ACCREDITED
Certificate # 3939.01

VARIANT FCC TEST REPORT

(Part 15, Subpart C)

Applicant:	Power Idea Technology (Shenzhen) Co., Ltd.
Address:	4th Floor, A Section, Languang Science&technology Building, No.7 Xinxi RD, Hi-Tech Industrial Park North, Nanshan District, ShenZhen, P.R.C.

Manufacturer or Supplier:	Power Idea Technology (Shenzhen) Co., Ltd.
Address:	4th Floor, A Section, Languang Science&technology Building, No.7 Xinxi RD, Hi-Tech Industrial Park North, Nanshan District, ShenZhen, P.R.C.
Product:	Mobile phone
Brand Name:	RugGear
Model Name:	PSH03G
FCC ID:	ZLE-PSH03G
Date of tests:	Apr. 01, 2024 ~ Jun. 25, 2024 Sep. 05, 2024 ~ Sep. 29, 2024

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

☒ **FCC Part 15, Subpart C, Section 15.247**

☒ **ANSI C63.10-2020**

CONCLUSION: The submitted sample was found to <u>COMPLY</u> with the test requirement

Prepared by Simon Wang Engineer / Mobile Department	Approved by Luke Lu Manager / Mobile Department
Simon Wang Date: Sep. 29, 2024	Luke Lu Date: Sep. 29, 2024

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P24030018RF02	Original release	Jun. 25, 2024
W7L-P24090003RF02	Based on the original product changing the applicant information, manufacturer information, model name, brand name and FCC ID, replace motherboard and battery (two types). The new sample only verify EIRP and RSE worst case and verify results of EIRP are similar or lower, So this report only update RSE worse case(802.11n(40MHz) CH9) data.	Sep. 29, 2024

1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART C (SECTION 15.247)		
STANDARD SECTION	**TEST TYPE AND LIMIT**	**RESULT**
15.207	AC Power Conducted Emission	Compliance
15.205 15.209	Radiated Emissions	Compliance
15.247(d)	Out of band Emission Measurement	Compliance
15.247(a)(2)	6dB bandwidth	Compliance
15.247(b)	Conducted Output power	Compliance
15.247(e)	Power Spectral Density	Compliance
15.203	Antenna Requirement	Compliance

Note：Except RSE and AC Power Conducted Emission, other data please refer to Appendix B.

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	UNCERTAINTY
AC Power Conducted emissions	±2.70dB
Radiated emissions (9KHz~30MHz)	±2.68dB
Radiated emissions (30MHz~1GHz)	±4.98dB
Radiated emissions (1GHz ~6GHz)	±4.70dB
Radiated emissions (6GHz ~18GHz)	±4.60dB
Radiated emissions (18GHz ~40GHz)	±4.12dB
Conducted emissions	±4.01dB
Occupied Channel Bandwidth	±43.58KHz
Conducted Output power	±2.06dB
Power Spectral Density	±0.85 dB

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	Mobile phone
BRAND NAME	RugGear
MODEL NAME	PSH03G
NOMINAL VOLTAGE	5Vdc (adapter or host equipment) 3.7Vdc (Li-ion, battery)
MODULATION	DSSS, OFDM, GFSK, OFDMA
TRANSMISSION RATE	802.11b: 11/ 5.5/ 2.0 / 1.0 Mbps 802.11g: 54/ 48/ 36 / 24 / 18 / 9/ 6 Mbps 802.11n(HT20)/ax(HE20): up to 144.4 Mbps 802.11n(HT40)/ax(HE40): up to 300 Mbps BT_LE: 0.125 Mbps /0.5 Mbps /1 Mbps/2 Mbps 802.11ax 20 (RU242): up to 286.8Mbps 802.11ax 40 (RU484): up to 573.5Mbps
OPERATING FREQUENCY	2412-2462MHz for 11b/g/n(HT20/40) /ax(HE20/40) 2402-2480MHz for BT-LE(GFSK) 2412-2462MHz for ax(20M RU242)/ax (40M RU484)
MAX. OUTPUT POWER	WLAN: 245.11mW (Maximum) BT-LE: 5.69mW (Maximum)
ANTENNA TYPE	ANT 8: PIFA Antenna with 0.4dBi gain for WIFI ANT 9: PIFA Antenna with -1.33dBi gain for WIFI
	ANT 8: PIFA Antenna with 0.4dBi gain for BLE
HW VERSION	V05
SW VERSION	IS440_00.00_1_20240613
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	USB cable: with shielded cable, w/o ferrite core, 1.0 meter

NOTE:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2. EUT operating function.:

MODULATION MODE	TX/RX FUNCTION
802.11b	2TX /2RX
802.11g	2TX /2RX
802.11n(HT20)/ax(HE20)	2TX /2RX
802.11n(HT40)/ax(HE40)	2TX /2RX
802.11ax (20MHz RU 242)	2TX /2RX
802.11ax (40MHz RU 484)	2TX /2RX
BT_LE(1MHz)	1TX /1RX
BT_LE(2MHz)	1TX /1RX
BT_LE(S2)	1TX /1RX
BT_LE(S8)	1TX /1RX

3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
4. Antenna gain and EUT conducted cable loss are provided by the customer, and the laboratory will record the results based on these items that involve these two parameters.

5. List of Accessory:

ACCESSORIES	BRAND	MANUFACTURER	MODEL	SPECIFICATION
AC Adapter	N/A	SHENZHEN SHI YINGYUAN POWER SUPPLY TECHNOLOGY CO., LTD.	ICP12-050-2000B	I/P: 100-240Vac, 0.5A, O/P: 5Vdc, 2A
Battery 1	N/A	FPR Connectivity Technology Inc.	BPIS440A.1A	Capacity：3.7Vdc, 2400mAh
Battery 2	N/A	FPR Connectivity Technology Inc.	IS440.1H	Capacity：3.7Vdc, 4800mAh
USB Cable	N/A	Winpower Technology Co., LTD	PROTECTOR 2.0	Signal Line,1.0meter

2.2 DESCRIPTION OF TEST MODES

11 channels are provided for 802.11b, 802.11g and 802.11n (HT20), 802.11ax20 (HE20); 802.11ax20 (RU 242):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	2412 MHz	7	2442 MHz
2	2417 MHz	8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz	10	2457 MHz
5	2432 MHz	11	2462 MHz
6	2437 MHz		

7 channels are provided for 802.11n (HT40), 802.11ax40 (HE40); 802.11ax40 (RU 484):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
3	2422 MHz	7	2442 MHz
4	2427 MHz	8	2447 MHz
5	2432 MHz	9	2452 MHz
6	2437 MHz		

40 channels are provided for BT-LE (GFSK):

CHANNEL	FREQ. (MHZ)	CHANNEL	FREQ. (MHZ)	CHANNEL	FREQ. (MHZ)	CHANNEL	FREQ. (MHZ)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

2.2.1 CONFIGURATION OF SYSTEM UNDER TEST

Please see section 4 photographs of the test configuration for reference.

2.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports.
The worst case was found when positioned on Y axis for radiated emission. Following test modes were selected for the final test, and the final worst case is marked in boldface and recorded in the report:

EUT CONFIGURE MODE	APPLICABLE TO				MODE
	RE<1G	RE≥1G	PLC	APCM	
-	√	√	√	√	-

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

NOTE: No need to concern of Conducted Emission due to the EUT is powered by battery.

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

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
802.11n HT40	3 to 9	9	OFDM	MCS0
BT-LE	0 to 39	19	GFSK	0.5

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).

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

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	1.0
802.11g	1 to 11	1, 6, 11	OFDM	6.0
802.11n HT20	1 to 11	1, 6, 11	OFDM	MCS0
802.11ax HE20	1 to 11	1, 6, 11	OFDM	MCS0
802.11n HT40	3 to 9	3,6,9	OFDM	MCS0
802.11ax HE40	3 to 9	3,6,9	OFDM	MCS0
BT-LE	0 to 39	0,19, 39	GFSK	0.125&0.5&1.0
BT-LE	1 to 38	1,19, 38	GFSK	2.0
802.11ax 20 (RU 242)	1 to 11	1, 11	OFDMA	MCS0
802.11ax 40 (RU 484)	3 to 9	3, 9	OFDMA	MCS0

POWER LINE CONDUCTED EMISSION TEST

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

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

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
802.11n HT40	3 to 9	9	OFDM	MCS0

BANDEDGE MEASUREMENT:

☒ 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).

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

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	1.0
802.11g	1 to 11	1, 6, 11	OFDM	6.0
802.11n HT20	1 to 11	1, 6, 11	OFDM	MCS0
802.11ax HE20	1 to 11	1, 6, 11	OFDM	MCS0
802.11n HT40	3 to 9	3,6,9	OFDM	MCS0
802.11n HT40	3 to 9	3,6,9	OFDM	MCS0
BT-LE	0 to 39	0,19, 39	GFSK	0.125&0.5&1.0
BT-LE	1 to 38	1,19, 38	GFSK	2.0
802.11ax 20 (RU 242)	1 to 11	1,11	OFDMA	MCS0
802.11ax 40 (RU 484)	3 to 9	3 ,9	OFDMA	MCS0

ANTENNA PORT CONDUCTED MEASUREMENT:

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

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	1.0
802.11g	1 to 11	1, 6, 11	OFDM	6.0
802.11n HT20	1 to 11	1, 6, 11	OFDM	MCS0
802.11ax HE20	1 to 11	1, 6, 11	OFDM	MCS0
802.11n HT40	3 to 9	3,6,9	OFDM	MCS0
802.11ax HE40	3 to 9	3,6,9	OFDM	MCS0
BT-LE	0 to 39	0,19, 39	GFSK	0.125&0.5&1.0
BT-LE	1 to 38	1,19, 38	GFSK	2.0
802.11ax 20 (RU 242)	1 to 11	1,11	OFDMA	MCS0
802.11ax 40 (RU 484)	3 to 9	3 ,9	OFDMA	MCS0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	TEST VOLTAGE	TESTED BY
RE<1G	23deg. C, 70%RH	DC 5V By Adapter	Jace Hu
RE≥1G	23deg. C, 70%RH	DC 5V By Adapter	Jace Hu
PLC	25deg. C, 52%RH	DC 5V By Adapter	Carl Xie
APCM	25deg. C, 60%RH	DC 3.7V By Battery	James Fu

2.3 DUTY CYCLE OF TEST SIGNAL

Please Refer to Appendix B.

2.4 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart C, Section 15.247

KDB 558074 D01 DTS Meas Guidance v05r02

ANSI C63.10-2020

Note：

1. All test items have been performed and recorded as per the above standards.
2. The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (Certification). The test report has been issued separately.

2.5 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	Desktop	Lenovo	M73 SFF	PC04GRQV	N/A
2	Desktop	Lenovo	M73 SFF	PC06CS27	N/A
3	Laptop	Lenovo	Thinkpad T450	PC-049PT1	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	AC Line: Unshielded, Detachable 1.5m
2	AC Line: Unshielded, Detachable 1.5m
3	AC Line: Unshielded, Detachable 1.5m

3 TEST TYPES AND RESULTS

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED 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.

3.1.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR3	101900	Feb. 14,24	Feb. 13,25
EMC32 test software	Rohde&Schwarz	EMC32	NA	NA	NA
LISN network	Rohde&Schwarz	ENV216	101922	Mar. 10,24	Mar. 09,25

NOTE:

1. The test was performed in CE shielded 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.

3.1.3 TEST PROCEDURES

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

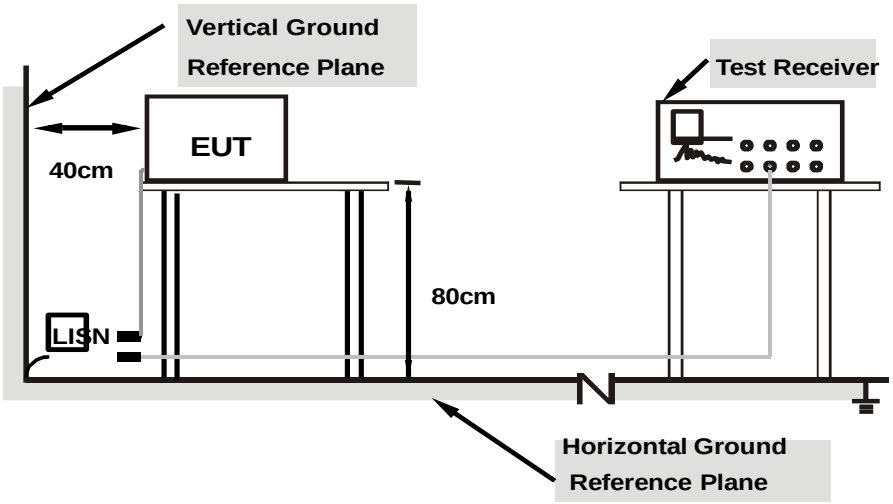
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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

3.1.4 DEVIATION FROM TEST STANDARD

No deviation.

3.1.5 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).

3.1.6 EUT OPERATING CONDITIONS

a. Turned on the power and connected of all equipment.
b. EUT was operated according to the type used was description in manufacturer's specifications or the User's Manual.

