FCC Test Report

Report No.:	RFBHBQ-WTW-P21080521-1
FCC ID:	2AH7L-UPSA
Test Model:	PAS800, PAS800L, PAS800P (Refer to item 3.1 for more details)
Received Date:	Aug. 12, 2021
Test Date:	Sep. 03 ~ Oct. 27, 2021
Issued Date:	Jan. 14, 2022
Applicant:	Schneider Electric Industries SAS
Address:	Electropole Site - 38EQ1, 31 rue Pierre Mendes France, Eybens - 38050 Grenoble cedex 9
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN
FCC Registration / Designation Number:	788550 / TW0003

Testing Laboratory
2021

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Release Control Record

Issue No.	Description	Date Issued
RFBHBQ-WTW-P21080521-1	Original release	Jan. 14, 2022

1 Certificate of Conformity

Product:	EcoStruxure™ Panel Server Advanced
Brand:	Schneider Electric
Test Model:	PAS800, PAS800L, PAS800P (Refer to item 3.1 for more details)
Sample Status:	Engineering sample
Applicant:	Schneider Electric Industries SAS
Test Date:	Sep. 03 ~ Oct. 27, 2021
Standards:	47 CFR FCC Part 15, Subpart E (Section 15.407) ANSI C63.10:2013

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

Prepared by : Polly Chien , **Date:** Jan. 14, 2022

Polly Chien / Specialist

Approved by : Jeremy Lin , **Date:** Jan. 14, 2022

Jeremy Lin / Project Engineer

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	Test Item	Result	Remarks
15.407(b)(9)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -14.00dB at 0.66200MHz.
15.407(b) (1/2/3/4(i/ii)/9)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -3.4dB at 30.00MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
---	Occupied Bandwidth Measurement	-	Reference only.
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.

Note:
1. For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOBE test plots were recorded in Annex A.
2. For U-NII-1 band compliance with rule 15.407(b) of the band-edge items, the test plots were recorded in Annex B. Test Procedures refer to report 4.1.3.
3. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

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

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.79 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.04 dB
	30MHz ~ 200MHz	3.59 dB
	200MHz ~1000MHz	3.60 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	EcoStruxure™ Panel Server Advanced (Refer to note)
Brand	Schneider Electric
Test Model	PAS800, PAS800L, PAS800P
Model Difference	Refer to note
Sample Status	Engineering sample
Power Supply rating	PAS800: 110 to 277Vac/dc +/-10%, 50-60Hz(+/-5Hz) < 3.5W/12VA , -25°C to 70°C PAS800L: 24Vdc +/-10% , 145 mA , < 3.5W, -25°C to 70°C PAS800P: POE(PD) - Class 0, 37Vdc to 57Vdc, < 3.5 W, 48Vdc (Typical), 72 mA, -25°C to 70°C
Modulation Type	256QAM, 64QAM, 16QAM, QPSK, BPSK
Modulation Technology	OFDM
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6Mbps 802.11n: up to 150Mbps
Operating Frequency	5180 ~ 5240MHz, 5745 ~ 5825MHz
Number of Channel	5180 ~ 5240MHz: 802.11a, 802.11n (HT20): 4 802.11n (HT40): 2 5745 ~ 5825MHz: 802.11a, 802.11n (HT20): 5 802.11n (HT40): 2
Output Power	5180 ~ 5240MHz: 4.667mW 5745 ~ 5825MHz: 5.105mW
Antenna Type	Refer to note
Antenna Connector	Refer to note
Accessory Device	External Antenna (Brand: Schneider Electric, Model: PASA-ANT1)
Cable Supplied	NA

Note:

1. All models are listed as below.

Brand	Model	Difference
Schneider Electric	PAS800	All three models are similar in construction and functioning except the mode of powering. PAS800: powered by 110V-277Vac/dc PAS800L: powered by 24Vdc source PAS800P: Powered Over Ethernet.
	PAS800L	
	PAS800P	

2. The EUT provide 1 completed transmitter and 1 receiver.

Modulation Mode	TX Function
802.11a	1TX
802.11n (HT20)	1TX
802.11n (HT40)	1TX

3. The following antennas were provided to the EUT.

Internal Antenna

No.	Antenna Type	Connector	Gain(dBi)		Remark
			2.4G	5G	
1	PCB	NA	3.80	2.10	WLAN, BT LE
2	PCB	NA	4.40	-	Zigbee
3	PCB	NA	5.10	-	Zigbee

External Antenna

No.	Antenna Type	Connector	Gain(dBi)		Remark
			2.4G	5G	
1	Dipole	RPSMA	2.54	3.00	WLAN, BT LE. Zigbee

*The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

4. The WLAN 2.4GHz, 5GHz, Zigbee and BT of the device can transmit simultaneously but not WLAN 2.4GHz and 5GHz at the same time.
5. Spurious emission of the simultaneous operation (WLAN 2.4GHz, 5GHz, Zigbee and BT) has been evaluated and no non-compliance was found.

3.2 Description of Test Modes

For 5180 ~ 5240MHz:

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

Channel	Frequency	Channel	Frequency
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

2 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

For 5745 ~ 5825MHz:

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

Channel	Frequency	Channel	Frequency
149	5745MHz	161	5805MHz
153	5765MHz	165	5825MHz
157	5785MHz		

2 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
151	5755MHz	159	5795MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable to				Antenna	Description
	RE≥1G	RE<1G	PLC	APCM		
A1	√	√	√	√	Internal	EUT (PAS800) + AC power
A2	-	√	√	-		EUT (PAS800L) + DC power
A3	-	√	√	-		EUT (PAS800P) + PoE
B1	√	√	√	√	External	EUT (PAS800) + AC power
B2	-	√	√	-		EUT (PAS800L) + DC power
B3	-	√	√	-		EUT (PAS800P) + PoE

Where RE≥1G: Radiated Emission above 1GHz & Bandedge Measurement 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** (for EUT) and **Z-plane** (for External antenna).
2. Radiated emission (below 1GHz) and power line conducted emission test items chosen the worst maximum power.
3. "-"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	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
A1, B1	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
	802.11n (HT20)		36 to 48	36, 40, 48	OFDM	6.5
	802.11n (HT40)		38 to 46	38, 46	OFDM	13.5
A1, B1	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0
	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	6.5
	802.11n (HT40)		151 to 159	151, 159	OFDM	13.5

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	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
A1, A2, A3, B1, B2, B3	802.11n (HT20)	5180-5240	36 to 48	157	OFDM	6.5
		5745-5825	149 to 165		OFDM	6.5

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	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
A1, A2, A3, B1, B2, B3	802.11n (HT20)	5180-5240	36 to 48	157	OFDM	6.5
		5745-5825	149 to 165		OFDM	6.5

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	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
A1, B1	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
	802.11n (HT20)		36 to 48	36, 40, 48	OFDM	6.5
	802.11n (HT40)		38 to 46	38, 46	OFDM	13.5
A1, B1	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0
	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	6.5
	802.11n (HT40)		151 to 159	151, 159	OFDM	13.5

Test Condition:

Applicable to	Environmental Conditions	Input Power (System)	Tested by
RE≥1G	21 deg. C, 68% RH 22 deg. C, 68% RH	120Vac, 60Hz	Rex Wang
RE<1G	23 deg. C, 66% RH	120Vac, 60Hz, 24Vdc, 56Vdc	Rex Wang
PLC	25 deg. C, 75% RH	120Vac, 60Hz, 277Vac, 24Vdc, 56Vdc	Rex Wang
APCM	25 deg. C, 60% RH	120Vac, 60Hz	Ivan Tseng, Gary Lin

3.3 Duty Cycle of Test Signal

Duty cycle of test signal is < 98%, duty factor is required.

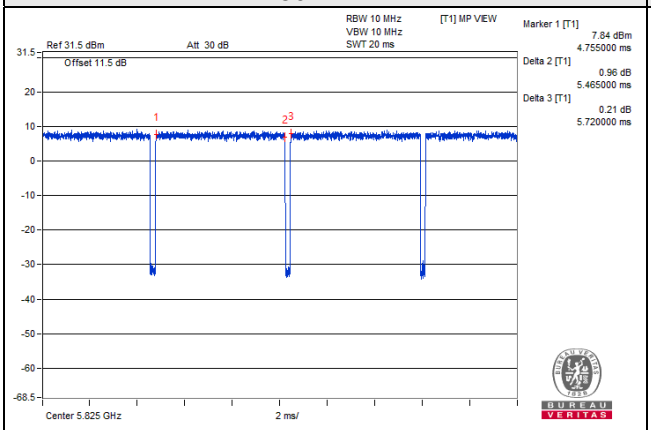
Internal antenna:

802.11a: Duty cycle = 5.465/5.720 = 0.955, Duty factor = 10 * log (1/0.955) = 0.20

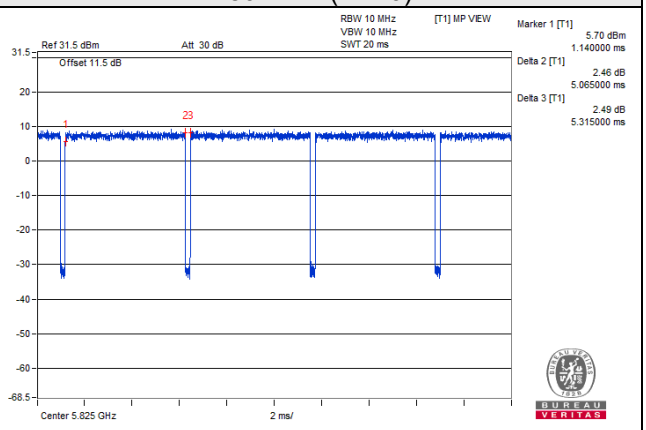
802.11n (HT20): Duty cycle = 5.065/5.315 = 0.953, Duty factor = 10 * log (1/0.953) = 0.21

802.11n (HT40): Duty cycle = 2.457/2.682 = 0.916, Duty factor = 10 * log (1/0.916) = 0.38

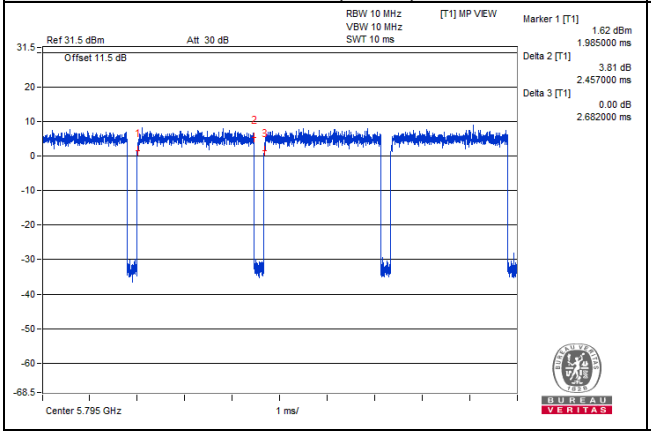
802.11a



802.11n (HT20)



802.11n (HT40)

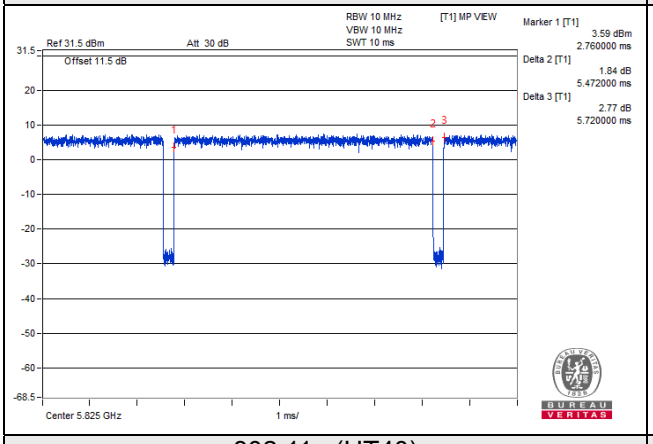
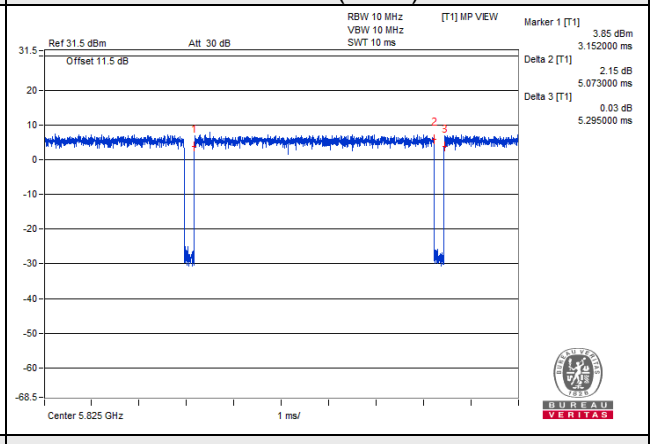
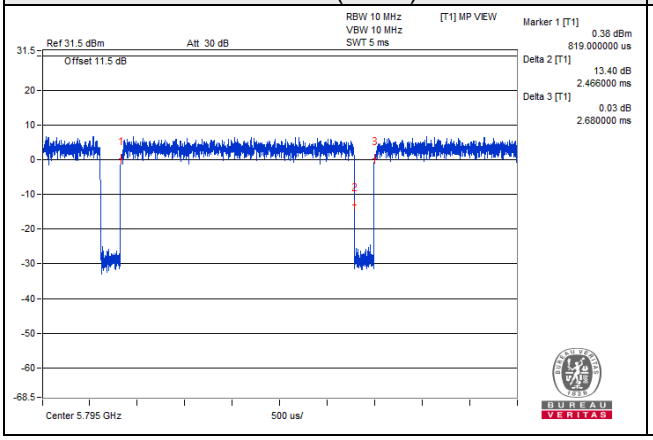


External antenna:

802.11a: Duty cycle = 5.472/5.720 = 0.957, Duty factor = 10 * log (1/0.957) = 0.19

802.11n (HT20): Duty cycle = 5.073/5.295 = 0.958, Duty factor = 10 * log (1/0.558) = 0.19

802.11n (HT40): Duty cycle = 2.466/2.680 = 0.920, Duty factor = 10 * log (1/0.920) = 0.36

802.11a	802.11n (HT20)
	
802.11n (HT40)	
	

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.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Notebook	Lenovo	81A4	YD02TWF5	FCC DoC Approved	-
B.	DC Power Supply	JIN YIH	ODP3033	ODP30332027416	NA	-
C.	POE	Phihong	POE29U-1AT(PL)D-R	NA	NA	Provided by client
D.	Load	NA	NA	NA	NA	-

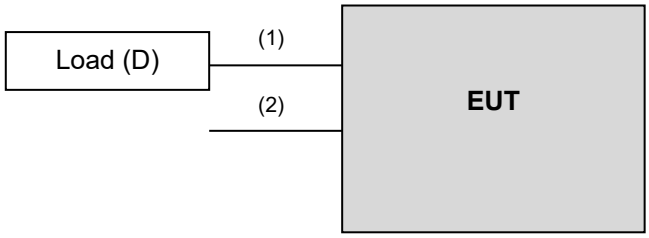
Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Items A acted as communication partners to transfer data.

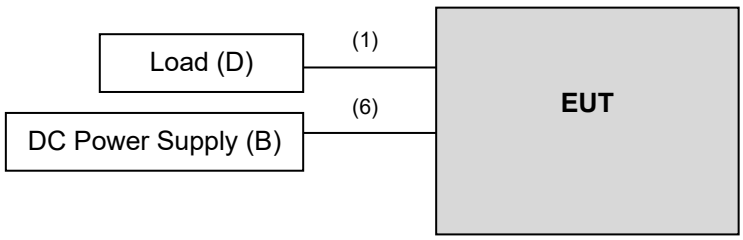
ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	LAN	2	1.5	N	0	RJ45, Cat5e
2.	DC cable	1	30	Y	0	Provided by client
3.	LAN	1	1.5	N	0	RJ45, Cat5e
4.	LAN	1	1.5	N	0	RJ45, Cat5e
5.	LAN	1	10	N	0	RJ45, Cat5e
6.	DC cable	1	30	Y	0	Provided by client

3.4.1 Configuration of System under Test

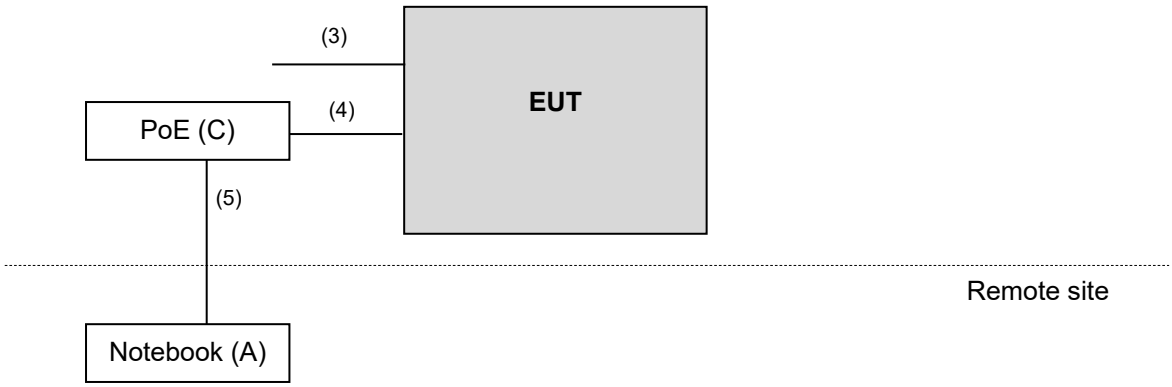
Mode A1, B1



Mode A2, B2



Mode A3, B3



3.5 General Description of Applied Standards and References

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards and references:

Test standard:
FCC Part 15, Subpart E (15.407)
ANSI C63.10:2013

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

References Test Guidance:
KDB 789033 D02 General UNII Test Procedure New Rules v02r01

All test items have been performed as a reference to the above KDB test guidance.

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 20dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

Applicable To			Limit	
789033 D02 General UNII Test Procedure New Rules v02r01			Field Strength at 3m	
			PK: 74 (dBμV/m)	AV: 54 (dBμV/m)
Frequency Band	Applicable To		EIRP Limit	Equivalent Field Strength at 3m
5150~5250 MHz	15.407(b)(1)		PK: -27 (dBm/MHz)	PK: 68.2(dBμV/m)
5250~5350 MHz	15.407(b)(2)			
5470~5725 MHz	15.407(b)(3)			
5725~5850 MHz	☒	15.407(b)(4)(i)	PK: -27 (dBm/MHz) *1 PK: 10 (dBm/MHz) *2 PK: 15.6 (dBm/MHz) *3 PK: 27 (dBm/MHz) *4	PK: 68.2(dBμV/m) *1 PK: 105.2 (dBμV/m) *2 PK: 110.8(dBμV/m) *3 PK: 122.2 (dBμV/m) *4

*1 beyond 75 MHz or more above of the band edge.

*2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.

*3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

*4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Note: 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).

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver KEYSIGHT	N9038A	MY55420137	Apr. 09, 2021	Apr. 08, 2022
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Jun. 10, 2021	Jun. 09, 2022
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Nov. 06, 2020	Nov. 05, 2021
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-1169	Nov. 22, 2020	Nov. 21, 2021
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 22, 2020	Nov. 21, 2021
Loop Antenna TESEQ	HLA 6121	45745	Jul. 21, 2021	Jul. 20, 2022
Preamplifier Agilent (Below 1GHz)	8447D	2944A10638	Jun. 05, 2021	Jun. 04, 2022
Preamplifier Agilent (Above 1GHz)	8449B	3008A02367	Feb. 17, 2021	Feb. 16, 2022
RF signal cable HUBER+SUHNER&EMCI	SUCOFLEX 104 & EMC104-SM-SM8000	CABLE-CH9-02 (248780+171006)	Jan. 16, 2021	Jan. 15, 2022
RF signal cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9-(250795/4)	Jan. 16, 2021	Jan. 15, 2022
RF signal cable Woken	8D-FB	Cable-CH9-01	Jun. 05, 2021	Jun. 04, 2022
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower &Turn BV ADT	AT100	AT93021705	NA	NA
Turn Table BV ADT	TT100	TT93021705	NA	NA
Turn Table Controller BV ADT	SC100	SC93021705	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Peak Power Analyzer KEYSIGHT	8990B	MY51000485	Jan. 19, 2021	Jan. 18, 2022
Wideband Power Sensor KEYSIGHT	N1923A	MY58020002	Jan. 11, 2021	Jan. 10, 2022
Pre-amplifier (18GHz-40GHz) EMC	EMC184045B	980175	Sep. 04, 2020	Sep. 03, 2021
			Sep. 04, 2021	Sep. 03, 2022

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 9.

4.1.3 Test Procedures

For Radiated emission below 30MHz

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. 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. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case 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 Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

For Radiated emission above 30MHz

a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. 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 height of antenna 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 quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.

2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) 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. (802.11a: RBW = 1MHz, VBW = 1kHz; 802.11n (HT20): RBW = 1MHz, VBW = 1kHz; 802.11n (HT40): RBW = 1MHz, VBW = 1kHz)

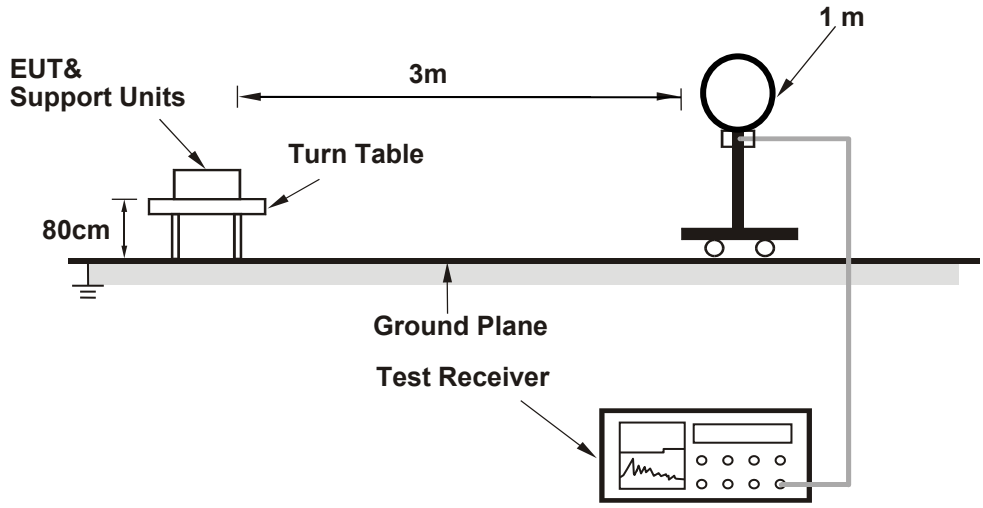
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

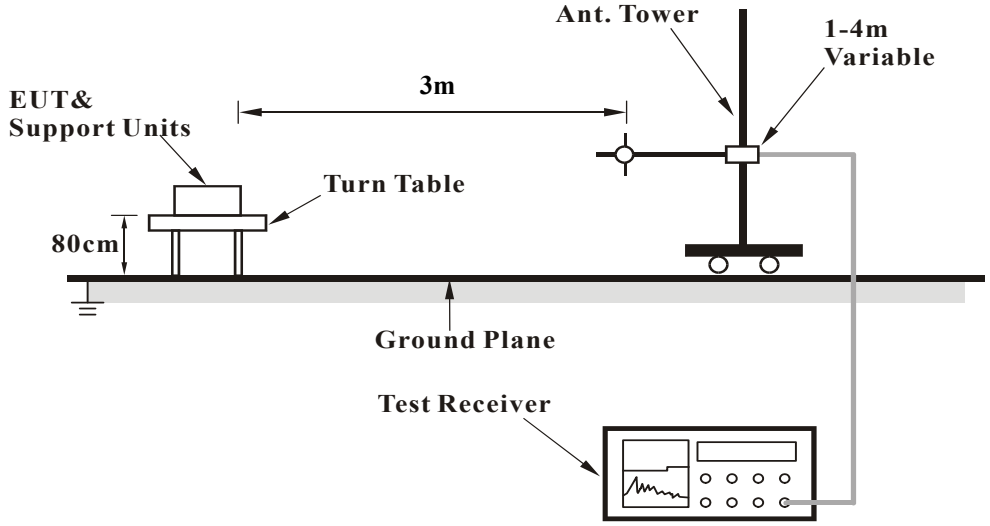
No deviation.

4.1.5 Test Setup

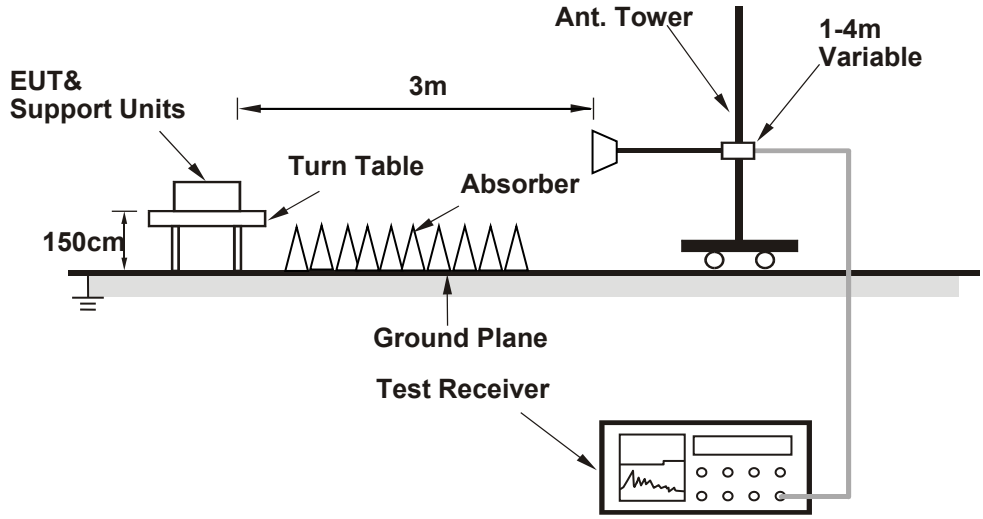
For Radiated emission below 30MHz



For Radiated emission 30MHz to 1GHz



For Radiated emission above 1GHz



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

4.1.6 EUT Operating Conditions

a. Placed the EUT on the testing table.

