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FORMAL REPORT ON TESTING IN ACCORDANCE WITH

FCC Parts 15B & C: 2007

OF A

BLUETOOTH MODULE [Model:LBMA46NET2] [FCC ID: KDZLXEBT001]

TEST FACILITY TÜV SÜD PSB Pte Ltd.

Electrical & Electronics Centre (EEC), Testing Services,

1 Science Park Drive, Singapore 118221

FCC REG. NO. 90937 (3m & 10m OATS)

99142 (10m Anechoic Chamber) 871638 (5m Anechoic Chamber) 325572 (10m Anechoic Chamber)

IND. CANADA REG. NO. IC 4257 (3m and 10m Anechoic Chambers)

PREPARED FOR Maung Kyaw Htin Aung

Olympus Technologies (S) Pte Ltd 41 Science Park Road, #04-17/18 The Gemini Singapore Science Park 2

Singapore 117610

Tel: (65) 6777 8978 Tel: (65) 6870 2508

QUOTATION NUMBER 56Q0700768

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TEST PERIOD 14 Aug 2007 – 06 Sep 2007

PREPARED BY

Quek Keng Huat Associate Engineer APPROVED BY

Lim Cher Hwee Assistant Vice President

I A-2007-0380-A



Laboratory: TÜV SÜD PSB Pte. Ltd. Testing Group No.1 Science Park Drive Singapore 118221



Phone: +65-6885 1333

Fax: +65-6776 8670

www.tuv-sud-psb.sg

Co. Reg: 199002667R

E-mail: testing@tuv-sud-psb.sg

LA-2007-0380-A-1 LA-2007-0381-B LA-2007-0381-B LA-2007-0383-G LA-2007-0383-G LA-2007-0385-E LA-2007-0386-C

The results reported herein have been performed in accordance with the laboratorys terms of accreditation under the Singapore Accreditation Council - Singapore Laboratory Accreditation Scheme. Tests/Calibrations marked "Not SAC-SINGLAS Accredited" in this Report are not included in the SAC-SINGLAS Accreditation Schedule for our laboratory.

Regional Head Office: TÜV SÜD Asia Pacific Pte. Ltd. 3 Science Park Drive #04-01/05 The Franklin Singapore 118223



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TEST SUMMARY

The product was tested in accordance with the customer's specifications.

Test Results Summary

Test Standard	Description	Pass / Fail
FCC Part 15: 2007		
15.107(a), 15.207	Conducted Emissions	Pass
15.109(a), 15.205, 15.209	Radiated Emissions (Spurious Pass Emissions inclusive Restricted Bands Requirement)	
15.247(a)(1)	Carrier Frequency Separation	Not Applicable *See Note 5
	Spectrum Bandwidth (20dB Bandwidth Measurement)	Not Applicable *See Note 5
15.247(a)(1)(iii)	Number of Hopping Frequencies	Not Applicable *See Note 5
	Average Frequency Dwell Time	Not Applicable *See Note 5
15.247(b)(1)	Maximum Peak Power	Pass
15.247(d)	RF Conducted Spurious Emissions	Not Applicable *See Note 5
15.247(d)	Band Edge Compliance (Conducted)	Not Applicable *See Note 5
15.247(d)	Band Edge Compliance (Radiated)	Pass
15.247(e)	Peak Power Spectral Density	Not Applicable *See Note 5
1.1310	Maximum Permissible Exposure	Refer to page 23 for details



TEST SUMMARY

Notes

1. The channels as listed below, which respectively represent the lower, middle and upper channels of the Equipment Under Test (EUT) were chosen and tested for the Bluetooth. For each channel, the EUT was configured to operate in the test mode.

Transmit Channel	<u>Frequency (GHz)</u>
Channel 0	2.402
Channel 39	2.441
Channel 78	2.480

- 2. The EUT is a Class A device when in non-transmitting state and meets the FCC Part15B Class A requirements.
- 3. All test measurement procedures are according to ANSI C63.4: 2003.
- 4. The Bluetooth module used in the Equipment Under Test (EUT) is a FCC limited modular approval which bears the FCC ID: KDZLXEBT001.
- 5. The test is deemed to meet the FCC requirement without further testing as the module used is a FCC certified module.

Modifications

No modifications were made.



