

FCC Test Report

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Test Model: MR86-HW

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**FCC Registration /
Designation Number:** 723255 / TW2022



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Release Control Record

Issue No.	Description	Date Issued
RF191023E01-1	Original release.	Mar. 02, 2020

1 Certificate of Conformity

Product: 4x4 WiFi6 Outdoor Access Point

Brand: Cisco

Test Model: MR86-HW

Sample Status: ENGINEERING SAMPLE

Applicant: Cisco Systems, Inc.

Test Date: Oct. 22, 2019 to Jan. 30, 2020

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 :



Joyce Kuo / Specialist

Date:

Mar. 02, 2020

Approved by :



Clark Lin / Technical Manager

Date:

Mar. 02, 2020

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 -5.43dB at 23.65234MHz.
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, 15600.00MHz, 17235.00MHz, 51720.00MHz, 17265.00MHz, 5936.28MHz.
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	Antenna connector is R-N type(F) not a standard connector.

*For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOB 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) (\pm)
Conducted Emissions at mains ports	150kHz ~ 30MHz	1.8 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.0 dB
	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	4x4 WiFi6 Outdoor Access Point
Brand	Cisco
Test Model	MR86-HW
Status of EUT	ENGINEERING SAMPLE
Power Supply Rating	55Vdc or 56Vdc from PoE adapter
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac 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 1733.3Mbps 802.11ax: up to 2401.9Mbps
Operating Frequency	2.4GHz: 2.412 ~ 2.462GHz 5GHz: 5.18 ~ 5.24GHz, 5.745 ~ 5.825GHz
Number of Channel	2.4GHz: 802.11b, 802.11g, 802.11n (HT20), 802.11ax (HE20): 11 802.11n (HT40), 802.11ax (HE40): 7 5GHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 9 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 4 802.11ac (VHT80), 802.11ax (HE80): 2
Output Power	Mode 1 Non-Beamforming Mode: 2.4GHz: 198.326mW 5.18 ~ 5.24GHz: 6.013mW 5.745 ~ 5.825GHz: 196.2mW Beamforming Mode: 2.4GHz: 48.923mW 5.18 ~ 5.24GHz: 1.5644mW 5.745 ~ 5.825GHz: 48.4mW Mode 2 Non-Beamforming Mode: 2.4GHz: 577.777mW 5.18 ~ 5.24GHz: 24.06mW 5.745 ~ 5.825GHz: 529.361mW Beamforming Mode: 2.4GHz: 379.494mW 5.18 ~ 5.24GHz: 6.15mW 5.745 ~ 5.825GHz: 191.739mW Mode 3 Non-Beamforming Mode: 2.4GHz: 470.66mW 5.18 ~ 5.24GHz: 27.236mW 5.745 ~ 5.825GHz: 335.941mW Beamforming Mode: 2.4GHz: 156.267mW 5.18 ~ 5.24GHz: 6.772mW 5.745 ~ 5.825GHz: 218.391mW

	Mode 4 Non-Beamforming Mode: 2.4GHz: 495.227mW 5.18 ~ 5.24GHz: 7.59mW 5.745 ~ 5.825GHz: 247.721mW Beamforming Mode: 2.4GHz: 120.979mW 5.18 ~ 5.24GHz: 1.8793mW 5.745 ~ 5.825GHz: 61.056mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	NA
Data Cable Supplied	NA

Note:

1. There are WLAN, Bluetooth technology used for the EUT.
2. The EUT power needs to be supplied from a PoE adapter, the information is as below table:

Only for test, not for sale			
No.	Brand	Model No.	Spec.
1	PHIHONG	POEA30U-1ATE	Input: 100-240Vac, 50/60Hz, 0.8A Output: 56V, 0.536A DC Output Cable: shielded, 1.5 m
2	CISCO	MA-INJ-5	Input: 100-240Vac, 50/60Hz, 1.5A Output: 55V, 0.63A DC Output Cable: shielded, 1.5 m
3	CISCO	MA-INJ-4	Input: 100-240Vac, 50/60Hz, 0.67A Output: 55V, 0.6A DC Output Cable: shielded, 1.5 m

From the above adapters, the Emissions worse case was found in **Adapter 1**. Therefore only the test data of the mode was recorded in this report.

3. Simultaneously transmission condition

Condition	Technology		
1	WLAN 2.4GHz		WLAN 5GHz
2	WLAN 2.4GHz	WLAN 5GHz	Bluetooth

Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.

4. There are WLAN, Bluetooth technology used for the EUT. The EUT has below radios as following table:

Radio 1	Radio 2	Radio 3	Radio 4
WLAN2.4G	WLAN 5G	2.4G/5G 1x1 scanning radio	Bluetooth

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

WLAN 2.4GHz + WLAN 5GHz							
Antenna set	Chain No.	Brand	Model	Antenna Gain (dBi)	Frequency Range (GHz)	Antenna Type	Connector Type
1	Chain 0/1 Chain 2/3	Cisco	AIR-ANT2513P4M-N	13	2.4~2.4835	Dual-Band Polarization Diverse Patch Array	R-N type(F)
				13	5.15~5.85		
2	Chain 0/1 Chain 2/3	Cisco	MA-ANT-20	4	2.4~2.4835	omni-directional	
				7	5.15~5.85		
3	Chain 0/1 Chain 2/3	Cisco	MA-ANT-25	8	2.4~2.4835	Patch Array	
				6.5	5.15~5.85		
4	Chain 0/1 Chain 2/3	Cisco	MA-ANT-27	9	2.4~2.4835	Sector	
				12	5.15~5.85		
Scanning Radio							
-	-	-	-	4	2.4~2.4835	PIFA	I-PEX
				6.63	5.15~5.85		
Bluetooth							
-	-	-	-	4.13	2.4~2.4835	PIFA	I-PEX

6. The EUT could be supplied with components and following different brand names could be chosen:

PART DES	Main source		2nd source	
Item list	Vendor	Vendor PN	Vendor	Vendor PN
DDR	MICRON	MT40A512M16LY-062E IT:E	SAMSUNG	K4A8G165WC-BITD
NAND	WINBOND	W29N02GZBJBF	CYPRESS	S34MS02G200BHV000
M-SMART CONN	GTT	1020G00000340	UDE	R65-MK-0002

From the above sources, the Emissions worse case was found in **Main source**. Therefore only the test data of the mode was recorded in this report.

7. 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
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
802.11ax (HE20)	4TX	4RX
802.11ax (HE40)	4TX	4RX
802.11ax (HE80)	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) and 802.11ax mode for 20MHz (40MHz), therefore the manufacturer will control the power for 802.11n/ac mode is the same as the 802.11ax or more lower than it and investigated worst case to representative mode in test report. (Final test mode refer to section 3.2.1)

Radio 3 - Scanning (only RX)

2.4GHZ	
MODULATION MODE	RX CONFIGURATION
802.11b	1RX
802.11g	1RX
802.11n (HT20)	1RX
802.11n (HT40)	1RX
802.11ax (HE20)	1RX
802.11ax (HE40)	1RX
5GHz	
MODULATION MODE	RX CONFIGURATION
802.11a	1RX
802.11n (HT20)	1RX
802.11n (HT40)	1RX
802.11ac (VHT20)	1RX
802.11ac (VHT40)	1RX
802.11ac (VHT80)	1RX
802.11ax (HE20)	1RX
802.11ax (HE40)	1RX
802.11ax (HE80)	1RX

8. 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 (VHT80):

Channel	Frequency
42	5210 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 \geq 1G	RE<1G	PLC	APCM	
1	√	√	-	√	Antenna: AIR-ANT2513P4M-N
2	√	√	√	√	Antenna: MA-ANT-20
3	√	√	-	√	Antenna: MA-ANT-25
4	√	√	-	√	Antenna: MA-ANT-27

Where **RE \geq 1G**: Radiated Emission above 1GHz & Bandedge Measurement
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	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						
Antenna: AIR-ANT2513P4M-N						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate Parameter
802.11a	5180-5240 5745-5825	36 to 48 149 to 165	149	OFDM	BPSK	6Mb/s
Antenna: MA-ANT-20						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate Parameter
802.11ax (HE40)	5180-5240 5745-5825	38 to 46 151 to 159	159	OFDMA	BPSK	MCS0
Antenna: MA-ANT-25						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate Parameter
802.11ax (HE80)	5180-5240 5745-5825	42 155	155	OFDMA	BPSK	MCS0
Antenna: MA-ANT-27						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate Parameter
802.11a	5180-5240 5745-5825	36 to 48 149 to 165	149	OFDM	BPSK	6Mb/s

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
802.11a	5180-5240 5745-5825	36 to 48 149 to 165	149	OFDM	BPSK	6Mb/s

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	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)	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 (SYSTEM)	Tested By
RE≥1G	22deg. C, 70%RH	120Vac, 60Hz	Andy Ho
RE<1G	22deg. C, 67%RH	120Vac, 60Hz	Ryan Du
PLC	25deg. C, 62%RH	120Vac, 60Hz	Andy Ho
APCM	25deg. C, 60%RH	120Vac, 60Hz	Andy Ho

3.3 Duty Cycle of Test Signal

If duty cycle of test signal is < 98%, duty factor shall be considered.

802.11a: Duty cycle = 1.429 ms/1.548 ms = 0.923, Duty factor = $10 * \log(1/\text{Duty cycle}) = 0.35$

802.11ac (VHT20): Duty cycle = 5.447 ms/5.683 ms = 0.958, Duty factor = $10 * \log(1/\text{Duty cycle}) = 0.18$

