FCC Test Report

Report No.:	RF181219E01-1
FCC ID:	PY319100440
Test Model:	EAX80
Received Date:	Dec. 19, 2018
Test Date:	Mar. 20 to May 17, 2019
Issued Date:	Aug. 26, 2019
Applicant:	NETGEAR, Inc.
Address:	350 East Plumeria Drive San Jose, CA 95134
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
Lab Address:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.
Test Location:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.
FCC Registration / Designation Number:	723255 / TW2022

Testing Laboratory
2022

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Release Control Record

Issue No.	Description	Date Issued
RF181219E01-1	Original release.	

1 Certificate of Conformity

Product:	AX6000 Nighthawk Mesh Extender
Brand:	NETGEAR
Test Model:	EAX80
Sample Status:	ENGINEERING SAMPLE
Applicant:	NETGEAR, Inc.
Test Date:	Mar. 20 to May 17, 2019
Standard:	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 EMC characteristics under the conditions specified in this report.

Prepared by : _____ , **Date:** Aug. 26, 2019

Wendy Wu / Specialist

Approved by : _____ , **Date:** Aug. 26, 2019

May Chen / Manager

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	Test Item	Result	Remarks
15.407(b)(6)	AC Power Conducted Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -7.94dB at 0.34531MHz.
15.407(b) (1/2/3/4(i/ii)/6)	Radiated Emissions & Band Edge Measurement*	PASS	Meet the requirement of limit. Minimum passing margin is -0.1dB at 5150.00MHz, 5725.00MHz, 5350.00MHz.
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.

*For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOBE test plots were recorded in Annex A.

Note:

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	1.8 dB
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	4.9 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	5.1 dB
	6GHz ~ 18GHz	4.9 dB
	18GHz ~ 40GHz	5.2 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	AX6000 Nighthawk Mesh Extender
Brand	NETGEAR
Test Model	EAX80
Status of EUT	ENGINEERING SAMPLE
Power Supply Rating	12Vdc from power adapter
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode and VHT20/40 in 2.4GHz mode 1024QAM for OFDMA in 11ax HE mode
Modulation Technology	DSSS, OFDM, OFDMA
Transfer Rate	802.11b: up to 11Mbps 802.11a/g: up to 54Mbps 802.11n: up to 600Mbps 802.11ac: up to 3466.7Mbps 802.11ax: up to 4803.9Mbps
Operating Frequency	**2.4GHz:** 2.412 ~ 2.462GHz **5GHz:** 5.18~ 5.24GHz, 5.26 ~ 5.32GHz, 5.5 ~ 5.72GHz, 5.745 ~ 5.825GHz
Number of Channel	**2.4GHz:** 802.11b, 802.11g, 802.11n (HT20), VHT20, 802.11ax (HE20): 11 802.11n (HT40), VHT40, 802.11ax (HE40): 7 **5GHz:** 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 25 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 12 802.11ac (VHT80), 802.11ax (HE80): 6 802.11ac (VHT160), 802.11ax (HE160): 2
Output Power	**Non-Beamforming Mode:** **2.4GHz:** 980.941mW **5.18 ~ 5.24GHz:** 983.82mW **5.26 ~ 5.32GHz:** 246.721mW **5.5 ~ 5.72GHz:** 249.087mW **5.745 ~ 5.825GHz:** 950.125mW **Beamforming Mode:** **2.4GHz:** 741.222mW **5.18 ~ 5.24GHz:** 688.216mW **5.26 ~ 5.32GHz:** 174.013mW **5.5 ~ 5.72GHz:** 182.735mW **5.745 ~ 5.825GHz:** 751.22mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	Adapter x 1
Data Cable Supplied	NA

Note:

1. Simultaneously transmission condition.

Condition	Technology	
1	WLAN (2.4GHz)	WLAN 5GHz
Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.		

2. The EUT must be supplied power adapter and following different models could be chosen as following table:

No.	Brand	Model No.	P/N	Spec.
1	NETGEAR	AD2150F10	332-11494-01	Input: 100-120Vac, 1.0A, 50/60Hz Output: 12V, 3.5A DC Output cable: Unshielded, 1.8m
2	NETGEAR	2ABN042F NA	332-10761-01	Input: 100-240Vac, 1.3A, 50/60Hz Output: 12V, 3.5A DC Output cable: Unshielded, 1.8m
Note: From the above adapters, the worst case was found in **Adapter 2.** Therefore only the test data of the mode was recorded in this report.				

3. The antennas provided to the EUT, please refer to the following table:

Frequency Range (GHz)	Directional Antenna Gain (dBi)	Antenna Type	Antenna Connector
2.4~2.4835	7.24	PIFA	NA
5.15~5.25	7.58		
5.25~5.35	7.49		
5.47~5.725	7.33		
5.725~5.85	7.23		
Note: More detailed information, please refer to opearating description.			

4. The EUT incorporates a MIMO function:

2.4GHz Band		
MODULATION MODE	**TX & RX CONFIGURATION**	
802.11b	4TX	4RX
802.11g	4TX	4RX
802.11n (HT20)	4TX	4RX
802.11n (HT40)	4TX	4RX
VHT20	4TX	4RX
VHT40	4TX	4RX
802.11ax (HE20)	4TX	4RX
802.11ax (HE40)	4TX	4RX
5GHz Band		
MODULATION MODE	**TX & RX CONFIGURATION**	
802.11a	4TX	4RX
802.11n (HT20)	4TX	4RX
802.11n (HT40)	4TX	4RX
802.11ac (VHT20)	4TX	4RX
802.11ac (VHT40)	4TX	4RX
802.11ac (VHT80)	4TX	4RX
802.11ac (VHT160)	4TX	4RX
802.11ax (HE20)	4TX	4RX
802.11ax (HE40)	4TX	4RX
802.11ax (HE80)	4TX	4RX
802.11ax (HE160)	4TX	4RX

Note:
1. All of modulation mode support beamforming function except 802.11a/b/g modulation mode.
2. The EUT support Beamforming and non-beamforming mode, therefore both mode were investigated and the worst case scenario was identified. The worst case data were presented in test report.
3. The modulation and bandwidth are similar for 802.11n mode for 20MHz (40MHz), 802.11ac mode for 20MHz (40MHz, 80MHz, 160MHz) and 802.11ax mode for 20MHz (40MHz, 80MHz, 160MHz), therefore investigated worst case to representative mode in test report. (Final test mode refer section 3.2.1)

5. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

3.2 Description of Test Modes

FOR 5180 ~ 5240MHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

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

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (VHT80), 802.11ax (HE80):

Channel	Frequency
42	5210 MHz

FOR 5260 ~ 5320MHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

Channel	Frequency	Channel	Frequency
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (VHT80), 802.11ax (HE80):

Channel	Frequency
58	5290 MHz

1 straddle channel is provided for 802.11ac (VHT160), 802.11ax (HE160):

Channel	Frequency
50	5250 MHz

FOR 5500 ~ 5720MHz

12 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

Channel	Frequency	Channel	Frequency
100	5500 MHz	124	5620 MHz
104	5520 MHz	128	5640 MHz
108	5540 MHz	132	5660 MHz
112	5560 MHz	136	5680 MHz
116	5580 MHz	140	5700 MHz
120	5600 MHz	144	5720 MHz

6 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
102	5510 MHz	126	5630 MHz
110	5550 MHz	134	5670 MHz
118	5590 MHz	142	5710 MHz

3 channels are provided for 802.11ac (VHT80), 802.11ax (HE80):

Channel	Frequency	Channel	Frequency
106	5530 MHz	138	5690 MHz
122	5610 MHz		

1 straddle channel is provided for 802.11ac (VHT160), 802.11ax (HE160):

Channel	Frequency
114	5570 MHz

FOR 5745 ~ 5825MHz:

5 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

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

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

1 channel is provided for 802.11ac (VHT80), 802.11ax (HE80):

Channel	Frequency
155	5775 MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable To				Description
	RE≥1G	RE<1G	PLC	APCM	
-	√	√	√	√	-

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

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.

Non-Beamforming Mode						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate Parameter
802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6Mb/s
802.11ax (HE20)		36 to 48	36, 40, 48	OFDMA	BPSK	MCS0
802.11ax (HE40)		38 to 46	38, 46	OFDMA	BPSK	MCS0
802.11ax (HE80)		42	42	OFDMA	BPSK	MCS0
802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6Mb/s
802.11ax (HE20)		52 to 64	52, 60, 64	OFDMA	BPSK	MCS0
802.11ax (HE40)		54 to 62	54, 62	OFDMA	BPSK	MCS0
802.11ax (HE80)		58	58	OFDMA	BPSK	MCS0
802.11ax (HE160)		50	50	OFDMA	BPSK	MCS0
802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	6Mb/s
802.11ax (HE20)		100 to 144	100, 116, 140, 144	OFDMA	BPSK	MCS0
802.11ax (HE40)		102 to 142	102, 110, 134, 142	OFDMA	BPSK	MCS0
802.11ax (HE80)		106 to 138	106, 122, 138	OFDMA	BPSK	MCS0
802.11ax (HE160)		114	114	OFDMA	BPSK	MCS0
802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6Mb/s
802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	BPSK	MCS0
802.11ax (HE40)		151 to 159	151, 159	OFDMA	BPSK	MCS0
802.11ax (HE80)		155	155	OFDMA	BPSK	MCS0

Radiated Emission Test (Below 1GHz):

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

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

Non-Beamforming Mode						
Mode	**FREQ. Band (MHz)**	**Available Channel**	**Tested Channel**	**Modulation Technology**	**Modulation Type**	**Data Rate Parameter**
802.11ax (HE40)	5180-5240 5260-5320 5500-5720 5745-5825	38 to 46 54 to 62 102 to 142 151 to 159	46	OFDMA	BPSK	MCS0

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.

Non-Beamforming Mode						
Mode	**FREQ. Band (MHz)**	**Available Channel**	**Tested Channel**	**Modulation Technology**	**Modulation Type**	**Data Rate Parameter**
802.11ax (HE40)	5180-5240 5260-5320 5500-5720 5745-5825	38 to 46 54 to 62 102 to 142 151 to 159	46	OFDMA	BPSK	MCS0

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.

Non-Beamforming Mode						
Mode	**FREQ. Band (MHz)**	**Available Channel**	**Tested Channel**	**Modulation Technology**	**Modulation Type**	**Data Rate Parameter**
802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6Mb/s
802.11ac (VHT20) (Output power only)		36 to 48	36, 40, 48	OFDM	BPSK	MCS0
802.11ac (VHT40) (Output power only)		38 to 46	38, 46	OFDM	BPSK	MCS0
802.11ac (VHT80) (Output power only)		42	42	OFDM	BPSK	MCS0
802.11ax (HE20)		36 to 48	36, 40, 48	OFDMA	BPSK	MCS0
802.11ax (HE40)		38 to 46	38, 46	OFDMA	BPSK	MCS0
802.11ax (HE80)		42	42	OFDMA	BPSK	MCS0
802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6Mb/s
802.11ac (VHT20) (Output power only)		52 to 64	52, 60, 64	OFDM	BPSK	MCS0
802.11ac (VHT40) (Output power only)		54 to 62	54, 62	OFDM	BPSK	MCS0
802.11ac (VHT80) (Output power only)		58	58	OFDM	BPSK	MCS0
802.11ac (VHT160) (Output power only)		50	50	OFDM	BPSK	MCS0
802.11ax (HE20)		52 to 64	52, 60, 64	OFDMA	BPSK	MCS0
802.11ax (HE40)		54 to 62	54, 62	OFDMA	BPSK	MCS0
802.11ax (HE80)		58	58	OFDMA	BPSK	MCS0
802.11ax (HE160)		50	50	OFDMA	BPSK	MCS0
802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	6Mb/s
802.11ac (VHT20) (Output power only)		100 to 144	100, 116, 140, 144	OFDM	BPSK	MCS0
802.11ac (VHT40) (Output power only)		102 to 142	102, 110, 134, 142	OFDM	BPSK	MCS0
802.11ac (VHT80) (Output power only)		106 to 138	106, 122, 138	OFDM	BPSK	MCS0
802.11ac (VHT160) (Output power only)		114	114	OFDM	BPSK	MCS0
802.11ax (HE20)		100 to 144	100, 116, 140, 144	OFDMA	BPSK	MCS0
802.11ax (HE40)		102 to 142	102, 110, 134, 142	OFDMA	BPSK	MCS0
802.11ax (HE80)		106 to 138	106, 122, 138	OFDMA	BPSK	MCS0
802.11ax (HE160)		114	114	OFDMA	BPSK	MCS0

802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6Mb/s
802.11ac (VHT20) (Output power only)		149 to 165	149, 157, 165	OFDM	BPSK	MCS0
802.11ac (VHT40) (Output power only)		151 to 159	151, 159	OFDM	BPSK	MCS0
802.11ac (VHT80) (Output power only)		155	155	OFDM	BPSK	MCS0
802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	BPSK	MCS0
802.11ax (HE40)		151 to 159	151, 159	OFDMA	BPSK	MCS0
802.11ax (HE80)		155	155	OFDMA	BPSK	MCS0
Beamforming Mode (output power only)						
Mode	**FREQ. Band (MHz)**	**Available Channel**	**Tested Channel**	**Modulation Technology**	**Modulation Type**	**Data Rate Parameter**
802.11ac (VHT20)	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	MCS0
802.11ac (VHT40)		38 to 46	38, 46	OFDM	BPSK	MCS0
802.11ac (VHT80)		42	42	OFDM	BPSK	MCS0
802.11ax (HE20)		36 to 48	36, 40, 48	OFDMA	BPSK	MCS0
802.11ax (HE40)		38 to 46	38, 46	OFDMA	BPSK	MCS0
802.11ax (HE80)		42	42	OFDMA	BPSK	MCS0
802.11ac (VHT20)	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	MCS0
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	MCS0
802.11ac (VHT80)		58	58	OFDM	BPSK	MCS0
802.11ac (VHT160)		50	50	OFDM	BPSK	MCS0
802.11ax (HE20)		52 to 64	52, 60, 64	OFDMA	BPSK	MCS0
802.11ax (HE40)		54 to 62	54, 62	OFDMA	BPSK	MCS0
802.11ax (HE80)		58	58	OFDMA	BPSK	MCS0
802.11ax (HE160)		50	50	OFDMA	BPSK	MCS0
802.11ac (VHT20)	5500-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	MCS0
802.11ac (VHT40)		102 to 142	102, 110, 134, 142	OFDM	BPSK	MCS0
802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	BPSK	MCS0
802.11ac (VHT160)		114	114	OFDM	BPSK	MCS0
802.11ax (HE20)		100 to 144	100, 116, 140, 144	OFDMA	BPSK	MCS0
802.11ax (HE40)		102 to 142	102, 110, 134, 142	OFDMA	BPSK	MCS0
802.11ax (HE80)		106 to 138	106, 122, 138	OFDMA	BPSK	MCS0
802.11ax (HE160)		114	114	OFDMA	BPSK	MCS0
802.11ac (VHT20)	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	MCS0
802.11ac (VHT40)		151 to 159	151, 159	OFDM	BPSK	MCS0
802.11ac (VHT80)		155	155	OFDM	BPSK	MCS0
802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	BPSK	MCS0
802.11ax (HE40)		151 to 159	151, 159	OFDMA	BPSK	MCS0
802.11ax (HE80)		155	155	OFDMA	BPSK	MCS0

Test Condition:

Applicable To	Environmental Conditions	Input Power	Tested By
RE≥1G	25deg. C, 65%RH	120Vac, 60Hz	Robert Cheng
RE<1G	20deg. C, 70%RH	120Vac, 60Hz	Ryan Du
PLC	25deg. C, 75%RH	120Vac, 60Hz	Andy Ho
APCM	25deg. C, 60%RH	120Vac, 60Hz	Jyunchun Lin

3.3 Duty Cycle of Test Signal

If duty cycle of test signal is ≥ 98 %, duty factor is not required.
If duty cycle of test signal is < 98%, duty factor shall be considered.

802.11a: Duty cycle = 2.063 ms/2.097 ms = 0.984

802.11ac (VHT20): Duty cycle = 1.926 ms/1.958 ms = 0.984

802.11ac (VHT40): Duty cycle = 0.949 ms/0.982 ms = 0.966, Duty factor = 10 * log (1/Duty cycle) = 0.15

802.11ac (VHT80): Duty cycle = 0.458 ms/0.491 ms = 0.933, Duty factor = 10 * log (1/Duty cycle) = 0.30

802.11ac (VHT160): Duty cycle = 0.252 ms/0.28 ms = 0.893, Duty factor = 10 * log (1/Duty cycle) = 0.53

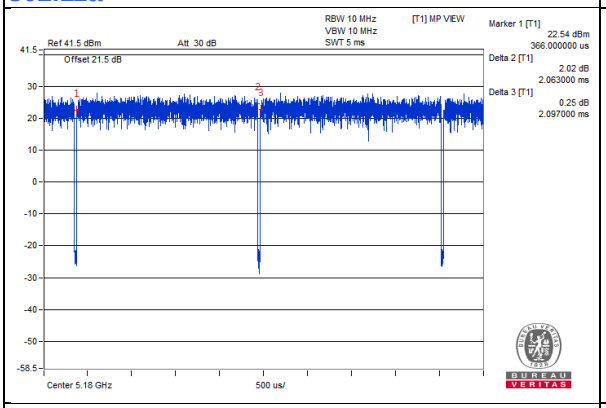
802.11ax (HE20): Duty cycle = 1.484 ms/1.52 ms = 0.976, Duty factor = 10 * log (1/Duty cycle) = 0.10

802.11ax (HE40): Duty cycle = 0.771 ms/0.805 ms = 0.958, Duty factor = 10 * log (1/Duty cycle) = 0.19

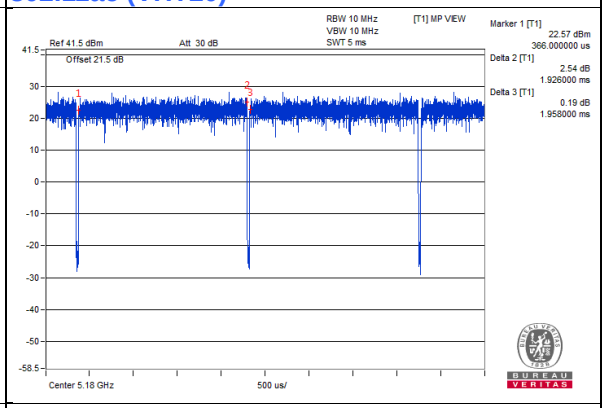
802.11ax (HE80): Duty cycle = 0.399 ms/0.436 ms = 0.915, Duty factor = 10 * log (1/Duty cycle) = 0.39

802.11ax (HE160): Duty cycle = 0.232 ms/0.262 ms = 0.885, Duty factor = 10 * log (1/Duty cycle) = 0.53

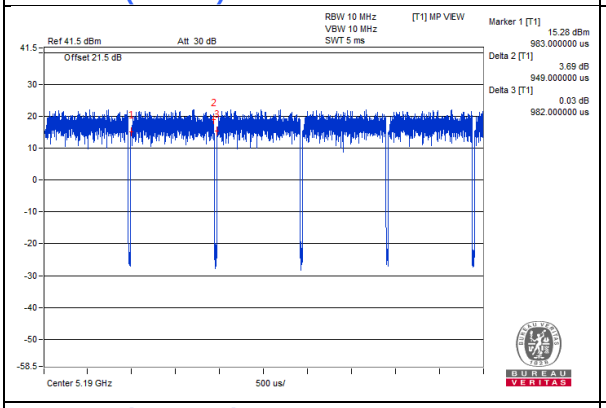
802.11a



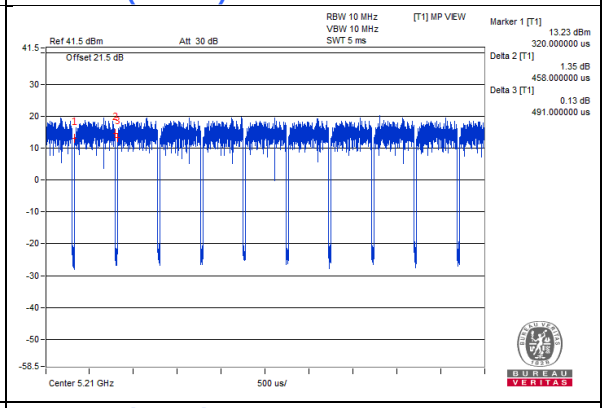
802.11ac (VHT20)



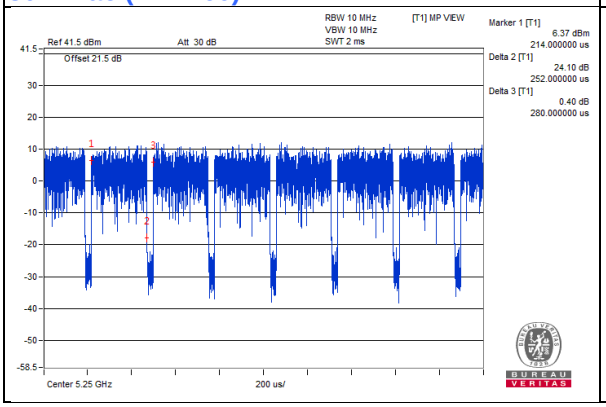
802.11ac (VHT40)



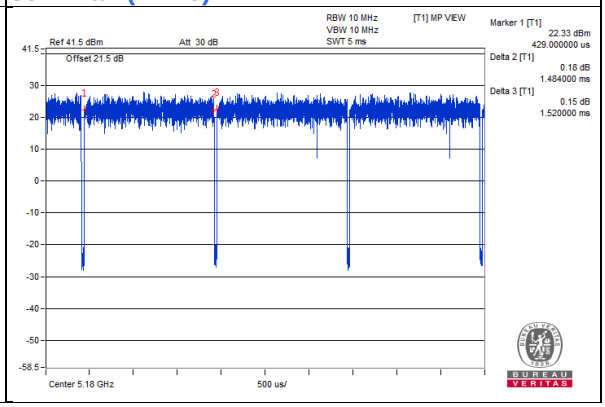
802.11ac (VHT80)



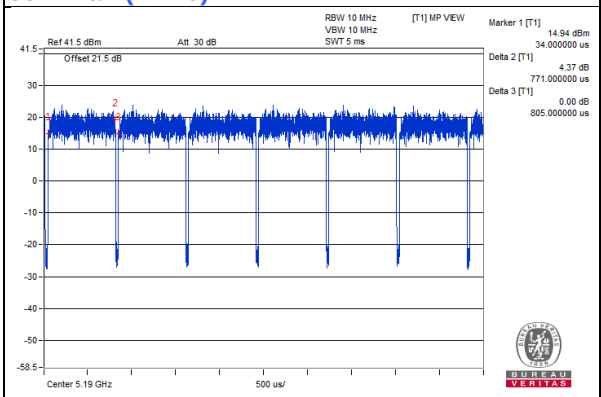
802.11ac (VHT160)



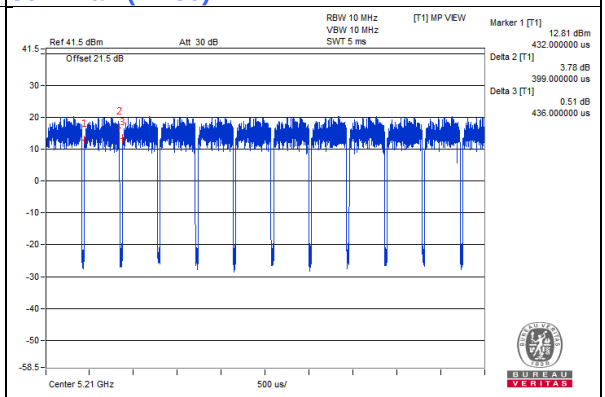
802.11ax (HE20)



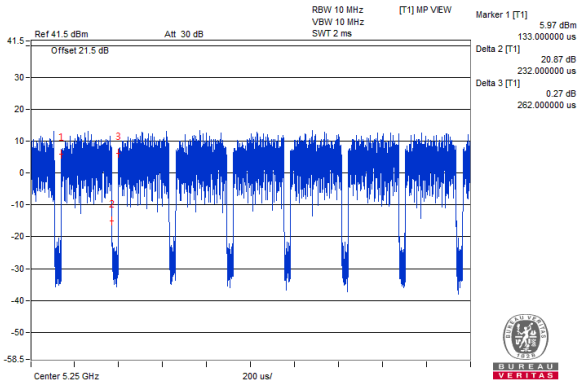
802.11ax (HE40)



802.11ax (HE80)



802.11ax (HE160)



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.

