RF TEST REPORT

Test report No.:	**EMC- FCC- R0007**
FCC ID:	**TT2EZBL100**
Type of equipment:	**Wireless Link**
Model Name:	**EZB-L100**
Brand Name:	**EZBee**
Applicant:	**ENUSTECH., Inc.**
FCC Rule Part(s):	**FCC Part 15 Subpart C 2008 Section 15.207, Section 15.247**
Frequency Range:	**2405 MHz ~ 2480 MHz**
Test result:	**Complied**

The above equipment was tested by EMC compliance Testing Laboratory for compliance with the requirements of FCC Rules and Regulations.
The results of testing in this report apply to the product/system which was tested only. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Date of test: September 25, 200 ~ October 9 , 2008

Issued date: ~ October 10 , 2008

Tested by: KIM, CHANG MIN

Approved by: YOO, SUNG YOUNG

82-1 Jeil-ri, Yangji-myun, Churingu, Yongin-city, Kyungki-do,Korea 449-825,
82 31 336 9919 (Main) 82 31 336 4767 (Fax)

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1. Client information

Applicant:	ENUSTECH., Inc.
Address:	Dooi Bldg, 5FL, 1196-2 Gaepo-4dong, Gangnam-gu, Seoul, Korea
Telephone number:	+82-2-565-0782
Facsimile number :	+82-2-3452-3603
Contact person:	Hyotae, Kim / General Manager

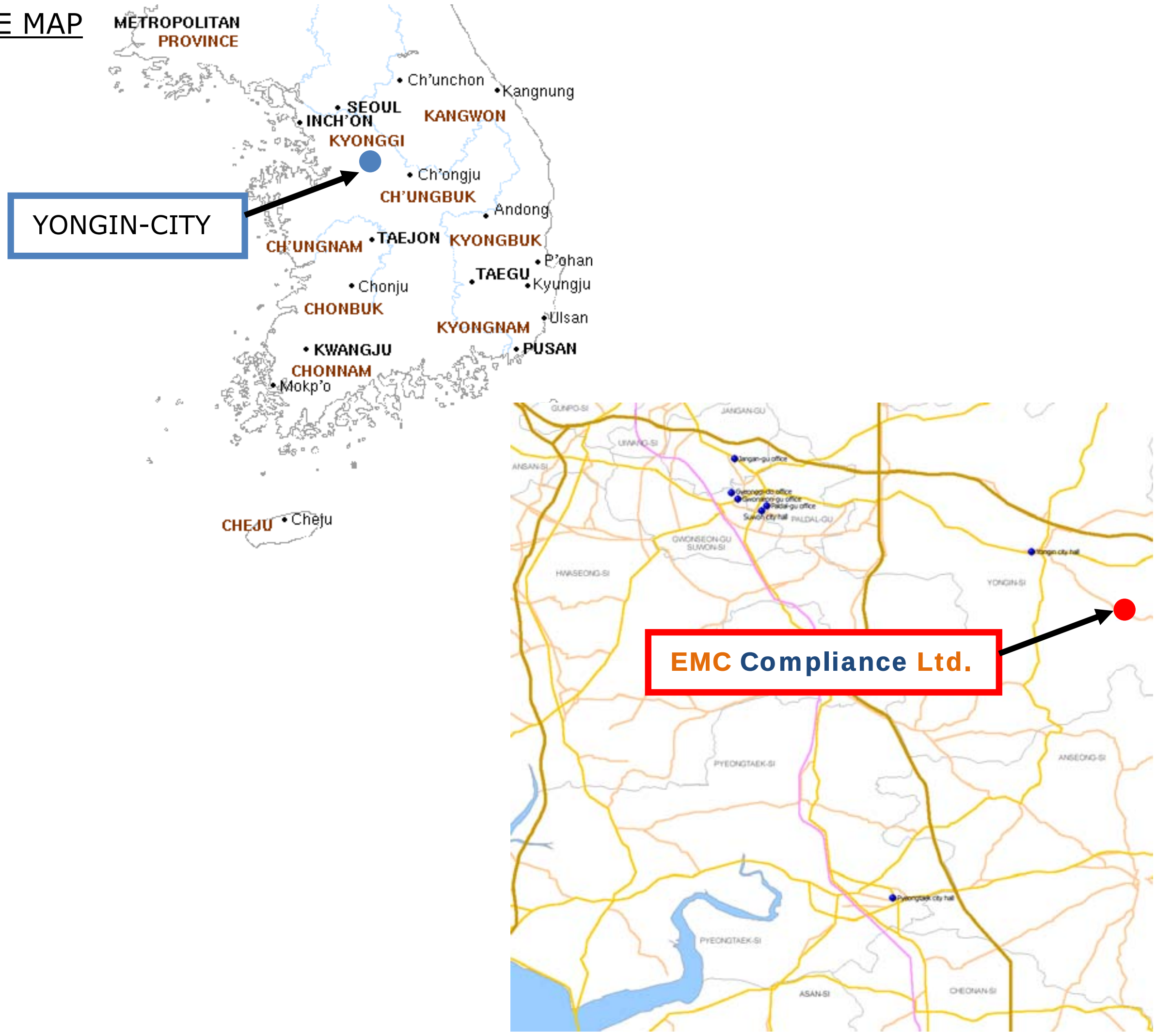
Manufacturer:	ENUSTECH., Inc.
Address:	Dooi Bldg, 5FL, 1196-2 Gaepo-4dong, Gangnam-gu, Seoul, Korea
Telephone number:	+82-2-565-0782
Facsimile number :	+82-2-3452-3603
Contact person:	Hyotae, Kim / General Manager

2. Laboratory information

<u>Address</u>
EMC Compliance Ltd.
82-1, JEIL-RI, YANGJI-MYUN, CHURINGU, YONGIN-CITY, KYUNGGI-DO, KOREA 449-825
Telephone Number: 82 31 336 9919   Facsimile Number: 82 31 336 4767

<u>Certificate</u>
CBTL Testing Laboratory, KOLAS NO.: 231
FCC Filing No.: 793334
VCCI Registration No.: C-1713, R-1606, T-258

<u>SITE MAP</u>



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3. Description of E.U.T.

