

PARTIAL FCC TEST REPORT (BLUETOOTH)

REPORT NO.: RF120905C13-1

MODEL NO.: RZ09-0093

FCC ID: OY7-RZ090093

RECEIVED: Sep. 05, 2012

TESTED: Sep. 23 ~ Sep. 25, 2012

ISSUED: Sep. 28, 2012

APPLICANT: RAZER USA LTD.

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ISSUED BY: Bureau Veritas Consumer Products Services
(H.K.) Ltd., Taoyuan Branch

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF120905C13-1	Original release	Sep. 28, 2012



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1. CERTIFICATION

PRODUCT: Gaming Tablet

MODEL NO.: RZ09-0093

BRAND: Razer

APPLICANT: RAZER USA LTD.

TESTED: Sep. 23 ~ Sep. 25, 2012

TEST SAMPLE: Identical Prototype

STANDARDS: FCC Part 15, Subpart C (Section 15.247)

ANSI C63.10-2009

The above equipment (model: RZ09-0093) 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 EMC characteristics under the conditions specified in this report.

PREPARED BY : Joanna Wang , **DATE** : Sep. 28, 2012
Joanna Wang / Supervisor

APPROVED BY : Gary Chang , **DATE** : Sep. 28, 2012
Gary Chang / Technical Manager

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C (Bluetooth EDR)			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -14.45dB at 0.15000MHz.
15.247(a)(1) (iii)	Number of Hopping Frequency Used	N/A	Refer to NOTE below.
15.247(a)(1) (iii)	Dwell Time on Each Channel	N/A	Refer to NOTE below.
15.247(a)(1)	1. Hopping Channel Separation 2. Spectrum Bandwidth of a Frequency Hopping Sequence Spread Spectrum System	N/A	Refer to NOTE below.
15.247(b)	Maximum Peak Output Power	N/A	Refer to NOTE below.
15.247(d)	Transmitter Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -1.4dB at 144.60MHz.
15.247(d)	Band Edge Measurement	N/A	Refer to NOTE below.

NOTE: Test items for conducted and radiated emission test were performed for this report. Other testing data please refer to module (Brand: Intel, Model: 2230BNHMQ, FCC ID: PD92230BNH) Report No.: R85142.

APPLIED STANDARD: FCC Part 15, Subpart C (Bluetooth LE 4.0)			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -14.04dB at 0.15000MHz.
15.247(d) 15.209	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -1.9dB at 144.60MHz.
15.247(d)	Band Edge Measurement	N/A	Refer to NOTE below.
15.247(a)(2)	6dB bandwidth	N/A	Refer to NOTE below.
15.247(b)	Conducted power	N/A	Refer to NOTE below.
15.247(e)	Power Spectral Density	N/A	Refer to NOTE below.

NOTE: Test items for conducted and radiated emission test were performed for this report. Other testing data please refer to module (Brand: Intel, Model: 2230BNHMQ, FCC ID: PD92230BNH) Report No.: R85141.

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	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.44dB
Radiated emissions	30MHz ~ 200MHz	3.34dB
	200MHz ~1000MHz	3.35dB
	1GHz ~ 18GHz	2.26dB
	18GHz ~ 40GHz	1.94dB

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	Gaming Tablet	
MODEL NO.	RZ09-0093	
POWER SUPPLY	19.0Vdc (Adapter) 7.4Vdc (Li-ion battery)	
MODULATION TYPE	Bluetooth EDR	GFSK, $\pi/4$ -DQPSK, 8DPSK
	Bluetooth LE 4.0	GFSK
TRANSFER RATE	Bluetooth EDR	1/2/3Mbps
	Bluetooth LE 4.0	1Mbps
OPERATING FREQUENCY	2402 ~ 2480MHz	
NUMBER OF CHANNEL	Bluetooth EDR	79
	Bluetooth LE 4.0	40
CHANNEL SPACING	Bluetooth EDR	1MHz
	Bluetooth LE 4.0	2MHz
ANTENNA TYPE	PIFA antenna with 1.28dBi gain	
ANTENNA CONNECTOR	NA	
DATA CABLE	NA	
I/O PORTS	Refer to user's manual	
ACCESSORY DEVICES	Refer to Note as below	

NOTE:

- The EUT contains following accessories.

AC Adapter	Brand Name	Chicony
	Model Name	A11-065N1A
	Power Rating	I/P:100-240Vac, 50~60Hz, 1.7A; O/P: 19Vdc, 3.42A
	POWER LINE	AC: 2m non-shielded cable, with one ferrite core DC: 1m non-shielded cable, without ferrite core
Battery	Brand Name	Simplo
	Model Name	RC30-0093
	Power Rating	7.4Vdc, 5600mAh
	Type	Li-ion
Battery (Controller)	Brand Name	Simplo
	Model Name	RC81-0112
	Power Rating	14.8Vdc, 2800mAh
	Type	Li-ion
Controller	Brand Name	Razer
	Model Name	RC81-0109
WLAN+BT Combo Module	Brand Name	Intel
	Model Name	2230BNHMW
	FCC ID	PD92230BNH
	IC	1000M-2230BNH

- The above EUT information is declared by the manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

For Bluetooth EDR:

79 channels are provided to this EUT:

CHANNEL	FREQ. (MHz)	CHANNEL	FREQ. (MHz)	CHANNEL	FREQ. (MHz)	CHANNEL	FREQ. (MHz)
0	2402	20	2422	40	2442	60	2462
1	2403	21	2423	41	2443	61	2463
2	2404	22	2424	42	2444	62	2464
3	2405	23	2425	43	2445	63	2465
4	2406	24	2426	44	2446	64	2466
5	2407	25	2427	45	2447	65	2467
6	2408	26	2428	46	2448	66	2468
7	2409	27	2429	47	2449	67	2469
8	2410	28	2430	48	2450	68	2470
9	2411	29	2431	49	2451	69	2471
10	2412	30	2432	50	2452	70	2472
11	2413	31	2433	51	2453	71	2473
12	2414	32	2434	52	2454	72	2474
13	2415	33	2435	53	2455	73	2475
14	2416	34	2436	54	2456	74	2476
15	2417	35	2437	55	2457	75	2477
16	2418	36	2438	56	2458	76	2478
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	78	2480
19	2421	39	2441	59	2461		

For Bluetooth LE 4.0:

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

For Bluetooth EDR:

EUT CONFIGURE MODE	APPLICABLE TO			DESCRIPTION
	RE $\geq$ 1G	RE<1G	PLC	
A	√	√	√	EUT + controller
B	-	√	√	EUT + cradle

Where **RE $\geq$ 1G**: Radiated Emission above 1GHz **RE<1G**: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

NOTE: "-" means no effect

RADIATED EMISSION TEST (ABOVE 1GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, antenna ports (if EUT with antenna diversity architecture) and packet type.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TYPE	PACKET TYPE
A	0 to 78	0, 39, 78	GFSK	DH5
A	0 to 78	0, 39, 78	8DPSK	DH5

RADIATED EMISSION TEST (BELOW 1GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, antenna ports (if EUT with antenna diversity architecture) and packet type.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TYPE	PACKET TYPE
A, B	0 to 78	78	GFSK	DH5

POWER LINE CONDUCTED EMISSION TEST:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, antenna ports (if EUT with antenna diversity architecture) and packet type.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TYPE	PACKET TYPE
A, B	0 to 78	78	GFSK	DH5



