

FCC Test Report

Report No.: RF180605C12-1

FCC ID: 2AMSPJ01K0L0

Test Model: ZX1

Received Date: Jun. 05, 2018

Test Date: Jun. 05 ~ Jun. 28, 2018

Issued Date: Jul. 05, 2018

Applicant: Carl Zeiss AG

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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(R.O.C.)

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33383, TAIWAN (R.O.C.)

FCC Registration / 788550 / TW0003

Designation Number:





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Release Control Record

Issue No.	Description	Date Issued
RF180605C12-1	Original release	Jul. 05, 2018



1 Certificate of Conformity

Product: Digital Camera

Brand: ZEISS

Test Model: ZX1

Sample Status: Engineering sample

Applicant: Carl Zeiss AG

Test Date: Jun. 05 ~ Jun. 28, 2018

Standards: 47 CFR FCC Part 15, Subpart E (Section 15.407)

ANSI C63.10:2013

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

Celine Chou / Specialist

Approved by: Jul. 05, 2018

Bruce Chen / Project Engineer



2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)					
FCC Clause	Test Item	Result	Remarks		
15.407(b)(6)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -10.19dB at 0.15000MHz.		
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 -2.5dB at 5725.00MHz.		
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	Antenna connector are IPEX4 and IPEX4L not a standard connector.		

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

2.1 Measurement Uncertainty

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

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.94 dB
Padiated Emissions up to 1 CHz	30MHz ~ 200MHz	3.63 dB
Radiated Emissions up to 1 GHz	200MHz ~1000MHz	3.64 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	2.29 dB
Radiated Emissions above 1 GHZ	18GHz ~ 40GHz	2.29 dB

2.2 Modification Record

There were no modifications required for compliance.



3 General Information

3.1 General Description of EUT

Product	Digital Camera		
Brand	ZEISS		
Test Model	ZX1		
Sample Status	Engineering sample		
D 0 1 D "	5Vdc from adapter or host equipment		
Power Supply Rating	7.2Vdc from battery		
Modulation Type	256QAM, 64QAM, 16QAM, QPSK, BPSK		
Modulation Technology	OFDM		
	802.11a: 54/48/36/24/18/12/9/6Mbps		
Transfer Rate	802.11n: up to 300Mbps		
	802.11ac: up to 867Mbps		
Operating Frequency	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5720MHz, 5745 ~ 5825MHz		
	5180 ~ 5240MHz:		
	802.11a, 802.11n (HT20), 802.11ac (VHT20): 4		
	802.11n (HT40), 802.11ac (VHT40): 2		
	802.11ac (VHT80): 1		
	5260 ~ 5320MHz:		
	802.11a, 802.11n (HT20), 802.11ac (VHT20): 4		
	802.11n (HT40), 802.11ac (VHT40): 2		
Number of Channel	802.11ac (VHT80): 1		
Number of Chamiler	5500 ~ 5720MHz:		
	802.11a, 802.11n (HT20), 802.11ac (VHT20): 12		
	802.11n (HT40), 802.11ac (VHT40): 6		
	802.11ac (VHT80): 3		
	5745 ~ 5825MHz:		
	802.11a, 802.11n (HT20), 802.11ac (VHT20): 5		
	802.11n (HT40), 802.11ac (VHT40): 2		
	802.11ac (VHT80): 1		
	5180 ~ 5240MHz: 10.595mW		
Output Power	5260 ~ 5320MHz: 10.667mW		
Output i owei	5500 ~ 5720MHz: 15.331mW		
	5745 ~ 5825MHz: 17.953mW		
Antenna Type Refer to note			
Antenna Connector	Refer to note		
Accessory Device	Adapter, Battery		
Cable Supplied	0.95m shielded USB type C cable without core		



Note:

1. The EUT incorporates a MIMO function. Physically, the EUT provides 2 completed transmitters and 2 receivers.

Modulation Mode	TX Function
802.11a	2TX
802.11n (HT20)	2TX
802.11n (HT40)	2TX
802.11ac (VHT20)	2TX
802.11ac (VHT40)	2TX
802.11ac (VHT80)	2TX

^{*} The modulation and bandwidth are similar for 802.11n mode for 20MHz/40MHz and 802.11ac mode for 20MHz/40MHz, therefore investigated worst case to representative mode in test report. (Final test mode refer section 3.2.1)

2. The EUT consumes power from the following Adapter & Battery.

Adapter	dapter			
Brand	ZEISS			
Model	EA1045SJR			
Input Power	100-240Vac, 50-60Hz, 1.5A			
Output Power	5Vdc, 3A or 9Vdc, 3A or 15Vdc, 3A or 20Vdc, 2.25A			

Battery	Battery		
Brand	ZEISS		
Model	DD-PS1E		
Rating	7.2Vdc, 3190mAh, 22.9Wh		

3. The following antennas were provided to the EUT.

No.	Brand Model Type	Model	Typo	Connector	Gain (dBi)	
INO.		туре	Connector	2.4G	5G	
1	LYNwave	ALA160-221033-000000	PCB	IPEX4	-1.72	1.69
2	LYNwave	ALA160-222040-000000	PCB	IPEX4L	-2.40	3.09

4. WLAN, BT and BT LE technology cannot transmit simultaneously.



3.2 Description of Test Modes

For 5180 ~ 5240MHz:

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

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

2 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency	
42	5210MHz	

For 5260 ~ 5320MHz:

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

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

2 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency	
54	5270 MHz	62	5310 MHz	

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency	
58	5290MHz	



For 5500 ~ 5720MHz:

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

Channel	Frequency	requency Channel Frequency	
100	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):

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):

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

For 5745 ~ 5825MHz:

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

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

2 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency	
151	5755MHz	159	5795MHz	

1 channel is provided for 802.11ac (VHT80):

·	,
Channel	Frequency
155	5775MHz



3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure		Applic	able to		Paradiation.	
Mode	RE≥1G	RE<1G	PLC	APCM	Description	
-	V	V	√	√	-	

Where RE≥1G: Radiated Emission above 1GHz & Bandedge

RE<1G: Radiated Emission below 1GHz

Measurement

PLC: Power Line Conducted Emission APCM: Antenna Port Conducted Measurement

Note: The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on Y-plane.

Radiated Emission Test (Above 1GHz):

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

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

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
	802.11a		36 to 48	36, 40, 48	OFDM	6.0
	802.11n (HT20)	5400 5040	36 to 48	36, 40, 48	OFDM	6.5
-	802.11n (HT40)	5180-5240	38 to 46	38, 46	OFDM	13.5
	802.11ac (VHT80)		42	42	OFDM	29.3
	802.11a		52 to 64	52, 60, 64	OFDM	6.0
	802.11n (HT20)	5000 5000	52 to 64	52, 60, 64	OFDM	6.5
-	802.11n (HT40)	5260-5320	54 to 62	54, 62	OFDM	13.5
	802.11ac (VHT80)		58	58	OFDM	29.3
	802.11a		100 to 144	100, 116, 140, 144	OFDM	6.0
	802.11n (HT20)	5500 5700	100 to 144	100, 116, 140, 144	OFDM	6.5
-	802.11n (HT40)	5500-5720	102 to 142	102, 110, 134, 142	OFDM	13.5
	802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	29.3
	802.11a		149 to 165	149, 157, 165	OFDM	6.0
	802.11n (HT20)	5745-5825	149 to 165	149, 157, 165	OFDM	6.5
-	802.11n (HT40)		151 to 159	151, 159	OFDM	13.5
	802.11ac (VHT80)		155	155	OFDM	29.3

Radiated Emission Test (Below 1GHz):

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

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

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
-	802.11a	5180-5240	36 to 48		OFDM	6.0
-	802.11a	5260-5320	52 to 64	405	OFDM	6.0
-	802.11a	5500-5720	100 to 140	165	OFDM	6.0
-	802.11a	5745-5825	149 to 165		OFDM	6.0



Power Line Conducted Emission Test:

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

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

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
-	802.11a	5180-5240	36 to 48		OFDM	6.0
-	802.11a	5260-5320	52 to 64	405	OFDM	6.0
-	802.11a	5500-5720	100 to 140	165	OFDM	6.0
-	802.11a	5745-5825	149 to 165		OFDM	6.0

Antenna Port Conducted Measurement:

- This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

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

EUT Configure Mode	_ Mode		Available Tested Channel		Modulation Technology	Data Rate (Mbps)
	802.11a		36 to 48	36, 40, 48	OFDM	6.0
	802.11n (HT20)	5400 5040	36 to 48	36, 40, 48	OFDM	6.5
-	802.11n (HT40)	5180-5240	38 to 46	38, 46	OFDM	13.5
	802.11ac (VHT80)		42	42	OFDM	29.3
	802.11a		52 to 64	52, 60, 64	OFDM	6.0
	802.11n (HT20)	5000 5000	52 to 64	52, 60, 64	OFDM	6.5
-	802.11n (HT40)	5260-5320	54 to 62	54, 62	OFDM	13.5
	802.11ac (VHT80)		58	58	OFDM	29.3
	802.11a		100 to 144	100, 116, 140, 144	OFDM	6.0
	802.11n (HT20)	5500 5700	100 to 144	100, 116, 140, 144	OFDM	6.5
-	802.11n (HT40)	5500-5720	102 to 142	102, 110, 134, 142	OFDM	13.5
	802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	29.3
	802.11a		149 to 165	149, 157, 165	OFDM	6.0
	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	6.5
-	802.11n (HT40)	5745-5825	151 to 159	151, 159	OFDM	13.5
	802.11ac (VHT80)		155	155	OFDM	29.3

Test Condition:

Applicable to	Environmental Conditions	Input Power	Tested by
RE≥1G	25 deg. C, 70% RH	120Vac, 60Hz	Luis Lee
RE<1G	25 deg. C, 70% RH	120Vac, 60Hz	Luis Lee
PLC	24 deg. C, 66% RH	120Vac, 60Hz	Willy Cheng
APCM	25 deg. C, 60% RH	120Vac, 60Hz	Ted Chang



3.3 Duty Cycle of Test Signal

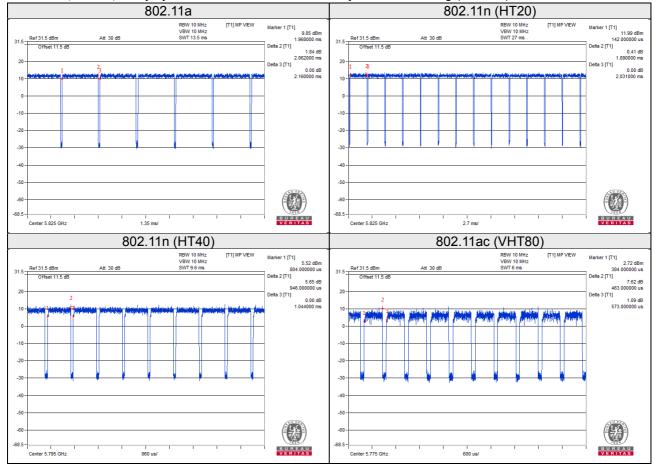
Duty cycle of test signal is < 98%, duty factor is required.

802.11a: Duty cycle = 2.062/2.160 = 0.955, Duty factor = 10 * log (1/0.955) = 0.20

802.11n (HT20): Duty cycle = 1.890/2.031 = 0.931, Duty factor = 10 * log (1/0.931) = 0.31

802.11n (HT40): Duty cycle = 0.946/1.044 = 0.906, Duty factor = 10 * log (1/0.906) = 0.43

802.11ac (VHT80): Duty cycle = 0.463/0.573 = 0.808, Duty factor = 10 * log (1/0.808) = 0.93

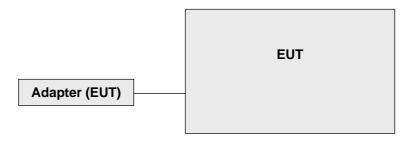




3.4 Description of Support Units

The EUT has been tested as an independent unit.

3.4.1 Configuration of System under Test



3.5 General Description of Applied Standards

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			Field Stren	ngth at 3m	
New Ru	les v0)2r01	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)				
5250~5350 MHz		15.407(b)(2)	PK: -27 (dBm/MHz)	PK: 68.2(dBµV/m)	
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)		

 $^{^{\}star 1}$ beyond 75 MHz or more above of 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).

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^{*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.



4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100424	Oct. 17, 2017	Oct. 16, 2018
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100040	Aug. 18, 2017	Aug. 17, 2018
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Dec. 11, 2017	Dec. 10, 2018
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-1170	Dec. 13, 2017	Dec. 12, 2018
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Dec. 01, 2017	Nov. 30, 2018
Loop Antenna EMCI	EM-6879	269	Aug. 11, 2017	Aug. 10, 2018
Preamplifier Agilent (Below 1GHz)	8447D	2944A10631	Aug. 08, 2017	Aug. 07, 2018
Preamplifier Agilent (Above 1GHz)	8449B	3008A01922	Sep. 15, 2017	Sep. 14, 2018
RF signal cable HUBER+SUHNER	SUCOFLEX 104	MY 13380+295012/04	Aug. 08, 2017	Aug. 07, 2018
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03 (250724)	Aug. 08, 2017	Aug. 07, 2018
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021703	NA	NA
Turn Table BV ADT	TT100	TT93021703	NA	NA
Turn Table Controller BV ADT	SC100	SC93021703	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
26GHz ~ 40GHz Amplifier Agilent	8449B	3008A1960	Aug. 08, 2017	Aug. 07, 2018
High Speed Peak Power Meter	ML2495A	0824012	Aug. 18, 2017	Aug. 17, 2018
Power Sensor	MA2411B	0738171	Aug. 18, 2017	Aug. 17, 2018
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 04, 2018	Jun. 03, 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 HwaYa Chamber 4.

^{3.} The FCC Designation Number is TW0003. The number will be varied with the Lab location and scope as attached.

^{4.} The IC Site Registration No. is IC 7450F-4.



4.1.3 Test Procedures

For Radiated emission below 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

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

For Radiated emission above 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
- 2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 10Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.
- 4. All modes of operation were investigated and the worst-case emissions are reported.

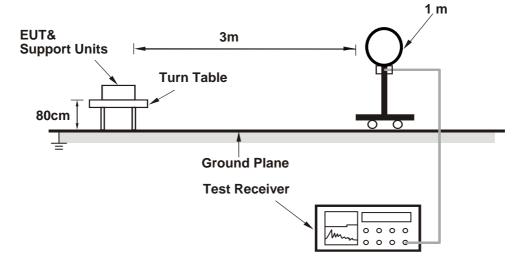
4.1.4 Deviation from Test Standard

No deviation.