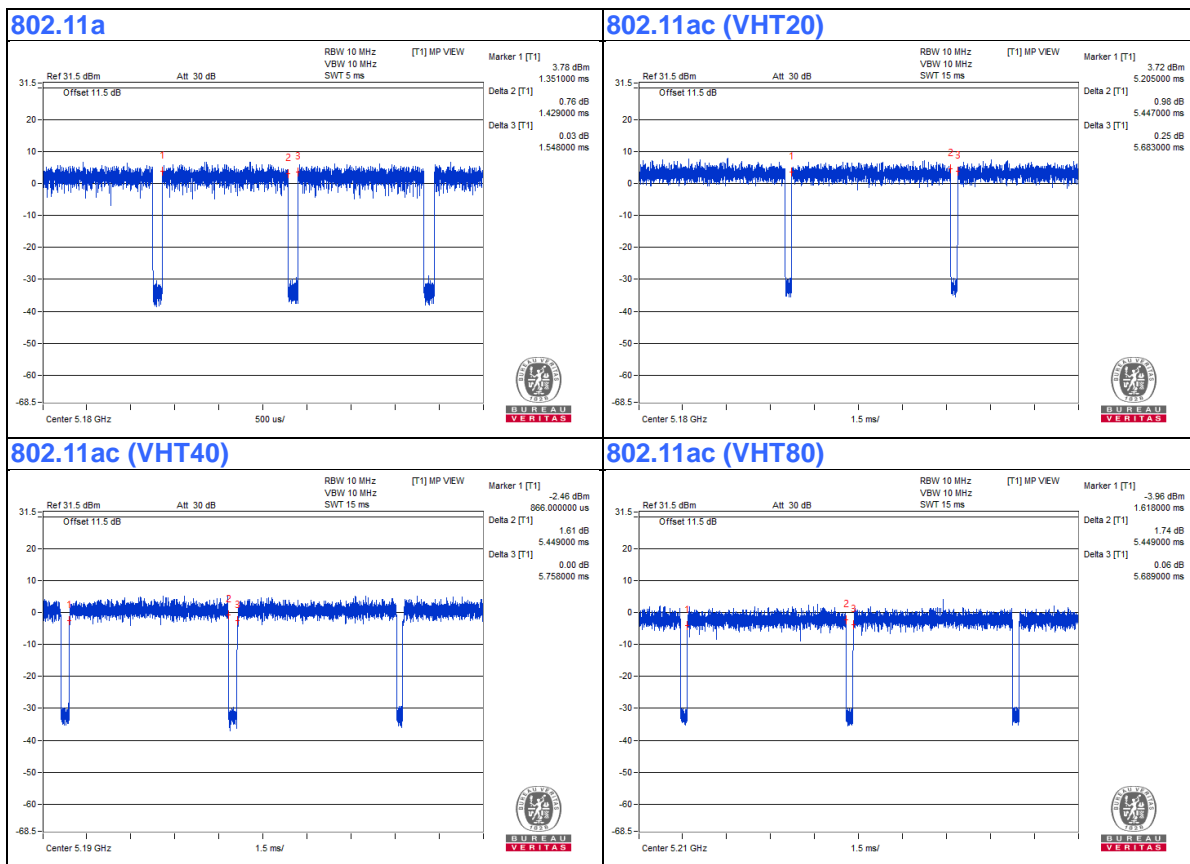
802.11ac (VHT40): Duty cycle = 5.449 ms/5.758 ms = 0.946, Duty factor = $10 * \log(1/\text{Duty cycle}) = 0.24$

802.11ac (VHT80): Duty cycle = 5.449 ms/5.689 ms = 0.958, Duty factor = $10 * \log(1/\text{Duty cycle}) = 0.19$

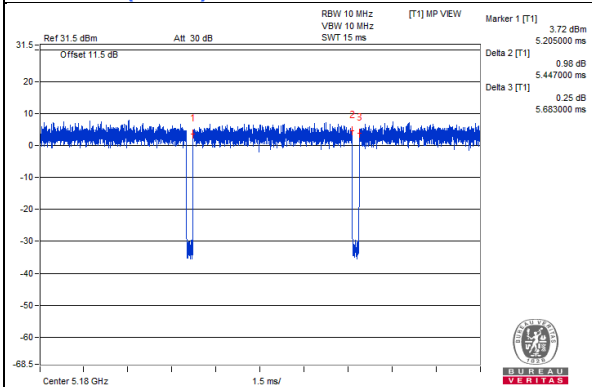
802.11ax (HE20): Duty cycle = 5.447 ms/5.683 ms = 0.958, Duty factor = $10 * \log(1/\text{Duty cycle}) = 0.18$

802.11ax (HE40): Duty cycle = 5.449 ms/5.758 ms = 0.946, Duty factor = $10 * \log(1/\text{Duty cycle}) = 0.24$

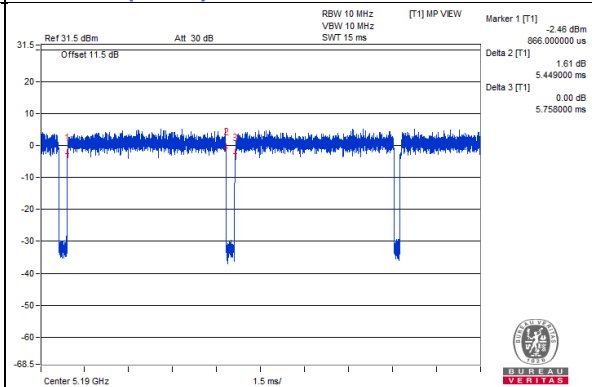
802.11ax (HE80): Duty cycle = 5.449 ms/5.689 ms = 0.958, Duty factor = $10 * \log(1/\text{Duty cycle}) = 0.19$



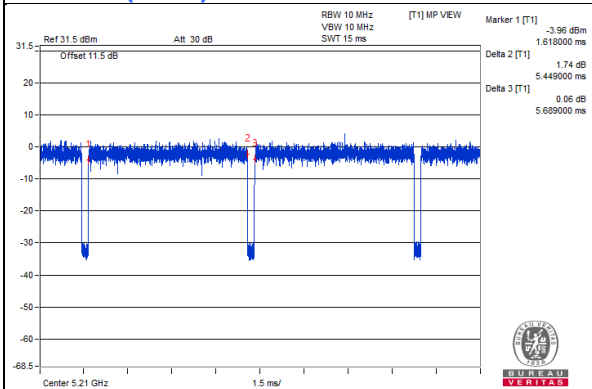
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)



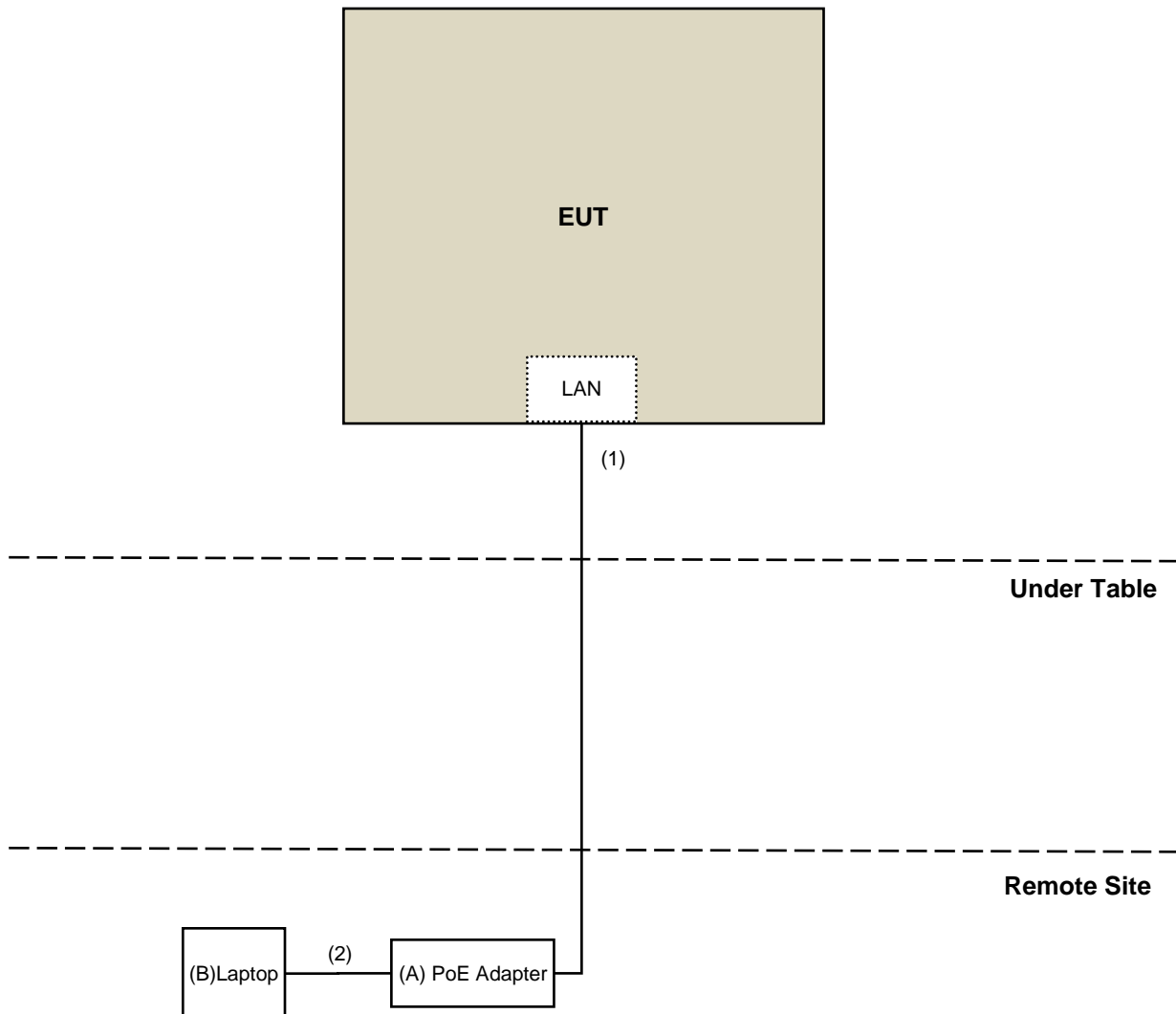
3.4 Description of Support Units

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.