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

4.1.7 Test Results

Above 1GHz data:

Internal antenna: Mode A1

RF Mode	TX 802.11a	Channel	CH 36：5180 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	62.4 PK	74.0	-11.6	2.46 H	300	55.1	7.3
2	5150.00	46.6 AV	54.0	-7.4	2.46 H	300	39.3	7.3
3	*5180.00	109.0 PK			2.46 H	300	67.4	41.6
4	*5180.00	99.0 AV			2.46 H	300	57.4	41.6
5	#10360.00	60.2 PK	68.2	-8.0	3.16 H	294	41.2	19.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	58.3 PK	74.0	-15.7	2.15 V	192	51.0	7.3
2	5150.00	45.4 AV	54.0	-8.6	2.15 V	192	38.1	7.3
3	*5180.00	105.0 PK			2.15 V	192	63.4	41.6
4	*5180.00	95.0 AV			2.15 V	192	53.4	41.6
5	#10360.00	59.9 PK	68.2	-8.3	2.73 V	150	40.9	19.0

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 40：5200 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	109.4 PK			2.51 H	310	67.9	41.5
2	*5200.00	99.4 AV			2.51 H	310	57.9	41.5
3	#10400.00	60.7 PK	68.2	-7.5	3.12 H	298	41.6	19.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	105.3 PK			2.18 V	199	63.8	41.5
2	*5200.00	95.3 AV			2.18 V	199	53.8	41.5
3	#10400.00	60.0 PK	68.2	-8.2	2.83 V	174	40.9	19.1

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 48：5240 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	109.0 PK			2.47 H	307	67.6	41.4
2	*5240.00	99.0 AV			2.47 H	307	57.6	41.4
3	5350.00	57.6 PK	74.0	-16.4	2.47 H	307	50.6	7.0
4	5350.00	45.6 AV	54.0	-8.4	2.47 H	307	38.6	7.0
5	#10480.00	60.6 PK	68.2	-7.6	3.19 H	297	41.6	19.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	105.0 PK			2.19 V	187	63.6	41.4
2	*5240.00	95.0 AV			2.19 V	187	53.6	41.4
3	5350.00	57.2 PK	74.0	-16.8	2.19 V	187	50.2	7.0
4	5350.00	44.9 AV	54.0	-9.1	2.19 V	187	37.9	7.0
5	#10480.00	59.7 PK	68.2	-8.5	2.79 V	154	40.7	19.0

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 149：5745 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5618.40	57.1 PK	68.2	-11.1	2.36 H	296	49.5	7.6
2	*5745.00	106.9 PK			2.36 H	296	64.9	42.0
3	*5745.00	96.9 AV			2.36 H	296	54.9	42.0
4	#5961.20	58.5 PK	68.2	-9.7	2.36 H	296	50.2	8.3
5	11490.00	61.4 PK	74.0	-12.6	3.08 H	293	41.4	20.0
6	11490.00	47.9 AV	54.0	-6.1	3.08 H	293	27.9	20.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5645.60	58.2 PK	68.2	-10.0	2.18 V	194	50.6	7.6
2	*5745.00	103.1 PK			2.18 V	194	61.1	42.0
3	*5745.00	93.1 AV			2.18 V	194	51.1	42.0
4	#5945.60	59.3 PK	68.2	-8.9	2.18 V	194	50.9	8.4
5	11490.00	60.8 PK	74.0	-13.2	2.82 V	157	40.8	20.0
6	11490.00	47.3 AV	54.0	-6.7	2.82 V	157	27.3	20.0

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 157：5785 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5636.80	58.4 PK	68.2	-9.8	2.53 H	306	50.8	7.6
2	*5785.00	110.6 PK			2.53 H	306	68.5	42.1
3	*5785.00	100.5 AV			2.53 H	306	58.4	42.1
4	#5999.60	58.4 PK	68.2	-9.8	2.53 H	306	50.1	8.3
5	11570.00	61.4 PK	74.0	-12.6	3.09 H	291	41.6	19.8
6	11570.00	48.0 AV	54.0	-6.0	3.09 H	291	28.2	19.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5603.20	58.0 PK	68.2	-10.2	2.11 V	198	50.3	7.7
2	*5785.00	106.5 PK			2.11 V	198	64.4	42.1
3	*5785.00	96.5 AV			2.11 V	198	54.4	42.1
4	#5946.40	58.2 PK	68.2	-10.0	2.11 V	198	49.8	8.4
5	11570.00	60.7 PK	74.0	-13.3	2.78 V	157	40.9	19.8
6	11570.00	47.4 AV	54.0	-6.6	2.78 V	157	27.6	19.8

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 165：5825 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5640.00	57.7 PK	68.2	-10.5	2.30 H	294	50.1	7.6
2	*5825.00	107.9 PK			2.30 H	294	65.5	42.4
3	*5825.00	97.9 AV			2.30 H	294	55.5	42.4
4	#5932.00	58.3 PK	68.2	-9.9	2.30 H	294	50.0	8.3
5	11650.00	61.1 PK	74.0	-12.9	3.23 H	302	41.4	19.7
6	11650.00	47.7 AV	54.0	-6.3	3.23 H	302	28.0	19.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5637.20	58.7 PK	68.2	-9.5	2.18 V	193	51.1	7.6
2	*5825.00	104.0 PK			2.18 V	193	61.6	42.4
3	*5825.00	94.0 AV			2.18 V	193	51.6	42.4
4	#5966.40	59.8 PK	68.2	-8.4	2.18 V	193	51.5	8.3
5	11650.00	60.4 PK	74.0	-13.6	2.81 V	154	40.7	19.7
6	11650.00	47.1 AV	54.0	-6.9	2.81 V	154	27.4	19.7

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 36：5180 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	62.1 PK	74.0	-11.9	2.44 H	295	54.8	7.3
2	5150.00	47.5 AV	54.0	-6.5	2.44 H	295	40.2	7.3
3	*5180.00	108.9 PK			2.44 H	295	67.3	41.6
4	*5180.00	98.9 AV			2.44 H	295	57.3	41.6
5	#10360.00	60.2 PK	68.2	-8.0	3.23 H	302	41.2	19.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	59.0 PK	74.0	-15.0	2.24 V	203	51.7	7.3
2	5150.00	46.7 AV	54.0	-7.3	2.24 V	203	39.4	7.3
3	*5180.00	104.8 PK			2.24 V	203	63.2	41.6
4	*5180.00	94.9 AV			2.24 V	203	53.3	41.6
5	#10360.00	59.6 PK	68.2	-8.6	2.81 V	155	40.6	19.0

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 40：5200 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	108.9 PK			2.47 H	302	67.4	41.5
2	*5200.00	99.1 AV			2.47 H	302	57.6	41.5
3	#10400.00	60.4 PK	68.2	-7.8	3.19 H	294	41.3	19.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	105.1 PK			2.19 V	193	63.6	41.5
2	*5200.00	95.2 AV			2.19 V	193	53.7	41.5
3	#10400.00	59.9 PK	68.2	-8.3	2.69 V	147	40.8	19.1

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 48：5240 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	108.5 PK			2.45 H	308	67.1	41.4
2	*5240.00	98.6 AV			2.45 H	308	57.2	41.4
3	5350.00	57.7 PK	74.0	-16.3	2.45 H	308	50.7	7.0
4	5350.00	45.7 AV	54.0	-8.3	2.45 H	308	38.7	7.0
5	#10480.00	59.6 PK	68.2	-8.6	3.11 H	292	40.6	19.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	104.6 PK			2.21 V	193	63.2	41.4
2	*5240.00	94.6 AV			2.21 V	193	53.2	41.4
3	5350.00	57.3 PK	74.0	-16.7	2.21 V	193	50.3	7.0
4	5350.00	45.1 AV	54.0	-8.9	2.21 V	193	38.1	7.0
5	#10480.00	59.3 PK	68.2	-8.9	2.79 V	158	40.3	19.0

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 149：5745 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5612.40	57.1 PK	68.2	-11.1	2.43 H	295	49.4	7.7
2	*5745.00	106.8 PK			2.43 H	295	64.8	42.0
3	*5745.00	96.9 AV			2.43 H	295	54.9	42.0
4	#5961.20	57.9 PK	68.2	-10.3	2.43 H	295	49.6	8.3
5	11490.00	61.2 PK	74.0	-12.8	3.10 H	297	41.2	20.0
6	11490.00	47.9 AV	54.0	-6.1	3.10 H	297	27.9	20.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5638.80	58.4 PK	68.2	-9.8	2.08 V	198	50.8	7.6
2	*5745.00	103.3 PK			2.08 V	197	61.3	42.0
3	*5745.00	93.2 AV			2.08 V	197	51.2	42.0
4	#5937.20	58.8 PK	68.2	-9.4	2.08 V	197	50.4	8.4
5	11490.00	60.6 PK	74.0	-13.4	2.84 V	164	40.6	20.0
6	11490.00	47.2 AV	54.0	-6.8	2.84 V	164	27.2	20.0

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 157：5785 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5616.80	58.0 PK	68.2	-10.2	2.43 H	294	50.4	7.6
2	*5785.00	111.5 PK			2.43 H	294	69.4	42.1
3	*5785.00	101.6 AV			2.43 H	294	59.5	42.1
4	#5935.60	59.0 PK	68.2	-9.2	2.43 H	294	50.6	8.4
5	11570.00	61.0 PK	74.0	-13.0	3.18 H	299	41.2	19.8
6	11570.00	47.5 AV	54.0	-6.5	3.18 H	299	27.7	19.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5627.60	57.5 PK	68.2	-10.7	2.13 V	195	49.9	7.6
2	*5785.00	107.8 PK			2.13 V	195	65.7	42.1
3	*5785.00	97.8 AV			2.13 V	195	55.7	42.1
4	#5969.20	58.3 PK	68.2	-9.9	2.13 V	195	50.0	8.3
5	11570.00	60.5 PK	74.0	-13.5	2.82 V	154	40.7	19.8
6	11570.00	47.0 AV	54.0	-7.0	2.82 V	154	27.2	19.8

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 165：5825 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5620.00	57.7 PK	68.2	-10.5	2.17 H	297	50.1	7.6
2	*5825.00	107.2 PK			2.17 H	297	64.8	42.4
3	*5825.00	97.3 AV			2.17 H	297	54.9	42.4
4	#5927.20	58.8 PK	68.2	-9.4	2.17 H	297	50.5	8.3
5	11650.00	60.9 PK	74.0	-13.1	3.17 H	289	41.2	19.7
6	11650.00	47.6 AV	54.0	-6.4	3.17 H	289	27.9	19.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5641.60	57.4 PK	68.2	-10.8	2.16 V	194	49.8	7.6
2	*5825.00	103.3 PK			2.16 V	194	60.9	42.4
3	*5825.00	93.4 AV			2.16 V	194	51.0	42.4
4	#5950.40	58.4 PK	68.2	-9.8	2.16 V	194	50.0	8.4
5	11650.00	60.4 PK	74.0	-13.6	2.68 V	157	40.7	19.7
6	11650.00	47.0 AV	54.0	-7.0	2.68 V	157	27.3	19.7

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT40)	Channel	CH 38：5190 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	61.2 PK	74.0	-12.8	2.54 H	307	53.9	7.3
2	5150.00	46.4 AV	54.0	-7.6	2.54 H	307	39.1	7.3
3	*5190.00	103.0 PK			2.54 H	307	61.4	41.6
4	*5190.00	93.1 AV			2.54 H	307	51.5	41.6
5	#10380.00	60.2 PK	68.2	-8.0	3.13 H	297	41.1	19.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	58.9 PK	74.0	-15.1	2.18 V	197	51.6	7.3
2	5150.00	45.7 AV	54.0	-8.3	2.18 V	197	38.4	7.3
3	*5190.00	99.2 PK			2.18 V	197	57.6	41.6
4	*5190.00	89.3 AV			2.18 V	197	47.7	41.6
5	#10380.00	59.6 PK	68.2	-8.6	2.81 V	156	40.5	19.1

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT40)	Channel	CH 46：5230 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5230.00	105.1 PK			2.53 H	308	63.7	41.4
2	*5230.00	95.1 AV			2.53 H	308	53.7	41.4
3	5350.00	59.6 PK	74.0	-14.4	2.53 H	308	52.6	7.0
4	5350.00	45.3 AV	54.0	-8.7	2.53 H	308	38.3	7.0
5	#10460.00	59.9 PK	68.2	-8.3	3.13 H	290	40.9	19.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5230.00	101.1 PK			2.19 V	198	59.7	41.4
2	*5230.00	91.2 AV			2.19 V	198	49.8	41.4
3	5350.00	58.2 PK	74.0	-15.8	2.19 V	198	51.2	7.0
4	5350.00	44.7 AV	54.0	-9.3	2.19 V	198	37.7	7.0
5	#10460.00	59.3 PK	68.2	-8.9	2.71 V	146	40.3	19.0

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT40)	Channel	CH 151：5755 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5626.80	58.1 PK	68.2	-10.1	2.44 H	307	50.5	7.6
2	*5755.00	101.9 PK			2.44 H	307	59.9	42.0
3	*5755.00	91.3 AV			2.44 H	307	49.3	42.0
4	#5971.20	58.4 PK	68.2	-9.8	2.44 H	307	50.1	8.3
5	11510.00	60.7 PK	74.0	-13.3	3.09 H	287	40.8	19.9
6	11510.00	47.6 AV	54.0	-6.4	3.09 H	287	27.7	19.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5643.20	57.8 PK	68.2	-10.4	2.18 V	197	50.2	7.6
2	*5755.00	97.4 PK			2.18 V	197	55.4	42.0
3	*5755.00	87.5 AV			2.18 V	197	45.5	42.0
4	#5997.20	58.7 PK	68.2	-9.5	2.18 V	197	50.4	8.3
5	11510.00	60.3 PK	74.0	-13.7	2.77 V	151	40.4	19.9
6	11510.00	47.0 AV	54.0	-7.0	2.77 V	151	27.1	19.9

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT40)	Channel	CH 159：5795 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5643.20	57.6 PK	68.2	-10.6	2.21 H	292	50.0	7.6
2	*5795.00	105.4 PK			2.21 H	292	63.2	42.2
3	*5795.00	95.3 AV			2.21 H	292	53.1	42.2
4	#5936.80	58.3 PK	68.2	-9.9	2.21 H	292	49.9	8.4
5	11590.00	60.6 PK	74.0	-13.4	3.14 H	298	40.8	19.8
6	11590.00	47.1 AV	54.0	-6.9	3.14 H	298	27.3	19.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5626.00	58.2 PK	68.2	-10.0	2.12 V	197	50.6	7.6
2	*5795.00	101.4 PK			2.12 V	197	59.2	42.2
3	*5795.00	91.4 AV			2.12 V	197	49.2	42.2
4	#5945.20	58.1 PK	68.2	-10.1	2.12 V	197	49.7	8.4
5	11590.00	60.1 PK	74.0	-13.9	2.81 V	153	40.3	19.8
6	11590.00	46.8 AV	54.0	-7.2	2.81 V	153	27.0	19.8

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

External antenna: Mode B1

RF Mode	TX 802.11a	Channel	CH 36：5180 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.4 PK	74.0	-16.6	1.52 H	50	50.1	7.3
2	5150.00	44.8 AV	54.0	-9.2	1.52 H	50	37.5	7.3
3	*5180.00	99.6 PK			1.52 H	50	58.0	41.6
4	*5180.00	90.5 AV			1.52 H	50	48.9	41.6
5	#10360.00	60.9 PK	68.2	-7.3	1.58 H	113	41.9	19.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.3 PK	74.0	-16.7	1.64 V	11	50.0	7.3
2	5150.00	44.9 AV	54.0	-9.1	1.64 V	11	37.6	7.3
3	*5180.00	101.8 PK			1.64 V	11	60.2	41.6
4	*5180.00	92.0 AV			1.64 V	11	50.4	41.6
5	#10360.00	60.0 PK	68.2	-8.2	1.81 V	310	41.0	19.0

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 40：5200 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	99.9 PK			1.50 H	49	58.4	41.5
2	*5200.00	90.2 AV			1.50 H	49	48.7	41.5
3	#10400.00	59.7 PK	68.2	-8.5	1.56 H	115	40.6	19.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	101.9 PK			1.63 V	7	60.4	41.5
2	*5200.00	92.2 AV			1.63 V	7	50.7	41.5
3	#10400.00	59.9 PK	68.2	-8.3	1.78 V	305	40.8	19.1

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 48：5240 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	100.7 PK			1.51 H	50	59.3	41.4
2	*5240.00	90.2 AV			1.51 H	50	48.8	41.4
3	5350.00	57.1 PK	74.0	-16.9	1.51 H	50	50.1	7.0
4	5350.00	44.3 AV	54.0	-9.7	1.51 H	50	37.3	7.0
5	#10480.00	59.8 PK	68.2	-8.4	1.58 H	114	40.8	19.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	103.7 PK			1.65 V	17	62.3	41.4
2	*5240.00	92.7 AV			1.65 V	17	51.3	41.4
3	5350.00	57.2 PK	74.0	-16.8	1.65 V	17	50.2	7.0
4	5350.00	44.0 AV	54.0	-10.0	1.65 V	17	37.0	7.0
5	#10480.00	60.0 PK	68.2	-8.2	1.88 V	321	41.0	19.0

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 149：5745 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5603.60	57.5 PK	68.2	-10.7	2.41 H	44	49.8	7.7
2	*5745.00	98.7 PK			2.41 H	44	56.7	42.0
3	*5745.00	89.0 AV			2.41 H	44	47.0	42.0
4	#5995.60	57.3 PK	68.2	-10.9	2.41 H	44	49.0	8.3
5	11490.00	57.5 PK	74.0	-16.5	1.55 H	119	37.5	20.0
6	11490.00	44.6 AV	54.0	-9.4	1.55 H	119	24.6	20.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5608.40	57.7 PK	68.2	-10.5	1.54 V	49	50.0	7.7
2	*5745.00	98.4 PK			1.54 V	49	56.4	42.0
3	*5745.00	88.5 AV			1.54 V	49	46.5	42.0
4	#5932.80	58.4 PK	68.2	-9.8	1.54 V	49	50.1	8.3
5	11490.00	57.7 PK	74.0	-16.3	1.83 V	304	37.7	20.0
6	11490.00	44.5 AV	54.0	-9.5	1.83 V	304	24.5	20.0

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 157：5785 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5649.60	56.6 PK	68.2	-11.6	2.32 H	44	49.0	7.6
2	*5785.00	105.7 PK			2.32 H	44	63.6	42.1
3	*5785.00	95.4 AV			2.32 H	44	53.3	42.1
4	#5988.40	57.5 PK	68.2	-10.7	2.32 H	44	49.2	8.3
5	11570.00	60.1 PK	74.0	-13.9	1.50 H	117	40.3	19.8
6	11570.00	47.0 AV	54.0	-7.0	1.50 H	117	27.2	19.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5619.60	58.7 PK	68.2	-9.5	2.12 V	43	51.1	7.6
2	*5785.00	104.1 PK			2.12 V	43	62.0	42.1
3	*5785.00	94.5 AV			2.12 V	43	52.4	42.1
4	#5966.40	57.8 PK	68.2	-10.4	2.12 V	43	49.5	8.3
5	11570.00	59.7 PK	74.0	-14.3	1.86 V	296	39.9	19.8
6	11570.00	47.2 AV	54.0	-6.8	1.86 V	296	27.4	19.8

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 165：5825 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5612.00	57.7 PK	68.2	-10.5	2.35 H	45	50.0	7.7
2	*5825.00	102.4 PK			2.35 H	45	60.0	42.4
3	*5825.00	92.3 AV			2.35 H	45	49.9	42.4
4	#5968.00	58.1 PK	68.2	-10.1	2.35 H	45	49.8	8.3
5	11650.00	57.6 PK	74.0	-16.4	1.66 H	109	37.9	19.7
6	11650.00	45.9 AV	54.0	-8.1	1.66 H	109	26.2	19.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5648.80	57.2 PK	68.2	-11.0	1.39 V	43	49.6	7.6
2	*5825.00	100.6 PK			1.39 V	43	58.2	42.4
3	*5825.00	90.7 AV			1.39 V	43	48.3	42.4
4	#5952.00	58.7 PK	68.2	-9.5	1.39 V	43	50.3	8.4
5	11650.00	57.4 PK	74.0	-16.6	1.77 V	296	37.7	19.7
6	11650.00	45.3 AV	54.0	-8.7	1.77 V	296	25.6	19.7

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 36：5180 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.8 PK	74.0	-16.2	1.43 H	140	50.5	7.3
2	5150.00	44.5 AV	54.0	-9.5	1.43 H	140	37.2	7.3
3	*5180.00	99.8 PK			1.43 H	140	58.2	41.6
4	*5180.00	90.3 AV			1.43 H	140	48.7	41.6
5	#10360.00	59.8 PK	68.2	-8.4	1.50 H	114	40.8	19.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	58.6 PK	74.0	-15.4	1.94 V	267	51.3	7.3
2	5150.00	44.9 AV	54.0	-9.1	1.94 V	267	37.6	7.3
3	*5180.00	103.1 PK			1.94 V	267	61.5	41.6
4	*5180.00	92.9 AV			1.94 V	267	51.3	41.6
5	#10360.00	60.0 PK	68.2	-8.2	1.77 V	295	41.0	19.0

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 40：5200 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	101.2 PK			1.44 H	142	59.7	41.5
2	*5200.00	91.2 AV			1.44 H	142	49.7	41.5
3	#10400.00	60.2 PK	68.2	-8.0	1.47 H	122	41.1	19.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	103.0 PK			1.71 V	26	61.5	41.5
2	*5200.00	92.7 AV			1.71 V	26	51.2	41.5
3	#10400.00	59.9 PK	68.2	-8.3	1.80 V	306	40.8	19.1

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 48：5240 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	100.5 PK			1.41 H	140	59.1	41.4
2	*5240.00	90.2 AV			1.41 H	140	48.8	41.4
3	5350.00	56.7 PK	74.0	-17.3	1.41 H	140	49.7	7.0
4	5350.00	43.8 AV	54.0	-10.2	1.41 H	140	36.8	7.0
5	#10480.00	59.8 PK	68.2	-8.4	1.55 H	117	40.8	19.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	101.8 PK			2.17 V	110	60.4	41.4
2	*5240.00	92.4 AV			2.17 V	110	51.0	41.4
3	5350.00	57.3 PK	74.0	-16.7	2.17 V	110	50.3	7.0
4	5350.00	43.7 AV	54.0	-10.3	2.17 V	110	36.7	7.0
5	#10480.00	60.2 PK	68.2	-8.0	1.83 V	322	41.2	19.0

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 149：5745 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5605.20	57.7 PK	68.2	-10.5	2.42 H	45	50.0	7.7
2	*5745.00	99.4 PK			2.42 H	45	57.4	42.0
3	*5745.00	89.0 AV			2.42 H	45	47.0	42.0
4	#5939.20	57.0 PK	68.2	-11.2	2.42 H	45	48.6	8.4
5	11490.00	61.3 PK	74.0	-12.7	1.69 H	110	41.3	20.0
6	11490.00	47.5 AV	54.0	-6.5	1.69 H	110	27.5	20.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5638.40	57.1 PK	68.2	-11.1	1.45 V	43	49.5	7.6
2	*5745.00	98.0 PK			1.45 V	43	56.0	42.0
3	*5745.00	88.6 AV			1.45 V	43	46.6	42.0
4	#5936.80	58.3 PK	68.2	-9.9	1.45 V	43	49.9	8.4
5	11490.00	60.4 PK	74.0	-13.6	1.88 V	313	40.4	20.0
6	11490.00	46.5 AV	54.0	-7.5	1.88 V	313	26.5	20.0

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 157：5785 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5602.80	57.4 PK	68.2	-10.8	2.46 H	45	49.7	7.7
2	*5785.00	104.6 PK			2.46 H	45	62.5	42.1
3	*5785.00	95.8 AV			2.46 H	45	53.7	42.1
4	#5952.00	58.7 PK	68.2	-9.5	2.46 H	45	50.3	8.4
5	11570.00	60.9 PK	74.0	-13.1	1.71 H	116	41.1	19.8
6	11570.00	47.3 AV	54.0	-6.7	1.71 H	116	27.5	19.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5648.40	57.3 PK	68.2	-10.9	2.34 V	50	49.7	7.6
2	*5785.00	105.7 PK			2.34 V	50	63.6	42.1
3	*5785.00	95.9 AV			2.34 V	50	53.8	42.1
4	#5978.00	58.6 PK	68.2	-9.6	2.34 V	50	50.3	8.3
5	11570.00	61.5 PK	74.0	-12.5	1.75 V	299	41.7	19.8
6	11570.00	48.2 AV	54.0	-5.8	1.75 V	299	28.4	19.8

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 165：5825 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5601.60	57.0 PK	68.2	-11.2	2.34 H	46	49.3	7.7
2	*5825.00	101.2 PK			2.34 H	46	58.8	42.4
3	*5825.00	92.2 AV			2.34 H	46	49.8	42.4
4	#5990.80	57.9 PK	68.2	-10.3	2.34 H	46	49.6	8.3
5	11650.00	59.6 PK	74.0	-14.4	1.57 H	106	39.9	19.7
6	11650.00	46.7 AV	54.0	-7.3	1.57 H	106	27.0	19.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5604.80	57.2 PK	68.2	-11.0	2.14 V	52	49.5	7.7
2	*5825.00	102.1 PK			2.14 V	52	59.7	42.4
3	*5825.00	92.0 AV			2.14 V	52	49.6	42.4
4	#5939.20	58.5 PK	68.2	-9.7	2.14 V	52	50.1	8.4
5	11650.00	60.2 PK	74.0	-13.8	1.75 V	300	40.5	19.7
6	11650.00	46.9 AV	54.0	-7.1	1.75 V	300	27.2	19.7

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT40)	Channel	CH 38：5190 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.5 PK	74.0	-16.5	1.45 H	139	50.2	7.3
2	5150.00	45.0 AV	54.0	-9.0	1.45 H	139	37.7	7.3
3	*5190.00	91.9 PK			1.45 H	139	50.3	41.6
4	*5190.00	82.1 AV			1.45 H	139	40.5	41.6
5	#10380.00	59.4 PK	68.2	-8.8	1.55 H	117	40.3	19.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.2 PK	74.0	-16.8	1.57 V	21	49.9	7.3
2	5150.00	44.6 AV	54.0	-9.4	1.57 V	21	37.3	7.3
3	*5190.00	94.6 PK			1.57 V	21	53.0	41.6
4	*5190.00	84.1 AV			1.57 V	21	42.5	41.6
5	#10380.00	59.9 PK	68.2	-8.3	1.88 V	323	40.8	19.1

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT40)	Channel	CH 46：5230 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5230.00	95.7 PK			1.46 H	143	54.3	41.4
2	*5230.00	85.4 AV			1.46 H	143	44.0	41.4
3	5350.00	56.9 PK	74.0	-17.1	1.46 H	143	49.9	7.0
4	5350.00	43.1 AV	54.0	-10.9	1.46 H	143	36.1	7.0
5	#10460.00	60.3 PK	68.2	-7.9	1.68 H	110	41.3	19.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5230.00	96.4 PK			1.55 V	8	55.0	41.4
2	*5230.00	86.1 AV			1.55 V	8	44.7	41.4
3	5350.00	58.0 PK	74.0	-16.0	1.55 V	8	51.0	7.0
4	5350.00	43.6 AV	54.0	-10.4	1.55 V	8	36.6	7.0
5	#10460.00	59.9 PK	68.2	-8.3	1.79 V	298	40.9	19.0

