ACCREDITED
Certificate # 3939.01

FCC TEST REPORT

(Part 15, Subpart C)

Applicant:	COOSEA GROUP (HK) COMPANY LIMITED
Address:	UNIT 5-6 16/F MULTIFIELD PLAZA 3-7A PRAT AVENUE TSIMSHATSUI KL, HONG KONG, CHINA

Manufacturer or Supplier:	COOSEA GROUP (HK) COMPANY LIMITED
Address:	UNIT 5-6 16/F MULTIFIELD PLAZA 3-7A PRAT AVENUE TSIMSHATSUI KL, HONG KONG, CHINA
Product:	LTE Smartphone
Brand Name:	Cricket
Model Name:	SL100EA
FCC ID:	2A28USL100EA
Date of tests:	Oct. 27, 2021 ~ Dec. 23, 2021

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

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

☒ **ANSI C63.10-2013**

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

Prepared by Simon Wang Engineer / Mobile Department	Approved by Luke Lu Manager / Mobile Department
Simon Date: Dec. 24, 2021	Luke Lu Date: Dec. 24, 2021

This report is governed by, and incorporates by reference, CPS Conditions of Service as posted at the date of issuance of this report at http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute you unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

TABLE OF CONTENTS

RELEASE CONTROL RECORD **4**
1 SUMMARY OF TEST RESULTS **5**
1.1 MEASUREMENT UNCERTAINTY 5
2 GENERAL INFORMATION **6**
2.1 GENERAL DESCRIPTION OF EUT 6
2.2 DESCRIPTION OF TEST MODES 8
2.2.1 CONFIGURATION OF SYSTEM UNDER TEST 9
2.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL 9
2.3 DUTY CYCLE OF TEST SIGNAL 12
2.4 GENERAL DESCRIPTION OF APPLIED STANDARDS 13
2.5 DESCRIPTION OF SUPPORT UNITS 13
3 TEST TYPES AND RESULTS **14**
3.1 CONDUCTED EMISSION MEASUREMENT 14
3.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT 14
3.1.2 TEST INSTRUMENTS 14
3.1.3 TEST PROCEDURES 15
3.1.4 DEVIATION FROM TEST STANDARD 15
3.1.5 TEST SETUP 16
3.1.6 EUT OPERATING CONDITIONS 16
3.1.7 TEST RESULTS 17
3.2 RADIATED EMISSION MEASUREMENT 19
3.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT 19
3.2.2 TEST INSTRUMENTS 20
3.2.3 TEST PROCEDURES 21
3.2.4 DEVIATION FROM TEST STANDARD 21
3.2.5 TEST SETUP 22
3.2.6 EUT OPERATING CONDITIONS 23
3.2.7 TEST RESULTS 24
3.3 6 DB BANDWIDTH MEASUREMENT 52
3.3.1 LIMITS OF 6DB BANDWIDTH MEASUREMENT 52
3.3.2 TEST INSTRUMENTS 52
3.3.3 TEST PROCEDURE 52
3.3.4 DEVIATION FROM TEST STANDARD 53

3.3.5 TEST SETUP 53
3.3.6 EUT OPERATING CONDITIONS 53
3.3.7 TEST RESULTS 54
3.4 CONDUCTED OUTPUT POWER 55
3.4.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT 55
3.4.2 TEST SETUP 55
3.4.3 TEST INSTRUMENTS 55
3.4.4 TEST PROCEDURES 55
3.4.5 DEVIATION FROM TEST STANDARD 55
3.4.6 EUT OPERATING CONDITIONS 55
3.4.7 TEST RESULTS 56
3.4.7.1 MAXIMUM PEAK OUTPUT POWER 56
3.4.7.2 AVERAGE OUTPUT POWER (FOR REFERENCE) 57
3.5 POWER SPECTRAL DENSITY MEASUREMENT 58
3.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT 58
3.5.2 TEST SETUP 58
3.5.3 TEST INSTRUMENTS 58
3.5.4 TEST PROCEDURE 58
3.5.5 DEVIATION FROM TEST STANDARD 58
3.5.6 EUT OPERATING CONDITION 58
3.5.7 TEST RESULTS 59
3.6 OUT OF BAND EMISSION MEASUREMENT 60
3.6.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT 60
3.6.2 TEST SETUP 60
3.6.3 TEST INSTRUMENTS 60
3.6.4 TEST PROCEDURE 60
3.6.5 DEVIATION FROM TEST STANDARD 61
3.6.6 EUT OPERATING CONDITION 61
3.6.7 TEST RESULTS 61
4 PHOTOGRAPHS OF THE TEST CONFIGURATION 62
5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB63
6 APPENDIX1 64
7 APPENDIX2 65

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P21100025RF02	Original release	Dec. 24, 2021

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，other data please refer to Appendix A (for WIFI-2.4G) and Appendix B (for BLE)

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 (30MHz~1GMHz)	±4.98dB
Radiated emissions (1GMHz ~6GMHz)	±4.70dB
Radiated emissions (6GMHz ~18GMHz)	±4.60dB
Radiated emissions (18GMHz ~40GMHz)	±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	LTE Smartphone
BRAND NAME	Cricket
MODEL NAME	SL100EA
NOMINAL VOLTAGE	5.0Vdc(adapter or host equipment) 3.85Vdc (Li-ion, battery)
MODULATION	DSSS, OFDM, GFSK
TRANSMISSION RATE	802.11b: 11/ 5.5/ 2.0 / 1.0 Mbps 802.11g: 54/ 48/ 36 / 24 / 18 / 9/ 6 Mbps 802.11n20: up to 65 Mbps 802.11n40: up to 135 Mbps BT_LE: 0.125 Mbps /0.5 Mbps /1 Mbps/2 Mbps
OPERATING FREQUENCY	2412-2462MHz for 11b/g/n(HT20/ HT40) 2402-2480MHz for BT-LE(GFSK)
MAX. OUTPUT POWER	WLAN: 304.09mW (Maximum) BT-LE: 0.622mW (Maximum)
ANTENNA TYPE	PIFA Antenna with 2.7dBi gain
HW VERSION	1.0
SW VERSION	SL100EAC010001
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	USB cable: unshielded without ferrite, 1.0meter

NOTE:

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

2. The EUT incorporates a SISO function. Physically, the EUT provides one transmitter and one receiver.

MODULATION MODE	TX/RX FUNCTION
802.11b	1TX /1RX
802.11g	1TX /1RX
802.11n (20MHz)	1TX /1RX
802.11n (40MHz)	1TX /1RX
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. In the finger plate, dial the code for entering Engineer mode: *#*#3646633#*#* EngineerMode->CONNECTIVITY->Wifi->Tx

List of Accessory:

ACCESSORIES	BRAND	MANUFACTURER	MODEL	SPECIFICATION
Battery	COOSEA	ZHONGSHAN TIANMAO BATTERY CO., LTD	BL-A32CT	Capacity：3.85 Vdc, 3450mAh
AC Adapter	COOSEA	Guangdong Beicom Electronics Co., Ltd.	U312E0A050200	I/P:100-240V,50/60Hz,0.35A, O/P: 5.0V,2.0A 10.0W
USB Cable	COOSEA	Wivtak	TP-C0028-B3	Signal Line, 1.0meter

2.2 DESCRIPTION OF TEST MODES

11 channels are provided for 802.11b, 802.11g and 802.11n (HT20):

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):

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

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 5 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).