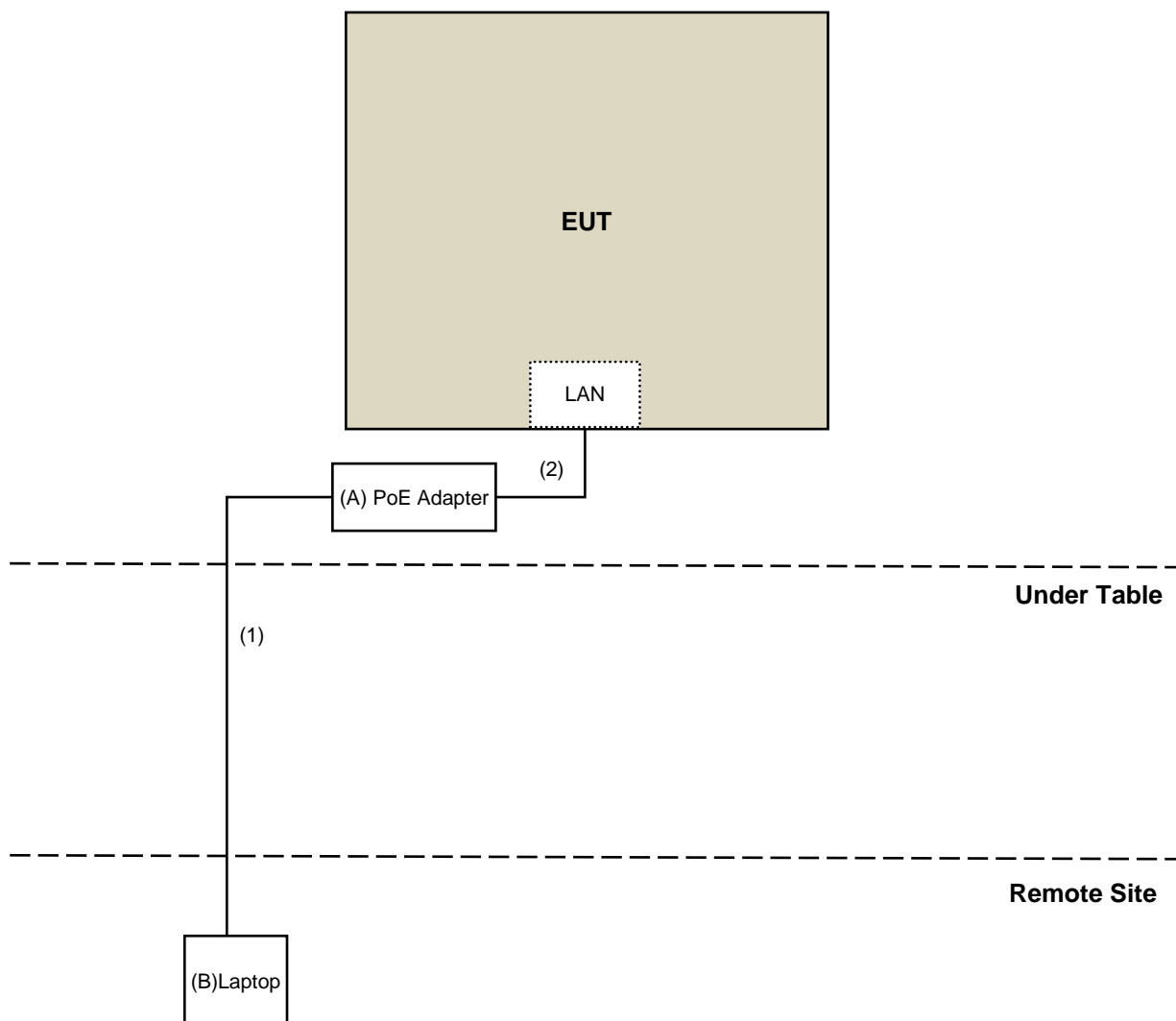
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	PoE Adapter	PHIHONG	POEA30U-1ATE	NA	NA	Supplied by client
B.	Laptop	DELL	E6420	B92T3R1	FCC DoC	Provided by Lab

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	RJ-45 Cable	1	10	No	0	Provided by Lab
2.	RJ-45 Cable	1	3	No	0	Provided by Lab

3.4.1 Configuration of System under Test POE Mode for Radiation



POE Mode for Conduction



3.5 General Description of Applied Standard and references

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

Test Standard:

FCC Part 15, Subpart E (15.407)
ANSI C63.10-2013

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

References Test Guidance:

KDB 789033 D02 General UNII Test Procedure New Rules v02r01
KDB 662911 D01 Multiple Transmitter Output v02r01

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

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

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

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE:

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

Limits of unwanted emission out of the restricted bands

Applicable To		Limit	
789033 D02 General UNII Test Procedure New Rules v02r01		Field Strength at 3m	
		PK:74 (dBuV/m)	AV:54 (dBuV/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(dBuV/m)
5250~5350 MHz	15.407(b)(2)		
5470~5725 MHz	15.407(b)(3)		
5725~5850 MHz	<input checked="" type="checkbox"/> 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(dBuV/m) ^{*1} PK:105.2 (dBuV/m) ^{*2} PK: 110.8(dBuV/m) ^{*3} PK:122.2 (dBuV/m) ^{*4}
	<input type="checkbox"/> 15.407(b)(4)(ii)	Emission limits in section 15.247(d)	
^{*1} beyond 75 MHz or more above of the band edge. ^{*3} below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.		^{*2} below the band edge increasing linearly to 10 dBm/MHz at 25 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:

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

4.1.2 Test Instruments

For OOB test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Keysight	N9038A	MY54450088	July 03, 2019	July 02, 2020
Horn_Antenna SCHWARZBECK	BBHA9120-D	9120D-406	Nov. 25, 2018	Nov. 24, 2019
Pre-Amplifier EMCI	EMC12630SE	980385	Aug. 15, 2019	Aug. 14, 2020
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
Pre-Amplifier EMCI	EMC184045SE	980387	Jan. 28, 2019	Jan. 27, 2020
Horn_Antenna SCHWARZBECK	BBHA9120-D	9120D-406	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. 3.
3. Loop antenna was used for all emissions below 30 MHz.
4. Tested Date: Oct. 22 to Nov. 22, 2019

For Radiated Emission test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Keysight	N9038A	MY54450088	July 03, 2019	July 02, 2020
Pre-Amplifier EMCI	EMC001340	980142	May 30, 2019	May 29, 2020
Loop Antenna Electro-Metrics	EM-6879	264	Jan. 22, 2019	Jan. 21, 2020
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-05	Apr. 30, 2019	Apr. 29, 2020
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	Nov. 11, 2019	Nov. 10, 2020
RF Cable	8D	966-3-1	Mar. 18, 2019	Mar. 17, 2020
RF Cable	8D	966-3-2	Mar. 18, 2019	Mar. 17, 2020
RF Cable	8D	966-3-3	Mar. 18, 2019	Mar. 17, 2020
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-3m-3-01	Sep. 26, 2019	Sep. 25, 2020
Horn_Antenna SCHWARZBECK	BBHA9120-D	9120D-406	Nov. 24, 2019	Nov. 23, 2020
Pre-Amplifier Mini-Circuits	ZFL-1000VH2B	AMP-ZFL-05	Apr. 30, 2019	Apr. 29, 2020
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	Nov. 11, 2019	Nov. 10, 2020
RF Cable	EMC104-SM-SM-2000	180601	June 10, 2019	June 09, 2020
RF Cable	EMC104-SM-SM-6000	180602	June 10, 2019	June 09, 2020
Spectrum Analyzer Keysight	N9030A	MY54490679	July 17, 2019	July 16, 2020
Pre-Amplifier EMCI	EMC184045SE	980387	Jan. 28, 2019	Jan. 27, 2020
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170519	Nov. 24, 2019	Nov. 23, 2020
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
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208406	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
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 21, 2019	May 20, 2020

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. 3.
3. Loop antenna was used for all emissions below 30 MHz.
4. Tested Date: Nov. 30, 2019 to Jan. 07, 2020

For other test:

Description & Manufacturer	Model no.	Serial No.	Calibrated DATE	Calibrated Until
Spectrum Analyzer R&S	FSV40	100964	June 04, 2019	June 03, 2020
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

- NOTE:**
1. The test was performed in Oven room 2.
 2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 3. Tested Date: Jan. 21 to 30, 2020

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:

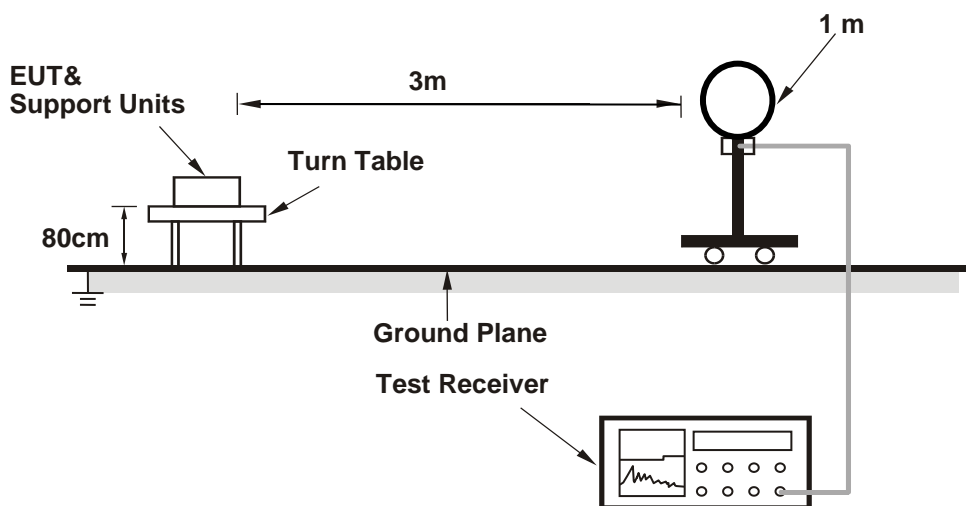
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle $< 98\%$) or 10Hz (Duty cycle $\geq 98\%$) 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

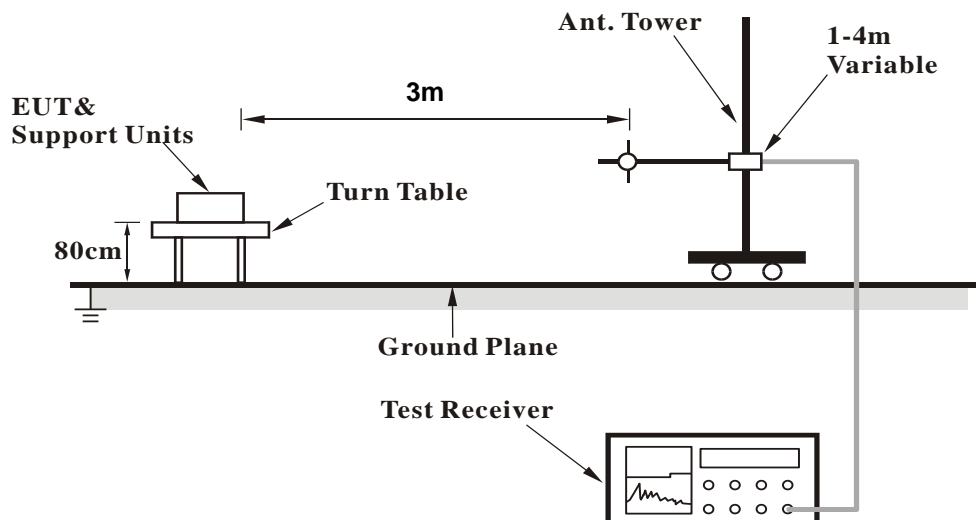
No deviation.