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TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE $\geq$ 1G	26deg. C, 69%RH	120Vac, 60Hz	Antony Lee
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Antony Lee
PLC	25deg. C, 68%RH	120Vac, 60Hz	Sun Lin

For Bluetooth LE 4.0:

EUT CONFIGURE MODE	APPLICABLE TO			DESCRIPTION
	RE $\geq$ 1G	RE<1G	PLC	
A	√	√	√	EUT + controller
B	-	√	√	EUT + cradle

Where RE $\geq$ 1G: Radiated Emission above 1GHz RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

NOTE: "-" means no effect

RADIATED EMISSION TEST (ABOVE 1GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations 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	0 to 39	0, 19, 39	GFSK	1.0

RADIATED EMISSION TEST (BELOW 1GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations 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	0 to 39	19	GFSK	1.0

POWER LINE CONDUCTED EMISSION TEST:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations 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	0 to 39	19	GFSK	1.0

TEST CONDITION:

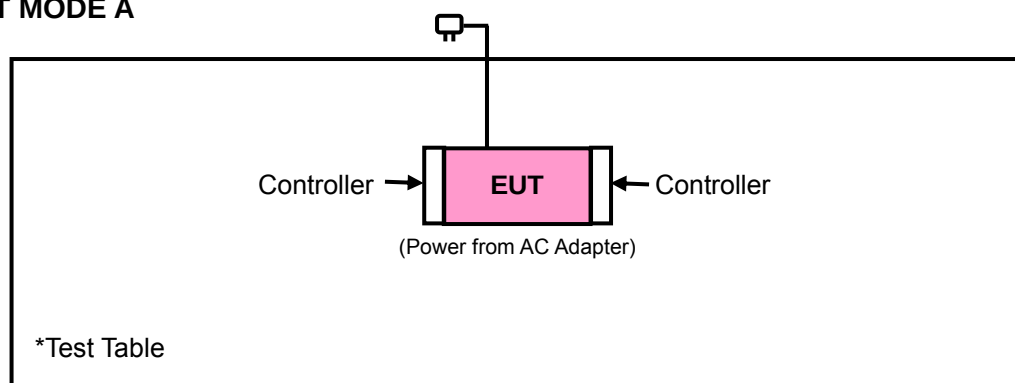
APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE $\geq$ 1G	26deg. C, 69%RH	120Vac, 60Hz	Antony Lee
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Antony Lee
PLC	25deg. C, 68%RH	120Vac, 60Hz	Sun Lin

3.3 DESCRIPTION OF SUPPORT UNITS

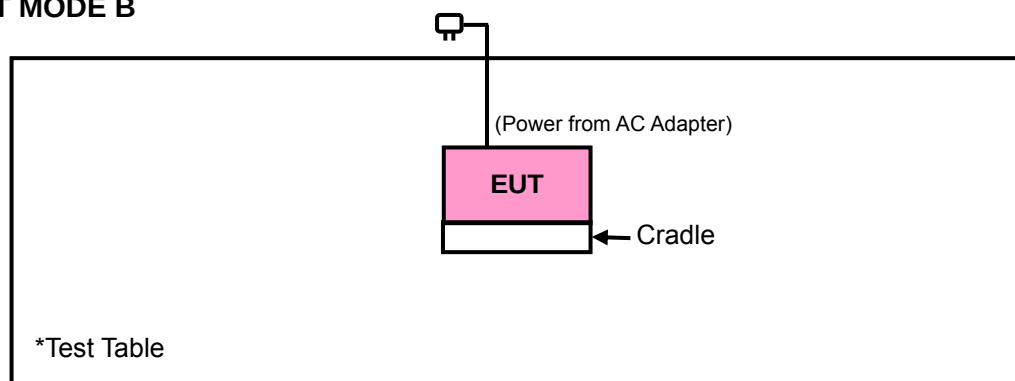
The EUT has been tested as an independent unit together with other necessary accessories or support units.

3.3.1 CONFIGURATION OF SYSTEM UNDER TEST

TEST MODE A



TEST MODE B



3.4 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart C (15.247)

ANSI C63.10-2009

KDB 558074 D01 DTS Meas Guidance v01

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

NOTE: The EUT has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

4. TEST TYPES AND RESULTS (FOR BLUETOOTH EDR)

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.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESIB7	100212	Aug. 06, 2012	Aug. 05, 2013
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Feb. 03, 2012	Feb. 02, 2013
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Apr. 06, 2012	Apr. 05, 2013
HORN Antenna SCHWARZBECK	9120D	209	Sep. 03, 2012	Sep. 02, 2013
HORN Antenna SCHWARZBECK	BBHA 9170	148	Jul. 11, 2012	Jul. 10, 2013
Loop Antenna	HFH2-Z2	100070	Jan. 31, 2012	Jan. 30, 2014
Preamplifier Agilent	8447D	2944A10633	Oct. 29, 2011	Oct. 28, 2012
Preamplifier Agilent	8449B	3008A01964	Oct. 29, 2011	Oct. 28, 2012
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250723/4	Aug. 28, 2012	Aug. 27, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 106	12738/6+309224/ 4	Aug. 28, 2012	Aug. 27, 2013
Software ADT.	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	017303	NA	NA
Turn Table ADT.	TT100	TT93021703	NA	NA
Turn Table Controller ADT.	SC100	SC93021703	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 calibration interval of the loop antenna is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. The test was performed in HwaYa Chamber 3.
4. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
5. The FCC Site Registration No. is 988962.
6. The IC Site Registration No. is IC 7450F-3.

4.1.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Height of receiving 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 Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

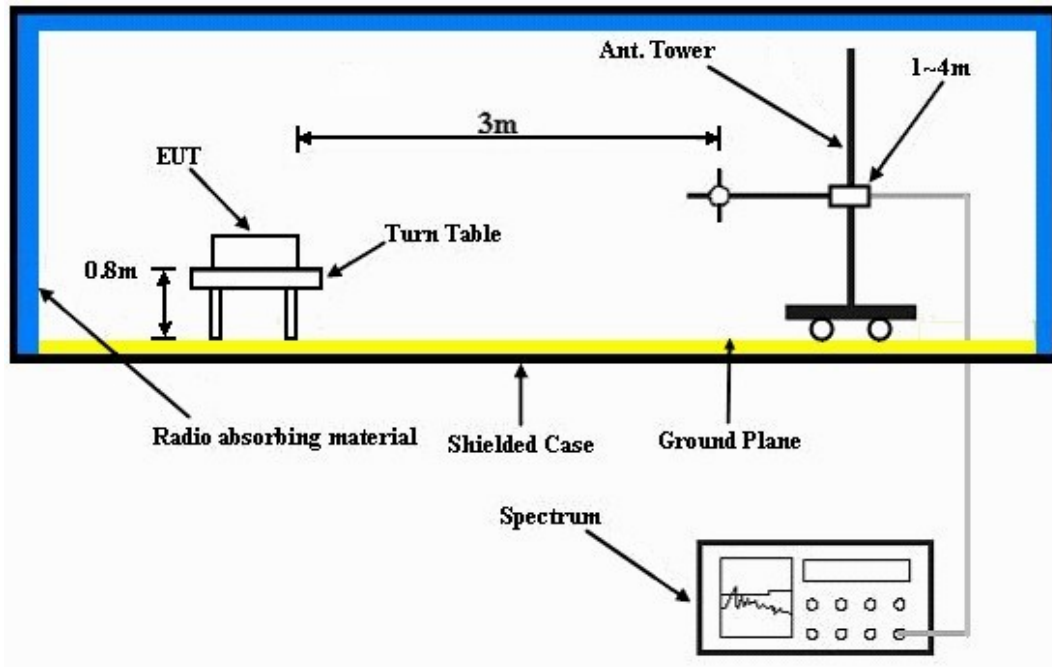
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz 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 the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.6 EUT OPERATING CONDITIONS

- Placed the EUT on a testing table.
- Use the software to control the EUT under transmission condition continuously at specific channel frequency.

