

Enlighted, Inc.

TEST REPORT FOR

**Compact Sensor
Model: SU-3E-00**

Tested To The Following Standards:

**FCC Part 15 Subpart C Sections 15.207, 15.247
and
RSS 210 Issue 8**

Report No.: 94651-6

Date of issue: July 25, 2013



This test report bears the accreditation symbol indicating that the testing performed herein meets the test and reporting requirements of ISO/IEC 17025 under the applicable scope of EMC testing for CKC Laboratories, Inc.

We strive to create long-term, trust based relationships by providing sound, adaptive, customer first testing services. We embrace each of our customers' unique EMC challenges, not as an interruption to set processes, but rather as the reason we are in business.

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ADMINISTRATIVE INFORMATION

Test Report Information

REPORT PREPARED FOR:

Enlighted, Inc.
930 Benecia Ave.
Sunnyvale, CA 94085

Representative: Leanne Ly
Customer Reference Number: 10113679

DATE OF EQUIPMENT RECEIPT:

DATE(S) OF TESTING:

REPORT PREPARED BY:

Dianne Dudley
CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

Project Number: 94651

July 16, 2013

July 16-18, 2013

Report Authorization

The test data contained in this report documents the observed testing parameters pertaining to and are relevant for only the sample equipment tested in the agreed upon operational mode(s) and configuration(s) as identified herein. Compliance assessment remains the client's responsibility. This report may not be used to claim product endorsement by A2LA or any government agencies. This test report has been authorized for release under quality control from CKC Laboratories, Inc.



Steve Behm
Director of Quality Assurance & Engineering Services
CKC Laboratories, Inc.

Test Facility Information



Our laboratories are configured to effectively test a wide variety of product types. CKC utilizes first class test equipment, anechoic chambers, data acquisition and information services to create accurate, repeatable and affordable test results.

TEST LOCATION(S):
CKC Laboratories, Inc.
1120 Fulton Place
Fremont, CA 94539

Software Versions

CKC Laboratories Proprietary Software	Version
EMITest Emissions	5.00.14
Immunity	5.00.07

Site Registration & Accreditation Information

Location	CB #	TAIWAN	CANADA	FCC	JAPAN
Fremont	US0082	SL2-IN-E-1148R	3082B-1	958979	A-0149

SUMMARY OF RESULTS

Standard / Specification: FCC Part 15 Subpart C 15.247 & RSS 210 Issue 8

Description	Test Procedure/Method	Results
Voltage Variation	FCC Part 15 Subpart C Section 15.31(e)	Pass
Conducted Emissions	FCC Part 15 Subpart C Section 15.207 / ANSI C63.4 (2003)	Pass
-6dB Occupied Bandwidth	FCC Part 15 Subpart C Section 15.247 (a)(2) / DA 00-705	Pass
RF Power Output	FCC Part 15 Subpart C Section 15.247 (b)(3) / DA 00-705	Pass
Bandedge	FCC Part 15 Subpart C 15.247/ ITU-R 55/1 / DA 00-705	Pass
Radiated Spurious Emissions	FCC Part 15 Subpart C Section 15.247(d) / DA 00-705	Pass
Power Spectral Density	FCC Part 15 Subpart C 15.247 (e) / DA 00-705	Pass
99% Occupied Bandwidth & Emissions Bandwidth	RSS 210 Issue 8	Pass

Conditions During Testing

This list is a summary of the conditions noted for or modifications made to the equipment during testing.

Summary of Conditions
None

EQUIPMENT UNDER TEST (EUT)

EQUIPMENT UNDER TEST

Compact Sensor

Manuf: Enlighted, Inc.

Model: SU-3E-00

Serial: None

PERIPHERAL DEVICES

The EUT was tested with the following peripheral device(s):

AC Adapter

Manuf: UL listed

Model: AD35-0900300DU

Serial: 2302AA

Remote Control

Manuf: Enlighted

Model: WS-1-00 Sensor

Serial: None

FCC PART 15 SUBPART C

This report contains EMC emissions test results under United States Federal Communications Commission (FCC) 47 CFR 15C requirements for Unlicensed Radio Frequency Devices, Subpart C - Intentional Radiators.

15.31(e) Voltage Variations

Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**

Specification: **15.31e**

Work Order #: **94651**

Date: 7/16/2013

Test Type: **Radiated Scan**

Time: 11:15:56

Equipment: **Compact Sensor**

Sequence#: 2

Manufacturer: Enlighted, Inc.

Tested By: Hieu Song Nguyenpham

Model: SU-3E-00

S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN02157	Horn Antenna-ANSI C63.5	3115	1/23/2013	1/23/2015
T2	AN03302	Cable	32026-29094K-29094K-72TC	3/21/2012	3/21/2014
T3	ANP01210	Cable	FSJ1P-50A-4A	2/19/2013	2/19/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
DC power supply	Tenma	72-6610	1002222
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

Firmware Used: Version 1214

Temperature: 21.3°C, Humidity: 43 %, Atmospheric Pressure: 101.0 kPa

High Clock: 16MHz

Transmitting operating frequency= 2.4GHz Band

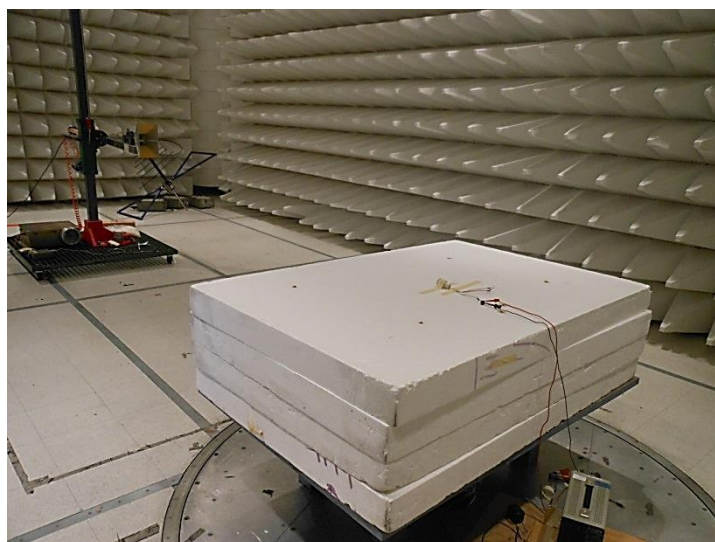
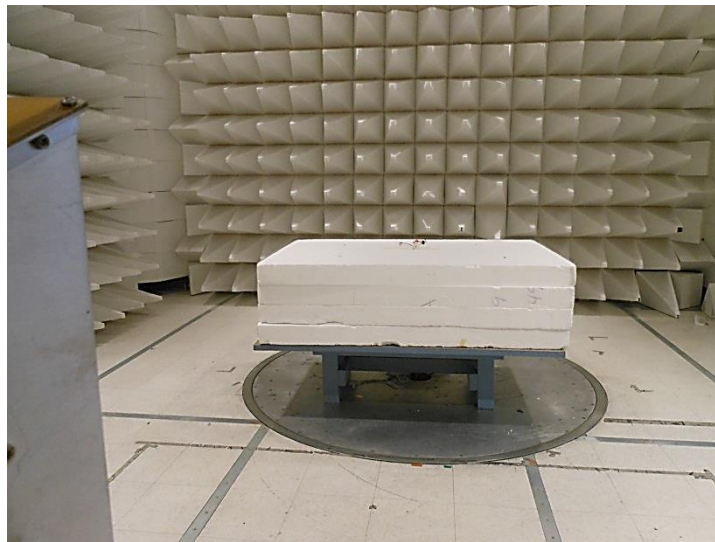
RF Output= 0dBm

Gain of the antenna=0dBi

Low channel=2405MHz, Middle channel=2440MHz, High Channel=2480MHz

15.31(e). Connect the EUT to DC power supply. Adjust the voltage +/- 15% (11.9VDC, 16.1VDC), the Fundamental of the EUT is not changing.

Test Setup Photos



15.207 AC Conducted Emissions

Test Data Sheets

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**

Specification: **15.207 AC Mains - Average**

Work Order #: **94651**

Test Type: **Conducted Emissions**

Equipment: **Compact Sensor**

Manufacturer: **Enlighted, Inc.**

Model: **SU-3E-00**

S/N: **None**

Date: 7/18/2013

Time: 8:26:09 AM

Sequence#: 48

Tested By: Hieu Song Nguyenpham
120V 60Hz

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP01211	Attenuator	PE7002-10	4/2/2013	4/2/2015
T2	ANP00880	Cable	RG214U	7/30/2012	7/30/2014
T3	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015
T4	AN00493	50uH LISN-L1 (L) Loss W/O European Adapter	3816/NM	3/4/2013	3/4/2015
	AN00493	50uH LISN-L(2) N Loss W/O European Adapter	3816/NM	3/4/2013	3/4/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
T5	ANP05258	High Pass Filter	HE9615-150K- 50-720B	12/6/2012	12/6/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

Conducted Emission

Frequency Range: 150kHz to 30MHz

Firmware Used: Version 1214

Temperature: 20.9°C

Humidity: 39 %

Atmospheric Pressure: 101.6kPa

High Clock: 16MHz

Transmitting operating frequency= 2.4GHz Band

RF Output= 0dBm

Gain of the antenna=0dBi

Low channel=2405MHz

Middle channel=2440MHz

High Channel=2475MHz

The EUT is a fit device and operated at 14VDC. It is placed on the 80 cm Styrofoam table. Instead of connecting to another device in order to get a14VDC power, the customer uses AC/DC power adapter to power up the EUT.

The EUT is set in continue transmit.

Ext Attn: 0 dB

Measurement Data:

Reading listed by margin.

Test Lead: Black

#	Freq MHz	Rdng dBμV	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBμV	Spec dBμV	Margin dB	Polar Ant
1	550.691k	23.4	+9.5 +0.1	+0.1	+0.0	+0.1	+0.0	33.2	46.0	-12.8	Black
2	523.784k	23.1	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	33.0	46.0	-13.0	Black
3	504.149k	22.0	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	32.0	46.0	-14.0	Black
4	599.413k	20.0	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	30.0	46.0	-16.0	Black
5	609.594k	19.5	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	29.5	46.0	-16.5	Black
6	621.229k	19.3	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	29.3	46.0	-16.7	Black
7	612.503k	19.0	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	29.0	46.0	-17.0	Black
8	277.988k	23.7	+9.6 +0.2	+0.1	+0.0	+0.1	+0.0	33.7	50.9	-17.2	Black
9	629.229k	18.5	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	28.5	46.0	-17.5	Black
10	632.138k	18.3	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	28.3	46.0	-17.7	Black
11	355.799k	20.9	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	30.8	48.8	-18.0	Black
12	627.047k	18.0	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	28.0	46.0	-18.0	Black
13	635.046k	18.0	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	28.0	46.0	-18.0	Black

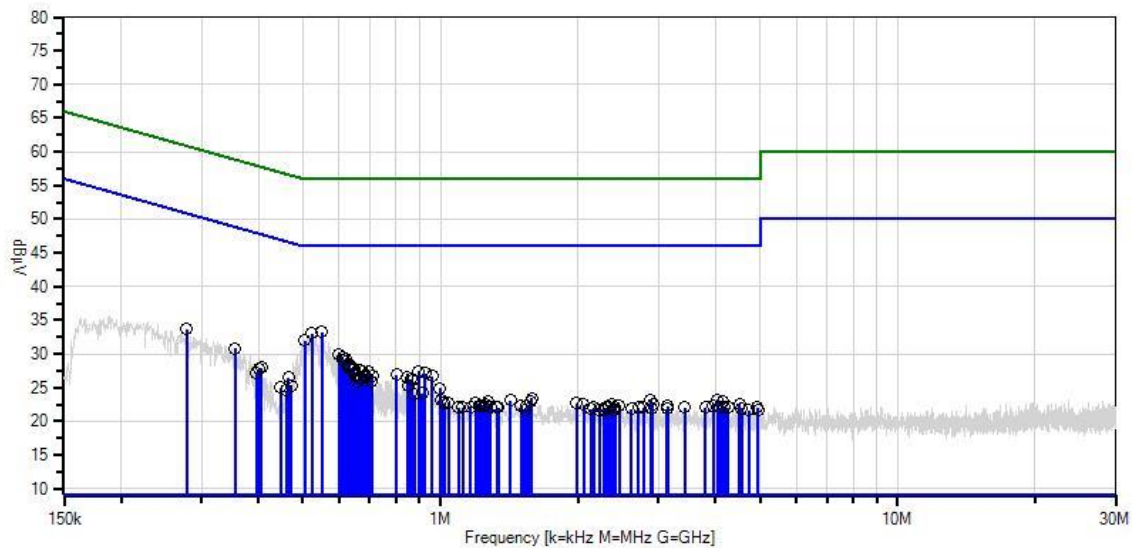
14	646.682k	17.8	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	27.8	46.0	-18.2	Black
15	665.589k	17.7	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	27.7	46.0	-18.3	Black
16	640.864k	17.5	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	27.5	46.0	-18.5	Black
17	677.952k	17.4	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	27.4	46.0	-18.6	Black
18	693.950k	17.5	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	27.4	46.0	-18.6	Black
19	894.216k	17.4	+9.6 +0.2	+0.1	+0.0	+0.1	+0.0	27.4	46.0	-18.6	Black
20	923.985k	17.1	+9.6 +0.2	+0.1	+0.0	+0.1	+0.0	27.1	46.0	-18.9	Black
21	651.772k	16.9	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	26.9	46.0	-19.1	Black
22	800.849k	16.9	+9.6 +0.2	+0.1	+0.0	+0.1	+0.0	26.9	46.0	-19.1	Black
23	650.318k	16.8	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	26.8	46.0	-19.2	Black
24	686.678k	16.8	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	26.8	46.0	-19.2	Black
25	708.494k	16.9	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	26.8	46.0	-19.2	Black
26	958.007k	16.8	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	26.7	46.0	-19.3	Black
27	845.209k	16.6	+9.6 +0.2	+0.1	+0.0	+0.1	+0.0	26.6	46.0	-19.4	Black
28	668.498k	16.5	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	26.5	46.0	-19.5	Black
29	683.769k	16.5	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	26.5	46.0	-19.5	Black
30	670.679k	16.4	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	26.4	46.0	-19.6	Black
31	405.249k	18.2	+9.6 +0.0	+0.1	+0.0	+0.1	+0.0	28.0	47.7	-19.7	Black
32	861.935k	16.3	+9.6 +0.2	+0.1	+0.0	+0.1	+0.0	26.3	46.0	-19.7	Black
33	868.480k	16.2	+9.6 +0.2	+0.1	+0.0	+0.1	+0.0	26.2	46.0	-19.8	Black
34	400.886k	18.0	+9.6 +0.0	+0.1	+0.0	+0.1	+0.0	27.8	47.8	-20.0	Black
35	465.607k	16.6	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	26.5	46.6	-20.1	Black
36	704.858k	16.0	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	25.9	46.0	-20.1	Black
37	655.408k	15.8	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	25.8	46.0	-20.2	Black
38	395.796k	17.4	+9.6 +0.0	+0.1	+0.0	+0.1	+0.0	27.2	47.9	-20.7	Black
39	851.027k	15.3	+9.6 +0.2	+0.1	+0.0	+0.1	+0.0	25.3	46.0	-20.7	Black

40	996.281k	15.0	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	24.9	46.0	-21.1	Black
41	472.152k	15.4	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	25.3	46.5	-21.2	Black
42	911.227k	14.2	+9.6 +0.2	+0.1	+0.0	+0.1	+0.0	24.2	46.0	-21.8	Black
43	446.700k	15.2	+9.6 +0.0	+0.1	+0.0	+0.1	+0.0	25.0	46.9	-21.9	Black
44	460.517k	14.7	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	24.6	46.7	-22.1	Black
45	877.205k	13.9	+9.6 +0.2	+0.1	+0.0	+0.1	+0.0	23.9	46.0	-22.1	Black
46	1.583M	13.4	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	23.4	46.0	-22.6	Black
47	1.005M	13.3	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	23.2	46.0	-22.8	Black
48	2.884M	13.2	+9.6 +0.1	+0.2	+0.0	+0.1	+0.0	23.2	46.0	-22.8	Black
49	4.041M	13.1	+9.6 +0.1	+0.2	+0.1	+0.1	+0.0	23.2	46.0	-22.8	Black
50	1.422M	13.2	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	23.1	46.0	-22.9	Black
51	4.139M	12.9	+9.6 +0.1	+0.2	+0.1	+0.1	+0.0	23.0	46.0	-23.0	Black
52	1.268M	13.0	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.9	46.0	-23.1	Black
53	1.570M	13.0	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.9	46.0	-23.1	Black
54	1.043M	12.9	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.8	46.0	-23.2	Black
55	1.192M	12.9	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.8	46.0	-23.2	Black
56	1.018M	12.8	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.7	46.0	-23.3	Black
57	1.983M	12.8	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.7	46.0	-23.3	Black
58	2.919M	12.6	+9.6 +0.1	+0.2	+0.0	+0.1	+0.0	22.6	46.0	-23.4	Black
59	4.513M	12.3	+9.7 +0.2	+0.2	+0.1	+0.1	+0.0	22.6	46.0	-23.4	Black
60	1.251M	12.6	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.5	46.0	-23.5	Black
61	2.059M	12.6	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.5	46.0	-23.5	Black
62	2.370M	12.5	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	22.5	46.0	-23.5	Black
63	1.222M	12.5	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.4	46.0	-23.6	Black
64	1.243M	12.5	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.4	46.0	-23.6	Black
65	3.952M	12.3	+9.6 +0.1	+0.2	+0.1	+0.1	+0.0	22.4	46.0	-23.6	Black

66	1.502M	12.4	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.3	46.0	-23.7	Black
67	1.213M	12.4	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.3	46.0	-23.7	Black
68	1.545M	12.4	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.3	46.0	-23.7	Black
69	3.140M	12.3	+9.6 +0.1	+0.2	+0.0	+0.1	+0.0	22.3	46.0	-23.7	Black
70	2.459M	12.3	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	22.3	46.0	-23.7	Black
71	1.162M	12.3	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.2	46.0	-23.8	Black
72	2.336M	12.3	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.2	46.0	-23.8	Black
73	2.778M	12.1	+9.6 +0.1	+0.2	+0.0	+0.1	+0.0	22.1	46.0	-23.9	Black
74	2.310M	12.2	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.1	46.0	-23.9	Black
75	1.120M	12.2	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.1	46.0	-23.9	Black
76	4.939M	12.0	+9.5 +0.2	+0.2	+0.1	+0.1	+0.0	22.1	46.0	-23.9	Black
77	3.799M	12.0	+9.6 +0.1	+0.2	+0.1	+0.1	+0.0	22.1	46.0	-23.9	Black
78	3.429M	12.1	+9.5 +0.1	+0.2	+0.1	+0.1	+0.0	22.1	46.0	-23.9	Black
79	1.336M	12.1	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.0	46.0	-24.0	Black
80	2.166M	12.1	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.0	46.0	-24.0	Black
81	1.328M	12.1	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.0	46.0	-24.0	Black
82	1.094M	12.1	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.0	46.0	-24.0	Black
83	1.285M	12.1	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.0	46.0	-24.0	Black
84	4.182M	11.9	+9.6 +0.1	+0.2	+0.1	+0.1	+0.0	22.0	46.0	-24.0	Black
85	4.262M	11.9	+9.6 +0.1	+0.2	+0.1	+0.1	+0.0	22.0	46.0	-24.0	Black
86	4.101M	11.9	+9.6 +0.1	+0.2	+0.1	+0.1	+0.0	22.0	46.0	-24.0	Black
87	2.400M	12.0	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	22.0	46.0	-24.0	Black
88	2.710M	12.1	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	22.0	46.0	-24.0	Black
89	2.893M	11.9	+9.6 +0.1	+0.2	+0.0	+0.1	+0.0	21.9	46.0	-24.1	Black
90	4.556M	11.6	+9.7 +0.2	+0.2	+0.1	+0.1	+0.0	21.9	46.0	-24.1	Black
91	2.136M	11.9	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	21.8	46.0	-24.2	Black

92	2.612M	11.9	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	21.8	46.0	-24.2	Black
93	3.127M	11.8	+9.6 +0.1	+0.2	+0.0	+0.1	+0.0	21.8	46.0	-24.2	Black
94	2.276M	11.8	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	21.7	46.0	-24.3	Black
95	2.225M	11.8	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	21.7	46.0	-24.3	Black
96	1.528M	11.8	+9.6 +0.1	+0.1	+0.0	+0.1	+0.0	21.7	46.0	-24.3	Black
97	4.956M	11.6	+9.5 +0.2	+0.2	+0.1	+0.1	+0.0	21.7	46.0	-24.3	Black
98	2.412M	11.7	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	21.7	46.0	-24.3	Black
99	2.387M	11.7	+9.7 +0.1	+0.1	+0.0	+0.1	+0.0	21.7	46.0	-24.3	Black
100	4.722M	11.4	+9.6 +0.2	+0.2	+0.1	+0.1	+0.0	21.6	46.0	-24.4	Black

CKC Laboratories, Inc Date: 7/18/2013 Time: 8:26:09 AM Enlighted, Inc WO#: 94651
Test Lead: Black 120V 60Hz Sequence#: 48



— Sweep Data
○ Peak Readings
* Average Readings
— 1 - 15.207 AC Mains - Average
— Readings
× QP Readings
▼ Ambient
— 2 - 15.207 AC Mains - Quasi-peak

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**
Specification: **15.207 AC Mains - Average**
Work Order #: **94651**
Test Type: **Conducted Emissions**
Equipment: **Compact Sensor**
Manufacturer: **Enlighted, Inc.**
Model: **SU-3E-00**
S/N: **None**

Date: 7/18/2013
Time: 8:29:48 AM
Sequence#: 49
Tested By: Hieu Song Nguyenpham
120V 60Hz

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP01211	Attenuator	PE7002-10	4/2/2013	4/2/2015
T2	ANP00880	Cable	RG214U	7/30/2012	7/30/2014
T3	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015
	AN00493	50uH LISN-L1 (L) Loss W/O European Adapter	3816/NM	3/4/2013	3/4/2015
T4	AN00493	50uH LISN-L(2) N Loss W/O European Adapter	3816/NM	3/4/2013	3/4/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
T5	ANP05258	High Pass Filter	HE9615-150K- 50-720B	12/6/2012	12/6/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

Conducted Emission
Frequency Range: 150kHz to 30MHz

Firmware Used: Version 1214
Temperature: 20.9°C, Humidity: 39 %, Atmospheric Pressure: 101.6kPa
High Clock: 16MHz

Transmitting operating frequency= 2.4GHz Band
RF Output= 0dBm
Gain of the antenna=0dBi

Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz

The EUT is a fit device and operated at 14VDC. It is placed on the 80 cm Styrofoam table. Instead of connecting to another device in order to get a14VDC power, the customer uses AC/DC power adapter to power up the EUT.
The EUT is set in continue transmit.

Ext Attn: 0 dB

Measurement Data:

Reading listed by margin.

