

TEST REPORT

Applicant	DingTalk (China) Information Technology Co., Ltd.
Address	Rm 527, 5F, Bldg 3, 969 Wenyi West Rd, Wuchang, Hangzhou, China.

Manufacturer or Supplier	DingTalk (China) Information Technology Co., Ltd.
Address	Rm 527, 5F, Bldg 3, 969 Wenyi West Rd, Wuchang, Hangzhou, China.
Product Name	QwenNote A1
Brand Name	QwenNote
Model	QWA1
Additional Model & Model Difference	N/A
Date of tests	Jun. 01, 2026 ~ Jun. 28, 2026

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

Prepared by Lucas Chen Project Engineer / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	

Date: Aug. 21, 2026

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF2605WDG0207-2	Original release	Aug. 21, 2026

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)(9)	AC Power Conducted Emissions	PASS	Meet the requirement of limit.
15.407(b)(1/2/3/4/9)	Radiated Emissions & Band Edge Measurement	PASS	Meet the requirement of limit.
15.407(a)(1/2/3)	Max Average Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(1/2/3)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	Meet the requirement of limit.

Test Location:

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

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	3.36dB
Radiated emissions	9KHz ~ 30MHz	2.76dB
	30MHz ~ 1GMHz	4.32dB
	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	QwenNote A1
MODEL NO.	QWA1
ADDITIONAL MODEL	N/A
FCC ID	2BWAT-QWA1
POWER SUPPLY	Powered by USB host unit or DC 3.7V from Li-ion battery
MODULATION TYPE	256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	OFDM
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 72.2Mbps 802.11ac: up to 86.7Mbps
OPERATING FREQUENCY	5745MHz ~ 5825MHz
NUMBER OF CHANNEL	5 channels for 802.11a, 802.11n, 11ac (20MHz)
CONDUCTED OUTPUT POWER	6.252mW (Maximum AVG Power)
ANTENNA TYPE	FPC Antenna, with -2.89dBi gain
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	N/A

NOTES:

1. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.
2. Please refer to the EUT photo document (Reference No.: 2605WDG0207-1) for detailed product photo.
3. The EUT provides complete transmitters and receivers, the EUT uses only one antenna at any time.

MODULATION MODE	TX FUNCTION
802.11a	1TX/1RX
802.11n (HT20) 802.11ac (VHT20)	1TX/1RX

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

3.2 DESCRIPTION OF TEST MODES

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	--	--

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE $\geq$ 1G	RE<1G	PLC	APCM	
A	-	-	--	√	Powered by Fully Battery
B	√	√	√	-	Powered by Adapter

Where **RE $\geq$ 1G**: Radiated Emission above 1GHz **RE<1G**: Radiated Emission below 1GHz
PLC: Power Line Conducted Emission **APCM**: Antenna Port Conducted Measurement

NOTE:

1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane**.
NOTE: "-" means no effect.

RADIATED EMISSION TEST (ABOVE 1GHz):

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
B	802.11a	5725-5850	149 to 165	149, 157, 165	OFDM	BPSK	6.0
	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	BPSK	6.5

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)
B	802.11a	5725-5850	149 to 165	149	OFDM	BPSK	6.0

POWER LINE CONDUCTED EMISSION TEST:

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
B	802.11a	5725-5850	149 to 165	149	OFDM	BPSK	6.0

ANTENNA PORT CONDUCTED MEASUREMENT:

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5725-5850	149 to 165	149, 157, 165	OFDM	BPSK	6.0
	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	BPSK	6.5

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	25deg. C, 57%RH	DC 3.7V From Fully Battery	Neil
RE≥1G	25deg. C, 57%RH	DC 3.7V From Fully Battery	Neil
PLC	25deg. C, 56%RH	DC 5V from Adapter	Summer
APCM	25deg. C, 57%RH	DC 3.7V From Fully Battery	Leo



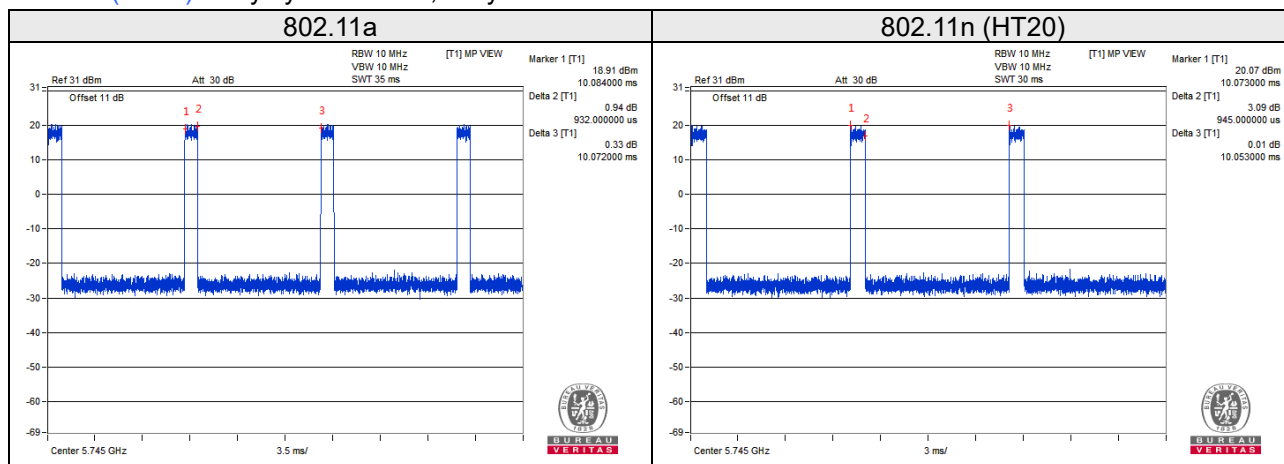
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3.3 DUTY CYCLE OF TEST SIGNAL

802.11a: Duty cycle =9.25%, Duty factor = 10.34

802.11n (HT20): Duty cycle =9.40%, Duty factor = 10.27



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.	REMARK
1	Adapter	N/A	DC 5V/2A	N/A	Provided by Lab
2	Galaxy S22	Samsung	SM-S9010	N/A	Provided by Lab

NO.	DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	USB Cable: Unshielded, detachable, 150cm
2	N/A

3.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart E (15.407)

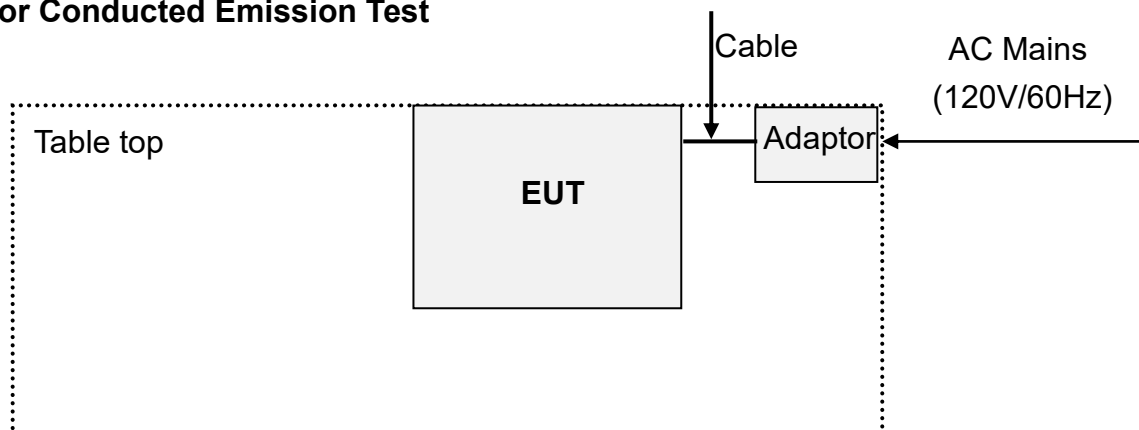
789033 D02 General UNII Test Procedures New Rules v02r01

ANSI C63.10-2020

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

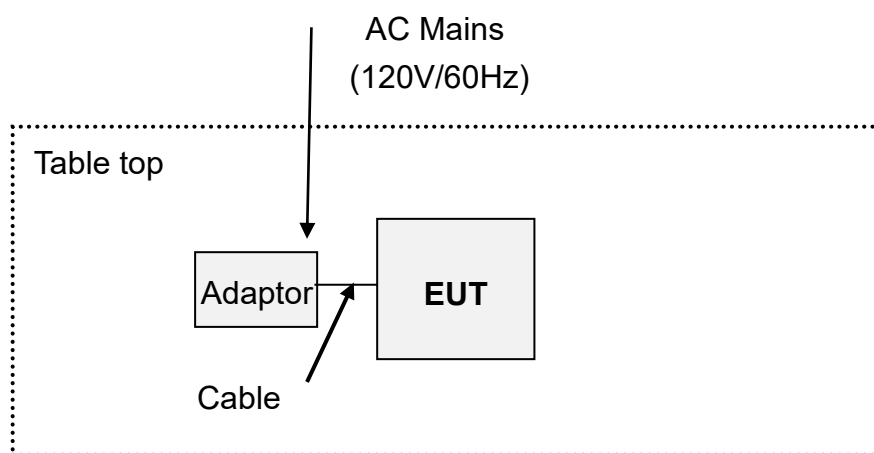
3.6 CONFIGURATION OF SYSTEM UNDER TEST

For Conducted Emission Test



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

For Radiated Emission Test



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

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

NOTES:

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

4.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

APPLICABLE TO	LIMIT	
789033 D02 General UNII Test Procedures New Rules v02r01	FIELD STRENGTH AT 3m	
	PK: 74 (dBμV/m)	AV: 54 (dBμV/m)
APPLICABLE TO	EIRP LIMIT	EQUIVALENT FIELD STRENGTH AT 3m
15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)
15.407(b)(2)		
15.407(b)(3)		
15.407(b)(4)	Note	Note

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

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

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

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

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



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4.1.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESU40	100449	Oct. 09, 26
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV7	102331	Apr. 08, 27
Active Loop Antenna (9KHz -30MHz)	SCHWARZBECK	FMZB 1519B	1519B-045	Apr. 13, 27
Amplifier (9KHz -1GHz)	Burgeon	BPA-530	100210	Feb. 12, 27
Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-554	Dec. 14, 26
Horn Antenna (1GHz -18GHz)	ETS -Lindgren	3117	0085519	Oct. 11, 26
Horn Antenna (18GHz -40GHz)	SCHWARZBECK	BBHA 9170	BBHA9170147	Apr. 19, 27
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	NSEMC003	May 17, 27
Test Software	ADT	ADT Radiated_V7.6.15.9.2	N/A	N/A
Broadband Preamplifier (1GHz~18GHz)	SCHWARZBECK	BBV9718	305	Feb. 12, 27
Pre-Amplifier (18GHz-40GHz)	EMCI	EMC 184045	980102	Oct. 10, 26

NOTES:

1. Equipment are calibrated by calibration laboratory accredited to ISO/IEC 17025 by a mutually recognized Accreditation.
2. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
3. The FCC Site registration No. is 749762, and the designation number is CN1174.

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:

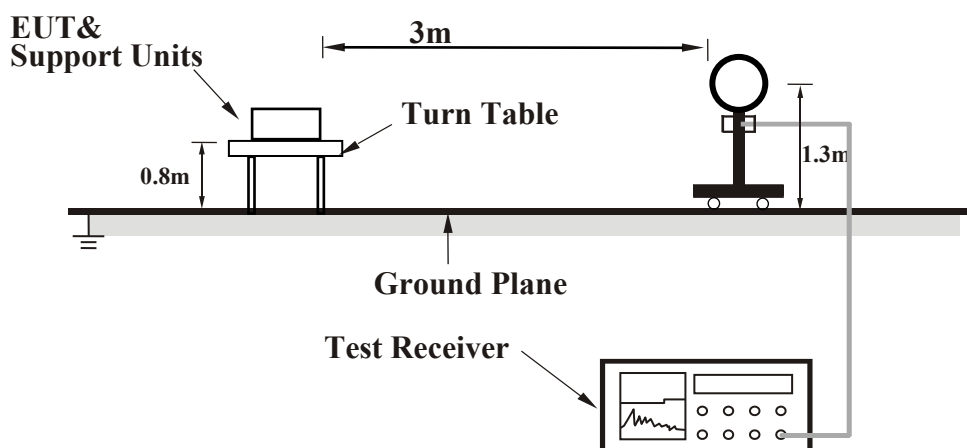
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution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

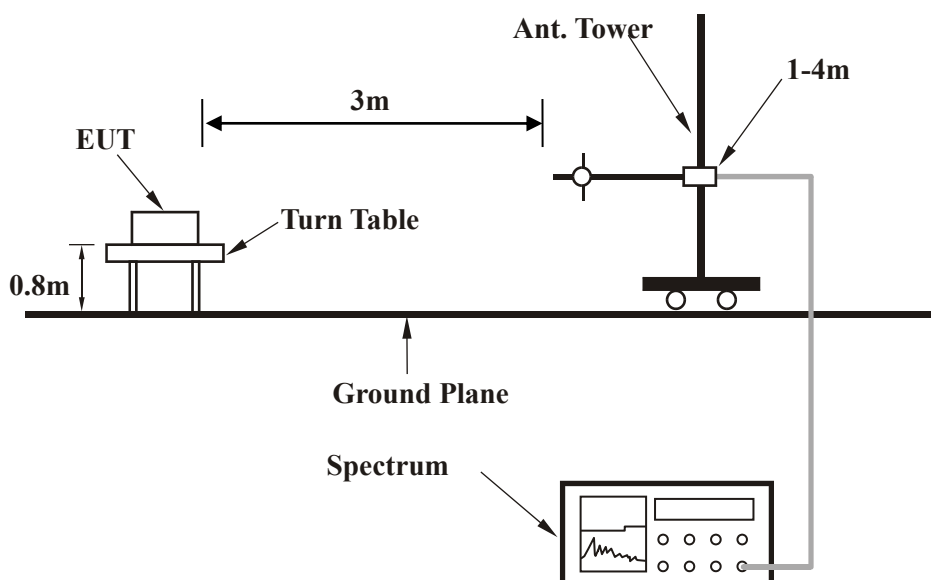
No deviation.