☒ 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	0	GFSK	2.0

RADIATED EMISSION TEST (ABOVE 1GHz):

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

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

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
802.11n HT40	3 to 9	3, 6, 9	OFDM	MCS0
BT-LE	0 to 39	0,19, 39	GFSK	0.125&0.5&1&2

POWER LINE CONDUCTED EMISSION TEST

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

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

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
802.11n HT20	1 to 11	11	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).

☒ 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, 11	DSSS	1.0
802.11g	1 to 11	1, 11	OFDM	6.0
802.11n HT20	1 to 11	1, 11	OFDM	MCS0
802.11n HT40	3 to 9	3, 6, 9	OFDM	MCS0
BT-LE	0 to 39	0, 39	GFSK	0.125&0.5&1&2

ANTENNA PORT CONDUCTED MEASUREMENT:

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

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
802.11b	1 to 11	1, 6, 11	CCK	1.0
802.11g	1 to 11	1, 6, 11	OFDM	6.0
802.11n HT20	1 to 11	1, 6, 11	OFDM	MCS0
802.11n HT40	3 to 9	3, 6, 9	OFDM	MCS0
BT-LE	0 to 39	0,19, 39	GFSK	0.125&0.5&1&2

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	TEST VOLTAGE	TESTED BY
RE<1G	23deg. C, 70%RH	DC 5V By Adapter	Star Le
RE≥1G	23deg. C, 70%RH	DC5V By Adapter	Star Le
PLC	25deg. C, 52%RH	DC5V By Adapter	Carl xie
APCM	25deg. C, 60%RH	DC 3.85V By Battery	Carl xie

2.3 Duty Cycle of Test Signal

Please Refer to AppendixA/B Of this test report.

WORST-CASE DATA:

Measured Duty Cycle		
Mode		Duty Cycle [%]
		ANT1
WIFI 2.4GHz	11B	100.00
	11G	100.00
	11N20	96.73
	11N40	93.64
BT LE	BT4.0	84.99
	BT5.0	57.01
	BTS2	90.94
	BTS8	97.41

Note:

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

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 C63.10-2013

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	Thnikpad 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	Mar. 03,21	Mar. 02,22
EMC32 test software	Rohde&Schwarz	EMC32	NA	NA	NA
LISN network	Rohde&Schwarz	ENV216	101922	Feb. 25,21	Feb. 24,22

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.

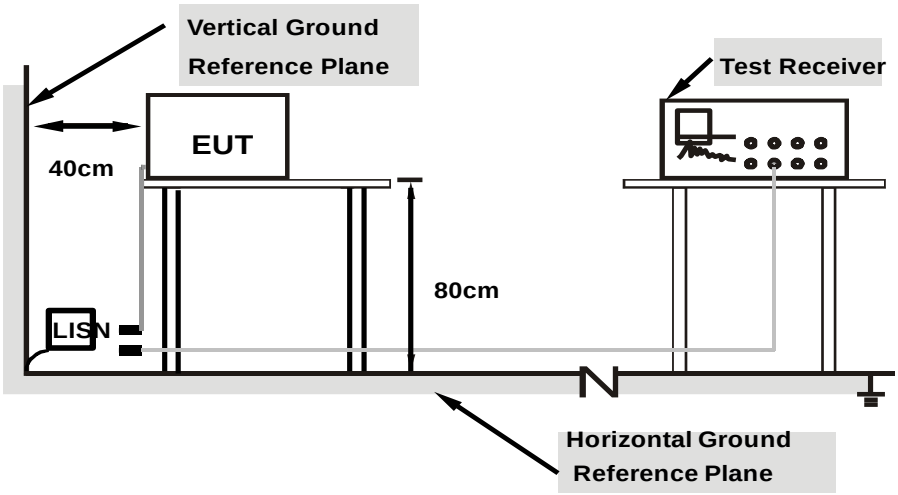
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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

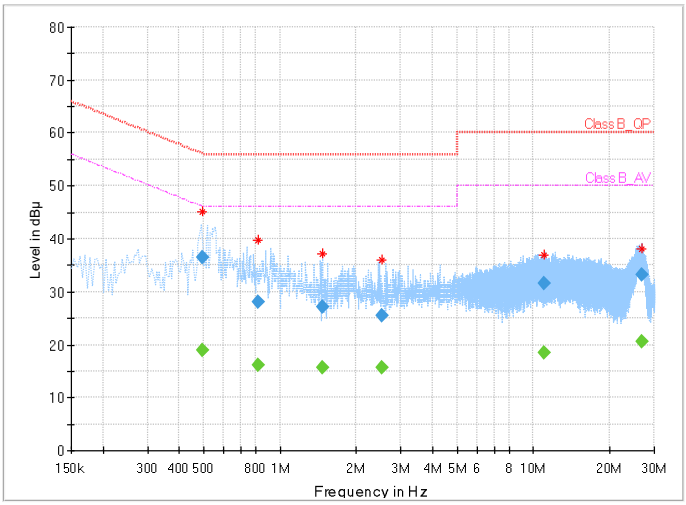
CONDUCTED WORST-CASE DATA:

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)
0.492000	---	18.91	46.13	27.22	L1	ON	9.7
0.492000	36.48	---	56.13	19.65	L1	ON	9.7
0.824000	---	16.21	46.00	29.79	L1	ON	9.7
0.824000	28.09	---	56.00	27.91	L1	ON	9.7
1.476000	---	15.69	46.00	30.31	L1	ON	9.7
1.476000	27.08	---	56.00	28.92	L1	ON	9.7
2.536000	---	15.57	46.00	30.43	L1	ON	9.7
2.536000	25.40	---	56.00	30.60	L1	ON	9.7
11.008000	---	18.56	50.00	31.44	L1	ON	9.8
11.008000	31.49	---	60.00	28.51	L1	ON	9.8
26.824000	---	20.62	50.00	29.38	L1	ON	9.8
26.824000	33.24	---	60.00	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.