3.1 Basic description

Applicant :	ENUSTECH., Inc.
Address of Applicant:	Dooi Bldg, 5FL, 1196-2 Gaepo-4dong, Gangnam-gu, Seoul, Korea
Manufacturer:	ENUSTECH., Inc.
Address of Manufacturer:	Dooi Bldg, 5FL, 1196-2 Gaepo-4dong, Gangnam-gu, Seoul, Korea
Type of equipment:	Wireless Link
Basic Model:	EZB-L100
Brand Name:	EZBee
Serial number:	Proto Type

3.2 General description

Frequency Range	2405~2480 MHz
RF Output Power	Under 6 dBm (declared by the applicant)
Type of Modulation	OQPSK
Channel spacing	5 MHz
Channel capacity	16 ch
Type of Antenna	INTERNAL ANTENNA
Power supply	DC 5V
Operating temperature	-20 ~50
Dimension	35mm(W)X20.5mm(H)X64.5mm(L)
Weight	30g

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3.3 Test frequency

	Frequency
Low frequency	2405 MHz
Middle frequency	2440 MHz
High frequency	2480 MHz

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4. Summary of test results

4.1 Standards & results

Rule Reference	Parameter	Report Section	Test Result
15.247(a)(2)	6dB bandwidth	5.1	C
15.247(b)(3)	Maximum Peak Output Power	5.2	C
15.247(e)	Power Density	5.3	C
15.247(d)	Restricted Band Edge	5.4	C
15.247(d) 15.209(a)	Spurious Emission	5.4	C
15.203	Antenna Requirement	5.5	C
15.207	Conducted Emission	5.6	C

Note: C=complies
NC= Not complies
NT=Not tested
NA=Not Applicable

4.2 Uncertainty

Measurement Item	Combined Standard Uncertainty Uc	Expanded Uncertainty U = KUc (K = 2)
Conducted RF power	± 0.272 dB	± 0.544 dB
Radiated disturbance	± 1.943 dB	± 3.886 dB
Conducted disturbance	± 1.265 dB	± 2.53 dB

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5. Test results

5.1 6dB bandwidth

5.1.1 Regulation

Systems using digital modulation techniques may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725 - 5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

5.1.2 Measurement procedure

The antenna output of the EUT was connected to the spectrum analyzer. The resolution bandwidth is set to 100 kHz, and peak dectection was used. The 6dB bandwidth is defined as the total spectrum over which the power is higher than the peak power minus 6dB.

5.1.3 Test Result

-Complied

CH	Frequency [MHz]	6dB bandwidth [kHz]	Limit [kHz]	Margin [kHz]
Low	2405	16300	500	15800
Middle	2440	15600	500	15100
High	2480	15800	500	15300

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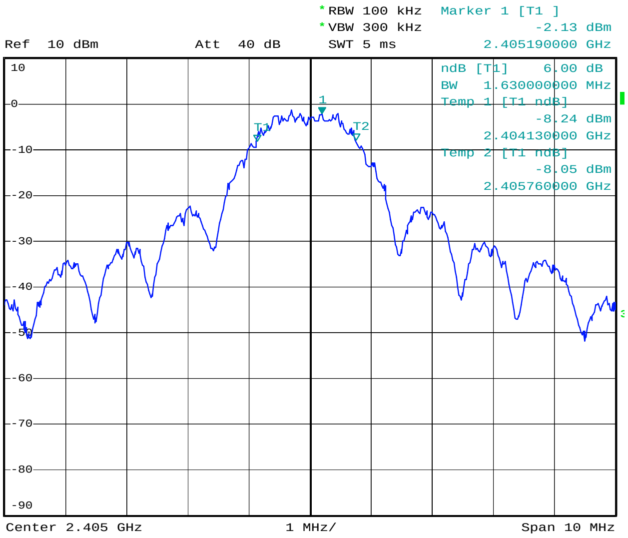
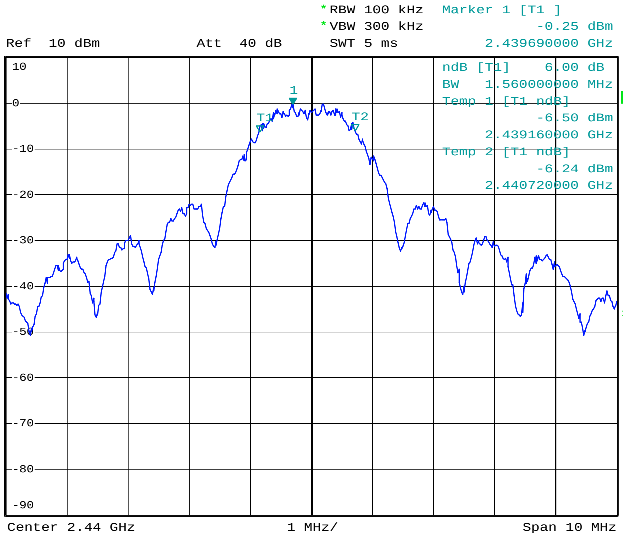
5.1.4 Test Plot

Figure 1. Plot of the 6dB bandwidth (Conducted)

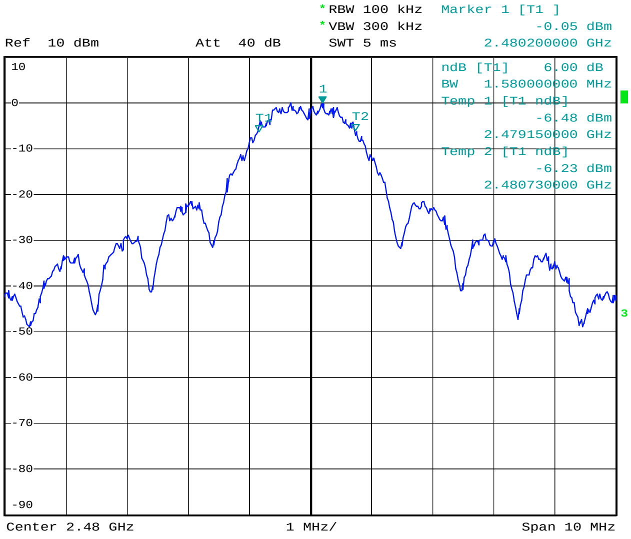
- Lowest Channel(2405 MHz)



- Middle Channel(2440 MHz)



- Highest Channel(2480 MHz)



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5.2 Maximum Peak Output Power

5.2.1 Regulation

According to §15.247(b)(3), For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

According to §15.247(b)(4) The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

5.2.2 Measurement Procedure

<u>Power Output Option 1</u> Set the RBW greater than 6 dB bandwidth of the emission or use a peak power meter.