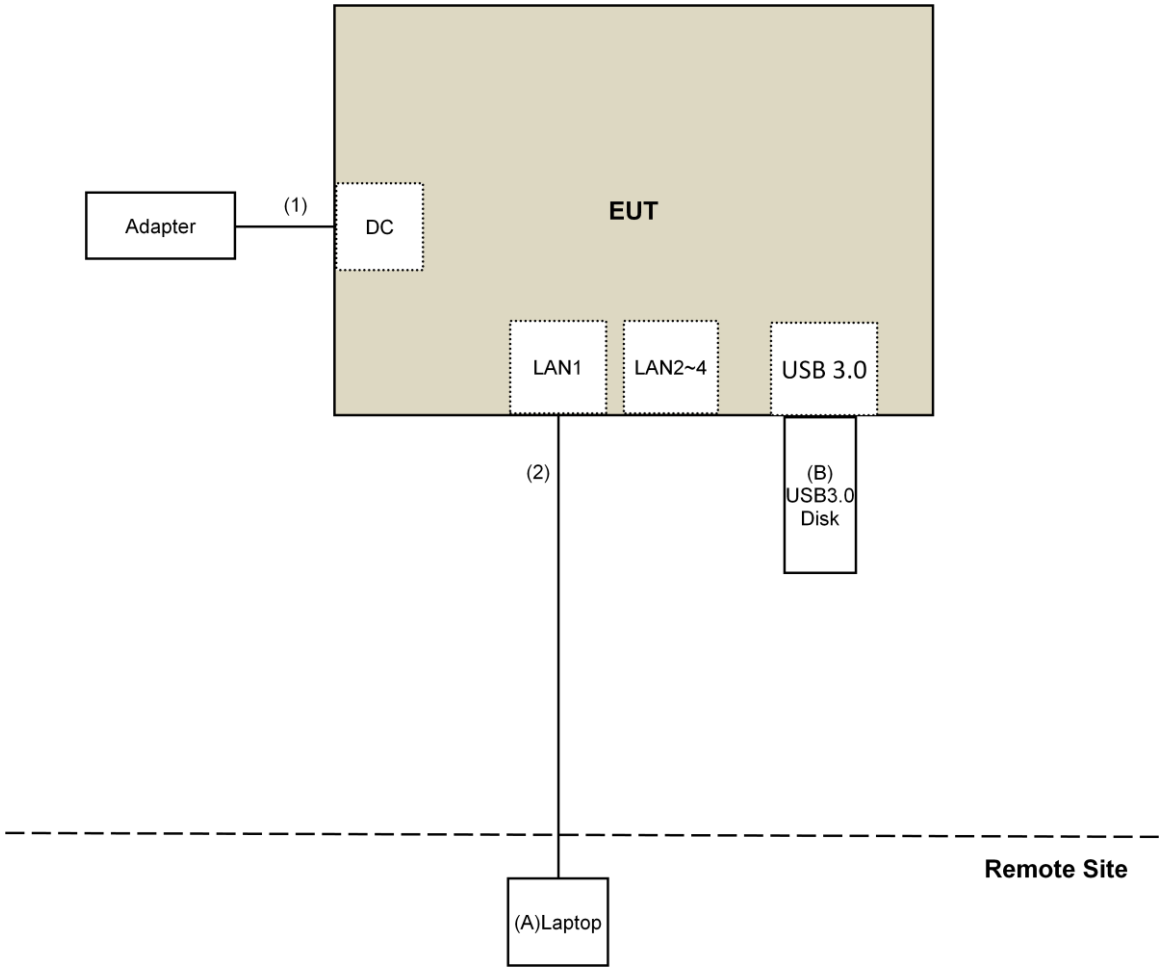
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Laptop	DELL	E6420	B92T3R1	FCC DoC	Provided by Lab
B.	USB3.0 Disk	SanDisk	32GB	NA	NA	Provided by Lab

Note:

1. All power cords of the above support units are non-shielded (1.8m).

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	DC Cable	1	1.8	No	0	Supplied by client
2.	RJ-45 Cable	1	10	No	0	Provided by Lab

3.4.1 Configuration of System under Test



3.5 General Description of Applied Standard

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

FCC Part 15, Subpart E (15.407)
KDB 789033 D02 General UNII Test Procedure New Rules v02r01
KDB 662911 D01 Multiple Transmitter Output v02r01
ANSI C63.10-2013

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

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
	☐	15.407(b)(4)(ii)	Emission limits in section 15.247(d)	

*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

For below 1GHz test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Keysight	N9038A	MY54450088	July 05, 2018	July 04, 2019
Pre-Amplifier EMCI	EMC001340	980142	Jan. 25, 2019	Jan. 24, 2020
Loop Antenna Electro-Metrics	EM-6879	269	Sep. 07, 2018	Sep. 06, 2019
RF Cable	NA	LOOPCAB-001	Jan. 14, 2019	Jan. 13, 2020
RF Cable	NA	LOOPCAB-002	Jan. 14, 2019	Jan. 13, 2020
Pre-Amplifier Mini-Circuits	ZFL-1000VH2B	AMP-ZFL-01	Oct. 30, 2018	Oct. 29, 2019
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-406	Nov. 22, 2018	Nov. 21, 2019
RF Cable	8D	966-4-1	Mar. 19, 2019	Mar. 18, 2020
RF Cable	8D	966-4-2	Mar. 19, 2019	Mar. 18, 2020
RF Cable	8D	966-4-3	Mar. 19, 2019	Mar. 18, 2020
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-3m-4-01	Sep. 27, 2018	Sep. 26, 2019
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	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 966 Chamber No. 4.
3. Loop antenna was used for all emissions below 30 MHz.
4. Tested Date: Apr. 25, 2019

For OOBE test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Keysight	N9038A	MY54450088	July 05, 2018	July 04, 2019
Horn_Antenna SCHWARZBECK	BBHA 9120D	9120D-783	Nov. 25, 2018	Nov. 24, 2019
Pre-Amplifier EMCI	EMC12630SE	980385	Aug. 16, 2018	Aug. 15, 2019
RF Cable	EMC104-SM-SM-1200	160923	Jan. 28, 2019	Jan. 27, 2020
RF Cable	104 RF cable	131215	Jan. 10, 2019	Jan. 09, 2020
RF Cable	EMC104-SM-SM-6000	180418	May 07, 2018	May 06, 2019
Pre-Amplifier EMCI	EMC184045SE	980387	Jan. 28, 2019	Jan. 27, 2020
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170519	Nov. 25, 2018	Nov. 24, 2019
RF Cable	EMC102-KM-KM-1200	160924	Jan. 28, 2019	Jan. 27, 2020
RF Cable	EMC102-KM-KM-1200	160925	Jan. 28, 2019	Jan. 27, 2020
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	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 966 Chamber No. 4.
3. Tested Date: Mar. 20, 2019

For 802.11 ax (HE40), 802.11 ax (HE80), 802.11 ax (HE160) above 1GHz test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Keysight	N9038A	MY54450088	July 05, 2018	July 04, 2019
Horn_Antenna SCHWARZBECK	BBHA 9120D	9120D-783	Nov. 25, 2018	Nov. 24, 2019
Pre-Amplifier EMCI	EMC12630SE	980385	Aug. 16, 2018	Aug. 15, 2019
RF Cable	EMC104-SM-SM-1200	160923	Jan. 28, 2019	Jan. 27, 2020
RF Cable	104 RF cable	131215	Jan. 10, 2019	Jan. 09, 2020
RF Cable	EMC104-SM-SM-6000	180418	May 07, 2018	May 06, 2019
Pre-Amplifier EMCI	EMC184045SE	980387	Jan. 28, 2019	Jan. 27, 2020
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170519	Nov. 25, 2018	Nov. 24, 2019
RF Cable	EMC102-KM-KM-1200	160924	Jan. 28, 2019	Jan. 27, 2020
RF Cable	EMC102-KM-KM-1200	160925	Jan. 28, 2019	Jan. 27, 2020
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	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 966 Chamber No. 4.
3. Tested Date: Apr. 26, 2019

For other test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Keysight	N9038A	MY54450088	July 05, 2018	July 04, 2019
Horn_Antenna SCHWARZBECK	BBHA 9120D	9120D-783	Nov. 25, 2018	Nov. 24, 2019
Pre-Amplifier EMCI	EMC12630SE	980385	Aug. 16, 2018	Aug. 15, 2019
RF Cable	EMC104-SM-SM-1200	160923	Jan. 28, 2019	Jan. 27, 2020
RF Cable	104 RF cable	131215	Jan. 10, 2019	Jan. 09, 2020
RF Cable	EMC104-SM-SM-6000	180418	May 03, 2019	May 02, 2020
Pre-Amplifier EMCI	EMC184045SE	980387	Jan. 28, 2019	Jan. 27, 2020
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170519	Nov. 25, 2018	Nov. 24, 2019
RF Cable	EMC102-KM-KM-1200	160924	Jan. 28, 2019	Jan. 27, 2020
RF Cable	EMC102-KM-KM-1200	160925	Jan. 28, 2019	Jan. 27, 2020
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	NA	NA
Spectrum Analyzer R&S	FSV40	100964	June 20, 2018	June 19, 2019
Power meter Anritsu	ML2495A	1014008	May 13, 2019	May 12, 2020
Power sensor Anritsu	MA2411B	0917122	May 13, 2019	May 12, 2020
Fixed Attenuator Mini-Circuits	MDCS18N-10	MDCS18N-10-01	Apr. 15, 2019	Apr. 14, 2020
AC Power Source Extech Electronics	6205	1440452	NA	NA
Temperature & Humidity Chamber Giant Force	GTH-150-40-SP-AR	MAA0812-008	Jan. 09, 2019	Jan. 08, 2020
True RMS Clamp Meter FLUKE	325	31130711WS	May 22, 2018	May 21, 2019

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 966 Chamber No. 4.
3. Tested Date: May 16 to 17, 2019

4.1.3 Test Procedure

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 detects 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:

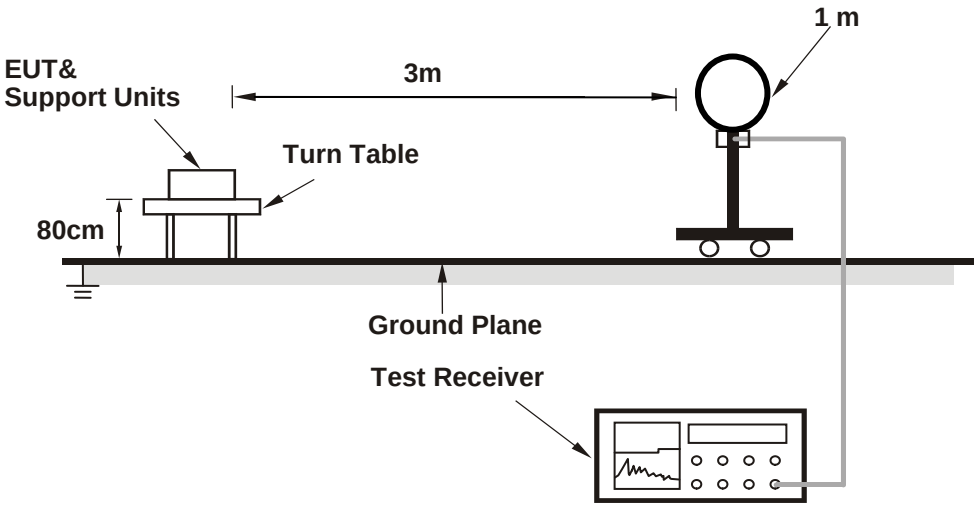
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
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.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

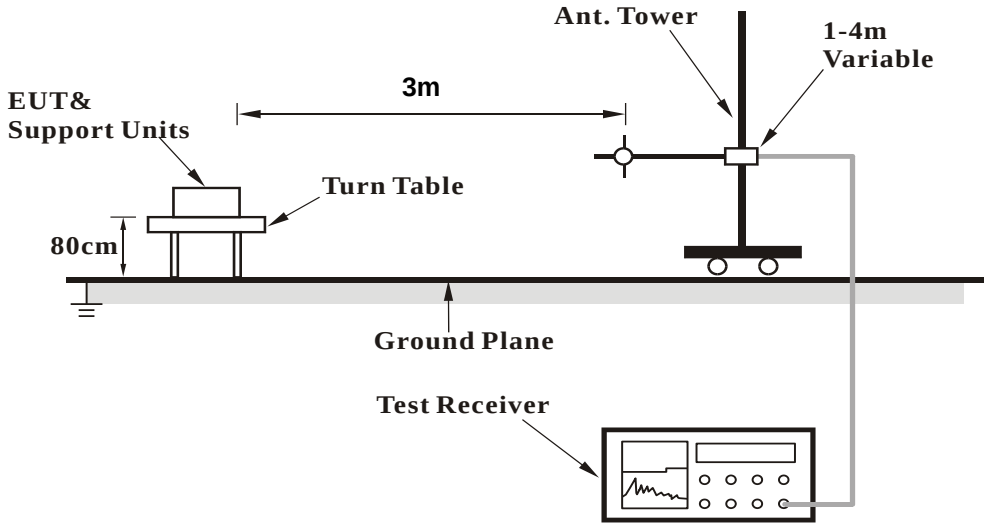
No deviation.

4.1.5 Test Setup

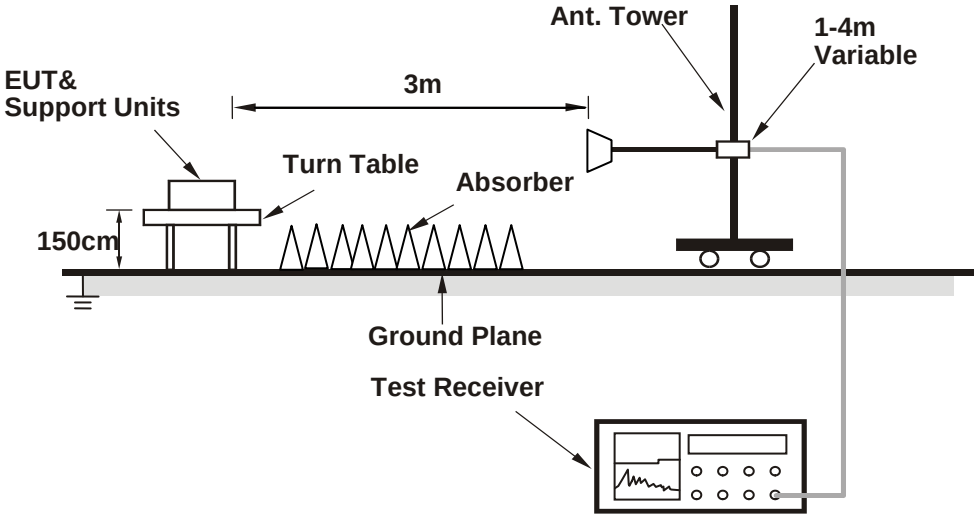
For Radiated emission below 30MHz



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 Condition

a. Connected the EUT with the Laptop which is placed on remote site.
b. Controlling software (Mtool[3.1.0.1]) has been activated to set the EUT on specific status.

4.1.7 Test Results

Above 1GHz Data:

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	69.5 PK	74.0	-4.5	1.36 H	206	66.8	2.7
2	5150.00	52.6 AV	54.0	-1.4	1.36 H	206	49.9	2.7
3	*5180.00	116.6 PK			1.36 H	206	113.9	2.7
4	*5180.00	106.4 AV			1.36 H	206	103.7	2.7
5	#10360.00	50.3 PK	68.2	-17.9	1.94 H	337	37.7	12.6
6	15540.00	54.0 PK	74.0	-20.0	2.35 H	306	41.2	12.8
7	15540.00	40.2 AV	54.0	-13.8	2.35 H	306	27.4	12.8
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	5150.00	68.5 PK	74.0	-5.5	1.48 V	255	65.8	2.7
2	5150.00	51.9 AV	54.0	-2.1	1.48 V	255	49.2	2.7
3	*5180.00	115.8 PK			1.48 V	255	113.1	2.7
4	*5180.00	105.6 AV			1.48 V	255	102.9	2.7
5	#10360.00	49.0 PK	68.2	-19.2	1.52 V	11	36.4	12.6
6	15540.00	49.7 PK	74.0	-24.3	1.68 V	211	36.9	12.8
7	15540.00	37.2 AV	54.0	-16.8	1.68 V	211	24.4	12.8

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	116.2 PK			1.32 H	221	113.5	2.7
2	*5200.00	106.8 AV			1.32 H	221	104.1	2.7
3	#10400.00	49.9 PK	68.2	-18.3	1.89 H	339	36.9	13.0
4	15600.00	54.2 PK	74.0	-19.8	2.37 H	297	41.4	12.8
5	15600.00	41.1 AV	54.0	-12.9	2.37 H	297	28.3	12.8
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	*5200.00	116.6 PK			1.56 V	241	113.9	2.7
2	*5200.00	105.8 AV			1.56 V	241	103.1	2.7
3	#10400.00	49.3 PK	68.2	-18.9	1.61 V	21	36.3	13.0
4	15600.00	50.7 PK	74.0	-23.3	1.71 V	216	37.9	12.8
5	15600.00	37.6 AV	54.0	-16.4	1.71 V	216	24.8	12.8

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	116.6 PK			1.29 H	219	114.3	2.3
2	*5240.00	106.2 AV			1.29 H	219	103.9	2.3
3	5350.00	70.3 PK	74.0	-3.7	1.29 H	219	67.7	2.6
4	5350.00	52.6 AV	54.0	-1.4	1.29 H	219	50.0	2.6
5	#10480.00	50.7 PK	68.2	-17.5	1.93 H	327	37.7	13.0
6	15720.00	54.7 PK	74.0	-19.3	2.36 H	288	42.7	12.0
7	15720.00	40.2 AV	54.0	-13.8	2.36 H	288	28.2	12.0
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	*5240.00	117.3 PK			1.68 V	176	115.0	2.3
2	*5240.00	105.7 AV			1.68 V	176	103.4	2.3
3	5350.00	69.7 PK	74.0	-4.3	1.68 V	176	67.1	2.6
4	5350.00	51.7 AV	54.0	-2.3	1.68 V	176	49.1	2.6
5	#10480.00	49.2 PK	68.2	-19.0	1.63 V	34	36.2	13.0
6	15720.00	50.8 PK	74.0	-23.2	1.67 V	221	38.8	12.0
7	15720.00	37.1 AV	54.0	-16.9	1.67 V	221	25.1	12.0

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.0 PK	74.0	-10.0	1.35 H	207	61.3	2.7
2	5150.00	46.9 AV	54.0	-7.1	1.35 H	207	44.2	2.7
3	*5260.00	111.5 PK			1.35 H	207	109.2	2.3
4	*5260.00	101.2 AV			1.35 H	207	98.9	2.3
5	#10520.00	50.8 PK	68.2	-17.4	1.93 H	346	37.8	13.0
6	15780.00	53.9 PK	74.0	-20.1	2.32 H	299	41.9	12.0
7	15780.00	41.6 AV	54.0	-12.4	2.32 H	299	29.6	12.0
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	5150.00	62.9 PK	74.0	-11.1	1.82 V	196	60.2	2.7
2	5150.00	46.9 AV	54.0	-7.1	1.82 V	196	44.2	2.7
3	*5260.00	110.2 PK			1.82 V	196	107.9	2.3
4	*5260.00	100.7 AV			1.82 V	196	98.4	2.3
5	#10520.00	48.9 PK	68.2	-19.3	1.61 V	8	35.9	13.0
6	15780.00	51.2 PK	74.0	-22.8	1.77 V	216	39.2	12.0
7	15780.00	37.1 AV	54.0	-16.9	1.77 V	216	25.1	12.0

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	111.3 PK			1.30 H	217	108.9	2.4
2	*5300.00	100.5 AV			1.30 H	217	98.1	2.4
3	10600.00	50.3 PK	74.0	-23.7	1.91 H	352	37.6	12.7
4	10600.00	37.1 AV	54.0	-16.9	1.91 H	352	24.4	12.7
5	15900.00	53.8 PK	74.0	-20.2	2.34 H	305	41.7	12.1
6	15900.00	41.5 AV	54.0	-12.5	2.34 H	305	29.4	12.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	111.1 PK			1.87 V	195	108.7	2.4
2	*5300.00	100.6 AV			1.87 V	195	98.2	2.4
3	10600.00	48.1 PK	74.0	-25.9	1.57 V	3	35.4	12.7
4	10600.00	36.9 AV	54.0	-17.1	1.57 V	3	24.2	12.7
5	15900.00	50.7 PK	74.0	-23.3	1.81 V	220	38.6	12.1
6	15900.00	37.6 AV	54.0	-16.4	1.81 V	220	25.5	12.1

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	112.2 PK			1.32 H	228	109.6	2.6
2	*5320.00	99.2 AV			1.32 H	228	96.6	2.6
3	5350.00	64.0 PK	74.0	-10.0	1.32 H	228	61.4	2.6
4	5350.00	44.5 AV	54.0	-9.5	1.32 H	228	41.9	2.6
5	10640.00	50.7 PK	74.0	-23.3	1.97 H	345	37.9	12.8
6	10640.00	35.1 AV	54.0	-18.9	1.97 H	345	22.3	12.8
7	15960.00	54.1 PK	74.0	-19.9	2.35 H	304	41.7	12.4
8	15960.00	39.2 AV	54.0	-14.8	2.35 H	304	26.8	12.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	110.6 PK			1.83 V	207	108.0	2.6
2	*5320.00	100.3 AV			1.83 V	207	97.7	2.6
3	5350.00	62.4 PK	74.0	-11.6	1.83 V	207	59.8	2.6
4	5350.00	47.0 AV	54.0	-7.0	1.83 V	207	44.4	2.6
5	10640.00	48.5 PK	74.0	-25.5	1.61 V	23	35.7	12.8
6	10640.00	37.0 AV	54.0	-17.0	1.61 V	23	24.2	12.8
7	15960.00	50.6 PK	74.0	-23.4	1.77 V	204	38.2	12.4
8	15960.00	37.4 AV	54.0	-16.6	1.77 V	204	25.0	12.4

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	60.1 PK	74.0	-13.9	1.10 H	196	57.2	2.9
2	5460.00	46.3 AV	54.0	-7.7	1.10 H	196	43.4	2.9
3	#5466.00	60.3 PK	68.2	-7.9	1.10 H	196	57.4	2.9
4	*5500.00	109.8 PK			1.10 H	196	107.0	2.8
5	*5500.00	100.7 AV			1.10 H	196	97.9	2.8
6	11000.00	51.3 PK	74.0	-22.7	2.01 H	334	37.7	13.6
7	11000.00	38.5 AV	54.0	-15.5	2.01 H	334	24.9	13.6
8	#16500.00	55.5 PK	68.2	-12.7	2.32 H	298	40.8	14.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	62.2 PK	74.0	-11.8	1.22 V	176	59.3	2.9
2	5460.00	46.9 AV	54.0	-7.1	1.22 V	176	44.0	2.9
3	#5466.00	62.6 PK	68.2	-5.6	1.22 V	176	59.7	2.9
4	*5500.00	109.4 PK			1.22 V	176	106.6	2.8
5	*5500.00	99.9 AV			1.22 V	176	97.1	2.8
6	11000.00	49.4 PK	74.0	-24.6	1.57 V	20	35.8	13.6
7	11000.00	37.2 AV	54.0	-16.8	1.57 V	20	23.6	13.6
8	#16500.00	51.2 PK	68.2	-17.0	1.75 V	212	36.5	14.7

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.

CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	109.7 PK			1.07 H	194	106.8	2.9
2	*5580.00	100.3 AV			1.07 H	194	97.4	2.9
3	11160.00	50.8 PK	74.0	-23.2	2.06 H	339	37.7	13.1
4	11160.00	38.1 AV	54.0	-15.9	2.06 H	339	25.0	13.1
5	#16740.00	55.9 PK	68.2	-12.3	2.34 H	287	39.8	16.1
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	*5580.00	109.9 PK			1.25 V	184	107.0	2.9
2	*5580.00	99.2 AV			1.25 V	184	96.3	2.9
3	11160.00	49.8 PK	74.0	-24.2	1.61 V	8	36.7	13.1
4	11160.00	37.7 AV	54.0	-16.3	1.61 V	8	24.6	13.1
5	#16740.00	51.1 PK	68.2	-17.1	1.70 V	222	35.0	16.1

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	108.9 PK			1.21 H	174	105.6	3.3
2	*5700.00	100.1 AV			1.21 H	174	96.8	3.3
3	#5725.00	52.6 PK	68.2	-15.6	1.21 H	174	49.4	3.2
4	11400.00	49.1 PK	74.0	-24.9	2.01 H	327	35.6	13.5
5	11400.00	37.3 AV	54.0	-16.7	2.01 H	327	23.8	13.5
6	#17100.00	55.2 PK	68.2	-13.0	2.40 H	296	39.0	16.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	108.9 PK			1.19 V	176	105.6	3.3
2	*5700.00	99.1 AV			1.19 V	176	95.8	3.3
3	#5725.00	52.7 PK	68.2	-15.5	1.19 V	176	49.5	3.2
4	11400.00	49.0 PK	74.0	-25.0	1.66 V	12	35.5	13.5
5	11400.00	37.3 AV	54.0	-16.7	1.66 V	12	23.8	13.5
6	#17100.00	50.3 PK	68.2	-17.9	1.75 V	206	34.1	16.2

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. 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.

CHANNEL	TX Channel 144	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	52.6 PK	68.2	-15.6	1.16 H	170	49.7	2.9
2	*5720.00	109.1 PK			1.16 H	170	105.8	3.3
3	*5720.00	99.6 AV			1.16 H	170	96.3	3.3
4	#5850.00	52.3 PK	68.2	-15.9	1.16 H	170	48.6	3.7
5	11440.00	49.8 PK	74.0	-24.2	1.97 H	320	36.4	13.4
6	11440.00	36.7 AV	54.0	-17.3	1.97 H	320	23.3	13.4
7	#17160.00	55.5 PK	68.2	-12.7	2.42 H	310	39.2	16.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	52.5 PK	68.2	-15.7	1.18 V	181	49.6	2.9
2	*5720.00	110.1 PK			1.18 V	181	106.8	3.3
3	*5720.00	99.4 AV			1.18 V	181	96.1	3.3
4	#5850.00	52.4 PK	68.2	-15.8	1.18 V	181	48.7	3.7
5	11440.00	48.9 PK	74.0	-25.1	1.71 V	14	35.5	13.4
6	11440.00	37.0 AV	54.0	-17.0	1.71 V	14	23.6	13.4
7	#17160.00	50.5 PK	68.2	-17.7	1.73 V	207	34.2	16.3

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5633.62	59.8 PK	68.2	-8.4	1.12 H	189	57.8	2.0
2	*5745.00	121.7 PK			1.12 H	189	118.4	3.3
3	*5745.00	112.0 AV			1.12 H	189	108.7	3.3
4	#5944.01	60.9 PK	68.2	-7.3	1.12 H	189	58.1	2.8
5	11490.00	47.8 PK	74.0	-26.2	1.95 H	248	34.5	13.3
6	11490.00	37.7 AV	54.0	-16.3	1.95 H	248	24.4	13.3
7	#17235.00	64.0 PK	68.2	-4.2	3.10 H	150	47.5	16.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5647.09	62.3 PK	68.2	-5.9	1.32 V	180	60.6	1.7
2	*5745.00	121.2 PK			1.32 V	180	117.9	3.3
3	*5745.00	111.8 AV			1.32 V	180	108.5	3.3
4	#5977.93	62.6 PK	68.2	-5.6	1.32 V	180	60.1	2.5
5	11490.00	46.2 PK	74.0	-27.8	1.60 V	83	32.9	13.3
6	11490.00	36.1 AV	54.0	-17.9	1.60 V	83	22.8	13.3
7	#17235.00	58.1 PK	68.2	-10.1	1.98 V	76	41.6	16.5

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. 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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5606.10	60.5 PK	68.2	-7.7	1.14 H	166	57.5	3.0
2	*5785.00	121.6 PK			1.14 H	166	118.2	3.4
3	*5785.00	111.8 AV			1.14 H	166	108.4	3.4
4	#6016.62	60.3 PK	68.2	-7.9	1.14 H	166	56.7	3.6
5	11570.00	48.0 PK	74.0	-26.0	1.90 H	246	35.0	13.0
6	11570.00	38.0 AV	54.0	-16.0	1.90 H	246	25.0	13.0
7	#17355.00	64.5 PK	68.2	-3.7	3.13 H	157	47.4	17.1
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	#5572.14	59.1 PK	68.2	-9.1	1.31 V	176	56.2	2.9
2	*5785.00	121.0 PK			1.31 V	176	117.6	3.4
3	*5785.00	111.5 AV			1.31 V	176	108.1	3.4
4	#6010.94	62.7 PK	68.2	-5.5	1.31 V	176	59.1	3.6
5	11570.00	46.0 PK	74.0	-28.0	1.63 V	83	33.0	13.0
6	11570.00	35.8 AV	54.0	-18.2	1.63 V	83	22.8	13.0
7	#17355.00	58.4 PK	68.2	-9.8	2.00 V	68	41.3	17.1

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5553.99	60.6 PK	68.2	-7.6	1.13 H	175	57.7	2.9
2	*5825.00	121.0 PK			1.13 H	175	117.4	3.6
3	*5825.00	111.5 AV			1.13 H	175	107.9	3.6
4	#6005.15	61.9 PK	68.2	-6.3	1.13 H	175	58.3	3.6
5	11650.00	47.9 PK	74.0	-26.1	1.94 H	237	35.0	12.9
6	11650.00	38.1 AV	54.0	-15.9	1.94 H	237	25.2	12.9
7	#17475.00	64.8 PK	68.2	-3.4	3.09 H	166	46.4	18.4
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	#5629.42	57.2 PK	68.2	-11.0	1.48 V	181	54.3	2.9
2	*5825.00	120.4 PK			1.48 V	181	116.8	3.6
3	*5825.00	111.2 AV			1.48 V	181	107.6	3.6
4	#5924.59	58.5 PK	68.5	-10.0	1.48 V	181	54.9	3.6
5	11650.00	46.4 PK	74.0	-27.6	1.68 V	88	33.5	12.9
6	11650.00	36.2 AV	54.0	-17.8	1.68 V	88	23.3	12.9
7	#17475.00	58.3 PK	68.2	-9.9	1.98 V	77	39.9	18.4

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. 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.