PRODUCT DESCRIPTION

Description : The Equipment Under Test (EUT) is a **BLUETOOTH MODULE.**

Applicant : LXE Inc.

125 Technology Parkway Norcross,

GA 30092 USA

Factor (ies) : Celestica Philippine, Inc.

Mactan Economic Zone 1 (MEZ 1) Lapu-lapu City,

Cebu Philippine 6015

Manufacturer : Olympus Technologies (S) Pte Ltd

41 Science Park Road, #04-17/18 The Gemini Singapore Science Park 2

Singapore 117610

Model Number : LBMA46NET2

Part Number : SNE801898

FCC ID : KDZLXEBT001

Serial Number : Nil

Microprocessor : Broadcom's BCM2045

Operating / Transmitting

Frequency

: 2.402GHz - 2.480GHz

Clock / Oscillator Frequency : 32.768kHz

Modulation : Frequency Shift Keying (GFSK)

Antenna Gain : 0dBi

Port / Connectors : Refer to manufacturer's user manual / operating manual.

Rated Input Power : 3.3VDC

Accessories : Nil



SUPPORTING EQUIPMENT DESCRIPTION

Equipment Description	Model, Serial & FCC ID Number	Cable Description
(Including Brand Name)		(List Length, Type & Purpose)
Dell Laptop	M/N: Latitude D400	2.00m unshielded power cable
	S/N: Nil	1.80m USB communication cable
	FCC ID: DoC	
Power Adapter (Laptop)	M/N: Nil	2.00m unshielded power cable
	S/N: Nil	
	FCC ID: Nil	
Olympus Vertical Hand	M/N: MX8	2.00m unshielded power cable
Held Terminal	S/N: Nil	
	FCC ID: KDZLXE4830P	



EUT OPERATING CONDITIONS

FCC Part 15

- 1. Conducted Emissions
- 2. Radiated Emissions (Spurious Emissions inclusive Restricted Bands Requirement)
- 3. Maximum Peak Power
- 4. Maximum Permissible Exposure

The EUT was exercised by operating in maximum continuous transmission with frequency hopping off

FCC Part 15

1. Band Edge Compliance (Radiated)

The EUT was exercised by operating in maximum continuous transmission with frequency hopping on.



CONDUCTED EMISSION TEST

FCC Parts 15.107(a) and 15.207 Conducted Emission Limits

Frequency Range	Limit Values (dBµV)				
(MHz)	Quasi-peak (QP)	Average (AV)			
0.15 - 0.5	66 – 56 *	56 – 46 *			
0.5 - 5.0	56	46			
5.0 - 30.0	60	50			
* Decreasing linearly with the logarithm of the frequency					

FCC Parts 15.107(a) and 15.207 Conducted Emission Test Instrumentation

Instrument	Model	S/No	Cal Due Date
R&S Test Receiver (20Hz–26.5GHz) – ESMI2	ESMI	829214/006 829550/001	10 May 2008
Agilent EMC Analyzer-SA7	E7403A	US41160167	22 May 2008
EMCO LISN (for EUT) - LISN9	3825/2	9309-2128	13 Aug 2008
R&S Pulse Limiter – PL2	ESH3-Z2	100347	13 Apr 2008
EMCO LISN (for supporting) – LISN6	3825/2	9309-2127	03 Jul 2008



CONDUCTED EMISSION TEST

FCC Parts 15.107(a) and 15.207 Conducted Emission Test Setup

- 1. The EUT and supporting equipment were set up in accordance with the requirements of the standard on top of a 1.5m x 1m x 0.8m high, non-metallic table.
- 2. The power supply for the EUT was fed through a $50\Omega/50\mu H$ EUT LISN, connected to filtered mains.
- The RF OUT of the EUT LISN was connected to the EMI test receiver via a low-loss coaxial cable.
- 4. All other supporting equipment were powered separately from another LISN.

FCC Parts 15.107(a) and 15.207 Conducted Emission Test Method

- 1. The EUT was switched on and allowed to warm up to its normal operating condition.
- 2. A scan was made on the NEUTRAL line over the required frequency range using an EMI test receiver.
- 3. High peaks, relative to the limit line, were then selected.
- 4. The EMI test receiver was then tuned to the selected frequencies and the necessary measurements made with a receiver bandwidth setting of 10kHz. Both Quasi-peak and Average measurements were made.
- 5. Steps 2 to 4 were then repeated for the LIVE line.