4.1.5 Test Setup

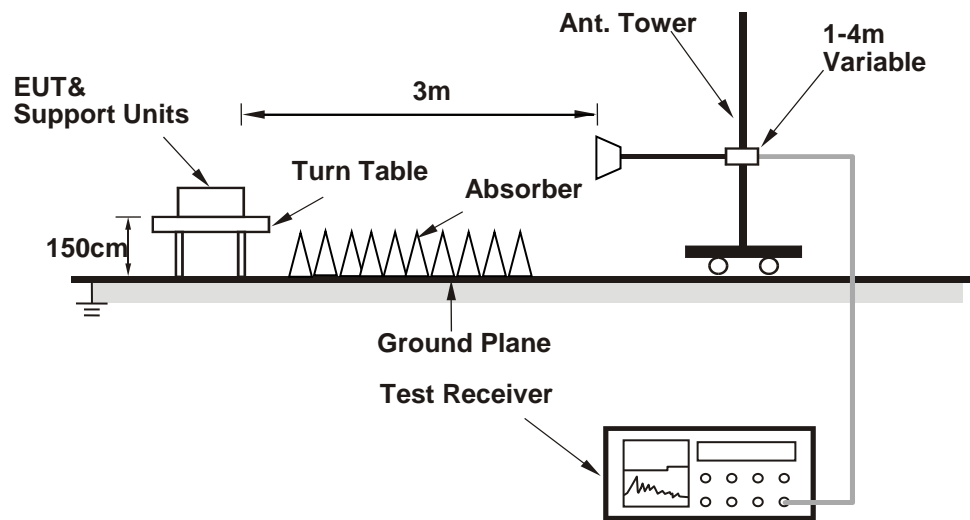
For Radiated emission below 30MHz



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 (QSPR (5.0-00161)) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

4.1.7 Test Results (Mode 1)

Above 1GHz Data:

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	65.2 PK	74.0	-8.8	2.06 H	1	62.2	3.0
2	5150.00	53.5 AV	54.0	-0.5	2.06 H	1	50.5	3.0
3	*5180.00	123.2 PK			2.06 H	1	120.3	2.9
4	*5180.00	114.2 AV			2.06 H	1	111.3	2.9
5	#10360.00	49.5 PK	68.2	-18.7	2.04 H	136	37.5	12.0
6	15540.00	62.7 PK	74.0	-11.3	3.10 H	133	49.7	13.0
7	15540.00	47.3 AV	54.0	-6.7	3.10 H	133	34.3	13.0

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	66.1 PK	74.0	-7.9	1.67 V	360	63.1	3.0
2	5150.00	53.9 AV	54.0	-0.1	1.67 V	360	50.9	3.0
3	*5180.00	123.3 PK			1.67 V	360	120.4	2.9
4	*5180.00	114.4 AV			1.67 V	360	111.5	2.9
5	#10360.00	49.8 PK	68.2	-18.4	2.04 V	305	37.8	12.0
6	15540.00	65.5 PK	74.0	-8.5	1.77 V	212	52.5	13.0
7	15540.00	52.2 AV	54.0	-1.8	1.77 V	212	39.2	13.0

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
- Margin value = Emission Level – Limit value
- The other emission levels were very low against the limit.
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	123.1 PK			2.10 H	12	120.3	2.8
2	*5200.00	113.2 AV			2.10 H	12	110.4	2.8
3	#10400.00	47.9 PK	68.2	-20.3	1.36 H	201	35.8	12.1
4	15600.00	62.5 PK	74.0	-11.5	1.48 H	202	49.6	12.9
5	15600.00	48.9 AV	54.0	-5.1	1.48 H	202	36.0	12.9

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	123.9 PK			1.46 V	360	121.1	2.8
2	*5200.00	113.5 AV			1.46 V	360	110.7	2.8
3	#10400.00	48.7 PK	68.2	-19.5	2.25 V	307	36.6	12.1
4	15600.00	67.5 PK	74.0	-6.5	1.58 V	213	54.6	12.9
5	15600.00	53.9 AV	54.0	-0.1	1.58 V	213	41.0	12.9

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	123.2 PK			2.10 H	11	120.6	2.6
2	*5240.00	112.1 AV			2.10 H	11	109.5	2.6
3	5350.00	64.8 PK	74.0	-9.2	2.10 H	11	62.2	2.6
4	5350.00	53.2 AV	54.0	-0.8	2.10 H	11	50.6	2.6
5	#10480.00	46.8 PK	68.2	-21.4	1.25 H	302	34.3	12.5
6	15720.00	61.2 PK	74.0	-12.8	1.56 H	215	49.0	12.2
7	15720.00	47.6 AV	54.0	-6.4	1.56 H	215	35.4	12.2

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	*5240.00	123.4 PK			2.03 V	5	120.8	2.6
2	*5240.00	113.2 AV			2.03 V	5	110.6	2.6
3	5350.00	55.7 PK	74.0	-18.3	2.03 V	5	53.1	2.6
4	5350.00	45.6 AV	54.0	-8.4	2.03 V	5	43.0	2.6
5	#10480.00	48.6 PK	68.2	-19.6	1.36 V	205	36.1	12.5
6	15720.00	66.2 PK	74.0	-7.8	3.12 V	146	54.0	12.2
7	15720.00	53.6 AV	54.0	-0.4	3.12 V	146	41.4	12.2

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5568.28	62.4 PK	68.2	-5.8	1.90 H	359	59.1	3.3
2	*5745.00	122.5 PK			1.91 H	360	119.2	3.3
3	*5745.00	112.5 AV			1.91 H	360	109.2	3.3
4	#5936.77	61.1 PK	68.2	-7.1	1.90 H	359	56.9	4.2
5	11490.00	46.8 PK	74.0	-27.2	1.52 H	202	34.2	12.6
6	11490.00	36.2 AV	54.0	-17.8	1.52 H	202	23.6	12.6
7	#17235.00	62.1 PK	68.2	-6.1	1.55 H	232	45.3	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	#5568.20	64.2 PK	68.2	-4.0	2.00 V	10	60.9	3.3
2	*5745.00	122.6 PK			2.00 V	10	119.3	3.3
3	*5745.00	112.9 AV			2.00 V	10	109.6	3.3
4	#5954.14	63.0 PK	68.2	-5.2	2.00 V	10	58.8	4.2
5	11490.00	46.2 PK	74.0	-27.8	1.21 V	208	33.6	12.6
6	11490.00	36.7 AV	54.0	-17.3	1.21 V	208	24.1	12.6
7	#17235.00	67.3 PK	68.2	-0.9	2.65 V	218	50.5	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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5622.03	63.2 PK	68.2	-5.0	1.91 H	0	59.9	3.3
2	*5785.00	122.9 PK			1.92 H	0	119.5	3.4
3	*5785.00	112.8 AV			1.92 H	0	109.4	3.4
4	#5960.66	62.0 PK	68.2	-6.2	1.91 H	0	57.8	4.2
5	11570.00	46.2 PK	74.0	-27.8	1.40 H	189	34.0	12.2
6	11570.00	36.7 AV	54.0	-17.3	1.40 H	189	24.5	12.2
7	#17355.00	62.7 PK	68.2	-5.5	1.50 H	222	46.1	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	#5588.68	63.3 PK	68.2	-4.9	1.47 V	0	60.0	3.3
2	*5785.00	123.5 PK			1.47 V	0	120.1	3.4
3	*5785.00	113.6 AV			1.47 V	0	110.2	3.4
4	#6010.92	62.9 PK	68.2	-5.3	1.47 V	0	58.8	4.1
5	11570.00	46.2 PK	74.0	-27.8	1.49 V	228	34.0	12.2
6	11570.00	35.7 AV	54.0	-18.3	1.49 V	228	23.5	12.2
7	#17355.00	67.7 PK	68.2	-0.5	2.18 V	219	51.1	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 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5565.05	61.7 PK	68.2	-6.5	1.89 H	359	58.4	3.3
2	*5825.00	122.5 PK			1.90 H	360	118.9	3.6
3	*5825.00	112.6 AV			1.90 H	360	109.0	3.6
4	#5953.10	61.3 PK	68.2	-6.9	1.89 H	359	57.1	4.2
5	11650.00	46.2 PK	74.0	-27.8	1.63 H	202	33.8	12.4
6	11650.00	35.2 AV	54.0	-18.8	1.63 H	202	22.8	12.4
7	#17475.00	63.8 PK	68.2	-4.4	1.68 H	232	46.8	17.0

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	#5617.15	64.4 PK	68.2	-3.8	1.62 V	358	61.1	3.3
2	*5825.00	123.2 PK			1.62 V	358	119.6	3.6
3	*5825.00	113.2 AV			1.62 V	358	109.6	3.6
4	#5940.81	63.3 PK	68.2	-4.9	1.62 V	358	59.1	4.2
5	11650.00	46.7 PK	74.0	-27.3	1.57 V	208	34.3	12.4
6	11650.00	36.8 AV	54.0	-17.2	1.57 V	208	24.4	12.4
7	#17475.00	67.5 PK	68.2	-0.7	2.19 V	218	50.5	17.0

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.

802.11ax (HE20)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	65.7 PK	74.0	-8.3	1.57 H	302	62.7	3.0
2	5150.00	53.1 AV	54.0	-0.9	1.57 H	302	50.1	3.0
3	*5180.00	123.1 PK			1.57 H	302	120.2	2.9
4	*5180.00	112.9 AV			1.57 H	302	110.0	2.9
5	#10360.00	46.2 PK	68.2	-22.0	2.14 H	310	34.2	12.0
6	15540.00	64.3 PK	74.0	-9.7	2.07 H	258	51.3	13.0
7	15540.00	48.9 AV	54.0	-5.1	2.07 H	258	35.9	13.0

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	66.2 PK	74.0	-7.8	1.51 V	4	63.2	3.0
2	5150.00	53.9 AV	54.0	-0.1	1.51 V	4	50.9	3.0
3	*5180.00	123.8 PK			1.51 V	4	120.9	2.9
4	*5180.00	113.5 AV			1.51 V	4	110.6	2.9
5	#10360.00	46.8 PK	68.2	-21.4	1.28 V	208	34.8	12.0
6	15540.00	69.5 PK	74.0	-4.5	3.44 V	142	56.5	13.0
7	15540.00	53.3 AV	54.0	-0.7	3.44 V	142	40.3	13.0

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
- Margin value = Emission Level – Limit value
- The other emission levels were very low against the limit.
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	122.6 PK			1.61 H	342	119.8	2.8
2	*5200.00	112.9 AV			1.61 H	342	110.1	2.8
3	#10400.00	45.7 PK	68.2	-22.5	1.46 H	202	33.6	12.1
4	15600.00	60.5 PK	74.0	-13.5	2.01 H	258	47.6	12.9
5	15600.00	48.9 AV	54.0	-5.1	2.01 H	258	36.0	12.9

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	123.4 PK			1.58 V	360	120.6	2.8
2	*5200.00	113.5 AV			1.58 V	360	110.7	2.8
3	#10400.00	46.2 PK	68.2	-22.0	1.37 V	202	34.1	12.1
4	15600.00	65.3 PK	74.0	-8.7	3.49 V	142	52.4	12.9
5	15600.00	53.2 AV	54.0	-0.8	3.49 V	142	40.3	12.9

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	123.9 PK			1.61 H	342	121.3	2.6
2	*5240.00	112.5 AV			1.61 H	342	109.9	2.6
3	5350.00	56.9 PK	74.0	-17.1	1.61 H	342	54.3	2.6
4	5350.00	46.1 AV	54.0	-7.9	1.61 H	342	43.5	2.6
5	#10480.00	46.3 PK	68.2	-21.9	1.24 H	223	33.8	12.5
6	15720.00	62.8 PK	74.0	-11.2	2.01 H	249	50.6	12.2
7	15720.00	48.9 AV	54.0	-5.1	2.01 H	249	36.7	12.2