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT40)	Channel	CH 151：5755 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5631.20	57.0 PK	68.2	-11.2	2.47 H	49	49.4	7.6
2	*5755.00	93.1 PK			2.47 H	49	51.1	42.0
3	*5755.00	83.5 AV			2.47 H	49	41.5	42.0
4	#5929.60	58.8 PK	68.2	-9.4	2.47 H	49	50.5	8.3
5	11510.00	60.5 PK	74.0	-13.5	1.69 H	104	40.6	19.9
6	11510.00	46.2 AV	54.0	-7.8	1.69 H	104	26.3	19.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5646.80	57.6 PK	68.2	-10.6	2.13 V	50	50.0	7.6
2	*5755.00	95.2 PK			2.13 V	50	53.2	42.0
3	*5755.00	84.6 AV			2.13 V	50	42.6	42.0
4	#5940.00	58.9 PK	68.2	-9.3	2.13 V	50	50.5	8.4
5	11510.00	60.2 PK	74.0	-13.8	1.77 V	296	40.3	19.9
6	11510.00	46.4 AV	54.0	-7.6	1.77 V	296	26.5	19.9

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT40)	Channel	CH 159：5795 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (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	57.4 PK	68.2	-10.8	2.49 H	43	49.7	7.7
2	*5795.00	99.2 PK			2.49 H	43	57.0	42.2
3	*5795.00	89.1 AV			2.49 H	43	46.9	42.2
4	#5938.80	59.2 PK	68.2	-9.0	2.49 H	43	50.8	8.4
5	11590.00	60.0 PK	74.0	-14.0	1.66 H	115	40.2	19.8
6	11590.00	47.2 AV	54.0	-6.8	1.66 H	115	27.4	19.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5634.80	57.7 PK	68.2	-10.5	2.22 V	45	50.1	7.6
2	*5795.00	98.1 PK			2.22 V	45	55.9	42.2
3	*5795.00	87.7 AV			2.22 V	45	45.5	42.2
4	#5977.60	58.2 PK	68.2	-10.0	2.22 V	45	49.9	8.3
5	11590.00	58.6 PK	74.0	-15.4	1.73 V	295	38.8	19.8
6	11590.00	46.8 AV	54.0	-7.2	1.73 V	295	27.0	19.8

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) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

Below 1GHz Worst-Case Data:

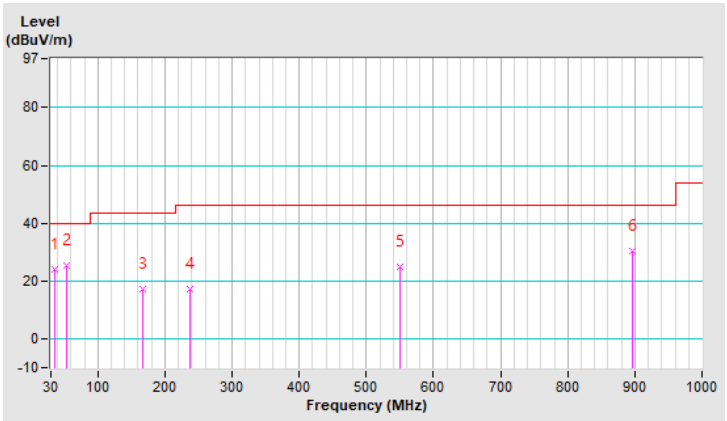
802.11n (HT20)

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	A1 (120Vac)

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	35.82	24.1 QP	40.0	-15.9	1.00 H	310	39.2	-15.1
2	54.25	25.2 QP	40.0	-14.8	1.25 H	213	39.4	-14.2
3	167.74	17.3 QP	43.5	-26.2	1.50 H	304	31.1	-13.8
4	237.58	17.1 QP	46.0	-28.9	1.00 H	148	31.6	-14.5
5	550.89	25.1 QP	46.0	-20.9	2.00 H	242	31.7	-6.6
6	897.18	30.5 QP	46.0	-15.5	1.00 H	177	30.3	0.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

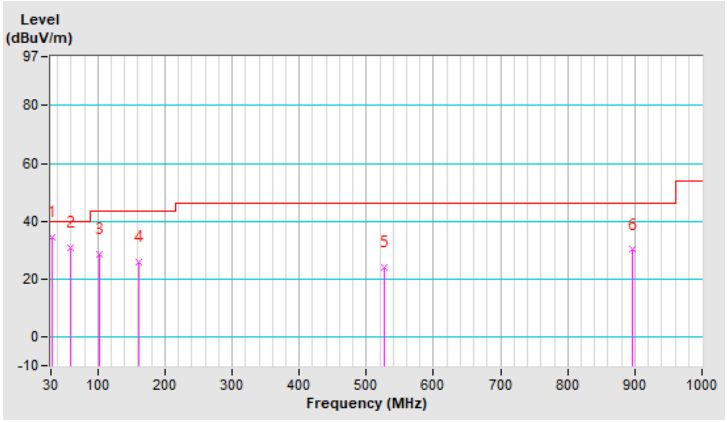


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	A1 (120Vac)

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	31.94	34.3 QP	40.0	-5.7	1.00 V	135	49.5	-15.2
2	60.07	30.7 QP	40.0	-9.3	1.50 V	294	45.2	-14.5
3	101.78	28.7 QP	43.5	-14.8	1.25 V	90	46.9	-18.2
4	161.92	25.6 QP	43.5	-17.9	1.50 V	237	39.1	-13.5
5	526.64	24.1 QP	46.0	-21.9	1.00 V	184	30.9	-6.8
6	897.18	30.1 QP	46.0	-15.9	1.00 V	209	29.9	0.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

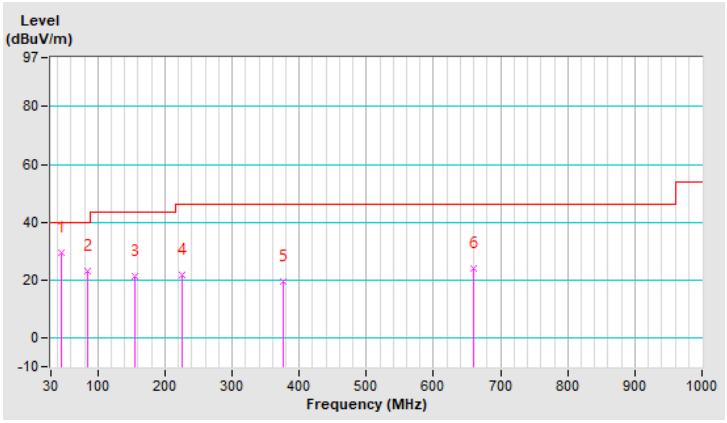


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	A2 (24Vdc)

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	45.52	29.5 QP	40.0	-10.5	1.00 H	170	43.6	-14.1
2	85.29	23.3 QP	40.0	-16.7	1.25 H	6	42.7	-19.4
3	155.13	21.5 QP	43.5	-22.0	1.50 H	51	35.1	-13.6
4	224.97	21.7 QP	46.0	-24.3	2.00 H	250	37.8	-16.1
5	375.32	19.3 QP	46.0	-26.7	2.00 H	284	29.5	-10.2
6	659.53	23.9 QP	46.0	-22.1	1.00 H	204	28.5	-4.6

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) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

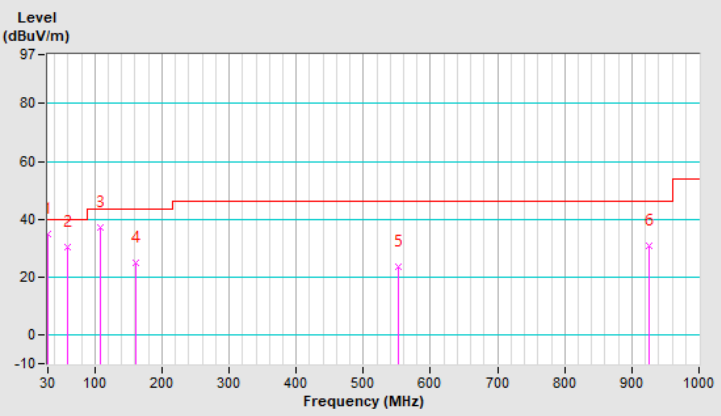


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	A2 (24Vdc)

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	30.97	34.7 QP	40.0	-5.3	1.50 V	96	50.2	-15.5
2	59.10	30.2 QP	40.0	-9.8	1.00 V	79	44.7	-14.5
3	107.60	37.2 QP	43.5	-6.3	1.00 V	310	54.3	-17.1
4	161.92	24.9 QP	43.5	-18.6	1.25 V	45	38.4	-13.5
5	552.83	23.4 QP	46.0	-22.6	1.25 V	177	29.9	-6.5
6	925.31	30.7 QP	46.0	-15.3	1.00 V	248	29.6	1.1

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) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

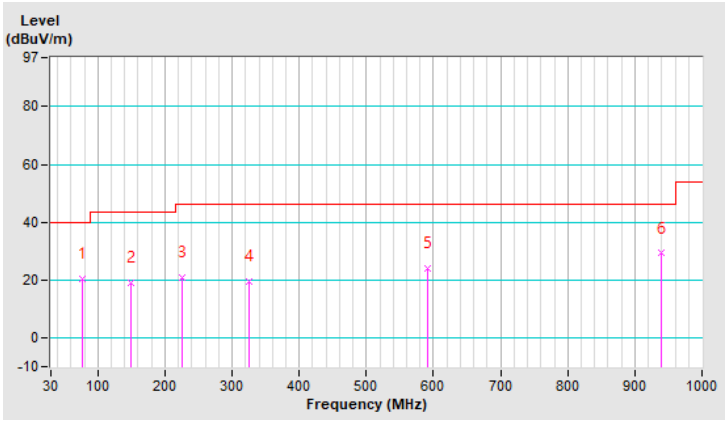


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	A3 (56Vdc)

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	77.53	20.3 QP	40.0	-19.7	1.25 H	344	38.2	-17.9
2	149.31	19.0 QP	43.5	-24.5	1.00 H	236	32.7	-13.7
3	224.97	20.8 QP	46.0	-25.2	1.50 H	248	36.9	-16.1
4	324.88	19.5 QP	46.0	-26.5	1.00 H	190	30.6	-11.1
5	591.63	23.8 QP	46.0	-22.2	2.00 H	119	29.3	-5.5
6	938.89	29.2 QP	46.0	-16.8	1.00 H	69	28.1	1.1

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) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

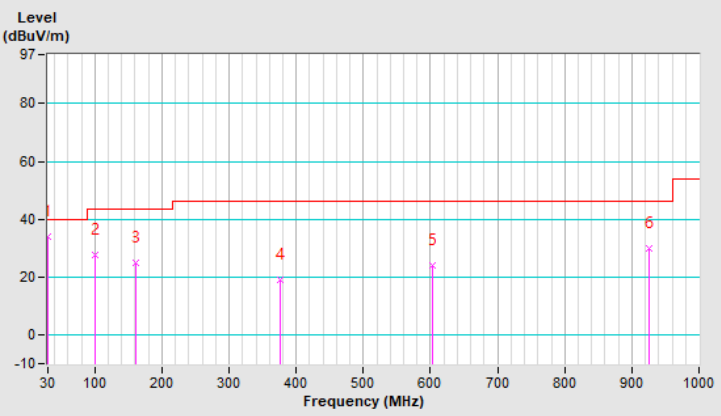


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	A3 (56Vdc)

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	30.97	34.1 QP	40.0	-5.9	1.25 V	128	49.6	-15.5
2	100.81	27.7 QP	43.5	-15.8	1.00 V	16	46.0	-18.3
3	161.92	25.1 QP	43.5	-18.4	1.50 V	173	38.6	-13.5
4	375.32	19.2 QP	46.0	-26.8	1.00 V	22	29.4	-10.2
5	603.27	24.2 QP	46.0	-21.8	2.00 V	128	29.5	-5.3
6	925.31	30.0 QP	46.0	-16.0	1.25 V	209	28.9	1.1

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) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

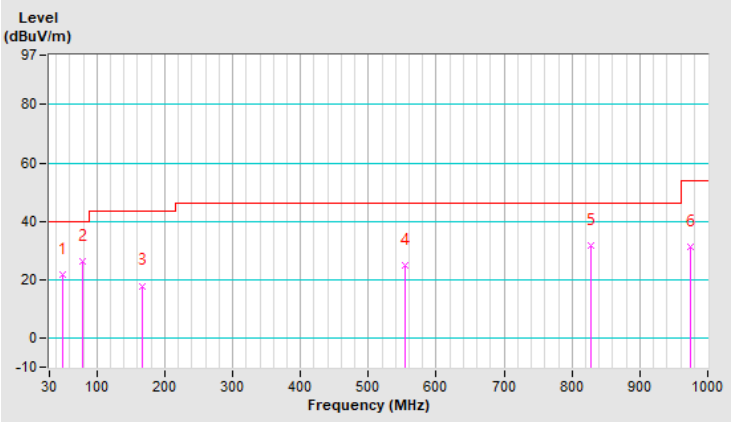


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	B1 (120Vac)

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	49.40	21.7 QP	40.0	-18.3	1.50 H	119	35.6	-13.9
2	78.50	26.1 QP	40.0	-13.9	1.25 H	7	44.2	-18.1
3	167.74	17.9 QP	43.5	-25.6	1.00 H	15	31.7	-13.8
4	554.77	25.0 QP	46.0	-21.0	1.00 H	130	31.5	-6.5
5	828.31	31.5 QP	46.0	-14.5	1.50 H	122	32.7	-1.2
6	973.81	31.3 QP	54.0	-22.7	1.00 H	7	29.8	1.5

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) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

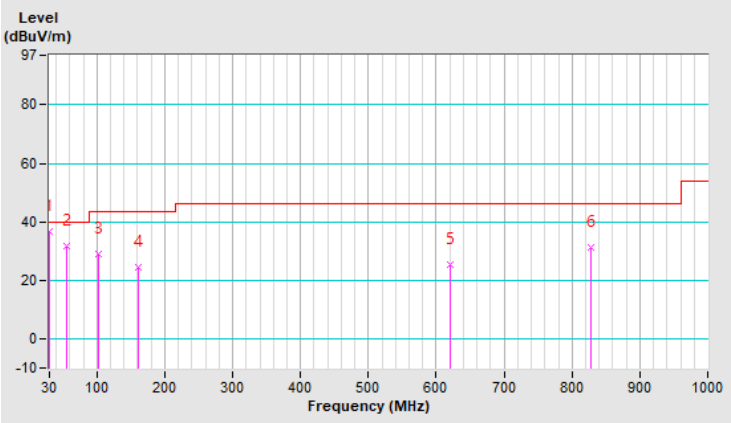


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	B1 (120Vac)

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**	**36.6 QP**	**40.0**	**-3.4**	**1.50 V**	**135**	**51.8**	**-15.2**
2	55.22	31.8 QP	40.0	-8.2	1.00 V	39	46.0	-14.2
3	101.78	29.2 QP	43.5	-14.3	2.00 V	47	47.4	-18.2
4	161.92	24.6 QP	43.5	-18.9	1.25 V	15	38.1	-13.5
5	620.73	25.4 QP	46.0	-20.6	1.00 V	149	30.4	-5.0
6	828.31	31.2 QP	46.0	-14.8	1.00 V	25	32.4	-1.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

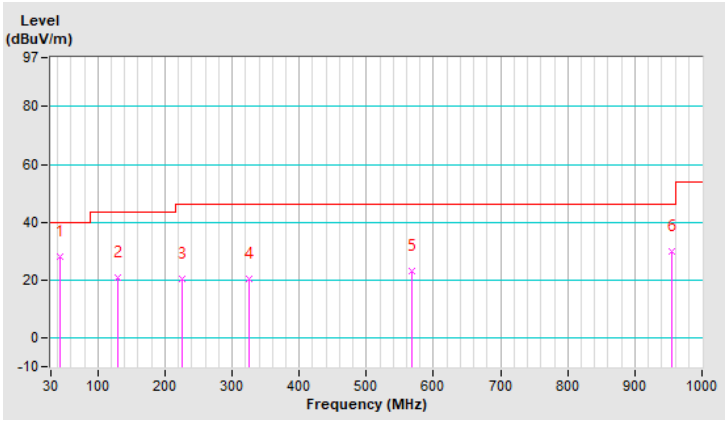


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	B2 (24Vdc)

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	44.55	28.2 QP	40.0	-11.8	1.50 H	158	42.4	-14.2
2	128.94	20.8 QP	43.5	-22.7	1.00 H	234	36.0	-15.2
3	224.97	20.5 QP	46.0	-25.5	1.25 H	5	36.6	-16.1
4	324.88	20.6 QP	46.0	-25.4	1.25 H	254	31.7	-11.1
5	568.35	23.1 QP	46.0	-22.9	2.00 H	50	29.4	-6.3
6	955.38	30.1 QP	46.0	-15.9	1.00 H	1	28.7	1.4

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) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

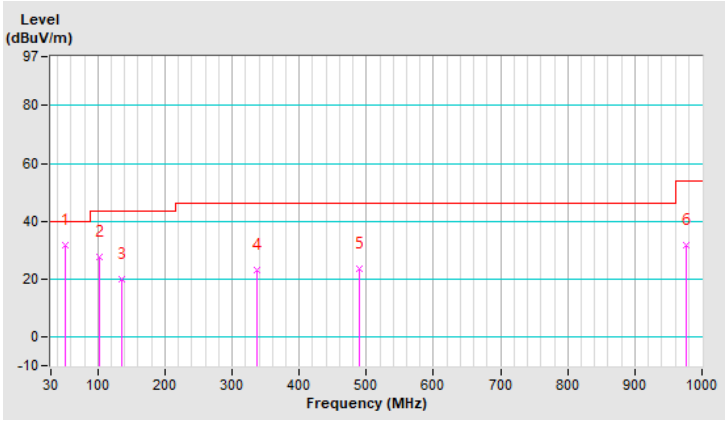


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	B2 (24Vdc)

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	52.31	31.6 QP	40.0	-8.4	1.25 V	54	45.5	-13.9
2	101.78	27.5 QP	43.5	-16.0	1.00 V	6	45.7	-18.2
3	135.73	20.0 QP	43.5	-23.5	1.50 V	73	34.6	-14.6
4	337.49	23.2 QP	46.0	-22.8	1.50 V	17	34.1	-10.9
5	488.81	23.4 QP	46.0	-22.6	1.00 V	6	31.0	-7.6
6	975.75	31.6 QP	54.0	-22.4	1.25 V	176	30.1	1.5

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) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

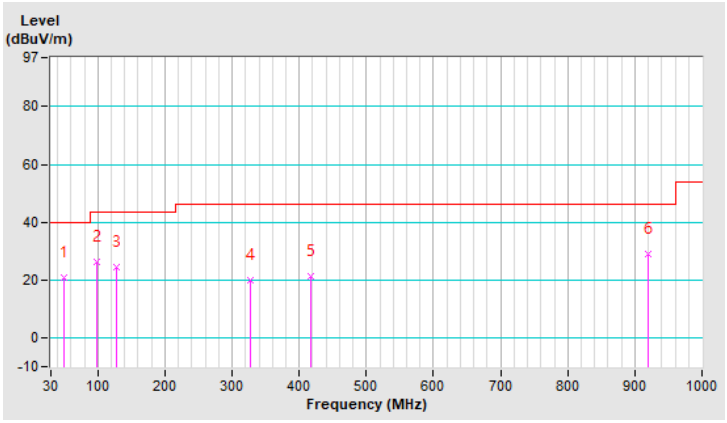


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	B3 (56Vdc)

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	49.40	20.9 QP	40.0	-19.1	1.50 H	234	34.8	-13.9
2	97.90	26.1 QP	43.5	-17.4	1.00 H	172	44.9	-18.8
3	127.97	24.3 QP	43.5	-19.2	1.50 H	152	39.5	-15.2
4	326.82	19.8 QP	46.0	-26.2	1.25 H	242	30.8	-11.0
5	418.00	21.5 QP	46.0	-24.5	1.25 H	288	30.8	-9.3
6	920.46	28.8 QP	46.0	-17.2	1.00 H	353	27.8	1.0

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) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

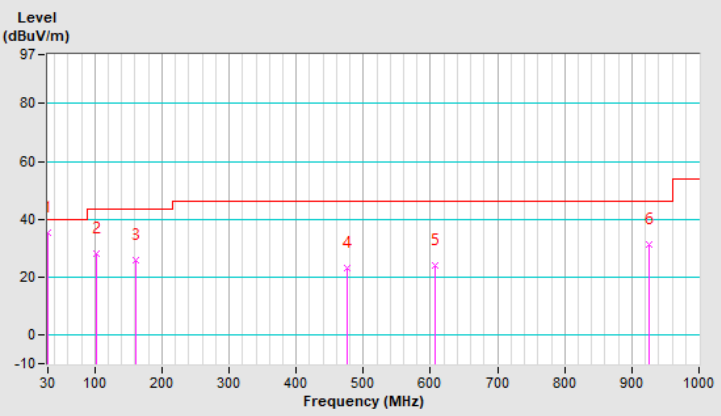


CHANNEL	TX Channel 157	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	B3 (56Vdc)

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	30.97	35.5 QP	40.0	-4.5	2.00 V	111	51.0	-15.5
2	101.78	28.0 QP	43.5	-15.5	1.00 V	18	46.2	-18.2
3	161.92	25.7 QP	43.5	-17.8	1.50 V	42	39.2	-13.5
4	475.23	22.9 QP	46.0	-23.1	1.25 V	7	30.7	-7.8
5	606.18	24.1 QP	46.0	-21.9	2.00 V	216	29.4	-5.3
6	925.31	31.2 QP	46.0	-14.8	1.00 V	247	30.1	1.1

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) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	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.

4.2.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESR3	102412	Jan. 29, 2021	Jan. 28, 2022
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond2-01	Sep. 04, 2021	Sep. 03, 2022
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Jan. 28, 2021	Jan. 27, 2022
LISN ROHDE & SCHWARZ (Peripheral)	ENV216	101196	Apr. 26, 2021	Apr. 25, 2022
Software ADT	BV ADT_Cond_ V7.3.7.4	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Shielded Room 2 (Conduction 2).
3. The VCCI Site Registration No. is C-12047.
4. Tested date: Sep. 07 ~ Sep 10, 2021

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.

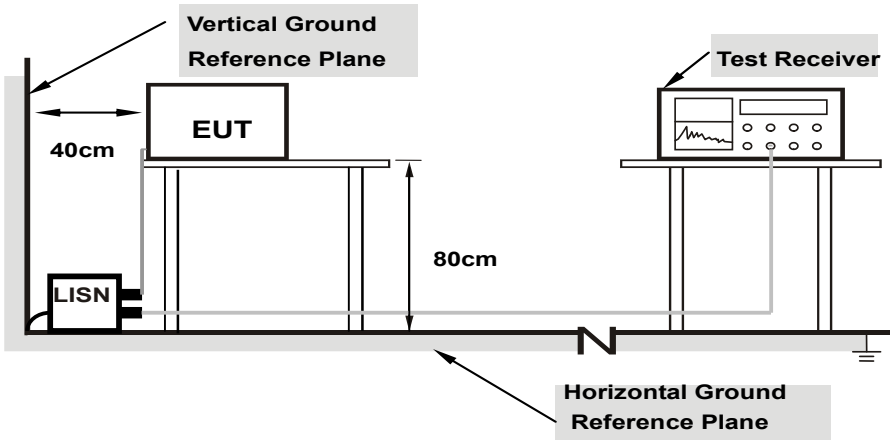
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

Note: The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



Note: 1.Support units were connected to second LISN.

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

4.2.6 EUT Operating Conditions

Same as 4.1.6.

4.2.7 Test Results

Worst-case data:

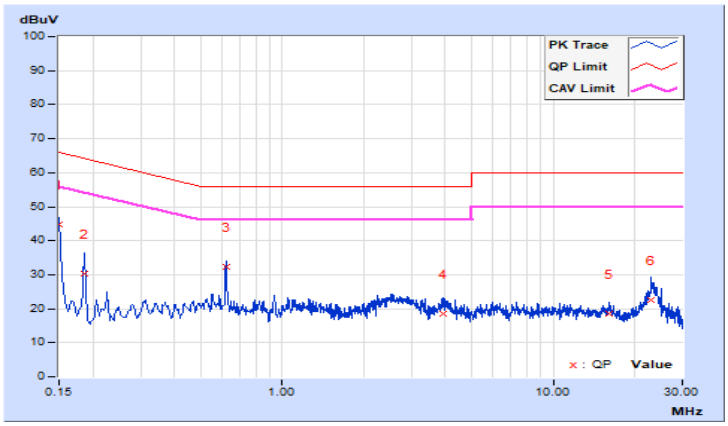
802.11n (HT20)

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A1 (120Vac)		

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	10.11	34.58	13.09	44.69	23.20	66.00	56.00	-21.31	-32.80
2	0.18600	10.12	20.27	6.14	30.39	16.26	64.21	54.21	-33.82	-37.95
3	0.62200	10.15	22.32	19.07	32.47	29.22	56.00	46.00	-23.53	-16.78
4	3.95000	10.24	8.36	3.84	18.60	14.08	56.00	46.00	-37.40	-31.92
5	16.09400	10.41	8.11	1.23	18.52	11.64	60.00	50.00	-41.48	-38.36
6	22.95000	10.36	12.30	7.26	22.66	17.62	60.00	50.00	-37.34	-32.38

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.

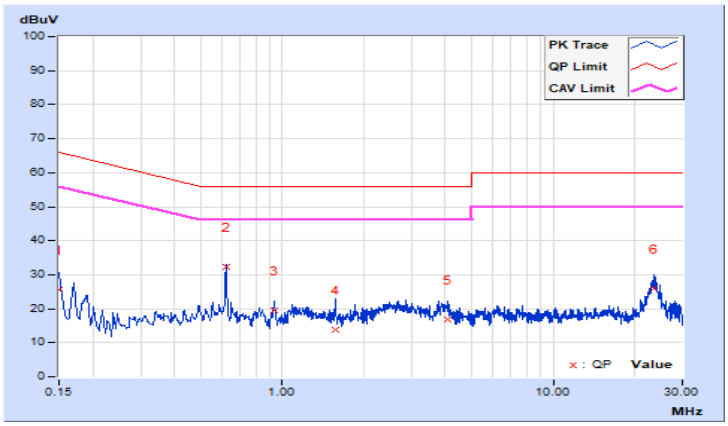


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A1 (120Vac)		

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	10.12	15.32	11.12	25.44	21.24	66.00	56.00	-40.56	-34.76
2	0.62200	10.16	22.04	18.89	32.20	29.05	56.00	46.00	-23.80	-16.95
3	0.93400	10.18	9.19	6.37	19.37	16.55	56.00	46.00	-36.63	-29.45
4	1.57000	10.20	3.72	1.23	13.92	11.43	56.00	46.00	-42.08	-34.57
5	4.07000	10.28	6.61	2.57	16.89	12.85	56.00	46.00	-39.11	-33.15
6	23.58200	10.53	15.51	10.16	26.04	20.69	60.00	50.00	-33.96	-29.31

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.

