FCC Test Report

Report No.:	RF190211C09-2
FCC ID:	2AHBN-AP43
Test Model:	AP43E, AP43
Received Date:	Feb. 11, 2019
Test Date:	Apr. 02 ~ Apr. 16, 2019
Issued Date:	Apr. 18, 2019
Applicant:	Mist Systems, Inc.
Address:	1601 South De Anza Blvd. Suite 248 Cupertino California United States 95014
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan (R.O.C.)
Test Location:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)
FCC Registration / Designation Number:	788550 / TW0003

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Table of Contents

Release Control Record **4**

1 Certificate of Conformity **5**

2 Summary of Test Results **6**

2.1 Measurement Uncertainty 6
2.2 Modification Record 6

3 General Information **7**

3.1 General Description of EUT 7
3.2 Description of Test Modes 9
3.2.1 Test Mode Applicability and Tested Channel Detail 10
3.3 Duty Cycle of Test Signal 12
3.4 Description of Support Units 13
3.4.1 Configuration of System under Test 13
3.5 General Description of Applied Standards 14

4 Test Types and Results **15**

4.1 Radiated Emission and Bandedge Measurement 15
4.1.1 Limits of Radiated Emission and Bandedge Measurement 15
4.1.2 Test Instruments 16
4.1.3 Test Procedures 17
4.1.4 Deviation from Test Standard 17
4.1.5 Test Setup 18
4.1.6 EUT Operating Conditions 19
4.1.7 Test Results 20
4.2 Conducted Emission Measurement 60
4.2.1 Limits of Conducted Emission Measurement 60
4.2.2 Test Instruments 60
4.2.3 Test Procedures 61
4.2.4 Deviation from Test Standard 61
4.2.5 Test Setup 61
4.2.6 EUT Operating Conditions 61
4.2.7 Test Results 62
4.3 6dB Bandwidth Measurement 78
4.3.1 Limits of 6dB Bandwidth Measurement 78
4.3.2 Test Setup 78
4.3.3 Test Instruments 78
4.3.4 Test Procedure 78
4.3.5 Deviation fromTest Standard 78
4.3.6 EUT Operating Conditions 78
4.3.7 Test Result 79
4.4 Conducted Output Power Measurement 81
4.4.1 Limits of Conducted Output Power Measurement 81
4.4.2 Test Setup 81
4.4.3 Test Instruments 81
4.4.4 Test Procedures 81
4.4.5 Deviation from Test Standard 81
4.4.6 EUT Operating Conditions 81
4.4.7 Test Results 82
4.5 Power Spectral Density Measurement 84
4.5.1 Limits of Power Spectral Density Measurement 84
4.5.2 Test Setup 84
4.5.3 Test Instruments 84
4.5.4 Test Procedure 84
4.5.5 Deviation from Test Standard 84
4.5.6 EUT Operating Condition 84

4.5.7 Test Results 85
4.6 Conducted Out of Band Emission Measurement 87
4.6.1 Limits of Conducted Out of Band Emission Measurement 87
4.6.2 Test Setup 87
4.6.3 Test Instruments 87
4.6.4 Test Procedure 87
4.6.5 Deviation from Test Standard 87
4.6.6 EUT Operating Condition 87
4.6.7 Test Results 87

5 Pictures of Test Arrangements 92

Appendix – Information of the Testing Laboratories 93

Release Control Record

Issue No.	Description	Date Issued
RF190211C09-2	Original release	Apr. 18, 2019

1 Certificate of Conformity

Product: Premium 802.11ax WiFi and BLE AP

Brand: Mist

Test Model: AP43E, AP43

Sample Status: Engineering sample

Applicant: Mist Systems, Inc.

Test Date: Apr. 02 ~ Apr. 16, 2019

Standards: 47 CFR FCC Part 15, Subpart C (Section 15.247)
ANSI C63.10:2013

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

Prepared by : Celine Chou , **Date:** Apr. 18, 2019
Celine Chou / Senior Specialist

Approved by : Bruce Chen , **Date:** Apr. 18, 2019
Bruce Chen / Project Engineer

2 Summary of Test Results

47 CFR FCC Part 15, Subpart C (Section 15.247)			
FCC Clause	Test Item	Result	Remarks
15.207	AC Power Conducted Emission	Pass	Meet the requirement of limit. Minimum passing margin is -4.93dB at 0.34560MHz.
15.205 / 15.209 / 15.247(d)	Radiated Emissions and Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -3.0dB at 2483.50MHz.
15.247(d)	Antenna Port Emission	Pass	Meet the requirement of limit.
15.247(a)(2)	6dB bandwidth	Pass	Meet the requirement of limit.
15.247(b)	Conducted power	Pass	Meet the requirement of limit.
15.247(e)	Power Spectral Density	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	Antenna connector is IPEX not a standard connector.

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

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

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.94 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.04 dB
	30MHz ~ 200MHz	3.63 dB
	200MHz ~1000MHz	3.64 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Premium 802.11ax WiFi and BLE AP
Brand	Mist
Test Model	AP43E, AP43
Power Supply rating	Refer to note
Sample Status	Engineering sample
Power Supply Rating	12Vdc from adapter 55Vdc from POE
Modulation Type	GFSK
Transfer Rate	Bluetooth LE 4.0: 1Mbps Bluetooth LE 5.0: 2Mbps
Operating Frequency	2402 ~ 2480MHz
Number of Channel	40
Channel Spacing	2MHz
Output Power	Test Mode E (BT-Omni antenna) Bluetooth LE 4.0: 4.345mW Bluetooth LE 5.0: 4.355mW Test Mode G (BT-Directional antenna) Bluetooth LE 4.0: 4.345mW Bluetooth LE 5.0: 4.355mW
Antenna Type	Refer to note
Antenna Connector	Refer to note
Accessory Device	N/A
Cable Supplied	N/A

Note:

1. All models are listed as below. Model AP43 is the representative for final test.

Brand	Model	Difference
Mist	AP43E	For External Antenna
	AP43	For Internal Antenna

2. The EUT consumes power from the following adapter and PoE.

Adapter (support unit only)	
Brand	Channel Well Technology
Model	2ABN036F
Input	100-240Vac, 50-60Hz 1.7A
Output	12.0Vdc, 3.0A, 36W
Power Line	1.5m DC cable with one core attached on adapter

PoE (support unit only)	
Brand	Microsemi
Model	PD9001GR
Input Power	100-240Vac, 50/60Hz 0.67A
Output Power	55Vdc, 0.6A

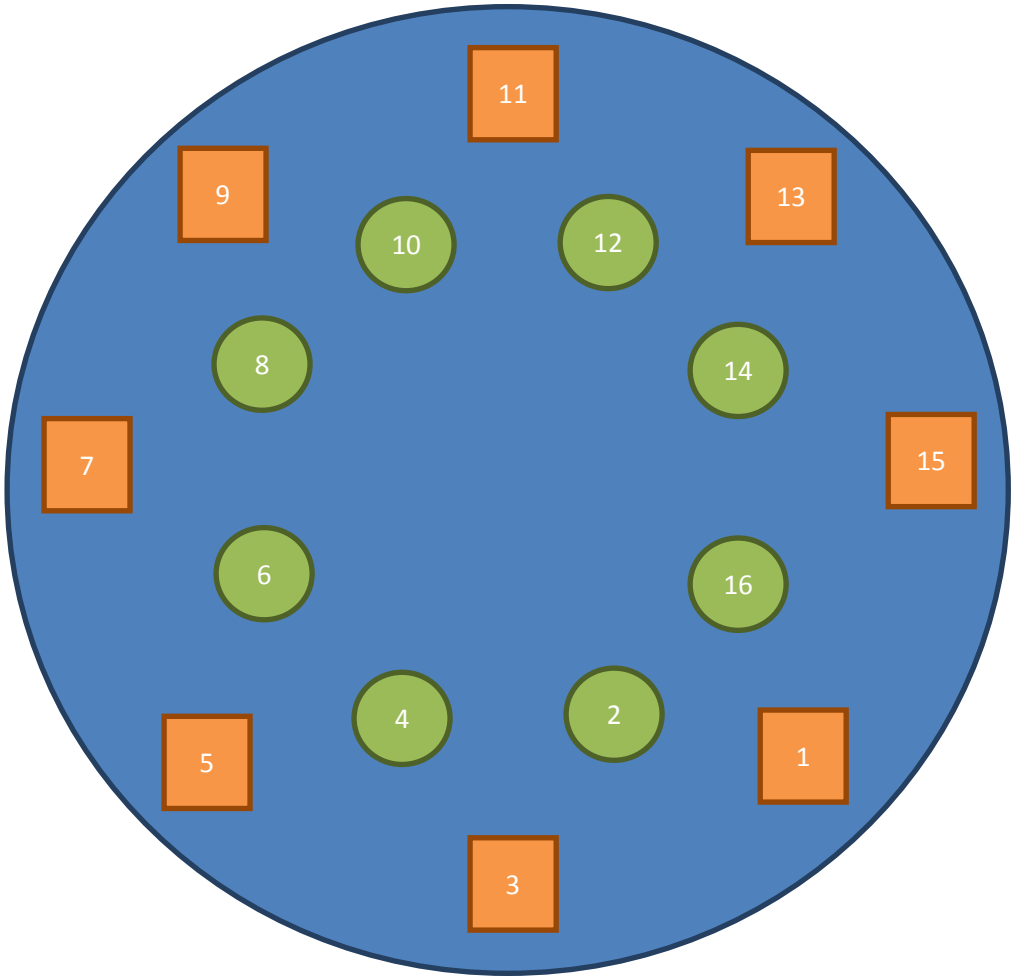
3. There are four radios for the EUT.

Radio	Brand	Model	Function		TX/RX Function
			Internal Antenna	External Antenna	
Eth6	Broadcom	BCM43694	WLAN 5G B1, 4	WLAN 5G B1, 4	4x4
Eth7	Broadcom	BCM43694	WLAN 2.4G, 5G B1, 4	WLAN 2.4G, 5G B1, 4	2x2
Eth8	Broadcom	BCM43694	WLAN 2.4G, 5G B4	WLAN 2.4G	4x4
BT LE	Nordic	NRF52832	BT LE	-	1X1

4. The following antennas were provided to the EUT.

Antenna Type	PIFA
Antenna Connector	IPEX
Gain (dBi)	
BT-Omni Ant.	0.1
BT-Directional Ant.	4.5

*The device is composition of 8 directional antenna. 1, 3, 5, 7, 9, 11, 13, 15 are the driven elements. 2, 4, 6, 8, 10, 12, 14, 16 are acting as the reflectors. 1x driven element + 2x adjacent reflector will be a directional antenna. At each time, the central control circuit will create one beam by triggering 4 driven elements. It will further enhance the directivity. Based on the pretest result, beam 1 (composition of ant 1, 3, 5, 7), beam 2 (composition of ant 3, 5, 7, 9), beam 3 (composition of ant 5, 7, 9, 11), beam 4 (composition of ant 7, 9, 11, 13), beam 5 (composition of ant 9, 11, 15, 1), beam 6 (composition of ant 11, 13, 15, 1), beam 7 (composition of ant 13, 15, 1, 3), beam 8 (composition of ant 15, 1, 3, 5) and beam 8 was the worst case. Thus, this case was chosen for the final test.



3.2 Description of Test Modes

40 channels are provided to this EUT:

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

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable to				Description
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	-	AP43 (BT-Omni antenna) + POE
B	-	√	√	-	AP43 (BT-Omni antenna) + Adapter
C	√	√	√	-	AP43 (BT-Directional antenna) + POE
D	-	√	√	-	AP43 (BT-Directional antenna) + Adapter
E	√	√	√	√	AP43E (BT-Omni antenna) + POE
F	-	√	√	-	AP43E (BT-Omni antenna) + Adapter
G	√	√	√	√	AP43E (BT-Directional antenna) + POE
H	-	√	√	-	AP43E (BT-Directional antenna) + Adapter

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

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

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

Radiated Emission Test (Above 1GHz):

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

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

EUT Configure Mode	Available Channel	Tested Channel	Modulation Type	Data Rate (Mbps)
A, C, E, G	0 to 39	0, 19, 39	GFSK	1, 2

Radiated Emission Test (Below 1GHz):

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

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

EUT Configure Mode	Available Channel	Tested Channel	Modulation Type	Data Rate (Mbps)
A, B, C, D, E, F, G, H	0 to 39	39	GFSK	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.

EUT Configure Mode	Available Channel	Tested Channel	Modulation Type	Data Rate (Mbps)
A, B, C, D, E, F, G, H	0 to 39	39	GFSK	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.

EUT Configure Mode	Available Channel	Tested Channel	Modulation Type	Data Rate (Mbps)
E, G	0 to 39	0, 19, 39	GFSK	1, 2

Test Condition:

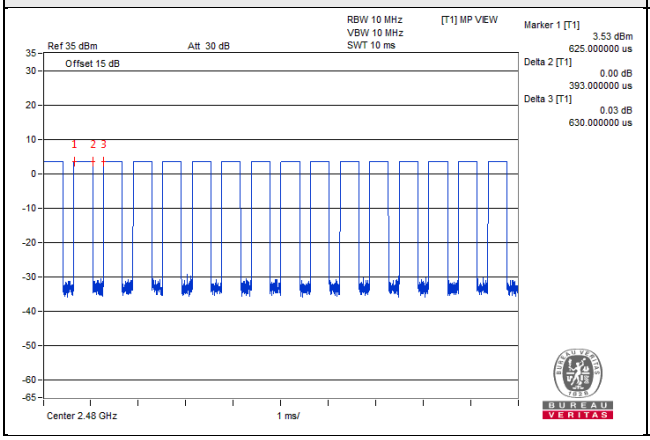
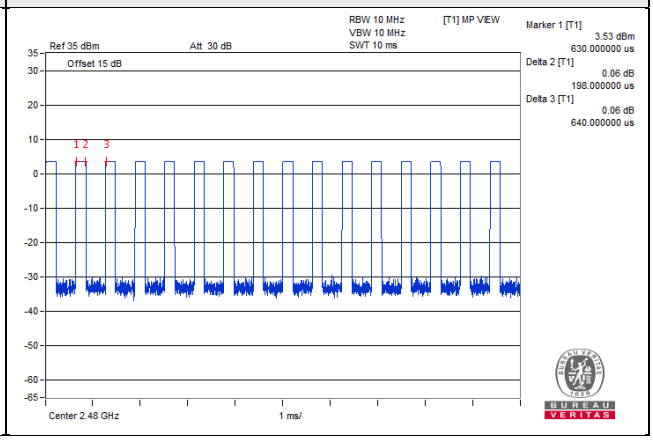
Applicable to	Environmental Conditions	Input Power	Tested by
RE≥1G	25 deg. C, 70% RH 25 deg. C, 71% RH	55Vdc	Luis Lee Noah Chang
RE<1G	25 deg. C, 70% RH	120Vac, 60Hz 55Vdc	Luis Lee
PLC	25 deg. C, 75% RH 22 deg. C, 66% RH	120Vac, 60Hz 55Vdc	Noah Chang Adair Peng
APCM	25 deg. C, 60% RH	55Vdc	Ted Chang

3.3 Duty Cycle of Test Signal

Test Mode E (BT-Omni antenna)

Duty cycle of test signal is < 98%.

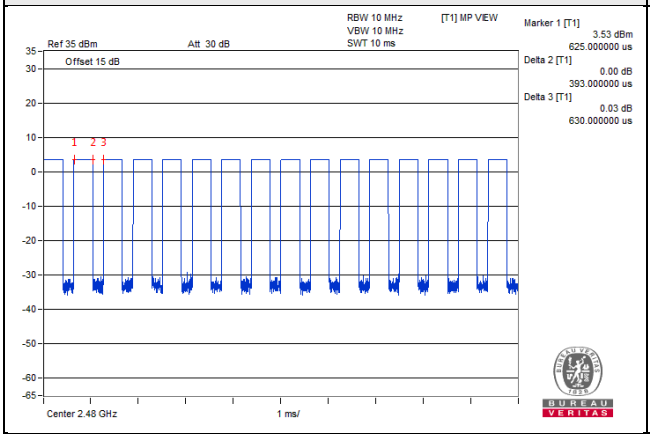
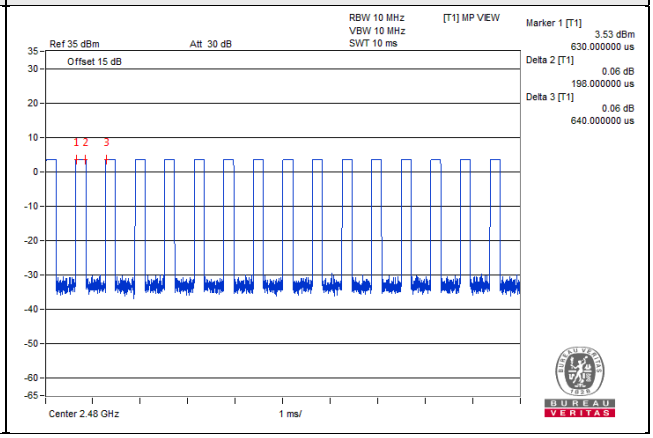
BT LE 4.0: Duty cycle = 0.393/0.630 = 0.624, Duty factor = 10 * log (1/0.624) = 2.05
BT LE 5.0: Duty cycle = 0.198/0.640 = 0.309, Duty factor = 10 * log (1/0.309) = 5.10

BT LE 4.0	BT LE 5.0
	

Test Mode G (BT-Directional antenna)

Duty cycle of test signal is < 98%.

