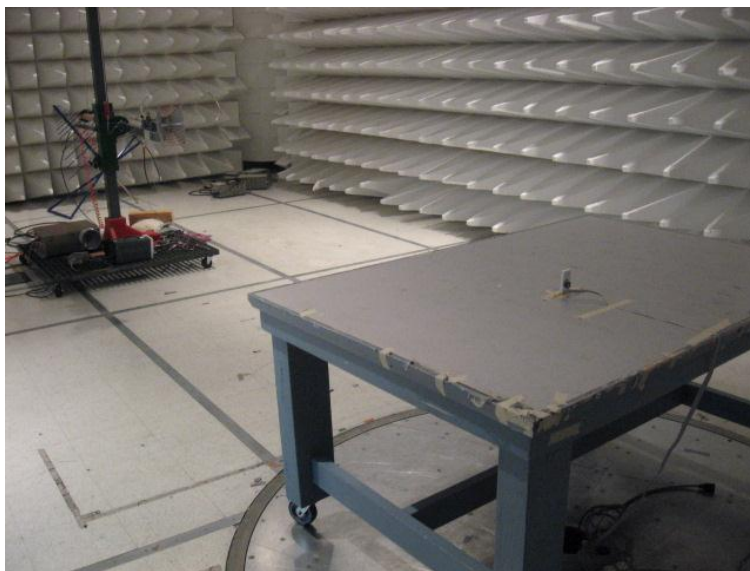
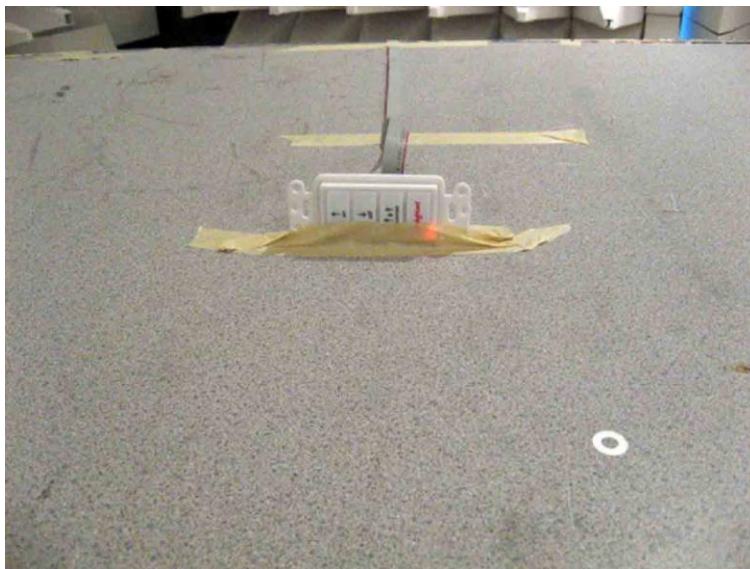


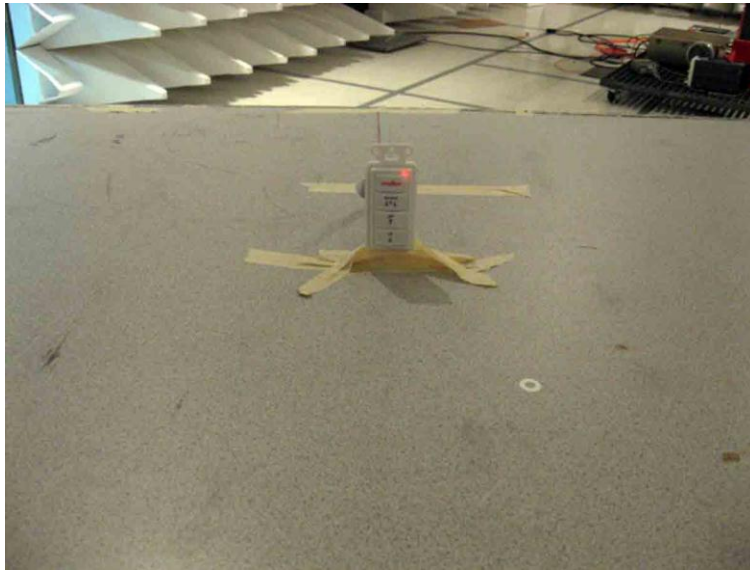




X Axis



Y Axis



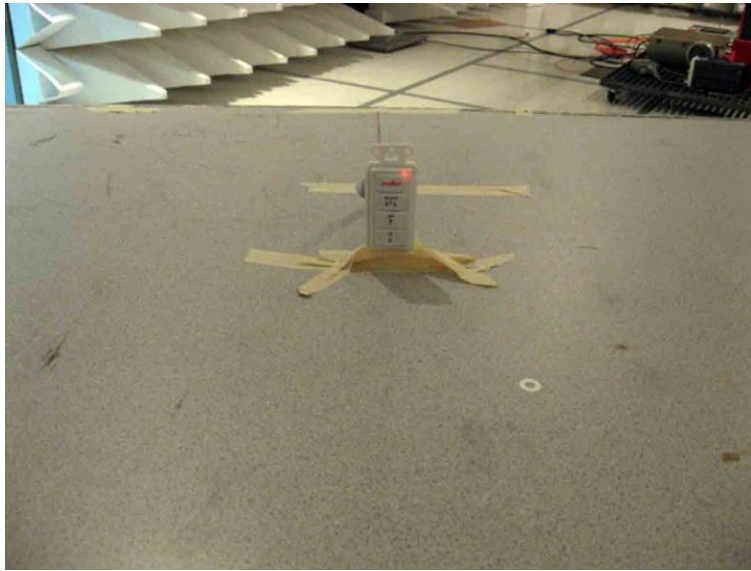
Z Axis



X Axis



Y Axis



Z Axis

15.249(d) Radiated Spurious Emissions

Test Data Sheets

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

Customer: **Enlighted, Inc**
 Specification: **15.249 Carrier and Spurious Emissions (2400-2483.5 MHz Transmitter)**
 Work Order #: **93965** Date: 1/18/2013
 Test Type: **Radiated Scan** Time: 16:31:18
 Equipment: **Enlighted Wireless Switch** Sequence#: 49
 Manufacturer: Enlighted Inc Tested By: Hieu Song Nguyenpham
 Model: WS-1-00
 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	ANP05440	Cable		3/7/2011	3/7/2013
	AN02668	Spectrum Analyzer	E4446A	2/23/2011	2/23/2013
T3	AN00432	Loop Antenna	6502	3/31/2011	3/31/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Enlighted Wireless Switch*	Enlighted Inc	WS-1-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC Power Adapter	Lenovo	92P1156	11S92P1156ZDXN17B5G
Laptop	Lenovo	T420	None

Test Conditions / Notes:

Radiated Spurious Emission Frequency Range: 9kHz to 30MHz Transmitter operating frequency: 2.4GHz Number of Channel: 16 Low Frequency: 2.405GHz High Frequency: 2.480GHz Software: Enlighted software Temperature: 20.3° C Humidity: 30% Atmospheric Pressure: 101.9kPa RBW=VBW= 200Hz from 9kHz to 150kHz RBW=VBW=9kHz from 150kHz to 30MHz Note: The EUT is a battery device. It is placed on 80cm table and at the center of the turning table. Low- Channel

Ext Attn: 0 dB

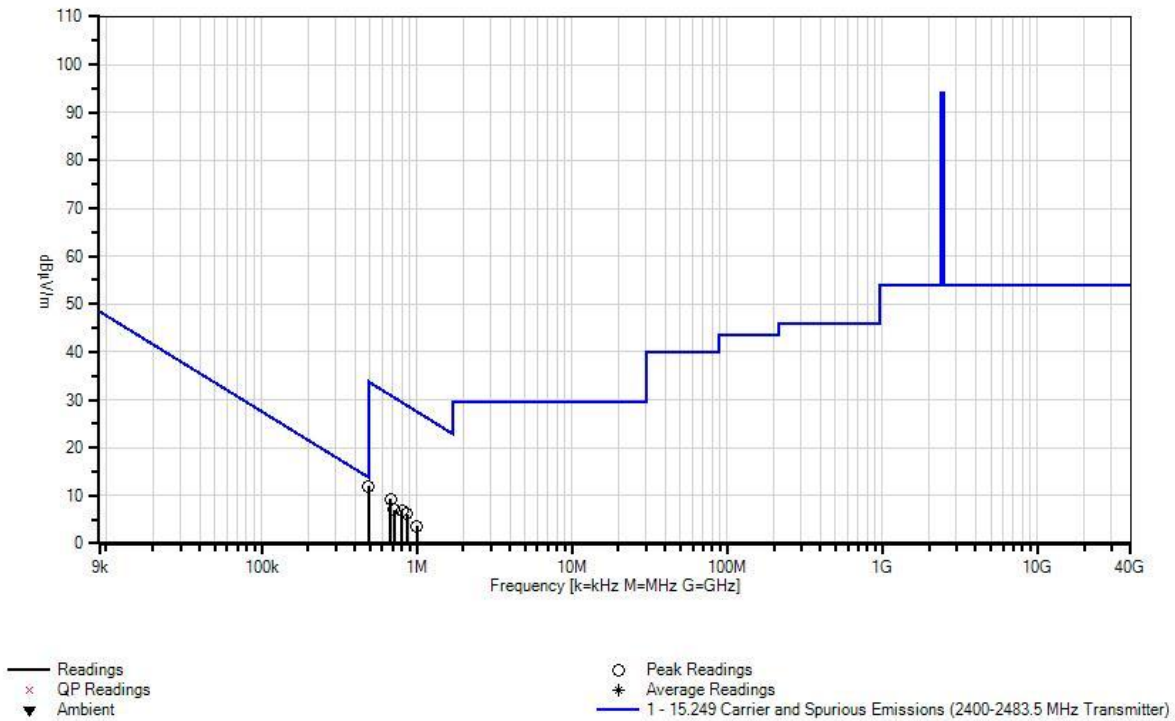
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB		Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	681.038k	37.7	+0.1	+0.0	+11.5		-40.0	9.3	30.9	-21.6	Perpe
2	490.784k	40.7	+0.1	+0.0	+11.1		-40.0	11.9	33.8	-21.9	Perpe
3	804.390k	35.4	+0.1	+0.0	+11.4		-40.0	6.9	29.5	-22.6	Paral
4	869.201k	34.5	+0.1	+0.1	+11.4		-40.0	6.1	28.8	-22.7	Perpe
5	712.399k	35.5	+0.1	+0.0	+11.5		-40.0	7.1	30.5	-23.4	Paral
6	1.003M	32.1	+0.1	+0.0	+11.5		-40.0	3.7	27.5	-23.8	Paral