4.1.6 TEST SETUP

Below 30MHz

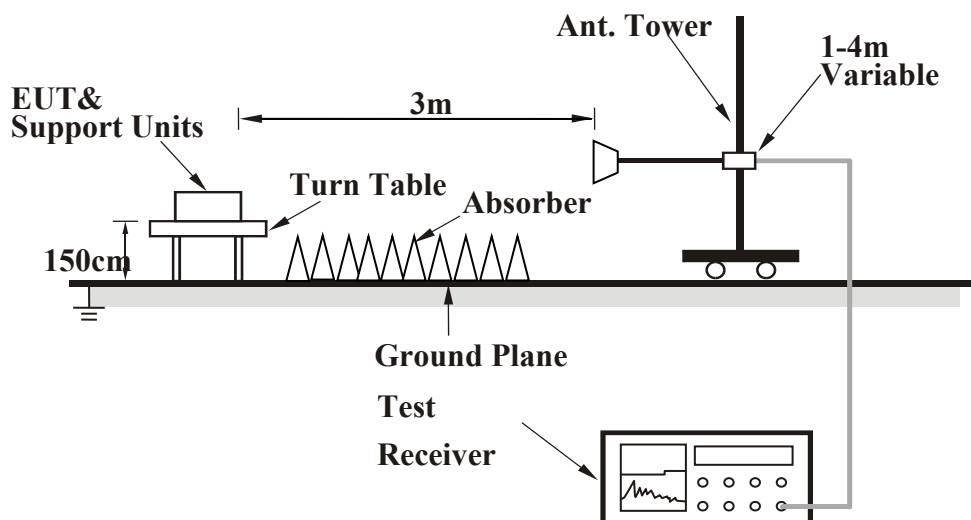


Below 1GHz test setup



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

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

4.1.8 TEST RESULTS

BELOW 1GHz WORST-CASE DATA

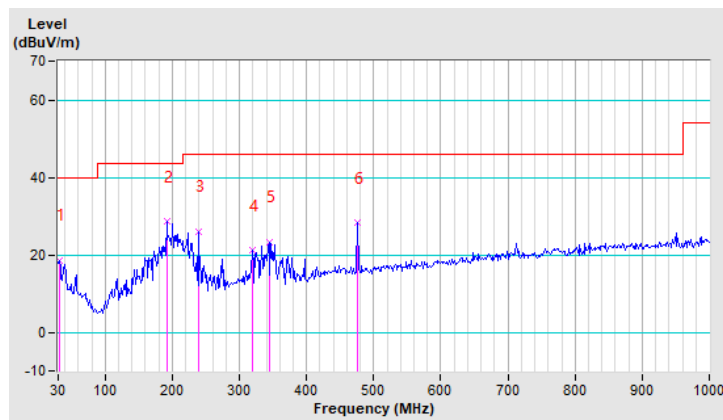
802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	31.55	18.40 QP	40.00	-21.60	2.36 H	329	37.25	-18.85
2	191.67	28.54 QP	43.50	-14.96	2.17 H	311	47.92	-19.38
3	238.30	26.08 QP	46.00	-19.92	2.04 H	297	44.42	-18.34
4	319.13	21.05 QP	46.00	-24.95	1.89 H	283	36.39	-15.34
5	344.01	23.31 QP	46.00	-22.69	1.75 H	269	37.96	-14.65
6	476.14	28.18 QP	46.00	-17.82	1.60 H	254	39.50	-11.32

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

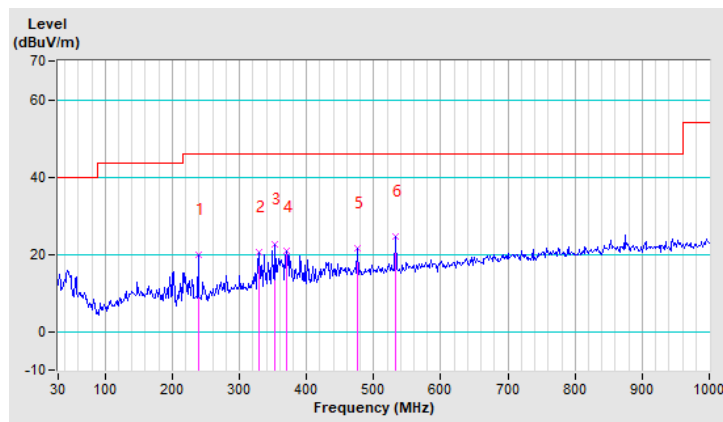


CHANNEL	TX Channel 36	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9KHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	238.30	19.80 QP	46.00	-26.20	1.00 V	177	38.14	-18.34
2	330.02	20.63 QP	46.00	-25.37	1.00 V	210	35.67	-15.04
3	353.33	22.70 QP	46.00	-23.30	1.06 V	162	37.12	-14.42
4	370.43	20.75 QP	46.00	-25.25	1.00 V	195	34.82	-14.07
5	476.14	21.63 QP	46.00	-24.37	1.00 V	227	32.95	-11.32
6	532.10	24.50 QP	46.00	-21.50	1.00 V	242	34.74	-10.24

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



Band 4 (5725-5850MHz):

ABOVE 1GHz DATA

802.11a

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

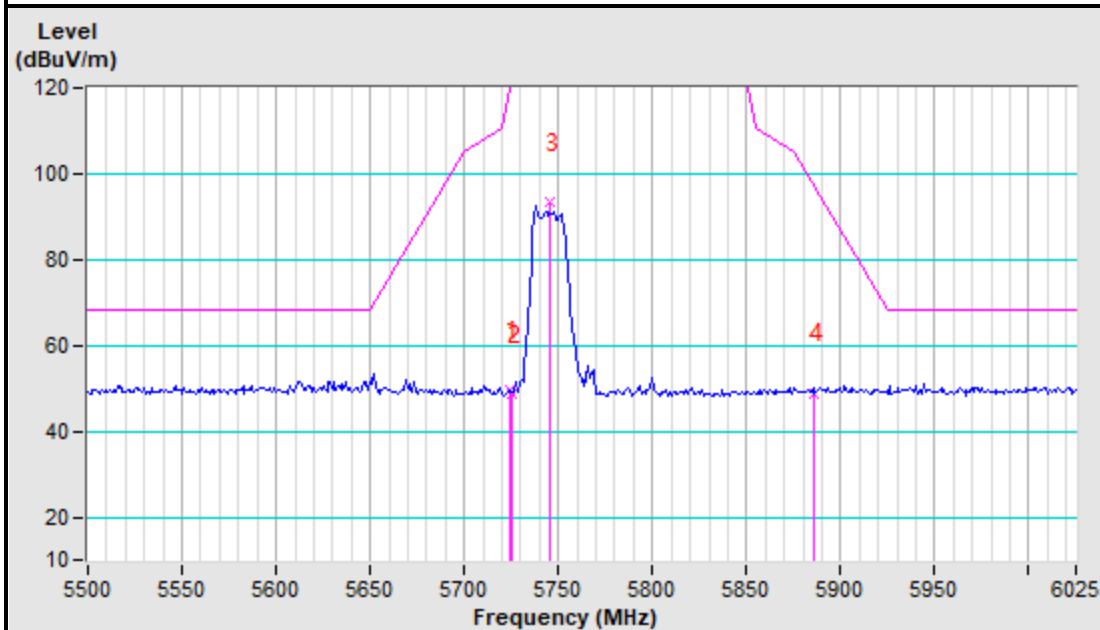
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5724.15	49.41 PK	120.26	-70.85	1.05 H	142	42.66	6.75
2	#5725.00	48.58 PK	122.20	-73.62	1.66 H	34	41.83	6.75
3	*5745.00	93.25 PK			1.44 H	39	86.46	6.79
4	#5886.17	48.81 PK	96.91	-48.10	1.05 H	96	41.68	7.13
5	11490.00	48.16 PK	74.00	-25.84	1.30 H	242	40.75	7.41
6	11490.00	37.52 AV	54.00	-16.48	1.30 H	242	30.11	7.41
7	#17235.00	43.44 PK	68.20	-24.76	1.93 H	47	40.95	2.49
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	#5724.15	48.27 PK	120.26	-71.99	1.62 V	142	41.52	6.75
2	#5725.00	48.23 PK	122.20	-73.97	1.62 V	75	41.48	6.75
3	*5745.00	91.55 PK			1.53 V	58	84.76	6.79
4	#5886.17	49.58 PK	96.91	-47.33	1.22 V	142	42.45	7.13
5	11490.00	48.58 PK	74.00	-25.42	1.07 V	47	41.17	7.41
6	11490.00	37.96 AV	54.00	-16.04	1.07 V	47	30.55	7.41
7	#17235.00	43.86 PK	68.20	-24.34	1.09 V	74	41.37	2.49

REMARKS:

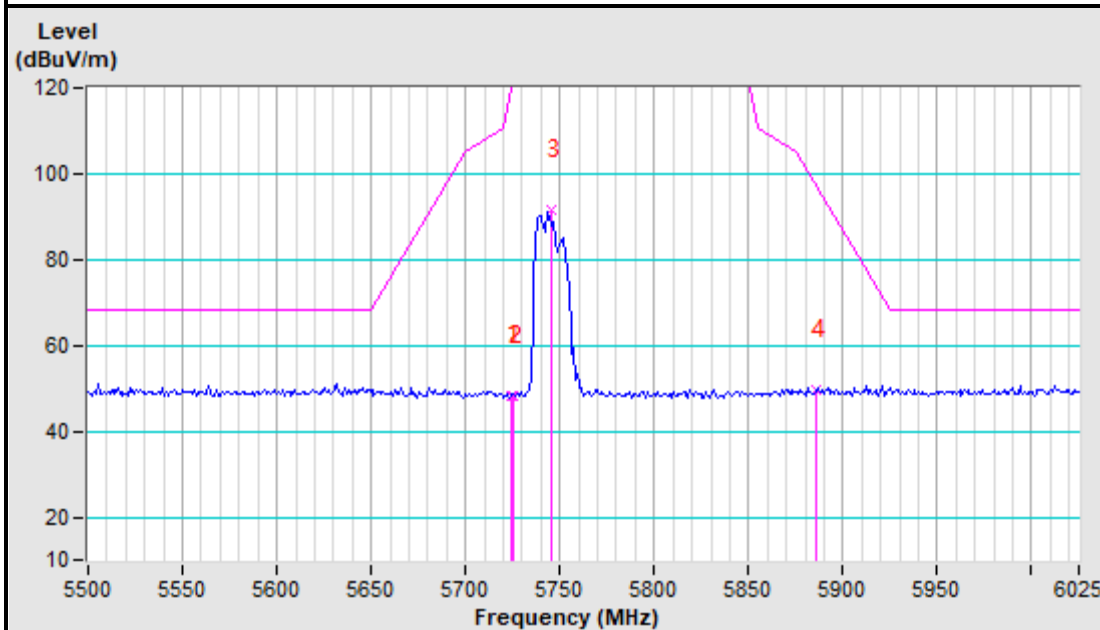
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.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

Band edge Plot

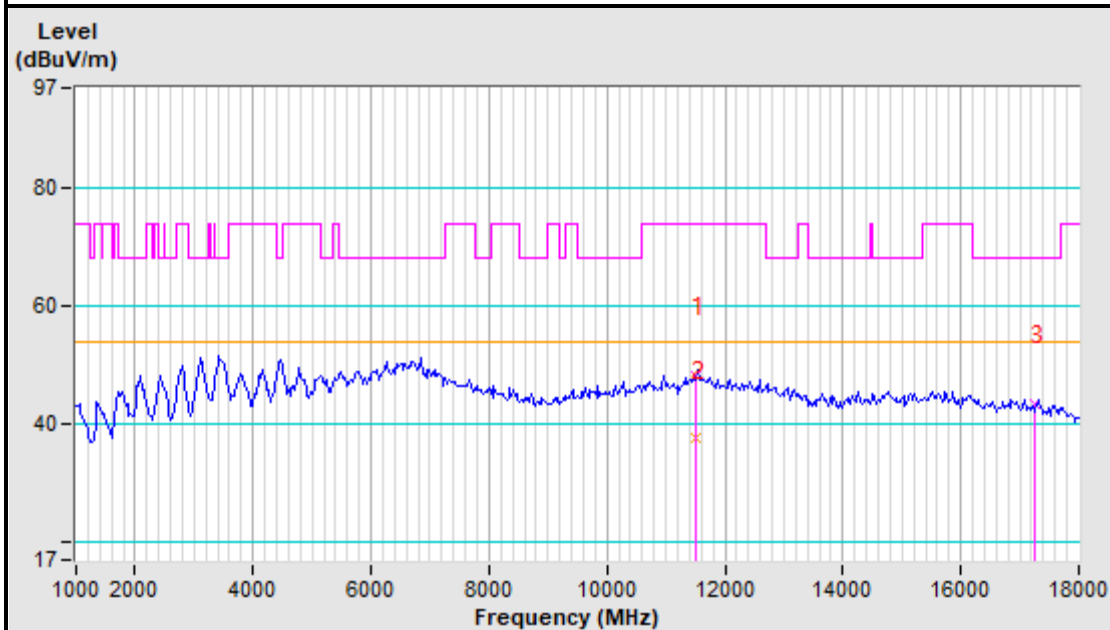
5745MHz Horizontal



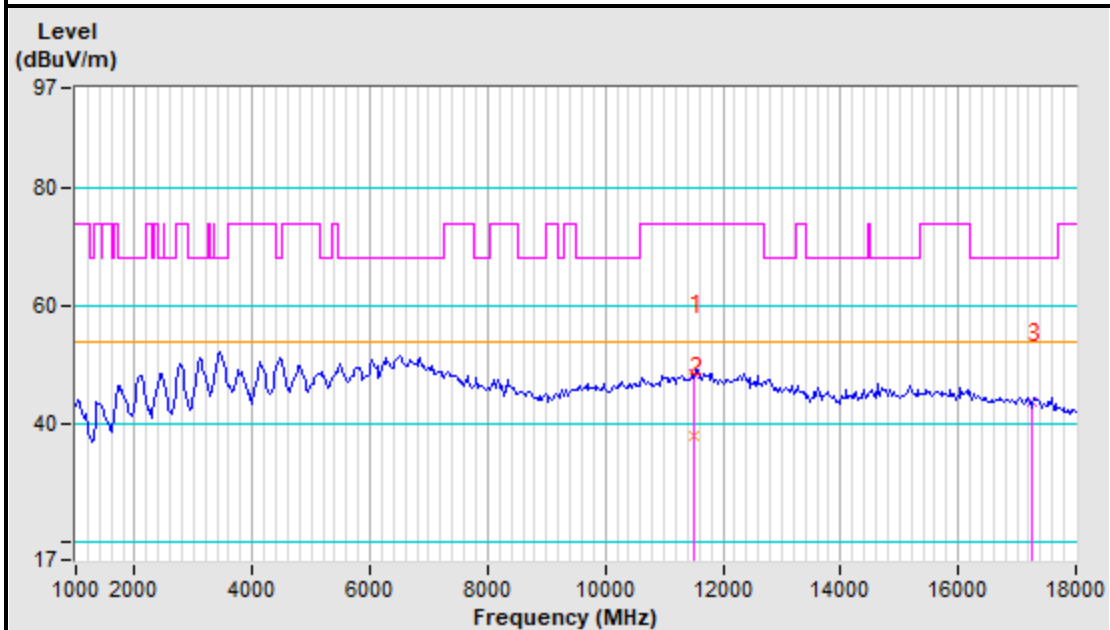
5745MHz Vertical



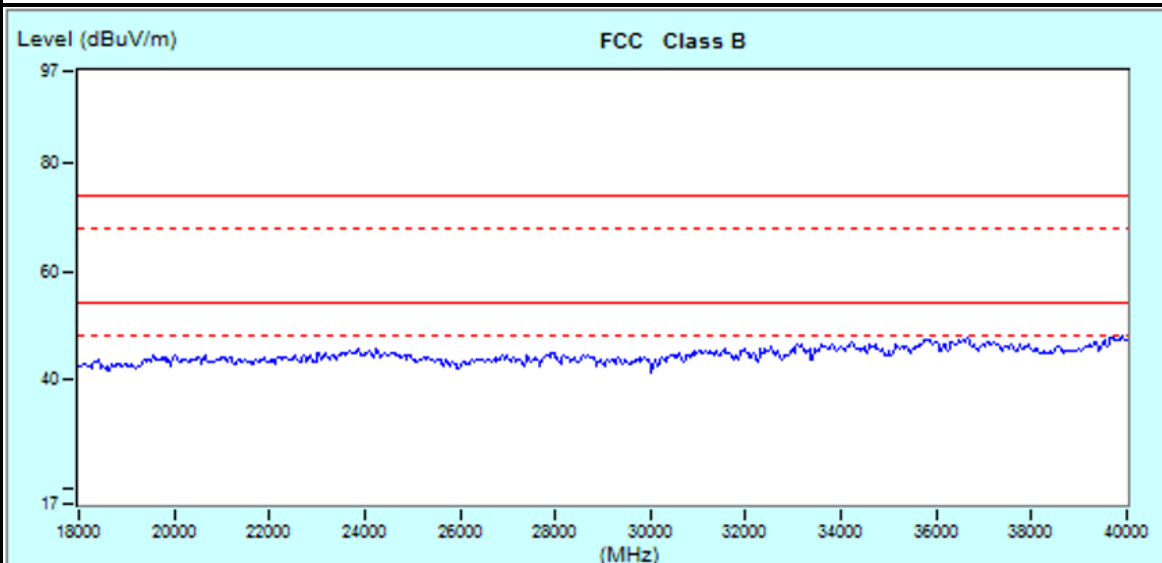
5745MHz Horizontal



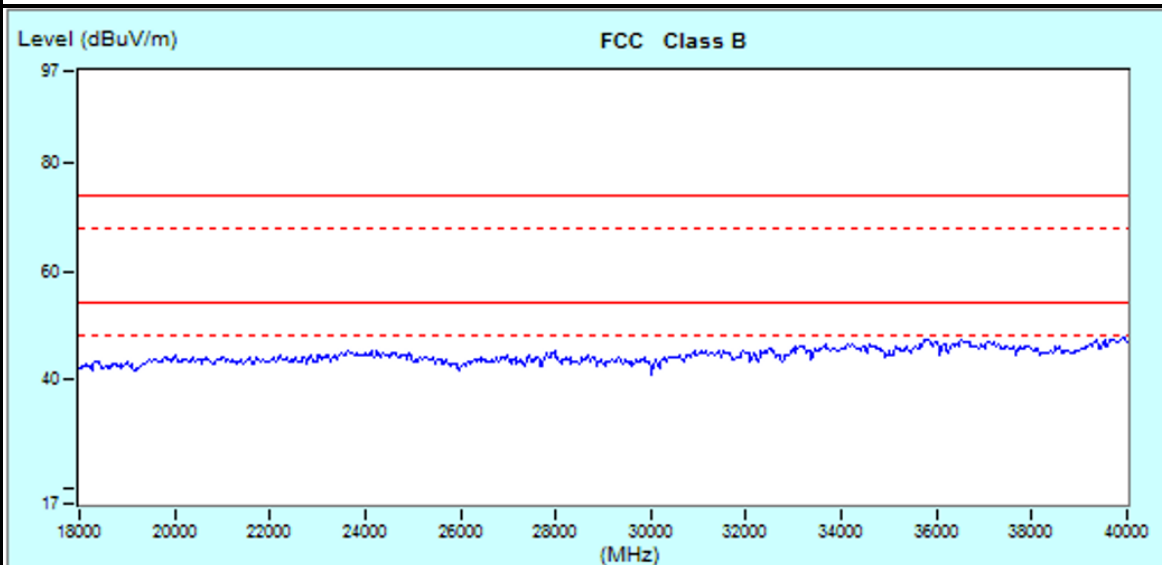
5745MHz Vertical



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	#5670.31	50.73 PK	83.27	-32.54	1.42 H	4	44.12	6.61
2	#5740.98	50.72 PK	152.20	-101.48	1.06 H	72	43.94	6.78
3	*5785.00	94.41 PK			1.51 H	47	87.52	6.89
4	#5823.43	51.92 PK	152.20	-100.28	1.63 H	241	44.95	6.97
5	11570.00	47.68 PK	74.00	-26.32	1.05 H	41	40.38	7.30
6	11570.00	36.24 AV	54.00	-17.76	1.05 H	41	28.94	7.30
7	#17355.00	43.75 PK	68.20	-24.45	1.63 H	98	41.36	2.39
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5670.31	48.45 PK	83.27	-34.82	1.77 V	68	41.84	6.61
2	#5740.98	48.92 PK	152.20	-103.28	1.35 V	128	42.14	6.78
3	*5785.00	89.28 PK			1.33 V	17	82.39	6.89
4	#5823.43	48.90 PK	152.20	-103.30	1.05 V	71	41.93	6.97
5	11570.00	48.36 PK	74.00	-25.64	1.36 V	85	41.06	7.30
6	11570.00	37.75 AV	54.00	-16.25	1.36 V	85	30.45	7.30
7	#17355.00	44.36 PK	68.20	-23.84	1.93 V	47	41.97	2.39

