



TEST REPORT

Applicant	Shanghai Mobvoi Information Technology Company Limited
Address	Building 2-106,1690 Cailun Road, China (Shanghai) free trade area, China Shanghai 201203 China

Manufacturer or Supplier	Shanghai Mobvoi Information Technology Company Limited
Address	Building 2-106,1690 Cailun Road,China (Shanghai) free trade area, China Shanghai 201203 China
Product Name	Smart Speaker
Brand Name	Mobvoi
Model	TicHome Mini
Additional Model & Model Difference	N/A
Date of tests	Aug. 15, 2017 ~ Sep. 02, 2017

The tests have been carried out according to the requirements of the following standard:

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Tested by Harry Li	Approved by Glyn He
Project Engineer / EMC Department	Supervisor / EMC Department
1 Tojout Engineer / Eme Department	Caporricor / Zimo Doparamoni

Date: Oct. 17, 2017

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TABLE OF CONTENTS

REL	EASE (CONTROL RECORD	4
1.	SUMM	IARY OF TEST RESULTS	5
1.	.1 N	MEASUREMENT UNCERTAINTY	5
2.	GENE	RAL INFORMATION	6
2.	.1 GENI	ERAL DESCRIPTION OF EUT	6
2.	.2 DES	CRIPTION OF TEST MODES	8
	2.2.1	EST MODE APPLICABILITY AND TESTED CHANNEL DETAIL	10
2.	.3 DUT	CYCLE OF TEST SIGNAL	12
2.	.4 DESC	CRIPTION OF SUPPORT UNITS	13
2.	.5 GENI	ERAL DESCRIPTION OF APPLIED STANDARDS	13
3.	TEST	TYPES AND RESULTS	14
3.	.1 RAI	DIATED EMISSION AND BANDEDGE MEASUREMENT	14
	3.1.1	LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT	14
	3.1.2	LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS	15
	3.1.3	TEST INSTRUMENTS	16
	3.1.4	TEST PROCEDURES	17
	3.1.5	DEVIATION FROM TEST STANDARD	17
	3.1.6	TEST SETUP	18
	3.1.7	EUT OPERATING CONDITION	18
	3.1.8	TEST RESULTS	19
3.	.2 CO	NDUCTED EMISSION MEASUREMENT	53
	3.2.1	LIMITS OF CONDUCTED EMISSION MEASUREMENT	53
	3.2.2	TEST INSTRUMENTS	53
	3.2.3	TEST PROCEDURES	54
	3.2.4	DEVIATION FROM TEST STANDARD	54
	3.2.5	TEST SETUP	54
	3.2.6	EUT OPERATING CONDITIONS	54
	3.2.7	TEST RESULTS	55
3.	.3 TR/	ANSMIT POWER MEASUREMENT	57

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RY T	THE I AF	B	85
5.	APPEN	NDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE	EUT
4.	РНОТО	OGRAPHS OF THE TEST CONFIGURATION	84
	3.5.7	TEST RESULTS	83
	3.5.6	EUT OPERATING CONDITION	82
	3.5.5	DEVIATION FROM TEST STANDARD	82
	3.5.4	TEST PROCEDURE	82
	3.5.3	TEST INSTRUMENTS	81
	3.5.2	TEST SETUP	81
	3.5.1	LIMITS OF FREQUENCY STABILITY MEASUREMENT	81
3.	.5 FRE	QUENCY STABILITY	81
	3.4.7	TEST RESULTS	74
	3.4.6	EUT OPERATING CONDITIONS	73
	3.4.5	DEVIATION FROM TEST STANDARD	73
	3.4.4	TEST PROCEDURES	72
	3.4.3	TEST INSTRUMENTS	72
	3.4.2	TEST SETUP	
	3.4.1	LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT	
3.		K POWER SPECTRAL DENSITY MEASUREMENT	
	3.3.7	TEST RESULTS	
	3.3.6	EUT OPERATING CONDITIONS	
	3.3.5	DEVIATION FROM TEST STANDARD	
	3.3.4	TEST PROCEDURE	
	3.3.3	TEST INSTRUMENTS	
	3.3.2	TEST SETUP	
	3.3.1	LIMITS OF TRANSMIT POWER MEASUREMENT	57



RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF170815N042-3	Original release.	Oct. 17, 2017

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Page 4 of 85



1. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E (SECTION 15.407 UNDER NEW RULE)			
STANDARD SECTION	TEST TYPE	RESULT	REMARK
15.407(b)(6)	AC Power Conducted Emissions	PASS	Meet the requirement of limit.
15.407(b) (1/2/3/4/6)	Radiated Emissions & Band Edge Measurement	PASS	Meet the requirement of limit.
15.407(a)(1/2/3)	Max Average Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(1/2/3)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	No antenna connector is used

1.1 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	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.70dB
	9KHz ~ 30MHz	2.16dB
Radiated emissions	30MHz ~ 1GMHz	3.83dB
Radiated emissions	1GHz ~ 18GHz	4.66dB
	18GHz ~ 40GHz	4.67dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT NAME	Smart Speaker	
MODEL NO.	TicHome Mini	
FCC ID	2AHEA-TICHOMEMINI	
POWER SUPPLY	DC 3.7V from Battery or DC 5V from USB Host Unit	
MODULATION TYPE	64QAM, 16QAM, QPSK, BPSK	
MODULATION TECHNOLOGY	OFDM	
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 135Mbps	
ODED ATIMO EDECUENCY	5150 ~ 5250MHz, 5250 ~ 5350MHz	
OPERATING FREQUENCY	5470 ~ 5725MHz, 5725 ~ 5850MHz	
NUMBER OF CHANNEL	5150 ~ 5250MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz), 5250 ~ 5350MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz), 5470 ~ 5725MHz: 8 for 802.11a, 802.11n (20MHz) 3 for 802.11n (40MHz), 5725 ~ 5850MHz: 3 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz),	
CONDUCTED OUTPUT POWER	15.38 dBm for 5150 ~ 5250MHz (Maximum AVG Power) 15.31 dBm for 5250 ~ 5350MHz (Maximum AVG Power) 15.41 dBm for 5500 ~ 5725MHz (Maximum AVG Power) 15.33 dBm for 5725 ~ 5850MHz (Maximum AVG Power)	
ANTENNA TYPE	5150 ~ 5250MHz: FPC antenna with 4.00dBi gain 5250 ~ 5350MHz: FPC antenna with 5.13dBi gain 5470 ~ 5725MHz: FPC antenna with 5.32dBi gain 5725 ~ 5850MHz: FPC antenna with 5.32dBi gain	
I/O PORTS	Refer to user's manual	
CABLE SUPPLIED	USB Line: Unshielded, Detachable, 0.75m	



NOTE:

1. The EUT incorporates a SISO function. Physically, the EUT provides 1 completed transmitter and 1 receiver.

MODULATION MODE	TX FUNCTION
802.11a	1TX/1RX
802.11n (20MHz)	1TX/1RX
802.11n (40MHz)	1TX/1RX

- 2. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- 3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
- 4. Please refer to the EUT photo document (Reference No.: 170815N042) for detailed product photo.



2.2 DESCRIPTION OF TEST MODES

FOR 5150 ~ 5250MHz

4 channels are provided for 802.11a, 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180 MHz	40	5200 MHz
44	5220 MHz	48	5240 MHz

2 channels are provided for 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

FOR 5250 ~ 5350MHz

4 channels are provided for 802.11a, 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY	
52	5260 MHz	56	5280 MHz	
60	5300 MHz	64	5320 MHz	

2 channels are provided for 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY	
54	5270 MHz	62	5310 MHz	

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FOR 5470 ~ 5725MHz

8 channels are provided for 802.11a, 802.11n (20MHz):

CHANNEL	FREQUENCY	REQUENCY CHANNEL	
100	5500 MHz	104	5520 MHz
108	5540 MHz	112	5560 MHz
116	5580 MHz	132	5660 MHz
136	5680 MHz	140	5700 MHz

3 channels are provided for 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	110	5550 MHz
134	5670 MHz		

FOR 5725 ~ 5850MHz

3 channels are provided for 802.11a, 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY	
149	5745MHz	157	5785MHz	
165	5825MHz	-		

2 channels are provided for 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY	
151	5755MHz	159	5795MHz	

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2.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE		APPLICA	ABLE TO		DESCRIPTION
MODE	RE≥1G	RE<1G	PLC	APCM	DESCRIPTION
А	•	-	1	- √	Powered by Full Battery& Powered by USB Host Unit
В	V	√	V	-	Powered by Full Battery& Powered by adaptor

Where

RE≥1G: Radiated Emission above 1GHz

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

NOTE:

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

RADIATED EMISSION TEST (ABOVE 1GHz):

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
В	802.11a		36 to 48	36, 40, 48	OFDM	BPSK	6.0
В	802.11n (20MHz)	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.5
В	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	13.5
В	802.11a		52 to 64	52, 60, 64	OFDM	BPSK	6.0
В	802.11n (20MHz)	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	MCS0
В	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	MCS0
В	802.11a		100 to 140	100, 116, 140	OFDM	BPSK	6.0
В	802.11n (20MHz)	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	MCS0
В	802.11n (40MHz)		102 to 134	102, 118, 134	OFDM	BPSK	MCS0
В	802.11a		149 to 165	149, 157, 165	OFDM	BPSK	6.0
В	802.11n (20MHz)	5725-5825	149 to 165	149, 157, 165	OFDM	BPSK	MCS0
В	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	MCS0

RADIATED EMISSION TEST (BELOW 1GHz):

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
В	802.11a	5180-5240 5725-5850	36 to 48 149 to 165	36	OFDM	BPSK	6.0



POWER LINE CONDUCTED EMISSION TEST:

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
В	802.11a	5180-5240 5725-5850	36 to 48 149 to 165	36	OFDM	BPSK	6.0

ANTENNA PORT CONDUCTED MEASUREMENT:

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
Α	802.11a		36 to 48	36, 40, 48	OFDM	BPSK	6.0
Α	802.11n (20MHz)	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.5
Α	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	13.5
Α	802.11a		52 to 64	52, 60, 64	OFDM	BPSK	6.0
Α	802.11n (20MHz)	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	MCS0
Α	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	MCS0
Α	802.11a		100 to 140	100, 116, 140	OFDM	BPSK	6.0
Α	802.11n (20MHz)	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	MCS0
Α	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	MCS0
Α	802.11a		149 to 165	149, 157, 165	OFDM	BPSK	6.0
Α	802.11n (20MHz)	5725-5825	149 to 165	149, 157, 165	OFDM	BPSK	MCS0
А	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	MCS0

TEST CONDITION:

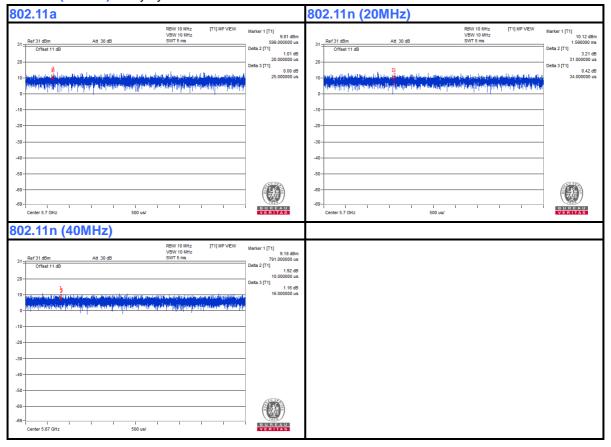
APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	25deg. C, 55%RH	DC 5V From Adapter	Hardy Leng
RE≥1G	25deg. C, 55%RH	DC 5V From Adapter	Hardy Leng
PLC	20deg. C, 56%RH	DC 5V from Notebook	Yang
APCM	20deg. C, 55%RH	DC 3.7V From Battery	Sen He



2.3 DUTY CYCLE OF TEST SIGNAL

802.11a: Duty cycle =100%

802.11n (20MHz): Duty cycle =100% **802.11n (40MHz):** Duty cycle =100%





2.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Notebook	DELL	5P2PM2X	12400120329	N/A
2	Notebook	DELL	Vostro145	X16-96100	N/A
3	Mouse	DELL	MS111-L	CN-09RRC7-48729-39 E-0C7Y	N/A
4	Printer	Lenovo	LJ2200L	LP02857415 48001408	N/A
5	Adapter	Apple	A1229	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS					
1	AC Line: Unshielded, Detachable 1.8m; DC Line: Unshielded, Detachable 1.8m;					
2	AC Line. Onshielded, Detachable 1.6m, DC Line. Onshielded, Detachable 1.6m,					
3	USB Line: Unshielded, Detachable 1.5m;					
4	AC Line: Unshielded, Detachable 1.8m; USB Line: Unshielded, Detachable 1.8m;					
5	N/A					

2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart E (15.407)
789033 D02 General UNII Test Procedures New Rules v01r03
KDB 662911 D01 v02r01
ANSI C63.10-2013

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



3. TEST TYPES AND RESULTS

3.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

3.1.1 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 30dB under any condition of modulation.

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3.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

APPLICABLE TO	LIMIT			
789033 D02 General UNII Test	FIELD STRENGTH AT 3m			
Procedures New Rules v01r03	PK: 74 (dBµV/m)	AV: 54 (dBμV/m)		
APPLICABLE TO	EIRP LIMIT	EQUIVALENT FIELD STRENGTH AT 3m		
15.407(b)(1)				
15.407(b)(2)	PK: -27 (dBm/MHz)	PK: 68.2 (dBµV/m)		
15.407(b)(3)				
15.407(b)(4)	Note	Note		

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

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

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

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

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Page 15 of 85



3.1.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESU40	100449	Mar. 12,17	Mar. 11,18
Signal and Spectrum Analyzer	Rohde&Schwar z	FSV7	102331	Nov. 04,16	Nov. 03,17
Bilog Antenna (30MHz~1GHz)	Teseq	CBL 6111D	30643	Jul. 14, 17	Jul. 13, 18
Loop antenna (9KHz ~30MHz)	Daze	ZN30900A	0708	Mar. 12,17	Mar. 11,18
Horn Antenna (1GHz -18GHz)	ETS -Lindgren	3117	00062558	May 18,17	May 17,18
GPS Generator+ Antenna	TOJOIN	GNSS-5000A	E1-010119	Aug. 08, 17	Aug. 07, 18
3m Semi-anechoic Chamber	ETS-LINDGRE N	9m*6m*6m	NSEMC003	Mar. 12,17	Mar. 11,18
Test Software	ADT	ADT_Radiated _V7.6.15.9.2	N/A	N/A	N/A
Horn Antenna (18GHz-40GHz)	SCHWARZBEC K	BBHA 9170	BBHA9170242	Mar. 15,17	Mar. 14,18
Amplifier (9kHz-1GHz)	SONOMA	310D	186955	Mar. 04,17	Mar. 03, 18
Broadband Preamplifier (1GHz~18GHz)	SCHWARZBEC K	BBV9718	305	Mar. 09,17	Mar. 08,18
Pre-Amplifier (18GHz-40GHz)	EMCI	EMC 184045	980102	Nov. 04,16	Nov. 03,17
Test Software	ADT	ADT_Radiated _V7.6.15.9.2	N/A	N/A	N/A
BLUETOOTH TESTER	Rohde&Schwar z	CBT32	100811	Aug. 08,17	Aug. 07,18

NOTE:

- 1. The test was performed in 966 Chamber.
- 2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
- 3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
- 4. The FCC Site Registration No. is 749762.