BT LE 4.0: Duty cycle = 0.393/0.630 = 0.624, Duty factor = 10 * log (1/0.624) = 2.05
BT LE 5.0: Duty cycle = 0.198/0.640 = 0.309, Duty factor = 10 * log (1/0.309) = 5.10

BT LE 4.0	BT LE 5.0
	

3.4 Description of Support Units

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

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Notebook	DELL	E5410	1HC2XM1	FCC DoC Approved	-
B.	Adapter	Channel Well Technology	2ABN036F	NA	NA	Provided by manufacturer
C.	POE	Microsemi	PD9001GR	NA	NA	Provided by manufacturer

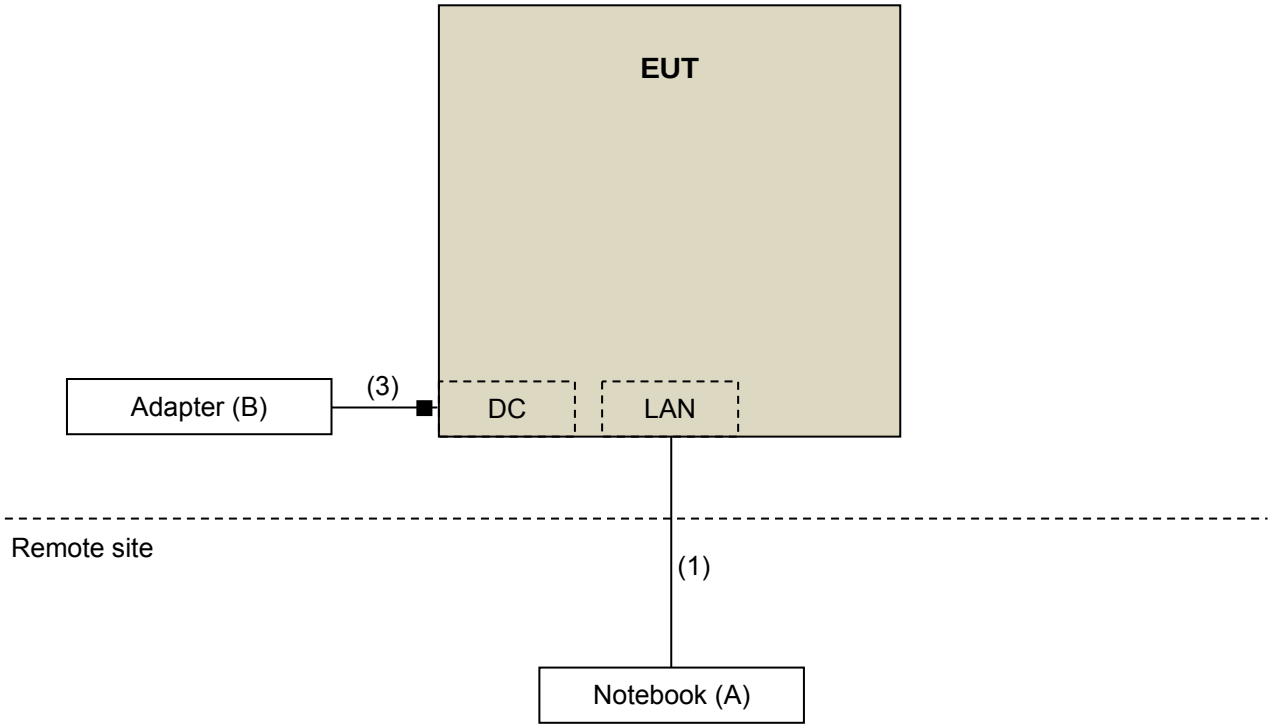
Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item A acted as a communication partner to transfer data.

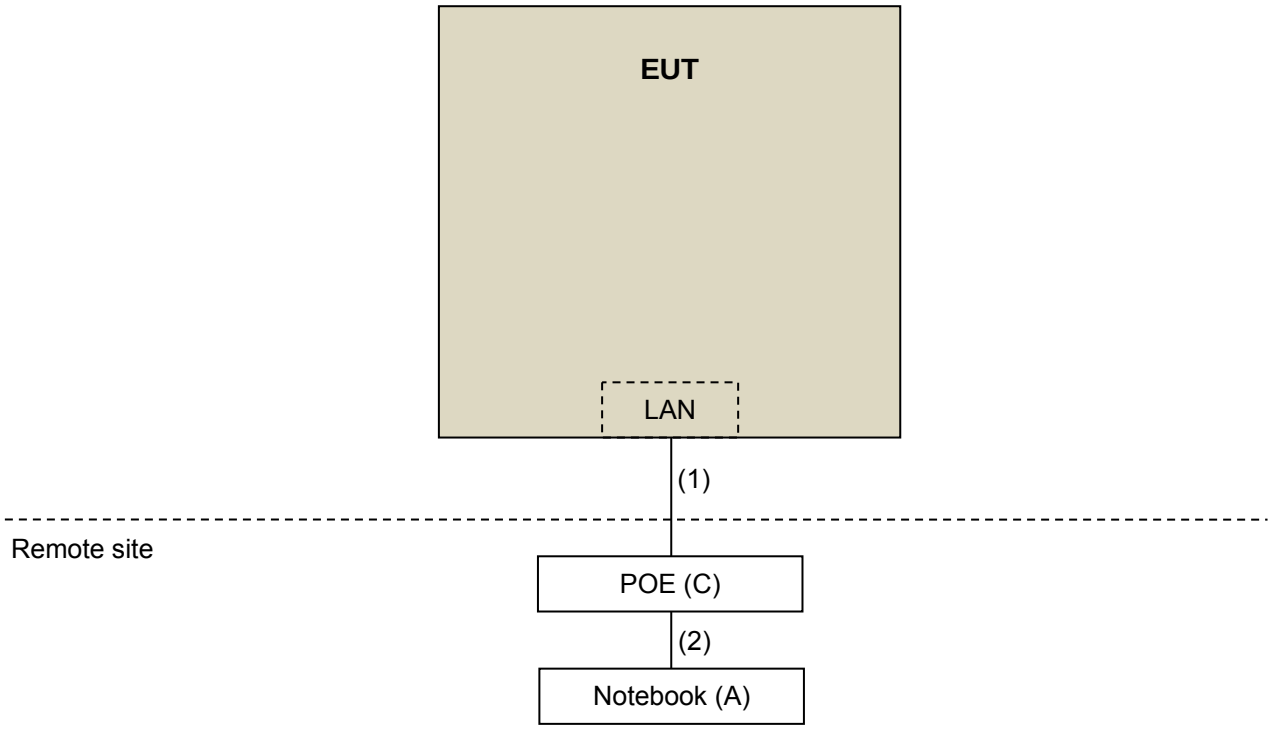
ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	RJ45 cable	1	6	N	0	Cat5e
2.	RJ45 cable	1	1.5	N	0	Cat5e
3.	DC cable	1	1.5	-	1	Provided by manufacturer

3.4.1 Configuration of System under Test

Adapter Mode



POE Mode



3.5 General Description of Applied Standards

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

FCC Part 15, Subpart C (15.247)
KDB 558074 D01 15.247 Meas Guidance v05r02
ANSI C63.10:2013

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

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

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

Note:

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

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100424	Jan. 03, 2019	Jan. 02, 2020
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100040	Sep. 25, 2018	Sep. 24, 2019
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Nov. 21, 2018	Nov. 20, 2019
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-1170	Nov. 25, 2018	Nov. 24, 2019
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 25, 2018	Nov. 24, 2019
Loop Antenna TESEQ	HLA 6121	45745	Jun. 14, 2018	Jun. 13, 2019
Preamplifier Agilent (Below 1GHz)	8447D	2944A10631	Aug. 08, 2018	Aug. 07, 2019
Preamplifier KEYSIGHT (Above 1GHz)	83017A	MY53270295	Jul. 02, 2018	Jul. 01, 2019
RF signal cable HUBER+SUHNER	SUCOFLEX 104	MY 13380+295012/04	Aug. 08, 2018	Aug. 07, 2019
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03 (250724)	Aug. 08, 2018	Aug. 07, 2019
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021703	NA	NA
Turn Table BV ADT	TT100	TT93021703	NA	NA
Turn Table Controller BV ADT	SC100	SC93021703	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Pre-amplifier (18GHz-40GHz) EMC	EMC184045B	980175	Nov. 14, 2018	Nov. 13, 2019
USB Wideband Power Sensor KEYSIGHT	U2021XA	MY55050005/MY55190004/MY55190007/MY55210005	Jul. 17, 2018	Jul. 16, 2019

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 4.

4.1.3 Test Procedures

For Radiated emission below 30MHz

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.

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

c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

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

For Radiated emission above 30MHz

a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

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

c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

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

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

3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 10Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.

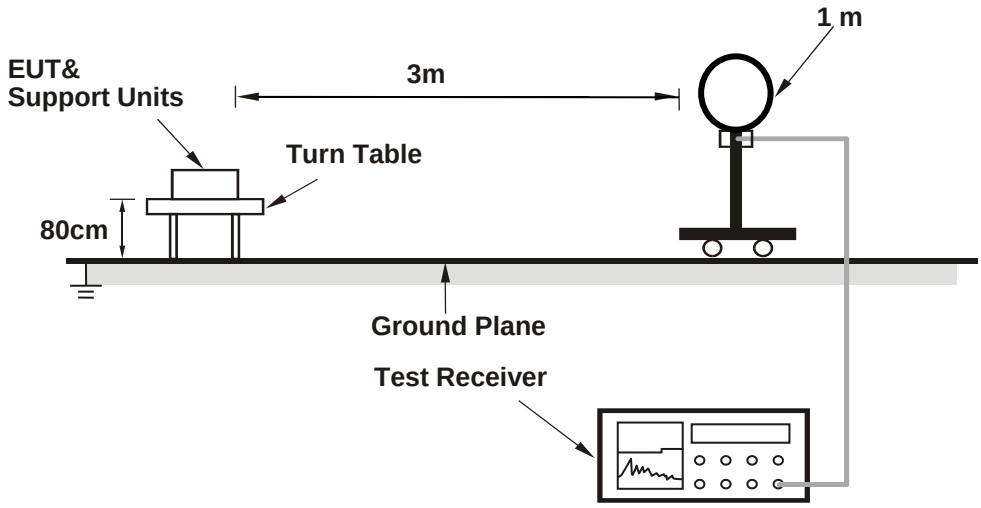
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

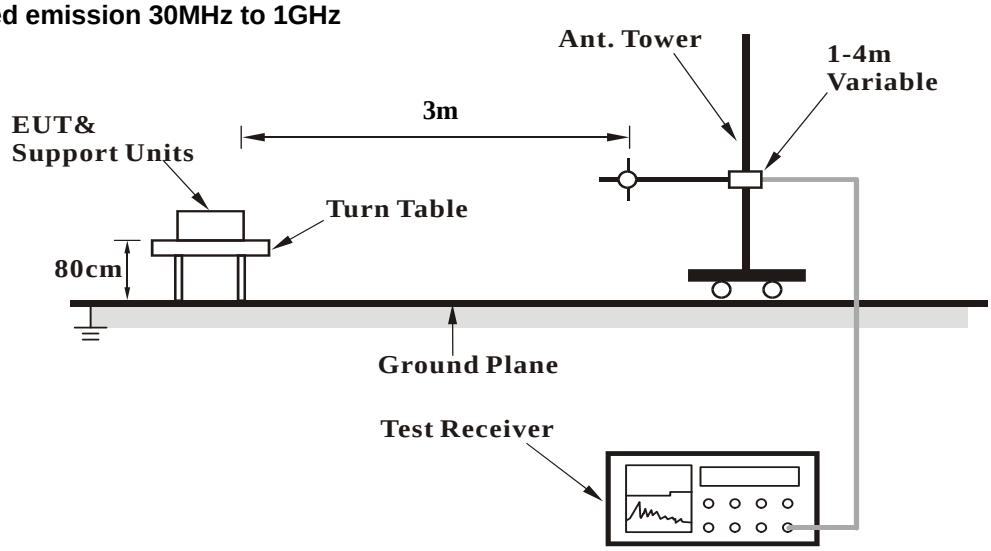
No deviation.

4.1.5 Test Setup

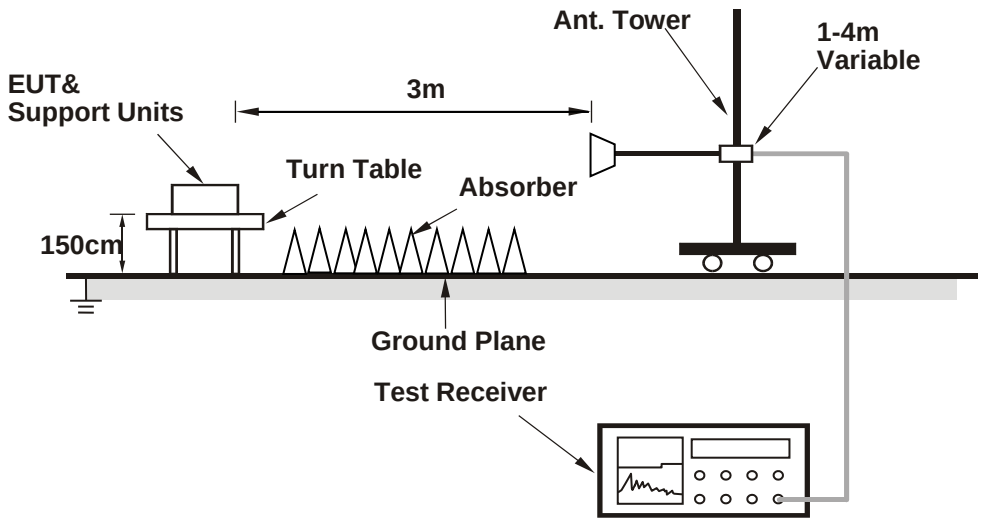
For Radiated emission below 30MHz



For Radiated emission 30MHz to 1GHz



For Radiated emission above 1GHz



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

4.1.6 EUT Operating Conditions

a. Placed the EUT on the testing table.
b. Prepared a notebook to act as a communication partner and placed it outside of testing area.
c. The communication partner connected with EUT via a RJ45 cable and ran a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.
d. The communication partner sent data to EUT by command "PING".

4.1.7 Test Results

Above 1 GHz Data:

Test Mode A (BT-Omni antenna)

BT LE 4.0

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	57.3 PK	74.0	-16.7	1.28 H	303	23.5	33.8
2	2390.00	45.8 AV	54.0	-8.2	1.28 H	303	12.0	33.8
3	*2402.00	82.9 PK			1.16 H	309	49.2	33.7
4	*2402.00	78.8 AV			1.16 H	309	45.1	33.7
5	4804.00	51.5 PK	74.0	-22.5	1.63 H	255	38.2	13.3
6	4804.00	39.3 AV	54.0	-14.7	1.63 H	255	26.0	13.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	58.0 PK	74.0	-16.0	3.15 V	336	24.2	33.8
2	2390.00	46.6 AV	54.0	-7.4	3.15 V	336	12.8	33.8
3	*2402.00	96.7 PK			3.21 V	327	63.0	33.7
4	*2402.00	92.7 AV			3.21 V	327	59.0	33.7
5	4804.00	51.9 PK	74.0	-22.1	2.20 V	126	38.6	13.3
6	4804.00	39.8 AV	54.0	-14.2	2.20 V	126	26.5	13.3

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	83.6 PK			1.11 H	305	49.8	33.8
2	*2440.00	79.4 AV			1.11 H	305	45.6	33.8
3	4880.00	51.7 PK	74.0	-22.3	1.96 H	230	38.5	13.2
4	4880.00	39.3 AV	54.0	-14.7	1.96 H	230	26.1	13.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	97.6 PK			3.16 V	320	63.8	33.8
2	*2440.00	93.4 AV			3.16 V	320	59.6	33.8
3	4880.00	51.7 PK	74.0	-22.3	2.50 V	163	38.5	13.2
4	4880.00	39.8 AV	54.0	-14.2	2.50 V	163	26.6	13.2

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2480.00	84.6 PK			1.28 H	316	50.7	33.9
2	*2480.00	80.3 AV			1.28 H	316	46.4	33.9
3	2483.50	58.2 PK	74.0	-15.8	1.05 H	315	24.3	33.9
4	2483.50	47.6 AV	54.0	-6.4	1.05 H	315	13.7	33.9
5	4960.00	51.4 PK	74.0	-22.6	2.21 H	154	37.9	13.5
6	4960.00	39.3 AV	54.0	-14.7	2.21 H	154	25.8	13.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2480.00	98.6 PK			3.24 V	319	64.7	33.9
2	*2480.00	94.3 AV			3.24 V	319	60.4	33.9
3	2483.50	59.6 PK	74.0	-14.4	3.35 V	317	25.7	33.9
4	2483.50	48.3 AV	54.0	-5.7	3.35 V	317	14.4	33.9
5	4960.00	51.9 PK	74.0	-22.1	2.58 V	196	38.4	13.5
6	4960.00	39.8 AV	54.0	-14.2	2.58 V	196	26.3	13.5

Remarks:

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

BT LE 5.0

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	57.2 PK	74.0	-16.8	1.22 H	310	23.4	33.8
2	2390.00	47.4 AV	54.0	-6.6	1.22 H	310	13.6	33.8
3	*2402.00	82.6 PK			1.07 H	296	48.9	33.7
4	*2402.00	79.1 AV			1.07 H	296	45.4	33.7
5	4804.00	51.3 PK	74.0	-22.7	2.67 H	143	38.0	13.3
6	4804.00	39.4 AV	54.0	-14.6	2.67 H	143	26.1	13.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	57.6 PK	74.0	-16.4	3.21 V	335	23.8	33.8
2	2390.00	47.8 AV	54.0	-6.2	3.21 V	335	14.0	33.8
3	*2402.00	96.6 PK			3.29 V	329	62.9	33.7
4	*2402.00	93.5 AV			3.29 V	329	59.8	33.7
5	4804.00	51.7 PK	74.0	-22.3	2.14 V	162	38.4	13.3
6	4804.00	39.6 AV	54.0	-14.4	2.14 V	162	26.3	13.3

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	83.0 PK			1.15 H	308	49.2	33.8
2	*2440.00	79.3 AV			1.15 H	308	45.5	33.8
3	4880.00	51.5 PK	74.0	-22.5	2.98 H	182	38.3	13.2
4	4880.00	39.1 AV	54.0	-14.9	2.98 H	182	25.9	13.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	97.0 PK			3.19 V	322	63.2	33.8
2	*2440.00	93.3 AV			3.19 V	322	59.5	33.8
3	4880.00	51.8 PK	74.0	-22.2	2.33 V	147	38.6	13.2
4	4880.00	40.0 AV	54.0	-14.0	2.33 V	147	26.8	13.2

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2480.00	85.7 PK			1.11 H	304	51.8	33.9
2	*2480.00	82.7 AV			1.11 H	304	48.8	33.9
3	2483.50	57.3 PK	74.0	-16.7	1.20 H	309	23.4	33.9
4	2483.50	47.4 AV	54.0	-6.6	1.20 H	309	13.5	33.9
5	4960.00	51.6 PK	74.0	-22.4	2.85 H	177	38.1	13.5
6	4960.00	39.8 AV	54.0	-14.2	2.85 H	177	26.3	13.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2480.00	99.4 PK			3.70 V	325	65.5	33.9
2	*2480.00	96.4 AV			3.70 V	325	62.5	33.9
3	2483.50	60.3 PK	74.0	-13.7	3.55 V	330	26.4	33.9
4	2483.50	49.0 AV	54.0	-5.0	3.55 V	330	15.1	33.9
5	4960.00	51.9 PK	74.0	-22.1	2.61 V	158	38.4	13.5
6	4960.00	40.3 AV	54.0	-13.7	2.61 V	158	26.8	13.5

Remarks:

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

Test Mode C (BT-Directional antenna)

BT LE 4.0

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	57.6 PK	74.0	-16.4	1.17 H	302	23.8	33.8
2	2390.00	45.9 AV	54.0	-8.1	1.17 H	302	12.1	33.8
3	*2402.00	87.9 PK			1.29 H	311	54.2	33.7
4	*2402.00	83.5 AV			1.29 H	311	49.8	33.7
5	4804.00	51.8 PK	74.0	-22.2	2.63 H	115	38.5	13.3
6	4804.00	39.6 AV	54.0	-14.4	2.63 H	115	26.3	13.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	58.5 PK	74.0	-15.5	2.66 V	27	24.7	33.8
2	2390.00	46.2 AV	54.0	-7.8	2.66 V	27	12.4	33.8
3	*2402.00	102.2 PK			2.58 V	8	68.5	33.7
4	*2402.00	97.4 AV			2.58 V	8	63.7	33.7
5	4804.00	53.2 PK	74.0	-20.8	2.04 V	158	39.9	13.3
6	4804.00	40.0 AV	54.0	-14.0	2.04 V	158	26.7	13.3