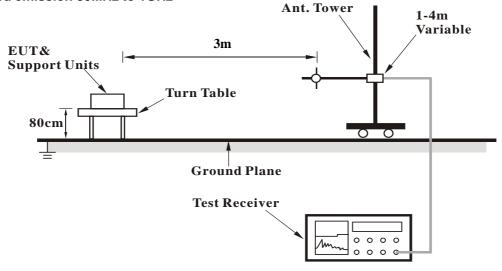


4.1.5 Test Setup

For Radiated emission below 30MHz

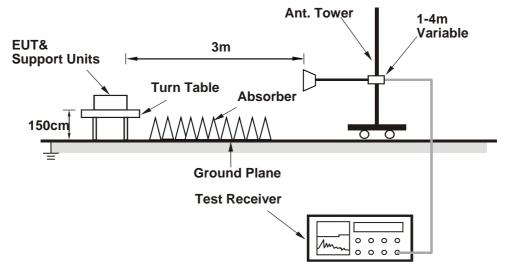


For Radiated emission 30MHz to 1GHz





For Radiated emission above 1GHz



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

4.1.6 EUT Operating Conditions

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



4.1.7 Test Results

Above 1GHz data:

802.11a

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

	ANTENNA DOLADITY A TEST DISTANCE LIGDITONITAL AT AM							
	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	1.00 H	135	61.8	2.6
2	5150.00	46.6 AV	54.0	-7.4	1.00 H	135	44.0	2.6
3	*5180.00	106.1 PK			1.00 H	136	65.2	40.9
4	*5180.00	96.2 AV			1.00 H	136	55.3	40.9
5	#10360.00	60.6 PK	74.0	-13.4	2.38 H	144	45.8	14.8
6	#10360.00	47.7 AV	54.0	-6.3	2.38 H	144	32.9	14.8
		ANTENN	A POLARITY	/ & TEST DI	STANCE: VI	ERTICAL AT	Г 3 М	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	61.3 PK	74.0	-12.7	3.65 V	322	58.7	2.6
2	5150.00	45.9 AV	54.0	-8.1	3.65 V	322	43.3	2.6
3	*5180.00	104.8 PK			3.68 V	337	63.9	40.9
4	*5180.00	94.9 AV			3.68 V	337	54.0	40.9
5	#10360.00	60.4 PK	74.0	-13.6	1.54 V	236	45.6	14.8
6	#10360.00	47.7 AV	54.0	-6.3	1.54 V	236	32.9	14.8

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



CHANNEL	TX Channel 40	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	106.2 PK			1.01 H	135	65.3	40.9
2	*5200.00	95.8 AV			1.01 H	135	54.9	40.9
3	#10400.00	60.7 PK	74.0	-13.3	2.25 H	156	45.8	14.9
4	#10400.00	47.6 AV	54.0	-6.4	2.25 H	156	32.7	14.9
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	T 3 M	
NO.	FREQ. (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	100.3 PK			1.60 V	353	59.4	40.9
2	*5200.00	91.1 AV			1.60 V	353	50.2	40.9
3	#10400.00	60.2 PK	74.0	-13.8	2.99 V	321	45.3	14.9
4	#10400.00	46.8 AV	54.0	-7.2	2.99 V	321	31.9	14.9

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



CHANNEL	TX Channel 48	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	106.9 PK			1.00 H	135	66.2	40.7
2	*5240.00	96.6 AV			1.00 H	135	55.9	40.7
3	5350.00	58.0 PK	74.0	-16.0	1.28 H	152	55.2	2.8
4	5350.00	45.2 AV	54.0	-8.8	1.28 H	152	42.4	2.8
5	#10480.00	60.4 PK	74.0	-13.6	2.18 H	162	45.7	14.7
6	#10480.00	47.2 AV	54.0	-6.8	2.18 H	162	32.5	14.7
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	Г 3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	100.9 PK			1.58 V	351	60.2	40.7
2	*5240.00	91.5 AV			1.58 V	351	50.8	40.7
3	5350.00	57.2 PK	74.0	-16.8	1.56 V	335	54.4	2.8
4	5350.00	44.0 AV	54.0	-10.0	1.56 V	335	41.2	2.8
5	#10480.00	59.6 PK	74.0	-14.4	3.22 V	150	44.9	14.7
6	#10480.00	46.2 AV	54.0	-7.8	3.22 V	150	31.5	14.7

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



CHANNEL	TX Channel 52	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	57.6 PK	74.0	-16.4	1.07 H	155	55.0	2.6
2	5150.00	44.9 AV	54.0	-9.1	1.07 H	155	42.3	2.6
3	*5260.00	105.1 PK			1.00 H	200	64.4	40.7
4	*5260.00	96.0 AV			1.00 H	200	55.3	40.7
5	#10520.00	59.1 PK	74.0	-14.9	1.55 H	326	44.3	14.8
6	#10520.00	47.0 AV	54.0	-7.0	1.55 H	326	32.2	14.8
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	Г 3 M	
NO.	FREQ. (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	56.8 PK	74.0	-17.2	1.09 V	256	54.2	2.6
2	5150.00	44.7 AV	54.0	-9.3	1.09 V	256	42.1	2.6
3	*5260.00	102.7 PK			1.00 V	298	62.0	40.7
4	*5260.00	93.0 AV			1.00 V	298	52.3	40.7
5	#10520.00	59.0 PK	74.0	-15.0	2.69 V	104	44.2	14.8
6	#10520.00	46.0 AV	54.0	-8.0	2.69 V	104	31.2	14.8

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



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

		ANTENNA	POLARITY 8	& TEST DIS	TANCE: HO	RIZONTAL A	AT 3 M	
NO.	FREQ. (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	104.0 PK			1.05 H	196	63.4	40.6
2	*5300.00	94.9 AV			1.05 H	196	54.3	40.6
3	10600.00	60.0 PK	74.0	-14.0	2.59 H	300	44.8	15.2
4	10600.00	47.0 AV	54.0	-7.0	2.59 H	300	31.8	15.2
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	Г 3 M	
NO.	FREQ. (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	101.6 PK			1.02 V	298	61.0	40.6
2	*5300.00	91.8 AV			1.02 V	298	51.2	40.6
3	10600.00	59.7 PK	74.0	-14.3	2.78 V	59	44.5	15.2
4	10600.00	46.7 AV	54.0	-7.3	2.78 V	59	31.5	15.2

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



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

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	103.6 PK			1.00 H	197	62.9	40.7
2	*5320.00	93.9 AV			1.00 H	197	53.2	40.7
3	5350.00	62.6 PK	74.0	-11.4	1.02 H	226	59.8	2.8
4	5350.00	45.3 AV	54.0	-8.7	1.02 H	226	42.5	2.8
5	10640.00	60.2 PK	74.0	-13.8	2.66 H	175	44.8	15.4
6	10640.00	47.1 AV	54.0	-6.9	2.66 H	175	31.7	15.4
		ANTENN	A POLARITY	4 TEST DI	STANCE: V	ERTICAL AT	Г 3 M	
NO.	FREQ. (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	101.5 PK			1.04 V	350	60.8	40.7
2	*5320.00	91.9 AV			1.04 V	350	51.2	40.7
3	5350.00	57.0 PK	74.0	-17.0	1.09 V	345	54.2	2.8
4	5350.00	44.9 AV	54.0	-9.1	1.09 V	345	42.1	2.8
5	10640.00	59.5 PK	74.0	-14.5	1.59 V	152	44.1	15.4
6	10640.00	46.3 AV	54.0	-7.7	1.59 V	152	30.9	15.4

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



CHANNEL	TX Channel 100	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	5460.00	58.6 PK	74.0	-15.4	1.36 H	89	55.4	3.2
2	5460.00	44.7 AV	54.0	-9.3	1.36 H	89	41.5	3.2
3	#5470.00	58.8 PK	74.0	-15.2	1.25 H	89	55.6	3.2
4	#5470.00	45.3 AV	54.0	-8.7	1.25 H	89	42.1	3.2
5	*5500.00	107.4 PK			1.26 H	76	65.9	41.5
6	*5500.00	97.2 AV			1.26 H	76	55.7	41.5
7	11000.00	61.1 PK	74.0	-12.9	2.99 H	346	45.1	16.0
8	11000.00	48.1 AV	54.0	-5.9	2.99 H	346	32.1	16.0
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	7 3 M	
NO.	FREQ. (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	58.3 PK	74.0	-15.7	1.22 V	289	55.1	3.2
2	5460.00	44.2 AV	54.0	-9.8	1.22 V	289	41.0	3.2
3	#5470.00	61.3 PK	74.0	-12.7	1.25 V	299	58.1	3.2
4	#5470.00	45.4 AV	54.0	-8.6	1.25 V	299	42.2	3.2
5	*5500.00	100.2 PK			1.03 V	303	58.7	41.5
6	*5500.00	90.7 AV			1.03 V	303	49.2	41.5
7	11000.00	60.9 PK	74.0	-13.1	2.59 V	105	44.9	16.0
8	11000.00	47.6 AV	54.0	-6.4	2.59 V	105	31.6	16.0

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



CHANNEL	TX Channel 116	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	*5580.00	108.4 PK			1.23 H	78	66.5	41.9	
2	*5580.00	98.1 AV			1.23 H	78	56.2	41.9	
3	11160.00	60.6 PK	74.0	-13.4	2.59 H	155	44.9	15.7	
4	11160.00	47.8 AV	54.0	-6.2	2.59 H	155	32.1	15.7	
		ANTENN	A POLARITY	/ & TEST DI	STANCE: VI	ERTICAL AT	3 M		
NO.	FREQ. (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	101.6 PK			1.03 V	349	59.7	41.9	
2	*5580.00	92.3 AV			1.03 V	349	50.4	41.9	
3	11160.00	60.4 PK	74.0	-13.6	2.66 V	22	44.7	15.7	
4	11160.00	47.5 AV	54.0	-6.5	2.66 V	22	31.8	15.7	

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



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

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	109.6 PK			1.02 H	75	67.5	42.1
2	*5700.00	99.1 AV			1.02 H	75	57.0	42.1
3	#5725.00	71.5 PK	74.0	-2.5	1.09 H	109	67.8	3.7
4	#5725.00	49.5 AV	54.0	-4.5	1.09 H	109	45.8	3.7
5	11400.00	61.3 PK	74.0	-12.7	2.99 H	326	45.3	16.0
6	11400.00	48.3 AV	54.0	-5.7	2.99 H	326	32.3	16.0
		ANTENNA	A POLARITY	/ & TEST DI	STANCE: VI	ERTICAL AT	Г 3 M	
NO.	FREQ. (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	102.9 PK			1.03 V	346	60.8	42.1
2	*5700.00	93.3 AV			1.03 V	346	51.2	42.1
3	#5725.00	62.5 PK	74.0	-11.5	1.22 V	332	58.8	3.7
4	#5725.00	46.2 AV	54.0	-7.8	1.22 V	332	42.5	3.7
5	11400.00	60.9 PK	74.0	-13.1	3.56 V	150	44.9	16.0
6	11400.00	47.6 AV	54.0	-6.4	3.56 V	150	31.6	16.0

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



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

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	58.5 PK	74.0	-15.5	1.06 H	38	55.3	3.2
2	#5470.00	46.0 AV	54.0	-8.0	1.06 H	38	42.8	3.2
3	*5720.00	107.7 PK			1.00 H	25	65.6	42.1
4	*5720.00	96.8 AV			1.00 H	25	54.7	42.1
5	#5850.00	59.5 PK	74.0	-14.5	1.41 H	57	54.9	4.6
6	#5850.00	47.7 AV	54.0	-6.3	1.41 H	57	43.1	4.6
7	11440.00	61.6 PK	74.0	-12.4	2.54 H	187	45.5	16.1
8	11440.00	48.4 AV	54.0	-5.6	2.54 H	187	32.3	16.1
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	7 3 M	
NO.	FREQ. (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	57.8 PK	74.0	-16.2	1.03 V	305	54.6	3.2
2	#5470.00	45.4 AV	54.0	-8.6	1.03 V	305	42.2	3.2
3	*5720.00	103.6 PK			1.00 V	309	61.5	42.1
4	*5720.00	93.1 AV			1.00 V	309	51.0	42.1
5	#5850.00	59.0 PK	74.0	-15.0	1.29 V	320	54.4	4.6
6	#5850.00	46.7 AV	54.0	-7.3	1.29 V	320	42.1	4.6
7	11440.00	61.2 PK	74.0	-12.8	1.69 V	210	45.1	16.1
8	11440.00	48.1 AV	54.0	-5.9	1.69 V	210	32.0	16.1

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



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

								1
		ANTENNA	POLARITY 8	& TEST DIS	TANCE: HO	RIZONTAL A	AT 3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5602.40	57.8 PK	68.2	-10.4	1.01 H	241	54.2	3.6
2	*5745.00	109.4 PK			1.01 H	241	67.2	42.2
3	*5745.00	99.5 AV			1.01 H	241	57.3	42.2
4	#5960.80	59.2 PK	68.2	-9.0	1.01 H	241	54.5	4.7
5	11490.00	61.8 PK	74.0	-12.2	2.39 H	154	45.6	16.2
6	11490.00	49.0 AV	54.0	-5.0	2.39 H	154	32.8	16.2
		ANTENNA	A POLARITY	/ & TEST DI	STANCE: VI	ERTICAL AT	Г 3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5629.60	57.6 PK	68.2	-10.6	1.46 V	26	54.1	3.5
2	*5745.00	104.2 PK			1.46 V	26	62.0	42.2
3	*5745.00	94.5 AV			1.46 V	26	52.3	42.2
4	#5962.40	59.6 PK	68.2	-8.6	1.46 V	26	54.9	4.7
5	11490.00	61.4 PK	74.0	-12.6	1.98 V	222	45.2	16.2
6	11490.00	48.3 AV	54.0	-5.7	1.98 V	222	32.1	16.2