3.1.4 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 1.5 meters (above 1GHz) and 0.8 meters (below 1GHz) above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

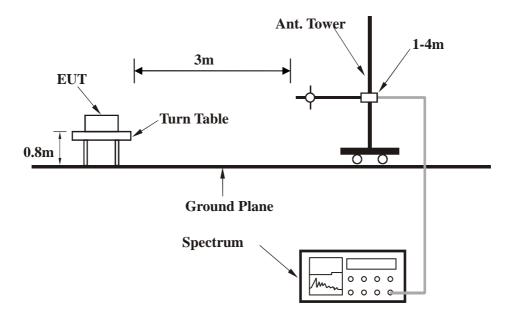
- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
- 2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
- 3. The resolution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

3.1.5 DEVIATION FROM TEST STANDARD

No deviation.

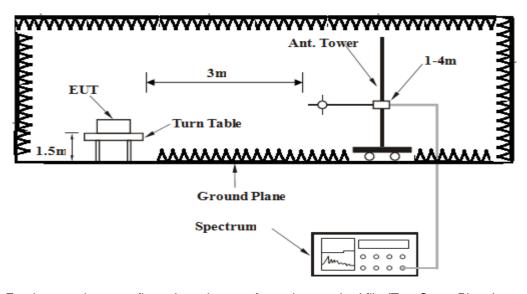


3.1.6 TEST SETUP Below 1GHz test setup



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

Above 1GHz test setup



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

3.1.7 EUT OPERATING CONDITION

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

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Page 18 of 85



3.1.8 TEST RESULTS

BELOW 1GHz WORST-CASE DATA

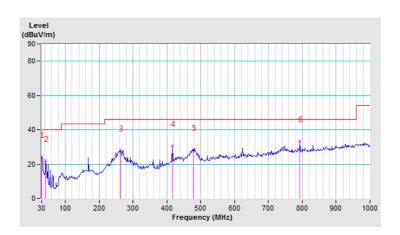
802.11a

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

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	30.00	24.41 QP	40.00	-15.59	2.00 H	304	35.68	-11.27	
2	42.44	21.95 QP	40.00	-18.05	2.00 H	297	39.82	-17.87	
3	263.17	28.25 QP	46.00	-17.75	2.00 H	139	41.18	-12.93	
4	415.51	30.72 QP	46.00	-15.28	2.00 H	207	39.42	-8.70	
5	477.69	28.63 QP	46.00	-17.37	2.00 H	182	35.39	-6.76	
6	793.25	33.57 QP	46.00	-12.43	2.00 H	251	33.58	-0.01	

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin against the limit.
- 4. Margin value = Emission level Limit value.



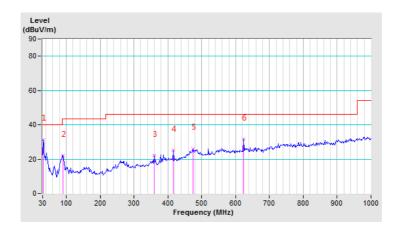


CHANNEL	TX Channel 36	DETECTOR	Ougai Pagis (OP)
FREQUENCY RANGE	9KHz ~ 1GHz	FUNCTION	Quasi-Peak (QP)

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
1	31.55	31.46 QP	40.00	-8.54	1.00 V	246	43.49	-12.03	
2	90.62	22.10 QP	43.50	-21.40	1.00 V	203	41.39	-19.29	
3	359.55	22.16 QP	46.00	-23.84	1.00 V	305	32.52	-10.36	
4	415.51	25.04 QP	46.00	-20.96	1.00 V	221	33.74	-8.70	
5	474.58	26.10 QP	46.00	-19.90	1.00 V	293	32.91	-6.81	
6	623.81	31.69 QP	46.00	-14.31	1.00 V	172	34.69	-3.00	

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin against the limit.
- 4. Margin value = Emission level Limit value.





ABOVE 1GHz WORST-CASE DATA Band 1 (5150-5250MHz):

802.11a

CHANNEL	TX Channel 36	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	54.26 PK	74.00	-19.74	2.00 H	322	47.86	6.40
2	5150.00	46.29 AV	54.00	-7.71	2.00 H	322	39.89	6.40
3	*5180.00	105.08 PK			2.00 H	322	98.65	6.43
4	*5180.00	97.17 AV			2.00 H	322	90.74	6.43
5	#10360.00	48.36 PK	74.00	-25.64	3.02 H	199	31.67	16.69
6	#10360.00	37.59 AV	54.00	-16.41	3.02 H	199	20.90	16.69
7	15540.00	56.39 PK	74.00	-17.61	1.02 H	144	32.46	23.93
8	15540.00	45.36 AV	54.00	-8.64	1.02 H	144	21.43	23.93
		ANTENNA	POLARITY	' & TEST DI	STANCE: V	ERTICAL A	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	5150.00	51.26 PK	74.00	-22.74	1.55 V	250	44.86	6.40
2	5150.00	41.29 AV	54.00	-12.71	1.55 V	250	34.89	6.40
3	*5180.00	99.28 PK			1.55 V	250	92.85	6.43
4	*5180.00	93.41 AV			1.55 V	250	86.98	6.43
5	#10360.00	46.59 PK	74.00	-27.41	1.00 V	205	29.90	16.69
6	#10360.00	37.84 AV	54.00	-16.16	1.00 V	205	21.15	16.69
7	15540.00	55.84 PK	74.00	-18.16	1.00 V	228	31.91	23.93
8	15540.00	45.29 AV	54.00	-8.71	1.00 V	228	21.36	23.93

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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 DIS	TANCE: HO	RIZONTAL	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	33.59 PK	74.00	-40.41	1.00 H	255	27.19	6.40
2	5150.00	26.32 AV	54.00	-27.68	1.00 H	255	19.92	6.40
3	*5200.00	105.29 PK			2.05 H	166	98.84	6.45
4	*5200.00	97.11 AV			2.05 H	166	90.66	6.45
5	#10400.00	48.06 PK	74.00	-25.94	1.00 H	205	31.15	16.91
6	#10400.00	37.36 AV	54.00	-16.64	1.00 H	205	20.45	16.91
7	15600.00	55.26 PK	74.00	-18.74	1.66 H	302	31.15	24.11
8	15600.00	44.58 AV	54.00	-9.42	1.66 H	302	20.47	24.11
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	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	5150.00	36.23 PK	74.00	-37.77	1.00 V	360	29.83	6.40
2	5150.00	26.19 AV	54.00	-27.81	1.00 V	360	19.79	6.40
3	*5200.00	99.99 PK			1.00 V	204	93.54	6.45
4	*5200.00	93.26 AV			1.00 V	204	86.81	6.45
5	#10400.00	46.22 PK	74.00	-27.78	1.00 V	20	29.31	16.91
6	#10400.00	37.50 AV	54.00	-16.50	1.00 V	20	20.59	16.91
7	15600.00	54.26 PK	74.00	-19.74	1.32 V	206	30.15	24.11
8	15600.00	44.92 AV	54.00	-9.08	1.32 V	206	20.81	24.11

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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 DIS	TANCE: HO	RIZONTAL	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	37.02 PK	74.00	-36.98	1.22 H	81	30.62	6.40
2	5150.00	26.59 AV	54.00	-27.41	1.22 H	81	20.19	6.40
3	*5240.00	99.52 PK			1.22 H	81	93.03	6.49
4	*5240.00	92.82 AV			1.22 H	81	86.33	6.49
5	5350.00	36.59 PK	74.00	-37.41	1.22 H	81	30.00	6.59
6	5350.00	26.32 AV	54.00	-27.68	1.22 H	81	19.73	6.59
7	#10480.00	48.20 PK	74.00	-25.80	1.33 H	23	30.87	17.33
8	#10480.00	38.59 AV	54.00	-15.41	1.33 H	23	21.26	17.33
9	15720.00	55.30 PK	74.00	-18.70	1.20 H	201	30.83	24.47
10	15720.00	46.13 AV	54.00	-7.87	1.20 H	201	21.66	24.47
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	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	5150.00	35.16 PK	74.00	-38.84	1.55 V	306	28.76	6.40
2	5150.00	26.48 AV	54.00	-27.52	1.55 V	306	20.08	6.40
3	*5240.00	100.16 PK			1.55 V	306	93.67	6.49
4	*5240.00	88.92 AV			1.55 V	306	82.43	6.49
5	5350.00	35.62 PK	74.00	-38.38	1.55 V	306	29.02	6.59
						000	40.00	6.59
6	5350.00	26.56 AV	54.00	-27.44	1.55 V	306	19.96	0.59
7	5350.00 #10480.00	26.56 AV 47.50 PK	54.00 74.00	-27.44 -26.50	1.55 V 1.00 V	20	30.17	17.33
7	#10480.00	47.50 PK	74.00	-26.50	1.00 V	20	30.17	17.33

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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 (20MHz)

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

		ANTENNA	POLARITY &	& TEST DIS	TANCE: HO	RIZONTAL	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	58.26 PK	74.00	-15.74	1.00 H	208	51.86	6.40
2	5150.00	50.36 AV	54.00	-3.64	1.00 H	208	43.96	6.40
3	*5180.00	107.09 PK			1.22 H	236	100.66	6.43
4	*5180.00	96.90 AV			1.22 H	236	90.47	6.43
5	#10360.00	48.25 PK	74.00	-25.75	1.00 H	230	31.56	16.69
6	#10360.00	37.26 AV	54.00	-16.74	1.00 H	230	20.57	16.69
7	15540.00	56.23 PK	74.00	-17.77	3.02 H	155	32.30	23.93
8	15540.00	45.23 AV	54.00	-8.77	3.02 H	155	21.30	23.93
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	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	5150.00	57.15 PK	74.00	-16.85	1.20 V	60	50.75	6.40
2	5150.00	46.98 AV	54.00	-5.02	1.20 V	60	40.58	6.40
3	*5180.00	97.86 PK			2.02 V	301	91.43	6.43
4	*5180.00	89.49 AV			2.02 V	301	83.06	6.43
5	#10360.00	46.32 PK	74.00	-27.68	1.00 V	20	29.63	16.69
6	#10360.00	37.15 AV	54.00	-16.85	1.00 V	20	20.46	16.69
7	15540.00	55.14 PK	74.00	-18.86	3.02 V	155	31.21	23.93
8	15540.00	44.24 AV	54.00	-9.76	3.02 V	155	20.31	23.93

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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 DIS	TANCE: HO	RIZONTAL	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	54.15 PK	74.00	-19.85	1.66 H	24	47.75	6.40
2	5150.00	41.88 AV	54.00	-12.12	1.66 H	24	35.48	6.40
3	*5200.00	97.59 PK			1.66 H	24	91.14	6.45
4	*5200.00	95.99 AV			1.66 H	24	89.54	6.45
5	#10400.00	48.32 PK	74.00	-25.68	1.22 H	105	31.41	16.91
6	#10400.00	37.11 AV	54.00	-16.89	1.22 H	105	20.20	16.91
7	15600.00	55.26 PK	74.00	-18.74	1.33 H	306	31.15	24.11
8	15600.00	45.09 AV	54.00	-8.91	1.33 H	306	20.98	24.11
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	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	5150.00	46.15 PK	74.00	-27.85	1.44 V	302	39.75	6.40
2	5150.00	35.02 AV	54.00	-18.98	1.44 V	302	28.62	6.40
3	*5200.00	97.25 PK			1.44 V	302	90.80	6.45
4	*5200.00	89.11 AV			1.44 V	302	82.66	6.45
5	#10400.00	46.26 PK	74.00	-27.74	2.01 V	21	29.35	16.91
6	#10400.00	37.05 AV	54.00	-16.95	2.01 V	21	20.14	16.91
7	15600.00	55.03 PK	74.00	-18.97	3.02 V	199	30.92	24.11
8	15600.00	44.32 AV	54.00	-9.68	3.02 V	199	20.21	24.11

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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	5150.00	37.15 PK	74.00	-36.85	1.20 H	214	30.75	6.40		
2	5150.00	26.36 AV	54.00	-27.64	1.20 H	214	19.96	6.40		
3	*5240.00	98.21 PK			2.00 H	132	91.72	6.49		
4	*5240.00	89.16 AV			2.00 H	132	82.67	6.49		
5	5350.00	36.12 PK	74.00	-37.88	2.00 H	132	29.52	6.59		
6	5350.00	26.32 AV	54.00	-27.68	2.00 H	132	19.73	6.59		
7	#10480.00	48.22 PK	74.00	-25.78	3.02 H	122	30.89	17.33		
8	#10480.00	37.99 AV	54.00	-16.01	3.02 H	122	20.66	17.33		
9	15720.00	54.26 PK	74.00	-19.74	3.02 H	100	29.79	24.47		
10	15720.00	45.36 AV	54.00	-8.64	3.02 H	100	20.89	24.47		
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	T 3 M			
NO.	FREQ.	EMISSION	LIMIT	MARGIN	ANTENNA	TABLE	RAW	CORRECTION		
	(MHz)	LEVEL (dBuV/m)	(dBuV/m)	(dB)	HEIGHT (m)	ANGLE (Degree)	VALUE (dBuV)	FACTOR (dB/m)		
1	(MHz) 5150.00		(dBuV/m) 74.00	(dB) -38.74						
1 2	, ,	(dBuV/m)		. ,	(m)	(Degree)	(dBuV)	(dB/m)		
-	5150.00	(dBuV/m) 35.26 PK	74.00	-38.74	(m) 1.22 V	(Degree)	(dBuV) 28.86	(dB/m) 6.40		
2	5150.00 5150.00	(dBuV/m) 35.26 PK 26.33 AV	74.00	-38.74	(m) 1.22 V 1.22 V	(Degree) 200 200	(dBuV) 28.86 19.93	(dB/m) 6.40 6.40		
3	5150.00 5150.00 *5240.00	(dBuV/m) 35.26 PK 26.33 AV 96.21 PK	74.00	-38.74	(m) 1.22 V 1.22 V 1.22 V	(Degree) 200 200 200	(dBuV) 28.86 19.93 89.72	(dB/m) 6.40 6.40 6.49		
3 4	5150.00 5150.00 *5240.00 *5240.00	(dBuV/m) 35.26 PK 26.33 AV 96.21 PK 88.03 AV	74.00 54.00	-38.74 -27.67	(m) 1.22 V 1.22 V 1.22 V 1.22 V	200 200 200 200 200	(dBuV) 28.86 19.93 89.72 81.54	(dB/m) 6.40 6.40 6.49 6.49		
2 3 4 5	5150.00 5150.00 *5240.00 *5240.00 5350.00	(dBuV/m) 35.26 PK 26.33 AV 96.21 PK 88.03 AV 35.26 PK	74.00 54.00 74.00	-38.74 -27.67	(m) 1.22 V 1.22 V 1.22 V 1.22 V 1.45 V	(Degree) 200 200 200 200 200 200	(dBuV) 28.86 19.93 89.72 81.54 28.66	(dB/m) 6.40 6.40 6.49 6.49 6.59		
2 3 4 5 6	5150.00 5150.00 *5240.00 *5240.00 5350.00	(dBuV/m) 35.26 PK 26.33 AV 96.21 PK 88.03 AV 35.26 PK 26.99 AV	74.00 54.00 74.00 54.00	-38.74 -27.67 -38.74 -27.01	(m) 1.22 V 1.22 V 1.22 V 1.22 V 1.45 V 1.45 V	(Degree) 200 200 200 200 200 200 200	(dBuV) 28.86 19.93 89.72 81.54 28.66 20.39	(dB/m) 6.40 6.40 6.49 6.49 6.59		
2 3 4 5 6 7	5150.00 5150.00 *5240.00 *5240.00 5350.00 5350.00 #10480.00	(dBuV/m) 35.26 PK 26.33 AV 96.21 PK 88.03 AV 35.26 PK 26.99 AV 47.25 PK	74.00 54.00 74.00 54.00 74.00	-38.74 -27.67 -38.74 -27.01 -26.75	(m) 1.22 V 1.22 V 1.22 V 1.22 V 1.45 V 1.45 V 1.66 V	(Degree) 200 200 200 200 200 200 49	(dBuV) 28.86 19.93 89.72 81.54 28.66 20.39 29.92	(dB/m) 6.40 6.40 6.49 6.49 6.59 6.59 17.33		