CKC Laboratories, Inc Date: 1/18/2013 Time: 16:31:18 Enlighted , Inc WO#: 93965
Test Distance: 3 Meters Sequence#: 49



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

Customer: **Enlighted, Inc**

Specification: **15.249 Carrier and Spurious Emissions (2400-2483.5 MHz Transmitter)**

Work Order #: **93965**

Date: 1/18/2013

Test Type: **Radiated Scan**

Time: 15:03:33

Equipment: **Enlighted Wireless Switch**

Sequence#: 40

Manufacturer: Enlighted Inc

Tested By: Hieu Song Nguyenpham

Model: WS-1-00

S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN00730	Preamplifier		1/31/2011	1/31/2013
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	ANP05440	Cable		3/7/2011	3/7/2013
	AN02668	Spectrum Analyzer	E4446A	2/23/2011	2/23/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Enlighted Wireless Switch*	Enlighted Inc	WS-1-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC Power Adapter	Lenovo	92P1156	11S92P1156ZDXN17B5GG
Laptop	Lenovo	T420	None

Test Conditions / Notes:

Radiated Spurious Emission

Frequency Range: 30MHz to 1000MHz

Transmitter operating frequency: 2.4GHz

Number of Channel: 16

Low Frequency: 2.405GHz

High Frequency: 2.480GHz

Enlighted software

Temperature: 20.3° C

Humidity: 30%

Atmospheric Pressure: 101.9kPa

RBW=VBW= 120kHz

Note: The EUT is a battery device. It is placed on 80cm table and at the center of the turning table.

Low- Channel

Ext Attn: 0 dB

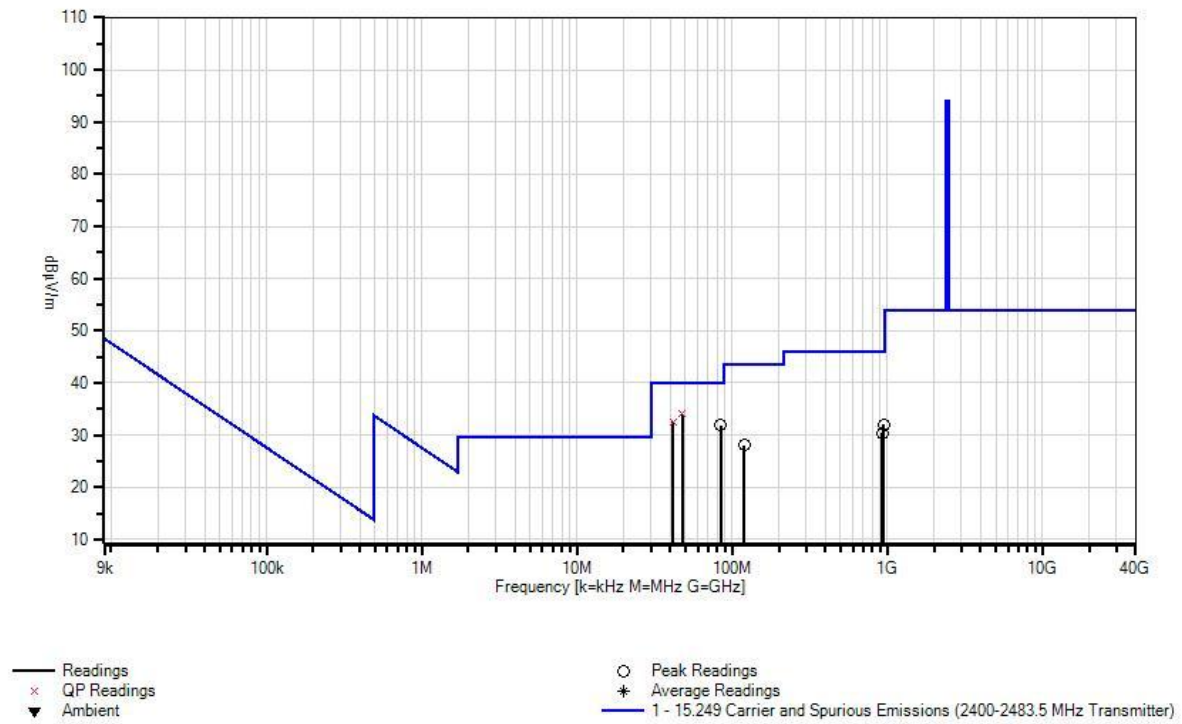
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBμV	dB	dB	dB	dB	Table	dBμV/m	dBμV/m	dB	Ant
1	47.992M	50.8	-27.5 +0.4	+9.6	+0.6	+0.1	+0.0	34.0	40.0	-6.0	Vert
^	47.992M	53.7	-27.5 +0.4	+9.6	+0.6	+0.1	+0.0	36.9	40.0	-3.1	Vert
^	47.992M	53.3	-27.5 +0.4	+9.6	+0.6	+0.1	+0.0	36.5	40.0	-3.5	Vert
4	41.517M	46.4	-27.5 +0.3	+12.6	+0.6	+0.1	+0.0	32.5	40.0	-7.5	Vert
^	41.517M	52.1	-27.5 +0.3	+12.6	+0.6	+0.1	+0.0	38.2	40.0	-1.8	Vert
^	41.517M	51.2	-27.5 +0.3	+12.6	+0.6	+0.1	+0.0	37.3	40.0	-2.7	Vert
7	84.171M	49.7	-27.5 +0.5	+8.2	+0.9	+0.1	+0.0	31.9	40.0	-8.1	Vert
8	951.226M	29.7	-27.7 +2.0	+23.5	+3.5	+1.0	+0.0	32.0	46.0	-14.0	Horiz
9	120.213M	42.3	-27.4 +0.6	+11.3	+1.1	+0.2	+0.0	28.1	43.5	-15.4	Horiz
10	925.377M	28.9	-27.6 +1.9	+22.7	+3.5	+1.0	+0.0	30.4	46.0	-15.6	Horiz

CKC Laboratories, Inc Date: 1/18/2013 Time: 15:03:33 Enlighted , Inc WO#: 93965
Test Distance: 3 Meters Sequence#: 40



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

Customer: **Enlighted, Inc**

Specification: **15.249 Carrier and Spurious Emissions (2400-2483.5 MHz Transmitter)**

Work Order #: **93965**

Date: 1/17/2013

Test Type: **Radiated Scan**

Time: 16:21:05

Equipment: **Enlighted Wireless Switch**

Sequence#: 13

Manufacturer: Enlighted Inc

Tested By: Hieu Song Nguyenpham

Model: WS-1-00

S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN01467	Horn Antenna-ANSI C63.5 Calibration	3115	10/19/2011	10/19/2013
T2	AN03302	Cable	32026-29094K- 29094K-72TC	3/21/2012	3/21/2014
T3	ANP01210	Cable	FSJ1P-50A-4A	3/15/2011	3/15/2013
	AN02668	Spectrum Analyzer	E4446A	2/23/2011	2/23/2013
T4	AN03309	High Pass Filter	11SH10- 3000/T10000-O/O	6/12/2012	6/12/2014
T5	AN03114	Preamp	AMF-7D- 00101800-30-10P	5/13/2011	5/13/2013
T6	ANP05843	Cable	32022-2-29094K- 48TC	8/7/2012	8/7/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Enlighted Wireless Switch*	Enlighted Inc	WS-1-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC Power Adapter	Lenovo	92P1156	11S92P1156ZDXN17B5GG
Laptop	Lenovo	T420	None

Test Conditions / Notes:

Radiated Spurious and Harmonic Emission

Frequency Range: 1000-12000MHz

Transmitter operating frequency: 2.4GHz

Number of Channel: 16

Low Frequency: 2.405GHz

High Frequency: 2.480GHz

Enlighted Software

Temperature: 19.9° C

Humidity: 28%

Atmospheric Pressure: 102.1kPa

RBW=VBW= 1MHz

Note: The EUT is a battery device. It is placed on 80cm table and at the center of the turning table.