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



CHANNEL	TX Channel 157	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	#5644.80	57.3 PK	68.2	-10.9	1.00 H	309	53.9	3.4
2	*5785.00	108.5 PK			1.00 H	309	66.1	42.4
3	*5785.00	98.6 AV			1.00 H	309	56.2	42.4
4	#5977.60	58.7 PK	68.2	-9.5	1.00 H	309	54.1	4.6
5	11570.00	61.8 PK	74.0	-12.2	2.41 H	158	45.8	16.0
6	11570.00	48.6 AV	54.0	-5.4	2.41 H	158	32.6	16.0
		ANTENN	A POLARITY	4 TEST DI	STANCE: VI	ERTICAL AT	T 3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5617.60	57.9 PK	68.2	-10.3	1.46 V	34	54.4	3.5
2	*5785.00	105.2 PK			1.46 V	34	62.8	42.4
3	*5785.00	94.5 AV			1.46 V	34	52.1	42.4
4	#5971.20	59.0 PK	68.2	-9.2	1.46 V	34	54.4	4.6
5	11570.00	61.2 PK	74.0	-12.8	1.78 V	231	45.2	16.0
6	11570.00	48.1 AV	54.0	-5.9	1.78 V	231	32.1	16.0

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



CHANNEL	TX Channel 165	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	#5641.60	57.4 PK	68.2	-10.8	1.07 H	242	54.0	3.4
2	*5825.00	110.6 PK			1.07 H	242	67.8	42.8
3	*5825.00	99.5 AV			1.07 H	242	56.7	42.8
4	#5971.20	58.8 PK	68.2	-9.4	1.07 H	242	54.2	4.6
5	11650.00	60.9 PK	74.0	-13.1	2.39 H	170	45.5	15.4
6	11650.00	48.1 AV	54.0	-5.9	2.39 H	170	32.7	15.4
		ANTENN	A POLARITY	/ & TEST DI	STANCE: VI	ERTICAL AT	3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5628.00	57.5 PK	68.2	-10.7	1.56 V	19	54.0	3.5
2	*5825.00	104.9 PK			1.56 V	19	62.1	42.8
3	*5825.00	94.5 AV			1.56 V	19	51.7	42.8
4	#5932.00	58.8 PK	68.2	-9.4	1.56 V	19	54.3	4.5
5	11650.00	60.6 PK	74.0	-13.4	1.52 V	294	45.2	15.4
6	11650.00	47.3 AV	54.0	-6.7	1.52 V	294	31.9	15.4

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



802.11n (HT20)

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

		ANTENNA	POLARITY &	& TEST DIS	TANCE: HO	RIZONTAL A	AT 3 M	
NO.	FREQ. (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	63.1 PK	74.0	-10.9	1.23 H	115	60.5	2.6
2	5150.00	45.2 AV	54.0	-8.8	1.23 H	115	42.6	2.6
3	*5180.00	104.6 PK			1.00 H	137	63.7	40.9
4	*5180.00	94.7 AV			1.00 H	137	53.8	40.9
5	#10360.00	60.4 PK	74.0	-13.6	2.25 H	159	45.6	14.8
6	#10360.00	47.5 AV	54.0	-6.5	2.25 H	159	32.7	14.8
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.6 PK	74.0	-15.4	1.81 V	306	56.0	2.6
2	5150.00	43.5 AV	54.0	-10.5	1.81 V	306	40.9	2.6
3	*5180.00	98.1 PK			1.82 V	313	57.2	40.9
4	*5180.00	88.8 AV			1.82 V	313	47.9	40.9
5	#10360.00	59.6 PK	74.0	-14.4	2.88 V	105	44.8	14.8
6	#10360.00	46.3 AV	54.0	-7.7	2.88 V	105	31.5	14.8

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



CHANNEL	TX Channel 40	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	105.5 PK			1.43 H	135	64.6	40.9
2	*5200.00	95.5 AV			1.43 H	135	54.6	40.9
3	#10400.00	60.8 PK	74.0	-13.2	2.45 H	168	45.9	14.9
4	#10400.00	47.4 AV	54.0	-6.6	2.45 H	168	32.5	14.9
	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	100.0 PK			1.09 V	311	59.1	40.9
2	*5200.00	89.9 AV			1.09 V	311	49.0	40.9
3	#10400.00	59.5 PK	74.0	-14.5	2.66 V	102	44.6	14.9
4	#10400.00	46.7 AV	54.0	-7.3	2.66 V	102	31.8	14.9

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



CHANNEL	TX Channel 48	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	105.2 PK			1.33 H	137	64.5	40.7
2	*5240.00	95.2 AV			1.33 H	137	54.5	40.7
3	5350.00	58.3 PK	74.0	-15.7	1.42 H	156	55.5	2.8
4	5350.00	45.2 AV	54.0	-8.8	1.42 H	156	42.4	2.8
5	#10480.00	60.3 PK	74.0	-13.7	2.10 H	188	45.6	14.7
6	#10480.00	47.1 AV	54.0	-6.9	2.10 H	188	32.4	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	*5240.00	99.9 PK			1.00 V	298	59.2	40.7
2	*5240.00	89.9 AV			1.00 V	298	49.2	40.7
3	5350.00	57.3 PK	74.0	-16.7	1.00 V	298	54.5	2.8
4	5350.00	44.1 AV	54.0	-9.9	1.00 V	298	41.3	2.8
5	#10480.00	59.8 PK	74.0	-14.2	1.59 V	102	45.1	14.7
6	#10480.00	46.2 AV	54.0	-7.8	1.59 V	102	31.5	14.7

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



CHANNEL	TX Channel 52	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	57.7 PK	74.0	-16.3	1.56 H	68	55.1	2.6
2	5150.00	44.4 AV	54.0	-9.6	1.56 H	68	41.8	2.6
3	*5260.00	105.3 PK			1.69 H	78	64.6	40.7
4	*5260.00	94.8 AV			1.69 H	78	54.1	40.7
5	#10520.00	59.5 PK	74.0	-14.5	2.69 H	199	44.7	14.8
6	#10520.00	46.3 AV	54.0	-7.7	2.69 H	199	31.5	14.8
	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	57.1 PK	74.0	-16.9	1.09 V	312	54.5	2.6
2	5150.00	43.8 AV	54.0	-10.2	1.09 V	312	41.2	2.6
3	*5260.00	101.4 PK			1.00 V	300	60.7	40.7
4	*5260.00	91.7 AV			1.00 V	300	51.0	40.7
5	#10520.00	59.3 PK	74.0	-14.7	2.56 V	150	44.5	14.8
6	#10520.00	46.0 AV	54.0	-8.0	2.56 V	150	31.2	14.8

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



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

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	*5300.00	104.1 PK			1.65 H	80	63.5	40.6	
2	*5300.00	94.0 AV			1.65 H	80	53.4	40.6	
3	10600.00	59.9 PK	74.0	-14.1	2.66 H	221	44.7	15.2	
4	10600.00	47.0 AV	54.0	-7.0	2.66 H	221	31.8	15.2	
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	Г 3 M		
NO.	FREQ. (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	99.9 PK			1.00 V	299	59.3	40.6	
2	*5300.00	89.8 AV			1.00 V	299	49.2	40.6	
3	10600.00	59.7 PK	74.0	-14.3	2.99 V	150	44.5	15.2	
4	10600.00	46.7 AV	54.0	-7.3	2.99 V	150	31.5	15.2	

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



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

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	*5320.00	105.2 PK			1.78 H	82	64.5	40.7	
2	*5320.00	94.8 AV			1.78 H	82	54.1	40.7	
3	5350.00	65.8 PK	74.0	-8.2	1.74 H	69	63.0	2.8	
4	5350.00	45.5 AV	54.0	-8.5	1.74 H	69	42.7	2.8	
5	10640.00	60.2 PK	74.0	-13.8	3.29 H	100	44.8	15.4	
6	10640.00	46.8 AV	54.0	-7.2	3.29 H	100	31.4	15.4	
		ANTENN	A POLARITY	4 & TEST DI	STANCE: V	ERTICAL AT	Г 3 M		
NO.	FREQ. (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	99.8 PK			1.00 V	358	59.1	40.7	
2	*5320.00	90.6 AV			1.00 V	358	49.9	40.7	
3	5350.00	57.1 PK	74.0	-16.9	1.09 V	334	54.3	2.8	
4	5350.00	44.9 AV	54.0	-9.1	1.09 V	334	42.1	2.8	
5	10640.00	60.0 PK	74.0	-14.0	2.59 V	269	44.6	15.4	
6	10640.00	46.6 AV	54.0	-7.4	2.59 V	269	31.2	15.4	

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



CHANNEL	TX Channel 100	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	5460.00	62.4 PK	74.0	-11.6	1.29 H	69	59.2	3.2
2	5460.00	44.3 AV	54.0	-9.7	1.29 H	69	41.1	3.2
3	#5470.00	66.4 PK	74.0	-7.6	1.20 H	68	63.2	3.2
4	#5470.00	46.1 AV	54.0	-7.9	1.20 H	68	42.9	3.2
5	*5500.00	107.5 PK			1.10 H	75	66.0	41.5
6	*5500.00	97.0 AV			1.10 H	75	55.5	41.5
7	11000.00	61.1 PK	74.0	-12.9	3.29 H	274	45.1	16.0
8	11000.00	47.8 AV	54.0	-6.2	3.29 H	274	31.8	16.0
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	7 3 M	
NO.	FREQ. (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	60.4 PK	74.0	-13.6	1.06 V	175	57.2	3.2
2	5460.00	44.4 AV	54.0	-9.6	1.06 V	175	41.2	3.2
3	#5470.00	62.8 PK	74.0	-11.2	1.10 V	182	59.6	3.2
4	#5470.00	46.3 AV	54.0	-7.7	1.10 V	182	43.1	3.2
5	*5500.00	101.3 PK			1.00 V	167	59.8	41.5
6	*5500.00	90.8 AV			1.00 V	167	49.3	41.5
7	11000.00	61.0 PK	74.0	-13.0	2.64 V	102	45.0	16.0
8	11000.00	47.6 AV	54.0	-6.4	2.64 V	102	31.6	16.0

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



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

		ANTENNA	POLARITY 8	& TEST DIS	TANCE: HO	RIZONTAL A	AT 3 M	
NO.	FREQ. (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	108.8 PK			1.08 H	75	66.9	41.9
2	*5580.00	98.2 AV			1.08 H	75	56.3	41.9
3	11160.00	60.3 PK	74.0	-13.7	2.59 H	325	44.6	15.7
4	11160.00	47.6 AV	54.0	-6.4	2.59 H	325	31.9	15.7
		ANTENNA	A POLARITY	/ & TEST DI	STANCE: VI	ERTICAL AT	Г 3 M	
NO.	FREQ. (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	102.1 PK			1.02 V	167	60.2	41.9
2	*5580.00	91.8 AV			1.02 V	167	49.9	41.9
3	11160.00	60.2 PK	74.0	-13.8	2.69 V	152	44.5	15.7
4	11160.00	47.2 AV	54.0	-6.8	2.69 V	152	31.5	15.7

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



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

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	*5700.00	109.1 PK			1.00 H	77	67.0	42.1	
2	*5700.00	98.7 AV			1.00 H	77	56.6	42.1	
3	#5725.00	69.2 PK	74.0	-4.8	1.09 H	88	65.5	3.7	
4	#5725.00	47.4 AV	54.0	-6.6	1.09 H	88	43.7	3.7	
5	11400.00	60.5 PK	74.0	-13.5	2.22 H	333	44.5	16.0	
6	11400.00	47.8 AV	54.0	-6.2	2.22 H	333	31.8	16.0	
		ANTENN	A POLARITY	4 & TEST DI	STANCE: V	ERTICAL AT	Г 3 M		
NO.	FREQ. (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	102.2 PK			1.00 V	172	60.1	42.1	
2	*5700.00	91.9 AV			1.00 V	172	49.8	42.1	
3	#5725.00	63.4 PK	74.0	-10.6	1.05 V	191	59.7	3.7	
4	#5725.00	46.9 AV	54.0	-7.1	1.05 V	191	43.2	3.7	
5	11400.00	60.2 PK	74.0	-13.8	2.57 V	146	44.2	16.0	
6	11400.00	47.6 AV	54.0	-6.4	2.57 V	146	31.6	16.0	

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



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

		ANTENNA	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL A	AT 3 M	
NO.	FREQ. (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	58.8 PK	74.0	-15.2	1.28 H	45	55.6	3.2
2	#5470.00	45.7 AV	54.0	-8.3	1.28 H	45	42.5	3.2
3	*5720.00	106.2 PK			1.00 H	37	64.1	42.1
4	*5720.00	95.7 AV			1.00 H	37	53.6	42.1
5	#5850.00	59.9 PK	74.0	-14.1	1.05 H	29	55.3	4.6
6	#5850.00	47.2 AV	54.0	-6.8	1.05 H	29	42.6	4.6
7	11440.00	61.9 PK	74.0	-12.1	2.39 H	172	45.8	16.1
8	11440.00	48.6 AV	54.0	-5.4	2.39 H	172	32.5	16.1
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	Г 3 M	
NO.	FREQ. (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	57.5 PK	74.0	-16.5	1.09 V	325	54.3	3.2
2	#5470.00	45.3 AV	54.0	-8.7	1.09 V	325	42.1	3.2
3	*5720.00	102.4 PK			1.03 V	309	60.3	42.1
4	*5720.00	92.6 AV			1.03 V	309	50.5	42.1
5	#5850.00	59.0 PK	74.0	-15.0	1.17 V	320	54.4	4.6
6	#5850.00	46.5 AV	54.0	-7.5	1.17 V	320	41.9	4.6
7	11440.00	61.2 PK	74.0	-12.8	1.52 V	297	45.1	16.1
8	11440.00	48.3 AV	54.0	-5.7	1.52 V	297	32.2	16.1

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



CHANNEL	TX Channel 149	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	#5601.60	57.5 PK	68.2	-10.7	1.15 H	240	53.9	3.6	
2	*5745.00	107.6 PK			1.15 H	240	65.4	42.2	
3	*5745.00	97.4 AV			1.15 H	240	55.2	42.2	
4	#5935.20	58.1 PK	68.2	-10.1	1.15 H	240	53.6	4.5	
5	11490.00	62.0 PK	74.0	-12.0	2.41 H	185	45.8	16.2	
6	11490.00	48.8 AV	54.0	-5.2	2.41 H	185	32.6	16.2	
		ANTENN	A POLARITY	/ & TEST DI	STANCE: VI	ERTICAL AT	Г 3 M		
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	#5605.60	57.3 PK	68.2	-10.9	1.41 V	23	53.7	3.6	
2	*5745.00	104.0 PK			1.41 V	23	61.8	42.2	
3	*5745.00	93.8 AV			1.41 V	23	51.6	42.2	
4	#5936.80	59.2 PK	68.2	-9.0	1.41 V	23	54.7	4.5	
5	11490.00	61.5 PK	74.0	-12.5	1.65 V	297	45.3	16.2	
6	11490.00	48.7 AV	54.0	-5.3	1.65 V	297	32.5	16.2	