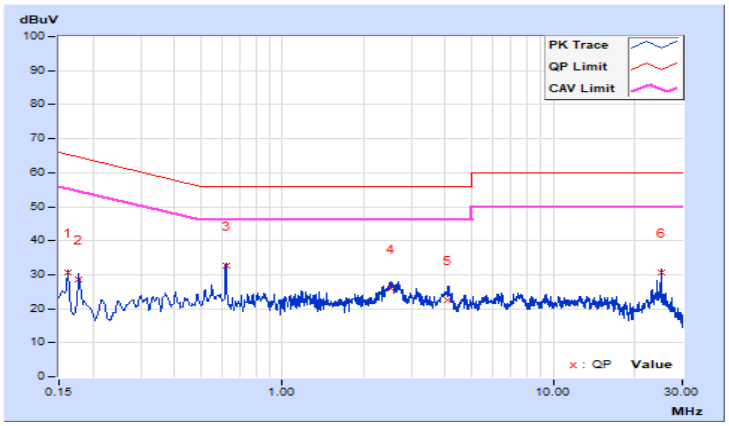


Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A1 (277Vac)		

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	0.16200	10.11	20.54	5.15	30.65	15.26	65.36	55.36	-34.71	-40.10
2	0.17800	10.12	18.64	4.88	28.76	15.00	64.58	54.58	-35.82	-39.58
3	0.61894	10.15	22.51	19.45	32.66	29.60	56.00	46.00	-23.34	-16.40
4	2.53000	10.22	15.64	11.92	25.86	22.14	56.00	46.00	-30.14	-23.86
5	4.09000	10.24	12.17	7.55	22.41	17.79	56.00	46.00	-33.59	-28.21
6	24.99800	10.29	20.42	18.89	30.71	29.18	60.00	50.00	-29.29	-20.82

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.

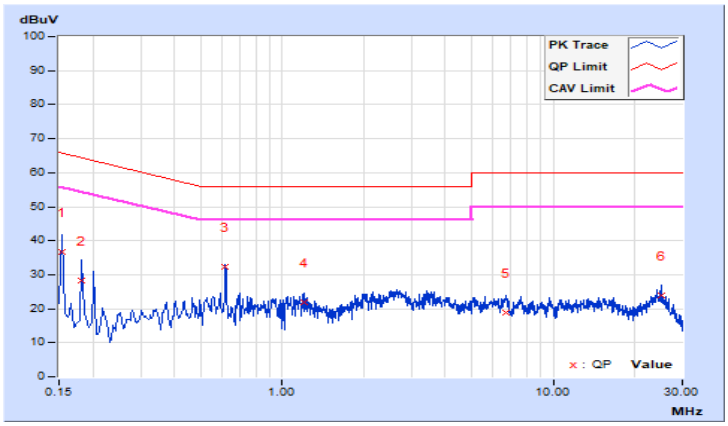


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A1 (277Vac)		

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	0.15400	10.12	26.56	7.77	36.68	17.89	65.78	55.78	-29.10	-37.89
2	0.18200	10.13	18.12	0.77	28.25	10.90	64.39	54.39	-36.14	-43.49
3	0.61800	10.16	22.02	18.64	32.18	28.80	56.00	46.00	-23.82	-17.20
4	1.19800	10.19	11.68	7.67	21.87	17.86	56.00	46.00	-34.13	-28.14
5	6.71400	10.34	8.45	1.06	18.79	11.40	60.00	50.00	-41.21	-38.60
6	25.00200	10.47	13.42	10.19	23.89	20.66	60.00	50.00	-36.11	-29.34

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.

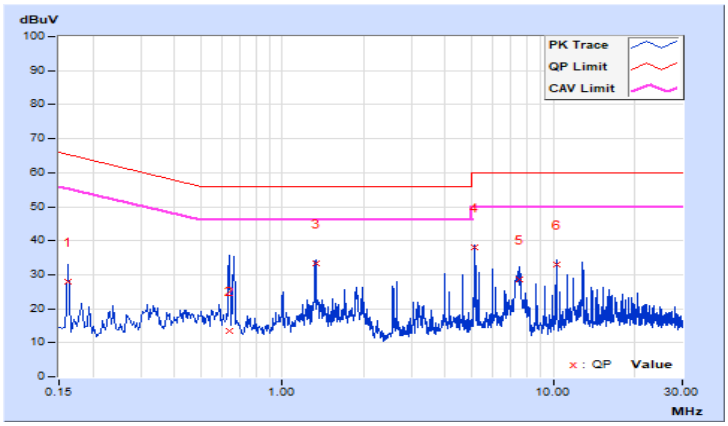


Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A2 (24Vdc)		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16200	10.11	17.69	8.71	27.80	18.82	65.36	55.36	-37.56	-36.54
2	0.63800	10.15	3.44	2.91	13.59	13.06	56.00	46.00	-42.41	-32.94
3	1.32600	10.18	23.30	19.13	33.48	29.31	56.00	46.00	-22.52	-16.69
4	5.13800	10.26	27.81	19.41	38.07	29.67	60.00	50.00	-21.93	-20.33
5	7.51800	10.29	18.25	7.00	28.54	17.29	60.00	50.00	-31.46	-32.71
6	10.30600	10.33	22.65	11.28	32.98	21.61	60.00	50.00	-27.02	-28.39

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.

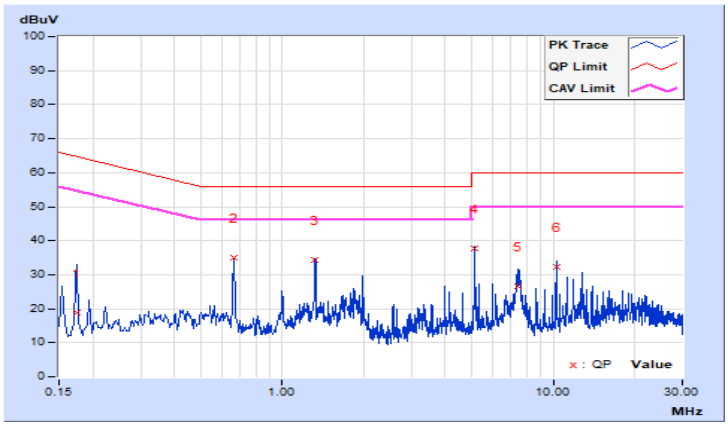


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A2 (24Vdc)		

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	0.17400	10.12	8.81	4.16	18.93	14.28	64.77	54.77	-45.84	-40.49
2	**0.66200**	**10.16**	**24.79**	**21.84**	**34.95**	**32.00**	**56.00**	**46.00**	**-21.05**	**-14.00**
3	1.32532	10.19	24.30	20.99	34.49	31.18	56.00	46.00	-21.51	-14.82
4	5.13000	10.31	27.26	16.80	37.57	27.11	60.00	50.00	-22.43	-22.89
5	7.44600	10.36	16.22	7.70	26.58	18.06	60.00	50.00	-33.42	-31.94
6	10.30200	10.43	22.03	10.52	32.46	20.95	60.00	50.00	-27.54	-29.05

Remarks:

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

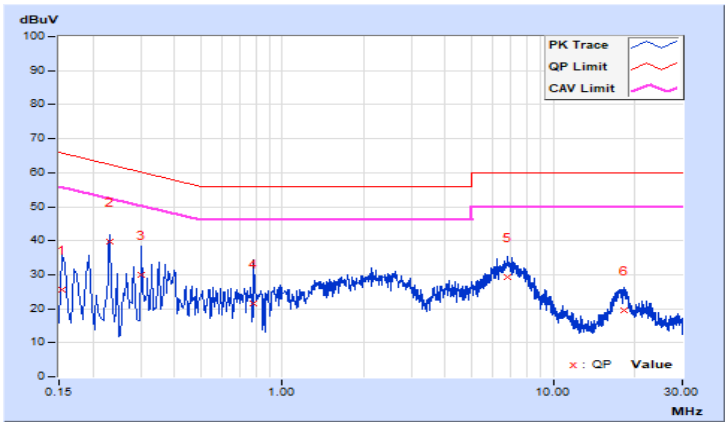


Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A3 (56Vdc)		

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	0.15400	10.11	15.32	13.40	25.43	23.51	65.78	55.78	-40.35	-32.27
2	0.23000	10.13	29.44	2.41	39.57	12.54	62.45	52.45	-22.88	-39.91
3	0.30200	10.14	19.82	1.94	29.96	12.08	60.19	50.19	-30.23	-38.11
4	0.78600	10.16	11.33	1.95	21.49	12.11	56.00	46.00	-34.51	-33.89
5	6.77400	10.28	18.88	4.66	29.16	14.94	60.00	50.00	-30.84	-35.06
6	18.32600	10.45	9.18	2.35	19.63	12.80	60.00	50.00	-40.37	-37.20

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.

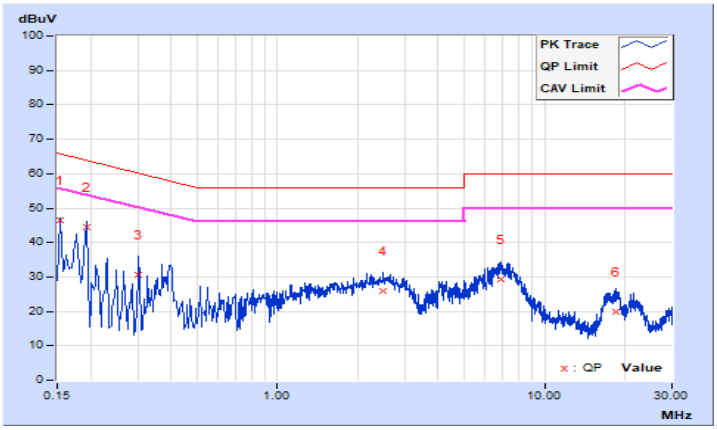


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A3 (56Vdc)		

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	0.15400	10.12	36.32	11.32	46.44	21.44	65.78	55.78	-19.34	-34.34
2	0.19400	10.13	34.22	7.77	44.35	17.90	63.86	53.86	-19.51	-35.96
3	0.30200	10.14	20.55	0.82	30.69	10.96	60.19	50.19	-29.50	-39.23
4	2.49800	10.23	15.80	3.34	26.03	13.57	56.00	46.00	-29.97	-32.43
5	6.89000	10.35	18.84	6.35	29.19	16.70	60.00	50.00	-30.81	-33.30
6	18.41000	10.63	9.11	2.85	19.74	13.48	60.00	50.00	-40.26	-36.52

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.

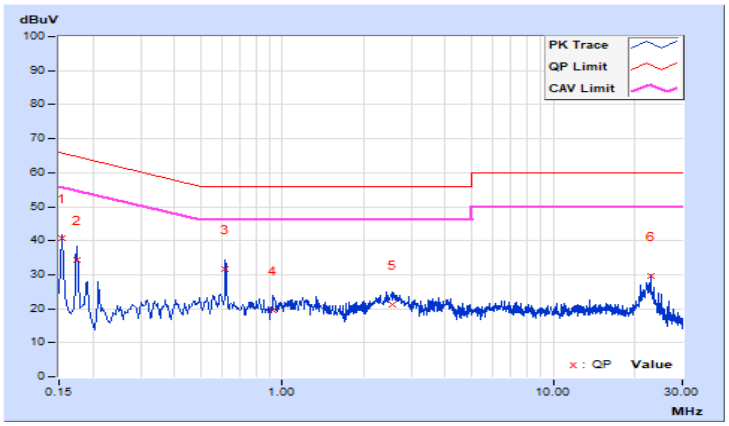


Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B1 (120Vac)		

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	0.15400	10.11	30.55	12.34	40.66	22.45	65.78	55.78	-25.12	-33.33
2	0.17400	10.12	24.33	1.29	34.45	11.41	64.77	54.77	-30.32	-43.36
3	0.61800	10.15	21.44	18.27	31.59	28.42	56.00	46.00	-24.41	-17.58
4	0.92600	10.17	9.32	4.93	19.49	15.10	56.00	46.00	-36.51	-30.90
5	2.55400	10.22	10.85	6.13	21.07	16.35	56.00	46.00	-34.93	-29.65
6	22.94600	10.37	19.40	14.83	29.77	25.20	60.00	50.00	-30.23	-24.80

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.

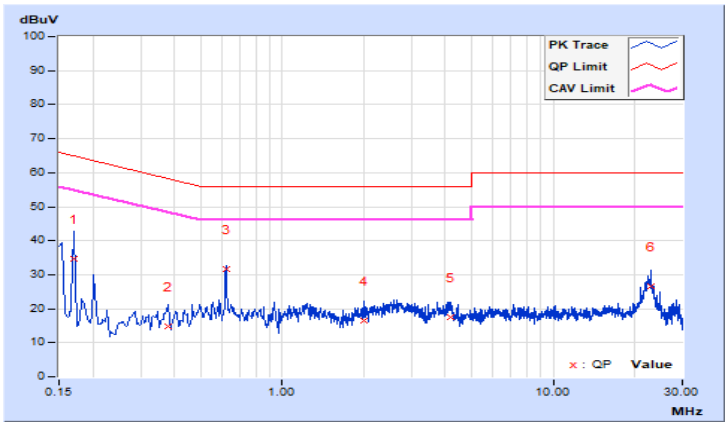


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B1 (120Vac)		

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	0.17000	10.12	24.51	0.49	34.63	10.61	64.96	54.96	-30.33	-44.35
2	0.37800	10.15	4.68	0.11	14.83	10.26	58.32	48.32	-43.49	-38.06
3	0.62200	10.16	21.65	18.63	31.81	28.79	56.00	46.00	-24.19	-17.21
4	2.01400	10.22	6.12	1.43	16.34	11.65	56.00	46.00	-39.66	-34.35
5	4.16600	10.28	7.16	0.70	17.44	10.98	56.00	46.00	-38.56	-35.02
6	22.94200	10.56	16.08	10.70	26.64	21.26	60.00	50.00	-33.36	-28.74

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.

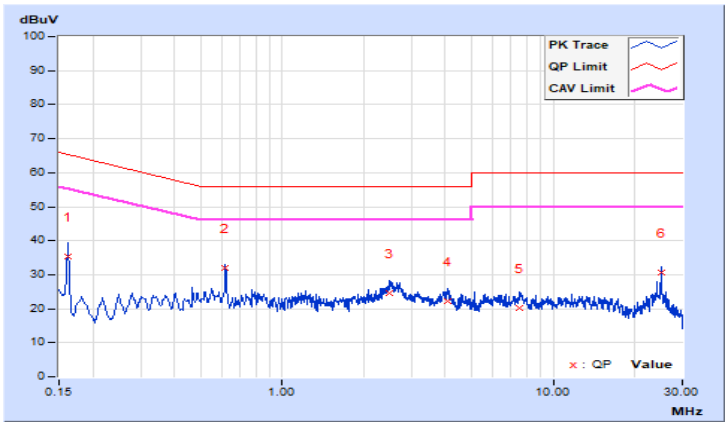


Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B1 (277Vac)		

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	0.16200	10.11	25.29	5.10	35.40	15.21	65.36	55.36	-29.96	-40.15
2	0.61800	10.15	21.69	18.50	31.84	28.65	56.00	46.00	-24.16	-17.35
3	2.49400	10.22	14.37	9.69	24.59	19.91	56.00	46.00	-31.41	-26.09
4	4.05800	10.24	12.07	6.89	22.31	17.13	56.00	46.00	-33.69	-28.87
5	7.47400	10.29	9.87	4.87	20.16	15.16	60.00	50.00	-39.84	-34.84
6	24.99800	10.29	20.45	18.89	30.74	29.18	60.00	50.00	-29.26	-20.82

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.

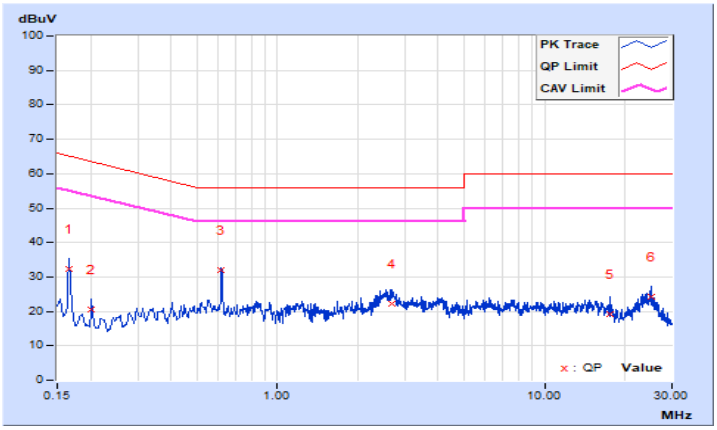


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B1 (277Vac)		

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	0.16600	10.12	22.29	1.65	32.41	11.77	65.16	55.16	-32.75	-43.39
2	0.20200	10.13	10.33	7.41	20.46	17.54	63.53	53.53	-43.07	-35.99
3	0.61800	10.16	21.81	18.55	31.97	28.71	56.00	46.00	-24.03	-17.29
4	2.67000	10.24	12.13	7.87	22.37	18.11	56.00	46.00	-33.63	-27.89
5	17.69400	10.61	8.64	3.35	19.25	13.96	60.00	50.00	-40.75	-36.04
6	25.00200	10.47	13.70	10.28	24.17	20.75	60.00	50.00	-35.83	-29.25

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.

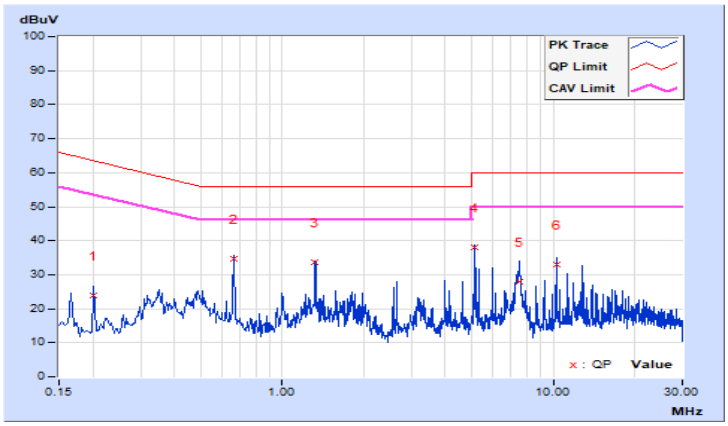


Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B2 (24Vdc)		

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	0.20200	10.13	13.80	6.33	23.93	16.46	63.53	53.53	-39.60	-37.07
2	0.66200	10.15	24.40	21.29	34.55	31.44	56.00	46.00	-21.45	-14.56
3	1.32532	10.18	23.44	19.29	33.62	29.47	56.00	46.00	-22.38	-16.53
4	5.14200	10.26	27.63	19.14	37.89	29.40	60.00	50.00	-22.11	-20.60
5	7.53400	10.29	17.71	6.43	28.00	16.72	60.00	50.00	-32.00	-33.28
6	10.29000	10.33	22.59	10.97	32.92	21.30	60.00	50.00	-27.08	-28.70

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.

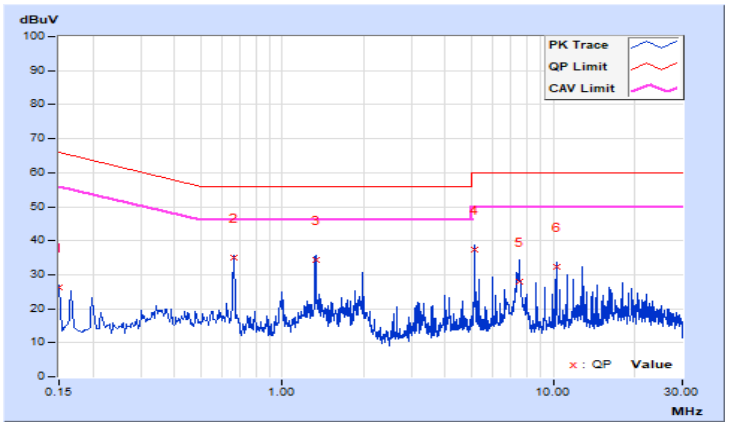


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B2 (24Vdc)		

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	10.12	16.27	3.26	26.39	13.38	66.00	56.00	-39.61	-42.62
2	0.66200	10.16	24.80	21.82	34.96	31.98	56.00	46.00	-21.04	-14.02
3	1.32600	10.19	24.09	20.71	34.28	30.90	56.00	46.00	-21.72	-15.10
4	5.13400	10.31	27.16	16.39	37.47	26.70	60.00	50.00	-22.53	-23.30
5	7.51000	10.36	17.66	6.75	28.02	17.11	60.00	50.00	-31.98	-32.89
6	10.30600	10.43	21.97	10.71	32.40	21.14	60.00	50.00	-27.60	-28.86

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.

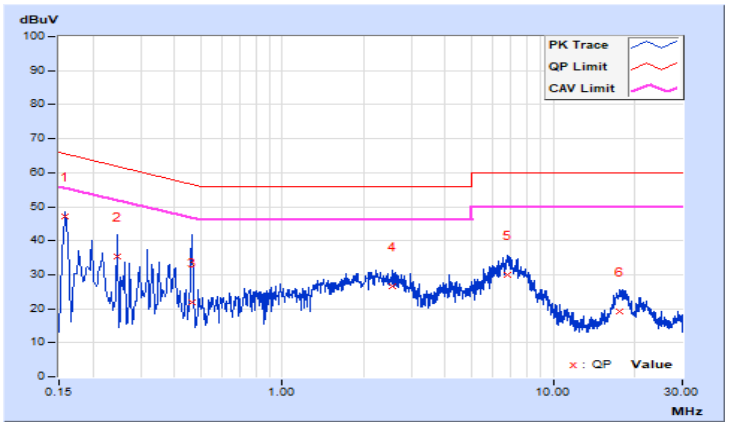


Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B3 (56Vdc)		

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	0.15800	10.11	37.01	11.50	47.12	21.61	65.57	55.57	-18.45	-33.96
2	0.24549	10.13	25.35	1.71	35.48	11.84	61.91	51.91	-26.43	-40.07
3	0.46200	10.14	11.72	3.02	21.86	13.16	56.66	46.66	-34.80	-33.50
4	2.55400	10.22	16.50	3.47	26.72	13.69	56.00	46.00	-29.28	-32.31
5	6.75400	10.28	19.66	6.28	29.94	16.56	60.00	50.00	-30.06	-33.44
6	17.53800	10.44	8.85	2.10	19.29	12.54	60.00	50.00	-40.71	-37.46

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.

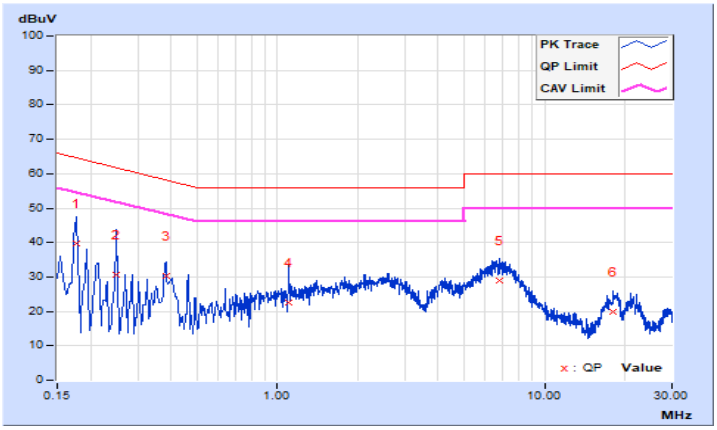


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B3 (56Vdc)		

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	0.17800	10.13	29.64	8.34	39.77	18.47	64.58	54.58	-24.81	-36.11
2	0.25000	10.14	20.39	1.94	30.53	12.08	61.76	51.76	-31.23	-39.68
3	0.38200	10.15	20.28	6.85	30.43	17.00	58.24	48.24	-27.81	-31.24
4	1.10200	10.18	12.41	0.83	22.59	11.01	56.00	46.00	-33.41	-34.99
5	6.78200	10.34	18.73	6.46	29.07	16.80	60.00	50.00	-30.93	-33.20
6	18.15800	10.63	9.16	2.53	19.79	13.16	60.00	50.00	-40.21	-36.84

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.



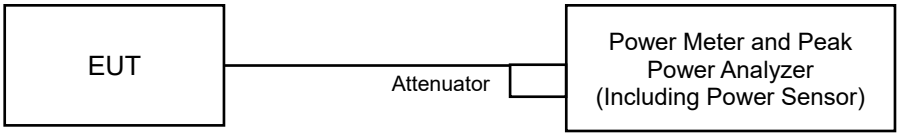
4.3 Transmit Power Measurement

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 ≦ 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 (24 dBm) or 11 dBm+10 log B*
U-NII-2C			250mW (24 dBm) or 11 dBm+10 log B*
U-NII-3	√		1 Watt (30 dBm)

*B is the 26 dB emission bandwidth in megahertz

4.3.2 Test Setup



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

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 and set the detector to average. Duty factor is not added to measured value.

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 lowest, middle and highest channel frequencies individually.

4.3.7 Test Result

Internal antenna: Mode A1

Power Output:

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	4.345	6.38	24.00	Pass
40	5200	2.858	4.56	24.00	Pass
48	5240	2.891	4.61	24.00	Pass
149	5745	1.923	2.84	30.00	Pass
157	5785	5.082	7.06	30.00	Pass
165	5825	2.213	3.45	30.00	Pass

802.11n (HT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	**4.667**	6.69	24.00	Pass
40	5200	3.048	4.84	24.00	Pass
48	5240	3.388	5.30	24.00	Pass
149	5745	2.113	3.25	30.00	Pass
157	5785	**5.105**	7.08	30.00	Pass
165	5825	2.223	3.47	30.00	Pass

802.11n (HT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	2.244	3.51	24.00	Pass
46	5230	4.150	6.18	24.00	Pass
151	5755	1.030	0.13	30.00	Pass
159	5795	2.244	3.51	30.00	Pass

External antenna: Mode B1

Power Output:

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	3.908	5.92	24.00	Pass
40	5200	3.724	5.71	24.00	Pass
48	5240	4.236	6.27	24.00	Pass
149	5745	1.361	1.34	30.00	Pass
157	5785	**4.102**	6.13	30.00	Pass
165	5825	1.671	2.23	30.00	Pass

802.11n (HT20)

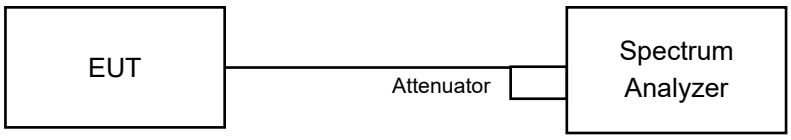
Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	4.345	6.38	24.00	Pass
40	5200	4.256	6.29	24.00	Pass
48	5240	4.178	6.21	24.00	Pass
149	5745	1.384	1.41	30.00	Pass
157	5785	3.707	5.69	30.00	Pass
165	5825	1.614	2.08	30.00	Pass

802.11n (HT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	**4.656**	6.68	24.00	Pass
46	5230	4.581	6.61	24.00	Pass
151	5755	0.588	-2.31	30.00	Pass
159	5795	1.400	1.46	30.00	Pass

4.4 Occupied Bandwidth Measurement

4.4.1 Test Setup



4.4.2 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.4.3 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to sampling. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 %of the total mean power of a given emission.