Test Lead: White

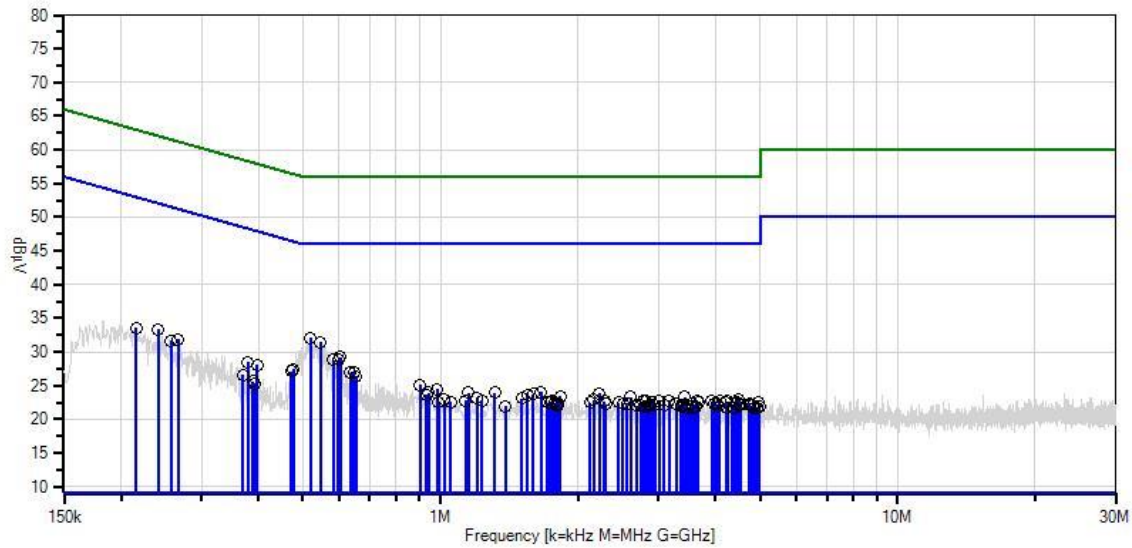
#	Freq MHz	Rdng dB μ V	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	519.421k	21.7	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	32.1	46.0	-13.9	White
2	545.600k	21.2	+9.5 +0.1	+0.1	+0.0	+0.6	+0.0	31.5	46.0	-14.5	White
3	603.777k	18.7	+9.7 +0.1	+0.1	+0.0	+0.6	+0.0	29.2	46.0	-16.8	White
4	581.960k	18.4	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	28.8	46.0	-17.2	White
5	597.232k	18.3	+9.7 +0.1	+0.1	+0.0	+0.6	+0.0	28.8	46.0	-17.2	White
6	240.901k	22.9	+9.6 +0.2	+0.1	+0.0	+0.6	+0.0	33.4	52.1	-18.7	White
7	477.243k	17.0	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	27.4	46.4	-19.0	White
8	645.954k	16.5	+9.7 +0.1	+0.1	+0.0	+0.6	+0.0	27.0	46.0	-19.0	White
9	634.319k	16.4	+9.7 +0.1	+0.1	+0.0	+0.6	+0.0	26.9	46.0	-19.1	White
10	266.353k	21.4	+9.6 +0.2	+0.1	+0.0	+0.6	+0.0	31.9	51.2	-19.3	White
11	216.176k	23.1	+9.6 +0.2	+0.1	+0.0	+0.6	+0.0	33.6	53.0	-19.4	White
12	472.152k	16.7	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	27.1	46.5	-19.4	White
13	653.954k	15.9	+9.7 +0.1	+0.1	+0.0	+0.6	+0.0	26.4	46.0	-19.6	White
14	256.899k	21.2	+9.6 +0.2	+0.1	+0.0	+0.6	+0.0	31.7	51.5	-19.8	White
15	379.070k	18.2	+9.6 +0.0	+0.1	+0.0	+0.6	+0.0	28.5	48.3	-19.8	White
16	396.523k	17.8	+9.6 +0.0	+0.1	+0.0	+0.6	+0.0	28.1	47.9	-19.8	White
17	902.721k	14.6	+9.6 +0.2	+0.1	+0.0	+0.6	+0.0	25.1	46.0	-20.9	White
18	983.523k	14.1	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	24.5	46.0	-21.5	White
19	368.889k	16.2	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	26.6	48.5	-21.9	White
20	1.660M	13.6	+9.7 +0.1	+0.1	+0.0	+0.6	+0.0	24.1	46.0	-21.9	White
21	940.996k	13.4	+9.6 +0.2	+0.1	+0.0	+0.6	+0.0	23.9	46.0	-22.1	White
22	1.149M	13.5	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	23.9	46.0	-22.1	White
23	1.315M	13.5	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	23.9	46.0	-22.1	White

24	2.230M	13.4	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	23.8	46.0	-22.2	White
25	1.596M	13.2	+9.7 +0.1	+0.1	+0.0	+0.6	+0.0	23.7	46.0	-22.3	White
26	932.490k	13.1	+9.6 +0.2	+0.1	+0.0	+0.6	+0.0	23.6	46.0	-22.4	White
27	1.549M	13.2	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	23.6	46.0	-22.4	White
28	388.524k	15.3	+9.6 +0.0	+0.1	+0.0	+0.6	+0.0	25.6	48.1	-22.5	White
29	1.826M	13.0	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	23.4	46.0	-22.6	White
30	391.432k	15.0	+9.6 +0.0	+0.1	+0.0	+0.6	+0.0	25.3	48.0	-22.7	White
31	2.604M	12.9	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	23.3	46.0	-22.7	White
32	3.429M	12.8	+9.5 +0.1	+0.2	+0.1	+0.6	+0.0	23.3	46.0	-22.7	White
33	1.200M	12.8	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	23.2	46.0	-22.8	White
34	1.507M	12.7	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	23.1	46.0	-22.9	White
35	1.018M	12.5	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	22.9	46.0	-23.1	White
36	2.166M	12.5	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	22.9	46.0	-23.1	White
37	4.496M	12.1	+9.7 +0.2	+0.2	+0.1	+0.6	+0.0	22.9	46.0	-23.1	White
38	1.758M	12.4	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	22.8	46.0	-23.2	White
39	1.230M	12.4	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	22.8	46.0	-23.2	White
40	1.137M	12.4	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	22.8	46.0	-23.2	White
41	2.812M	12.3	+9.6 +0.1	+0.2	+0.0	+0.6	+0.0	22.8	46.0	-23.2	White
42	3.637M	12.2	+9.6 +0.1	+0.2	+0.1	+0.6	+0.0	22.8	46.0	-23.2	White
43	3.161M	12.3	+9.6 +0.1	+0.2	+0.0	+0.6	+0.0	22.8	46.0	-23.2	White
44	3.008M	12.3	+9.6 +0.1	+0.2	+0.0	+0.6	+0.0	22.8	46.0	-23.2	White
45	2.778M	12.2	+9.6 +0.1	+0.2	+0.0	+0.6	+0.0	22.7	46.0	-23.3	White
46	2.285M	12.3	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	22.7	46.0	-23.3	White
47	3.926M	12.1	+9.6 +0.1	+0.2	+0.1	+0.6	+0.0	22.7	46.0	-23.3	White
48	4.224M	12.1	+9.6 +0.1	+0.2	+0.1	+0.6	+0.0	22.7	46.0	-23.3	White
49	4.088M	12.1	+9.6 +0.1	+0.2	+0.1	+0.6	+0.0	22.7	46.0	-23.3	White

50	4.462M	12.0	+9.6 +0.1	+0.2	+0.1	+0.6	+0.0	22.6	46.0	-23.4	White
51	1.052M	12.2	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	22.6	46.0	-23.4	White
52	1.741M	12.2	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	22.6	46.0	-23.4	White
53	3.663M	12.0	+9.6 +0.1	+0.2	+0.1	+0.6	+0.0	22.6	46.0	-23.4	White
54	1.779M	12.1	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	22.5	46.0	-23.5	White
55	2.128M	12.1	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	22.5	46.0	-23.5	White
56	992.029k	12.1	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	22.5	46.0	-23.5	White
57	1.715M	12.1	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	22.5	46.0	-23.5	White
58	4.216M	11.9	+9.6 +0.1	+0.2	+0.1	+0.6	+0.0	22.5	46.0	-23.5	White
59	4.968M	11.8	+9.5 +0.2	+0.2	+0.1	+0.7	+0.0	22.5	46.0	-23.5	White
60	2.451M	12.0	+9.7 +0.1	+0.1	+0.0	+0.6	+0.0	22.5	46.0	-23.5	White
61	2.902M	12.0	+9.6 +0.1	+0.2	+0.0	+0.6	+0.0	22.5	46.0	-23.5	White
62	2.561M	12.0	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	22.4	46.0	-23.6	White
63	2.510M	12.0	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	22.4	46.0	-23.6	White
64	1.800M	12.0	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	22.4	46.0	-23.6	White
65	4.747M	11.6	+9.6 +0.2	+0.2	+0.1	+0.7	+0.0	22.4	46.0	-23.6	White
66	4.530M	11.5	+9.7 +0.2	+0.2	+0.1	+0.7	+0.0	22.4	46.0	-23.6	White
67	3.535M	11.9	+9.5 +0.1	+0.2	+0.1	+0.6	+0.0	22.4	46.0	-23.6	White
68	3.280M	11.7	+9.6 +0.1	+0.2	+0.1	+0.6	+0.0	22.3	46.0	-23.7	White
69	2.298M	11.9	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	22.3	46.0	-23.7	White
70	3.986M	11.7	+9.6 +0.1	+0.2	+0.1	+0.6	+0.0	22.3	46.0	-23.7	White
71	4.432M	11.7	+9.6 +0.1	+0.2	+0.1	+0.6	+0.0	22.3	46.0	-23.7	White
72	4.041M	11.7	+9.6 +0.1	+0.2	+0.1	+0.6	+0.0	22.3	46.0	-23.7	White
73	2.944M	11.7	+9.6 +0.1	+0.2	+0.0	+0.6	+0.0	22.2	46.0	-23.8	White
74	1.809M	11.8	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	22.2	46.0	-23.8	White
75	3.080M	11.7	+9.6 +0.1	+0.2	+0.0	+0.6	+0.0	22.2	46.0	-23.8	White

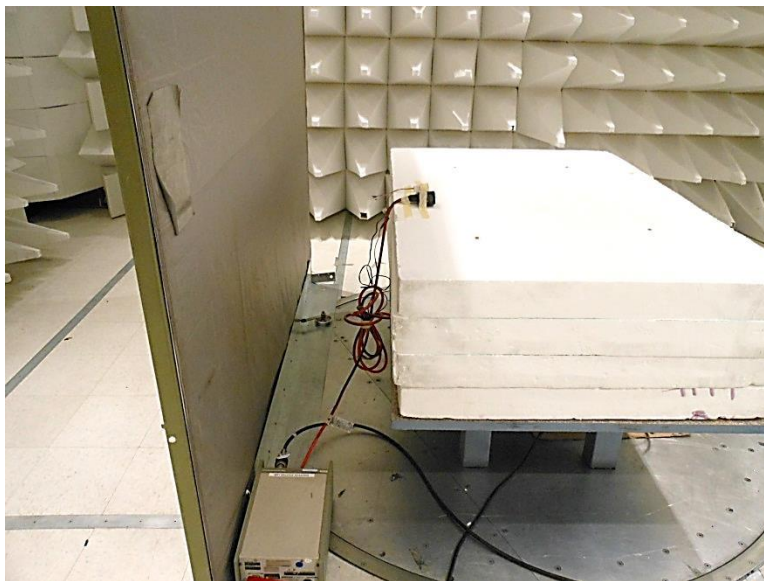
76	3.412M	11.7	+9.5 +0.1	+0.2	+0.1	+0.6	+0.0	22.2	46.0	-23.8	White
77	3.361M	11.7	+9.5 +0.1	+0.2	+0.1	+0.6	+0.0	22.2	46.0	-23.8	White
78	1.792M	11.7	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	22.1	46.0	-23.9	White
79	2.872M	11.6	+9.6 +0.1	+0.2	+0.0	+0.6	+0.0	22.1	46.0	-23.9	White
80	4.756M	11.3	+9.6 +0.2	+0.2	+0.1	+0.7	+0.0	22.1	46.0	-23.9	White
81	2.744M	11.5	+9.6 +0.1	+0.2	+0.0	+0.6	+0.0	22.0	46.0	-24.0	White
82	2.685M	11.6	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	22.0	46.0	-24.0	White
83	4.836M	11.3	+9.5 +0.2	+0.2	+0.1	+0.7	+0.0	22.0	46.0	-24.0	White
84	4.513M	11.2	+9.7 +0.2	+0.2	+0.1	+0.6	+0.0	22.0	46.0	-24.0	White
85	1.388M	11.5	+9.6 +0.1	+0.1	+0.0	+0.6	+0.0	21.9	46.0	-24.1	White
86	2.833M	11.4	+9.6 +0.1	+0.2	+0.0	+0.6	+0.0	21.9	46.0	-24.1	White
87	3.612M	11.3	+9.6 +0.1	+0.2	+0.1	+0.6	+0.0	21.9	46.0	-24.1	White
88	3.374M	11.3	+9.5 +0.1	+0.2	+0.1	+0.6	+0.0	21.8	46.0	-24.2	White
89	2.795M	11.3	+9.6 +0.1	+0.2	+0.0	+0.6	+0.0	21.8	46.0	-24.2	White
90	3.488M	11.3	+9.5 +0.1	+0.2	+0.1	+0.6	+0.0	21.8	46.0	-24.2	White
91	4.994M	11.1	+9.5 +0.2	+0.2	+0.1	+0.7	+0.0	21.8	46.0	-24.2	White
92	4.067M	11.2	+9.6 +0.1	+0.2	+0.1	+0.6	+0.0	21.8	46.0	-24.2	White
93	4.360M	11.1	+9.6 +0.1	+0.2	+0.1	+0.6	+0.0	21.7	46.0	-24.3	White
94	4.250M	11.1	+9.6 +0.1	+0.2	+0.1	+0.6	+0.0	21.7	46.0	-24.3	White
95	3.459M	11.2	+9.5 +0.1	+0.2	+0.1	+0.6	+0.0	21.7	46.0	-24.3	White
96	4.922M	11.0	+9.5 +0.2	+0.2	+0.1	+0.7	+0.0	21.7	46.0	-24.3	White
97	4.849M	11.0	+9.5 +0.2	+0.2	+0.1	+0.7	+0.0	21.7	46.0	-24.3	White
98	4.390M	11.1	+9.6 +0.1	+0.2	+0.1	+0.6	+0.0	21.7	46.0	-24.3	White
99	3.471M	11.1	+9.5 +0.1	+0.2	+0.1	+0.6	+0.0	21.6	46.0	-24.4	White
100	3.578M	11.0	+9.6 +0.1	+0.2	+0.1	+0.6	+0.0	21.6	46.0	-24.4	White

CKC Laboratories, Inc Date: 7/18/2013 Time: 8:29:48 AM Enlighted, Inc WO#: 94651
Test Lead: White 120V 60Hz Sequence#: 49



— Sweep Data
○ Peak Readings
* Average Readings
— 1 - 15.207 AC Mains - Average
— Readings
× QP Readings
▼ Ambient
— 2 - 15.207 AC Mains - Quasi-peak

Test Setup Photos



15.247(a)(2) -6dB Occupied Bandwidth

Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**

Specification: **OBW**

Work Order #: **94651**

Date: 7/16/2013

Test Type: **Radiated Scan**

Time: 13:09:30

Equipment: **Compact Sensor**

Sequence#: 1

Manufacturer: Enlighted, Inc.

Tested By: Hieu Song Nguyenpham

Model: SU-3E-00

S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN02157	Horn Antenna-ANSI C63.5	3115	1/23/2013	1/23/2015
T2	AN03302	Cable	32026-29094K- 29094K-72TC	3/21/2012	3/21/2014
T3	ANP01210	Cable	FSJ1P-50A-4A	2/19/2013	2/19/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

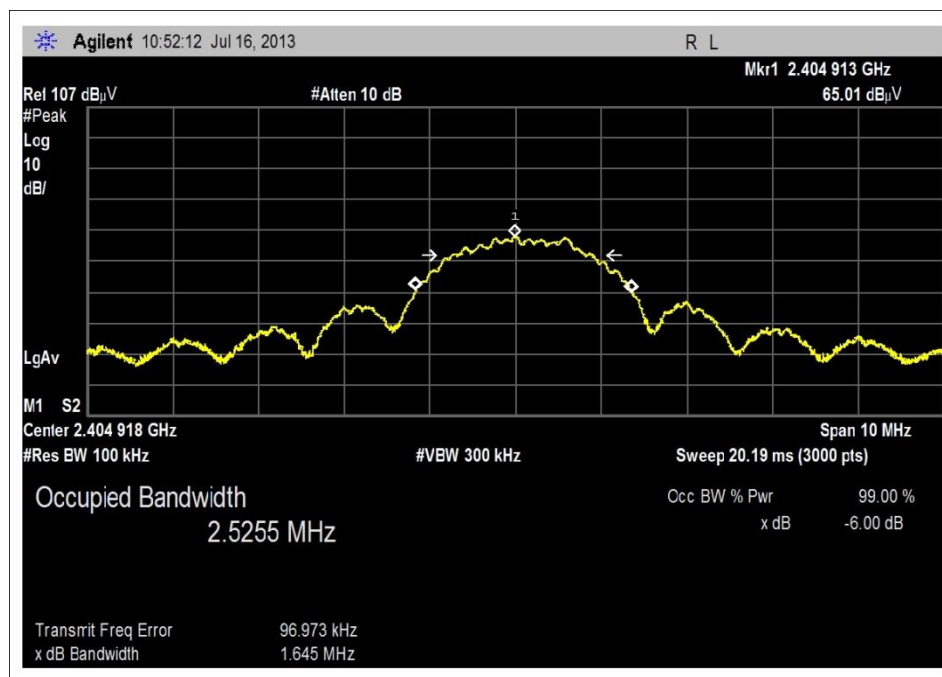
Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

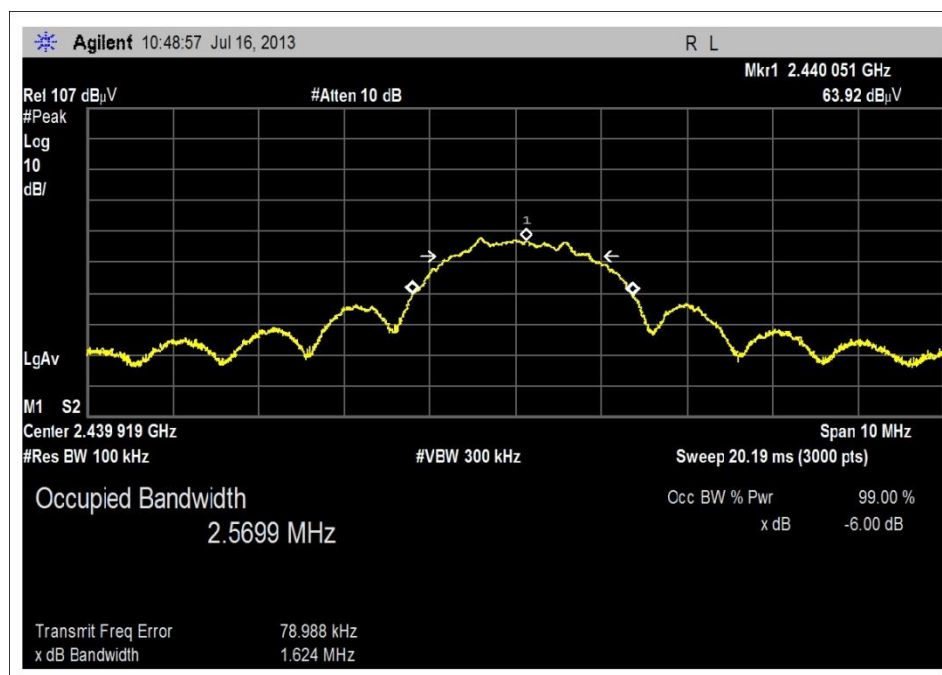
Test Conditions / Notes:

OBW Setup Firmware Used: Version 1214
 Temperature: 21.3°C, Humidity: 43 %, Atmospheric Pressure: 101.0kPa
 High Clock: 16MHz
 Transmitting operating frequency= 2.4GHz Band
 RF Output= 0dBm
 Gain of the antenna=0dBi
 Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz
 The EUT is a fit device and operated at 14VDC. It is placed on the 80cm Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, the customer uses an AC/DC power adapter to power up the EUT. The EUT is set in continue transmit and 3 meter away from the measuring antenna.

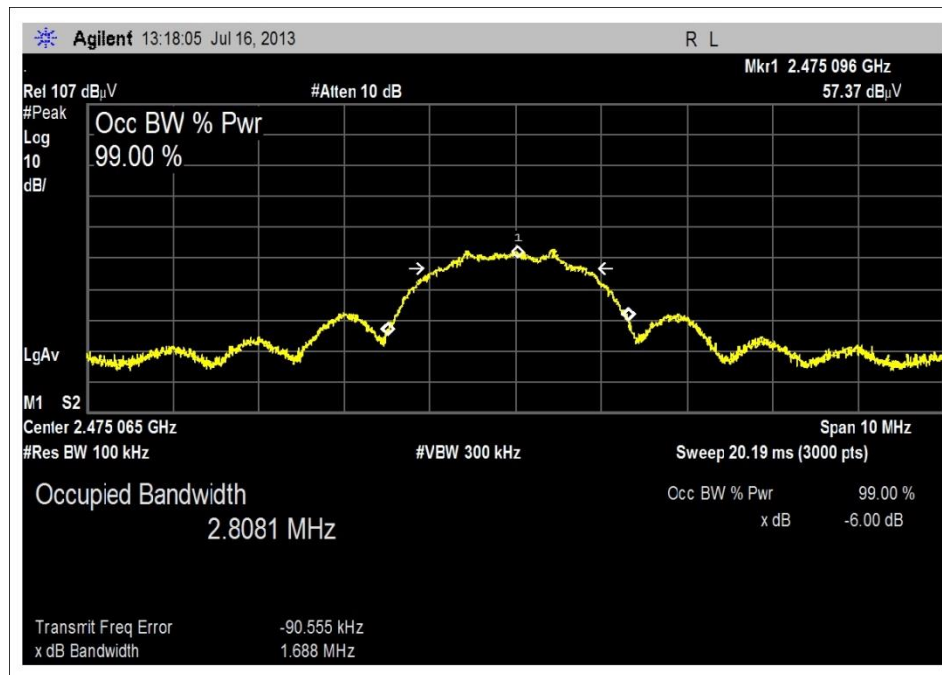
Test Data



Low Channel

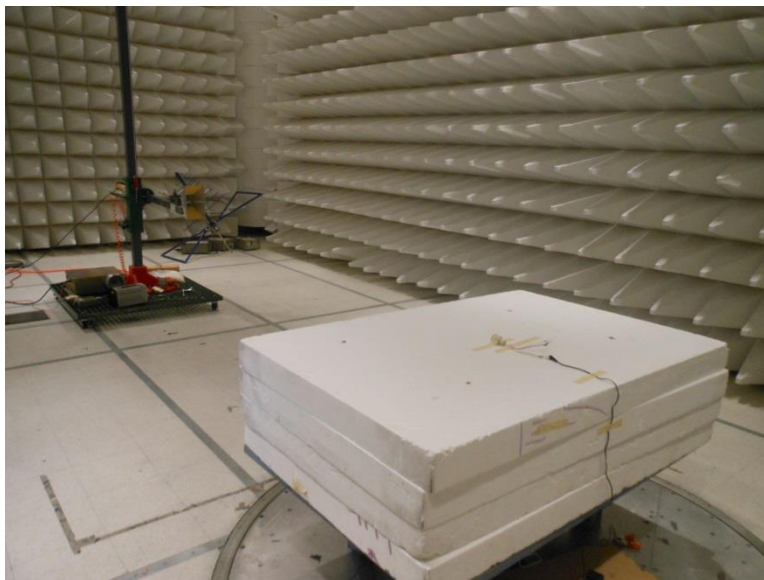
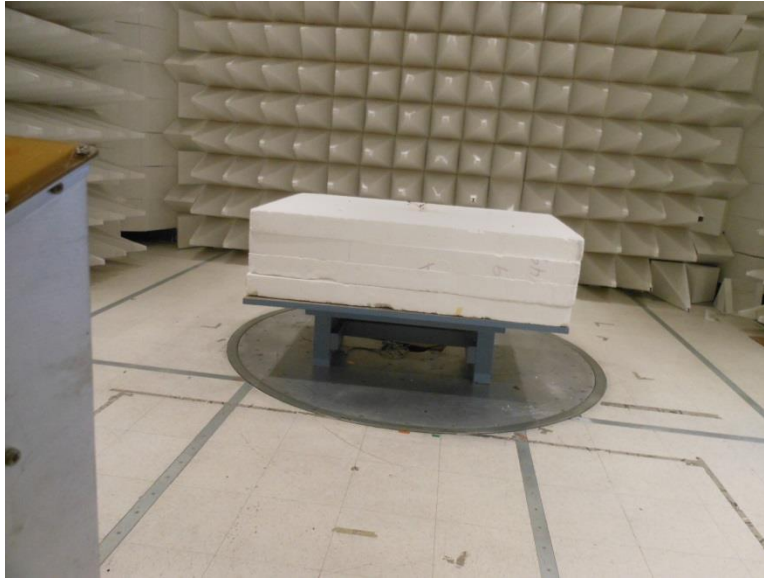


Middle Channel



High Channel

Test Setup Photos



15.247 (b)(3) RF Power Output

Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**

Specification: **15.247(b)(3) Fundamental Readings**

Work Order #: **94651**

Date: 7/16/2013

Test Type: **Radiated Scan**

Time: 13:09:30

Equipment: **Compact Sensor**

Sequence#: 1

Manufacturer: Enlighted, Inc.