REMARKS:

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

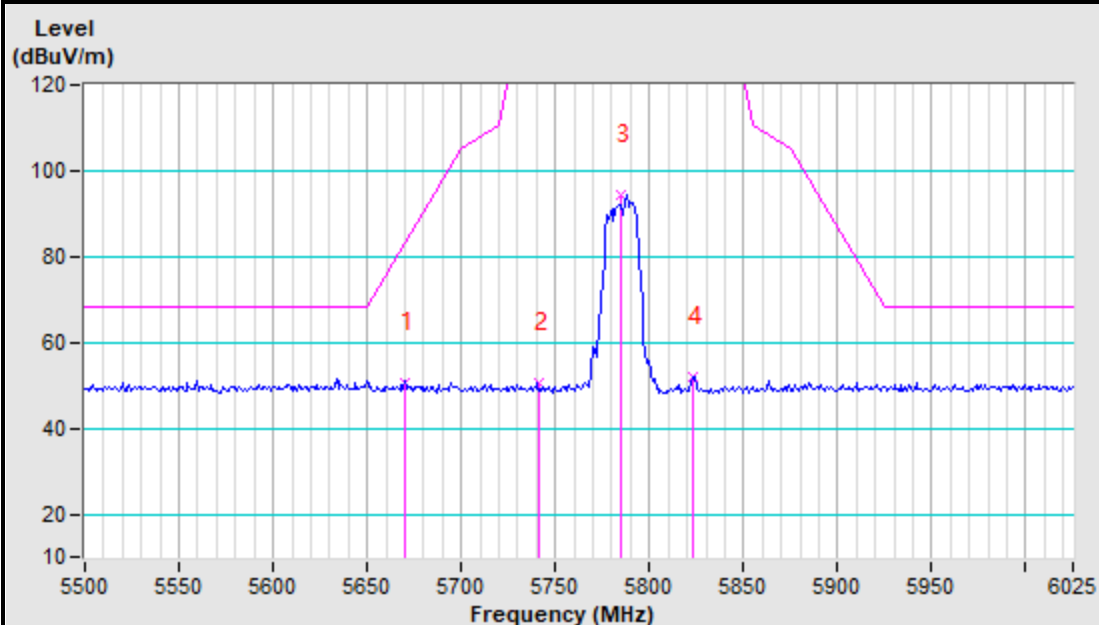


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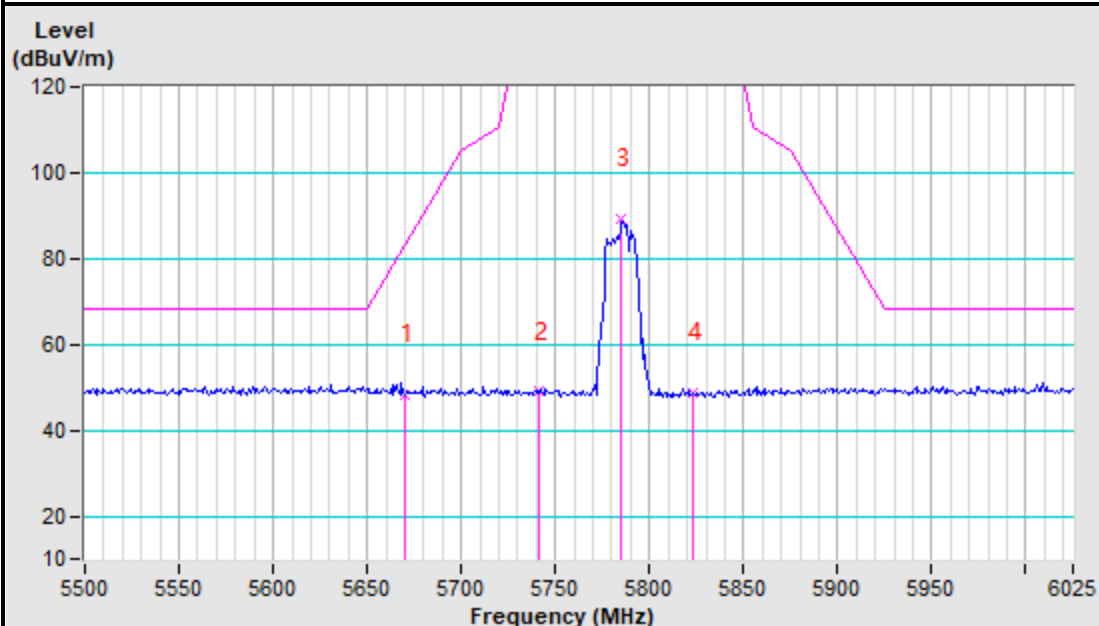
Test Report No.: RF2605WDG0207-2

Band edge Plot

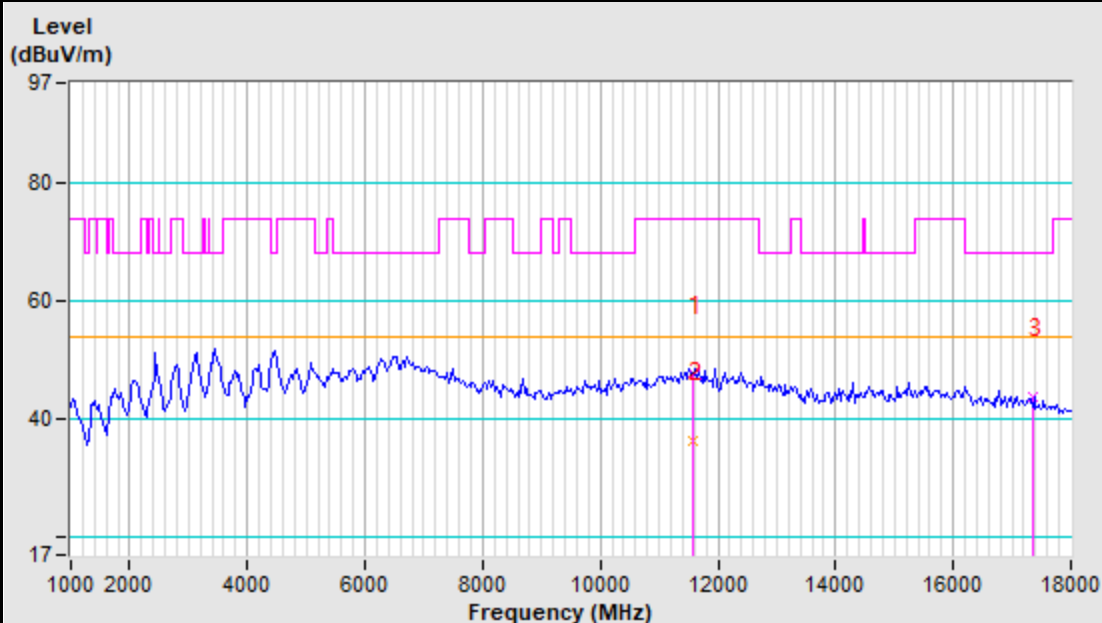
5785MHz Horizontal



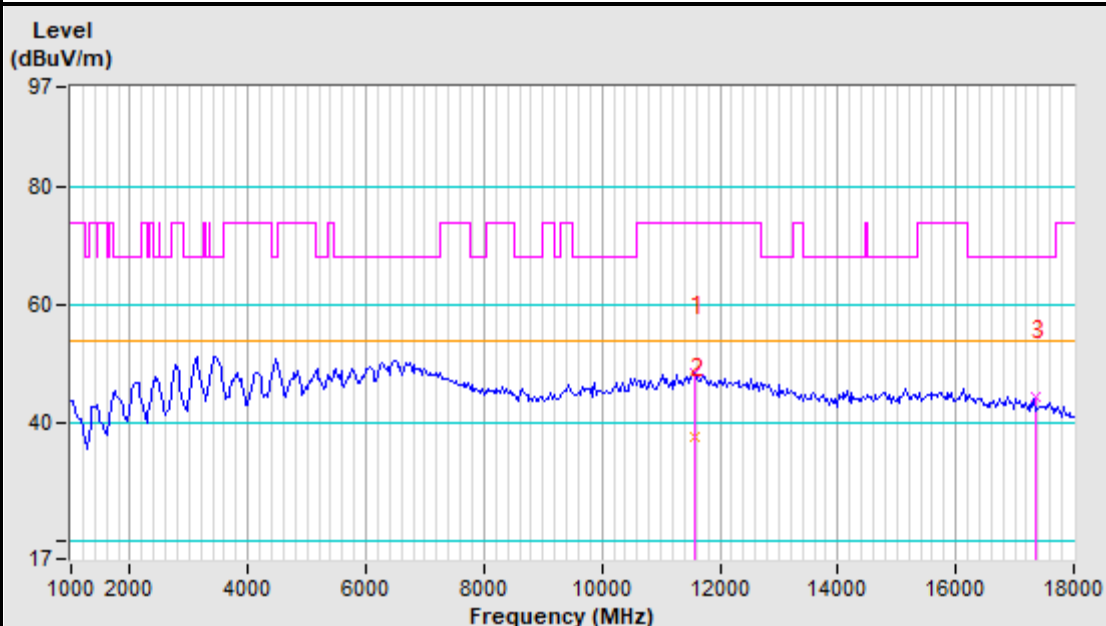
5785MHz Vertical



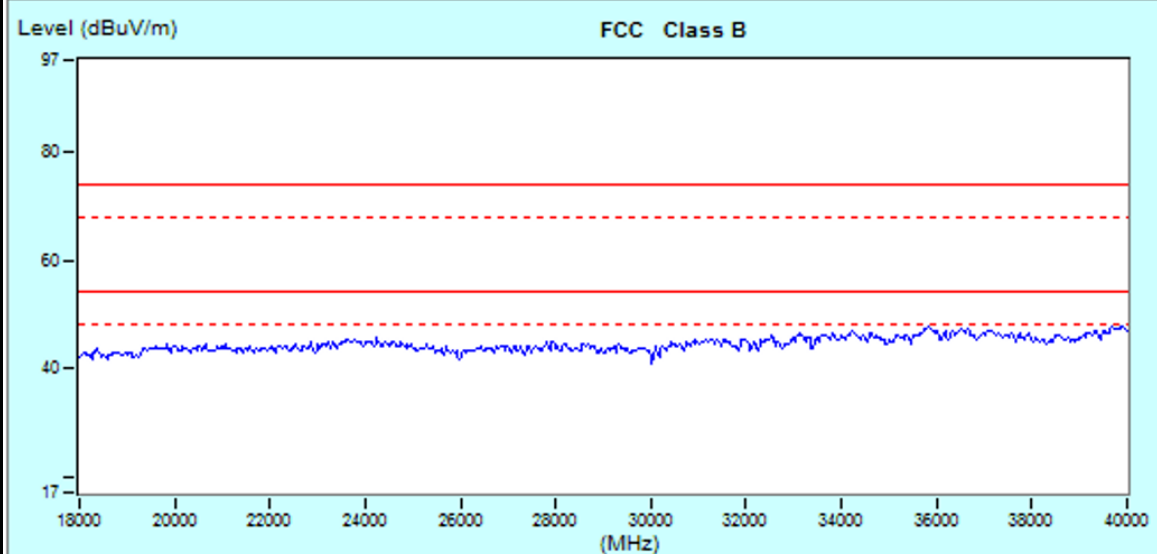
5785MHz Horizontal



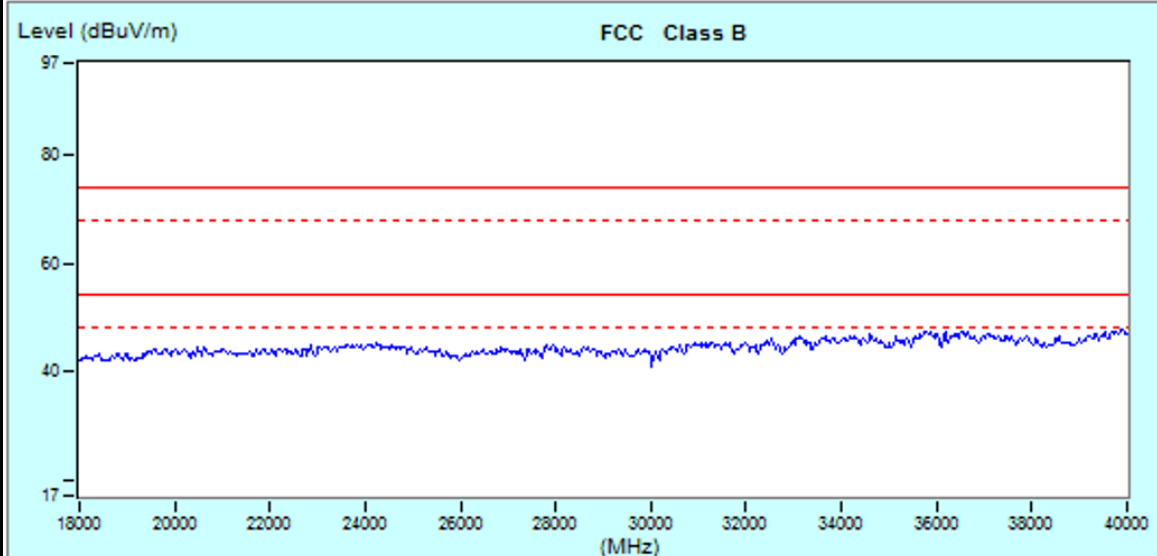
5785MHz Vertical



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	#5758.29	48.42 PK	152.20	-103.78	2.18 H	174	41.59	6.83
2	#5764.18	52.04 PK	152.20	-100.16	1.66 H	18	45.20	6.84
3	#5810.45	49.14 PK	152.20	-103.06	1.30 H	44	42.19	6.95
4	*5825.00	94.69 PK			1.23 H	64	87.71	6.98
5	11650.00	48.21 PK	74.00	-25.79	1.22 H	254	41.07	7.14
6	11650.00	36.67 AV	54.00	-17.33	1.22 H	254	29.53	7.14
7	#17475.00	42.17 PK	68.20	-26.03	1.34 H	215	39.89	2.28
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	#5758.29	52.48 PK	152.20	-99.72	1.09 V	74	45.65	6.83
2	#5764.18	52.81 PK	152.20	-99.39	1.63 V	85	45.97	6.84
3	#5810.45	53.14 PK	152.20	-99.06	1.32 V	105	46.19	6.95
4	*5825.00	88.95 PK			1.62 V	74	81.97	6.98
5	11650.00	46.92 PK	74.00	-27.08	1.32 V	104	39.78	7.14
6	11650.00	35.72 AV	54.00	-18.28	1.32 V	104	28.58	7.14
7	#17475.00	42.06 PK	68.20	-26.14	1.36 V	142	39.78	2.28