4.4.4 Test Result

Internal antenna: Mode A1

802.11a

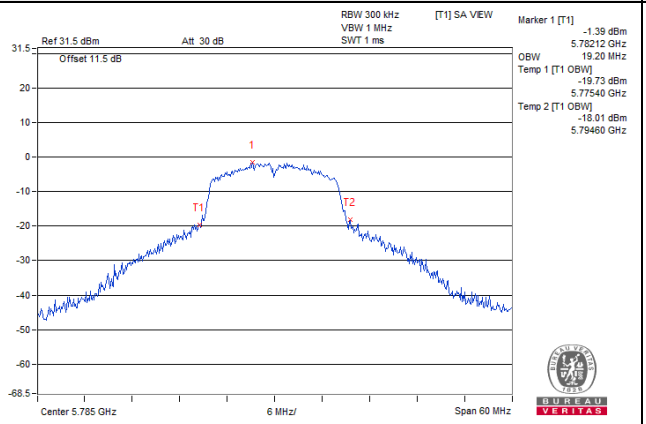
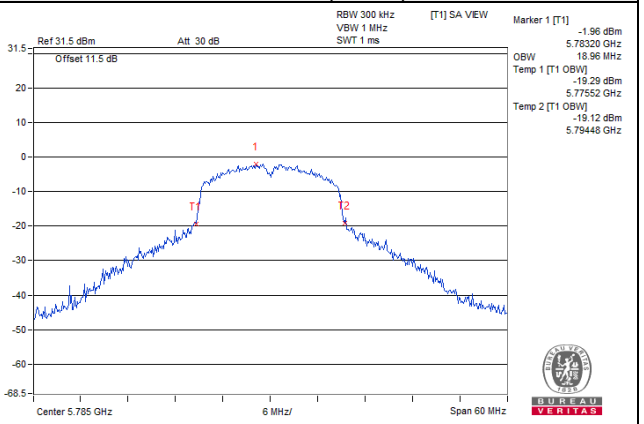
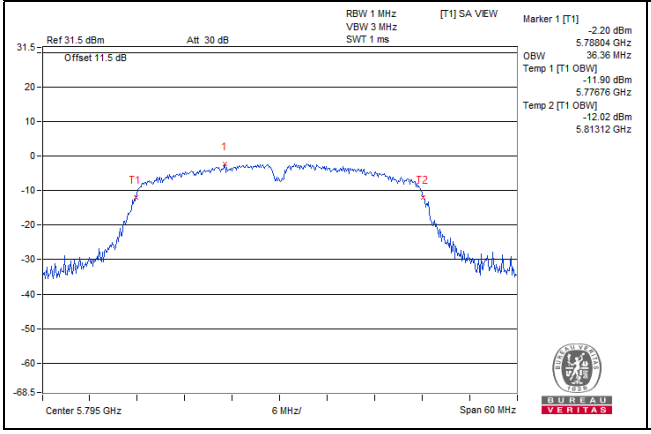
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
36	5180	17.04
40	5200	16.92
48	5240	16.92
149	5745	16.38
157	5785	19.20
165	5825	17.16

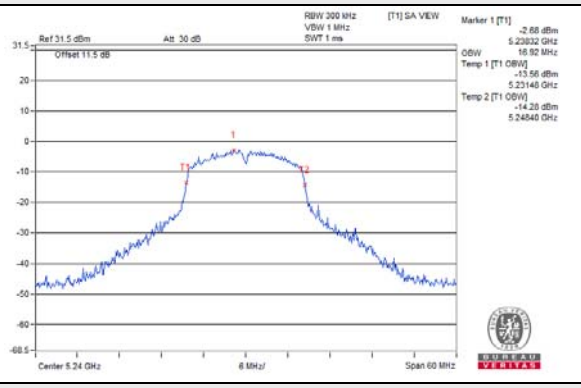
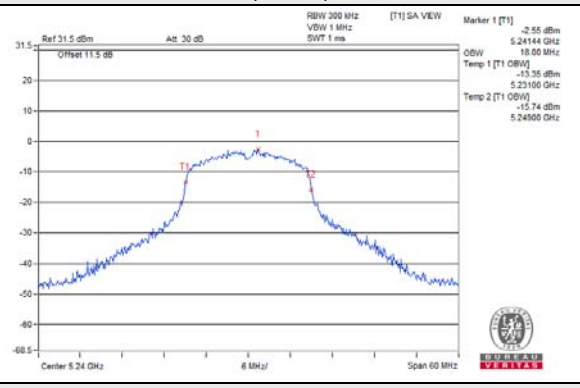
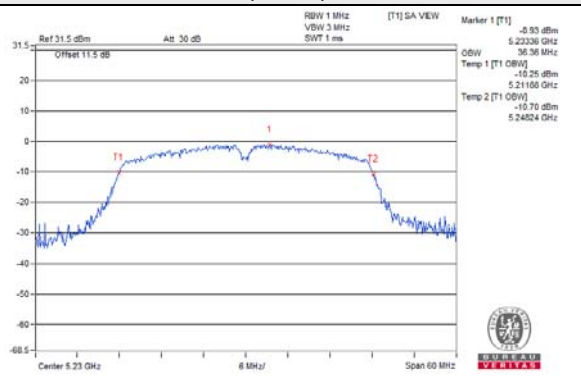
802.11n (HT20)

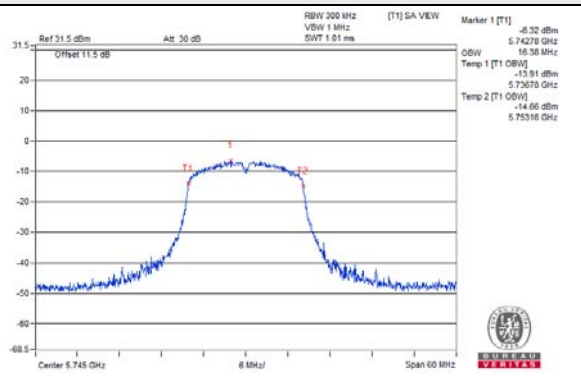
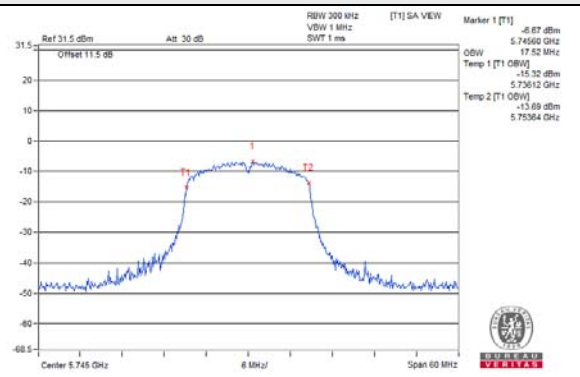
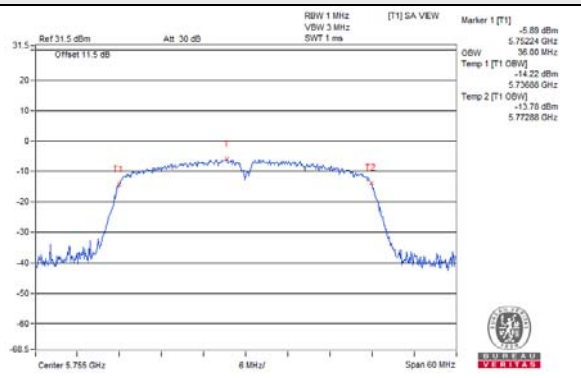
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
36	5180	18.00
40	5200	18.00
48	5240	18.00
149	5745	17.52
157	5785	18.96
165	5825	18.12

802.11n (HT40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
38	5190	36.18
46	5230	36.36
151	5755	36.00
159	5795	36.36

Spectrum Plot of Worst Value	
802.11a	802.11n (HT20)
	
802.11n (HT40)	
	

Spectrum Plot for near By DFS Band	
802.11a / CH 48	802.11n (HT20) / CH 48
	
802.11n (HT40) / CH 46	
	

Spectrum Plot for near By DFS Band	
802.11a / CH 149	802.11n (HT20) / CH 149
	
802.11n (HT40) / CH 151	
	

External antenna: Mode B1

802.11a

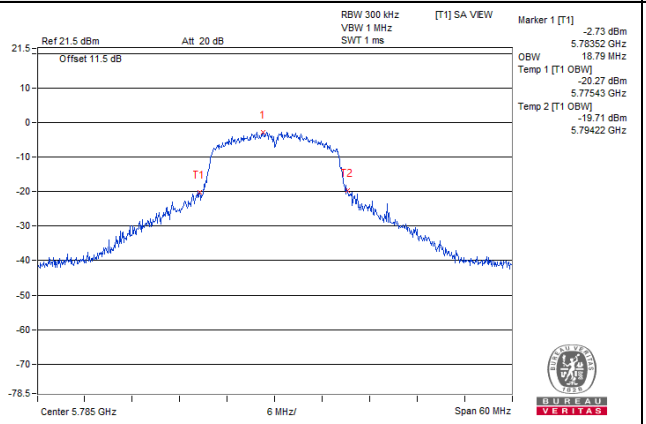
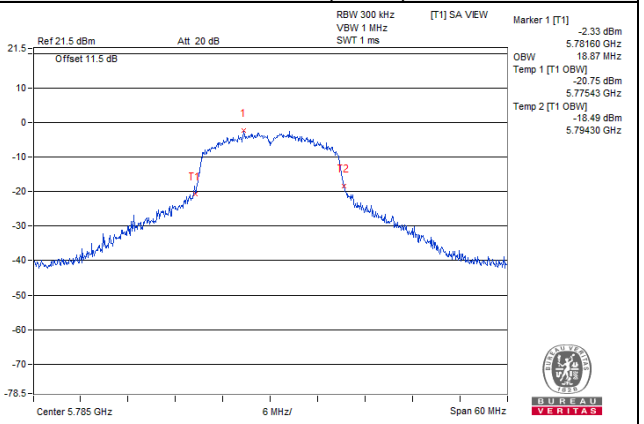
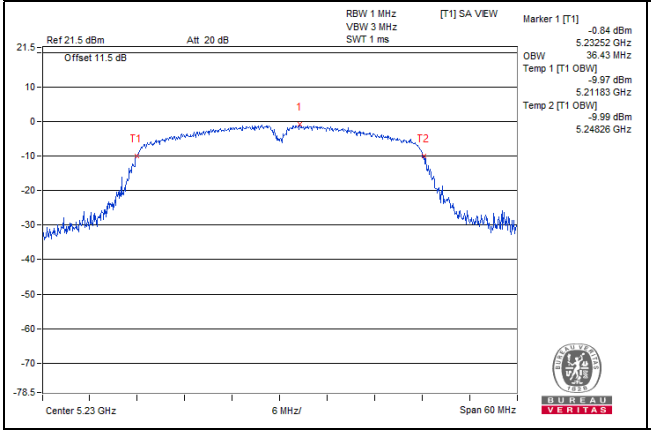
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
36	5180	16.86
40	5200	16.86
48	5240	16.86
149	5745	16.43
157	5785	18.79
165	5825	17.04

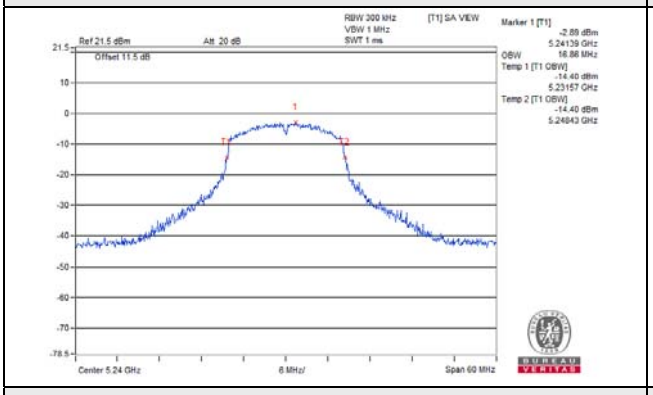
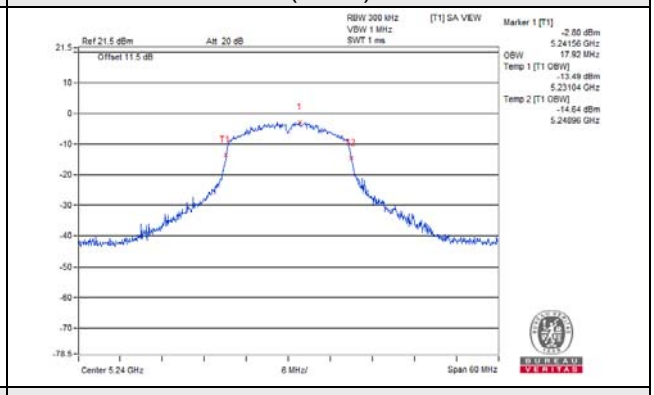
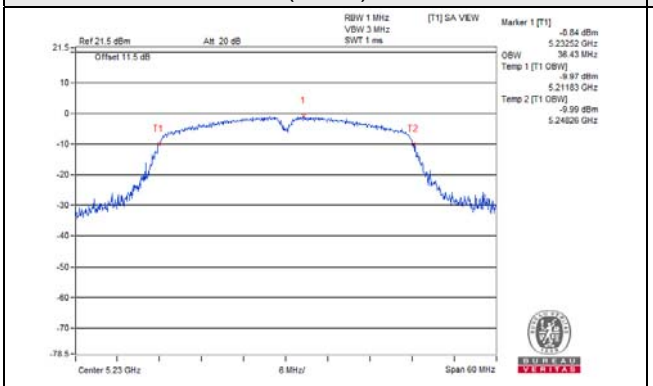
802.11n (HT20)

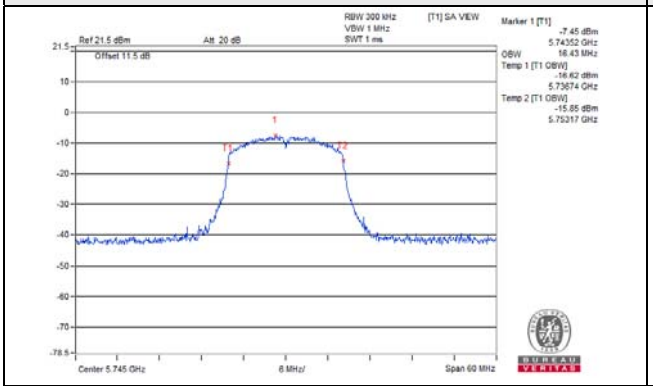
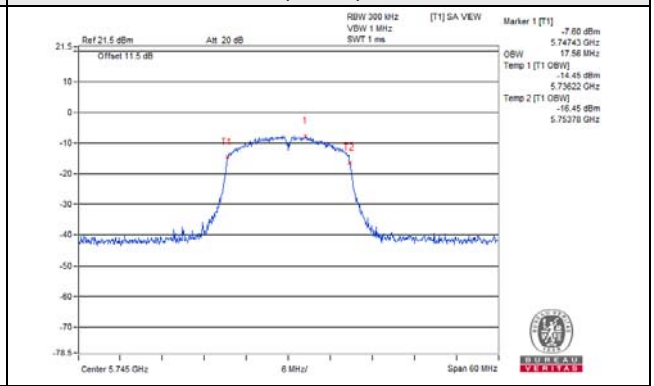
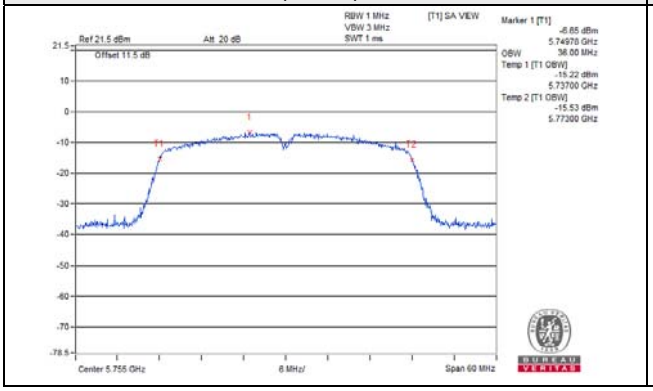
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
36	5180	17.92
40	5200	17.92
48	5240	17.92
149	5745	17.56
157	5785	18.87
165	5825	18.08

802.11n (HT40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
38	5190	36.26
46	5230	36.43
151	5755	36.00
159	5795	36.26

Spectrum Plot of Worst Value	
802.11a	802.11n (HT20)
	
802.11n (HT40)	
	

Spectrum Plot for near By DFS Band	
802.11a / CH 48	802.11n (HT20) / CH 48
	
802.11n (HT40) / CH 46	
	

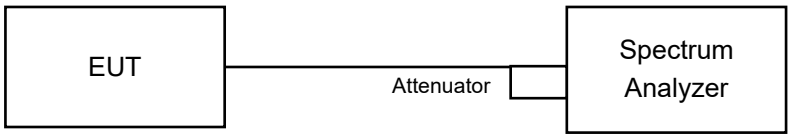
Spectrum Plot for near By DFS Band	
802.11a / CH 149	802.11n (HT20) / CH 149
	
802.11n (HT40) / CH 151	
	

4.5 Peak Power Spectral Density Measurement

4.5.1 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

4.5.2 Test Setup



4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.5.4 Test Procedures

For U-NII-1 band:

Using method SA-2

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.

b. Set RBW = 1MHz, Set VBW ≥ 3 MHz, Detector = RMS

c. Set Channel power measure = 1MHz

d. Sweep time = auto, trigger set to “free run”.

e. Trace average at least 100 traces in power averaging mode.

f. Record the max value and add 10 log (1/duty cycle)

For U-NII-3 band:

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.

b. Set RBW = 300 kHz, Set VBW ≥ 1 MHz, Detector = RMS

c. Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.

d. Scale the observed power level to an equivalent value in 500 kHz by adjusting (increasing) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log(500 kHz / 300 kHz)

e. Sweep time = auto, trigger set to “free run”.

f. Trace average at least 100 traces in power averaging mode.

g. Record the max value and add 10 log (1/duty cycle)

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Conditions

Same as 4.3.6.

4.5.7 Test Results

Internal antenna: Mode A1

For U-NII-1 band:

802.11a

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
36	5180	-6.90	0.20	-6.70	11.00	Pass
40	5200	-7.04	0.20	-6.84	11.00	Pass
48	5240	-6.68	0.20	-6.48	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

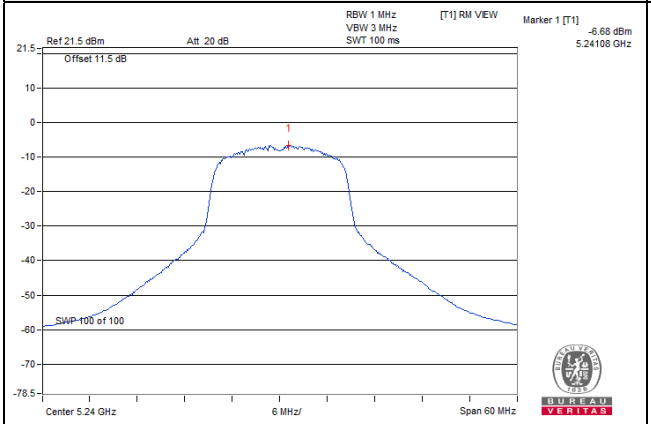
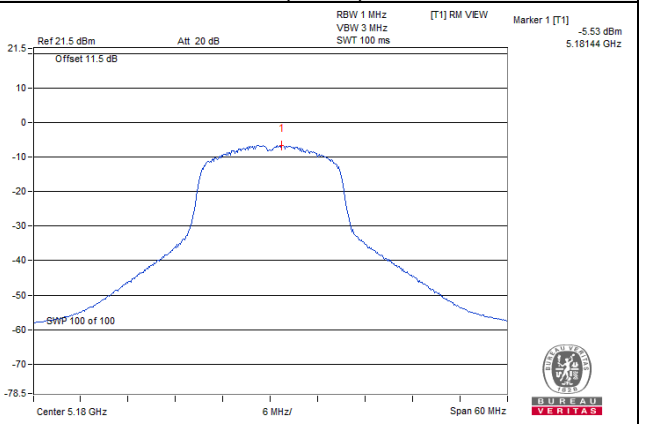
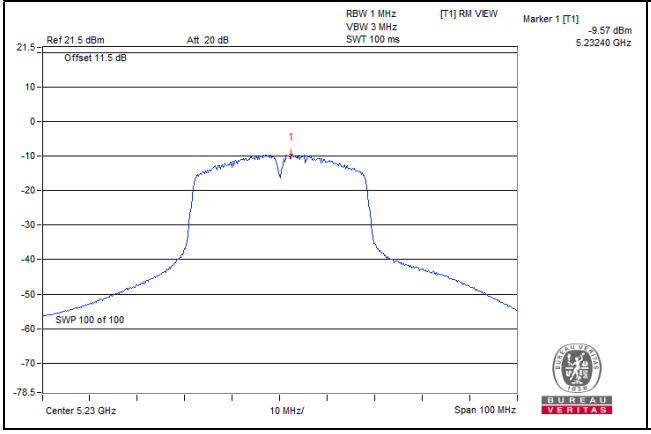
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
36	5180	-5.53	0.21	-5.32	11.00	Pass
40	5200	-6.66	0.21	-6.45	11.00	Pass
48	5240	-6.64	0.21	-6.43	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
38	5190	-12.44	0.38	-12.06	11.00	Pass
46	5230	-9.57	0.38	-9.19	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a / Ch48	802.11n (HT20) / Ch36
	
802.11n (HT40) / Ch46	
	

For U-NII-3 band:

802.11a

Chan.	Freq. (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		(dBm/300kHz)	(dBm/500kHz)				
149	5745	-13.98	-11.76	0.20	-11.56	30.00	Pass
157	5785	-9.14	-6.92	0.20	-6.72	30.00	Pass
165	5825	-12.44	-10.22	0.20	-10.02	30.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

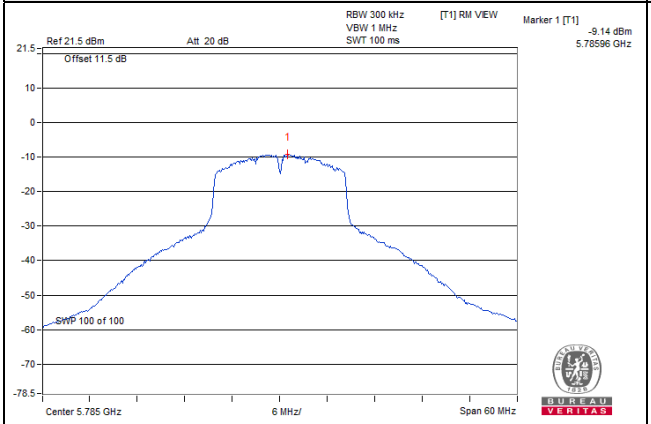
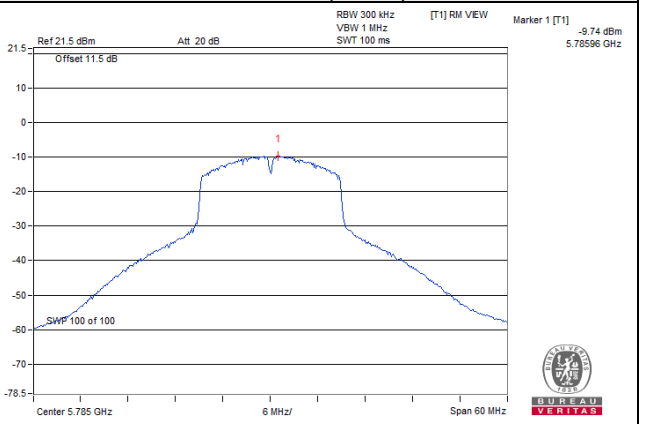
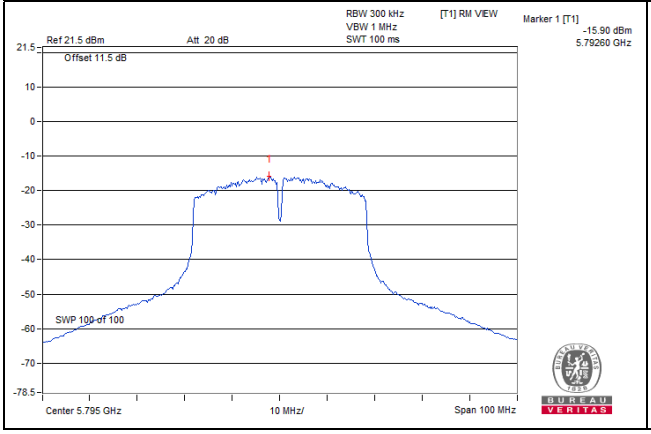
Chan.	Freq. (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		(dBm/300kHz)	(dBm/500kHz)				
149	5745	-14.16	-11.94	0.21	-11.73	30.00	Pass
157	5785	-9.74	-7.52	0.21	-7.31	30.00	Pass
165	5825	-12.51	-10.29	0.21	-10.08	30.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

Chan.	Freq. (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		(dBm/300kHz)	(dBm/500kHz)				
151	5755	-19.92	-17.70	0.38	-17.32	30.00	Pass
159	5795	-15.90	-13.68	0.38	-13.30	30.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a	802.11n (HT20)
	
802.11n (HT40)	
	

External antenna: Mode B1

For U-NII-1 band:

802.11a

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
36	5180	-4.97	0.19	-4.78	11.00	Pass
40	5200	-4.87	0.19	-4.68	11.00	Pass
48	5240	-5.13	0.19	-4.94	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