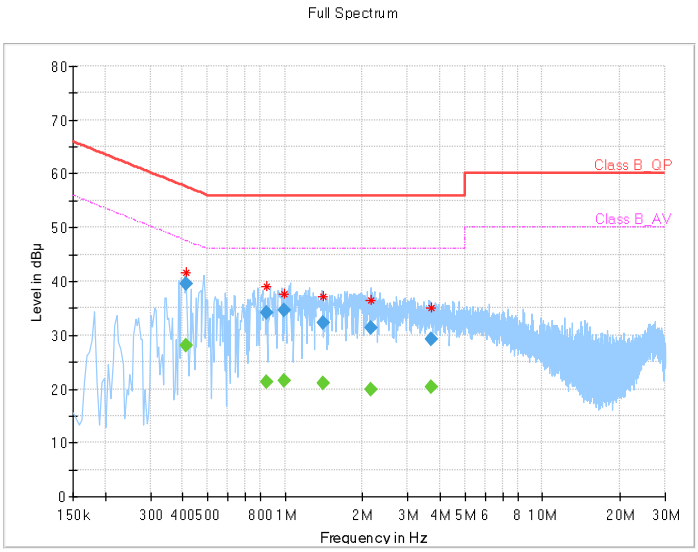
3.1.7 TEST RESULTS

CONDUCTED WORST-CASE DATA:

Frequency Range	150KHz ~ 30MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120Vac, 60Hz	**Environmental Conditions**	26deg. C, 51%RH
Tested By	Carl Xie		

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.412000	---	28.00	47.61	19.61	L1	ON	9.8
0.412000	39.46	---	57.61	18.15	L1	ON	9.8
0.844000	---	21.39	46.00	24.61	L1	ON	9.8
0.844000	34.22	---	56.00	21.78	L1	ON	9.8
0.988000	---	21.47	46.00	24.53	L1	ON	9.8
0.988000	34.55	---	56.00	21.45	L1	ON	9.8
1.400000	---	21.04	46.00	24.96	L1	ON	9.8
1.400000	32.31	---	56.00	23.69	L1	ON	9.8
2.152000	---	19.99	46.00	26.01	L1	ON	9.8
2.152000	31.43	---	56.00	24.57	L1	ON	9.8
3.712000	---	20.38	46.00	25.62	L1	ON	9.8
3.712000	29.24	---	56.00	26.76	L1	ON	9.8

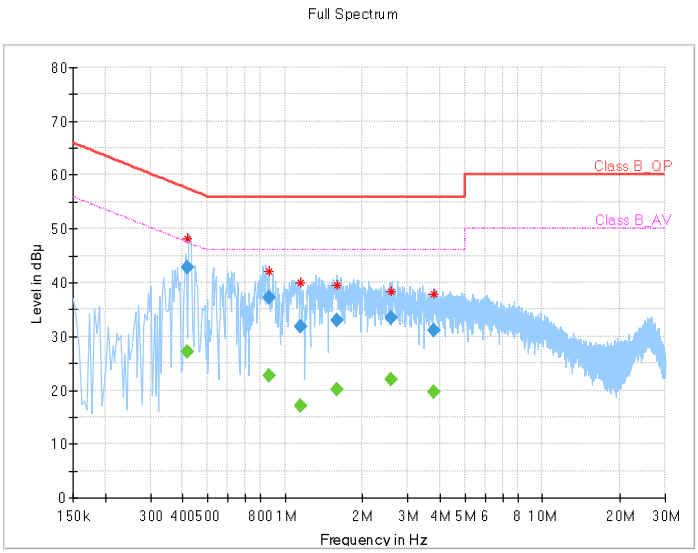
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Limit value -Emission level
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



Frequency Range	150KHz ~ 30MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120Vac, 60Hz	**Environmental Conditions**	26deg. C, 51%RH
Tested By	Carl Xie		

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.416000	---	27.23	47.53	20.30	N	ON	9.6
0.416000	42.78	---	57.53	14.75	N	ON	9.6
0.872000	---	22.65	46.00	23.35	N	ON	9.7
0.872000	37.14	---	56.00	18.86	N	ON	9.7
1.148000	---	17.17	46.00	28.83	N	ON	9.7
1.148000	31.74	---	56.00	24.26	N	ON	9.7
1.594000	---	20.04	46.00	25.96	N	ON	9.8
1.594000	33.09	---	56.00	22.91	N	ON	9.8
2.588000	---	21.90	46.00	24.10	N	ON	9.8
2.588000	33.52	---	56.00	22.48	N	ON	9.8
3.772000	---	19.73	46.00	26.27	N	ON	9.7
3.772000	31.07	---	56.00	24.93	N	ON	9.7

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Limit value -Emission level
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

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. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

3.2.2 TEST INSTRUMENTS

#1:

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	Nov. 14,23	Nov. 13,26
Bilog Antenna	ETS-LINDGREN	3143B	00161965	Feb. 18,24	Feb. 17,25
Horn Antenna	ETS-LINDGREN	3117	00168692	Feb. 18,24	Feb. 17,25
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Sep.04, 23	Sep.03, 24
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	JS1120-3	3.2.06	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SMA	N/A	May. 06,23	May. 05,24
10dB Attenuator	JFW/USA	50HF-010-SMA	N/A	May. 05,24	May. 04,25
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Mar. 28,24	Mar. 27,25
Signal Pre-Amplifier	EMSI	EMC 9135	980249	May. 06,23	May. 05,24
Signal Pre-Amplifier	EMSI	EMC 9135	980249	May. 05,24	May. 04,25
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	May.10,23	May.09,24
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	May.09,24	May.08,25
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Feb. 17,24	Feb. 16,25
DC Source	Kikusui/JP	PMX18-5A	0000001	Aug. 12,23	Aug. 11,24
Power Meter	Anritsu	ML2495A	1506002	Feb. 14,24	Feb. 13,25
Power Sensor	Anritsu	MA2411B	1339352	Feb. 14,24	Feb. 13,25
Loop Antenna	Schwarzbeck	FMZB 1519B	00173	Sep.03,23	Sep.02,24

#2:

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	Nov. 14,23	Nov. 13,26
Bilog Antenna	ETS-LINDGREN	3143B	00161965	Feb. 18,24	Feb. 17,25
Horn Antenna	ETS-LINDGREN	3117	00168692	Feb. 18,24	Feb. 17,25
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Sep.03, 24	Sep.02, 25
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	JS1120-3	3.2.06	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SMA	N/A	May. 06,24	May. 05,25
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Mar. 28,24	Mar. 27,25
Signal Pre-Amplifier	EMSI	EMC 9135	980249	May. 06,24	May. 05,25
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	May.10,24	May.09,25
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Feb. 17,24	Feb. 16,25
DC Source	Kikusui/JP	PMX18-5A	0000001	Aug. 12,24	Aug. 11,25
Power Meter	Anritsu	ML2495A	1506002	Feb. 14,24	Feb. 13,25
Power Sensor	Anritsu	MA2411B	1339352	Feb. 14,24	Feb. 13,25
Loop Antenna	Schwarzbeck	FMZB 1519B	00173	Sep.03,24	Sep.02,25

NOTE: 1. The calibration interval of the above test instruments is 12 months or 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

2. The test was performed in 3m Chamber.

3. The FCC Site Registration No. is 525120; The Designation No. is CN1171.

3.2.3 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The 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. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, For battery operated equipment, the equipment tests shall be perform using fresh batteries. The turntable was rotated to maximize the emission level.

Note:

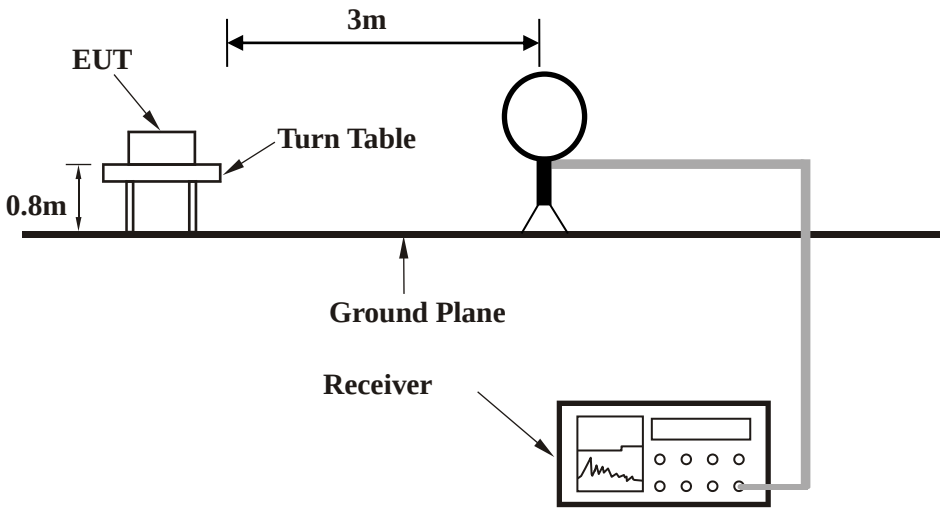
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor (10 log(1/duty cycle)).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

3.2.4 DEVIATION FROM TEST STANDARD

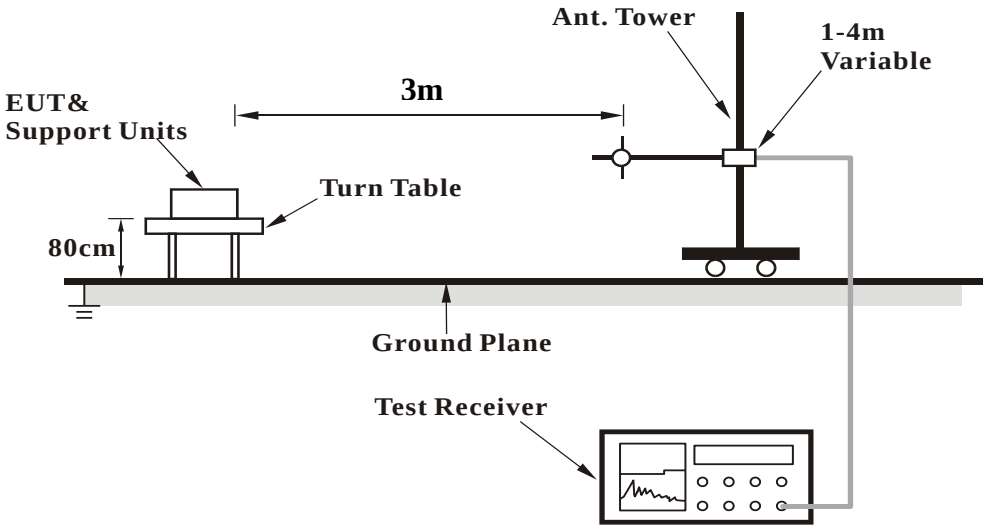
No deviation

3.2.5 TEST SETUP

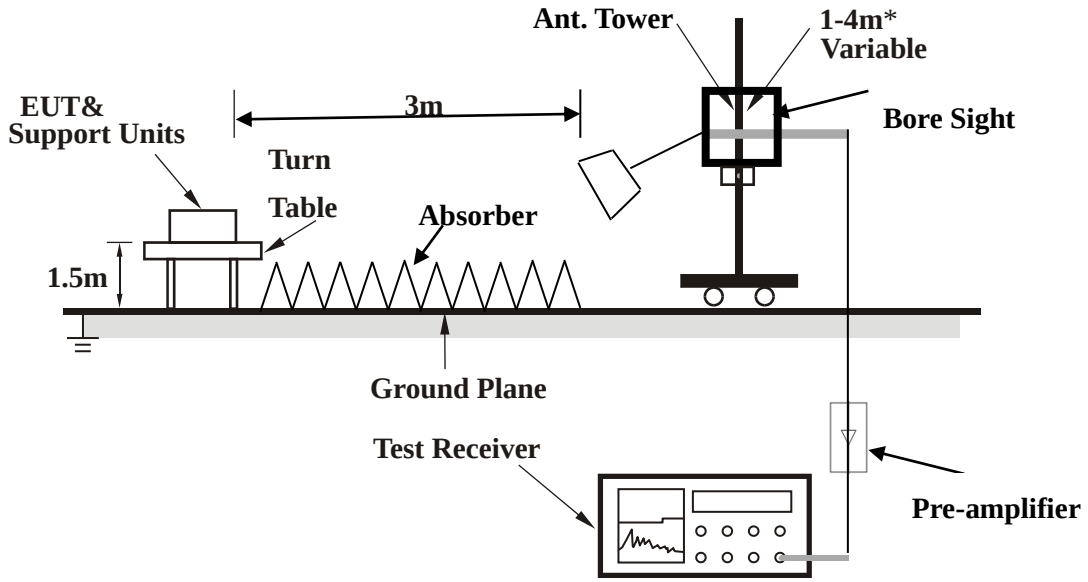
<Frequency Range 9KHz~30MHz >



< Frequency Range 30MHz~1GHz >



<Frequency Range above 1GHz>



Note: Above 1G is a directional antenna

Depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

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

3.2.6 EUT OPERATING CONDITIONS

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.

3.2.7 TEST RESULTS

NOTE ：The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

BELOW 1GHz WORST-CASE DATA:

30 MHz – 1GHz data:

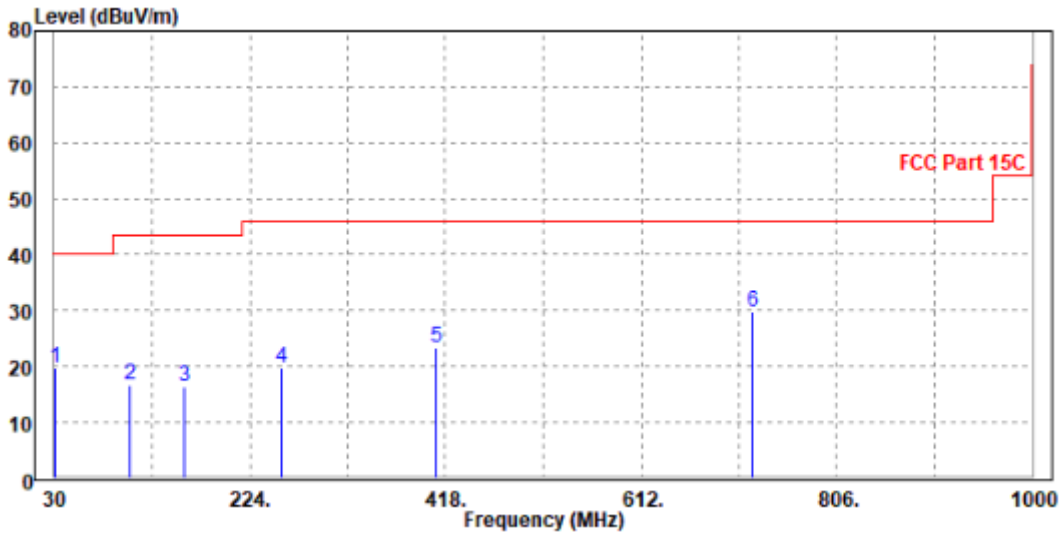
802.11n (40MHz):

CHANNEL	TX Channel 9	**DETECTOR FUNCTION**	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
30.97	19.83	26.51	40	-20.17	24.61	6.14	37.43	100	360	Peak
105.66	16.62	31.93	43.5	-26.88	15	6.56	36.87	100	360	Peak
159.01	16.38	29.4	43.5	-27.12	16.9	6.78	36.7	100	360	Peak
256.01	19.78	30.29	46	-26.22	18.9	7.17	36.58	100	360	Peak
409.27	23.38	28.89	46	-22.62	23.59	7.6	36.7	100	360	Peak
722.58	29.79	29.93	46	-16.21	28.9	8.43	37.47	100	360	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission Level – Limit value.