Sample Calculation Example

At 20 MHz

Q-P limit (Class B) = $1000 \mu V = 60.0 dB\mu V$

Transducer factor of LISN, pulse limiter & cable loss at 20 MHz = 11.2 dB

Q-P reading obtained directly from EMI Receiver = 40.0 dBµV

(Calibrated for system losses)

Therefore, Q-P margin = 40.0 - 60.0 = -20.0

i.e. 20.0 dB below Q-P limit



CONDUCTED EMISSION TEST

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Conducted Emissions Test Setup - AC Mains (Front View)



Conducted Emissions Test Setup - AC Mains (Rear View)



CONDUCTED EMISSION TEST

FCC Parts 15.107(a) and 15.207 Conducted Emission Results

Test Input Power	110V 60Hz	Temperature	22°C
Line Under Test	AC Mains	Relative Humidity	58%
Operating Mode	Bluetooth	Atmospheric Pressure	1030mbar
·		Tested By	Kenneth Ler

Frequency (MHz)	Q-P Value (dBμV)	Q-P Margin (dB)	AV Value (dBμV)	AV Margin (dB)	Line	Channel
0.2002	53.5	-10.1	430	-10.6	Neutral	0
0.3990	41.7	-16.2	38.3	-9.6	Neutral	0
0.5318	41.0	-15.0	39.6	-6.4	Live	0
0.8646	37.4	-18.6	35.0	-11.0	Neutral	0
1.2627	33.5	-22.5	36.1	-9.9	Live	0
2.6607	37.0	-19.0	35.0	-11.0	Neutral	0

Notes

- 1. All possible modes of operation were investigated from 150kHz to 30MHz. Only the worst case emissions measured, using the correct CISPR detectors, are reported. All other emissions were relatively insignificant.
- 2. A "-ve" margin indicates a PASS as it refers to the margin present below the limit line at the particular frequency.
- EMI receiver Resolution Bandwidth (RBW) and Video Bandwidth (VBW) settings: 9kHz - 30MHz

RBW: 10kHz VBW: 30kHz

4. <u>Conducted Emissions Measurement Uncertainty</u>

All test measurements carried out are traceable to national standards. The uncertainty of the measurement at a confidence level of approximately 95%, with a coverage factor of 2, in the range 9kHz - 30MHz (Average & Quasi-peak) is $\pm 3.0dB$.

Olympus Technologies (S) Pte Ltd Page Bluetooth Module [Model : LBMA46NET2] [FCC ID : KDZLXEBT001]



RADIATED EMISSION TEST

FCC Part 15.205 Restricted Bands

N	ЛHz	2	ı	ИΗ	Z	N	ИΗ	Z	G	Hz
0.090	-	0.110	16.42	-	16.423	399.9	-	410	4.5	- 5.15
0.495	-	0.505	16.69475	-	16.69525	608	-	614	5.35	- 5.46
2.1735	-	2.1905	16.80425	-	16.80475	960	-	1240	7.25	- 7.75
4.125	-	4.128	25.5	-	25.67	1300	-	1427	8.025	- 8.5
4.17725	-	4.17775	37.5	-	38.25	1435	-	1626.5	9.0	- 9.2
4.20725	-	4.20775	73	-	74.6	1645.5	-	1646.5	9.3	- 9.5
6.215	-	6.218	74.8	-	75.2	1660	-	1710	10.6	- 12.7
6.26775	-	6.26825	108	-	121.94	1718.8	-	1722.2	13.25	- 13.4
6.31175	-	6.31225	123	-	138	2200	-	2300	14.47	- 14.5
8.291	-	8.294	149.9	-	150.05	2310	-	2390	15.35	- 16.2
8.362	-	8.366	156.52475	-	156.52525	2483.5	-	2500	17.7	- 21.4
8.37625	-	8.38675	156.7	-	156.9	2690	-	2900	22.01	- 23.12
8.41425	-	8.41475	162.0125	-	167.17	3260	-	3267	23.6	- 24.0
12.29	-	12.293	167.72	-	173.2	3332	-	3339	31.2	- 31.8
12.51975	-	12.52025	240	-	285	3345.8	-	3358	36.43	- 36.5
12.57675	-	12.57725	322	-	335.4	3600	-	4400	Abov	e 38.6
13.36	-	13.41								

FCC Parts 15.109(a) and 15.209 Radiated Emission Limits

Frequency Range (MHz)	Quasi-Peak Limit Values (dBµV/m) @ 3m			
30 - 88	40.0			
88 - 216	43.5			
216 - 960	46.0			
Above 960 54.0*				
* Above 1GHz, average detector was used. A peak limit of 20dB above the average limit does apply.				