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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 (40MHz)

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

		ANTENNA	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	64.59 PK	74.00	-9.41	1.66 H	360	58.19	6.40				
2	5150.00	49.36 AV	54.00	-4.64	1.66 H	360	42.96	6.40				
3	*5190.00	102.58 PK			1.66 H	360	96.13	6.45				
4	*5190.00	83.49 AV			1.66 H	360	77.05	6.45				
5	#10380.00	48.37 PK	74.00	-25.63	1.55 H	305	31.57	16.80				
6	#10380.00	36.69 AV	54.00	-17.31	1.55 H	305	19.89	16.80				
7	15570.00	55.25 PK	74.00	-18.75	1.88 H	84	31.23	24.02				
8	15570.00	45.36 AV	54.00	-8.64	1.88 H	84	21.34	24.02				
		ANTENNA	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	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	5150.00	55.44 PK	74.00	-18.56	1.25 V	14	59.04	6.40				
2	5150.00	46.23 AV	54.00	-7.77	1.25 V	14	39.83	6.40				
3	*5190.00	97.69 PK			1.25 V	14	91.24	6.45				
4	*5190.00	87.43 AV			1.25 V	14	80.98	6.45				
5	#10380.00	46.26 PK	74.00	-27.74	1.22 V	154	29.46	16.80				
	#10380.00	37.11 AV	54.00	-16.89	1.22 V	154	20.31	16.80				
6	11 10000.00											
7	15570.00	54.69 PK	74.00	-19.31	3.02 V	140	30.67	24.02				

REMARKS:

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

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Page 27 of 85



CHANNEL	TX Channel 46	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	33.69 PK	74.00	-40.31	1.22 H	41	27.29	6.40
2	5150.00	25.37 AV	54.00	-28.63	1.22 H	41	18.97	6.40
3	*5230.00	101.05 PK			1.22 H	41	94.57	6.48
4	*5230.00	92.45 AV			1.22 H	41	85.97	6.48
5	#10460.00	48.26 PK	74.00	-25.74	1.00 H	305	31.03	17.23
6	#10460.00	36.25 AV	54.00	-17.75	1.00 H	305	19.02	17.23
7	15690.00	55.16 PK	74.00	-18.84	3.02 H	199	30.78	24.38
8	15690.00	44.95 AV	54.00	-9.05	3.02 H	199	20.57	24.38
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	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	5150.00	35.12 PK	74.00	-38.88	3.02 V	110	28.72	6.40
2	5150.00	26.32 AV	54.00	-27.68	3.02 V	110	19.92	6.40
3	*5230.00	96.26 PK			3.02 V	110	89.78	6.48
4	*5230.00	86.23 AV			3.02 V	110	79.75	6.48
5	#10460.00	46.36 PK	74.00	-27.64	1.22 V	30	29.13	17.23
6	#10460.00	36.29 AV	54.00	-17.71	1.22 V	30	19.06	17.23
7	15690.00	53.69 PK	74.00	-20.31	2.20 V	150	29.31	24.38
8	15690.00	42.69 AV	54.00	-11.31	2.20 V	150	18.31	24.38

REMARKS:

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



Band 2 (5250-5350MHz):

802.11a

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	37.11 PK	74.00	-36.89	1.44 H	209	30.71	6.40	
2	5150.00	24.59 AV	54.00	-29.41	1.44 H	209	18.19	6.40	
3	*5260.00	101.26 PK			1.44 H	209	94.75	6.51	
4	*5260.00	90.46 AV			1.44 H	209	83.95	6.51	
5	5350.00	36.11 PK	74.00	-37.89	1.44 H	209	29.52	6.59	
6	5350.00	25.89 AV	54.00	-28.11	1.44 H	209	19.30	6.59	
7	#10520.00	48.22 PK	74.00	-25.78	1.33 H	20	30.70	17.52	
8	#10520.00	37.59 AV	54.00	-16.41	1.33 H	20	20.07	17.52	
9	15780.00	54.26 PK	74.00	-19.74	3.02 H	199	29.61	24.65	
10	15780.00	45.34 AV	54.00	-8.66	3.02 H	199	20.69	24.65	
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
		ANTENNA	APOLARITY	& TEST DI	STANCE: V	ERTICAL A	T 3 M		
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	STANCE: V ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
NO .		EMISSION LEVEL	LIMIT	MARGIN	ANTENNA HEIGHT	TABLE ANGLE	RAW VALUE	FACTOR	
	(MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	FACTOR (dB/m)	
1	(MHz) 5150.00	EMISSION LEVEL (dBuV/m) 37.22 PK	LIMIT (dBuV/m) 74.00	MARGIN (dB)	ANTENNA HEIGHT (m) 3.02 V	TABLE ANGLE (Degree)	RAW VALUE (dBuV) 30.82	FACTOR (dB/m) 6.40	
1 2	(MHz) 5150.00 5150.00	EMISSION LEVEL (dBuV/m) 37.22 PK 26.59 AV	LIMIT (dBuV/m) 74.00	MARGIN (dB)	ANTENNA HEIGHT (m) 3.02 V 3.02 V	TABLE ANGLE (Degree) 122 122	RAW VALUE (dBuV) 30.82 20.19	FACTOR (dB/m) 6.40 6.40	
1 2 3	(MHz) 5150.00 5150.00 *5260.00	EMISSION LEVEL (dBuV/m) 37.22 PK 26.59 AV 98.85 PK	LIMIT (dBuV/m) 74.00	MARGIN (dB)	ANTENNA HEIGHT (m) 3.02 V 3.02 V 1.55 V	TABLE ANGLE (Degree) 122 122 60	RAW VALUE (dBuV) 30.82 20.19 92.34	FACTOR (dB/m) 6.40 6.40 6.51	
1 2 3 4	(MHz) 5150.00 5150.00 *5260.00 *5260.00	EMISSION LEVEL (dBuV/m) 37.22 PK 26.59 AV 98.85 PK 92.55 AV	LIMIT (dBuV/m) 74.00 54.00	MARGIN (dB) -36.78 -27.41	ANTENNA HEIGHT (m) 3.02 V 3.02 V 1.55 V	TABLE ANGLE (Degree) 122 122 60 60	RAW VALUE (dBuV) 30.82 20.19 92.34 86.04	FACTOR (dB/m) 6.40 6.40 6.51 6.51	
1 2 3 4 5	(MHz) 5150.00 5150.00 *5260.00 *5260.00 5350.00	EMISSION LEVEL (dBuV/m) 37.22 PK 26.59 AV 98.85 PK 92.55 AV 36.02 PK	LIMIT (dBuV/m) 74.00 54.00	MARGIN (dB) -36.78 -27.41	ANTENNA HEIGHT (m) 3.02 V 3.02 V 1.55 V 1.55 V 3.02 V	TABLE ANGLE (Degree) 122 122 60 60 122	RAW VALUE (dBuV) 30.82 20.19 92.34 86.04 29.43	FACTOR (dB/m) 6.40 6.40 6.51 6.51 6.59	
1 2 3 4 5	(MHz) 5150.00 5150.00 *5260.00 *5260.00 5350.00	EMISSION LEVEL (dBuV/m) 37.22 PK 26.59 AV 98.85 PK 92.55 AV 36.02 PK 25.69 AV	LIMIT (dBuV/m) 74.00 54.00 74.00 54.00	MARGIN (dB) -36.78 -27.41 -37.98 -28.31	ANTENNA HEIGHT (m) 3.02 V 3.02 V 1.55 V 1.55 V 3.02 V 3.02 V	TABLE ANGLE (Degree) 122 122 60 60 122 122	RAW VALUE (dBuV) 30.82 20.19 92.34 86.04 29.43 19.10	FACTOR (dB/m) 6.40 6.40 6.51 6.51 6.59 6.59	
1 2 3 4 5 6 7	(MHz) 5150.00 5150.00 *5260.00 *5260.00 5350.00 5350.00 #10520.00	EMISSION LEVEL (dBuV/m) 37.22 PK 26.59 AV 98.85 PK 92.55 AV 36.02 PK 25.69 AV 46.26 PK	LIMIT (dBuV/m) 74.00 54.00 74.00 54.00 74.00 74.00	MARGIN (dB) -36.78 -27.41 -37.98 -28.31 -27.74	ANTENNA HEIGHT (m) 3.02 V 3.02 V 1.55 V 1.55 V 3.02 V 3.02 V	TABLE ANGLE (Degree) 122 122 60 60 122 122 23	RAW VALUE (dBuV) 30.82 20.19 92.34 86.04 29.43 19.10 28.74	FACTOR (dB/m) 6.40 6.40 6.51 6.51 6.59 6.59 17.52	

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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 56	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	Average (AV)

		ANTENNA	POLARITY 8	& TEST DIS	TANCE: HO	RIZONTAL	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	*5280.00	91.21 PK			1.20 H	300	94.68	6.53
2	*5280.00	90.33 AV			1.20 H	300	83.80	6.53
3	5350.00	36.12 PK	74.00	-37.88	1.20 H	300	29.52	6.59
4	5350.00	25.16 AV	54.00	-28.84	1.20 H	300	18.57	6.59
5	#10560.00	48.26 PK	74.00	-25.74	1.00 H	205	30.59	17.67
6	#10560.00	38.46 AV	54.00	-15.54	1.00 H	205	20.79	17.67
7	15840.00	54.26 PK	74.00	-19.74	1.99 H	40	29.43	24.83
8	15840.00	45.32 AV	54.00	-8.68	1.99 H	40	20.49	24.83
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	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	*5280.00	98.26 PK			1.00 V	204	91.73	6.53
2	*5280.00	92.36 AV			1.00 V	204	85.83	6.53
3	5350.00	36.12 PK	74.00	-37.88	1.00 V	20	29.52	6.59
4	5350.00	25.49 AV	54.00	-28.51	1.00 V	20	18.89	6.59
5	#10560.00	46.59 PK	74.00	-27.41	1.45 V	216	28.92	17.67
6	#10560.00	38.44 AV	54.00	-15.56	1.45 V	216	20.77	17.67
7	15840.00	52.69 PK	74.00	-21.31	1.66 V	46	27.86	24.83
8	15840.00	44.29 AV	54.00	-9.71	1.66 V	46	19.46	24.83

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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 DIS	TANCE: HO	RIZONTAL	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	104.89 PK			1.55 H	40	98.32	6.57
2	*5320.00	99.46 AV			1.55 H	40	92.89	6.57
3	5350.00	65.99 PK	74.00	-8.01	1.33 H	205	59.40	6.59
4	5350.00	49.64 AV	54.00	-5.36	1.33 H	205	44.05	6.59
5	10640.00	48.36 PK	74.00	-25.64	1.20 H	145	30.40	17.96
6	10640.00	36.15 AV	54.00	-17.85	1.20 H	145	18.19	17.96
7	15960.00	54.26 PK	74.00	-19.74	1.20 H	62	29.07	25.19
8	15960.00	44.89 AV	54.00	-9.11	1.20 H	62	19.70	25.19
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	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	*5320.00	98.26 PK			1.00 V	162	91.69	6.57
2	*5320.00	92.36 AV			1.00 V	162	85.79	6.57
3	5350.00	61.59 PK	74.00	-12.41	2.01 V	122	55.00	6.59
4	5350.00	45.16 AV	54.00	-8.84	2.01 V	122	38.57	6.59
5	10640.00	46.11 PK	74.00	-27.89	1.22 V	306	28.15	17.96
6	10640.00	38.46 AV	54.00	-15.54	1.22 V	306	20.50	17.96
7	15960.00	52.16 PK	74.00	-21.84	1.00 V	204	26.97	25.19
8	15960.00	44.30 AV	54.00	-9.70	1.00 V	204	19.11	25.19

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin against the limit.
- 4. Margin value = Emission level Limit value.
- 5. " * ": Fundamental frequency.