4.1.7 TEST RESULTS

ABOVE 1GHz WORST-CASE DATA : GFSK

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 0	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 69%RH	TESTED BY	Antony Lee

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	41.1 PK	74.0	-32.9	1.00 H	27	10.30	30.80
2	2390.00	29.9 AV	54.0	-24.1	1.00 H	27	-0.90	30.80
3	#2398.00	53.6 PK	80.6	-27.0	1.00 H	27	22.80	30.80
4	#2398.00	46.2 AV	50.5	-4.3	1.00 H	27	15.40	30.80
5	#2400.00	52.4 PK	80.6	-28.2	1.00 H	27	21.50	30.90
6	#2400.00	22.3 AV	50.5	-28.2	1.00 H	27	-8.60	30.90
7	*2402.00	100.6 PK			1.00 H	27	69.70	30.90
8	*2402.00	70.5 AV			1.00 H	27	39.60	30.90
9	4804.00	47.0 PK	74.0	-27.0	1.05 H	78	10.10	36.90
10	4804.00	16.9 AV	54.0	-37.1	1.05 H	78	-20.00	36.90

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * “: Fundamental frequency.
6. The DH5 packet was the worst case duty cycle for a transmit dwell time on a channel, based upon Bluetooth theory the transmitter is on 0.625 * 5 per 296.25 ms per channel. Therefore, the duty cycle correlation factor be equal to: $20\log(3.125 / 100) = -30.1 \text{ dB}$.
7. Average value = peak reading + $20\log(\text{duty cycle})$.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 0	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 69%RH	TESTED BY	Antony Lee

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	41.9 PK	74.0	-32.1	1.00 V	172	11.10	30.80
2	2390.00	33.4 AV	54.0	-20.6	1.00 V	172	2.60	30.80
3	#2398.00	46.6 PK	70.3	-23.7	1.00 V	172	15.80	30.80
4	#2398.00	36.4 AV	40.2	-3.8	1.00 V	172	5.60	30.80
5	#2400.00	42.1 PK	70.3	-28.2	1.00 V	172	11.20	30.90
6	#2400.00	12.0 AV	40.2	-28.2	1.00 V	172	-18.90	30.90
7	*2402.00	90.3 PK			1.00 V	172	59.40	30.90
8	*2402.00	60.2 AV			1.00 V	172	29.30	30.90
9	4804.00	47.3 PK	74.0	-26.7	1.32 V	44	10.40	36.90
10	4804.00	17.2 AV	54.0	-36.8	1.32 V	44	-19.70	36.90

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * “: Fundamental frequency.
6. The DH5 packet was the worst case duty cycle for a transmit dwell time on a channel, based upon Bluetooth theory the transmitter is on 0.625 * 5 per 296.25 ms per channel. Therefore, the duty cycle correlation factor be equal to: $20\log(3.125 / 100) = -30.1$ dB.
7. Average value = peak reading + $20\log(\text{duty cycle})$.
8. “#”: The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 39	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 69%RH	TESTED BY	Antony Lee

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	*2441.00	100.9 PK			1.00 H	19	69.90	31.00
2	*2441.00	70.8 AV			1.00 H	19	39.80	31.00
3	4882.00	47.7 PK	74.0	-26.3	1.40 H	33	10.60	37.10
4	4882.00	17.6 AV	54.0	-36.4	1.40 H	33	-19.50	37.10
5	7323.00	53.7 PK	74.0	-20.3	1.22 H	44	10.00	43.70
6	7323.00	23.6 AV	54.0	-30.4	1.22 H	44	-20.10	43.70
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	*2441.00	94.4 PK			1.24 V	177	63.40	31.00
2	*2441.00	64.3 AV			1.24 V	177	33.30	31.00
3	4882.00	47.7 PK	74.0	-26.3	1.24 V	195	10.60	37.10
4	4882.00	17.6 AV	54.0	-36.4	1.24 V	195	-19.50	37.10
5	7323.00	52.4 PK	74.0	-21.6	1.00 V	0	8.70	43.70
6	7323.00	22.3 AV	54.0	-31.7	1.00 V	0	-21.40	43.70

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * “: Fundamental frequency.
6. The DH5 packet was the worst case duty cycle for a transmit dwell time on a channel, based upon Bluetooth theory the transmitter is on 0.625 * 5 per 296.25 ms per channel. Therefore, the duty cycle correlation factor be equal to: $20\log(3.125 / 100) = -30.1 \text{ dB}$.
7. Average value = peak reading + $20\log(\text{duty cycle})$.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 78	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 69%RH	TESTED BY	Antony Lee

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	101.0 PK			1.00 H	32	69.80	31.20
2	*2480.00	70.9 AV			1.00 H	32	39.70	31.20
3	2483.50	44.6 PK	74.0	-29.4	1.00 H	32	13.40	31.20
4	2483.50	14.5 AV	54.0	-39.5	1.00 H	32	-16.70	31.20
5	2485.50	46.3 PK	74.0	-27.7	1.00 H	32	15.10	31.20
6	2485.50	41.9 AV	54.0	-12.1	1.00 H	32	10.70	31.20
7	4960.00	54.5 PK	74.0	-19.5	1.26 H	65	17.20	37.30
8	4960.00	24.4 AV	54.0	-29.6	1.26 H	65	-12.90	37.30
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	95.5 PK			1.46 V	194	64.30	31.20
2	*2480.00	65.4 AV			1.46 V	194	34.20	31.20
3	2483.50	39.1 PK	74.0	-34.9	1.46 V	194	7.90	31.20
4	2483.50	9.0 AV	54.0	-45.0	1.46 V	194	-22.20	31.20
5	2485.50	45.3 PK	74.0	-28.7	1.46 V	94	14.10	31.20
6	2485.50	33.9 AV	54.0	-20.1	1.46 V	94	2.70	31.20
7	4960.00	53.5 PK	74.0	-20.5	1.00 V	240	16.20	37.30
8	4960.00	23.4 AV	54.0	-30.6	1.00 V	240	-13.90	37.30

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * “: Fundamental frequency.
6. The DH5 packet was the worst case duty cycle for a transmit dwell time on a channel, based upon Bluetooth theory the transmitter is on 0.625 * 5 per 296.25 ms per channel. Therefore, the duty cycle correlation factor be equal to: $20\log(3.125 / 100) = -30.1$ dB.
7. Average value = peak reading + $20\log(\text{duty cycle})$.