FCC Parts 15.109(a) and 15.209 Radiated Emission Test Instrumentation

Instrument	Model	S/No	Cal Due Date
R&S Test Receiver (20Hz-26.5GHz) –	ESMI	829214/005	24 Nov 2007
ESMI3		829550/004	
Schaffner Preamplifier (9kHz-2GHz) – PA19	CPA9231A	18763	12 Jan 2008
MITEQ Preamplifier (0.1-26.5GHz) – PA10	NSP2650-N	728230	26 Jan 2008
Schaffner Bilog Antenna –BL	CBL6112D	22020	14 May 2008
EMCO Horn Antenna – H14	3115	0003-6087	18 May 2008
Mirco-Tronics 2.4GHz Bandstop Filter	BRM50701	042	13 Aug 2008

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RADIATED EMISSION TEST

FCC Parts 15.109(a) and 15.209 Radiated Emission Test Setup

- The EUT and supporting equipment were set up in accordance with the requirements of the standard on top of a 1.5m X 1.0m X 0.8m high, non-metallic table.

 The filtered power supply for the EUT and supporting equipment were tapped from the
- 2. appropriate power sockets located on the turntable.
- 3. The relevant broadband antenna was set at the required test distance away from the EUT and supporting equipment boundary.

FCC Parts 15.109(a) and 15.209 Radiated Emission Test Method

- The EUT was switched on and allowed to warm up to its normal operating condition. A prescan was carried out to pick the worst emission frequencies from the EUT. For EUT which 2. is a portable device, the prescan was carried out by rotating the EUT through three orthogonal
- axes to determine which altitude and equipment arrangement produces such emissions. The test was carried out at the selected frequency points obtained from the prescan in step 2. 3. Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner:
 - Vertical or horizontal polarisation (whichever gave the higher emission level over a full rotation of the EUT) was chosen.
 - h
 - The EUT was then rotated to the direction that gave the maximum emission. Finally, the antenna height was adjusted to the height that gave the maximum emission.
- A Quasi-peak measurement was made for that frequency point if it was less than or equal to 4. 1GHz. For frequency point that above 1GHz, both Peak and Average measurements were carried out.
- 5. Steps 3 and 4 were repeated for the next frequency point, until all selected frequency points were measured.
- The frequency range covered was from 30MHz to 10th harmonics of the EUT fundamental 6. frequency, using the Bi-log antenna for frequencies from 30MHz up to 3GHz, and the Horn antenna above 3GHz.

Sample Calculation Example

At 300 MHz

Q-P limit (Class B) = $200 \mu V/m = 46.0 dB\mu V/m$

Log-periodic antenna factor & cable loss at 300 MHz = 18.5 dB

Q-P reading obtained directly from EMI Receiver = 40.0 dBuV/m

(Calibrated level including antenna factors & cable losses)

Therefore, Q-P margin = 40.0 - 46.0 = -6.0

i.e. 6 dB below Q-P limit



RADIATED EMISSION TEST



Radiated Emissions Test Setup (Front View)



Radiated Emissions Test Setup (Rear View)



RADIATED EMISSION TEST

FCC Parts 15.109(a), 15.205 and 15.209 Radiated Emission Results

Test Input Power	110V 60Hz	Temperature	22°C
Test Distance	3m	Relative Humidity	58%
Operating Mode	Bluetooth	Atmospheric Pressure	1030mbar
		Tested By	Kenneth Ler