802.11n (20MHz)

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

		ANTENNA	POLARITY &	& TEST DIS	TANCE: HO	RIZONTAL	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	34.26 PK	74.00	-39.74	1.00 H	201	27.86	6.40
2	5150.00	26.36 AV	54.00	-27.64	1.00 H	201	19.96	6.40
3	*5260.00	102.25 PK			1.00 H	201	95.74	6.51
4	*5260.00	96.12 AV			1.00 H	201	89.61	6.51
5	5350.00	36.15 PK	74.00	-37.85	1.00 H	201	29.55	6.59
6	5350.00	25.46 AV	54.00	-28.54	1.00 H	201	18.87	6.59
7	#10520.00	48.26 PK	74.00	-25.74	1.00 H	360	30.74	17.52
8	#10520.00	37.46 AV	54.00	-16.54	1.00 H	360	19.94	17.52
9	15780.00	54.26 PK	74.00	-19.74	1.33 H	302	29.61	24.65
10	15780.00	45.36 AV	54.00	-8.64	1.33 H	302	20.71	24.65
		ANTENNA	POLARITY	' & TEST DI	STANCE: V	ERTICAL A	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	5150.00	33.26 PK	74.00	-40.74	1.00 V	205	26.86	6.40
2	5150.00	25.15 AV	54.00	-28.85	1.00 V	205	18.75	6.40
3	*5260.00	97.05 PK			1.00 V	45	90.54	6.51
4	*5260.00	89.16 AV			1.00 V	45	82.65	6.51
5	5350.00	36.26 PK	74.00	-37.74	1.00 V	45	29.66	6.59
6	5350.00	25.88 AV	54.00	-28.12	1.00 V	45	19.29	6.59
7	#10520.00	46.25 PK	74.00	-27.75	1.55 V	49	28.73	17.52
8	#10520.00	38.12 AV	54.00	-15.88	1.55 V	49	20.60	17.52
9	15780.00	54.26 PK	74.00	-19.74	1.55 V	21	29.61	24.65

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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 56	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	*5280.00	98.55 PK			1.22 H	54	92.02	6.53
2	*5280.00	87.16 AV			1.22 H	54	80.63	6.53
3	5350.00	37.15 PK	74.00	-36.85	1.55 H	54	30.55	6.59
4	5350.00	26.32 AV	54.00	-27.68	1.55 H	54	19.73	6.59
5	#10560.00	47.26 PK	74.00	-26.74	1.66 H	58	29.59	17.67
6	#10560.00	36.65 AV	54.00	-17.35	1.66 H	58	18.98	17.67
7	15840.00	54.26 PK	74.00	-19.74	1.22 H	8	29.43	24.83
8	15840.00	45.33 AV	54.00	-8.67	1.22 H	8	20.50	24.83
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	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	*5280.00	97.59 PK			1.55 V	224	91.06	6.53
2	*5280.00	89.46 AV			1.55 V	224	82.93	6.53
3	5350.00	36.55 PK	74.00	-37.45	1.55 V	224	29.95	6.59
4	5350.00	25.13 AV	54.00	-28.87	1.55 V	224	18.54	6.59
5	#10560.00	45.25 PK	74.00	-28.75	2.20 V	155	27.58	17.67
6	#10560.00	37.15 AV	54.00	-16.85	2.20 V	155	19.48	17.67
7	15840.00	52.13 PK	74.00	-21.87	3.02 V	12	27.30	24.83
8	15840.00	43.26 AV	54.00	-10.74	3.02 V	12	18.43	24.83

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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	98.69 PK			1.00 H	65	92.12	6.57
2	*5320.00	87.15 AV			1.00 H	65	80.58	6.57
3	5350.00	56.60 PK	74.00	-17.40	3.02 H	65	50.01	6.59
4	5350.00	45.37 AV	54.00	-8.63	3.02 H	65	38.78	6.59
5	10640.00	48.26 PK	74.00	-25.74	1.20 H	25	30.30	17.96
6	10640.00	37.00 AV	54.00	-17.00	1.20 H	25	19.04	17.96
7	15960.00	54.26 PK	74.00	-19.74	3.02 H	130	29.07	25.19
8	15960.00	45.33 AV	54.00	-8.67	3.02 H	130	20.14	25.19
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	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	*5320.00	98.25 PK			1.22 V	50	91.68	6.57
2	*5320.00	90.15 AV			1.22 V	50	83.58	6.57
3	5350.00	53.12 PK	74.00	-20.88	1.22 V	50	46.52	6.59
4	5350.00	40.25 AV	54.00	-13.75	1.22 V	50	33.66	6.59
5	10640.00	46.22 PK	74.00	-27.78	1.22 V	201	28.26	17.96
6	10640.00	38.60 AV	54.00	-15.40	1.22 V	201	20.64	17.96
7	15960.00	53.22 PK	74.00	-20.78	2.01 V	55	28.03	25.19
8	15960.00	44.15 AV	54.00	-9.85	2.01 V	55	18.96	25.19

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin against the limit.
- 4. Margin value = Emission level Limit value.
- 5. " * ": Fundamental frequency.



802.11n (40MHz)

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	*5270.00	102.59 PK			1.00 H	204	96.08	6.52
2	*5270.00	93.05 AV			1.00 H	204	86.53	6.52
3	5350.00	45.99 PK	74.00	-28.01	1.22 H	24	39.40	6.59
4	5350.00	34.13 AV	54.00	-19.87	1.22 H	24	27.54	6.59
5	#10540.00	48.11 PK	74.00	-25.89	3.02 H	201	30.52	17.59
6	#10540.00	37.05 AV	54.00	-16.95	3.02 H	201	19.46	17.59
7	15810.00	54.26 PK	74.00	-19.74	1.55 H	64	29.52	24.74
8	15810.00	45.33 AV	54.00	-8.67	1.55 H	64	20.59	24.74
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	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	*5270.00	97.25 PK			1.00 V	205	90.73	6.52
2	*5270.00	87.89 AV			1.00 V	205	81.37	6.52
3	5350.00	46.11 PK	74.00	-27.89	1.00 V	206	39.52	6.59
4	5350.00	35.46 AV	54.00	-18.54	1.00 V	206	28.87	6.59
5	#10540.00	46.26 PK	74.00	-27.74	1.66 V	60	28.67	17.59
6	#10540.00	38.21 AV	54.00	-15.79	1.66 V	60	20.62	17.59
7	15810.00	53.16 PK	74.00	-20.84	2.01 V	30	28.42	24.74
8	15810.00	44.01 AV	54.00	-9.99	2.01 V	30	19.27	24.74

REMARKS:

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

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Page 35 of 85



CHANNEL	TX Channel 62	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	*5310.00	102.15 PK			1.99 H	50	95.59	6.55
2	*5310.00	93.08 AV			1.99 H	50	86.52	6.55
3	5350.00	60.23 PK	74.00	-13.77	1.77 H	45	53.63	6.59
4	5350.00	48.89 AV	54.00	-5.11	1.77 H	45	42.30	6.59
5	10620.00	48.25 PK	74.00	-25.75	1.22 H	20	30.36	17.89
6	10620.00	37.15 AV	54.00	-16.85	1.22 H	20	19.26	17.89
7	15930.00	54.25 PK	74.00	-19.75	1.20 H	205	29.15	25.10
8	15930.00	45.22 AV	54.00	-8.78	1.20 H	205	20.12	25.10
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	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	*5310.00	97.14 PK			2.00 V	201	90.59	6.55
2	*5310.00	87.58 AV			2.00 V	201	81.02	6.55
3	5350.00	56.15 PK	74.00	-17.85	2.00 V	201	49.55	6.59
4	5350.00	45.49 AV	54.00	-8.51	2.00 V	201	38.89	6.59
5	10620.00	46.22 PK	74.00	-27.78	1.22 V	20	28.33	17.89
6	10620.00	38.15 AV	54.00	-15.85	1.22 V	20	20.26	17.89
7	15930.00	53.16 PK	74.00	-20.84	2.01 V	6	28.06	25.10
8	15930.00	44.02 AV	54.00	-9.98	2.01 V	6	18.92	25.10

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin against the limit.
- 4. Margin value = Emission level Limit value.
- 5. " * ": Fundamental frequency.



Band 3 (5470-5725MHz):

ABOVE 1GHz DATA

802.11a

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

		ANTENNA	POLARITY &	& TEST DIS	TANCE: HO	RIZONTAL	AT 3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5470.00	63.16 PK	74.00	-10.84	2.01 H	255	56.46	6.70
2	5470.00	50.49 AV	54.00	-3.51	2.01 H	255	43.79	6.70
3	*5500.00	105.25 PK			1.00 H	154	98.51	6.74
4	*5500.00	97.48 AV			1.00 H	154	90.74	6.74
5	11000.00	48.25 PK	74.00	-25.75	3.02 H	155	28.93	19.32
6	11000.00	37.15 AV	54.00	-16.85	3.02 H	155	17.83	19.32
7	#16500.00	54.25 PK	74.00	-19.75	1.00 H	24	29.74	24.51
8	#16500.00	45.23 AV	54.00	-8.77	1.00 H	24	20.72	24.51
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	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	56.11 PK	74.00	-17.89	2.01 V	122	49.41	6.70
2	5470.00	45.46 AV	54.00	-8.54	2.01 V	122	38.76	6.70
3	*5500.00	99.36 PK			1.20 V	208	92.62	6.74
4	*5500.00	93.33 AV			1.20 V	208	86.59	6.74
5	11000.00	46.26 PK	74.00	-27.74	2.01 V	122	26.94	19.32
6	11000.00	38.15 AV	54.00	-15.85	2.01 V	122	18.83	19.32
7	#16500.00	53.25 PK	74.00	-20.75	1.22 V	304	28.74	24.51
8	#16500.00	44.31 AV	54.00	-9.69	1.22 V	304	19.80	24.51

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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	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	36.10 PK	74.00	-37.90	1.00 H	205	29.40	6.70
2	5470.00	25.12 AV	54.00	-28.88	1.00 H	205	18.42	6.70
3	*5580.00	96.58 PK			1.22 H	20	89.55	7.03
4	*5580.00	88.16 AV			1.22 H	20	81.13	7.03
5	11160.00	48.36 PK	74.00	-25.64	1.20 H	202	29.34	19.02
6	11160.00	37.22 AV	54.00	-16.78	1.20 H	202	18.20	19.02
7	#16740.00	54.15 PK	74.00	-19.85	2.05 H	46	28.34	25.81
8	#16740.00	45.36 AV	54.00	-8.64	2.05 H	46	19.55	25.81
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	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	36.11 PK	74.00	-37.89	2.05 V	16	29.41	6.70
2	5470.00	25.46 AV	54.00	-28.54	2.05 V	16	18.76	6.70
3	*5580.00	99.55 PK			1.00 V	205	92.52	7.03
4	*5580.00	93.22 AV			1.00 V	205	86.19	7.03
5	11160.00	46.26 PK	74.00	-27.74	1.00 V	20	27.24	19.02
6	11160.00	38.16 AV	54.00	-15.84	1.00 V	20	19.14	19.02
7	#16740.00	53.26 PK	74.00	-20.74	3.00 V	201	27.45	25.81
8	#16740.00	44.05 AV	54.00	-9.95	3.00 V	201	18.24	25.81

REMARKS:

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

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Page 38 of 85



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

		ANTENNA	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL	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	105.55 PK			1.00 H	210	98.09	7.46
2	*5700.00	97.16 AV			1.00 H	210	89.70	7.46
3	#5725.00	63.33 PK	68.20	-4.87	2.01 H	322	55.78	7.55
4	11400.00	48.25 PK	74.00	-25.75	1.00 H	205	29.69	18.56
5	11400.00	37.49 AV	54.00	-16.51	1.00 H	205	18.93	18.56
6	#17100.00	54.02 PK	74.00	-19.98	3.02 H	11	26.93	27.09
7	#17100.00	45.69 AV	54.00	-8.31	3.02 H	11	18.60	27.09
		ANTENNA	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M	
NO.	FREQ.	EMISSION	LIMIT	MARGIN	ANTENNA	TABLE	RAW	CORRECTION
	(MHz)	LEVEL (dBuV/m)	(dBuV/m)	(dB)	HEIGHT (m)	ANGLE (Degree)	VALUE (dBuV)	FACTOR (dB/m)
1	(MHz) *5700.00							
1 2	, ,	(dBuV/m)			(m)	(Degree)	(dBuV)	(dB/m)
-	*5700.00	(dBuV/m) 100.01 PK			(m) 2.00 V	(Degree) 190	(dBuV) 92.55	(dB/m) 7.46
2	*5700.00 *5700.00	(dBuV/m) 100.01 PK 93.36 AV	(dBuV/m)	(dB)	(m) 2.00 V 2.00 V	(Degree) 190 190	(dBuV) 92.55 85.90	(dB/m) 7.46 7.46
2	*5700.00 *5700.00 #5725.00	(dBuV/m) 100.01 PK 93.36 AV 59.58 PK	(dBuV/m) 68.20	(dB) -8.62	(m) 2.00 V 2.00 V 1.90 V	(Degree) 190 190 201	(dBuV) 92.55 85.90 52.03	(dB/m) 7.46 7.46 7.55
3 4	*5700.00 *5700.00 #5725.00 11400.00	(dBuV/m) 100.01 PK 93.36 AV 59.58 PK 46.26 PK	(dBuV/m) 68.20 74.00	-8.62 -27.74	(m) 2.00 V 2.00 V 1.90 V 1.55 V	(Degree) 190 190 201 24	(dBuV) 92.55 85.90 52.03 27.70	(dB/m) 7.46 7.46 7.55 18.56

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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 (20MHz)

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

		ANTENNA	POLARITY 8	& TEST DIS	TANCE: HO	RIZONTAL	AT 3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5470.00	62.58 PK	74.00	-11.42	1.22 H	205	55.88	6.70
2	5470.00	49.30 AV	54.00	-4.70	1.22 H	205	42.60	6.70
3	*5500.00	97.59 PK			2.00 H	205	90.85	6.74
4	*5500.00	86.37 AV			2.00 H	205	79.63	6.74
5	11000.00	48.25 PK	74.00	-25.75	2.01 H	15	28.93	19.32
6	11000.00	36.55 AV	54.00	-17.45	2.01 H	15	17.23	19.32
7	#16500.00	54.27 PK	74.00	-19.73	1.00 H	360	29.76	24.51
8	#16500.00	46.36 AV	54.00	-7.64	1.00 H	360	21.85	24.51
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	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	57.59 PK	74.00	-16.41	1.00 V	205	50.89	6.70
2	5470.00	46.22 AV	54.00	-7.78	1.00 V	205	39.52	6.70
3	*5500.00	97.58 PK			1.00 V	205	90.84	6.74
4	*5500.00	89.15 AV			1.00 V	205	82.41	6.74
5	11000.00	46.36 PK	74.00	-27.64	1.00 V	20	27.04	19.32
6	11000.00	38.22 AV	54.00	-15.78	1.00 V	20	18.90	19.32
7	#16500.00	53.26 PK	74.00	-20.74	1.00 V	29	28.75	24.51
8	#16500.00	44.83 AV	54.00	-9.17	1.00 V	29	20.32	24.51

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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 DIS	TANCE: HO	RIZONTAL	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	37.59 PK	74.00	-36.41	2.01 H	199	30.89	6.70
2	5470.00	27.11 AV	54.00	-26.89	2.01 H	199	20.41	6.70
3	*5580.00	98.69 PK			2.00 H	199	91.66	7.03
4	*5580.00	87.59 AV			2.00 H	199	80.56	7.03
5	11160.00	48.25 PK	74.00	-25.75	2.00 H	111	29.23	19.02
6	11160.00	37.26 AV	54.00	-16.74	2.00 H	111	18.24	19.02
7	#16740.00	54.26 PK	74.00	-19.74	1.00 H	302	28.45	25.81
8	#16740.00	45.36 AV	54.00	-8.64	1.00 H	302	19.55	25.81
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	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	36.59 PK	74.00	-37.41	2.00 V	30	29.89	6.70
2	5470.00	25.55 AV	54.00	-28.45	2.00 V	30	18.85	6.70
3	*5580.00	98.99 PK			2.00 V	30	91.96	7.03
4	*5580.00	90.25 AV			2.00 V	30	83.22	7.03
5	11160.00	46.36 PK	74.00	-27.64	2.00 V	122	27.34	19.02
6	11160.00	38.59 AV	54.00	-15.41	2.00 V	122	19.57	19.02
7	#16740.00	53.26 PK	74.00	-20.74	2.00 V	154	27.45	25.81
8	#16740.00	44.58 AV	54.00	-9.42	2.00 V	154	18.77	25.81

REMARKS:

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

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Page 41 of 85



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

		ANTENNA	POLARITY &	& TEST DIS	TANCE: HO	RIZONTAL	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	103.26 PK			1.00 H	50	95.80	7.46
2	*5700.00	97.15 AV			1.00 H	50	89.69	7.46
3	#5725.00	63.26 PK	68.20	-4.94	3.01 H	24	55.71	7.55
4	11400.00	48.25 PK	74.0	-25.75	2.00 H	0	29.69	18.56
5	11400.00	37.55 AV	54.0	-16.45	2.00 H	0	18.99	18.56
6	#17100.00	54.26 PK	74.0	-19.74	1.00 H	360	27.17	27.09
7	#17100.00	45.33 AV	54.0	-8.67	1.00 H	360	18.24	27.09
		ANTENNA	POLARITY	' & TEST DI	STANCE: V	ERTICAL A	T 3 M	
NO.	FREQ.	EMISSION	LIMIT	MARGIN	ANTENNA	TABLE	RAW	CORRECTION
	(MHz)	LEVEL (dBuV/m)	(dBuV/m)	(dB)	HEIGHT (m)	ANGLE (Degree)	VALUE (dBuV)	FACTOR (dB/m)
1	(MHz) *5700.00							
1 2	, ,	(dBuV/m)			(m)	(Degree)	(dBuV)	(dB/m)
	*5700.00	(dBuV/m) 99.24 PK			(m)	(Degree)	(dBuV) 91.78	(dB/m) 7.46
2	*5700.00 *5700.00	(dBuV/m) 99.24 PK 91.01 AV	(dBuV/m)	(dB)	(m) 1.10 V 1.10 V	(Degree) 20 20	(dBuV) 91.78 83.55	(dB/m) 7.46 7.46
2	*5700.00 *5700.00 #5725.00	(dBuV/m) 99.24 PK 91.01 AV 60.15 PK	(dBuV/m) 68.20	(dB) -8.05	(m) 1.10 V 1.10 V 1.00 V	(Degree) 20 20 20	(dBuV) 91.78 83.55 52.60	(dB/m) 7.46 7.46 7.55
3 4	*5700.00 *5700.00 #5725.00 11400.00	(dBuV/m) 99.24 PK 91.01 AV 60.15 PK 46.25 PK	(dBuV/m) 68.20 74.0	-8.05 -27.75	(m) 1.10 V 1.10 V 1.00 V 2.05 V	20 20 20 20 166	(dBuV) 91.78 83.55 52.60 27.69	(dB/m) 7.46 7.46 7.55 18.56

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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 (40MHz)

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

		ANTENNA	POLARITY &	& TEST DIS	TANCE: HO	RIZONTAL	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	58.26 PK	74.00	-15.74	1.00 H	40	51.56	6.70
2	5470.00	49.46 AV	54.00	-4.54	1.00 H	40	42.76	6.70
3	*5510.00	104.25 PK			1.00 H	40	97.47	6.78
4	*5510.00	95.57 AV			1.00 H	40	88.79	6.78
5	11020.00	48.25 PK	74.00	-25.75	2.01 H	360	28.97	19.28
6	11020.00	39.56 AV	54.00	-14.44	2.01 H	360	20.28	19.28
7	#16530.00	56.26 PK	74.00	-17.74	1.33 H	360	31.59	24.67
8	#16530.00	45.39 AV	54.00	-8.61	1.33 H	360	20.72	24.67
		ANTENNA	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	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	55.25 PK	74.00	-18.75	2.00 V	15	48.55	6.70
2	5470.00	44.77 AV	54.00	-9.23	2.00 V	15	38.07	6.70
3	*5510.00	99.36 PK			2.00 V	15	92.58	6.78
4	*5510.00	89.15 AV			2.00 V	15	82.37	6.78
5	11020.00	46.25 PK	74.00	-27.75	3.02 V	155	26.97	19.28
6	11020.00	38.26 AV	54.00	-15.74	3.02 V	155	18.98	19.28
7	#16530.00	55.26 PK	74.00	-18.74	2.05 V	46	30.59	24.67
8	#16530.00	46.03 AV	54.00	-7.97	2.05 V	46	21.36	24.67

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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 DIS	TANCE: HO	RIZONTAL	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	48.66 PK	74.00	-25.34	1.66 H	100	41.96	6.70
2	5470.00	36.95 AV	54.00	-17.05	1.66 H	100	30.25	6.70
3	*5550.00	104.59 PK			3.02 H	100	97.67	6.92
4	*5550.00	95.99 AV			3.02 H	100	89.07	6.92
5	11100.00	58.26 PK	74.00	-15.74	1.00 H	360	39.13	19.13
6	11100.00	37.65 AV	54.00	-16.35	1.00 H	360	18.52	19.13
7	#16650.00	54.37 PK	74.00	-19.63	1.66 H	96	29.04	25.33
8	#16650.00	45.11 AV	54.00	-8.89	1.66 H	96	19.78	25.33
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	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	49.22 PK	74.00	-24.78	2.01 V	48	42.52	6.70
2	5470.00	36.48 AV	54.00	-17.52	2.01 V	48	29.78	6.70
3	*5550.00	99.59 PK			1.00 V	48	92.67	6.92
4	*5550.00	89.15 AV			1.00 V	48	82.23	6.92
5	11100.00	56.36 PK	74.00	-17.64	2.00 V	214	37.23	19.13
6	11100.00	38.15 AV	54.00	-15.85	2.00 V	214	19.02	19.13
7	#16650.00	53.26 PK	74.00	-20.74	1.66 V	49	27.93	25.33
8	#16650.00	45.36 AV	54.00	-8.64	1.66 V	49	20.03	25.33

REMARKS:

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

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Page 44 of 85



Band 4 (5725-5850MHz):

ABOVE 1GHz DATA

802.11a

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

		ANTENNA	POLARITY 8	& TEST DIS	TANCE: HO	RIZONTAL	AT 3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5650.00	32.27 PK	68.20	-35.93	1.21 H	255	24.99	7.28
2	#5700.00	31.84 PK	105.20	-73.36	1.22 H	255	24.38	7.46
3	#5720.00	56.36 PK	110.80	-54.44	1.21 H	255	48.82	7.54
4	#5725.00	63.08 PK	122.20	-59.12	1.21 H	255	55.53	7.55
5	*5745.00	95.69 PK			1.21 H	255	88.06	7.63
6	*5745.00	85.75 AV			1.21 H	255	78.12	7.63
7	11490.00	58.26 PK	74.00	-15.74	1.00 H	205	39.87	18.39
8	11490.00	37.25 AV	54.00	-16.75	1.00 H	205	18.86	18.39
9	#17235.00	54.36 PK	74.00	-19.64	3.02 H	166	27.46	26.90
10	#17235.00	45.40 AV	54.00	-8.60	3.02 H	166	18.50	26.90
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	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	#5650.00	32.25 PK	68.20	-35.95	1.11 V	352	24.97	7.28
2	#5700.00	31.26 PK	105.20	-73.94	1.11 V	265	23.80	7.46
3	#5720.00	52.15 PK	110.80	-58.65	1.11 V	265	44.61	7.54
4	#5725.00	53.36 PK	122.20	-68.84	1.11 V	265	45.81	7.55
5	*5745.00	94.24 PK			1.11 V	265	86.61	7.63
6	*5745.00	84.02 AV			1.11 V	265	76.39	7.63
7	11490.00	56.26 PK	74.00	-17.74	3.02 V	155	37.87	18.39
8	11490.00	38.65 AV	54.00	-15.35	3.02 V	155	20.26	18.39
9	#17235.00	53.45 PK	74.00	-20.55	1.00 V	360	26.55	26.90
10	#17235.00	44.36 AV	54.00	-9.64	1.00 V	360	17.46	26.90

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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 I	POLARITY &	& TEST DIS	TANCE: HO	RIZONTAL	AT 3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5650.00	32.11 PK	68.20	-36.09	1.00 H	205	24.83	7.28
2	#5700.00	33.26 PK	105.20	-71.94	1.00 H	205	25.80	7.46
3	#5720.00	32.16 PK	110.80	-78.64	1.00 H	205	24.62	7.54
4	#5725.00	43.26 PK	122.20	-78.94	1.00 H	206	35.71	7.55
5	*5785.00	95.25 PK			1.00 H	205	87.48	7.77
6	*5785.00	85.36 AV			1.00 H	205	77.59	7.77
7	#5850.00	42.36 PK	122.20	-79.84	1.00 H	205	34.35	8.01
8	#5855.00	33.26 PK	110.80	-77.54	1.00 H	206	25.23	8.03
9	#5875.00	33.25 PK	105.20	-71.95	1.00 H	205	25.15	8.10
10	#5925.00	34.01 PK	68.20	-34.19	1.00 H	200	25.73	8.28
11	11570.00	48.25 PK	74.00	-25.75	3.20 H	205	29.79	18.46
12	11570.00	37.29 AV	54.00	-16.71	3.20 H	205	18.83	18.46
13	#17355.00	53.26 PK	74.00	-20.74	1.55 H	42	26.52	26.74
14	#17355.00	44.29 AV	54.00	-9.71	1.55 H	42	17.55	26.74
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	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	#5650.00	33.25 PK	68.20	-34.95	2.00 V	102	25.97	7.28
2	#5700.00	33.25 PK	105.20	-71.95	2.00 V	103	25.79	7.46
3	#5720.00	32.25 PK	110.80	-78.55	2.00 V	201	24.71	7.54
4	#5725.00	43.25 PK	122.20	-78.95	2.00 V	203	35.70	7.55
5	*5785.00	94.02 PK			2.00 V	102	86.25	7.77
6	*5785.00	84.25 AV			2.00 V	102	76.48	7.77
7	#5850.00	42.15 PK	122.20	-80.05	1.80 V	205	34.14	8.01
8	#5855.00	32.15 PK	110.80	-78.65	1.00 V	206	24.12	8.03
9	#5875.00	33.36 PK	105.20	-71.84	1.00 V	208	25.26	8.10
10	#5925.00	33.15 PK	68.20	-35.05	2.00 V	205	24.87	8.28
11	11570.00	46.36 PK	74.00	-27.64	2.00 V	201	27.90	18.46
12	11570.00	38.25 AV	54.00	-15.75	2.00 V	201	19.79	18.46
				_				
13	#17355.00	53.36 PK	74.00	-20.64	2.05 V	110	26.62	26.74

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- The emission levels of other frequencies were less than 20dB margin against the limit.
 Margin value = Emission level Limit value.
 " * ": Fundamental frequency.
 " # ": 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 8	& TEST DIS	TANCE: HO	RIZONTAL	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	*5825.00	95.26 PK			1.00 H	122	87.34	7.92	
2	*5825.00	86.03 AV			1.00 H	122	78.11	7.92	
3	#5850.00	63.26 PK	122.20	-58.94	1.00 H	122	55.25	8.01	
4	#5855.00	53.25 PK	110.80	-57.55	1.00 H	122	45.22	8.03	
5	#5875.00	52.19 PK	105.20	-53.01	1.00 H	122	44.09	8.10	
6	#5925.00	33.31 PK	68.20	-34.89	1.00 H	122	25.03	8.28	
7	11650.00	48.32 PK	74.00	-25.68	1.00 H	205	29.77	18.55	
8	11650.00	37.16 AV	54.00	-16.84	1.00 H	205	18.61	18.55	
9	#17475.00	53.37 PK	74.00	-20.63	1.00 H	82	26.80	26.57	
10	#17475.00	43.69 AV	54.00	-10.31	1.00 H	82	17.12	26.57	
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	T 3 M		
NO.	FREQ. (MHz)	ANTENNA EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	STANCE: V ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	T 3 M RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)	
NO .	-	EMISSION LEVEL	LIMIT	MARGIN	ANTENNA HEIGHT	TABLE ANGLE	RAW VALUE	FACTOR	
	(MHz)	EMISSION LEVEL (dBuV/m)	LIMIT	MARGIN	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	FACTOR (dB/m)	
1	(MHz) *5825.00	EMISSION LEVEL (dBuV/m) 94.25 PK	LIMIT	MARGIN	ANTENNA HEIGHT (m) 1.00 V	TABLE ANGLE (Degree)	RAW VALUE (dBuV) 86.33	FACTOR (dB/m) 7.92	
1 2	*5825.00 *5825.00	EMISSION LEVEL (dBuV/m) 94.25 PK 84.30 AV	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m) 1.00 V 1.00 V	TABLE ANGLE (Degree) 200 200	RAW VALUE (dBuV) 86.33 76.38	FACTOR (dB/m) 7.92 7.92	
1 2 3	*5825.00 *5825.00 #5850.00	EMISSION LEVEL (dBuV/m) 94.25 PK 84.30 AV 62.33 PK	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m) 1.00 V 1.00 V 1.55 V	TABLE ANGLE (Degree) 200 200 45	RAW VALUE (dBuV) 86.33 76.38 54.32	FACTOR (dB/m) 7.92 7.92 8.01	
1 2 3 4	*5825.00 *5825.00 #5850.00 #5855.00	EMISSION LEVEL (dBuV/m) 94.25 PK 84.30 AV 62.33 PK 63.33 PK	LIMIT (dBuV/m) 122.20 110.80	MARGIN (dB) -59.87 -47.47	ANTENNA HEIGHT (m) 1.00 V 1.00 V 1.55 V	TABLE ANGLE (Degree) 200 200 45 45	RAW VALUE (dBuV) 86.33 76.38 54.32 55.30	FACTOR (dB/m) 7.92 7.92 8.01 8.03	
1 2 3 4 5	*5825.00 *5825.00 *5850.00 #5850.00 #5875.00	EMISSION LEVEL (dBuV/m) 94.25 PK 84.30 AV 62.33 PK 63.33 PK 52.26 PK	LIMIT (dBuV/m) 122.20 110.80 105.20	MARGIN (dB) -59.87 -47.47 -52.94	ANTENNA HEIGHT (m) 1.00 V 1.00 V 1.55 V 1.55 V	TABLE ANGLE (Degree) 200 200 45 45 45	RAW VALUE (dBuV) 86.33 76.38 54.32 55.30 44.16	FACTOR (dB/m) 7.92 7.92 8.01 8.03 8.10	
1 2 3 4 5 6	*5825.00 *5825.00 *5825.00 #5855.00 #5875.00 #5925.00	EMISSION LEVEL (dBuV/m) 94.25 PK 84.30 AV 62.33 PK 63.33 PK 52.26 PK 33.26 PK	LIMIT (dBuV/m) 122.20 110.80 105.20 68.20	-59.87 -47.47 -52.94 -34.94	ANTENNA HEIGHT (m) 1.00 V 1.00 V 1.55 V 1.55 V 1.55 V	TABLE ANGLE (Degree) 200 200 45 45 45 45	RAW VALUE (dBuV) 86.33 76.38 54.32 55.30 44.16 24.98	FACTOR (dB/m) 7.92 7.92 8.01 8.03 8.10 8.28	
1 2 3 4 5 6 7	*5825.00 *5825.00 #5850.00 #5855.00 #5875.00 #5925.00 11650.00	EMISSION LEVEL (dBuV/m) 94.25 PK 84.30 AV 62.33 PK 63.33 PK 52.26 PK 33.26 PK 46.36 PK	LIMIT (dBuV/m) 122.20 110.80 105.20 68.20 74.00	-59.87 -47.47 -52.94 -34.94 -27.64	ANTENNA HEIGHT (m) 1.00 V 1.00 V 1.55 V 1.55 V 1.50 V 1.00 V	TABLE ANGLE (Degree) 200 200 45 45 45 45 205	RAW VALUE (dBuV) 86.33 76.38 54.32 55.30 44.16 24.98 27.81	FACTOR (dB/m) 7.92 7.92 8.01 8.03 8.10 8.28 18.55	