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	89.5 PK			1.16 H	311	55.7	33.8
2	*2440.00	84.8 AV			1.16 H	311	51.0	33.8
3	4880.00	51.7 PK	74.0	-22.3	1.89 H	214	38.5	13.2
4	4880.00	39.3 AV	54.0	-14.7	1.89 H	214	26.1	13.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	102.8 PK			2.57 V	12	69.0	33.8
2	*2440.00	98.9 AV			2.57 V	12	65.1	33.8
3	4880.00	52.7 PK	74.0	-21.3	1.88 V	241	39.5	13.2
4	4880.00	40.0 AV	54.0	-14.0	1.88 V	241	26.8	13.2

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2480.00	87.7 PK			1.33 H	320	53.8	33.9
2	*2480.00	83.5 AV			1.33 H	320	49.6	33.9
3	2483.50	58.0 PK	74.0	-16.0	1.05 H	319	24.1	33.9
4	2483.50	46.5 AV	54.0	-7.5	1.05 H	319	12.6	33.9
5	4960.00	51.7 PK	74.0	-22.3	1.99 H	245	38.2	13.5
6	4960.00	39.4 AV	54.0	-14.6	1.99 H	245	25.9	13.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2480.00	101.9 PK			2.75 V	9	68.0	33.9
2	*2480.00	96.9 AV			2.75 V	9	63.0	33.9
3	2483.50	61.2 PK	74.0	-12.8	2.71 V	5	27.3	33.9
4	2483.50	47.8 AV	54.0	-6.2	2.71 V	5	13.9	33.9
5	4960.00	52.3 PK	74.0	-21.7	1.74 V	265	38.8	13.5
6	4960.00	40.0 AV	54.0	-14.0	1.74 V	265	26.5	13.5

Remarks:

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

BT LE 5.0

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	56.9 PK	74.0	-17.1	1.11 H	319	23.1	33.8
2	2390.00	46.6 AV	54.0	-7.4	1.11 H	319	12.8	33.8
3	*2402.00	88.2 PK			1.14 H	306	54.5	33.7
4	*2402.00	85.3 AV			1.14 H	306	51.6	33.7
5	4804.00	51.4 PK	74.0	-22.6	2.39 H	147	38.1	13.3
6	4804.00	39.2 AV	54.0	-14.8	2.39 H	147	25.9	13.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	57.7 PK	74.0	-16.3	2.77 V	16	23.9	33.8
2	2390.00	47.6 AV	54.0	-6.4	2.77 V	16	13.8	33.8
3	*2402.00	102.4 PK			2.68 V	5	68.7	33.7
4	*2402.00	99.5 AV			2.68 V	5	65.8	33.7
5	4804.00	51.6 PK	74.0	-22.4	1.49 V	211	38.3	13.3
6	4804.00	39.6 AV	54.0	-14.4	1.49 V	211	26.3	13.3

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	88.9 PK			1.38 H	320	55.1	33.8
2	*2440.00	85.9 AV			1.38 H	320	52.1	33.8
3	4880.00	51.3 PK	74.0	-22.7	2.66 H	196	38.1	13.2
4	4880.00	39.1 AV	54.0	-14.9	2.66 H	196	25.9	13.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	103.0 PK			2.71 V	7	69.2	33.8
2	*2440.00	100.2 AV			2.71 V	7	66.4	33.8
3	4880.00	51.9 PK	74.0	-22.1	1.63 V	254	38.7	13.2
4	4880.00	39.7 AV	54.0	-14.3	1.63 V	254	26.5	13.2

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2480.00	87.7 PK			1.36 H	338	53.8	33.9
2	*2480.00	84.3 AV			1.36 H	338	50.4	33.9
3	2483.50	58.1 PK	74.0	-15.9	1.16 H	311	24.2	33.9
4	2483.50	47.7 AV	54.0	-6.3	1.16 H	311	13.8	33.9
5	4960.00	51.3 PK	74.0	-22.7	1.85 H	222	37.8	13.5
6	4960.00	39.4 AV	54.0	-14.6	1.85 H	222	25.9	13.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2480.00	102.0 PK			2.66 V	10	68.1	33.9
2	*2480.00	99.2 AV			2.66 V	10	65.3	33.9
3	2483.50	60.7 PK	74.0	-13.3	2.70 V	3	26.8	33.9
4	**2483.50**	**51.0 AV**	**54.0**	**-3.0**	**2.70 V**	**3**	**17.1**	**33.9**
5	4960.00	51.6 PK	74.0	-22.4	2.10 V	144	38.1	13.5
6	4960.00	40.2 AV	54.0	-13.8	2.10 V	144	26.7	13.5

Remarks:

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

Test Mode E (BT-Omni antenna)

BT LE 4.0

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	57.7 PK	74.0	-16.3	3.02 H	306	23.9	33.8
2	2390.00	45.8 AV	54.0	-8.2	3.02 H	306	12.0	33.8
3	*2402.00	85.1 PK			3.00 H	300	51.4	33.7
4	*2402.00	80.7 AV			3.00 H	300	47.0	33.7
5	4804.00	51.8 PK	74.0	-22.2	1.11 H	121	38.5	13.3
6	4804.00	39.8 AV	54.0	-14.2	1.11 H	121	26.5	13.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	58.0 PK	74.0	-16.0	2.99 V	350	24.2	33.8
2	2390.00	46.2 AV	54.0	-7.8	2.99 V	350	12.4	33.8
3	*2402.00	99.1 PK			3.08 V	353	65.4	33.7
4	*2402.00	94.7 AV			3.08 V	353	61.0	33.7
5	4804.00	52.4 PK	74.0	-21.6	2.52 V	152	39.1	13.3
6	4804.00	40.2 AV	54.0	-13.8	2.52 V	152	26.9	13.3

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	84.5 PK			3.07 H	302	50.7	33.8
2	*2440.00	79.8 AV			3.07 H	302	46.0	33.8
3	4880.00	51.2 PK	74.0	-22.8	2.12 H	2	38.0	13.2
4	4880.00	38.7 AV	54.0	-15.3	2.12 H	2	25.5	13.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	98.5 PK			3.07 V	351	64.7	33.8
2	*2440.00	93.8 AV			3.07 V	351	60.0	33.8
3	4880.00	51.8 PK	74.0	-22.2	2.55 V	211	38.6	13.2
4	4880.00	39.0 AV	54.0	-15.0	2.55 V	211	25.8	13.2

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2480.00	84.8 PK			3.12 H	302	50.9	33.9
2	*2480.00	80.6 AV			3.12 H	302	46.7	33.9
3	2483.50	58.4 PK	74.0	-15.6	3.50 H	320	24.5	33.9
4	2483.50	46.1 AV	54.0	-7.9	3.50 H	320	12.2	33.9
5	4960.00	51.6 PK	74.0	-22.4	2.63 H	125	38.1	13.5
6	4960.00	38.7 AV	54.0	-15.3	2.63 H	125	25.2	13.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2480.00	98.8 PK			3.56 V	340	64.9	33.9
2	*2480.00	94.6 AV			3.56 V	340	60.7	33.9
3	2483.50	60.4 PK	74.0	-13.6	3.55 V	340	26.5	33.9
4	2483.50	46.6 AV	54.0	-7.4	3.55 V	340	12.7	33.9
5	4960.00	52.0 PK	74.0	-22.0	1.55 V	242	38.5	13.5
6	4960.00	39.1 AV	54.0	-14.9	1.55 V	242	25.6	13.5

Remarks:

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

BT LE 5.0

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	57.9 PK	74.0	-16.1	2.52 H	320	24.1	33.8
2	2390.00	46.7 AV	54.0	-7.3	2.52 H	320	12.9	33.8
3	*2402.00	84.3 PK			2.32 H	300	50.6	33.7
4	*2402.00	71.2 AV			2.32 H	300	37.5	33.7
5	4804.00	51.0 PK	74.0	-23.0	1.02 H	122	37.7	13.3
6	4804.00	40.6 AV	54.0	-13.4	1.02 H	122	27.3	13.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	58.5 PK	74.0	-15.5	2.89 V	350	24.7	33.8
2	2390.00	47.7 AV	54.0	-6.3	2.89 V	350	13.9	33.8
3	*2402.00	98.3 PK			2.91 V	357	64.6	33.7
4	*2402.00	83.9 AV			2.91 V	357	50.2	33.7
5	4804.00	51.4 PK	74.0	-22.6	1.51 V	152	38.1	13.3
6	4804.00	41.0 AV	54.0	-13.0	1.51 V	152	27.7	13.3

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	84.0 PK			3.65 H	300	50.2	33.8
2	*2440.00	69.8 AV			3.65 H	300	36.0	33.8
3	4880.00	51.4 PK	74.0	-22.6	2.22 H	21	38.2	13.2
4	4880.00	40.0 AV	54.0	-14.0	2.22 H	21	26.8	13.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	98.0 PK			2.91 V	339	64.2	33.8
2	*2440.00	83.8 AV			2.91 V	339	50.0	33.8
3	4880.00	51.8 PK	74.0	-22.2	2.52 V	263	38.6	13.2
4	4880.00	40.7 AV	54.0	-13.3	2.52 V	263	27.5	13.2

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2480.00	85.2 PK			3.77 H	299	51.3	33.9
2	*2480.00	73.8 AV			3.77 H	299	39.9	33.9
3	2483.50	58.7 PK	74.0	-15.3	2.52 H	300	24.8	33.9
4	2483.50	48.1 AV	54.0	-5.9	2.52 H	300	14.2	33.9
5	4960.00	52.0 PK	74.0	-22.0	3.33 H	101	38.5	13.5
6	4960.00	40.4 AV	54.0	-13.6	3.33 H	101	26.9	13.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2480.00	98.4 PK			2.91 V	341	64.5	33.9
2	*2480.00	84.0 AV			2.91 V	341	50.1	33.9
3	2483.50	58.9 PK	74.0	-15.1	2.99 V	344	25.0	33.9
4	2483.50	49.3 AV	54.0	-4.7	2.99 V	344	15.4	33.9
5	4960.00	52.2 PK	74.0	-21.8	2.56 V	122	38.7	13.5
6	4960.00	41.0 AV	54.0	-13.0	2.56 V	122	27.5	13.5

Remarks:

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

Test Mode G (BT-Directional antenna)

BT LE 4.0

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	57.0 PK	74.0	-17.0	2.88 H	11	23.2	33.8
2	2390.00	45.8 AV	54.0	-8.2	2.88 H	11	12.0	33.8
3	*2402.00	89.5 PK			2.71 H	14	55.8	33.7
4	*2402.00	84.2 AV			2.71 H	14	50.5	33.7
5	4804.00	51.1 PK	74.0	-22.9	2.52 H	322	37.8	13.3
6	4804.00	39.1 AV	54.0	-14.9	2.52 H	322	25.8	13.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	57.4 PK	74.0	-16.6	3.12 V	15	23.6	33.8
2	2390.00	46.1 AV	54.0	-7.9	3.12 V	15	12.3	33.8
3	*2402.00	103.5 PK			3.05 V	8	69.8	33.7
4	*2402.00	98.2 AV			3.05 V	8	64.5	33.7
5	4804.00	51.2 PK	74.0	-22.8	2.52 V	115	37.9	13.3
6	4804.00	38.9 AV	54.0	-15.1	2.52 V	115	25.6	13.3

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	89.0 PK			2.86 H	21	55.2	33.8
2	*2440.00	84.1 AV			2.86 H	21	50.3	33.8
3	4880.00	51.3 PK	74.0	-22.7	2.52 H	142	38.1	13.2
4	4880.00	38.4 AV	54.0	-15.6	2.52 H	142	25.2	13.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	103.0 PK			3.08 V	6	69.2	33.8
2	*2440.00	98.1 AV			3.08 V	6	64.3	33.8
3	4880.00	51.7 PK	74.0	-22.3	2.15 V	241	38.5	13.2
4	4880.00	38.8 AV	54.0	-15.2	2.15 V	241	25.6	13.2

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2480.00	86.8 PK			2.89 H	30	52.9	33.9
2	*2480.00	81.9 AV			2.89 H	30	48.0	33.9
3	2483.50	59.0 PK	74.0	-15.0	2.70 H	15	25.1	33.9
4	2483.50	47.1 AV	54.0	-6.9	2.70 H	15	13.2	33.9
5	4960.00	51.9 PK	74.0	-22.1	1.58 H	53	38.4	13.5
6	4960.00	39.0 AV	54.0	-15.0	1.58 H	53	25.5	13.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2480.00	100.8 PK			3.24 V	10	66.9	33.9
2	*2480.00	95.9 AV			3.24 V	10	62.0	33.9
3	2483.50	59.7 PK	74.0	-14.3	3.15 V	15	25.8	33.9
4	2483.50	47.7 AV	54.0	-6.3	3.15 V	15	13.8	33.9
5	4960.00	52.2 PK	74.0	-21.8	2.22 V	152	38.7	13.5
6	4960.00	39.3 AV	54.0	-14.7	2.22 V	152	25.8	13.5

Remarks:

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

BT LE 5.0

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	56.7 PK	74.0	-17.3	3.00 H	35	22.9	33.8
2	2390.00	45.9 AV	54.0	-8.1	3.00 H	35	12.1	33.8
3	*2402.00	88.8 PK			2.71 H	10	55.1	33.7
4	*2402.00	86.0 AV			2.71 H	10	52.3	33.7
5	4804.00	51.4 PK	74.0	-22.6	2.11 H	174	38.1	13.3
6	4804.00	38.3 AV	54.0	-15.7	2.11 H	174	25.0	13.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	57.0 PK	74.0	-17.0	3.00 V	12	23.2	33.8
2	2390.00	46.3 AV	54.0	-7.7	3.00 V	12	12.5	33.8
3	*2402.00	102.8 PK			3.04 V	5	69.1	33.7
4	*2402.00	100.0 AV			3.04 V	5	66.3	33.7
5	4804.00	51.7 PK	74.0	-22.3	3.00 V	12	38.4	13.3
6	4804.00	38.4 AV	54.0	-15.6	3.00 V	12	25.1	13.3

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	89.1 PK			2.75 H	20	55.3	33.8
2	*2440.00	86.4 AV			2.75 H	20	52.6	33.8
3	4880.00	51.2 PK	74.0	-22.8	2.15 H	241	38.0	13.2
4	4880.00	38.3 AV	54.0	-15.7	2.15 H	241	25.1	13.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2440.00	103.1 PK			3.09 V	2	69.3	33.8
2	*2440.00	100.4 AV			3.09 V	2	66.6	33.8
3	4880.00	51.4 PK	74.0	-22.6	2.58 V	241	38.2	13.2
4	4880.00	38.8 AV	54.0	-15.2	2.58 V	241	25.6	13.2

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2480.00	86.6 PK			2.80 H	21	52.7	33.9
2	*2480.00	83.6 AV			2.80 H	21	49.7	33.9
3	2483.50	57.5 PK	74.0	-16.5	2.79 H	14	23.6	33.9
4	2483.50	47.4 AV	54.0	-6.6	2.79 H	14	13.5	33.9
5	4960.00	51.6 PK	74.0	-22.4	1.52 H	144	38.1	13.5
6	4960.00	38.7 AV	54.0	-15.3	1.52 H	144	25.2	13.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2480.00	100.4 PK			3.35 V	10	66.5	33.9
2	*2480.00	97.9 AV			3.35 V	10	64.0	33.9
3	2483.50	61.4 PK	74.0	-12.6	3.25 V	12	27.5	33.9
4	2483.50	50.4 AV	54.0	-3.6	3.25 V	12	16.5	33.9
5	4960.00	51.9 PK	74.0	-22.1	2.51 V	142	38.4	13.5
6	4960.00	38.8 AV	54.0	-15.2	2.51 V	142	25.3	13.5

Remarks:

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

Below 1GHz worst-case data:

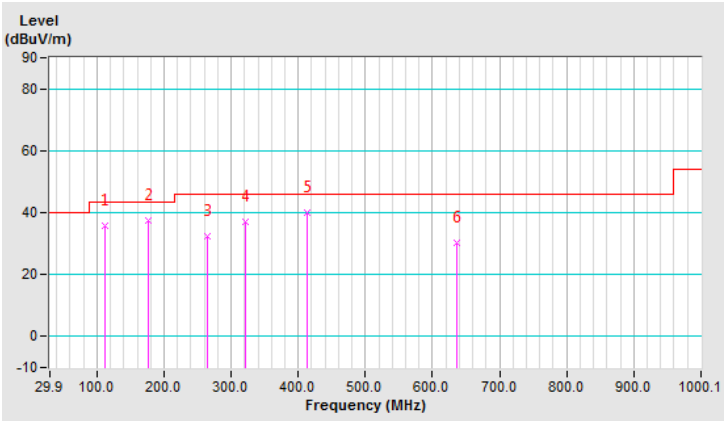
Test Mode A (BT-Omni antenna)

CHANNEL	TX Channel 39	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	111.56	35.8 QP	43.5	-7.7	1.50 H	72	47.7	-11.9
2	175.72	37.5 QP	43.5	-6.0	1.00 H	68	47.3	-9.8
3	265.16	32.5 QP	46.0	-13.5	1.00 H	108	41.5	-9.0
4	321.54	37.0 QP	46.0	-9.0	1.50 H	171	44.4	-7.4
5	412.92	39.9 QP	46.0	-6.1	2.00 H	199	46.3	-6.4
6	636.52	30.1 QP	46.0	-15.9	1.00 H	98	31.8	-1.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

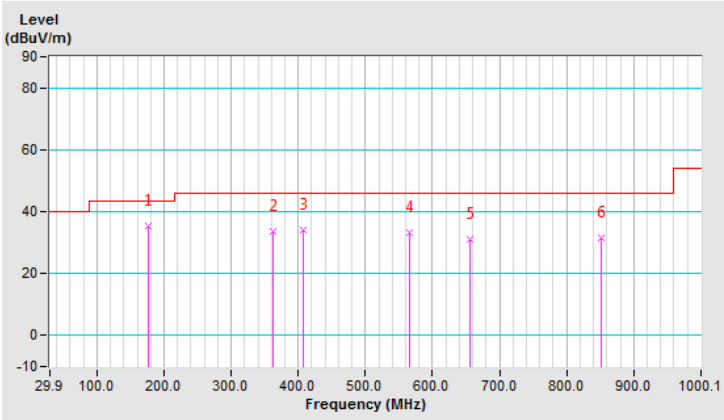


CHANNEL	TX Channel 39	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	175.72	35.2 QP	43.5	-8.3	1.50 V	263	45.0	-9.8
2	362.37	33.8 QP	46.0	-12.2	1.00 V	224	41.0	-7.2
3	407.09	34.0 QP	46.0	-12.0	1.00 V	263	40.5	-6.5
4	566.52	33.2 QP	46.0	-12.8	1.50 V	99	37.0	-3.8
5	655.96	31.0 QP	46.0	-15.0	1.00 V	190	32.5	-1.5
6	852.33	31.4 QP	46.0	-14.6	1.00 V	190	28.8	2.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