<u>Power Output Option 2</u>

Power output measurement allowed per Section 15.247(b)(3).
In the following, "T" is the transmission pulse duration over which the transmitter is on and transmitting at its maximum power control level. Measurements are performed with a spectrum analyzer.
Three methods are provided to accommodate measurement limitations of the spectrum analyzer depending on signal parameters. Set resolution bandwidth (RBW) = 1 MHz.
Set span to encompass the entire emission bandwidth (EBW) of the signal.
Use automatic setting for analyzer sweep time (except in Method #2).
Check the sweep time to determine which procedure to use.

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Method #1

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz.
3. Set VBW ≥ 3 MHz.
4. Use sample detector mode if bin width (i.e., span/number of points in spectrum display) < 0.5 RBW. Otherwise use peak detector mode.
5. Use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at full control power for entire sweep of every sweep. If the device transmits continuously, with no off intervals or reduced power intervals, the trigger may be set to "free run".
6. Trace average 100 traces in power averaging mode.
7. Compute power by integrating the spectrum across the 26 dB EBW of the signal. The integration can be performed using the spectrum analyzer's band power measurement function with band limits set equal to the EBW band edges or by summing power levels in each 1 MHz band in linear power terms. The 1 MHz band power levels to be summed can be obtained by averaging, in linear power terms, power levels in each frequency bin across the 1 MHz.

5.2.3 Test Result

-Complied

Channel	Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
Low	2405	0.01	30	29.99
Middle	2440	0.94	30	29.06
High	2480	1.27	30	28.73

NOTE:
1. Since the directional gain of the integral antenna declared by the manufacturer (G_{ANT} = dBi) does not exceed 6.0 dBi, there was no need to reduce the output power.
2. We took the insertion loss of the cable loss into consideration within the measuring instrument.

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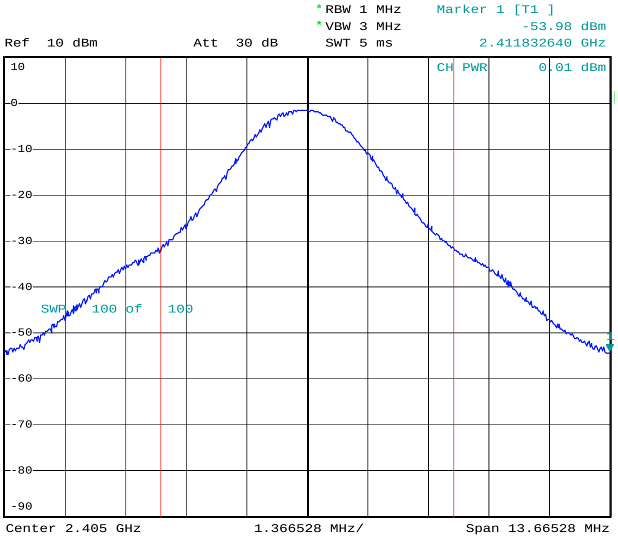
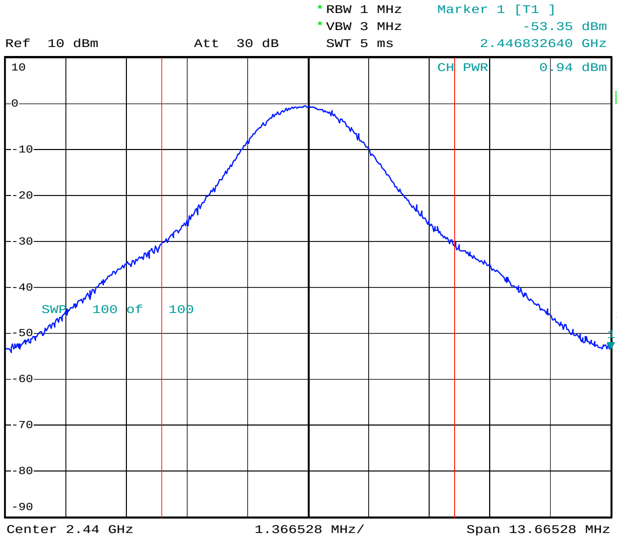
5.2.4 Test Plot

Figure 2. Plot of the Maximum Peak output power (Conducted)

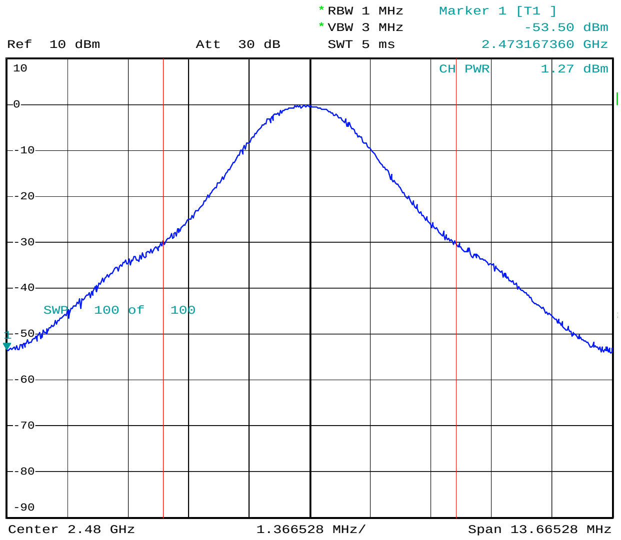
- Lowest Channel(2405 MHz)



- Middle Channel(2440 MHz)



- Highest Channel(2480 MHz)



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5.3 Power Density

5.3.1 Regulation

According to §15.247(e), for digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

5.3.2 Measurement Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Connect the antenna port of the EUT to RF input on the spectrum analyzer via a low loss cable and attenuator.
3. Turn on the EUT and set it to any one measured frequency within its operating range by controlling it via UART interface and make sure the spectrum analyzer is operated in its linear range.
4. Set the spectrum analyzer to MAX HOLD mode with RBW = 3kHz.
5. Measure the highest amplitude appearing on spectral display and record the level to calculate results.
6. Repeat above procedures until all frequencies measured were complete.