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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 (20MHz)

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

		ANTENNA	POLARITY &	& TEST DIS	TANCE: HO	RIZONTAL	AT 3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5650.00	33.25 PK	68.20	-34.95	2.00 H	155	25.97	7.28
2	#5700.00	53.49 PK	105.20	-51.71	2.00 H	155	46.03	7.46
3	#5720.00	62.22 PK	110.80	-48.58	2.00 H	155	54.68	7.54
4	#5725.00	63.15 PK	122.20	-59.05	2.00 H	155	55.60	7.55
5	*5745.00	93.36 PK			2.00 H	155	85.73	7.63
6	*5745.00	83.33 AV			2.00 H	155	75.70	7.63
7	11490.00	49.25 PK	74.00	-24.75	1.20 H	102	30.86	18.39
8	11490.00	38.22 AV	54.00	-15.78	1.20 H	102	19.83	18.39
9	#17235.00	54.26 PK	74.00	-19.74	2.01 H	89	27.36	26.90
10	#17235.00	45.33 AV	54.00	-8.67	2.01 H	89	18.43	26.90
		ANTENNA	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	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	#5650.00	32.45 PK	68.20	-35.75	1.00 V	50	25.17	7.28
2	#5700.00	53.25 PK	105.20	-51.95	1.00 V	50	45.79	7.46
3	#5720.00	64.25 PK	110.80	-46.55	1.00 V	50	56.71	7.54
4	#5725.00	63.69 PK	122.20	-58.51	1.00 V	50	56.14	7.55
5	*5745.00	92.26 PK			1.00 V	50	84.63	7.63
6	*5745.00	82.55 AV			1.00 V	50	74.92	7.63
7	11490.00	87.28 PK	74.00	-26.72	1.02 V	88	28.89	18.39
8	11490.00	39.16 AV	54.00	-14.84	1.02 V	88	20.77	18.39
_	11490.00 #17235.00	39.16 AV 53.26 PK	54.00 74.00	-14.84 -20.74	1.02 V 1.20 V	88 149	20.77 26.36	18.39 26.90

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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	#5650.00	33.25 PK	68.20	-34.95	1.00 H	303	25.97	7.28		
2	#5700.00	33.49 PK	105.20	-71.71	1.00 H	303	26.03	7.46		
3	#5720.00	51.59 PK	110.80	-59.21	1.00 H	303	44.05	7.54		
4	#5725.00	53.46 PK	122.20	-68.74	1.00 H	303	45.91	7.55		
5	*5785.00	93.26 PK			1.00 H	303	85.49	7.77		
6	*5785.00	83.65 AV			1.00 H	303	75.88	7.77		
7	#5850.00	53.15 PK	122.20	-69.05	1.00 H	300	45.14	8.01		
8	#5855.00	53.26 PK	110.80	-57.54	1.00 H	303	45.23	8.03		
9	#5875.00	34.16 PK	105.20	-71.04	1.00 H	300	26.06	8.10		
10	#5925.00	34.55 PK	68.20	-33.65	1.00 H	300	26.27	8.28		
11	11570.00	48.25 PK	74.00	-25.75	1.00 H	205	29.79	18.46		
12	11570.00	37.45 AV	54.00	-16.55	1.00 H	205	18.99	18.46		
13	#17355.00	54.25 PK	74.00	-19.75	1.20 H	48	27.51	26.74		
14	#17355.00	45.11 AV	54.00	-8.89	1.20 H	48	18.37	26.74		
	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
		ANTENNA	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M			
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	/ & TEST DI MARGIN (dB)	STANCE: V ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
NO.	-	EMISSION LEVEL	LIMIT	MARGIN	ANTENNA HEIGHT	TABLE ANGLE	RAW VALUE	FACTOR		
	(MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	FACTOR (dB/m)		
1	(MHz) #5650.00	EMISSION LEVEL (dBuV/m) 33.25 PK	LIMIT (dBuV/m) 68.20	MARGIN (dB)	ANTENNA HEIGHT (m) 1.00 V	TABLE ANGLE (Degree)	RAW VALUE (dBuV) 25.97	FACTOR (dB/m) 7.28		
1 2	(MHz) #5650.00 #5700.00	EMISSION LEVEL (dBuV/m) 33.25 PK 31.59 PK	LIMIT (dBuV/m) 68.20 105.20	MARGIN (dB) -34.95 -73.61	ANTENNA HEIGHT (m) 1.00 V 1.00 V	TABLE ANGLE (Degree) 90	RAW VALUE (dBuV) 25.97 24.13	FACTOR (dB/m) 7.28 7.46		
1 2 3	(MHz) #5650.00 #5700.00 #5720.00	EMISSION LEVEL (dBuV/m) 33.25 PK 31.59 PK 53.48 PK	LIMIT (dBuV/m) 68.20 105.20 110.80	MARGIN (dB) -34.95 -73.61 -57.32	ANTENNA HEIGHT (m) 1.00 V 1.00 V 1.00 V	TABLE ANGLE (Degree) 90 90 97	RAW VALUE (dBuV) 25.97 24.13 45.94	FACTOR (dB/m) 7.28 7.46 7.54		
1 2 3 4	(MHz) #5650.00 #5700.00 #5720.00 #5725.00	EMISSION LEVEL (dBuV/m) 33.25 PK 31.59 PK 53.48 PK 53.48 PK	LIMIT (dBuV/m) 68.20 105.20 110.80	MARGIN (dB) -34.95 -73.61 -57.32	ANTENNA HEIGHT (m) 1.00 V 1.00 V 1.00 V	TABLE ANGLE (Degree) 90 90 97 99	RAW VALUE (dBuV) 25.97 24.13 45.94 45.93	FACTOR (dB/m) 7.28 7.46 7.54 7.55		
1 2 3 4 5	#5650.00 #5700.00 #5720.00 #5725.00 *5785.00	EMISSION LEVEL (dBuV/m) 33.25 PK 31.59 PK 53.48 PK 53.48 PK 92.15 PK	LIMIT (dBuV/m) 68.20 105.20 110.80	MARGIN (dB) -34.95 -73.61 -57.32	ANTENNA HEIGHT (m) 1.00 V 1.00 V 1.00 V 1.00 V	TABLE ANGLE (Degree) 90 90 97 99 99	RAW VALUE (dBuV) 25.97 24.13 45.94 45.93 84.38	FACTOR (dB/m) 7.28 7.46 7.54 7.55 7.77		
1 2 3 4 5 6	#5650.00 #5700.00 #5720.00 #5725.00 *5785.00	EMISSION LEVEL (dBuV/m) 33.25 PK 31.59 PK 53.48 PK 53.48 PK 92.15 PK 82.99 AV	LIMIT (dBuV/m) 68.20 105.20 110.80 122.20	MARGIN (dB) -34.95 -73.61 -57.32 -68.72	ANTENNA HEIGHT (m) 1.00 V 1.00 V 1.00 V 1.00 V 1.00 V	TABLE ANGLE (Degree) 90 90 97 99 90 90	RAW VALUE (dBuV) 25.97 24.13 45.94 45.93 84.38 75.22	FACTOR (dB/m) 7.28 7.46 7.54 7.55 7.77		
1 2 3 4 5 6 7	#5650.00 #5700.00 #5720.00 #5725.00 *5785.00 *5785.00	EMISSION LEVEL (dBuV/m) 33.25 PK 31.59 PK 53.48 PK 53.48 PK 92.15 PK 82.99 AV 62.16 PK	LIMIT (dBuV/m) 68.20 105.20 110.80 122.20	MARGIN (dB) -34.95 -73.61 -57.32 -68.72	ANTENNA HEIGHT (m) 1.00 V 1.00 V 1.00 V 1.00 V 1.00 V 1.00 V	TABLE ANGLE (Degree) 90 90 97 99 90 90 90	RAW VALUE (dBuV) 25.97 24.13 45.94 45.93 84.38 75.22 54.15	FACTOR (dB/m) 7.28 7.46 7.54 7.55 7.77 7.77 8.01		
1 2 3 4 5 6 7 8	#5650.00 #5700.00 #5720.00 #5725.00 *5785.00 *5785.00 #5850.00	EMISSION LEVEL (dBuV/m) 33.25 PK 31.59 PK 53.48 PK 53.48 PK 92.15 PK 82.99 AV 62.16 PK 63.49 PK	LIMIT (dBuV/m) 68.20 105.20 110.80 122.20 122.20 110.80	MARGIN (dB) -34.95 -73.61 -57.32 -68.72 -60.04 -47.31	ANTENNA HEIGHT (m) 1.00 V 1.00 V 1.00 V 1.00 V 1.00 V 1.45 V 1.00 V	TABLE ANGLE (Degree) 90 90 97 99 90 90 90 92	RAW VALUE (dBuV) 25.97 24.13 45.94 45.93 84.38 75.22 54.15 55.46	FACTOR (dB/m) 7.28 7.46 7.54 7.55 7.77 7.77 8.01 8.03		
1 2 3 4 5 6 7 8	#5650.00 #5700.00 #5720.00 #5725.00 *5785.00 *5785.00 #5850.00 #5855.00	EMISSION LEVEL (dBuV/m) 33.25 PK 31.59 PK 53.48 PK 53.48 PK 92.15 PK 82.99 AV 62.16 PK 63.49 PK 53.44 PK	LIMIT (dBuV/m) 68.20 105.20 110.80 122.20 110.80 105.20	MARGIN (dB) -34.95 -73.61 -57.32 -68.72 -60.04 -47.31 -51.76	ANTENNA HEIGHT (m) 1.00 V 1.00 V 1.00 V 1.00 V 1.00 V 1.00 V 1.00 V 1.00 V	TABLE ANGLE (Degree) 90 90 97 99 90 90 92 90 90	RAW VALUE (dBuV) 25.97 24.13 45.94 45.93 84.38 75.22 54.15 55.46 45.34	FACTOR (dB/m) 7.28 7.46 7.54 7.55 7.77 7.77 8.01 8.03 8.10		
1 2 3 4 5 6 7 8 9	(MHz) #5650.00 #5700.00 #5720.00 #5725.00 *5785.00 *5785.00 #5850.00 #5875.00 #5875.00	EMISSION LEVEL (dBuV/m) 33.25 PK 31.59 PK 53.48 PK 53.48 PK 92.15 PK 82.99 AV 62.16 PK 63.49 PK 53.44 PK 35.36 PK	LIMIT (dBuV/m) 68.20 105.20 110.80 122.20 122.20 110.80 105.20 68.20	-34.95 -73.61 -57.32 -68.72 -60.04 -47.31 -51.76 -32.84	ANTENNA HEIGHT (m) 1.00 V 1.00 V 1.00 V 1.00 V 1.00 V 1.45 V 1.00 V 1.00 V	TABLE ANGLE (Degree) 90 90 97 99 90 90 92 90 90 90	RAW VALUE (dBuV) 25.97 24.13 45.94 45.93 84.38 75.22 54.15 55.46 45.34 27.08	FACTOR (dB/m) 7.28 7.46 7.54 7.55 7.77 7.77 8.01 8.03 8.10 8.28		
1 2 3 4 5 6 7 8 9 10	#5650.00 #5700.00 #5720.00 #5725.00 *5785.00 *5785.00 #5855.00 #5855.00 #5925.00 11570.00	EMISSION LEVEL (dBuV/m) 33.25 PK 31.59 PK 53.48 PK 53.48 PK 92.15 PK 82.99 AV 62.16 PK 63.49 PK 53.44 PK 35.36 PK 46.36 PK	LIMIT (dBuV/m) 68.20 105.20 110.80 122.20 110.80 105.20 68.20 74.00	-34.95 -73.61 -57.32 -68.72 -60.04 -47.31 -51.76 -32.84 -27.64	ANTENNA HEIGHT (m) 1.00 V 1.00 V 1.00 V 1.00 V 1.00 V 1.45 V 1.00 V 1.00 V 2.00 V	TABLE ANGLE (Degree) 90 90 97 99 90 90 90 90 90 90 90	RAW VALUE (dBuV) 25.97 24.13 45.94 45.93 84.38 75.22 54.15 55.46 45.34 27.08 27.90	FACTOR (dB/m) 7.28 7.46 7.54 7.55 7.77 7.77 8.01 8.03 8.10 8.28 18.46		

REMARKS:

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

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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)	LEVEL (dBuV/m)		ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)		
1	*5825.00	94.26 PK			2.05 H	200	86.34	7.92		
2	*5825.00	84.25 AV			2.05 H	200	76.33	7.92		
3	#5850.00	63.23 PK	122.20	-58.97	2.05 H	200	55.22	8.01		
4	#5855.00	63.15 PK	110.80	-47.65	2.05 H	200	55.12	8.03		
5	#5875.00	52.56 PK	105.20	-52.64	2.00 H	203	44.46	8.10		
6	#5925.00	44.01 PK	68.20	-24.19	2.05 H	200	35.73	8.28		
7	11650.00	48.25 PK	74.00	-25.75	2.01 H	200	29.70	18.55		
8	11650.00	37.45 AV	54.00	-16.55	2.01 H	200	18.90	18.55		
9	#17475.00	54.26 PK	74.00	-19.74	3.02 H	30	27.69	26.57		
10	#17475.00	44.50 AV	54.00	-9.50	3.02 H	30	17.93	26.57		
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	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	*5825.00	92.22 PK			1.00 V	45	84.30	7.92		
2	*5825.00	83.10 AV			1.00 V	45	75.18	7.92		
3	#5850.00	63.23 PK	122.20	-58.97	1.00 V	45	55.22	8.01		
4	#5855.00	61.45 PK	110.80	-49.35	1.00 V	45	53.42	8.03		
5	#5875.00	53.66 PK	105.20	-51.54	1.00 V	45	45.56	8.10		
6	#5925.00	34.12 PK	68.20	-34.08	1.00 V	45	25.84	8.28		
7	11650.00	46.28 PK	74.00	-27.72	2.01 V	144	27.73	18.55		
8	11650.00	38.46 AV	54.00	-15.54	2.01 V	144	19.91	18.55		
9	#17475.00	53.26 PK	74.00	-20.74	1.00 V	45	26.69	26.57		
10	#17475.00	44.12 AV	54.00	-9.88	1.00 V	45	17.55	26.57		

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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 (40MHz)