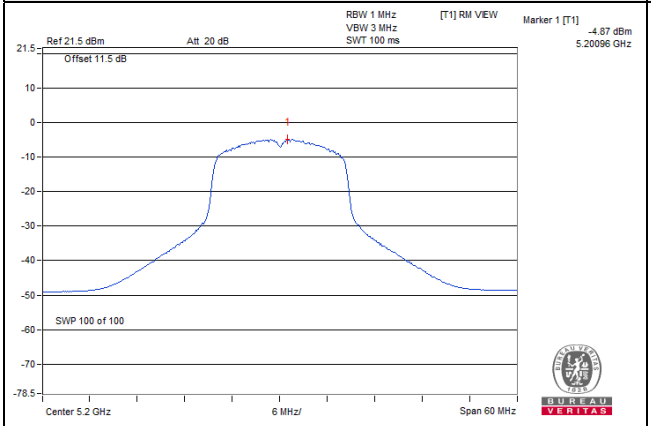
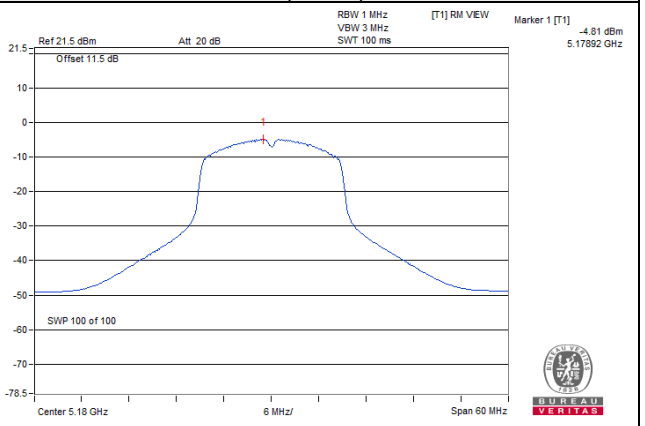
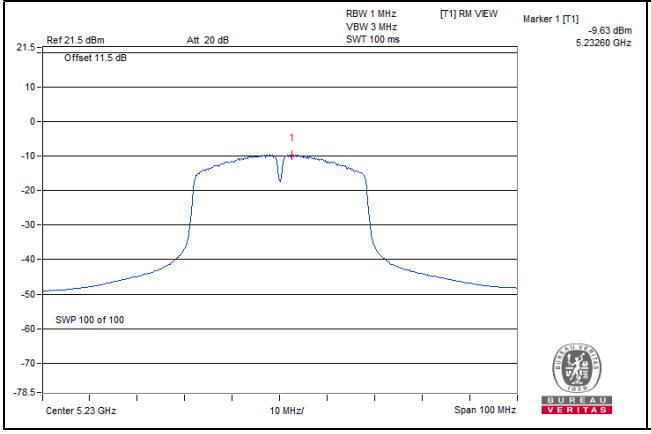
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
36	5180	-4.81	0.19	-4.62	11.00	Pass
40	5200	-4.96	0.19	-4.77	11.00	Pass
48	5240	-5.28	0.19	-5.09	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
38	5190	-13.01	0.36	-12.65	11.00	Pass
46	5230	-9.63	0.36	-9.27	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a / Ch40	802.11n (HT20) / Ch36
	
802.11n (HT40) / Ch46	
	

For U-NII-3 band:

802.11a

Chan.	Freq. (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		(dBm/300kHz)	(dBm/500kHz)				
149	5745	-19.31	-17.09	0.19	-16.90	30.00	Pass
157	5785	-14.68	-12.46	0.19	-12.27	30.00	Pass
165	5825	-18.74	-16.52	0.19	-16.33	30.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

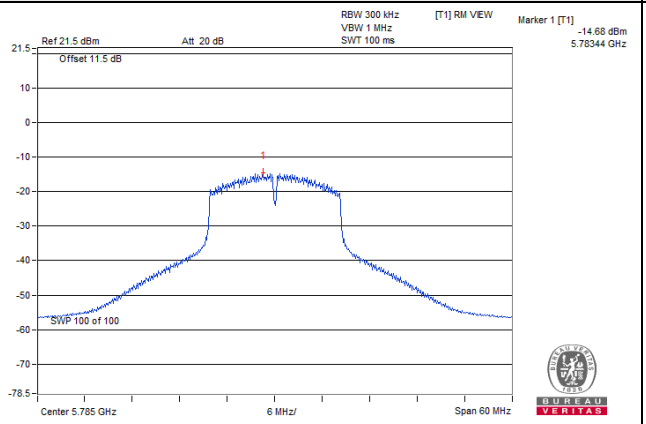
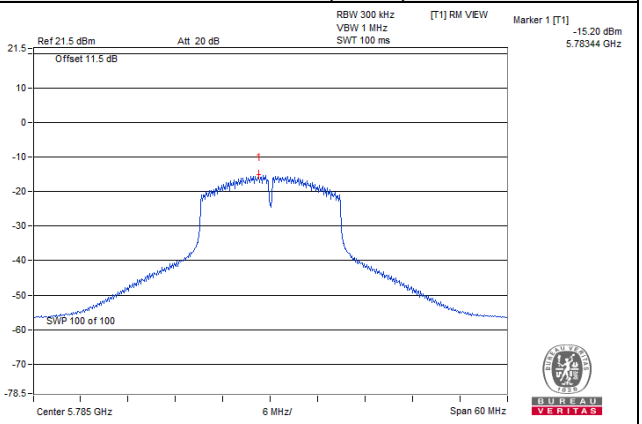
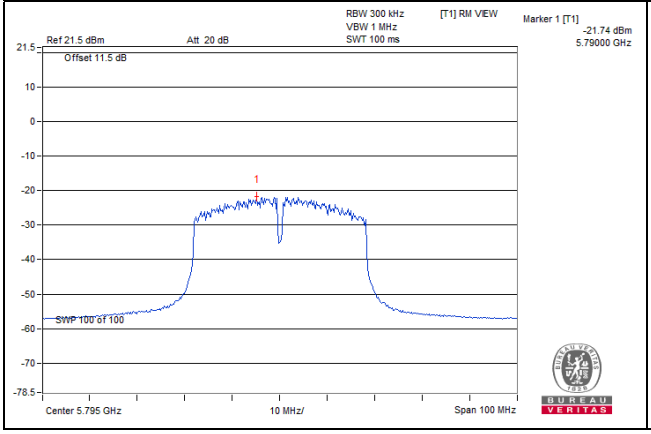
Chan.	Freq. (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		(dBm/300kHz)	(dBm/500kHz)				
149	5745	-19.34	-17.12	0.19	-16.93	30.00	Pass
157	5785	-15.20	-12.98	0.19	-12.79	30.00	Pass
165	5825	-18.78	-16.56	0.19	-16.37	30.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

Chan.	Freq. (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		(dBm/300kHz)	(dBm/500kHz)				
151	5755	-25.13	-22.91	0.36	-22.55	30.00	Pass
159	5795	-21.74	-19.52	0.36	-19.16	30.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

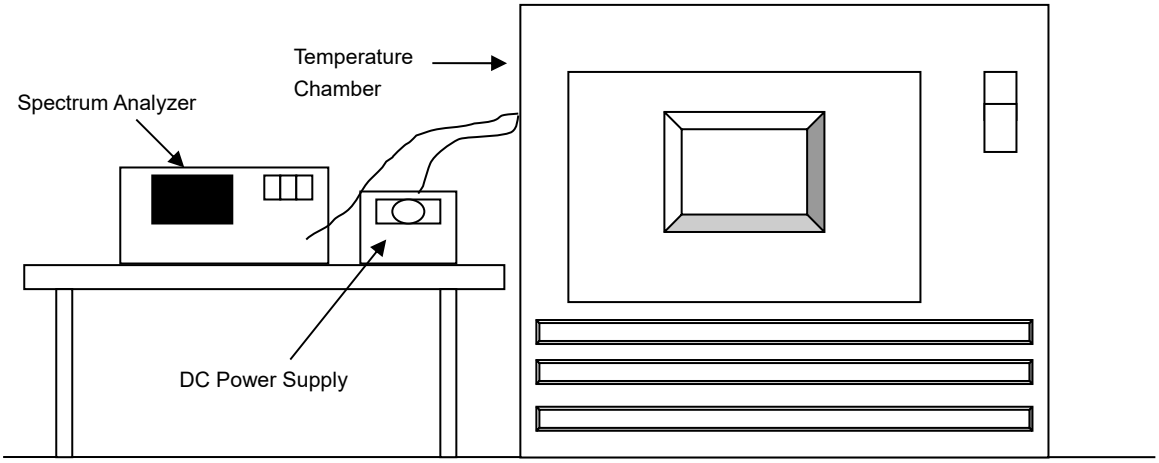
Spectrum Plot of Worst Value	
802.11a	802.11n (HT20)
	
802.11n (HT40)	
	

4.6 Frequency Stability

4.6.1 Limits of Frequency Stability Measurement

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

4.6.2 Test Setup



4.6.3 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100040	Sep. 15, 2021	Sep. 14, 2022
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 01, 2021	May 31, 2022
Three-phase coupling / decoupling network TESEQ	CDN 3063	4006	Mar. 10, 2021	Mar. 09, 2022
DC Power Supply Topward	6306A	727263	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested date: Sep. 15, 2021

4.6.4 Test Procedure

a. The EUT was placed inside the environmental test chamber and powered by nominal DC 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 (d) with the temperature chamber set to the next desired temperature until measurements down to the lowest specified temperature have been completed.

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.

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

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

4.6.7 Test Results

Internal antenna:

Frequency Stability Versus Temp.									
Operating Frequency: 5180MHz									
Temp. (℃)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
70	24	5179.9771	PASS	5179.976	PASS	5179.9781	PASS	5179.9786	PASS
60	24	5179.9842	PASS	5179.9862	PASS	5179.9827	PASS	5179.9853	PASS
50	24	5180.0226	PASS	5180.0234	PASS	5180.0196	PASS	5180.0208	PASS
40	24	5179.9735	PASS	5179.9751	PASS	5179.9762	PASS	5179.9782	PASS
30	24	5179.9923	PASS	5179.9918	PASS	5179.9951	PASS	5179.9938	PASS
20	24	5179.988	PASS	5179.9889	PASS	5179.9855	PASS	5179.9868	PASS
10	24	5179.9801	PASS	5179.982	PASS	5179.9824	PASS	5179.9801	PASS
0	24	5179.9945	PASS	5179.9905	PASS	5179.9912	PASS	5179.9943	PASS
-10	24	5180.0125	PASS	5180.0132	PASS	5180.0127	PASS	5180.0131	PASS
-20	24	5180.0171	PASS	5180.0179	PASS	5180.0195	PASS	5180.0182	PASS
-25	24	5179.9829	PASS	5179.9868	PASS	5179.9847	PASS	5179.9842	PASS

Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. (℃)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	27.6	5179.987	PASS	5179.989	PASS	5179.9848	PASS	5179.9862	PASS
	24	5179.988	PASS	5179.9889	PASS	5179.9855	PASS	5179.9868	PASS
	20.4	5179.9875	PASS	5179.9899	PASS	5179.9845	PASS	5179.9869	PASS

External antenna:

Frequency Stability Versus Temp.									
Operating Frequency: 5180MHz									
Temp. (℃)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
70	24	5179.9807	PASS	5179.9789	PASS	5179.9779	PASS	5179.9775	PASS
60	24	5179.9877	PASS	5179.9834	PASS	5179.9831	PASS	5179.9867	PASS
50	24	5179.9948	PASS	5179.995	PASS	5179.993	PASS	5179.994	PASS
40	24	5179.9979	PASS	5179.9995	PASS	5180.0006	PASS	5179.9975	PASS
30	24	5179.9981	PASS	5180.0002	PASS	5179.9954	PASS	5179.9979	PASS
20	24	5180.0225	PASS	5180.0251	PASS	5180.027	PASS	5180.0229	PASS
10	24	5180.0182	PASS	5180.0189	PASS	5180.0174	PASS	5180.0209	PASS
0	24	5180.0242	PASS	5180.0243	PASS	5180.0232	PASS	5180.0214	PASS
-10	24	5180.0157	PASS	5180.0147	PASS	5180.0139	PASS	5180.0151	PASS
-20	24	5180.0081	PASS	5180.0108	PASS	5180.0119	PASS	5180.0119	PASS
-25	24	5179.9734	PASS	5179.9732	PASS	5179.9731	PASS	5179.9767	PASS

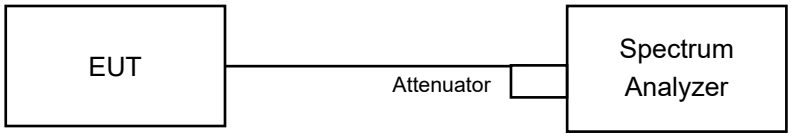
Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. (℃)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	27.6	5180.015	PASS	5180.0169	PASS	5180.0181	PASS	5180.0169	PASS
	24	5180.0225	PASS	5180.0251	PASS	5180.027	PASS	5180.0229	PASS
	20.4	5180.0279	PASS	5180.0315	PASS	5180.0284	PASS	5180.0291	PASS

4.7 6dB Bandwidth Measurement

4.7.1 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

4.7.2 Test Setup



4.7.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.7.4 Test Procedure

a. Set resolution bandwidth (RBW) = 100kHz
b. Set the video bandwidth (VBW) ≥ 3 x RBW, Detector = Peak.
c. Trace mode = max hold.
d. Sweep = auto couple.
e. Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

4.7.5 Deviation from Test Standard

No deviation.

4.7.6 EUT Operating Condition

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.7.7 Test Results

Internal antenna: Mode A1

802.11a

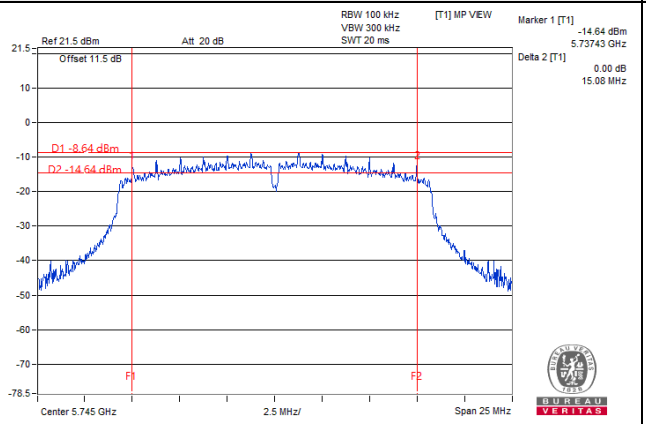
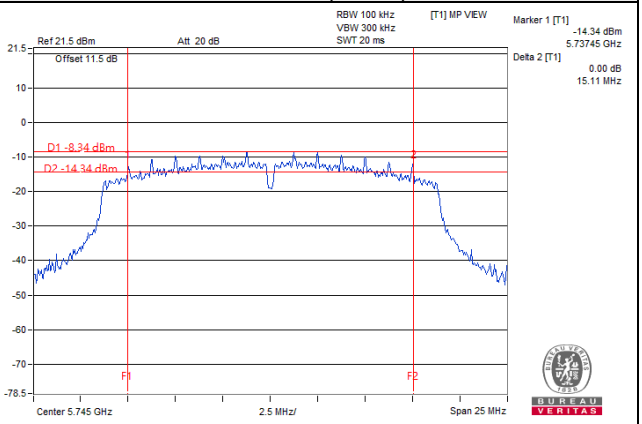
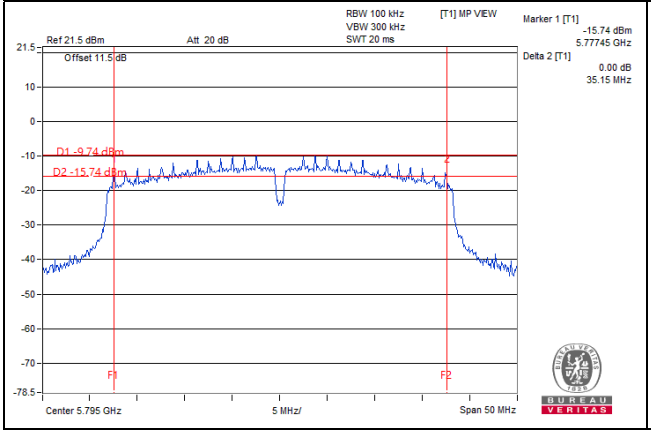
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
149	5745	15.08	0.5	Pass
157	5785	15.14	0.5	Pass
165	5825	15.12	0.5	Pass

802.11n (HT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
149	5745	15.11	0.5	Pass
157	5785	15.16	0.5	Pass
165	5825	15.15	0.5	Pass

802.11n (HT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
151	5755	35.17	0.5	Pass
159	5795	35.15	0.5	Pass

Spectrum Plot of Worst Value	
802.11a	802.11n (HT20)
	
802.11n (HT40)	
	

External antenna: Mode B1

802.11a

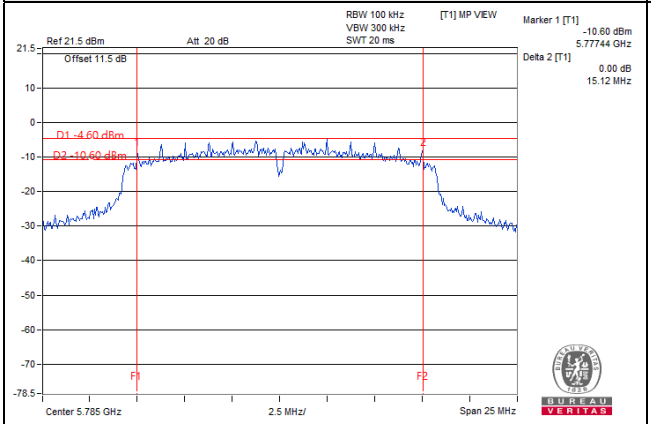
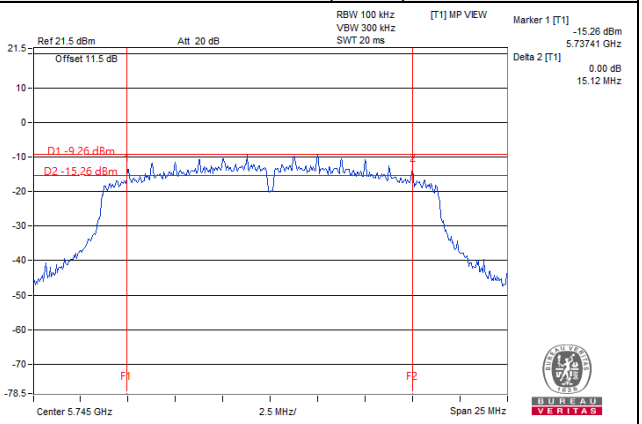
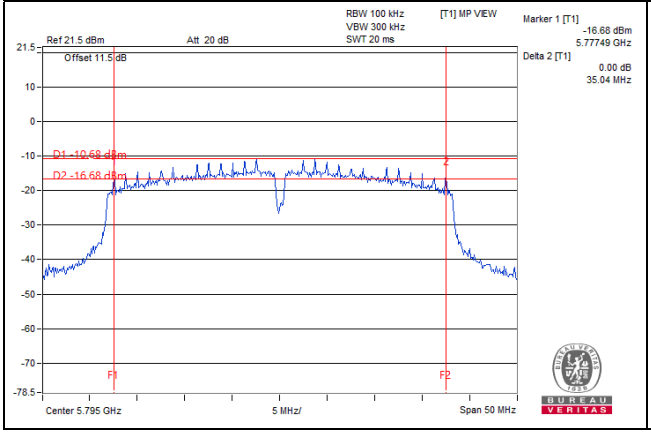
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
149	5745	15.13	0.5	Pass
157	5785	15.12	0.5	Pass
165	5825	15.15	0.5	Pass

802.11n (HT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
149	5745	15.12	0.5	Pass
157	5785	15.15	0.5	Pass
165	5825	15.14	0.5	Pass

802.11n (HT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
151	5755	35.14	0.5	Pass
159	5795	35.04	0.5	Pass

Spectrum Plot of Worst Value	
802.11a	802.11n (HT20)
	
802.11n (HT40)	
	

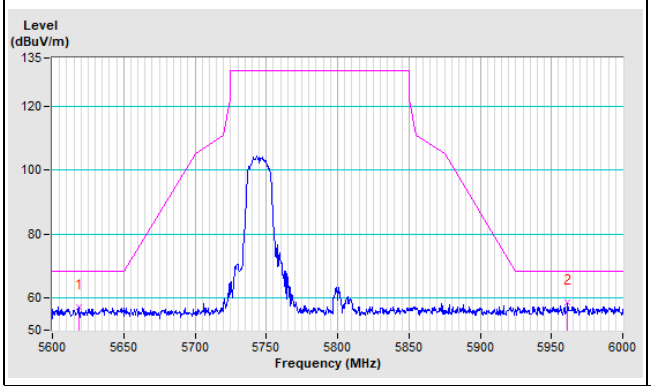
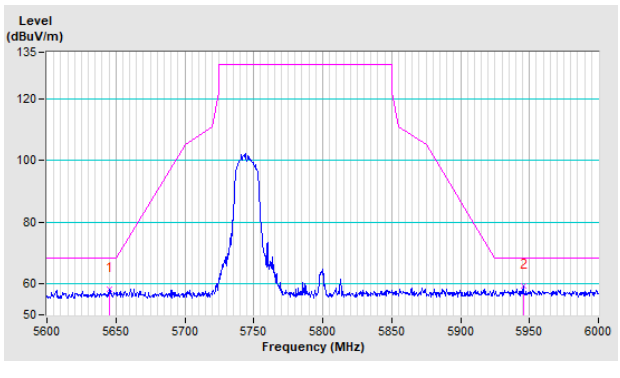
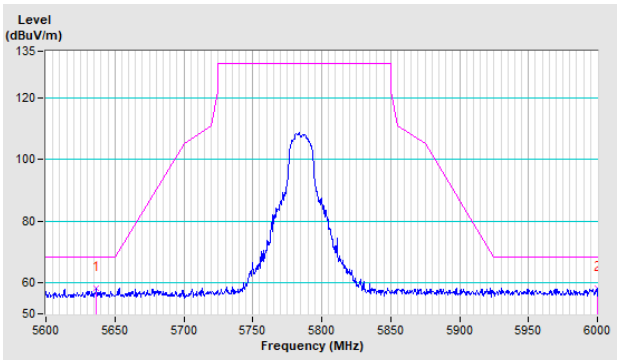
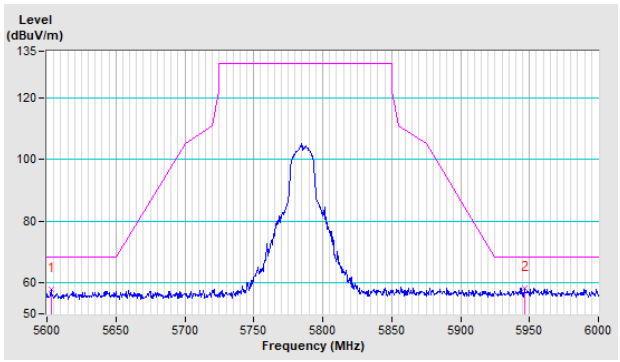
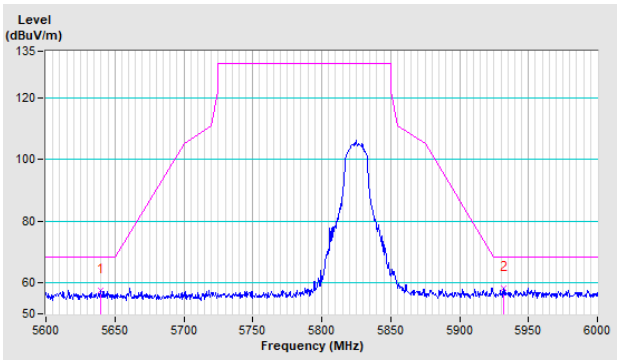
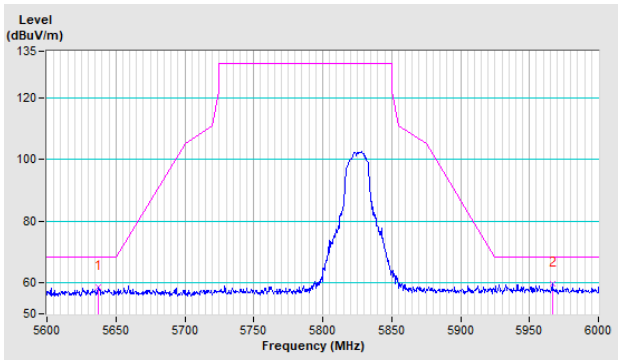
5 Pictures of Test Arrangements

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

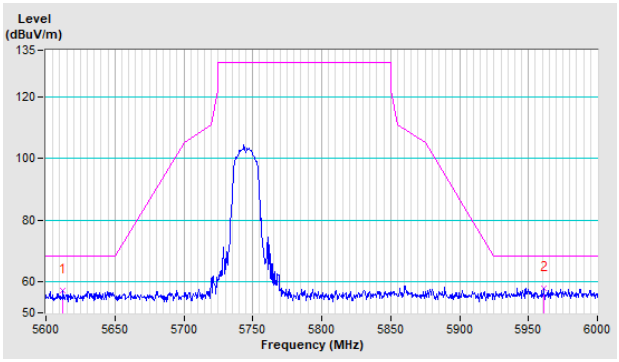
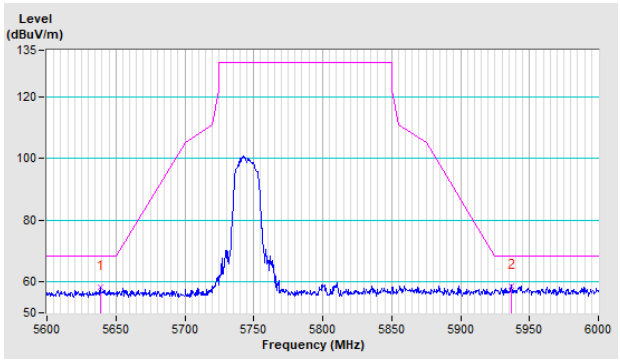
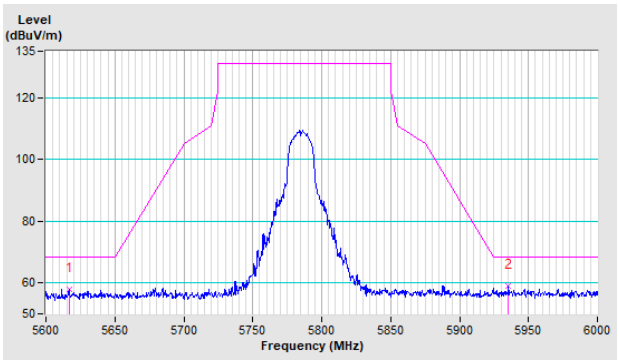
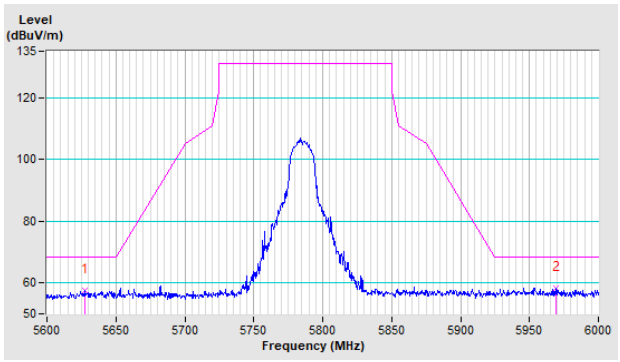
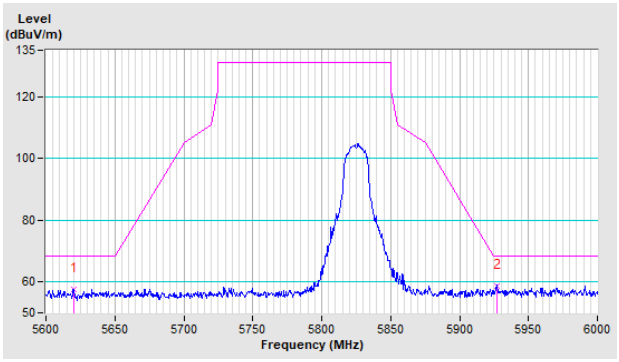
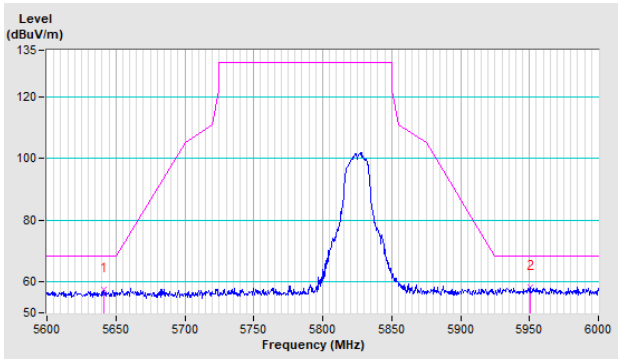
Annex A- Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band)