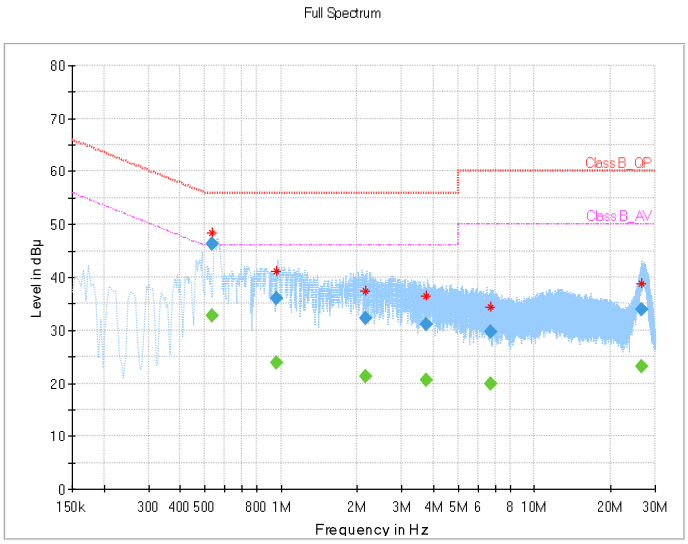
Full Spectrum



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)
0.532000	---	32.64	46.00	13.36	N	ON	9.7
0.532000	46.25	---	56.00	9.75	N	ON	9.7
0.960000	---	23.94	46.00	22.06	N	ON	9.7
0.960000	35.96	---	56.00	20.04	N	ON	9.7
2.162000	---	21.29	46.00	24.71	N	ON	9.8
2.162000	32.18	---	56.00	23.82	N	ON	9.8
3.764000	---	20.70	46.00	25.30	N	ON	9.8
3.764000	31.09	---	56.00	24.91	N	ON	9.8
6.752000	---	19.93	50.00	30.07	N	ON	9.8
6.752000	29.62	---	60.00	30.38	N	ON	9.8
26.472000	---	23.10	50.00	26.90	N	ON	9.9
26.472000	33.97	---	60.00	26.03	N	ON	9.9

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

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	May. 19,20	May. 18,23
Bilog Antenna	ETS-LINDGREN	3143B	00161965	Mar. 05,21	Mar. 04,22
Horn Antenna	ETS-LINDGREN	3117	00168728	Apr. 02, 21	Apr. 01, 22
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Aug. 25, 21	Aug. 24, 22
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SMA	1505	Jun. 03,21	Jun. 02,22
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Apr. 27,21	Apr. 26,22
Signal Pre-Amplifier	EMSI	EMC 9135	980249	Jun. 02,21	Jun. 01,22
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	Jun. 02,21	Jun. 01,22
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Apr. 30,21	Apr. 29,22
DC Source	Kikusui/JP	PMX18-5A	0000001	Aug. 25,21	Aug. 24,22
Power Meter	Anritsu	ML2495A	1506002	Feb. 25,21	Feb. 24,22
Power Sensor	Anritsu	MA2411B	1339352	Feb. 25,21	Feb. 24,22
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-051	Feb 14,20	Feb. 13,23

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:

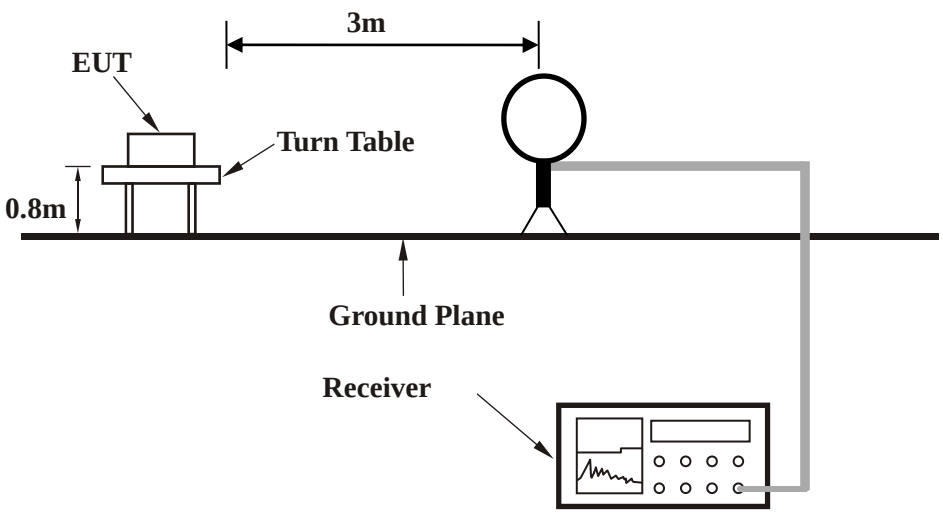
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.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