CHANNEL	TX Channel 151	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	#5650.00	43.88 PK	68.20	-24.32	1.10 H	20	36.60	7.28		
2	#5700.00	53.59 PK	105.20	-52.61	1.00 H	20	46.13	7.46		
3	#5720.00	62.85 PK	110.80	-47.95	1.00 H	20	55.31	7.54		
4	#5725.00	61.94 PK	122.20	-60.26	1.00 H	20	54.39	7.55		
5	*5755.00	90.35 PK			1.00 H	20	82.69	7.66		
6	*5755.00	80.26 AV			1.00 H	20	72.60	7.66		
7	11510.00	48.36 PK	74.00	-25.64	2.15 H	88	29.97	18.39		
8	11510.00	37.69 AV	54.00	-16.31	2.15 H	88	19.30	18.39		
9	#17265.00	54.26 PK	74.00	-19.74	1.00 H	83	27.40	26.86		
10	#17265.00	45.88 AV	54.00	-8.12	1.00 H	83	19.02	26.86		
		ANTENNA	POLARITY	' & TEST DI	STANCE: V	ERTICAL A	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	#5650.00	53.84 PK	68.20	-14.36	1.00 V	46	46.56	7.28		
2	#5700.00	53.85 PK	105.20	-51.35	1.00 V	46	46.39	7.46		
3	#5720.00	62.59 PK	110.80	-48.21	1.00 V	46	55.05	7.54		
4	#5725.00	63.49 PK	122.20	-58.71	1.00 V	45	55.94	7.55		
5	*5755.00	89.25 PK			1.55 V	46	81.59	7.66		
6	*5755.00	80.11 AV			1.55 V	46	72.45	7.66		
7	11510.00	46.26 PK	74.00	-27.74	1.11 V	50	27.87	18.39		
8	11510.00	38.63 AV	54.00	-15.37	1.11 V	50	20.24	18.39		
0	11310.00	30.0371								
9	#17265.00	53.26 PK	74.00	-20.74	1.00 V	49	26.40	26.86		

REMARKS:

- 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
- 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
- 3. The emission levels of other frequencies were less than 20dB margin 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.	D. FREQ. EMISSION LEVEL (dBuV/m)		MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)			
1	*5795.00	90.89 PK			1.88 H	250	83.08	7.81		
2	*5795.00	80.45 AV			1.88 H	250	72.64	7.81		
3	#5850.00	62.33 PK	122.20	-59.87	1.88 H	250	54.32	8.01		
4	#5855.00	56.26 PK	110.80	-53.54	1.88 H	250	48.23	8.03		
5	#5875.00	52.59 PK	105.20	-52.61	1.90 H	250	44.49	8.10		
6	#5925.00	43.25 PK	68.20	-24.95	1.50 H	250	34.97	8.28		
7	11590.00	48.26 PK	74.00	-25.74	1.00 H	205	29.78	18.48		
8	11590.00	37.29 AV	54.00	-16.71	1.00 H	205	18.81	18.48		
9	#17385.00	54.36 PK	74.00	-19.64	2.00 H	208	27.67	26.69		
10	#17385.00	45.26 AV	54.00	-8.74	2.00 H	208	18.57	26.69		
		ANTENNA	POLARITY	& TEST DI	STANCE: V	ERTICAL A	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	*5795.00	89.39 PK			1.50 V	131	81.58	7.81		
2	*5795.00	80.77 AV			1.50 V	131	72.96	7.81		
3	#5850.00	62.35 PK	122.20	-59.85	1.50 V	131	54.34	8.01		
4	#5855.00	54.09 PK	110.80	-56.71	1.50 V	131	46.06	8.03		
5	#5875.00	53.26 PK	105.20	-51.94	1.50 V	131	45.16	8.10		
6	#5925.00	43.09 PK	68.20	-25.11	1.50 V	131	34.81	8.28		
7	11590.00	46.36 PK	74.00	-27.64	1.00 V	205	27.88	18.48		
8	11590.00	38.59 AV	54.00	-15.41	1.00 V	205	20.11	18.48		
	#4720E 00	50.00 DI/	74.00	00.04	4.55.17	95	27.00	26.69		
9	#17385.00	53.69 PK	74.00	-20.31	1.55 V	95	27.00	20.09		

REMARKS:

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



3.2 CONDUCTED EMISSION MEASUREMENT

3.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTE	D LIMIT (dBμV)
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

NOTE: 1. The lower limit shall apply at the transition frequencies.

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

3.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101494	Apr. 05,17	Apr. 04,18
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Mar. 06,17	Mar. 05,18
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Apr. 05,17	Apr. 04,18
Voltage probe	SCHWARZBECK	TK 9421	TK 9421-176	Jan. 04,17	Jan. 03,18
Test software	ADT	ADT_Cond_V7.3.7	N/A	N/A	N/A

NOTE:

- 1. The test was performed in shielded room 553.
- 2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.



3.2.3 TEST PROCEDURES

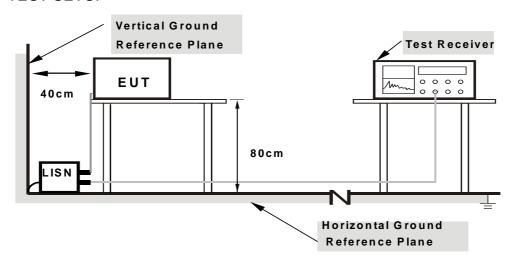
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling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

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

3.2.4 DEVIATION FROM TEST STANDARD

No deviation.

3.2.5 TEST SETUP



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

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

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

3.2.6 EUT OPERATING CONDITIONS

Same as 3.1.6



3.2.7 TEST RESULTS

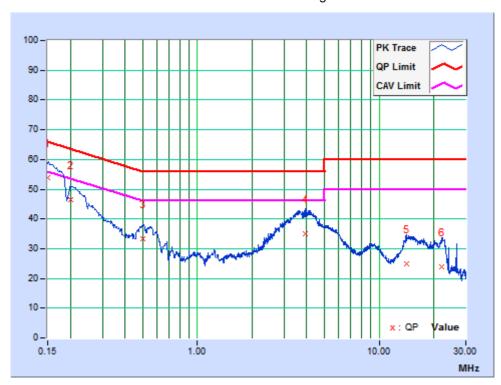
CONDUCTED WORST-CASE DATA: 802.11a

PHASE	Line	6dB BANDWIDTH	9kHz

Na	Freq. Corr.		Readin	g Value		ssion vel	Lir	nit	Mar	gin
No		Factor	[dB	(uV)]	[dB	(uV)]	[dB	(uV)]	(dl	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.22	43.68	26.33	53.90	36.55	66.00	56.00	-12.10	-19.45
2	0.20036	10.22	36.21	18.16	46.43	28.38	63.60	53.60	-17.17	-25.22
3	0.50000	10.22	22.95	13.93	33.17	24.15	56.00	46.00	-22.83	-21.85
4	3.94350	10.22	24.67	18.14	34.89	28.36	56.00	46.00	-21.11	-17.64
5	14.12925	10.25	14.65	5.36	24.90	15.61	60.00	50.00	-35.10	-34.39
6	21.99300	10.27	13.68	6.75	23.95	17.02	60.00	50.00	-36.05	-32.98

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.

- 2. The emission levels of other frequencies were very low against the limit.
- 3. Margin value = Emission level Limit value
- 4. Correction factor = Insertion loss + Cable loss
- 5. Emission Level = Correction Factor + Reading Value.



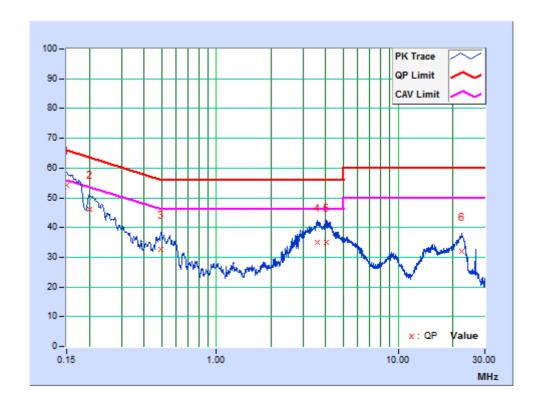


PHASE	Neutral	6dB BANDWIDTH	9kHz
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Na	Freq.	Corr. Factor	Readin	g Value		ssion vel	Limit		Mar	gin
No		Factor	[dB	(uV)]	[dB	(uV)]	[dB	(uV)]	(di	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.01	44.24	26.70	54.25	36.71	66.00	56.00	-11.75	-19.29
2	0.19983	10.01	36.03	18.76	46.04	28.77	63.62	53.62	-17.58	-24.85
3	0.49559	10.02	22.80	13.13	32.82	23.15	56.07	46.07	-23.25	-22.92
4	3.61050	10.02	24.94	17.68	34.96	27.70	56.00	46.00	-21.04	-18.30
5	4.04250	10.02	24.90	18.00	34.92	28.02	56.00	46.00	-21.08	-17.98
6	22.48350	10.15	21.73	16.49	31.88	26.64	60.00	50.00	-28.12	-23.36

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak an d 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.





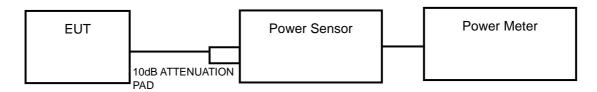
3.3 TRANSMIT POWER MEASUREMENT

3.3.1 LIMITS OF TRANSMIT POWER MEASUREMENT

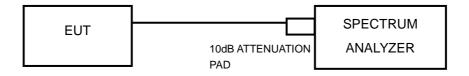
Operation Band	EUT Category		LIMIT
		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p ≤ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
U-NII-1		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	\checkmark	Mobile and Portable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

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

3.3.2 TEST SETUP



FOR 6/26dB BANDWIDTH





3.3.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Power Sensor	Keysight	U2021XA	MY55060016	May 19,17	May 18,18
Power Sensor	Keysight	U2021XA	MY55060018	May 19,17	May 18,18
Test software	Agilent	Power Analyzer 3.9	N/A	N/A	N/A
Digital Multimeter	FLUKE	15B	A1220010DG	Oct. 13, 16	Oct.12, 17
Humid & Temp Programmable Tester	Haida	HD-2257	110807201	Sep.05,16	Sep. 04,17
Oscilloscope	Agilent	DSO9254A	MY51260160	Nov. 04,16	Nov. 03,17
Signal Analyzer	Rohde & Schwarz	FSV7	102331	Nov. 04,16	Nov. 03,17
Signal Generator	Agilent	N5183A	MY50140980	Nov. 04,16	Nov. 03,17
Agile Signal Generator	Agilent	8645A	Agilent	Aug.08, 17	Aug.07, 18
Spectrum Analyzer	Keysight	N9020A	MY55400499	Apr. 10,17	Apr. 09,18
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY56200288	Dec.05, 16	Dec. 04, 17
BLUETOOTH TESTER	Rohde&Schwarz	CBT32	100811	Aug.08, 17	Aug.07, 18
Attenuator	MINI	BW-S10W2+	S130129FGE2	N/A	N/A

NOTE:

- 1. The test was performed in RF Oven room.
- 2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

3.3.4 TEST PROCEDURE

FOR AVERAGE POWER MEASUREMENT

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

FOR 26dB BANDWIDTH

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



FOR 6dB BANDWIDTH

- 1) Set RBW = 100 kHz.
- 2) Set the video bandwidth (VBW) ≥ 3 RBW.
- 3) Detector = Peak.
- 4) Trace mode = max hold.
- 5) Sweep = auto couple.
- 6) Allow the trace to stabilize.
- 7) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

3.3.5 DEVIATION FROM TEST STANDARD

No deviation.

3.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

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3.3.7 TEST RESULTS

OUTPUT POWER:

802.11a

Channel Number	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	LIMIT (dBm)	PASS /FAIL
36	5180	15.14	24.00	PASS
40	5200	15.08	24.00	PASS
48	5240	15.31	24.00	PASS
52	5260	15.07	24.00	PASS
60	5300	15.16	24.00	PASS
64	5320	15.21	24.00	PASS
100	5500	15.18	24.00	PASS
116	5580	13.39	24.00	PASS
140	5700	15.26	24.00	PASS
149	5745	15.29	30.00	PASS
157	5785	15.33	30.00	PASS
165	5825	15.18	30.00	PASS

For Band 2~Band 3: Limit = 11dBm+10log(26 BW)=11+10log(22.14)=24.45dBm > 24dBm



802.11n (20MHz)

Channel Number	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	LIMIT (dBm)	PASS /FAIL
36	5180	15.01	24.00	PASS
40	5200	15.17	24.00	PASS
48	5240	15.38	24.00	PASS
52	5260	15.06	24.00	PASS
60	5300	15.21	24.00	PASS
64	5320	15.17	24.00	PASS
100	5500	15.14	24.00	PASS
116	5580	15.41	24.00	PASS
140	5700	15.28	24.00	PASS
149	5745	15.06	30.00	PASS
157	5785	15.21	30.00	PASS
165	5825	15.02	30.00	PASS

For Band 2~Band 3: Limit = 11dBm+10log(26 BW)=11+10log(21.21)=24.26dBm > 24dBm



802.11n (40MHz)

Channel Number	FREQ. (MHz)	AVG. CONDUCTED POWER (dBm)	LIMIT (dBm)	PASS /FAIL
38	5190	15.02	24.00	PASS
46	5230	15.16	24.00	PASS
54	5270	15.31	24.00	PASS
62	5310	15.08	24.00	PASS
102	5510	15.19	24.00	PASS
110	5550	15.37	24.00	PASS
134	5670	15.41	24.00	PASS
151	5755	15.19	30.00	PASS
159	5795	15.08	30.00	PASS



26dB BANDWIDTH:

802.11a

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
36	5180	23.70	PASS
40	5200	22.14	PASS
48	5240	25.24	PASS
52	5260	23.61	PASS
60	5300	24.53	PASS
64	5320	22.71	PASS
100	5500	23.27	PASS
116	5580	27.08	PASS
140	5700	26.26	PASS

802.11n (20MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
36	5180	21.57	PASS
40	5200	25.12	PASS
48	5240	23.25	PASS
52	5260	22.50	PASS
60	5300	24.23	PASS
64	5320	21.21	PASS
100	5500	25.01	PASS
116	5580	28.71	PASS
140	5700	24.77	PASS



802.11n (40MHz)

Channel Number	Freq. (MHz)	26dB DOWN BANDWIDTH (MHz)	PASS /FAIL
38	5190	45.33	PASS
46	5230	45.89	PASS
54	5270	48.72	PASS
62	5310	45.96	PASS
102	5510	52.45	PASS
110	5550	52.70	PASS
134	5670	59.27	PASS

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Page 64 of 85



6dB BANDWIDTH For 5725-5850MHz

802.11a

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
149	5745	16.37	PASS
157	5785	16.38	PASS
165	5825	16.35	PASS

802.11n (20M)

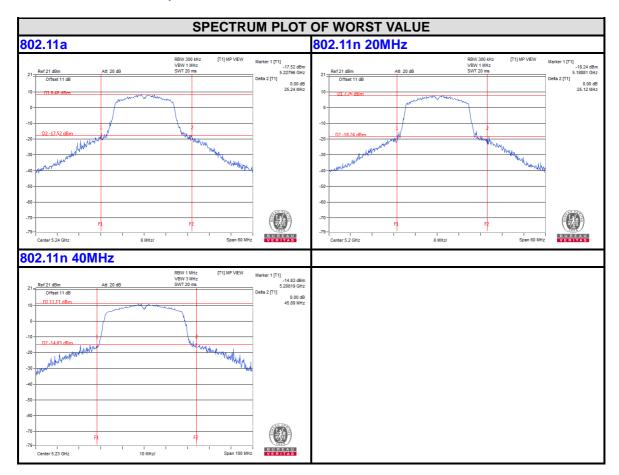
Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
149	5745	17.60	PASS
157	5785	17.56	PASS
165	5825	17.62	PASS