Tested By: Hieu Song Nguyenpham

Model: SU-3E-00

S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN02157	Horn Antenna-ANSI C63.5	3115	1/23/2013	1/23/2015
T2	AN03302	Cable	32026-29094K-29094K-72TC	3/21/2012	3/21/2014
T3	ANP01210	Cable	FSJ1P-50A-4A	2/19/2013	2/19/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

Fundamental of the EUT
 Firmware Used: Version 1214
 Temperature: 21.°C, Humidity: 43 %, Atmospheric Pressure: 101.0 kPa
 High Clock: 16MHz

Transmitting operating frequency= 2.4GHz Band
 RF Output= 0dBm
 Gain of the antenna=0dBi

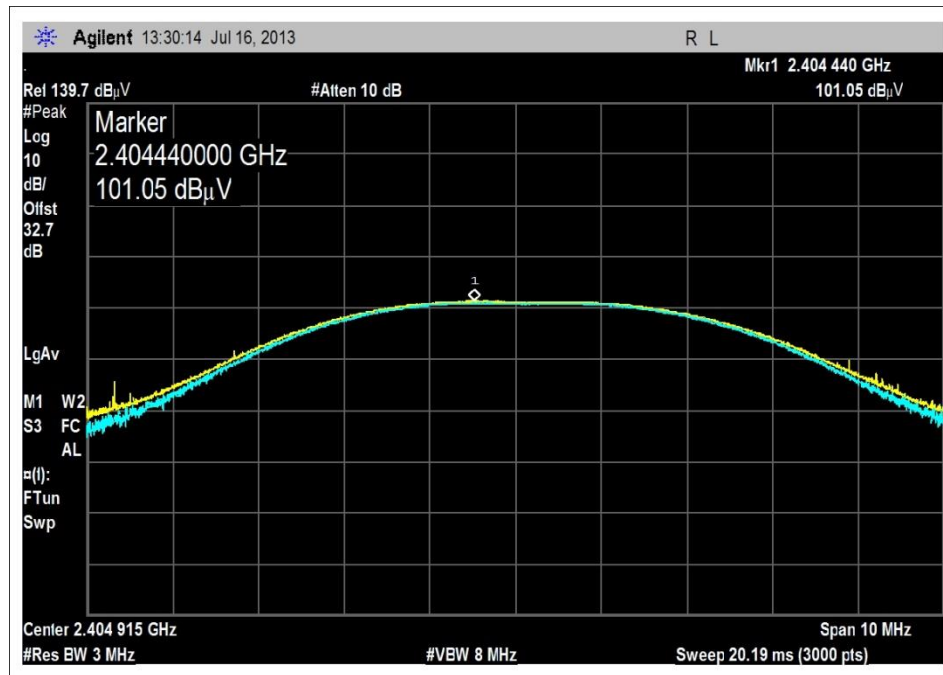
Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz

RBW=3MHz
 VBW=8MHz

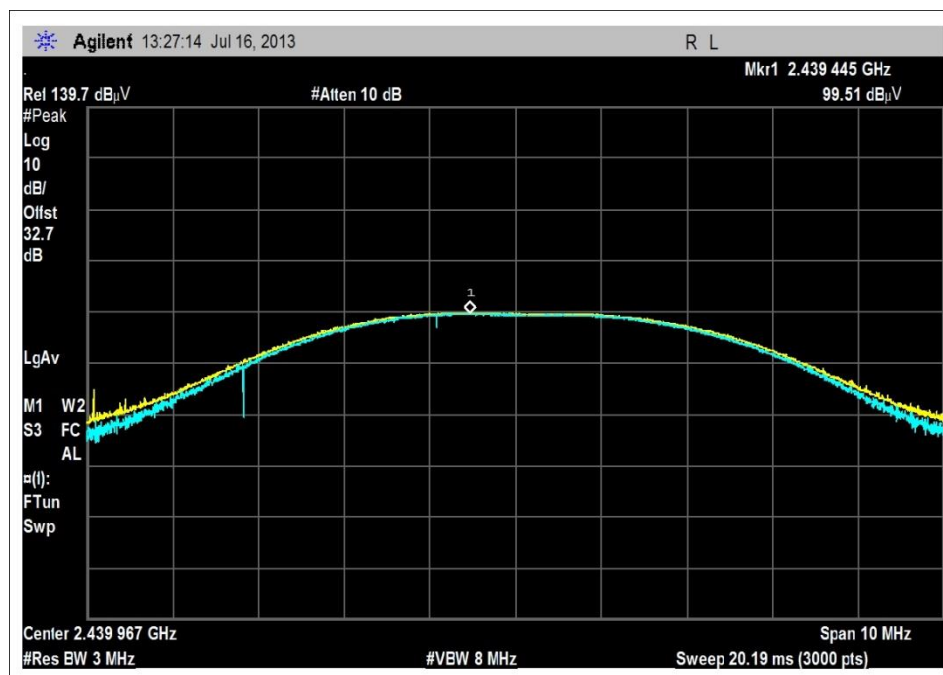
The EUT is a fit device and operated at 14VDC. It is placed on the 80 m Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, the customer uses an AC/DC power adapter to power up the EUT. The EUT is set in continue transmit and 3 meter away from the measuring antenna.

Test Data

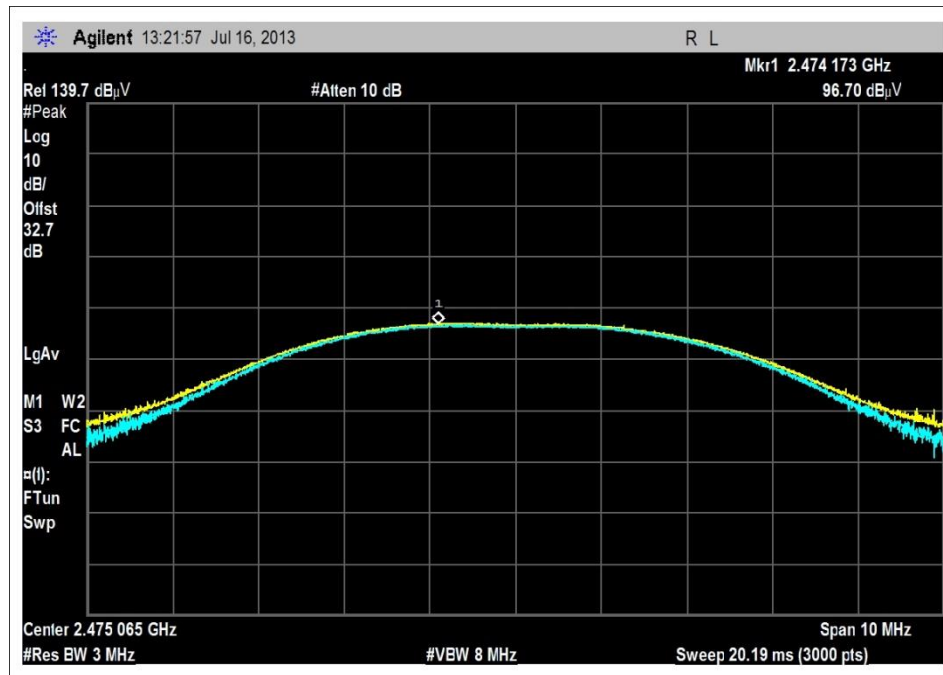
Frequency (MHz)	Measured Power in Watts	Power Limit in Watts	Pass/Fail
2404.444 Low Channel	0.00386	1.00	Pass
2439.967 Middle Channel	0.00270	1.00	Pass
2475.065 High Channel	0.00141	1.00	Pass



Low Channel

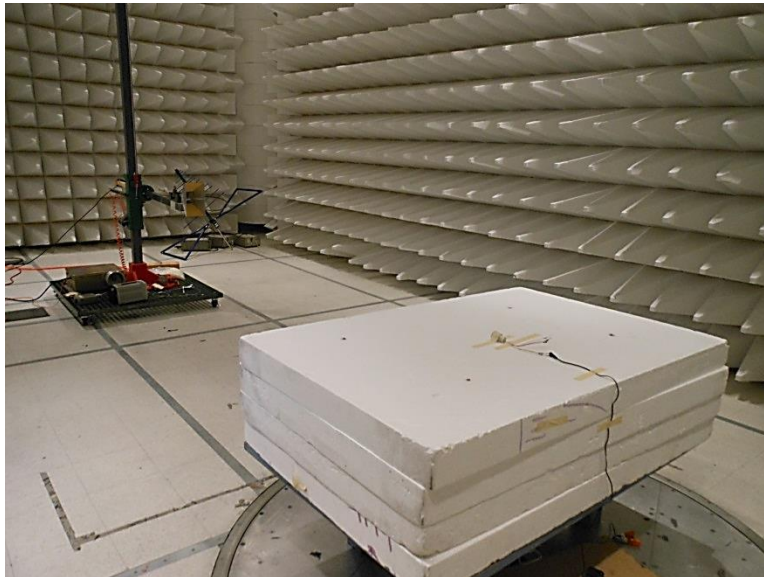
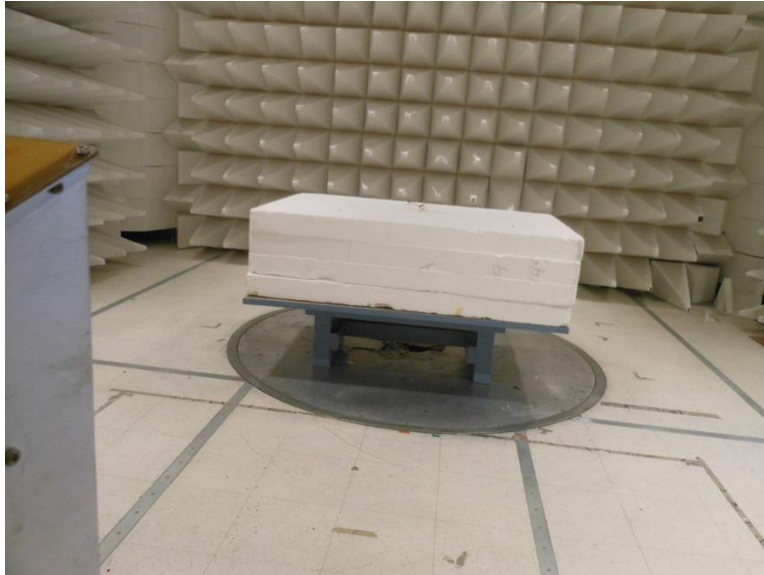


Middle Channel



High Channel

Test Setup Photos



Bandedge

Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**

Specification: **Band Edge**

Work Order #: **94651**

Date: 7/16/2013

Test Type: **Radiated Scan**

Time: 13:09:30

Equipment: **Compact Sensor**

Sequence#: 1

Manufacturer: Enlighted, Inc.

Tested By: Hieu Song Nguyenpham

Model: SU-3E-00

S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN02157	Horn Antenna-ANSI C63.5	3115	1/23/2013	1/23/2015
T2	AN03302	Cable	32026-29094K-29094K-72TC	3/21/2012	3/21/2014
T3	ANP01210	Cable	FSJ1P-50A-4A	2/19/2013	2/19/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

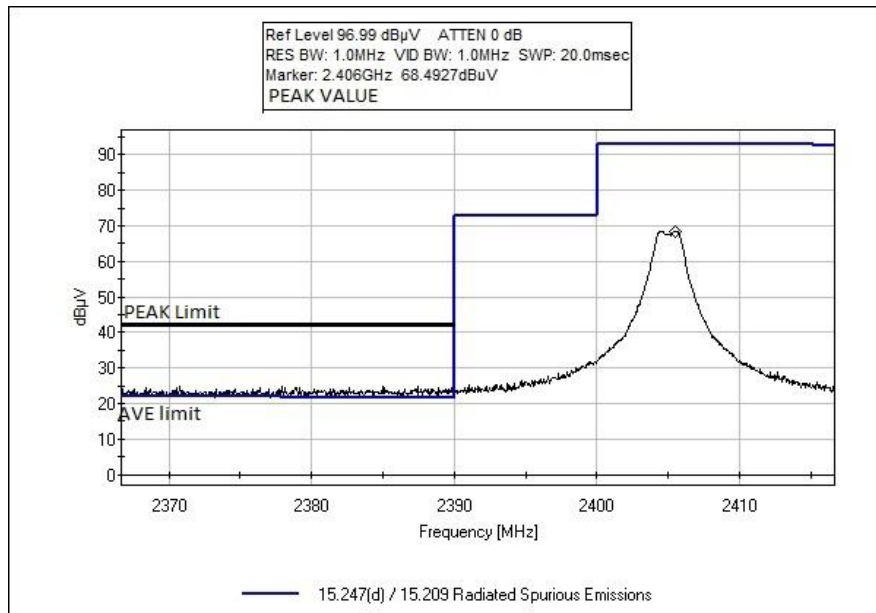
Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

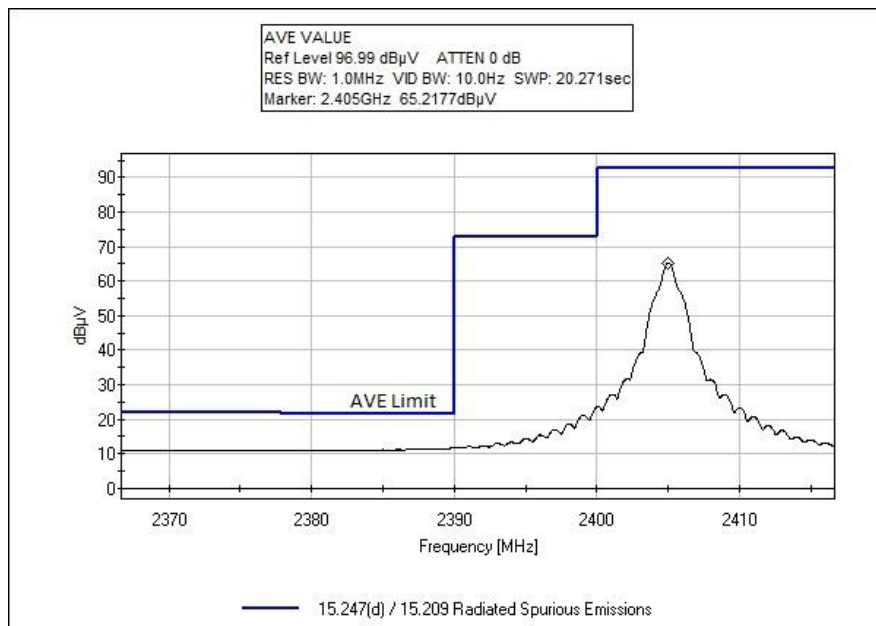
Test Conditions / Notes:

Band Edge Setup
Firmware Used: Version 1214
Temperature: 21.3°C, Humidity: 43 %, Atmospheric Pressure: 101.0 kPa
High Clock: 16MHz
Transmitting operating frequency= 2.4GHz Band
RF Output= 0dBm
Gain of the antenna=0dBi
Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz
The EUT is a fit device and operated at 14VDC. It is placed on the 80cm Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, the customer uses an AC/DC power adapter to power up the EUT. The EUT is set in continue transmit and 3 meter away from the measuring antenna.

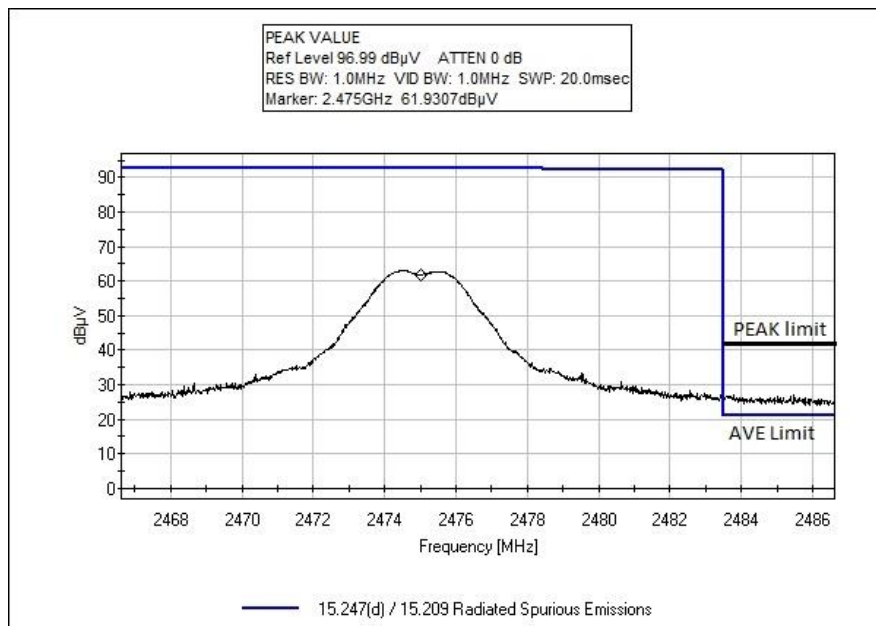
Test Data



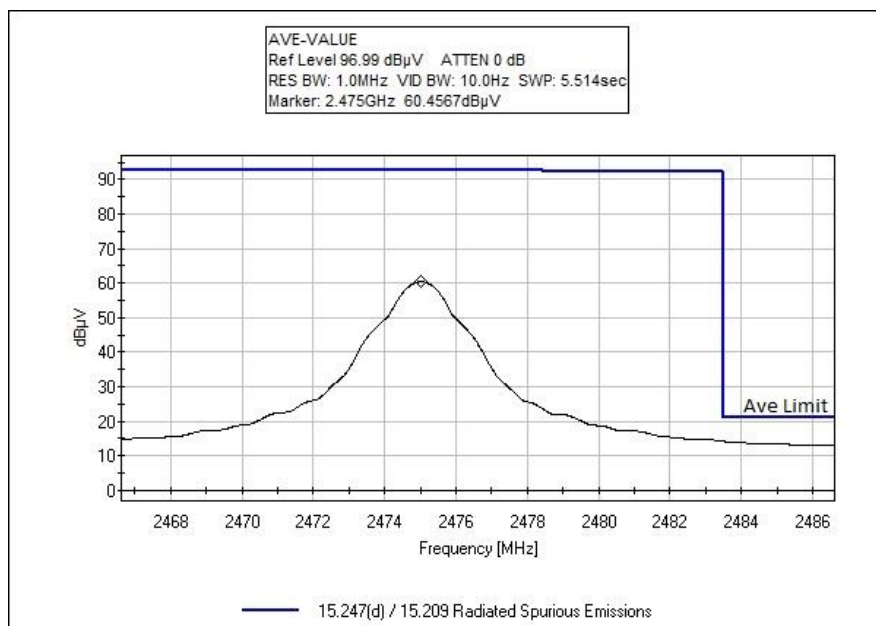
Low Channel



Low Channel

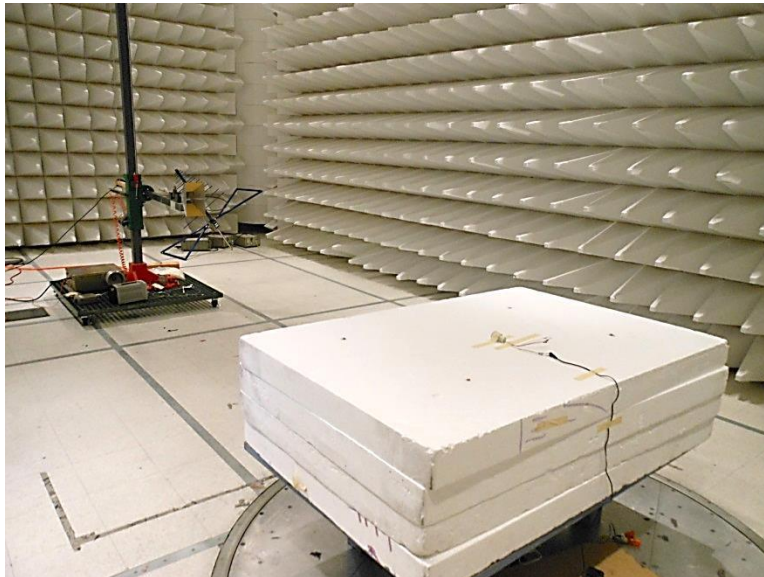
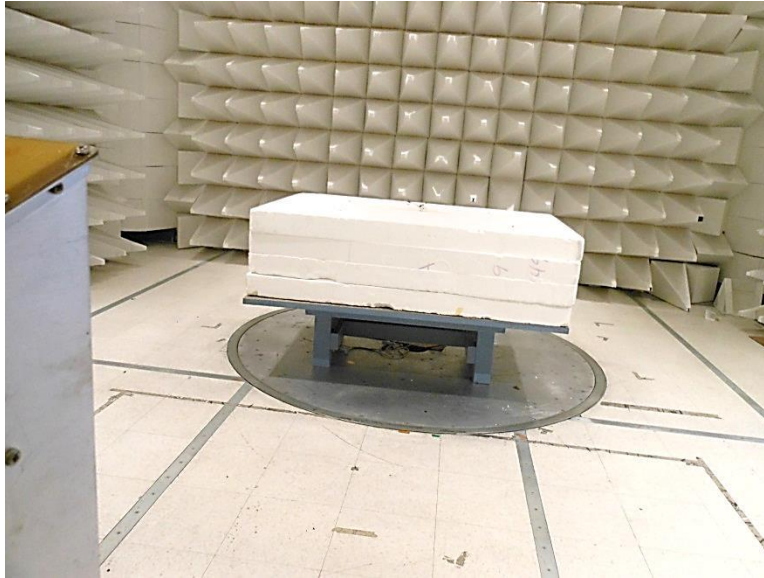


High Channel



High Channel

Test Setup Photos



15.247(d) Radiated Spurious Emissions

Test Data Sheets

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**

Specification: **15.247(d) / 15.209 Radiated Spurious Emissions**

Work Order #: **94651**

Date: 7/17/2013

Test Type: **Radiated Scan**

Time: 16:32:48

Equipment: **Compact Sensor**

Sequence#: 47

Manufacturer: Enlighted, Inc.

Tested By: Hieu Song Nguyenpham

Model: SU-3E-00

S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP00880	Cable	RG214U	7/30/2012	7/30/2014
T2	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
T3	AN00432	Loop Antenna	6502	4/2/2013	4/2/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

Radiated Spurious Emission
Frequency Range: 9kHz to 30MHz

Firmware Used: Version 1214
Temperature: 20.9°C, Humidity: 39 %, Atmospheric Pressure: 101.6 kPa
High Clock: 16MHz

Transmitting operating frequency= 2.4GHz Band
RF Output= 0dBm
Gain of the antenna=0dBi

Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz;
150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;
30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,
1000 MHz-25000MHz RBW=1 MHz, VBW=1 MHz.