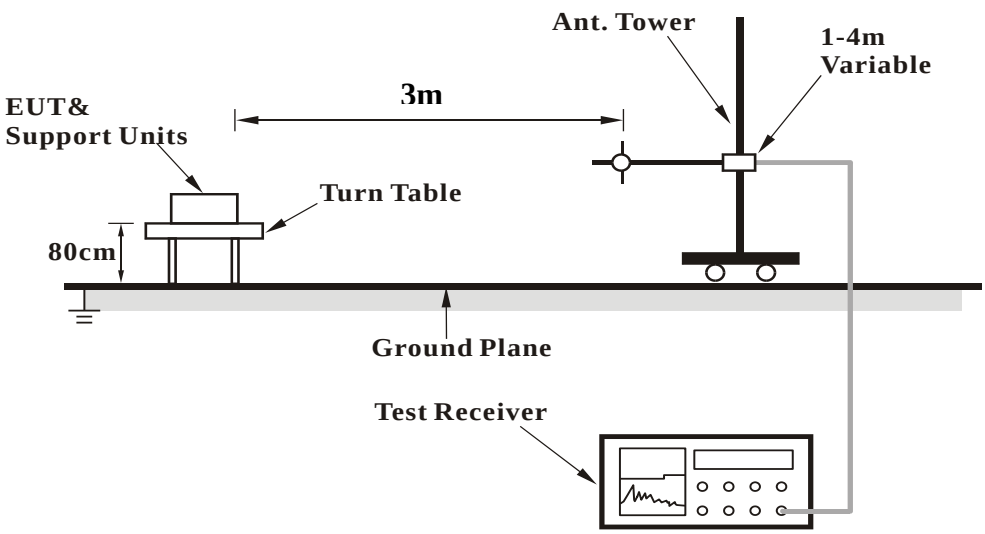
No deviation

3.2.5 TEST SETUP

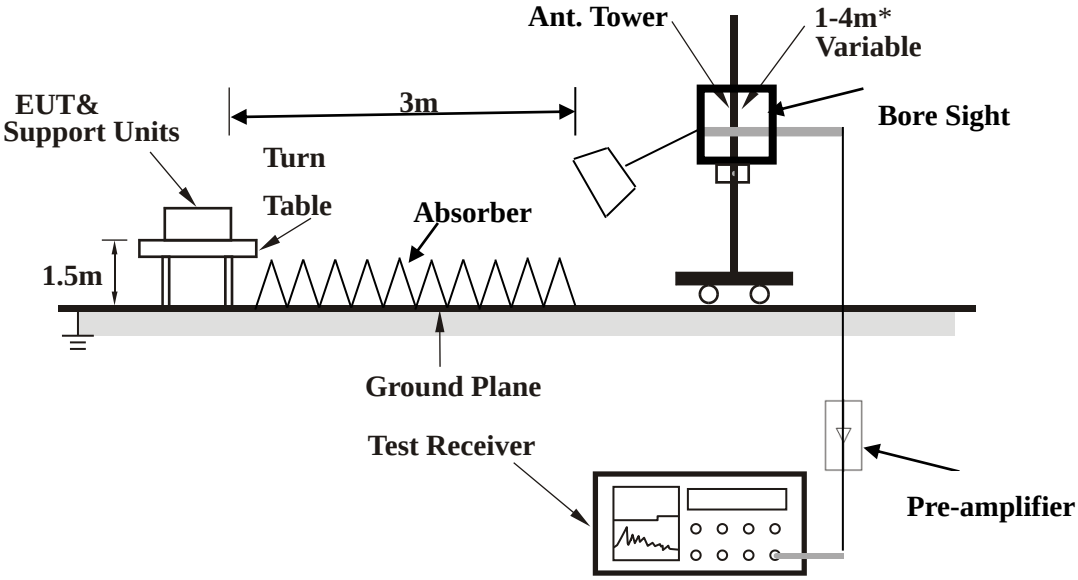
<Frequency Range 9KHz~30MHz >



< 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

BELOW 1GHz WORST-CASE DATA :

30 MHz – 1GHz data:

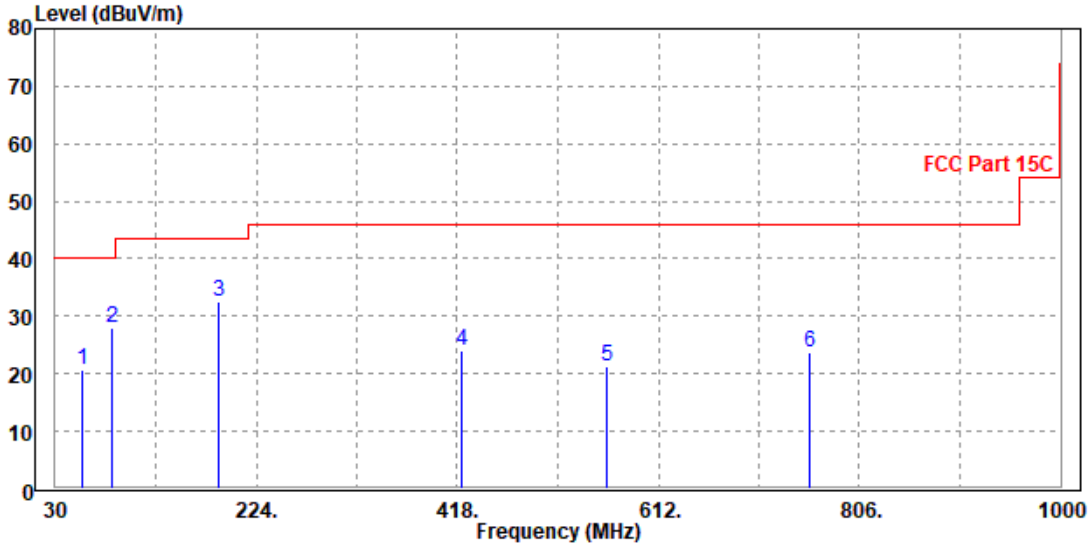
802.11n (40MHz)

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
56.19	20.74	49.66	40	-19.26	7.98	0.43	37.33	300	0	Peak
84.32	28.05	56.99	40	-11.95	7.86	0.5	37.3	300	0	Peak
188.11	32.64	58	43.5	-10.86	10.52	0.72	36.6	300	0	Peak
422.85	24.12	42.57	46	-21.88	17.31	1.11	36.87	300	0	Peak
562.53	21.32	37.29	46	-24.68	19.95	1.31	37.23	300	0	Peak
757.5	23.68	36.67	46	-22.32	23.1	1.54	37.63	300	0	Peak

REMARKS:

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

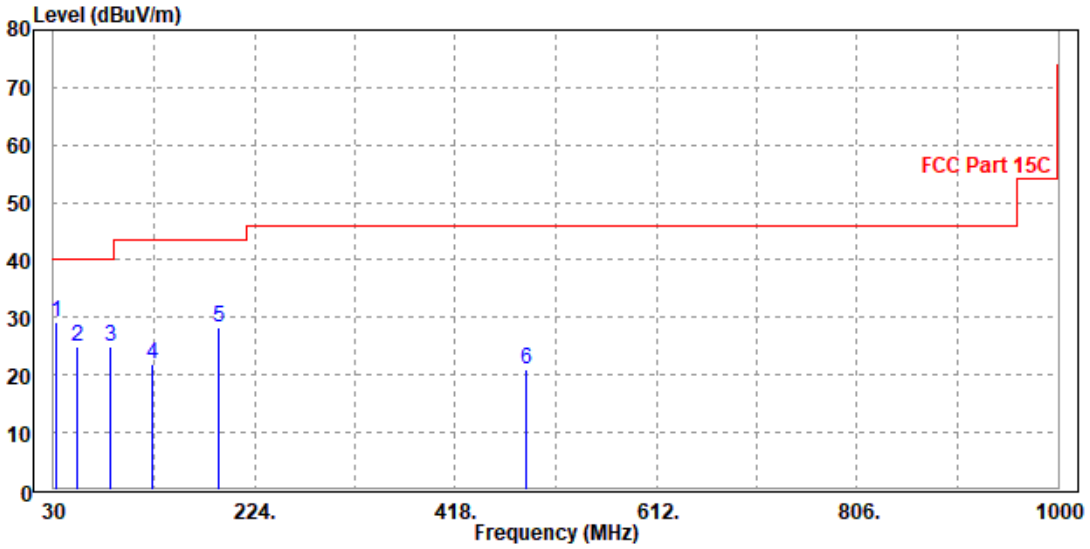


CHANNEL	TX Channel 9	**DETECTOR FUNCTION**	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