802.11n (40M)

Channel Number	Freq. (MHz)	6dB DOWN BANDWIDTH (MHz)	PASS /FAIL
151	5755	36.19	PASS
159	5795	35.86	PASS

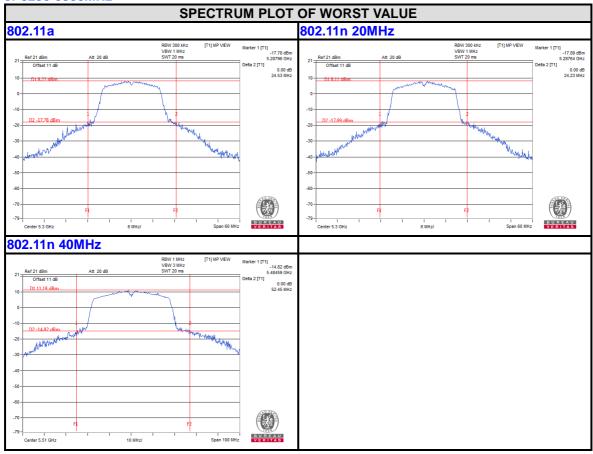


26dB bandwidth Test Plot For 5150-5250MHz worst plot



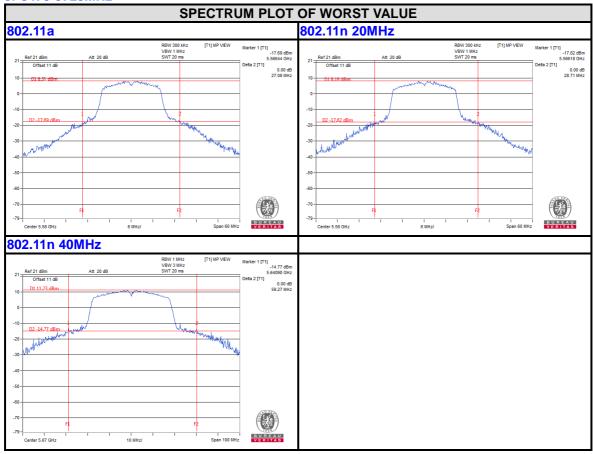


For 5250-5350MHz



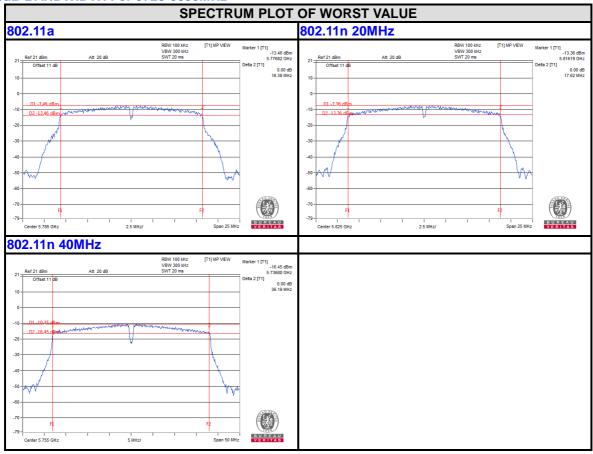


For 5470-5725MHz





6dB BANDWIDTH For 5725-5850MHz





99% BANDWIDTH:

802.11a

Channel Number	Freq. (MHz)	99% BANDWIDTH (MHz)	PASS /FAIL
36	5180	16.56	PASS
40	5200	16.68	PASS
48	5240	16.80	PASS
52	5260	16.80	PASS
60	5300	16.80	PASS
64	5320	16.80	PASS
100	5500	16.92	PASS
116	5580	17.04	PASS
140	5700	16.92	PASS

802.11n (20MHz)

Channel Number	Freq. (MHz)	99% BANDWIDTH (MHz))	PASS /FAIL
36	5180	17.76	PASS
40	5200	17.88	PASS
48	5240	17.76	PASS
52	5260	17.76	PASS
60	5300	17.76	PASS
64	5320	17.76	PASS
100	5500	17.76	PASS
116	5580	18.00	PASS
140	5700	17.88	PASS



802.11n (40MHz)

Channel Number	Freq. (MHz)	99% BANDWIDTH (MHz)	PASS /FAIL
38	5190	36.40	PASS
46	5230	36.40	PASS
54	5270	36.40	PASS
62	5310	36.20	PASS
102	5510	36.60	PASS
110	5550	36.80	PASS
134	5670	36.60	PASS

Note: The 99% bandwidth using for prove the sub-band not fall in other band.

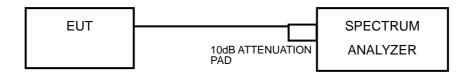


3.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

3.4.1 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		$\sqrt{}$	11dBm/ MHz
U-NII-2C		$\sqrt{}$	11dBm/ MHz
U-NII-3	V		30dBm/ 500kHz

3.4.2 TEST SETUP



3.4.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.

3.4.4 TEST PROCEDURES

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

Using method SA-2

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

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Page 72 of 85



For U-NII-3 band:

Using method SA-2

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 300 kHz, Set VBW =1 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = auto, trigger set to "free run".
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Record the max value and add 10 log (1/duty cycle)

3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

3.4.6 EUT OPERATING CONDITIONS

Same as 3.3.6



3.4.7 TEST RESULTS

For U-NII-1, U-NII-2A & U-NII-2C, For U-NII-3: 802.11a

Channel Number	Frequency (MHz)	RF Power Level in 1MHz BW (dBm)	Total power density (mW)	MAX. Limit (dBm)	PASS/ FAIL
36	5180	4.15	2.6002	11.00	PASS
40	5200	3.91	2.4604	11.00	PASS
48	5240	4.31	2.6977	11.00	PASS
52	5260	4.11	2.5763	11.00	PASS
60	5300	4.23	2.6485	11.00	PASS
64	5320	4.07	2.5527	11.00	PASS
100	5500	4.03	2.5293	11.00	PASS
116	5580	4.13	2.5882	11.00	PASS
140	5700	4.00	2.5119	11.00	PASS
Channel Number	Frequency (MHz)	RF Power Level in 300kHz BW (dBm)	RF Power Level in 500kHz BW (dBm)	MAX. Limit (dBm/500k)	PASS/ FAIL
149	5745	-3.96	-1.74	30.00	PASS
157	5785	-4.02	-1.80	30.00	PASS
165	5825	-4.24	-2.02	30.00	PASS



802.11n (20MHz)

Channel Number	Frequency (MHz)	RF Power Level in 1MHz BW (dBm)	Total power density (mW)	MAX. Limit (dBm)	PASS/ FAIL
36	5180	3.50	2.2387	11.00	PASS
40	5200	3.80	2.3988	11.00	PASS
48	5240	3.91	2.4604	11.00	PASS
52	5260	3.72	2.3550	11.00	PASS
60	5300	3.85	2.4266	11.00	PASS
64	5320	3.80	2.3988	11.00	PASS
100	5500	3.74	2.3659	11.00	PASS
116	5580	3.95	2.4831	11.00	PASS
140	5700	3.89	2.4491	11.00	PASS
Channel Number	Frequency (MHz)	RF Power Level in 300kHz BW (dBm)	RF Power Level in 500kHz BW (dBm)	MAX. Limit (dBm/500k)	PASS/ FAIL
149	5745	-4.35	-2.13	30.00	PASS
157	5785	-4.60	-2.38	30.00	PASS
165	5825	-4.76	-2.54	30.00	PASS

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Page 75 of 85

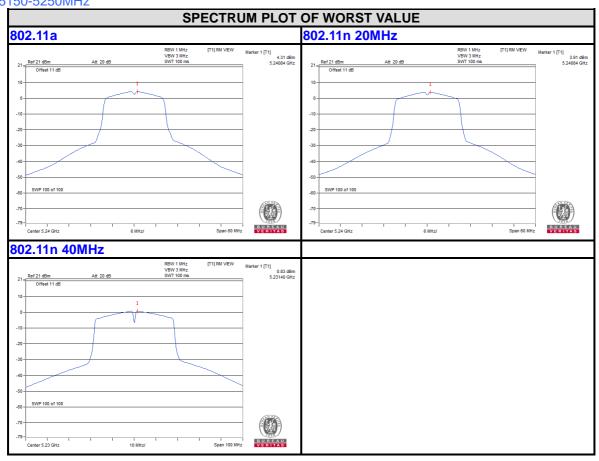


802.11n (40MHz)

Channel Number	Frequency (MHz)	RF Power Level in 1MHz BW (dBm)	Total power density (mW)	MAX. Limit (dBm)	PASS/ FAIL
38	5190	0.68	1.1695	11.00	PASS
46	5230	0.83	1.2106	11.00	PASS
54	5270	1.21	1.3213	11.00	PASS
62	5310	0.82	1.2078	11.00	PASS
102	5510	0.89	1.2274	11.00	PASS
110	5550	1.08	1.2823	11.00	PASS
134	5670	1.19	1.3152	11.00	PASS
Channel Number			RF Power Level in 500kHz BW (dBm)	MAX. Limit (dBm/500k)	PASS/ FAIL
151	5755	-7.89	-5.67	30.00	PASS
159	5795	-7.76	-5.54	30.00	PASS



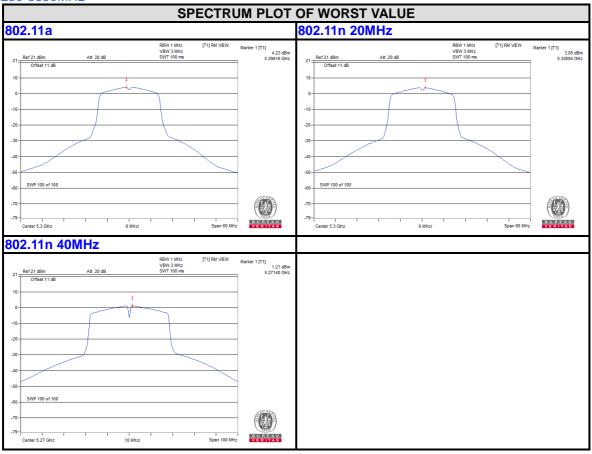
PSD Test Plot BAND 1 5150-5250MHz



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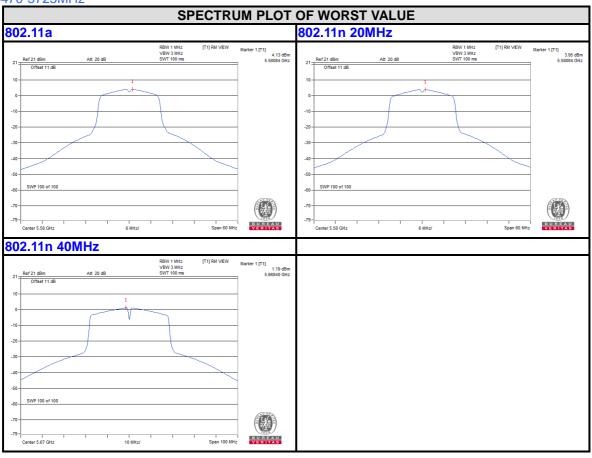


BAND 2 5250-5350MHz





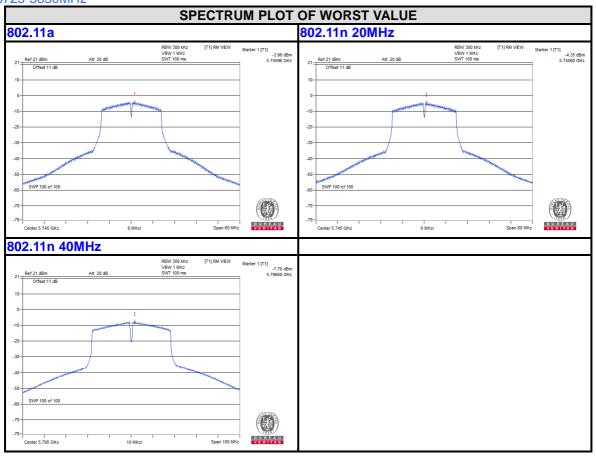
BAND 3 5470-5725MHz



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BAND4 5725-5850MHz



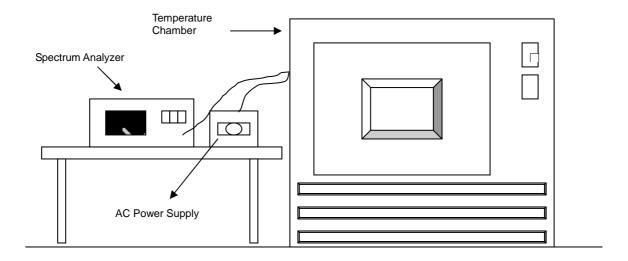


3.5 FREQUENCY STABILITY

3.5.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

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

3.5.2 TEST SETUP



3.5.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.

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3.5.4 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.

3.5.5 DEVIATION FROM TEST STANDARD

No deviation.

3.5.6 EUT OPERATING CONDITION

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



3.5.7 TEST RESULTS

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
	POWER	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
TEMP. (℃)	SUPPLY (Vac)	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift
50	120	5179.9879	-0.00023	5179.9895	-0.00020	5179.9876	-0.00024	5179.9887	-0.00022
40	120	5180.0102	0.00020	5180.0121	0.00023	5180.0075	0.00014	5180.007	0.00014
30	120	5180.0132	0.00025	5180.0134	0.00026	5180.0152	0.00029	5180.014	0.00027
20	120	5179.9989	-0.00002	5179.9976	-0.00005	5179.9958	-0.00008	5179.9949	-0.00010
10	120	5180.0227	0.00044	5180.0235	0.00045	5180.0215	0.00042	5180.0245	0.00047
0	120	5180.0049	0.00009	5180.0042	0.00008	5180.0044	0.00008	5180.004	0.00008
-10	120	5179.9935	-0.00013	5179.9901	-0.00019	5179.9894	-0.00020	5179.9942	-0.00011
-20	120	5180.0213	0.00041	5180.0204	0.00039	5180.0207	0.00040	5180.0237	0.00046
-30	120	5179.9947	-0.00010	5179.9977	-0.00004	5179.9941	-0.00011	5179.9971	-0.00006

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
I I FIMP. I	POWER	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
	SUPPLY (Vac)	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift
	138	5179.9985	-0.00003	5179.9978	-0.00004	5179.9954	-0.00009	5179.9946	-0.00010
20	120	5179.9989	-0.00002	5179.9976	-0.00005	5179.9958	-0.00008	5179.9949	-0.00010
	102	5179.9986	-0.00003	5179.9974	-0.00005	5179.9959	-0.00008	5179.9941	-0.00011



4. PHOTOGRAPHS OF THE TEST CONFIGURATION

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



5. APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No modifications were made to the EUT by the lab during the test.

---END---