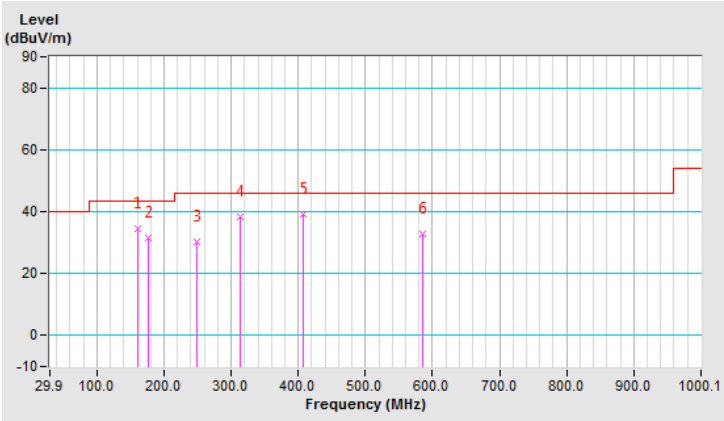
Test Mode B (BT-Omni antenna)

CHANNEL	TX Channel 39	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	160.17	34.7 QP	43.5	-8.8	1.00 H	92	43.6	-8.9
2	175.72	31.7 QP	43.5	-11.8	1.00 H	79	41.5	-9.8
3	249.60	30.4 QP	46.0	-15.6	1.50 H	96	39.8	-9.4
4	313.77	38.3 QP	46.0	-7.7	1.50 H	171	45.8	-7.5
5	407.09	39.2 QP	46.0	-6.8	1.00 H	194	45.7	-6.5
6	585.97	32.9 QP	46.0	-13.1	1.00 H	107	35.9	-3.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

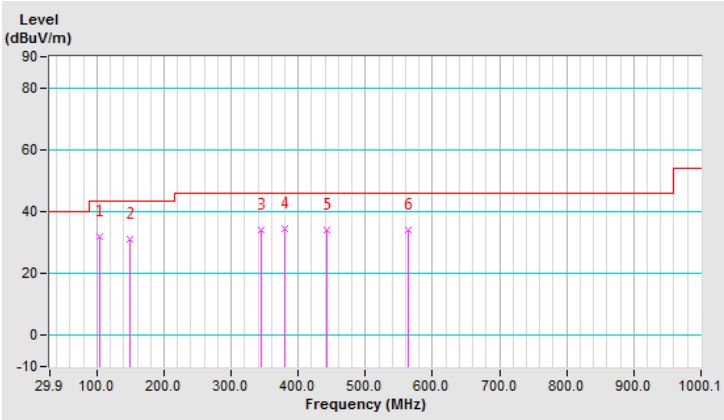


CHANNEL	TX Channel 39	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	103.78	31.8 QP	43.5	-11.7	1.00 V	7	44.5	-12.7
2	148.50	30.9 QP	43.5	-12.6	1.00 V	7	39.7	-8.8
3	344.87	33.9 QP	46.0	-12.1	1.00 V	116	41.3	-7.4
4	379.87	34.4 QP	46.0	-11.6	2.00 V	200	41.2	-6.8
5	442.09	34.1 QP	46.0	-11.9	1.50 V	203	39.9	-5.8
6	564.58	34.2 QP	46.0	-11.8	1.00 V	100	38.1	-3.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



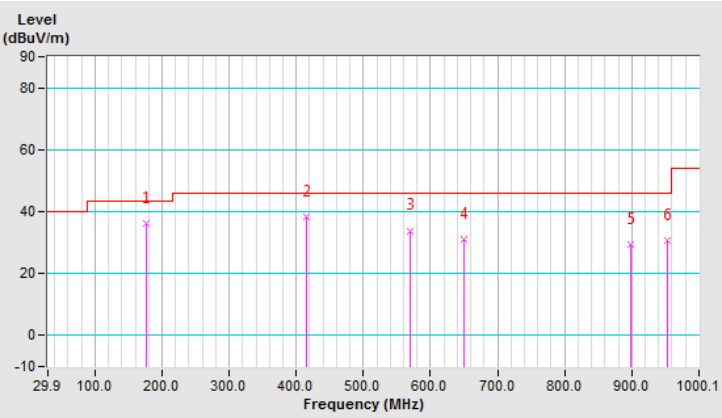
Test Mode C (BT-Directional antenna)

CHANNEL	TX Channel 39	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	175.72	36.2 QP	43.5	-7.3	2.00 H	98	46.0	-9.8
2	414.87	38.2 QP	46.0	-7.8	1.00 H	196	44.6	-6.4
3	570.41	33.9 QP	46.0	-12.1	1.00 H	104	37.5	-3.6
4	650.13	31.3 QP	46.0	-14.7	2.00 H	95	32.9	-1.6
5	899.00	29.4 QP	46.0	-16.6	1.00 H	351	26.0	3.4
6	953.44	30.6 QP	46.0	-15.4	1.00 H	85	26.3	4.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

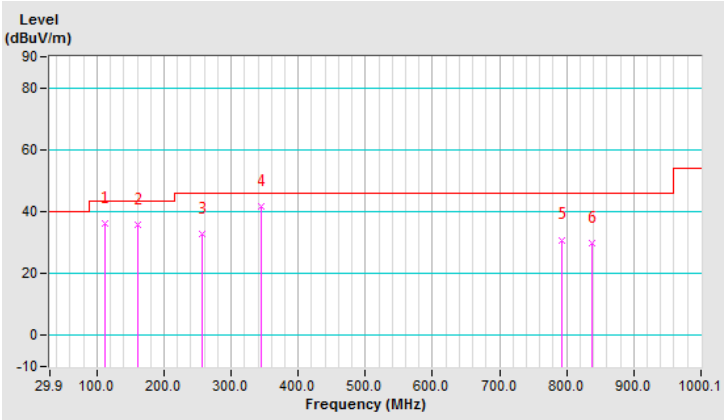


CHANNEL	TX Channel 39	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	111.56	36.3 QP	43.5	-7.2	1.50 V	70	48.2	-11.9
2	160.17	35.7 QP	43.5	-7.8	1.00 V	57	44.6	-8.9
3	257.38	32.7 QP	46.0	-13.3	1.00 V	87	41.9	-9.2
4	344.87	41.8 QP	46.0	-4.2	1.50 V	168	49.2	-7.4
5	792.06	30.9 QP	46.0	-15.1	1.00 V	204	29.2	1.7
6	838.72	29.7 QP	46.0	-16.3	1.00 V	334	27.3	2.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



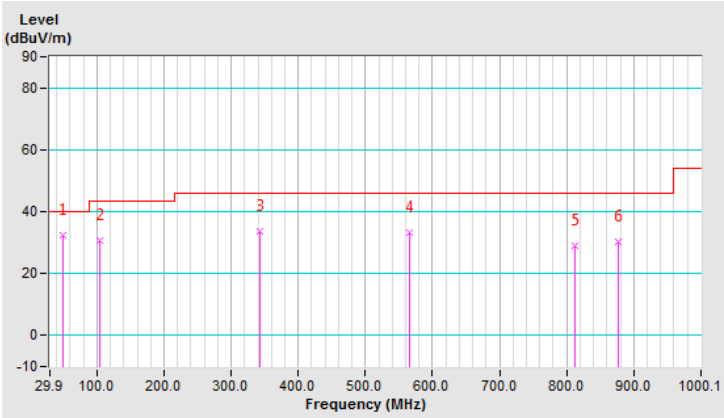
Test Mode D (BT-Directional antenna)

CHANNEL	TX Channel 39	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	49.34	32.3 QP	40.0	-7.7	1.50 H	95	41.2	-8.9
2	103.78	30.6 QP	43.5	-12.9	1.00 H	255	43.3	-12.7
3	342.93	33.7 QP	46.0	-12.3	1.00 H	112	41.1	-7.4
4	566.52	33.2 QP	46.0	-12.8	1.50 H	103	37.0	-3.8
5	811.50	28.8 QP	46.0	-17.2	1.00 H	91	26.8	2.0
6	877.61	30.3 QP	46.0	-15.7	1.00 H	169	27.4	2.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

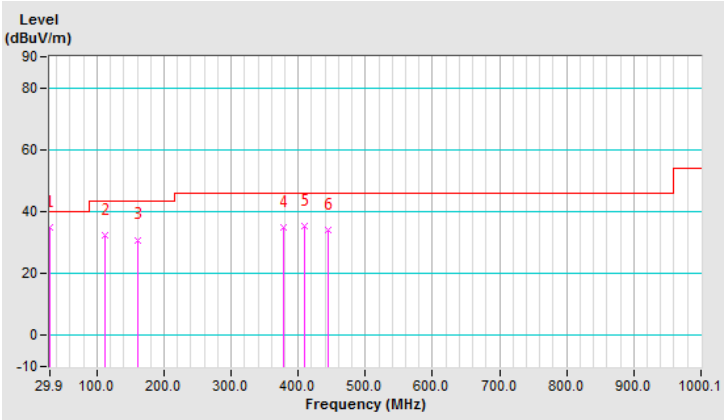


CHANNEL	TX Channel 39	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	29.90	34.8 QP	40.0	-5.2	1.50 V	137	45.9	-11.1
2	111.56	32.3 QP	43.5	-11.2	1.00 V	304	44.2	-11.9
3	160.17	30.9 QP	43.5	-12.6	1.00 V	252	39.8	-8.9
4	377.93	35.0 QP	46.0	-11.0	1.50 V	196	41.9	-6.9
5	409.04	35.5 QP	46.0	-10.5	1.00 V	286	41.9	-6.4
6	444.03	34.2 QP	46.0	-11.8	1.00 V	191	40.0	-5.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



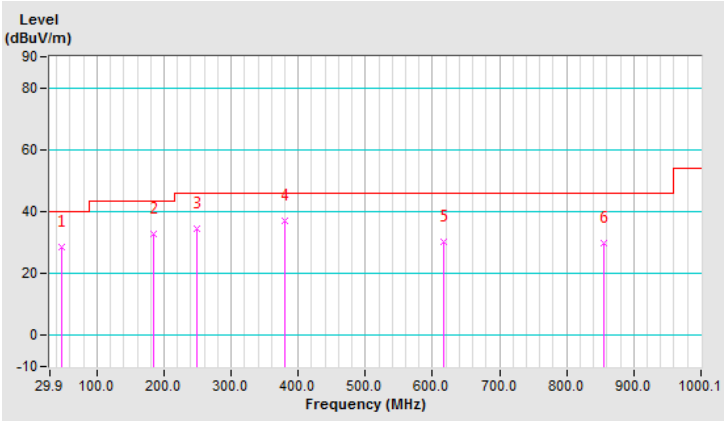
Test Mode E (BT-Omni antenna)

CHANNEL	TX Channel 39	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	47.36	28.7 QP	40.0	-11.3	1.00 H	3	37.7	-9.0
2	185.13	32.7 QP	43.5	-10.8	1.00 H	324	43.5	-10.8
3	249.17	34.5 QP	46.0	-11.5	2.00 H	201	43.9	-9.4
4	379.17	37.2 QP	46.0	-8.8	1.50 H	83	44.0	-6.8
5	615.90	30.1 QP	46.0	-15.9	1.50 H	247	32.1	-2.0
6	854.57	29.9 QP	46.0	-16.1	1.00 H	11	27.3	2.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

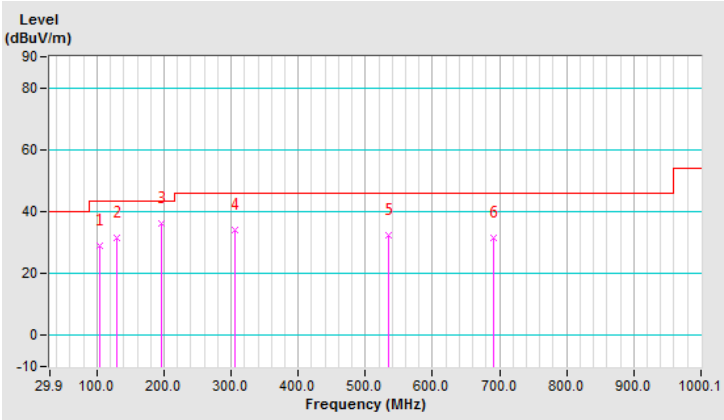


CHANNEL	TX Channel 39	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	103.64	29.1 QP	43.5	-14.4	1.50 V	305	41.8	-12.7
2	128.86	31.6 QP	43.5	-11.9	1.50 V	334	42.0	-10.4
3	196.77	36.0 QP	43.5	-7.5	1.00 V	133	47.3	-11.3
4	305.44	34.2 QP	46.0	-11.8	1.00 V	70	42.1	-7.9
5	534.40	32.5 QP	46.0	-13.5	2.00 V	203	36.9	-4.4
6	691.58	31.6 QP	46.0	-14.4	1.00 V	342	32.4	-0.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



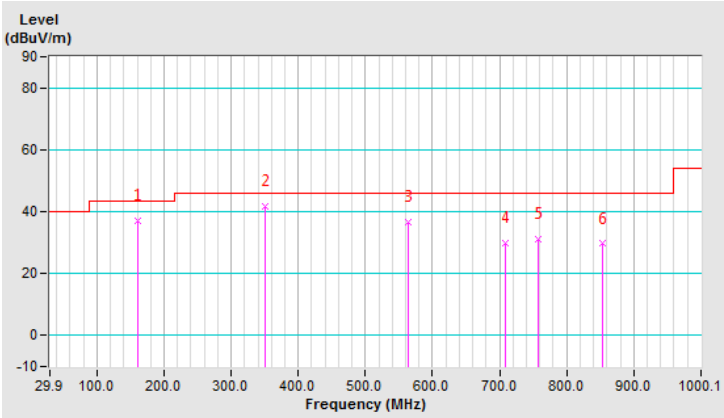
Test Mode F (BT-Omni antenna)

CHANNEL	TX Channel 39	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	160.17	37.2 QP	43.5	-6.3	1.50 H	43	46.1	-8.9
2	350.71	41.9 QP	46.0	-4.1	1.00 H	145	49.2	-7.3
3	564.58	36.7 QP	46.0	-9.3	1.50 H	334	40.6	-3.9
4	708.46	29.8 QP	46.0	-16.2	1.50 H	13	30.1	-0.3
5	757.06	30.9 QP	46.0	-15.1	1.00 H	239	29.7	1.2
6	854.28	29.6 QP	46.0	-16.4	1.50 H	220	27.0	2.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

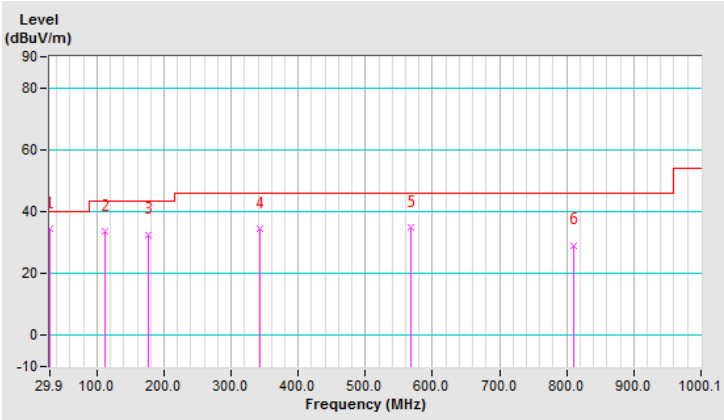


CHANNEL	TX Channel 39	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	29.90	34.5 QP	40.0	-5.5	1.01 V	139	45.6	-11.1
2	111.56	33.7 QP	43.5	-9.8	1.50 V	289	45.6	-11.9
3	175.72	32.6 QP	43.5	-10.9	1.50 V	134	42.4	-9.8
4	342.93	34.6 QP	46.0	-11.4	1.01 V	103	42.0	-7.4
5	568.47	34.9 QP	46.0	-11.1	1.01 V	103	38.7	-3.8
6	809.56	29.2 QP	46.0	-16.8	1.01 V	67	27.2	2.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



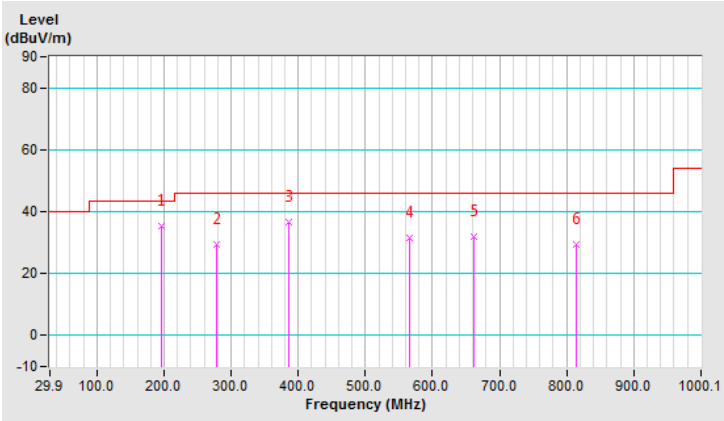
Test Mode G (BT-Directional antenna)

CHANNEL	TX Channel 39	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	196.77	35.4 QP	43.5	-8.1	1.50 H	120	46.7	-11.3
2	278.27	29.5 QP	46.0	-16.5	1.00 H	292	37.9	-8.4
3	384.99	36.6 QP	46.0	-9.4	1.00 H	74	43.4	-6.8
4	565.45	31.6 QP	46.0	-14.4	1.50 H	166	35.4	-3.8
5	662.47	31.8 QP	46.0	-14.2	1.00 H	166	33.2	-1.4
6	813.82	29.5 QP	46.0	-16.5	1.00 H	185	27.5	2.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

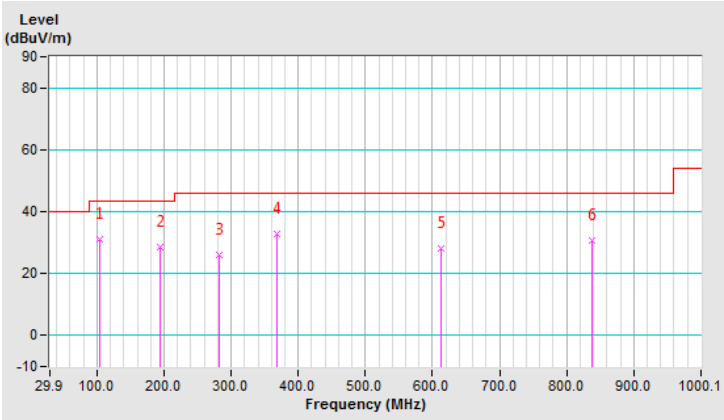


CHANNEL	TX Channel 39	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	103.64	31.1 QP	43.5	-12.4	1.00 V	196	43.8	-12.7
2	194.83	28.4 QP	43.5	-15.1	1.00 V	194	39.7	-11.3
3	282.15	26.0 QP	46.0	-20.0	2.00 V	114	34.3	-8.3
4	367.53	32.8 QP	46.0	-13.2	2.00 V	280	39.8	-7.0
5	612.02	28.2 QP	46.0	-17.8	1.00 V	325	30.3	-2.1
6	837.11	30.8 QP	46.0	-15.2	1.00 V	231	28.4	2.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