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
31.94	29.26	47.01	40	-10.74	19.35	0.32	37.42	200	360	Peak
53.28	25	53.26	40	-15	8.64	0.42	37.32	200	360	Peak
84.32	24.98	53.39	40	-15.02	8.39	0.5	37.3	200	360	Peak
125.06	21.79	50.33	43.5	-21.71	7.9	0.6	37.04	200	360	Peak
190.05	28.19	53.16	43.5	-15.31	10.9	0.72	36.59	200	360	Peak
486.87	20.92	37.85	46	-25.08	18.85	1.2	36.98	200	360	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: For higher frequency, the emission is too low to be detected.

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	52.84	61.6	74	-21.16	31.75	5.86	46.37	163	180	Peak
2390	45.91	54.67	54	-8.09	31.75	5.86	46.37	163	180	Average
2412	105.73	114.39	/	/	31.82	5.89	46.37	163	180	Peak
2412	104.53	113.19	/	/	31.82	5.89	46.37	163	180	Average
2483.5	52.18	60.51	74	-21.82	32.05	5.99	46.37	163	180	Peak
2483.5	44.28	52.61	54	-9.72	32.05	5.99	46.37	163	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	52.25	60.62	74	-21.75	32.14	5.86	46.37	103	220	Peak
2390	45.46	53.83	54	-8.54	32.14	5.86	46.37	103	220	Average
2412	103.42	111.71	/	/	32.19	5.89	46.37	103	220	Peak
2412	102.28	110.57	/	/	32.19	5.89	46.37	103	220	Average
2483.5	51.95	59.97	74	-22.05	32.36	5.99	46.37	103	220	Peak
2483.5	44.66	52.68	54	-9.34	32.36	5.99	46.37	103	220	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	50.86	59.62	74	-23.14	31.75	5.86	46.37	163	180	Peak
2390	45	53.76	54	-9	31.75	5.86	46.37	163	180	Average
2437	106.24	114.78	/	/	31.9	5.93	46.37	163	180	Peak
2437	104.9	113.44	/	/	31.9	5.93	46.37	163	180	Average
2483.5	52.46	60.79	74	-21.54	32.05	5.99	46.37	163	180	Peak
2483.5	44.73	53.06	54	-9.27	32.05	5.99	46.37	163	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	52.6	60.97	74	-21.4	32.14	5.86	46.37	103	220	Peak
2390	45.09	53.46	54	-8.91	32.14	5.86	46.37	103	220	Average
2437	102	110.19	/	/	32.25	5.93	46.37	103	220	Peak
2437	100.53	108.72	/	/	32.25	5.93	46.37	103	220	Average
2483.5	54.01	62.03	74	-19.99	32.36	5.99	46.37	103	220	Peak
2483.5	44.72	52.74	54	-9.28	32.36	5.99	46.37	103	220	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	51.77	60.53	74	-22.23	31.75	5.86	46.37	155	8	Peak
2390	44.39	53.15	54	-9.61	31.75	5.86	46.37	155	8	Average
2462	106.88	115.31	/	/	31.98	5.96	46.37	155	8	Peak
2462	105.42	113.85	/	/	31.98	5.96	46.37	155	8	Average
2483.5	53.06	61.39	74	-20.94	32.05	5.99	46.37	155	8	Peak
2483.5	45.61	53.94	54	-8.39	32.05	5.99	46.37	155	8	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	52.15	60.52	74	-21.85	32.14	5.86	46.37	100	225	Peak
2390	44.96	53.33	54	-9.04	32.14	5.86	46.37	100	225	Average
2462	102.65	110.75	/	/	32.31	5.96	46.37	100	225	Peak
2462	101.48	109.58	/	/	32.31	5.96	46.37	100	225	Average
2483.5	52.33	60.35	74	-21.67	32.36	5.99	46.37	100	225	Peak
2483.5	45.37	53.39	54	-8.63	32.36	5.99	46.37	100	225	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	64.32	73.08	74	-9.68	31.75	5.86	46.37	155	8	Peak
2390	50.74	59.5	54	-3.26	31.75	5.86	46.37	155	8	Average
2412	107.32	115.98	/	/	31.82	5.89	46.37	155	8	Peak
2412	99.77	108.43	/	/	31.82	5.89	46.37	155	8	Average
2483.5	52.24	60.57	74	-21.76	32.05	5.99	46.37	155	8	Peak
2483.5	44.49	52.82	54	-9.51	32.05	5.99	46.37	155	8	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	57.47	65.84	74	-16.53	32.14	5.86	46.37	100	275	Peak
2390	48.51	56.88	54	-5.49	32.14	5.86	46.37	100	275	Average
2412	102.89	111.18	/	/	32.19	5.89	46.37	100	275	Peak
2412	95.43	103.72	/	/	32.19	5.89	46.37	100	275	Average
2483.5	52.51	60.53	74	-21.49	32.36	5.99	46.37	100	275	Peak
2483.5	45.26	53.28	54	-8.74	32.36	5.99	46.37	100	275	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	52.23	60.99	74	-21.77	31.75	5.86	46.37	200	210	Peak
2390	46.14	54.9	54	-7.86	31.75	5.86	46.37	200	210	Average
2437	106.77	115.31	/	/	31.9	5.93	46.37	200	210	Peak
2437	99.85	108.39	/	/	31.9	5.93	46.37	200	210	Average
2483.5	52.47	60.8	74	-21.53	32.05	5.99	46.37	200	210	Peak
2483.5	45.16	53.49	54	-8.84	32.05	5.99	46.37	200	210	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	54.08	62.45	74	-19.92	32.14	5.86	46.37	100	275	Peak
2390	45.58	53.95	54	-8.42	32.14	5.86	46.37	100	275	Average
2437	102.42	110.61	/	/	32.25	5.93	46.37	100	275	Peak
2437	96.04	104.23	/	/	32.25	5.93	46.37	100	275	Average
2483.5	53.13	61.15	74	-20.87	32.36	5.99	46.37	100	275	Peak
2483.5	45.38	53.4	54	-8.62	32.36	5.99	46.37	100	275	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	51.77	60.53	74	-22.23	31.75	5.86	46.37	200	240	Peak
2390	44.73	53.49	54	-9.27	31.75	5.86	46.37	200	240	Average
2462	103.45	111.88	/	/	31.98	5.96	46.37	200	240	Peak
2462	96.31	104.74	/	/	31.98	5.96	46.37	200	240	Average
2483.5	56.19	64.52	74	-17.81	32.05	5.99	46.37	200	240	Peak
2483.5	48.47	56.8	54	-5.53	32.05	5.99	46.37	200	240	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	52.13	60.5	74	-21.87	32.14	5.86	46.37	100	315	Peak
2390	45.52	53.89	54	-8.48	32.14	5.86	46.37	100	315	Average