5.3.3 Test Result

-Complied

Channel	Frequency (MHz)	Result (dBm)	Limit (dBm)	Margin (dB)
Low	2405	-14.62	8	22.62
Middle	2440	-13.40	8	21.40
High	2480	-11.75	8	19.75

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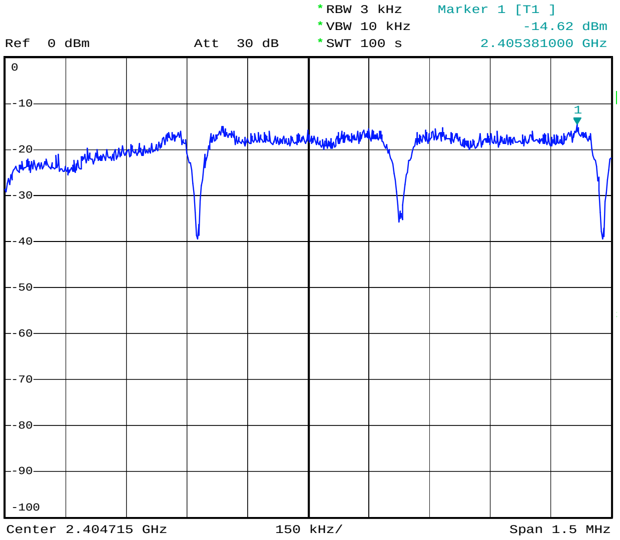
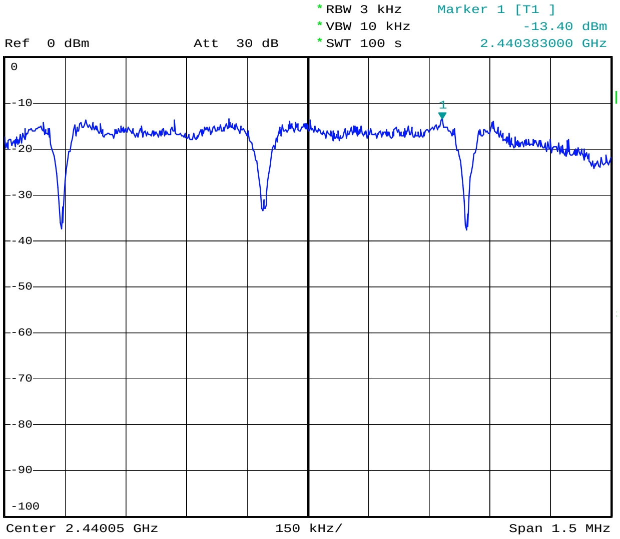
5.3.4 Test Plot

Figure 3. Plot of the PSD (Conducted)

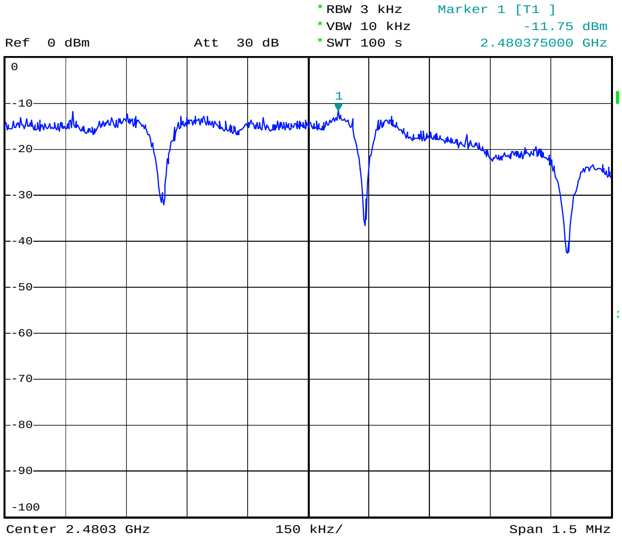
- Lowest Channel(2405 MHz)



- Middle Channel(2440 MHz)



- Highest Channel(2480 MHz)



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5.4 SPURIOUS EMISSION, BAND EDGE, AND RESTRICTED BANDS

5.4.1 Regulation

According to §15.247(d), in any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).
According to §15.209(a), for an intentional device, the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency (MHz)	Field strength (μV/m @ 3m)	Field strength (dBμV/m @ 3m)
30–88	100	40.0
88–216	150	43.5
216–960	200	46.0
Above 960	500	54.0

According to §15.109(a), for an unintentional device, except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the above table.

** The emission limits shown in the above table are based on measurement instrumentation employing a CISPR quasi-peak detector and above 1000 MHz are based on the average value of measured emissions.

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5.4.2 Measurement Procedure

1) Band-edge Compliance of RF Conducted Emissions
2)

1. Set the spectrum analyzer as follows:
   Span = wide enough to capture the peak level of the emission operating on the channel closest to the bandedge, as well as any modulation products which fall outside of the authorized band of operation
   RBW ≥ 1% of the span
   VBW ≥ RBW
   Sweep = auto
   Detector function = peak
   Trace = max hold
2. Allow the trace to stabilize. Set the marker on the emission at the band-edge, or on the highest modulation product outside of the band, if this level is greater than that at the band-edge. Enable the marker-delta function, and then use the marker-to-peak function to move the marker to the peak of the in-band emission.
3. Now, using the same instrument settings, enable the hopping function of the EUT. Allow the trace to stabilize. Follow the same procedure listed above to determine if any spurious emissions caused by the hopping function also comply with the specified limit.

2) Spurious RF Conducted Emissions:

1. Set the spectrum analyzer as follows:
   Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.
   RBW = 100 kHz
   VBW ≥ RBW
   Sweep = auto
   Detector function = peak
   Trace = max hold
2. Allow the trace to stabilize. Set the marker on the peak of any spurious emission recorded.

a 4 × 4 meter at the Open Area Test Site. The EUT was tested at a distance 3 meters.

5. Each frequency found during preliminary measurements was re-examined and investigated. The test-receiver system was set up to average, peak, and quasi-peak detector function with specified bandwidth.

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3) Spurious Radiated Emissions:

1. The preliminary radiated measurements were performed to determine the frequency producing the maximum emissions in an anechoic chamber at a distance of 3 meters.
2. The EUT was placed on the top of the 0.8-meter height, 1 × 1.5 meter non-metallic table. To find the maximum emission levels, the height of a measuring antenna was changed and the turntable was rotated 360°.
3. The antenna polarization was also changed from vertical to horizontal. The spectrum was scanned from 30 to 1000 MHz using the TRILOG broadband antenna, and from 1000 MHz to 18000 MHz using the horn antenna.
4. To obtain the final measurement data, the EUT was arranged on a turntable situated on a 4 × 4 meter at the Open Area Test Site. The EUT was tested at a distance 3 meters.
5. Each frequency found during preliminary measurements was re-examined and investigated. The test-receiver system was set up to average, peak, and quasi-peak detector function with specified bandwidth.