802.11ax (HE20)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	73.5 PK	74.0	-0.5	1.18 H	186	70.8	2.7
2	5150.00	53.5 AV	54.0	-0.5	1.18 H	186	50.8	2.7
3	*5180.00	119.2 PK			1.18 H	186	116.5	2.7
4	*5180.00	107.3 AV			1.18 H	186	104.6	2.7
5	#10360.00	50.4 PK	68.2	-17.8	1.98 H	346	37.8	12.6
6	15540.00	54.3 PK	74.0	-19.7	2.38 H	312	41.5	12.8
7	15540.00	40.5 AV	54.0	-13.5	2.38 H	312	27.7	12.8
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	5150.00	71.5 PK	74.0	-2.5	1.01 V	180	68.8	2.7
2	5150.00	53.2 AV	54.0	-0.8	1.01 V	180	50.5	2.7
3	*5180.00	117.9 PK			1.01 V	180	115.2	2.7
4	*5180.00	106.3 AV			1.01 V	180	103.6	2.7
5	#10360.00	48.8 PK	68.2	-19.4	1.50 V	23	36.2	12.6
6	15540.00	50.7 PK	74.0	-23.3	1.73 V	205	37.9	12.8
7	15540.00	36.6 AV	54.0	-17.4	1.73 V	205	23.8	12.8

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	119.0 PK			1.19 H	180	116.3	2.7
2	*5200.00	107.5 AV			1.19 H	180	104.8	2.7
3	#10400.00	50.2 PK	68.2	-18.0	1.97 H	332	37.2	13.0
4	15600.00	53.5 PK	74.0	-20.5	2.40 H	321	40.7	12.8
5	15600.00	41.0 AV	54.0	-13.0	2.40 H	321	28.2	12.8
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	*5200.00	118.1 PK			1.22 V	186	115.4	2.7
2	*5200.00	106.8 AV			1.22 V	186	104.1	2.7
3	#10400.00	48.4 PK	68.2	-19.8	1.46 V	35	35.4	13.0
4	15600.00	50.2 PK	74.0	-23.8	1.74 V	198	37.4	12.8
5	15600.00	36.2 AV	54.0	-17.8	1.74 V	198	23.4	12.8

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	118.8 PK			1.25 H	166	116.5	2.3
2	*5240.00	107.0 AV			1.25 H	166	104.7	2.3
3	5350.00	69.7 PK	74.0	-4.3	1.25 H	166	67.1	2.6
4	5350.00	52.7 AV	54.0	-1.3	1.25 H	166	50.1	2.6
5	#10480.00	49.7 PK	68.2	-18.5	2.01 H	332	36.7	13.0
6	15720.00	54.2 PK	74.0	-19.8	2.42 H	308	42.2	12.0
7	15720.00	41.3 AV	54.0	-12.7	2.42 H	308	29.3	12.0
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	*5240.00	118.4 PK			1.00 V	179	116.1	2.3
2	*5240.00	107.0 AV			1.00 V	179	104.7	2.3
3	5350.00	68.9 PK	74.0	-5.1	1.00 V	179	66.3	2.6
4	5350.00	52.0 AV	54.0	-2.0	1.00 V	179	49.4	2.6
5	#10480.00	48.5 PK	68.2	-19.7	1.51 V	22	35.5	13.0
6	15720.00	49.8 PK	74.0	-24.2	1.78 V	208	37.8	12.0
7	15720.00	36.0 AV	54.0	-18.0	1.78 V	208	24.0	12.0

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.4 PK	74.0	-9.6	1.33 H	208	61.7	2.7
2	5150.00	46.8 AV	54.0	-7.2	1.33 H	208	44.1	2.7
3	*5260.00	111.0 PK			1.33 H	208	108.7	2.3
4	*5260.00	100.6 AV			1.33 H	208	98.3	2.3
5	#10520.00	49.3 PK	68.2	-18.9	1.94 H	332	36.3	13.0
6	15780.00	53.8 PK	74.0	-20.2	2.30 H	303	41.8	12.0
7	15780.00	41.4 AV	54.0	-12.6	2.30 H	303	29.4	12.0
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	5150.00	62.5 PK	74.0	-11.5	1.85 V	200	59.8	2.7
2	5150.00	47.1 AV	54.0	-6.9	1.85 V	200	44.4	2.7
3	*5260.00	110.0 PK			1.85 V	200	107.7	2.3
4	*5260.00	100.2 AV			1.85 V	200	97.9	2.3
5	#10520.00	47.9 PK	68.2	-20.3	1.56 V	23	34.9	13.0
6	15780.00	50.4 PK	74.0	-23.6	1.81 V	206	38.4	12.0
7	15780.00	37.6 AV	54.0	-16.4	1.81 V	206	25.6	12.0

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	111.4 PK			1.35 H	204	109.0	2.4
2	*5300.00	100.6 AV			1.35 H	204	98.2	2.4
3	10600.00	51.2 PK	74.0	-22.8	1.86 H	351	38.5	12.7
4	10600.00	37.3 AV	54.0	-16.7	1.86 H	351	24.6	12.7
5	15900.00	53.9 PK	74.0	-20.1	2.36 H	315	41.8	12.1
6	15900.00	40.8 AV	54.0	-13.2	2.36 H	315	28.7	12.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	110.8 PK			1.87 V	189	108.4	2.4
2	*5300.00	100.8 AV			1.87 V	189	98.4	2.4
3	10600.00	48.9 PK	74.0	-25.1	1.62 V	25	36.2	12.7
4	10600.00	36.0 AV	54.0	-18.0	1.62 V	25	23.3	12.7
5	15900.00	50.4 PK	74.0	-23.6	1.85 V	216	38.3	12.1
6	15900.00	36.9 AV	54.0	-17.1	1.85 V	216	24.8	12.1

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	111.2 PK			1.35 H	214	108.6	2.6
2	*5320.00	101.3 AV			1.35 H	214	98.7	2.6
3	5350.00	63.9 PK	74.0	-10.1	1.35 H	214	61.3	2.6
4	5350.00	47.1 AV	54.0	-6.9	1.35 H	214	44.5	2.6
5	10640.00	49.8 PK	74.0	-24.2	1.94 H	329	37.0	12.8
6	10640.00	36.7 AV	54.0	-17.3	1.94 H	329	23.9	12.8
7	15960.00	54.7 PK	74.0	-19.3	2.32 H	288	42.3	12.4
8	15960.00	41.4 AV	54.0	-12.6	2.32 H	288	29.0	12.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	110.5 PK			1.86 V	220	107.9	2.6
2	*5320.00	100.5 AV			1.86 V	220	97.9	2.6
3	5350.00	62.2 PK	74.0	-11.8	1.86 V	220	59.6	2.6
4	5350.00	46.0 AV	54.0	-8.0	1.86 V	220	43.4	2.6
5	10640.00	48.9 PK	74.0	-25.1	1.63 V	10	36.1	12.8
6	10640.00	37.3 AV	54.0	-16.7	1.63 V	10	24.5	12.8
7	15960.00	52.0 PK	74.0	-22.0	1.73 V	214	39.6	12.4
8	15960.00	37.8 AV	54.0	-16.2	1.73 V	214	25.4	12.4

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	59.9 PK	74.0	-14.1	1.08 H	205	57.0	2.9
2	5460.00	46.3 AV	54.0	-7.7	1.08 H	205	43.4	2.9
3	#5470.00	60.3 PK	68.2	-7.9	1.08 H	205	57.4	2.9
4	*5500.00	110.2 PK			1.08 H	205	107.4	2.8
5	*5500.00	100.4 AV			1.08 H	205	97.6	2.8
6	11000.00	51.3 PK	74.0	-22.7	1.96 H	347	37.7	13.6
7	11000.00	38.3 AV	54.0	-15.7	1.96 H	347	24.7	13.6
8	#16500.00	55.2 PK	68.2	-13.0	2.36 H	296	40.5	14.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	63.0 PK	74.0	-11.0	1.17 V	175	60.1	2.9
2	5460.00	47.6 AV	54.0	-6.4	1.17 V	175	44.7	2.9
3	#5470.00	62.3 PK	68.2	-5.9	1.17 V	175	59.4	2.9
4	*5500.00	110.5 PK			1.17 V	175	107.7	2.8
5	*5500.00	99.8 AV			1.17 V	175	97.0	2.8
6	11000.00	50.2 PK	74.0	-23.8	1.62 V	15	36.6	13.6
7	11000.00	38.4 AV	54.0	-15.6	1.62 V	15	24.8	13.6
8	#16500.00	50.9 PK	68.2	-17.3	1.79 V	213	36.2	14.7

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.

CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	109.9 PK			1.04 H	182	107.0	2.9
2	*5580.00	99.9 AV			1.04 H	182	97.0	2.9
3	11160.00	50.4 PK	74.0	-23.6	2.04 H	332	37.3	13.1
4	11160.00	37.8 AV	54.0	-16.2	2.04 H	332	24.7	13.1
5	#16740.00	55.3 PK	68.2	-12.9	2.32 H	300	39.2	16.1
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	*5580.00	110.4 PK			1.22 V	171	107.5	2.9
2	*5580.00	99.9 AV			1.22 V	171	97.0	2.9
3	11160.00	50.1 PK	74.0	-23.9	1.55 V	31	37.0	13.1
4	11160.00	38.3 AV	54.0	-15.7	1.55 V	31	25.2	13.1
5	#16740.00	51.5 PK	68.2	-16.7	1.69 V	217	35.4	16.1

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	109.6 PK			1.22 H	160	106.3	3.3
2	*5700.00	99.8 AV			1.22 H	160	96.5	3.3
3	#5725.00	53.4 PK	68.2	-14.8	1.22 H	160	50.2	3.2
4	11400.00	49.4 PK	74.0	-24.6	2.02 H	313	35.9	13.5
5	11400.00	36.5 AV	54.0	-17.5	2.02 H	313	23.0	13.5
6	#17100.00	56.0 PK	68.2	-12.2	2.43 H	300	39.8	16.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	109.1 PK			1.18 V	160	105.8	3.3
2	*5700.00	99.1 AV			1.18 V	160	95.8	3.3
3	#5725.00	53.6 PK	68.2	-14.6	1.18 V	160	50.4	3.2
4	11400.00	49.2 PK	74.0	-24.8	1.67 V	17	35.7	13.5
5	11400.00	37.3 AV	54.0	-16.7	1.67 V	17	23.8	13.5
6	#17100.00	50.9 PK	68.2	-17.3	1.76 V	208	34.7	16.2

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. 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.

CHANNEL	TX Channel 144	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	52.7 PK	68.2	-15.5	1.22 H	185	49.8	2.9
2	*5720.00	109.4 PK			1.22 H	185	106.1	3.3
3	*5720.00	100.0 AV			1.22 H	185	96.7	3.3
4	#5850.00	52.4 PK	68.2	-15.8	1.22 H	185	48.7	3.7
5	11440.00	49.4 PK	74.0	-24.6	1.91 H	308	36.0	13.4
6	11440.00	36.5 AV	54.0	-17.5	1.91 H	308	23.1	13.4
7	#17160.00	56.9 PK	68.2	-11.3	2.47 H	311	40.6	16.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	52.4 PK	68.2	-15.8	1.21 V	170	49.5	2.9
2	*5720.00	110.5 PK			1.21 V	170	107.2	3.3
3	*5720.00	99.8 AV			1.21 V	170	96.5	3.3
4	#5850.00	52.1 PK	68.2	-16.1	1.21 V	170	48.4	3.7
5	11440.00	49.1 PK	74.0	-24.9	1.75 V	7	35.7	13.4
6	11440.00	36.9 AV	54.0	-17.1	1.75 V	7	23.5	13.4
7	#17160.00	51.1 PK	68.2	-17.1	1.76 V	197	34.8	16.3

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5571.68	60.0 PK	68.2	-8.2	1.14 H	178	57.1	2.9
2	*5745.00	121.7 PK			1.14 H	178	118.4	3.3
3	*5745.00	111.9 AV			1.14 H	178	108.6	3.3
4	#5960.04	60.8 PK	68.2	-7.4	1.14 H	178	57.2	3.6
5	11490.00	48.0 PK	74.0	-26.0	2.01 H	261	34.7	13.3
6	11490.00	38.1 AV	54.0	-15.9	2.01 H	261	24.8	13.3
7	#17235.00	63.6 PK	68.2	-4.6	3.13 H	162	47.1	16.5
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	#5550.62	58.1 PK	68.2	-10.1	1.38 V	168	56.4	1.7
2	*5745.00	121.0 PK			1.38 V	168	117.7	3.3
3	*5745.00	111.6 AV			1.38 V	168	108.3	3.3
4	#5934.56	57.8 PK	68.2	-10.4	1.38 V	168	55.4	2.4
5	11490.00	46.0 PK	74.0	-28.0	1.58 V	98	32.7	13.3
6	11490.00	35.9 AV	54.0	-18.1	1.58 V	98	22.6	13.3
7	#17235.00	57.8 PK	68.2	-10.4	1.95 V	79	41.3	16.5

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. 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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5619.09	60.2 PK	68.2	-8.0	1.17 H	167	58.1	2.1
2	*5785.00	120.9 PK			1.17 H	167	117.5	3.4
3	*5785.00	107.9 AV			1.17 H	167	104.5	3.4
4	#5973.30	60.5 PK	68.2	-7.7	1.17 H	167	57.6	2.9
5	11570.00	48.1 PK	74.0	-25.9	1.93 H	253	35.1	13.0
6	11570.00	38.4 AV	54.0	-15.6	1.93 H	253	25.4	13.0
7	#17355.00	64.5 PK	68.2	-3.7	3.10 H	161	47.4	17.1
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	#5622.58	57.6 PK	68.2	-10.6	1.34 V	172	55.8	1.8
2	*5785.00	121.6 PK			1.34 V	172	118.2	3.4
3	*5785.00	108.7 AV			1.34 V	172	105.3	3.4
4	#5987.81	58.8 PK	68.2	-9.4	1.34 V	172	56.3	2.5
5	11570.00	45.6 PK	74.0	-28.4	1.61 V	98	32.6	13.0
6	11570.00	35.4 AV	54.0	-18.6	1.61 V	98	22.4	13.0
7	#17355.00	58.2 PK	68.2	-10.0	2.05 V	63	41.1	17.1

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5578.76	60.1 PK	68.2	-8.1	1.23 H	167	58.0	2.1
2	*5825.00	120.6 PK			1.23 H	167	117.0	3.6
3	*5825.00	107.7 AV			1.23 H	167	104.1	3.6
4	#6006.26	61.5 PK	68.2	-6.7	1.23 H	167	58.6	2.9
5	11650.00	48.3 PK	74.0	-25.7	1.93 H	267	35.4	12.9
6	11650.00	38.4 AV	54.0	-15.6	1.93 H	267	25.5	12.9
7	#17475.00	64.2 PK	68.2	-4.0	3.11 H	165	45.8	18.4
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	#5628.37	57.8 PK	68.2	-10.4	1.34 V	186	56.0	1.8
2	*5825.00	121.6 PK			1.34 V	186	118.0	3.6
3	*5825.00	108.9 AV			1.34 V	186	105.3	3.6
4	#5987.85	58.9 PK	68.2	-9.3	1.34 V	186	56.4	2.5
5	11650.00	45.3 PK	74.0	-28.7	1.61 V	102	32.4	12.9
6	11650.00	35.3 AV	54.0	-18.7	1.61 V	102	22.4	12.9
7	#17475.00	58.6 PK	68.2	-9.6	2.09 V	78	40.2	18.4

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. 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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	73.3 PK	74.0	-0.7	1.18 H	188	70.6	2.7
2	5150.00	52.0 AV	54.0	-2.0	1.18 H	188	49.3	2.7
3	*5190.00	113.0 PK			1.18 H	188	110.3	2.7
4	*5190.00	100.5 AV			1.18 H	188	97.8	2.7
5	#10380.00	44.8 PK	68.2	-23.4	1.53 H	122	32.0	12.8
6	15570.00	58.9 PK	74.0	-15.1	2.09 H	81	46.2	12.7
7	15570.00	48.9 AV	54.0	-5.1	2.09 H	81	36.2	12.7
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	5150.00	73.8 PK	74.0	-0.2	1.78 V	180	71.1	2.7
2	5150.00	52.1 AV	54.0	-1.9	1.78 V	180	49.4	2.7
3	*5190.00	112.1 PK			1.78 V	180	109.4	2.7
4	*5190.00	99.9 AV			1.78 V	180	97.2	2.7
5	#10380.00	45.2 PK	68.2	-23.0	1.58 V	114	32.4	12.8
6	15570.00	58.3 PK	74.0	-15.7	2.04 V	87	45.6	12.7
7	15570.00	47.6 AV	54.0	-6.4	2.04 V	87	34.9	12.7

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	71.2 PK	74.0	-2.8	1.15 H	176	68.5	2.7
2	5150.00	53.5 AV	54.0	-0.5	1.15 H	176	50.8	2.7
3	*5230.00	117.0 PK			1.15 H	176	114.6	2.4
4	*5230.00	104.3 AV			1.15 H	176	101.9	2.4
5	5350.00	60.3 PK	74.0	-13.7	1.15 H	176	57.7	2.6
6	5350.00	48.8 AV	54.0	-5.2	1.15 H	176	46.2	2.6
7	#10460.00	49.7 PK	68.2	-18.5	1.49 H	119	36.7	13.0
8	15690.00	63.9 PK	74.0	-10.1	2.05 H	70	51.8	12.1
9	15690.00	53.1 AV	54.0	-0.9	2.05 H	70	41.0	12.1
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	5150.00	71.8 PK	74.0	-2.2	1.55 V	179	69.1	2.7
2	5150.00	53.8 AV	54.0	-0.2	1.55 V	179	51.1	2.7
3	*5230.00	116.6 PK			1.55 V	179	114.2	2.4
4	*5230.00	104.0 AV			1.55 V	179	101.6	2.4
5	5350.00	60.0 PK	74.0	-14.0	1.55 V	179	57.4	2.6
6	5350.00	48.7 AV	54.0	-5.3	1.55 V	179	46.1	2.6
7	#10460.00	50.5 PK	68.2	-17.7	1.53 V	115	37.5	13.0
8	15690.00	63.6 PK	74.0	-10.4	2.00 V	72	51.5	12.1
9	15690.00	53.2 AV	54.0	-0.8	2.00 V	72	41.1	12.1

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	110.1 PK			1.09 H	169	107.8	2.3
2	*5270.00	97.9 AV			1.09 H	169	95.6	2.3
3	5350.00	62.0 PK	74.0	-12.0	1.09 H	169	59.4	2.6
4	5350.00	49.9 AV	54.0	-4.1	1.09 H	169	47.3	2.6
5	15810.00	59.1 PK	74.0	-14.9	2.08 H	63	47.0	12.1
6	15810.00	49.3 AV	54.0	-4.7	2.08 H	63	37.2	12.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	109.7 PK			1.58 V	165	107.4	2.3
2	*5270.00	97.1 AV			1.58 V	165	94.8	2.3
3	5350.00	61.2 PK	74.0	-12.8	1.58 V	165	58.6	2.6
4	5350.00	50.0 AV	54.0	-4.0	1.58 V	165	47.4	2.6
5	#10540.00	46.1 PK	68.2	-22.1	1.54 V	120	33.1	13.0
6	15810.00	59.2 PK	74.0	-14.8	2.03 V	63	47.1	12.1
7	15810.00	48.9 AV	54.0	-5.1	2.03 V	63	36.8	12.1

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	110.8 PK			1.62 H	196	108.3	2.5
2	*5310.00	98.0 AV			1.62 H	196	95.5	2.5
3	5350.00	69.0 PK	74.0	-5.0	1.62 H	196	66.4	2.6
4	5350.00	51.6 AV	54.0	-2.4	1.62 H	196	49.0	2.6
5	10620.00	45.5 PK	74.0	-28.5	1.54 H	99	32.8	12.7
6	10620.00	36.4 AV	54.0	-17.6	1.54 H	99	23.7	12.7
7	15930.00	60.1 PK	74.0	-13.9	2.04 H	54	48.0	12.1
8	15930.00	50.1 AV	54.0	-3.9	2.04 H	54	38.0	12.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	110.3 PK			1.21 V	180	107.8	2.5
2	*5310.00	98.5 AV			1.21 V	180	96.0	2.5
3	5350.00	69.0 PK	74.0	-5.0	1.21 V	180	66.4	2.6
4	5350.00	51.2 AV	54.0	-2.8	1.21 V	180	48.6	2.6
5	10620.00	45.8 PK	74.0	-28.2	1.59 V	109	33.1	12.7
6	10620.00	36.5 AV	54.0	-17.5	1.59 V	109	23.8	12.7
7	15930.00	59.8 PK	74.0	-14.2	2.09 V	48	47.7	12.1
8	15930.00	50.0 AV	54.0	-4.0	2.09 V	48	37.9	12.1

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	60.2 PK	74.0	-13.8	1.51 H	194	57.3	2.9
2	5460.00	48.3 AV	54.0	-5.7	1.51 H	194	45.4	2.9
3	#5470.00	67.4 PK	68.2	-0.8	1.51 H	194	64.5	2.9
4	*5510.00	108.6 PK			1.51 H	194	105.8	2.8
5	*5510.00	97.1 AV			1.51 H	194	94.3	2.8
6	11020.00	46.2 PK	74.0	-27.8	1.62 H	109	32.7	13.5
7	11020.00	37.0 AV	54.0	-17.0	1.62 H	109	23.5	13.5
8	#16530.00	60.6 PK	68.2	-7.6	2.09 H	77	45.9	14.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	66.1 PK	74.0	-7.9	1.08 V	184	63.2	2.9
2	5460.00	50.7 AV	54.0	-3.3	1.08 V	184	47.8	2.9
3	#5470.00	67.8 PK	68.2	-0.4	1.08 V	184	64.9	2.9
4	*5510.00	110.5 PK			1.08 V	184	107.7	2.8
5	*5510.00	98.1 AV			1.08 V	184	95.3	2.8
6	11020.00	46.1 PK	74.0	-27.9	1.61 V	105	32.6	13.5
7	11020.00	37.8 AV	54.0	-16.2	1.61 V	105	24.3	13.5
8	#16530.00	59.7 PK	68.2	-8.5	2.07 V	62	45.0	14.7

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5550.00	108.7 PK			1.55 H	195	105.8	2.9
2	*5550.00	96.7 AV			1.55 H	195	93.8	2.9
3	11100.00	46.4 PK	74.0	-27.6	1.66 H	114	33.4	13.0
4	11100.00	37.2 AV	54.0	-16.8	1.66 H	114	24.2	13.0
5	#16650.00	58.8 PK	68.2	-9.4	2.16 H	121	43.3	15.5
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	*5550.00	110.0 PK			1.08 V	186	107.1	2.9
2	*5550.00	97.6 AV			1.08 V	186	94.7	2.9
3	11100.00	46.2 PK	74.0	-27.8	1.60 V	119	33.2	13.0
4	11100.00	38.3 AV	54.0	-15.7	1.60 V	119	25.3	13.0
5	#16650.00	59.8 PK	68.2	-8.4	1.92 V	88	44.3	15.5

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. 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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	109.5 PK			1.71 H	206	106.4	3.1
2	*5670.00	97.8 AV			1.71 H	206	94.7	3.1
3	#5725.00	67.5 PK	68.2	-0.7	1.71 H	206	64.3	3.2
4	11340.00	46.6 PK	74.0	-27.4	1.72 H	121	33.2	13.4
5	11340.00	37.4 AV	54.0	-16.6	1.72 H	121	24.0	13.4
6	#17010.00	59.5 PK	68.2	-8.7	2.36 H	89	42.9	16.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	110.6 PK			1.06 V	176	107.5	3.1
2	*5670.00	97.7 AV			1.06 V	176	94.6	3.1
3	#5725.00	67.7 PK	68.2	-0.5	1.06 V	176	64.5	3.2
4	11340.00	46.2 PK	74.0	-27.8	1.64 V	106	32.8	13.4
5	11340.00	37.9 AV	54.0	-16.1	1.64 V	106	24.5	13.4
6	#17010.00	59.1 PK	68.2	-9.1	1.76 V	164	42.5	16.6

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. 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.

CHANNEL	TX Channel 142	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	56.6 PK	68.2	-11.6	1.65 H	191	53.7	2.9
2	*5710.00	108.1 PK			1.65 H	191	104.8	3.3
3	*5710.00	95.2 AV			1.65 H	191	91.9	3.3
4	#5850.00	62.3 PK	68.2	-5.9	1.65 H	191	58.6	3.7
5	11420.00	44.7 PK	74.0	-29.3	1.74 H	130	31.4	13.3
6	11420.00	35.8 AV	54.0	-18.2	1.74 H	130	22.5	13.3
7	#17130.00	57.6 PK	68.2	-10.6	2.32 H	100	41.3	16.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	56.4 PK	68.2	-11.8	1.07 V	175	53.5	2.9
2	*5710.00	108.4 PK			1.07 V	175	105.1	3.3
3	*5710.00	95.8 AV			1.07 V	175	92.5	3.3
4	#5850.00	62.6 PK	68.2	-5.6	1.07 V	175	58.9	3.7
5	11420.00	44.6 PK	74.0	-29.4	1.63 V	97	31.3	13.3
6	11420.00	35.7 AV	54.0	-18.3	1.63 V	97	22.4	13.3
7	#17130.00	57.2 PK	68.2	-11.0	1.82 V	181	40.9	16.3

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5643.91	61.5 PK	68.2	-6.7	1.86 H	236	59.5	2.0
2	*5755.00	114.3 PK			1.86 H	236	111.0	3.3
3	*5755.00	103.5 AV			1.86 H	236	100.2	3.3
4	#5937.98	61.4 PK	68.2	-6.8	1.86 H	236	58.6	2.8
5	11510.00	44.3 PK	74.0	-29.7	1.70 H	116	31.0	13.3
6	11510.00	35.3 AV	54.0	-18.7	1.70 H	116	22.0	13.3
7	#17265.00	57.6 PK	68.2	-10.6	2.39 H	121	41.2	16.4
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	#5652.65	58.8 PK	70.2	-11.4	2.03 V	240	55.8	3.0
2	*5755.00	114.7 PK			2.03 V	240	111.4	3.3
3	*5755.00	103.6 AV			2.03 V	240	100.3	3.3
4	#5956.03	57.3 PK	68.2	-10.9	2.03 V	240	53.7	3.6
5	11510.00	44.4 PK	74.0	-29.6	1.59 V	100	31.1	13.3
6	11510.00	35.7 AV	54.0	-18.3	1.59 V	100	22.4	13.3
7	#17265.00	57.9 PK	68.2	-10.3	1.96 V	201	41.5	16.4

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. 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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5642.65	61.3 PK	68.2	-6.9	1.96 H	216	58.4	2.9
2	*5795.00	115.1 PK			1.96 H	216	111.7	3.4
3	*5795.00	104.0 AV			1.96 H	216	100.6	3.4
4	#5968.14	60.0 PK	68.2	-8.2	1.96 H	216	56.4	3.6
5	11590.00	44.7 PK	74.0	-29.3	1.75 H	108	31.8	12.9
6	11590.00	35.7 AV	54.0	-18.3	1.75 H	108	22.8	12.9
7	#17385.00	58.1 PK	68.2	-10.1	2.35 H	132	40.7	17.4
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	#5636.16	57.3 PK	68.2	-10.9	2.03 V	238	55.6	1.7
2	*5795.00	115.4 PK			2.03 V	238	112.0	3.4
3	*5795.00	104.2 AV			2.03 V	238	100.8	3.4
4	#6013.46	59.1 PK	68.2	-9.1	2.03 V	238	56.6	2.5
5	11590.00	44.5 PK	74.0	-29.5	1.58 V	84	31.6	12.9
6	11590.00	35.8 AV	54.0	-18.2	1.58 V	84	22.9	12.9
7	#17385.00	58.2 PK	68.2	-10.0	2.06 V	162	40.8	17.4

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. 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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	67.9 PK	74.0	-6.1	1.89 H	211	65.2	2.7
2	5150.00	51.3 AV	54.0	-2.7	1.89 H	211	48.6	2.7
3	*5210.00	111.0 PK			1.89 H	211	108.4	2.6
4	*5210.00	101.2 AV			1.89 H	211	98.6	2.6
5	5350.00	58.0 PK	74.0	-16.0	1.89 H	211	55.4	2.6
6	5350.00	47.1 AV	54.0	-6.9	1.89 H	211	44.5	2.6
7	#10420.00	43.9 PK	68.2	-24.3	1.79 H	132	30.9	13.0
8	15630.00	55.7 PK	74.0	-18.3	2.44 H	136	43.1	12.6
9	15630.00	44.9 AV	54.0	-9.1	2.44 H	136	32.3	12.6
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	5150.00	69.4 PK	74.0	-4.6	1.53 V	263	66.7	2.7
2	**5150.00**	**53.9 AV**	**54.0**	**-0.1**	**1.53 V**	**263**	**51.2**	**2.7**
3	*5210.00	111.5 PK			1.53 V	263	108.9	2.6
4	*5210.00	101.8 AV			1.53 V	263	99.2	2.6
5	5350.00	58.9 PK	74.0	-15.1	1.53 V	263	56.3	2.6
6	5350.00	47.8 AV	54.0	-6.2	1.53 V	263	45.2	2.6
7	#10420.00	44.3 PK	68.2	-23.9	1.89 V	82	31.3	13.0
8	15630.00	56.9 PK	74.0	-17.1	2.11 V	121	44.3	12.6
9	15630.00	46.3 AV	54.0	-7.7	2.11 V	121	33.7	12.6

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. 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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.1 PK	74.0	-18.9	1.92 H	222	52.4	2.7
2	5150.00	48.8 AV	54.0	-5.2	1.92 H	222	46.1	2.7
3	*5290.00	105.7 PK			1.92 H	222	103.3	2.4
4	*5290.00	94.9 AV			1.92 H	222	92.5	2.4
5	5350.00	65.6 PK	74.0	-8.4	1.92 H	222	63.0	2.6
6	5350.00	49.4 AV	54.0	-4.6	1.92 H	222	46.8	2.6
7	#10580.00	43.6 PK	68.2	-24.6	2.11 H	262	30.8	12.8
8	15870.00	55.7 PK	74.0	-18.3	2.48 H	151	43.6	12.1
9	15870.00	44.6 AV	54.0	-9.4	2.48 H	151	32.5	12.1
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	5150.00	55.6 PK	74.0	-18.4	1.51 V	265	52.9	2.7
2	5150.00	49.1 AV	54.0	-4.9	1.51 V	265	46.4	2.7
3	*5290.00	106.9 PK			1.51 V	265	104.5	2.4
4	*5290.00	95.8 AV			1.51 V	265	93.4	2.4
5	5350.00	66.8 PK	74.0	-7.2	1.51 V	265	64.2	2.6
6	5350.00	50.2 AV	54.0	-3.8	1.51 V	265	47.6	2.6
7	#10580.00	44.0 PK	68.2	-24.2	1.92 V	266	31.2	12.8
8	15870.00	57.3 PK	74.0	-16.7	2.06 V	135	45.2	12.1
9	15870.00	46.7 AV	54.0	-7.3	2.06 V	135	34.6	12.1

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	66.2 PK	74.0	-7.8	1.78 H	200	63.3	2.9
2	5460.00	51.2 AV	54.0	-2.8	1.78 H	200	48.3	2.9
3	#5470.00	66.5 PK	68.2	-1.7	1.78 H	200	63.6	2.9
4	*5530.00	107.1 PK			1.78 H	200	104.2	2.9
5	*5530.00	95.7 AV			1.78 H	200	92.8	2.9
6	#5725.00	63.1 PK	68.2	-5.1	1.78 H	200	59.9	3.2
7	11060.00	45.0 PK	74.0	-29.0	2.01 H	242	31.7	13.3
8	11060.00	35.4 AV	54.0	-18.6	2.01 H	242	22.1	13.3
9	#16590.00	57.0 PK	68.2	-11.2	2.22 H	251	42.0	15.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	67.4 PK	74.0	-6.6	1.51 V	174	64.5	2.9
2	5460.00	52.7 AV	54.0	-1.3	1.51 V	174	49.8	2.9
3	#5470.00	67.6 PK	68.2	-0.6	1.51 V	174	64.7	2.9
4	*5530.00	107.6 PK			1.51 V	174	104.7	2.9
5	*5530.00	96.2 AV			1.51 V	174	93.3	2.9
6	#5725.00	64.3 PK	68.2	-3.9	1.51 V	174	61.1	3.2
7	11060.00	44.9 PK	74.0	-29.1	1.62 V	192	31.6	13.3
8	11060.00	35.3 AV	54.0	-18.7	1.62 V	192	22.0	13.3
9	#16590.00	57.6 PK	68.2	-10.6	1.66 V	236	42.6	15.0

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5610.00	107.9 PK			1.88 H	216	104.9	3.0
2	*5610.00	96.0 AV			1.88 H	216	93.0	3.0
3	#5725.00	66.9 PK	68.2	-1.3	1.88 H	216	63.7	3.2
4	11220.00	45.3 PK	74.0	-28.7	2.16 H	256	32.2	13.1
5	11220.00	35.2 AV	54.0	-18.8	2.16 H	256	22.1	13.1
6	#16830.00	56.4 PK	68.2	-11.8	2.12 H	222	40.1	16.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5610.00	108.4 PK			1.39 V	178	105.4	3.0
2	*5610.00	96.7 AV			1.39 V	178	93.7	3.0
3	**#5725.00**	**68.1 PK**	**68.2**	**-0.1**	**1.39 V**	**178**	**64.9**	**3.2**
4	11220.00	45.5 PK	74.0	-28.5	1.46 V	211	32.4	13.1
5	11220.00	35.5 AV	54.0	-18.5	1.46 V	211	22.4	13.1
6	#16830.00	57.0 PK	68.2	-11.2	1.78 V	192	40.7	16.3

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.