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



CHANNEL	TX Channel 157	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	#5608.00	57.5 PK	68.2	-10.7	1.00 H	244	54.0	3.5	
2	*5785.00	108.2 PK			1.00 H	244	65.8	42.4	
3	*5785.00	97.5 AV			1.00 H	244	55.1	42.4	
4	#5965.60	59.0 PK	68.2	-9.2	1.00 H	244	54.3	4.7	
5	11570.00	61.9 PK	74.0	-12.1	2.05 H	152	45.9	16.0	
6	11570.00	48.6 AV	54.0	-5.4	2.05 H	152	32.6	16.0	
		ANTENN	A POLARITY	4 & TEST DI	STANCE: VI	ERTICAL AT	Г 3 M		
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	#5628.00	57.6 PK	68.2	-10.6	1.37 V	22	54.1	3.5	
2	*5785.00	103.5 PK			1.37 V	22	61.1	42.4	
3	*5785.00	93.7 AV			1.37 V	22	51.3	42.4	
4	#5930.40	59.1 PK	68.2	-9.1	1.37 V	22	54.6	4.5	
5	11570.00	61.1 PK	74.0	-12.9	1.67 V	230	45.1	16.0	
6	11570.00	48.4 AV	54.0	-5.6	1.67 V	230	32.4	16.0	

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



CHANNEL	TX Channel 165	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	#5603.20	57.9 PK	68.2	-10.3	1.00 H	245	54.3	3.6	
2	*5825.00	108.6 PK			1.00 H	245	65.8	42.8	
3	*5825.00	98.2 AV			1.00 H	245	55.4	42.8	
4	#5928.00	59.3 PK	68.2	-8.9	1.00 H	245	54.8	4.5	
5	11650.00	61.2 PK	74.0	-12.8	2.33 H	187	45.8	15.4	
6	11650.00	48.0 AV	54.0	-6.0	2.33 H	187	32.6	15.4	
		ANTENNA	A POLARITY	/ & TEST DI	STANCE: VI	ERTICAL AT	3 M		
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	#5604.00	58.0 PK	68.2	-10.2	1.38 V	34	54.4	3.6	
2	*5825.00	104.0 PK			1.38 V	34	61.2	42.8	
3	*5825.00	93.3 AV			1.38 V	34	50.5	42.8	
4	#5980.00	59.1 PK	68.2	-9.1	1.38 V	34	54.5	4.6	
5	11650.00	60.5 PK	74.0	-13.5	1.79 V	280	45.1	15.4	
6	11650.00	47.6 AV	54.0	-6.4	1.79 V	280	32.2	15.4	

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



802.11n (HT40)

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

		ANTENNA	POLARITY 8	& TEST DIS	TANCE: HO	RIZONTAL A	AT 3 M	
NO.	FREQ. (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	63.3 PK	74.0	-10.7	1.61 H	135	60.7	2.6
2	5150.00	46.9 AV	54.0	-7.1	1.61 H	135	44.3	2.6
3	*5190.00	101.1 PK			1.24 H	137	60.2	40.9
4	*5190.00	90.7 AV			1.24 H	137	49.8	40.9
5	#10380.00	60.0 PK	74.0	-14.0	2.21 H	106	45.2	14.8
6	#10380.00	47.7 AV	54.0	-6.3	2.21 H	106	32.9	14.8
		ANTENN	A POLARITY	/ & TEST DI	STANCE: VI	ERTICAL AT	3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.9 PK	74.0	-14.1	1.05 V	306	57.3	2.6
2	5150.00	45.8 AV	54.0	-8.2	1.05 V	306	43.2	2.6
3	*5190.00	96.9 PK			1.10 V	307	56.0	40.9
4	*5190.00	87.2 AV			1.10 V	307	46.3	40.9
5	#10380.00	59.4 PK	74.0	-14.6	2.55 V	159	44.6	14.8
6	#10380.00	46.3 AV	54.0	-7.7	2.55 V	159	31.5	14.8

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



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

								1	
	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	99.8 PK			1.46 H	118	59.1	40.7	
2	*5230.00	89.6 AV			1.46 H	118	48.9	40.7	
3	5350.00	58.0 PK	74.0	-16.0	1.62 H	139	55.2	2.8	
4	5350.00	45.4 AV	54.0	-8.6	1.62 H	139	42.6	2.8	
5	#10460.00	60.7 PK	74.0	-13.3	2.38 H	145	45.9	14.8	
6	#10460.00	47.6 AV	54.0	-6.4	2.38 H	145	32.8	14.8	
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	Г 3 M		
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	*5230.00	96.1 PK			1.00 V	298	55.4	40.7	
2	*5230.00	87.0 AV			1.00 V	298	46.3	40.7	
3	5350.00	57.4 PK	74.0	-16.6	1.05 V	322	54.6	2.8	
4	5350.00	44.0 AV	54.0	-10.0	1.05 V	322	41.2	2.8	
5	#10460.00	60.0 PK	74.0	-14.0	2.22 V	109	45.2	14.8	
6	#10460.00	46.1 AV	54.0	-7.9	2.22 V	109	31.3	14.8	

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



CHANNEL	TX Channel 54	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	57.8 PK	74.0	-16.2	1.79 H	99	55.2	2.6	
2	5150.00	44.9 AV	54.0	-9.1	1.79 H	99	42.3	2.6	
3	*5270.00	100.5 PK			1.88 H	82	59.9	40.6	
4	*5270.00	90.6 AV			1.88 H	82	50.0	40.6	
5	#10540.00	59.2 PK	74.0	-14.8	2.99 H	263	44.3	14.9	
6	#10540.00	46.2 AV	54.0	-7.8	2.99 H	263	31.3	14.9	
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	Г 3 M		
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	5150.00	57.8 PK	74.0	-16.2	1.22 V	285	55.2	2.6	
2	5150.00	44.6 AV	54.0	-9.4	1.22 V	285	42.0	2.6	
3	*5270.00	95.9 PK			1.00 V	296	55.3	40.6	
4	*5270.00	86.5 AV			1.00 V	296	45.9	40.6	
5	#10540.00	58.8 PK	74.0	-15.2	2.69 V	150	43.9	14.9	
6	#10540.00	45.6 AV	54.0	-8.4	2.69 V	150	30.7	14.9	

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



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

		ANTENNA	POLARITY (& TEST DIS	TANCE: HO	RIZONTAL A	AT 3 M	
NO.	FREQ. (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	100.4 PK			1.88 H	81	59.8	40.6
2	*5310.00	91.1 AV			1.88 H	81	50.5	40.6
3	5350.00	65.8 PK	74.0	-8.2	1.76 H	77	63.0	2.8
4	5350.00	47.0 AV	54.0	-7.0	1.76 H	77	44.2	2.8
5	10620.00	59.8 PK	74.0	-14.2	2.63 H	229	44.5	15.3
6	10620.00	46.8 AV	54.0	-7.2	2.63 H	229	31.5	15.3
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	Г 3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	95.5 PK			1.00 V	1	54.9	40.6
2	*5310.00	85.9 AV			1.00 V	1	45.3	40.6
3	5350.00	59.7 PK	74.0	-14.3	1.09 V	355	56.9	2.8
4	5350.00	46.6 AV	54.0	-7.4	1.09 V	355	43.8	2.8
5	10620.00	59.5 PK	74.0	-14.5	3.22 V	325	44.2	15.3
6	10620.00	46.4 AV	54.0	-7.6	3.22 V	325	31.1	15.3

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



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

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
		ANTENNA	POLARITY	X LEST DIS	TANCE: HO	RIZUNTAL	4 I 3 IVI	l
	FREQ.	EMISSION	LIMIT	MARGIN	ANTENNA	TABLE	RAW	CORRECTION
NO.	(MHz)	LEVEL	(dBuV/m)	(dB)	HEIGHT	ANGLE	VALUE	FACTOR
	(1711 12)	(dBuV/m)	(dbd v/iii)	(db)	(m)	(Degree)	(dBuV)	(dB/m)
1	5460.00	63.5 PK	74.0	-10.5	1.23 H	100	60.3	3.2
2	5460.00	35.1 AV	54.0	-18.9	1.23 H	100	31.9	3.2
3	#5470.00	68.0 PK	74.0	-6.0	1.09 H	88	64.8	3.2
4	#5470.00	47.1 AV	54.0	-6.9	1.09 H	88	43.9	3.2
5	*5510.00	101.6 PK			1.00 H	72	60.0	41.6
6	*5510.00	92.6 AV			1.00 H	72	51.0	41.6
7	11020.00	60.7 PK	74.0	-13.3	2.99 H	236	44.9	15.8
8	11020.00	47.8 AV	54.0	-6.2	2.99 H	236	32.0	15.8
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	Г 3 M	
		EMISSION			ANTENNA	TABLE	RAW	CORRECTION
NO.	FREQ.	LEVEL	LIMIT	MARGIN	HEIGHT	ANGLE	VALUE	FACTOR
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(m)	(Degree)	(dBuV)	(dB/m)
1	5460.00	58.4 PK	74.0	-15.6	1.17 V	159	55.2	3.2
2	5460.00	34.8 AV	54.0	-19.2	1.17 V	159	31.6	3.2
3	#5470.00	62.9 PK	74.0	-11.1	1.06 V	175	59.7	3.2
4	#5470.00	46.3 AV	54.0	-7.7	1.06 V	175	43.1	3.2
5	*5510.00	96.8 PK			1.02 V	168	55.2	41.6
6	*5510.00	86.5 AV			1.02 V	168	44.9	41.6
7	11020.00	60.1 PK	74.0	-13.9	2.52 V	129	44.3	15.8
8	11020.00	47.5 AV	54.0	-6.5	2.52 V	129	31.7	15.8

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



CHANNEL	TX Channel 110	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	*5550.00	101.5 PK			1.00 H	74	59.7	41.8	
2	*5550.00	92.3 AV			1.00 H	74	50.5	41.8	
3	11100.00	60.9 PK	74.0	-13.1	2.77 H	341	45.2	15.7	
4	11100.00	48.0 AV	54.0	-6.0	2.77 H	341	32.3	15.7	
		ANTENN	A POLARITY	/ & TEST DI	STANCE: VI	ERTICAL AT	Г 3 M		
NO.	FREQ. (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	96.3 PK			1.04 V	173	54.5	41.8	
2	*5550.00	86.7 AV			1.04 V	173	44.9	41.8	
3	11100.00	60.5 PK	74.0	-13.5	2.41 V	132	44.8	15.7	
4	11100.00	47.3 AV	54.0	-6.7	2.41 V	132	31.6	15.7	

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



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

		ANTENNA	POLARITY (& TEST DIS	TANCE: HO	RIZONTAL A	AT 3 M	
NO.	FREQ. (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	103.0 PK			1.02 H	78	61.2	41.8
2	*5670.00	93.3 AV			1.02 H	78	51.5	41.8
3	#5725.00	62.2 PK	74.0	-11.8	1.09 H	99	58.5	3.7
4	#5725.00	46.3 AV	54.0	-7.7	1.09 H	99	42.6	3.7
5	11340.00	60.3 PK	74.0	-13.7	2.22 H	255	44.3	16.0
6	11340.00	47.6 AV	54.0	-6.4	2.22 H	255	31.6	16.0
		ANTENN	A POLARITY	4 & TEST DI	STANCE: V	ERTICAL AT	Г 3 M	
NO.	FREQ. (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	98.1 PK			1.04 V	173	56.3	41.8
2	*5670.00	88.2 AV			1.04 V	173	46.4	41.8
3	#5725.00	60.4 PK	74.0	-13.6	1.08 V	181	56.7	3.7
4	#5725.00	46.5 AV	54.0	-7.5	1.08 V	181	42.8	3.7
5	11340.00	60.5 PK	74.0	-13.5	2.57 V	123	44.5	16.0
6	11340.00	47.2 AV	54.0	-6.8	2.57 V	123	31.2	16.0

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



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

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
		ANTENNA	POLARITY	X LEST DIS	TANCE: HO	RIZUNTAL	4 I 3 IVI	l
	FREQ.	EMISSION	LIMIT	MARGIN	ANTENNA	TABLE	RAW	CORRECTION
NO.	(MHz)	LEVEL	(dBuV/m)	(dB)	HEIGHT	ANGLE	VALUE	FACTOR
	(1711 12)	(dBuV/m)	(dbd v/iii)	(db)	(m)	(Degree)	(dBuV)	(dB/m)
1	#5470.00	58.6 PK	74.0	-15.4	1.26 H	41	55.4	3.2
2	#5470.00	46.1 AV	54.0	-7.9	1.26 H	41	42.9	3.2
3	*5710.00	101.9 PK			1.00 H	25	59.8	42.1
4	*5710.00	91.7 AV			1.00 H	25	49.6	42.1
5	#5850.00	60.2 PK	74.0	-13.8	1.15 H	34	55.6	4.6
6	#5850.00	47.7 AV	54.0	-6.3	1.15 H	34	43.1	4.6
7	11420.00	61.9 PK	74.0	-12.1	2.61 H	123	45.8	16.1
8	11420.00	48.5 AV	54.0	-5.5	2.61 H	123	32.4	16.1
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	Г 3 M	
		EMISSION			ANTENNA	TABLE	RAW	CORRECTION
NO.	FREQ.	LEVEL	LIMIT	MARGIN	HEIGHT	ANGLE	VALUE	FACTOR
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(m)	(Degree)	(dBuV)	(dB/m)
1	#5470.00	57.4 PK	74.0	-16.6	1.18 V	271	54.2	3.2
2	#5470.00	45.3 AV	54.0	-8.7	1.18 V	271	42.1	3.2
3	*5710.00	97.3 PK			1.06 V	302	55.2	42.1
4	*5710.00	87.2 AV			1.06 V	302	45.1	42.1
5	#5850.00	58.7 PK	74.0	-15.3	1.11 V	289	54.1	4.6
6	#5850.00	47.2 AV	54.0	-6.8	1.11 V	289	42.6	4.6
7	11420.00	61.3 PK	74.0	-12.7	1.63 V	220	45.2	16.1
8	11420.00	47.9 AV	54.0	-6.1	1.63 V	220	31.8	16.1