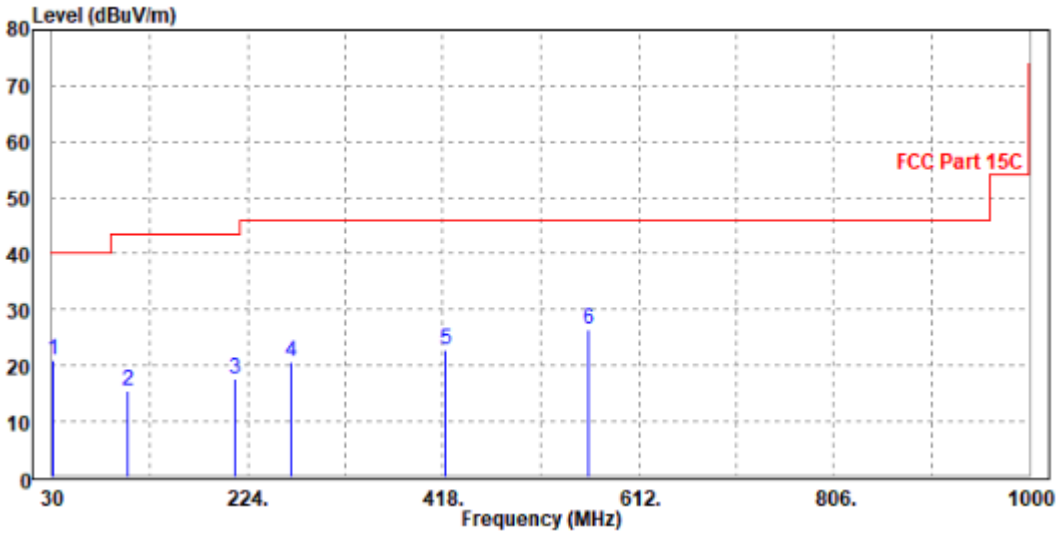


CHANNEL	TX Channel 9	**DETECTOR FUNCTION**	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
30.97	21.07	27.75	40	-18.93	24.61	6.14	37.43	100	0	Peak
105.66	15.49	30.8	43.5	-28.01	15	6.56	36.87	100	0	Peak
211.39	17.51	30.34	43.5	-25.99	16.7	7.03	36.56	100	0	Peak
267.65	20.81	30.9	46	-25.19	19.29	7.21	36.59	100	0	Peak
419.94	22.93	28.64	46	-23.07	23.4	7.64	36.75	100	0	Peak
562.53	26.34	29.03	46	-19.66	26.35	8.12	37.16	100	0	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission Level – Limit value.



ABOVE 1GHz WORST-CASE DATA:

Note: 1. For radiated emissions testing，the full testing range of different modes have been scanned，only the worst case harmonic data is reported in the sheet.

2. All other emissions were greater than 20dB below the limit was not recorded

802.11b:

CHANNEL	TX Channel 1	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	51.24	57.93	74.00	-22.76	31.78	7.74	46.21	120	70	Peak
2390.000	39.94	46.63	54.00	-14.06	31.78	7.74	46.21	120	70	Average
2412.000	104.69	111.31	/	/	31.82	7.77	46.21	120	70	Peak
2412.000	102.24	108.86	/	/	31.82	7.77	46.21	120	70	Average
2483.500	50.21	56.55	74.00	-23.79	31.97	7.88	46.19	120	70	Peak
2483.500	40.04	46.38	54.00	-13.96	31.97	7.88	46.19	120	70	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	48.96	55.53	74.00	-25.04	31.90	7.74	46.21	100	90	Peak
2390.000	39.95	46.52	54.00	-14.05	31.90	7.74	46.21	100	90	Average
2412.000	100.55	107.05	/	/	31.94	7.77	46.21	100	90	Peak
2412.000	98.00	104.50	/	/	31.94	7.77	46.21	100	90	Average
2483.500	51.27	57.51	74.00	-22.73	32.07	7.88	46.19	100	90	Peak
2483.500	40.14	46.38	54.00	-13.86	32.07	7.88	46.19	100	90	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2412MHz: Fundamental frequency.

CHANNEL	TX Channel 6	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.72	57.41	74.00	-23.28	31.78	7.74	46.21	100	290	Peak
2390.000	39.70	46.39	54.00	-14.30	31.78	7.74	46.21	100	290	Average
2437.000	100.20	106.72	/	/	31.87	7.81	46.20	100	290	Peak
2437.000	97.05	103.57	/	/	31.87	7.81	46.20	100	290	Average
2483.500	49.88	56.22	74.00	-24.12	31.97	7.88	46.19	100	290	Peak
2483.500	40.13	46.47	54.00	-13.87	31.97	7.88	46.19	100	290	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.48	57.05	74.00	-23.52	31.90	7.74	46.21	100	105	Peak
2390.000	39.96	46.53	54.00	-14.04	31.90	7.74	46.21	100	105	Average
2437.000	98.87	105.27	/	/	31.99	7.81	46.20	100	105	Peak
2437.000	96.48	102.88	/	/	31.99	7.81	46.20	100	105	Average
2483.500	50.33	56.57	74.00	-23.67	32.07	7.88	46.19	100	105	Peak
2483.500	40.30	46.54	54.00	-13.70	32.07	7.88	46.19	100	105	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2437MHz: Fundamental frequency.

CHANNEL	TX Channel 11	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	49.75	56.44	74.00	-24.25	31.78	7.74	46.21	100	230	Peak
2390.000	39.89	46.58	54.00	-14.11	31.78	7.74	46.21	100	230	Average
2462.000	101.11	107.54	/	/	31.92	7.84	46.19	100	230	Peak
2462.000	98.10	104.53	/	/	31.92	7.84	46.19	100	230	Average
2483.500	50.13	56.47	74.00	-23.87	31.97	7.88	46.19	100	230	Peak
2483.500	40.29	46.63	54.00	-13.71	31.97	7.88	46.19	100	230	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	48.94	55.51	74.00	-25.06	31.90	7.74	46.21	100	145	Peak
2390.000	40.04	46.61	54.00	-13.96	31.90	7.74	46.21	100	145	Average
2462.000	98.21	104.53	/	/	32.03	7.84	46.19	100	145	Peak
2462.000	95.08	101.40	/	/	32.03	7.84	46.19	100	145	Average
2483.500	49.80	56.04	74.00	-24.20	32.07	7.88	46.19	100	145	Peak
2483.500	40.41	46.65	54.00	-13.59	32.07	7.88	46.19	100	145	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2462MHz: Fundamental frequency.

802.11g

CHANNEL	TX Channel 1	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	49.87	56.56	74.00	-24.13	31.78	7.74	46.21	100	170	Peak
2390.000	40.32	47.01	54.00	-13.68	31.78	7.74	46.21	100	170	Average
2412.000	103.62	110.24	/	/	31.82	7.77	46.21	100	170	Peak
2412.000	93.94	100.56	/	/	31.82	7.77	46.21	100	170	Average
2483.500	51.02	57.36	74.00	-22.98	31.97	7.88	46.19	100	170	Peak
2483.500	40.29	46.63	54.00	-13.71	31.97	7.88	46.19	100	170	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.05	56.62	74.00	-23.95	31.90	7.74	46.21	100	100	Peak
2390.000	40.15	46.72	54.00	-13.85	31.90	7.74	46.21	100	100	Average
2412.000	100.69	107.19	/	/	31.94	7.77	46.21	100	100	Peak
2412.000	91.99	98.49	/	/	31.94	7.77	46.21	100	100	Average
2483.500	50.74	56.98	74.00	-23.26	32.07	7.88	46.19	100	100	Peak
2483.500	40.49	46.73	54.00	-13.51	32.07	7.88	46.19	100	100	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2412MHz: Fundamental frequency.

CHANNEL	TX Channel 6	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	49.80	56.49	74.00	-24.20	31.78	7.74	46.21	100	250	Peak
2390.000	39.89	46.58	54.00	-14.11	31.78	7.74	46.21	100	250	Average
2437.000	102.07	108.59	/	/	31.87	7.81	46.20	100	250	Peak
2437.000	92.32	98.84	/	/	31.87	7.81	46.20	100	250	Average
2483.500	51.32	57.66	74.00	-22.68	31.97	7.88	46.19	100	250	Peak
2483.500	40.34	46.68	54.00	-13.66	31.97	7.88	46.19	100	250	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	52.12	58.69	74.00	-21.88	31.90	7.74	46.21	100	105	Peak
2390.000	39.98	46.55	54.00	-14.02	31.90	7.74	46.21	100	105	Average
2437.000	99.90	106.30	/	/	31.99	7.81	46.20	100	105	Peak
2437.000	90.23	96.63	/	/	31.99	7.81	46.20	100	105	Average
2483.500	50.38	56.62	74.00	-23.62	32.07	7.88	46.19	100	105	Peak
2483.500	40.39	46.63	54.00	-13.61	32.07	7.88	46.19	100	105	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
   2. 2437MHz: Fundamental frequency.

CHANNEL	TX Channel 11	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.51	57.20	74.00	-23.49	31.78	7.74	46.21	100	295	Peak
2390.000	39.95	46.64	54.00	-14.05	31.78	7.74	46.21	100	295	Average
2462.000	101.88	108.31	/	/	31.92	7.84	46.19	100	295	Peak
2462.000	92.27	98.70	/	/	31.92	7.84	46.19	100	295	Average
2483.500	52.24	58.58	74.00	-21.76	31.97	7.88	46.19	100	295	Peak
2483.500	41.15	47.49	54.00	-12.85	31.97	7.88	46.19	100	295	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.31	56.88	74.00	-23.69	31.90	7.74	46.21	100	145	Peak
2390.000	40.07	46.64	54.00	-13.93	31.90	7.74	46.21	100	145	Average
2462.000	98.26	104.58	/	/	32.03	7.84	46.19	100	145	Peak
2462.000	88.26	94.58	/	/	32.03	7.84	46.19	100	145	Average
2483.500	51.78	58.02	74.00	-22.22	32.07	7.88	46.19	100	145	Peak
2483.500	40.79	47.03	54.00	-13.21	32.07	7.88	46.19	100	145	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2462MHz: Fundamental frequency.

802.11n (20MHz)

CHANNEL	TX Channel 1	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	48.98	55.67	74.00	-25.02	31.78	7.74	46.21	100	190	Peak
2390.000	40.19	46.88	54.00	-13.81	31.78	7.74	46.21	100	190	Average
2412.000	100.39	107.01	/	/	31.82	7.77	46.21	100	190	Peak
2412.000	91.57	98.19	/	/	31.82	7.77	46.21	100	190	Average
2483.500	50.57	56.91	74.00	-23.43	31.97	7.88	46.19	100	190	Peak
2483.500	40.20	46.54	54.00	-13.80	31.97	7.88	46.19	100	190	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	48.95	55.52	74.00	-25.05	31.90	7.74	46.21	100	105	Peak
2390.000	40.04	46.61	54.00	-13.96	31.90	7.74	46.21	100	105	Average
2412.000	99.42	105.92	/	/	31.94	7.77	46.21	100	105	Peak
2412.000	90.04	96.54	/	/	31.94	7.77	46.21	100	105	Average
2483.500	50.19	56.43	74.00	-23.81	32.07	7.88	46.19	100	105	Peak
2483.500	40.35	46.59	54.00	-13.65	32.07	7.88	46.19	100	105	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2412MHz: Fundamental frequency.

CHANNEL	TX Channel 6	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	49.06	55.75	74.00	-24.94	31.78	7.74	46.21	100	225	Peak
2390.000	40.04	46.73	54.00	-13.96	31.78	7.74	46.21	100	225	Average
2437.000	100.70	107.22	/	/	31.87	7.81	46.20	100	225	Peak
2437.000	91.27	97.79	/	/	31.87	7.81	46.20	100	225	Average
2483.500	50.82	57.16	74.00	-23.18	31.97	7.88	46.19	100	225	Peak
2483.500	40.32	46.66	54.00	-13.68	31.97	7.88	46.19	100	225	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	49.96	56.53	74.00	-24.04	31.90	7.74	46.21	100	100	Peak
2390.000	40.06	46.63	54.00	-13.94	31.90	7.74	46.21	100	100	Average
2437.000	97.63	104.03	/	/	31.99	7.81	46.20	100	100	Peak
2437.000	88.84	95.24	/	/	31.99	7.81	46.20	100	100	Average
2483.500	49.73	55.97	74.00	-24.27	32.07	7.88	46.19	100	100	Peak
2483.500	40.39	46.63	54.00	-13.61	32.07	7.88	46.19	100	100	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
   2. 2437MHz: Fundamental frequency.