2462	102.83	110.93	/	/	32.31	5.96	46.37	100	315	Peak
2462	95.86	103.96	/	/	32.31	5.96	46.37	100	315	Average
2483.5	54.19	62.21	74	-19.81	32.36	5.99	46.37	100	315	Peak
2483.5	46.79	54.81	54	-7.21	32.36	5.99	46.37	100	315	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	61.97	70.73	74	-12.03	31.75	5.86	46.37	100	100	Peak
2390	49.76	58.52	54	-4.24	31.75	5.86	46.37	100	100	Average
2412	103.84	112.5	/	/	31.82	5.89	46.37	100	100	Peak
2412	96.58	105.24	/	/	31.82	5.89	46.37	100	100	Average
2483.5	53.35	61.68	74	-20.65	32.05	5.99	46.37	100	100	Peak
2483.5	44.99	53.32	54	-9.01	32.05	5.99	46.37	100	100	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	57.3	65.67	74	-16.7	32.14	5.86	46.37	100	220	Peak
2390	47.61	55.98	54	-6.39	32.14	5.86	46.37	100	220	Average
2412	102.01	110.3	/	/	32.19	5.89	46.37	100	220	Peak
2412	94.86	103.15	/	/	32.19	5.89	46.37	100	220	Average
2483.5	52.7	60.72	74	-21.3	32.36	5.99	46.37	100	220	Peak
2483.5	45.23	53.25	54	-8.77	32.36	5.99	46.37	100	220	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	51.85	60.61	74	-22.15	31.75	5.86	46.37	100	100	Peak
2390	44.97	53.73	54	-9.03	31.75	5.86	46.37	100	100	Average
2437	102.89	111.43	/	/	31.9	5.93	46.37	100	100	Peak
2437	94.91	103.45	/	/	31.9	5.93	46.37	100	100	Average
2483.5	52.94	61.27	74	-21.06	32.05	5.99	46.37	100	100	Peak
2483.5	45.6	53.93	54	-8.4	32.05	5.99	46.37	100	100	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	53.57	61.94	74	-20.43	32.14	5.86	46.37	100	170	Peak
2390	45.55	53.92	54	-8.45	32.14	5.86	46.37	100	170	Average
2437	102.98	111.17	/	/	32.25	5.93	46.37	100	170	Peak
2437	95.98	104.17	/	/	32.25	5.93	46.37	100	170	Average
2483.5	53.63	61.65	74	-20.37	32.36	5.99	46.37	100	170	Peak
2483.5	45.42	53.44	54	-8.58	32.36	5.99	46.37	100	170	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	52.15	60.91	74	-21.85	31.75	5.86	46.37	105	310	Peak
2390	44.99	53.75	54	-9.01	31.75	5.86	46.37	105	310	Average
2462	106.66	115.09	/	/	31.98	5.96	46.37	105	310	Peak
2462	99.64	108.07	/	/	31.98	5.96	46.37	105	310	Average
2483.5	59.18	67.51	74	-14.82	32.05	5.99	46.37	105	310	Peak
2483.5	50.43	58.76	54	-3.57	32.05	5.99	46.37	105	310	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	52.88	61.25	74	-21.12	32.14	5.86	46.37	100	310	Peak
2390	45.23	53.6	54	-8.77	32.14	5.86	46.37	100	310	Average
2462	102.42	110.52	/	/	32.31	5.96	46.37	100	310	Peak
2462	95.23	103.33	/	/	32.31	5.96	46.37	100	310	Average
2483.5	54.09	62.11	74	-19.91	32.36	5.99	46.37	100	310	Peak
2483.5	46.74	54.76	54	-7.26	32.36	5.99	46.37	100	310	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	61.22	69.98	74	-12.78	31.75	5.86	46.37	100	105	Peak
2390	50.25	59.01	54	-3.75	31.75	5.86	46.37	100	105	Average
2422	99.26	107.87	/	/	31.85	5.91	46.37	100	105	Peak
2422	92.16	100.77	/	/	31.85	5.91	46.37	100	105	Average
2483.5	52.29	60.62	74	-21.71	32.05	5.99	46.37	100	105	Peak
2483.5	45.21	53.54	54	-8.79	32.05	5.99	46.37	100	105	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	60.32	68.69	74	-13.68	32.14	5.86	46.37	100	290	Peak
2390	49.55	57.92	54	-4.45	32.14	5.86	46.37	100	290	Average
2422	98.39	106.64	/	/	32.21	5.91	46.37	100	290	Peak
2422	90.68	98.93	/	/	32.21	5.91	46.37	100	290	Average
2483.5	53.14	61.16	74	-20.86	32.36	5.99	46.37	100	290	Peak
2483.5	45.83	53.85	54	-8.17	32.36	5.99	46.37	100	290	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	58.51	67.27	74	-15.49	31.75	5.86	46.37	100	105	Peak
2390	48.07	56.83	54	-5.93	31.75	5.86	46.37	100	105	Average
2437	101.61	110.15	/	/	31.9	5.93	46.37	100	105	Peak
2437	94.1	102.64	/	/	31.9	5.93	46.37	100	105	Average
2483.5	55.19	63.52	74	-18.81	32.05	5.99	46.37	100	105	Peak
2483.5	47.15	55.48	54	-6.85	32.05	5.99	46.37	100	105	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	56.94	65.31	74	-17.06	32.14	5.86	46.37	100	190	Peak
2390	47.88	56.25	54	-6.12	32.14	5.86	46.37	100	190	Average
2437	100.13	108.32	/	/	32.25	5.93	46.37	100	190	Peak
2437	93.14	101.33	/	/	32.25	5.93	46.37	100	190	Average
2483.5	55.32	63.34	74	-18.68	32.36	5.99	46.37	100	190	Peak
2483.5	47.82	55.84	54	-6.18	32.36	5.99	46.37	100	190	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	52.2	60.96	74	-21.8	31.75	5.86	46.37	165	280	Peak
2390	43.49	52.25	54	-10.51	31.75	5.86	46.37	165	280	Average
2452	99.41	107.88	/	/	31.95	5.95	46.37	165	280	Peak
2452	92.04	100.51	/	/	31.95	5.95	46.37	165	280	Average
2483.5	65.92	74.25	74	-8.08	32.05	5.99	46.37	165	280	Peak
2483.5	50.9	59.23	54	-3.1	32.05	5.99	46.37	165	280	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	51.04	59.41	74	-22.96	32.14	5.86	46.37	110	280	Peak
2390	42.93	51.3	54	-11.07	32.14	5.86	46.37	110	280	Average
2452	92.87	101.01	/	/	32.28	5.95	46.37	110	280	Peak
2452	84.85	92.99	/	/	32.28	5.95	46.37	110	280	Average
2483.5	58.16	66.18	74	-15.84	32.36	5.99	46.37	110	280	Peak
2483.5	45.22	53.24	54	-8.78	32.36	5.99	46.37	110	280	Average