Internal antenna: Mode A1

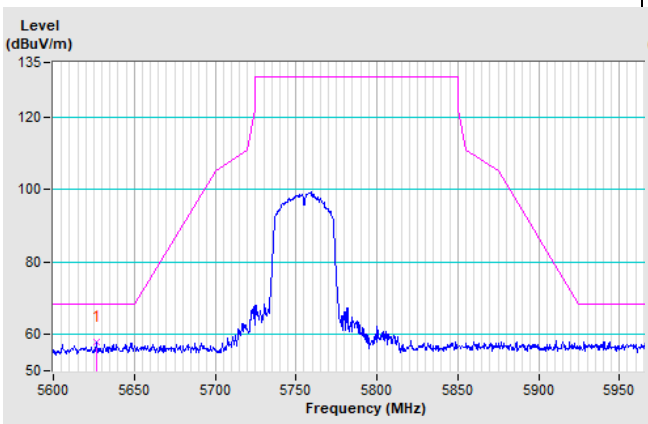
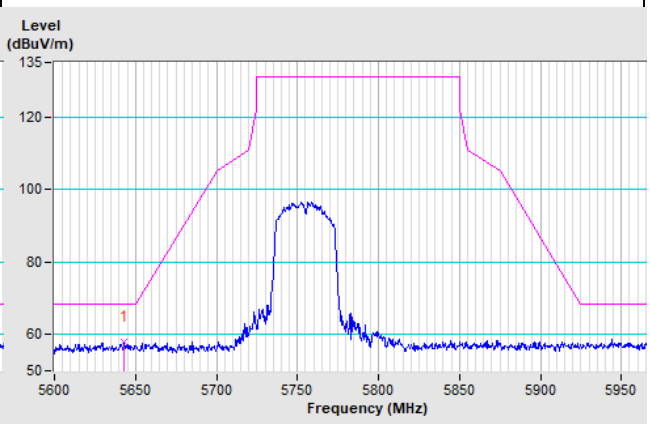
802.11a

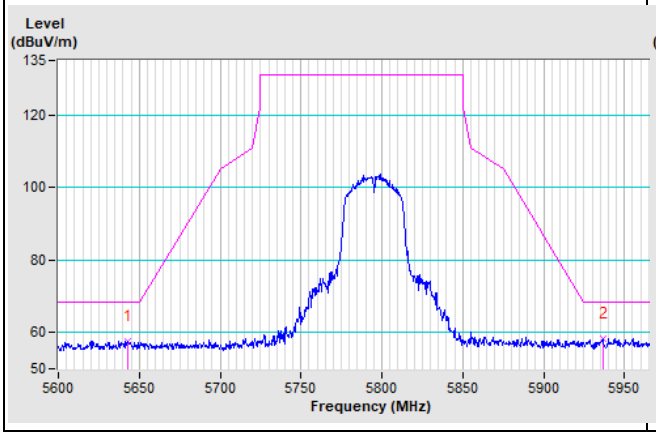
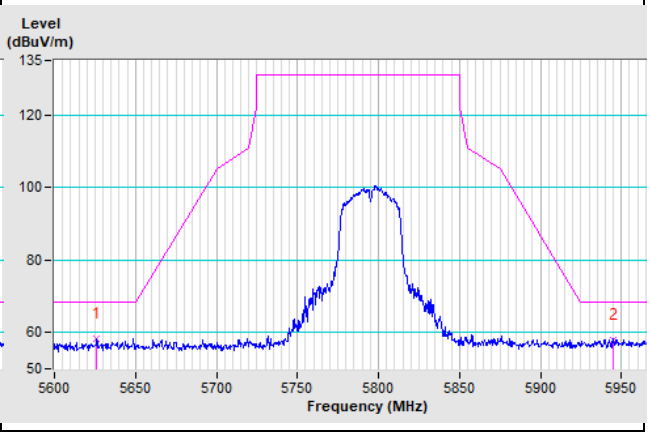
CH149	
Horizontal	Vertical
	
CH157	
Horizontal	Vertical
	
CH165	
Horizontal	Vertical
	

802.11n (HT20)

CH149	
Horizontal	Vertical
	
CH157	
Horizontal	Vertical
	
CH165	
Horizontal	Vertical
	

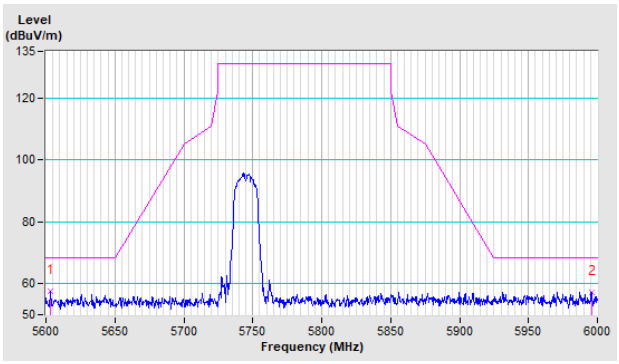
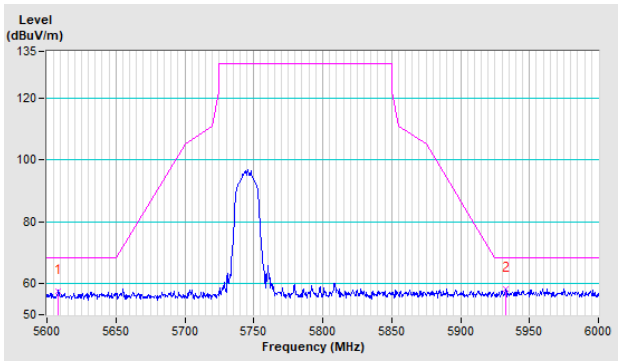
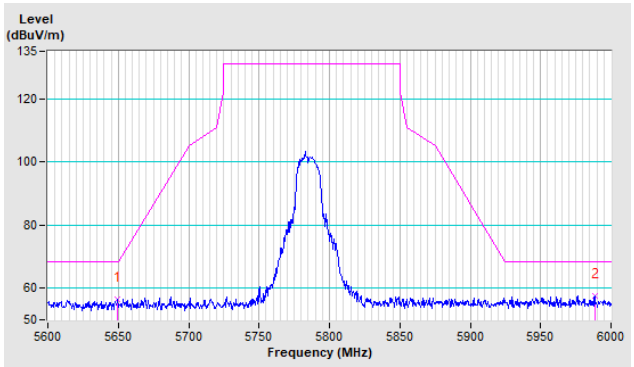
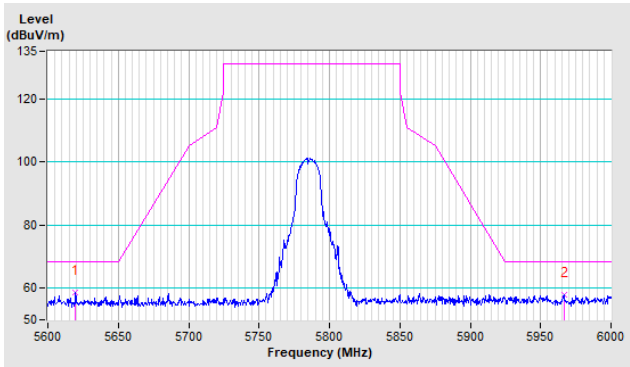
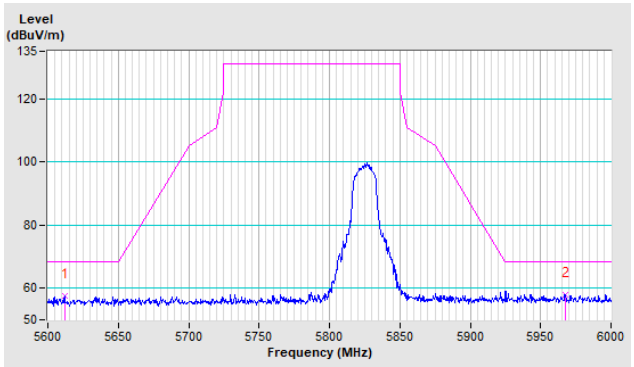
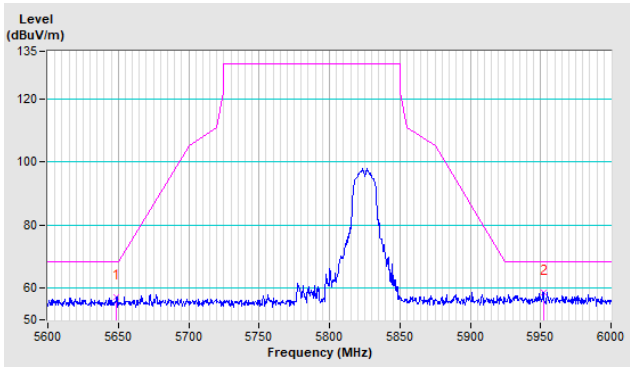
802.11n (HT40)

CH151	
Horizontal	Vertical
	

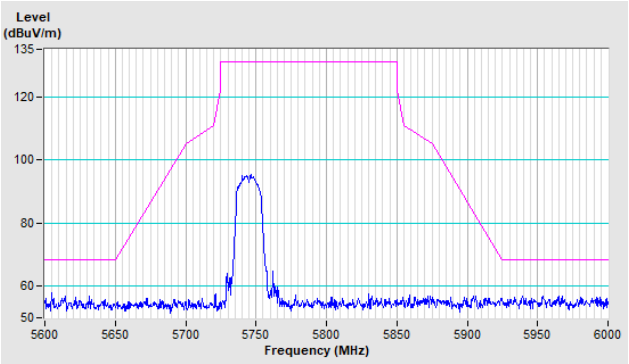
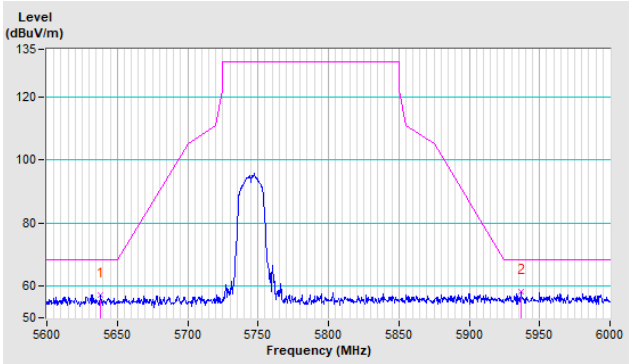
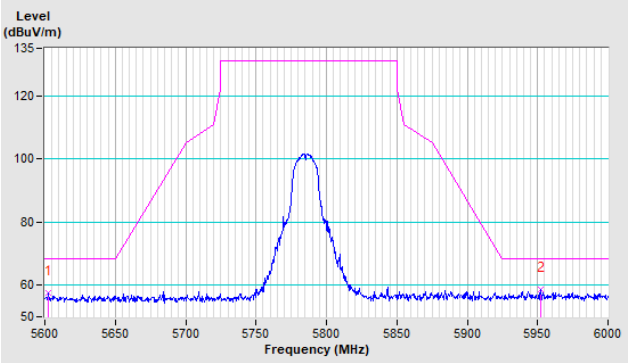
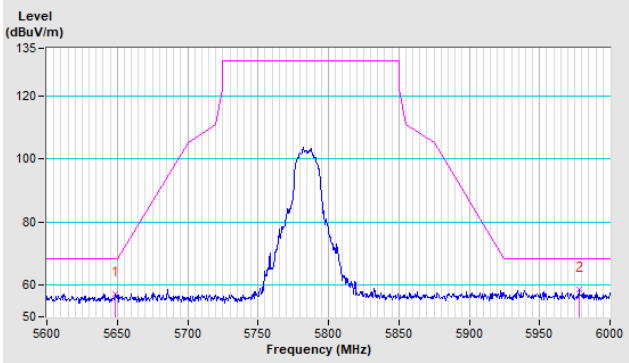
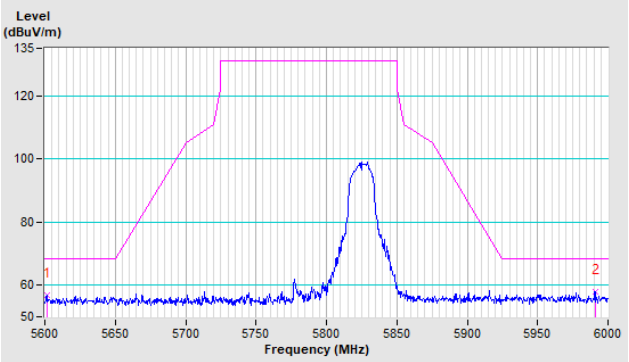
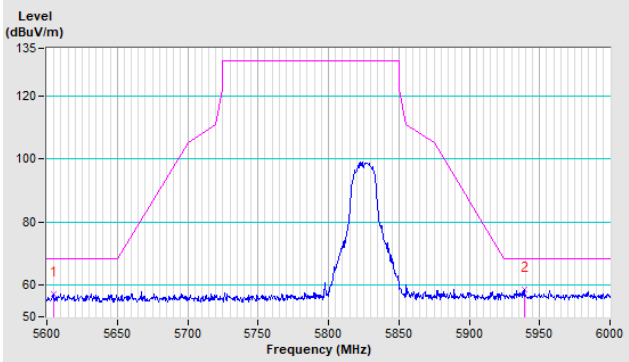
CH159	
Horizontal	Vertical
	

External antenna: Mode B1

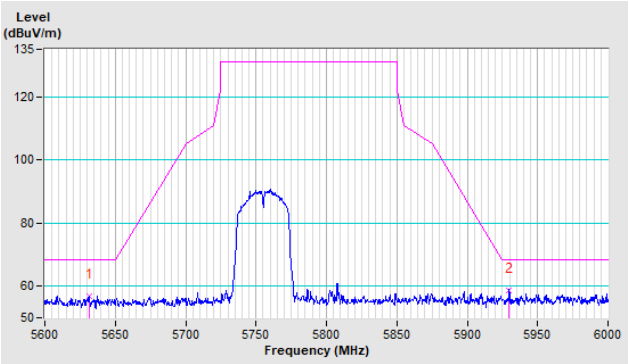
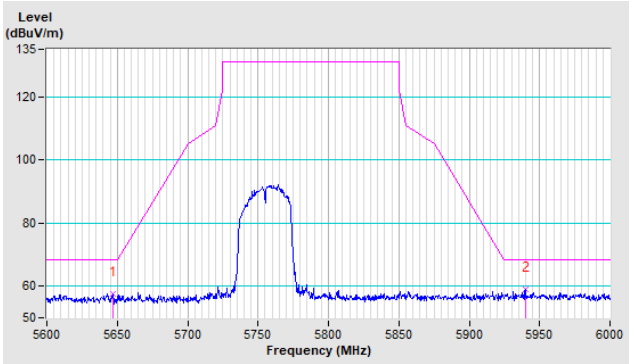
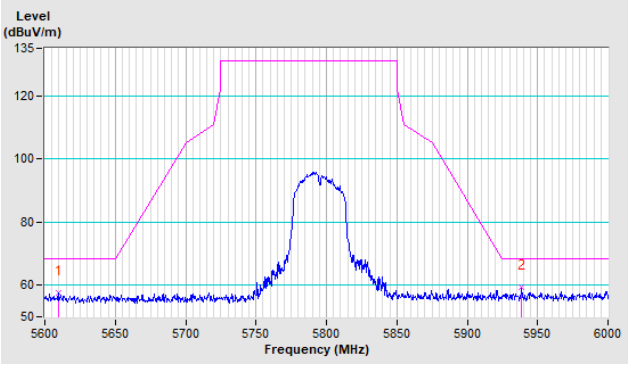
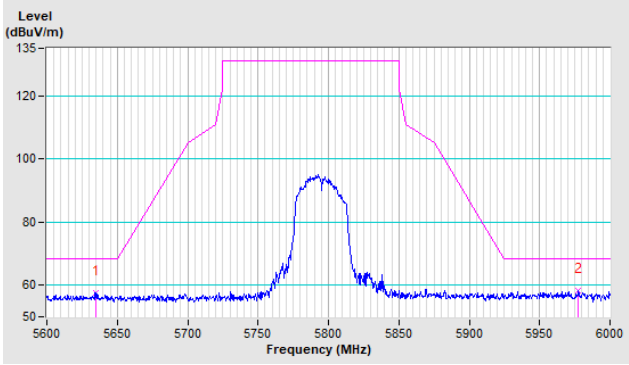
802.11a

CH149	
Horizontal	Vertical
	
CH157	
Horizontal	Vertical
	
CH165	
Horizontal	Vertical
	

802.11n (HT20)

CH149	
Horizontal	Vertical
	
CH157	
Horizontal	Vertical
	
CH165	
Horizontal	Vertical
	

802.11n (HT40)

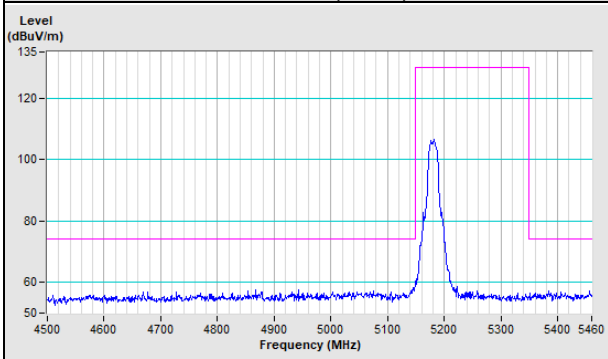
CH151	
Horizontal	Vertical
	
CH159	
Horizontal	Vertical
	

Annex B- Band Edge Measurement

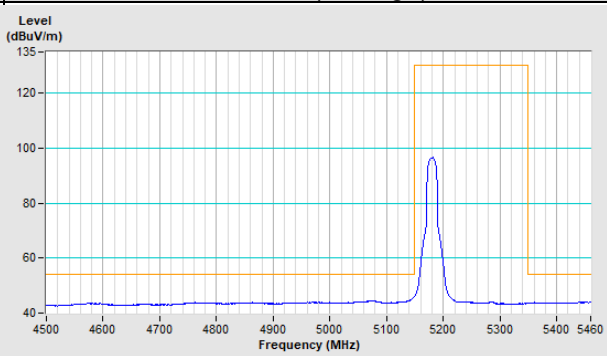
Internal antenna: Mode A1

802.11a Channel 36

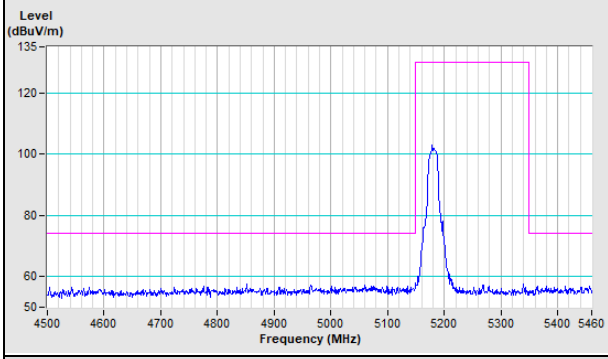
Horizontal (Peak)



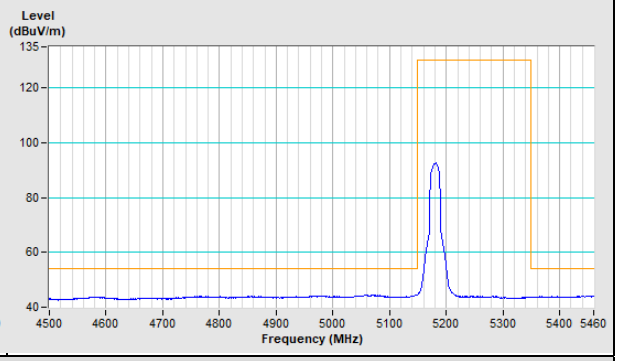
Horizontal (Average)



Vertical (Peak)

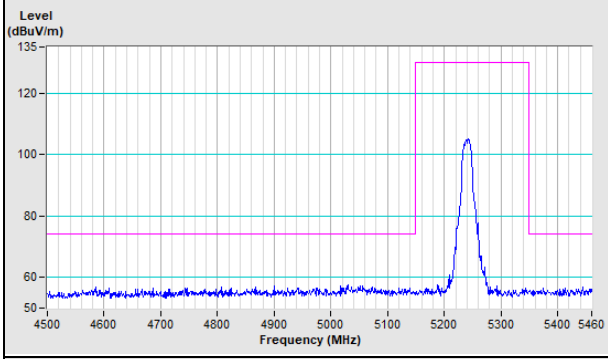


Vertical (Average)

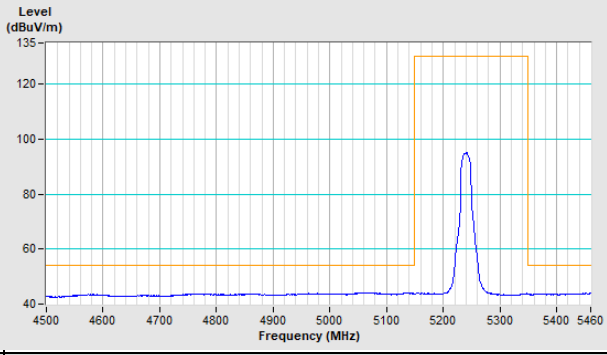


802.11a Channel 48

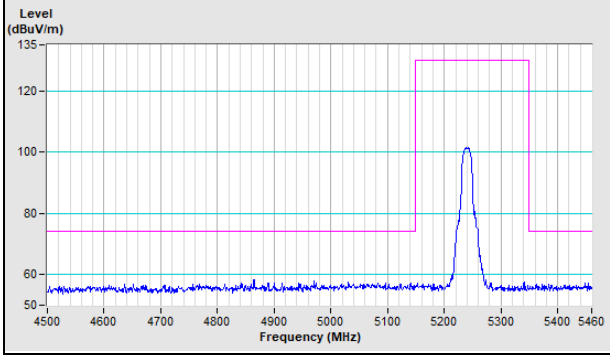
Horizontal (Peak)



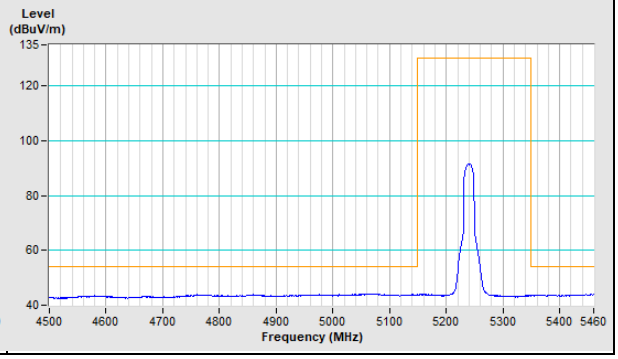
Horizontal (Average)