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5.4.3 Test Result

-complied

1. Band edge compliance of RF Conducted Emissions was shown in figure 4.
2. Spurious RF conducted Emissions were shown in the Figure 5.
   Note: We took the insertion loss of the cable into consideration within the measuring instrument.
3. Measured value of the Field strength of spurious Emissions (Radiated)
   - Low channel (2405 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Reading [dB(μV)]	Pol. [V/H]	ATT [dB]	Amp Gain [dB]	AF [dB(1/m)]	CL [dB]	Limit [dB(μV/m)]	Result [dB(μV/m)]	Margin [dB]
Quasi-Peak DATA. Emissions below 1GHz										
250.02	120	13.8	H	-		15.95	3.34	46.0	33.09	12.91
325.03	120	9.2	H	-		14.19	3.88	46.0	27.27	18.73
750.00	120	3.9	H	-		20.99	6.42	46.0	31.31	14.69
Peak DATA. Emissions above 1GHz										
2400.00	1000	48.5	V	-	36.00	28.30	6.65	74.0	47.45	26.55
4810.00	1000	46.8	H	-	35.84	32.90	8.26	74.0	52.08	21.92
7215.00	1000	45.0	H	-	35.88	37.70	11.54	74.0	58.33	15.67
9620.00	1000	45.0	V	-	35.42	38.60	13.42	74.0	61.64	12.36
Average DATA. Emissions above 1GHz										
2400.00	1000	36.0	V	-	36.00	28.30	6.65	54.0	34.95	19.05
4810.00	1000	34.3	H	-	35.84	32.90	8.26	54.0	39.61	14.39
7215.00	1000	32.1	H	-	35.88	37.70	11.54	54.0	45.46	8.54
9620.00	1000	31.9	V	-	35.42	38.60	13.42	54.0	48.46	5.54

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- Middle channel (2440MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Reading [dB(µV)]	Pol. [V/H]	ATT [dB]	Amp Gain [dB]	AF [dB(1/m)]	CL [dB]	Limit [dB(µV/m)]	Result [dB(µV/m)]	Margin [dB]
Quasi-Peak DATA. Emissions below 1GHz										
125.01	120	10.9	H	-	-	11.70	2.22	43.5	24.79	18.71
250.02	120	13.5	H	-	-	15.95	3.34	46.0	32.79	13.21
305.04	120	8.4	H	-	-	14.06	3.69	46.0	26.15	19.85
	120			-						
Peak DATA. Emissions above 1GHz										
4880.00	1000	47.3	V		35.84	32.90	8.26	74.0	52.58	21.42
7320.00	1000	43.8	H		35.88	37.70	11.54	74.0	57.15	16.85
9760.00	1000	44.4	V		35.42	38.60	13.42	74.0	60.96	13.04
Average DATA. Emissions above 1GHz										
4880.00	1000	34.2	H		35.84	32.90	8.26	54.0	39.55	14.45
7320.00	1000	31.1	H		35.88	37.70	11.54	54.0	44.41	9.59
9760.00	1000	32.2	H		35.42	38.60	13.42	54.0	48.75	5.25

Margin (dB) = Limit – Actual
[Resultl = Reading – Amp Gain + Attenuator + AF + CL]
1. H = Horizontal, V = Vertical Polarization
2. ATT = Attenuation (10dB pad and/or Insertion Loss of HPF), AF/CL = Antenna Factor and Cable Loss

* The spurious emission at the frequency does not fall in the restricted bands.

NOTE: All emissions not reported were more than 20 dB below the specified limit or in the noise floor.

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- High channel (2480 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Reading [dB(μV)]	Pol. [V/H]	ATT [dB]	Amp Gain [dB]	AF [dB(1/m)]	CL [dB]	Limit [dB(μV/m)]	Result [dB(μV/m)]	Margin [dB]
Quasi-Peak DATA. Emissions below 1GHz										
320.62	120	9.8	H	-	-	14.16	3.83	46.0	27.79	18.21
330.02	120	11.4	H	-	-	14.22	3.92	46.0	29.54	16.46
662.33	120	0.4	H	-	-	20.35	5.88	46.0	26.63	19.37
	120			-						
	120			-						
	120			-						
	120			-						
	120			-						
	120			-						
Peak DATA. Emissions above 1GHz										
2483.50	1000	51.5	H	-	36.00	28.30	6.65	74.0	50.45	23.55
4960.00	1000	46.5	V	-	36.00	28.30	6.65	74.0	51.83	22.17
7440.00	1000	44.1	H	-	35.84	32.90	8.26	74.0	57.46	16.54
9920.00	1000	45.8	H	-	35.88	37.70	11.54	74.0	62.44	11.56
Average DATA. Emissions above 1GHz										
2483.50	1000	37.1	H	-	36.00	28.30	6.65	54.0	36.05	17.95
4960.00	1000	34.3	H	-	36.00	28.30	6.65	54.0	39.62	14.38
7440.00	1000	31.8	H	-	35.84	32.90	8.26	54.0	45.19	8.81
9920.00	1000	32.7	V	-	35.88	37.70	11.54	54.0	49.29	4.71

Margin (dB) = Limit – Actual
[Resultl = Reading – Amp Gain + Attenuator + AF + CL]
1. H = Horizontal, V = Vertical Polarization
2. ATT = Attenuation (10dB pad and/or Insertion Loss of HPF), AF/CL = Antenna Factor and Cable Loss

* The spurious emission at the frequency does not fall in the restricted bands.

NOTE: All emissions not reported were more than 20 dB below the specified limit or in the noise floor.

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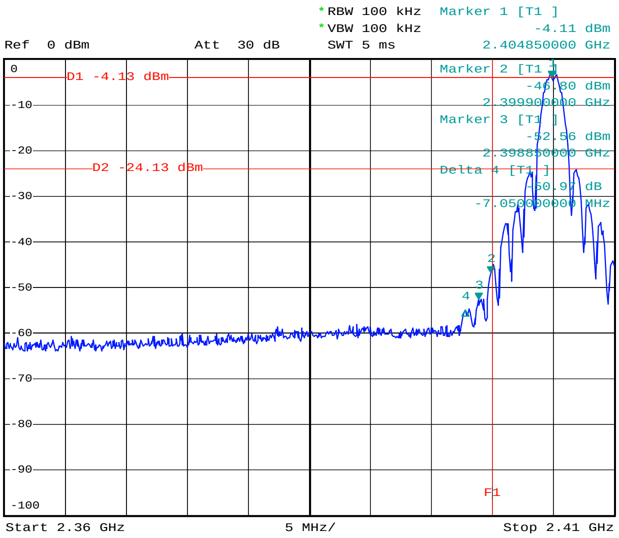
5.4.4 Test Plot

Figure 4. Plot of the Bandedge Compliance (Conducted)

- Lowest Channel(2405 MHz)



- Highest Channel(2480 MHz)