Low- Channel

Ext Attn: 0 dB

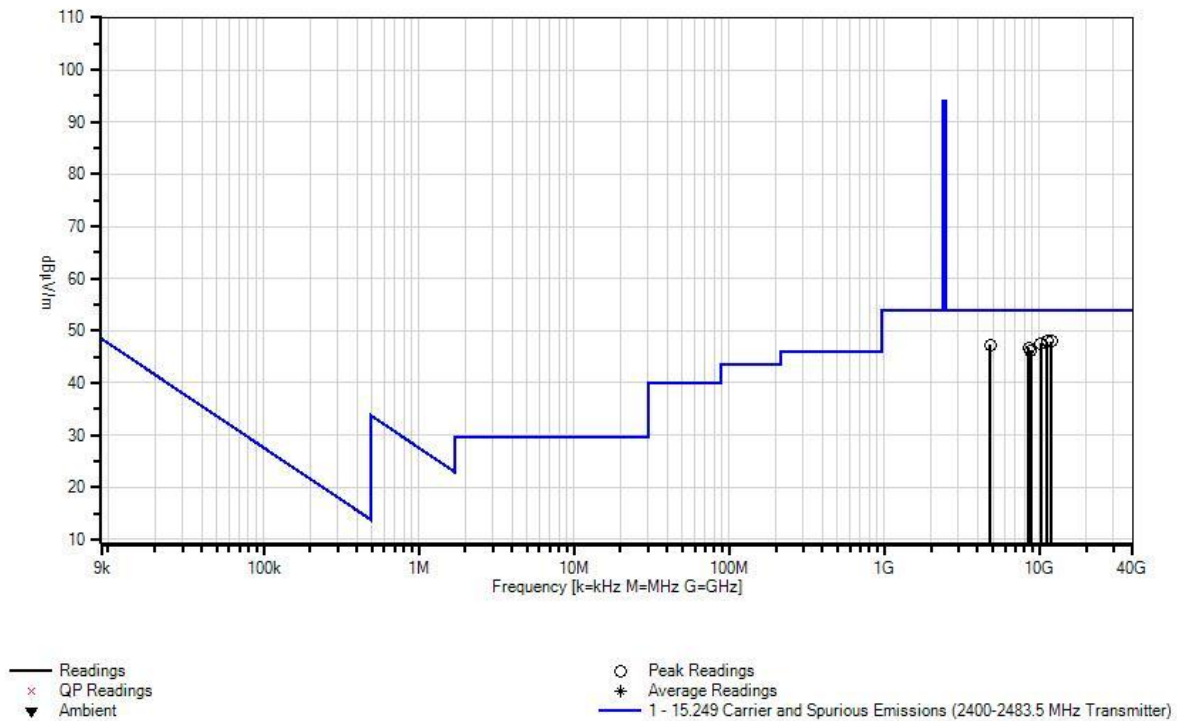
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2 T6	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dB μ V	dB	dB	dB	dB	Table	dB μ V/m	dB μ V/m	dB	Ant
1	11992.064 M	53.2	+38.6 -55.9	+2.4 +2.2	+7.1	+0.3	+0.0	47.9	54.0	-6.1	Vert
2	11200.448 M	55.3	+38.3 -57.1	+2.3 +2.1	+6.8	+0.2	+0.0	47.9	54.0	-6.1	Horiz
3	10236.229 M	57.1	+38.1 -58.5	+2.3 +2.0	+6.5	+0.1	+0.0	47.6	54.0	-6.4	Horiz
4	4811.810M	67.0	+32.0 -58.9	+1.5 +1.3	+4.2	+0.2	+0.0	47.3	54.0	-6.7	Vert
5	8513.508M	56.5	+36.7 -56.3	+2.1 +1.6	+5.8	+0.3	+0.0	46.7	54.0	-7.3	Horiz
6	8838.833M	56.1	+37.0 -56.7	+2.1 +1.5	+5.9	+0.3	+0.0	46.2	54.0	-7.8	Vert

CKC Laboratories, Inc Date: 1/17/2013 Time: 16:21:05 Enlighted , Inc WO#: 93965
Test Distance: 3 Meters Sequence#: 13



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

Customer: **Enlighted, Inc**

Specification: **15.249 Carrier and Spurious Emissions (2400-2483.5 MHz Transmitter)**

Work Order #: **93965**

Date: 1/18/2013

Test Type: **Radiated Scan**

Time: 09:56:54

Equipment: **Enlighted Wireless Switch**

Sequence#: 22

Manufacturer: Enlighted Inc

Tested By: Hieu Song Nguyenpham

Model: WS-1-00

S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP00928	Cable	various	2/10/2012	2/10/2014
T2	ANP05843	Cable	32022-2-29094K-48TC	8/7/2012	8/7/2014
T3	ANP06127	Cable	32022-29094K-29094K-132TC	9/7/2011	9/7/2013
	AN02668	Spectrum Analyzer	E4446A	2/23/2011	2/23/2013
T4	AN02741	Active Horn Antenna	AMFW-5F-12001800-20-10P	12/18/2012	12/18/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Enlighted Wireless Switch*	Enlighted Inc	WS-1-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC Power Adapter	Lenovo	92P1156	11S92P1156ZDXN17B5GG
Laptop	Lenovo	T420	None

Test Conditions / Notes:

Radiated Spurious and Harmonic Emission

Frequency Range: 12000MHz to 18000MHz

Transmitter operating frequency: 2.4GHz

Number of Channel: 16

Low Frequency: 2.405GHz

High Frequency: 2.480GHz

Enlighted Software

Temperature: 20.3° C

Humidity: 30%

Atmospheric Pressure: 101.9kPa

RBW=VBW= 1MHz

Note: The EUT is a battery device. It is placed on 80cm table and at the center of the turning table.

Low- Channel

Ext Attn: 0 dB

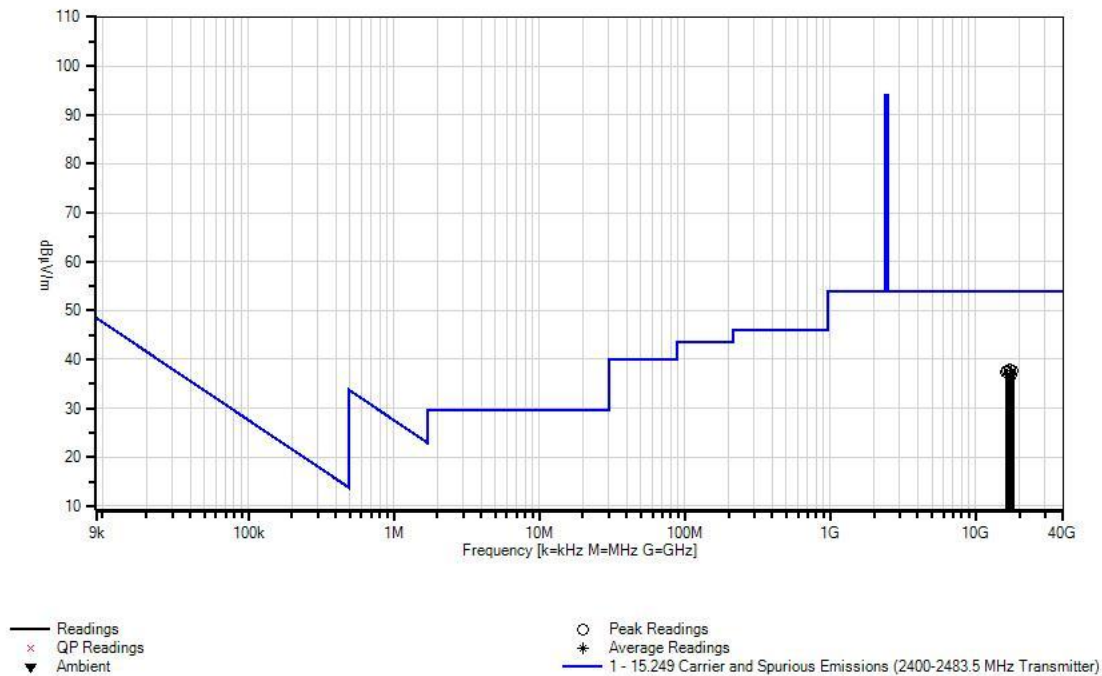
Measurement Data:

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	17234.845 M	43.4	+0.8	+2.6	+3.7	-12.5	+0.0	38.0	54.0	-16.0	Vert
2	16433.429 M	42.0	+0.9	+2.6	+3.6	-11.4	+0.0	37.7	54.0	-16.3	Horiz
3	17975.125 M	40.7	+0.8	+2.7	+3.7	-10.3	+0.0	37.6	54.0	-16.4	Horiz
4	16297.293 M	41.5	+1.0	+2.6	+3.6	-11.3	+0.0	37.4	54.0	-16.6	Vert
5	17155.245 M	42.7	+0.9	+2.6	+3.7	-12.7	+0.0	37.2	54.0	-16.8	Vert
6	17592.050 M	41.2	+0.8	+2.7	+3.7	-11.6	+0.0	36.8	54.0	-17.2	Horiz

CKC Laboratories, Inc Date: 1/18/2013 Time: 09:56:54 Enlighted , Inc WO#: 93965
Test Distance: 3 Meters Sequence#: 22



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

Customer: **Enlighted, Inc**

Specification: **15.249 Carrier and Spurious Emissions (2400-2483.5 MHz Transmitter)**

Work Order #: **93965**

Date: 1/18/2013

Test Type: **Radiated Scan**

Time: 11:31:29

Equipment: **Enlighted Wireless Switch**

Sequence#: 31

Manufacturer: Enlighted Inc

Tested By: Hieu Song Nguyenpham

Model: WS-1-00

S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP05843	Cable	32022-2-29094K-48TC	8/7/2012	8/7/2014
T2	ANP06127	Cable	32022-29094K-29094K-132TC	9/7/2011	9/7/2013
	AN02668	Spectrum Analyzer	E4446A	2/23/2011	2/23/2013
T3	ANP00929	Cable	various	2/16/2012	2/16/2014
T4	AN02742	Active Horn Antenna	AMFW-5F-18002650-20-10P	12/17/2012	12/17/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Enlighted Wireless Switch*	Enlighted Inc	WS-1-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC Power Adapter	Lenovo	92P1156	11S92P1156ZDXN17B5GG
Laptop	Lenovo	T420	None

Test Conditions / Notes:

Radiated Spurious and Harmonic Emission

Frequency Range: 18000MHz to 25000MHz

Transmitter operating frequency: 2.4GHz

Number of Channel: 16

Low Frequency: 2.405GHz

High Frequency: 2.480GHz

Enlighted software

Temperature: 20.3° C

Humidity: 30%

Atmospheric Pressure: 101.9kPa

RBW=VBW= 1MHz

Note: The EUT is a battery device. It is placed on 80cm table and at the center of the turning table.