The EUT is a fit device and operated at 14VDC. It is placed on the 80cm Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, the customer uses AC/DC power adapter to power up the EUT.
The EUT is set in continue transmit.

Note: Low Channel

Ext Attn: 0 dB

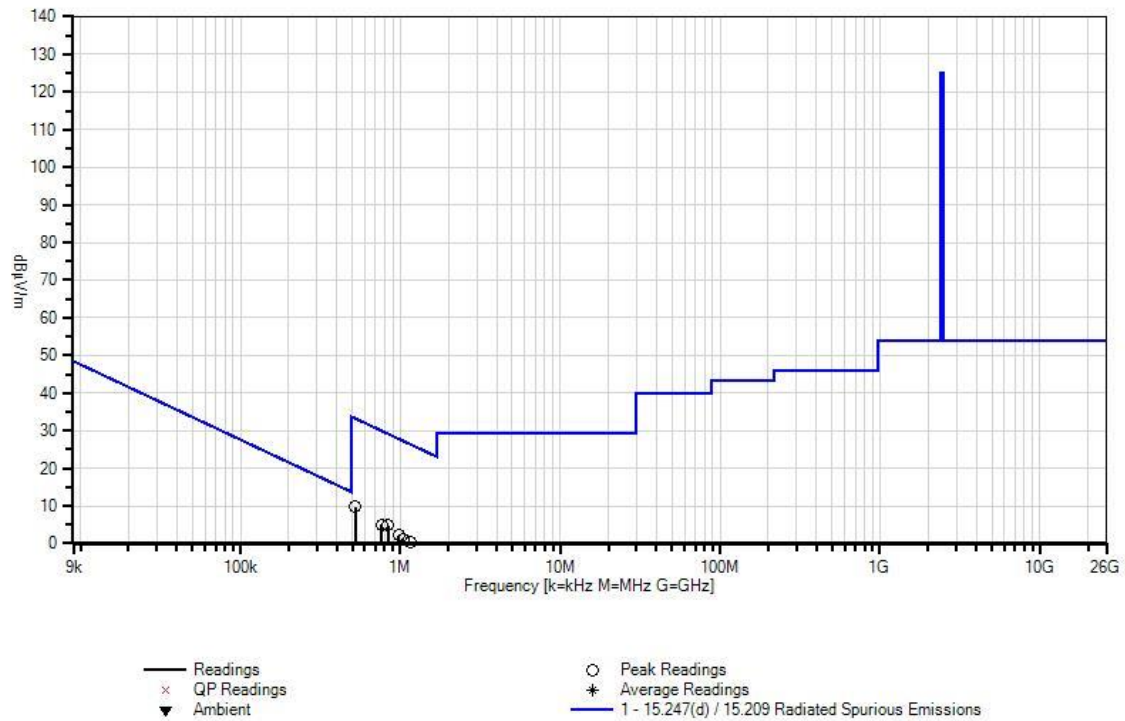
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	T1 dB	T2 dB	T3 dB		Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	522.145k	39.8	+0.1	+0.0	+9.8		-40.0	9.7	33.2	-23.5	Perpe
2	833.660k	35.4	+0.1	+0.0	+9.4		-40.0	4.9	29.2	-24.3	Paral
3	766.757k	35.4	+0.1	+0.0	+9.6		-40.0	5.1	29.9	-24.8	Perpe
4	977.918k	32.4	+0.1	+0.0	+9.7		-40.0	2.2	27.8	-25.6	Paral
5	1.036M	31.4	+0.1	+0.0	+9.7		-40.0	1.2	27.3	-26.1	Perpe
6	1.149M	30.4	+0.1	+0.0	+9.7		-40.0	0.2	26.4	-26.2	Paral

CKC Laboratories, Inc Date: 7/17/2013 Time: 16:32:48 Enlighted, Inc WO#: 94651
Test Distance: 3 Meters Sequence#: 47



Test Location: CKC Laboratories, Inc. • 1120 Fulton Places • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**
 Specification: **15.247(d) / 15.209 Radiated Spurious Emissions**
 Work Order #: **94651** Date: 7/17/2013
 Test Type: **Radiated Scan** Time: 13:22:22
 Equipment: **Compact Sensor** Sequence#: 32
 Manufacturer: **Enlighted, Inc.** Tested By: Hieu Song Nguyenpham
 Model: **SU-3E-00**
 S/N: **None**

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN00730	Preamp	8447D	1/17/2013	1/17/2015
T2	AN00852	Biconilog Antenna	CBL 6111C	11/28/2012	11/28/2014
T3	ANP00880	Cable	RG214U	7/30/2012	7/30/2014
T4	ANP01183	Cable	CNT-195	10/24/2011	10/24/2013
T5	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

Radiated Spurious Emission
 Frequency Range: 30MHz to 1000MHz
 Firmware Used: Version 1214
 Temperature: 20.9°C, Humidity: 39 %, Atmospheric Pressure: 101.6 kPa
 High Clock: 16MHz

Transmitting operating frequency= 2.4GHz Band
 RF Output= 0dBm
 Gain of the antenna=0dBi

Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz;
 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;
 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,
 1000 MHz-25000MHz RBW=1 MHz, VBW=1 MHz.

The EUT is a fit device and operated at 14VDC. It is placed on the 80cm Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, the customer uses AC/DC power adapter to power up the EUT.
 The EUT is set in continue transmit and 3 meters away from the antenna.

Note: Low Channel

Ext Attn: 0 dB

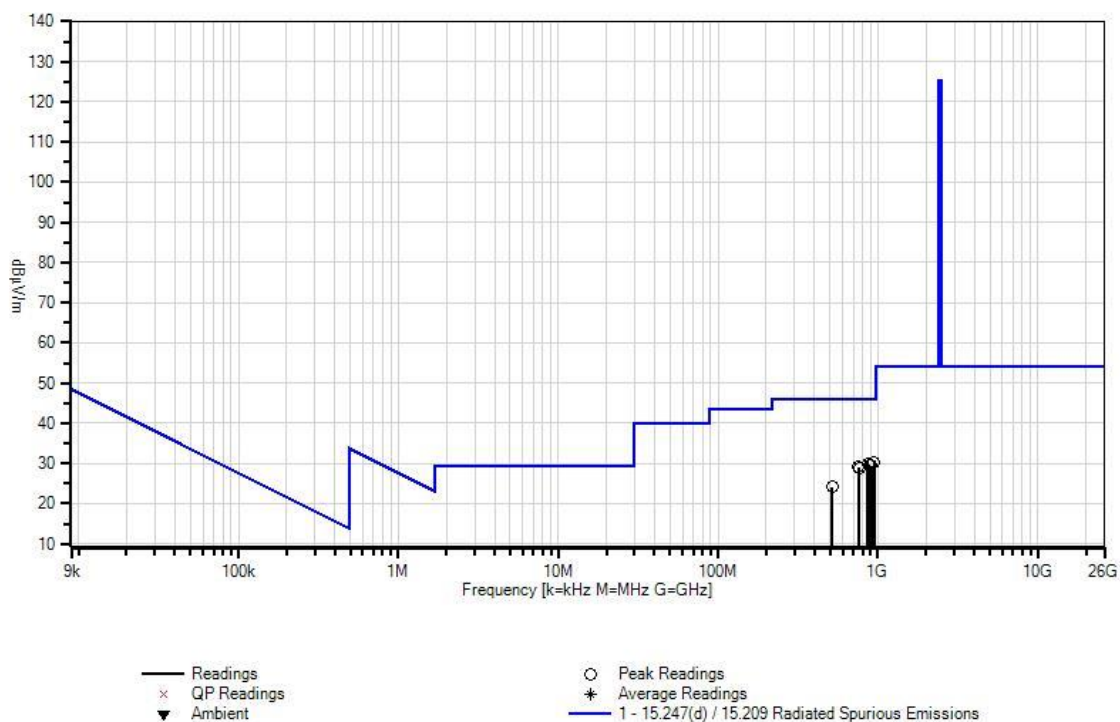
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	941.459M	28.5	-27.1 +0.9	+23.4	+3.5	+1.0	+0.0	30.2	46.0	-15.8	Vert
2	861.473M	28.8	-27.0 +0.9	+22.9	+3.3	+1.0	+0.0	29.9	46.0	-16.1	Vert
3	879.131M	28.4	-27.1 +0.9	+23.1	+3.4	+0.9	+0.0	29.6	46.0	-16.4	Horiz
4	903.155M	28.3	-27.1 +0.9	+23.0	+3.4	+1.0	+0.0	29.5	46.0	-16.5	Horiz
5	752.524M	29.5	-26.9 +0.8	+21.8	+3.0	+0.9	+0.0	29.1	46.0	-16.9	Vert
6	765.137M	29.2	-26.8 +0.8	+21.6	+3.1	+0.9	+0.0	28.8	46.0	-17.2	Horiz
7	516.609M	29.3	-26.9 +0.7	+18.1	+2.4	+0.6	+0.0	24.2	46.0	-21.8	Horiz

CKC Laboratories, Inc Date: 7/17/2013 Time: 13:22:22 Enlighted, Inc WO#: 94651
Test Distance: 3 Meters Sequence#: 32



Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**
 Specification: **15.247(d) / 15.209 Radiated Spurious Emissions**
 Work Order #: **94651** Date: 7/16/2013
 Test Type: **Radiated Scan** Time: 14:29:40
 Equipment: **Compact Sensor** Sequence#: 5
 Manufacturer: **Enlighted, Inc.** Tested By: Hieu Song Nguyenpham
 Model: **SU-3E-00**
 S/N: **None**

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN02157	Horn Antenna-ANSI C63.5	3115	1/23/2013	1/23/2015
T2	AN03302	Cable	32026-29094K-29094K-72TC	3/21/2012	3/21/2014
T3	ANP01210	Cable	FSJ1P-50A-4A	2/19/2013	2/19/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
T4	AN03114	Preamplifier	AMF-7D-00101800-30-10P	4/11/2013	4/11/2015
T5	AN03015	Cable	32022-2-29094K-24TC	5/6/2013	5/6/2015
T6	AN03309	High Pass Filter	11SH10-3000/T10000-O/O	6/12/2012	6/12/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

Radiated Spurious Emission
Frequency Range: 1000MHz to 12000MHz

Firmware Used: Version 1214
Temperature: 21.3°C, Humidity: 43 %, Atmospheric Pressure: 101.0 kPa
High Clock: 16MHz

Transmitting operating frequency= 2.4GHz Band
RF Output= 0dBm
Gain of the antenna=0dBi

Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz;
150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz;
30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz,
1000 MHz-25000MHz; RBW=1 MHz, VBW=1 MHz.

The EUT is a fit device and operated at 14VDC. It is placed on the 80cm Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, the customer uses AC/DC power adapter to power up the EUT.

The EUT is set in continue transmit and 3 meter away from the antenna.

Note: Low Channel

Ext Attn: 0 dB

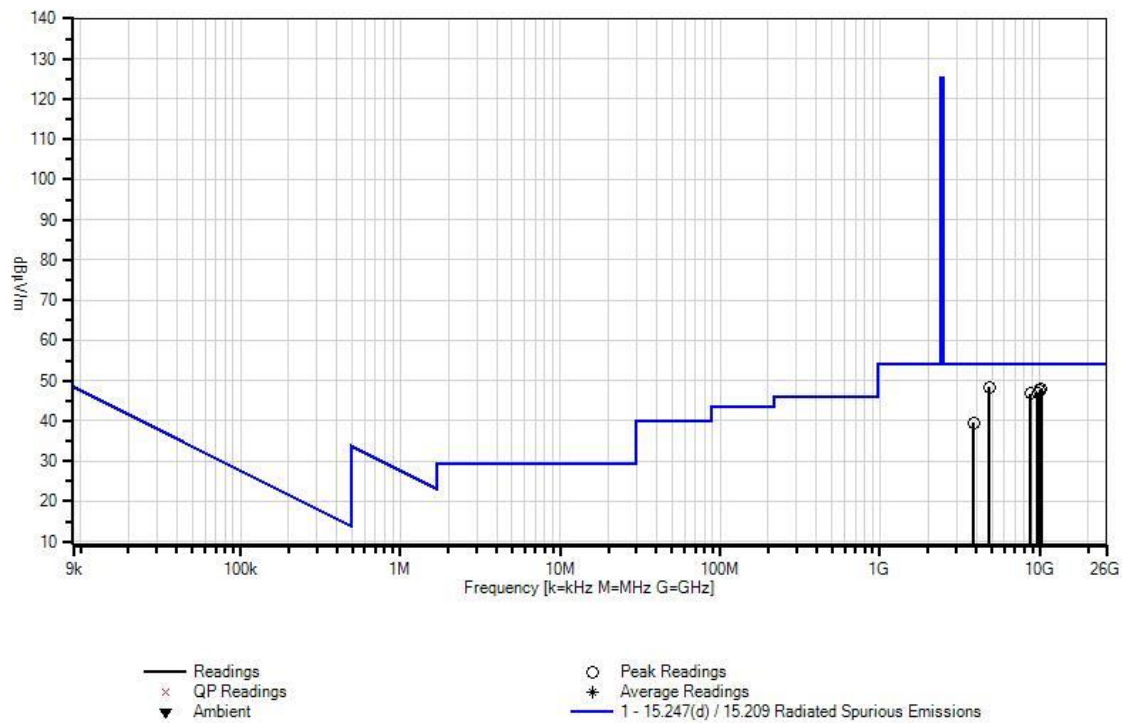
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2 T6	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBμV	dB	dB	dB	dB	Table	dBμV/m	dBμV/m	dB	Ant
1	4810.809M	67.1	+33.3 +0.7	+1.5 +0.2	+3.8	-58.3	+0.0	48.3	54.0	-5.7	Vert
2	10186.179 M	56.6	+39.7 +1.3	+2.3 +0.1	+6.3	-58.2	+0.0	48.1	54.0	-5.9	Horiz
3	10019.012 M	56.2	+39.7 +1.3	+2.3 +0.0	+6.3	-58.2	+0.0	47.6	54.0	-6.4	Vert
4	9722.716M	55.7	+38.9 +1.3	+2.2 +0.2	+6.2	-57.5	+0.0	47.0	54.0	-7.0	Vert
5	8763.758M	55.6	+37.9 +1.4	+2.1 +0.3	+5.8	-56.3	+0.0	46.8	54.0	-7.2	Horiz
6	3863.863M	60.9	+32.5 +0.5	+1.4 +0.3	+3.3	-59.3	+0.0	39.6	54.0	-14.4	Horiz

CKC Laboratories, Inc Date: 7/16/2013 Time: 14:29:40 Enlighted, Inc WO#: 94651
 Test Distance: 3 Meters Sequence#: 5



Test Location: CKC Laboratories, Inc. • 1120 Fulton Places • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**
 Specification: **15.247(d) / 15.209 Radiated Spurious Emissions**
 Work Order #: **94651** Date: 7/17/2013
 Test Type: **Radiated Scan** Time: 10:08:40
 Equipment: **Compact Sensor** Sequence#: 20
 Manufacturer: **Enlighted, Inc.** Tested By: Hieu Song Nguyenpham
 Model: **SU-3E-00**
 S/N: **None**

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANANT-AN02693-20130221	Active Horn Antenna	AMFW-5F-18002650-20-10P	2/21/2013	2/21/2015
T2	AN03143	Cable	32022-29094K-144TC	8/30/2011	8/30/2013
T3	ANP00928	Cable	various	2/10/2012	2/10/2014
T4	ANP06125	Cable	32022-29094K-29094K-72TC	5/6/2013	5/6/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

Radiated Spurious Emission
 Frequency Range: 12000MHz to 18000MHz

Firmware Used: Version 1214
 Temperature: 20.9°C, Humidity: 39 %, Atmospheric Pressure: 101.6 kPa
 High Clock: 16MHz

Transmitting operating frequency= 2.4GHz Band
 RF Output= 0dBm
 Gain of the antenna=0dBi

Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-25000MHz; RBW=1 MHz, VBW=1 MHz.

The EUT is a fit device and operated at 14VDC. It is placed on the 80cm Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, the customer uses AC/DC power adapter to power up the EUT. The EUT is set in continue transmit and 3 meters away from the antenna.

Note: Low Channel

Ext Attn: 0 dB

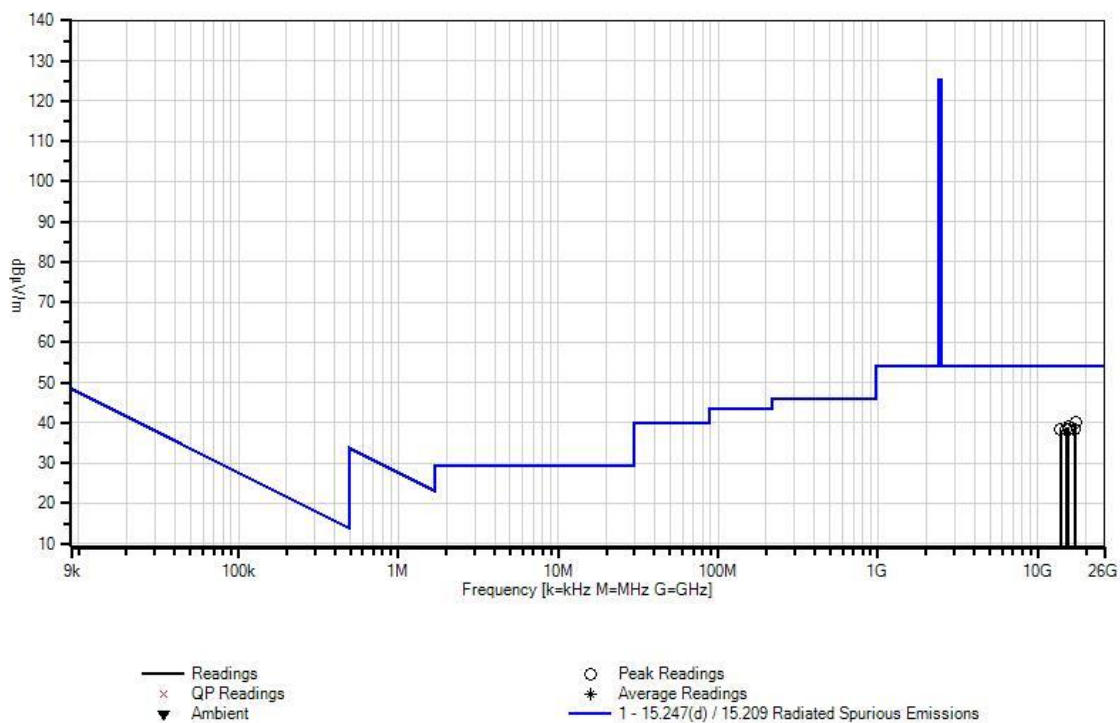
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	17210.965 M	44.8	-14.7	+6.0	+0.8	+3.1	+0.0	40.0	54.0	-14.0	Horiz
2	15509.506 M	44.9	-15.8	+5.7	+1.0	+3.2	+0.0	39.0	54.0	-15.0	Vert
3	15463.460 M	44.4	-15.8	+5.7	+1.0	+3.1	+0.0	38.4	54.0	-15.6	Horiz
4	14953.951 M	44.1	-15.4	+5.6	+1.0	+3.0	+0.0	38.3	54.0	-15.7	Horiz
5	13877.876 M	45.3	-16.0	+5.4	+0.9	+2.7	+0.0	38.3	54.0	-15.7	Vert
6	17046.790 M	43.9	-15.4	+5.9	+0.9	+3.0	+0.0	38.3	54.0	-15.7	Vert

CKC Laboratories, Inc Date: 7/17/2013 Time: 10:08:40 Enlighted, Inc WO#: 94651
Test Distance: 3 Meters Sequence#: 20



Test Location: CKC Laboratories, Inc. • 1120 Fulton Places • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**
 Specification: **15.247(d) / 15.209 Radiated Spurious Emissions**
 Work Order #: **94651** Date: 7/17/2013
 Test Type: **Radiated Scan** Time: 10:41:17
 Equipment: **Compact Sensor** Sequence#: 23
 Manufacturer: Enlighted, Inc. Tested By: Hieu Song Nguyenpham
 Model: SU-3E-00
 S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN03143	Cable	32022-29094K-144TC	8/30/2011	8/30/2013
T2	ANP06125	Cable	32022-29094K-29094K-72TC	5/6/2013	5/6/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
T3	AN02694	Horn Antenna-ANSI C63.5 Antenna Factors (dB)	AMFW-5F-18002650-20-10P	2/4/2013	2/4/2015
T4	ANP00929	Cable	various	2/16/2012	2/16/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

Radiated Spurious Emission
 Frequency Range: 18000MHz to 25000MHz
 Firmware Used: Version 1214
 Temperature: 20.9°C, Humidity: 39 %, Atmospheric Pressure: 101.6 kPa
 High Clock: 16MHz
 Transmitting operating frequency= 2.4GHz Band
 RF Output= 0dBm
 Gain of the antenna=0dBi
 Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz
 9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-25000MHz; RBW=1 MHz, VBW=1 MHz.
 The EUT is a fit device and operated at 14VDC. It is placed on the 80cm Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, the customer uses AC/DC power adapter to power up the EUT. The EUT is set in continue transmit and 3 meters away from the antenna.
 Note: Low Channel

Ext Attn: 0 dB

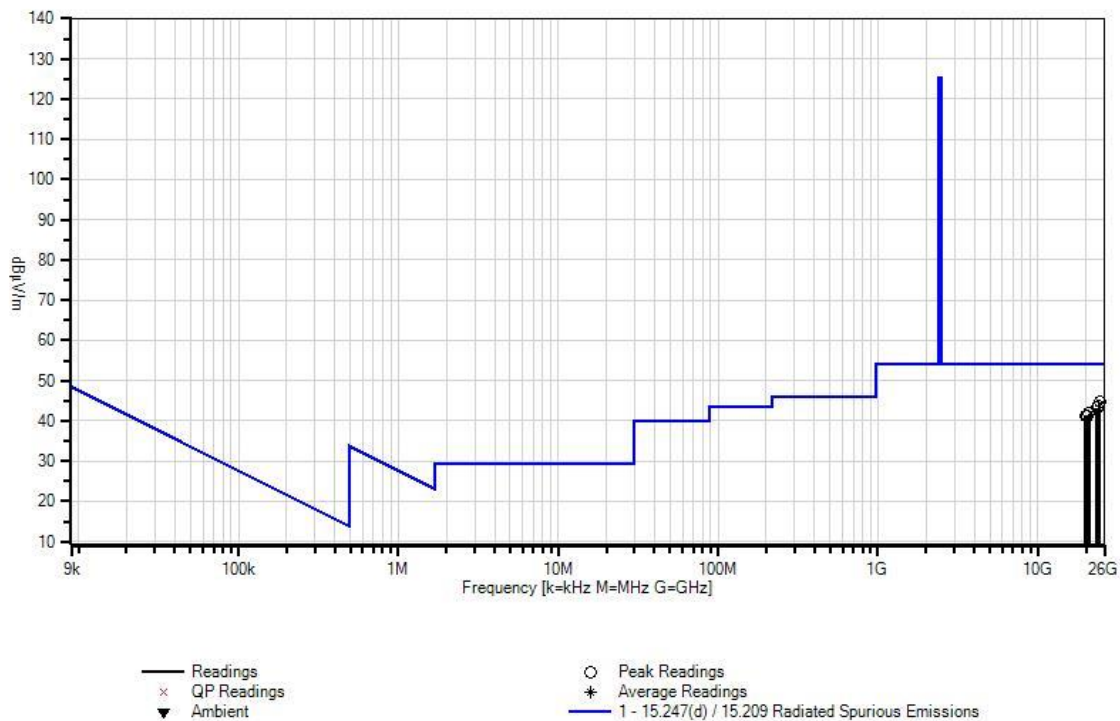
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	24317.998 M	47.4	+7.3	+4.5	-17.4	+2.9	+0.0	44.7	54.0	-9.3	Horiz
2	23961.229 M	46.5	+7.2	+4.4	-17.5	+3.0	+0.0	43.6	54.0	-10.4	Vert
3	23328.504 M	46.8	+7.0	+4.4	-17.8	+2.9	+0.0	43.3	54.0	-10.7	Horiz
4	20893.749 M	44.8	+6.7	+4.2	-17.0	+3.1	+0.0	41.8	54.0	-12.2	Vert
5	19900.262 M	44.5	+6.5	+3.8	-16.7	+3.2	+0.0	41.3	54.0	-12.7	Vert
6	20457.217 M	44.3	+6.5	+4.1	-16.8	+3.2	+0.0	41.3	54.0	-12.7	Horiz

CKC Laboratories, Inc Date: 7/17/2013 Time: 10:41:17 Enlighted, Inc WO#: 94651
Test Distance: 3 Meters Sequence#: 23



Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**
 Specification: **15.247(d) / 15.209 Radiated Spurious Emissions**
 Work Order #: **94651** Date: 7/17/2013
 Test Type: **Radiated Scan** Time: 16:01:32
 Equipment: **Compact Sensor** Sequence#: 44
 Manufacturer: **Enlighted, Inc.** Tested By: Hieu Song Nguyenpham
 Model: **SU-3E-00**
 S/N: **None**

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP00880	Cable	RG214U	7/30/2012	7/30/2014
T2	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
T3	AN00432	Loop Antenna	6502	4/2/2013	4/2/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

Radiated Spurious Emission
 Frequency Range: 9kHz to 30MHz

Firmware Used: Version 1214
 Temperature: 20.9°C, Humidity: 39 %, Atmospheric Pressure: 101.6 kPa
 High Clock: 16MHz

Transmitting operating frequency= 2.4GHz Band
 RF Output= 0dBm
 Gain of the antenna=0dBi

Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-25000MHz; RBW=1 MHz, VBW=1 MHz.