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	*5240.00	124.2 PK			1.88 V	358	121.6	2.6
2	*5240.00	113.5 AV			1.88 V	358	110.9	2.6
3	5350.00	57.3 PK	74.0	-16.7	1.88 V	358	54.7	2.6
4	5350.00	46.5 AV	54.0	-7.5	1.88 V	358	43.9	2.6
5	#10480.00	45.7 PK	68.2	-22.5	1.29 V	207	33.2	12.5
6	15720.00	67.5 PK	74.0	-6.5	1.84 V	206	55.3	12.2
7	15720.00	53.1 AV	54.0	-0.9	1.84 V	206	40.9	12.2

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
- Margin value = Emission Level – Limit value
- The other emission levels were very low against the limit.
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5632.78	61.7 PK	68.2	-6.5	1.91 H	359	58.4	3.3
2	*5745.00	121.5 PK			1.92 H	360	118.2	3.3
3	*5745.00	110.3 AV			1.92 H	360	107.0	3.3
4	#5932.93	61.2 PK	68.2	-7.0	1.91 H	359	57.1	4.1
5	11490.00	46.2 PK	74.0	-27.8	1.33 H	123	33.6	12.6
6	11490.00	36.9 AV	54.0	-17.1	1.33 H	123	24.3	12.6
7	#17235.00	63.4 PK	68.2	-4.8	1.47 H	202	46.6	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	#5642.45	64.1 PK	68.2	-4.1	1.89 V	360	60.8	3.3
2	*5745.00	124.5 PK			1.89 V	360	121.2	3.3
3	*5745.00	113.5 AV			1.89 V	360	110.2	3.3
4	#5984.53	62.7 PK	68.2	-5.5	1.89 V	360	58.6	4.1
5	11490.00	46.2 PK	74.0	-27.8	1.28 V	307	33.6	12.6
6	11490.00	36.8 AV	54.0	-17.2	1.28 V	307	24.2	12.6
7	#17235.00	68.1 PK	68.2	-0.1	3.01 V	179	51.3	16.8

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
- Margin value = Emission Level – Limit value
- The other emission levels were very low against the limit.
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5639.47	62.2 PK	68.2	-6.0	1.90 H	0	58.9	3.3
2	*5785.00	121.4 PK			1.91 H	0	118.0	3.4
3	*5785.00	110.5 AV			1.91 H	0	107.1	3.4
4	#5947.61	61.2 PK	68.2	-7.0	1.90 H	0	57.0	4.2
5	11570.00	46.6 PK	74.0	-27.4	1.62 H	302	34.4	12.2
6	11570.00	37.1 AV	54.0	-16.9	1.62 H	302	24.9	12.2
7	#17355.00	62.8 PK	68.2	-5.4	2.02 H	170	46.2	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	#5590.70	63.5 PK	68.2	-4.7	1.78 V	360	60.2	3.3
2	*5785.00	124.3 PK			1.78 V	360	120.9	3.4
3	*5785.00	113.5 AV			1.78 V	360	110.1	3.4
4	#5938.13	63.4 PK	68.2	-4.8	1.78 V	360	59.2	4.2
5	11570.00	46.8 PK	74.0	-27.2	1.40 V	208	34.6	12.2
6	11570.00	37.5 AV	54.0	-16.5	1.40 V	208	25.3	12.2
7	#17355.00	67.3 PK	68.2	-0.9	2.27 V	218	50.7	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 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5640.70	61.0 PK	68.2	-7.2	1.92 H	359	57.7	3.3
2	*5825.00	121.7 PK			1.92 H	359	118.1	3.6
3	*5825.00	110.9 AV			1.92 H	359	107.3	3.6
4	#5928.21	61.4 PK	68.2	-6.8	1.92 H	359	57.3	4.1
5	11650.00	46.5 PK	74.0	-27.5	1.55 H	202	34.1	12.4
6	11650.00	37.9 AV	54.0	-16.1	1.55 H	202	25.5	12.4
7	#17475.00	62.7 PK	68.2	-5.5	1.37 H	202	45.7	17.0

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	#5634.49	63.8 PK	68.2	-4.4	1.90 V	357	60.5	3.3
2	*5825.00	123.7 PK			1.90 V	357	120.1	3.6
3	*5825.00	113.5 AV			1.90 V	357	109.9	3.6
4	#5988.57	63.1 PK	68.2	-5.1	1.90 V	357	59.0	4.1
5	11650.00	46.7 PK	74.0	-27.3	1.40 V	206	34.3	12.4
6	11650.00	37.9 AV	54.0	-16.1	1.40 V	206	25.5	12.4
7	#17475.00	67.2 PK	68.2	-1.0	3.45 V	218	50.2	17.0

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
- Margin value = Emission Level – Limit value
- The other emission levels were very low against the limit.
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

802.11ax (HE40)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.8 PK	74.0	-9.2	1.52 H	22	61.8	3.0
2	5150.00	52.9 AV	54.0	-1.1	1.52 H	22	49.9	3.0
3	*5190.00	119.1 PK			1.52 H	22	116.2	2.9
4	*5190.00	107.6 AV			1.52 H	22	104.7	2.9
5	#10380.00	46.3 PK	68.2	-21.9	1.62 H	178	34.1	12.2
6	15570.00	62.3 PK	74.0	-11.7	1.52 H	302	49.3	13.0
7	15570.00	46.7 AV	54.0	-7.3	1.52 H	302	33.7	13.0

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	65.3 PK	74.0	-8.7	1.44 V	0	62.3	3.0
2	5150.00	53.5 AV	54.0	-0.5	1.44 V	0	50.5	3.0
3	*5190.00	119.5 PK			1.44 V	0	116.6	2.9
4	*5190.00	108.5 AV			1.44 V	0	105.6	2.9
5	#10380.00	46.5 PK	68.2	-21.7	1.30 V	202	34.3	12.2
6	15570.00	65.4 PK	74.0	-8.6	3.49 V	143	52.4	13.0
7	15570.00	51.9 AV	54.0	-2.1	3.49 V	143	38.9	13.0

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	120.9 PK			1.76 H	352	118.3	2.6
2	*5230.00	110.8 AV			1.76 H	352	108.2	2.6
3	5350.00	57.9 PK	74.0	-16.1	1.76 H	352	55.3	2.6
4	5350.00	47.1 AV	54.0	-6.9	1.76 H	352	44.5	2.6
5	#10460.00	46.1 PK	68.2	-22.1	1.64 H	202	33.7	12.4
6	15690.00	59.4 PK	74.0	-14.6	1.57 H	301	47.0	12.4
7	15690.00	49.7 AV	54.0	-4.3	1.57 H	301	37.3	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	*5230.00	121.2 PK			1.90 V	360	118.6	2.6
2	*5230.00	111.3 AV			1.90 V	360	108.7	2.6
3	5350.00	58.5 PK	74.0	-15.5	1.90 V	360	55.9	2.6
4	5350.00	47.9 AV	54.0	-6.1	1.90 V	360	45.3	2.6
5	#10460.00	46.7 PK	68.2	-21.5	1.34 V	208	34.3	12.4
6	15690.00	63.4 PK	74.0	-10.6	3.51 V	143	51.0	12.4
7	15690.00	53.2 AV	54.0	-0.8	3.51 V	143	40.8	12.4

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
- Margin value = Emission Level – Limit value
- The other emission levels were very low against the limit.
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5644.47	62.3 PK	68.2	-5.9	1.95 H	0	59.0	3.3
2	*5755.00	119.4 PK			1.95 H	0	116.1	3.3
3	*5755.00	108.3 AV			1.95 H	0	105.0	3.3
4	#5944.93	61.4 PK	68.2	-6.8	1.95 H	0	57.2	4.2
5	11510.00	46.2 PK	74.0	-27.8	1.33 H	205	33.7	12.5
6	11510.00	36.1 AV	54.0	-17.9	1.33 H	205	23.6	12.5
7	#17265.00	62.5 PK	68.2	-5.7	1.48 H	222	45.9	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	#5612.51	63.8 PK	68.2	-4.4	1.41 V	360	60.5	3.3
2	*5755.00	120.2 PK			1.41 V	360	116.9	3.3
3	*5755.00	110.3 AV			1.41 V	360	107.0	3.3
4	#5925.32	63.3 PK	68.2	-4.9	1.41 V	360	59.2	4.1
5	11510.00	45.7 PK	74.0	-28.3	1.18 V	202	33.2	12.5
6	11510.00	35.9 AV	54.0	-18.1	1.18 V	202	23.4	12.5
7	#17265.00	67.8 PK	68.2	-0.4	3.45 V	192	51.2	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 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5634.05	60.8 PK	68.2	-7.4	1.94 H	359	57.5	3.3
2	*5795.00	119.7 PK			1.94 H	359	116.2	3.5
3	*5795.00	108.5 AV			1.94 H	359	105.0	3.5
4	#5956.56	61.4 PK	68.2	-6.8	1.94 H	359	57.2	4.2
5	11590.00	46.9 PK	74.0	-27.1	1.36 H	218	34.6	12.3
6	11590.00	36.5 AV	54.0	-17.5	1.36 H	218	24.2	12.3
7	#17385.00	62.7 PK	68.2	-5.5	1.55 H	240	46.2	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	#5616.13	64.1 PK	68.2	-4.1	1.88 V	0	60.8	3.3
2	*5795.00	120.6 PK			1.88 V	0	117.1	3.5
3	*5795.00	110.7 AV			1.88 V	0	107.2	3.5
4	#5928.08	64.0 PK	68.2	-4.2	1.88 V	0	59.9	4.1
5	11590.00	45.7 PK	74.0	-28.3	1.13 V	230	33.4	12.3
6	11590.00	35.8 AV	54.0	-18.2	1.13 V	230	23.5	12.3
7	#17385.00	67.9 PK	68.2	-0.3	3.51 V	192	51.4	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.