Low- Channel

Ext Attn: 0 dB

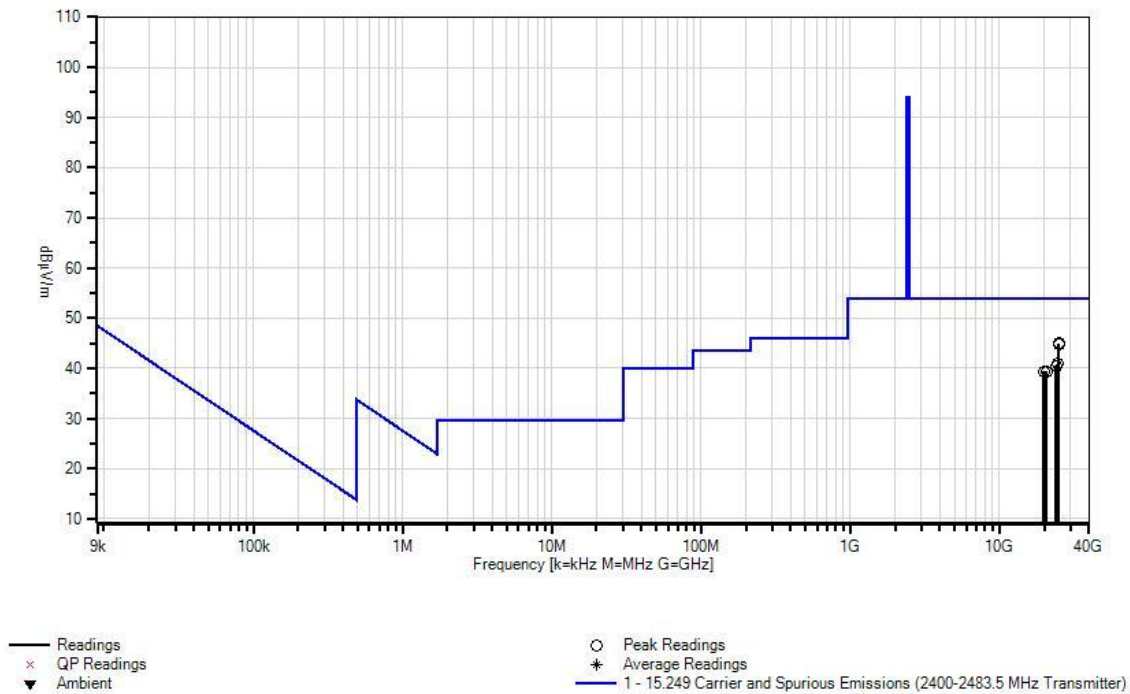
Measurement Data:

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	24982.108 M	46.8	+3.1	+4.4	+2.9	-12.3	+0.0	44.9	54.0	-9.1	Horiz
2	24897.618 M	46.4	+3.3	+4.4	+2.9	-12.3	+0.0	44.7	54.0	-9.3	Vert
3	24587.490 M	43.0	+3.4	+4.4	+2.9	-12.8	+0.0	40.9	54.0	-13.1	Horiz
4	23994.989 M	43.9	+3.1	+4.4	+3.0	-14.0	+0.0	40.4	54.0	-13.6	Vert
5	19927.926 M	42.7	+2.9	+4.0	+3.2	-13.4	+0.0	39.4	54.0	-14.6	Vert
6	20646.644 M	43.6	+2.8	+4.0	+3.1	-14.1	+0.0	39.4	54.0	-14.6	Horiz

CKC Laboratories, Inc Date: 1/18/2013 Time: 11:31:29 Enlighted , Inc WO#: 93965
Test Distance: 3 Meters Sequence#: 31



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

Customer: **Enlighted, Inc**

Specification: **15.249 Carrier and Spurious Emissions (2400-2483.5 MHz Transmitter)**

Work Order #: **93965**

Date: 1/18/2013

Test Type: **Radiated Scan**

Time: 15:40:06

Equipment: **Enlighted Wireless Switch**

Sequence#: 43

Manufacturer: Enlighted Inc

Tested By: Hieu Song Nguyenpham

Model: WS-1-00

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	ANP05440	Cable		3/7/2011	3/7/2013
	AN02668	Spectrum Analyzer	E4446A	2/23/2011	2/23/2013
T3	AN00432	Loop Antenna	6502	3/31/2011	3/31/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Enlighted Wireless Switch*	Enlighted Inc	WS-1-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC Power Adapter	Lenovo	92P1156	11S92P1156ZDXN17B5GG
Laptop	Lenovo	T420	None

Test Conditions / Notes:

Radiated Spurious Emission
Frequency Range: 9kHz to 30MHz
Transmitter operating frequency: 2.4GHz
Number of Channel: 16
Low Frequency: 2.405GHz
High Frequency: 2.480GHz
Enlighted software
Temperature: 20.3° C
Humidity: 30%
Atmospheric Pressure: 101.9kPa
RBW=VBW= 200Hz from 9kHz to 150kHz
RBW=VBW=9kHz from 150kHz to 30MHz
Note: The EUT is a battery device. It is placed on 80cm table and at the center of the turning table.
Middle- Channel

Ext Attn: 0 dB

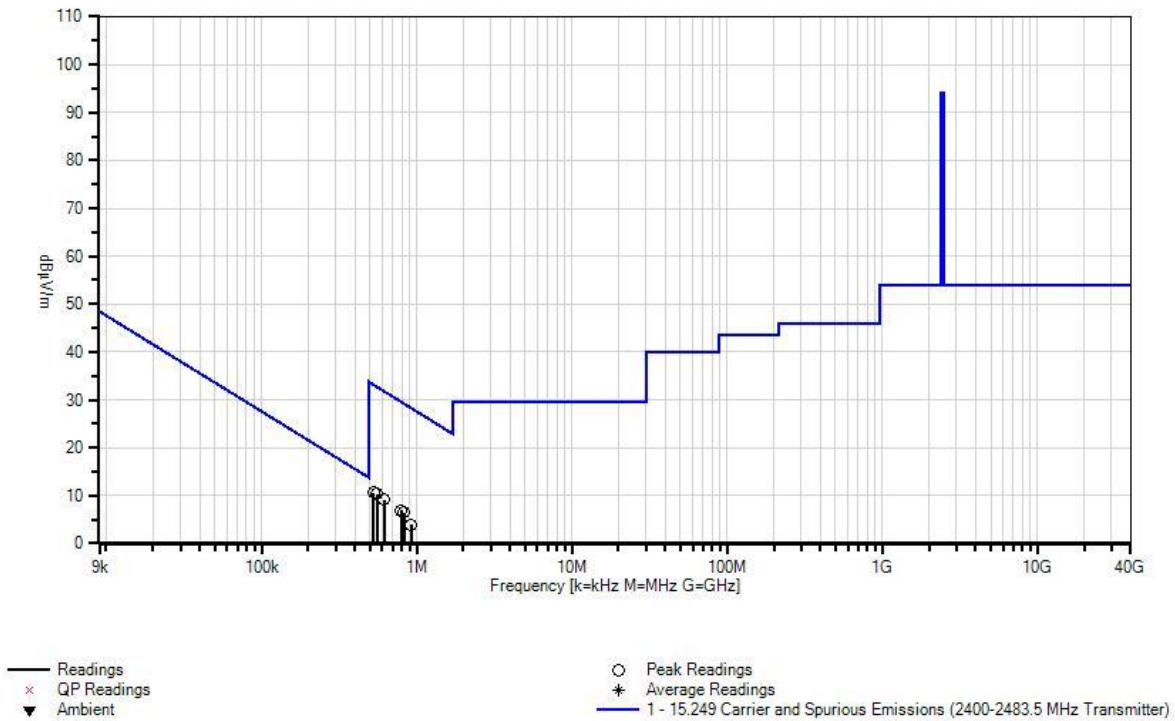
Measurement Data:

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	557.687k	39.1	+0.1	+0.0	+11.2		-40.0	10.4	32.7	-22.3	Perpe
2	528.417k	39.3	+0.1	+0.0	+11.2		-40.0	10.6	33.1	-22.5	Perpe
3	618.317k	37.8	+0.1	+0.0	+11.3		-40.0	9.2	31.8	-22.6	Paral
4	798.118k	35.4	+0.1	+0.0	+11.4		-40.0	6.9	29.5	-22.6	Paral
5	833.660k	35.0	+0.1	+0.0	+11.4		-40.0	6.5	29.2	-22.7	Perpe
6	917.288k	32.5	+0.1	+0.0	+11.4		-40.0	4.0	28.3	-24.3	Paral

CKC Laboratories, Inc Date: 1/18/2013 Time: 15:40:06 Enlighted , Inc WO#: 93965
Test Distance: 3 Meters Sequence#: 43



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

Customer: **Enlighted, Inc**

Specification: **15.249 Carrier and Spurious Emissions (2400-2483.5 MHz Transmitter)**

Work Order #: **93965**

Date: 1/18/2013

Test Type: **Radiated Scan**

Time: 13:53:36

Equipment: **Enlighted Wireless Switch**

Sequence#: 34

Manufacturer: Enlighted Inc

Tested By: Hieu Song Nguyenpham

Model: WS-1-00

S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN00730	Preamp		1/31/2011	1/31/2013
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	ANP05440	Cable		3/7/2011	3/7/2013
	AN02668	Spectrum Analyzer	E4446A	2/23/2011	2/23/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Enlighted Wireless Switch*	Enlighted Inc	WS-1-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC Power Adapter	Lenovo	92P1156	11S92P1156ZDXN17B5GG
Laptop	Lenovo	T420	None

Test Conditions / Notes:

Radiated Spurious Emission

Frequency Range: 30MHz to 1000MHz

Transmitter operating frequency: 2.4GHz

Number of Channel: 16

Low Frequency: 2.405GHz

High Frequency: 2.480GHz

Enlighted software

Temperature: 20.3° C

Humidity: 30%

Atmospheric Pressure: 101.9kPa

RBW=VBW= 120kHz

Note: The EUT is a battery device. It is placed on 80cm table and at the center of the turning table.