CHANNEL	TX Channel 11	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	49.79	56.48	74.00	-24.21	31.78	7.74	46.21	100	230	Peak
2390.000	40.16	46.85	54.00	-13.84	31.78	7.74	46.21	100	230	Average
2462.000	98.92	105.35	/	/	31.92	7.84	46.19	100	230	Peak
2462.000	90.14	96.57	/	/	31.92	7.84	46.19	100	230	Average
2483.500	51.01	57.35	74.00	-22.99	31.97	7.88	46.19	100	230	Peak
2483.500	40.74	47.08	54.00	-13.26	31.97	7.88	46.19	100	230	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.87	57.44	74.00	-23.13	31.90	7.74	46.21	100	275	Peak
2390.000	40.24	46.81	54.00	-13.76	31.90	7.74	46.21	100	275	Average
2462.000	95.41	101.73	/	/	32.03	7.84	46.19	100	275	Peak
2462.000	86.08	92.40	/	/	32.03	7.84	46.19	100	275	Average
2483.500	50.00	56.24	74.00	-24.00	32.07	7.88	46.19	100	275	Peak
2483.500	40.65	46.89	54.00	-13.35	32.07	7.88	46.19	100	275	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2462MHz: Fundamental frequency.

802.11n (40MHz)

CHANNEL	TX Channel 3	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.15	56.84	74.00	-23.85	31.78	7.74	46.21	100	225	Peak
2390.000	40.36	47.05	54.00	-13.64	31.78	7.74	46.21	100	225	Average
2422.000	98.29	104.87	/	/	31.84	7.78	46.20	100	225	Peak
2422.000	89.99	96.57	/	/	31.84	7.78	46.20	100	225	Average
2483.500	49.07	55.41	74.00	-24.93	31.97	7.88	46.19	100	225	Peak
2483.500	40.31	46.65	54.00	-13.69	31.97	7.88	46.19	100	225	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.44	57.01	74.00	-23.56	31.90	7.74	46.21	100	100	Peak
2390.000	40.09	46.66	54.00	-13.91	31.90	7.74	46.21	100	100	Average
2422.000	96.99	103.45	/	/	31.96	7.78	46.20	100	100	Peak
2422.000	86.97	93.43	/	/	31.96	7.78	46.20	100	100	Average
2483.500	50.64	56.88	74.00	-23.36	32.07	7.88	46.19	100	100	Peak
2483.500	40.35	46.59	54.00	-13.65	32.07	7.88	46.19	100	100	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2422MHz: Fundamental frequency.

CHANNEL	TX Channel 6	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.78	57.47	74.00	-23.22	31.78	7.74	46.21	100	225	Peak
2390.000	40.37	47.06	54.00	-13.63	31.78	7.74	46.21	100	225	Average
2437.000	98.66	105.18	/	/	31.87	7.81	46.20	100	225	Peak
2437.000	89.78	96.30	/	/	31.87	7.81	46.20	100	225	Average
2483.500	50.78	57.12	74.00	-23.22	31.97	7.88	46.19	100	225	Peak
2483.500	40.46	46.80	54.00	-13.54	31.97	7.88	46.19	100	225	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	49.98	56.55	74.00	-24.02	31.90	7.74	46.21	100	100	Peak
2390.000	40.25	46.82	54.00	-13.75	31.90	7.74	46.21	100	100	Average
2437.000	96.01	102.41	/	/	31.99	7.81	46.20	100	100	Peak
2437.000	86.30	92.70	/	/	31.99	7.81	46.20	100	100	Average
2483.500	51.87	58.11	74.00	-22.13	32.07	7.88	46.19	100	100	Peak
2483.500	40.48	46.72	54.00	-13.52	32.07	7.88	46.19	100	100	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2437MHz: Fundamental frequency.

CHANNEL	TX Channel 9	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.15	57.72	74	-23.85	30.8	7.74	46.11	100	180	Peak
2390.000	38.91	46.48	54	-15.09	30.8	7.74	46.11	100	180	Average
2452.000	98.1	103.78	/	/	32.59	7.83	46.1	100	180	Peak
2452.000	89.22	94.9	/	/	32.59	7.83	46.1	100	180	Average
2483.500	52.86	58.6	74	-21.14	32.47	7.88	46.09	100	180	Peak
2483.500	42.71	48.45	54	-11.29	32.47	7.88	46.09	100	180	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.9	56.91	74	-23.1	32.36	7.74	46.11	100	150	Peak
2390.000	41.01	47.02	54	-12.99	32.36	7.74	46.11	100	150	Average
2452.000	93.12	100.37	/	/	31.02	7.83	46.1	100	150	Peak
2452.000	82.87	90.12	/	/	31.02	7.83	46.1	100	150	Average
2483.500	51.23	58.11	74	-22.77	31.33	7.88	46.09	100	150	Peak
2483.500	40.24	47.12	54	-13.76	31.33	7.88	46.09	100	150	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2452MHz: Fundamental frequency.

802.11ax (20MHz)

CHANNEL	TX Channel 1	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.16	56.85	74.00	-23.84	31.78	7.74	46.21	100	190	Peak
2390.000	40.62	47.31	54.00	-13.38	31.78	7.74	46.21	100	190	Average
2412.000	103.85	110.47	/	/	31.82	7.77	46.21	100	190	Peak
2412.000	91.92	98.54	/	/	31.82	7.77	46.21	100	190	Average
2483.500	49.83	56.17	74.00	-24.17	31.97	7.88	46.19	100	190	Peak
2483.500	39.91	46.25	54.00	-14.09	31.97	7.88	46.19	100	190	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	49.78	56.35	74.00	-24.22	31.90	7.74	46.21	100	105	Peak
2390.000	40.56	47.13	54.00	-13.44	31.90	7.74	46.21	100	105	Average
2412.000	102.04	108.54	/	/	31.94	7.77	46.21	100	105	Peak
2412.000	90.48	96.98	/	/	31.94	7.77	46.21	100	105	Average
2483.500	49.60	55.84	74.00	-24.40	32.07	7.88	46.19	100	105	Peak
2483.500	40.11	46.35	54.00	-13.89	32.07	7.88	46.19	100	105	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2412MHz: Fundamental frequency.

CHANNEL	TX Channel 6	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	49.80	56.49	74.00	-24.20	31.78	7.74	46.21	100	225	Peak
2390.000	40.24	46.93	54.00	-13.76	31.78	7.74	46.21	100	225	Average
2437.000	103.09	109.61	/	/	31.87	7.81	46.20	100	225	Peak
2437.000	91.74	98.26	/	/	31.87	7.81	46.20	100	225	Average
2483.500	50.44	56.78	74.00	-23.56	31.97	7.88	46.19	100	225	Peak
2483.500	40.48	46.82	54.00	-13.52	31.97	7.88	46.19	100	225	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.59	57.16	74.00	-23.41	31.90	7.74	46.21	100	100	Peak
2390.000	40.17	46.74	54.00	-13.83	31.90	7.74	46.21	100	100	Average
2437.000	101.35	107.75	/	/	31.99	7.81	46.20	100	100	Peak
2437.000	89.07	95.47	/	/	31.99	7.81	46.20	100	100	Average
2483.500	50.52	56.76	74.00	-23.48	32.07	7.88	46.19	100	100	Peak
2483.500	40.31	46.55	54.00	-13.69	32.07	7.88	46.19	100	100	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
   2. 2437MHz: Fundamental frequency.

CHANNEL	TX Channel 11	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	51.47	58.16	74.00	-22.53	31.78	7.74	46.21	100	230	Peak
2390.000	39.69	46.38	54.00	-14.31	31.78	7.74	46.21	100	230	Average
2462.000	102.85	109.28	/	/	31.92	7.84	46.19	100	230	Peak
2462.000	90.83	97.26	/	/	31.92	7.84	46.19	100	230	Average
2483.500	50.76	57.10	74.00	-23.24	31.97	7.88	46.19	100	230	Peak
2483.500	40.90	47.24	54.00	-13.10	31.97	7.88	46.19	100	230	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	49.82	56.39	74.00	-24.18	31.90	7.74	46.21	100	275	Peak
2390.000	39.95	46.52	54.00	-14.05	31.90	7.74	46.21	100	275	Average
2462.000	98.28	104.60	/	/	32.03	7.84	46.19	100	275	Peak
2462.000	86.98	93.30	/	/	32.03	7.84	46.19	100	275	Average
2483.500	50.60	56.84	74.00	-23.40	32.07	7.88	46.19	100	275	Peak
2483.500	41.11	47.35	54.00	-12.89	32.07	7.88	46.19	100	275	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2462MHz: Fundamental frequency.

802.11ax (40MHz)

CHANNEL	TX Channel 3	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.99	57.68	74.00	-23.01	31.78	7.74	46.21	100	225	Peak
2390.000	40.77	47.46	54.00	-13.23	31.78	7.74	46.21	100	225	Average
2422.000	100.79	107.37	/	/	31.84	7.78	46.20	100	225	Peak
2422.000	90.15	96.73	/	/	31.84	7.78	46.20	100	225	Average
2483.500	49.78	56.12	74.00	-24.22	31.97	7.88	46.19	100	225	Peak
2483.500	39.91	46.25	54.00	-14.09	31.97	7.88	46.19	100	225	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	49.96	56.53	74.00	-24.04	31.90	7.74	46.21	100	275	Peak
2390.000	40.41	46.98	54.00	-13.59	31.90	7.74	46.21	100	275	Average
2422.000	97.93	104.39	/	/	31.96	7.78	46.20	100	275	Peak
2422.000	86.85	93.31	/	/	31.96	7.78	46.20	100	275	Average
2483.500	49.61	55.85	74.00	-24.39	32.07	7.88	46.19	100	275	Peak
2483.500	40.11	46.35	54.00	-13.89	32.07	7.88	46.19	100	275	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2422MHz: Fundamental frequency.

CHANNEL	TX Channel 6	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.38	57.07	74.00	-23.62	31.78	7.74	46.21	100	225	Peak
2390.000	40.62	47.31	54.00	-13.38	31.78	7.74	46.21	100	225	Average
2437.000	101.43	107.95	/	/	31.87	7.81	46.20	100	225	Peak
2437.000	90.27	96.79	/	/	31.87	7.81	46.20	100	225	Average
2483.500	50.59	56.93	74.00	-23.41	31.97	7.88	46.19	100	225	Peak
2483.500	40.66	47.00	54.00	-13.34	31.97	7.88	46.19	100	225	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	51.11	57.68	74.00	-22.89	31.90	7.74	46.21	100	100	Peak
2390.000	39.99	46.56	54.00	-14.01	31.90	7.74	46.21	100	100	Average
2437.000	97.91	104.31	/	/	31.99	7.81	46.20	100	100	Peak
2437.000	87.24	93.64	/	/	31.99	7.81	46.20	100	100	Average
2483.500	49.94	56.18	74.00	-24.06	32.07	7.88	46.19	100	100	Peak
2483.500	39.99	46.23	54.00	-14.01	32.07	7.88	46.19	100	100	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2437MHz: Fundamental frequency.

CHANNEL	TX Channel 9	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	49.79	56.48	74.00	-24.21	31.78	7.74	46.21	100	225	Peak
2390.000	40.34	47.03	54.00	-13.66	31.78	7.74	46.21	100	225	Average
2452.000	100.20	106.67	/	/	31.90	7.83	46.20	100	225	Peak
2452.000	88.67	95.14	/	/	31.90	7.83	46.20	100	225	Average
2483.500	50.94	57.28	74.00	-23.06	31.97	7.88	46.19	100	225	Peak
2483.500	42.00	48.34	54.00	-12.00	31.97	7.88	46.19	100	225	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.51	57.08	74.00	-23.49	31.90	7.74	46.21	100	105	Peak
2390.000	40.10	46.67	54.00	-13.90	31.90	7.74	46.21	100	105	Average
2452.000	98.15	104.51	/	/	32.01	7.83	46.20	100	105	Peak
2452.000	86.86	93.22	/	/	32.01	7.83	46.20	100	105	Average
2483.500	51.15	57.39	74.00	-22.85	32.07	7.88	46.19	100	105	Peak
2483.500	40.81	47.05	54.00	-13.19	32.07	7.88	46.19	100	105	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2452MHz: Fundamental frequency.

2.4G WIFI-RU

802.11ax (20MHz) (RU 242):

CHANNEL	TX Channel 1	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.13	56.82	74.00	-23.87	31.78	7.74	46.21	100	315	Peak
2390.000	40.47	47.16	54.00	-13.53	31.78	7.74	46.21	100	315	Average
2412.000	102.43	109.05	/	/	31.82	7.77	46.21	100	315	Peak
2412.000	91.27	97.89	/	/	31.82	7.77	46.21	100	315	Average
2483.500	51.64	57.98	74.00	-22.36	31.97	7.88	46.19	100	315	Peak
2483.500	40.66	47.00	54.00	-13.34	31.97	7.88	46.19	100	315	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.69	57.26	74.00	-23.31	31.90	7.74	46.21	100	325	Peak
2390.000	40.35	46.92	54.00	-13.65	31.90	7.74	46.21	100	325	Average
2412.000	101.70	108.20	/	/	31.94	7.77	46.21	100	325	Peak
2412.000	90.02	96.52	/	/	31.94	7.77	46.21	100	325	Average
2483.500	50.64	56.88	74.00	-23.36	32.07	7.88	46.19	100	325	Peak
2483.500	40.78	47.02	54.00	-13.22	32.07	7.88	46.19	100	325	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2412MHz: Fundamental frequency.