Spurious Emissions ranging from 30MHz - 1GHz

Frequency (MHz)	Q-P Value (dBμV/m)	Q-P Margin (dB)	Azimuth (Degrees)	Height (cm)	Polarisation (H/V)	Channel
113.2900	39.6	-4.0	263	100	V	0
431.9500	42.5	-3.5	230	129	Н	0
479.9559	43.2	-2.8	261	100	Н	0
527.9600	39.8	-6.2	259	100	Н	0
575.9543	42.0	-4.0	304	101	Н	0
623.9500	44.8	-1.2	356	100	Н	0

Spurious Emissions above 1GHz

Frequency (GHz)	Peak Value (dBμV/m)	Average Value (dBμV/m)	Average Margin (dB)	Azimuth (Degree)	Height (cm)	Pol (H/V)	Channel
4.9459	53.4	44.2	-9.8	235	100	Н	78
11.9757	56.1	42.0	-12.0	28	100	V	0
12.3662	58.7	41.8	-12.2	351	100	Ι	78
		-	-		-	1	-
			-		1	ŀ	-

Notes

- All possible modes of operation were investigated. Only the worst case emissions measured, using the correct CISPR detectors, are reported. All other emissions were relatively insignificant.
- 2. "--" indicates no emissions were found and shows compliance to the limits.
- 3. Quasi-peak measurement was used for frequency measurement up to 1GHz. Average and peak measurements were used for emissions above 1GHz. The average measurement was done by averaging over a complete cycle of the pulse train, including the blanking interval as the pulse train duration does not exceed 0.1 second.
- A "-ve" margin indicates a PASS as it refers to the margin present below the limit line at the particular frequency.
- 5. EMI receiver Resolution Bandwidth (RBW) and Video Bandwidth (VBW) settings:

30MHz - 1GHz

RBW: 120kHz VBW: 1MHz

>1GHz

RBW: 1MHz VBW: 1MHz



RADIATED EMISSION TEST

- 6. The upper frequency of radiated emission investigations was according to requirements stated in Section 15.33(a) for intentional radiators & Section 15.33(b) for unintentional radiators.
- 7. The channel in the table refers to the transmit channel of the EUT.
- 8. Radiated Emissions Measurement Uncertainty

All test measurements carried out are traceable to national standards. The uncertainty of the measurement at a confidence level of approximately 95%, with a coverage factor of 2, in the range 30MHz - 25GHz (QP only @ 3m & 10m) is $\pm 4.6dB$ (for EUTs < $0.5m \times 0.5m \times 0.5m$).



MAXIMUM PEAK POWER TEST

FCC Part 15.247(b)(1) Maximum Peak Power Limits

The EUT shows compliance to the requirements of this section, which states the EUT employing at least 75 non-overlapping hopping channels shall not exceed 1W (30dBm). For the EUT employs other frequency hopping systems, the peak power shall not greater than 0.125W (21dBm).

FCC Part 15.247(b)(1) Maximum Peak Power Test Instrumentation

Instrument	Model	S/No	Cal Due Date
Anritsu Bluetooth Test Set	MT8850A	6K0000200	18 Jan 2008

FCC Part 15.247(b)(1) Maximum Peak Power Test Setup

- 1. The EUT and supporting equipment were set up as shown in the setup photo.
- 2. The power supply for the EUT was connected to a filtered mains.
- 3. The RF antenna connector was connected to the appropriate measuring device, which was set into power analyser mode via a low-loss coaxial cable.
- 4. All other supporting equipment were powered separately from another filtered mains.

FCC Part 15.247(b)(1) Maximum Peak Power Test Method

- 1. The EUT was switched on and allowed to warm up to its normal operating condition. The EUT was then configured to operate in the test mode, non-hopping with transmitting frequency at Channel 0 (2.402GHz).
- 2. The maximum peak power of the transmitting frequency was detected and recorded.
- The Equivalent Isotropic Radiated Power (EIRP) of the EUT was computed by adding its antenna gain to the measured maximum peak power.
- 4. The steps 2 to 3 were repeated with the transmitting frequency was set to Channel 39 (2.441GHz) and Channel 78 (2.480GHz) respectively.