8DPSK

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 0	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 69%RH	TESTED BY	Antony Lee

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	44.5 PK	74.0	-29.5	1.22 H	55	13.70	30.80
2	2390.00	32.5 AV	54.0	-21.5	1.22 H	55	1.70	30.80
3	#2398.00	48.2 PK	81.0	-32.8	1.22 H	55	17.40	30.80
4	#2398.00	38.9 AV	50.9	-12.0	1.22 H	55	8.10	30.80
5	#2400.00	49.9 PK	81.0	-31.1	1.22 H	55	19.00	30.90
6	#2400.00	19.8 AV	50.9	-31.1	1.22 H	55	-11.10	30.90
7	*2402.00	101.0 PK			1.22 H	55	70.10	30.90
8	*2402.00	70.9 AV			1.22 H	55	40.00	30.90
9	4804.00	47.9 PK	74.0	-26.1	1.00 H	169	11.00	36.90
10	4804.00	17.8 AV	54.0	-36.2	1.00 H	169	-19.10	36.90

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * “: Fundamental frequency.
6. The DH5 packet was the worst case duty cycle for a transmit dwell time on a channel, based upon Bluetooth theory the transmitter is on 0.625 * 5 per 296.25 ms per channel. Therefore, the duty cycle correlation factor be equal to: $20\log(3.125 / 100) = -30.1$ dB.
7. Average value = peak reading + $20\log(\text{duty cycle})$.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 0	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 69%RH	TESTED BY	Antony Lee

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	48.0 PK	74.0	-26.0	1.04 V	346	17.20	30.80
2	2390.00	31.2 AV	54.0	-22.8	1.04 V	346	0.40	30.80
3	#2398.00	47.8 PK	70.4	-22.6	1.04 V	346	17.00	30.80
4	#2398.00	35.4 AV	40.3	-4.9	1.04 V	346	4.60	30.80
5	#2400.00	39.3 PK	70.4	-31.1	1.04 V	346	8.40	30.90
6	#2400.00	9.2 AV	40.3	-31.1	1.04 V	346	-21.70	30.90
7	*2402.00	90.4 PK			1.04 V	346	59.50	30.90
8	*2402.00	60.3 AV			1.04 V	346	29.40	30.90
9	4804.00	47.3 PK	74.0	-26.7	1.44 V	254	10.40	36.90
10	4804.00	17.2 AV	54.0	-36.8	1.44 V	254	-19.70	36.90

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * “: Fundamental frequency.
6. The DH5 packet was the worst case duty cycle for a transmit dwell time on a channel, based upon Bluetooth theory the transmitter is on 0.625 * 5 per 296.25 ms per channel. Therefore, the duty cycle correlation factor be equal to: $20\log(3.125 / 100) = -30.1$ dB.
7. Average value = peak reading + $20\log(\text{duty cycle})$.
8. "#": The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 39	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 69%RH	TESTED BY	Antony Lee

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	*2441.00	100.9 PK			1.02 H	16	69.90	31.00
2	*2441.00	70.8 AV			1.02 H	16	39.80	31.00
3	4882.00	46.8 PK	74.0	-27.2	1.00 H	125	9.70	37.10
4	4882.00	16.7 AV	54.0	-37.3	1.00 H	125	-20.40	37.10
5	7323.00	52.7 PK	74.0	-21.3	1.00 H	57	9.00	43.70
6	7323.00	22.6 AV	54.0	-31.4	1.00 H	57	-21.10	43.70
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	*2441.00	92.4 PK			1.00 V	15	61.40	31.00
2	*2441.00	62.3 AV			1.00 V	15	31.30	31.00
3	4882.00	47.6 PK	74.0	-26.4	1.00 V	123	10.50	37.10
4	4882.00	17.5 AV	54.0	-36.5	1.00 V	123	-19.60	37.10
5	7323.00	52.7 PK	74.0	-21.3	1.00 V	55	9.00	43.70
6	7323.00	22.6 AV	54.0	-31.4	1.00 V	55	-21.10	43.70

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * “: Fundamental frequency.
6. The DH5 packet was the worst case duty cycle for a transmit dwell time on a channel, based upon Bluetooth theory the transmitter is on 0.625 * 5 per 296.25 ms per channel. Therefore, the duty cycle correlation factor be equal to: $20\log(3.125 / 100) = -30.1 \text{ dB}$.
7. Average value = peak reading + $20\log(\text{duty cycle})$.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 78	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 69%RH	TESTED BY	Antony Lee

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	100.8 PK			1.21 H	45	69.60	31.20
2	*2480.00	70.7 AV			1.21 H	45	39.50	31.20
3	2483.50	47.2 PK	74.0	-26.8	1.00 H	18	16.00	31.20
4	2483.50	17.1 AV	54.0	-36.9	1.00 H	18	-14.10	31.20
5	2485.50	44.3 PK	74.0	-29.7	1.21 H	45	13.10	31.20
6	2485.50	36.2 AV	54.0	-17.8	1.21 H	45	-5.00	31.20
7	4960.00	47.5 PK	74.0	-26.5	1.00 H	18	10.20	37.30
8	4960.00	17.4 AV	54.0	-36.6	1.00 H	18	-19.90	37.30
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	92.0 PK			1.00 V	333	60.80	31.20
2	*2480.00	61.9 AV			1.00 V	333	30.70	31.20
3	2483.50	38.4 PK	74.0	-35.6	1.00 V	333	7.20	31.20
4	2483.50	8.3 AV	54.0	-45.7	1.00 V	333	-22.90	31.20
5	2485.50	39.7 PK	74.0	-34.3	1.00 V	13	8.50	31.20
6	2485.50	31.6 AV	54.0	-22.4	1.00 V	13	0.40	31.20
7	4960.00	46.6 PK	74.0	-27.4	1.00 V	214	9.30	37.30
8	4960.00	16.5 AV	54.0	-37.5	1.00 V	214	-20.80	37.30

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * “: Fundamental frequency.
6. The DH5 packet was the worst case duty cycle for a transmit dwell time on a channel, based upon Bluetooth theory the transmitter is on 0.625 * 5 per 296.25 ms per channel. Therefore, the duty cycle correlation factor be equal to: $20\log(3.125 / 100) = -30.1$ dB.
7. Average value = peak reading + $20\log(\text{duty cycle})$.

BELOW 1GHz WORST-CASE DATA : GFSK

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 78	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee
TEST MODE	A		

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	144.60	42.1 QP	43.5	-1.4	1.00 H	334	28.30	13.80
2	282.70	40.7 QP	46.0	-5.3	1.00 H	172	26.40	14.30
3	395.40	37.5 QP	46.0	-8.5	1.25 H	130	20.10	17.40
4	535.40	33.8 QP	46.0	-12.2	1.24 H	13	13.10	20.70
5	799.80	30.2 QP	46.0	-15.8	1.50 H	121	4.60	25.60
6	951.50	30.8 QP	46.0	-15.2	1.24 H	206	3.50	27.30
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	144.60	31.1 QP	43.5	-12.4	1.50 V	213	17.30	13.80
2	379.90	35.8 QP	46.0	-10.2	1.00 V	21	18.80	17.00
3	411.00	33.5 QP	46.0	-12.5	1.00 V	21	15.70	17.80
4	506.30	30.1 QP	46.0	-15.9	1.50 V	79	10.00	20.10
5	799.80	31.1 QP	46.0	-14.9	1.25 V	9	5.50	25.60
6	891.20	29.4 QP	46.0	-16.6	1.50 V	51	2.70	26.70