CHANNEL	TX Channel 138	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	62.4 PK	68.2	-5.8	1.82 H	222	59.5	2.9
2	*5690.00	107.5 PK			1.82 H	222	104.2	3.3
3	*5690.00	95.7 AV			1.82 H	222	92.4	3.3
4	#5850.00	67.2 PK	68.2	-1.0	1.82 H	222	63.5	3.7
5	11380.00	45.0 PK	74.0	-29.0	1.86 H	215	31.5	13.5
6	11380.00	35.3 AV	54.0	-18.7	1.86 H	215	21.8	13.5
7	#17070.00	56.7 PK	68.2	-11.5	1.96 H	188	40.3	16.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	63.3 PK	68.2	-4.9	1.33 V	167	60.4	2.9
2	*5690.00	107.8 PK			1.33 V	167	104.5	3.3
3	*5690.00	96.2 AV			1.33 V	167	92.9	3.3
4	#5850.00	67.9 PK	68.2	-0.3	1.33 V	167	64.2	3.7
5	11380.00	45.3 PK	74.0	-28.7	1.45 V	214	31.8	13.5
6	11380.00	35.4 AV	54.0	-18.6	1.45 V	214	21.9	13.5
7	#17070.00	57.1 PK	68.2	-11.1	1.75 V	207	40.7	16.4

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. 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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5636.97	65.6 PK	68.2	-2.6	2.42 H	74	63.6	2.0
2	*5775.00	111.3 PK			2.42 H	74	108.0	3.3
3	*5775.00	102.6 AV			2.42 H	74	99.3	3.3
4	#5928.39	64.2 PK	68.2	-4.0	2.42 H	74	61.5	2.7
5	11550.00	45.6 PK	74.0	-28.4	2.02 H	126	32.6	13.0
6	11550.00	37.0 AV	54.0	-17.0	2.02 H	126	24.0	13.0
7	#17325.00	55.6 PK	68.2	-12.6	1.76 H	222	38.8	16.8
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	#5633.55	67.3 PK	68.2	-0.9	2.02 V	237	65.3	2.0
2	*5775.00	115.4 PK			2.02 V	237	112.1	3.3
3	*5775.00	104.2 AV			2.02 V	237	100.9	3.3
4	#5950.61	63.8 PK	68.2	-4.4	2.02 V	237	60.9	2.9
5	11550.00	46.3 PK	74.0	-27.7	1.48 V	214	33.3	13.0
6	11550.00	37.2 AV	54.0	-16.8	1.48 V	214	24.2	13.0
7	#17325.00	55.9 PK	68.2	-12.3	1.65 V	126	39.1	16.8

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.

802.11ax (HE160)

CHANNEL	TX Channel 50	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	65.4 PK	74.0	-8.6	2.16 H	193	62.7	2.7
2	5150.00	51.6 AV	54.0	-2.4	2.16 H	193	48.9	2.7
3	*5250.00	108.1 PK			2.16 H	193	105.9	2.2
4	*5250.00	97.0 AV			2.16 H	193	94.8	2.2
5	5350.00	64.2 PK	74.0	-9.8	2.16 H	193	61.6	2.6
6	5350.00	52.8 AV	54.0	-1.2	2.16 H	193	50.2	2.6
7	#10500.00	44.8 PK	68.2	-23.4	1.96 H	236	31.7	13.1
8	15750.00	54.9 PK	74.0	-19.1	1.86 H	213	42.9	12.0
9	15750.00	45.0 AV	54.0	-9.0	1.86 H	213	33.0	12.0
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	5150.00	66.3 PK	74.0	-7.7	1.39 V	176	63.6	2.7
2	5150.00	52.5 AV	54.0	-1.5	1.39 V	176	49.8	2.7
3	*5250.00	108.6 PK			1.39 V	176	106.4	2.2
4	*5250.00	97.7 AV			1.39 V	176	95.5	2.2
5	5350.00	65.4 PK	74.0	-8.6	1.39 V	176	62.8	2.6
6	**5350.00**	**53.9 AV**	**54.0**	**-0.1**	**1.39 V**	**176**	**51.3**	**2.6**
7	#10500.00	45.2 PK	68.2	-23.0	1.69 V	201	32.1	13.1
8	15750.00	55.3 PK	74.0	-18.7	2.01 V	169	43.3	12.0
9	15750.00	45.6 AV	54.0	-8.4	2.01 V	169	33.6	12.0

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.

CHANNEL	TX Channel 114	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	61.3 PK	74.0	-12.7	1.92 H	211	58.4	2.9
2	5460.00	50.1 AV	54.0	-3.9	1.92 H	211	47.2	2.9
3	#5470.00	64.8 PK	68.2	-3.4	1.92 H	211	61.9	2.9
4	*5570.00	104.5 PK			1.92 H	211	101.6	2.9
5	*5570.00	94.0 AV			1.92 H	211	91.1	2.9
6	#5725.00	62.7 PK	68.2	-5.5	1.92 H	211	59.5	3.2
7	11140.00	43.2 PK	74.0	-30.8	1.96 H	114	30.2	13.0
8	11140.00	35.3 AV	54.0	-18.7	1.96 H	114	22.3	13.0
9	#16710.00	52.3 PK	68.2	-15.9	1.36 H	263	36.3	16.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	62.9 PK	74.0	-11.1	1.35 V	177	60.0	2.9
2	5460.00	51.5 AV	54.0	-2.5	1.35 V	177	48.6	2.9
3	#5470.00	66.0 PK	68.2	-2.2	1.35 V	177	63.1	2.9
4	*5570.00	106.2 PK			1.35 V	177	103.3	2.9
5	*5570.00	95.6 AV			1.35 V	177	92.7	2.9
6	#5725.00	63.7 PK	68.2	-4.5	1.35 V	177	60.5	3.2
7	11140.00	43.2 PK	74.0	-30.8	1.44 V	221	30.2	13.0
8	11140.00	33.8 AV	54.0	-20.2	1.44 V	221	20.8	13.0
9	#16710.00	53.2 PK	68.2	-15.0	2.36 V	111	37.2	16.0

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.

Below 1GHz Data:

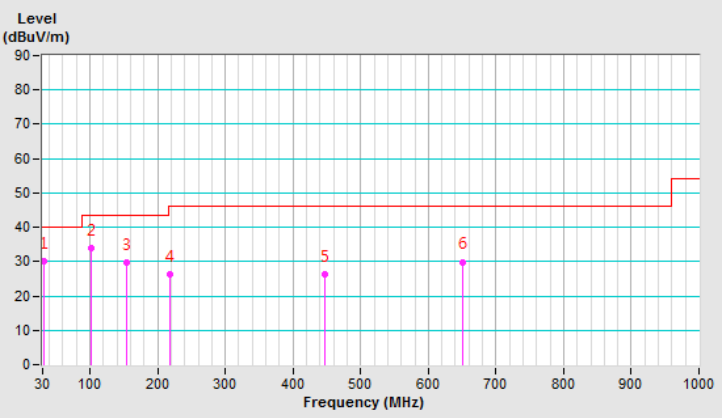
802.11ax (HE40)

CHANNEL	TX Channel 46	**DETECTOR FUNCTION**	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	31.17	30.2 QP	40.0	-9.8	1.00 H	6	39.9	-9.7
2	102.74	33.8 QP	43.5	-9.7	3.00 H	296	45.4	-11.6
3	154.04	29.7 QP	43.5	-13.8	2.00 H	132	37.5	-7.8
4	217.41	26.3 QP	46.0	-19.7	1.00 H	92	36.6	-10.3
5	446.38	26.3 QP	46.0	-19.7	2.00 H	300	28.9	-2.6
6	649.99	29.9 QP	46.0	-16.1	1.00 H	131	28.4	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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
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.

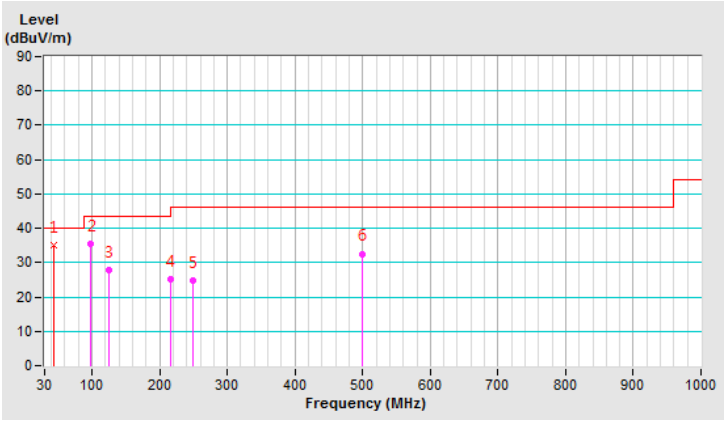


CHANNEL	TX Channel 46	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	44.12	34.9 QP	40.0	-5.1	1.00 V	201	43.2	-8.3
2	98.87	35.6 QP	43.5	-7.9	1.00 V	289	47.7	-12.1
3	124.99	27.9 QP	43.5	-15.6	1.50 V	189	37.3	-9.4
4	215.32	25.3 QP	43.5	-18.2	1.00 V	177	35.6	-10.3
5	249.98	24.8 QP	46.0	-21.2	1.00 V	165	33.5	-8.7
6	499.99	32.6 QP	46.0	-13.4	1.00 V	1	34.4	-1.8

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 of frequency range 30MHz~1000MHz.
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.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver R&S	ESCS 30	847124/029	Oct. 24, 2018	Oct. 23, 2019
Line-Impedance Stabilization Network (for EUT) R&S	ESH3-Z5	848773/004	Oct. 22, 2018	Oct. 21, 2019
Line-Impedance Stabilization Network (for Peripheral) R&S	ESH3-Z5	835239/001	Mar. 17, 2019	Mar. 16, 2020
50 ohms Terminator	N/A	3	Oct. 22, 2018	Oct. 21, 2019
RF Cable	5D-FB	COCCAB-001	Sep. 28, 2018	Sep. 27, 2019
Fixed attenuator EMCI	STI02-2200-10	003	Mar. 14, 2019	Mar. 13, 2020
Software BVADT	BVADT_Cond_ V7.3.7.4	NA	NA	NA

Note:

1. The calibration interval of the above test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in Conduction 1.
3 Tested Date: Apr. 29, 2019

4.2.3 Test Procedure

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.

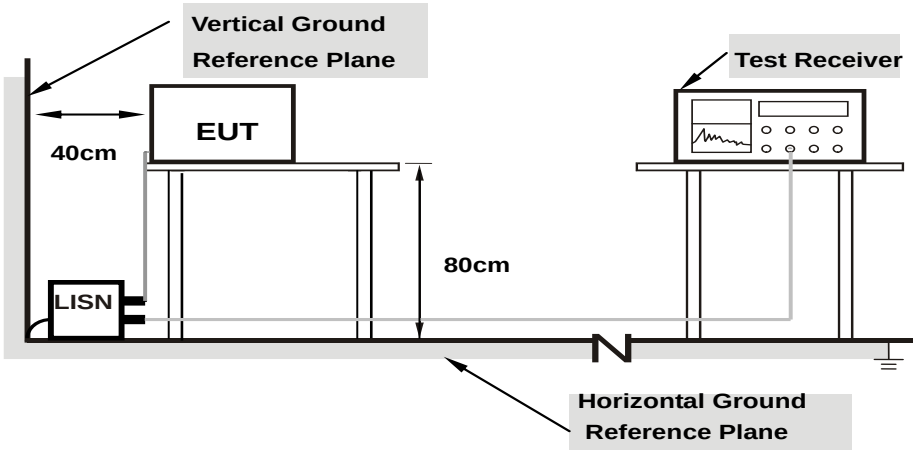
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



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

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

4.2.6 EUT Operating Condition

Same as 4.1.6.

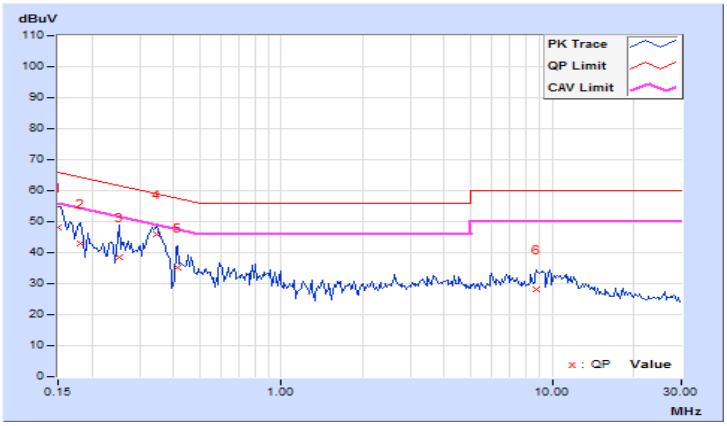
4.2.7 Test Results

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)

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	0.15000	10.03	38.25	22.14	48.28	32.17	66.00	56.00	-17.72	-23.83
2	0.18125	10.04	33.10	20.16	43.14	30.20	64.43	54.43	-21.29	-24.23
3	0.25156	10.06	28.29	14.76	38.35	24.82	61.71	51.71	-23.36	-26.89
4	**0.34531**	**10.07**	**35.81**	**31.06**	**45.88**	**41.13**	**59.07**	**49.07**	**-13.19**	**-7.94**
5	0.41563	10.08	24.98	16.39	35.06	26.47	57.54	47.54	-22.48	-21.07
6	8.75781	10.62	17.70	11.77	28.32	22.39	60.00	50.00	-31.68	-27.61

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.

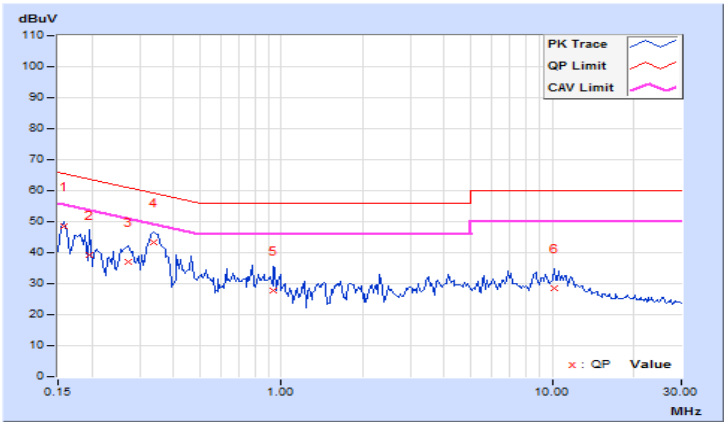


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)

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	0.15781	9.94	38.48	24.89	48.42	34.83	65.58	55.58	-17.16	-20.75
2	0.19687	9.95	29.16	13.92	39.11	23.87	63.74	53.74	-24.63	-29.87
3	0.27109	9.96	27.02	16.03	36.98	25.99	61.08	51.08	-24.10	-25.09
4	0.33750	9.97	33.49	26.99	43.46	36.96	59.26	49.26	-15.80	-12.30
5	0.93906	10.00	17.84	7.04	27.84	17.04	56.00	46.00	-28.16	-28.96
6	10.19141	10.54	17.83	11.82	28.37	22.36	60.00	50.00	-31.63	-27.64

REMARKS:

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



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)
		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

Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

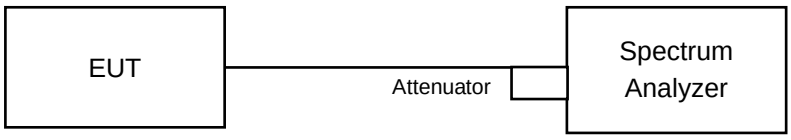
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};
Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

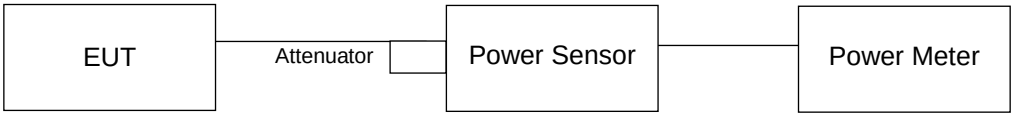
4.3.2 Test Setup

FOR POWER OUTPUT MEASUREMENT

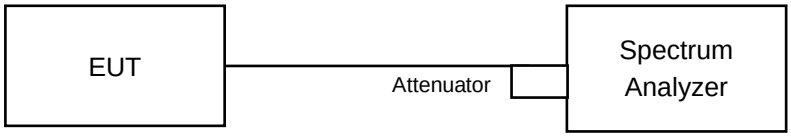
For channel straddling 5725MHz:



For other channels:



FOR 26dB OCCUPIED BANDWIDTH



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

FOR POWER OUTPUT MEASUREMENT

For channel straddling 5725MHz:

Follow FCC KDB 789033 UNII test procedure:

For 802.11a, 802.11ac (VHT20):

Method SA-1

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW =1MHz.
3. Set the VBW ≥ 3 x RBW.
4. Number of points in sweep ≥ 2 Span / RBW.
5. Sweep time = auto.
6. Set trigger to free run (duty cycle ≥ 98 percent)
7. Detector = RMS.
8. Trace average at least 100 traces in power averaging mode
9. Compute power by integrating the spectrum across the 26 dB EBW of the signal.

For other modulation:

Method SA-2

1. Set span to encompass the emission bandwidth (EBW) of the signal.
2. Set RBW =1MHz.
3. Set the VBW ≥ 3 x RBW.
4. Number of points in sweep ≥ 2 Span / RBW.
5. Sweep time = auto.
6. Detector = RMS.
7. Trace average at least 100 traces in power averaging mode
8. Compute power by integrating the spectrum across the 26 dB EBW of the signal.
9. Duty factor need added to measured value (duty cycle < 98 percent).

For other channels:

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

FOR 26dB OCCUPIED BANDWIDTH

1. Set RBW = approximately 1% of the emission bandwidth.
2. Set the VBW > RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

4.3.5 Deviation from Test Standard

No deviation.

4.3.6 EUT Operating Condition

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

4.3.7 Test Result

Non-Beamforming Mode

802.11a

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
36	5180	22.32	22.29	22.15	22.39	677.481	28.31	30.00	Pass
40	5200	22.25	22.34	22.31	22.49	686.911	28.37	30.00	Pass
48	5240	22.46	21.79	22.43	22.56	682.493	28.34	30.00	Pass
52	5260	15.78	16.11	17.43	16.24	176.084	22.46	24.00	Pass
60	5300	15.56	16.24	17.42	16.11	174.088	22.41	24.00	Pass
64	5320	15.47	16.18	17.34	16.12	171.858	22.35	24.00	Pass
100	5500	16.79	15.64	16.82	16.86	181.01	22.58	24.00	Pass
116	5580	16.76	15.81	16.47	16.98	179.78	22.55	24.00	Pass
140	5700	16.39	16.05	16.02	17.41	178.898	22.53	24.00	Pass
*144 (U-NII-2C Band)	5720	12.56	12.51	12.94	13.95	80.364	19.05	22.97	Pass
*144 (U-NII-3 Band)	5720	6.59	6.19	6.74	7.90	19.606	12.92	30.00	Pass
149	5745	23.89	23.02	23.54	24.06	925.98	29.67	30.00	Pass
157	5785	23.79	23.42	23.46	23.83	922.484	29.65	30.00	Pass
165	5825	23.90	23.10	23.10	24.01	905.587	29.57	30.00	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
144	5720	99.97	20
Note: The total power was calculated through formula and record the value for reference only.			

For Reference only – Power meter value

The power value was measured by power meter with average sensor.

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1	Chain 2	Chain 3		
144	5720	16.62	16.23	16.03	17.50	184.217	22.65

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	21.54	21.79	21.70	21.50
60	5300	21.73	21.72	21.87	21.58
64	5320	21.58	21.57	21.72	21.69
100	5500	21.58	21.48	21.72	21.51
116	5580	21.61	21.74	21.60	21.73
140	5700	21.58	21.78	21.78	21.60
144 (U-NII-2C Band)	5720	15.80	15.78	15.91	15.77

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB <U-NII-2A, U-NII-2C>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	21.50	24.32 > 24
60	5300	21.58	24.34 > 24
64	5320	21.57	24.33 > 24
100	5500	21.48	24.32 > 24
116	5580	21.60	24.34 > 24
140	5700	21.58	24.34 > 24
144 (U-NII-2C Band)	5720	15.77	22.97 < 24

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
36	5180	22.28	21.98	21.88	22.26	649.242	28.12	30.00	Pass
40	5200	22.35	21.71	21.85	22.47	649.756	28.13	30.00	Pass
48	5240	22.17	21.70	21.99	22.30	640.676	28.07	30.00	Pass
52	5260	15.67	15.69	17.15	15.98	165.474	22.19	24.00	Pass
60	5300	15.34	16.05	16.67	16.14	162.037	22.10	24.00	Pass
64	5320	15.50	16.11	16.99	15.82	164.51	22.16	24.00	Pass
100	5500	16.25	15.62	16.78	16.66	172.633	22.37	24.00	Pass
116	5580	16.60	15.42	16.25	16.92	171.917	22.35	24.00	Pass
140	5700	16.24	15.59	16.19	17.06	170.704	22.32	24.00	Pass
*144 (U-NII-2C Band)	5720	12.16	12.11	12.86	13.46	74.201	18.70	22.98	Pass
*144 (U-NII-3 Band)	5720	6.47	6.44	7.16	7.86	20.151	13.04	30.00	Pass
149	5745	23.71	23.20	23.58	23.92	918.531	29.63	30.00	Pass
157	5785	23.40	23.30	23.59	23.94	908.874	29.59	30.00	Pass
165	5825	23.61	22.89	23.51	23.94	896.281	29.52	30.00	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
144	5720	94.352	19.75
Note: The total power was calculated through formula and record the value for reference only.			

For Reference only – Power meter value

The power value was measured by power meter with average sensor.

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1	Chain 2	Chain 3		
144	5720	16.15	15.80	16.10	17.26	173.178	22.38

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	21.96	21.51	21.57	21.87
60	5300	21.95	21.69	21.59	21.83
64	5320	21.86	21.67	21.62	21.92
100	5500	22.02	21.72	21.65	21.91
116	5580	22.04	21.70	21.69	21.83
140	5700	21.85	21.76	21.63	21.79
144 (U-NII-2C Band)	5720	15.86	15.86	15.79	15.91

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB <U-NII-2A, U-NII-2C>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	21.51	24.32 > 24
60	5300	21.59	24.34 > 24
64	5320	21.62	24.34 > 24
100	5500	21.65	24.35 > 24
116	5580	21.69	24.36 > 24
140	5700	21.63	24.35 > 24
144 (U-NII-2C Band)	5720	15.79	22.98 < 24

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
38	5190	19.80	19.59	20.16	21.19	421.765	26.25	30.00	Pass
46	5230	23.26	23.30	23.91	24.20	934.696	29.71	30.00	Pass
54	5270	17.97	17.93	17.99	16.51	232.47	23.66	24.00	Pass
62	5310	17.81	17.96	18.31	16.41	234.428	23.70	24.00	Pass
102	5510	17.64	17.68	17.33	18.02	234.152	23.69	24.00	Pass
110	5550	18.19	17.71	16.84	17.89	234.761	23.71	24.00	Pass
134	5670	17.87	17.81	17.35	17.85	236.909	23.75	24.00	Pass
*142 (U-NII-2C Band)	5710	14.64	14.68	14.75	15.21	125.752	21.00	24.00	Pass
*142 (U-NII-3 Band)	5710	4.16	4.46	4.25	4.95	11.575	10.64	30.00	Pass
151	5755	23.10	23.40	24.06	23.41	896.913	29.53	30.00	Pass
159	5795	23.28	23.50	23.96	23.31	899.861	29.54	30.00	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
142	5710	137.327	21.38
Note: The total power was calculated through formula and record the value for reference only.			

For Reference only – Power meter value

The power value was measured by power meter with average sensor.

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1	Chain 2	Chain 3		
142	5710	17.83	17.80	17.26	17.95	236.514	23.74

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	41.89	41.64	41.43	41.14
62	5310	41.68	41.73	41.58	41.27
102	5510	41.69	41.57	41.54	41.25
110	5550	41.52	41.54	41.49	41.16
134	5670	41.59	41.69	41.17	41.07
142 (U-NII-2C Band)	5710	35.98	35.85	35.83	35.51

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB <U-NII-2A, U-NII-2C>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	41.14	27.14 > 24
62	5310	41.27	27.15 > 24
102	5510	41.25	27.15 > 24
110	5550	41.16	27.14 > 24
134	5670	41.07	27.13 > 24
142 (U-NII-2C Band)	5710	35.51	26.5 > 24

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
42	5210	20.60	20.84	20.41	20.51	458.515	26.61	30.00	Pass
58	5290	16.90	18.11	17.75	17.11	224.662	23.52	24.00	Pass
106	5530	17.50	17.06	17.21	18.01	222.893	23.48	24.00	Pass
122	5610	17.38	17.58	17.40	17.96	229.453	23.61	24.00	Pass
*138 (U-NII-2C Band)	5690	14.23	14.10	14.37	15.14	120.285	20.80	24.00	Pass
*138 (U-NII-3 Band)	5690	0.00	0.24	0.17	1.25	4.75	6.77	30.00	Pass
155	5775	23.31	23.28	23.86	23.50	894.195	29.51	30.00	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
138	5690	125.035	20.97
Note: The total power was calculated through formula and record the value for reference only.			