CHANNEL	TX Channel 6	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	49.94	56.63	74.00	-24.06	31.78	7.74	46.21	100	320	Peak
2390.000	40.02	46.71	54.00	-13.98	31.78	7.74	46.21	100	320	Average
2437.000	103.86	110.38	/	/	31.87	7.81	46.20	100	320	Peak
2437.000	91.61	98.13	/	/	31.87	7.81	46.20	100	320	Average
2483.500	50.46	56.80	74.00	-23.54	31.97	7.88	46.19	100	320	Peak
2483.500	40.57	46.91	54.00	-13.43	31.97	7.88	46.19	100	320	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.06	56.63	74.00	-23.94	31.90	7.74	46.21	100	325	Peak
2390.000	40.16	46.73	54.00	-13.84	31.90	7.74	46.21	100	325	Average
2437.000	103.02	109.42	/	/	31.99	7.81	46.20	100	325	Peak
2437.000	91.10	97.50	/	/	31.99	7.81	46.20	100	325	Average
2483.500	49.82	56.06	74.00	-24.18	32.07	7.88	46.19	100	325	Peak
2483.500	40.71	46.95	54.00	-13.29	32.07	7.88	46.19	100	325	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
   2. 2437MHz: Fundamental frequency.

CHANNEL	TX Channel 11	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.48	57.17	74.00	-23.52	31.78	7.74	46.21	100	320	Peak
2390.000	40.12	46.81	54.00	-13.88	31.78	7.74	46.21	100	320	Average
2462.000	102.25	108.68	/	/	31.92	7.84	46.19	100	320	Peak
2462.000	90.09	96.52	/	/	31.92	7.84	46.19	100	320	Average
2483.500	52.25	58.59	74.00	-21.75	31.97	7.88	46.19	100	320	Peak
2483.500	41.19	47.53	54.00	-12.81	31.97	7.88	46.19	100	320	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	49.80	56.37	74.00	-24.20	31.90	7.74	46.21	100	325	Peak
2390.000	40.13	46.70	54.00	-13.87	31.90	7.74	46.21	100	325	Average
2462.000	99.73	106.05	/	/	32.03	7.84	46.19	100	325	Peak
2462.000	87.76	94.08	/	/	32.03	7.84	46.19	100	325	Average
2483.500	50.86	57.10	74.00	-23.14	32.07	7.88	46.19	100	325	Peak
2483.500	41.00	47.24	54.00	-13.00	32.07	7.88	46.19	100	325	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2462MHz: Fundamental frequency.

802.11ax (40MHz) (RU484):

CHANNEL	TX Channel 3	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	51.48	58.17	74.00	-22.52	31.78	7.74	46.21	100	315	Peak
2390.000	41.14	47.83	54.00	-12.86	31.78	7.74	46.21	100	315	Average
2422.000	98.22	104.80	/	/	31.84	7.78	46.20	100	315	Peak
2422.000	85.87	92.45	/	/	31.84	7.78	46.20	100	315	Average
2483.500	50.96	57.30	74.00	-23.04	31.97	7.88	46.19	100	315	Peak
2483.500	40.68	47.02	54.00	-13.32	31.97	7.88	46.19	100	315	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	51.10	57.67	74.00	-22.90	31.90	7.74	46.21	100	325	Peak
2390.000	40.60	47.17	54.00	-13.40	31.90	7.74	46.21	100	325	Average
2422.000	96.67	103.13	/	/	31.96	7.78	46.20	100	325	Peak
2422.000	85.17	91.63	/	/	31.96	7.78	46.20	100	325	Average
2483.500	50.09	56.33	74.00	-23.91	32.07	7.88	46.19	100	325	Peak
2483.500	40.70	46.94	54.00	-13.30	32.07	7.88	46.19	100	325	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2422MHz: Fundamental frequency.

802.11ax (40MHz) (RU484):

CHANNEL	TX Channel 6	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390.000	50.07	56.76	74.00	-23.93	31.78	7.74	46.21	100	320	Peak
2390.000	40.38	47.07	54.00	-13.62	31.78	7.74	46.21	100	320	Average
2437.000	98.27	104.79	/	/	31.87	7.81	46.20	100	320	Peak
2437.000	86.44	92.96	/	/	31.87	7.81	46.20	100	320	Average
2483.500	50.97	57.31	74.00	-23.03	31.97	7.88	46.19	100	320	Peak
2483.500	40.80	47.14	54.00	-13.20	31.97	7.88	46.19	100	320	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390.000	49.69	56.26	74.00	-24.31	31.90	7.74	46.21	100	325	Peak
2390.000	40.38	46.95	54.00	-13.62	31.90	7.74	46.21	100	325	Average
2437.000	96.92	103.32	/	/	31.99	7.81	46.20	100	325	Peak
2437.000	85.63	92.03	/	/	31.99	7.81	46.20	100	325	Average
2483.500	52.06	58.30	74.00	-21.94	32.07	7.88	46.19	100	325	Peak
2483.500	40.83	47.07	54.00	-13.17	32.07	7.88	46.19	100	325	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2437MHz: Fundamental frequency.

802.11ax (40MHz) (RU484):

CHANNEL	TX Channel 9	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.32	57.01	74.00	-23.68	31.78	7.74	46.21	100	320	Peak
2390.000	40.17	46.86	54.00	-13.83	31.78	7.74	46.21	100	320	Average
2452.000	98.48	104.95	/	/	31.90	7.83	46.20	100	320	Peak
2452.000	86.41	92.88	/	/	31.90	7.83	46.20	100	320	Average
2483.500	51.31	57.65	74.00	-22.69	31.97	7.88	46.19	100	320	Peak
2483.500	41.57	47.91	54.00	-12.43	31.97	7.88	46.19	100	320	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	49.81	56.38	74.00	-24.19	31.90	7.74	46.21	100	325	Peak
2390.000	40.26	46.83	54.00	-13.74	31.90	7.74	46.21	100	325	Average
2452.000	96.43	102.79	/	/	32.01	7.83	46.20	100	325	Peak
2452.000	84.21	90.57	/	/	32.01	7.83	46.20	100	325	Average
2483.500	51.80	58.04	74.00	-22.20	32.07	7.88	46.19	100	325	Peak
2483.500	41.17	47.41	54.00	-12.83	32.07	7.88	46.19	100	325	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2452MHz: Fundamental frequency.

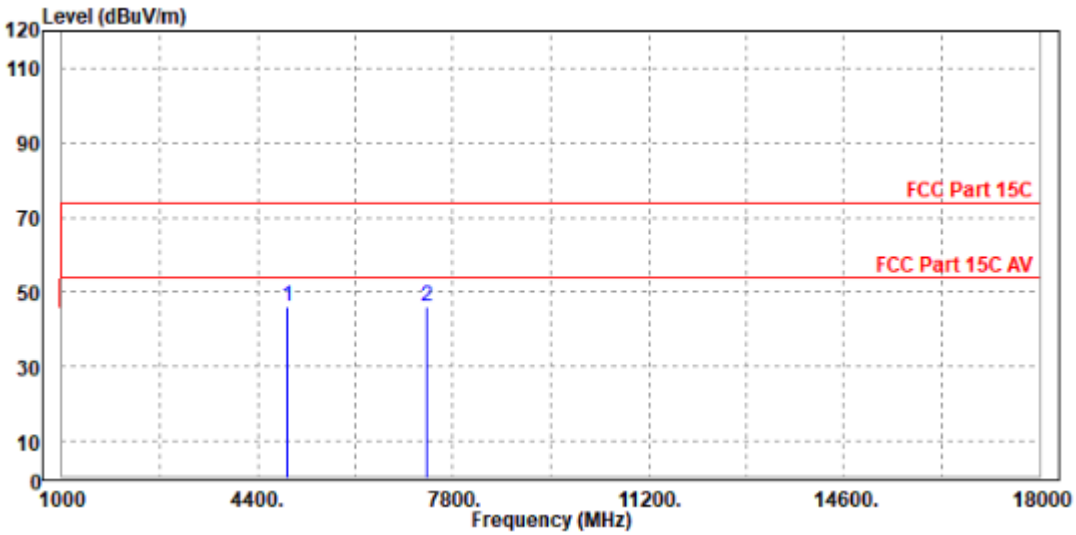
Worst case harmonic:

802.11n (40MHz)

CHANNEL	TX Channel 9	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

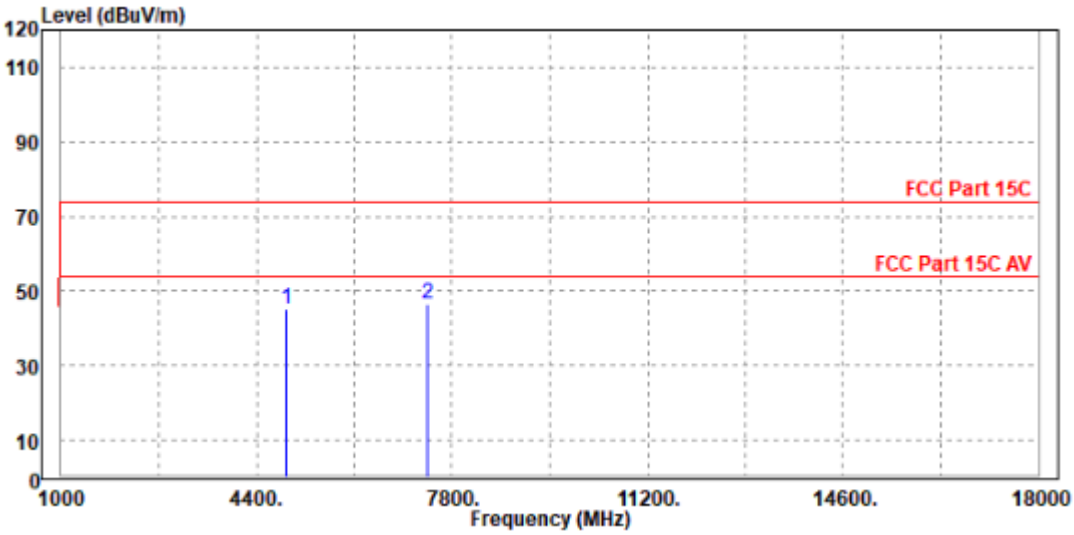
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1		4910.000	45.87	47.72	74.00	-28.13	-1.85	Peak	Horizontal
2	PP	7356.000	45.88	43.64	74.00	-28.12	2.24	Peak	Horizontal



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1		4904.000	45.08	46.87	74.00	-28.92	-1.79	Peak	Vertical
2	PP	7358.000	46.40	43.87	74.00	-27.60	2.53	Peak	Vertical



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2452MHz: Fundamental frequency.
3. For frequency above 18GHz, the emission was tested 20db below the limit so the data not recorded in the sheet.

BELOW 1GHz WORST-CASE DATA:

30 MHz – 1GHz data:

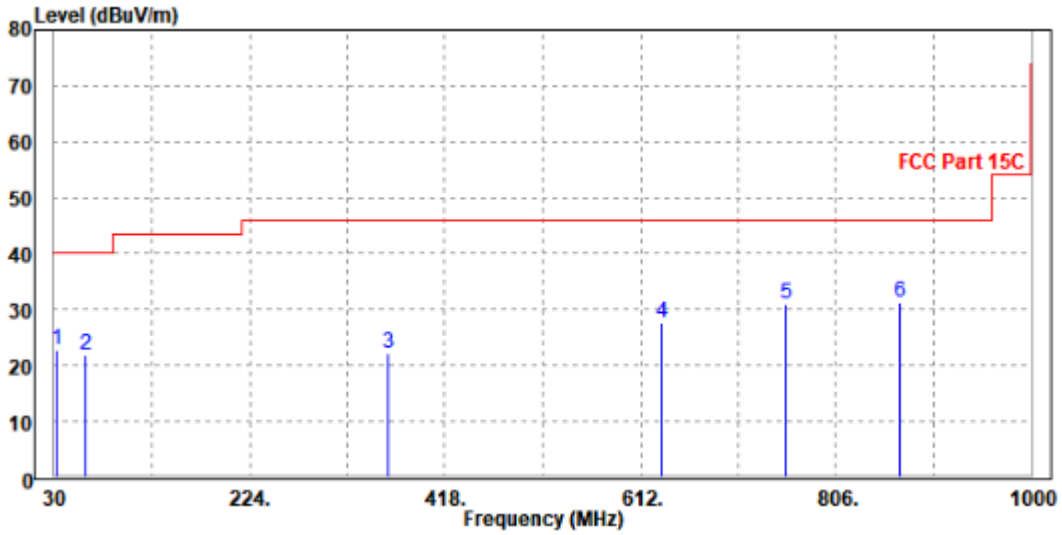
BT-LE _S2

CHANNEL	TX Channel 19	**0DETECTOR FUNCTION**	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
31.94	22.79	34.46	40	-17.21	19.55	6.16	37.38	100	360	Peak
61.04	21.92	45.54	40	-18.08	7.36	6.31	37.29	100	360	Peak
361.74	22.18	35.62	46	-23.82	15.84	7.47	36.75	100	360	Peak
632.37	27.6	35.49	46	-18.4	21.04	8.27	37.2	100	360	Peak
756.53	31.06	36.82	46	-14.94	23.22	8.5	37.48	100	360	Peak
870.02	31.31	36.44	46	-14.69	23.91	8.73	37.77	100	360	Peak

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

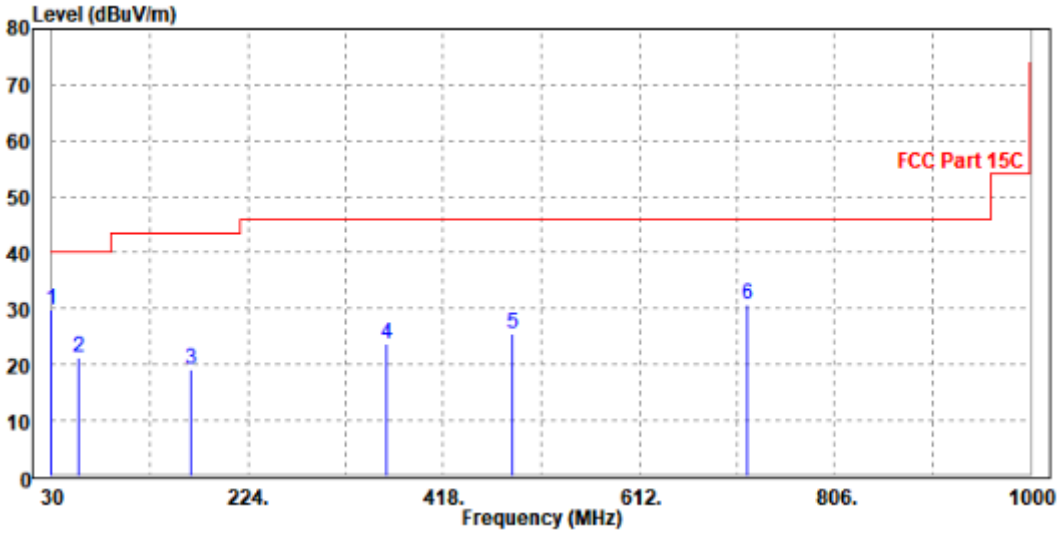


CHANNEL	TX Channel 19	**DETECTOR FUNCTION**	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
30	29.86	40.3	40	-10.14	20.8	6.13	37.37	100	0	Peak
56.19	21.41	44.54	40	-18.59	7.93	6.3	37.36	100	0	Peak
167.74	19.01	34.92	43.5	-24.49	14.03	6.81	36.75	100	0	Peak
361.74	23.61	36.44	46	-22.39	16.45	7.47	36.75	100	0	Peak
486.87	25.66	35.55	46	-20.34	19.25	7.9	37.04	100	0	Peak
719.67	30.73	36.53	46	-15.27	23.12	8.42	37.34	100	0	Peak

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



ABOVE 1GHz TEST DATA

Note: 1. For radiated emissions testing，the full testing range of different modes have been scanned，only the worst case harmonic data is reported in the sheet.