802.11ax (HE80)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	63.9 PK	74.0	-10.1	1.37 H	226	60.9	3.0
2	5150.00	52.9 AV	54.0	-1.1	1.37 H	226	49.9	3.0
3	*5210.00	112.1 PK			1.37 H	226	109.4	2.7
4	*5210.00	100.9 AV			1.37 H	226	98.2	2.7
5	5350.00	52.9 PK	74.0	-21.1	1.37 H	226	50.3	2.6
6	5350.00	42.2 AV	54.0	-11.8	1.37 H	226	39.6	2.6
7	#10420.00	45.7 PK	68.2	-22.5	1.64 H	235	33.4	12.3
8	15630.00	53.4 PK	74.0	-20.6	1.75 H	252	40.7	12.7
9	15630.00	43.6 AV	54.0	-10.4	1.75 H	252	30.9	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	64.2 PK	74.0	-9.8	2.05 V	358	61.2	3.0
2	5150.00	53.4 AV	54.0	-0.6	2.05 V	358	50.4	3.0
3	*5210.00	112.5 PK			2.05 V	358	109.8	2.7
4	*5210.00	101.8 AV			2.05 V	358	99.1	2.7
5	5350.00	53.4 PK	74.0	-20.6	2.05 V	358	50.8	2.6
6	5350.00	42.6 AV	54.0	-11.4	2.05 V	358	40.0	2.6
7	#10420.00	46.8 PK	68.2	-21.4	1.24 V	302	34.5	12.3
8	15630.00	58.5 PK	74.0	-15.5	3.42 V	143	45.8	12.7
9	15630.00	47.3 AV	54.0	-6.7	3.42 V	143	34.6	12.7

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
- Margin value = Emission Level – Limit value
- The other emission levels were very low against the limit.
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5648.79	67.1 PK	68.2	-1.1	1.82 H	359	63.8	3.3
2	*5775.00	116.4 PK			1.82 H	359	113.0	3.4
3	*5775.00	105.6 AV			1.82 H	359	102.2	3.4
4	#5931.26	64.1 PK	68.2	-4.1	1.82 H	359	60.0	4.1
5	11550.00	45.7 PK	74.0	-28.3	1.82 H	217	33.3	12.4
6	11550.00	35.9 AV	54.0	-18.1	1.82 H	217	23.5	12.4
7	#17325.00	60.4 PK	68.2	-7.8	1.70 H	302	43.7	16.7

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	#5649.85	67.9 PK	68.2	-0.3	1.94 V	3	64.6	3.3
2	*5775.00	116.8 PK			1.94 V	3	113.4	3.4
3	*5775.00	105.7 AV			1.94 V	3	102.3	3.4
4	#5938.56	66.7 PK	68.2	-1.5	1.94 V	3	62.5	4.2
5	11550.00	46.8 PK	74.0	-27.2	1.75 V	207	34.4	12.4
6	11550.00	36.5 AV	54.0	-17.5	1.75 V	207	24.1	12.4
7	#17325.00	64.4 PK	68.2	-3.8	2.12 V	218	47.7	16.7

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.

Below 1GHz Data:

802.11a

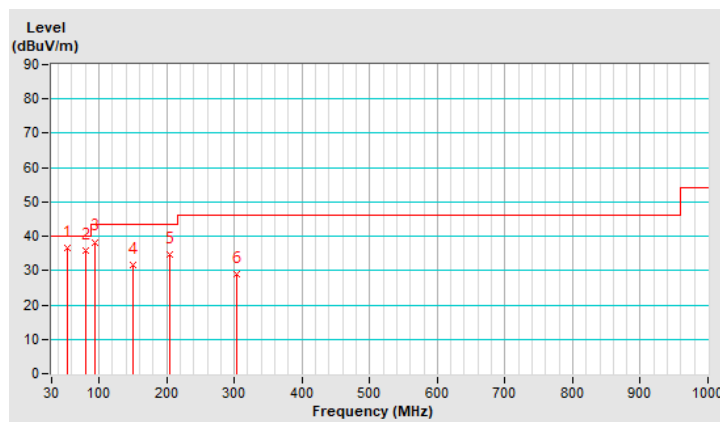
CHANNEL	TX Channel 149	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

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	53.66	36.5 QP	40.0	-3.5	2.00 H	81	44.4	-7.9
2	80.15	35.7 QP	40.0	-4.3	3.00 H	332	48.4	-12.7
3	94.80	38.3 QP	43.5	-5.2	2.50 H	111	51.1	-12.8
4	149.73	31.8 QP	43.5	-11.7	2.00 H	80	38.9	-7.1
5	205.20	34.7 QP	43.5	-8.8	1.50 H	106	44.9	-10.2
6	303.94	28.9 QP	46.0	-17.1	1.00 H	300	35.1	-6.2

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 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.



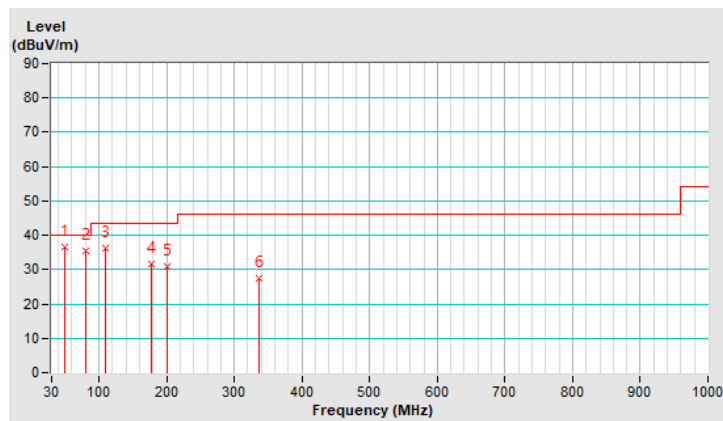
CHANNEL	TX Channel 149	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

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	49.08	36.7 QP	40.0	-3.3	1.50 V	189	44.4	-7.7
2	79.96	35.4 QP	40.0	-4.6	3.00 V	15	48.0	-12.6
3	109.05	36.2 QP	43.5	-7.3	1.00 V	262	46.6	-10.4
4	177.97	31.7 QP	43.5	-11.8	1.00 V	23	40.1	-8.4
5	200.98	30.7 QP	43.5	-12.8	1.00 V	132	41.1	-10.4
6	336.18	27.5 QP	46.0	-18.5	1.50 V	214	32.8	-5.3

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 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.



4.1.8 Test Results (Mode 2)

Above 1GHz Data:

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	48.8 PK	74.0	-25.2	1.41 H	31	45.8	3.0
2	5150.00	40.6 AV	54.0	-13.4	1.41 H	31	37.6	3.0
3	*5180.00	102.8 PK			1.41 H	31	99.9	2.9
4	*5180.00	93.7 AV			1.41 H	31	90.8	2.9
5	#10360.00	45.9 PK	68.2	-22.3	1.50 H	202	33.9	12.0
6	15540.00	57.4 PK	74.0	-16.6	1.51 H	70	44.4	13.0
7	15540.00	44.9 AV	54.0	-9.1	1.51 H	70	31.9	13.0

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	65.5 PK	74.0	-8.5	1.90 V	141	62.5	3.0
2	5150.00	53.9 AV	54.0	-0.1	1.90 V	141	50.9	3.0
3	*5180.00	119.1 PK			1.90 V	141	116.2	2.9
4	*5180.00	109.5 AV			1.90 V	141	106.6	2.9
5	#10360.00	46.8 PK	68.2	-21.4	1.22 V	302	34.8	12.0
6	15540.00	62.1 PK	74.0	-11.9	2.60 V	206	49.1	13.0
7	15540.00	51.3 AV	54.0	-2.7	2.60 V	206	38.3	13.0

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
- Margin value = Emission Level – Limit value
- The other emission levels were very low against the limit.
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	49.7 PK	74.0	-24.3	1.75 H	225	46.7	3.0
2	5150.00	41.5 AV	54.0	-12.5	1.75 H	225	38.5	3.0
3	*5200.00	104.8 PK			1.75 H	225	102.0	2.8
4	*5200.00	94.5 AV			1.75 H	225	91.7	2.8
5	#10400.00	45.8 PK	68.2	-22.4	1.60 H	235	33.7	12.1
6	15600.00	56.8 PK	74.0	-17.2	1.85 H	302	43.9	12.9
7	15600.00	45.8 AV	54.0	-8.2	1.85 H	302	32.9	12.9

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	1.52 V	200	59.9	3.0
2	5150.00	53.1 AV	54.0	-0.9	1.52 V	200	50.1	3.0
3	*5200.00	120.1 PK			1.52 V	200	117.3	2.8
4	*5200.00	110.6 AV			1.52 V	200	107.8	2.8
5	#10400.00	46.2 PK	68.2	-22.0	1.20 V	315	34.1	12.1
6	15600.00	63.3 PK	74.0	-10.7	2.66 V	192	50.4	12.9
7	15600.00	52.8 AV	54.0	-1.2	2.66 V	192	39.9	12.9

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
- Margin value = Emission Level – Limit value
- The other emission levels were very low against the limit.
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	103.8 PK			2.01 H	249	101.2	2.6
2	*5240.00	93.9 AV			2.01 H	249	91.3	2.6
3	5350.00	49.5 PK	74.0	-24.5	2.01 H	249	46.9	2.6
4	5350.00	41.7 AV	54.0	-12.3	2.01 H	249	39.1	2.6
5	#10480.00	45.8 PK	68.2	-22.4	3.02 H	225	33.3	12.5
6	15720.00	56.1 PK	74.0	-17.9	1.56 H	214	43.9	12.2
7	15720.00	45.2 AV	54.0	-8.8	1.56 H	214	33.0	12.2

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	*5240.00	119.7 PK			1.49 V	194	117.1	2.6
2	*5240.00	109.9 AV			1.49 V	194	107.3	2.6
3	5350.00	50.7 PK	74.0	-23.3	1.49 V	194	48.1	2.6
4	5350.00	40.8 AV	54.0	-13.2	1.49 V	194	38.2	2.6
5	#10480.00	46.5 PK	68.2	-21.7	1.48 V	225	34.0	12.5
6	15720.00	64.9 PK	74.0	-9.1	2.08 V	204	52.7	12.2
7	15720.00	53.9 AV	54.0	-0.1	2.08 V	204	41.7	12.2

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5578.17	61.1 PK	68.2	-7.1	1.51 H	51	57.8	3.3
2	*5745.00	107.9 PK			1.51 H	51	104.6	3.3
3	*5745.00	99.1 AV			1.51 H	51	95.8	3.3
4	#5946.97	61.6 PK	68.2	-6.6	1.51 H	51	57.4	4.2
5	11490.00	45.7 PK	74.0	-28.3	2.14 H	226	33.1	12.6
6	11490.00	36.5 AV	54.0	-17.5	2.14 H	226	23.9	12.6
7	#17235.00	57.8 PK	68.2	-10.4	3.02 H	256	41.0	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	#5643.82	61.0 PK	68.2	-7.2	1.75 V	147	57.7	3.3
2	*5745.00	121.7 PK			1.75 V	147	118.4	3.3
3	*5745.00	112.6 AV			1.75 V	147	109.3	3.3
4	#5931.76	61.0 PK	68.2	-7.2	1.75 V	147	56.9	4.1
5	11490.00	46.5 PK	74.0	-27.5	1.53 V	306	33.9	12.6
6	11490.00	36.5 AV	54.0	-17.5	1.53 V	306	23.9	12.6
7	#17235.00	67.9 PK	68.2	-0.3	2.42 V	28	51.1	16.8