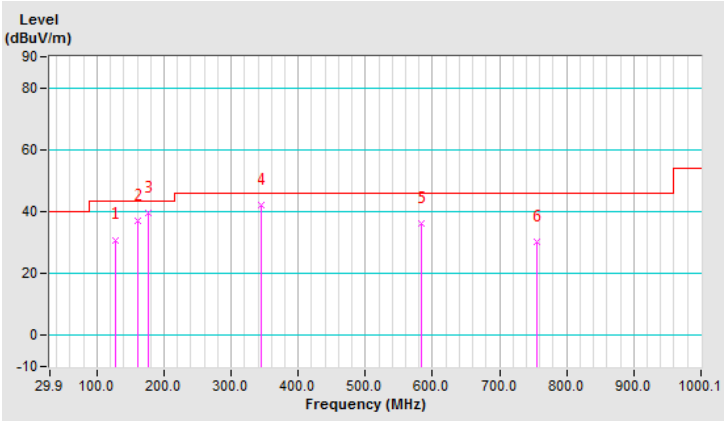
Test Mode H (BT-Directional antenna)

CHANNEL	TX Channel 39	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	127.11	30.9 QP	43.5	-12.6	1.50 H	54	41.5	-10.6
2	160.17	37.0 QP	43.5	-6.5	1.50 H	66	45.9	-8.9
3	175.72	39.7 QP	43.5	-3.8	1.50 H	234	49.5	-9.8
4	344.87	42.0 QP	46.0	-4.0	1.01 H	154	49.4	-7.4
5	584.02	36.3 QP	46.0	-9.7	1.50 H	113	39.4	-3.1
6	755.12	30.1 QP	46.0	-15.9	1.01 H	184	29.0	1.1

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 of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

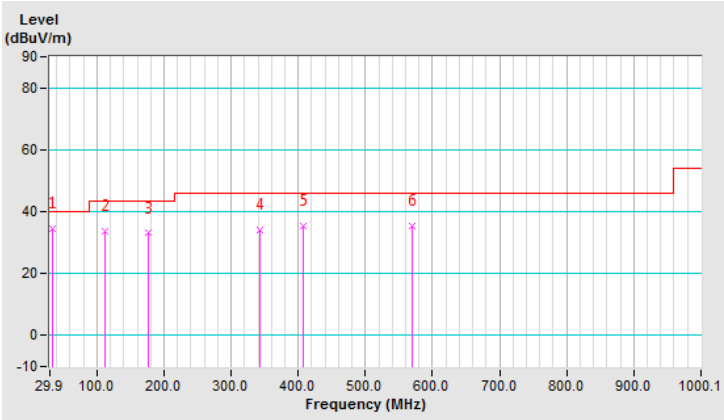


CHANNEL	TX Channel 39	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	33.79	34.7 QP	40.0	-5.3	1.50 V	32	45.3	-10.6
2	111.56	33.6 QP	43.5	-9.9	1.00 V	280	45.5	-11.9
3	175.72	33.0 QP	43.5	-10.5	1.50 V	140	42.8	-9.8
4	342.93	34.2 QP	46.0	-11.8	1.00 V	110	41.6	-7.4
5	407.09	35.4 QP	46.0	-10.6	1.00 V	257	41.9	-6.5
6	570.41	35.2 QP	46.0	-10.8	1.00 V	110	38.8	-3.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Note: 1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.2.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCS 30	100288	Jan. 03, 2019	Jan. 02, 2020
RF signal cable Woken	5D-FB	Cable-cond1-01	Sep. 05, 2018	Sep. 04, 2019
LISN ROHDE & SCHWARZ (EUT)	ENV216	101826	Feb. 21, 2019	Feb. 20, 2020
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Aug. 19, 2018	Aug. 18, 2019
Software ADT	BV ADT_Cond_ V7.3.7.4	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Shielded Room 1.
3. The VCCI Site Registration No. is C-12040.

4.2.3 Test Procedures

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

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

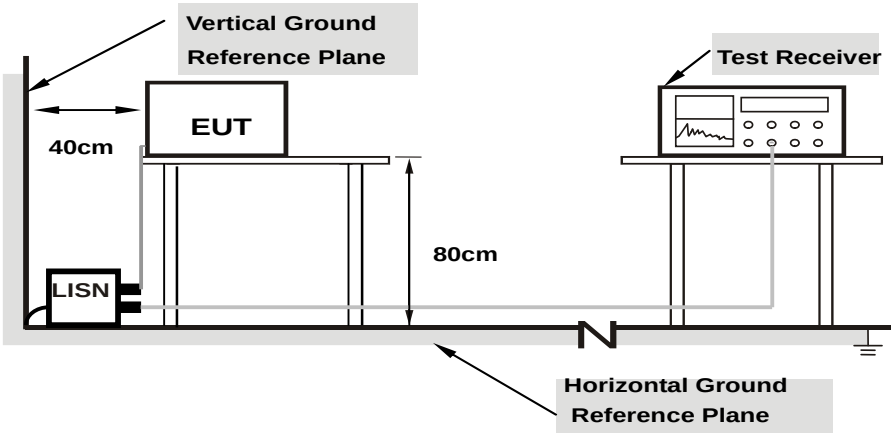
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



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

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

4.2.6 EUT Operating Conditions

Same as 4.1.6.

4.2.7 Test Results

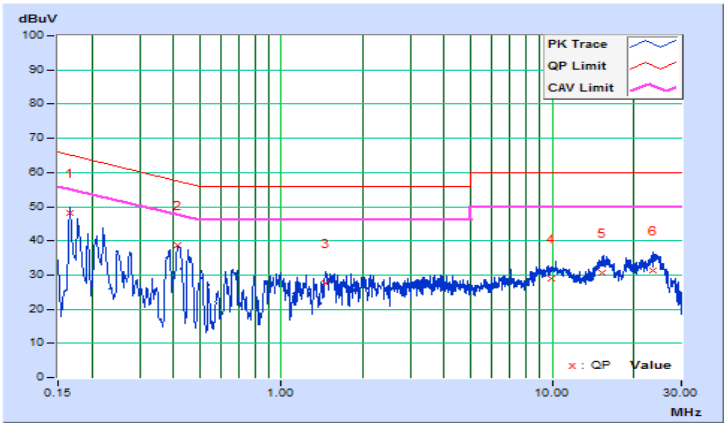
Test Mode A (BT-Omni antenna)

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

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16569	9.66	38.49	26.58	48.15	36.24	65.17	55.17	-17.02	-18.93
2	0.41560	9.65	29.04	22.26	38.69	31.91	57.54	47.54	-18.85	-15.63
3	1.45594	9.65	18.05	10.37	27.70	20.02	56.00	46.00	-28.30	-25.98
4	9.94846	9.83	19.03	13.43	28.86	23.26	60.00	50.00	-31.14	-26.74
5	15.38727	9.86	20.78	15.17	30.64	25.03	60.00	50.00	-29.36	-24.97
6	23.70384	9.88	21.53	16.23	31.41	26.11	60.00	50.00	-28.59	-23.89

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

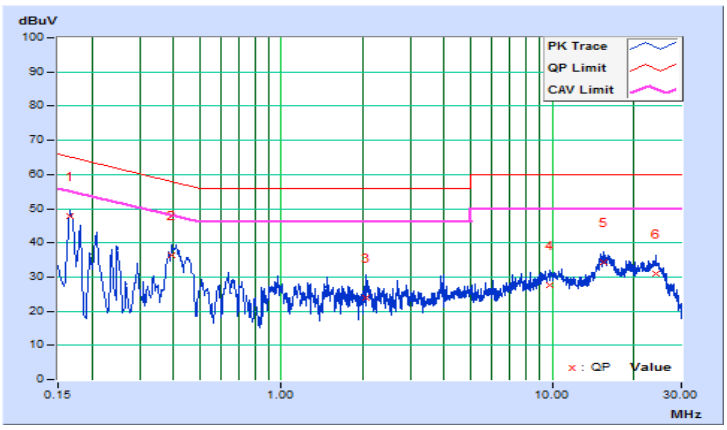


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16569	9.66	38.02	25.97	47.68	35.63	65.17	55.17	-17.49	-19.54
2	0.39635	9.65	26.57	13.47	36.22	23.12	57.93	47.93	-21.71	-24.81
3	2.06199	9.66	14.27	6.01	23.93	15.67	56.00	46.00	-32.07	-30.33
4	9.79206	9.84	17.76	12.08	27.60	21.92	60.00	50.00	-32.40	-28.08
5	15.44983	9.90	24.35	20.17	34.25	30.07	60.00	50.00	-25.75	-19.93
6	24.10266	9.96	21.01	15.81	30.97	25.77	60.00	50.00	-29.03	-24.23

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



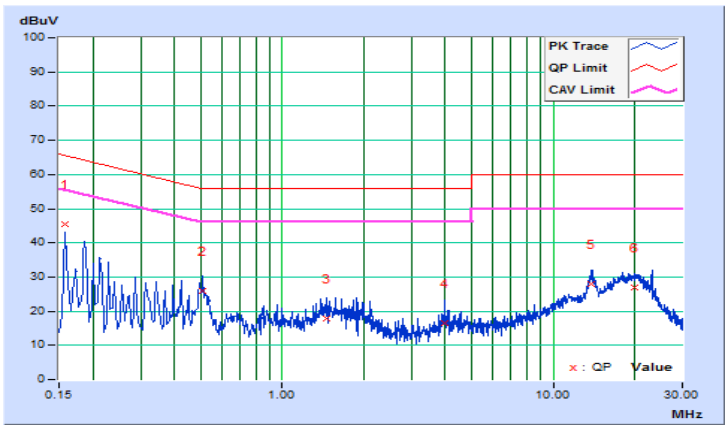
Test Mode B (BT-Omni antenna)

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

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15782	9.66	35.84	21.19	45.50	30.85	65.58	55.58	-20.08	-24.73
2	0.50972	9.65	16.25	6.33	25.90	15.98	56.00	46.00	-30.10	-30.02
3	1.45985	9.65	8.03	2.14	17.68	11.79	56.00	46.00	-38.32	-34.21
4	3.97398	9.71	6.92	0.05	16.63	9.76	56.00	46.00	-39.37	-36.24
5	13.85064	9.85	18.04	11.85	27.89	21.70	60.00	50.00	-32.11	-28.30
6	19.94242	9.87	17.17	11.56	27.04	21.43	60.00	50.00	-32.96	-28.57

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

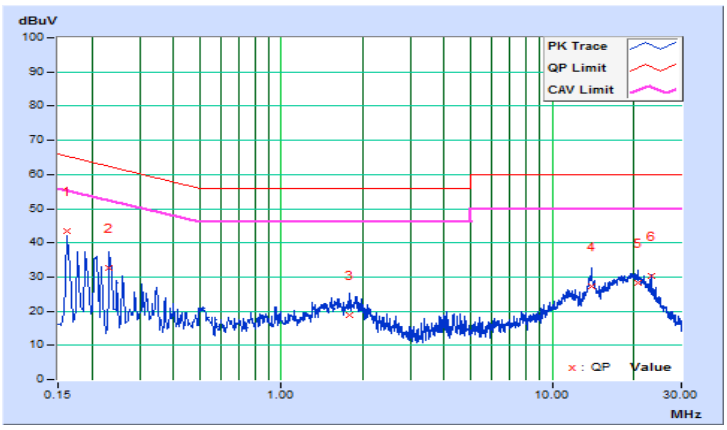


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16173	9.66	33.89	18.28	43.55	27.94	65.37	55.37	-21.82	-27.43
2	0.23216	9.66	22.91	7.36	32.57	17.02	62.37	52.37	-29.80	-35.35
3	1.78829	9.65	9.13	2.74	18.78	12.39	56.00	46.00	-37.22	-33.61
4	14.01095	9.88	17.26	10.79	27.14	20.67	60.00	50.00	-32.86	-29.33
5	20.80653	9.94	18.34	12.96	28.28	22.90	60.00	50.00	-31.72	-27.10
6	23.12907	9.96	20.24	16.48	30.20	26.44	60.00	50.00	-29.80	-23.56

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



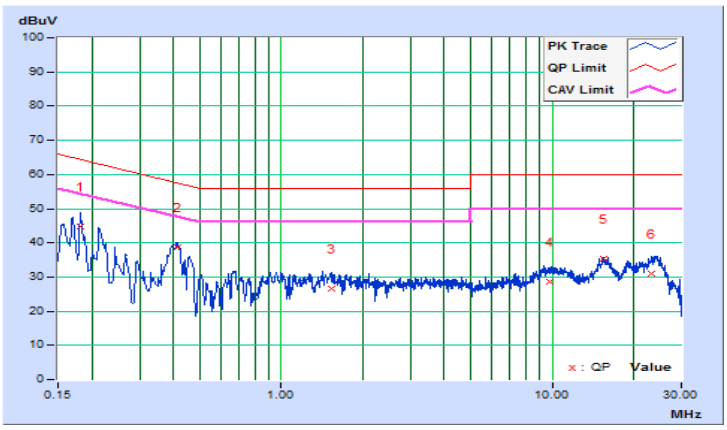
Test Mode C (BT-Directional antenna)

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

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18128	9.66	35.20	19.67	44.86	29.33	64.43	54.43	-19.57	-25.10
2	0.41233	9.65	29.11	20.85	38.76	30.50	57.60	47.60	-18.84	-17.10
3	1.53414	9.65	17.05	10.03	26.70	19.68	56.00	46.00	-29.30	-26.32
4	9.79988	9.83	18.78	13.29	28.61	23.12	60.00	50.00	-31.39	-26.88
5	15.44592	9.86	25.39	21.83	35.25	31.69	60.00	50.00	-24.75	-18.31
6	23.23855	9.88	21.13	15.73	31.01	25.61	60.00	50.00	-28.99	-24.39

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

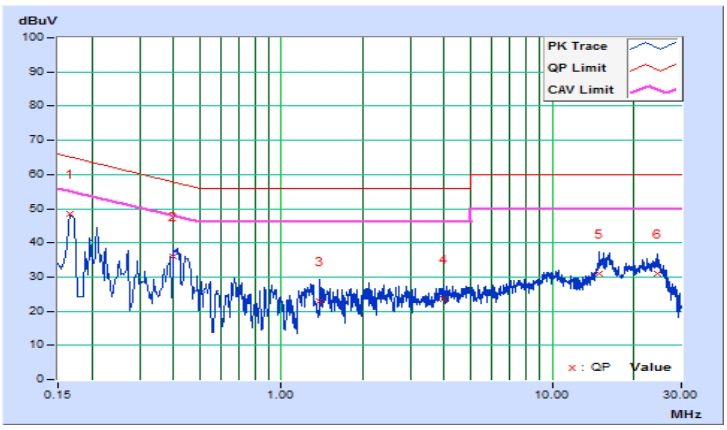


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16569	9.66	38.68	26.52	48.34	36.18	65.17	55.17	-16.83	-18.99
2	0.40055	9.65	26.24	14.28	35.89	23.93	57.84	47.84	-21.95	-23.91
3	1.39338	9.64	13.42	5.60	23.06	15.24	56.00	46.00	-32.94	-30.76
4	3.98180	9.71	13.90	6.88	23.61	16.59	56.00	46.00	-32.39	-29.41
5	14.97672	9.89	21.15	15.68	31.04	25.57	60.00	50.00	-28.96	-24.43
6	24.36463	9.97	20.89	15.68	30.86	25.65	60.00	50.00	-29.14	-24.35

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



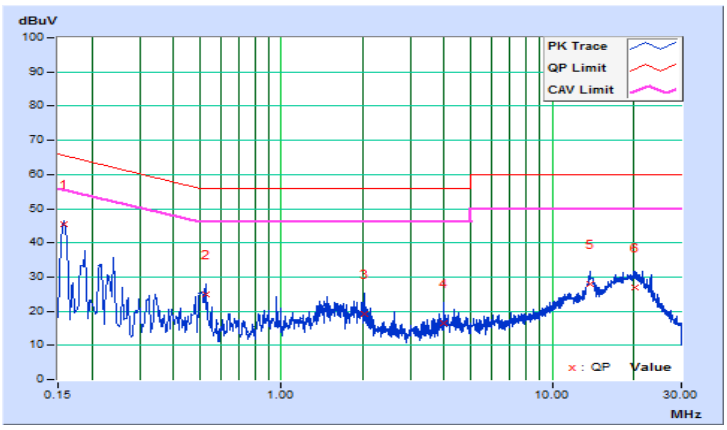
Test Mode D (BT-Directional antenna)

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

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15802	9.66	35.74	20.79	45.40	30.45	65.57	55.57	-20.17	-25.12
2	0.52544	9.65	15.38	8.60	25.03	18.25	56.00	46.00	-30.97	-27.75
3	2.01898	9.66	9.57	1.60	19.23	11.26	56.00	46.00	-36.77	-34.74
4	3.97789	9.71	6.86	1.17	16.57	10.88	56.00	46.00	-39.43	-35.12
5	13.84673	9.85	18.20	11.98	28.05	21.83	60.00	50.00	-31.95	-28.17
6	20.14183	9.87	17.13	11.53	27.00	21.40	60.00	50.00	-33.00	-28.60

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

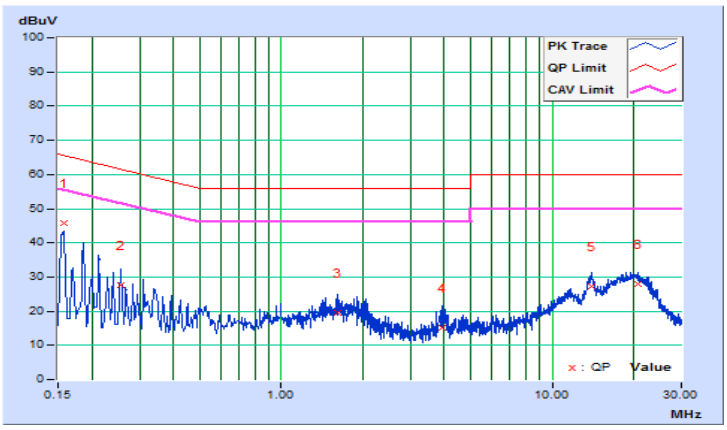


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15719	9.66	35.97	21.13	45.63	30.79	65.61	55.61	-19.98	-24.82
2	0.25557	9.66	17.79	0.51	27.45	10.17	61.57	51.57	-34.12	-41.40
3	1.60452	9.65	9.88	4.08	19.53	13.73	56.00	46.00	-36.47	-32.27
4	3.93488	9.71	5.47	2.80	15.18	12.51	56.00	46.00	-40.82	-33.49
5	13.97576	9.88	17.52	11.40	27.40	21.28	60.00	50.00	-32.60	-28.72
6	20.86909	9.95	17.91	12.44	27.86	22.39	60.00	50.00	-32.14	-27.61