2. All other emissions were greater than 20dB below the limit was not recorded

BT-LE _1M

CHANNEL	TX Channel 0	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.65	57.34	74.00	-23.35	31.78	7.74	46.21	100	290	Peak
2390.000	39.96	46.65	54.00	-14.04	31.78	7.74	46.21	100	290	Average
2402.000	100.59	107.25	/	/	31.80	7.75	46.21	100	290	Peak
2402.000	95.02	101.68	/	/	31.80	7.75	46.21	100	290	Average
2483.500	51.26	57.60	74.00	-22.74	31.97	7.88	46.19	100	290	Peak
2483.500	39.91	46.25	54.00	-14.09	31.97	7.88	46.19	100	290	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	49.72	56.29	74.00	-24.28	31.90	7.74	46.21	100	40	Peak
2390.000	40.27	46.84	54.00	-13.73	31.90	7.74	46.21	100	40	Average
2402.000	97.74	104.28	/	/	31.92	7.75	46.21	100	40	Peak
2402.000	92.34	98.88	/	/	31.92	7.75	46.21	100	40	Average
2483.500	50.33	56.57	74.00	-23.67	32.07	7.88	46.19	100	40	Peak
2483.500	40.27	46.51	54.00	-13.73	32.07	7.88	46.19	100	40	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2402MHz: Fundamental frequency.

CHANNEL	TX Channel 19	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	51.00	57.69	74.00	-23.00	31.78	7.74	46.21	100	290	Peak
2390.000	40.50	47.19	54.00	-13.50	31.78	7.74	46.21	100	290	Average
2440.000	101.84	108.35	/	/	31.88	7.81	46.20	100	290	Peak
2440.000	96.36	102.87	/	/	31.88	7.81	46.20	100	290	Average
2483.500	51.02	57.36	74.00	-22.98	31.97	7.88	46.19	100	290	Peak
2483.500	40.78	47.12	54.00	-13.22	31.97	7.88	46.19	100	290	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.68	57.25	74.00	-23.32	31.90	7.74	46.21	100	40	Peak
2390.000	40.61	47.18	54.00	-13.39	31.90	7.74	46.21	100	40	Average
2440.000	98.20	104.60	/	/	31.99	7.81	46.20	100	40	Peak
2440.000	92.87	99.27	/	/	31.99	7.81	46.20	100	40	Average
2483.500	51.17	57.41	74.00	-22.83	32.07	7.88	46.19	100	40	Peak
2483.500	40.85	47.09	54.00	-13.15	32.07	7.88	46.19	100	40	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2440MHz: Fundamental frequency.

CHANNEL	TX Channel 39	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	49.23	55.92	74.00	-24.77	31.78	7.74	46.21	100	290	Peak
2390.000	39.89	46.58	54.00	-14.11	31.78	7.74	46.21	100	290	Average
2480.000	99.27	105.63	/	/	31.96	7.87	46.19	100	290	Peak
2480.000	93.60	99.96	/	/	31.96	7.87	46.19	100	290	Average
2483.500	50.27	56.61	74.00	-23.73	31.97	7.88	46.19	100	290	Peak
2483.500	40.72	47.06	54.00	-13.28	31.97	7.88	46.19	100	290	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.79	57.36	74.00	-23.21	31.90	7.74	46.21	100	40	Peak
2390.000	39.89	46.46	54.00	-14.11	31.90	7.74	46.21	100	40	Average
2480.000	96.72	102.98	/	/	32.06	7.87	46.19	100	40	Peak
2480.000	91.13	97.39	/	/	32.06	7.87	46.19	100	40	Average
2483.500	51.35	57.59	74.00	-22.65	32.07	7.88	46.19	100	40	Peak
2483.500	40.63	46.87	54.00	-13.37	32.07	7.88	46.19	100	40	Average

REMARKS:

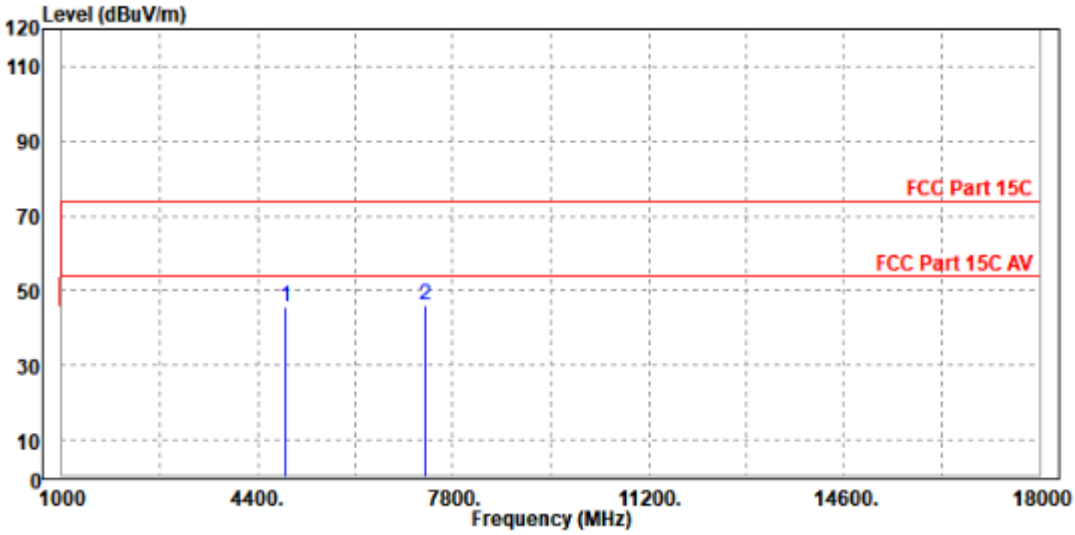
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2480MHz: Fundamental frequency.

Worst case harmonic:

CHANNEL	TX Channel 19	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

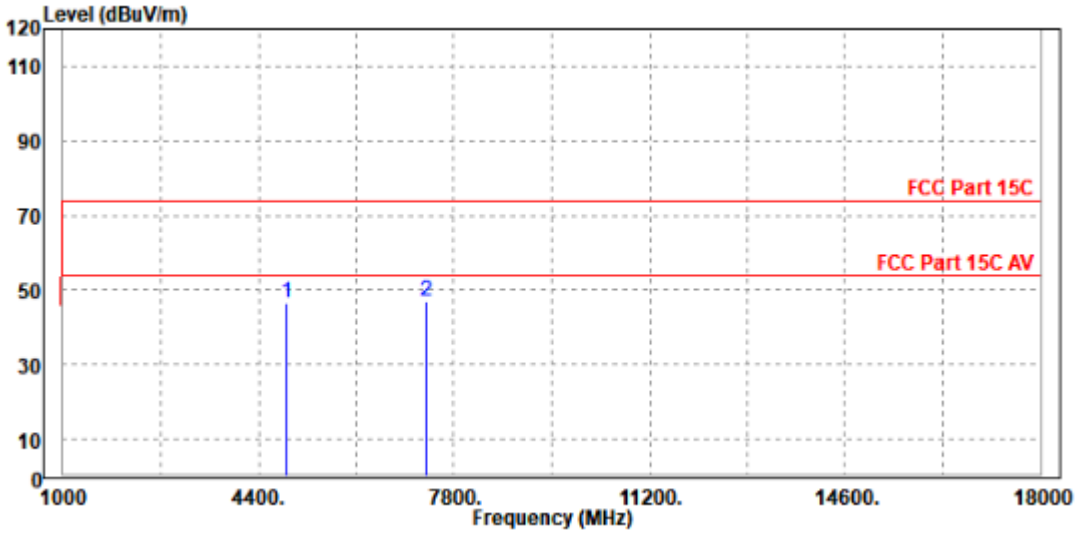
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	4876.000	45.81	47.44	74.00	-28.19	-1.63	Peak	Horizontal
2 PP	7320.000	46.16	43.63	74.00	-27.84	2.53	Peak	Horizontal



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1		4880.000	46.49	48.08	74.00	-27.51	-1.59	Peak	Vertical
2	PP	7324.000	46.85	44.20	74.00	-27.15	2.65	Peak	Vertical



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2440MHz: Fundamental frequency.
3. For frequency above 18GHz, the emission was tested 20db below the limit so the data not recorded in the sheet.

BT-LE _2M

CHANNEL	TX Channel 1	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390.000	49.99	56.68	74.00	-24.01	31.78	7.74	46.21	100	290	Peak
2390.000	40.13	46.82	54.00	-13.87	31.78	7.74	46.21	100	290	Average
2404.000	100.87	107.51	/	/	31.81	7.76	46.21	100	290	Peak
2404.000	88.09	94.73	/	/	31.81	7.76	46.21	100	290	Average
2483.500	50.85	57.19	74.00	-23.15	31.97	7.88	46.19	100	290	Peak
2483.500	40.61	46.95	54.00	-13.39	31.97	7.88	46.19	100	290	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390.000	49.92	56.49	74.00	-24.08	31.90	7.74	46.21	100	40	Peak
2390.000	40.56	47.13	54.00	-13.44	31.90	7.74	46.21	100	40	Average
2404.000	97.53	104.05	/	/	31.93	7.76	46.21	100	40	Peak
2404.000	85.37	91.89	/	/	31.93	7.76	46.21	100	40	Average
2483.500	51.24	57.48	74.00	-22.76	32.07	7.88	46.19	100	40	Peak
2483.500	40.67	46.91	54.00	-13.33	32.07	7.88	46.19	100	40	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2404MHz: Fundamental frequency.

CHANNEL	TX Channel 19	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.63	57.32	74.00	-23.37	31.78	7.74	46.21	100	290	Peak
2390.000	40.55	47.24	54.00	-13.45	31.78	7.74	46.21	100	290	Average
2440.000	101.07	107.58	/	/	31.88	7.81	46.20	100	290	Peak
2440.000	88.12	94.63	/	/	31.88	7.81	46.20	100	290	Average
2483.500	50.29	56.63	74.00	-23.71	31.97	7.88	46.19	100	290	Peak
2483.500	40.56	46.90	54.00	-13.44	31.97	7.88	46.19	100	290	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.41	56.98	74.00	-23.59	31.90	7.74	46.21	100	40	Peak
2390.000	40.02	46.59	54.00	-13.98	31.90	7.74	46.21	100	40	Average
2440.000	97.75	104.15	/	/	31.99	7.81	46.20	100	40	Peak
2440.000	85.41	91.81	/	/	31.99	7.81	46.20	100	40	Average
2483.500	50.58	56.82	74.00	-23.42	32.07	7.88	46.19	100	40	Peak
2483.500	40.79	47.03	54.00	-13.21	32.07	7.88	46.19	100	40	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2440MHz: Fundamental frequency.