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MAXIMUM PEAK POWER TEST



Maximum Peak Power Test Setup

FCC Part 15.247(b)(1) Maximum Peak Power Results

Test Input Power	110V 60Hz	Temperature	22°C
Antenna Gain	0 dBi	Relative Humidity	58%
Operating Mode	Bluetooth	Atmospheric Pressure	1030mbar
		Tested By	Kenneth Ler

Channel	Channel Frequency (GHz)	Maximum Peak Power (W)	Limit (W)
0	2.402	0.002	1.0
39	2.441	0.002	1.0
78	2.480	0.002	1.0

<u>Notes</u>

1. Nil



BAND EDGE COMPLIANCE (RADIATED) TEST

FCC Part 15.247(d) Band Edge Compliance (Radiated) Limits

The EUT shows compliance to the requirements of this section, which states in any 100kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator (EUT) is operating, the radio frequency power that is produced by the EUT shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of desired power. In addition, radiated emissions which fall in the restricted bands shall comply to the radiated emission limits specified in 15.209.

FCC Part 15.247(d) Band Edge Compliance (Radiated) Test Instrumentation

Instrument	Model	S/No	Cal Due Date
Rohde & Schwarz EMI Test Receiver	ESMI	829214-006	24 Nov 2007
		829550-001	
Schaffner Preamplifier (9kHz-2GHz) – PA19	CPA9231A	18763	12 Jan 2008
Schaffner Bilog Antenna –BL	CBL6112D	22020	14 May 2008
EMCO Horn Antenna – H14	3115	0003-6087	18 May 2008
MITEQ Preamplifier (0.1-26.5GHz) – PA10	NSP2650-N	728230	26 Jan 2008

FCC Part 15.247(d) Band Edge Compliance (Radiated) Test Setup

- 1. The EUT and supporting equipment were set up as shown in the setup photo.
- 2. The power supply for the EUT was connected to a filtered mains.
- 3. The resolution bandwidth (RBW) and the video bandwidth (VBW) of the spectrum analyser were respectively set to 100kHz and 300kHz to show compliance of spurious at band edges are at least 20dB below the carriers. For restricted band spurious at band edges, peak and average measurement plots were taken using the following setting:
 - a. Peak Plot:
 - RBW = VBW = 1MHz
 - b. Average Plot
 - RBW = 1MHz, VBW = 10Hz
- 4. All other supporting equipment were powered separately from another filtered mains.

FCC Part 15.247(d) Band Edge Compliance (Radiated) Test Method

- 1. The EUT was switched on and allowed to warm up to its normal operating condition. The EUT was then configured to operate in the test mode with frequency hopping sequence on.
- 2. The frequency span of the spectrum analyser was set to wide enough to capture the lower band edge of the transmission band, 2.400GHz and any spurious emissions at the band edge.
- 3. The spectrum analyser was set to max hold to capture any spurious emissions within the span. The signal capturing was continuous until no further spurious emissions were detected.
- 4. The steps 2 to 3 were repeated with the frequency span of the spectrum analyser was set to wide enough to capture the upper band edge frequency of the transmission band, 2.4835GHz and the any spurious emissions at the band-edge.

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BAND EDGE COMPLIANCE (RADIATED) TEST



Band Edge Compliance (Radiated) Test Setup

FCC Part 15.247(d) Band Edge Compliance (Radiated) Results

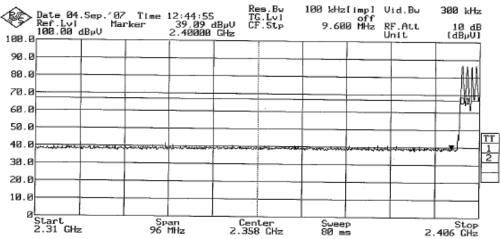
Test Input Power	110V 60Hz	Temperature	22°C
Attached Plots	1 - 6	Relative Humidity	58%
Operating Mode	erating Mode Bluetooth Atmo		1030mbar
		Tested By	Kenneth Ler

No significant signal was found and they were below the specified limit.

