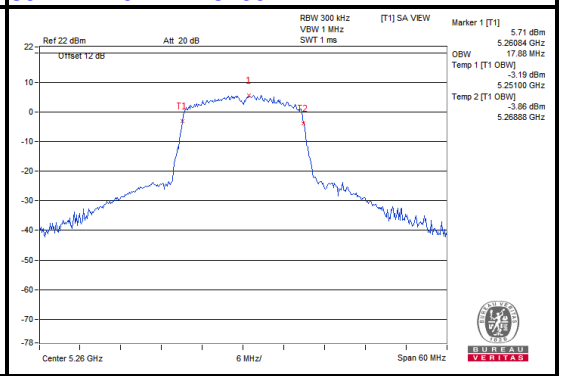
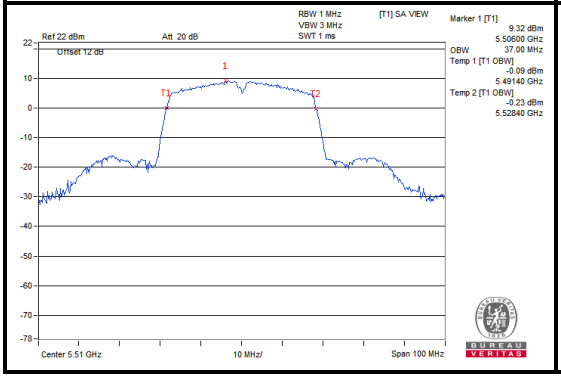
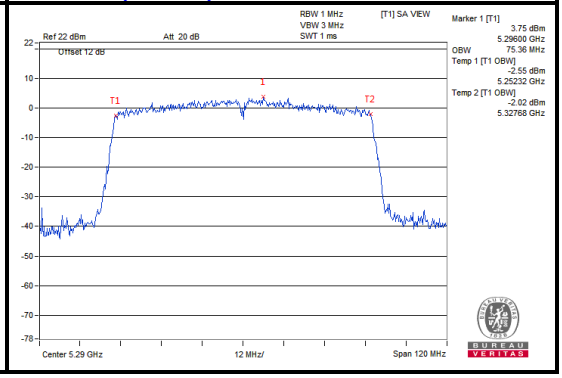
FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (℃)	POWER SUPPLY (Adapter)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift
50	120	5180.0183	0.00035	5180.0148	0.00029	5180.0147	0.00028	5180.019	0.00037
40	120	5179.9782	-0.00042	5179.9772	-0.00044	5179.9745	-0.00049	5179.9783	-0.00042
30	120	5179.9972	-0.00005	5179.996	-0.00008	5179.9965	-0.00007	5179.9948	-0.00010
20	120	5180.0043	0.00008	5180.0062	0.00012	5180.006	0.00012	5180.0025	0.00005
10	120	5179.9866	-0.00026	5179.9861	-0.00027	5179.9853	-0.00028	5179.9829	-0.00033
0	120	5179.9776	-0.00043	5179.976	-0.00046	5179.9774	-0.00044	5179.9782	-0.00042
-10	120	5179.9988	-0.00002	5179.9948	-0.00010	5179.9955	-0.00009	5179.997	-0.00006
-20	120	5180.0191	0.00037	5180.0182	0.00035	5180.0197	0.00038	5180.0164	0.00032
-30	120	5179.9857	-0.00028	5179.9876	-0.00024	5179.9896	-0.00020	5179.99	-0.00019

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (℃)	POWER SUPPLY (Adapter)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift
20	138	5180.0034	0.00007	5180.0053	0.00010	5180.0061	0.00012	5180.0029	0.00006
	120	5180.0043	0.00008	5180.0062	0.00012	5180.006	0.00012	5180.0025	0.00005
	102	5180.0053	0.00010	5180.0072	0.00014	5180.007	0.00014	5180.002	0.00004

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

SPECTRUM PLOT OF WORST VALUE	
802.11a 5180MHz	**802.11n 20MHz 5180MHz**
	
802.11n 40MHz 5190MHz	**802.11ac (80MHz)**
	

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

SPECTRUM PLOT OF WORST VALUE	
802.11a 5320MHz	**802.11n 20MHz 5260MHz**
	
802.11n 40MHz 5510MHz	**802.11ac (80MHz)**
	

5. PHOTOGRAPHS OF THE TEST CONFIGURATION

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

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

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

---END---