REMARKS:

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

BELOW 1GHz WORST-CASE DATA:

30 MHz – 1GHz data:

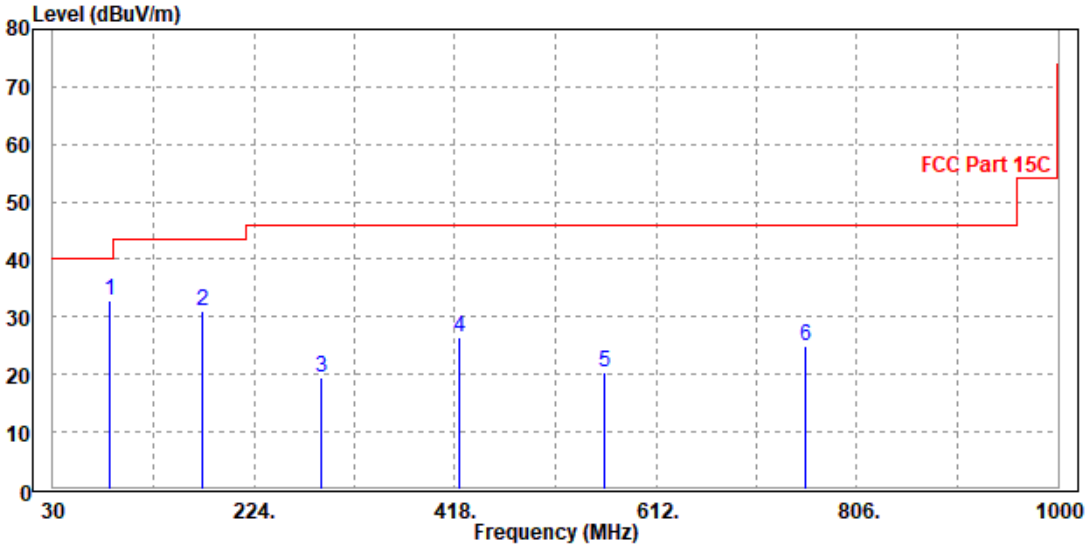
BT-LE _2M

CHANNEL	TX Channel 0	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
85.29	32.7	61.64	40	-7.3	7.85	0.5	37.29	200	0	Peak
174.53	30.99	56.56	43.5	-12.51	10.39	0.7	36.66	200	0	Peak
288.99	19.42	41.44	46	-26.58	13.82	0.89	36.73	200	0	Peak
422.85	26.49	44.94	46	-19.51	17.31	1.11	36.87	200	0	Peak
562.53	20.34	36.31	46	-25.66	19.95	1.31	37.23	200	0	Peak
756.53	24.83	37.82	46	-21.17	23.1	1.54	37.63	200	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

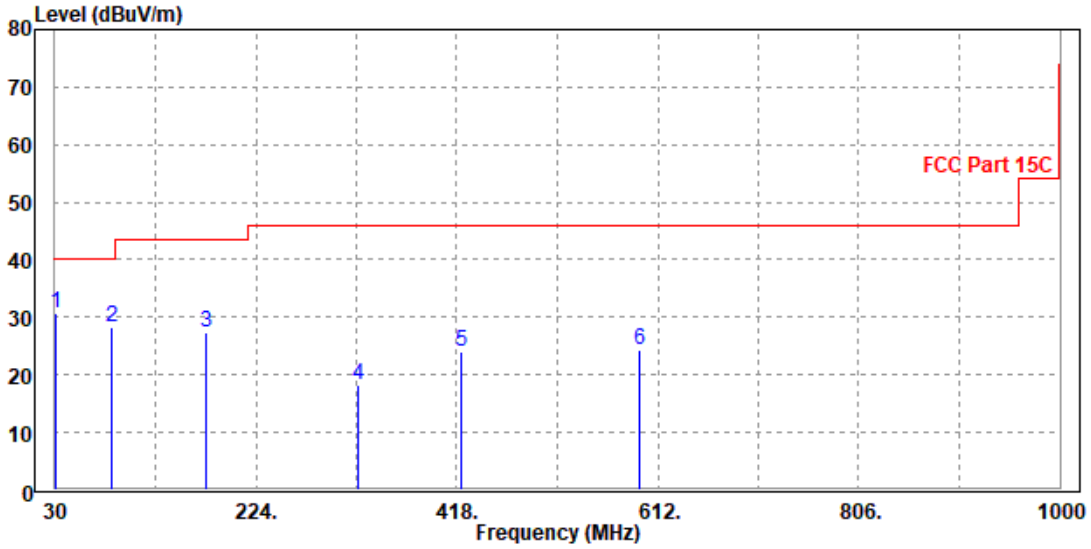


CHANNEL	TX Channel 0	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

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	30.65	47.92	40	-9.35	19.77	0.32	37.36	300	0	Peak
85.29	28.22	56.6	40	-11.78	8.41	0.5	37.29	300	0	Peak
175.5	27.29	52.68	43.5	-16.21	10.57	0.7	36.66	300	0	Peak
322.94	18.18	38.5	46	-27.82	15.5	0.95	36.77	300	0	Peak
422.85	23.94	42.07	46	-22.06	17.63	1.11	36.87	300	0	Peak
594.54	24.43	39.63	46	-21.57	20.8	1.35	37.35	300	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: For higher frequency, the emission is too low to be detected.