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 78	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee
TEST MODE	B		

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	150.40	32.3 QP	43.5	-11.2	1.00 H	235	18.20	14.10
2	216.60	32.2 QP	46.0	-13.8	1.00 H	46	20.50	11.70
3	335.20	33.9 QP	46.0	-12.1	1.00 H	12	18.00	15.90
4	414.90	33.9 QP	46.0	-12.1	2.00 H	130	16.00	17.90
5	747.30	34.5 QP	46.0	-11.5	2.00 H	178	10.30	24.20
6	840.70	33.4 QP	46.0	-12.6	1.50 H	167	7.30	26.10
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	189.30	28.8 QP	43.5	-14.7	1.00 V	356	17.00	11.80
2	294.30	32.3 QP	46.0	-13.7	1.74 V	141	17.60	14.70
3	504.30	29.9 QP	46.0	-16.1	1.00 V	327	9.90	20.00
4	582.10	32.3 QP	46.0	-13.7	1.99 V	8	10.60	21.70
5	747.30	31.2 QP	46.0	-14.8	1.99 V	322	7.00	24.20
6	799.80	32.6 QP	46.0	-13.4	1.50 V	16	7.00	25.60

REMARKS:

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

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB μ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

- NOTE:** 1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.
3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100291	Nov. 23, 2011	Nov. 22, 2012
RF signal cable Woken	5D-FB	Cable-HYC01-01	Dec. 29, 2011	Dec. 28, 2012
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Jul. 02, 2012	Jul. 01, 2013
LISN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Feb. 07, 2012	Feb. 06, 2013
Software ADT	BV ADT_Conf_ V7.3.7.3	NA	NA	NA

- NOTE:** 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Shielded Room 1.
3. The VCCI Site Registration No. is C-2040.

4.2.3 TEST PROCEDURES

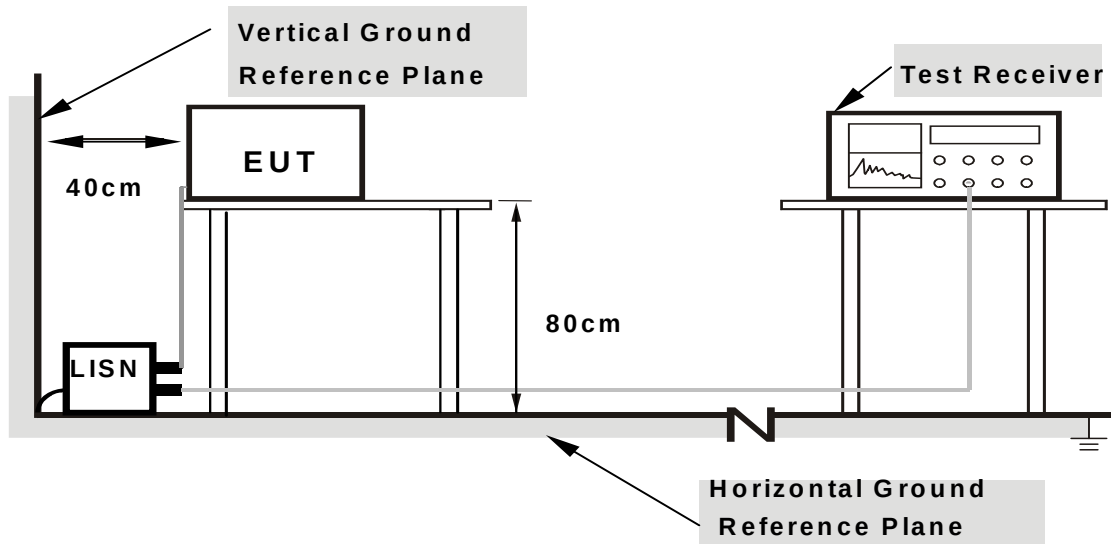
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling 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: All modes of operation were investigated and the worst-case emissions are reported.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

4.2.5 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

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

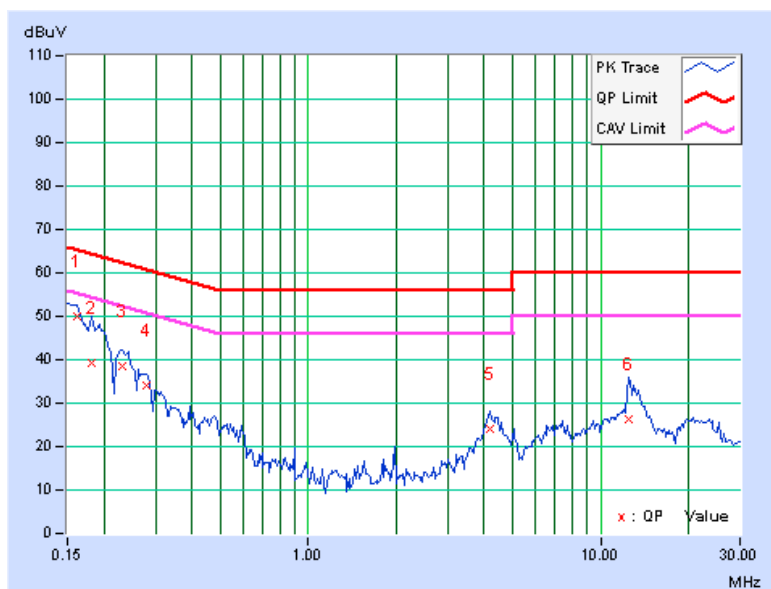
CONDUCTED WORST-CASE DATA : GFSK

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16172	0.12	49.94	35.68	50.06	35.80	65.38	55.38	-15.32	-19.58
2	0.18125	0.12	39.01	15.62	39.13	15.74	64.43	54.43	-25.29	-38.68
3	0.23203	0.13	38.39	25.35	38.52	25.48	62.38	52.38	-23.86	-26.90
4	0.27891	0.13	34.08	19.84	34.21	19.97	60.85	50.85	-26.64	-30.88
5	4.19141	0.35	23.54	18.15	23.89	18.50	56.00	46.00	-32.11	-27.50
6	12.43359	0.77	25.66	18.81	26.43	19.58	60.00	50.00	-33.57	-30.42

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.