The EUT is a fit device and operated at 14VDC. It is placed on the 80 cm Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, the customer uses AC/DC power adapter to power up the EUT. The EUT is set in continue transmit.

Note: Middle Channel

Ext Attn: 0 dB

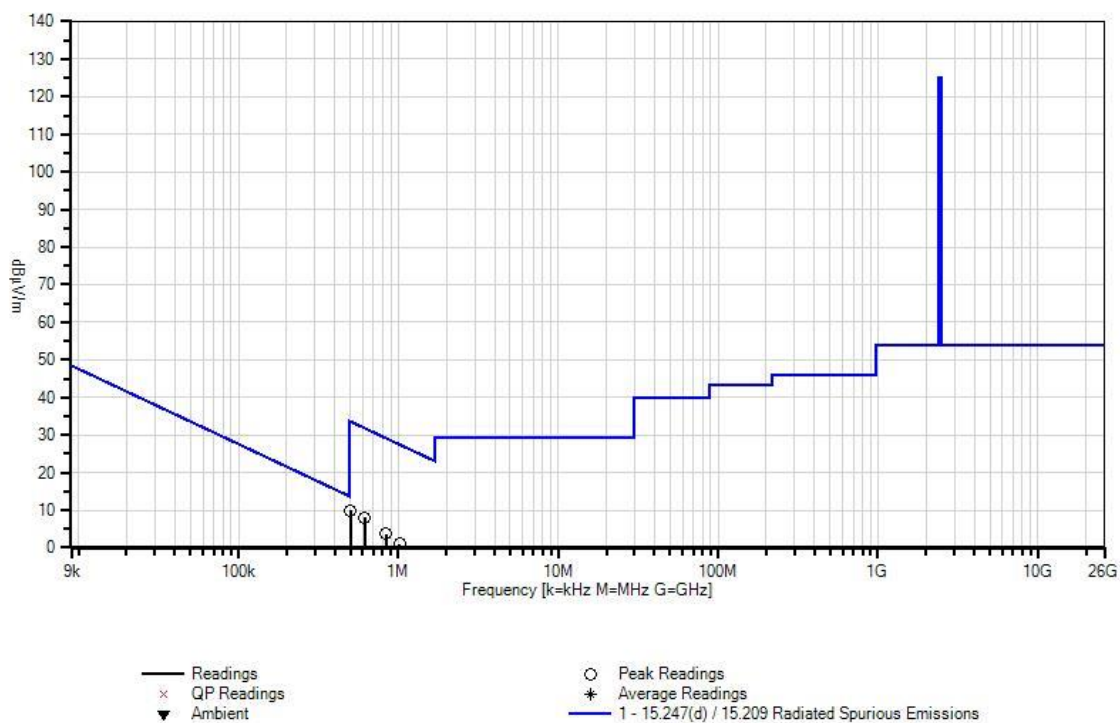
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB		Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	501.238k	40.0	+0.1	+0.0	+9.8		-40.0	9.9	33.6	-23.7	Perpe
2	614.136k	38.1	+0.1	+0.0	+9.8		-40.0	8.0	31.8	-23.8	Paral
3	839.932k	34.2	+0.1	+0.0	+9.4		-40.0	3.7	29.1	-25.4	Paral
4	1.013M	31.3	+0.1	+0.0	+9.7		-40.0	1.1	27.5	-26.4	Paral
5	1.476M	27.5	+0.1	+0.0	+9.8		-40.0	-2.6	24.3	-26.9	Perpe
6	1.670M	26.1	+0.1	+0.0	+9.8		-40.0	-4.0	23.2	-27.2	Perpe

CKC Laboratories, Inc Date: 7/17/2013 Time: 16:01:32 Enlighted, Inc WO#: 94651
Test Distance: 3 Meters Sequence#: 44



Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**
 Specification: **15.247(d) / 15.209 Radiated Spurious Emissions**
 Work Order #: **94651** Date: 7/17/2013
 Test Type: **Radiated Scan** Time: 13:58:52
 Equipment: **Compact Sensor** Sequence#: 35
 Manufacturer: **Enlighted, Inc.** Tested By: Hieu Song Nguyenpham
 Model: **SU-3E-00**
 S/N: **None**

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN00730	Preamplifier	8447D	1/17/2013	1/17/2015
T2	AN00852	Biconilog Antenna	CBL 6111C	11/28/2012	11/28/2014
T3	ANP00880	Cable	RG214U	7/30/2012	7/30/2014
T4	ANP01183	Cable	CNT-195	10/24/2011	10/24/2013
T5	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

Radiated Spurious Emission
 Frequency Range: 30MHz to 1000MHz

Firmware Used: Version 1214
 Temperature: 20.9°C
 Humidity: 39 %
 Atmospheric Pressure: 101.6 kPa
 High Clock: 16MHz

Transmitting operating frequency= 2.4GHz Band
 RF Output= 0dBm
 Gain of the antenna=0dBi

Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-25000MHz; RBW=1 MHz, VBW=1 MHz.

The EUT is a fit device and operated at 14VDC. It is placed on the 80cm Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, the customer uses AC/DC power an adapter to power up the EUT. The EUT is set in continue transmit and 3 meters away from the antenna.

Note: Middle Channel

Ext Attn: 0 dB

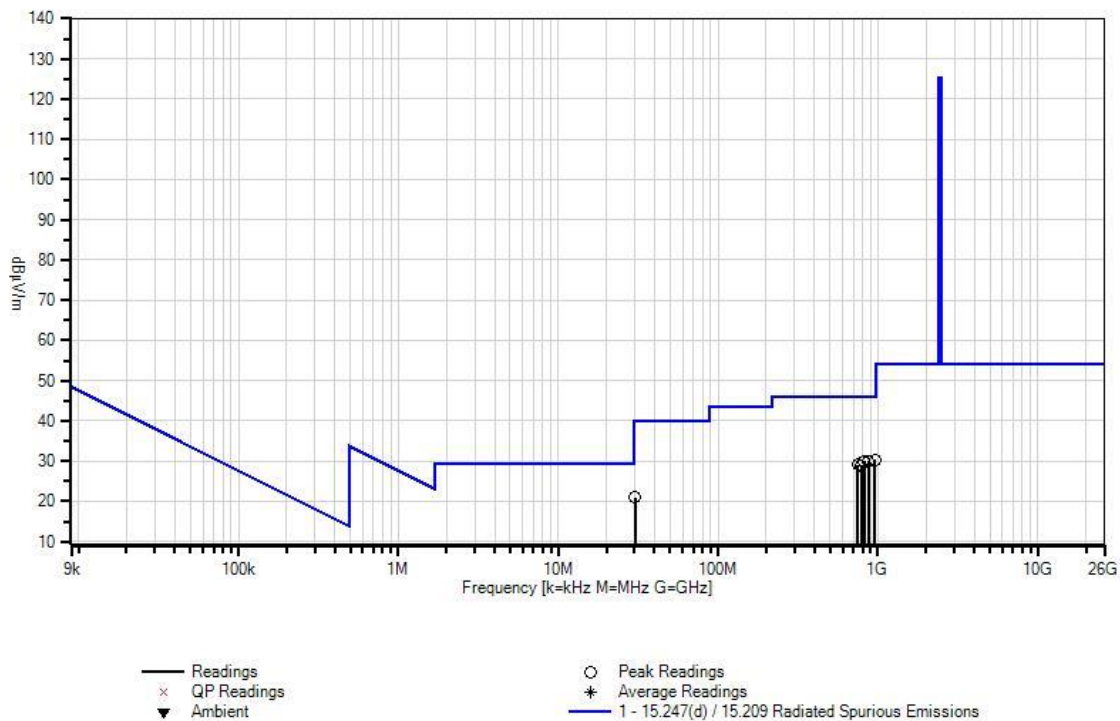
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	951.101M	28.5	-27.1 +0.9	+23.5	+3.5	+1.0	+0.0	30.3	46.0	-15.7	Horiz
2	871.803M	28.7	-27.0 +0.9	+23.0	+3.4	+0.9	+0.0	29.9	46.0	-16.1	Vert
3	822.074M	29.5	-26.8 +0.9	+22.0	+3.3	+0.9	+0.0	29.8	46.0	-16.2	Horiz
4	746.518M	29.5	-26.9 +0.8	+21.8	+3.0	+0.9	+0.0	29.1	46.0	-16.9	Vert
5	784.476M	29.2	-26.7 +0.8	+21.6	+3.2	+0.8	+0.0	28.9	46.0	-17.1	Horiz
6	30.266M	28.9	-27.1 +0.1	+18.3	+0.5	+0.2	+0.0	20.9	40.0	-19.1	Vert

CKC Laboratories, Inc Date: 7/17/2013 Time: 13:58:52 Enlighted, Inc WO#: 94651
Test Distance: 3 Meters Sequence#: 35



Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**
 Specification: **15.247(d) / 15.209 Radiated Spurious Emissions**
 Work Order #: **94651** Date: 7/16/2013
 Test Type: **Radiated Scan** Time: 15:03:37
 Equipment: **Compact Sensor** Sequence#: 8
 Manufacturer: **Enlighted, Inc.** Tested By: Hieu Song Nguyenpham
 Model: **SU-3E-00**
 S/N: **None**

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN02157	Horn Antenna-ANSI C63.5	3115	1/23/2013	1/23/2015
T2	AN03302	Cable	32026-29094K-29094K-72TC	3/21/2012	3/21/2014
T3	ANP01210	Cable	FSJ1P-50A-4A	2/19/2013	2/19/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
T4	AN03114	Preamp	AMF-7D-00101800-30-10P	4/11/2013	4/11/2015
T5	AN03015	Cable	32022-2-29094K-24TC	5/6/2013	5/6/2015
T6	AN03309	High Pass Filter	11SH10-3000/T10000-O/O	6/12/2012	6/12/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

Radiated Spurious Emission
 Frequency Range: 1000MHz to 12000MHz
 Firmware Used: Version 1214
 Temperature: 21.3°C, Humidity: 43 %, Atmospheric Pressure: 101.0 kPa
 High Clock: 16MHz
 Transmitting operating frequency= 2.4GHz Band
 RF Output= 0dBm
 Gain of the antenna=0dBi
 Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz
 9 kHz -150 kHz; RBW=200 Hz, VBW=200Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-25000MHz; RBW=1 MHz, VBW=1 MHz.
 The EUT is a fit device and operated at 14VDC. It is placed on the 80cm Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, the customer uses an AC/DC power adapter to power up the EUT. The EUT is set in continue transmit and 3 meters away from the antenna.
 Note: Middle Channel

Ext Attn: 0 dB

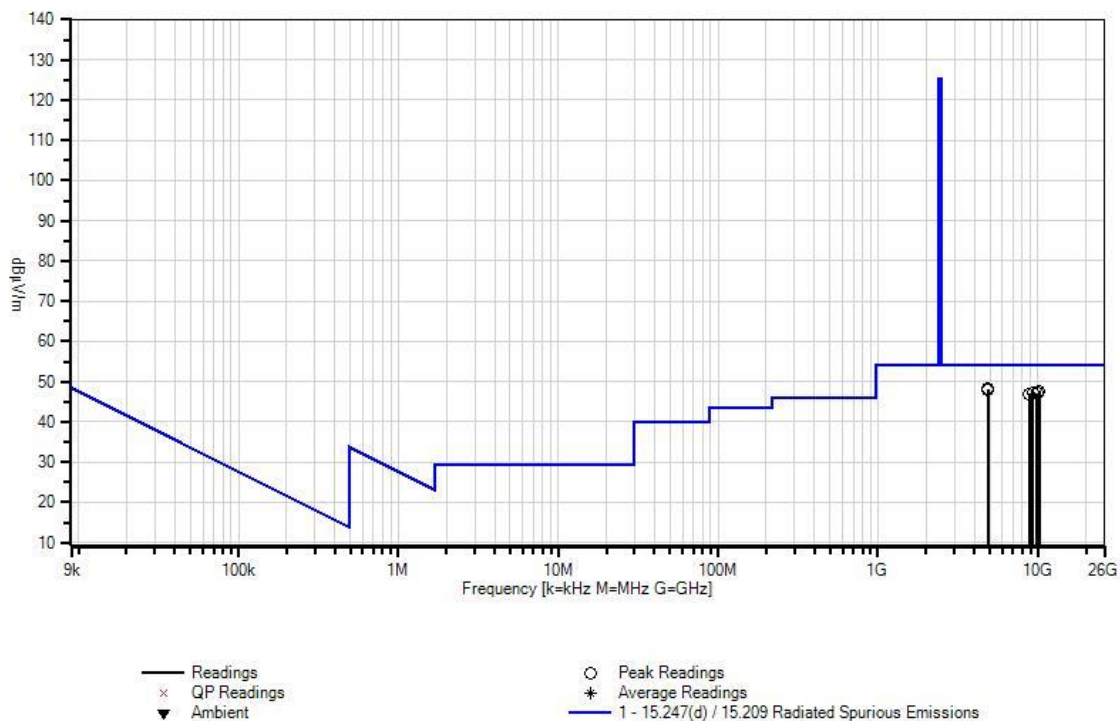
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	T1 T5 dB	T2 T6 dB	T3 dB	T4 dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	4880.879M	66.7	+33.4 +0.7	+1.5 +0.3	+3.8	-58.2	+0.0	48.2	54.0	-5.8	Vert
2	4878.877M	66.3	+33.4 +0.7	+1.5 +0.3	+3.8	-58.2	+0.0	47.8	54.0	-6.2	Vert
3	10218.211 M	56.2	+39.7 +1.3	+2.3 +0.1	+6.2	-58.2	+0.0	47.6	54.0	-6.4	Horiz
4	9276.270M	56.3	+38.3 +1.3	+2.2 +0.4	+6.1	-57.3	+0.0	47.3	54.0	-6.7	Horiz
5	9869.863M	55.7	+39.5 +1.3	+2.3 +0.1	+6.2	-57.9	+0.0	47.2	54.0	-6.8	Vert
6	8808.803M	55.5	+38.0 +1.4	+2.1 +0.3	+5.9	-56.3	+0.0	46.9	54.0	-7.1	Horiz

CKC Laboratories, Inc Date: 7/16/2013 Time: 15:03:37 Enlighted, Inc WO#: 94651
Test Distance: 3 Meters Sequence#: 8



Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**
 Specification: **15.247(d) / 15.209 Radiated Spurious Emissions**
 Work Order #: **94651** Date: 7/17/2013
 Test Type: **Radiated Scan** Time: 09:33:31
 Equipment: **Compact Sensor** Sequence#: 17
 Manufacturer: **Enlighted, Inc.** Tested By: Hieu Song Nguyenpham
 Model: **SU-3E-00**
 S/N: **None**

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANANT-AN02693-20130221	Active Horn Antenna	AMFW-5F-18002650-20-10P	2/21/2013	2/21/2015
T2	AN03143	Cable	32022-29094K-144TC	8/30/2011	8/30/2013
T3	ANP00928	Cable	various	2/10/2012	2/10/2014
T4	ANP06125	Cable	32022-29094K-29094K-72TC	5/6/2013	5/6/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

Radiated Spurious Emission
 Frequency Range: 12000MHz to 18000MHz

Firmware Used: Version 1214
 Temperature: 20.9°C, Humidity: 39 %, Atmospheric Pressure: 101.6 kPa
 High Clock: 16MHz

Transmitting operating frequency= 2.4GHz Band
 RF Output= 0dBm
 Gain of the antenna=0dBi

Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz

9 kHz-150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-25000MHz; RBW=1 MHz, VBW=1 MHz.

The EUT is a fit device and operated at 14VDC. It is placed on the 80cm Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, the customer uses an AC/DC power adapter to power up the EUT. The EUT is set in continue transmit and 3 meters away from the antenna.

Note: Middle Channel

Ext Attn: 0 dB

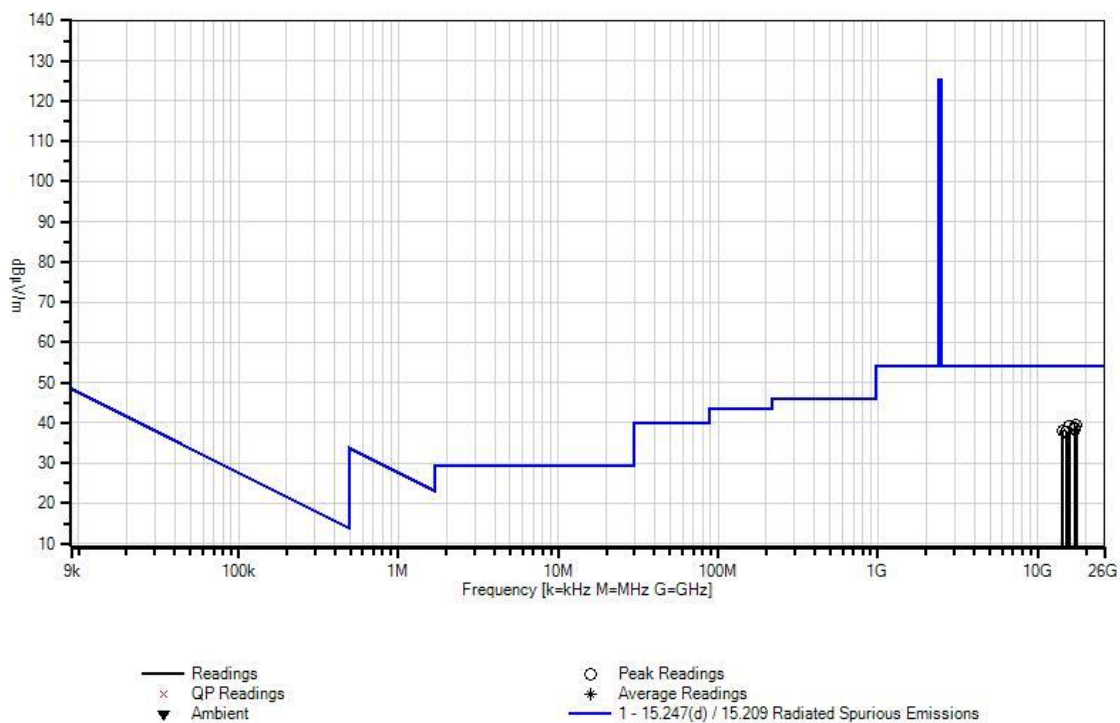
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	17350.265 M	44.2	-14.6	+6.0	+0.8	+3.0	+0.0	39.4	54.0	-14.6	Horiz
2	15610.607 M	44.9	-15.9	+5.8	+1.0	+3.2	+0.0	39.0	54.0	-15.0	Horiz
3	16977.973 M	44.5	-15.5	+5.9	+0.9	+3.0	+0.0	38.8	54.0	-15.2	Vert
4	17022.910 M	44.0	-15.4	+5.9	+0.9	+3.0	+0.0	38.4	54.0	-15.6	Vert
5	14329.327 M	44.6	-15.6	+5.4	+0.9	+2.8	+0.0	38.1	54.0	-15.9	Horiz
6	15000.998 M	43.6	-15.4	+5.6	+1.0	+3.0	+0.0	37.8	54.0	-16.2	Vert

CKC Laboratories, Inc Date: 7/17/2013 Time: 09:33:31 Enlighted, Inc WO#: 94651
Test Distance: 3 Meters Sequence#: 17



Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**
 Specification: **15.247(d) / 15.209 Radiated Spurious Emissions**
 Work Order #: **94651** Date: 7/17/2013
 Test Type: **Radiated Scan** Time: 10:57:30
 Equipment: **Compact Sensor** Sequence#: 26
 Manufacturer: **Enlighted, Inc.** Tested By: Hieu Song Nguyenpham
 Model: **SU-3E-00**
 S/N: **None**

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN03143	Cable	32022-29094K-144TC	8/30/2011	8/30/2013
T2	ANP06125	Cable	32022-29094K-29094K-72TC	5/6/2013	5/6/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
T3	AN02694	Horn Antenna-ANSI C63.5 Antenna Factors (dB)	AMFW-5F-18002650-20-10P	2/4/2013	2/4/2015
T4	ANP00929	Cable	various	2/16/2012	2/16/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

Radiated Spurious Emission
 Frequency Range: 18000MHz to 25000MHz

Firmware Used: Version 1214
 Temperature: 20.9°C, Humidity: 39 %, Atmospheric Pressure: 101.6 kPa
 High Clock: 16MHz

Transmitting operating frequency= 2.4GHz Band
 RF Output= 0dBm
 Gain of the antenna=0dBi

Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz

9 kHz-150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-25000MHz; RBW=1 MHz, VBW=1 MHz.

The EUT is a fit device and operated at 14VDC. It is placed on the 80cm Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, the customer uses an AC/DC power adapter to power up the EUT. The EUT is set in continue transmit and 3 meters away from the antenna.