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



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

		ANTENNA	POLARITY (& TEST DIS	TANCE: HO	RIZONTAL A	AT 3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5635.20	57.4 PK	68.2	-10.8	1.00 H	243	53.9	3.5
2	*5755.00	103.2 PK			1.00 H	243	60.9	42.3
3	*5755.00	93.0 AV			1.00 H	243	50.7	42.3
4	#5946.40	58.6 PK	68.2	-9.6	1.00 H	243	54.0	4.6
5	11510.00	61.5 PK	74.0	-12.5	2.67 H	155	45.5	16.0
6	11510.00	48.8 AV	54.0	-5.2	2.67 H	155	32.8	16.0
		ANTENN	A POLARITY	/ & TEST DI	STANCE: VI	ERTICAL AT	Г 3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5603.20	57.1 PK	68.2	-11.1	1.38 V	25	53.5	3.6
2	*5755.00	99.7 PK			1.38 V	25	57.4	42.3
3	*5755.00	90.2 AV			1.38 V	25	47.9	42.3
4	#5950.40	57.9 PK	68.2	-10.3	1.38 V	25	53.3	4.6
5	11510.00	60.9 PK	74.0	-13.1	1.45 V	281	44.9	16.0
6	11510.00	47.8 AV	54.0	-6.2	1.45 V	281	31.8	16.0

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



CHANNEL	TX Channel 159	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	#5648.00	58.3 PK	68.2	-9.9	1.00 H	242	54.9	3.4	
2	*5795.00	104.0 PK			1.00 H	242	61.5	42.5	
3	*5795.00	94.2 AV			1.00 H	242	51.7	42.5	
4	#5956.00	58.7 PK	68.2	-9.5	1.00 H	242	54.0	4.7	
5	11590.00	61.2 PK	74.0	-12.8	2.31 H	114	45.4	15.8	
6	11590.00	48.3 AV	54.0	-5.7	2.31 H	114	32.5	15.8	
		ANTENN	A POLARITY	/ & TEST DI	STANCE: VI	ERTICAL AT	Г 3 M		
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	#5620.00	57.8 PK	68.2	-10.4	1.36 V	25	54.3	3.5	
2	*5795.00	100.0 PK			1.36 V	25	57.5	42.5	
3	*5795.00	90.2 AV			1.36 V	25	47.7	42.5	
4	#5944.00	58.7 PK	68.2	-9.5	1.36 V	25	54.2	4.5	
5	11590.00	60.9 PK	74.0	-13.1	1.89 V	242	45.1	15.8	
6	11590.00	48.1 AV	54.0	-5.9	1.89 V	242	32.3	15.8	

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



802.11ac (VHT80)

CHANNEL	TX Channel 42	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	59.9 PK	74.0	-14.1	1.56 H	121	57.3	2.6	
2	5150.00	45.9 AV	54.0	-8.1	1.56 H	121	43.3	2.6	
3	*5210.00	100.0 PK			1.40 H	135	59.2	40.8	
4	*5210.00	87.2 AV			1.40 H	135	46.4	40.8	
5	5350.00	57.9 PK	74.0	-16.1	1.42 H	129	55.1	2.8	
6	5350.00	45.4 AV	54.0	-8.6	1.42 H	129	42.6	2.8	
7	#10420.00	60.5 PK	74.0	-13.5	2.87 H	106	45.7	14.8	
8	#10420.00	47.4 AV	54.0	-6.6	2.87 H	106	32.6	14.8	
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	Г 3 М		
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	5150.00	58.6 PK	74.0	-15.4	1.09 V	305	56.0	2.6	
2	5150.00	44.8 AV	54.0	-9.2	1.09 V	305	42.2	2.6	
3	*5210.00	93.9 PK			1.00 V	297	53.1	40.8	
4	*5210.00	82.3 AV			1.00 V	297	41.5	40.8	
5	5350.00	57.7 PK	74.0	-16.3	1.08 V	322	54.9	2.8	
6	5350.00	44.0 AV	54.0	-10.0	1.08 V	322	41.2	2.8	
7	#10420.00	59.7 PK	74.0	-14.3	2.66 V	159	44.9	14.8	
8	#10420.00	47.0 AV	54.0	-7.0	2.66 V	159	32.2	14.8	

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



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

	ANITENNA DOLABITMA TEOT BIOTANIOS HOBITONITAL AT ANA								
	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	57.7 PK	74.0	-16.3	1.99 H	76	55.1	2.6	
2	5150.00	44.8 AV	54.0	-9.2	1.99 H	76	42.2	2.6	
3	*5290.00	98.3 PK			1.92 H	81	57.7	40.6	
4	*5290.00	85.8 AV			1.92 H	81	45.2	40.6	
5	5350.00	63.1 PK	74.0	-10.9	1.96 H	102	60.3	2.8	
6	5350.00	46.8 AV	54.0	-7.2	1.96 H	102	44.0	2.8	
7	#10580.00	59.7 PK	74.0	-14.3	2.99 H	209	44.6	15.1	
8	#10580.00	47.0 AV	54.0	-7.0	2.99 H	209	31.9	15.1	
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	Г3 М		
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	5150.00	57.4 PK	74.0	-16.6	1.05 V	289	54.8	2.6	
2	5150.00	43.7 AV	54.0	-10.3	1.05 V	289	41.1	2.6	
3	*5290.00	93.4 PK			1.00 V	307	52.8	40.6	
4	*5290.00	82.5 AV			1.00 V	307	41.9	40.6	
5	5350.00	57.9 PK	74.0	-16.1	1.22 V	298	55.1	2.8	
6	5350.00	45.8 AV	54.0	-8.2	1.22 V	298	43.0	2.8	
7	#10580.00	59.3 PK	74.0	-14.7	2.22 V	29	44.2	15.1	
8	#10580.00	46.3 AV	54.0	-7.7	2.22 V	29	31.2	15.1	

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



CHANNEL	TX Channel 106	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	5460.00	61.4 PK	74.0	-12.6	1.36 H	45	58.2	3.2	
2	5460.00	45.9 AV	54.0	-8.1	1.36 H	45	42.7	3.2	
3	#5470.00	63.8 PK	74.0	-10.2	1.09 H	89	60.6	3.2	
4	#5470.00	46.8 AV	54.0	-7.2	1.09 H	89	43.6	3.2	
5	*5530.00	99.9 PK			1.02 H	76	58.1	41.8	
6	*5530.00	87.5 AV			1.02 H	76	45.7	41.8	
7	#5725.00	58.5 PK	74.0	-15.5	1.33 H	99	54.8	3.7	
8	#5725.00	45.2 AV	54.0	-8.8	1.33 H	99	41.5	3.7	
9	11060.00	61.0 PK	74.0	-13.0	3.33 H	266	45.3	15.7	
10	11060.00	47.8 AV	54.0	-6.2	3.33 H	266	32.1	15.7	
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	3 M		
NO.	FREQ. (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	59.4 PK	74.0	-14.6	1.20 V	149	56.2	3.2	
2	5460.00	45.3 AV	54.0	-8.7	1.20 V	149	42.1	3.2	
3	#5470.00	61.8 PK	74.0	-12.2	1.07 V	163	58.6	3.2	
4	#5470.00	46.0 AV	54.0	-8.0	1.07 V	163	42.8	3.2	
5	*5530.00	94.2 PK			1.03 V	158	52.4	41.8	
6	*5530.00	82.0 AV			1.03 V	158	40.2	41.8	
7	#5725.00	58.2 PK	74.0	-15.8	1.38 V	181	54.5	3.7	
8	#5725.00	44.9 AV	54.0	-9.1	1.38 V	181	41.2	3.7	
9	11060.00	60.8 PK	74.0	-13.2	2.69 V	144	45.1	15.7	
10	11060.00	47.7 AV	54.0	-6.3	2.69 V	144	32.0	15.7	

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



CHANNEL	TX Channel 122	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	5460.00	57.9 PK	74.0	-16.1	1.56 H	36	54.7	3.2	
2	5460.00	45.0 AV	54.0	-9.0	1.56 H	36	41.8	3.2	
3	#5470.00	59.4 PK	74.0	-14.6	1.08 H	99	56.2	3.2	
4	#5470.00	45.7 AV	54.0	-8.3	1.08 H	99	42.5	3.2	
5	*5610.00	101.2 PK			1.03 H	75	59.4	41.8	
6	*5610.00	88.9 AV			1.03 H	75	47.1	41.8	
7	#5725.00	59.9 PK	74.0	-14.1	1.45 H	66	56.2	3.7	
8	#5725.00	46.0 AV	54.0	-8.0	1.45 H	66	42.3	3.7	
9	11220.00	60.4 PK	74.0	-13.6	2.50 H	211	44.5	15.9	
10	11220.00	47.5 AV	54.0	-6.5	2.50 H	211	31.6	15.9	
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	Г 3 M		
NO.	FREQ. (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	57.7 PK	74.0	-16.3	1.03 V	188	54.5	3.2	
2	5460.00	44.8 AV	54.0	-9.2	1.03 V	188	41.6	3.2	
3	#5470.00	59.1 PK	74.0	-14.9	1.21 V	165	55.9	3.2	
4	#5470.00	45.3 AV	54.0	-8.7	1.21 V	165	42.1	3.2	
5	*5610.00	94.7 PK			1.00 V	171	52.9	41.8	
_ ^ _		00 0 11 /	· · · · · · · · · · · · · · · · · · ·		1.00 V	171	41.8	41.8	
6	*5610.00	83.6 AV			1.00 V				
7	*5610.00 #5725.00	83.6 AV 57.8 PK	74.0	-16.2	1.30 V	172	54.1	3.7	
-			74.0 54.0	-16.2 -8.3				-	
7	#5725.00	57.8 PK		_	1.30 V	172	54.1	3.7	

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



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

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	#5470.00	58.9 PK	74.0	-15.1	1.13 H	29	55.7	3.2	
2	#5470.00	46.0 AV	54.0	-8.0	1.13 H	29	42.8	3.2	
3	*5690.00	99.8 PK			1.00 H	26	57.8	42.0	
4	*5690.00	89.1 AV			1.00 H	26	47.1	42.0	
5	#5850.00	59.5 PK	74.0	-14.5	1.09 H	41	54.9	4.6	
6	#5850.00	47.2 AV	54.0	-6.8	1.09 H	41	42.6	4.6	
7	11380.00	61.8 PK	74.0	-12.2	2.10 H	159	45.8	16.0	
8	11380.00	48.7 AV	54.0	-5.3	2.10 H	159	32.7	16.0	
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	T 3 M		
NO.	FREQ. (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	57.4 PK	74.0	-16.6	1.26 V	320	54.2	3.2	
2	#5470.00	45.1 AV	54.0	-8.9	1.26 V	320	41.9	3.2	
3	*5690.00	95.8 PK			1.00 V	308	53.8	42.0	
4	*5690.00	84.4 AV			1.00 V	308	42.4	42.0	
5	#5850.00	58.7 PK	74.0	-15.3	1.07 V	317	54.1	4.6	
6	#5850.00	46.1 AV	54.0	-7.9	1.07 V	317	41.5	4.6	
7	11380.00	61.2 PK	74.0	-12.8	1.78 V	214	45.2	16.0	
8	11380.00	47.9 AV	54.0	-6.1	1.78 V	214	31.9	16.0	

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



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

		ANTENNA	POLARITY &	& TEST DIS	TANCE: HO	RIZONTAL A	AT 3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5620.00	58.4 PK	68.2	-9.8	1.00 H	242	54.9	3.5
2	*5775.00	101.2 PK			1.00 H	242	58.8	42.4
3	*5775.00	88.6 AV			1.00 H	242	46.2	42.4
4	#5956.80	58.9 PK	68.2	-9.3	1.00 H	242	54.2	4.7
5	11550.00	61.9 PK	74.0	-12.1	2.33 H	146	45.9	16.0
6	11550.00	48.6 AV	54.0	-5.4	2.33 H	146	32.6	16.0
		ANTENN	A POLARITY	/ & TEST DI	STANCE: VI	ERTICAL AT	3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5608.80	57.4 PK	68.2	-10.8	1.38 V	22	53.9	3.5
2	*5775.00	97.6 PK			1.38 V	22	55.2	42.4
3	*5775.00	85.8 AV			1.38 V	22	43.4	42.4
4	#5940.80	58.6 PK	68.2	-9.6	1.38 V	22	54.1	4.5
5	11550.00	60.9 PK	74.0	-13.1	1.87 V	255	44.9	16.0
6	11550.00	47.8 AV	54.0	-6.2	1.87 V	255	31.8	16.0

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



Below 1GHz Worst-Case Data:

802.11a

CHANNEL	TX Channel 165	DETECTOR	Overi Book (OB)
FREQUENCY RANGE	9kHz ~ 1GHz	FUNCTION	Quasi-Peak (QP)

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
		ANTENNA	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL A	AT 3 M	1		
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	78.41	35.4 QP	40.0	-4.6	1.99 H	288	47.7	-12.3		
2	239.46	33.9 QP	46.0	-12.1	1.00 H	268	43.5	-9.6		
3	480.07	37.4 QP	46.0	-8.6	1.99 H	7	41.1	-3.7		
4	600.38	38.1 QP	46.0	-7.9	1.49 H	13	39.0	-0.9		
5	734.27	38.6 QP	46.0	-7.4	1.99 H	192	36.6	2.0		
6	932.19	41.5 QP	46.0	-4.5	1.49 H	13	35.9	5.6		
		ANTENN	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL AT	Г 3 М			
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	47.80	27.5 QP	40.0	-12.5	1.00 V	294	36.5	-9.0		
2	76.47	35.9 QP	40.0	-4.1	1.00 V	218	47.7	-11.8		
3	179.31	32.3 QP	43.5	-11.2	1.00 V	297	42.0	-9.7		
4	480.07	32.1 QP	46.0	-13.9	2.00 V	190	35.8	-3.7		
5	600.38	36.9 QP	46.0	-9.1	1.00 V	227	37.8	-0.9		
6	734.27	37.2 QP	46.0	-8.8	2.00 V	209	35.2	2.0		

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) Pre-Amplifier Factor(dB)
- 3. The other emission levels were very low against the limit of frequency range $30 MHz \sim 1000 MHz$
- 4. Margin value = Emission Level Limit value
- 5. The emission levels were very low against the limit of frequency range $9kHz \sim 30MHz$: 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

Eroguanay (MHz)	Conducted	Limit (dBuV)
Frequency (MHz)	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.

4.2.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100613	Nov. 23, 2017	Nov. 22, 2018
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond1-01	Sep. 05, 2017	Sep. 04, 2018
LISN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Mar. 06, 2018	Mar. 05, 2019
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Aug. 15, 2017	Aug. 14, 2018
Software ADT	BV ADT_Cond_ V7.3.7.4	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

- 2. The test was performed in HwaYa Shielded Room 1.
- 3. The VCCI Site Registration No. is C-2040.