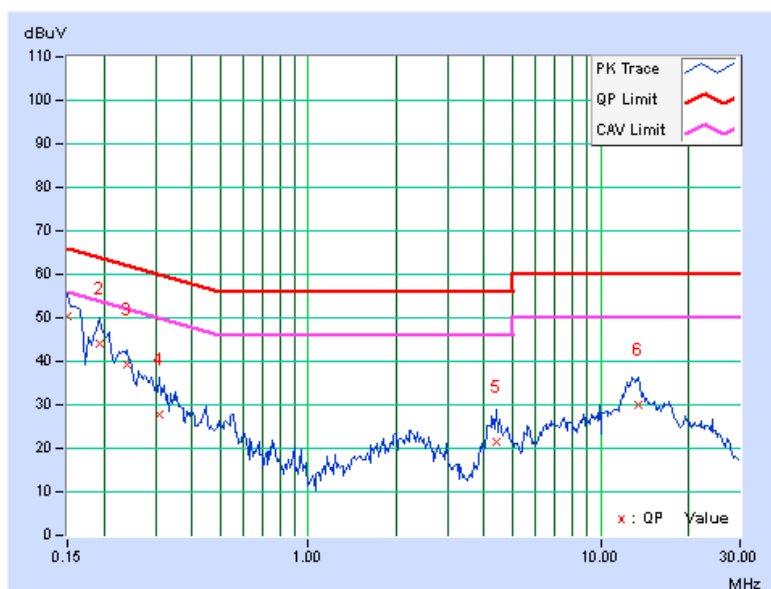


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	0.12	50.27	33.00	50.39	33.12	66.00	56.00	-15.61	-22.88
2	0.19297	0.14	43.78	29.01	43.92	29.15	63.91	53.91	-19.99	-24.76
3	0.23984	0.14	39.03	25.06	39.17	25.20	62.10	52.10	-22.93	-26.90
4	0.31016	0.15	27.77	12.42	27.92	12.57	59.97	49.97	-32.05	-37.40
5	4.39844	0.37	21.20	16.00	21.57	16.37	56.00	46.00	-34.43	-29.63
6	13.42578	0.72	29.38	23.56	30.10	24.28	60.00	50.00	-29.90	-25.72

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.

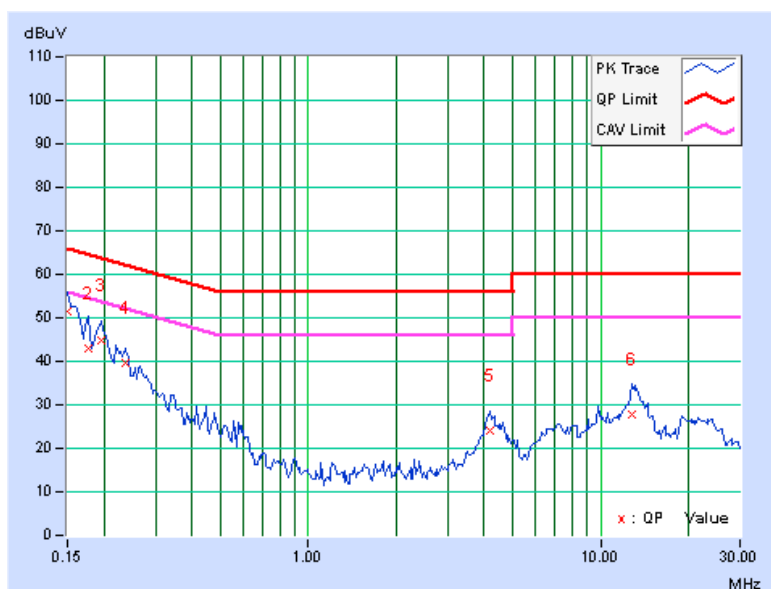


PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	(dB)	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	0.11	51.44	32.70	51.55	32.81	66.00	56.00	-14.45	-23.19
2	0.17734	0.12	42.76	24.35	42.88	24.47	64.61	54.61	-21.73	-30.14
3	0.19687	0.13	44.75	30.89	44.88	31.02	63.74	53.74	-18.86	-22.72
4	0.23594	0.13	39.33	25.19	39.46	25.32	62.24	52.24	-22.78	-26.92
5	4.16016	0.35	23.69	18.22	24.04	18.57	56.00	46.00	-31.96	-27.43
6	12.83984	0.79	26.85	20.44	27.64	21.23	60.00	50.00	-32.36	-28.77

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.

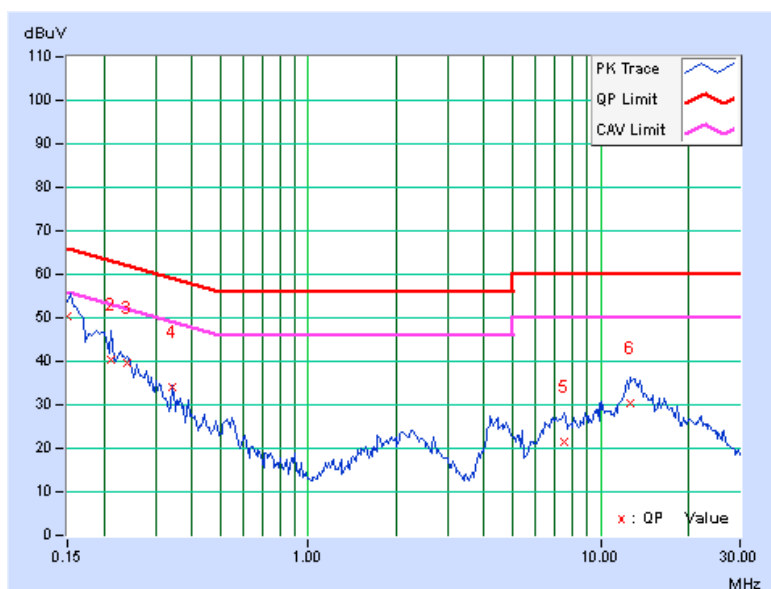


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	(dB)	[dB (uV)]	[dB (uV)]	[dB (uV)]	[dB (uV)]	[dB (uV)]	[dB (uV)]	(dB)	(dB)
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	0.12	50.17	32.76	50.29	32.88	66.00	56.00	-15.71	-23.12
2	0.21250	0.14	40.37	20.13	40.51	20.27	63.11	53.11	-22.60	-32.84
3	0.23984	0.14	39.64	25.34	39.78	25.48	62.10	52.10	-22.32	-26.62
4	0.34141	0.15	34.08	19.05	34.23	19.20	59.17	49.17	-24.94	-29.97
5	7.49609	0.49	20.95	14.79	21.44	15.28	60.00	50.00	-38.56	-34.72
6	12.60547	0.69	29.52	23.67	30.21	24.36	60.00	50.00	-29.79	-25.64

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.



5. TEST TYPES AND RESULTS (FOR BLUETOOTH LE 4.0)

5.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

5.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

Same as 4.1.1.

5.1.2 TEST INSTRUMENTS

Same as 4.1.2.

5.1.3 TEST PROCEDURES

Same as 4.1.3.

5.1.4 DEVIATION FROM TEST STANDARD

No deviation.

5.1.5 TEST SETUP

Same as 4.1.5.

5.1.6 EUT OPERATING CONDITIONS

Same as 4.1.6.