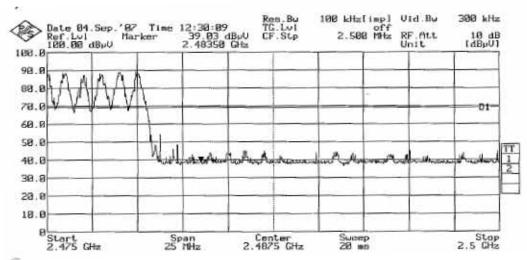


BAND EDGE COMPLIANCE (RADIATED) TEST

Band Edge Compliance (Radiated) Plots (20dB Delta from Carrier at Band Edge)



Plot 1 – Lower Band Edge at 2.4000GHz

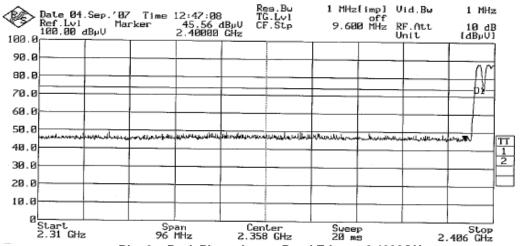


Plot 2 - Upper Band Edge at 2.4835GHz

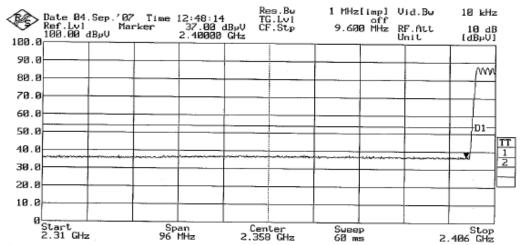


BAND EDGE COMPLIANCE (RADIATED) TEST

Band Edge Compliance (Radiated) Plots (Restricted Band)



Plot 3 - Peak Plot at Lower Band Edge at 2.4000GHz

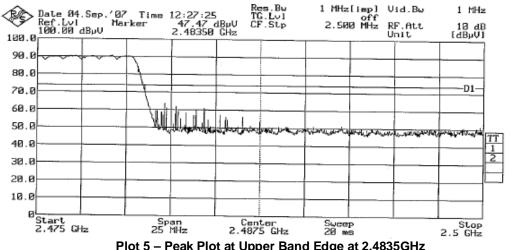


Plot 4 - Average Plot at Lower Band Edge at 2.4000GHz

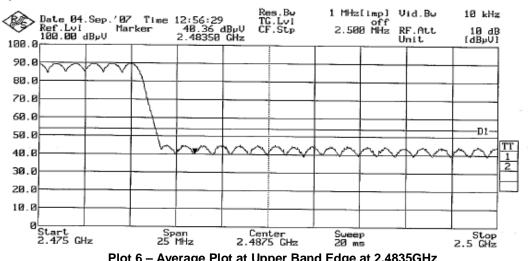


BAND EDGE COMPLIANCE (RADIATED) TEST

Band Edge Compliance (Radiated) Plots (Restricted Band)



Plot 5 - Peak Plot at Upper Band Edge at 2.4835GHz



Plot 6 - Average Plot at Upper Band Edge at 2.4835GHz



MAXIMUM PERMISSIBLE EXPOSURE (MPE) TEST

FCC Part 1.1310 Maximum Permissible Exposure (MPE) Limits

The EUT shows compliance to the requirements of this section, which states the MPE limits for general population / uncontrolled exposure are as shown below:

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (min)
0.3 - 1.34	614	1.63	100 Note 2	30
1.34 - 30	824 / f	2.19 / f	180 / f ^{2 Note 2}	30
30 - 300	27.5	0.073	0.2	30
300 - 1500	-	-	f / 1500	30
1500 - 100000	-	-	1.0	30
Notes				
1. f = frequency in MHz				
Plane wave equivalent power density				

FCC Part 1.1310 Maximum Permissible Exposure Computation

The minimum safe distance between the EUT and field probe was computed from the following formula: d = $\sqrt{[(30GP)/377S]}$ where S = Power density, $10W/m^2$

0.002W

d G Minimum safety distance, m Numerical isotropic gain, 1.0 (0dBi)

Substituting the relevant parameters into the formula: d = $\sqrt{[(30GP)/377S]}$

0.004m 0.4cm

.. The distance between users and the EUT shall be maintained at a minimum distance of 0.4cm during normal operation in order to ensure RF exposure to the users is within the allowable safety margin.