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



4.2.3 Test Procedures

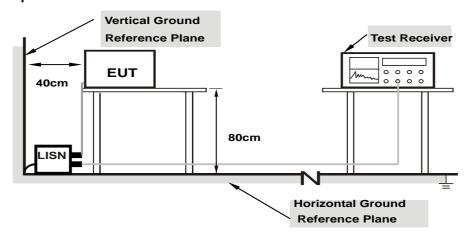
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit 20dB) was not recorded.

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

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



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

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

4.2.6 EUT Operating Conditions

Same as 4.1.6.



4.2.7 Test Results

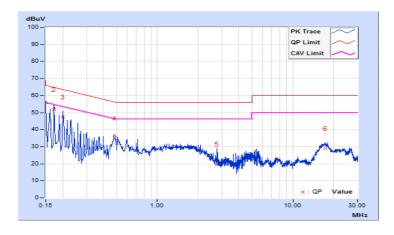
Worst-case data:

802.11a

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

	Corr.		Freq. Corr. Reading Value		Emissio	Emission Level		Limit		rgin
No	Freq.	Factor	[dB	(uV)]	[dB ((uV)]	[dB	(uV)]	(d	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.73	46.08	28.89	55.81	38.62	66.00	56.00	-10.19	-17.38
2	0.17346	9.73	42.04	25.39	51.77	35.12	64.79	54.79	-13.02	-19.67
3	0.20084	9.73	37.74	22.12	47.47	31.85	63.58	53.58	-16.11	-21.73
4	0.48041	9.75	25.41	18.35	35.16	28.10	56.33	46.33	-21.17	-18.23
5	2.75797	9.79	10.05	4.42	19.84	14.21	56.00	46.00	-36.16	-31.79
6	17.44393	9.97	18.82	14.20	28.79	24.17	60.00	50.00	-31.21	-25.83

- 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.

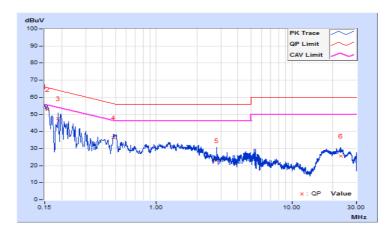




Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
-------	-------------	-------------------	-----------------------------------

	Erog Corr.		Erog Corr. Rea		Corr. Reading Value Emission Level		Limit		Margin	
No	Freq.	Factor	[dB ((uV)]	[dB ((uV)]	[dB ((uV)]	(d	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.72	44.96	28.30	54.68	38.02	66.00	56.00	-11.32	-17.98
2	0.15782	9.73	42.97	25.89	52.70	35.62	65.58	55.58	-12.88	-19.96
3	0.18910	9.73	37.91	21.84	47.64	31.57	64.08	54.08	-16.44	-22.51
4	0.48235	9.76	26.50	19.25	36.26	29.01	56.30	46.30	-20.04	-17.29
5	2.78143	9.79	12.96	7.59	22.75	17.38	56.00	46.00	-33.25	-28.62
6	22.90229	10.14	15.50	10.81	25.64	20.95	60.00	50.00	-34.36	-29.05

- 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
11 NIII 4		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)
U-NII-1		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	$\sqrt{}$	Mobile and Portable client device	250mW (24 dBm)
U-NII-2A		\checkmark	250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	√		250mW (24 dBm) or 11 dBm+10 log B*
U-NII-3		$\sqrt{}$	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 $N_{ANT} \le 4$;

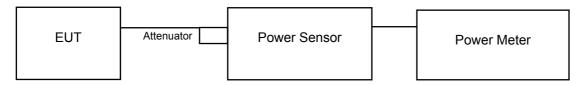
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};

Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less for 20-MHz channel widths with N_{ANT} ≥ 5.

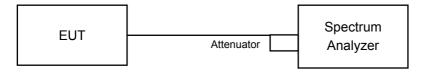
For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

4.3.2 Test Setup

For Power Output 802.11a, 802.11n (HT20), 802.11n (HT40)



802.11ac (VHT80)



For 26dB Bandwidth



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.



4.3.4 Test Procedure

For Average Power Measurement

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

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

For 802.11ac (VHT80)

- a. Set span to encompass the entire 26 dB EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
- b. Set sweep trigger to "free run".
- c. Set RBW = 1 MHz.
- d. Set VBW ≥ 3 MHz.
- e. Number of points in sweep ≥ 2 Span / RBW.
- f. Sweep time ≤ (number of points in sweep) * T
- g. Using emission bandwidth to determine the frequency span for integration the channel bandwidth.
- h. Detector = RMS.
- i. Trace mode = max hold.
- j. Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.
- k. Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

For 26dB Bandwidth

- a. Set RBW = approximately 1% of the emission bandwidth.
- b. Set the VBW > RBW.
- c. Detector = Peak.
- d. Trace mode = max hold.
- e. 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 Conditions

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



4.3.7 Test Result

Power Output:

802.11a

Chan	Freq.	Maximum Conduc	cted Power (dBm)	Total	Total	Power	Pass /
Chan.	(MHz)	Chain 0	Chain 1	Power (mW)	Power (dBm)	Limit (dBm)	Fail
36	5180	7.48	6.94	10.541	10.23	24.00	Pass
40	5200	7.12	7.02	10.187	10.08	24.00	Pass
48	5240	7.32	7.13	10.559	10.24	24.00	Pass
52	5260	7.22	7.32	10.667	10.28	23.81	Pass
60	5300	7.25	6.82	10.117	10.05	23.84	Pass
64	5320	7.36	6.82	10.253	10.11	23.81	Pass
100	5500	8.76	8.32	14.308	11.56	23.80	Pass
116	5580	8.62	8.41	14.212	11.53	23.83	Pass
140	5700	8.91	8.78	15.331	11.86	23.86	Pass
144	5720 (For U-NII-2C)	7.26	7.34	10.740	10.31	22.65	Pass
144	5720 (For U-NII-3)	2.12	2.25	3.310	5.20	30.00	Pass
149	5745	9.63	9.43	17.953	12.54	30.00	Pass
157	5785	9.62	9.12	17.328	12.39	30.00	Pass
165	5825	9.43	9.23	17.145	12.34	30.00	Pass

Note:

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

Chain 0

- 1. 11dBm + 10log (19.13) = 23.81 < 24dBm
- 2. 11dBm + 10log (19.76) = 23.95 < 24dBm
- 3. 11dBm + 10log (19.64) = 23.93 < 24dBm
- 4. 11dBm + 10log (19.45) = 23.88 < 24dBm
- 5. 11dBm + 10log (19.24) = 23.84 < 24dBm
- 6. 11dBm + 10log (19.34) = 23.86 < 24dBm
- 7. 11dBm + 10log (5725.00 5710.14) = 22.72 < 24dBm

- 1. 11dBm + 10log (19.30) = 23.85 < 24dBm
- 2. 11dBm + 10log (19.24) = 23.84 < 24dBm
- 3. 11dBm + 10log (19.13) = 23.81 < 24dBm
- 4. 11dBm + 10log (19.06) = 23.80 < 24dBm
- 5. 11dBm + 10log (19.22) = 23.83 < 24dBm
- 6. 11dBm + 10log (19.49) = 23.89 < 24dBm
- 7. 11dBm + 10log (5725.00 5710.37) = 22.65 < 24dBm



802.11n (HT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total	Total	Power Limit	Pass /
		Chain 0	Chain 1	Power (mW)	Power (dBm)	(dBm)	Fail
36	5180	7.53	6.77	10.415	10.18	24.00	Pass
40	5200	7.32	6.62	9.987	9.99	24.00	Pass
48	5240	7.54	6.92	10.595	10.25	24.00	Pass
52	5260	7.12	7.21	10.412	10.18	24.00	Pass
60	5300	7.17	6.74	9.933	9.97	24.00	Pass
64	5320	7.21	6.73	9.970	9.99	24.00	Pass
100	5500	8.62	8.12	13.764	11.39	24.00	Pass
116	5580	8.52	8.34	13.935	11.44	24.00	Pass
140	5700	8.53	8.43	14.095	11.49	24.00	Pass
144	5720 (For U-NII-2C)	7.53	7.36	11.107	10.46	22.84	Pass
144	5720 (For U-NII-3)	2.92	2.62	3.787	5.78	30.00	Pass
149	5745	9.11	9.42	16.897	12.28	30.00	Pass
157	5785	9.56	9.42	17.786	12.50	30.00	Pass
165	5825	9.23	9.56	17.411	12.41	30.00	Pass

Note:

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

Chain 0

- 1. 11dBm + 10log (29.38) = 25.68 > 24dBm
- 2. 11dBm + 10log (20.56) = 24.13 > 24dBm
- 3. 11dBm + 10log(20.70) = 24.15 > 24dBm
- 4. 11dBm + 10log (20.56) = 24.13 > 24dBm
- 5. 11dBm + 10log (20.84) = 24.18 > 24dBm
- 6. 11dBm + 10log (20.62) = 24.14 > 24dBm
- 7. 11dBm + 10log (5725.00 5709.51) = 22.90 < 24dBm

- 1. 11dBm + 10log (20.80) = 24.18 > 24dBm
- 2. 11dBm + 10log (20.53) = 24.12 > 24dBm
- 3. 11dBm + 10log(20.57) = 24.13 > 24dBm
- 4. 11dBm + 10log (20.56) = 24.13 > 24dBm
- 5. 11dBm + 10log (20.50) = 24.11 > 24dBm
- 6. 11dBm + 10log (20.52) = 24.12 > 24dBm
- 7. 11dBm + 10log (5725.00 5709.70) = 22.84 < 24dBm



802.11n (HT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power	Total Power	Power Limit	Pass /
		Chain 0	Chain 1	(mW)	(dBm)	(dBm)	Fail
38	5190	6.38	6.43	8.740	9.42	24.00	Pass
46	5230	6.53	6.60	9.069	9.58	24.00	Pass
54	5270	6.82	6.67	9.453	9.76	24.00	Pass
62	5310	6.72	6.34	9.004	9.54	24.00	Pass
102	5510	8.46	8.16	13.561	11.32	24.00	Pass
110	5550	8.32	8.36	13.647	11.35	24.00	Pass
134	5670	8.22	8.01	12.961	11.13	24.00	Pass
142	5710 (For U-NII-2C)	7.27	7.44	10.879	10.37	24.00	Pass
142	5710 (For U-NII-3)	0.89	-0.29	2.1628	3.35	30.00	Pass
151	5755	8.93	8.52	14.928	11.74	30.00	Pass
159	5795	8.93	8.74	15.298	11.85	30.00	Pass

Note:

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

Chain 0

- 1. 11dBm + 10log (42.10) = 27.24 > 24dBm
- 2. 11dBm + 10log (42.26) = 27.25 > 24dBm
- 3. 11dBm + 10log (42.19) = 27.25 > 24dBm
- 4. 11dBm + 10log (42.02) = 27.23 > 24dBm
- 5. 11dBm + 10log (46.31) = 27.65 > 24dBm
- 6. 11dBm + 10log (5725.00 5684.79) = 27.04 > 24dBm

- 1. 11dBm + 10log (42.09) = 27.24 > 24dBm
- 2. 11dBm + 10log (41.92) = 27.22 > 24dBm
- 3. 11dBm + 10log (42.50) = 27.28 > 24dBm
- 4. 11dBm + 10log (42.45) = 27.27 > 24dBm
- 5. 11dBm + 10log (42.33) = 27.26 > 24dBm
- 6. 11dBm + 10log (5725.00 5688.96) = 26.56 > 24dBm



802.11ac (VHT80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power	Total Power	Power Limit	Pass /
		Chain 0	Chain 1	(mW)	(dBm)	(dBm)	Fail
42	5210	6.76	6.61	9.323	9.70	24.00	Pass
58	5290	6.92	6.57	9.459	9.76	24.00	Pass
106	5530	8.26	8.02	13.038	11.15	24.00	Pass
122	5610	8.02	8.01	12.663	11.03	24.00	Pass
138	5690 (For U-NII-2C)	7.74	7.56	11.645	10.66	24.00	Pass
138	5690 (For U-NII-3)	-3.65	-2.93	0.9408	-0.27	30.00	Pass
155	5775	8.91	8.31	14.556	11.63	30.00	Pass

Note:

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

Chain 0

- 1. 11dBm + 10log (82.10) = 30.14 > 24dBm
- 2. 11dBm + 10log (84.92) = 30.29 > 24dBm
- 3.11dBm + 10log(81.95) = 30.13 > 24dBm
- 4. 11dBm + 10log (5725.00 5649.52) = 29.78 > 24dBm

- 1. 11dBm + 10log (84.04) = 30.24 > 24dBm
- 2. 11dBm + 10log (83.37) = 30.21 > 24dBm
- 3.11dBm + 10log (84.51) = 30.26 > 24dBm
- 4. 11dBm + 10log (5725.00 5647.95) = 29.87 > 24dBm



26dB Bandwidth:

802.11a

Chan	Freq.	26dBc Bandwidth (MHz)	
Chan.	(MHz)	Chain 0	Chain 1
52	5260	19.13	19.30
60	5300	19.76	19.24
64	5320	19.64	19.13
100	5500	19.45	19.06
116	5580	19.24	19.22
140	5700	19.34	19.49
144	5720 (For U-NII-2C)	14.86	14.63
144	5720 (For U-NII-3)	4.55	4.53

802.11n (HT20)

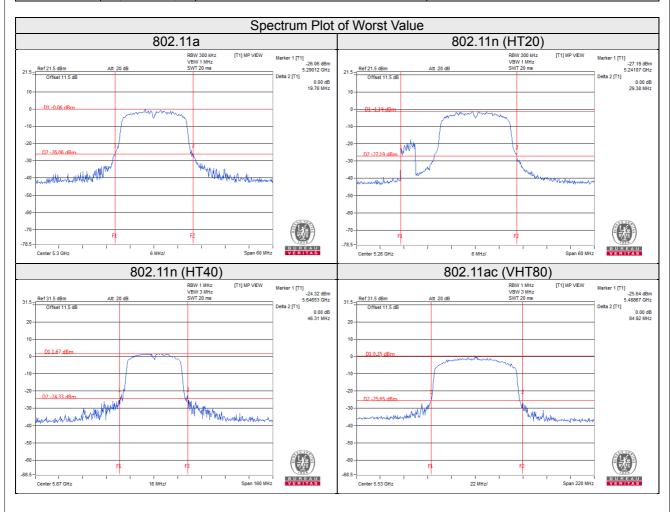
Chan.	Freq.	26dBc Bandwidth (MHz)	
Crian.	(MHz)	Chain 0	Chain 1
52	5260	29.38	20.80
60	5300	20.56	20.53
64	5320	20.70	20.57
100	5500	20.56	20.56
116	5580	20.84	20.50
140	5700	20.62	20.52
144	5720 (For U-NII-2C)	15.49	15.30
144	5720 (For U-NII-3)	5.36	5.14