Note: Middle Channel

Ext Attn: 0 dB

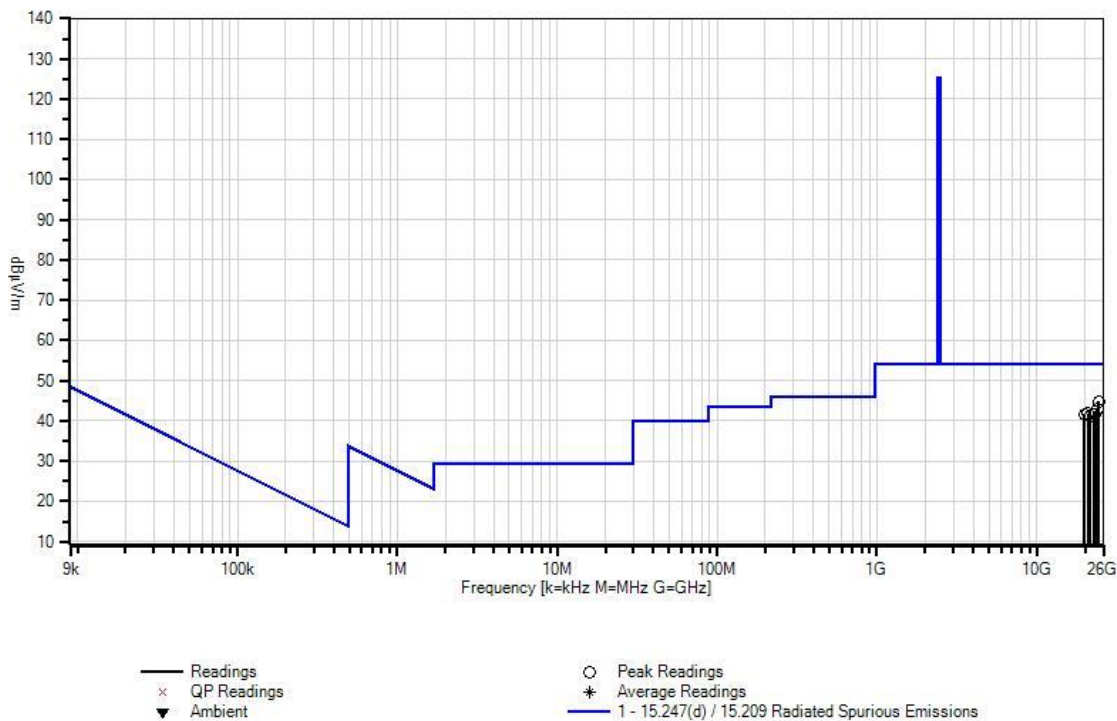
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	24284.490 M	47.6	+7.3	+4.5	-17.4	+2.9	+0.0	44.9	54.0	-9.1	Vert
2	23722.725 M	46.1	+7.1	+4.4	-17.7	+3.0	+0.0	42.9	54.0	-11.1	Horiz
3	20793.397 M	45.0	+6.6	+4.2	-17.0	+3.1	+0.0	41.9	54.0	-12.1	Vert
4	22776.515 M	45.4	+7.0	+4.2	-17.8	+2.9	+0.0	41.7	54.0	-12.3	Vert
5	19836.706 M	44.8	+6.5	+3.8	-16.7	+3.2	+0.0	41.6	54.0	-12.4	Horiz
6	21545.475 M	44.5	+6.8	+4.2	-17.2	+3.0	+0.0	41.3	54.0	-12.7	Horiz

CKC Laboratories, Inc Date: 7/17/2013 Time: 10:57:30 Enlighted, Inc WO#: 94651
Test Distance: 3 Meters Sequence#: 26



Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**
 Specification: **15.247(d) / 15.209 Radiated Spurious Emissions**
 Work Order #: **94651** Date: 7/17/2013
 Test Type: **Radiated Scan** Time: 15:30:07
 Equipment: **Compact Sensor** Sequence#: 41
 Manufacturer: **Enlighted, Inc.** Tested By: Hieu Song Nguyenpham
 Model: **SU-3E-00**
 S/N: **None**

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP00880	Cable	RG214U	7/30/2012	7/30/2014
T2	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
T3	AN00432	Loop Antenna	6502	4/2/2013	4/2/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

Radiated Spurious Emission
 Frequency Range: 9kHz to 30MHz

Firmware Used: Version 1214
 Temperature: 20.9°C, Humidity: 39 %, Atmospheric Pressure: 101.6 kPa
 High Clock: 16MHz

Transmitting operating frequency= 2.4GHz Band
 RF Output= 0dBm
 Gain of the antenna=0dBi

Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-25000MHz; RBW=1 MHz, VBW=1 MHz.

The EUT is a fit device and operated at 14VDC. It is placed on the 80cm Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, the customer uses an AC/DC power adapter to power up the EUT. The EUT is set in continue transmit and 3 meters away from the antenna.

Note: High Channel

Ext Attn: 0 dB

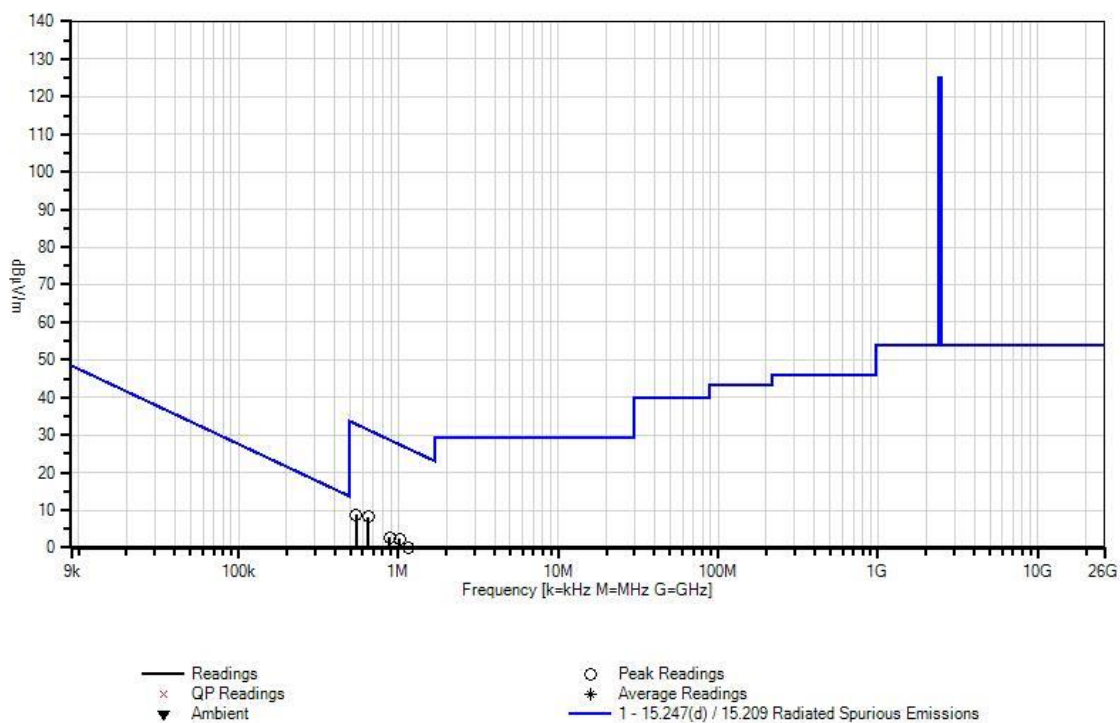
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB		Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	647.587k	38.3	+0.1	+0.0	+9.8		-40.0	8.2	31.4	-23.2	Perpe
2	545.143k	38.9	+0.1	+0.0	+9.8		-40.0	8.8	32.9	-24.1	Paral
3	1.020M	32.5	+0.1	+0.0	+9.7		-40.0	2.3	27.5	-25.2	Perpe
4	879.655k	33.1	+0.1	+0.0	+9.5		-40.0	2.7	28.7	-26.0	Paral
5	1.149M	30.2	+0.1	+0.0	+9.7		-40.0	0.0	26.4	-26.4	Perpe
6	1.225M	29.1	+0.1	+0.0	+9.8		-40.0	-1.0	25.9	-26.9	Paral

CKC Laboratories, Inc Date: 7/17/2013 Time: 15:30:07 Enlighted, Inc WO#: 94651
Test Distance: 3 Meters Sequence#: 41



Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**
 Specification: **15.247(d) / 15.209 Radiated Spurious Emissions**
 Work Order #: **94651** Date: 7/17/2013
 Test Type: **Radiated Scan** Time: 14:45:02
 Equipment: **Compact Sensor** Sequence#: 38
 Manufacturer: **Enlighted, Inc.** Tested By: Hieu Song Nguyenpham
 Model: **SU-3E-00**
 S/N: **None**

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN00730	Preamplifier	8447D	1/17/2013	1/17/2015
T2	AN00852	Biconilog Antenna	CBL 6111C	11/28/2012	11/28/2014
T3	ANP00880	Cable	RG214U	7/30/2012	7/30/2014
T4	ANP01183	Cable	CNT-195	10/24/2011	10/24/2013
T5	ANP05300	Cable	RG214/U	3/25/2013	3/25/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

Radiated Spurious Emission
 Frequency Range: 30MHz to 1000MHz

Firmware Used: Version 1214
 Temperature: 20.9°C, Humidity: 39 %, Atmospheric Pressure: 101.6 kPa
 High Clock: 16MHz

Transmitting operating frequency= 2.4GHz Band
 RF Output= 0dBm
 Gain of the antenna=0dBi

Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-25000MHz; RBW=1 MHz, VBW=1 MHz.

The EUT is a fit device and operated at 14VDC. It is placed on the 80cm Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, the customer uses an AC/DC power adapter to power up the EUT. The EUT is set in continue transmit and 3 meters away from the antenna.

Note: High Channel

Ext Attn: 0 dB

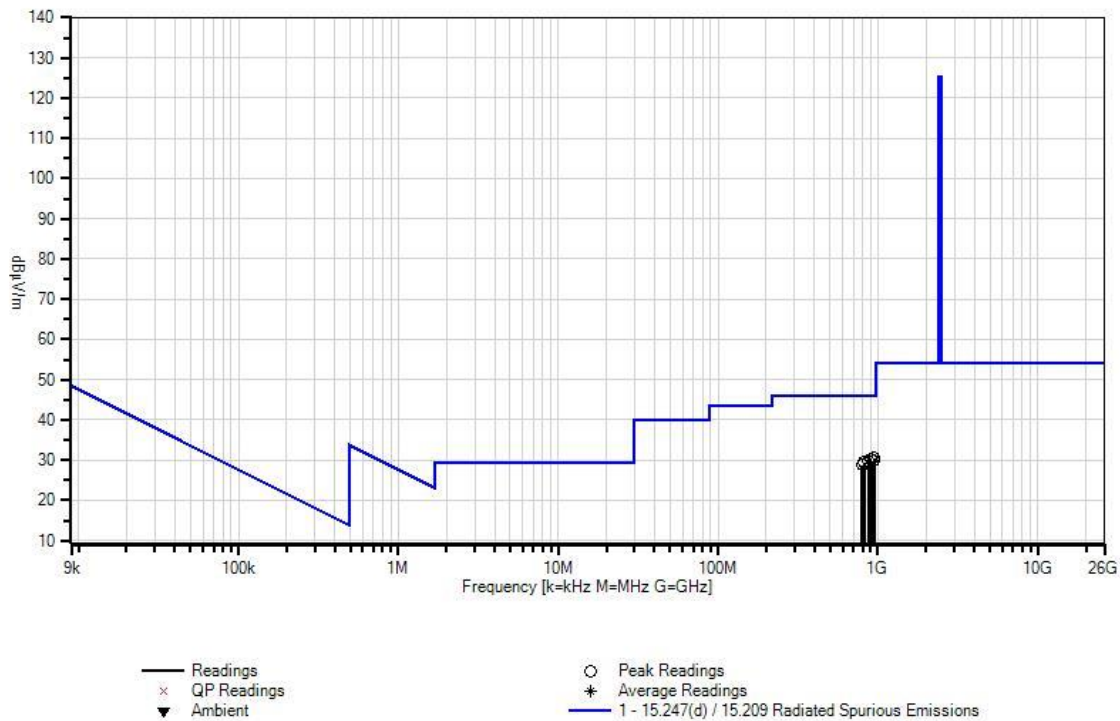
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	942.273M	28.8	-27.1 +0.9	+23.4	+3.5	+1.0	+0.0	30.5	46.0	-15.5	Horiz
2	894.266M	29.4	-27.1 +0.9	+22.7	+3.4	+1.0	+0.0	30.3	46.0	-15.7	Vert
3	870.482M	28.8	-27.0 +0.9	+23.0	+3.4	+0.9	+0.0	30.0	46.0	-16.0	Vert
4	931.143M	28.7	-27.1 +0.9	+22.8	+3.5	+1.0	+0.0	29.8	46.0	-16.2	Vert
5	815.107M	29.6	-26.8 +0.9	+21.7	+3.2	+0.9	+0.0	29.5	46.0	-16.5	Horiz
6	791.443M	29.0	-26.7 +0.8	+21.5	+3.2	+0.9	+0.0	28.7	46.0	-17.3	Horiz

CKC Laboratories, Inc Date: 7/17/2013 Time: 14:45:02 Enlighted, Inc WO#: 94651
Test Distance: 3 Meters Sequence#: 38



Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**
 Specification: **15.247(d) / 15.209 Radiated Spurious Emissions**
 Work Order #: **94651** Date: 7/16/2013
 Test Type: **Radiated Scan** Time: 15:41:55
 Equipment: **Compact Sensor** Sequence#: 11
 Manufacturer: **Enlighted, Inc.** Tested By: Hieu Song Nguyenpham
 Model: **SU-3E-00**
 S/N: **None**

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN02157	Horn Antenna-ANSI C63.5	3115	1/23/2013	1/23/2015
T2	AN03302	Cable	32026-29094K-29094K-72TC	3/21/2012	3/21/2014
T3	ANP01210	Cable	FSJ1P-50A-4A	2/19/2013	2/19/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
T4	AN03114	Preamp	AMF-7D-00101800-30-10P	4/11/2013	4/11/2015
T5	AN03015	Cable	32022-2-29094K-24TC	5/6/2013	5/6/2015
T6	AN03309	High Pass Filter	11SH10-3000/T10000-O/O	6/12/2012	6/12/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

Radiated Spurious Emission
 Frequency Range: 1000MHz to 12000MHz
 Firmware Used: Version 1214
 Temperature: 21.3°C, Humidity: 43 %, Atmospheric Pressure: 101.0 kPa
 High Clock: 16MHz
 Transmitting operating frequency= 2.4GHz Band
 RF Output= 0dBm
 Gain of the antenna=0dBi
 Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz
 9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-25000MHz; RBW=1 MHz, VBW=1 MHz.
 The EUT is a fit device and operated at 14VDC. It is placed on the 80cm Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, the customer uses an AC/DC power adapter to power up the EUT. The EUT is set in continue transmit and 3 meters away from the antenna.
 Note: High Channel

Ext Attn: 0 dB

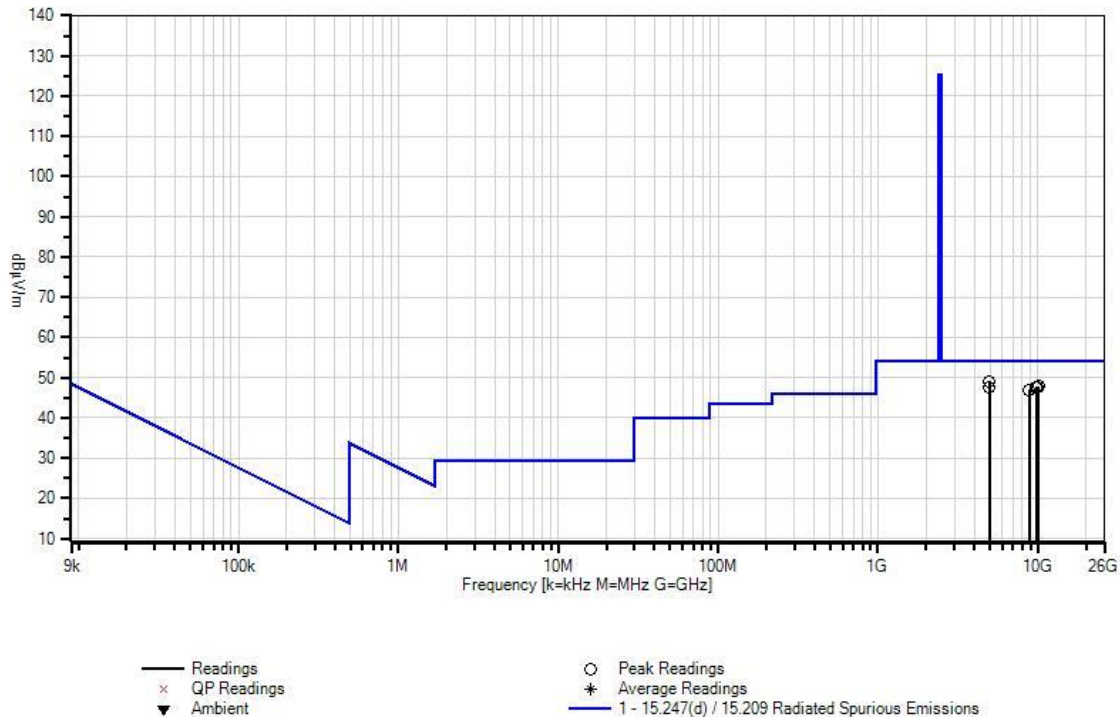
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	T1 T5 dB	T2 T6 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	4950.949M	66.8	+33.6 +0.7	+1.6 +0.2	+3.8	-57.8	+0.0	48.9	54.0	-5.1	Horiz
2	10063.056 M	56.4	+39.7 +1.3	+2.3 +0.0	+6.3	-58.2	+0.0	47.8	54.0	-6.2	Horiz
3	9760.754M	56.1	+39.1 +1.3	+2.3 +0.2	+6.3	-57.6	+0.0	47.7	54.0	-6.3	Vert
4	4948.947M	65.5	+33.6 +0.7	+1.6 +0.2	+3.8	-57.8	+0.0	47.6	54.0	-6.4	Vert
5	9880.874M	56.1	+39.5 +1.3	+2.3 +0.1	+6.2	-58.0	+0.0	47.5	54.0	-6.5	Horiz
6	8835.830M	55.5	+38.1 +1.4	+2.1 +0.3	+5.9	-56.3	+0.0	47.0	54.0	-7.0	Vert

CKC Laboratories, Inc Date: 7/16/2013 Time: 15:41:55 Enlighted, Inc WO#: 94651
Test Distance: 3 Meters Sequence#: 11



Test Location: CKC Laboratories, Inc. • 1120 Fulton Places • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**
 Specification: **15.247(d) / 15.209 Radiated Spurious Emissions**
 Work Order #: **94651** Date: 7/17/2013
 Test Type: **Radiated Scan** Time: 09:11:48
 Equipment: **Compact Sensor** Sequence#: 14
 Manufacturer: **Enlighted, Inc.** Tested By: Hieu Song Nguyenpham
 Model: **SU-3E-00**
 S/N: **None**

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANANT-AN02693-20130221	Active Horn Antenna	AMFW-5F-18002650-20-10P	2/21/2013	2/21/2015
T2	AN03143	Cable	32022-29094K-144TC	8/30/2011	8/30/2013
T3	ANP00928	Cable	various	2/10/2012	2/10/2014
T4	ANP06125	Cable	32022-29094K-29094K-72TC	5/6/2013	5/6/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

Radiated Spurious Emission
 Frequency Range: 12000MHz to 18000MHz

Firmware Used: Version 1214
 Temperature: 20.9°C, Humidity: 39 %, Atmospheric Pressure: 101.6 kPa
 High Clock: 16MHz

Transmitting operating frequency= 2.4GHz Band
 RF Output= 0dBm
 Gain of the antenna=0dBi

Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz

9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-25000MHz; RBW=1 MHz, VBW=1 MHz.

The EUT is a fit device and operated at 14VDC. It is placed on the 80cm Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, the customer uses an AC/DC power adapter to power up the EUT. The EUT is set in continue transmit and 3 meters away from the antenna.

Note: High Channel

Ext Attn: 0 dB

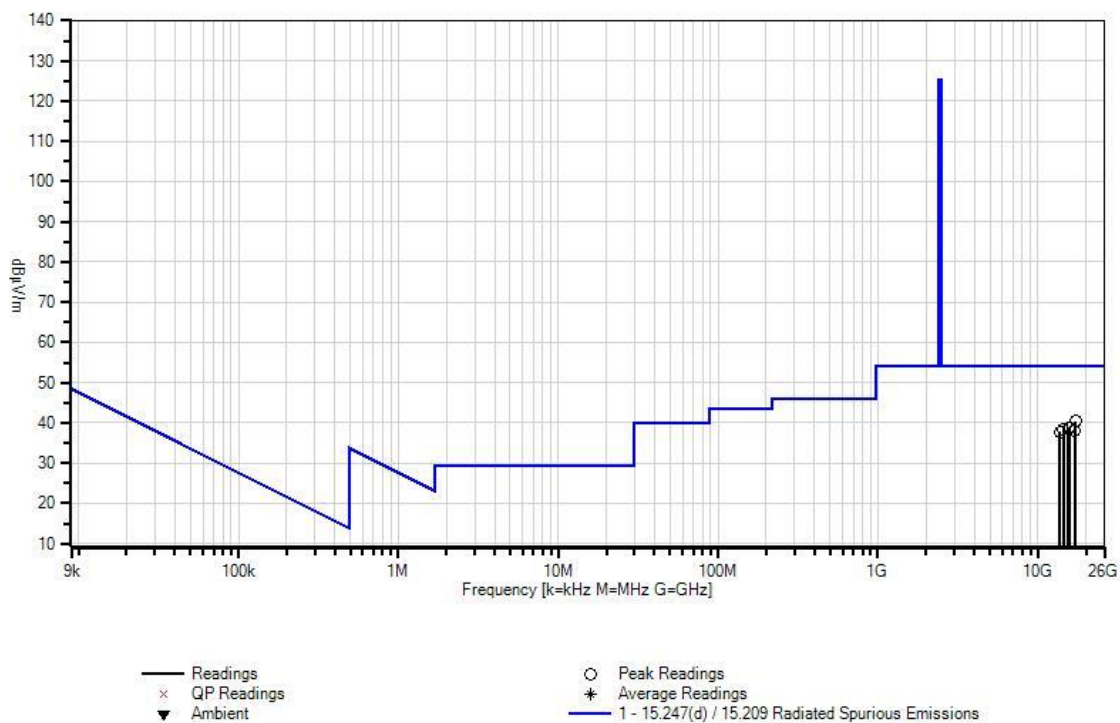
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	17149.275 M	45.6	-15.1	+6.0	+0.9	+3.0	+0.0	40.4	54.0	-13.6	Vert
2	15764.761 M	45.1	-16.3	+5.8	+1.0	+3.2	+0.0	38.8	54.0	-15.2	Horiz
3	15558.555 M	44.7	-15.8	+5.7	+1.0	+3.2	+0.0	38.8	54.0	-15.2	Vert
4	14360.358 M	44.8	-15.6	+5.4	+0.9	+2.8	+0.0	38.3	54.0	-15.7	Vert
5	17016.940 M	43.6	-15.4	+5.9	+0.9	+3.0	+0.0	38.0	54.0	-16.0	Horiz
6	13722.721 M	44.9	-16.1	+5.4	+0.9	+2.7	+0.0	37.8	54.0	-16.2	Horiz

CKC Laboratories, Inc Date: 7/17/2013 Time: 09:11:48 Enlighted, Inc WO#: 94651
Test Distance: 3 Meters Sequence#: 14



Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**
 Specification: **15.247(d) / 15.209 Radiated Spurious Emissions**
 Work Order #: **94651** Date: 7/17/2013
 Test Type: **Radiated Scan** Time: 11:14:09
 Equipment: **Compact Sensor** Sequence#: 29
 Manufacturer: **Enlighted, Inc.** Tested By: Hieu Song Nguyenpham
 Model: **SU-3E-00**
 S/N: **None**

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN03143	Cable	32022-29094K-144TC	8/30/2011	8/30/2013
T2	ANP06125	Cable	32022-29094K-29094K-72TC	5/6/2013	5/6/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015
T3	AN02694	Horn Antenna-ANSI C63.5 Antenna Factors (dB)	AMFW-5F-18002650-20-10P	2/4/2013	2/4/2015
T4	ANP00929	Cable	various	2/16/2012	2/16/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

Radiated Spurious Emission
 Frequency Range: 18000MHz to 25000MHz
 Firmware Used: Version 1214
 Temperature: 20.9°C, Humidity: 39 %, Atmospheric Pressure: 101.6 kPa
 High Clock: 16MHz
 Transmitting operating frequency= 2.4GHz Band
 RF Output= 0dBm
 Gain of the antenna=0dBi
 Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz
 9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-25000MHz; RBW=1 MHz, VBW=1 MHz.