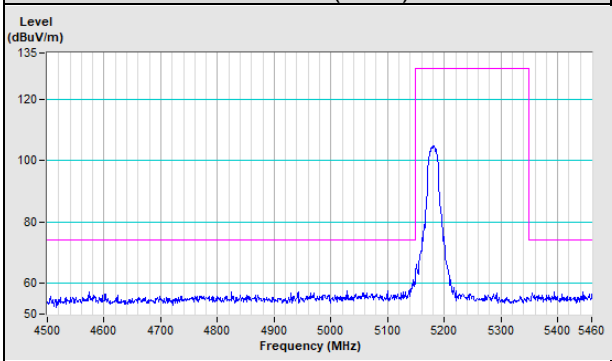
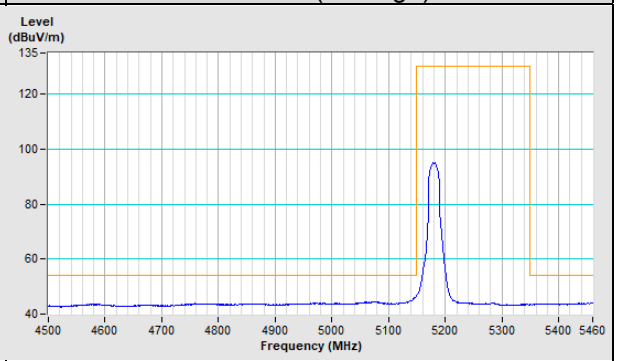
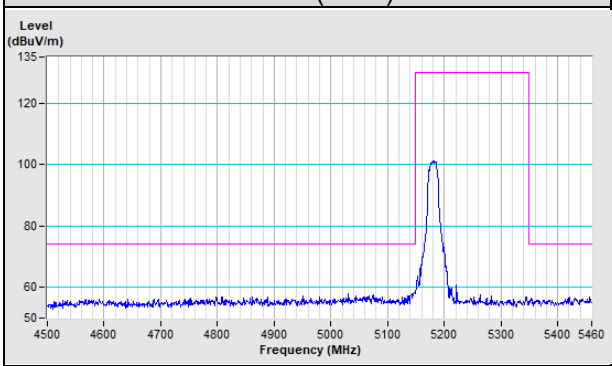
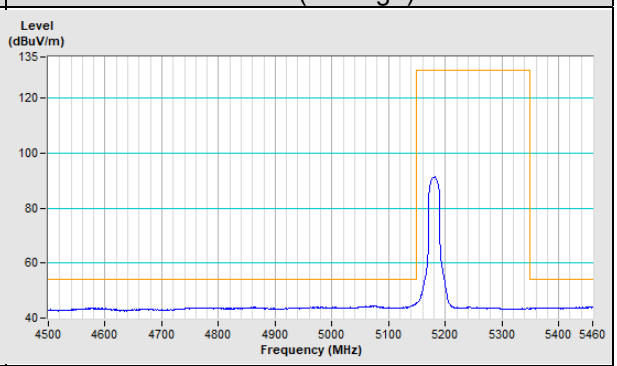
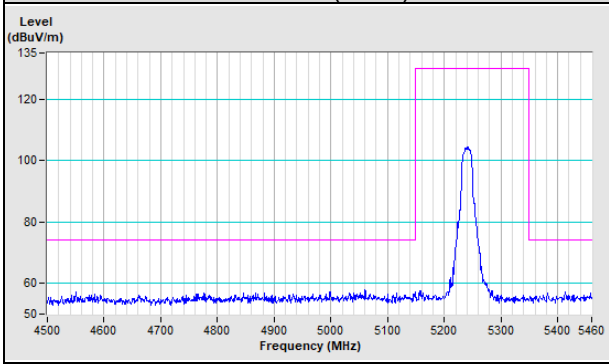
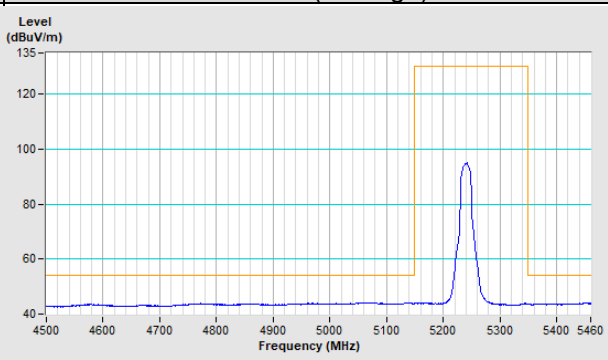
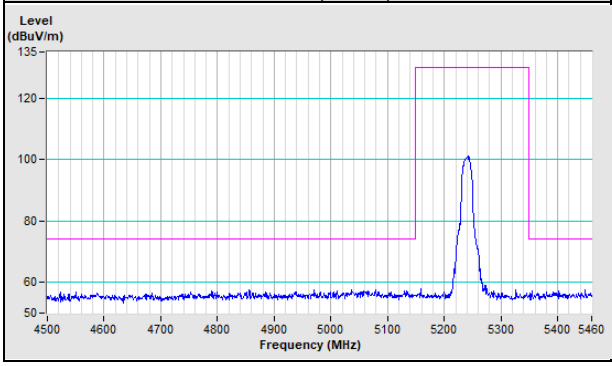
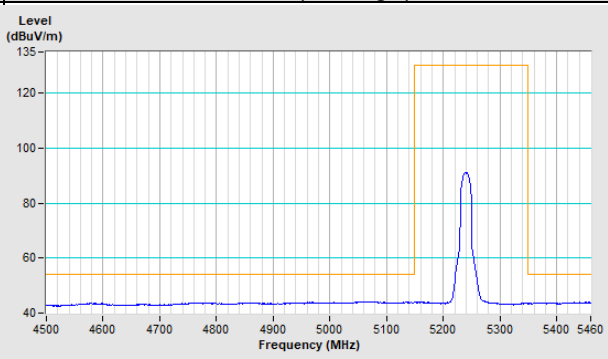


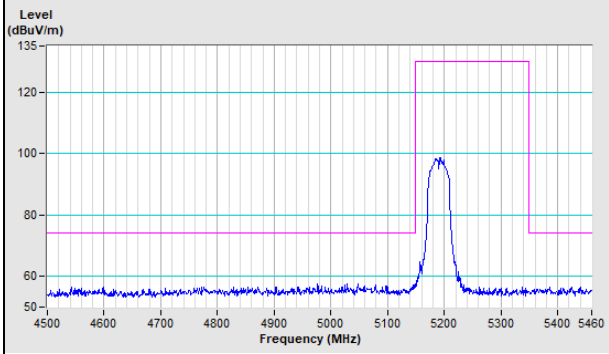
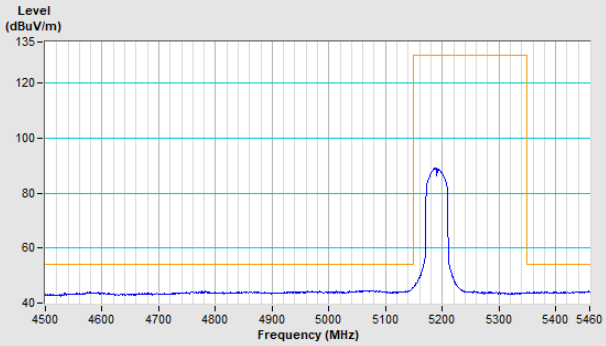
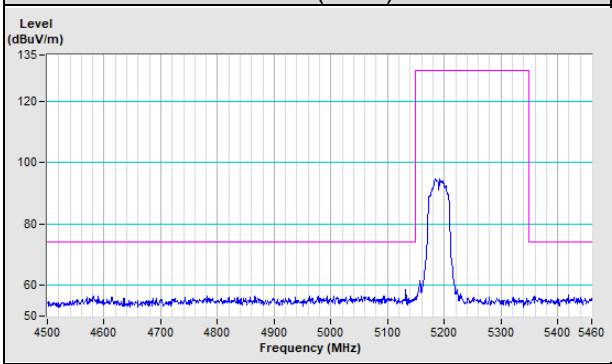
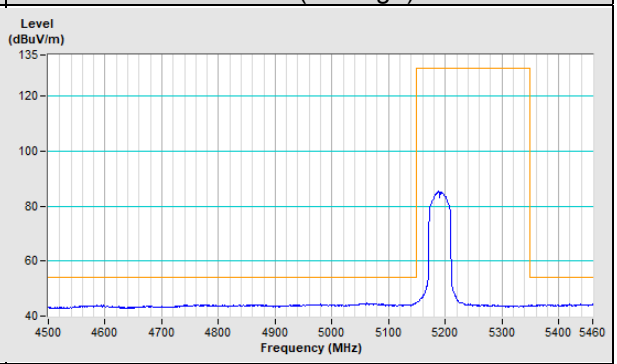
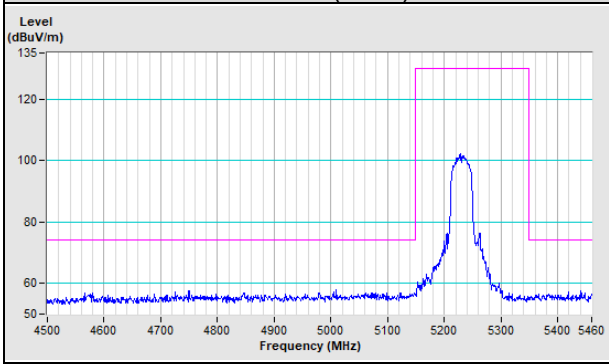
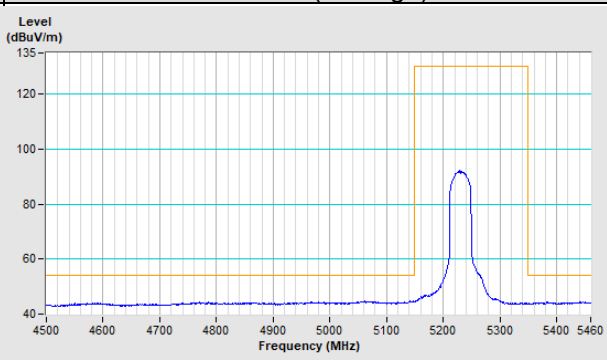
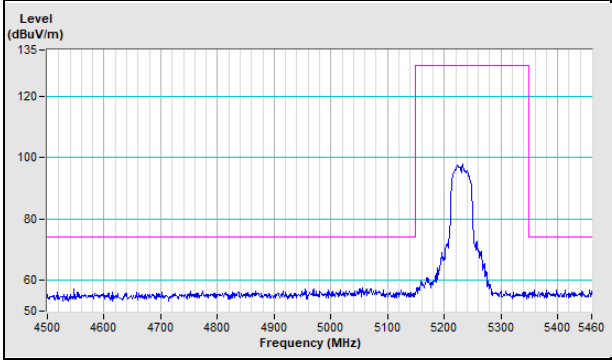
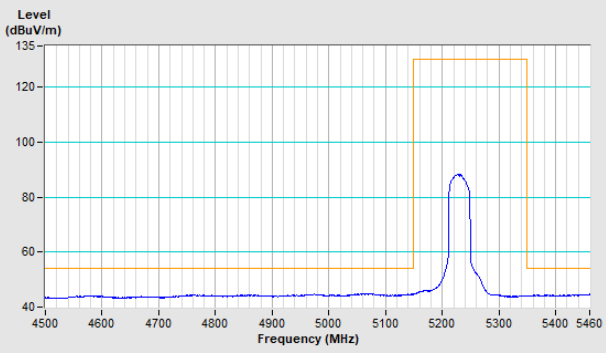
Vertical (Peak)



Vertical (Average)



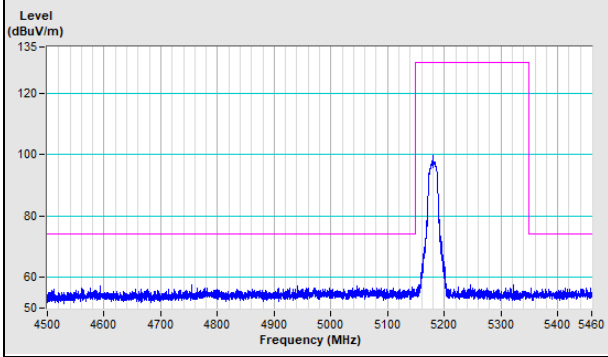
802.11n (HT20) Channel 36	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11n (HT20) Channel 48	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11n (HT40) Channel 38	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11n (HT40) Channel 46	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

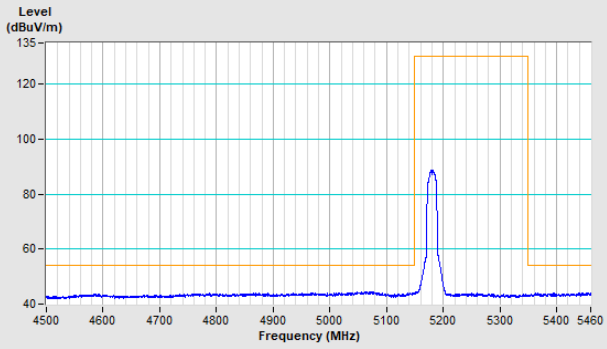
External antenna: Mode B1

802.11a Channel 36

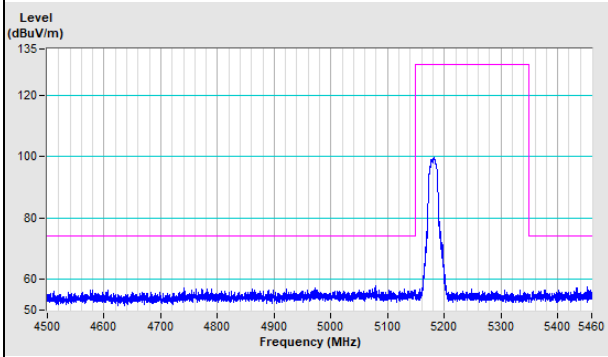
Horizontal (Peak)



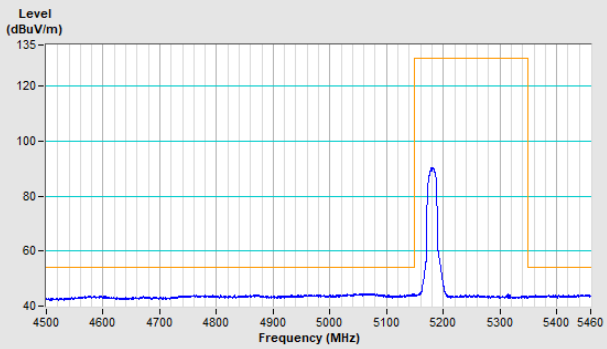
Horizontal (Average)



Vertical (Peak)

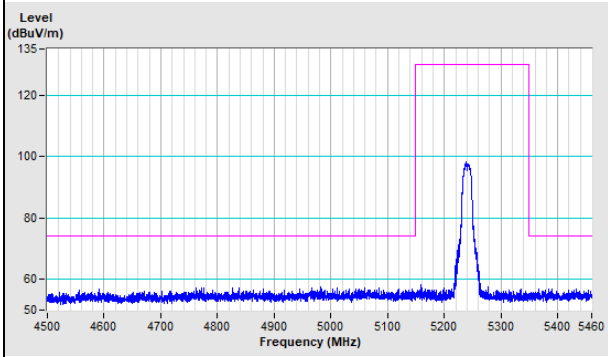


Vertical (Average)

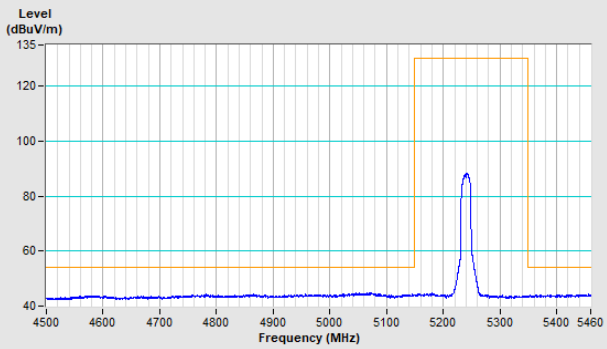


802.11a Channel 48

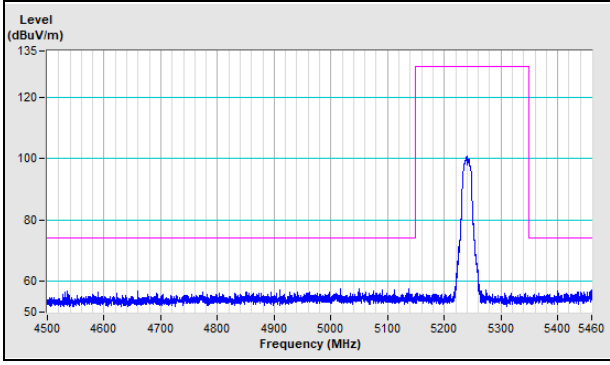
Horizontal (Peak)



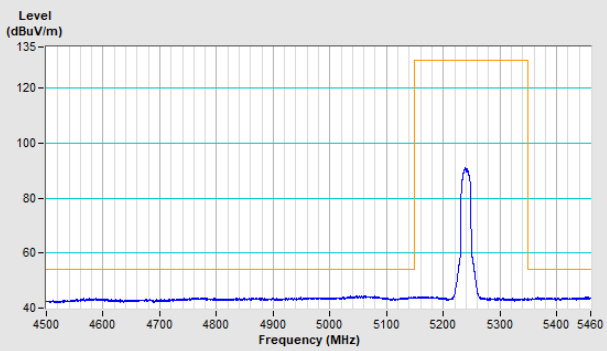
Horizontal (Average)

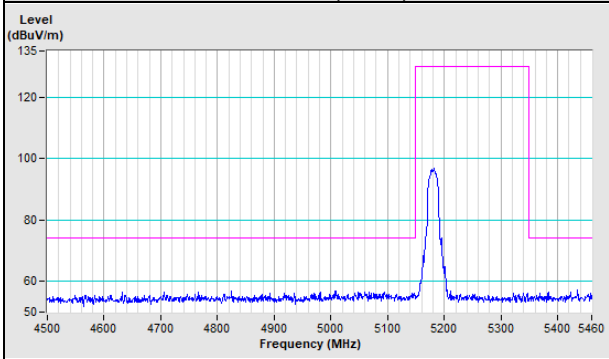
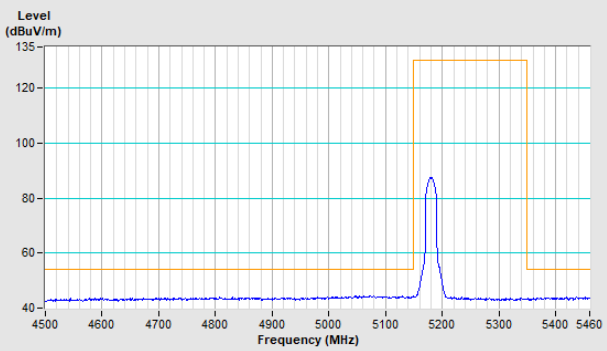
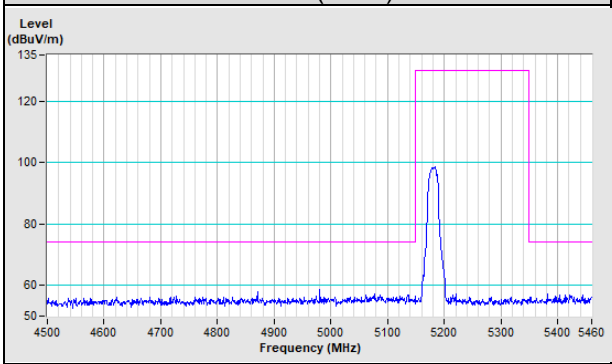
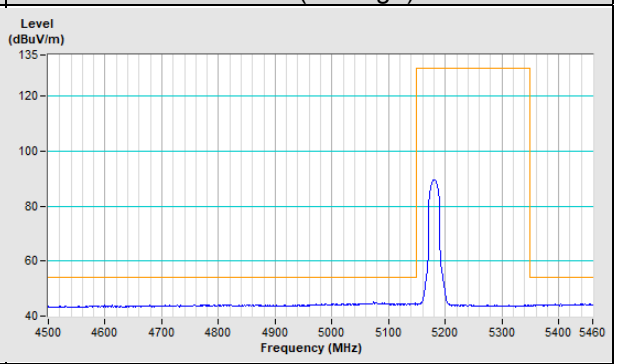
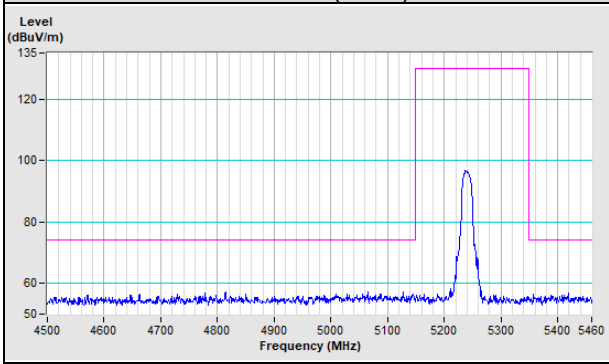
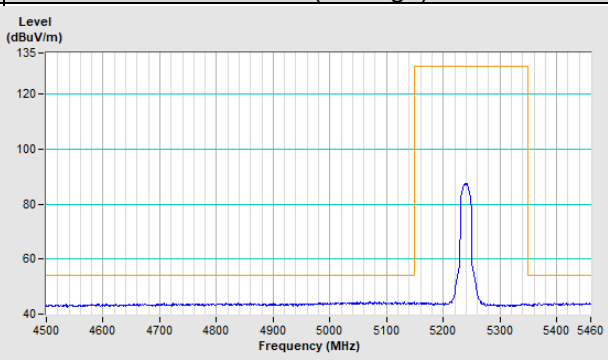
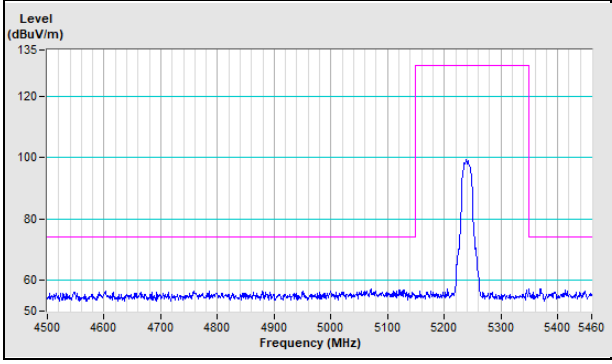
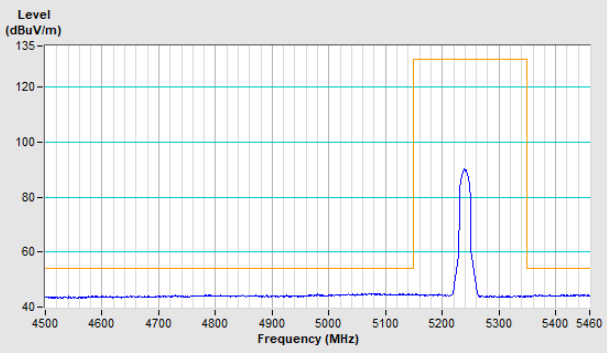


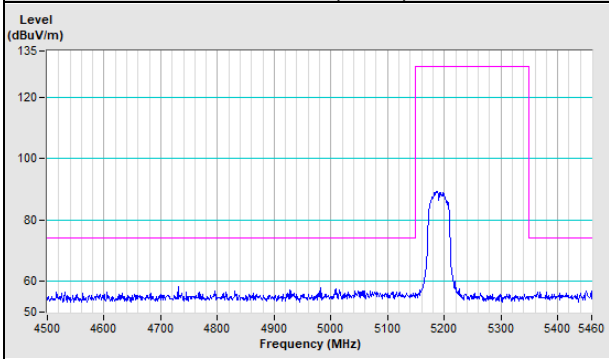
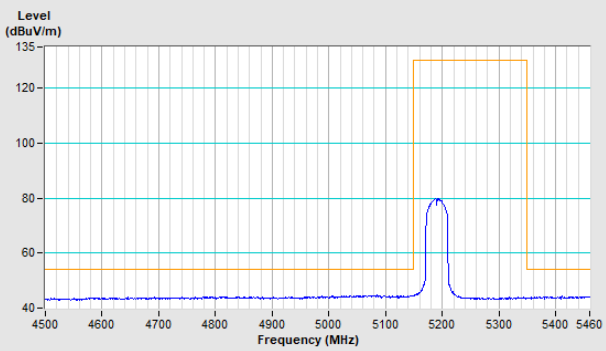
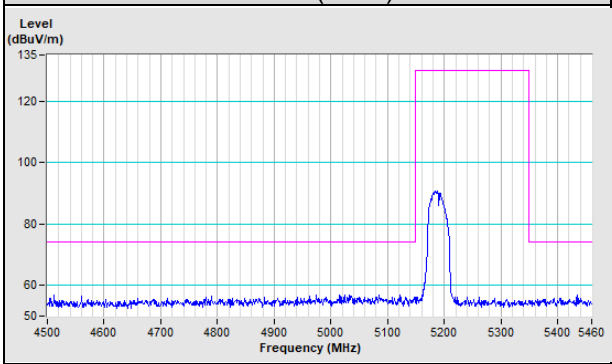
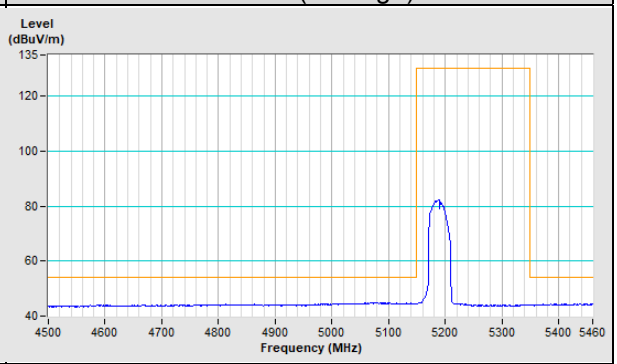
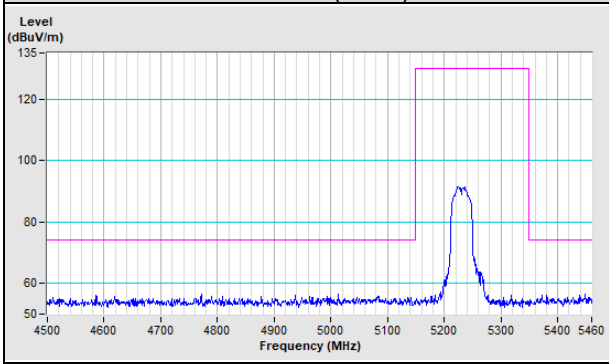
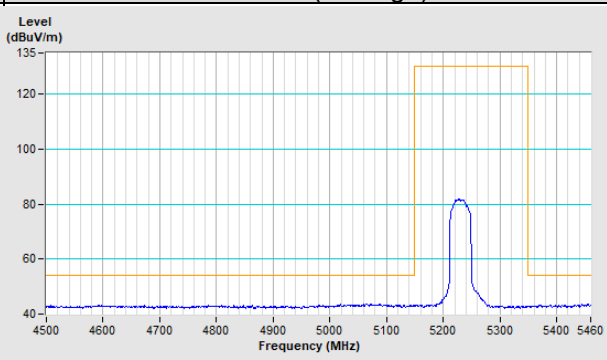
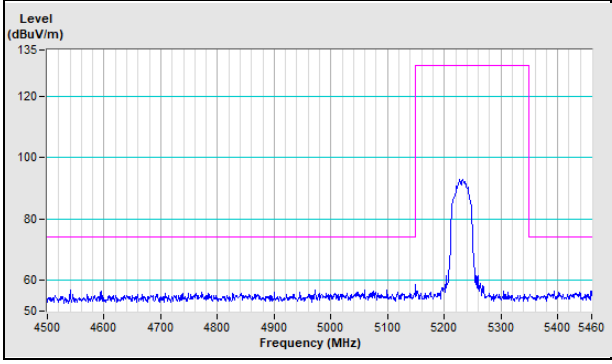
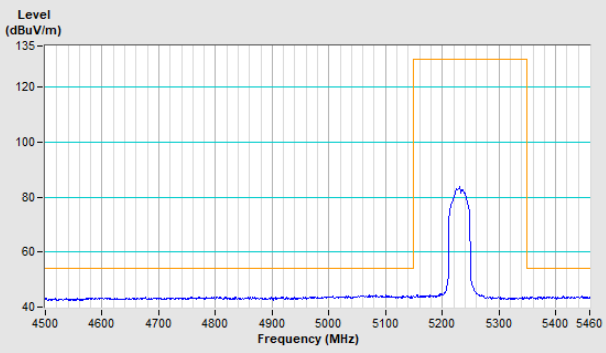
Vertical (Peak)



Vertical (Average)



802.11n (HT20) Channel 36	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11n (HT20) Channel 48	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11n (HT40) Channel 38	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11n (HT40) Channel 46	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

Appendix – Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

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The address and road map of all our labs can be found in our web site also.

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