802.11n (HT40)

Oh ava	Freq.	26dBc Bandwidth (MHz)	
Chan.	(MHz)	Chain 0	Chain 1
54	5270	42.10	42.09
62	5310	42.26	41.92
102	5510	42.19	42.50
110	5550	42.02	42.45
134	5670	46.31	42.33
142	5710 (For U-NII-2C)	40.21	36.04
142	5710 (For U-NII-3)	9.24	6.07



Chan	Freq. (MHz)	26dBc Bandwidth (MHz)	
Chan.		Chain 0	Chain 1
58	5290	82.10	84.04
106	5530	84.92	83.37
122	5610	81.95	84.51
138	5690 (For U-NII-2C)	75.48	77.05
138	5690 (For U-NII-3)	5.49	6.88





EUT Maximum Conducted Power

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	10.667	10.28
5470~5725	15.331	11.86

802.11n (HT20)

Fraguerou Dond (MIII)	Max. Power	
Frequency Band (MHz)	Output Power (mW)	Output Power (dBm)
5250~5350	10.412	10.18
5470~5725	14.095	11.49

802.11n (HT40)

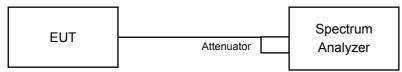
Francisco Dand (MIII-)	Max. Power	
Frequency Band (MHz)	Output Power (mW)	Output Power (dBm)
5250~5350	9.453	9.76
5470~5725	13.647	11.35

Eroguanov Band (MHz)	Max. Power	
Frequency Band (MHz)	Output Power (mW)	Output Power (dBm)
5250~5350	9.459	9.76
5470~5725	13.038	11.15



4.4 Occupied Bandwidth Measurement

4.4.1 Test Setup



4.4.2 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.4.3 Test Procedure

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



4.4.4 Test Result

802.11a

Chan	Freq.	Occupied Ban	dwidth (MHz)
Chan.	(MHz)	Chain 0	Chain 1
36	5180	16.20	16.32
40	5200	16.32	16.32
48	5240	16.32	16.32
52	5260	16.32	16.32
60	5300	16.32	16.32
64	5320	17.64	16.32
100	5500	16.20	16.32
116	5580	16.32	16.32
140	5700	16.20	16.20
144	5720 (For U-NII-2C)	13.28	13.16
144	5720 (For U-NII-3)	3.04	3.04
149	5745	16.32	16.32
157	5785	17.52	16.32
165	5825	16.32	16.32



802.11n (HT20)

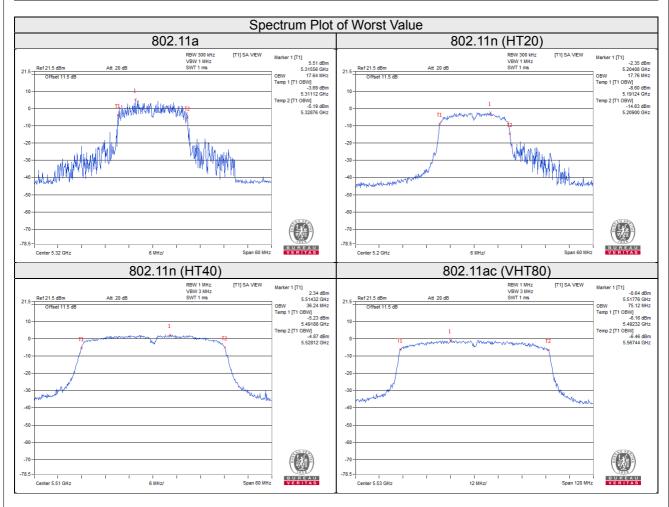
Chan	Freq.	Occupied Ban	dwidth (MHz)
Chan.	(MHz)	Chain 0	Chain 1
36	5180	17.52	17.40
40	5200	17.76	17.40
48	5240	17.64	17.40
52	5260	17.28	17.40
60	5300	17.40	17.40
64	5320	17.40	17.40
100	5500	17.40	17.40
116	5580	17.40	17.40
140	5700	17.40	17.40
144	5720 (For U-NII-2C)	13.88	13.76
144	5720 (For U-NII-3)	3.64	3.64
149	5745	17.40	17.40
157	5785	17.40	17.40
165	5825	17.40	17.40

802.11n (HT40)

Ohan	Freq.	Occupied Bandwidth (MHz)	
Chan.	(MHz)	Chain 0	Chain 1
38	5190	36.12	36.00
46	5230	36.00	36.00
54	5270	36.00	36.00
62	5310	36.12	36.00
102	5510	36.24	36.00
110	5550	36.00	36.00
134	5670	36.12	36.00
142	5710 (For U-NII-2C)	33.12	33.00
142	5710 (For U-NII-3)	3.00	3.00
151	5755	36.12	36.00
159	5795	36.12	36.00



Chan.	Freq.	Occupied Bandwidth (MHz)	
Gilaii.	(MHz)	Chain 0	Chain 1
42	5210	74.88	75.12
58	5290	74.88	74.88
106	5530	74.64	75.12
122	5610	74.64	75.12
138	5690 (For U-NII-2C)	72.68	72.68
138	5690 (For U-NII-3)	2.20	2.44
155	5775	74.88	75.12





4.5 Peak Power Spectral Density Measurement

4.5.1 Limits of Peak Power Spectral Density Measurement

Operation Band		EUT Category	Limit
		Outdoor Access Point	
U-NII-1		Fixed point-to-point Access Point	17dBm/ MHz
U-INII- I		Indoor Access Point	
	$\sqrt{}$	Mobile and Portable client device	11dBm/ MHz
U-NII-2A		\checkmark	11dBm/ MHz
U-NII-2C			11dBm/ MHz
U-NII-3			30dBm/ 500kHz

4.5.2 Test Setup



4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.5.4 Test Procedures

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

Using method SA-2

- a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
- b. Set RBW = 1MHz, Set VBW ≥ 3 MHz, Detector = RMS
- c. Set Channel power measure = 1MHz
- d. Sweep time = auto, trigger set to "free run".
- e. Trace average at least 100 traces in power averaging mode.
- f. Record the max value and add 10 log (1/duty cycle)

For U-NII-3 band:

- a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
- b. Set RBW = 300 kHz, Set VBW ≥ 1 MHz, Detector = RMS
- c. Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.
- d. Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log(500 kHz / 300 kHz)
- e. Sweep time = auto, trigger set to "free run".
- f. Trace average at least 100 traces in power averaging mode.
- g. Record the max value and add 10 log (1/duty cycle)



4.5.5 Deviation from Test Standard No deviation.	
4.5.6 EUT Operating Conditions Same as 4.3.6.	

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4.5.7 Test Results

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

802.11a

Chan.	Freq.	PSD w/o Duty Fa	actor (dBm/MHz)	Duty	Total PSD with	Max. Limit	Pass /
Chan.	(MHz)	Chain 0	Chain 1	Factor (dB)	Duty Factor (dBm/MHz)	(dBm/MHz)	Fail
36	5180	-5.37	-5.93	0.20	-2.43	10.90	Pass
40	5200	-5.57	-5.47	0.20	-2.31	10.90	Pass
48	5240	-5.11	-5.76	0.20	-2.21	10.90	Pass
52	5260	-5.19	-5.69	0.20	-2.22	10.90	Pass
60	5300	-5.29	-5.92	0.20	-2.38	10.90	Pass
64	5320	-5.32	-5.92	0.20	-2.40	10.90	Pass
100	5500	-4.13	-4.69	0.20	-1.19	10.90	Pass
116	5580	-4.42	-4.66	0.20	-1.33	10.90	Pass
140	5700	-3.90	-4.40	0.20	-0.93	10.90	Pass
144	5720	-4.30	-4.70	0.20	-1.28	10.90	Pass

- 1. Method 1 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. Directional gain = 3.09dBi + $10\log(2)$ = 6.10dBi > 6dBi, so the power density limit shall be reduced to 11-(6.10-6) = 10.90dBm.
- 3. Refer to section 3.3 for duty cycle spectrum plot.



802.11n (HT20)

Chan.	Freq.	PSD w/o Duty Fa	actor (dBm/MHz)	Duty Factor	Total PSD with	Max. Limit	Pass /
Chan.	(MHz)	Chain 0	Chain 1	(dB)	Duty Factor (dBm/MHz)	(dBm/MHz)	Fail
36	5180	-6.30	-6.57	0.31	-3.11	10.90	Pass
40	5200	-6.08	-6.70	0.31	-3.06	10.90	Pass
48	5240	-4.81	-5.95	0.31	-2.02	10.90	Pass
52	5260	-5.50	-6.26	0.31	-2.54	10.90	Pass
60	5300	-5.71	-6.42	0.31	-2.73	10.90	Pass
64	5320	-5.71	-6.54	0.31	-2.78	10.90	Pass
100	5500	-4.52	-5.25	0.31	-1.55	10.90	Pass
116	5580	-4.70	-5.35	0.31	-1.69	10.90	Pass
140	5700	-4.43	-4.91	0.31	-1.34	10.90	Pass
144	5720	-4.24	-4.74	0.31	-1.16	10.90	Pass

Note:

- 1. Method 1 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. Directional gain = 3.09dBi + $10\log(2)$ = 6.10dBi > 6dBi, so the power density limit shall be reduced to 11-(6.10-6) = 10.90dBm.
- 3. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

Chan.	Freq.	PSD w/o Duty Fa	actor (dBm/MHz)	Duty	Total PSD with	Max. Limit	Pass /
Chan.	(MHz)	Chain 0	Chain 1	Factor (dB)	Duty Factor (dBm/MHz)	(dBm/MHz)	Fail
38	5190	-10.23	-10.30	0.43	-6.83	10.90	Pass
46	5230	-9.87	-9.93	0.43	-6.46	10.90	Pass
54	5270	-9.73	-9.94	0.43	-6.40	10.90	Pass
62	5310	-9.73	-10.13	0.43	-6.49	10.90	Pass
102	5510	-8.19	-8.22	0.43	-4.77	10.90	Pass
110	5550	-8.76	-8.31	0.43	-5.09	10.90	Pass
134	5670	-8.86	-8.66	0.43	-5.32	10.90	Pass
142	5710	-8.31	-8.60	0.43	-5.01	10.90	Pass

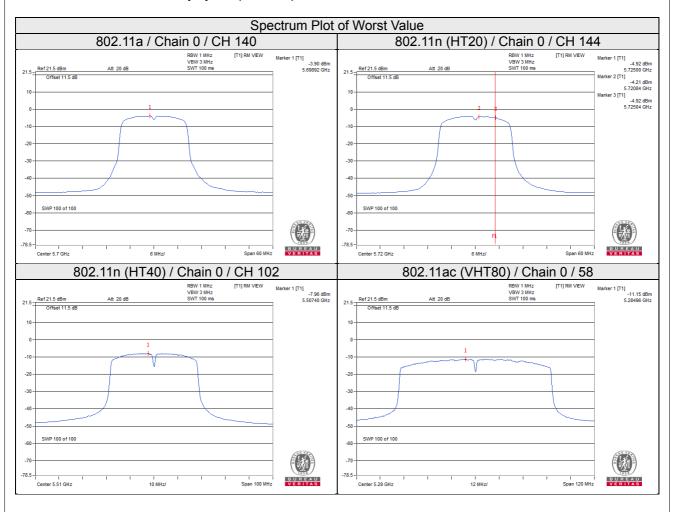
- 1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- 2. Directional gain = 3.09dBi + $10\log(2)$ = 6.10dBi > 6dBi, so the power density limit shall be reduced to 11-(6.10-6) = 10.90dBm.
- 3. Refer to section 3.3 for duty cycle spectrum plot.



802.11ac (VHT80)

Chan	Chan. Freq. (MHz)	PSD w/o Duty Fa	actor (dBm/MHz)	Duty	Total PSD with	Max. Limit	Pass /
Chan.		Chain 0	Chain 1	Factor (dB)	Duty Factor (dBm/MHz)	(dBm/MHz)	Fail
42	5210	-13.42	-13.13	0.93	-9.34	10.90	Pass
58	5290	-11.15	-13.01	0.93	-8.05	10.90	Pass
106	5530	-12.50	-11.63	0.93	-8.11	10.90	Pass
122	5610	-12.05	-12.10	0.93	-8.14	10.90	Pass
138	5690	-11.98	-11.94	0.93	-8.02	10.90	Pass

- 1. Method 1 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. Directional gain = 3.09dBi + 10log(2) = 6.10dBi > 6dBi, so the power density limit shall be reduced to 11-(6.10-6) = 10.90dBm.
- 3. Refer to section 3.3 for duty cycle spectrum plot.





For U-NII-3 band:

802.11a

TX	Chan	Chan. Freq. (MHz)	PSD W/O	Outy Factor	10 log	Duty Factor	Total PSD With	Limit (dBm/	Pass
chain	Criari.		(dBm/300kHz)	(dBm/500kHz)	(N=2) dB	(dB)	Duty Factor (dBm/500kHz)	500kHz)	/ Fail
	144	5720	-13.65	-11.43	3.01	0.20	-8.22	29.90	Pass
0	149	5745	-11.61	-9.39	3.01	0.20	-6.18	29.90	Pass
	157	5785	-11.82	-9.60	3.01	0.20	-6.39	29.90	Pass
	165	5825	-12.54	-10.32	3.01	0.20	-7.11	29.90	Pass
	144	5720	-14.20	-11.98	3.01	0.20	-8.77	29.90	Pass
1	149	5745	-12.16	-9.94	3.01	0.20	-6.73	29.90	Pass
'	157	5785	-12.49	-10.27	3.01	0.20	-7.06	29.90	Pass
	165	5825	-12.14	-9.92	3.01	0.20	-6.71	29.90	Pass

Note:

- 1. Directional gain = 3.09dBi + 10log(2) = 6.10dBi > 6dBi, so the power density limit shall be reduced to 30-(6.10-6) = 29.90dBm.
- 2. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

TX C	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log	Duty Factor	Total PSD With Duty Factor	Limit (dBm/	Pass
chain	Chan.		(dBm/300kHz)	(dBm/500kHz)	(N=2) dB	(dB)	(dBm/500kHz)	500kHz)	/ Fail
	144	5720	-13.42	-11.20	3.01	0.31	-7.88	29.90	Pass
0	149	5745	-12.40	-10.18	3.01	0.31	-6.86	29.90	Pass
	157	5785	-12.34	-10.12	3.01	0.31	-6.80	29.90	Pass
	165	5825	-12.66	-10.44	3.01	0.31	-7.12	29.90	Pass
	144	5720	-13.95	-11.73	3.01	0.31	-8.41	29.90	Pass
1	149	5745	-12.95	-10.73	3.01	0.31	-7.41	29.90	Pass
'	157	5785	-12.83	-10.61	3.01	0.31	-7.29	29.90	Pass
	165	5825	-12.75	-10.53	3.01	0.31	-7.21	29.90	Pass

- 1. Directional gain = 3.09dBi + 10log(2) = 6.10dBi > 6dBi, so the power density limit shall be reduced to 30-(6.10-6) = 29.90dBm.
- 2. Refer to section 3.3 for duty cycle spectrum plot.