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



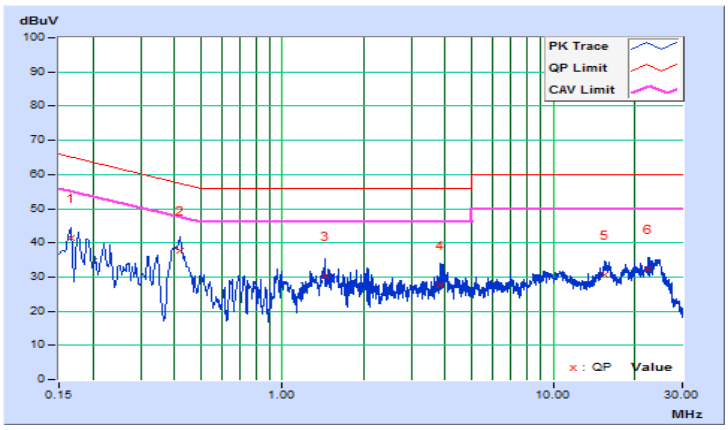
Test Mode E (BT-Omni antenna)

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

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16564	9.66	31.88	16.42	41.54	26.08	65.18	55.18	-23.64	-29.10
2	0.42000	9.65	28.15	21.28	37.80	30.93	57.45	47.45	-19.65	-16.52
3	1.43248	9.65	20.82	14.04	30.47	23.69	56.00	46.00	-25.53	-22.31
4	3.83322	9.71	17.77	9.94	27.48	19.65	56.00	46.00	-28.52	-26.35
5	15.45765	9.86	20.67	15.87	30.53	25.73	60.00	50.00	-29.47	-24.27
6	22.45655	9.87	22.53	17.09	32.40	26.96	60.00	50.00	-27.60	-23.04

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

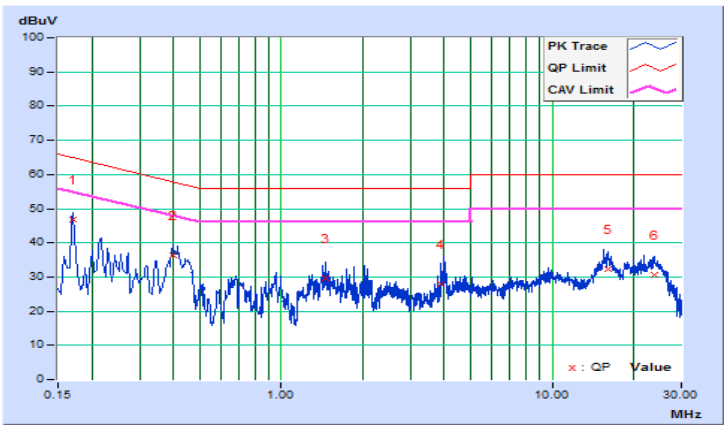


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16955	9.66	37.18	26.10	46.84	35.76	64.98	54.98	-18.14	-19.22
2	0.40024	9.65	26.79	15.02	36.44	24.67	57.85	47.85	-21.41	-23.18
3	1.45594	9.64	20.07	13.04	29.71	22.68	56.00	46.00	-26.29	-23.32
4	3.88796	9.71	18.18	9.11	27.89	18.82	56.00	46.00	-28.11	-27.18
5	15.99723	9.90	22.54	17.00	32.44	26.90	60.00	50.00	-27.56	-23.10
6	23.84851	9.96	20.83	15.47	30.79	25.43	60.00	50.00	-29.21	-24.57

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



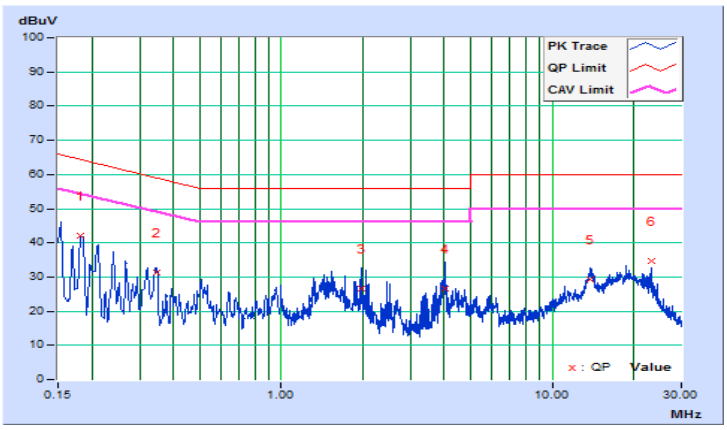
Test Mode F (BT-Omni antenna)

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

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18122	9.66	32.36	19.23	42.02	28.89	64.43	54.43	-22.41	-25.54
2	0.34560	9.65	21.70	20.48	31.35	30.13	59.07	49.07	-27.72	-18.94
3	1.97988	9.66	16.82	5.67	26.48	15.33	56.00	46.00	-29.52	-30.67
4	4.00526	9.71	16.82	8.35	26.53	18.06	56.00	46.00	-29.47	-27.94
5	13.87801	9.85	19.32	13.26	29.17	23.11	60.00	50.00	-30.83	-26.89
6	23.12907	9.88	24.86	21.58	34.74	31.46	60.00	50.00	-25.26	-18.54

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

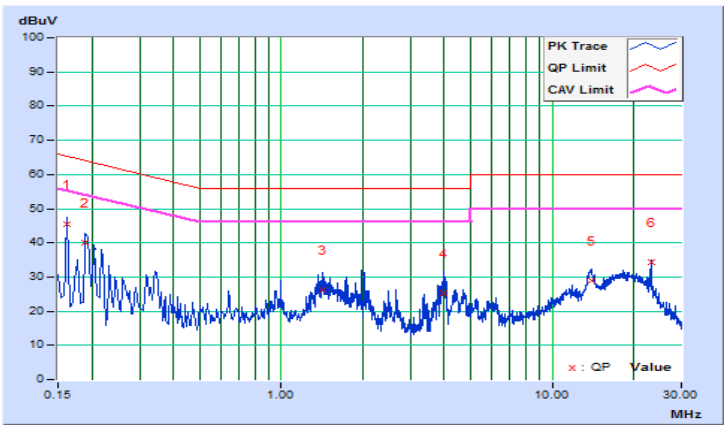


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16181	9.66	35.74	21.94	45.40	31.60	65.37	55.37	-19.97	-23.77
2	0.18910	9.66	30.41	15.64	40.07	25.30	64.08	54.08	-24.01	-28.78
3	1.41684	9.64	16.71	9.98	26.35	19.62	56.00	46.00	-29.65	-26.38
4	4.00135	9.71	15.65	7.01	25.36	16.72	56.00	46.00	-30.64	-29.28
5	13.90929	9.88	19.02	12.66	28.90	22.54	60.00	50.00	-31.10	-27.46
6	23.12907	9.96	24.24	20.92	34.20	30.88	60.00	50.00	-25.80	-19.12

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



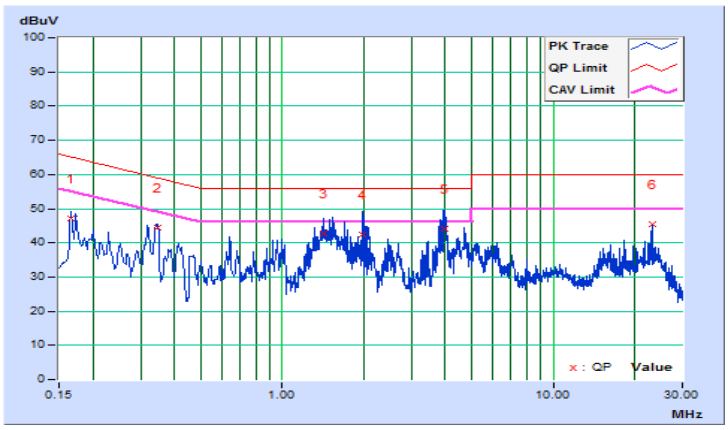
Test Mode G (BT-Directional antenna)

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

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16569	9.66	37.35	26.97	47.01	36.63	65.17	55.17	-18.16	-18.54
2	**0.34560**	**9.65**	**34.77**	**34.49**	**44.42**	**44.14**	**59.07**	**49.07**	**-14.65**	**-4.93**
3	1.41293	9.65	33.15	26.33	42.80	35.98	56.00	46.00	-13.20	-10.02
4	1.97206	9.66	32.75	20.24	42.41	29.90	56.00	46.00	-13.59	-16.10
5	3.99744	9.71	34.49	25.62	44.20	35.33	56.00	46.00	-11.80	-10.67
6	23.12907	9.88	35.65	32.44	45.53	42.32	60.00	50.00	-14.47	-7.68

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

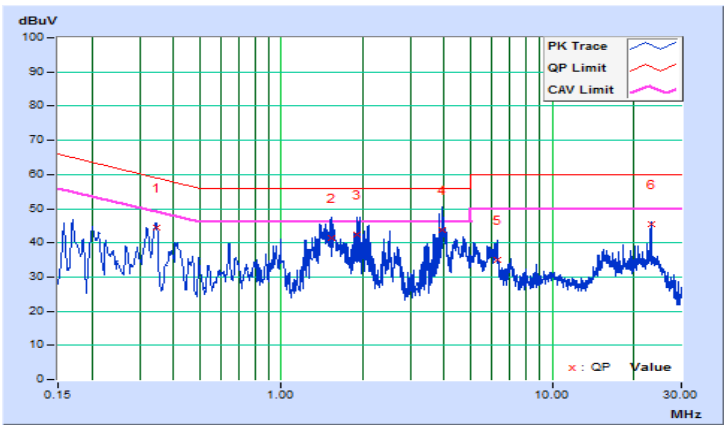


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.34560	9.65	34.83	34.47	44.48	44.12	59.07	49.07	-14.59	-4.95
2	1.53805	9.65	31.67	25.30	41.32	34.95	56.00	46.00	-14.68	-11.05
3	1.90168	9.66	32.93	25.58	42.59	35.24	56.00	46.00	-13.41	-10.76
4	3.94270	9.71	33.93	24.91	43.64	34.62	56.00	46.00	-12.36	-11.38
5	6.26524	9.76	25.39	17.23	35.15	26.99	60.00	50.00	-24.85	-23.01
6	23.12907	9.96	35.34	32.20	45.30	42.16	60.00	50.00	-14.70	-7.84

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



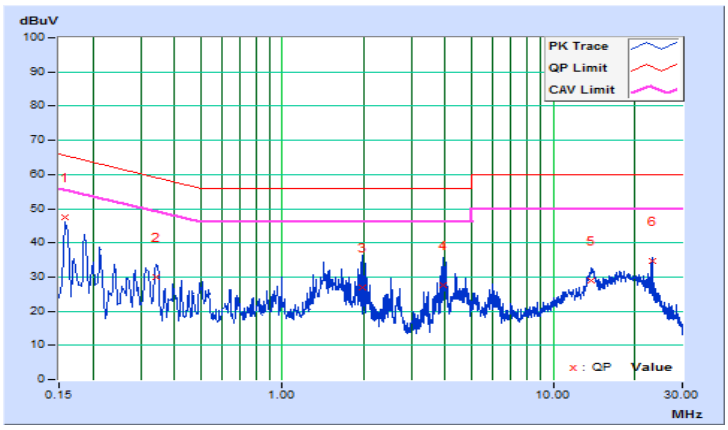
Test Mode H (BT-Directional antenna)

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

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15802	9.66	37.70	24.66	47.36	34.32	65.57	55.57	-18.21	-21.25
2	0.34198	9.65	20.23	17.98	29.88	27.63	59.16	49.16	-29.28	-21.53
3	1.98379	9.66	17.41	5.82	27.07	15.48	56.00	46.00	-28.93	-30.52
4	3.93879	9.71	17.95	7.84	27.66	17.55	56.00	46.00	-28.34	-28.45
5	13.76462	9.85	19.10	12.90	28.95	22.75	60.00	50.00	-31.05	-27.25
6	23.12907	9.88	24.88	21.69	34.76	31.57	60.00	50.00	-25.24	-18.43

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

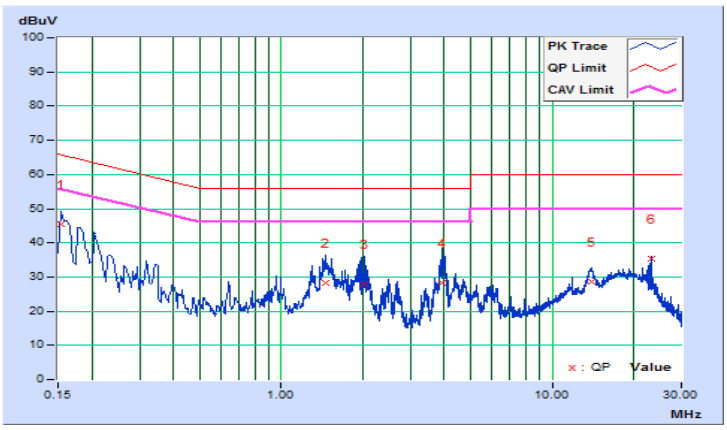


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	9.66	35.91	21.13	45.57	30.79	65.79	55.79	-20.22	-25.00
2	1.46376	9.64	18.78	11.60	28.42	21.24	56.00	46.00	-27.58	-24.76
3	2.02680	9.66	18.37	6.14	28.03	15.80	56.00	46.00	-27.97	-30.20
4	3.93097	9.71	18.42	8.12	28.13	17.83	56.00	46.00	-27.87	-28.17
5	14.03050	9.88	18.67	12.59	28.55	22.47	60.00	50.00	-31.45	-27.53
6	23.12907	9.96	25.40	22.31	35.36	32.27	60.00	50.00	-24.64	-17.73

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

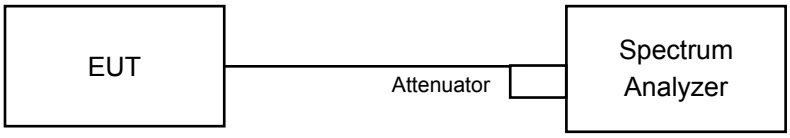


4.3 6dB Bandwidth Measurement

4.3.1 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 Test Setup



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

a. Set resolution bandwidth (RBW) = 100kHz.

b. Set the video bandwidth (VBW) ≥ 3 x RBW, Detector = peak.

c. Trace mode = max hold.

d. Sweep = auto couple.

e. Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

4.3.5 Deviation fromTest Standard

No deviation.

4.3.6 EUT Operating Conditions

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

4.3.7 Test Result

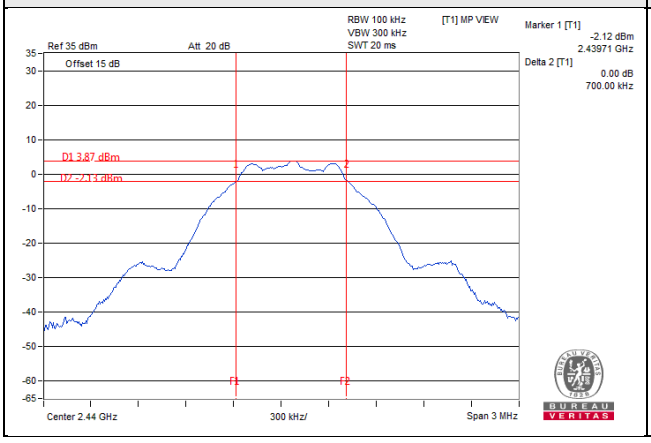
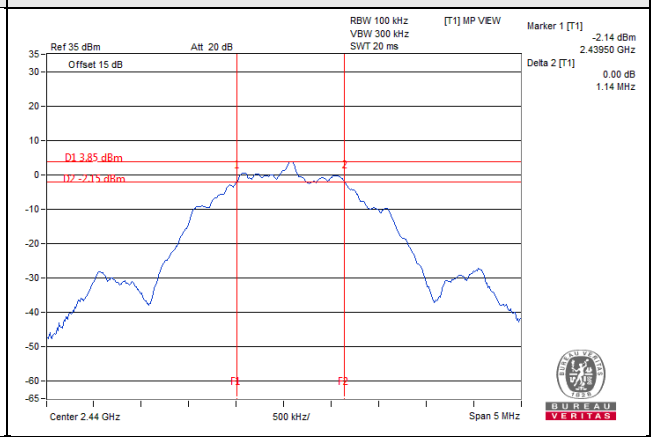
Test Mode E (BT-Omni antenna)

BT LE 4.0

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
0	2402	0.71	0.5	Pass
19	2440	0.70	0.5	Pass
39	2480	0.72	0.5	Pass

BT LE 5.0

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
0	2402	1.14	0.5	Pass
19	2440	1.14	0.5	Pass
39	2480	1.16	0.5	Pass

Spectrum Plot of Worst Value	
BT LE 4.0	BT LE 5.0
	

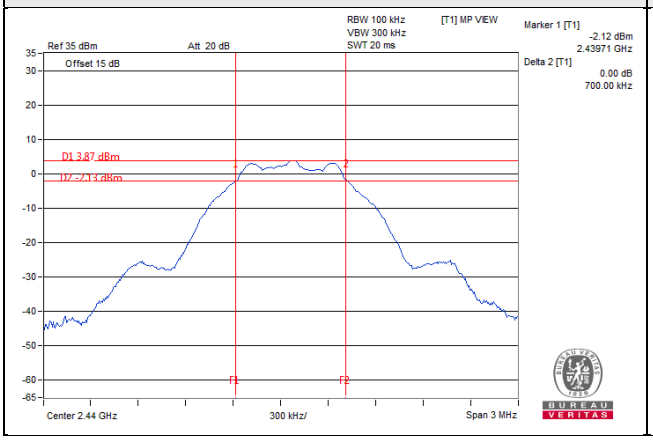
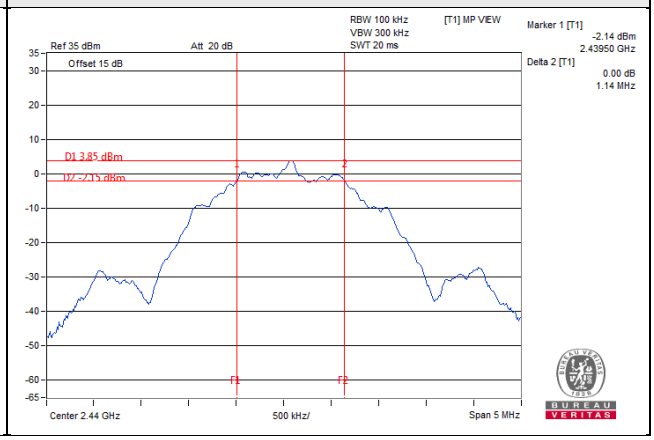
Test Mode G (BT-Directional antenna)

BT LE 4.0

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
0	2402	0.71	0.5	Pass
19	2440	0.70	0.5	Pass
39	2480	0.72	0.5	Pass

BT LE 5.0

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
0	2402	1.14	0.5	Pass
19	2440	1.14	0.5	Pass
39	2480	1.16	0.5	Pass

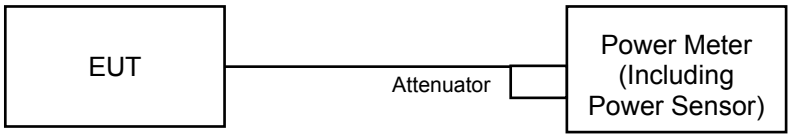
Spectrum Plot of Worst Value	
BT LE 4.0	BT LE 5.0
	

4.4 Conducted Output Power Measurement

4.4.1 Limits of Conducted Output Power Measurement

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

4.4.2 Test Setup



4.4.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.4.4 Test Procedures

For Peak Power
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.