Middle- Channel

Ext Attn: 0 dB

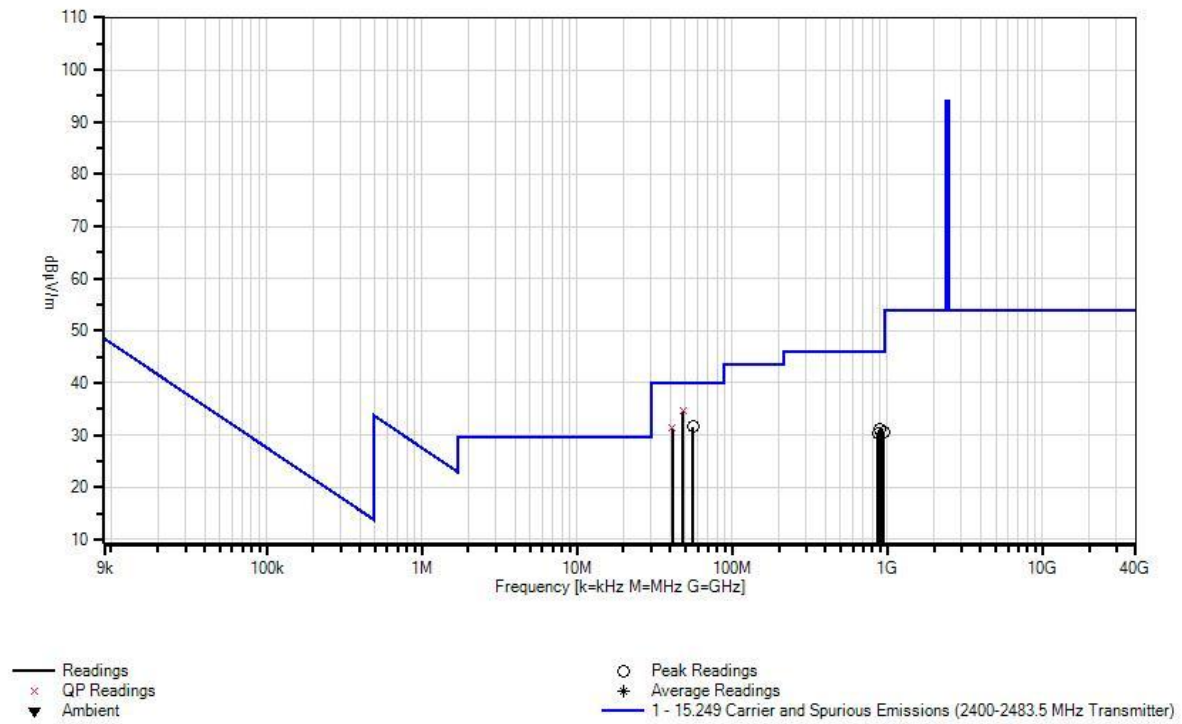
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dB μ V	dB	dB	dB	dB	Table	dB μ V/m	dB μ V/m	dB	Ant
1	48.117M	51.4	-27.5 +0.4	+9.6	+0.6	+0.1	+0.0	34.6	40.0	-5.4	Vert
^	48.117M	54.2	-27.5 +0.4	+9.6	+0.6	+0.1	+0.0	37.4	40.0	-2.6	Vert
^	48.117M	53.8	-27.5 +0.4	+9.6	+0.6	+0.1	+0.0	37.0	40.0	-3.0	Vert
4	56.220M	51.0	-27.5 +0.4	+6.8	+0.7	+0.2	+0.0	31.6	40.0	-8.4	Vert
5	41.139M	45.0	-27.5 +0.3	+12.8	+0.6	+0.1	+0.0	31.3	40.0	-8.7	Vert
^	41.139M	50.9	-27.5 +0.3	+12.8	+0.6	+0.1	+0.0	37.2	40.0	-2.8	Vert
^	41.139M	50.6	-27.5 +0.3	+12.8	+0.6	+0.1	+0.0	36.9	40.0	-3.1	Vert
8	903.395M	29.1	-27.4 +1.9	+23.0	+3.4	+1.0	+0.0	31.0	46.0	-15.0	Horiz
9	946.530M	28.3	-27.7 +2.0	+23.5	+3.5	+1.0	+0.0	30.6	46.0	-15.4	Horiz
10	874.806M	28.5	-27.3 +1.9	+22.9	+3.4	+0.9	+0.0	30.3	46.0	-15.7	Horiz

CKC Laboratories, Inc Date: 1/18/2013 Time: 13:53:36 Enlighted , Inc WO#: 93965
Test Distance: 3 Meters Sequence#: 34



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

Customer: **Enlighted, Inc**

Specification: **15.249 Carrier and Spurious Emissions (2400-2483.5 MHz Transmitter)**

Work Order #: **93965**

Date: 1/17/2013

Test Type: **Radiated Scan**

Time: 15:14:07

Equipment: **Enlighted Wireless Switch**

Sequence#: 7

Manufacturer: Enlighted Inc

Tested By: Hieu Song Nguyenpham

Model: WS-1-00

S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN01467	Horn Antenna-ANSI C63.5 Calibration	3115	10/19/2011	10/19/2013
T2	AN03302	Cable	32026-29094K- 29094K-72TC	3/21/2012	3/21/2014
T3	ANP01210	Cable	FSJ1P-50A-4A	3/15/2011	3/15/2013
	AN02668	Spectrum Analyzer	E4446A	2/23/2011	2/23/2013
T4	AN03309	High Pass Filter	11SH10- 3000/T10000-O/O	6/12/2012	6/12/2014
T5	AN03114	Preamp	AMF-7D- 00101800-30-10P	5/13/2011	5/13/2013
T6	ANP05843	Cable	32022-2-29094K- 48TC	8/7/2012	8/7/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Enlighted Wireless Switch*	Enlighted Inc	WS-1-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC Power Adapter	Lenovo	92P1156	11S92P1156ZDXN17B5GG
Laptop	Lenovo	T420	None

Test Conditions / Notes:

Radiated Spurious and Harmonic Emission

Frequency Range: 1000-12000MHz

Transmitter operating frequency: 2.4GHz

Number of Channel: 16

Low Frequency: 2.405GHz

High Frequency: 2.480GHz

Enlighted Software

Temperature: 19.9° C

Humidity: 28%

Atmospheric Pressure: 102.1kPa

RBW=VBW= 1MHz

Note: The EUT is a battery device. It is placed on 80cm table and at the center of the turning table.

Middle- Channel

Ext Attn: 0 dB

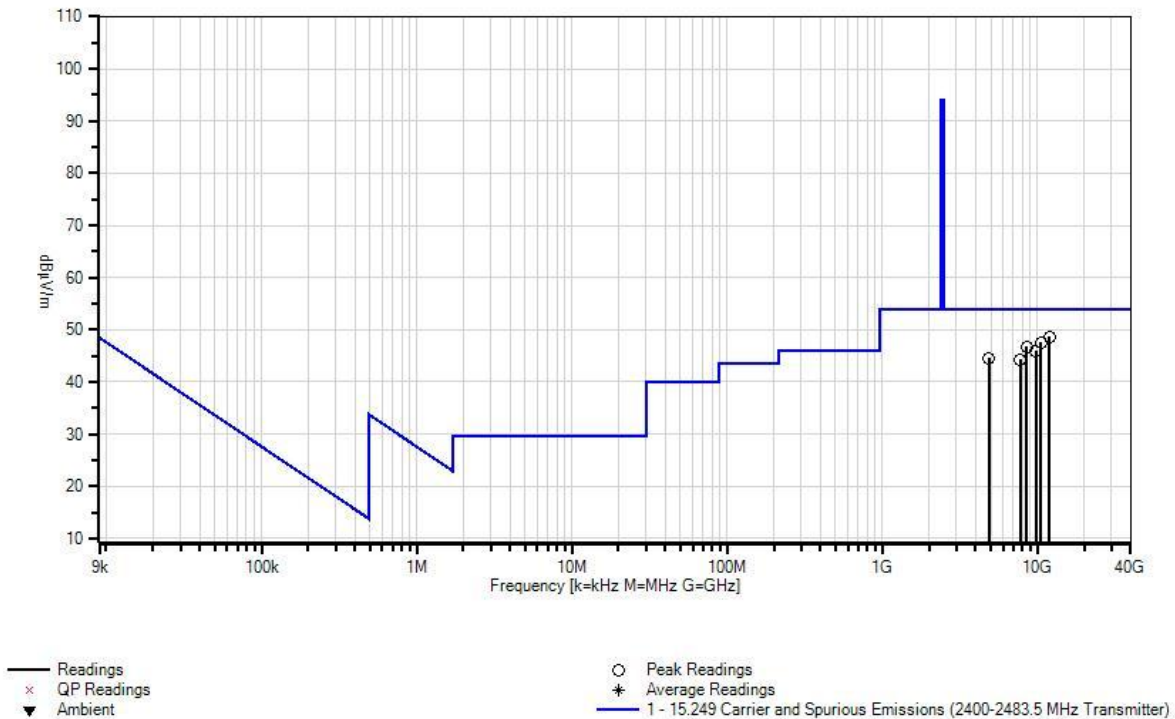
Measurement Data:

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	11986.112 M	54.0	+38.6 -56.0	+2.4 +2.2	+7.1	+0.3	+0.0	48.6	54.0	-5.4	Vert
2	10470.463 M	56.7	+38.4 -58.6	+2.3 +1.9	+6.7	+0.1	+0.0	47.5	54.0	-6.5	Horiz
3	8501.496M	56.8	+36.7 -56.4	+2.0 +1.6	+5.8	+0.3	+0.0	46.8	54.0	-7.2	Horiz
4	9760.754M	57.8	+36.3 -58.7	+2.3 +1.7	+6.3	+0.2	+0.0	45.9	54.0	-8.1	Horiz
5	4881.880M	64.2	+32.1 -59.0	+1.5 +1.3	+4.2	+0.3	+0.0	44.6	54.0	-9.4	Vert
6	7780.776M	57.8	+35.9 -58.6	+2.0 +1.5	+5.5	+0.2	+0.0	44.3	54.0	-9.7	Vert