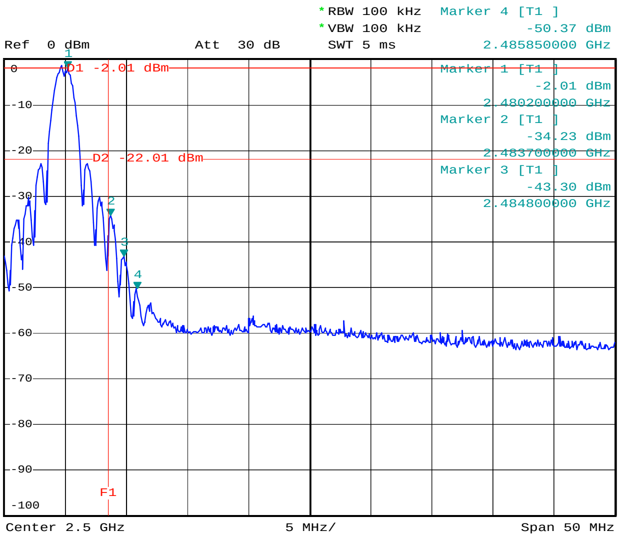


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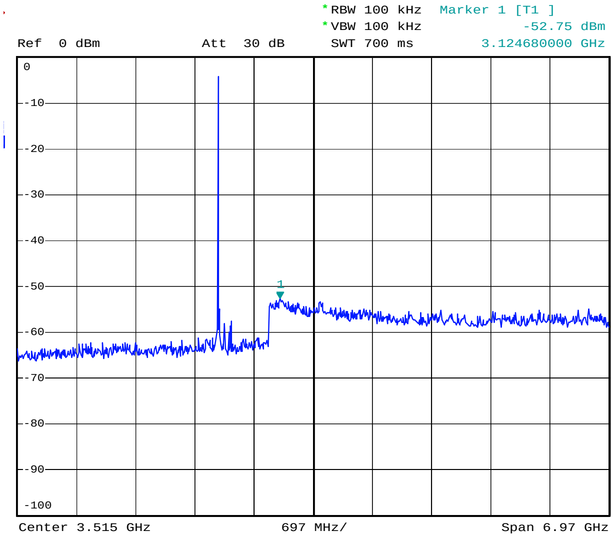
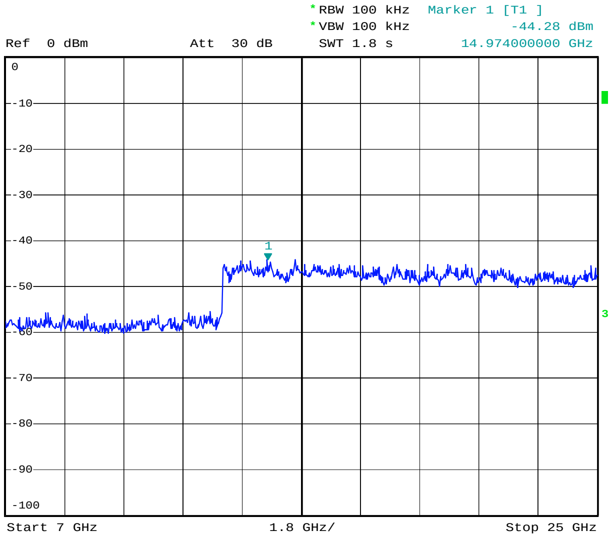
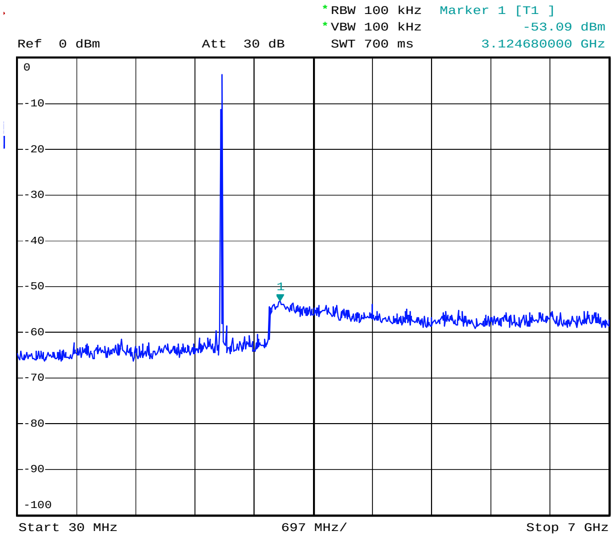
Figure 5. Plot of the Spurious Emission (Conducted)

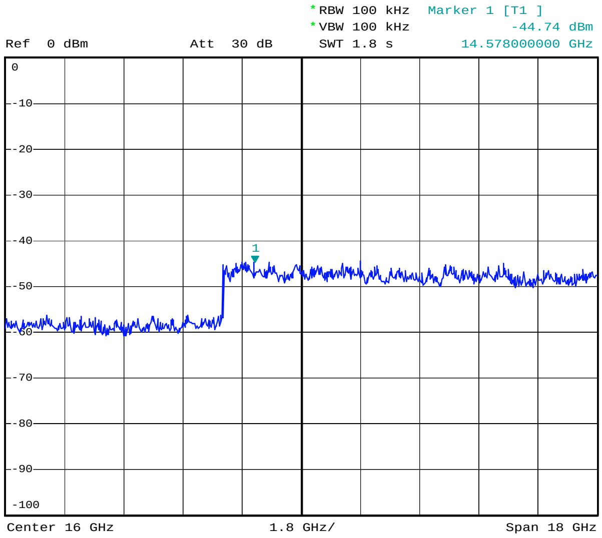
- Lowest Channel(2405 MHz)





- Middle Channel(2440MHz)