The EUT is a fit device and operated at 14VDC. It is placed on the 80cm Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, the customer uses an AC/DC power adapter to power up the EUT. The EUT is set in continue transmit and 3 meters away from the antenna.

Note: High Channel

Ext Attn: 0 dB

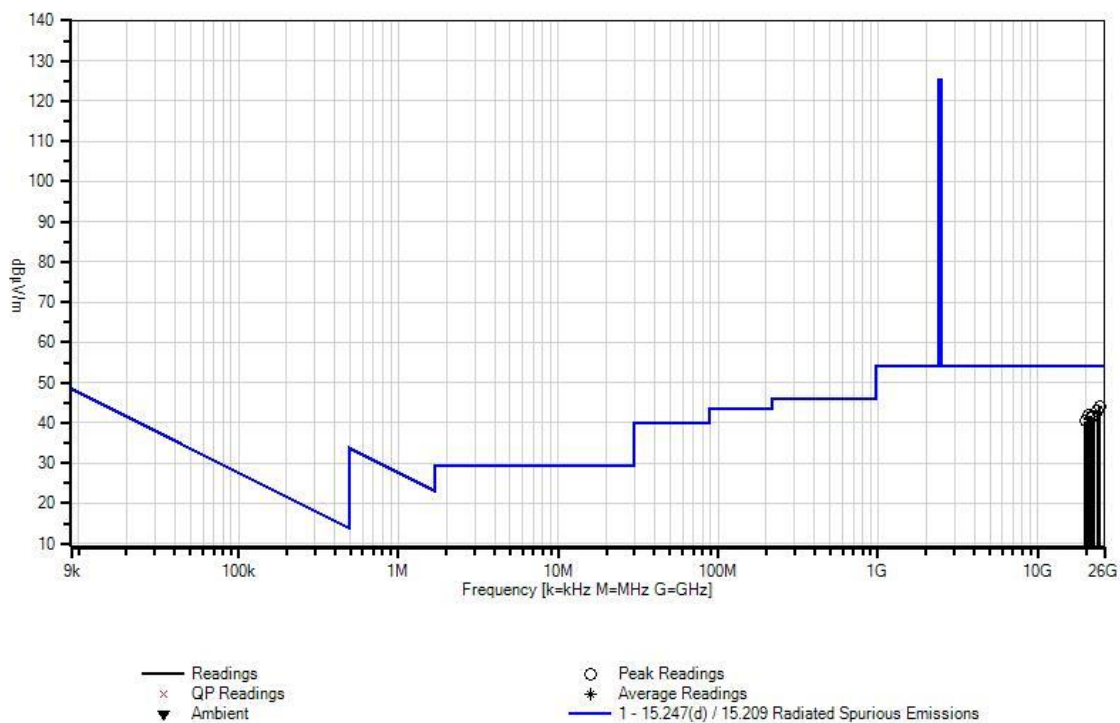
Measurement Data:

Reading listed by margin.

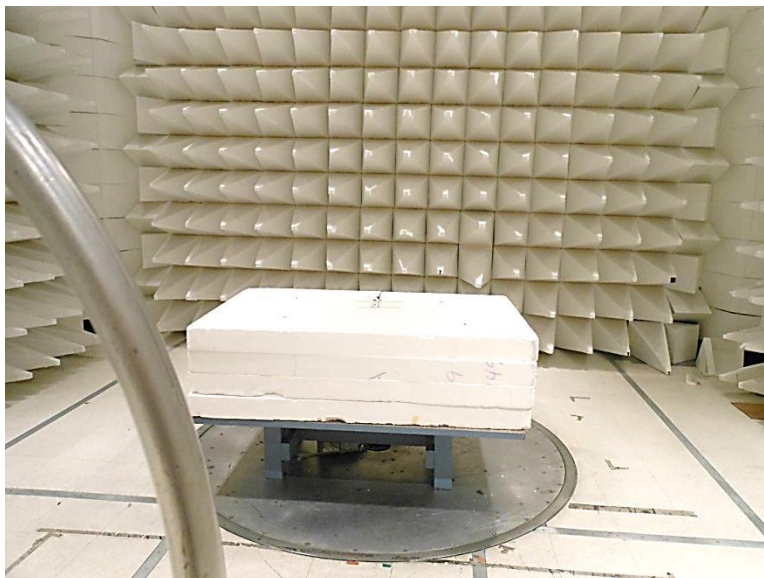
Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	24316.027 M	46.9	+7.3	+4.5	-17.4	+2.9	+0.0	44.2	54.0	-9.8	Vert
2	23606.430 M	46.3	+7.1	+4.4	-17.7	+3.0	+0.0	43.1	54.0	-10.9	Vert
3	20594.365 M	44.8	+6.6	+4.2	-16.9	+3.1	+0.0	41.8	54.0	-12.2	Vert
4	21471.032 M	44.9	+6.8	+4.2	-17.2	+3.0	+0.0	41.7	54.0	-12.3	Horiz
5	22170.074 M	44.8	+6.9	+4.4	-17.5	+2.9	+0.0	41.5	54.0	-12.5	Horiz
6	19726.318 M	43.6	+6.5	+3.7	-16.6	+3.3	+0.0	40.5	54.0	-13.5	Horiz

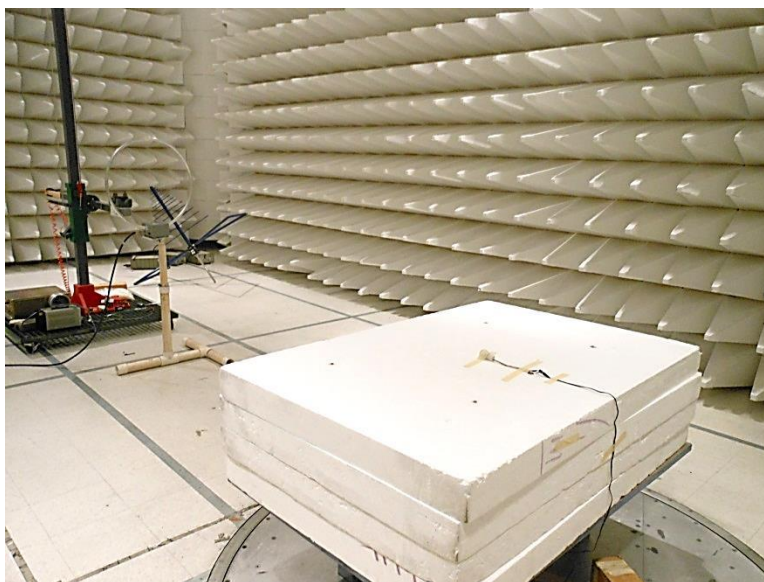
CKC Laboratories, Inc Date: 7/17/2013 Time: 11:14:09 Enlighted, Inc WO#: 94651
Test Distance: 3 Meters Sequence#: 29



Test Setup Photos



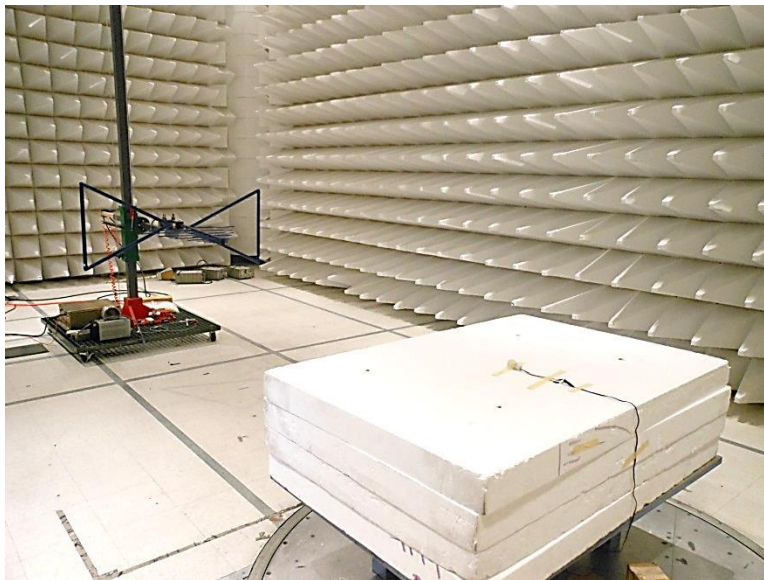
9kHz to 30MHz



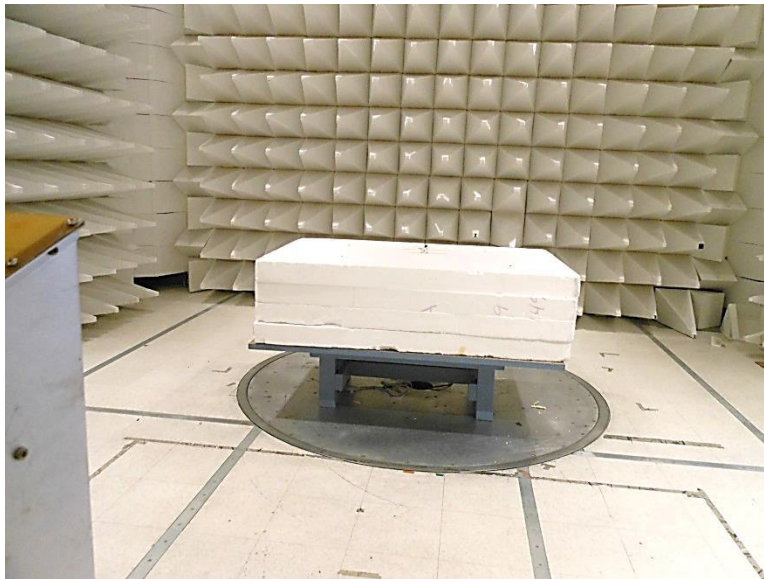
9kHz to 30MHz



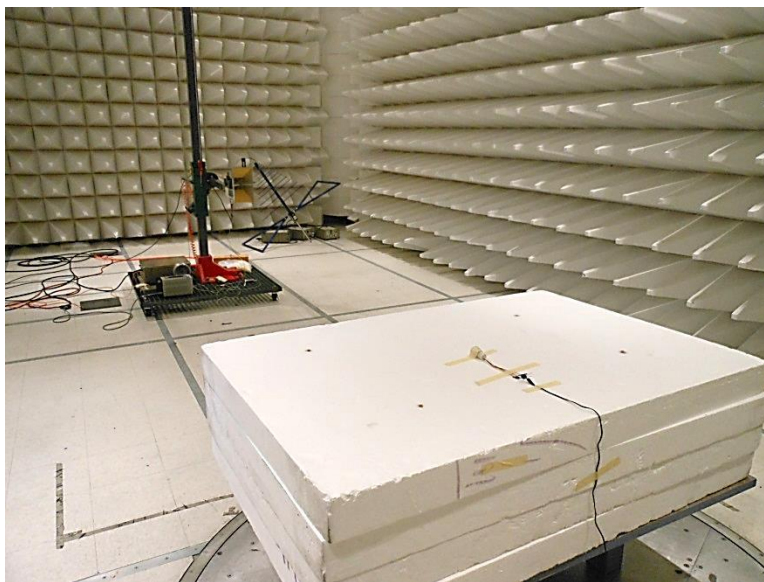
30MHz to 1GHz



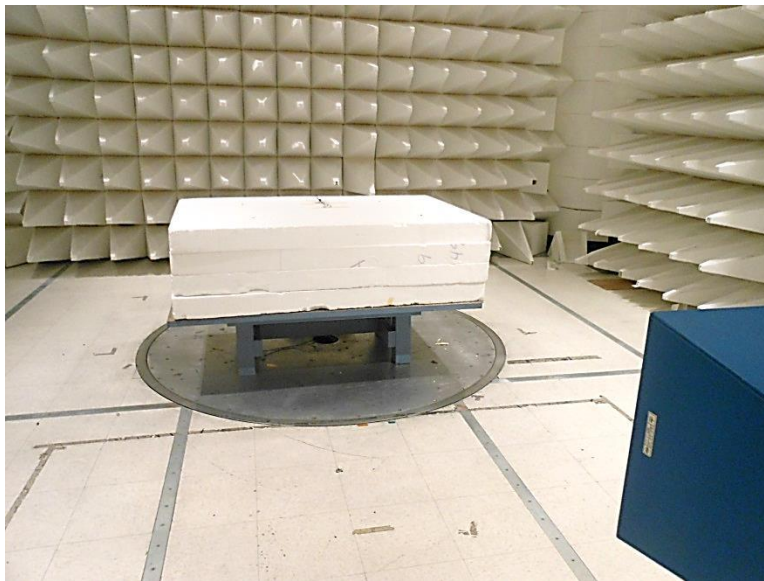
30MHz to 1GHz



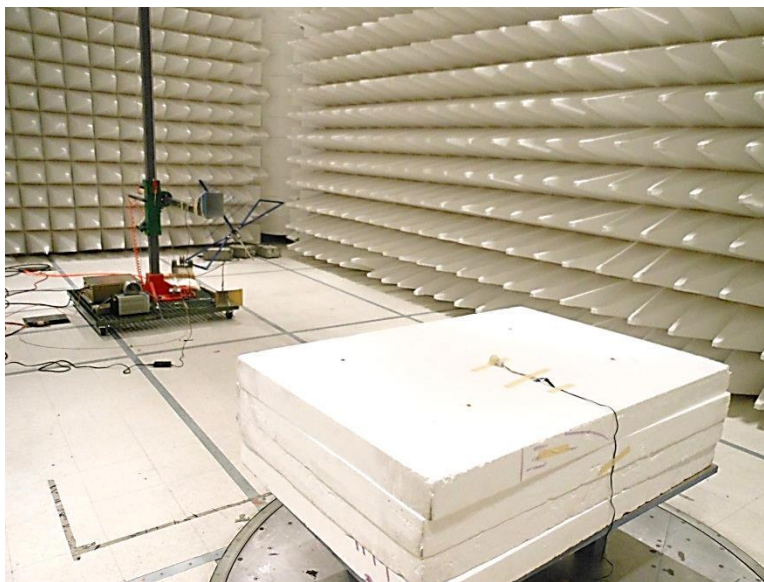
1-12GHz



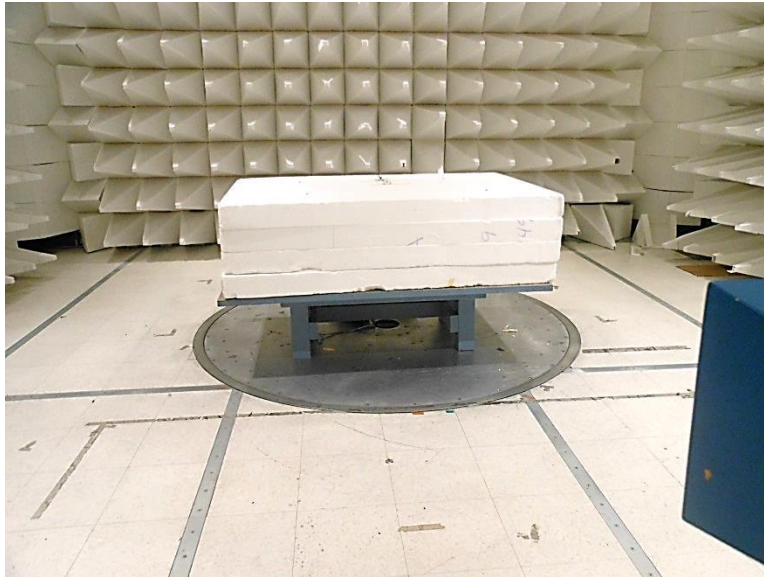
1-12GHz



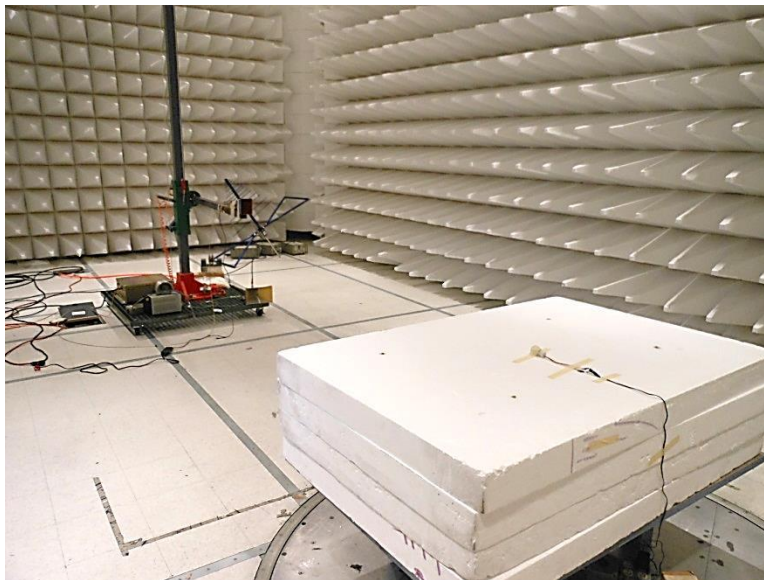
12-18GHz



12-18GHz



18-25GHz



18-25GHz

15.247(e) Power Spectral Density

Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**

Specification: **15.247(e) Power Spectral Density**

Work Order #: **94651**

Date: 7/16/2013

Test Type: **Radiated Scan**

Time: 13:09:30

Equipment: **Compact Sensor**

Sequence#: 1

Manufacturer: Enlighted, Inc.

Tested By: Hieu Song Nguyenpham

Model: SU-3E-00

S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN02157	Horn Antenna-ANSI C63.5	3115	1/23/2013	1/23/2015
T2	AN03302	Cable	32026-29094K-29094K-72TC	3/21/2012	3/21/2014
T3	ANP01210	Cable	FSJ1P-50A-4A	2/19/2013	2/19/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

15.247(e) Power Spectral Density

Firmware Used: Version 1214

Temperature: 21.3°C, Humidity: 43 %, Atmospheric Pressure: 101.0 kPa

High Clock: 16MHz

Transmitting operating frequency= 2.4GHz Band

RF Output= 0dBm

Gain of the antenna=0dBi

Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz

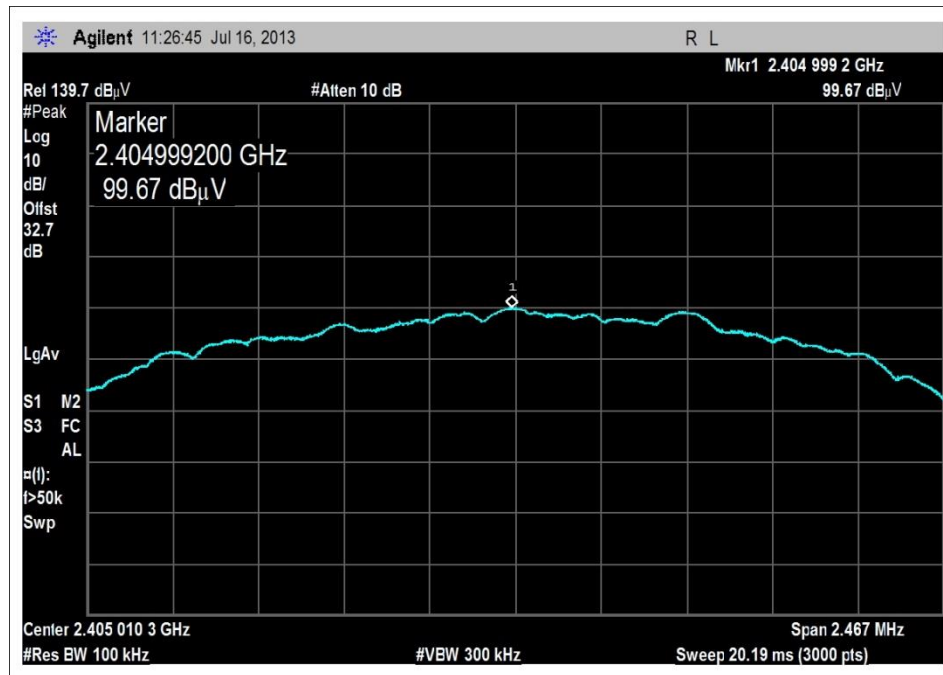
RBW=100kHz

VBW=300kHz

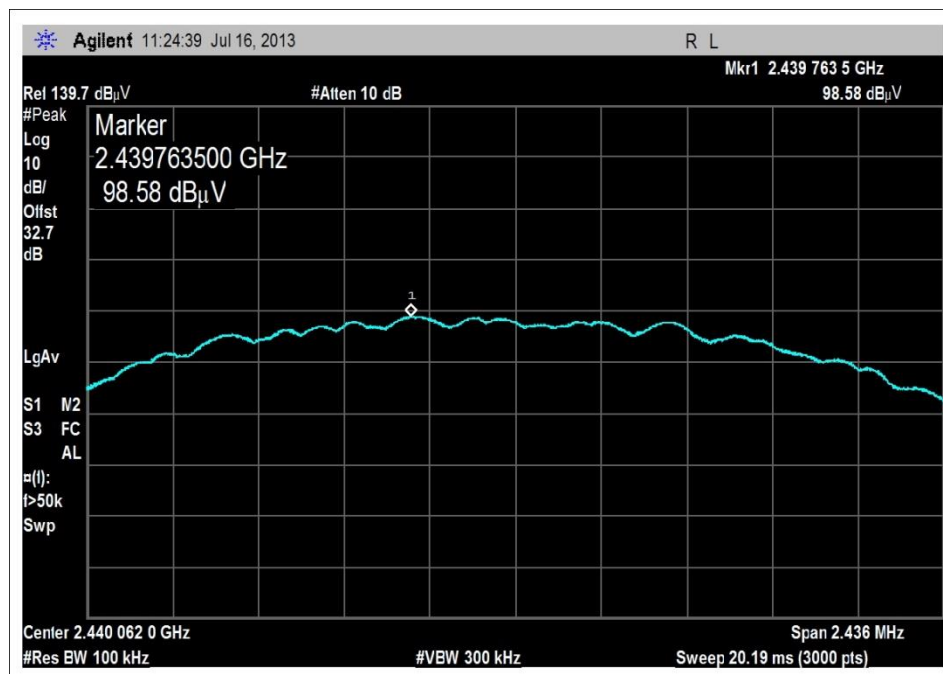
The EUT is a fit device and operated at 14VDC. It is placed on the 80cm Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, the customer uses an AC/DC power adapter to power up the EUT. The EUT is set in continue transmit and 3 meter away from the measuring antenna.