CKC Laboratories, Inc Date: 1/17/2013 Time: 15:14:07 Enlighted , Inc WO#: 93965
Test Distance: 3 Meters Sequence#: 7



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

Customer: **Enlighted, Inc**

Specification: **15.249 Carrier and Spurious Emissions (2400-2483.5 MHz Transmitter)**

Work Order #: **93965**

Date: 1/18/2013

Test Type: **Radiated Scan**

Time: 09:11:37

Equipment: **Enlighted Wireless Switch**

Sequence#: 16

Manufacturer: Enlighted Inc

Tested By: Hieu Song Nguyenpham

Model: WS-1-00

S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP00928	Cable	various	2/10/2012	2/10/2014
T2	ANP05843	Cable	32022-2-29094K-48TC	8/7/2012	8/7/2014
T3	ANP06127	Cable	32022-29094K-29094K-132TC	9/7/2011	9/7/2013
	AN02668	Spectrum Analyzer	E4446A	2/23/2011	2/23/2013
T4	AN02741	Active Horn Antenna	AMFW-5F-12001800-20-10P	12/18/2012	12/18/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Enlighted Wireless Switch*	Enlighted Inc	WS-1-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC Power Adapter	Lenovo	92P1156	11S92P1156ZDXN17B5GG
Laptop	Lenovo	T420	None

Test Conditions / Notes:

Radiated Spurious and Harmonic Emission

Frequency Range: 12000MHz to 18000MHz

Transmitter operating frequency: 2.4GHz

Number of Channel: 16

Low Frequency: 2.405GHz

High Frequency: 2.480GHz

Enlighted Software

Temperature: 20.3° C

Humidity: 30%

Atmospheric Pressure: 101.9kPa

RBW=VBW= 1MHz

Note: The EUT is a battery device. It is placed on 80cm table and at the center of the turning table.

Middle- Channel

Ext Attn: 0 dB

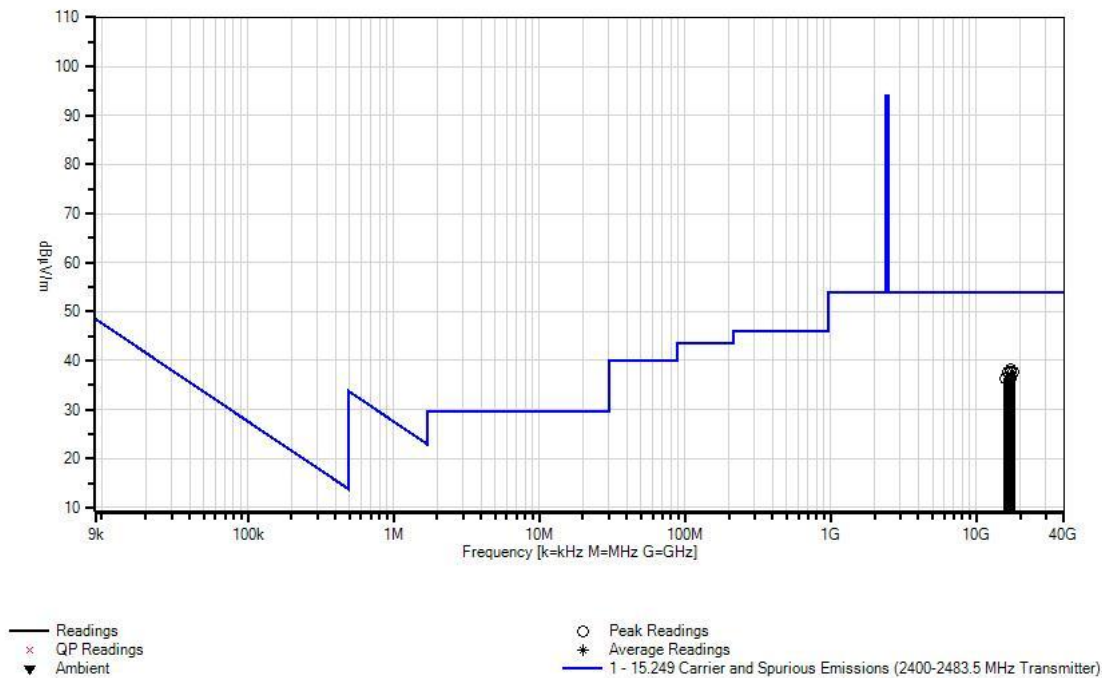
Measurement Data:

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	17306.485 M	43.3	+0.8	+2.6	+3.7	-12.3	+0.0	38.1	54.0	-15.9	Vert
2	17977.115 M	40.7	+0.8	+2.7	+3.7	-10.3	+0.0	37.6	54.0	-16.4	Vert
3	17167.185 M	43.1	+0.8	+2.6	+3.7	-12.6	+0.0	37.6	54.0	-16.4	Vert
4	16389.385 M	41.6	+0.9	+2.6	+3.6	-11.1	+0.0	37.6	54.0	-16.4	Horiz
5	15738.735 M	42.5	+1.0	+2.5	+3.5	-13.1	+0.0	36.4	54.0	-17.6	Horiz
6	17058.730 M	42.0	+0.9	+2.6	+3.7	-12.8	+0.0	36.4	54.0	-17.6	Horiz

CKC Laboratories, Inc Date: 1/18/2013 Time: 09:11:37 Enlighted, Inc WO#: 93965
Test Distance: 3 Meters Sequence#: 16



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

Customer: **Enlighted, Inc**

Specification: **15.249 Carrier and Spurious Emissions (2400-2483.5 MHz Transmitter)**

Work Order #: **93965**

Date: 1/18/2013

Test Type: **Radiated Scan**

Time: 10:35:28

Equipment: **Enlighted Wireless Switch**

Sequence#: 25

Manufacturer: Enlighted Inc

Tested By: Hieu Song Nguyenpham

Model: WS-1-00

S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP05843	Cable	32022-2-29094K-48TC	8/7/2012	8/7/2014
T2	ANP06127	Cable	32022-29094K-29094K-132TC	9/7/2011	9/7/2013
	AN02668	Spectrum Analyzer	E4446A	2/23/2011	2/23/2013
T3	ANP00929	Cable	various	2/16/2012	2/16/2014
T4	AN02742	Active Horn Antenna	AMFW-5F-18002650-20-10P	12/17/2012	12/17/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Enlighted Wireless Switch*	Enlighted Inc	WS-1-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC Power Adapter	Lenovo	92P1156	11S92P1156ZDXN17B5GG
Laptop	Lenovo	T420	None

Test Conditions / Notes:

Radiated Spurious and Harmonic Emission

Frequency Range: 18000MHz to 25000MHz

Transmitter operating frequency: 2.4GHz

Number of Channel: 16

Low Frequency: 2.405GHz

High Frequency: 2.480GHz

Enlighted Software

Temperature: 20.3° C

Humidity: 30%

Atmospheric Pressure: 101.9kPa

RBW=VBW= 1MHz

Note: The EUT is a battery device. It is placed on 80cm table and at the center of the turning table.

Middle- Channel

Ext Attn: 0 dB

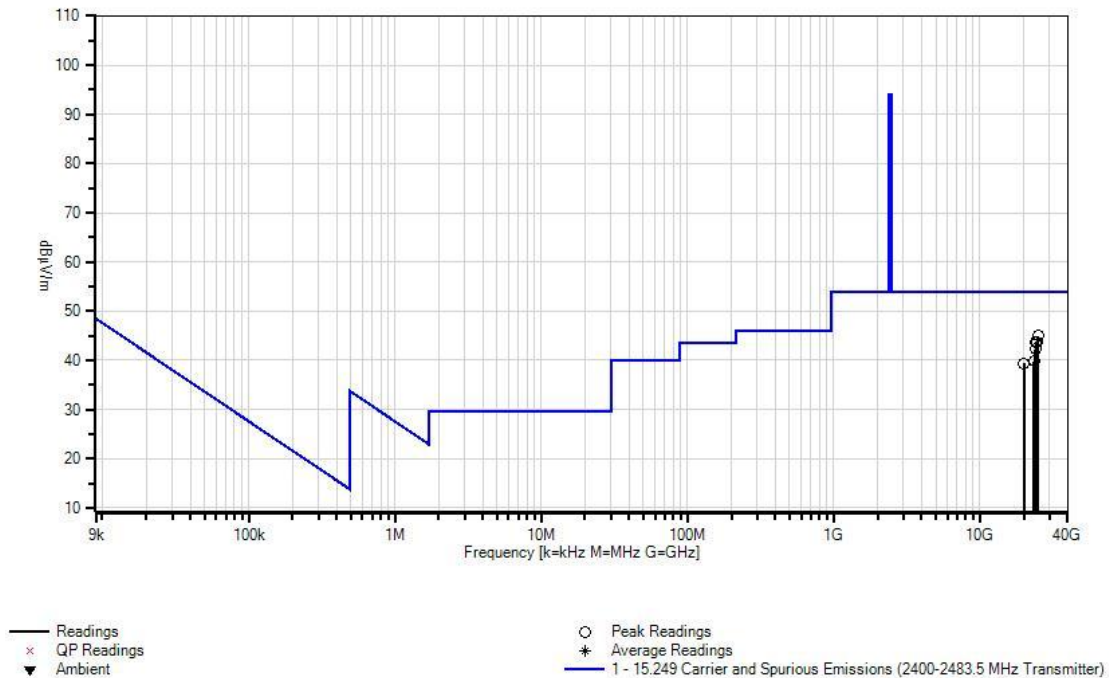
Measurement Data:

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	24956.264 M	46.8	+3.2	+4.4	+2.9	-12.3	+0.0	45.0	54.0	-9.0	Vert
2	24336.008 M	46.7	+3.0	+4.4	+2.9	-13.2	+0.0	43.8	54.0	-10.2	Horiz
3	24812.134 M	45.3	+3.4	+4.4	+2.9	-12.4	+0.0	43.6	54.0	-10.4	Horiz
4	24039.796 M	45.7	+3.1	+4.4	+2.9	-13.9	+0.0	42.2	54.0	-11.8	Vert
5	23563.558 M	44.2	+3.2	+4.4	+3.0	-15.0	+0.0	39.8	54.0	-14.2	Vert
6	19930.929 M	42.6	+2.9	+4.0	+3.2	-13.4	+0.0	39.3	54.0	-14.7	Horiz

CKC Laboratories, Inc Date: 1/18/2013 Time: 10:35:28 Enlighted , Inc WO#: 93965
Test Distance: 3 Meters Sequence#: 25



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

Customer: **Enlighted, Inc**

Specification: **15.249 Carrier and Spurious Emissions (2400-2483.5 MHz Transmitter)**

Work Order #: **93965**

Date: 1/18/2013

Test Type: **Radiated Scan**

Time: 16:08:15

Equipment: **Enlighted Wireless Switch**

Sequence#: 46

Manufacturer: Enlighted Inc

Tested By: Hieu Song Nguyenpham

Model: WS-1-00

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	ANP05440	Cable		3/7/2011	3/7/2013
	AN02668	Spectrum Analyzer	E4446A	2/23/2011	2/23/2013
T3	AN00432	Loop Antenna	6502	3/31/2011	3/31/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Enlighted Wireless Switch*	Enlighted Inc	WS-1-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC Power Adapter	Lenovo	92P1156	11S92P1156ZDXN17B5GG
Laptop	Lenovo	T420	None

Test Conditions / Notes:

Radiated Spurious Emission
Frequency Range: 9kHz to 30MHz
Transmitter operating frequency: 2.4GHz
Number of Channel: 16
Low Frequency: 2.405GHz
High Frequency: 2.480GHz
Enlighted software
Temperature: 20.3° C
Humidity: 30%
Atmospheric Pressure: 101.9kPa
RBW=VBW= 200Hz from 9kHz to 150kHz
RBW=VBW=9kHz from 150kHz to 30MHz
Note: The EUT is a battery device. It is placed on 80cm table and at the center of the turning table.
High- Channel.

Ext Attn: 0 dB

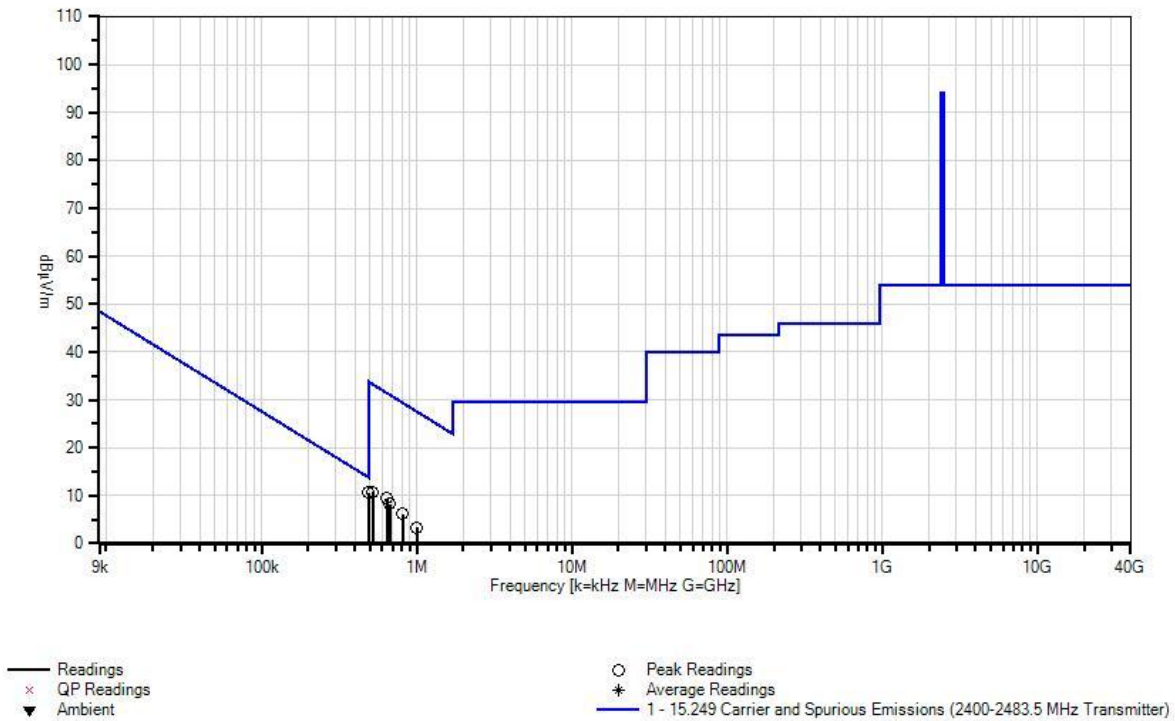
Measurement Data:

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	641.315k	38.0	+0.1	+0.0	+11.4		-40.0	9.5	31.4	-21.9	Paral
2	522.145k	39.6	+0.1	+0.0	+11.1		-40.0	10.8	33.2	-22.4	Perpe
3	674.766k	36.6	+0.1	+0.0	+11.5		-40.0	8.2	31.0	-22.8	Perpe
4	490.784k	39.5	+0.1	+0.0	+11.1		-40.0	10.7	33.8	-23.1	Perpe
5	812.753k	34.6	+0.1	+0.0	+11.4		-40.0	6.1	29.4	-23.3	Paral
6	1.003M	31.7	+0.1	+0.0	+11.5		-40.0	3.3	27.5	-24.2	Paral

CKC Laboratories, Inc Date: 1/18/2013 Time: 16:08:15 Enlighted , Inc WO#: 93965
Test Distance: 3 Meters Sequence#: 46



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

Customer: **Enlighted, Inc**

Specification: **15.249 Carrier and Spurious Emissions (2400-2483.5 MHz Transmitter)**

Work Order #: **93965**

Date: 1/18/2013

Test Type: **Radiated Scan**

Time: 14:29:24

Equipment: **Enlighted Wireless Switch**

Sequence#: 37

Manufacturer: Enlighted Inc

Tested By: Hieu Song Nguyenpham

Model: WS-1-00

S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN00730	Preamp		1/31/2011	1/31/2013
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	ANP05440	Cable		3/7/2011	3/7/2013
	AN02668	Spectrum Analyzer	E4446A	2/23/2011	2/23/2013

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Enlighted Wireless Switch*	Enlighted Inc	WS-1-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC Power Adapter	Lenovo	92P1156	11S92P1156ZDXN17B5GG
Laptop	Lenovo	T420	None

Test Conditions / Notes:

Radiated Spurious Emission

Frequency Range: 30MHz to 1000MHz

Transmitter operating frequency: 2.4GHz

Number of Channel: 16

Low Frequency: 2.405GHz

High Frequency: 2.480GHz

Enlighted software

Temperature: 20.3° C

Humidity: 30%

Atmospheric Pressure: 101.9kPa

RBW=VBW= 120kHz

Note: The EUT is a battery device. It is placed on 80cm table and at the center of the turning table.

High- Channel

Ext Attn: 0 dB

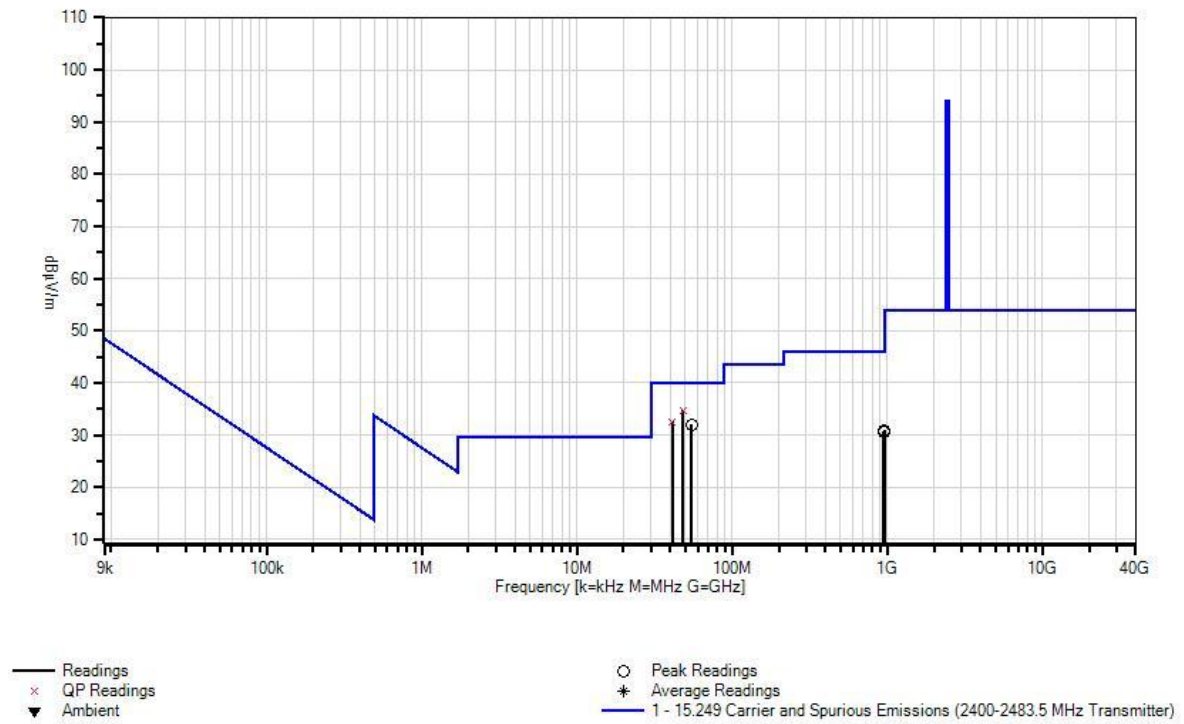
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBμV	dB	dB	dB	dB	Table	dBμV/m	dBμV/m	dB	Ant
1	48.114M	51.5	-27.5	+9.6	+0.6	+0.1	+0.0	34.7	40.0	-5.3	Vert
	QP		+0.4								
^	48.114M	54.5	-27.5	+9.6	+0.6	+0.1	+0.0	37.7	40.0	-2.3	Vert
			+0.4								
^	48.114M	53.5	-27.5	+9.6	+0.6	+0.1	+0.0	36.7	40.0	-3.3	Vert
			+0.4								
4	41.400M	46.4	-27.5	+12.6	+0.6	+0.1	+0.0	32.5	40.0	-7.5	Vert
	QP		+0.3								
^	41.400M	51.6	-27.5	+12.6	+0.6	+0.1	+0.0	37.7	40.0	-2.3	Vert
			+0.3								
^	41.400M	51.2	-27.5	+12.6	+0.6	+0.1	+0.0	37.3	40.0	-2.7	Vert
			+0.3								
7	54.756M	50.9	-27.5	+7.3	+0.7	+0.2	+0.0	32.0	40.0	-8.0	Vert
			+0.4								
8	956.798M	28.6	-27.7	+23.5	+3.5	+1.0	+0.0	30.9	46.0	-15.1	Horiz
			+2.0								
9	951.664M	28.4	-27.7	+23.5	+3.5	+1.0	+0.0	30.7	46.0	-15.3	Horiz
			+2.0								
10	957.424M	28.2	-27.7	+23.5	+3.5	+1.0	+0.0	30.5	46.0	-15.5	Horiz
			+2.0								