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

4.4.5 Deviation from Test Standard

No deviation.

4.4.6 EUT Operating Conditions

Same as item 4.3.6.

4.4.7 Test Results

For Peak Power

Test Mode E (BT-Omni antenna)

BT LE 4.0

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass/Fail
0	2402	4.093	6.12	30.00	Pass
19	2440	4.207	6.24	30.00	Pass
39	2480	**4.345**	6.38	30.00	Pass

BT LE 5.0

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass/Fail
0	2402	4.102	6.13	30.00	Pass
19	2440	4.217	6.25	30.00	Pass
39	2480	**4.355**	6.39	30.00	Pass

Test Mode G (BT-Directional antenna)

BT LE 4.0

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass/Fail
0	2402	4.093	6.12	30.00	Pass
19	2440	4.207	6.24	30.00	Pass
39	2480	**4.345**	6.38	30.00	Pass

BT LE 5.0

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass/Fail
0	2402	4.102	6.13	30.00	Pass
19	2440	4.217	6.25	30.00	Pass
39	2480	**4.355**	6.39	30.00	Pass

For Average Power

Test Mode E (BT-Omni antenna)

BT LE 4.0

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
0	2402	2.449	3.89
19	2440	2.495	3.97
39	2480	2.518	4.01

BT LE 5.0

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
0	2402	2.443	3.88
19	2440	2.483	3.95
39	2480	2.512	4.00

Test Mode G (BT-Directional antenna)

BT LE 4.0

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
0	2402	2.449	3.89
19	2440	2.495	3.97
39	2480	2.518	4.01

BT LE 5.0

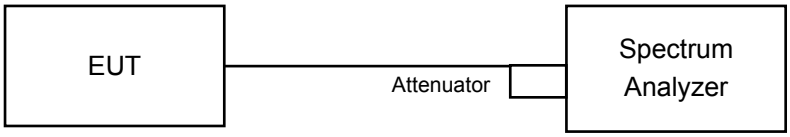
Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
0	2402	2.443	3.88
19	2440	2.483	3.95
39	2480	2.512	4.00

4.5 Power Spectral Density Measurement

4.5.1 Limits of Power Spectral Density Measurement

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 Test Setup



4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.5.4 Test Procedure

a. Set analyzer center frequency to DTS channel center frequency.

b. Set the span to 1.5 times the DTS bandwidth.

c. Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.

d. Set the VBW ≥ 3 × RBW.

e. Detector = peak.

f. Sweep time = auto couple.

g. Trace mode = max hold.

h. Allow trace to fully stabilize.

i. Use the peak marker function to determine the maximum amplitude level within the RBW.

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Condition

Same as item 4.3.6

4.5.7 Test Results

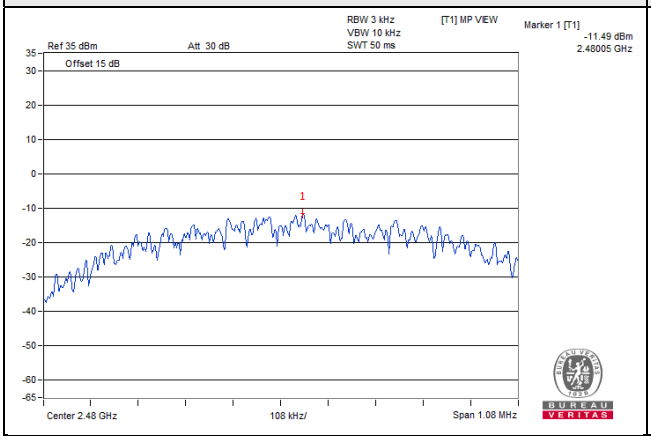
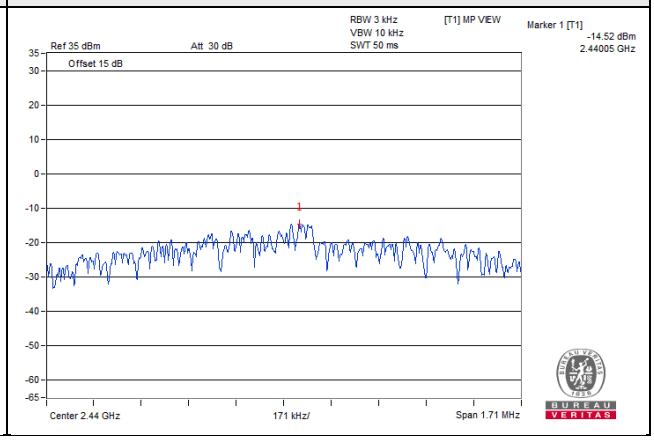
Test Mode E (BT-Omni antenna)

BT LE 4.0

Channel	Freq. (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass / Fail
0	2402	-11.66	8.00	Pass
19	2440	-11.61	8.00	Pass
39	2480	-11.49	8.00	Pass

BT LE 5.0

Channel	Freq. (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass / Fail
0	2402	-14.74	8.00	Pass
19	2440	-14.52	8.00	Pass
39	2480	-14.72	8.00	Pass

Spectrum Plot of Worst Value	
BT LE 4.0	BT LE 5.0
	

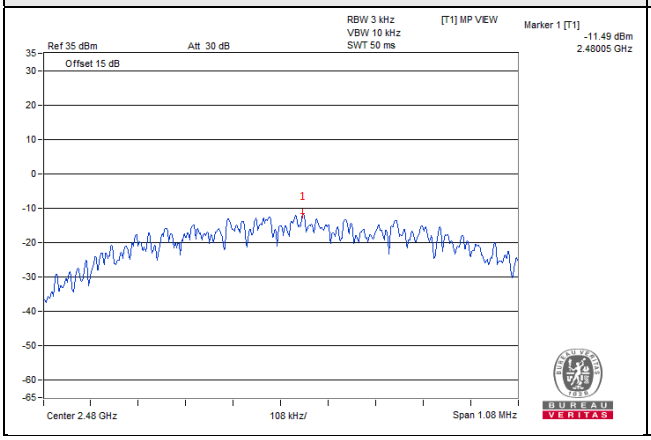
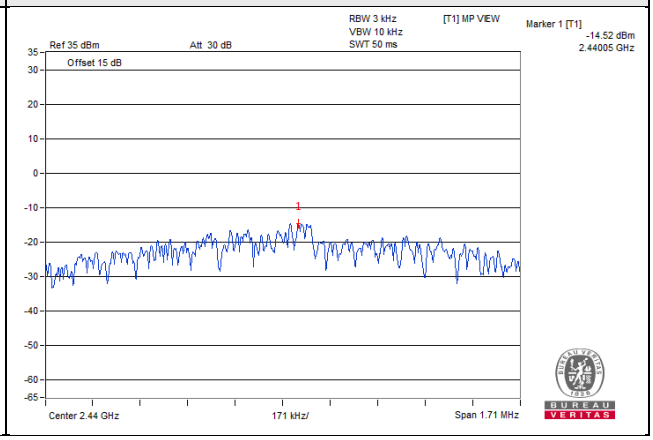
Test Mode G (BT-Directional antenna)

BT LE 4.0

Channel	Freq. (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass / Fail
0	2402	-11.66	8.00	Pass
19	2440	-11.61	8.00	Pass
39	2480	-11.49	8.00	Pass

BT LE 5.0

Channel	Freq. (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass / Fail
0	2402	-14.74	8.00	Pass
19	2440	-14.52	8.00	Pass
39	2480	-14.72	8.00	Pass

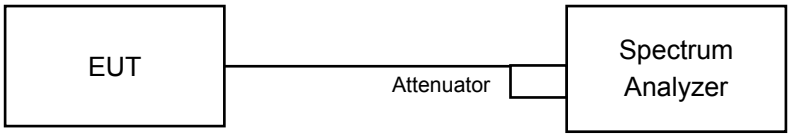
Spectrum Plot of Worst Value	
BT LE 4.0	BT LE 5.0
	

4.6 Conducted Out of Band Emission Measurement

4.6.1 Limits of Conducted Out of Band Emission Measurement

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

4.6.2 Test Setup



4.6.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.6.4 Test Procedure

MEASUREMENT PROCEDURE REF

a. Set the RBW = 100 kHz.
b. Set the VBW ≥ 300 kHz.
c. Detector = peak.
d. Sweep time = auto couple.
e. Trace mode = max hold.
f. Allow trace to fully stabilize.
g. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOBE

a. Set RBW = 100 kHz.
b. Set VBW ≥ 300 kHz.
c. Detector = peak.
d. Sweep = auto couple.
e. Trace Mode = max hold.
f. Allow trace to fully stabilize.
g. Use the peak marker function to determine the maximum amplitude level.

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

Same as item 4.3.6

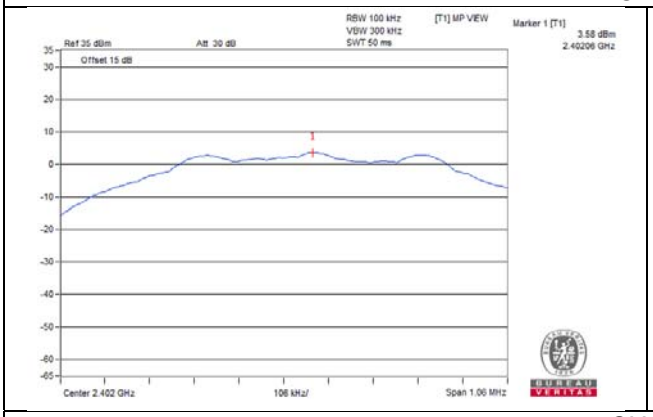
4.6.7 Test Results

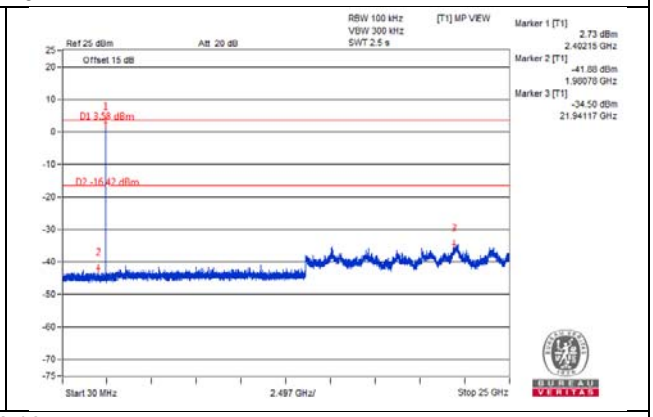
The conducted emission test is performed on each TX port of operating mode without summing or adding 10log (N) since the limit is relative emission limit.
The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement.

Test Mode E (BT-Omni antenna)

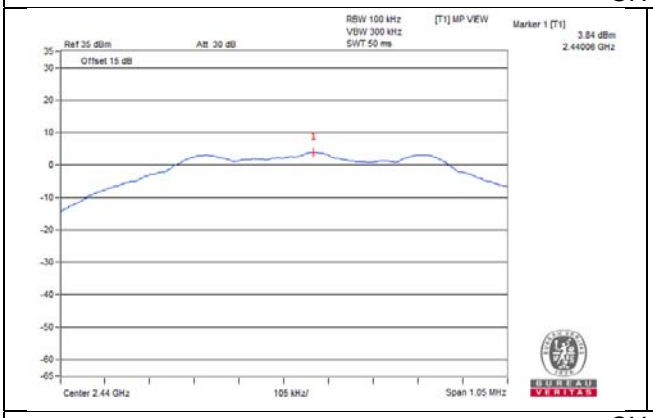
BT LE 4.0

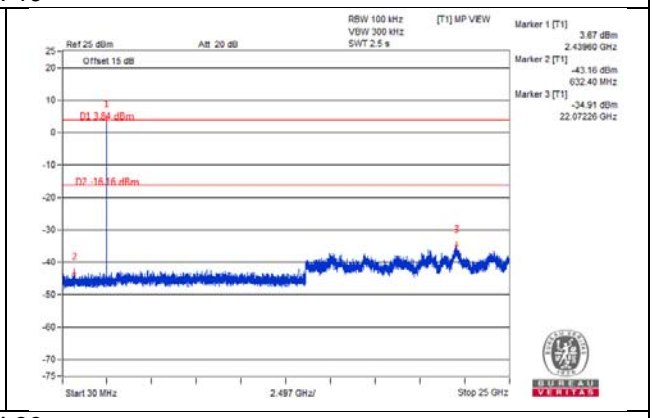
CH 0



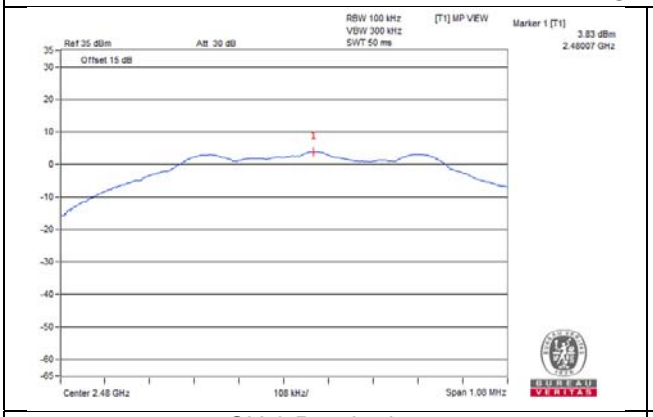


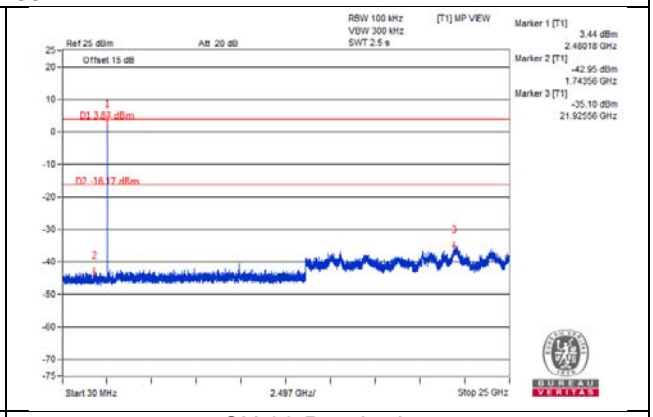
CH 19



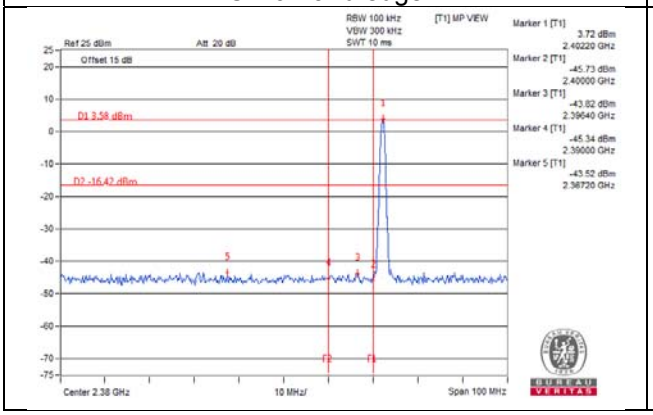


CH 39

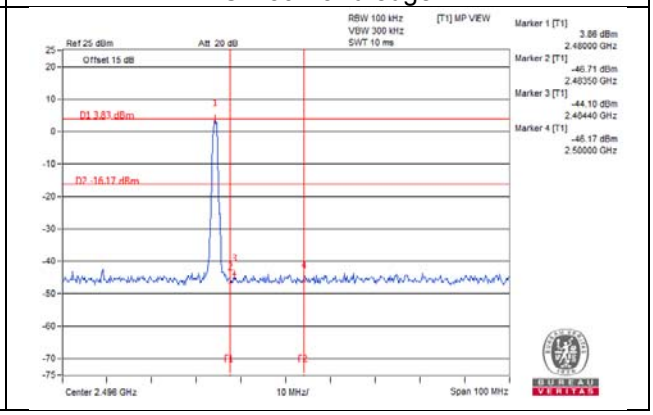




CH 0 Band edge

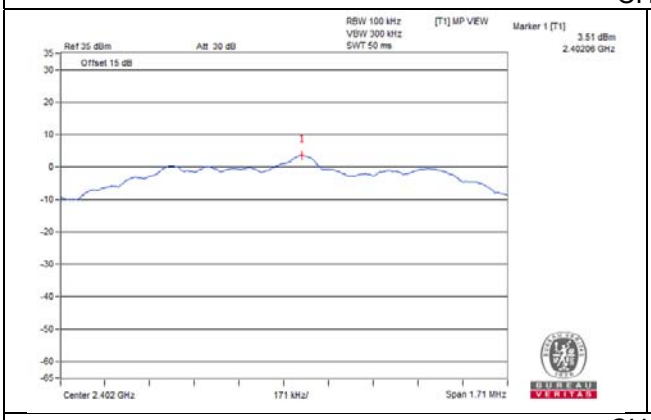


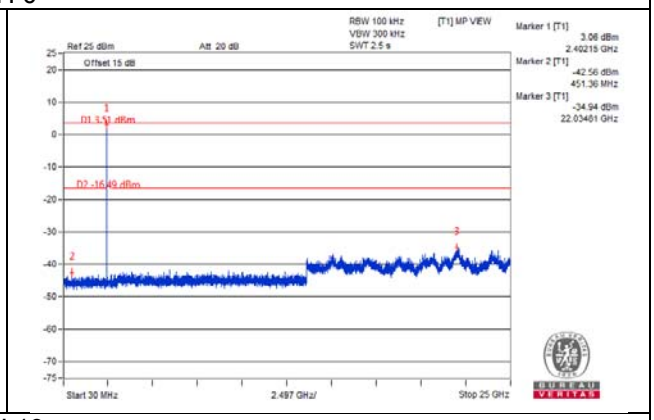
CH 39 Band edge



BT LE 5.0

CH 0





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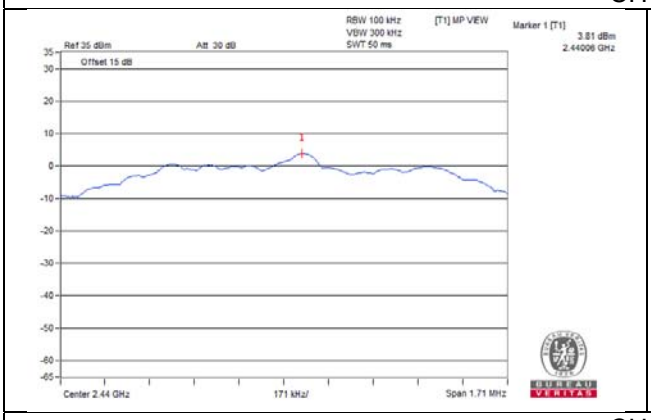