CHANNEL	TX Channel 38	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.29	56.98	74.00	-23.71	31.78	7.74	46.21	100	290	Peak
2390.000	40.18	46.87	54.00	-13.82	31.78	7.74	46.21	100	290	Average
2478.000	99.95	106.31	/	/	31.96	7.87	46.19	100	290	Peak
2478.000	87.12	93.48	/	/	31.96	7.87	46.19	100	290	Average
2483.500	52.28	58.62	74.00	-21.72	31.97	7.88	46.19	100	290	Peak
2483.500	41.28	47.62	54.00	-12.72	31.97	7.88	46.19	100	290	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	51.13	57.70	74.00	-22.87	31.90	7.74	46.21	100	40	Peak
2390.000	40.29	46.86	54.00	-13.71	31.90	7.74	46.21	100	40	Average
2478.000	96.18	102.44	/	/	32.06	7.87	46.19	100	40	Peak
2478.000	84.10	90.36	/	/	32.06	7.87	46.19	100	40	Average
2483.500	50.58	56.82	74.00	-23.42	32.07	7.88	46.19	100	40	Peak
2483.500	40.78	47.02	54.00	-13.22	32.07	7.88	46.19	100	40	Average

REMARKS:

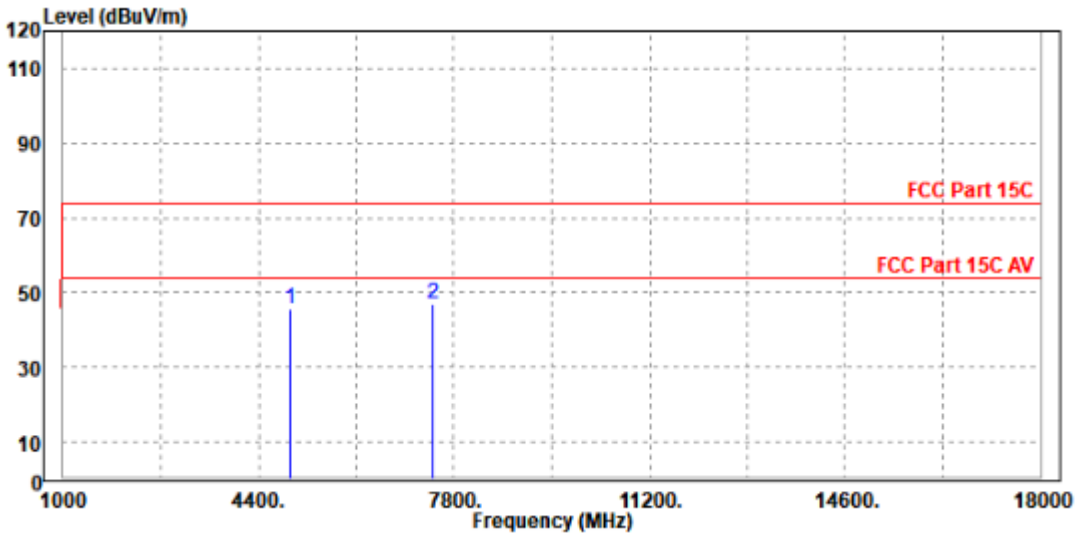
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2478MHz: Fundamental frequency.

Worst case harmonic:

CHANNEL	TX Channel 38	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

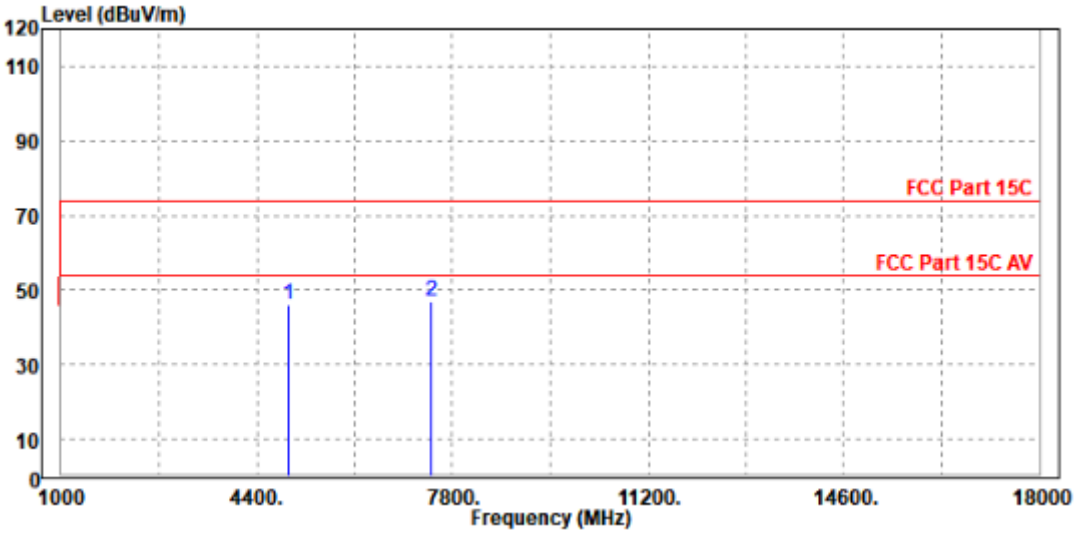
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	4956.000	45.58	46.98	74.00	-28.42	-1.40	Peak	Horizontal
2 PP	7426.000	47.18	44.37	74.00	-26.82	2.81	Peak	Horizontal



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1		4961.000	45.98	47.30	74.00	-28.02	-1.32	Peak	Vertical
2	PP	7434.000	46.94	44.01	74.00	-27.06	2.93	Peak	Vertical



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2478MHz: Fundamental frequency.
3. For frequency above 18GHz, the emission was tested 20db below the limit so the data not recorded in the sheet

BT-LE _S2

CHANNEL	TX Channel 0	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390.000	50.91	57.60	74.00	-23.09	31.78	7.74	46.21	100	290	Peak
2390.000	40.17	46.86	54.00	-13.83	31.78	7.74	46.21	100	290	Average
2402.000	100.56	107.22	/	/	31.80	7.75	46.21	100	290	Peak
2402.000	95.18	101.84	/	/	31.80	7.75	46.21	100	290	Average
2483.500	51.06	57.40	74.00	-22.94	31.97	7.88	46.19	100	290	Peak
2483.500	40.34	46.68	54.00	-13.66	31.97	7.88	46.19	100	290	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390.000	39.78	46.35	74.00	-34.22	31.90	7.74	46.21	100	40	Peak
2390.000	39.89	46.46	54.00	-14.11	31.90	7.74	46.21	100	40	Average
2402.000	97.32	103.86	/	/	31.92	7.75	46.21	100	40	Peak
2402.000	92.03	98.57	/	/	31.92	7.75	46.21	100	40	Average
2483.500	51.10	57.34	74.00	-22.90	32.07	7.88	46.19	100	40	Peak
2483.500	39.79	46.03	54.00	-14.21	32.07	7.88	46.19	100	40	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2402MHz: Fundamental frequency.

CHANNEL	TX Channel 19	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.59	57.28	74.00	-23.41	31.78	7.74	46.21	100	290	Peak
2390.000	40.06	46.75	54.00	-13.94	31.78	7.74	46.21	100	290	Average
2440.000	101.66	108.17	/	/	31.88	7.81	46.20	100	290	Peak
2440.000	96.15	102.66	/	/	31.88	7.81	46.20	100	290	Average
2483.500	50.04	56.38	74.00	-23.96	31.97	7.88	46.19	100	290	Peak
2483.500	40.31	46.65	54.00	-13.69	31.97	7.88	46.19	100	290	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.55	57.12	74.00	-23.45	31.90	7.74	46.21	100	40	Peak
2390.000	40.21	46.78	54.00	-13.79	31.90	7.74	46.21	100	40	Average
2440.000	97.97	104.37	/	/	31.99	7.81	46.20	100	40	Peak
2440.000	93.14	99.54	/	/	31.99	7.81	46.20	100	40	Average
2483.500	50.28	56.52	74.00	-23.72	32.07	7.88	46.19	100	40	Peak
2483.500	40.47	46.71	54.00	-13.53	32.07	7.88	46.19	100	40	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2440MHz: Fundamental frequency.

CHANNEL	TX Channel 39	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.66	57.35	74.00	-23.34	31.78	7.74	46.21	100	290	Peak
2390.000	39.74	46.43	54.00	-14.26	31.78	7.74	46.21	100	290	Average
2480.000	98.43	104.79	/	/	31.96	7.87	46.19	100	290	Peak
2480.000	93.97	100.33	/	/	31.96	7.87	46.19	100	290	Average
2483.500	52.33	58.67	74.00	-21.67	31.97	7.88	46.19	100	290	Peak
2483.500	39.88	46.22	54.00	-14.12	31.97	7.88	46.19	100	290	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.01	56.58	74.00	-23.99	31.90	7.74	46.21	100	40	Peak
2390.000	39.89	46.46	54.00	-14.11	31.90	7.74	46.21	100	40	Average
2440.000	96.51	102.91	/	/	31.99	7.81	46.20	100	40	Peak
2440.000	90.78	97.18	/	/	31.99	7.81	46.20	100	40	Average
2483.500	51.07	57.31	74.00	-22.93	32.07	7.88	46.19	100	40	Peak
2483.500	40.08	46.32	54.00	-13.92	32.07	7.88	46.19	100	40	Average

REMARKS:

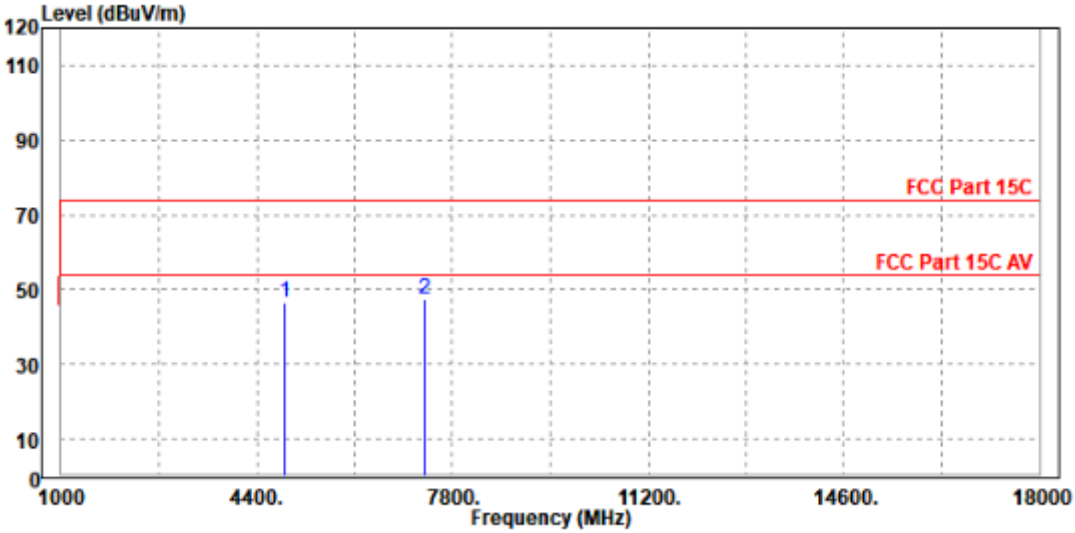
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2480MHz: Fundamental frequency.

Worst case harmonic:

CHANNEL	TX Channel 19	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

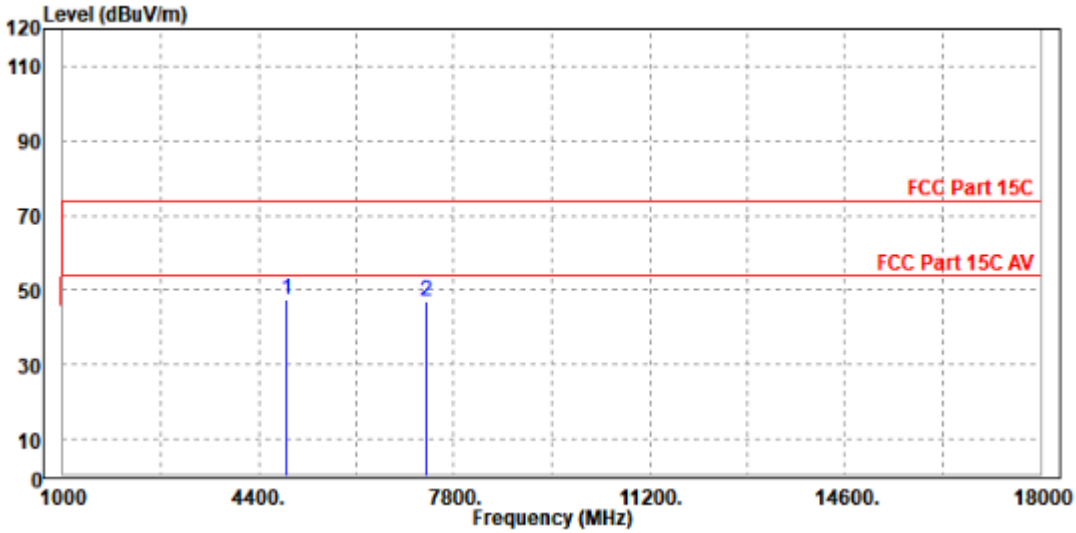
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1		4876.000	46.58	48.21	74.00	-27.42	-1.63	Peak	Horizontal
2	PP	7320.000	47.44	44.91	74.00	-26.56	2.53	Peak	Horizontal



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	PP	4880.000	47.53	49.12	74.00	-26.47	-1.59	Peak	Vertical
2		7324.000	47.02	44.37	74.00	-26.98	2.65	Peak	Vertical



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2440MHz: Fundamental frequency.
3. For frequency above 18GHz, the emission was tested 20db below the limit so the data not recorded in the sheet

BT-LE _S8

CHANNEL	TX Channel 0	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.12	56.81	74.00	-23.88	31.78	7.74	46.21	100	290	Peak
2390.000	39.85	46.54	54.00	-14.15	31.78	7.74	46.21	100	290	Average
2402.000	100.36	107.02	/	/	31.80	7.75	46.21	100	290	Peak
2402.000	97.16	103.82	/	/	31.80	7.75	46.21	100	290	Average
2483.500	50.58	56.92	74.00	-23.42	31.97	7.88	46.19	100	290	Peak
2483.500	39.80	46.14	54.00	-14.20	31.97	7.88	46.19	100	290	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	49.43	56.00	74.00	-24.57	31.90	7.74	46.21	100	40	Peak
2390.000	40.42	46.99	54.00	-13.58	31.90	7.74	46.21	100	40	Average
2402.000	96.87	103.41	/	/	31.92	7.75	46.21	100	40	Peak
2402.000	94.14	100.68	/	/	31.92	7.75	46.21	100	40	Average
2483.500	50.99	57.23	74.00	-23.01	32.07	7.88	46.19	100	40	Peak
2483.500	40.64	46.88	54.00	-13.36	32.07	7.88	46.19	100	40	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2402MHz: Fundamental frequency.