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May 2007



EUT PHOTOGRAPHS / DIAGRAMS

ANNEX A

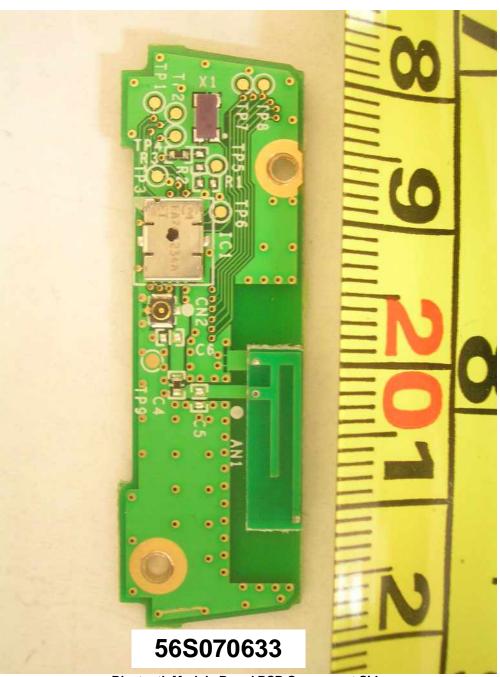
ANNEX A EUT PHOTOGRAPHS / DIAGRAMS



EUT PHOTOGRAPHS / DIAGRAMS

ANNEX A

EUT PHOTOGRAPHS



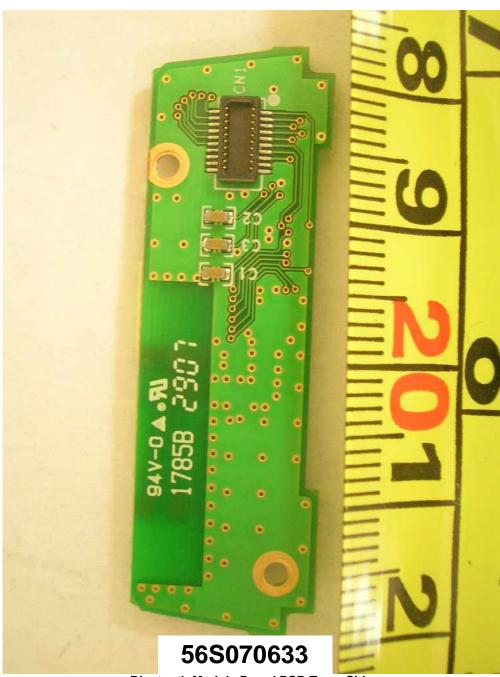
Bluetooth Module Board PCB Component Side



EUT PHOTOGRAPHS / DIAGRAMS

ANNEX A

EUT PHOTOGRAPHS



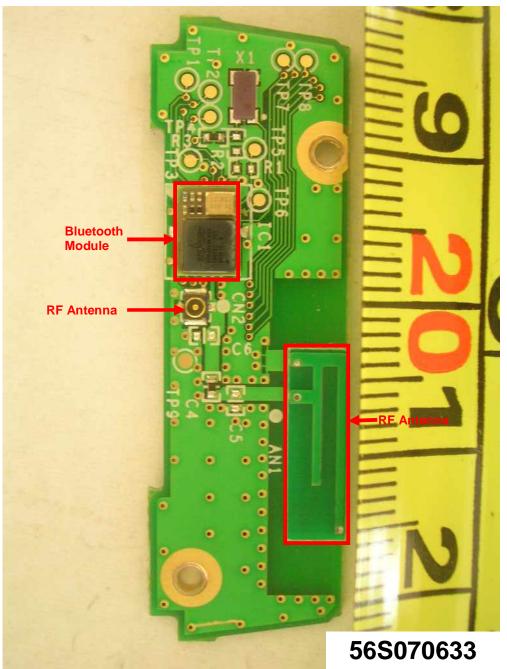
Bluetooth Module Board PCB Trace Side



EUT PHOTOGRAPHS / DIAGRAMS

ANNEX A

EUT PHOTOGRAPHS



Bluetooth Module Circuit with RF Shield Removed



FCC LABEL & POSITION

ANNEX B

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ANNEX B

FCC LABEL & POSITION

(Please refer to manufacturer for details)



USER MANUAL TECHINCAL DESCRIPTION BLOCK & CIRCUIT DIAGRAMS

ANNEX C

ANNEX C

USER MANUAL TECHNICAL DESCRIPTION BLOCK & CIRCUIT DIAGRAMS

(Please refer to manufacturer for details)

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Bluetooth Module [Model : LBMA46NET2] [FCC ID : KDZLXEBT001]