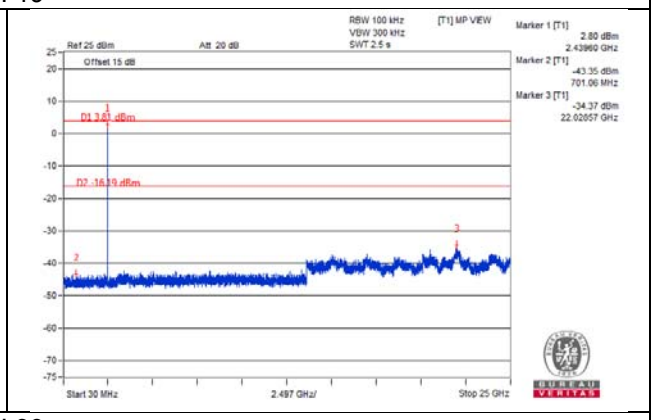

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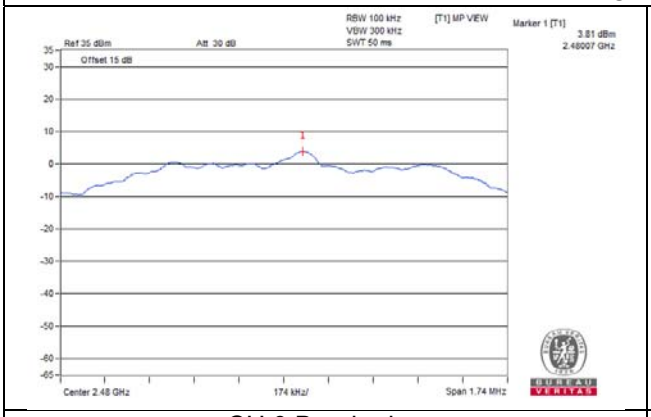
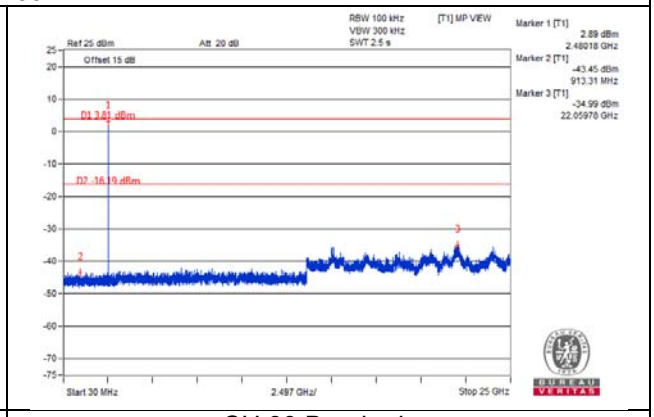
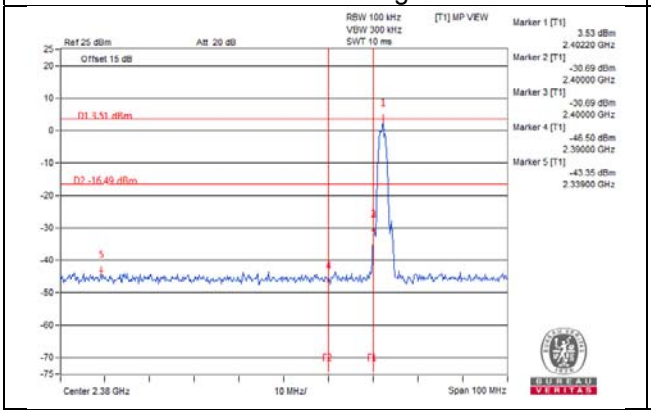
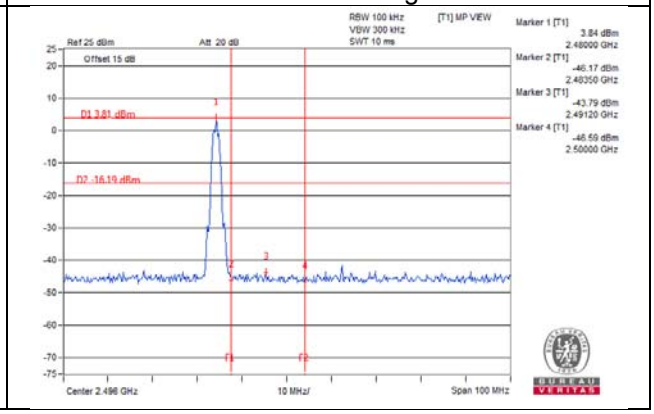




CH 0 Band edge



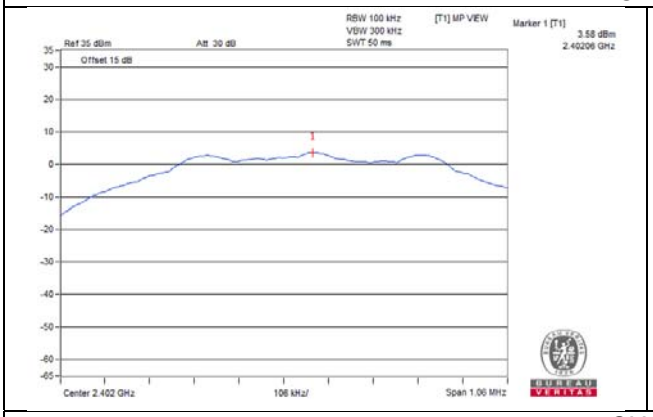
CH 39 Band edge

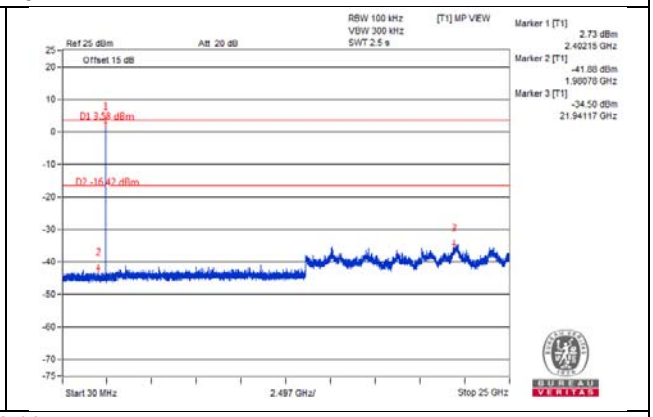


Test Mode G (BT-Directional antenna)

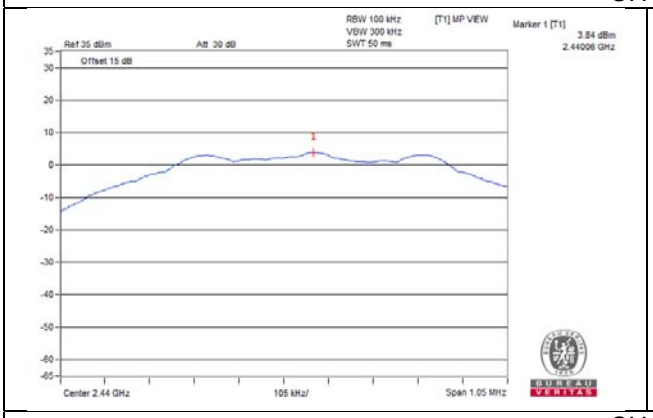
BT LE 4.0

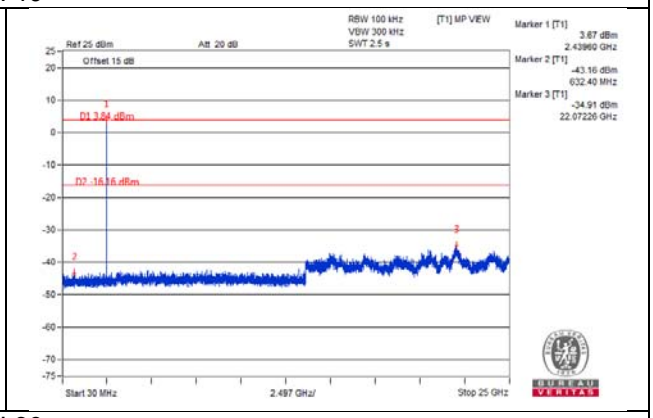
CH 0





CH 19





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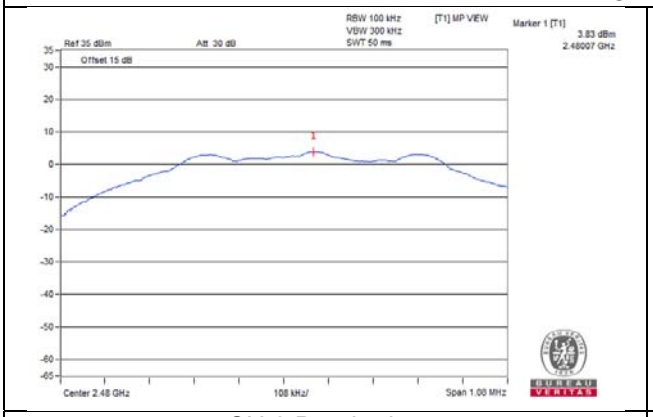
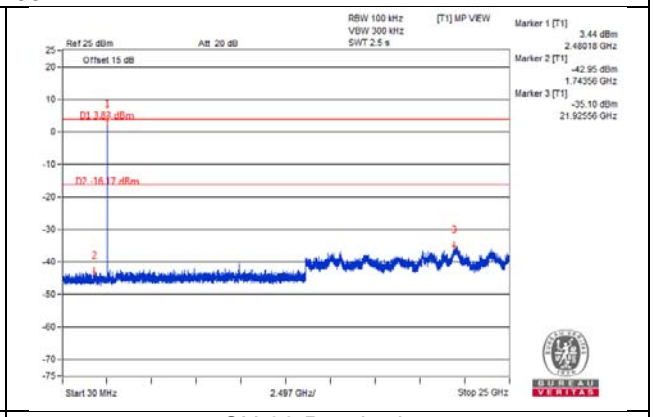
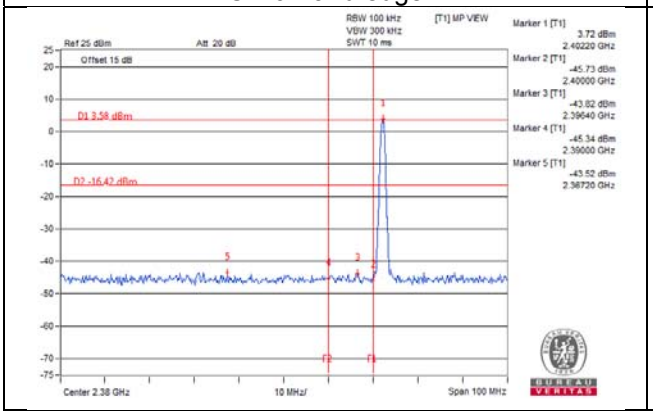
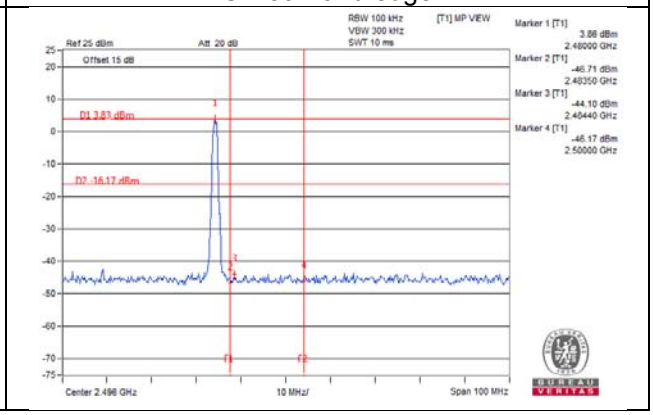




CH 0 Band edge

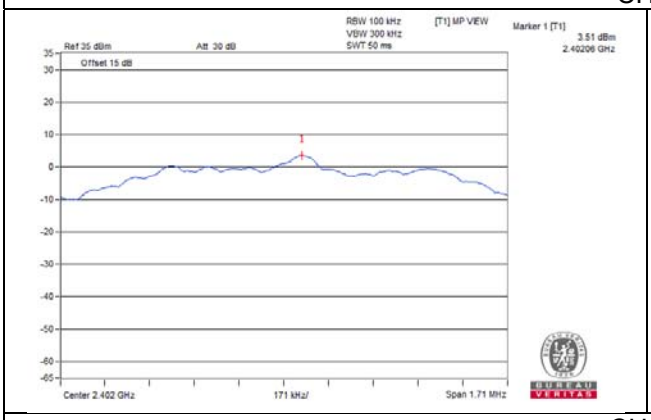


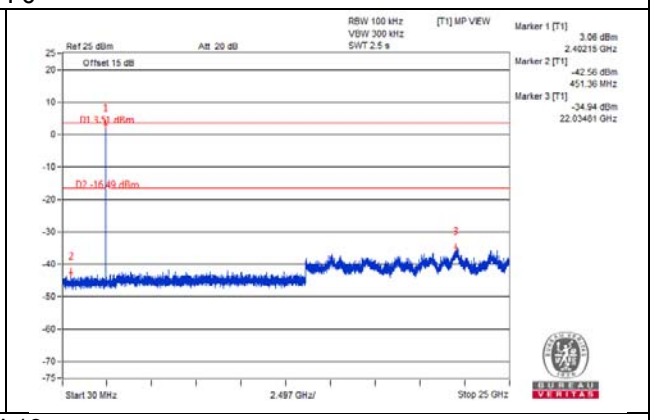
CH 39 Band edge



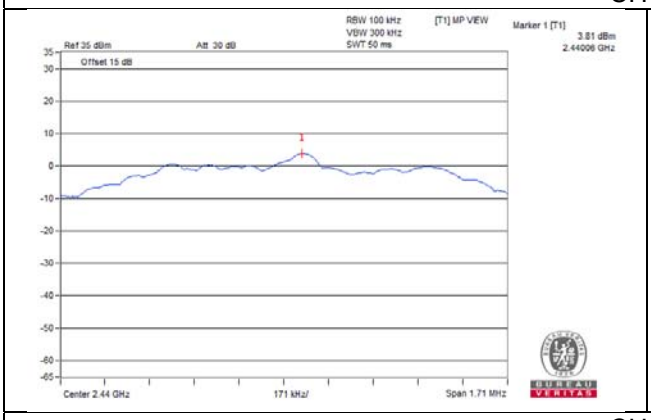
BT LE 5.0

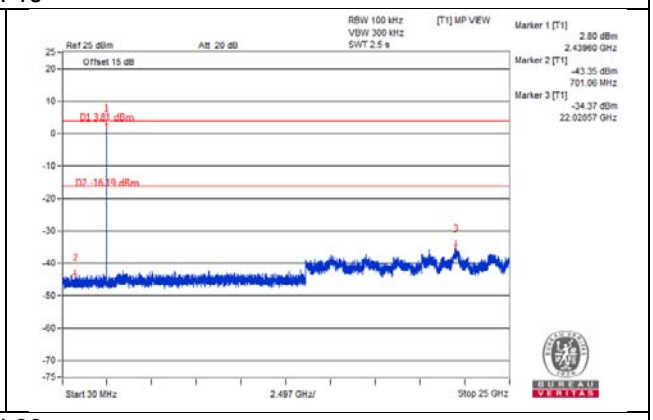
CH 0



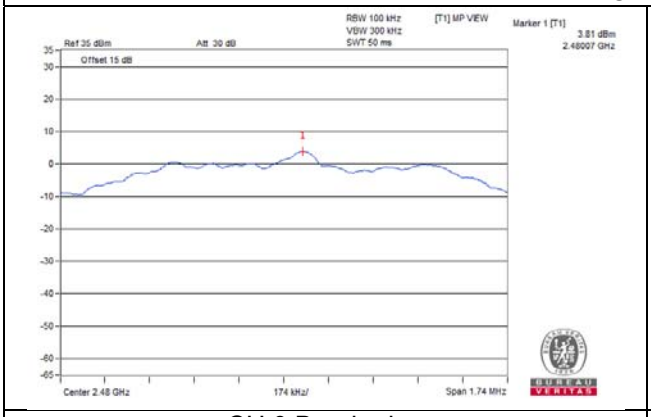


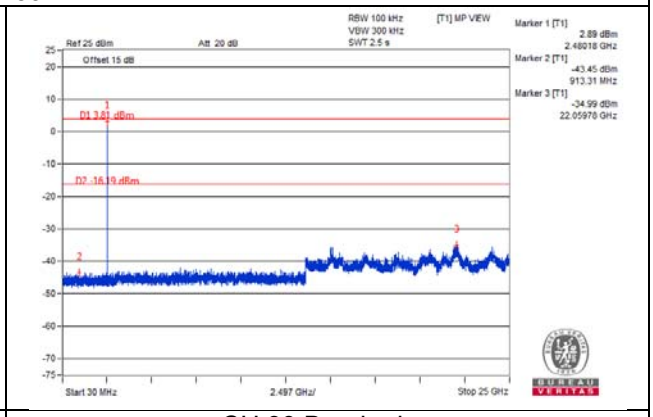
CH 19



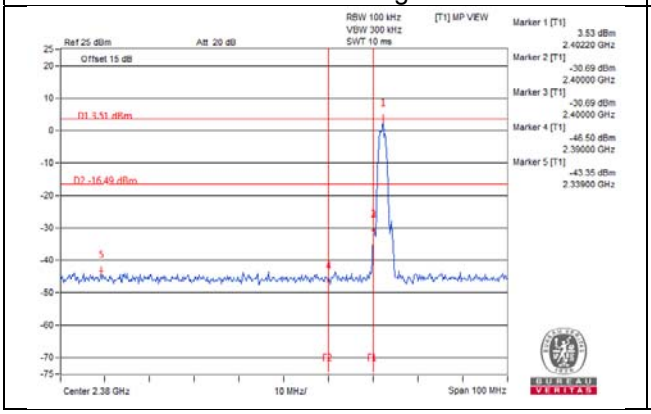


CH 39

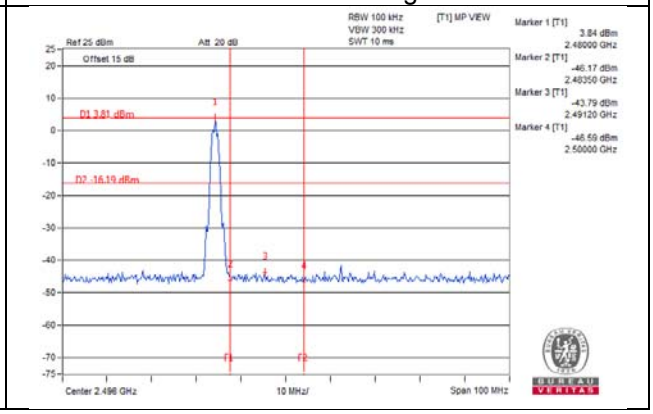




CH 0 Band edge



CH 39 Band edge



5 Pictures of Test Arrangements

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

Appendix – Information of the Testing Laboratories

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

If you have any comments, please feel free to contact us at the following:

Lin Kou EMC/RF Lab
Tel: 886-2-26052180
Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab
Tel: 886-3-6668565
Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab
Tel: 886-3-3183232
Fax: 886-3-3270892

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

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

--- END ---