CHANNEL	TX Channel 19	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.54	57.23	74.00	-23.46	31.78	7.74	46.21	100	290	Peak
2390.000	40.28	46.97	54.00	-13.72	31.78	7.74	46.21	100	290	Average
2440.000	101.52	108.03	/	/	31.88	7.81	46.20	100	290	Peak
2440.000	98.51	105.02	/	/	31.88	7.81	46.20	100	290	Average
2483.500	50.61	56.95	74.00	-23.39	31.97	7.88	46.19	100	290	Peak
2483.500	40.53	46.87	54.00	-13.47	31.97	7.88	46.19	100	290	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
2390.000	50.17	56.74	74.00	-23.83	31.90	7.74	46.21	100	40	Peak
2390.000	40.02	46.59	54.00	-13.98	31.90	7.74	46.21	100	40	Average
2440.000	98.03	104.43	/	/	31.99	7.81	46.20	100	40	Peak
2440.000	101.31	107.71	/	/	31.99	7.81	46.20	100	40	Average
2483.500	50.23	56.47	74.00	-23.77	32.07	7.88	46.19	100	40	Peak
2483.500	40.67	46.91	54.00	-13.33	32.07	7.88	46.19	100	40	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2440MHz: Fundamental frequency.

CHANNEL	TX Channel 39	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390.000	49.82	56.51	74.00	-24.18	31.78	7.74	46.21	100	290	Peak
2390.000	40.33	47.02	54.00	-13.67	31.78	7.74	46.21	100	290	Average
2480.000	98.76	105.12	/	/	31.96	7.87	46.19	100	290	Peak
2480.000	96.11	102.47	/	/	31.96	7.87	46.19	100	290	Average
2483.500	51.61	57.95	74.00	-22.39	31.97	7.88	46.19	100	290	Peak
2483.500	40.69	47.03	54.00	-13.31	31.97	7.88	46.19	100	290	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390.000	49.94	56.51	74.00	-24.06	31.90	7.74	46.21	100	40	Peak
2390.000	39.68	46.25	54.00	-14.32	31.90	7.74	46.21	100	40	Average
2480.000	96.59	102.85	/	/	32.06	7.87	46.19	100	40	Peak
2480.000	94.05	100.31	/	/	32.06	7.87	46.19	100	40	Average
2483.500	51.95	58.19	74.00	-22.05	32.07	7.88	46.19	100	40	Peak
2483.500	40.77	47.01	54.00	-13.23	32.07	7.88	46.19	100	40	Average

REMARKS:

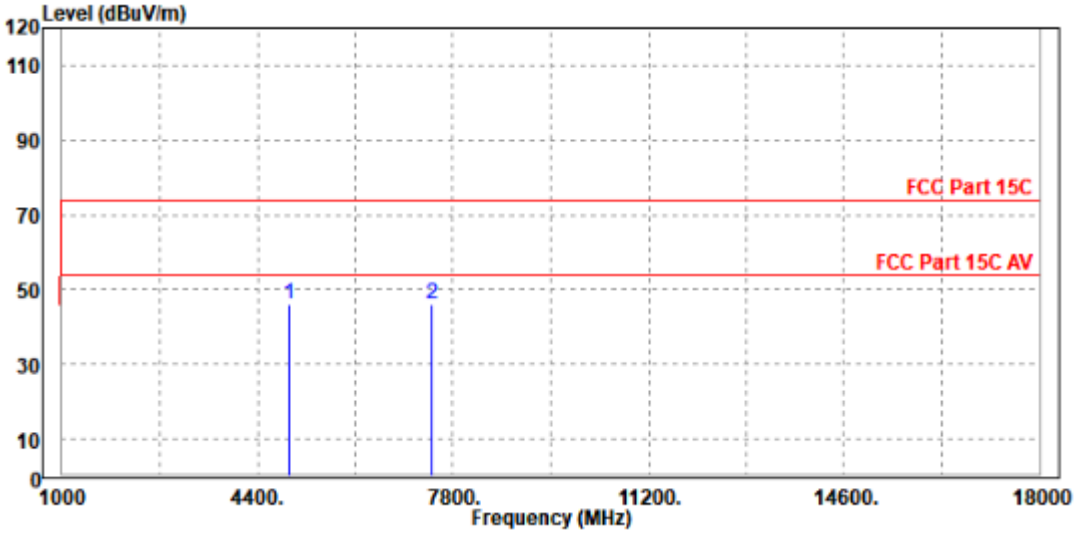
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2480MHz: Fundamental frequency.

Worst case harmonic:

CHANNEL	TX Channel 39	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

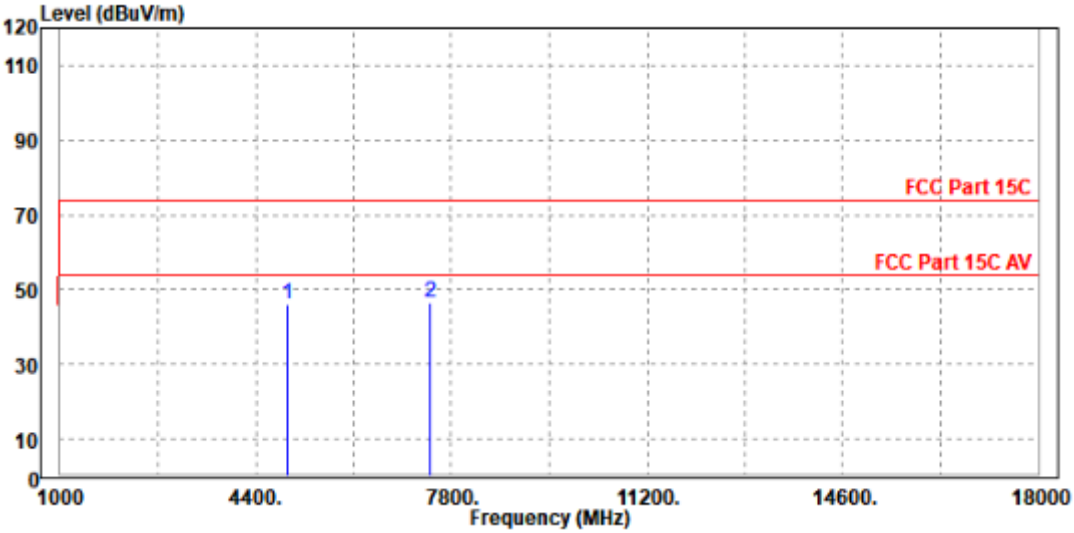
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1		4960.000	45.88	47.27	74.00	-28.12	-1.39	Peak	Horizontal
2	PP	7443.000	46.21	43.36	74.00	-27.79	2.85	Peak	Horizontal



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1		4961.000	46.12	47.44	74.00	-27.88	-1.32	Peak	Vertical
2	PP	7440.000	46.36	43.41	74.00	-27.64	2.95	Peak	Vertical



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2480MHz: Fundamental frequency.
3. For frequency above 18GHz, the emission was tested 20db below the limit so the data not recorded in the sheet

3.3 6 dB BANDWIDTH MEASUREMENT

3.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum 6dB Bandwidth Measurement is 0.5 MHz.

3.3.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Power Meter	ANRITSU	ML2495A	1506002	Feb. 14,24	Feb. 13,25
EXA Signal Analyzer	KEYSIGHT	N9010A-526	MY54510523	Feb. 14,24	Feb. 13,25
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	May.10,23	May.09,24
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	May.09,24	May.08,25
Power Sensor	ANRITSU	MA2411B	1339352	Feb. 14,24	Feb. 13,25

NOTE:

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

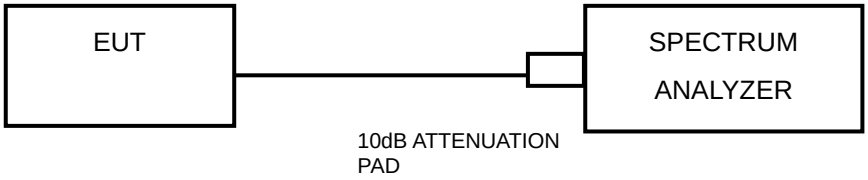
3.3.3 TEST PROCEDURE

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.

3.3.4 DEVIATION FROM TEST STANDARD

No deviation.

3.3.5 TEST SETUP



3.3.6 EUT OPERATING CONDITIONS

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

3.3.7 TEST RESULTS

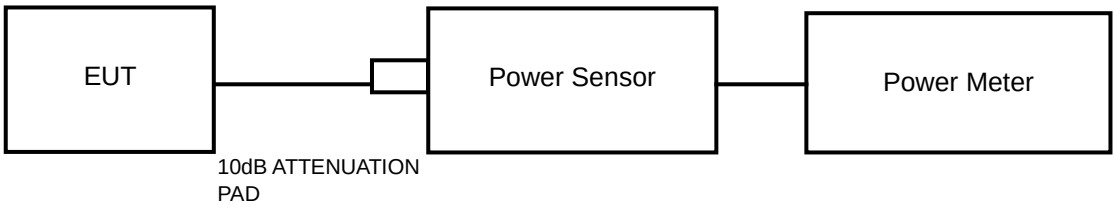
Please Refer to Appendix B.

3.4 CONDUCTED OUTPUT POWER

3.4.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT

For systems using digital modulation in the 2400–2483.5 MHz band: 1 Watt (30dBm)

3.4.2 TEST SETUP



3.4.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.4.4 TEST PROCEDURES

A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the power level.

3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

3.4.6 EUT OPERATING CONDITIONS

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

3.4.7 TEST RESULTS

3.4.7.1 MAXIMUM PEAK OUTPUT POWER

Please Refer to Appendix B.

3.4.7.2 AVERAGE OUTPUT POWER (FOR REFERENCE)

The average power sensor was used on the output port of the EUT. A power meter was used to read the response of the power sensor. Record the power level.

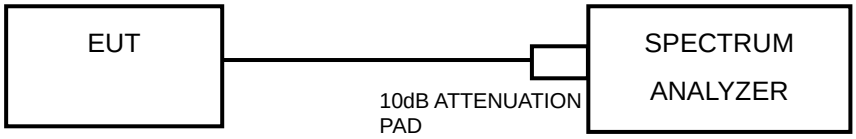
Please Refer to Appendix B.

3.5 POWER SPECTRAL DENSITY MEASUREMENT

3.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm/3KHz.

3.5.2 TEST SETUP



3.5.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.5.4 TEST PROCEDURE

1. Set the span to 1.5 times the DTS bandwidth
2. Set the RBW = 3 kHz, VBW ≥ 3 x RBW, Detector = peak.
3. Sweep time = auto couple, Trace mode = max hold, allow trace to fully stabilize.
4. Use the peak marker function to determine the maximum amplitude level.

3.5.5 DEVIATION FROM TEST STANDARD

No deviation.

3.5.6 EUT OPERATING CONDITION

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

3.5.7 TEST RESULTS

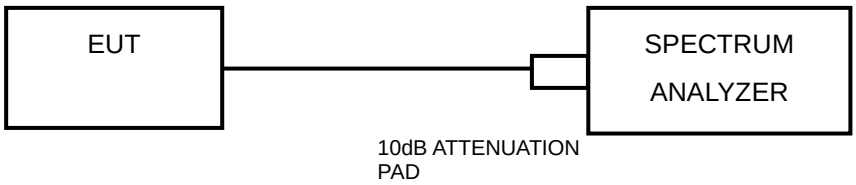
Please Refer to Appendix B.

3.6 OUT OF BAND EMISSION MEASUREMENT

3.6.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

3.6.2 TEST SETUP



3.6.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.6.4 TEST PROCEDURE

MEASUREMENT PROCEDURE REF

1. Set the RBW = 100 kHz.
2. Set the VBW ≥ 300 kHz.
3. Detector = peak.
4. Sweep time = auto couple.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOBE

1. Set RBW = 100 kHz.
2. Set VBW ≥ 300 kHz.
3. Set span to encompass the spectrum to be examined
4. Detector = peak.
5. Trace Mode = max hold.
6. Sweep = auto couple.

3.6.5 DEVIATION FROM TEST STANDARD

No deviation.

3.6.6 EUT OPERATING CONDITION

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

3.6.7 TEST RESULTS

The spectrum plots are attached on the following images. D1 line indicates the highest level. D2 line indicates the 20dB offset below D1. It shows compliance to the requirement.

Please Refer to Appendix B.

3.7 ANTENNA REQUIREMENTS

3.7.1 STANDARD APPLICABLE

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.7.2 ANTENNA CONNECTED CONSTRUCTION

An embedded-in antenna design is used.

3.7.3 ANTENNA GAIN

According to FCC KDB 662911 D01 Multiple Transmitter Output v02r01
For CDD transmissions, directional gain is calculated as
Directional gain=GANT +Array Gain, where Array Gain is as follows.
For power spectral density (PSD) measurements on all devices,
Array Gain= 10 log(NANT/ Nss) dB;
For power measurements on IEEE 802.11 devices,Array Gain = 0 dB for NANT≤ 4;
The EUT supports Cyclic Delay Diversity (CDD) mode,
For power measurements,the directional GANT is set equal to the antenna having the highest gain as following formulas.

Directional Gain = Max.Gain + Array Gain.

For PSD measurements,the directional GANT is calculation is following F)2)f)ii of KDB 662911 D01 v02r01.
The directional gain is calculated as following table.

2.4GHz	Ant 8 (dBi)	Ant 9 (dBi)	DG For Power (dBi)	DG For PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
	0.4	-1.33	0.4	**2.59**	0.00	0.00

NOTE :DG= directional gain, Power Limit Reduction = DG For Power Gain -6dbi<0

PSD Limit Reduction = DG For PSD – 6dBi<0.Therefore, it is not necessary to reduce maximum peak output power and PSD limit.

4 PHOTOGRAPHS OF THE TEST CONFIGURATION

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

5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

--END--