Test Data

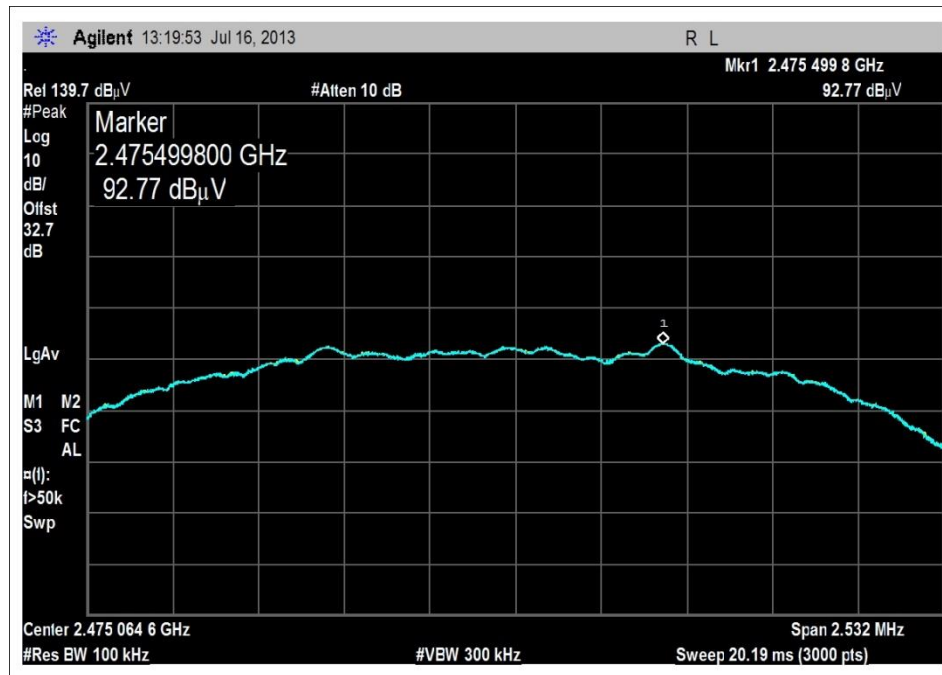
Frequency (MHz)	Measured Power in dBm	Power Limit in dBm	Pass/Fail
2404.999 Low Channel	4.47	8	Pass
2439.763 Middle Channel	3.38	8	Pass
2475.499 High Channel	-2.43	8	Pass



Low Channel

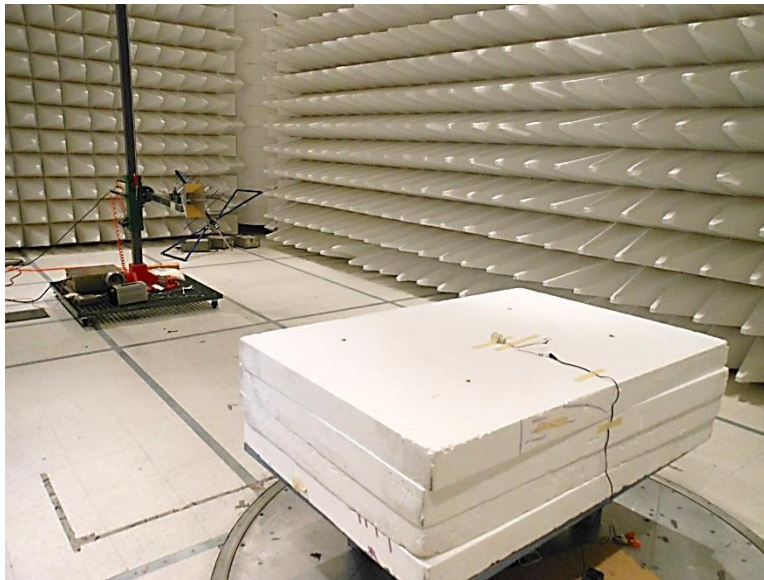
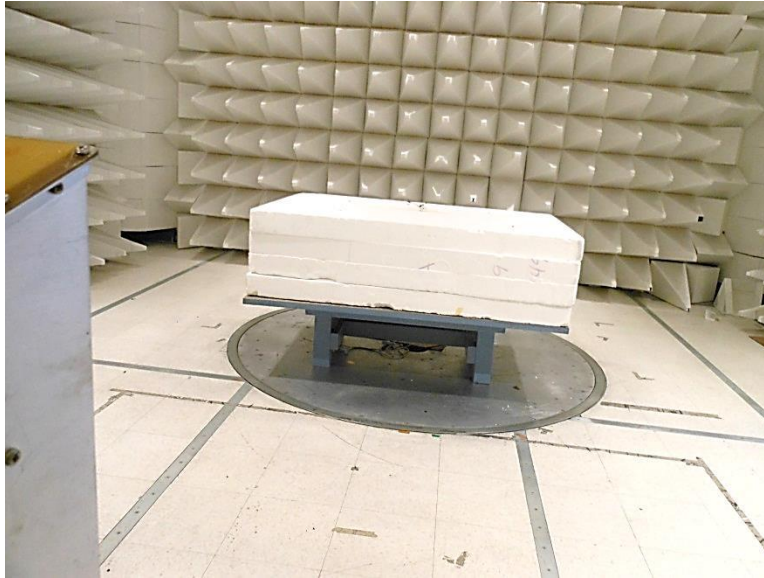


Middle Channel



High Channel

Test Setup Photos



RSS-210

RSS-210 – 99% Occupied Bandwidth & Emissions Bandwidth

Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • (510) 249-1170

Customer: **Enlighted, Inc.**

Specification: **OBW**

Work Order #: **94651**

Date: 7/16/2013

Test Type: **Radiated Scan**

Time: 13:09:30

Equipment: **Compact Sensor**

Sequence#: 1

Manufacturer: Enlighted, Inc.

Tested By: Hieu Song Nguyenpham

Model: SU-3E-00

S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN02157	Horn Antenna-ANSI C63.5	3115	1/23/2013	1/23/2015
T2	AN03302	Cable	32026-29094K-29094K-72TC	3/21/2012	3/21/2014
T3	ANP01210	Cable	FSJ1P-50A-4A	2/19/2013	2/19/2015
	AN02668	Spectrum Analyzer	E4446A	2/22/2013	2/22/2015

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Compact Sensor*	Enlighted, Inc.	SU-3E-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC Adapter	UL listed	AD35-0900300DU	2302AA
Remote Control	Enlighted	WS-1-00 Sensor	None

Test Conditions / Notes:

OBW Setup

Firmware Used: Version 1214

Temperature: 21.3°C, Humidity: 43 %, Atmospheric Pressure: 101.0 kPa

High Clock: 16MHz

Transmitting operating frequency= 2.4GHz Band

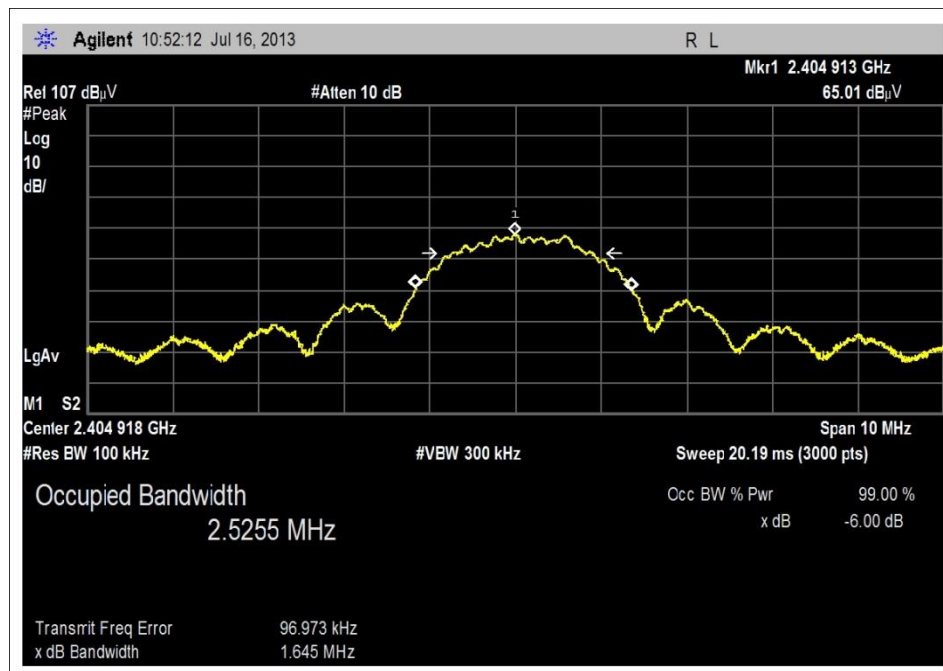
RF Output= 0dBm

Gain of the antenna=0dBi

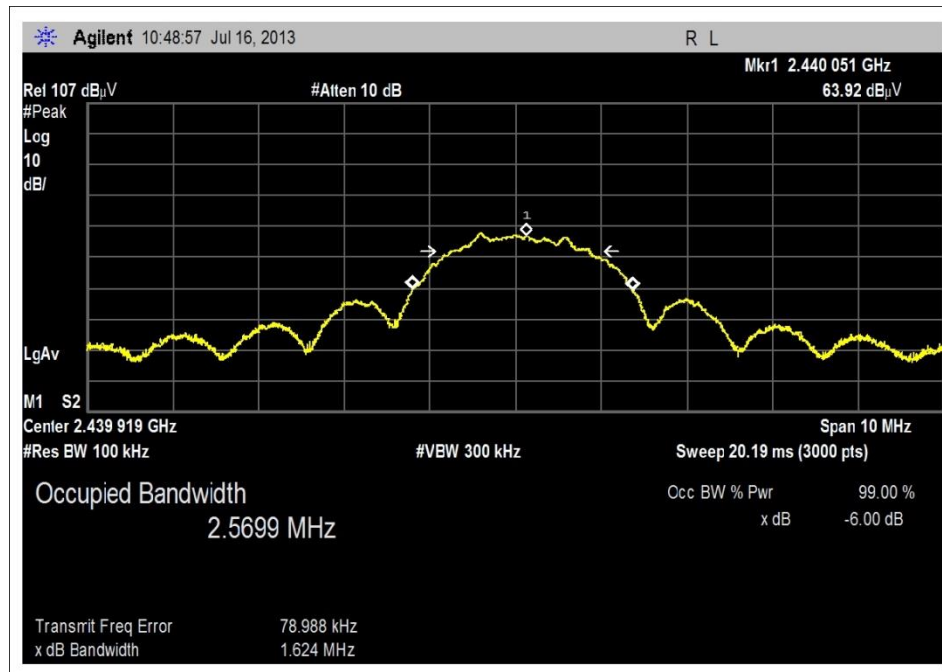
Low channel=2405MHz, Middle channel=2440MHz, High Channel=2475MHz

The EUT is a fit device and operated at 14VDC. It is placed on the 80cm Styrofoam table and at the center of a turning table. Instead of connecting to another device in order to get a14VDC power, a customer uses an AC/DC power adapter to power up the EUT. The EUT is set in continue transmit and 3 meter away from the measuring antenna.

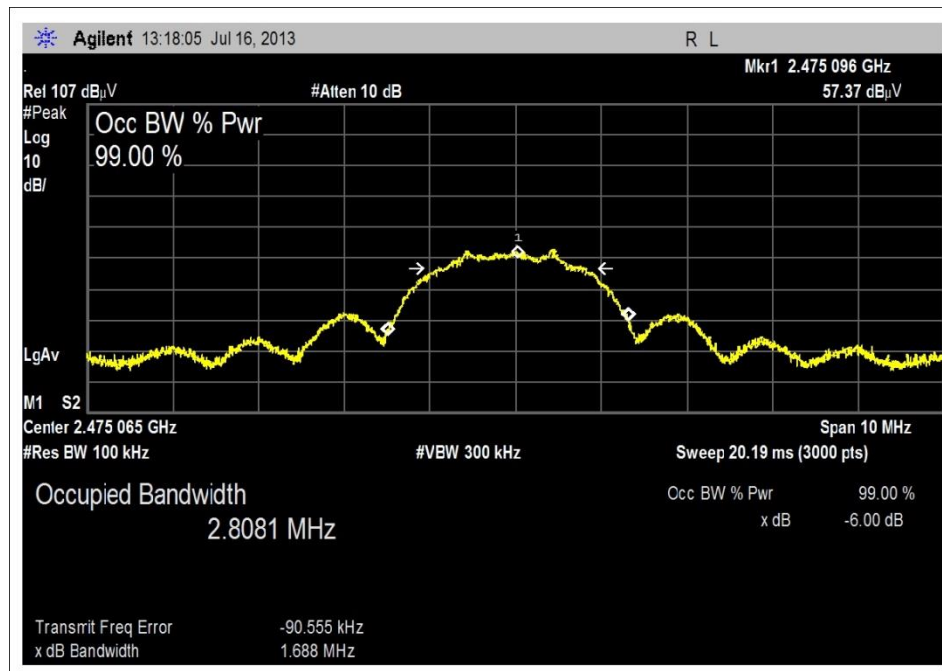
Test Data



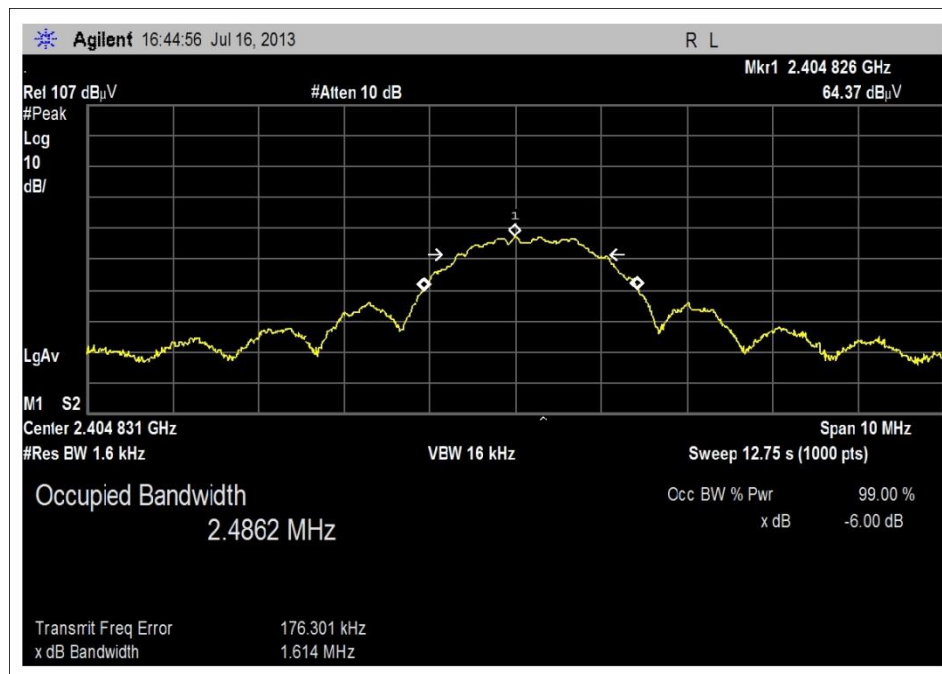
99%, Low Channel



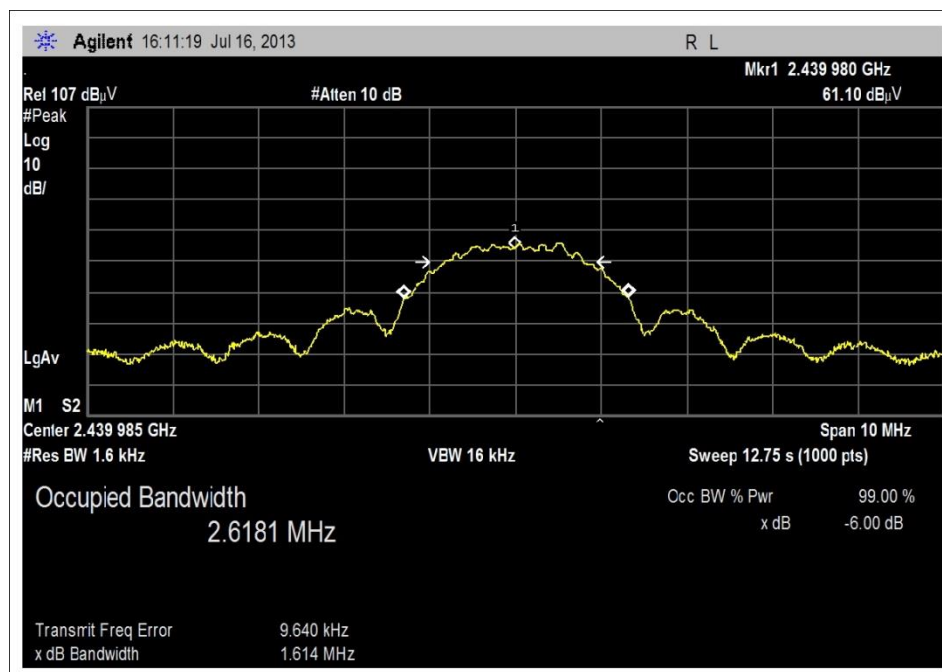
99%, Middle Channel



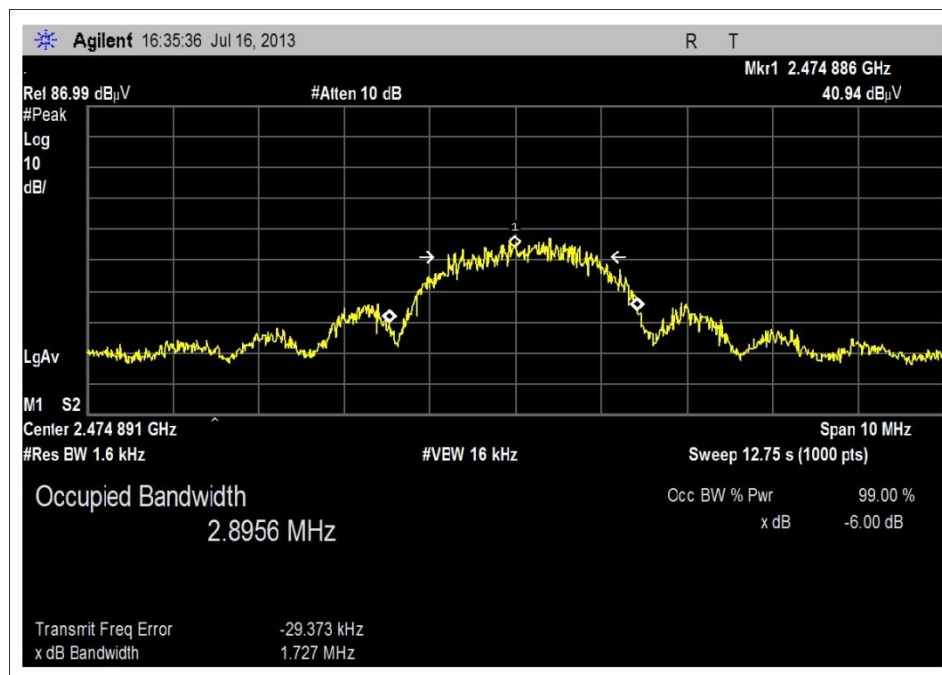
99%, High Channel



Emissions Bandwidth, Low Channel

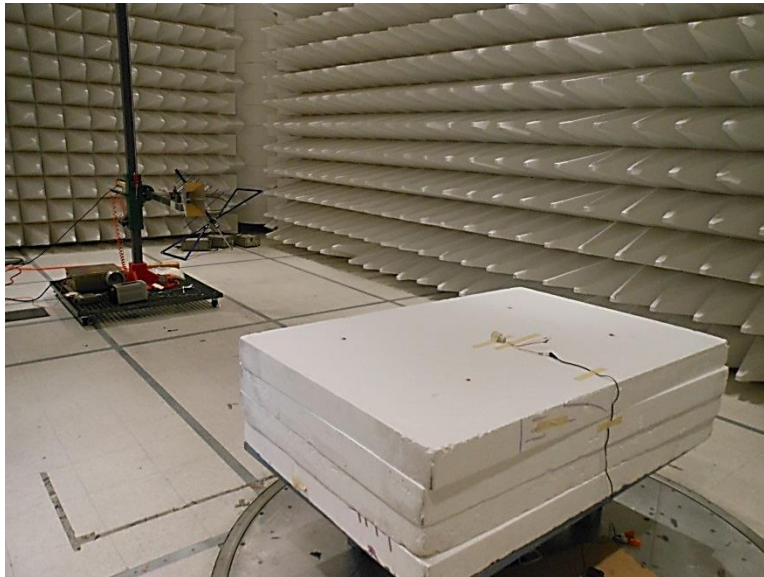
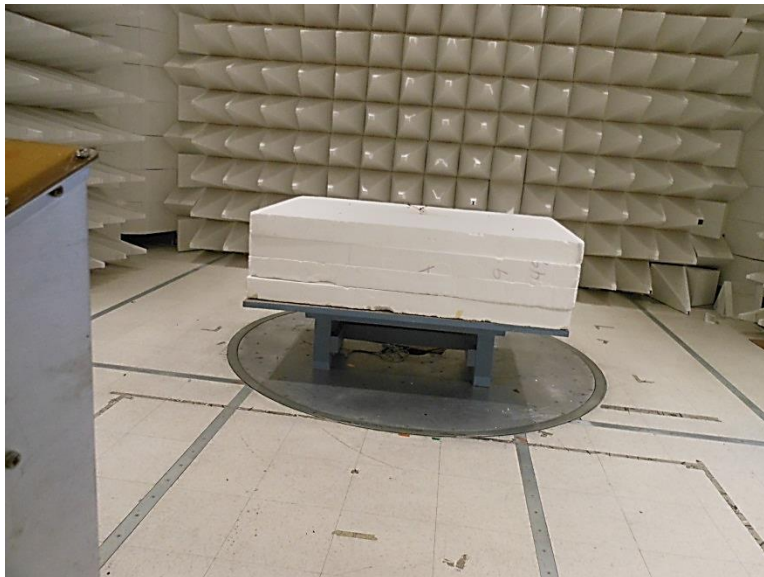


Emissions Bandwidth, Middle Channel



Emissions Bandwidth, High Channel

Test Setup Photos



SUPPLEMENTAL INFORMATION

Measurement Uncertainty

Uncertainty Value	Parameter
4.73 dB	Radiated Emissions
3.34 dB	Mains Conducted Emissions
3.30 dB	Disturbance Power

The reported measurement uncertainties are calculated based on the worst case of all laboratory environments from CKC Laboratories, Inc. test sites. Only those parameters which require estimation of measurement uncertainty are reported. The reported worst case measurement uncertainty is less than the maximum values derived in CISPR 16-4-2. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k=2$. Compliance is deemed to occur provided measurements are below the specified limits.

Emissions Test Details

TESTING PARAMETERS

Unless otherwise indicated, the following configuration parameters are used for equipment setup: The cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. Cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the setup photographs. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables.

The emissions data was taken with a spectrum analyzer or receiver. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the table below. The corrected data was then compared to the applicable emission limits. Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in dB μ V/m, the spectrum analyzer reading in dB μ V was corrected by using the following formula. This reading was then compared to the applicable specification limit.

SAMPLE CALCULATIONS		
	Meter reading	(dBμV)
+	Antenna Factor	(dB)
+	Cable Loss	(dB)
-	Distance Correction	(dB)
-	Preamplifier Gain	(dB)
=	Corrected Reading	(dBμV/m)

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed were used to collect the emissions data. A spectrum analyzer or receiver was used for all measurements. Unless otherwise specified, the following table shows the measuring equipment bandwidth settings that were used in designated frequency bands. For testing emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used.

MEASURING EQUIPMENT BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	9 kHz	150 kHz	200 Hz
RADIATED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1000 MHz	>1 GHz	1 MHz

SPECTRUM ANALYZER/RECEIVER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the emissions tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "positive peak" detector mode. Whenever a "quasi-peak" or "average" reading was recorded, the measurement was annotated with a "QP" or an "Ave" on the appropriate rows of the data sheets. In cases where quasi-peak or average limits were employed and data exists for multiple measurement types for the same frequency then the peak measurement was retained in the report for reference, however the numbering for the affected row was removed and an arrow or carrot ("^") was placed in the far left-hand column indicating that the row above takes precedence for comparison to the limit. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

Peak

In this mode, the spectrum analyzer or receiver recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature called "peak hold," the measurement device had the ability to measure intermittent or low duty cycle transient emission peak levels. In this mode the measuring device made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

Quasi-peak measurements were taken using the quasi-peak detector when the true peak values exceeded or were within 2 dB of a quasi-peak specification limit. Additional QP measurements may have been taken at the discretion of the operator.

Average

Average measurements were taken using the average detector when the true peak values exceeded or were within 2 dB of an average specification limit. Additional average measurements may have been taken at the discretion of the operator. If the specification or test procedure requires trace averaging, then the averaging was performed using 100 samples or as required by the specification. All other average measurements are performed using video bandwidth averaging. To make these measurements, the test engineer reduces the video bandwidth on the measuring device until the modulation of the signal is filtered out. At this point the measuring device is set into the linear mode and the scan time is reduced.