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
- Margin value = Emission Level – Limit value
- The other emission levels were very low against the limit.
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5569.75	61.6 PK	68.2	-6.6	1.58 H	151	58.3	3.3
2	*5785.00	106.9 PK			1.58 H	151	103.5	3.4
3	*5785.00	97.7 AV			1.58 H	151	94.3	3.4
4	#5977.45	61.0 PK	68.2	-7.2	1.58 H	151	56.9	4.1
5	11570.00	45.8 PK	74.0	-28.2	1.34 H	242	33.6	12.2
6	11570.00	36.5 AV	54.0	-17.5	1.34 H	242	24.3	12.2
7	#17355.00	56.7 PK	68.2	-11.5	2.22 H	148	40.1	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	#5626.37	61.1 PK	68.2	-7.1	1.52 V	166	57.8	3.3
2	*5785.00	123.9 PK			1.63 V	223	120.5	3.4
3	*5785.00	113.9 AV			1.63 V	223	110.5	3.4
4	#5934.06	61.4 PK	68.2	-6.8	1.52 V	166	57.2	4.2
5	11570.00	46.7 PK	74.0	-27.3	1.48 V	224	34.5	12.2
6	11570.00	35.8 AV	54.0	-18.2	1.48 V	224	23.6	12.2
7	#17355.00	68.0 PK	68.2	-0.2	2.38 V	32	51.4	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 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5625.15	61.4 PK	68.2	-6.8	1.59 H	49	58.1	3.3
2	*5825.00	107.5 PK			1.59 H	49	103.9	3.6
3	*5825.00	98.9 AV			1.59 H	49	95.3	3.6
4	#5957.94	61.0 PK	68.2	-7.2	1.59 H	49	56.8	4.2
5	11650.00	45.7 PK	74.0	-28.3	3.02 H	224	33.3	12.4
6	11650.00	35.4 AV	54.0	-18.6	3.02 H	224	23.0	12.4
7	#17475.00	55.7 PK	68.2	-12.5	1.45 H	302	38.7	17.0

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	#5629.25	62.1 PK	68.2	-6.1	1.43 V	142	58.8	3.3
2	*5825.00	122.7 PK			1.56 V	42	119.1	3.6
3	*5825.00	113.2 AV			1.56 V	42	109.6	3.6
4	#5950.25	62.5 PK	68.2	-5.7	1.43 V	142	58.3	4.2
5	11650.00	46.3 PK	74.0	-27.7	1.48 V	302	33.9	12.4
6	11650.00	36.8 AV	54.0	-17.2	1.48 V	302	24.4	12.4
7	#17475.00	68.0 PK	68.2	-0.2	1.98 V	24	51.0	17.0

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.

802.11ax (HE20)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	48.6 PK	74.0	-25.4	1.40 H	17	45.6	3.0
2	5150.00	40.1 AV	54.0	-13.9	1.40 H	17	37.1	3.0
3	*5180.00	102.9 PK			1.40 H	17	100.0	2.9
4	*5180.00	94.1 AV			1.40 H	17	91.2	2.9
5	#10360.00	45.9 PK	68.2	-22.3	1.45 H	194	33.9	12.0
6	15540.00	57.1 PK	74.0	-16.9	1.47 H	71	44.1	13.0
7	15540.00	44.7 AV	54.0	-9.3	1.47 H	71	31.7	13.0

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	66.9 PK	74.0	-7.1	1.47 V	144	63.9	3.0
2	5150.00	53.2 AV	54.0	-0.8	1.47 V	144	50.2	3.0
3	*5180.00	120.2 PK			1.47 V	144	117.3	2.9
4	*5180.00	110.1 AV			1.47 V	144	107.2	2.9
5	#10360.00	46.5 PK	68.2	-21.7	1.24 V	302	34.5	12.0
6	15540.00	66.2 PK	74.0	-7.8	1.49 V	207	53.2	13.0
7	15540.00	51.2 AV	54.0	-2.8	1.49 V	207	38.2	13.0

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	51.7 PK	74.0	-22.3	1.59 H	214	48.7	3.0
2	5150.00	42.6 AV	54.0	-11.4	1.59 H	214	39.6	3.0
3	*5200.00	105.3 PK			1.59 H	214	102.5	2.8
4	*5200.00	94.7 AV			1.59 H	214	91.9	2.8
5	#10400.00	45.8 PK	68.2	-22.4	1.34 H	211	33.7	12.1
6	15600.00	56.7 PK	74.0	-17.3	2.06 H	148	43.8	12.9
7	15600.00	44.2 AV	54.0	-9.8	2.06 H	148	31.3	12.9

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	65.6 PK	74.0	-8.4	1.44 V	144	62.6	3.0
2	5150.00	53.9 AV	54.0	-0.1	1.44 V	144	50.9	3.0
3	*5200.00	121.5 PK			1.44 V	144	118.7	2.8
4	*5200.00	111.5 AV			1.44 V	144	108.7	2.8
5	#10400.00	46.2 PK	68.2	-22.0	1.56 V	215	34.1	12.1
6	15600.00	63.4 PK	74.0	-10.6	3.96 V	205	50.5	12.9
7	15600.00	52.9 AV	54.0	-1.1	3.96 V	205	40.0	12.9

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
- Margin value = Emission Level – Limit value
- The other emission levels were very low against the limit.
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	103.8 PK			1.66 H	215	101.2	2.6
2	*5240.00	94.0 AV			1.66 H	215	91.4	2.6
3	5350.00	49.7 PK	74.0	-24.3	1.66 H	215	47.1	2.6
4	5350.00	42.0 AV	54.0	-12.0	1.66 H	215	39.4	2.6
5	#10480.00	45.7 PK	68.2	-22.5	1.27 H	302	33.2	12.5
6	15720.00	55.9 PK	74.0	-18.1	2.18 H	226	43.7	12.2
7	15720.00	44.9 AV	54.0	-9.1	2.18 H	226	32.7	12.2

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	*5240.00	123.4 PK			1.47 V	144	120.8	2.6
2	*5240.00	112.9 AV			1.47 V	144	110.3	2.6
3	5350.00	52.5 PK	74.0	-21.5	1.47 V	144	49.9	2.6
4	5350.00	43.2 AV	54.0	-10.8	1.47 V	144	40.6	2.6
5	#10480.00	46.5 PK	68.2	-21.7	1.48 V	302	34.0	12.5
6	15720.00	64.8 PK	74.0	-9.2	1.48 V	237	52.6	12.2
7	15720.00	53.5 AV	54.0	-0.5	1.48 V	237	41.3	12.2

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
- Margin value = Emission Level – Limit value
- The other emission levels were very low against the limit.
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5650.70	61.2 PK	68.7	-7.5	1.48 H	151	57.9	3.3
2	*5745.00	106.9 PK			1.48 H	151	103.6	3.3
3	*5745.00	97.2 AV			1.48 H	151	93.9	3.3
4	#5978.45	61.4 PK	68.2	-6.8	1.48 H	151	57.3	4.1
5	11490.00	45.6 PK	74.0	-28.4	1.34 H	206	33.0	12.6
6	11490.00	36.5 AV	54.0	-17.5	1.34 H	206	23.9	12.6
7	#17235.00	55.6 PK	68.2	-12.6	1.53 H	306	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	#5622.75	61.5 PK	68.2	-6.7	1.69 V	140	58.2	3.3
2	*5745.00	121.8 PK			1.69 V	140	118.5	3.3
3	*5745.00	111.3 AV			1.69 V	140	108.0	3.3
4	#5950.69	61.5 PK	68.2	-6.7	1.69 V	140	57.3	4.2
5	11490.00	46.9 PK	74.0	-27.1	1.48 V	222	34.3	12.6
6	11490.00	36.5 AV	54.0	-17.5	1.48 V	222	23.9	12.6
7	#17235.00	67.8 PK	68.2	-0.4	1.49 V	25	51.0	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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5602.45	61.1 PK	68.2	-7.1	1.62 H	152	57.8	3.3
2	*5785.00	108.4 PK			1.62 H	152	105.0	3.4
3	*5785.00	98.5 AV			1.62 H	152	95.1	3.4
4	#5980.42	60.5 PK	68.2	-7.7	1.62 H	152	56.4	4.1
5	11570.00	45.6 PK	74.0	-28.4	2.01 H	223	33.4	12.2
6	11570.00	35.9 AV	54.0	-18.1	2.01 H	223	23.7	12.2
7	#17355.00	55.9 PK	68.2	-12.3	1.74 H	202	39.3	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	#5575.98	62.4 PK	68.2	-5.8	1.51 V	162	59.1	3.3
2	*5785.00	121.5 PK			1.51 V	162	118.1	3.4
3	*5785.00	111.1 AV			1.51 V	162	107.7	3.4
4	#5996.92	61.5 PK	68.2	-6.7	1.51 V	162	57.4	4.1
5	11570.00	47.9 PK	74.0	-26.1	1.54 V	29	35.7	12.2
6	11570.00	39.2 AV	54.0	-14.8	1.54 V	29	27.0	12.2
7	#17355.00	67.7 PK	68.2	-0.5	1.54 V	26	51.1	16.6

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
- Margin value = Emission Level – Limit value
- The other emission levels were very low against the limit.
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5572.61	61.2 PK	68.2	-7.0	1.59 H	49	57.9	3.3
2	*5825.00	107.5 PK			1.59 H	49	103.9	3.6
3	*5825.00	97.8 AV			1.59 H	49	94.2	3.6
4	#5977.87	61.9 PK	68.2	-6.3	1.59 H	49	57.8	4.1
5	11650.00	45.7 PK	74.0	-28.3	1.66 H	206	33.3	12.4
6	11650.00	36.5 AV	54.0	-17.5	1.66 H	206	24.1	12.4
7	#17475.00	55.2 PK	68.2	-13.0	1.45 H	264	38.2	17.0

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	#5599.11	61.4 PK	68.2	-6.8	1.50 V	147	58.1	3.3
2	*5825.00	122.7 PK			1.50 V	147	119.1	3.6
3	*5825.00	111.5 AV			1.50 V	147	107.9	3.6
4	#5924.22	62.2 PK	68.8	-6.6	1.50 V	147	58.1	4.1
5	11650.00	46.7 PK	74.0	-27.3	1.48 V	224	34.3	12.4
6	11650.00	36.8 AV	54.0	-17.2	1.48 V	224	24.4	12.4
7	#17475.00	67.7 PK	68.2	-0.5	1.50 V	24	50.7	17.0

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.