REMARKS:

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

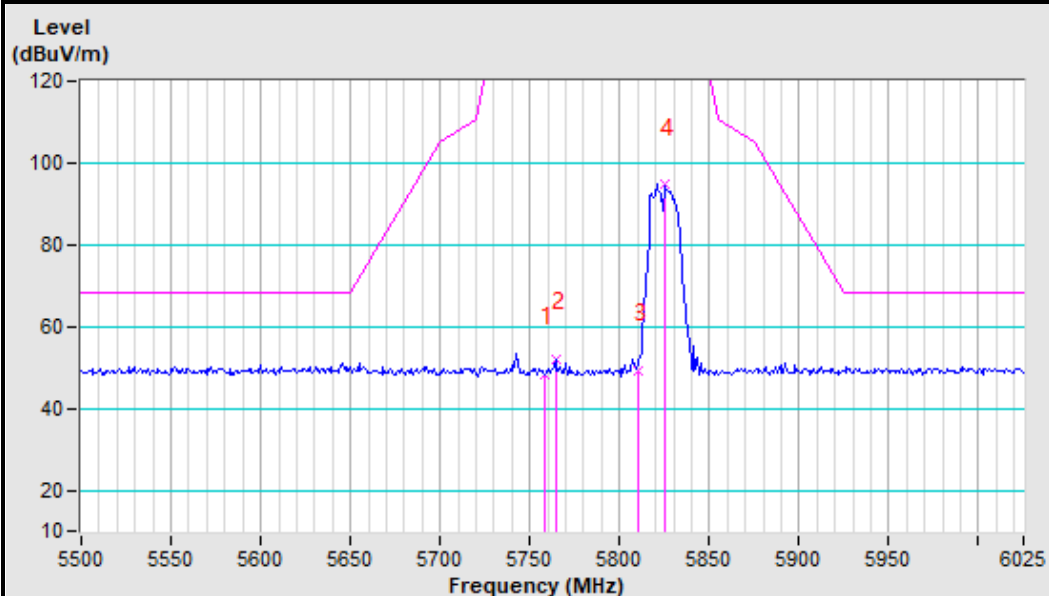


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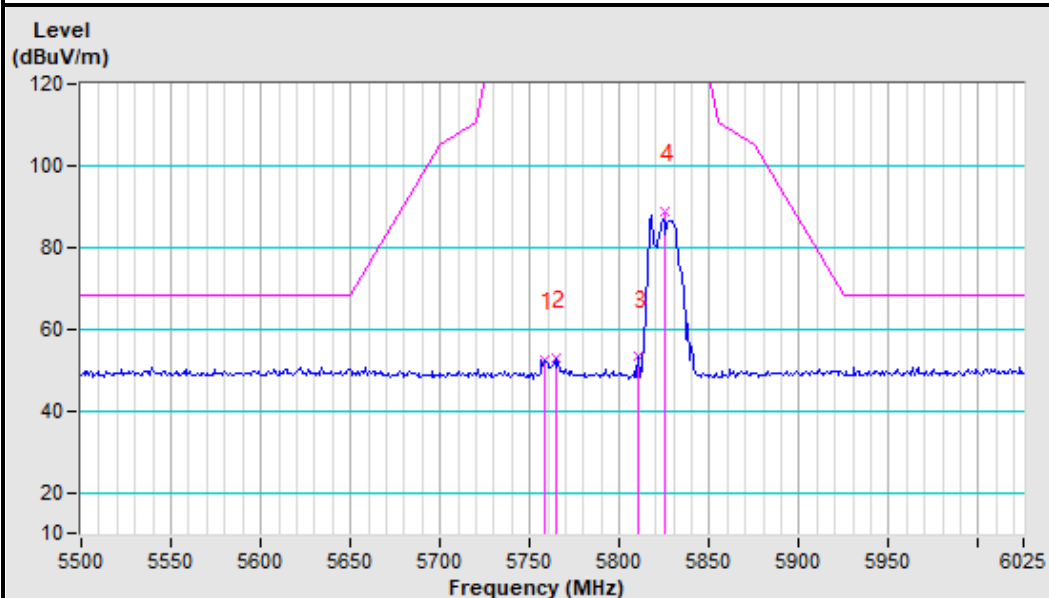
Test Report No.: RF2605WDG0207-2

Band edge Plot

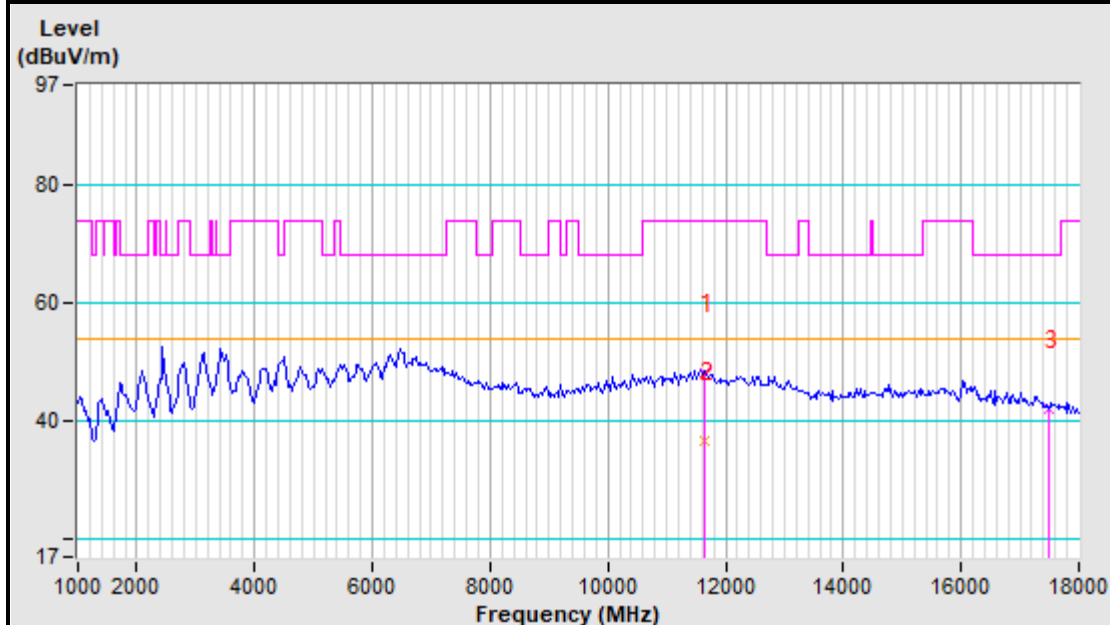
5825MHz Horizontal



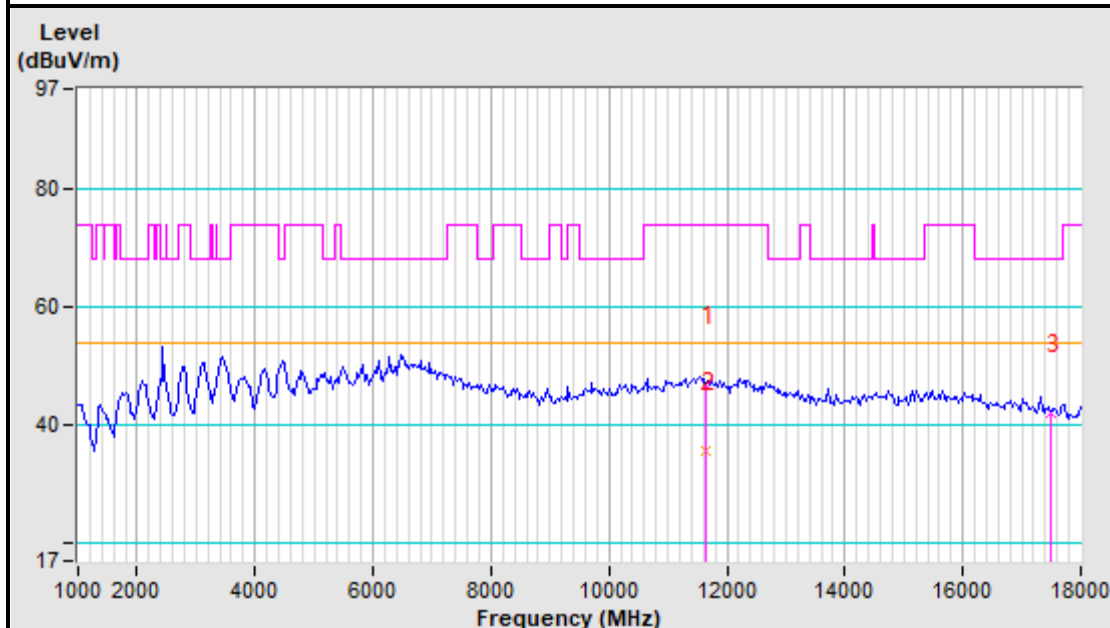
5825MHz Vertical



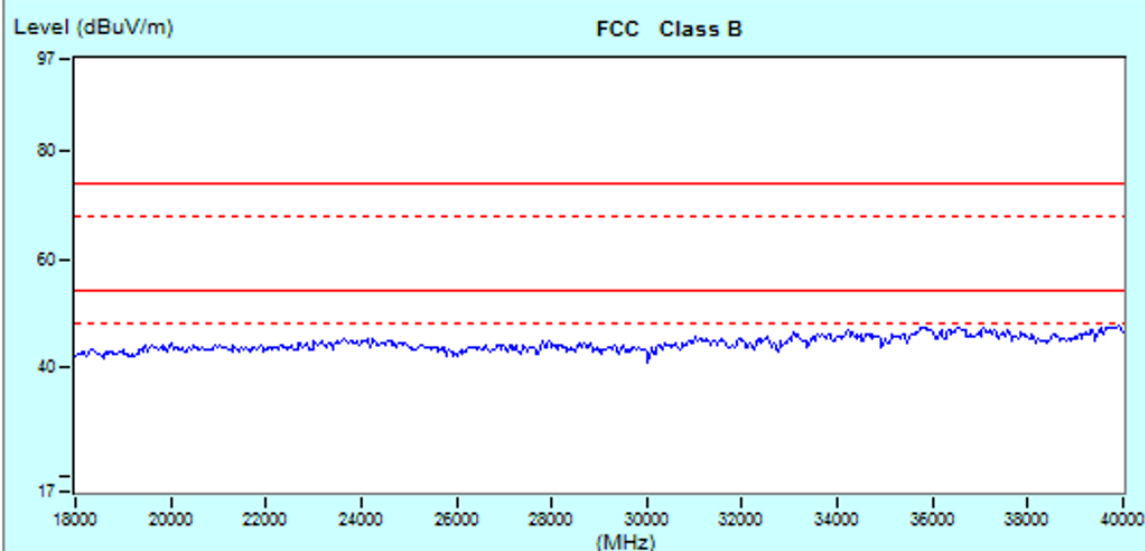
5825MHz Horizontal



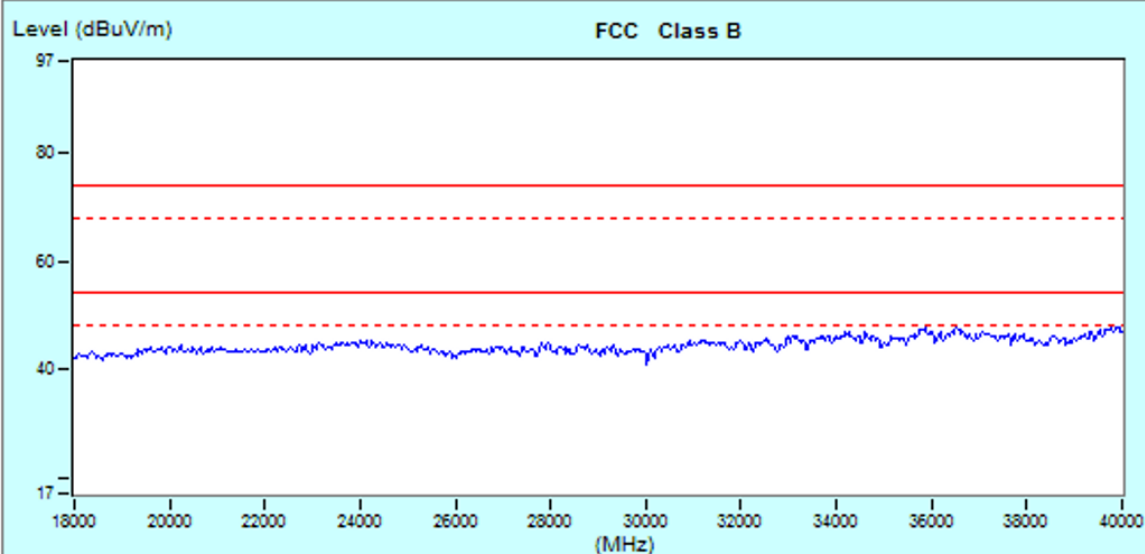
5825MHz Vertical



5825MHz Horizontal



5825MHz Vertical



802.11n (20MHz)

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

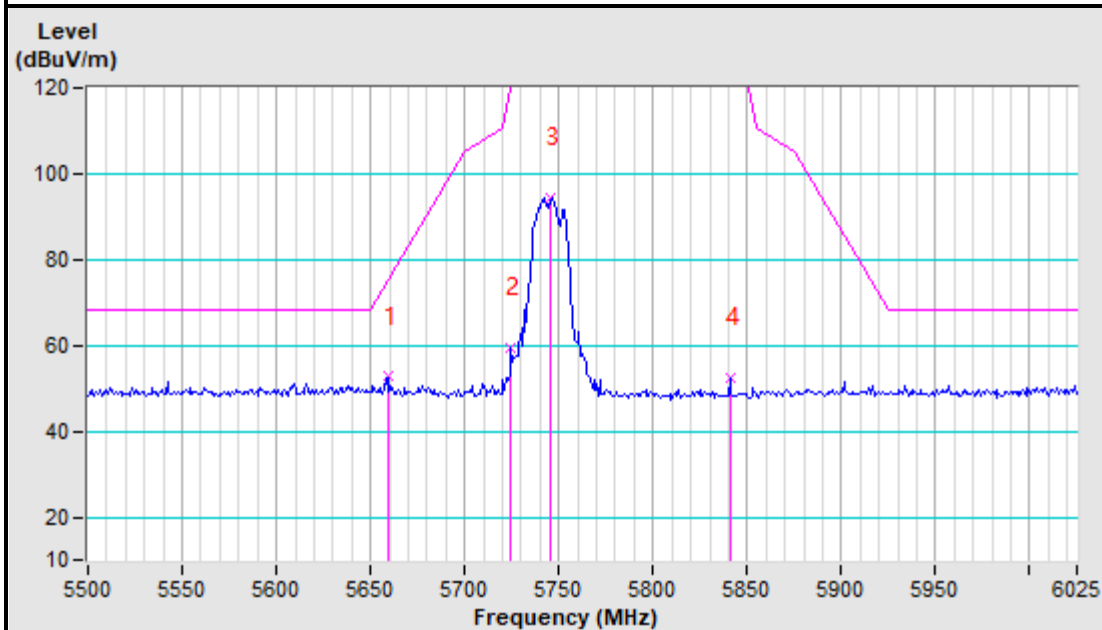
ANTENNA POLARITY & TEST DISTANCE : HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5659.85	52.68 PK	75.51	-22.83	1.55 H	52	46.09	6.59
2	#5724.63	59.58 PK	121.36	-61.78	1.34 H	248	52.83	6.75
3	*5745.00	94.53 PK			1.66 H	27	87.74	6.79
4	#5840.74	52.50 PK	152.20	-99.70	2.14 H	324	45.48	7.02
5	11490.00	48.92 PK	74.00	-25.08	1.05 H	221	41.51	7.41
6	11490.00	38.12 AV	54.00	-15.88	1.05 H	221	30.71	7.41
7	#17235.00	42.60 PK	68.20	-25.60	1.40 H	118	40.11	2.49
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	#5659.85	49.93 PK	75.51	-25.58	1.55 V	217	43.34	6.59
2	#5724.63	49.05 PK	121.36	-72.31	1.20 V	142	42.30	6.75
3	*5745.00	93.07 PK			1.44 V	75	86.28	6.79
4	#5840.74	48.62 PK	152.20	-103.58	2.63 V	327	41.60	7.02
5	11490.00	48.42 PK	74.00	-25.58	1.42 V	114	41.01	7.41
6	11490.00	37.86 AV	54.00	-16.14	1.42 V	114	30.45	7.41
7	#17235.00	42.42 PK	68.20	-25.78	1.07 V	74	39.93	2.49