For Reference only – Power meter value

The power value was measured by power meter with average sensor.

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1	Chain 2	Chain 3		
138	5690	17.11	17.01	17.01	17.96	214.389	23.31

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	82.89	82.35	82.35	82.59
106	5530	82.80	82.10	82.23	82.23
122	5610	82.53	82.24	82.20	82.49
138 (U-NII-2C Band)	5690	76.17	76.08	76.06	76.27

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB <U-NII-2A, U-NII-2C>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	82.35	30.15 > 24
106	5530	82.10	30.14 > 24
122	5610	82.20	30.14 > 24
138 (U-NII-2C Band)	5690	76.06	29.81 > 24

802.11ac (VHT160)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
*50 (U-NII-1 Band)	5250	11.94	12.98	12.74	12.93	82.132	19.15	30.00	Pass
*50 (U-NII-2A Band)	5250	11.94	12.98	12.74	12.93	82.132	19.15	24.00	Pass
114	5570	17.41	17.28	17.11	18.20	226.01	23.54	24.00	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
50	5250	164.264	22.16
Note: The total power was calculated through formula and record the value for reference only.			

For Reference only – Power meter value

The power value was measured by power meter with average sensor.

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1	Chain 2	Chain 3		
50	5250	18.19	19.70	19.20	18.50	313.213	24.96

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
50 (U-NII-2A Band)	5250	163.26	165.37	163.46	162.80
114	5570	163.50	164.60	163.78	162.97

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB <U-NII-2A, U-NII-2C>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
50 (U-NII-2A Band)	5250	162.80	33.11 > 24
114	5570	162.97	33.12 > 24

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
36	5180	22.49	22.21	22.11	22.47	682.919	28.34	30.00	Pass
40	5200	22.57	21.94	22.06	22.69	683.506	28.35	30.00	Pass
48	5240	22.40	21.91	22.19	22.51	672.834	28.28	30.00	Pass
52	5260	15.89	15.90	17.38	16.19	174.013	22.41	24.00	Pass
60	5300	15.56	16.28	16.90	16.35	170.567	22.32	24.00	Pass
64	5320	15.72	16.34	17.21	16.05	173.252	22.39	24.00	Pass
100	5500	16.46	15.84	16.98	16.89	181.383	22.59	24.00	Pass
116	5580	16.81	15.64	16.49	17.15	181.063	22.58	24.00	Pass
140	5700	16.45	15.82	16.41	17.28	179.559	22.54	24.00	Pass
*144 (U-NII-2C Band)	5720	12.54	12.13	12.63	13.76	78.222	18.93	22.95	Pass
*144 (U-NII-3 Band)	5720	7.27	6.93	7.30	8.58	23.4	13.69	30.00	Pass
149	5745	23.87	23.31	23.70	24.11	950.125	29.78	30.00	Pass
157	5785	23.59	23.47	23.72	24.10	943.436	29.75	30.00	Pass
165	5825	23.79	23.02	23.69	24.12	931.889	29.69	30.00	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
144	5720	101.622	20.07
Note: The total power was calculated through formula and record the value for reference only.			

For Reference only – Power meter value

The power value was measured by power meter with average sensor.

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1	Chain 2	Chain 3		
144	5720	16.38	16.02	16.32	17.49	182.405	22.61

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	21.85	21.69	21.84	21.90
60	5300	21.85	21.69	21.91	21.71
64	5320	21.78	21.94	21.84	21.74
100	5500	21.84	21.64	21.84	21.88
116	5580	21.83	21.65	21.83	21.66
140	5700	21.82	21.77	21.89	21.80
144 (U-NII-2C Band)	5720	15.88	15.69	15.96	15.88

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB <U-NII-2A, U-NII-2C>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	21.69	24.36 > 24
60	5300	21.69	24.36 > 24
64	5320	21.74	24.37 > 24
100	5500	21.64	24.35 > 24
116	5580	21.65	24.35 > 24
140	5700	21.77	24.37 > 24
144 (U-NII-2C Band)	5720	15.69	22.95 < 24

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
38	5190	20.14	19.92	20.52	21.63	459.717	26.62	30.00	Pass
46	5230	23.49	23.52	24.12	24.43	983.82	29.93	30.00	Pass
54	5270	18.19	18.16	18.22	16.72	244.744	23.89	24.00	Pass
62	5310	18.02	18.19	18.53	16.64	246.721	23.92	24.00	Pass
102	5510	17.86	17.90	17.56	18.24	246.451	23.92	24.00	Pass
110	5550	18.41	17.94	17.06	18.11	247.103	23.93	24.00	Pass
134	5670	18.10	18.03	17.56	18.06	249.087	23.96	24.00	Pass
*142 (U-NII-2C Band)	5710	14.63	15.41	14.49	15.35	131.755	21.20	24.00	Pass
*142 (U-NII-3 Band)	5710	4.77	5.68	4.59	5.66	13.84	11.41	30.00	Pass
151	5755	23.36	23.59	24.24	23.56	937.777	29.72	30.00	Pass
159	5795	23.41	23.71	24.11	23.46	933.695	29.70	30.00	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
142	5710	145.595	21.63
Note: The total power was calculated through formula and record the value for reference only.			

For Reference only – Power meter value

The power value was measured by power meter with average sensor.

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1	Chain 2	Chain 3		
142	5710	18.06	18.02	17.49	18.17	249.08	23.96

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	41.41	41.41	41.50	41.56
62	5310	41.56	41.46	41.43	41.60
102	5510	41.37	41.33	41.34	41.80
110	5550	41.57	41.47	41.59	41.65
134	5670	41.38	41.49	41.64	41.65
142 (U-NII-2C Band)	5710	35.76	35.72	35.93	35.98

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB <U-NII-2A, U-NII-2C>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	41.41	27.17 > 24
62	5310	41.43	27.17 > 24
102	5510	41.33	27.16 > 24
110	5550	41.47	27.17 > 24
134	5670	41.38	27.16 > 24
142 (U-NII-2C Band)	5710	35.72	26.52 > 24

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
42	5210	20.75	20.99	20.55	20.68	474.904	26.77	30.00	Pass
58	5290	17.03	18.35	17.90	17.31	234.344	23.70	24.00	Pass
106	5530	17.64	17.23	17.38	18.12	230.486	23.63	24.00	Pass
122	5610	17.52	17.83	17.54	18.11	238.636	23.78	24.00	Pass
*138 (U-NII-2C Band)	5690	14.36	14.22	14.25	14.64	119.575	20.78	24.00	Pass
*138 (U-NII-3 Band)	5690	0.49	0.93	0.63	1.38	5.341	7.28	30.00	Pass
155	5775	23.48	23.41	24.01	23.66	926.166	29.67	30.00	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
138	5690	124.916	20.97
Note: The total power was calculated through formula and record the value for reference only.			

For Reference only – Power meter value

The power value was measured by power meter with average sensor.

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1	Chain 2	Chain 3		
138	5690	17.24	17.13	17.15	18.10	221.053	23.44

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	82.96	82.98	82.56	82.50
106	5530	82.74	82.82	82.52	82.50
122	5610	82.95	82.79	82.88	82.31
138 (U-NII-2C Band)	5690	76.06	76.40	76.50	76.31

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB <U-NII-2A, U-NII-2C>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	82.50	30.16 > 24
106	5530	82.50	30.16 > 24
122	5610	82.31	30.15 > 24
138 (U-NII-2C Band)	5690	76.06	29.81 > 24

802.11ax (HE160)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
*50 (U-NII-1 Band)	5250	11.73	13.38	13.27	13.58	91.142	19.60	30.00	Pass
*50 (U-NII-2A Band)	5250	12.16	14.15	13.73	13.61	100.522	20.02	24.00	Pass
114	5570	17.50	17.40	17.24	18.34	232.388	23.66	24.00	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
50	5250	191.664	22.83
Note: The total power was calculated through formula and record the value for reference only.			

For Reference only – Power meter value

The power value was measured by power meter with average sensor.

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1	Chain 2	Chain 3		
50	5250	18.25	19.84	19.34	19.63	340.951	25.33

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
50 (U-NII-2A Band)	5250	163.99	163.93	164.02	163.13
114	5570	163.43	162.99	164.27	163.75

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB <U-NII-2A, U-NII-2C>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
50 (U-NII-2A Band)	5250	163.13	33.12 > 24
114	5570	162.99	33.12 > 24

Beamforming Mode

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
36	5180	22.28	21.98	21.88	22.26	649.242	28.12	28.42	Pass
40	5200	22.35	21.71	21.85	22.47	649.756	28.13	28.42	Pass
48	5240	22.17	21.70	21.99	22.30	640.676	28.07	28.42	Pass
52	5260	15.67	15.69	17.15	15.98	165.474	22.19	22.51	Pass
60	5300	15.34	16.05	16.67	16.14	162.037	22.10	22.51	Pass
64	5320	15.50	16.11	16.99	15.82	164.51	22.16	22.51	Pass
100	5500	16.25	15.62	16.78	16.66	172.633	22.37	22.67	Pass
116	5580	16.60	15.42	16.25	16.92	171.917	22.35	22.67	Pass
140	5700	16.24	15.59	16.19	17.06	170.704	22.32	22.67	Pass
*144 (U-NII-2C Band)	5720	12.16	12.11	12.86	13.46	74.201	18.70	21.65	Pass
*144 (U-NII-3 Band)	5720	6.47	6.44	7.16	7.86	20.151	13.04	28.77	Pass
149	5745	22.64	22.09	22.46	22.87	715.302	28.54	28.77	Pass
157	5785	22.34	22.31	22.45	22.86	710.601	28.52	28.77	Pass
165	5825	22.53	21.78	22.42	22.88	698.393	28.44	28.77	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

1. For U-NII-1: The directional gain = 7.58dBi > 6dBi, so the power limit shall be reduced to 30-(7.58-6) = 28.42dBm.
2. For U-NII-2A: The directional gain = 7.49dBi > 6dBi, so the power limit shall be reduced to “Determined Conducted Limit- (7.39-6)”.
3. For U-NII-2C: The directional gain = 7.33dBi > 6dBi, so the power limit shall be reduced to “Determined Conducted Limit- (7.33-6)”.
4. For U-NII-3: The directional gain = 7.23dBi > 6dBi, so the power limit shall be reduced to 30-(7.23-6) = 28.77dBm.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
144	5720	94.352	19.75
Note: The total power was calculated through formula and record the value for reference only.			

For Reference only – Power meter value

The power value was measured by power meter with average sensor.

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1	Chain 2	Chain 3		
144	5720	16.15	15.80	16.10	17.26	173.178	22.38

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	21.96	21.51	21.57	21.87
60	5300	21.95	21.69	21.59	21.83
64	5320	21.86	21.67	21.62	21.92
100	5500	22.02	21.72	21.65	21.91
116	5580	22.04	21.70	21.69	21.83
140	5700	21.85	21.76	21.63	21.79
144 (U-NII-2C Band)	5720	15.86	15.86	15.79	15.91

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB <U-NII-2A, U-NII-2C>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	21.51	24.32 > 24
60	5300	21.59	24.34 > 24
64	5320	21.62	24.34 > 24
100	5500	21.65	24.35 > 24
116	5580	21.69	24.36 > 24
140	5700	21.63	24.35 > 24
144 (U-NII-2C Band)	5720	15.79	22.98 < 24

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
38	5190	19.80	19.59	20.16	21.19	421.765	26.25	28.42	Pass
46	5230	21.96	21.98	22.59	22.83	688.216	28.38	28.42	Pass
54	5270	16.48	16.41	16.49	15.05	164.77	22.17	22.51	Pass
62	5310	16.29	16.45	16.74	14.90	164.826	22.17	22.51	Pass
102	5510	16.16	16.21	15.90	16.60	167.702	22.25	22.67	Pass
110	5550	16.71	16.24	15.36	16.41	167.062	22.23	22.67	Pass
134	5670	16.38	16.35	15.89	16.37	168.769	22.27	22.67	Pass
*142 (U-NII-2C Band)	5710	12.88	13.54	13.27	13.46	88.387	19.46	22.67	Pass
*142 (U-NII-3 Band)	5710	2.48	3.10	2.71	3.07	7.974	9.02	28.77	Pass
151	5755	22.13	22.38	22.96	22.31	704.2	28.48	28.77	Pass
159	5795	22.20	22.46	22.87	22.29	705.233	28.48	28.77	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

1. For U-NII-1: The directional gain = 7.58dBi > 6dBi, so the power limit shall be reduced to 30-(7.58-6) = 28.42dBm.
2. For U-NII-2A: The directional gain = 7.49dBi > 6dBi, so the power limit shall be reduced to “Determined Conducted Limit- (7.39-6)”.
3. For U-NII-2C: The directional gain = 7.33dBi > 6dBi, so the power limit shall be reduced to “Determined Conducted Limit- (7.33-6)”.
4. For U-NII-3: The directional gain = 7.23dBi > 6dBi, so the power limit shall be reduced to 30-(7.23-6) = 28.77dBm.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
142	5710	96.361	19.84
Note: The total power was calculated through formula and record the value for reference only.			

For Reference only – Power meter value

The power value was measured by power meter with average sensor.

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1	Chain 2	Chain 3		
142	5710	16.39	16.31	15.80	16.45	168.483	22.27

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	41.89	41.64	41.43	41.14
62	5310	41.68	41.73	41.58	41.27
102	5510	41.69	41.57	41.54	41.25
110	5550	41.52	41.54	41.49	41.16
134	5670	41.59	41.69	41.17	41.07
142 (U-NII-2C Band)	5710	35.98	35.85	35.83	35.51

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB <U-NII-2A, U-NII-2C>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	41.14	27.14 > 24
62	5310	41.27	27.15 > 24
102	5510	41.25	27.15 > 24
110	5550	41.16	27.14 > 24
134	5670	41.07	27.13 > 24
142 (U-NII-2C Band)	5710	35.51	26.5 > 24

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
42	5210	20.60	20.84	20.41	20.51	458.515	26.61	28.42	Pass
58	5290	15.69	16.98	16.60	16.02	172.659	22.37	22.51	Pass
106	5530	16.65	16.31	16.42	16.98	182.735	22.62	22.67	Pass
122	5610	16.24	16.49	16.23	16.78	176.258	22.46	22.67	Pass
*138 (U-NII-2C Band)	5690	13.21	12.84	13.20	13.88	91.659	19.62	22.67	Pass
*138 (U-NII-3 Band)	5690	-1.27	-1.09	-1.23	-0.17	3.4728	5.41	28.77	Pass
155	5775	22.49	22.38	23.02	22.65	734.925	28.66	28.77	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

1. For U-NII-1: The directional gain = 7.58dBi > 6dBi, so the power limit shall be reduced to 30-(7.58-6) = 28.42dBm.
2. For U-NII-2A: The directional gain = 7.49dBi > 6dBi, so the power limit shall be reduced to “Determined Conducted Limit- (7.39-6)”.
3. For U-NII-2C: The directional gain = 7.33dBi > 6dBi, so the power limit shall be reduced to “Determined Conducted Limit- (7.33-6)”.
4. For U-NII-3: The directional gain = 7.23dBi > 6dBi, so the power limit shall be reduced to 30-(7.23-6) = 28.77dBm.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
138	5690	95.1318	19.78
Note: The total power was calculated through formula and record the value for reference only.			

For Reference only – Power meter value

The power value was measured by power meter with average sensor.

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1	Chain 2	Chain 3		
138	5690	16.31	16.15	16.18	17.09	176.629	22.47

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	82.89	82.35	82.35	82.59
106	5530	82.80	82.10	82.23	82.23
122	5610	82.53	82.24	82.20	82.49
138 (U-NII-2C Band)	5690	76.17	76.08	76.06	76.27

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB <U-NII-2A, U-NII-2C>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	82.35	30.15 > 24
106	5530	82.10	30.14 > 24
122	5610	82.20	30.14 > 24
138 (U-NII-2C Band)	5690	76.06	29.81 > 24

802.11ac (VHT160)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
*50 (U-NII-1 Band)	5250	11.94	12.98	12.74	12.93	82.132	19.15	28.42	Pass
*50 (U-NII-2A Band)	5250	11.94	12.98	12.74	12.93	82.132	19.15	22.51	Pass
114	5570	16.43	16.30	16.15	17.18	180.062	22.55	22.67	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

1. For U-NII-1: The directional gain = 7.58dBi > 6dBi, so the power limit shall be reduced to 30-(7.58-6) = 28.42dBm.
2. For U-NII-2A: The directional gain = 7.49dBi > 6dBi, so the power limit shall be reduced to "Determined Conducted Limit- (7.39-6)".
3. For U-NII-2C: The directional gain = 7.33dBi > 6dBi, so the power limit shall be reduced to "Determined Conducted Limit- (7.33-6)".

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
50	5250	164.264	22.16
Note: The total power was calculated through formula and record the value for reference only.			

For Reference only – Power meter value

The power value was measured by power meter with average sensor.

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1	Chain 2	Chain 3		
50	5250	18.19	19.70	19.20	18.50	313.213	24.96

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
50 (U-NII-2A Band)	5250	163.26	165.37	163.46	162.80
114	5570	163.50	164.60	163.78	162.97

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB <U-NII-2A, U-NII-2C>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
50 (U-NII-2A Band)	5250	162.80	33.11 > 24
114	5570	162.97	33.12 > 24

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
36	5180	22.49	22.21	22.11	22.47	682.919	28.34	28.42	Pass
40	5200	22.57	21.94	22.06	22.69	683.506	28.35	28.42	Pass
48	5240	22.40	21.91	22.19	22.51	672.834	28.28	28.42	Pass
52	5260	15.89	15.90	17.38	16.19	174.013	22.41	22.51	Pass
60	5300	15.56	16.28	16.90	16.35	170.567	22.32	22.51	Pass
64	5320	15.72	16.34	17.21	16.05	173.252	22.39	22.51	Pass
100	5500	16.46	15.84	16.98	16.89	181.383	22.59	22.67	Pass
116	5580	16.81	15.64	16.49	17.15	181.063	22.58	22.67	Pass
140	5700	16.45	15.82	16.41	17.28	179.559	22.54	22.67	Pass
*144 (U-NII-2C Band)	5720	12.54	12.13	12.63	13.76	78.222	18.93	21.62	Pass
*144 (U-NII-3 Band)	5720	7.27	6.93	7.30	8.58	23.4	13.69	28.77	Pass
149	5745	22.86	22.29	22.68	23.08	751.22	28.76	28.77	Pass
157	5785	22.56	22.51	22.69	23.09	748.024	28.74	28.77	Pass
165	5825	22.76	22.01	22.65	23.10	735.905	28.67	28.77	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

1. For U-NII-1: The directional gain = 7.58dBi > 6dBi, so the power limit shall be reduced to 30-(7.58-6) = 28.42dBm.
2. For U-NII-2A: The directional gain = 7.49dBi > 6dBi, so the power limit shall be reduced to "Determined Conducted Limit- (7.39-6)".
3. For U-NII-2C: The directional gain = 7.33dBi > 6dBi, so the power limit shall be reduced to "Determined Conducted Limit- (7.33-6)".
4. For U-NII-3: The directional gain = 7.23dBi > 6dBi, so the power limit shall be reduced to 30-(7.23-6) = 28.77dBm.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
144	5720	101.622	20.07
Note: The total power was calculated through formula and record the value for reference only.			

For Reference only – Power meter value

The power value was measured by power meter with average sensor.

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1	Chain 2	Chain 3		
144	5720	16.38	16.02	16.32	17.49	182.405	22.61

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	21.85	21.69	21.84	21.90
60	5300	21.85	21.69	21.91	21.71
64	5320	21.78	21.94	21.84	21.74
100	5500	21.84	21.64	21.84	21.88
116	5580	21.83	21.65	21.83	21.66
140	5700	21.82	21.77	21.89	21.80
144 (U-NII-2C Band)	5720	15.88	15.69	15.96	15.88

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB <U-NII-2A, U-NII-2C>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	21.69	24.36 > 24
60	5300	21.69	24.36 > 24
64	5320	21.74	24.37 > 24
100	5500	21.64	24.35 > 24
116	5580	21.65	24.35 > 24
140	5700	21.77	24.37 > 24
144 (U-NII-2C Band)	5720	15.69	22.95 < 24

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
38	5190	20.14	19.92	20.52	21.63	459.717	26.62	28.42	Pass
46	5230	21.96	21.98	22.59	22.83	688.216	28.38	28.42	Pass
54	5270	16.70	16.65	16.73	15.28	173.839	22.40	22.51	Pass
62	5310	16.49	16.69	16.98	15.12	173.629	22.40	22.51	Pass
102	5510	16.40	16.43	16.11	16.83	176.633	22.47	22.67	Pass
110	5550	16.92	16.46	15.59	16.62	175.607	22.45	22.67	Pass
134	5670	16.61	16.58	16.12	16.59	177.843	22.50	22.67	Pass
*142 (U-NII-2C Band)	5710	13.59	13.02	13.37	13.34	90.007	19.54	22.67	Pass
*142 (U-NII-3 Band)	5710	3.04	3.31	3.39	3.49	8.952	9.52	28.77	Pass
151	5755	22.35	22.61	23.19	22.53	741.691	28.70	28.77	Pass
159	5795	22.43	22.69	23.09	22.51	742.707	28.71	28.77	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

1. For U-NII-1: The directional gain = 7.58dBi > 6dBi, so the power limit shall be reduced to 30-(7.58-6) = 28.42dBm.
2. For U-NII-2A: The directional gain = 7.49dBi > 6dBi, so the power limit shall be reduced to “Determined Conducted Limit- (7.39-6)”.
3. For U-NII-2C: The directional gain = 7.33dBi > 6dBi, so the power limit shall be reduced to “Determined Conducted Limit- (7.33-6)”.
4. For U-NII-3: The directional gain = 7.23dBi > 6dBi, so the power limit shall be reduced to 30-(7.23-6) = 28.77dBm.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
142	5710	98.959	19.95
Note: The total power was calculated through formula and record the value for reference only.			

For Reference only – Power meter value

The power value was measured by power meter with average sensor.

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1	Chain 2	Chain 3		
142	5710	16.62	16.53	16.03	16.68	177.544	22.49

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	41.41	41.41	41.50	41.56
62	5310	41.56	41.46	41.43	41.60
102	5510	41.37	41.33	41.34	41.80
110	5550	41.57	41.47	41.59	41.65
134	5670	41.38	41.49	41.64	41.65
142 (U-NII-2C Band)	5710	35.76	35.72	35.93	35.98

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB <U-NII-2A, U-NII-2C>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	41.41	27.17 > 24
62	5310	41.43	27.17 > 24
102	5510	41.33	27.16 > 24
110	5550	41.47	27.17 > 24
134	5670	41.38	27.16 > 24
142 (U-NII-2C Band)	5710	35.72	26.52 > 24

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
42	5210	20.75	20.99	20.55	20.68	474.904	26.77	28.42	Pass
58	5290	15.69	16.98	16.60	16.02	172.659	22.37	22.51	Pass
106	5530	16.65	16.31	16.42	16.98	182.735	22.62	22.67	Pass
122	5610	16.24	16.49	16.23	16.78	176.258	22.46	22.67	Pass
*138 (U-NII-2C Band)	5690	13.22	13.14	13.34	14.01	96.542	19.85	22.67	Pass
*138 (U-NII-3 Band)	5690	-0.55	0.03	-0.35	0.74	4.3669	6.40	28.77	Pass
155	5775	22.49	22.38	23.02	22.65	734.925	28.66	28.77	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

1. For U-NII-1: The directional gain = 7.58dBi > 6dBi, so the power limit shall be reduced to 30-(7.58-6) = 28.42dBm.
2. For U-NII-2A: The directional gain = 7.49dBi > 6dBi, so the power limit shall be reduced to “Determined Conducted Limit- (7.39-6)”.
3. For U-NII-2C: The directional gain = 7.33dBi > 6dBi, so the power limit shall be reduced to “Determined Conducted Limit- (7.33-6)”.
4. For U-NII-3: The directional gain = 7.23dBi > 6dBi, so the power limit shall be reduced to 30-(7.23-6) = 28.77dBm.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
138	5690	100.9089	20.04
Note: The total power was calculated through formula and record the value for reference only.			

For Reference only – Power meter value

The power value was measured by power meter with average sensor.

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1	Chain 2	Chain 3		
138	5690	16.31	16.15	16.18	17.09	176.629	22.47

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	82.96	82.98	82.56	82.50
106	5530	82.74	82.82	82.52	82.50
122	5610	82.95	82.79	82.88	82.31
138 (U-NII-2C Band)	5690	76.06	76.40	76.50	76.31

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB <U-NII-2A, U-NII-2C>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	82.50	30.16 > 24
106	5530	82.50	30.16 > 24
122	5610	82.31	30.15 > 24
138 (U-NII-2C Band)	5690	76.06	29.81 > 24

802.11ax (HE160)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
*50 (U-NII-1 Band)	5250	11.73	13.38	13.27	13.58	91.142	19.60	28.42	Pass
*50 (U-NII-2A Band)	5250	12.16	14.15	13.73	13.61	100.522	20.02	22.51	Pass
114	5570	16.48	16.35	16.21	17.27	182.731	22.62	22.67	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

1. For U-NII-1: The directional gain = 7.58dBi > 6dBi, so the power limit shall be reduced to 30-(7.58-6) = 28.42dBm.
2. For U-NII-2A: The directional gain = 7.49dBi > 6dBi, so the power limit shall be reduced to “Determined Conducted Limit- (7.39-6)”.
3. For U-NII-2C: The directional gain = 7.33dBi > 6dBi, so the power limit shall be reduced to “Determined Conducted Limit- (7.33-6)”.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
50	5250	191.664	22.83
Note: The total power was calculated through formula and record the value for reference only.			

For Reference only – Power meter value

The power value was measured by power meter with average sensor.