5.1.7 TEST RESULTS

ABOVE 1GHz WORST-CASE DATA :

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 0	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 69%RH	TESTED BY	Antony Lee

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	53.1 PK	74.0	-20.9	1.00 H	15	22.30	30.80
2	2390.00	43.7 AV	54.0	-10.3	1.00 H	15	12.90	30.80
3	*2402.00	99.3 PK			1.00 H	18	68.40	30.90
4	*2402.00	94.4 AV			1.00 H	18	63.50	30.90
5	4804.00	47.1 PK	74.0	-26.9	1.00 H	147	10.20	36.90
6	4804.00	34.4 AV	54.0	-19.6	1.00 H	147	-2.50	36.90
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	53.3 PK	74.0	-20.7	1.00 V	344	22.50	30.80
2	2390.00	43.6 AV	54.0	-10.4	1.00 V	344	12.80	30.80
3	*2402.00	89.2 PK			1.00 V	347	58.30	30.90
4	*2402.00	84.1 AV			1.00 V	347	53.20	30.90
5	4804.00	46.8 PK	74.0	-27.2	1.00 V	11	9.90	36.90
6	4804.00	34.3 AV	54.0	-19.7	1.00 V	11	-2.60	36.90

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 19	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 69%RH	TESTED BY	Antony Lee

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	102.7 PK			1.00 H	20	71.70	31.00
2	*2440.00	98.4 AV			1.00 H	20	67.40	31.00
3	4880.00	46.7 PK	74.0	-27.3	1.00 H	63	9.60	37.10
4	4880.00	34.2 AV	54.0	-19.8	1.00 H	63	-2.90	37.10
5	7320.00	52.6 PK	74.0	-21.4	1.00 H	254	8.90	43.70
6	7320.00	40.7 AV	54.0	-13.3	1.00 H	254	-3.00	43.70
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	93.4 PK			1.00 V	6	62.40	31.00
2	*2440.00	89.6 AV			1.00 V	6	58.60	31.00
3	4880.00	48.0 PK	74.0	-26.0	1.00 V	159	10.90	37.10
4	4880.00	33.8 AV	54.0	-20.2	1.00 V	159	-3.30	37.10
5	7320.00	52.3 PK	74.0	-21.7	1.00 V	6	8.60	43.70
6	7320.00	39.9 AV	54.0	-14.1	1.00 V	6	-3.80	43.70

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 39	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 69%RH	TESTED BY	Antony Lee

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	99.7 PK			1.00 H	23	68.50	31.20
2	*2480.00	95.8 AV			1.00 H	23	64.60	31.20
3	2483.50	57.3 PK	74.0	-16.7	1.00 H	5	25.90	31.20
4	2483.50	49.9 AV	54.0	-4.1	1.00 H	5	18.70	31.20
5	4960.00	47.3 PK	74.0	-26.7	1.00 H	147	10.00	37.30
6	4960.00	35.3 AV	54.0	-18.7	1.00 H	147	-2.00	37.30
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	92.1 PK			1.00 V	334	60.90	31.20
2	*2480.00	88.8 AV			1.00 V	334	57.60	31.20
3	2483.50	57.4 PK	74.0	-16.6	1.00 V	334	26.20	31.20
4	2483.50	49.8 AV	54.0	-4.2	1.00 V	334	18.60	31.20
5	4960.00	47.2 PK	74.0	-26.8	1.00 V	26	9.90	37.30
6	4960.00	35.3 AV	54.0	-18.7	1.00 V	26	-2.00	37.30

REMARKS:

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

BELOW 1GHz WORST-CASE DATA :

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 19	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee
TEST MODE	A		

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	144.60	41.6 QP	43.5	-1.9	1.24 H	16	27.80	13.80
2	282.70	41.2 QP	46.0	-4.8	1.00 H	176	26.90	14.30
3	342.90	37.5 QP	46.0	-8.5	1.75 H	343	21.40	16.10
4	401.30	37.7 QP	46.0	-8.3	1.00 H	132	20.10	17.60
5	517.90	35.1 QP	46.0	-10.9	1.24 H	136	14.80	20.30
6	895.10	32.0 QP	46.0	-14.0	1.50 H	92	5.30	26.70
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	88.20	30.7 QP	43.5	-12.8	1.00 V	177	22.20	8.50
2	278.80	28.4 QP	46.0	-17.6	1.24 V	216	14.30	14.10
3	420.70	39.8 QP	46.0	-6.2	1.00 V	99	21.80	18.00
4	469.30	34.8 QP	46.0	-11.2	1.00 V	115	15.60	19.20
5	799.80	33.1 QP	46.0	-12.9	1.24 V	15	7.50	25.60
6	869.80	32.9 QP	46.0	-13.1	1.00 V	100	6.50	26.40

REMARKS:

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 19	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee
TEST MODE	B		

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	150.40	34.0 QP	43.5	-9.5	1.75 H	241	19.90	14.10
2	216.60	36.4 QP	46.0	-9.6	1.50 H	43	24.70	11.70
3	288.50	29.1 QP	46.0	-16.9	1.50 H	122	14.60	14.50
4	335.20	30.8 QP	46.0	-15.2	1.25 H	20	14.90	15.90
5	521.80	26.6 QP	46.0	-19.4	1.50 H	206	6.20	20.40
6	840.70	33.4 QP	46.0	-12.6	1.50 H	168	7.30	26.10
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	57.10	28.3 QP	40.0	-11.7	1.00 V	353	14.70	13.60
2	150.40	27.7 QP	43.5	-15.8	1.00 V	172	13.60	14.10
3	298.20	29.4 QP	46.0	-16.6	1.50 V	166	14.50	14.90
4	414.90	30.9 QP	46.0	-15.1	1.25 V	310	13.00	17.90
5	504.30	28.1 QP	46.0	-17.9	1.00 V	12	8.10	20.00
6	799.80	32.8 QP	46.0	-13.2	1.50 V	15	7.20	25.60

REMARKS:

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

5.2 CONDUCTED EMISSION MEASUREMENT

5.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

Same as 4.2.1.

5.2.2 TEST INSTRUMENTS

Same as 4.2.2.

5.2.3 TEST PROCEDURES

Same as 4.2.3.

5.2.4 DEVIATION FROM TEST STANDARD

No deviation.

5.2.5 TEST SETUP

Same as 4.2.5.

5.2.6 EUT OPERATING CONDITIONS

Same as 4.2.6.

5.2.7 TEST RESULTS

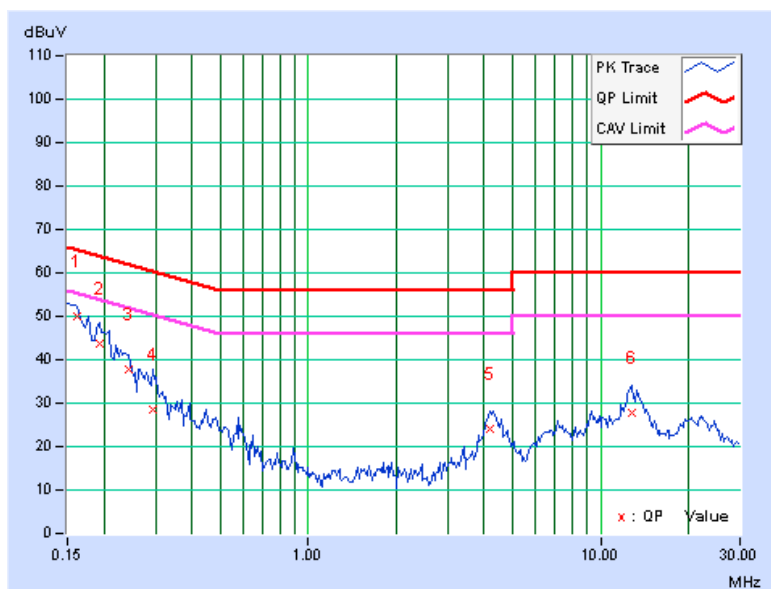
CONDUCTED WORST-CASE DATA :

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16172	0.12	49.96	35.49	50.08	35.61	65.38	55.38	-15.30	-19.77
2	0.19297	0.13	43.66	28.71	43.79	28.84	63.91	53.91	-20.12	-25.07
3	0.24375	0.13	37.57	20.72	37.70	20.85	61.97	51.97	-24.27	-31.12
4	0.29453	0.13	28.46	26.64	28.59	26.77	60.40	50.40	-31.81	-23.63
5	4.20313	0.35	23.78	18.23	24.13	18.58	56.00	46.00	-31.87	-27.42
6	12.82813	0.79	26.96	20.12	27.75	20.91	60.00	50.00	-32.25	-29.09

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.