REMARKS:

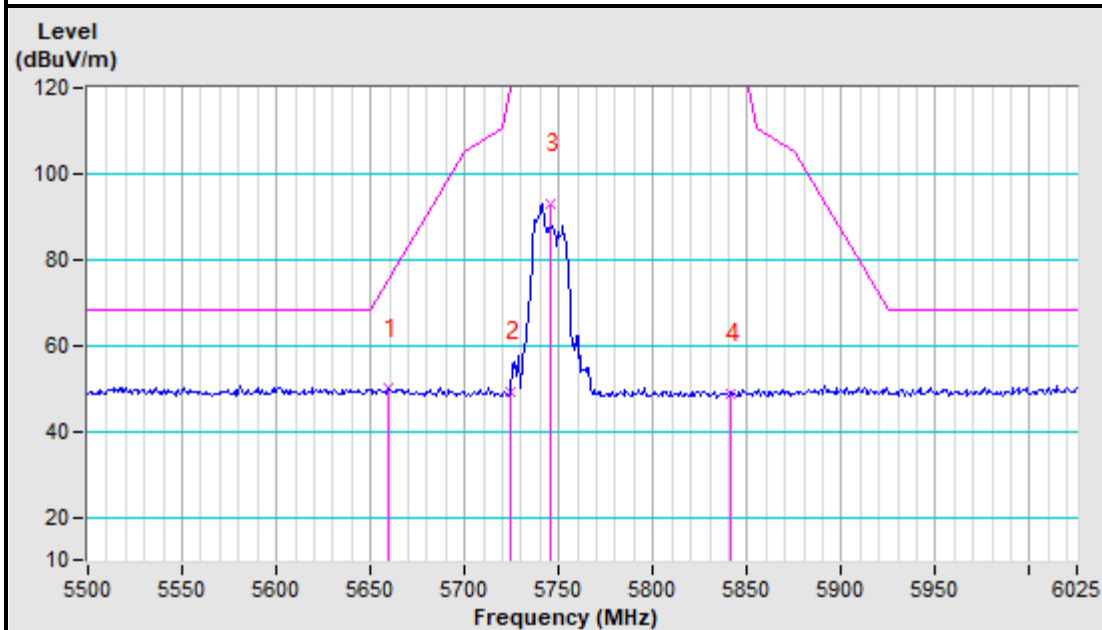
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.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

Band edge Plot

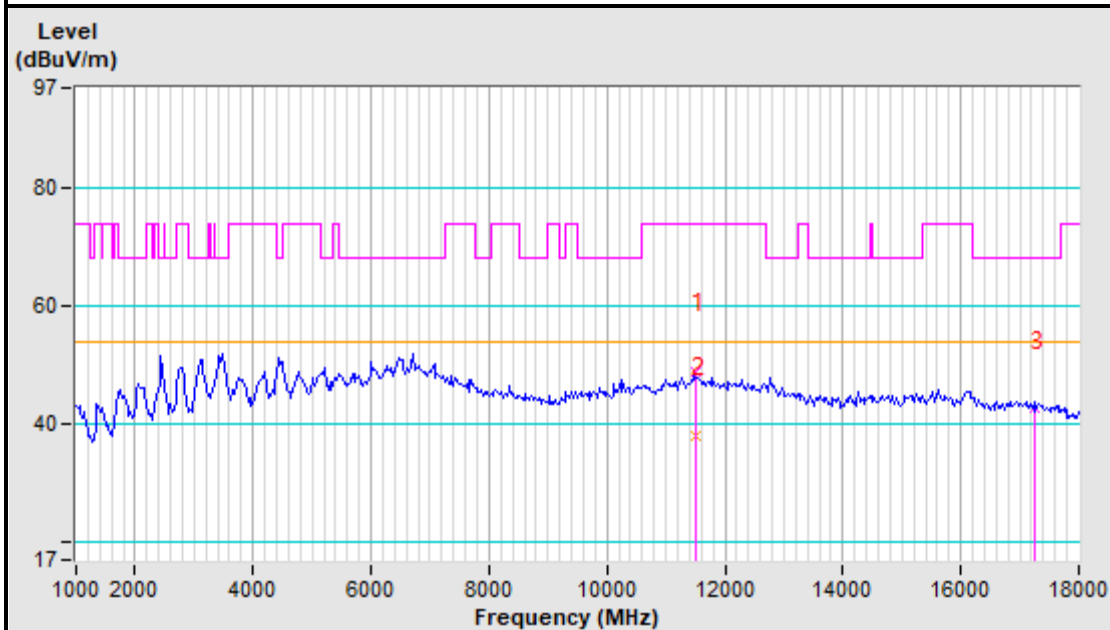
5745MHz Horizontal



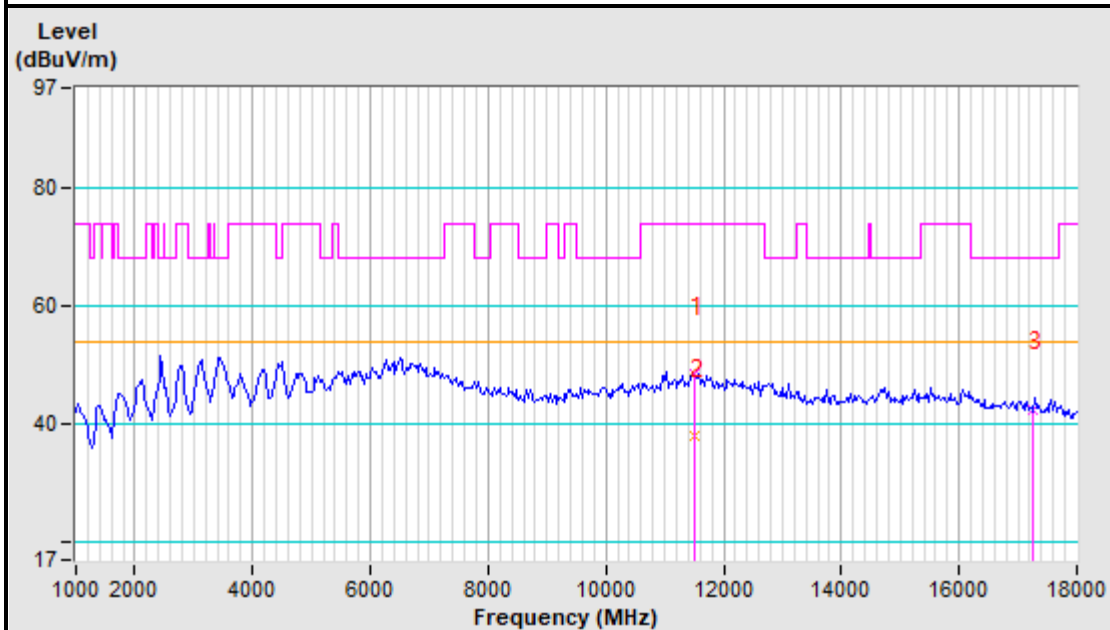
5745MHz Vertical



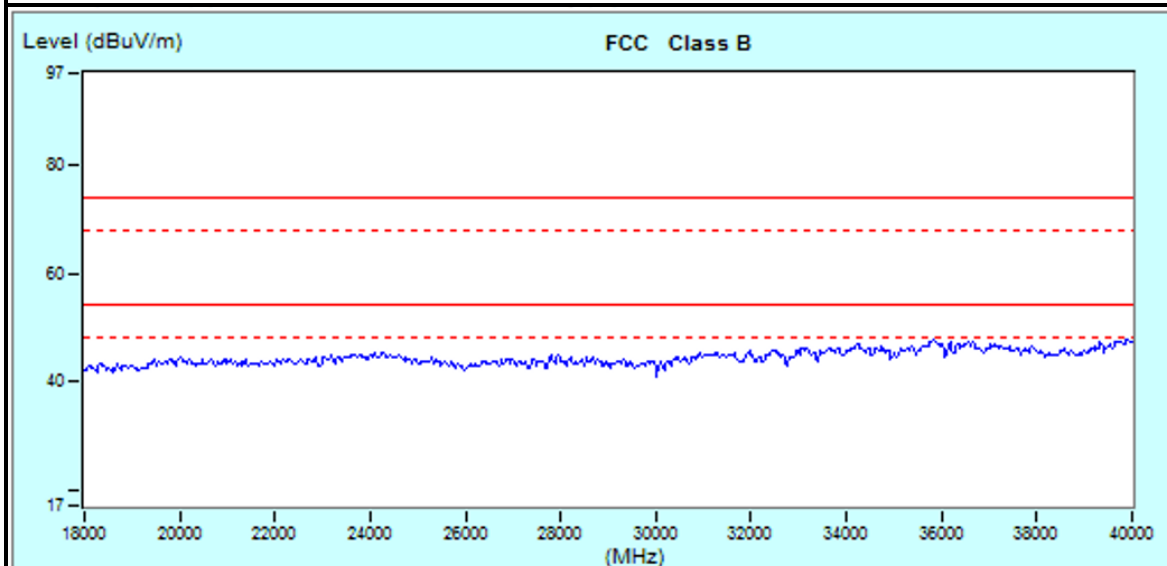
5745MHz Horizontal



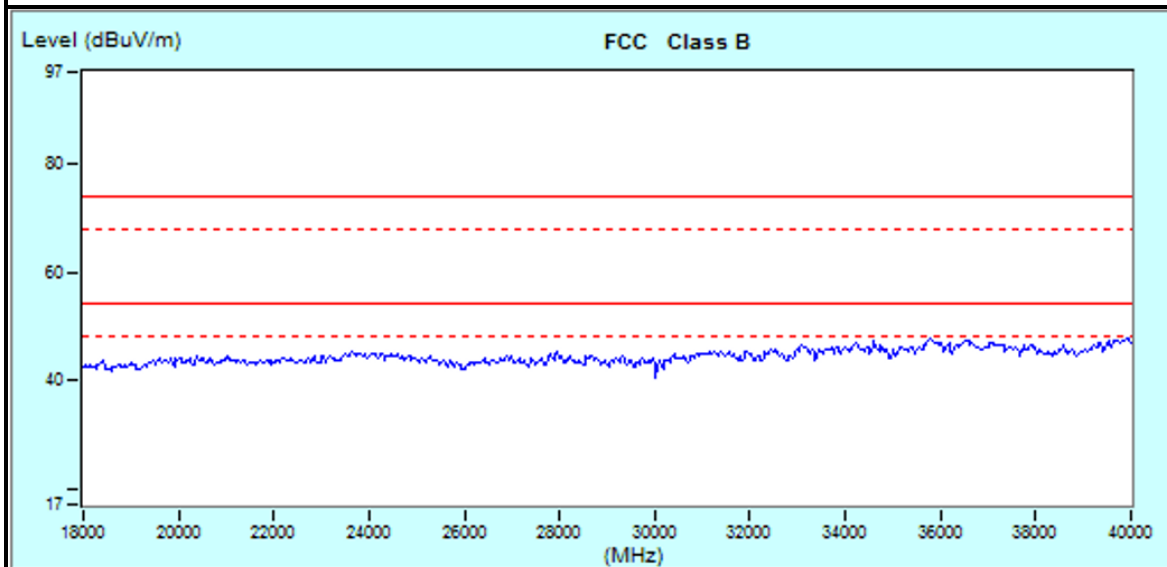
5745MHz Vertical



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	#5763.34	54.75 PK	152.20	-97.45	1.22 H	173	47.91	6.84
2	#5766.70	63.35 PK	152.20	-88.85	2.17 H	48	56.51	6.84
3	#5769.23	66.26 PK	152.20	-85.94	1.27 H	149	59.41	6.85
4	*5785.00	94.74 PK			1.33 H	28	87.85	6.89
5	11570.00	48.26 PK	74.00	-25.74	1.35 H	41	40.96	7.30
6	11570.00	37.46 AV	54.00	-16.54	1.35 H	41	30.16	7.30
7	#17355.00	42.35 PK	68.20	-25.85	1.88 H	78	39.96	2.39
ANTENNA POLARITY & TEST DISTANCE : VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5686.77	50.72 PK	95.44	-44.72	1.87 V	72	44.06	6.66
2	*5785.00	90.07 PK			1.85 V	47	83.18	6.89
3	#5800.36	60.83 PK	152.20	-91.37	1.22 V	142	53.91	6.92
4	#5805.40	52.15 PK	152.20	-100.05	1.63 V	42	45.21	6.94
5	11570.00	47.63 PK	74.00	-26.37	1.86 V	78	40.33	7.30
6	11570.00	36.24 AV	54.00	-17.76	1.86 V	78	28.94	7.30
7	#17355.00	42.53 PK	68.20	-25.67	1.32 V	166	40.14	2.39

REMARKS:

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

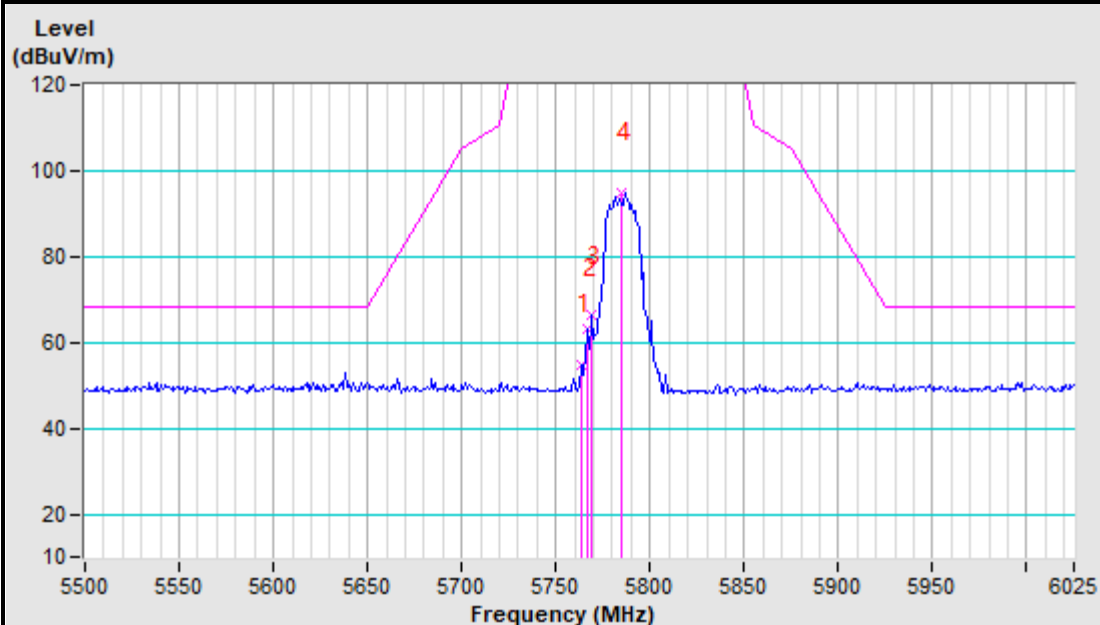


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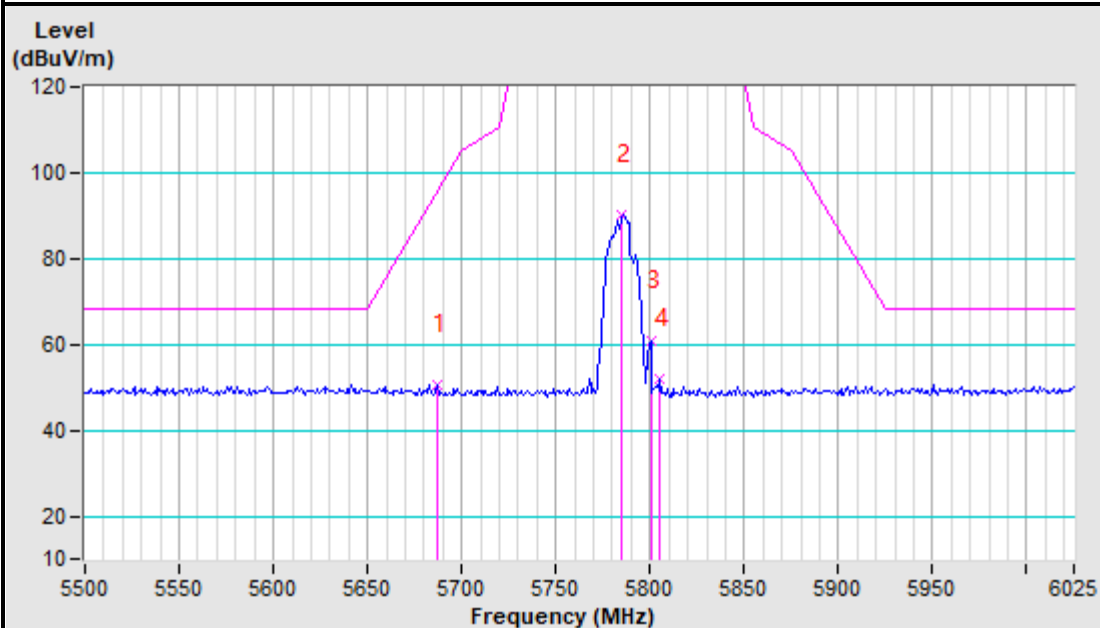
Test Report No.: RF2605WDG0207-2