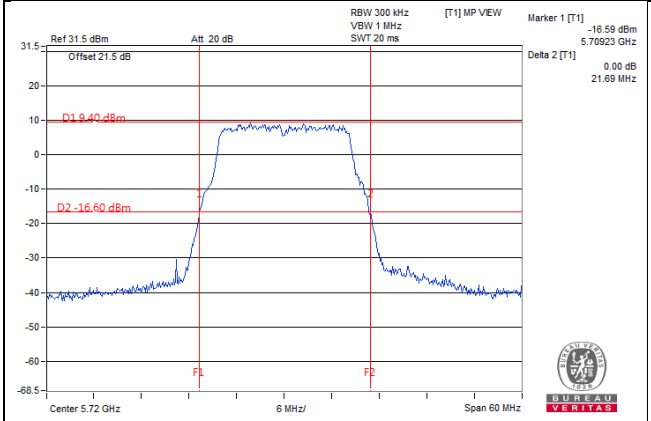
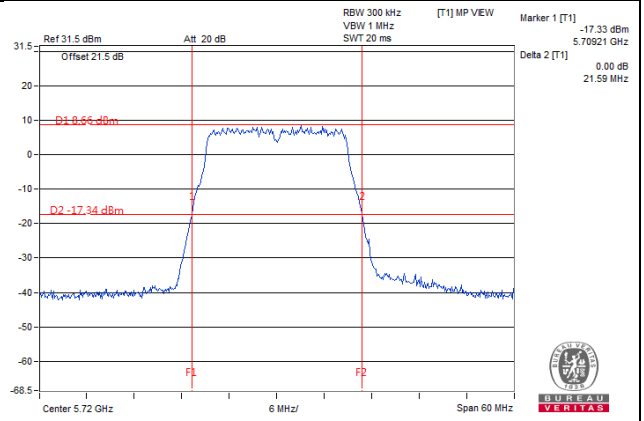
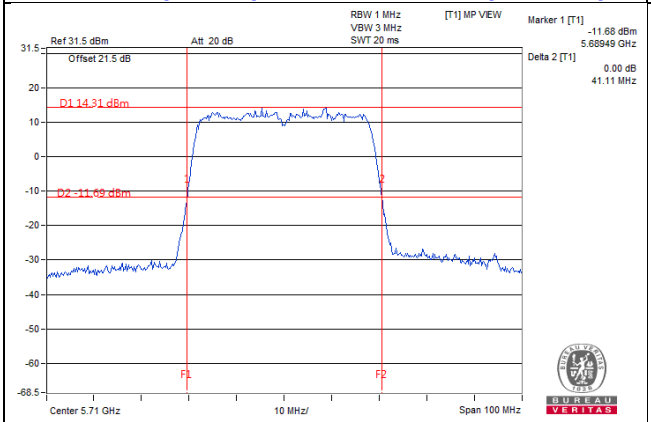
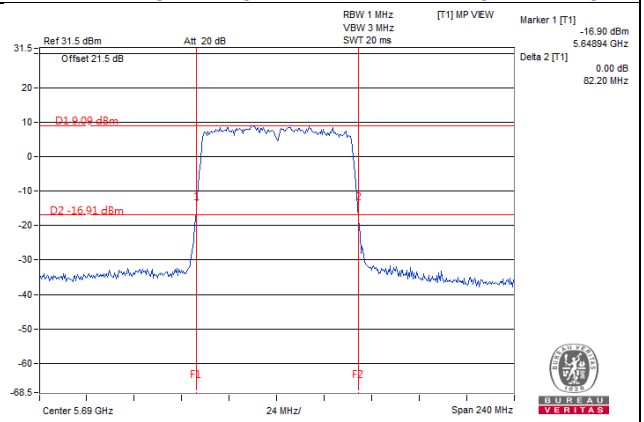
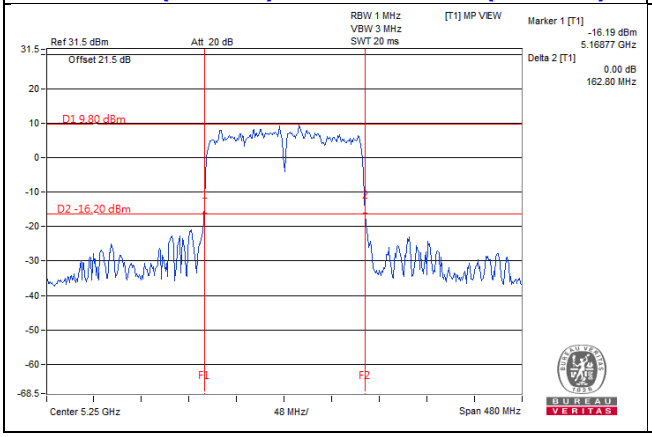
Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1	Chain 2	Chain 3		
50	5250	18.25	19.84	19.34	19.63	340.951	25.33

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
50 (U-NII-2A Band)	5250	163.99	163.93	164.02	163.13
114	5570	163.43	162.99	164.27	163.75

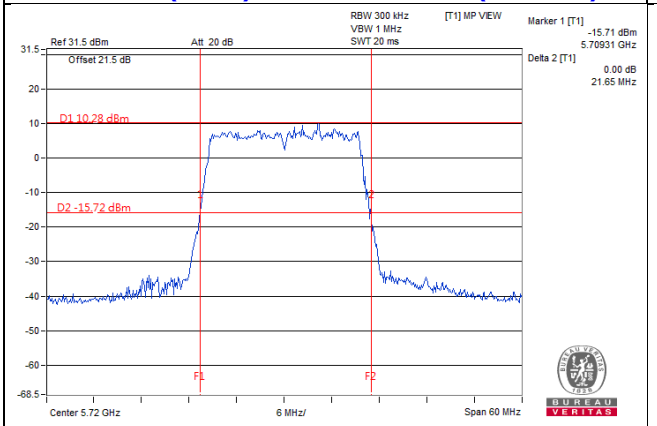
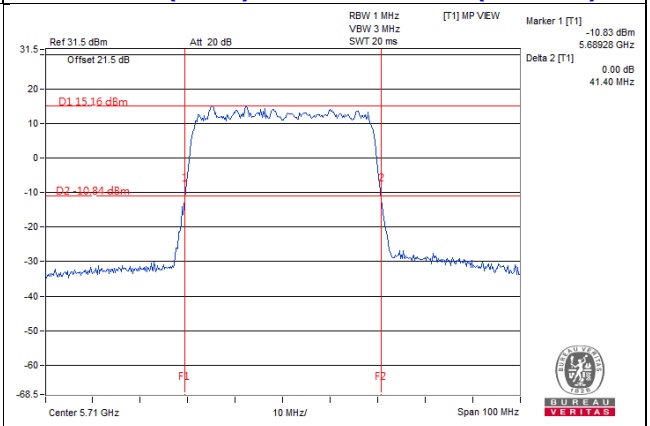
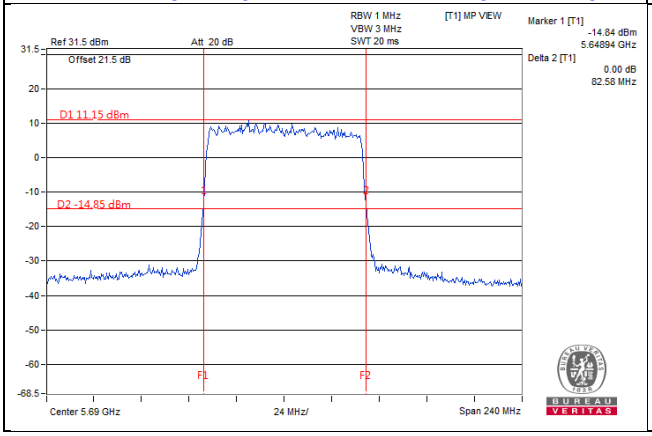
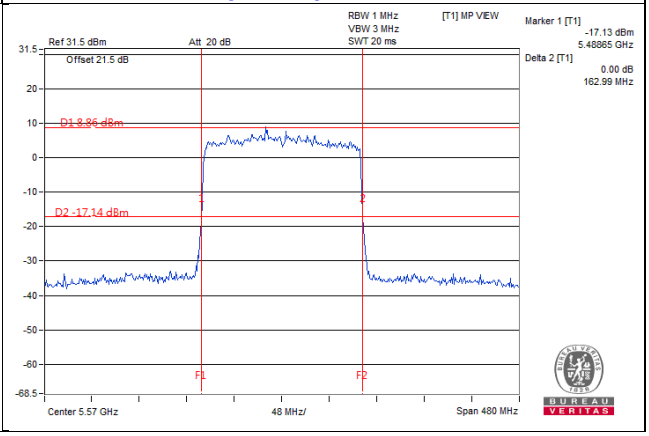
Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB <U-NII-2A, U-NII-2C>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
50 (U-NII-2A Band)	5250	163.13	33.12 > 24
114	5570	162.99	33.12 > 24

Spectrum Plot of Worst Value	
802.11a_Chain 3 / CH144 (U-NII-2C)	**802.11ac (VHT20)_Chain 2 / CH144 (U-NII-2C)**
	
802.11ac (VHT40)_Chain 3 / CH142 (U-NII-2C)	**802.11ac (VHT80)_Chain 2 / CH138 (U-NII-2C)**
	
802.11ac (VHT160)_Chain 3 / CH50 (U-NII-2A)	
	

Note:

For CH144 (U-NII-2C) = 5725MHz - Marker 1
For CH142 (U-NII-2C) = 5725MHz - Marker 1
For CH138 (U-NII-2C) = 5725MHz - Marker 1
For CH50 (U-NII-2A) = Marker 1 + Delta 2 – 5250MHz

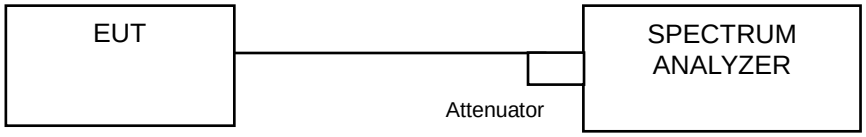
Spectrum Plot of Worst Value	
802.11ax (HE20)_Chain 1 / CH144 (U-NII-2C)	**802.11ax (HE40)_Chain 1 / CH142 (U-NII-2C)**
	
802.11ax (HE80)_Chain 0 / CH138 (U-NII-2C)	**802.11ax (HE160)_Chain 1 / CH114**
	

Note:

For CH144 (U-NII-2C) = 5725MHz - Marker 1
For CH142 (U-NII-2C) = 5725MHz - Marker 1
For CH138 (U-NII-2C) = 5725MHz - Marker 1

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 SAMPLE. 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 Results

802.11a

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	17.76	16.80	16.92	16.92
40	5200	18.00	17.04	16.92	16.92
48	5240	16.92	16.92	16.92	16.92
52	5260	17.88	16.92	16.80	16.80
60	5300	17.88	17.04	16.92	16.92
64	5320	17.88	16.80	16.92	16.92
100	5500	18.00	16.92	16.92	16.80
116	5580	16.80	16.92	16.92	16.80
140	5700	17.64	17.04	16.92	16.92
144 (U-NII-2C Band)	5720	13.52	13.52	13.40	13.40
144 (U-NII-3 Band)	5720	3.40	3.40	3.40	3.28
149	5745	17.76	17.04	16.92	16.92
157	5785	17.04	17.16	16.92	16.92
165	5825	17.04	16.92	17.04	16.92

802.11ax (HE20)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	19.20	19.08	19.08	19.08
40	5200	19.08	19.08	19.08	19.20
48	5240	19.08	19.08	19.08	19.08
52	5260	19.08	18.96	19.08	19.08
60	5300	19.08	19.20	19.08	19.20
64	5320	19.08	19.08	19.08	19.08
100	5500	19.08	19.08	19.08	19.08
116	5580	19.08	19.08	19.08	19.08
140	5700	19.08	19.08	19.08	19.08
144 (U-NII-2C Band)	5720	14.72	14.60	14.72	14.60
144 (U-NII-3 Band)	5720	4.48	4.48	4.48	4.48
149	5745	19.08	19.08	19.08	19.08
157	5785	18.96	19.08	19.08	19.20
165	5825	19.08	19.08	19.08	19.08

802.11ax (HE40)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
38	5190	37.68	38.16	38.16	37.92
46	5230	37.92	37.68	37.92	37.92
54	5270	37.92	37.92	37.92	37.92
62	5310	37.92	37.92	37.92	37.92
102	5510	37.92	37.92	37.92	37.68
110	5550	37.92	37.68	37.92	38.16
134	5670	38.16	37.68	37.92	37.68
142 (U-NII-2C Band)	5710	34.00	34.00	34.00	34.00
142 (U-NII-3 Band)	5710	3.80	4.00	3.80	3.80
151	5755	38.16	38.16	38.16	37.92
159	5795	38.16	38.16	38.16	38.16

802.11ax (HE80)

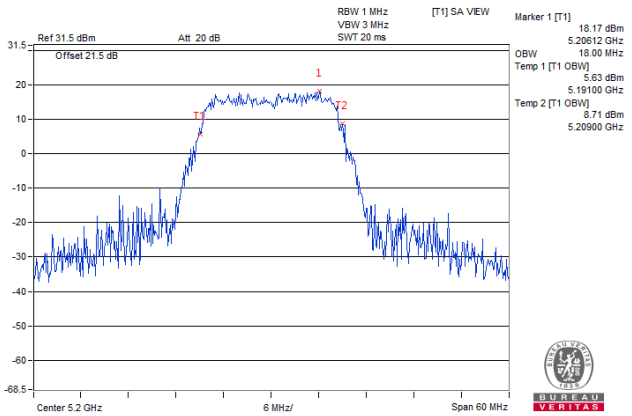
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
42	5210	77.76	77.28	77.28	77.28
58	5290	77.28	77.28	77.28	77.28
106	5530	77.28	77.28	77.28	77.28
122	5610	77.28	77.28	77.28	77.28
138 (U-NII-2C Band)	5690	73.88	73.88	73.88	73.88
138 (U-NII-3 Band)	5690	3.40	3.40	3.40	3.40
155	5775	77.28	77.28	77.76	77.76

802.11ax (HE160)

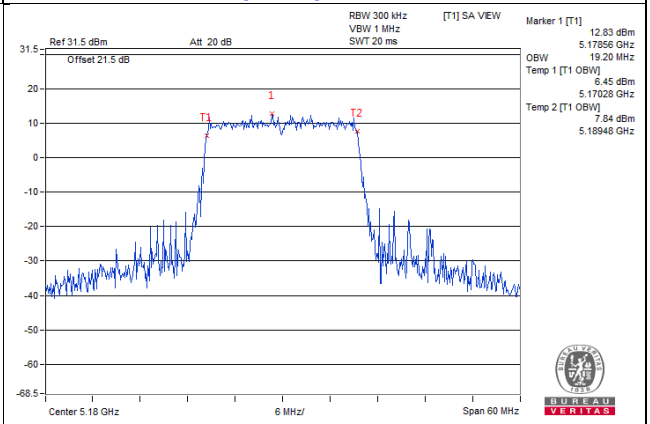
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
50 (U-NII-1 Band)	5250	155.52	155.52	154.56	155.52
50 (U-NII-2A Band)	5250	155.52	155.52	154.56	155.52
114	5570	154.56	154.56	155.52	155.52

Spectrum Plot of Max. Value

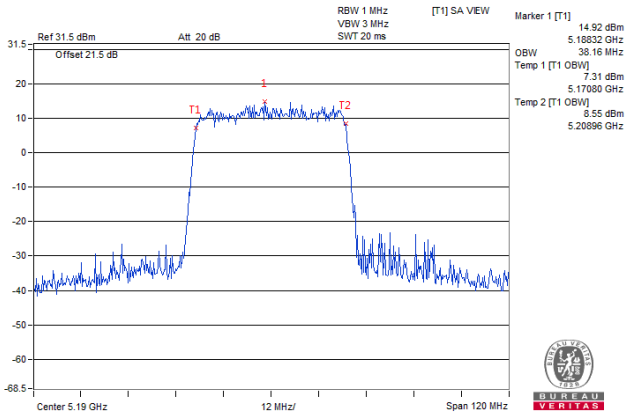
802.11a_Chain 0 / CH40



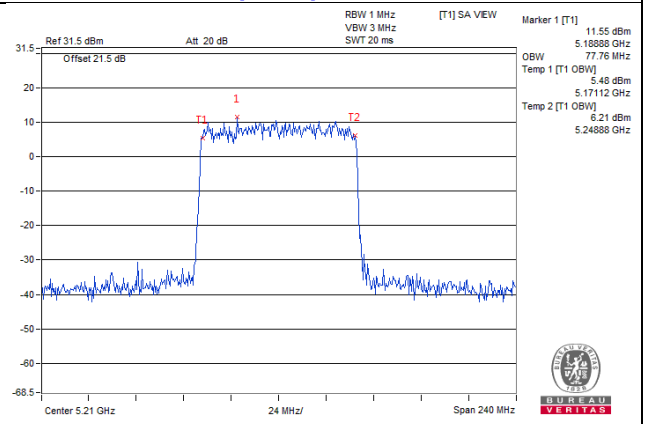
802.11ax (HE20)_Chain 0 / CH36



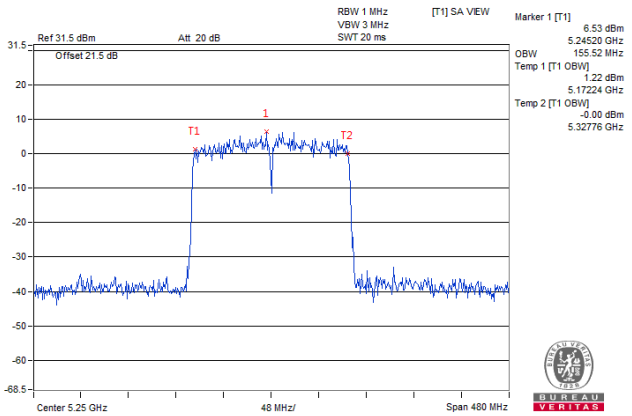
802.11ax (HE40)_Chain 1 / CH38



802.11ax (HE80)_Chain 0 / CH42

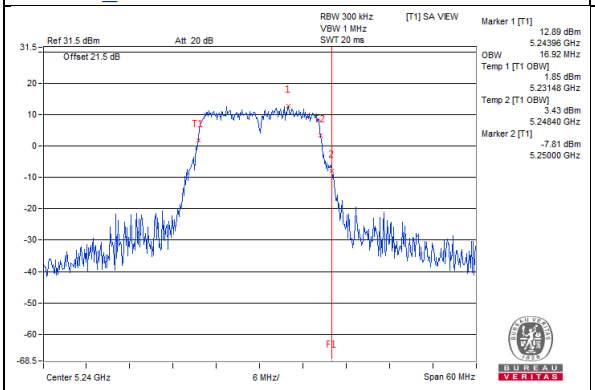


802.11ax (HE160)_Chain 0 / CH50 (U-NII-1)

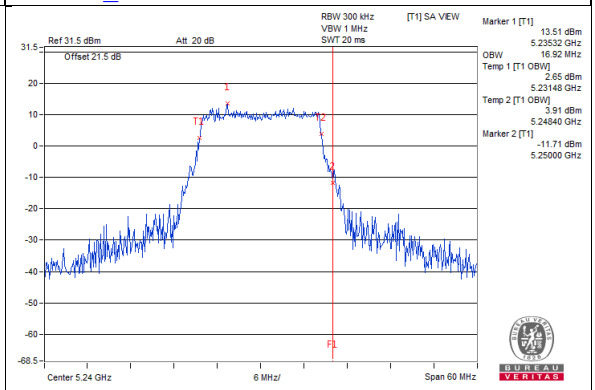


Spectrum Plot for near by DFS band
(DFS is required, if 99% OCP straddle into U-NII-2A band)

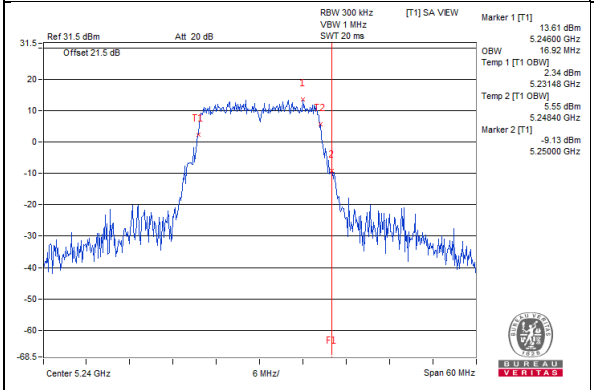
802.11a_Chain 0 / CH48



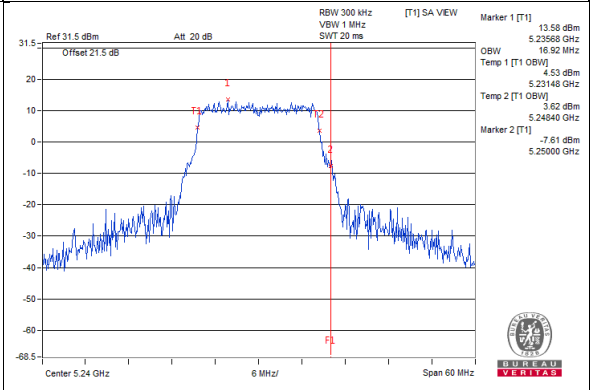
802.11a_Chain 1 / CH48



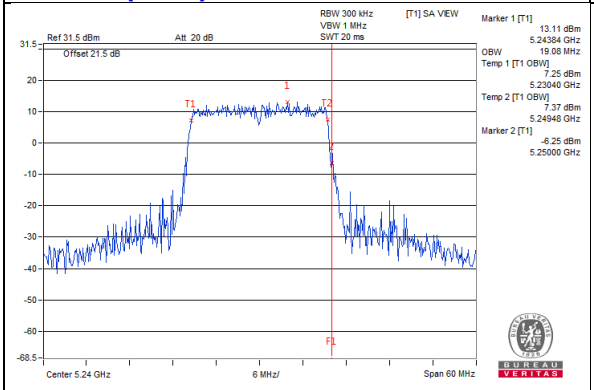
802.11a_Chain 2 / CH48



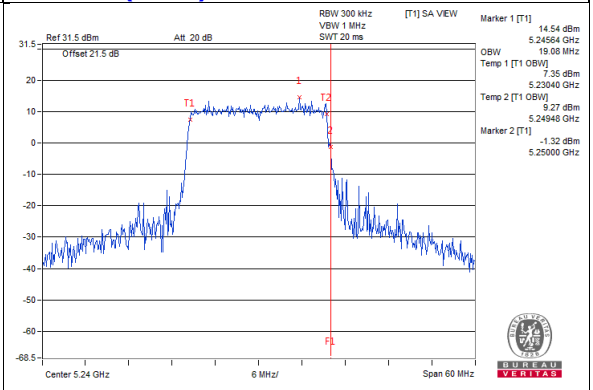
802.11a_Chain 3 / CH48



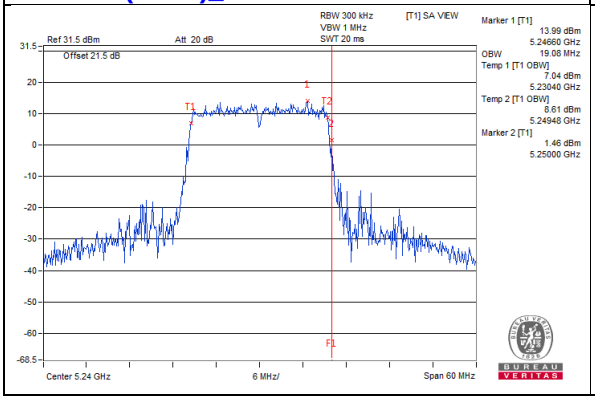
802.11ax (HE20)_Chain 0 / CH48



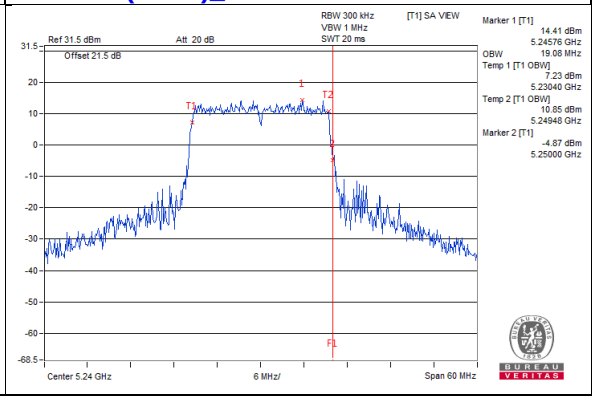
802.11ax (HE20)_Chain 1 / CH48



802.11ax (HE20)_Chain 2 / CH48

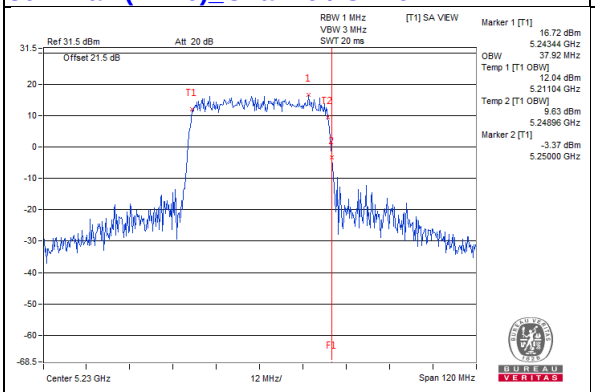


802.11ax (HE20)_Chain 3 / CH48

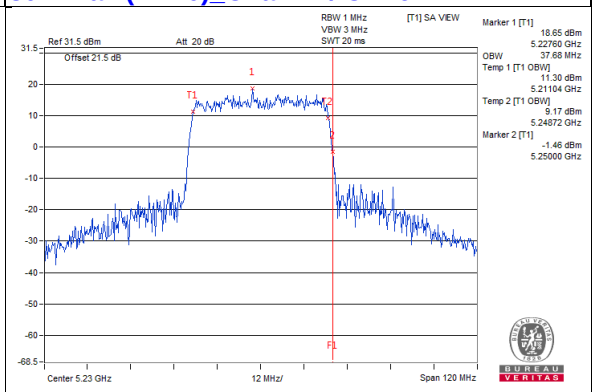


Spectrum Plot for near by DFS band
(DFS is required, if 99% OCP straddle into U-NII-2A band)

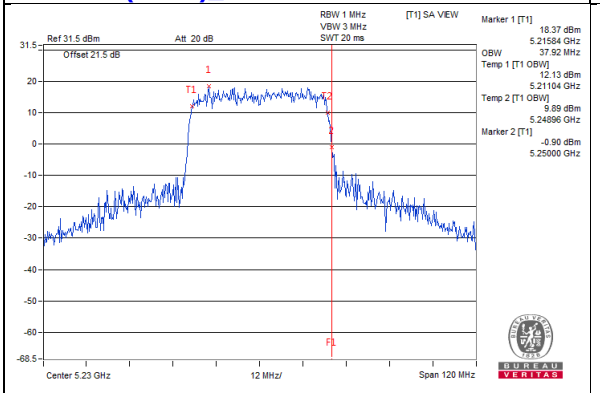
802.11ax (HE40)_Chain 0 / CH46



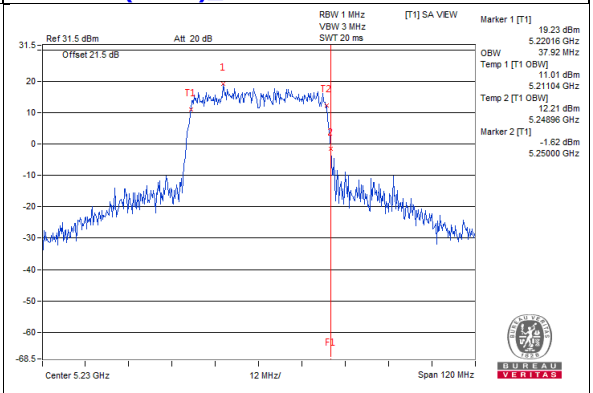
802.11ax (HE40)_Chain 1 / CH46



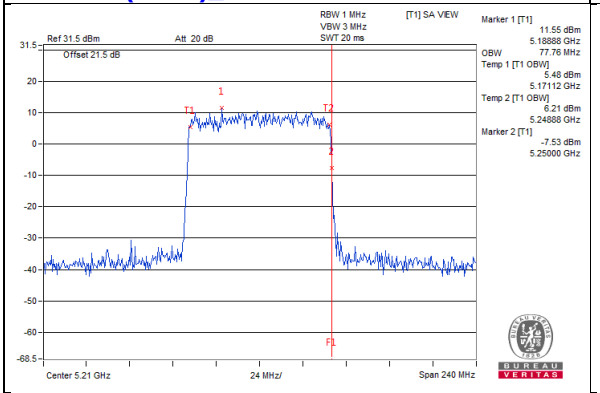
802.11ax (HE40)_Chain 2 / CH46



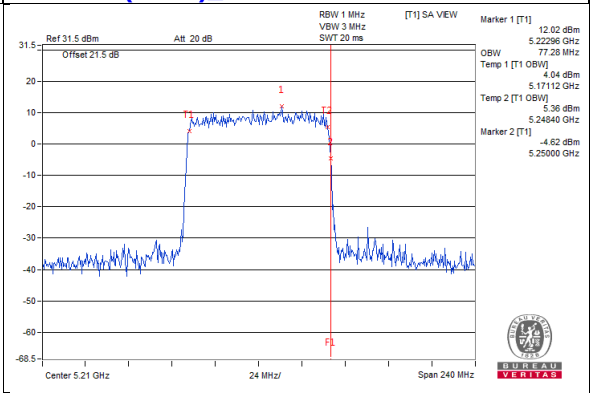
802.11ax (HE40)_Chain 3 / CH46



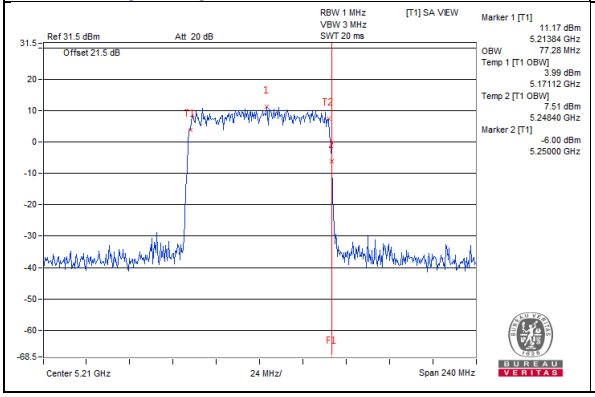
802.11ax (HE80)_Chain 0 / CH42



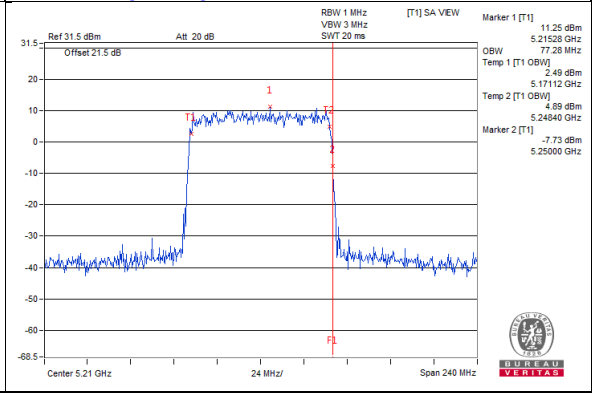
802.11ax (HE80)_Chain 1 / CH42



802.11ax (HE80)_Chain 2 / CH42

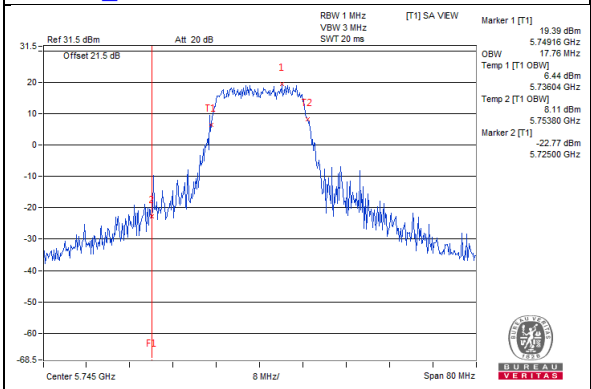


802.11ax (HE80)_Chain 3 / CH42

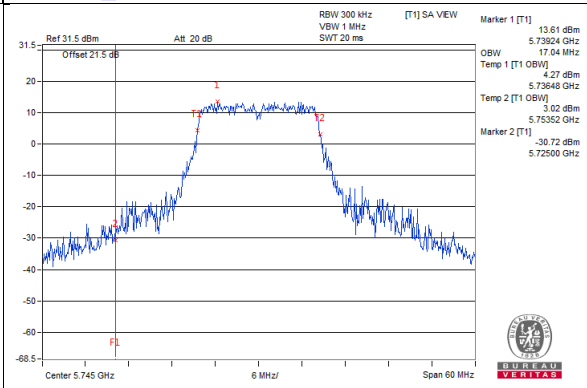


Spectrum Plot for near by DFS band
(DFS is required, if 99% OCP straddle into U-NII-2C band)