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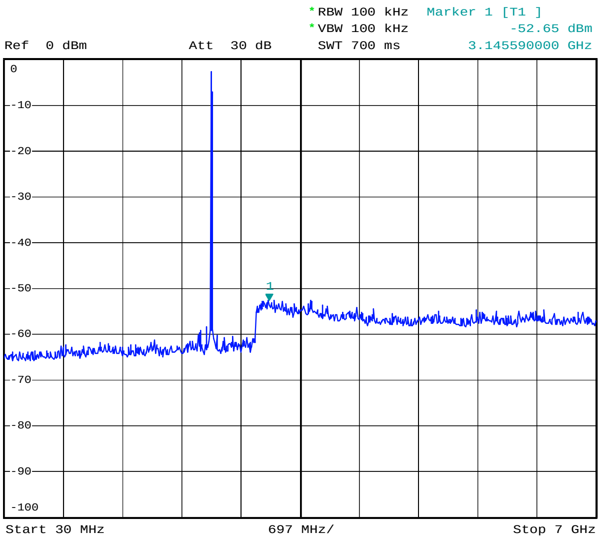
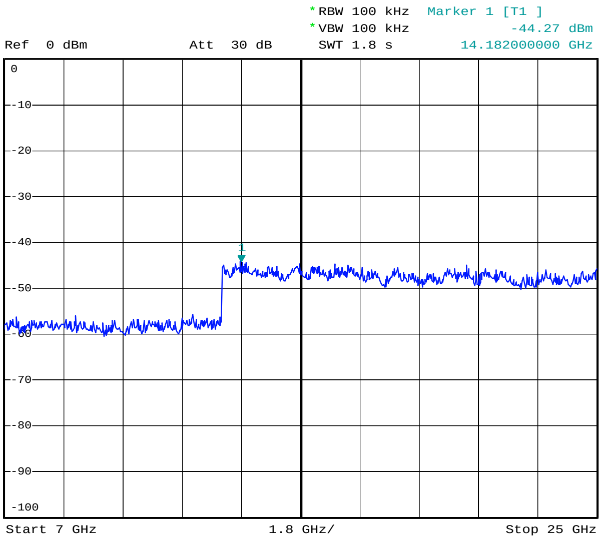
- Highest Channel(2480MHz)





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5.5 Antenna Requirement

5.5.1 Regulation

According to §15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

And according to §15.247(b)(4), the conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

5.5.2 Result

-Complied

The transmitter has an integral PCB pattern antenna. The directional gain of the antenna is -1.5 dBi.

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5.6 Conducted Emission

5.6.1 Regulation

According to §15.207(a), for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50μH/50Ω line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Qausi-peak	Average
0.15 – 0.5	66 to 56 *	56 to 46 *
0.5 – 5	56	46
5 – 30	60	50

* Decreases with the logarithm of the frequency.

According to §15.107(a), for unintentional device, except for Class A digital devices, line conducted emission limits are the same as the above table.

5.6.2 Measurement Procedure

1. The EUT was placed on a wooden table of size, 1 m by 1.5 m, raised 80 cm in which is located 40 cm away from the vertical wall and 1.5m away from the side wall of the shielded room.
2. Each current-carrying conductor of the EUT power cord was individually connected through a 50Ω/50μH LISN, which is an input transducer to a Spectrum Analyzer or an EMI/Field Intensity Meter, to the input power source.
3. Exploratory measurements were made to identify the frequency of the emission that had the highest amplitude relative to the limit by operating the EUT in a range of typical modes of operation, cable position, and with a typical system equipment configuration and arrangement. Based on the exploratory tests of the EUT, the one EUT cable configuration and arrangement and mode of operation that had produced the emission with the highest amplitude relative to the limit was selected for the final measurement.
4. The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment is the system) was then performed over the frequency range of 0.15 MHz to 30 MHz.
5. The measurements were made with the detector set to PEAK amplitude within a bandwidth of 10 kHz or to QUASI-PEAK and AVERAGE within a bandwidth of 9 kHz. The EUT was in transmitting mode during the measurements.

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5.6.3 Test Result

-Complied

Frequency [MHz]	Correction Factor LISN	Correction Factor Cable	Line	Quasi-Peak Limit [dBuV]	Quasi-Peak Reading [dBuV]	Quasi-Peak Result [dBuV]	Average Limit [dBuV]	Average Reading [dBuV]	Average Result [dBuV]
0.174	0.09	0.4	H	64.77	46.70	47.19	54.77	35.21	35.70
0.177	0.07	0.4	N	64.63	47.04	47.51	54.63	35.58	36.05
0.201	0.07	0.4	N	63.57	47.65	48.12	53.57	37.22	37.69
0.264	0.07	0.4	N	61.30	44.68	45.15	51.30	34.62	35.09
0.321	0.07	0.5	N	59.68	44.81	45.38	49.68	33.85	34.42
0.477	0.10	0.5	H	56.39	43.17	43.77	46.39	31.12	31.72
0.546	0.10	0.5	H	56.00	45.70	46.30	46.00	32.52	33.12
0.546	0.08	0.5	N		48.06	48.64		34.52	35.10
0.630	0.09	0.4	N		46.78	47.27		34.32	34.81
0.909	0.10	0.5	N		47.31	47.91		31.16	31.76
1.010	0.12	0.5	H		44.96	45.58		29.69	30.31
1.119	0.10	0.5	N		48.61	49.21		31.37	31.97
5.863	0.27	0.5	N	60.00	34.17	34.94	50.00	28.02	28.79
7.130	0.39	0.5	H		34.54	35.43		28.32	29.21
10.380	0.44	0.6	H		33.06	34.10		26.97	28.01
10.800	0.39	0.5	N		30.98	31.87		24.44	25.33
20.260	0.93	0.6	H		33.76	35.29		30.04	31.57
23.130	1.03	0.9	H		35.31	37.24		30.25	32.18

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5.6.4 Test Plots

Figure 6. Plot of the Conducted Emission

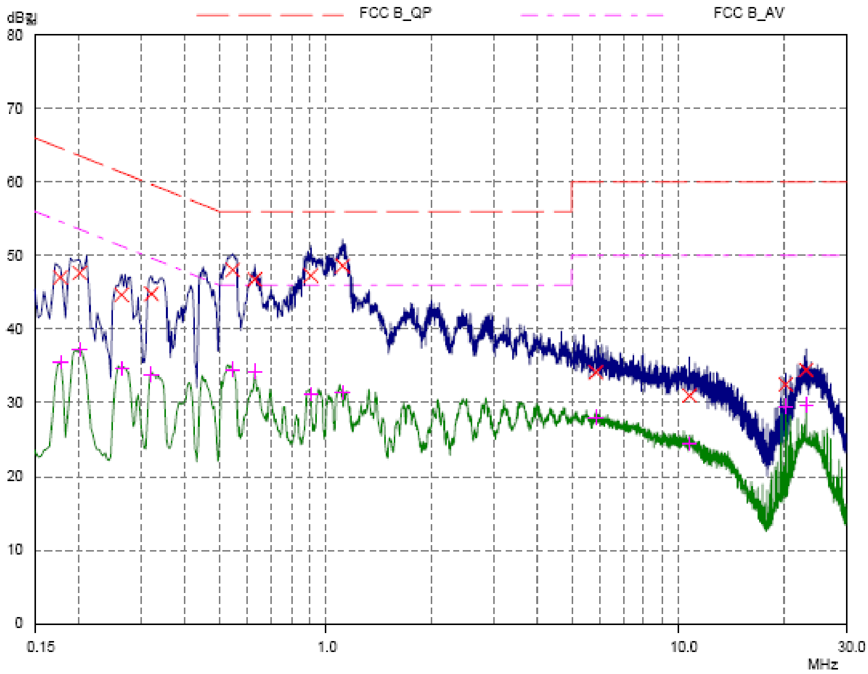
EUT: EZB-L100
Manuf:
Op Cond: H
Operator:
Test Spec: FCC Class B Conducted Emission
Comment:

Result File: ezbl100h.dat : EZB-L100 H

Scan Settings (2 Ranges)

Frequencies			Receiver Settings					
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpRge
150kHz	3MHz	3kHz	10kHz	PK+AV	10msec	Auto	OFF	60dB
3MHz	30MHz	10kHz	10kHz	PK+AV	5msec	Auto	OFF	60dB

Final Measurement:
Detectors: X QP / + AV
Meas Time: 1sec
Peaks: 8
Acc Margin: 25 dB



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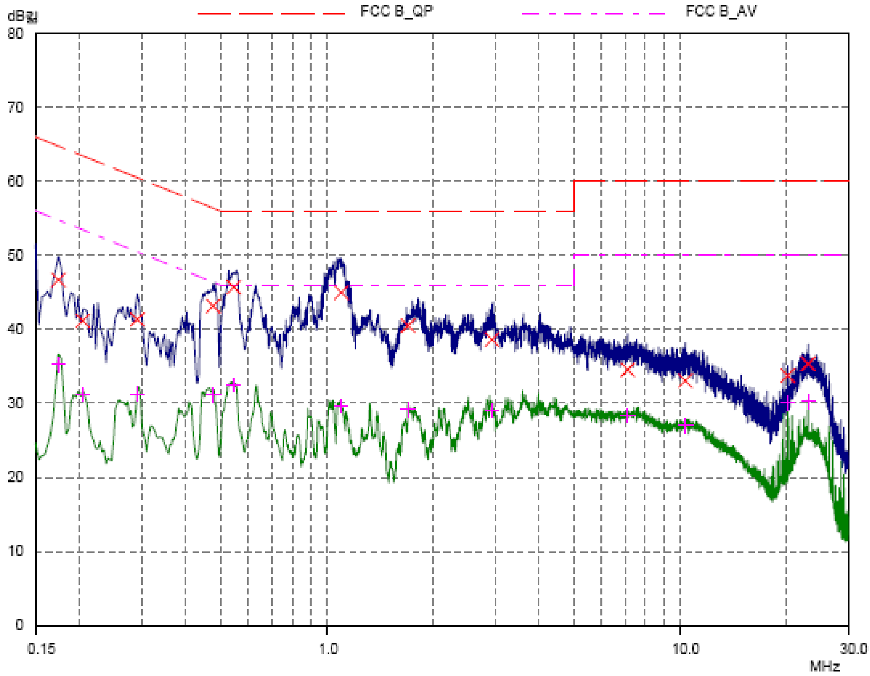
EUT:	EZB-L100	
Manuf:		
Op Cond:	N	
Operator:		
Test Spec:	FCC Class B Conducted Emission	
Comment:		
Result File:	ezbl100n.dat : EZB-L100 N	
Scan Settings	(2 Ranges)	

Frequencies			Receiver Settings					
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpRge
150kHz	3MHz	3kHz	10kHz	PK+AV	10msec	Auto	OFF	60dB
3MHz	30MHz	10kHz	10kHz	PK+AV	5msec	Auto	OFF	60dB

Final Measurement:

	Detectors:	X QP / + AV
	Meas Time:	1sec
	Peaks:	8
	Acc Margin:	25 dB



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6. Test equipment used for test

	Description	Manufacture	Model No.	Serial No.	Next Cal Date.
□	Temp & humidity chamber	taekwang	TK-04	TK001	08.12.12
□	Temp & humidity chamber	taekwang	TK-500	TK002	09.09.06
■	Power Meter	Agilent	E4416A	GB41292365	09.10.30
■	Frequency Counter	HP	5351B	3049A01295	09.10.30
■	Spectrum Analyzer	Agilent	E4407B	US39010142	09.10.30
■	Spectrum Analyzer	R & S	FSP40	100209	09.10.30
■	Signal Generator	HP	E4432B	GB39340611	09.10.30
□	Modulation Analyzer	HP	8901B	3538A05527	09.11.07
□	Function Generator	Agilent	33120A	US36018826	09.01.25
□	Audio Analyzer	HP	8903B	3011A10372	09.01.07
□	Audio Analyzer	HP	8903B	3729A18248	09.10.30
□	AC Power Supply	KIKUSUI	PCR2000W	GB001619	09.10.30
■	DC Power Supply	Tektronix	PS2520G	TW50517	09.02.15
□	DC Power Supply	Tektronix	PS2521G	TW53135	09.10.30
□	Dummy Load	BIRD	8141	7560	-
□	Dummy Load	BIRD	8401-025	799	-
■	EMI Test Receiver	R&S	ESCI	100001	09.08.18
■	Attenuator	HP	8494A	2631A09825	09.11.03
■	Attenuator	HP	8496A	3308A16640	09.11.03
■	Attenuator	R&S	RBS1000	D67079	09.11.04
□	Attenuator	BIRD	50-A-MFN-20	0403002	09.11.03
■	Attenuator	HP	11581A	29738	09.01.10
■	Power sensor	Agilent	E9321A	US40390422	09.11.03
□	Power sensor	Agilent	E9325A		09.11.03
□	LOOP Antenna	EMCO	EMCO6502	9205-2745	09.05.28
■	BILOG Antenna	Schwarzbeck	VULB 9160	3138	10.02.21
■	HORN Antenna	ETS	3115	00062589	09.12.26
■	Power Divider	HP	11636A	05441	09.08.21
■	Signal Generator	HP	E4421B	GB40052295	09.10.30
■	Signal Generator	IFR	IFR2023A	202304/278	09.10.30
□	Power Divider	Weinschel	1580-1	NX375	09.08.21
□	Power Divider	Weinschel	1580-1	NX380	09.08.21
□	Power Divider	Weinschel	1594	671	09.08.21
■	Test Receiver	R&S	ESHS10	843276/003	09.05.29
■	LISN	R&S	ESH3-Z5	100267	09.07.04
■	LISN	PMM	L2-16A	0000J10705	-

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