Band edge Plot

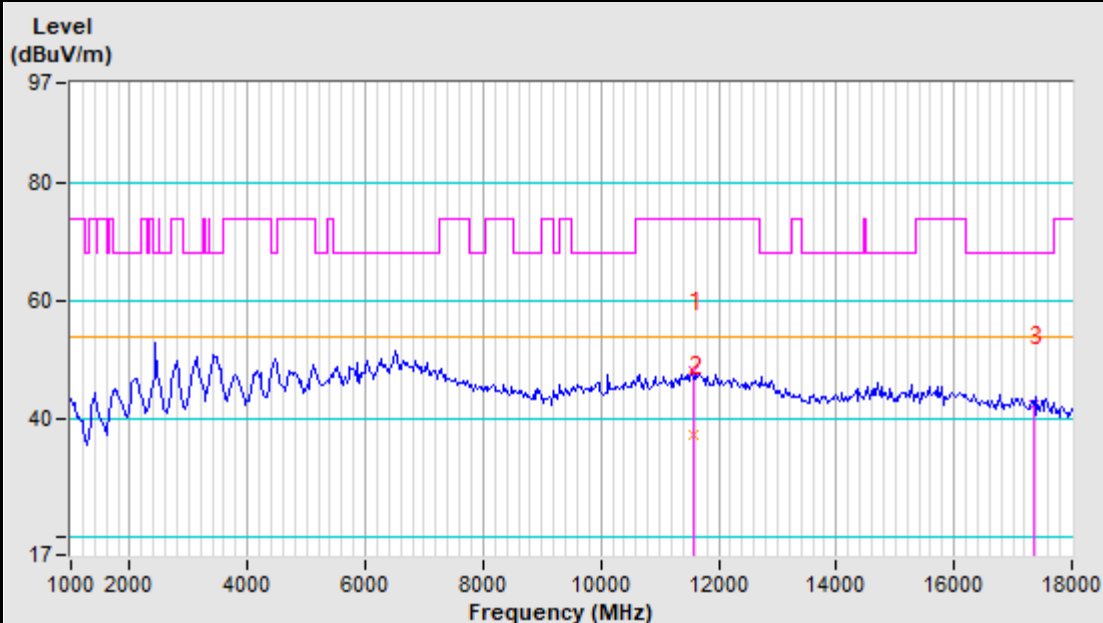
5785MHz Horizontal



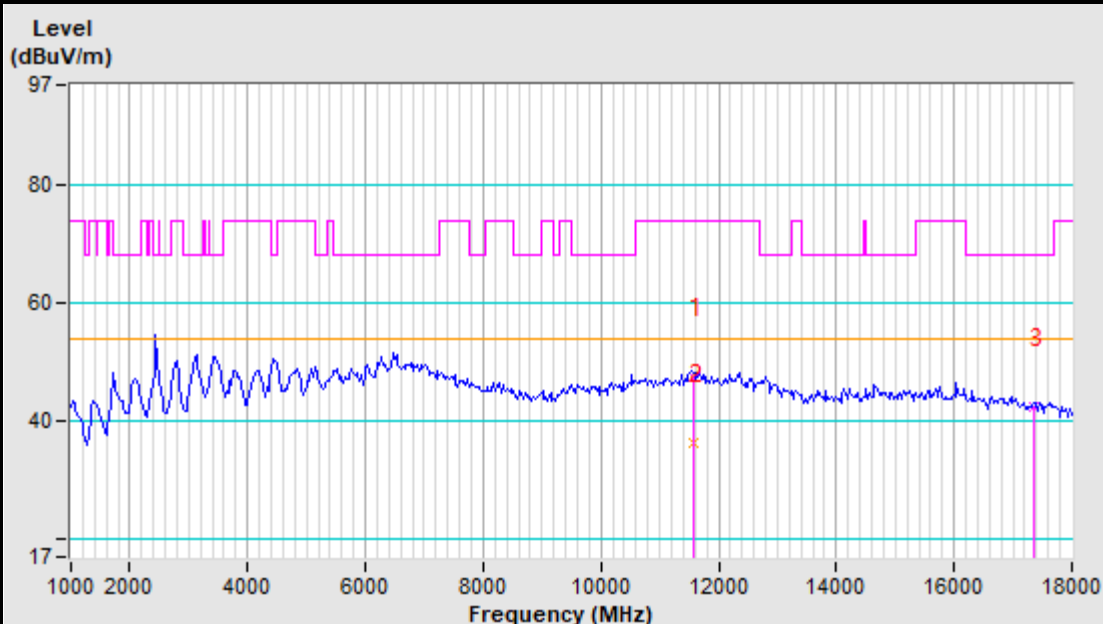
5785MHz Vertical



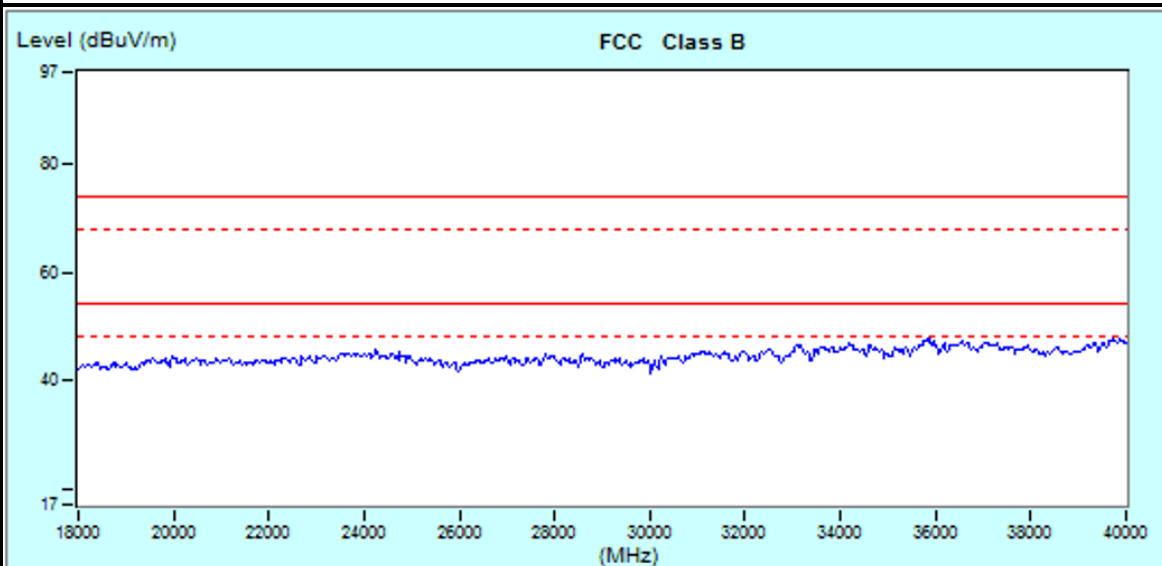
5785MHz Horizontal



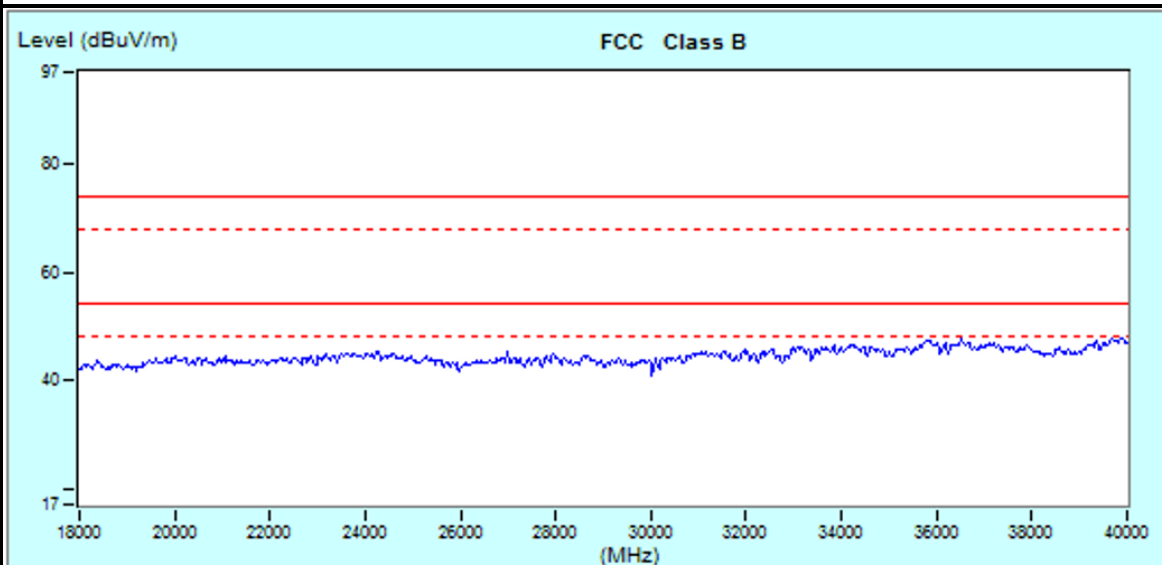
5785MHz Vertical



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	#5805.40	58.86 PK	152.20	-93.34	1.99 H	75	51.92	6.94
2	#5810.45	65.18 PK	152.20	-87.02	1.22 H	47	58.23	6.95
3	*5825.00	89.37 PK			2.14 H	354	82.39	6.98
4	#5841.58	61.95 PK	152.20	-90.25	1.76 H	49	54.93	7.02
5	11650.00	48.12 PK	74.00	-25.88	1.77 H	79	40.98	7.14
6	11650.00	38.51 AV	54.00	-15.49	1.77 H	79	31.37	7.14
7	#17475.00	42.85 PK	68.20	-25.35	1.33 H	217	40.57	2.28
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	#5805.40	47.93 PK	152.20	-104.27	1.30 V	117	40.99	6.94
2	#5810.45	53.85 PK	152.20	-98.35	1.52 V	154	46.90	6.95
3	*5825.00	90.92 PK			1.65 V	124	83.94	6.98
4	#5841.58	51.66 PK	152.20	-100.54	1.36 V	88	44.64	7.02
5	11650.00	47.96 PK	74.00	-26.04	1.49 V	71	40.82	7.14
6	11650.00	37.75 AV	54.00	-16.25	1.49 V	71	30.61	7.14
7	#17475.00	42.32 PK	68.20	-25.88	2.13 V	227	40.04	2.28

REMARKS:

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

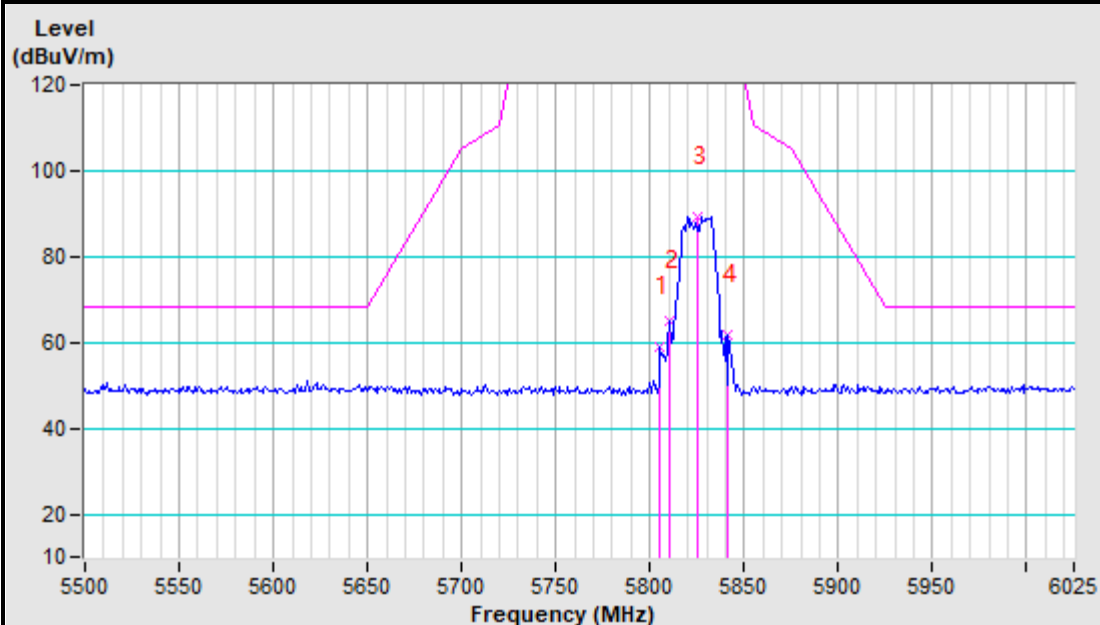


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VERITAS

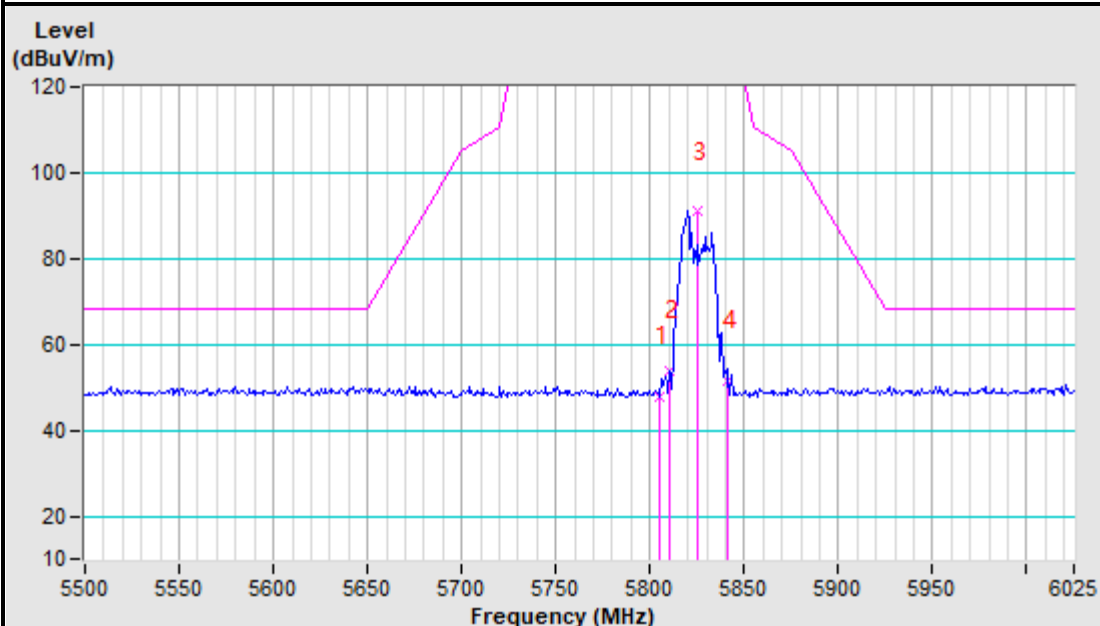
Test Report No.: RF2605WDG0207-2

Band edge Plot

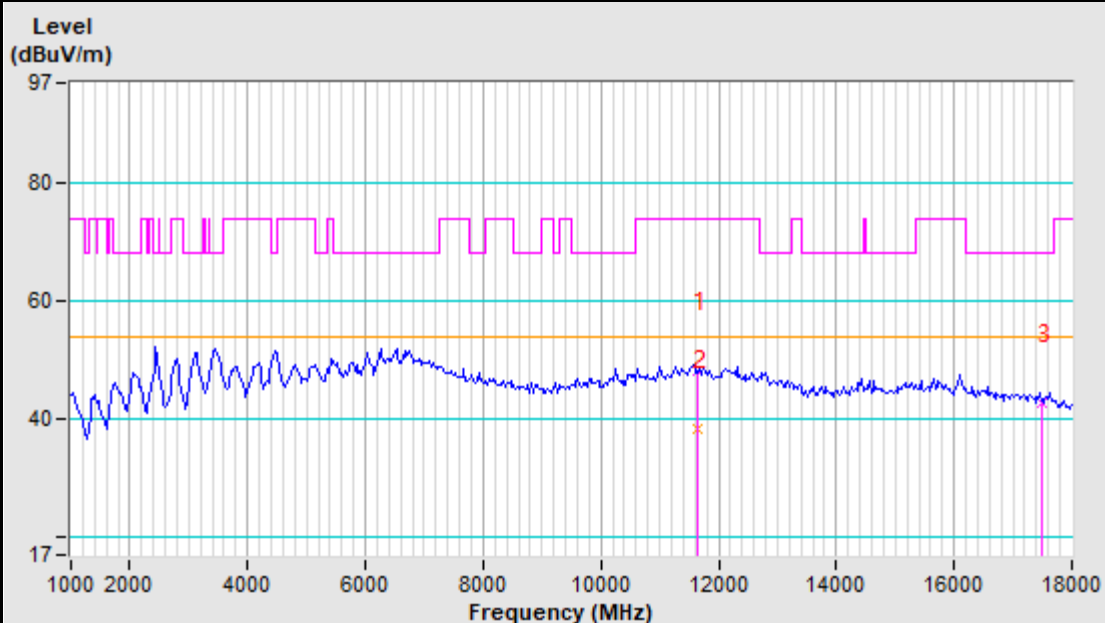
5825MHz Horizontal



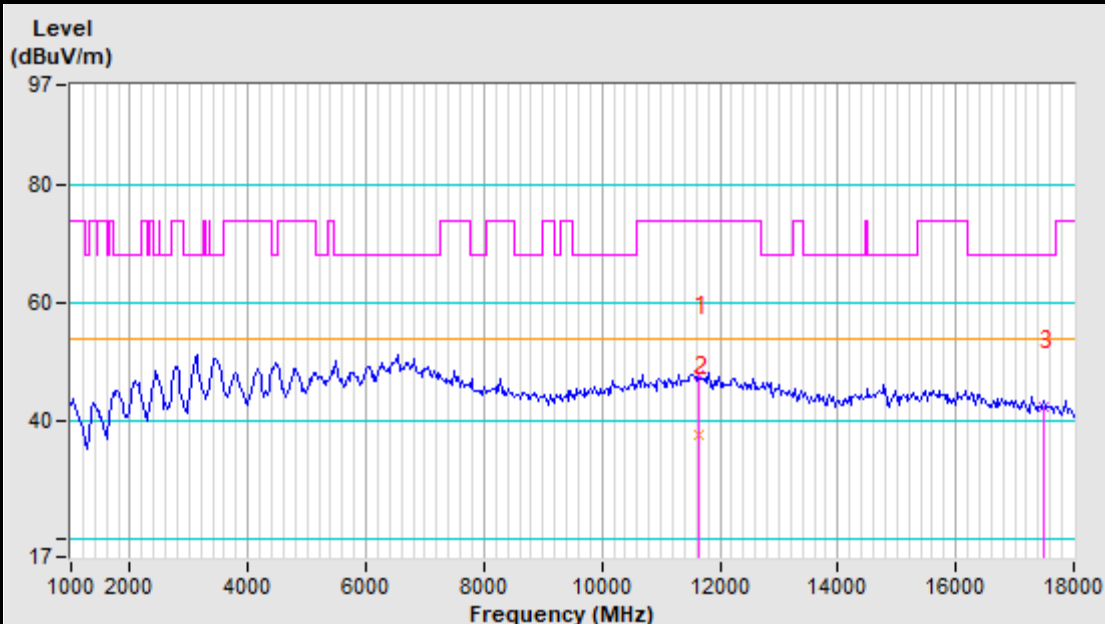
5825MHz Vertical



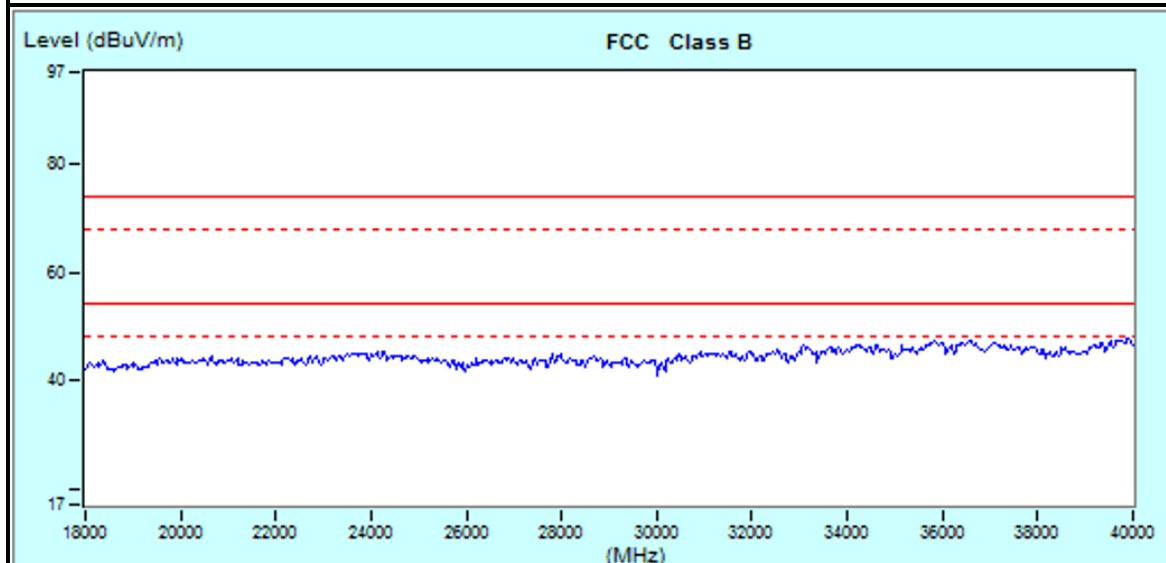
5825MHz Horizontal



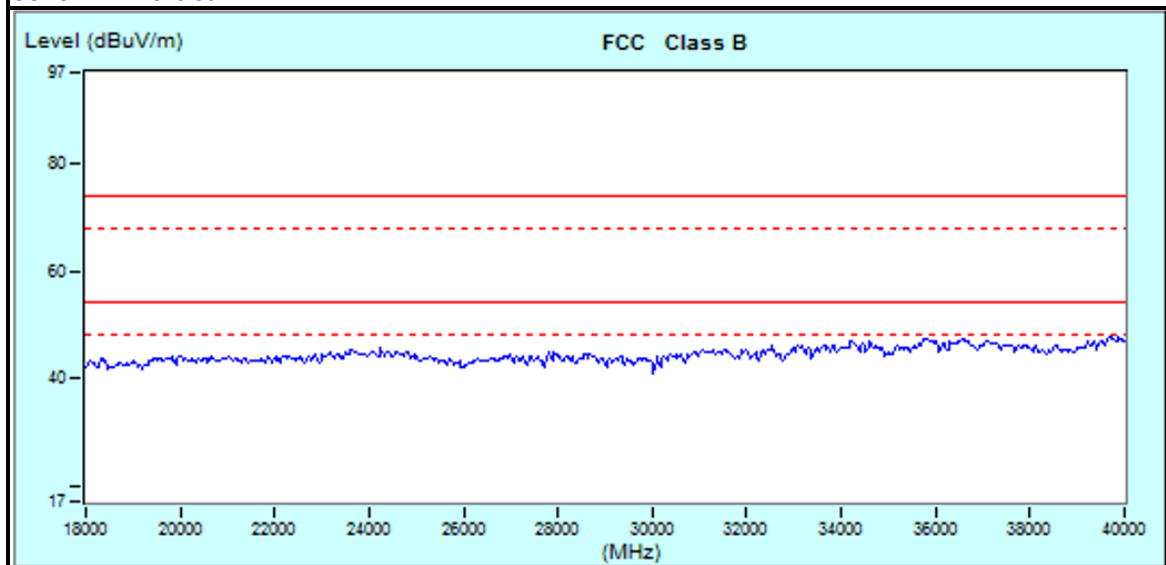
5825MHz Vertical



5825MHz Horizontal



5825MHz Vertical



4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

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

4.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101494	Oct. 10, 26
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Oct. 10, 26
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Oct. 10, 26
Artificial Mains Network	SCHWARZBECK	NSLK 8122	8122-05001	Nov. 04, 26
V-LISN (CISPR 25)	SCHWARZBECK	NNBM 8124-200	8124-200 05857	Apr. 08, 27
V-LISN (CISPR 25)	SCHWARZBECK	NNBM 8124-200	8124-200 05858	Apr. 08, 27
Voltage probe	SCHWARZBECK	TK 9421	TK 9421-176	Apr. 07, 27
Coaxial RF Cable	SUHNER	RG 223/U-CE	C2310066DG	Jun. 22, 27
Test software	ADT	ADT_Cond_V7.3.7	N/A	N/A

- NOTES:**
1. The test was performed at Shielded Room 553.
 2. Equipment are calibrated by calibration laboratory accredited to ISO/IEC 17025 by a mutually recognized Accreditation and all tests are conducted within a valid calibration cycle.

4.2.3 TEST PROCEDURES

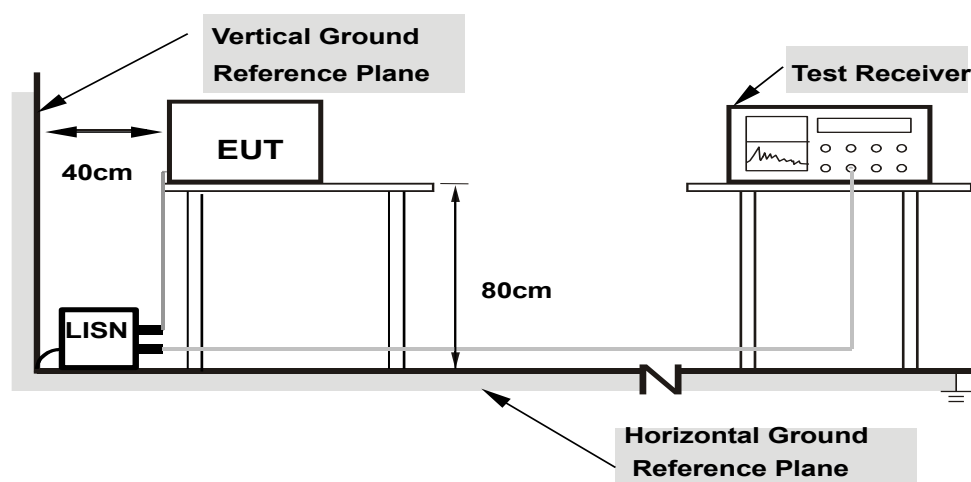
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling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

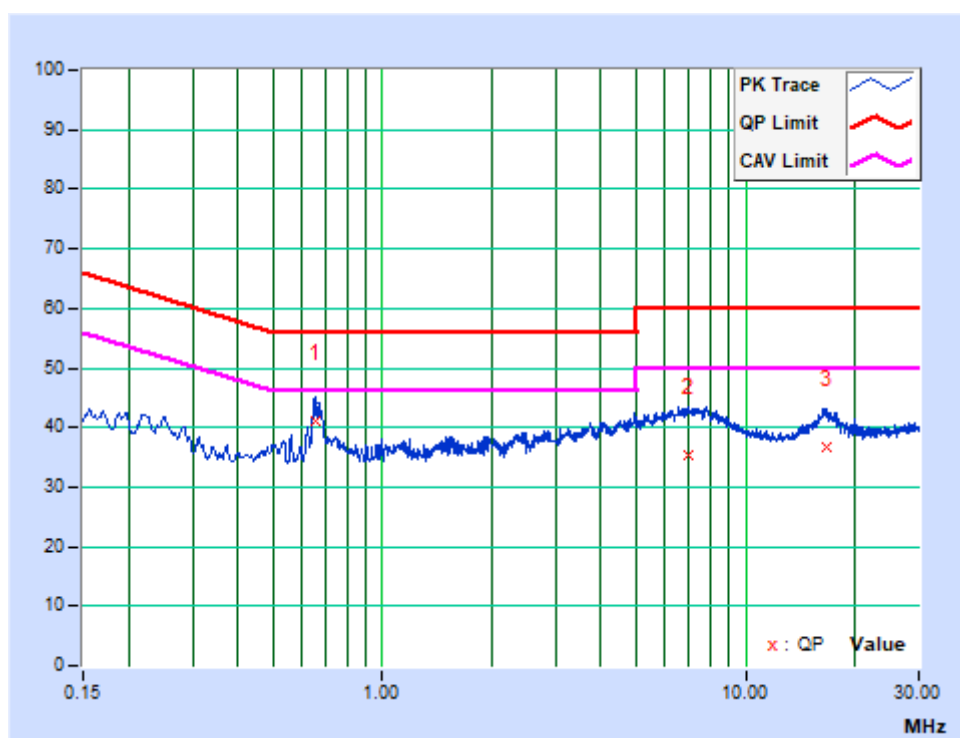
4.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA: 802.11a CH36

PHASE	Line	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.65220	9.81	31.20	21.73	41.01	31.54	56.00	46.00	-14.99	-14.46
2	6.93150	10.21	25.14	18.06	35.35	28.27	60.00	50.00	-24.65	-21.73
3	16.82456	10.59	26.23	20.56	36.82	31.15	60.00	50.00	-23.18	-18.85

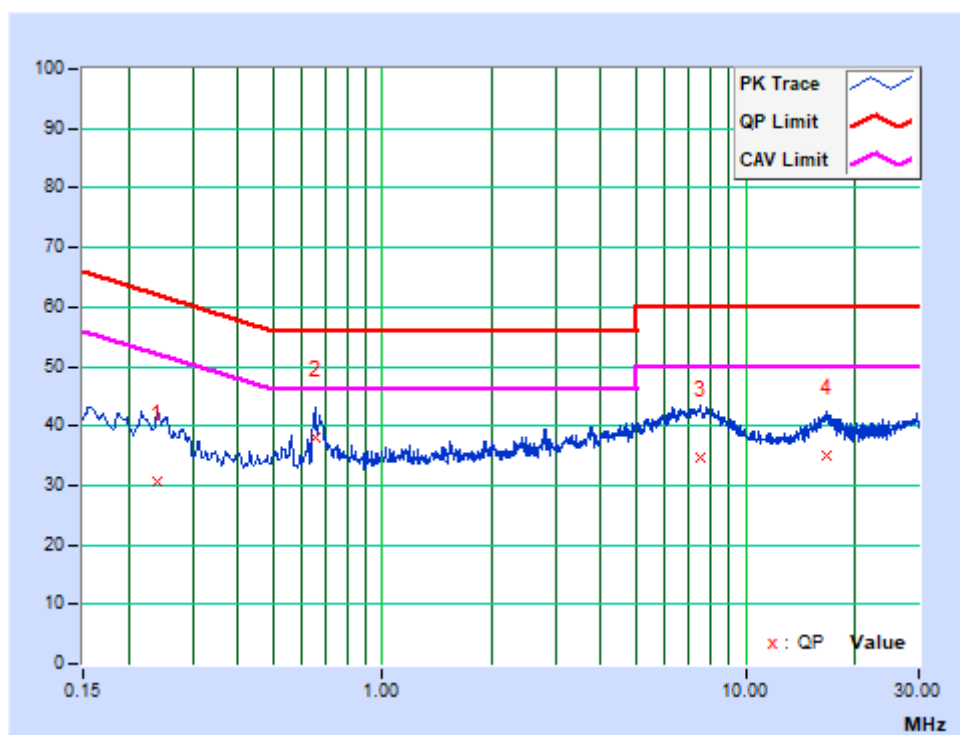
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. The emission levels of other frequencies were very low against the limit.
 3. Margin value = Emission level - Limit value
 4. Correction factor = Insertion loss + Cable loss
 5. Emission Level = Correction Factor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



PHASE	Neutral	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.24040	9.64	20.85	14.69	30.49	24.33	62.08	52.08	-31.59	-27.75
2	0.65392	9.66	28.33	19.61	37.99	29.27	56.00	46.00	-18.01	-16.73
3	7.52100	10.16	24.61	17.39	34.77	27.55	60.00	50.00	-25.23	-22.45
4	16.76175	10.58	24.54	19.60	35.12	30.18	60.00	50.00	-24.88	-19.82

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.