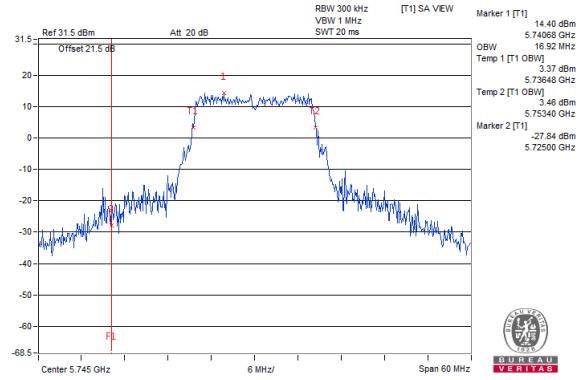
802.11a_Chain 0 / CH149



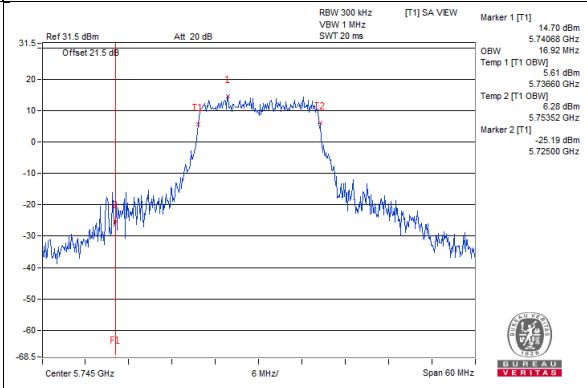
802.11a_Chain 1 / CH149



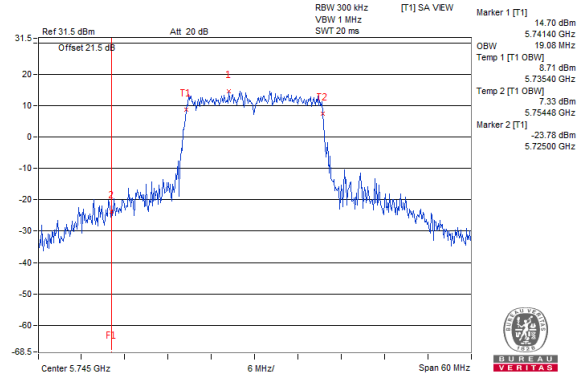
802.11a_Chain 2 / CH149



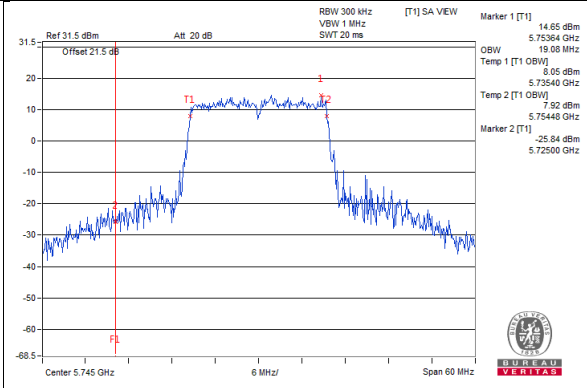
802.11a_Chain 3 / CH149



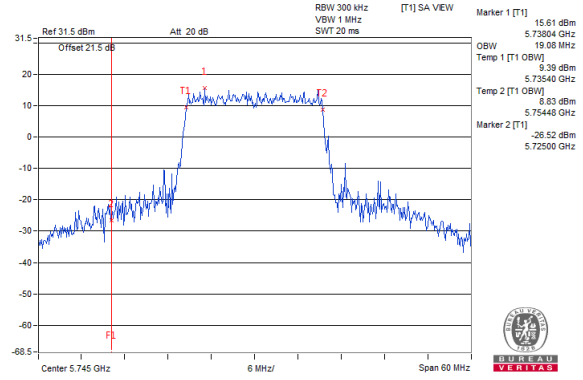
802.11ax (HE20)_Chain 0 / CH149



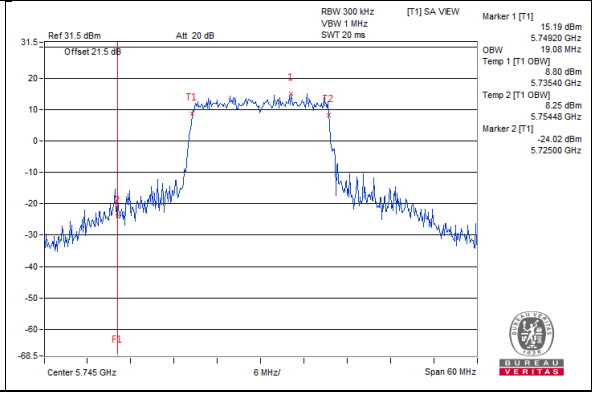
802.11ax (HE20)_Chain 1 / CH149



802.11ax (HE20)_Chain 2 / CH149

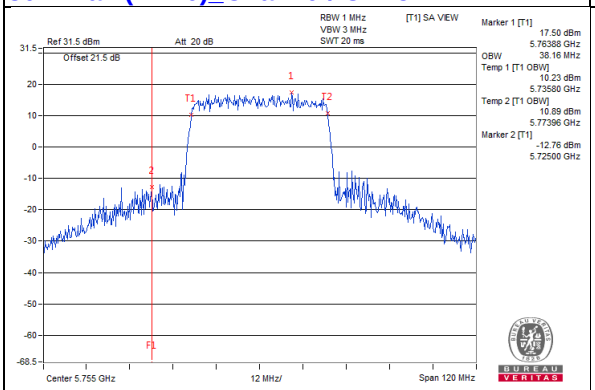


802.11ax (HE20)_Chain 3 / CH149

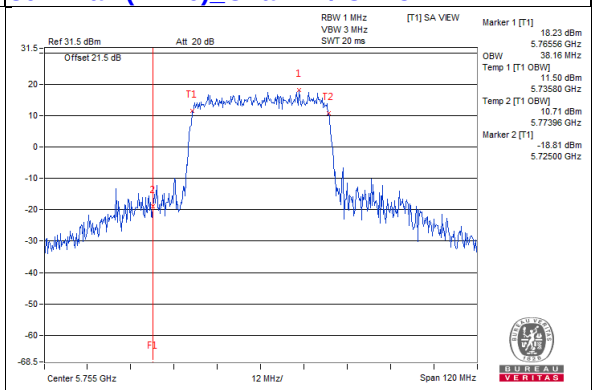


Spectrum Plot for near by DFS band
(DFS is required, if 99% OCP straddle into U-NII-2C band)

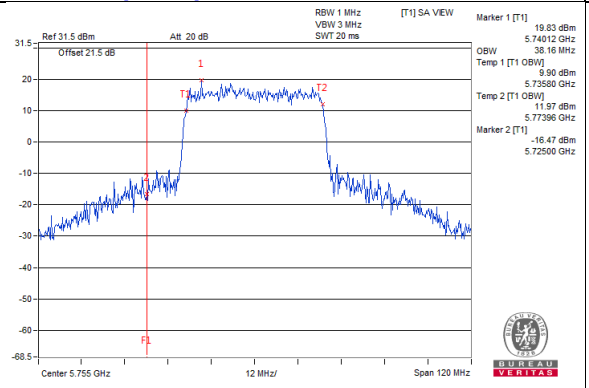
802.11ax (HE40)_Chain 0 / CH151



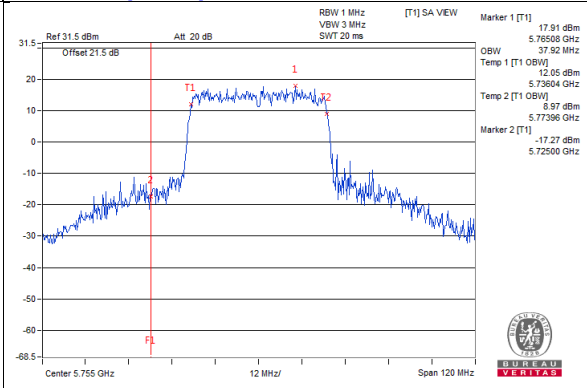
802.11ax (HE40)_Chain 1 / CH151



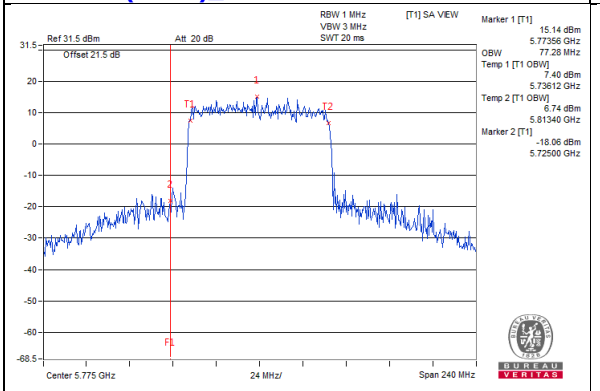
802.11ax (HE40)_Chain 2 / CH151



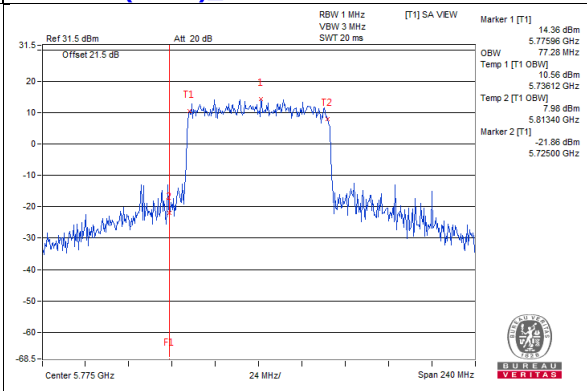
802.11ax (HE40)_Chain 3 / CH151



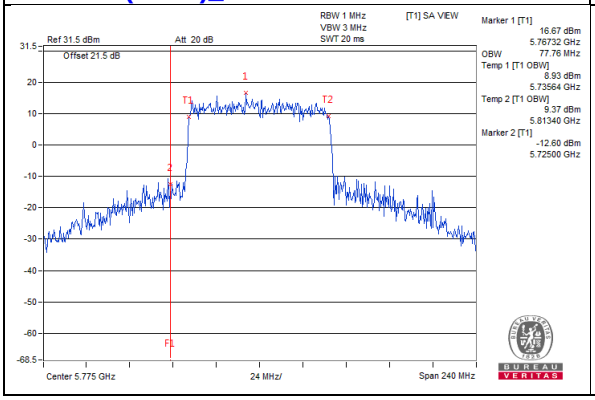
802.11ax (HE80)_Chain 0 / CH155



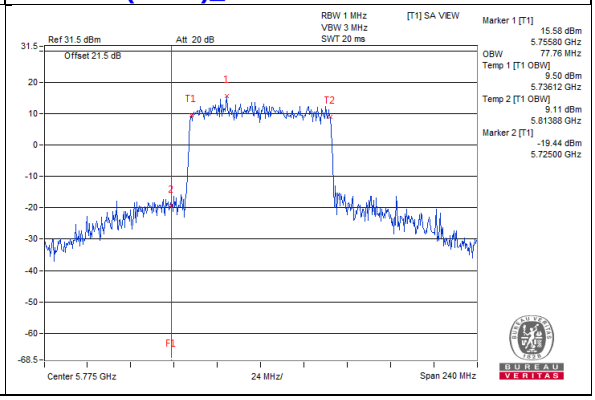
802.11ax (HE80)_Chain 1 / CH155



802.11ax (HE80)_Chain 2 / CH155



802.11ax (HE80)_Chain 3 / CH155

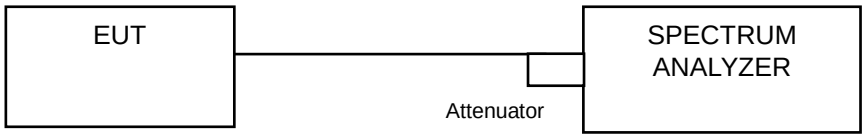


4.5 Peak Power Spectral Density Measurement

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	
		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 Procedure

For 802.11a:

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

Using method SA-1

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
3. Sweep time = auto, trigger set to “free run”.
4. Trace average at least 100 traces in power averaging mode.
5. Record the max value

For U-NII-3:

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 300 kHz, Set VBW ≥ 1 MHz, Detector = RMS
3. Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.
4. Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log(500 kHz/300kHz)
5. Sweep time = auto, trigger set to “free run”.
6. Trace average at least 100 traces in power averaging mode.
7. Record the max value

For other modulation:

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

Using method SA-2

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

For U-NII-3:

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 300 kHz, Set VBW ≥ 1 MHz, Detector = RMS
3. Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.
4. Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log(500 kHz/300kHz)
5. Sweep time = auto, trigger set to “free run”.
6. Trace average at least 100 traces in power averaging mode.
7. 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 Condition

Same as Item 4.3.6.

4.5.7 Test Results

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

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)				Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3			
36	5180	8.06	8.29	8.89	8.87	14.56	15.42	Pass
40	5200	8.34	8.58	9.16	9.00	14.80	15.42	Pass
48	5240	8.52	8.48	8.61	8.82	14.63	15.42	Pass
52	5260	1.70	2.62	3.94	2.67	8.83	9.51	Pass
60	5300	2.00	2.84	3.73	2.81	8.91	9.51	Pass
64	5320	1.51	2.93	3.87	2.37	8.78	9.51	Pass
100	5500	3.63	2.57	2.75	3.64	9.20	9.67	Pass
116	5580	4.15	2.56	2.90	3.75	9.41	9.67	Pass
140	5700	2.06	3.05	2.93	3.79	9.02	9.67	Pass
144 (U-NII-2C Band)	5720	2.28	2.37	2.74	3.68	8.82	9.67	Pass

Note:
1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For U-NII-1: The directional gain = 7.58dBi > 6dBi, so the power density limit shall be reduced to 17-(7.58-6) = 15.42dBm.
3. For U-NII-2A: The directional gain = 7.49dBi > 6dBi, so the power density limit shall be reduced to 11-(7.49-6) = 9.51dBm.
4. For U-NII-2C: The directional gain = 7.33dBi > 6dBi, so the power density limit shall be reduced to 11-(7.33-6) = 9.67dBm.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
36	5180	7.47	7.99	7.98	8.59	0.10	14.15	15.42	Pass
40	5200	8.12	7.64	8.13	8.68	0.10	14.28	15.42	Pass
48	5240	7.74	8.08	8.41	8.84	0.10	14.41	15.42	Pass
52	5260	1.29	1.93	2.85	2.10	0.10	8.20	9.51	Pass
60	5300	1.10	2.34	3.05	2.05	0.10	8.31	9.51	Pass
64	5320	1.27	2.44	3.13	1.88	0.10	8.36	9.51	Pass
100	5500	2.06	1.96	2.71	2.73	0.10	8.50	9.67	Pass
116	5580	2.79	1.92	2.57	3.13	0.10	8.75	9.67	Pass
140	5700	2.24	1.16	2.11	3.26	0.10	8.38	9.67	Pass
144 (U-NII-2C Band)	5720	1.90	1.82	1.96	3.13	0.10	8.36	9.67	Pass

Note:
1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For U-NII-1: The directional gain = 7.58dBi > 6dBi, so the power density limit shall be reduced to 17-(7.58-6) = 15.42dBm.
3. For U-NII-2A: The directional gain = 7.49dBi > 6dBi, so the power density limit shall be reduced to 11-(7.49-6) = 9.51dBm.
4. For U-NII-2C: The directional gain = 7.33dBi > 6dBi, so the power density limit shall be reduced to 11-(7.33-6) = 9.67dBm.
5. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
38	5190	2.84	3.72	4.11	4.10	0.19	9.93	15.42	Pass
46	5230	5.96	6.34	7.53	6.98	0.19	12.95	15.42	Pass
54	5270	0.34	1.34	1.50	-0.18	0.19	7.02	9.51	Pass
62	5310	0.14	1.66	1.68	-0.13	0.19	7.13	9.51	Pass
102	5510	0.65	1.03	0.17	1.82	0.19	7.17	9.67	Pass
110	5550	1.64	1.02	0.23	1.41	0.19	7.32	9.67	Pass
134	5670	0.77	1.18	0.53	1.07	0.19	7.11	9.67	Pass
142 (U-NII-2C Band)	5710	0.63	1.38	0.39	1.25	0.19	7.14	9.67	Pass

Note:
1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For U-NII-1: The directional gain = 7.58dBi > 6dBi, so the power density limit shall be reduced to 17-(7.58-6) = 15.42dBm.
3. For U-NII-2A: The directional gain = 7.49dBi > 6dBi, so the power density limit shall be reduced to 11-(7.49-6) = 9.51dBm.
4. For U-NII-2C: The directional gain = 7.33dBi > 6dBi, so the power density limit shall be reduced to 11-(7.33-6) = 9.67dBm.
5. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
42	5210	0.55	1.08	1.03	0.76	0.39	7.27	15.42	Pass
58	5290	-2.96	-1.79	-1.74	-2.16	0.39	4.27	9.51	Pass
106	5530	-2.39	-2.40	-2.79	-1.33	0.39	4.22	9.67	Pass
122	5610	-2.10	-2.10	-2.21	-1.26	0.39	4.51	9.67	Pass
138 (U-NII-2C Band)	5690	-2.92	-2.91	-2.98	-2.16	0.39	3.68	9.67	Pass

Note:
1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For U-NII-1: The directional gain = 7.58dBi > 6dBi, so the power density limit shall be reduced to 17-(7.58-6) = 15.42dBm.
3. For U-NII-2A: The directional gain = 7.49dBi > 6dBi, so the power density limit shall be reduced to 11-(7.49-6) = 9.51dBm.
4. For U-NII-2C: The directional gain = 7.33dBi > 6dBi, so the power density limit shall be reduced to 11-(7.33-6) = 9.67dBm.
5. Refer to section 3.3 for duty cycle spectrum plot.

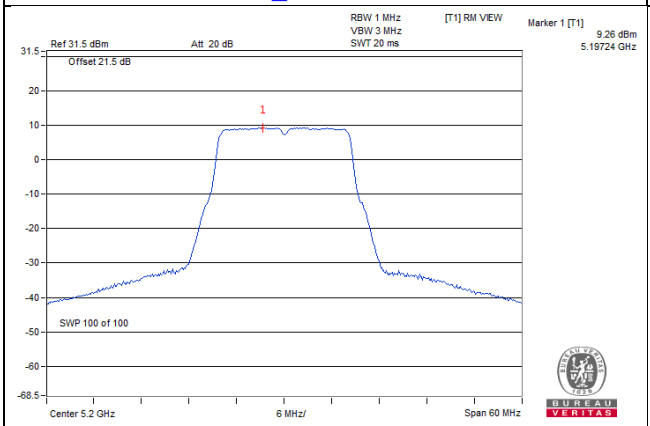
802.11ax (HE160)

Chan.	Chan. Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
50 (U-NII-1 Band)	5250	-4.85	-3.09	-3.19	-3.29	0.53	3.00	15.42	Pass
50 (U-NII-2A Band)	5250	-4.85	-3.09	-3.19	-3.29	0.53	3.00	9.51	Pass
114	5570	-5.70	-5.08	-5.65	-4.60	0.53	1.32	9.67	Pass

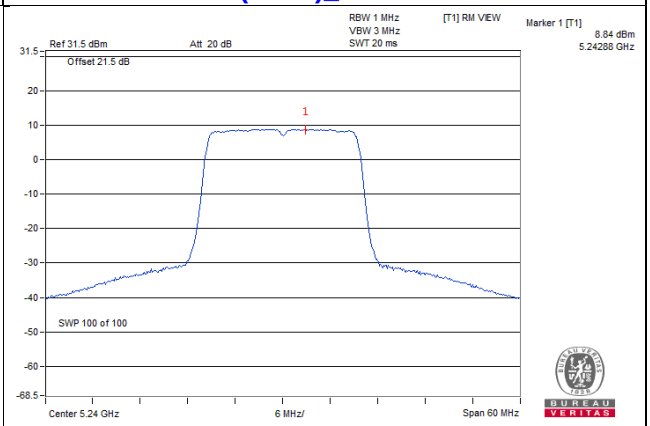
Note:
1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For U-NII-1: The directional gain = 7.58dBi > 6dBi, so the power density limit shall be reduced to 17-(7.58-6) = 15.42dBm.
3. For U-NII-2A: The directional gain = 7.49dBi > 6dBi, so the power density limit shall be reduced to 11-(7.49-6) = 9.51dBm.
4. For U-NII-2C: The directional gain = 7.33dBi > 6dBi, so the power density limit shall be reduced to 11-(7.33-6) = 9.67dBm.
5. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

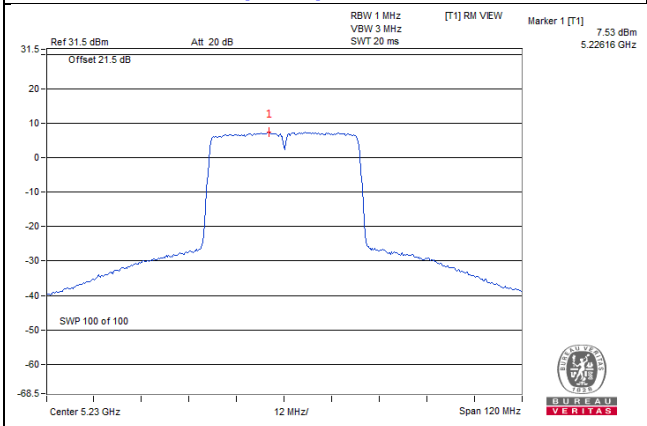
802.11a_Chain 2 / CH40



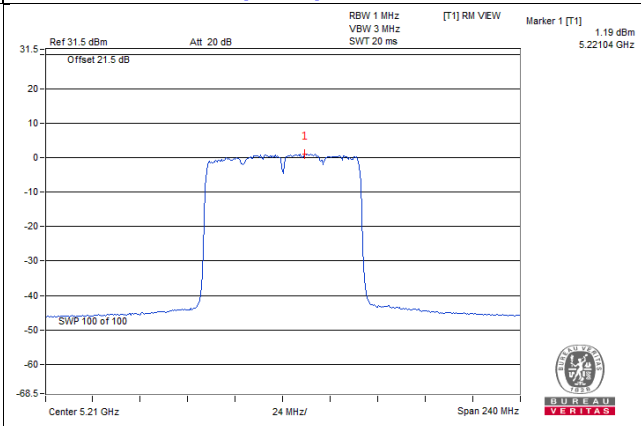
802.11ax (HE20)_Chain 3 / CH48



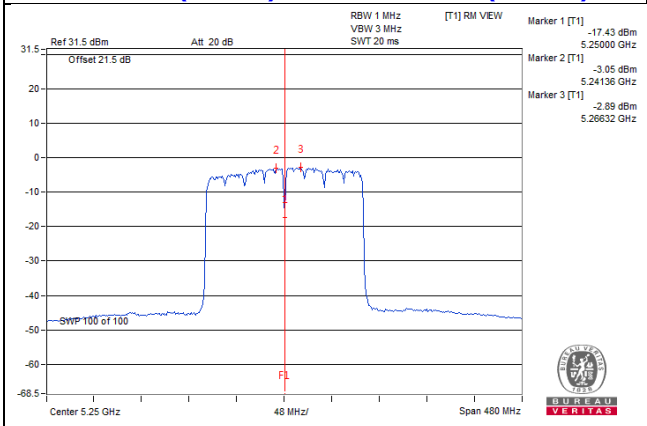
802.11ax (HE40)_Chain 2 / CH46



802.11ax (HE80)_Chain 1 / CH42



802.11ax (HE160)_Chain 1 / CH50 (U-NII-1)



For U-NII-3:

802.11a

Chan.	Freq. (MHz)	PSD (dBm/300kHz)				Total PSD		Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
		Chain 0	Chain 1	Chain 2	Chain 3	mW/ 300kHz	dBm/ 300kHz			
144 (U-NII-3 Band)	5720	-5.66	-6.62	-5.79	-4.44	1.1128	0.46	2.68	28.77	Pass
149	5745	1.51	1.47	1.94	1.74	5.8745	7.69	9.91	28.77	Pass
157	5785	1.43	1.66	1.98	1.94	5.9963	7.78	10.00	28.77	Pass
165	5825	1.95	1.51	1.95	1.70	6.0284	7.80	10.02	28.77	Pass

Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.

2. The directional gain = 7.23dBi > 6dBi, so the power density limit shall be reduced to 30-(7.23-6) = 28.77dBm.

802.11ax (HE20)

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/300kHz)				Duty Factor (dB)	Total PSD With Duty Factor		Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
		Chain 0	Chain 1	Chain 2	Chain 3		mW/300 kHz	dBm/300kHz			
144 (U-NII-3 Band)	5720	-6.97	-7.42	-7.04	-5.87	0.10	0.8589	-0.66	1.56	28.77	Pass
149	5745	0.73	0.43	0.54	0.93	0.10	4.7713	6.79	9.01	28.77	Pass
157	5785	0.33	0.51	0.82	0.82	0.10	4.7312	6.75	8.97	28.77	Pass
165	5825	0.28	0.12	0.94	0.50	0.10	4.5664	6.60	8.82	28.77	Pass

Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.

2. The directional gain = 7.23dBi > 6dBi, so the power density limit shall be reduced to 30-(7.23-6) = 28.77dBm.

3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/300kHz)				Duty Factor (dB)	Total PSD With Duty Factor		Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
		Chain 0	Chain 1	Chain 2	Chain 3		mW/300 kHz	dBm/300kHz			
142 (U-NII-3 Band)	5710	-8.50	-7.83	-8.98	-7.89	0.19	0.6213	-2.07	0.15	28.77	Pass
151	5755	-1.89	-2.05	-1.49	-1.67	0.19	2.7786	4.44	6.66	28.77	Pass
159	5795	-1.99	-2.58	-1.59	-1.60	0.19	2.6831	4.29	6.51	28.77	Pass

Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.