802.11ax (HE40)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.8 PK	74.0	-15.2	1.50 H	37	55.8	3.0
2	5150.00	50.6 AV	54.0	-3.4	1.50 H	37	47.6	3.0
3	*5190.00	100.5 PK			1.50 H	37	97.6	2.9
4	*5190.00	89.9 AV			1.50 H	37	87.0	2.9
5	5350.00	47.8 PK	74.0	-26.2	1.50 H	37	45.2	2.6
6	5350.00	36.9 AV	54.0	-17.1	1.50 H	37	34.3	2.6
7	#10380.00	45.6 PK	68.2	-22.6	1.36 H	178	33.4	12.2
8	15570.00	51.6 PK	74.0	-22.4	1.66 H	214	38.6	13.0
9	15570.00	41.2 AV	54.0	-12.8	1.66 H	214	28.2	13.0

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	64.5 PK	74.0	-9.5	1.60 V	143	61.5	3.0
2	5150.00	53.1 AV	54.0	-0.9	1.60 V	143	50.1	3.0
3	*5190.00	113.5 PK			1.60 V	143	110.6	2.9
4	*5190.00	103.5 AV			1.60 V	143	100.6	2.9
5	5350.00	51.8 PK	74.0	-22.2	1.60 V	143	49.2	2.6
6	5350.00	40.9 AV	54.0	-13.1	1.60 V	143	38.3	2.6
7	#10380.00	46.5 PK	68.2	-21.7	2.55 V	112	34.3	12.2
8	15570.00	56.9 PK	74.0	-17.1	2.56 V	205	43.9	13.0
9	15570.00	49.2 AV	54.0	-4.8	2.56 V	205	36.2	13.0

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
- Margin value = Emission Level – Limit value
- The other emission levels were very low against the limit.
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	53.6 PK	74.0	-20.4	1.66 H	258	50.6	3.0
2	5150.00	38.9 AV	54.0	-15.1	1.66 H	258	35.9	3.0
3	*5230.00	102.9 PK			1.66 H	258	100.3	2.6
4	*5230.00	92.9 AV			1.66 H	258	90.3	2.6
5	5350.00	42.8 PK	74.0	-31.2	1.66 H	258	40.2	2.6
6	5350.00	35.9 AV	54.0	-18.1	1.66 H	258	33.3	2.6
7	#10460.00	45.6 PK	68.2	-22.6	1.56 H	215	33.2	12.4
8	15690.00	50.8 PK	74.0	-23.2	1.48 H	232	38.4	12.4
9	15690.00	42.6 AV	54.0	-11.4	1.48 H	232	30.2	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	5150.00	65.5 PK	74.0	-8.5	1.46 V	160	62.5	3.0
2	5150.00	53.2 AV	54.0	-0.8	1.46 V	160	50.2	3.0
3	*5230.00	115.8 PK			1.46 V	160	113.2	2.6
4	*5230.00	105.9 AV			1.46 V	160	103.3	2.6
5	5350.00	56.5 PK	74.0	-17.5	1.46 V	160	53.9	2.6
6	5350.00	47.9 AV	54.0	-6.1	1.46 V	160	45.3	2.6
7	#10460.00	45.8 PK	68.2	-22.4	1.48 V	223	33.4	12.4
8	15690.00	62.2 PK	74.0	-11.8	2.70 V	218	49.8	12.4
9	15690.00	51.2 AV	54.0	-2.8	2.70 V	218	38.8	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.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5592.54	61.4 PK	68.2	-6.8	1.68 H	51	58.1	3.3
2	*5755.00	106.9 PK			1.68 H	51	103.6	3.3
3	*5755.00	96.9 AV			1.68 H	51	93.6	3.3
4	#5951.60	60.8 PK	68.2	-7.4	1.68 H	51	56.6	4.2
5	11510.00	45.3 PK	74.0	-28.7	1.34 H	206	32.8	12.5
6	11510.00	35.5 AV	54.0	-18.5	1.34 H	206	23.0	12.5
7	#17265.00	56.8 PK	68.2	-11.4	1.48 H	202	40.2	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	#5632.76	67.8 PK	68.2	-0.4	1.55 V	142	64.5	3.3
2	*5755.00	119.5 PK			1.55 V	142	116.2	3.3
3	*5755.00	109.5 AV			1.55 V	142	106.2	3.3
4	#5938.84	63.0 PK	68.2	-5.2	1.55 V	142	58.8	4.2
5	11510.00	46.2 PK	74.0	-27.8	1.48 V	226	33.7	12.5
6	11510.00	35.5 AV	54.0	-18.5	1.48 V	226	23.0	12.5
7	#17265.00	68.1 PK	68.2	-0.1	1.52 V	25	51.5	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 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5647.27	60.2 PK	68.2	-8.0	1.56 H	153	56.9	3.3
2	*5795.00	106.8 PK			1.56 H	153	103.3	3.5
3	*5795.00	96.8 AV			1.56 H	153	93.3	3.5
4	#5936.33	62.3 PK	68.2	-5.9	1.56 H	153	58.1	4.2
5	11590.00	45.2 PK	74.0	-28.8	1.65 H	214	32.9	12.3
6	11590.00	34.5 AV	54.0	-19.5	1.65 H	214	22.2	12.3
7	#17385.00	55.6 PK	68.2	-12.6	1.34 H	66	39.1	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	#5637.41	63.2 PK	68.2	-5.0	1.45 V	169	59.9	3.3
2	*5795.00	119.8 PK			1.45 V	169	116.3	3.5
3	*5795.00	110.9 AV			1.45 V	169	107.4	3.5
4	#5936.28	68.1 PK	68.2	-0.1	1.45 V	169	63.9	4.2
5	11590.00	45.6 PK	74.0	-28.4	1.74 V	226	33.3	12.3
6	11590.00	36.2 AV	54.0	-17.8	1.74 V	226	23.9	12.3
7	#17385.00	67.9 PK	68.2	-0.3	1.51 V	25	51.4	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.

802.11ax (HE80)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	53.2 PK	74.0	-20.8	1.48 H	215	50.2	3.0
2	5150.00	42.5 AV	54.0	-11.5	1.48 H	215	39.5	3.0
3	*5210.00	97.8 PK			1.48 H	215	95.1	2.7
4	*5210.00	87.5 AV			1.48 H	215	84.8	2.7
5	5350.00	42.6 PK	74.0	-31.4	1.48 H	215	40.0	2.6
6	5350.00	32.9 AV	54.0	-21.1	1.48 H	215	30.3	2.6
7	#10420.00	45.2 PK	68.2	-23.0	1.34 H	206	32.9	12.3
8	15630.00	46.8 PK	74.0	-27.2	2.19 H	226	34.1	12.7
9	15630.00	41.5 AV	54.0	-12.5	2.19 H	226	28.8	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	63.5 PK	74.0	-10.5	2.05 V	147	60.5	3.0
2	5150.00	53.1 AV	54.0	-0.9	2.05 V	147	50.1	3.0
3	*5210.00	110.1 PK			2.05 V	147	107.4	2.7
4	*5210.00	100.3 AV			2.05 V	147	97.6	2.7
5	5350.00	49.9 PK	74.0	-24.1	2.05 V	147	47.3	2.6
6	5350.00	40.9 AV	54.0	-13.1	2.05 V	147	38.3	2.6
7	#10420.00	45.9 PK	68.2	-22.3	2.06 V	322	33.6	12.3
8	15630.00	55.9 PK	74.0	-18.1	2.58 V	27	43.2	12.7
9	15630.00	48.1 AV	54.0	-5.9	2.58 V	27	35.4	12.7

REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
- Margin value = Emission Level – Limit value
- The other emission levels were very low against the limit.
- " * ": Fundamental frequency.
- " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5568.16	61.1 PK	68.2	-7.1	1.58 H	48	57.8	3.3
2	*5775.00	101.8 PK			1.58 H	48	98.4	3.4
3	*5775.00	91.5 AV			1.58 H	48	88.1	3.4
4	#6011.87	60.5 PK	68.2	-7.7	1.58 H	48	56.4	4.1
5	11550.00	45.6 PK	74.0	-28.4	1.08 H	179	33.2	12.4
6	11550.00	35.2 AV	54.0	-18.8	1.08 H	179	22.8	12.4
7	#17325.00	53.9 PK	68.2	-14.3	1.66 H	206	37.2	16.7

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	#5648.30	66.9 PK	68.2	-1.3	1.51 V	168	63.6	3.3
2	*5775.00	115.2 PK			1.51 V	168	111.8	3.4
3	*5775.00	103.5 AV			1.51 V	168	100.1	3.4
4	#5936.82	64.4 PK	68.2	-3.8	1.51 V	168	60.2	4.2
5	11550.00	45.2 PK	74.0	-28.8	1.62 V	305	32.8	12.4
6	11550.00	36.5 AV	54.0	-17.5	1.62 V	305	24.1	12.4
7	#17325.00	65.8 PK	68.2	-2.4	1.61 V	52	49.1	16.7

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.

Below 1GHz Data:

802.11ax (HE40)

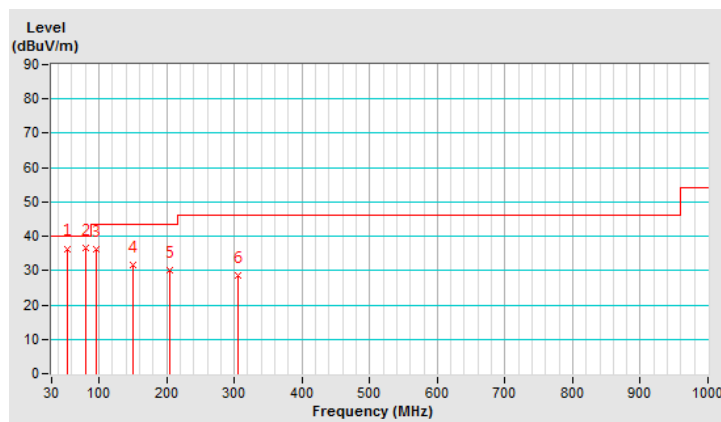
CHANNEL	TX Channel 159	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

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	52.84	36.4 QP	40.0	-3.6	1.50 H	234	44.2	-7.8
2	79.99	36.6 QP	40.0	-3.4	2.00 H	34	49.2	-12.6
3	95.12	36.2 QP	43.5	-7.3	2.50 H	300	49.0	-12.8
4	150.19	31.5 QP	43.5	-12.0	2.00 H	35	38.6	-7.1
5	204.73	30.1 QP	43.5	-13.4	1.50 H	96	40.3	-10.2
6	304.55	28.5 QP	46.0	-17.5	1.50 H	210	34.7	-6.2

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 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 159	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	49.04	36.6 QP	40.0	-3.4	1.50 V	206	44.3	-7.7
2	79.22	36.0 QP	40.0	-4.0	3.00 V	3	48.5	-12.5
3	109.68	36.3 QP	43.5	-7.2	1.00 V	290	46.7	-10.4
4	177.03	32.2 QP	43.5	-11.3	1.00 V	7	40.6	-8.4
5	202.47	30.9 QP	43.5	-12.6	2.00 V	93	41.2	-10.3
6	335.58	27.7 QP	46.0	-18.3	1.50 V	243	33.0	-5.3

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 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.