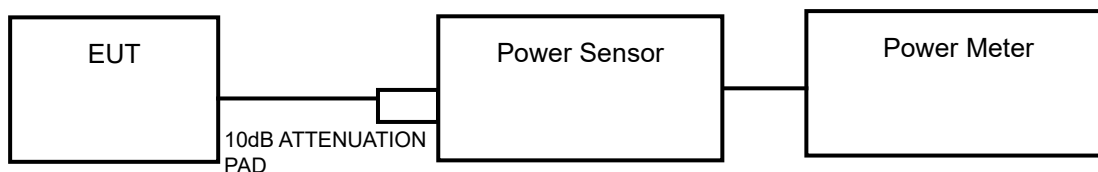
4.3 TRANSMIT POWER MEASUREMENT

4.3.1 LIMITS OF TRANSMIT POWER MEASUREMENT

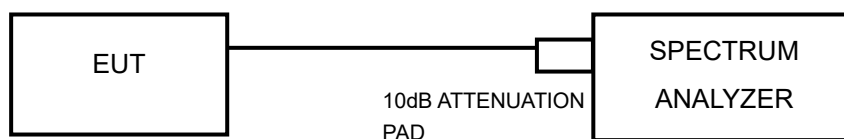
Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW (21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Mobile and Portable client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

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

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	Apr. 08, 27
Digital Multimeter	FLUKE	15B	12151063	Jun. 03, 27
Humid & Temp Programmable Tester	Haida	HD-225T	110807201	Oct. 10, 26
Oscilloscope	Agilent	DSO9254A	MY51260160	Jul. 06, 26
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV40	101003	Oct. 09, 26
Signal Generator	Agilent	N5183A	MY50140980	Jul. 06, 26
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY56200288	Jul. 06, 26
Attenuator	MINI	BW-S10W2+	S130129FGE2	Jul. 06, 26
DC Source	Rohde&Schwarz	HMP2020	101295	Jun. 03, 27
Test software	ADT	ADT_RF Test Software V6.6.5.3	N/A	N/A

NOTES:

1. The test was performed in RF Test Shielded Room.
2. Equipment are calibrated by calibration laboratory accredited to ISO/IEC 17025 by a mutually recognized Accreditation and all tests are conducted within a valid calibration cycle.

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
149	5745	7.95	6.237	30.00	PASS
157	5785	7.83	6.067	30.00	PASS
165	5825	7.60	5.754	30.00	PASS

802.11n (20MHz)

CHANNEL NUMBER	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	AVG. CONDUCTED POWER (mW)	LIMIT (dBm)	PASS /FAIL
149	5745	7.96	6.252	30.00	PASS
157	5785	7.89	6.152	30.00	PASS
165	5825	7.50	5.623	30.00	PASS

6dB BANDWIDTH For 5725-5850MHz

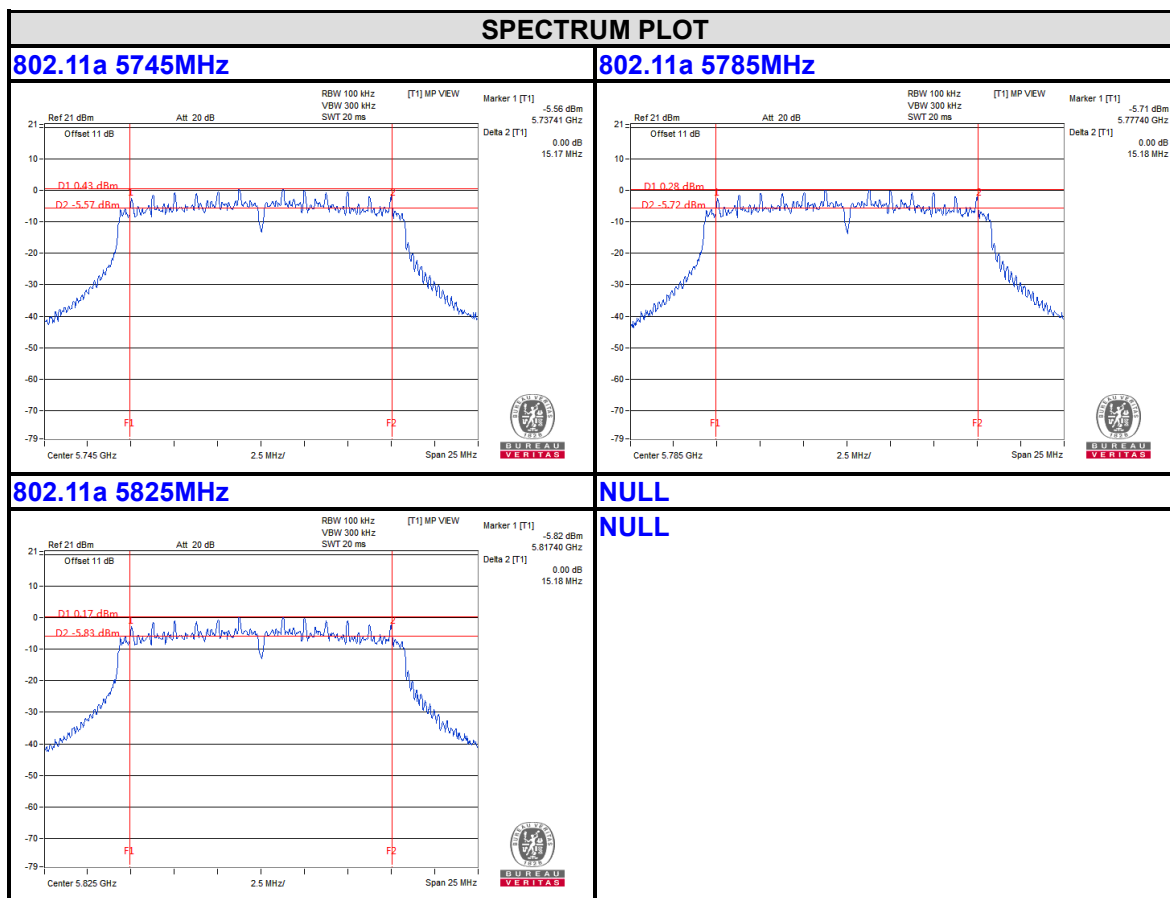
802.11a

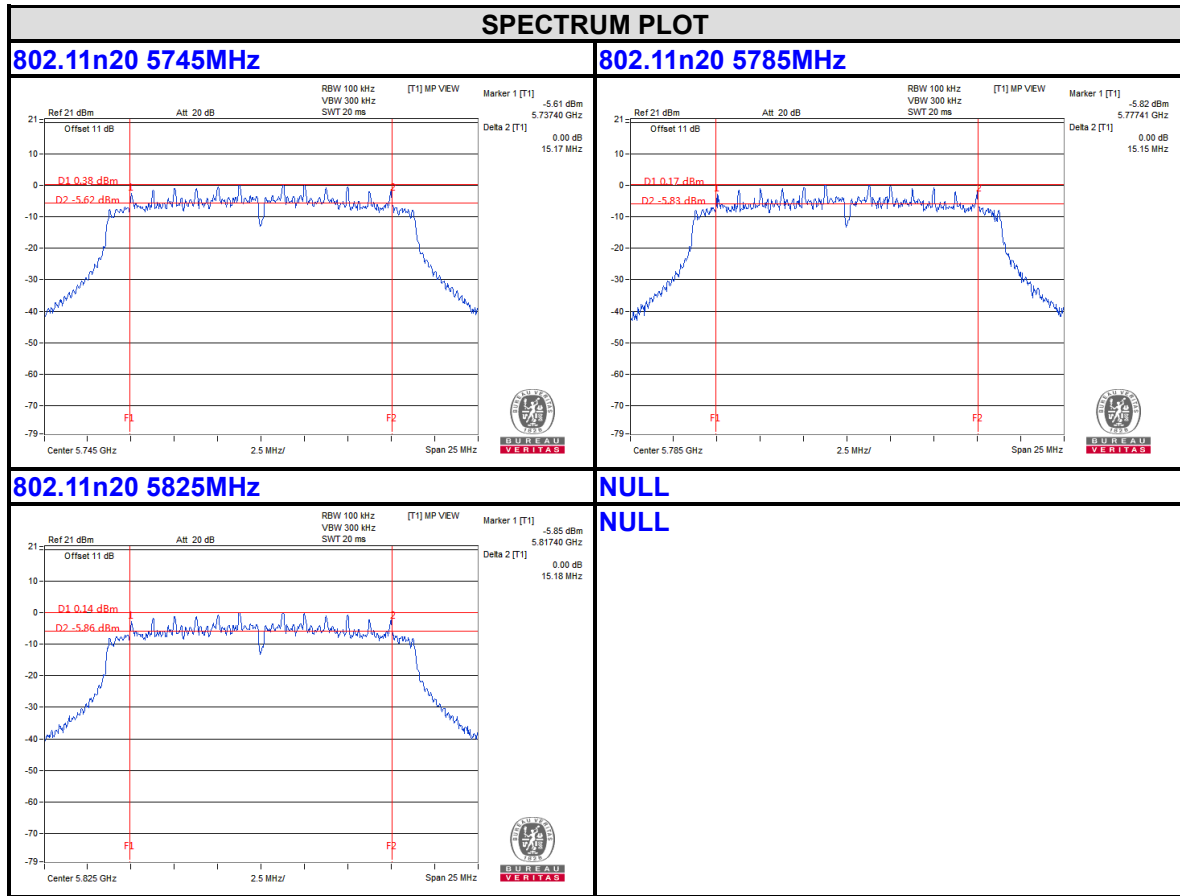
Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
149	5745	15.17	PASS
157	5785	15.18	PASS
165	5825	15.18	PASS

802.11n (20M)

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
149	5745	15.17	PASS
157	5785	15.15	PASS
165	5825	15.18	PASS

6dB BANDWIDTH For 5725-5850MHz



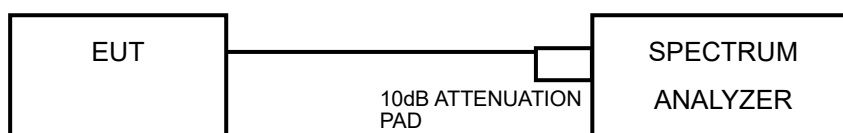


4.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

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 = 500 kHz, Set VBW = 2 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

802.11a

Chan.	Freq. (MHz)	PSD (dBm/500kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS / FAIL
149	5745	-6.80	10.34	3.54	30.00	PASS
157	5785	-6.93	10.34	3.41	30.00	PASS
165	5825	-7.24	10.34	3.10	30.00	PASS

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

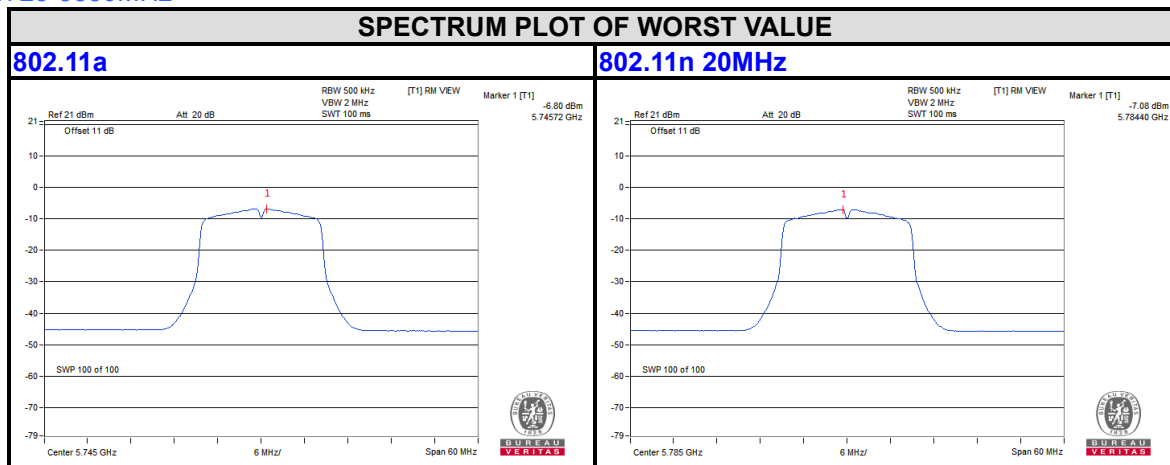
802.11n (20MHz)

Chan.	Freq. (MHz)	PSD (dBm/500kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS / FAIL
149	5745	-7.10	10.27	3.17	30.00	PASS
157	5785	-7.08	10.27	3.19	30.00	PASS
165	5825	-7.41	10.27	2.86	30.00	PASS

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

PSD Test Plot

BAND4
5725-5850MHz

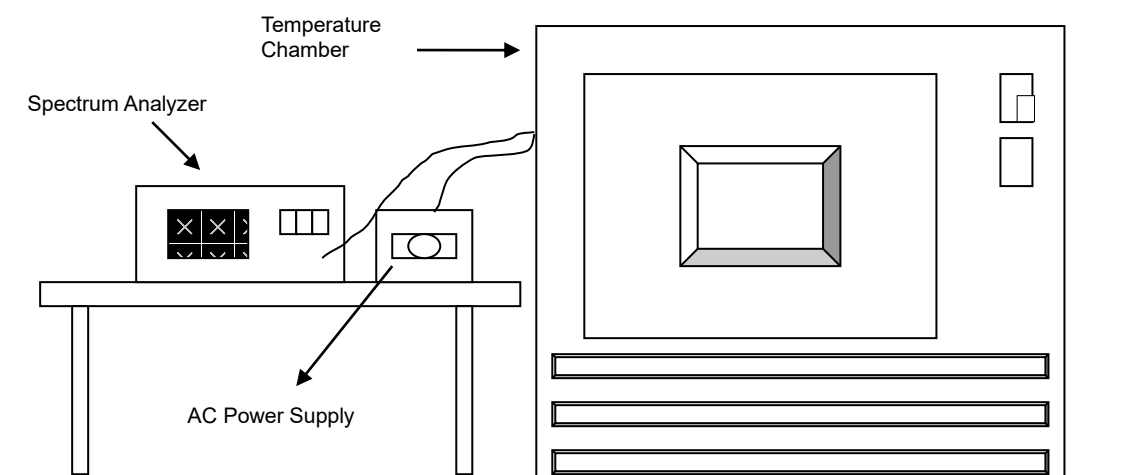


4.5 FREQUENCY STABILITY

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

- The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
- Turn the EUT on and couple its output to a spectrum analyzer.
- Turn the EUT off and set the chamber to the highest temperature specified.
- 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.
- Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
- 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

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (°C)	POWER SUPPLY (Vdc)	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	3.7	5744.9713	-0.00050	5744.9705	-0.00051	5744.9738	-0.00046	5744.9725	-0.00048
40	3.7	5745.0156	0.00027	5745.0149	0.00026	5745.0188	0.00033	5745.0147	0.00026
30	3.7	5745.0086	0.00015	5745.0115	0.00020	5745.0123	0.00021	5745.0119	0.00021
20	3.7	5745.0021	0.00004	5745.0036	0.00006	5745.0031	0.00005	5745.0023	0.00004
10	3.7	5744.9842	-0.00028	5744.9884	-0.00020	5744.9852	-0.00026	5744.984	-0.00028
0	3.7	5745.0003	0.00001	5745.0009	0.00002	5745.0021	0.00004	5745.0021	0.00004
-10	3.7	5744.9822	-0.00031	5744.9844	-0.00027	5744.9833	-0.00029	5744.9844	-0.00027
-20	3.7	5744.9751	-0.00043	5744.9729	-0.00047	5744.9738	-0.00046	5744.9753	-0.00043
-30	3.7	5745.0244	0.00042	5745.0246	0.00043	5745.0272	0.00047	5745.0268	0.00047

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift
20	4.07	5745.0032	0.00006	5745.0042	0.00007	5745.0033	0.00006	5745.0013	0.00002
	3.7	5745.0021	0.00004	5745.0036	0.00006	5745.0031	0.00005	5745.0023	0.00004
	3.33	5745.0012	0.00002	5745.0044	0.00008	5745.0036	0.00006	5745.0028	0.00005



Test Report No.: RF2605WDG0207-2

5 PHOTOGRAPHS OF THE TEST CONFIGURATION

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



Test Report No.: RF2605WDG0207-2

6 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---