2. The directional gain = 7.23dBi > 6dBi, so the power density limit shall be reduced to 30-(7.23-6) = 28.77dBm.

3. Refer to section 3.3 for duty cycle spectrum plot.

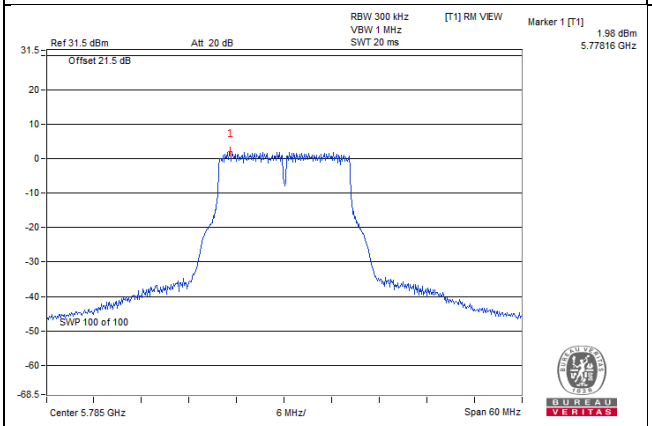
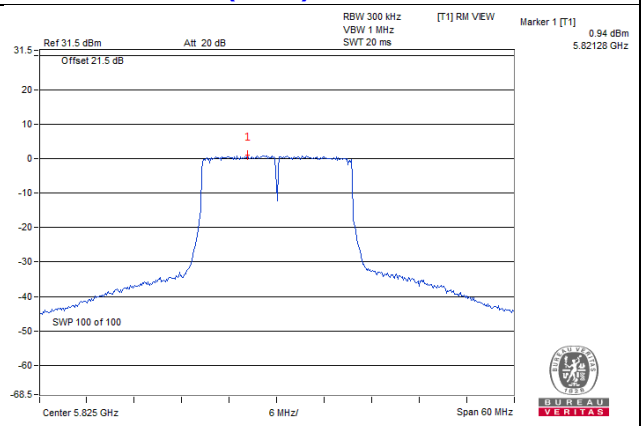
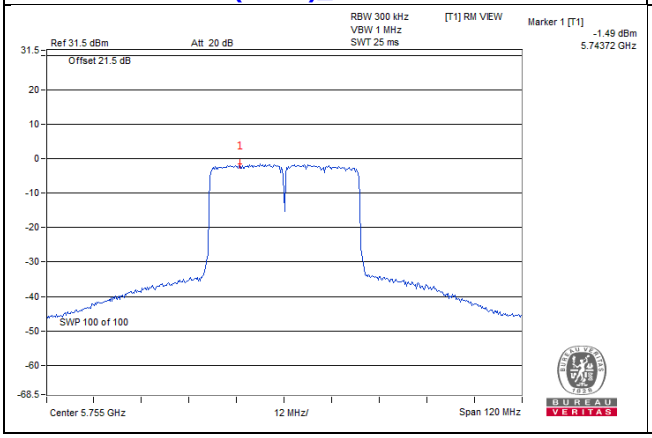
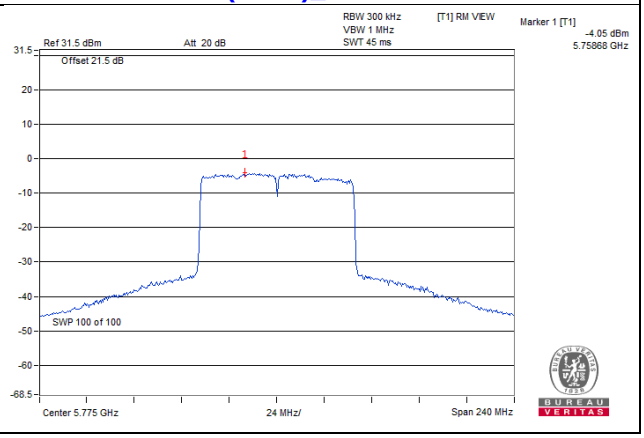
802.11ax (HE80)

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/300kHz)				Duty Factor (dB)	Total PSD With Duty Factor		Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
		Chain 0	Chain 1	Chain 2	Chain 3		mW/300 kHz	dBm/300kHz			
138 (U-NII-3 Band)	5690	-13.21	-12.75	-13.03	-11.88	0.39	0.23546	-6.28	-4.06	28.77	Pass
155	5775	-5.25	-4.68	-4.05	-4.93	0.39	1.4794	1.70	3.92	28.77	Pass

Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.

2. The directional gain = 7.23dBi > 6dBi, so the power density limit shall be reduced to 30-(7.23-6) = 28.77dBm.

3. Refer to section 3.3 for duty cycle spectrum plot.

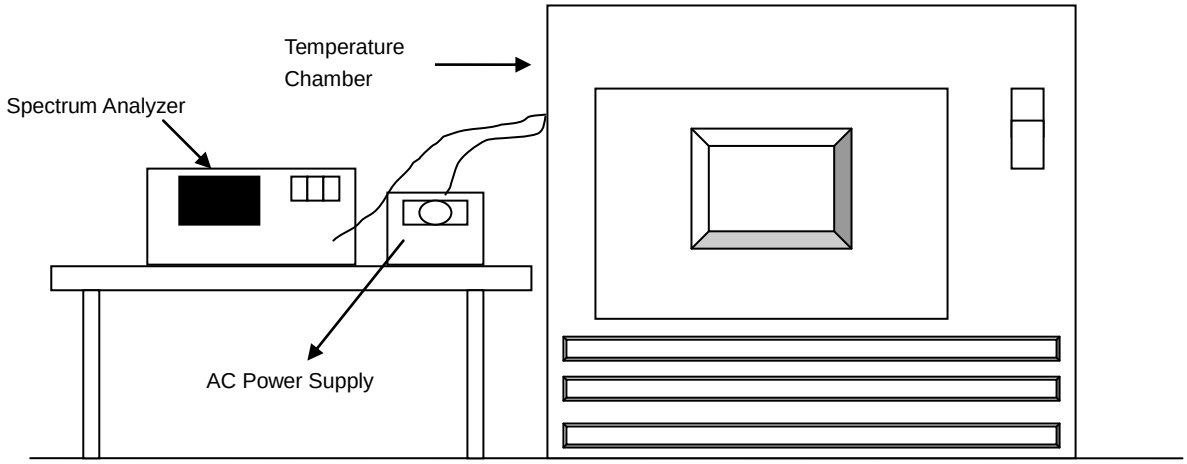
Spectrum Plot of Worst Value	
802.11a_Chain 2 / CH157	**802.11ax (HE20)_Chain 2 / CH165**
	
802.11ax (HE40)_Chain 2 / CH151	**802.11ax (HE80)_Chain 2 / CH155**
	

4.6 Frequency Stability Measurement

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

Refer to section 4.1.2 to get information of above instrument.

4.6.4 Test Procedure

a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
b. Turn the EUT on and couple its output to a spectrum analyzer.
c. Turn the EUT off and set the chamber to the highest temperature specified.
d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 Minutes.
e. Repeat step (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

Frequency Stability Versus Temp.									
Operating Frequency: 5180 MHz									
TEMP. (℃)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
50	120	5180.012	PASS	5180.0123	PASS	5180.0143	PASS	5180.013	PASS
40	120	5179.996	PASS	5179.9929	PASS	5179.9975	PASS	5179.993	PASS
30	120	5179.9965	PASS	5179.9956	PASS	5179.9985	PASS	5179.9957	PASS
20	120	5179.9808	PASS	5179.9801	PASS	5179.9832	PASS	5179.9836	PASS
10	120	5180.0194	PASS	5180.0181	PASS	5180.0177	PASS	5180.0203	PASS
0	120	5179.9968	PASS	5179.9932	PASS	5179.9959	PASS	5179.9959	PASS
-10	120	5179.9771	PASS	5179.9793	PASS	5179.9751	PASS	5179.9766	PASS
-20	120	5179.9894	PASS	5179.9872	PASS	5179.9879	PASS	5179.99	PASS
-30	120	5180.0076	PASS	5180.0076	PASS	5180.0082	PASS	5180.0083	PASS

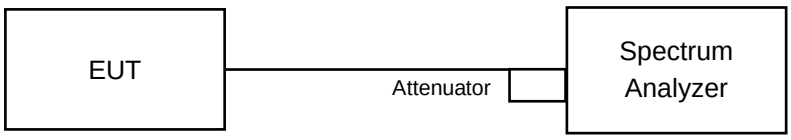
Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
TEMP. (℃)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
20	138	5179.9799	PASS	5179.9792	PASS	5179.9825	PASS	5179.9829	PASS
	120	5179.9808	PASS	5179.9801	PASS	5179.9832	PASS	5179.9836	PASS
	102	5179.9814	PASS	5179.9801	PASS	5179.9831	PASS	5179.9846	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

MEASUREMENT PROCEDURE REF

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

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
144 (U-NII-3 Band)	5720	3.19	3.19	3.24	3.19	0.5	Pass
149	5745	16.45	16.45	16.46	16.45	0.5	Pass
157	5785	16.45	16.46	16.48	16.46	0.5	Pass
165	5825	16.43	16.45	16.47	16.45	0.5	Pass

802.11ax (HE20)

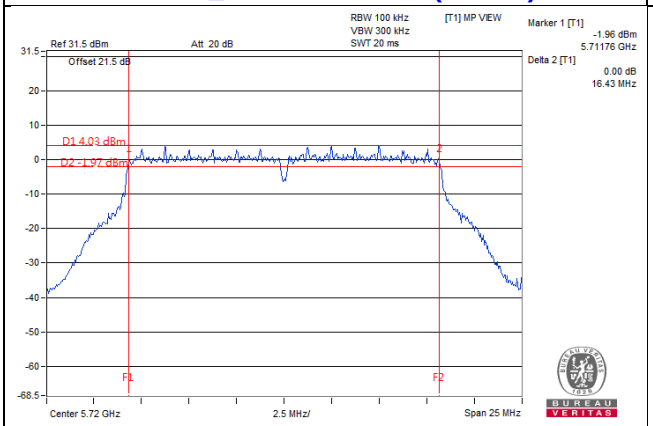
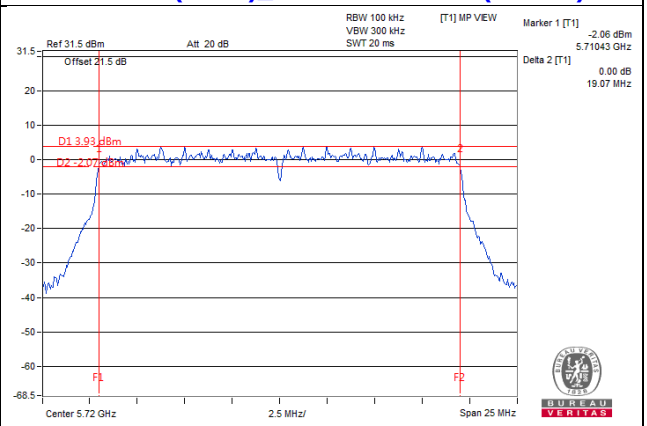
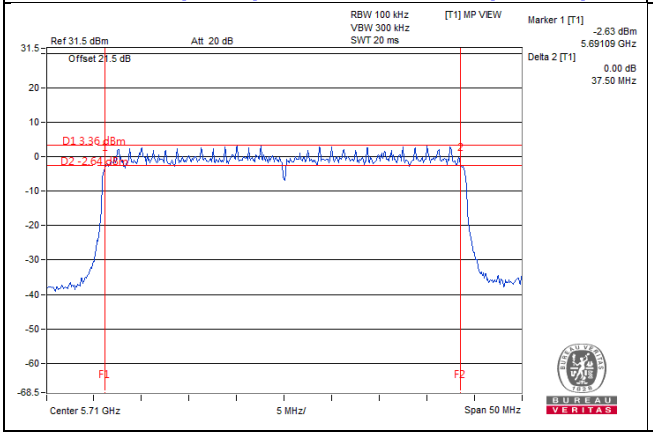
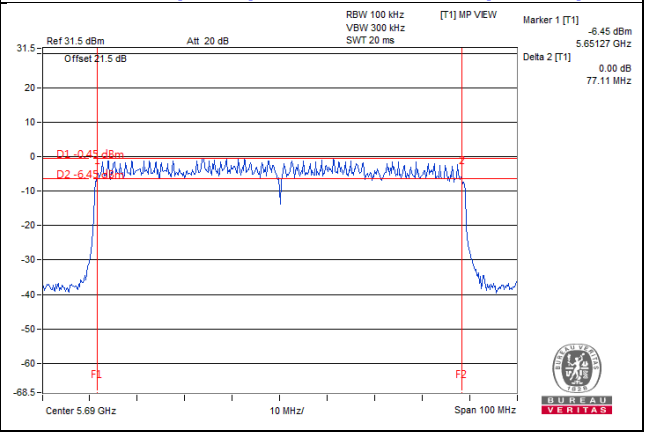
Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
144 (U-NII-3 Band)	5720	4.50	4.54	4.50	4.60	0.5	Pass
149	5745	19.06	19.08	19.04	19.16	0.5	Pass
157	5785	19.12	19.06	19.07	19.10	0.5	Pass
165	5825	19.08	19.09	19.03	19.08	0.5	Pass

802.11ax (HE40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
142 (U-NII-3 Band)	5710	3.83	3.59	3.77	3.79	0.5	Pass
151	5755	37.80	37.54	37.69	37.67	0.5	Pass
159	5795	37.83	37.49	37.70	37.59	0.5	Pass

802.11ax (HE80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
138 (U-NII-3 Band)	5690	3.38	3.98	3.42	3.91	0.5	Pass
155	5775	77.00	77.72	76.77	77.70	0.5	Pass

Spectrum Plot of Worst Value	
802.11a_Chain 0 / CH144 (U-NII-3)	**802.11ax (HE20)_Chain 0 / CH144 (U-NII-3)**
	
802.11ax (HE40)_Chain 1 / CH142 (U-NII-3)	**802.11ax (HE80)_Chain 0 / CH138 (U-NII-3)**
	

Note: The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

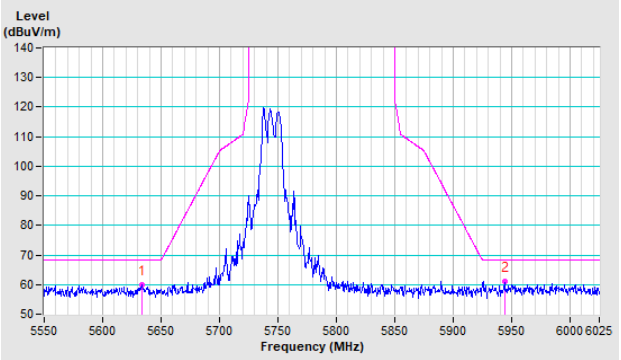
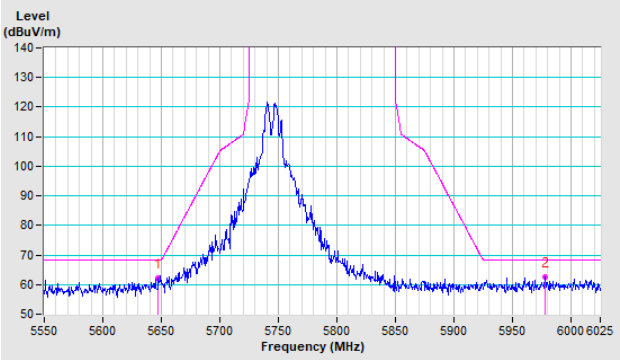
5 Pictures of Test Arrangements

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

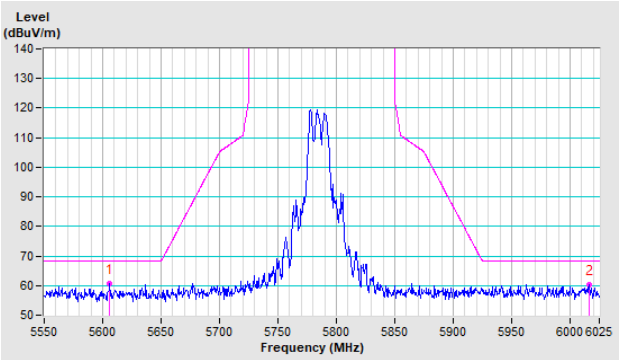
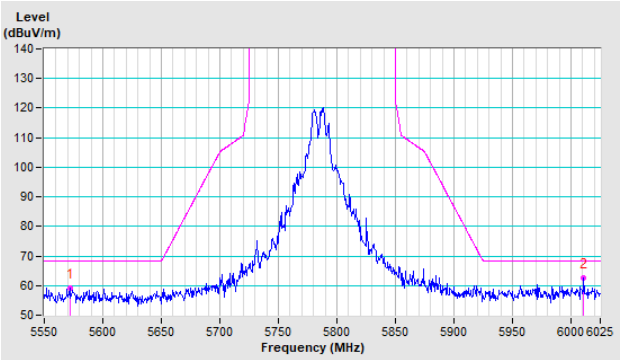
Annex A- Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band)

802.11a

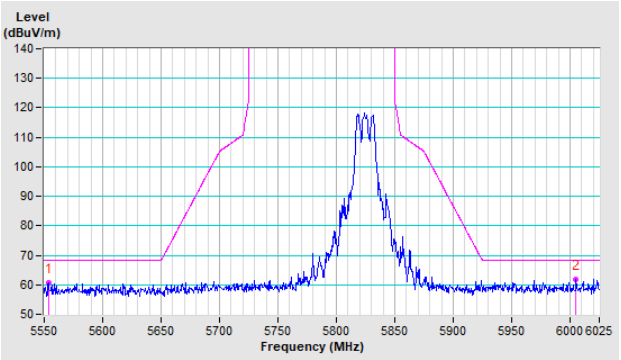
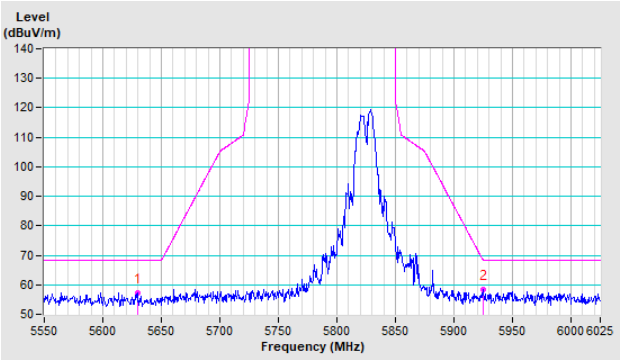
CH 149 5745 MHz

Horizontal	Vertical
	

CH 157 5785 MHz

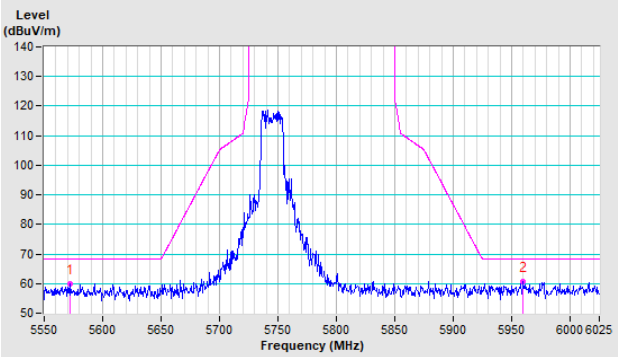
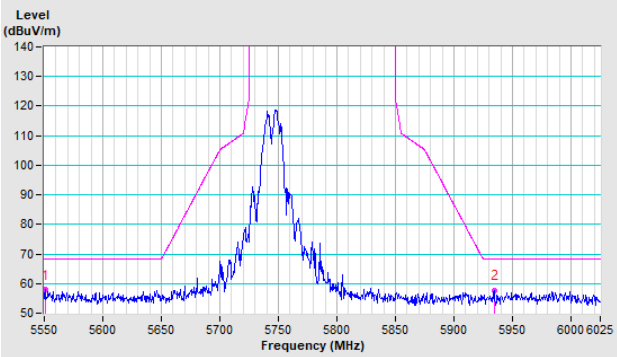
Horizontal	Vertical
	

CH 165 5825 MHz

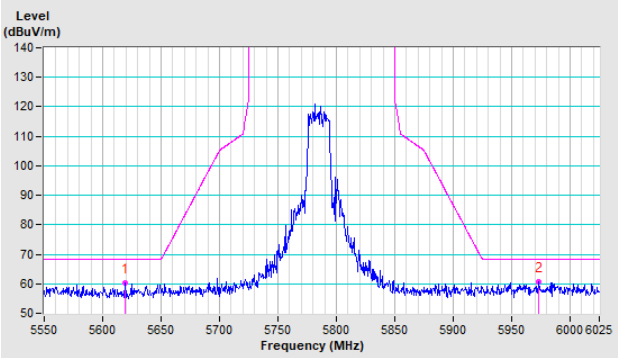
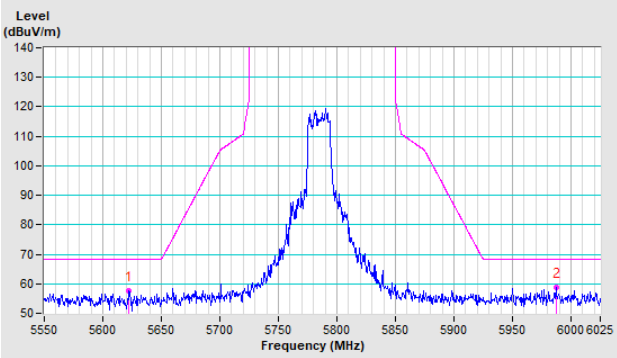
Horizontal	Vertical
	

802.11ax (HE20)

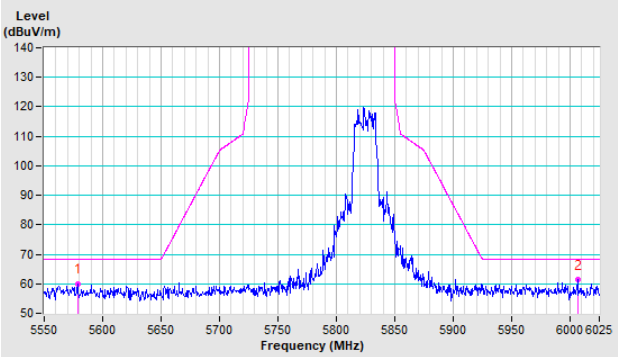
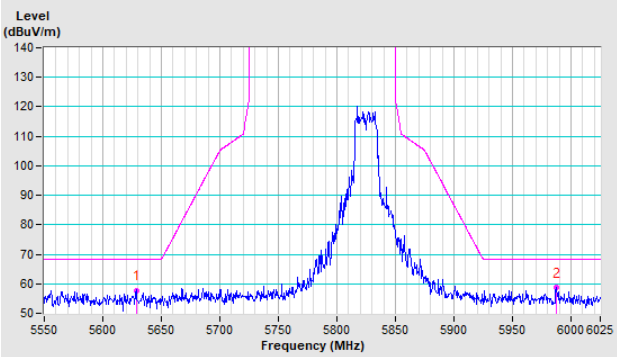
CH 149 5745 MHz

Horizontal	Vertical
	

CH 157 5785 MHz

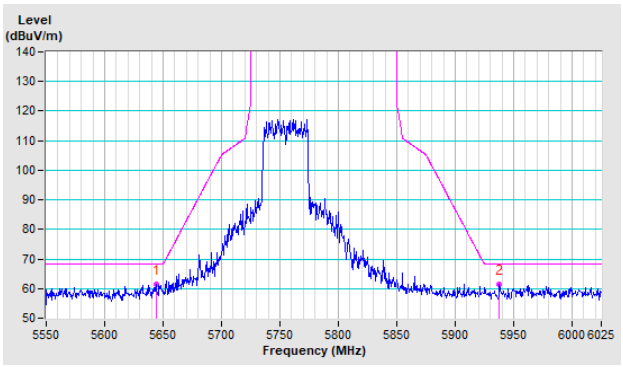
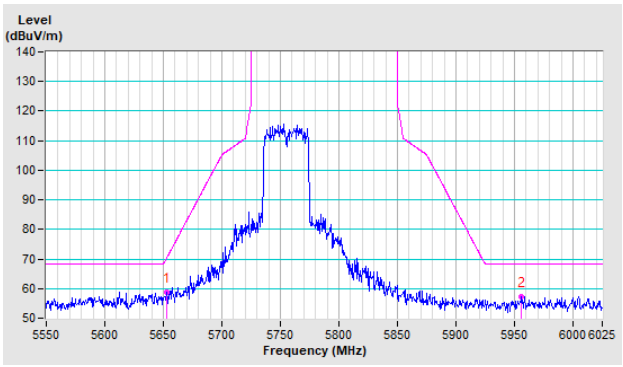
Horizontal	Vertical
	

CH 165 5825 MHz

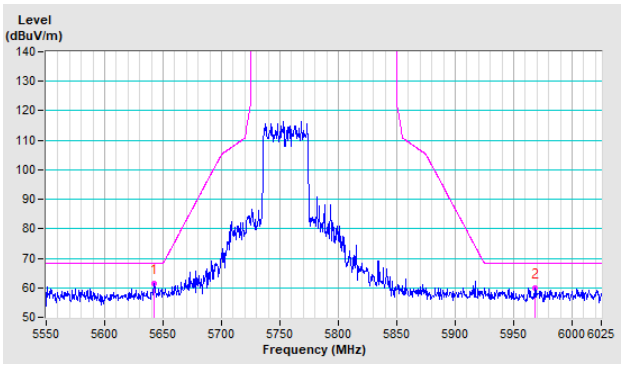
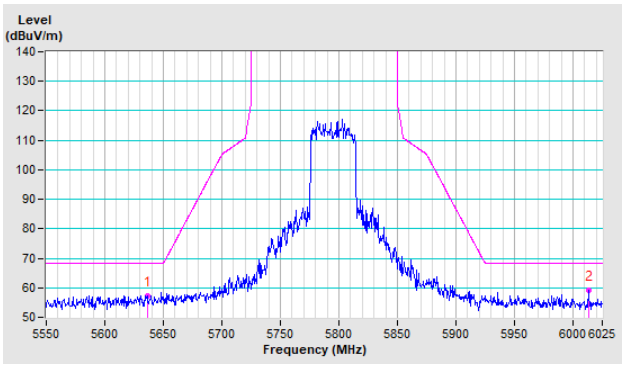
Horizontal	Vertical
	

802.11ax (HE40)

CH 151 5755 MHz

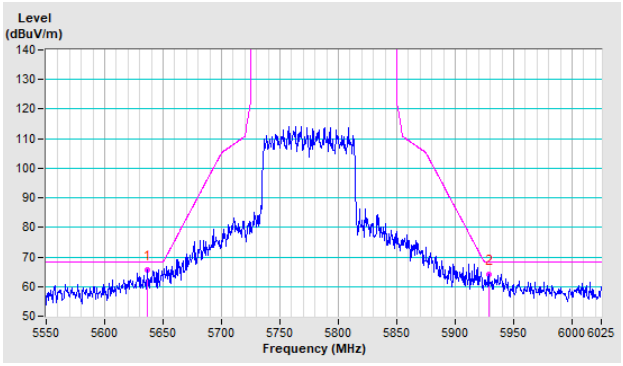
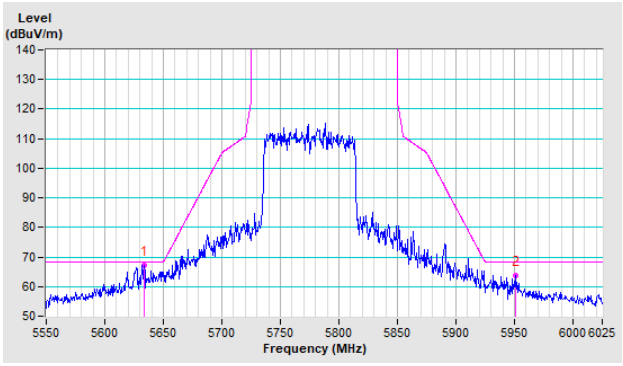
Horizontal	Vertical
	

CH 159 5795 MHz

Horizontal	Vertical
	

802.11ax (HE80)

CH 155 5775 MHz

Horizontal	Vertical
	

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 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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