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	52.76	61.52	74	-21.24	31.75	5.86	46.37	113	180	Peak
2390	45.12	53.88	54	-8.88	31.75	5.86	46.37	113	180	Average
2402	94	102.7	/	/	31.79	5.88	46.37	113	180	Peak
2402	93.28	101.98	/	/	31.79	5.88	46.37	113	180	Average
2483.5	52.87	61.2	74	-21.13	32.05	5.99	46.37	113	180	Peak
2483.5	44.83	53.16	54	-9.17	32.05	5.99	46.37	113	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	52.57	60.94	74	-21.43	32.14	5.86	46.37	100	265	Peak
2390	44.87	53.24	54	-9.13	32.14	5.86	46.37	100	265	Average
2402	90.71	99.04	/	/	32.16	5.88	46.37	100	265	Peak
2402	89.66	97.99	/	/	32.16	5.88	46.37	100	265	Average
2483.5	53.15	61.17	74	-20.85	32.36	5.99	46.37	100	265	Peak
2483.5	45.06	53.08	54	-8.94	32.36	5.99	46.37	100	265	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	51.89	60.65	74	-22.11	31.75	5.86	46.37	210	200	Peak
2390	44.61	53.37	54	-9.39	31.75	5.86	46.37	210	200	Average
2440	94.62	103.15	/	/	31.91	5.93	46.37	210	200	Peak
2440	94	102.53	/	/	31.91	5.93	46.37	210	200	Average
2483.5	53.16	61.49	74	-20.84	32.05	5.99	46.37	210	200	Peak
2483.5	45.12	53.45	54	-8.88	32.05	5.99	46.37	210	200	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	51.89	60.26	74	-22.11	32.14	5.86	46.37	100	280	Peak
2390	44.83	53.2	54	-9.17	32.14	5.86	46.37	100	280	Average
2440	91.49	99.67	/	/	32.26	5.93	46.37	100	280	Peak
2440	90.65	98.83	/	/	32.26	5.93	46.37	100	280	Average
2483.5	53.68	61.7	74	-20.32	32.36	5.99	46.37	100	280	Peak
2483.5	45.03	53.05	54	-8.97	32.36	5.99	46.37	100	280	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	51.5	60.26	74	-22.5	31.75	5.86	46.37	120	303	Peak
2390	44.26	53.02	54	-9.74	31.75	5.86	46.37	120	303	Average
2480	94.08	102.43	/	/	32.04	5.98	46.37	120	303	Peak
2480	92.67	101.02	/	/	32.04	5.98	46.37	120	303	Average
2483.5	52.56	60.89	74	-21.44	32.05	5.99	46.37	120	303	Peak
2483.5	44.62	52.95	54	-9.38	32.05	5.99	46.37	120	303	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	52.06	60.43	74	-21.94	32.14	5.86	46.37	100	210	Peak
2390	44.98	53.35	54	-9.02	32.14	5.86	46.37	100	210	Average
2480	89.51	97.55	/	/	32.35	5.98	46.37	100	210	Peak
2480	88.66	96.7	/	/	32.35	5.98	46.37	100	210	Average
2483.5	53.62	61.64	74	-20.38	32.36	5.99	46.37	100	210	Peak
2483.5	45.11	53.13	54	-8.89	32.36	5.99	46.37	100	210	Average

REMARKS:

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

BT-LE _2M

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	52.16	60.92	74	-21.84	31.75	5.86	46.37	113	175	Peak
2390	45.2	53.96	54	-8.8	31.75	5.86	46.37	113	175	Average
2402	92.97	101.67	/	/	31.79	5.88	46.37	113	175	Peak
2402	90.72	99.42	/	/	31.79	5.88	46.37	113	175	Average
2483.5	52.14	60.47	74	-21.86	32.05	5.99	46.37	113	175	Peak
2483.5	44.96	53.29	54	-9.04	32.05	5.99	46.37	113	175	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	52.15	60.52	74	-21.85	32.14	5.86	46.37	100	265	Peak
2390	44.51	52.88	54	-9.49	32.14	5.86	46.37	100	265	Average
2402	90.64	98.97	/	/	32.16	5.88	46.37	100	265	Peak
2402	87.85	96.18	/	/	32.16	5.88	46.37	100	265	Average
2483.5	53.45	61.47	74	-20.55	32.36	5.99	46.37	100	265	Peak
2483.5	45.55	53.57	54	-8.45	32.36	5.99	46.37	100	265	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	51.55	60.31	74	-22.45	31.75	5.86	46.37	120	313	Peak
2390	44.67	53.43	54	-9.33	31.75	5.86	46.37	120	313	Average
2440	96.41	104.94	/	/	31.91	5.93	46.37	120	313	Peak
2440	94.36	102.89	/	/	31.91	5.93	46.37	120	313	Average
2483.5	52.43	60.76	74	-21.57	32.05	5.99	46.37	120	313	Peak
2483.5	45.44	53.77	54	-8.56	32.05	5.99	46.37	120	313	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	51.97	60.34	74	-22.03	32.14	5.86	46.37	100	280	Peak
2390	44.83	53.2	54	-9.17	32.14	5.86	46.37	100	280	Average
2440	90.93	99.11	/	/	32.26	5.93	46.37	100	280	Peak
2440	88.59	96.77	/	/	32.26	5.93	46.37	100	280	Average
2483.5	52.35	60.37	74	-21.65	32.36	5.99	46.37	100	280	Peak
2483.5	45.11	53.13	54	-8.89	32.36	5.99	46.37	100	280	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	51.93	60.69	74	-22.07	31.75	5.86	46.37	120	313	Peak
2390	44.87	53.63	54	-9.13	31.75	5.86	46.37	120	313	Average
2480	94.92	103.27	/	/	32.04	5.98	46.37	120	313	Peak
2480	92.66	101.01	/	/	32.04	5.98	46.37	120	313	Average
2483.5	52.12	60.45	74	-21.88	32.05	5.99	46.37	120	313	Peak
2483.5	44.77	53.1	54	-9.23	32.05	5.99	46.37	120	313	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	52.36	60.73	74	-21.64	32.14	5.86	46.37	100	225	Peak
2390	44.76	53.13	54	-9.24	32.14	5.86	46.37	100	225	Average
2480	89.3	97.34	/	/	32.35	5.98	46.37	100	225	Peak
2480	87.28	95.32	/	/	32.35	5.98	46.37	100	225	Average
2483.5	53.7	61.72	74	-20.3	32.36	5.99	46.37	100	225	Peak
2483.5	45.18	53.2	54	-8.82	32.36	5.99	46.37	100	225	Average

REMARKS:

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