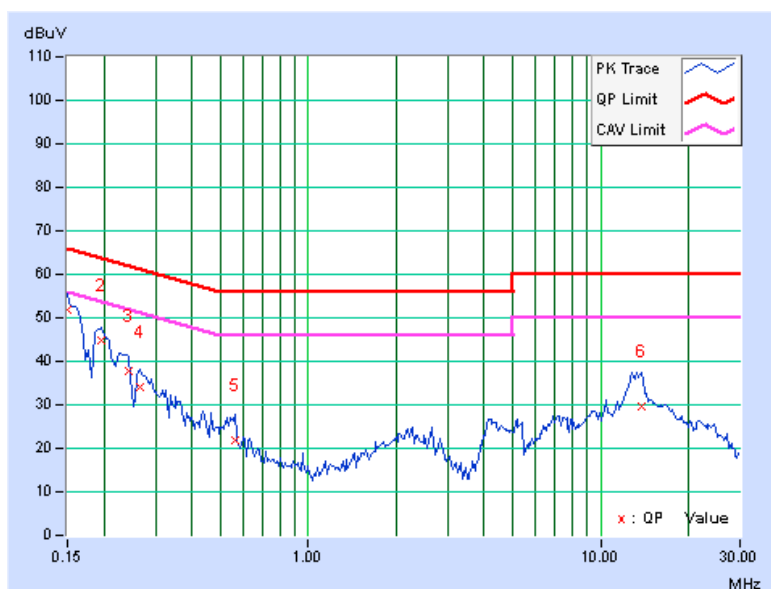


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	0.12	51.84	32.96	51.96	33.08	66.00	56.00	-14.04	-22.92
2	0.19687	0.14	44.51	31.10	44.65	31.24	63.74	53.74	-19.09	-22.50
3	0.24375	0.14	37.52	21.28	37.66	21.42	61.97	51.97	-24.31	-30.55
4	0.26719	0.14	33.81	15.20	33.95	15.34	61.20	51.20	-27.25	-35.86
5	0.56406	0.17	21.53	14.41	21.70	14.58	56.00	46.00	-34.30	-31.42
6	13.76953	0.73	28.72	22.25	29.45	22.98	60.00	50.00	-30.55	-27.02

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.

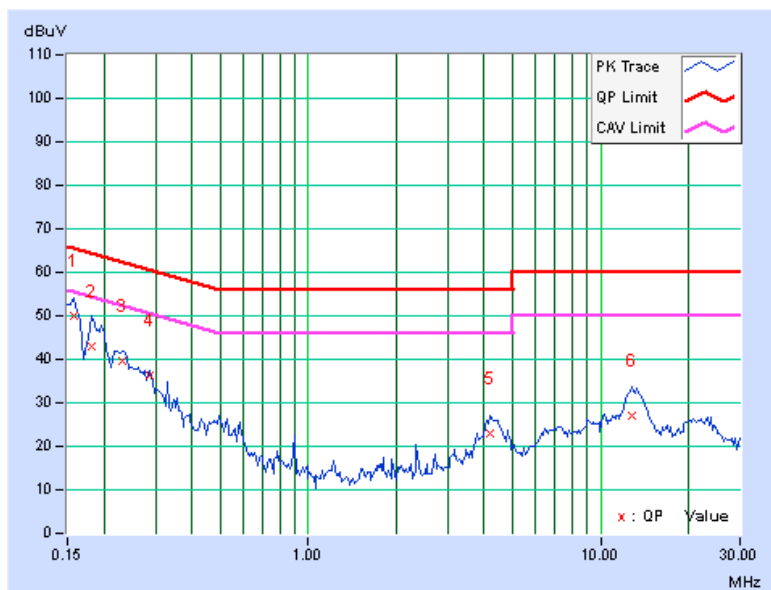


PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15781	0.12	49.98	36.37	50.10	36.49	65.58	55.58	-15.48	-19.09
2	0.18125	0.12	42.99	22.04	43.11	22.16	64.43	54.43	-21.31	-32.26
3	0.23203	0.13	39.46	25.57	39.59	25.70	62.38	52.38	-22.79	-26.68
4	0.28672	0.13	36.10	27.50	36.23	27.63	60.62	50.62	-24.39	-22.99
5	4.17578	0.35	22.54	16.92	22.89	17.27	56.00	46.00	-33.11	-28.73
6	12.73438	0.78	26.19	19.11	26.97	19.89	60.00	50.00	-33.03	-30.11

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.

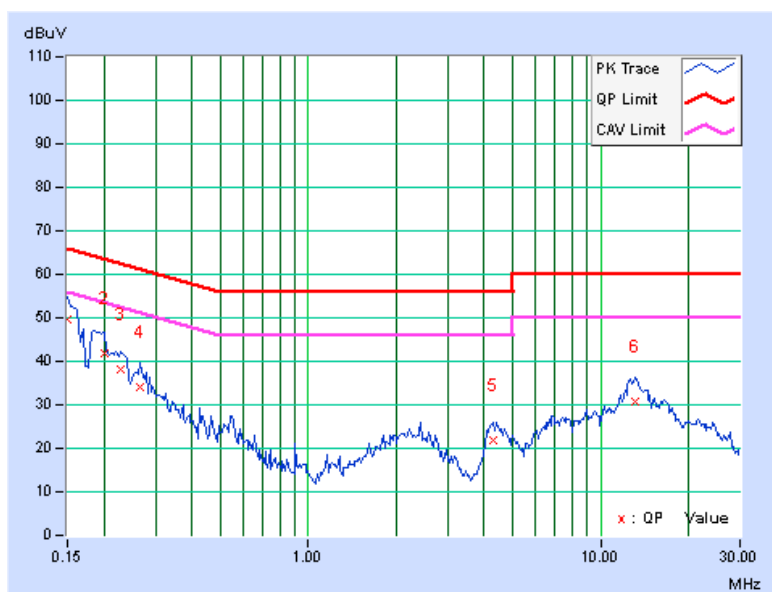


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	0.12	49.50	35.83	49.62	35.95	66.00	56.00	-16.38	-20.05
2	0.20078	0.14	41.85	23.84	41.99	23.98	63.58	53.58	-21.59	-29.60
3	0.22812	0.14	38.08	24.24	38.22	24.38	62.52	52.52	-24.30	-28.14
4	0.26719	0.14	33.77	18.78	33.91	18.92	61.20	51.20	-27.29	-32.28
5	4.27344	0.36	21.47	15.84	21.83	16.20	56.00	46.00	-34.17	-29.80
6	13.12500	0.71	30.12	24.40	30.83	25.11	60.00	50.00	-29.17	-24.89

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.





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6. PHOTOGRAPHS OF THE TEST CONFIGURATION

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

7. INFORMATION ON THE TESTING LABORATORIES

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

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

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Web Site: www.bureauveritas-adt.com

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



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8. APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

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

---END---