802.11n (HT40)

TX	TX chain Chan. Freq. (MHz)	Freq.	PSD W/O	PSD W/O Duty Factor		Duty Factor	Total PSD With	Limit	Pass
chain		(dBm/300kHz)	(dBm/500kHz)	(N=2) dB	(dB)	Duty Factor (dBm/500kHz)	(dBm/ 500kHz)	/ Fail	
	142	5710	-19.48	-17.26	3.01	0.43	-13.82	29.90	Pass
0	151	5755	-16.70	-14.48	3.01	0.43	-11.04	29.90	Pass
	159	5795	-16.48	-14.26	3.01	0.43	-10.82	29.90	Pass
	142	5710	-19.39	-17.17	3.01	0.43	-13.73	29.90	Pass
1	151	5755	-16.87	-14.65	3.01	0.43	-11.21	29.90	Pass
	159	5795	-16.60	-14.38	3.01	0.43	-10.94	29.90	Pass

Note:

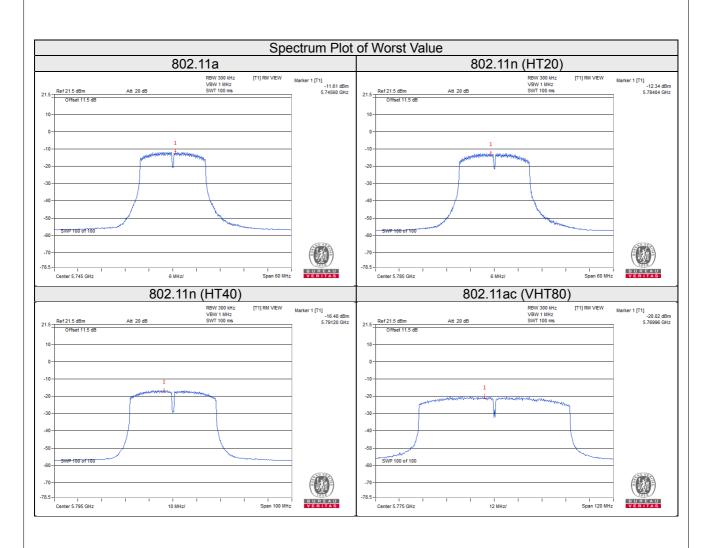
- 1. Directional gain = 3.09dBi + 10log(2) = 6.10dBi > 6dBi, so the power density limit shall be reduced to 30-(6.10-6) = 29.90dBm.
- 2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT80)

TX chain Chan.	Chan	Freq.	Freq. PSD W/O Duty Factor		10 log (N=2)	Duty Factor	Total PSD With	Limit	Pass
		(dBm/300kHz)	(dBm/500kHz)	dB	(dB)	Duty Factor (dBm/500kHz)	(dBm/ 500kHz)	/ Fail	
0	138	5690	-25.18	-22.96	3.01	0.93	-19.02	29.90	Pass
0	155	5775	-20.03	-17.81	3.01	0.93	-13.87	29.90	Pass
4	138	5690	-23.93	-21.71	3.01	0.93	-17.77	29.90	Pass
'	155	5775	-20.02	-17.80	3.01	0.93	-13.86	29.90	Pass

- 1. Directional gain = 3.09dBi + 10log(2) = 6.10dBi > 6dBi, so the power density limit shall be reduced to 30-(6.10-6) = 29.90dBm.
- 2. Refer to section 3.3 for duty cycle spectrum plot.





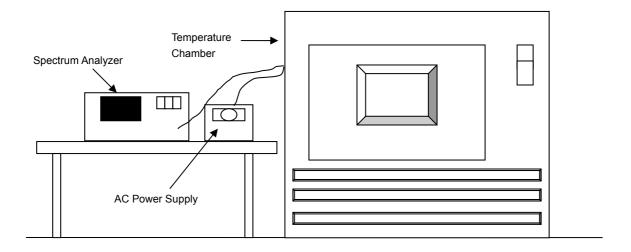


4.6 Frequency Stability

4.6.1 Limits of Frequency Stability Measurement

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

4.6.2 Test Setup



4.6.3 Test Instruments

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 2 and 3 with the temperature chamber set to the lowest temperature.
- f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.6.5 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 S	Stability Versu	ıs Temp.							
	Operating Frequency: 5180MHz												
т	Power	0 Mi	nute	2 Mi	nute	5 Mi	nute	10 M	inute				
Temp. (°C)	Supply (Vac)	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result				
50	120	5179.9915	Pass	5179.9904	Pass	5179.9915	Pass	5179.9875	Pass				
40	120	5180.0046	Pass	5180.0046	Pass	5180.0046	Pass	5180.0037	Pass				
30	120	5179.9986	Pass	5179.9949	Pass	5179.9957	Pass	5179.999	Pass				
20	120	5179.9792	Pass	5179.9747	Pass	5179.9786	Pass	5179.9765	Pass				
10	120	5180.0114	Pass	5180.0147	Pass	5180.0107	Pass	5180.0136	Pass				
0	120	5179.9827	Pass	5179.9784	Pass	5179.978	Pass	5179.9822	Pass				
-10	120	5180.0168	Pass	5180.0164	Pass	5180.0198	Pass	5180.0193	Pass				
-20	120	5179.9754	Pass	5179.9726	Pass	5179.975	Pass	5179.972	Pass				
-30	120	5180.0249	Pass	5180.0239	Pass	5180.0273	Pass	5180.0241	Pass				

	Frequency Stability Versus Voltage												
	Operating Frequency: 5180MHz												
Power 0 Minute 2 Minute 5 Minute 10 Minu									inute				
i iemp. i	Supply (Vac)	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result				
	138	5179.9784	Pass	5179.9737	Pass	5179.978	Pass	5179.9758	Pass				
20	120	5179.9792	Pass	5179.9747	Pass	5179.9786	Pass	5179.9765	Pass				
	102 5179.98 Pass 5179.9756 Pass 5179.9787 Pass 5179.976 Pass												

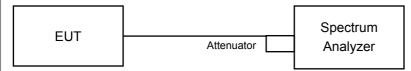


4.7 6dB Bandwidth Measurement

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) \geq 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	Pass / Fail
		Chain 0	Chain 1	(MHz)	Fass / Fall
144 (For U-NII-3)	5720	2.56	2.58	0.5	Pass
149	5745	15.21	15.20	0.5	Pass
157	5785	15.39	15.20	0.5	Pass
165	5825	15.38	15.19	0.5	Pass

802.11n (HT20)

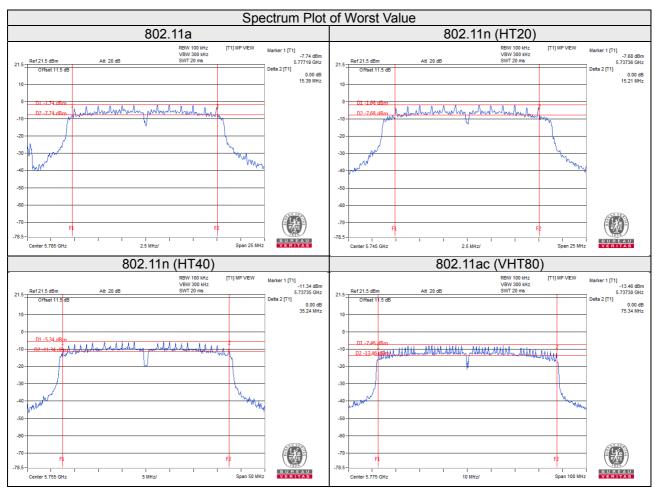
Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit	Pass / Fail
		Chain 0	Chain 1	(MHz)	rass/raii
144 (For U-NII-3)	5720	2.56	2.57	0.5	Pass
149	5745	15.21	15.16	0.5	Pass
157	5785	15.20	15.20	0.5	Pass
165	5825	15.20	15.17	0.5	Pass

802.11n (HT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit	Pass / Fail
		Chain 0	Chain 1	(MHz)	Fass / Fall
142 (For U-NII-3)	5710	2.59	2.54	0.5	Pass
151	5755	35.24	35.19	0.5	Pass
159	5795	35.24	35.19	0.5	Pass

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit	Dogo / Foil
		Chain 0	Chain 1	(MHz)	Pass / Fail
138 (For U-NII-3)	5690	2.60	2.64	0.5	Pass
155	5775	75.27	75.34	0.5	Pass





Note:

For CH144 (UNII-3 Band): The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz For CH142 (UNII-3 Band): The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz For CH138 (UNII-3 Band): The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

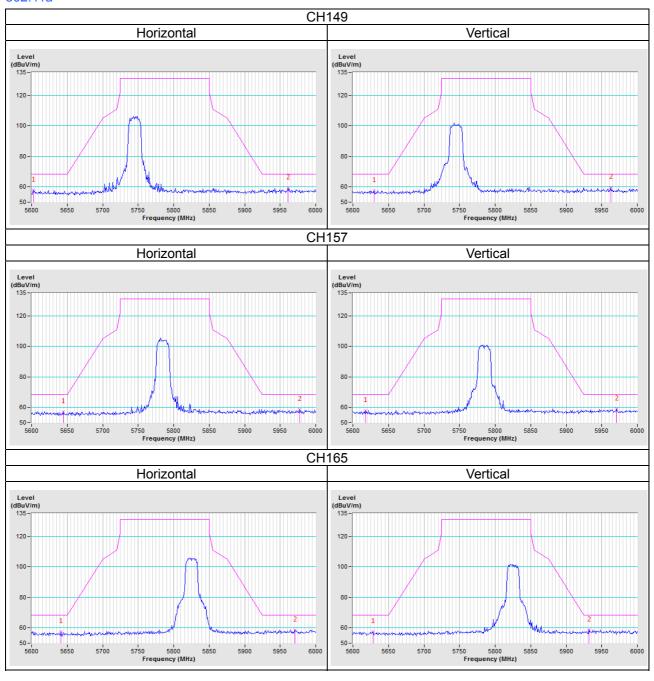


5 Pictures of Test Arrangements	
Please refer to the attached file (Test Setup Photo).	



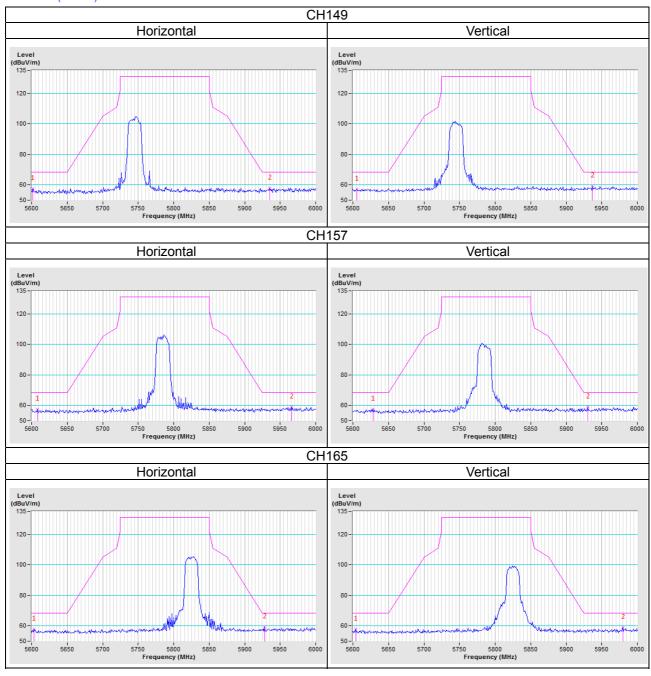
Annex A- Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band)

802.11a



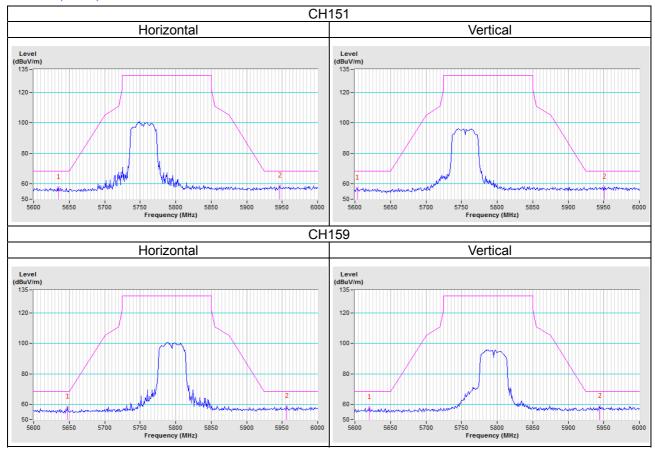


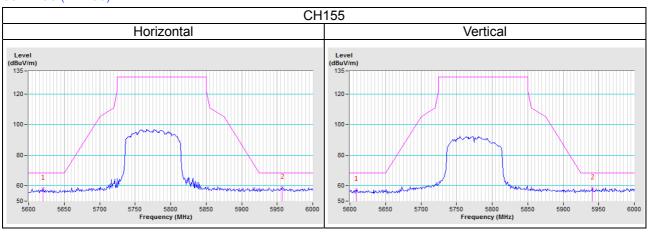
802.11n (HT20)





802.11n (HT40)







Appendix – Information on the Testing Laboratories

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

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Hwa Ya EMC/RF/Safety

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Email: service.adt@tw.bureauveritas.com
Web Site: www.bureauveritas-adt.com

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

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