CKC Laboratories, Inc Date: 1/18/2013 Time: 14:29:24 Enlighted , Inc WO#: 93965
Test Distance: 3 Meters Sequence#: 37



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

Customer: **Enlighted, Inc**

Specification: **15.249 Carrier and Spurious Emissions (2400-2483.5 MHz Transmitter)**

Work Order #: **93965**

Date: 1/17/2013

Test Type: **Radiated Scan**

Time: 15:51:37

Equipment: **Enlighted Wireless Switch**

Sequence#: 10

Manufacturer: Enlighted Inc

Tested By: Hieu Song Nguyenpham

Model: WS-1-00

S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN01467	Horn Antenna-ANSI C63.5 Calibration	3115	10/19/2011	10/19/2013
T2	AN03302	Cable	32026-29094K- 29094K-72TC	3/21/2012	3/21/2014
T3	ANP01210	Cable	FSJ1P-50A-4A	3/15/2011	3/15/2013
	AN02668	Spectrum Analyzer	E4446A	2/23/2011	2/23/2013
T4	AN03309	High Pass Filter	11SH10- 3000/T10000-O/O	6/12/2012	6/12/2014
T5	AN03114	Preamp	AMF-7D- 00101800-30-10P	5/13/2011	5/13/2013
T6	ANP05843	Cable	32022-2-29094K- 48TC	8/7/2012	8/7/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Enlighted Wireless Switch*	Enlighted Inc	WS-1-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC Power Adapter	Lenovo	92P1156	11S92P1156ZDXN17B5GG
Laptop	Lenovo	T420	None

Test Conditions / Notes:

Radiated Spurious and Harmonic Emission

Frequency Range: 1000-12000MHz

Transmitter operating frequency: 2.4GHz

Number of Channel: 16

Low Frequency: 2.405GHz

High Frequency: 2.480GHz

Enlighted Software

Temperature: 19.9° C

Humidity: 28%

Atmospheric Pressure: 102.1kPa

RBW=VBW= 1MHz

Note: The EUT is a battery device. It is placed on 80cm table and at the center of the turning table.

High- Channel

Ext Attn: 0 dB

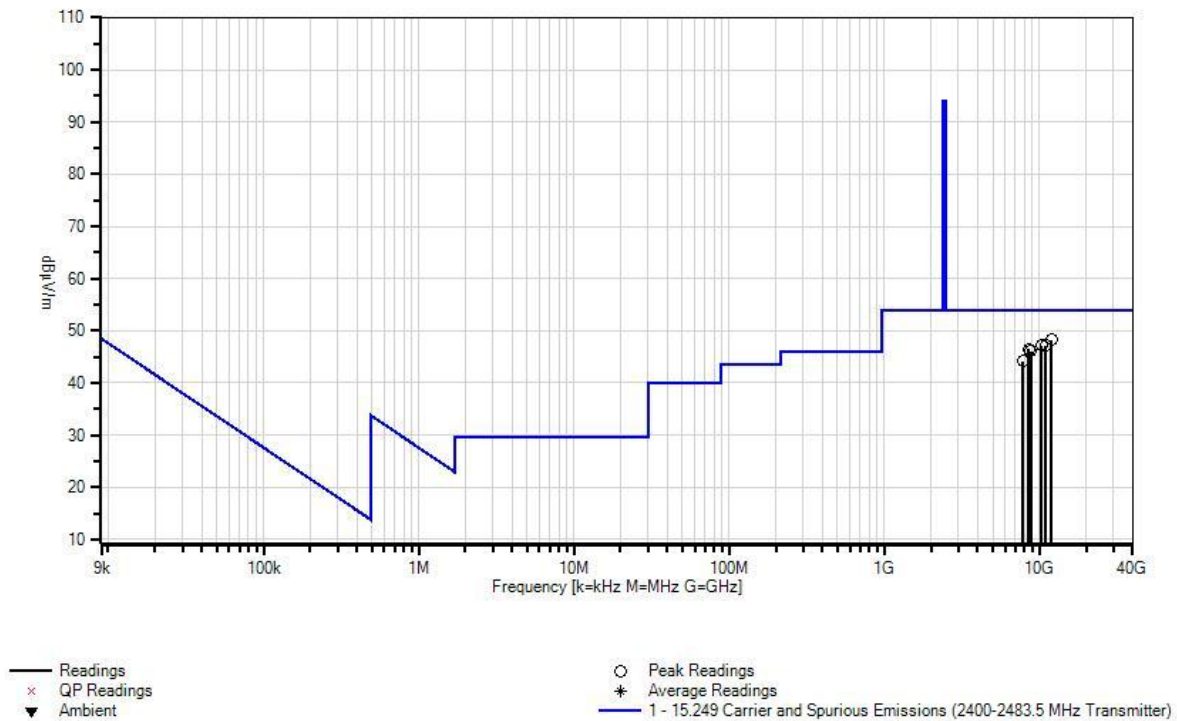
Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq	Rdng	T1 T5	T2 T6	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dB μ V	dB	dB	dB	dB	Table	dB μ V/m	dB μ V/m	dB	Ant
1	11982.144 M	53.7	+38.6 -56.0	+2.4 +2.2	+7.1	+0.3	+0.0	48.3	54.0	-5.7	Horiz
2	10994.987 M	55.5	+38.3 -58.0	+2.3 +2.1	+6.8	+0.2	+0.0	47.2	54.0	-6.8	Vert
3	10301.294 M	56.6	+38.2 -58.6	+2.3 +2.0	+6.5	+0.1	+0.0	47.1	54.0	-6.9	Horiz
4	8564.559M	56.4	+36.8 -56.6	+2.1 +1.6	+5.8	+0.3	+0.0	46.4	54.0	-7.6	Horiz
5	8764.759M	55.6	+36.9 -56.3	+2.1 +1.5	+5.9	+0.3	+0.0	46.0	54.0	-8.0	Vert
6	7806.802M	57.7	+35.9 -58.6	+2.0 +1.5	+5.5	+0.2	+0.0	44.2	54.0	-9.8	Vert

CKC Laboratories, Inc Date: 1/17/2013 Time: 15:51:37 Enlighted , Inc WO#: 93965
Test Distance: 3 Meters Sequence#: 10



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

Customer: **Enlighted, Inc**

Specification: **15.249 Carrier and Spurious Emissions (2400-2483.5 MHz Transmitter)**

Work Order #: **93965**

Date: 1/18/2013

Test Type: **Radiated Scan**

Time: 09:37:37

Equipment: **Enlighted Wireless Switch**

Sequence#: 19

Manufacturer: Enlighted Inc

Tested By: Hieu Song Nguyenpham

Model: WS-1-00

S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP00928	Cable	various	2/10/2012	2/10/2014
T2	ANP05843	Cable	32022-2-29094K-48TC	8/7/2012	8/7/2014
T3	ANP06127	Cable	32022-29094K-29094K-132TC	9/7/2011	9/7/2013
	AN02668	Spectrum Analyzer	E4446A	2/23/2011	2/23/2013
T4	AN02741	Active Horn Antenna	AMFW-5F-12001800-20-10P	12/18/2012	12/18/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Enlighted Wireless Switch*	Enlighted Inc	WS-1-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC Power Adapter	Lenovo	92P1156	11S92P1156ZDXN17B5G
Laptop	Lenovo	T420	None

Test Conditions / Notes:

Radiated Spurious and Harmonic Emission

Frequency Range: 12000MHz to 18000MHz

Transmitter operating frequency: 2.4GHz

Number of Channel: 16

Low Frequency: 2.405GHz

High Frequency: 2.480GHz

Enlighted Software

Temperature: 20.3° C

Humidity: 30%

Atmospheric Pressure: 101.9kPa

RBW=VBW= 1MHz

Note: The EUT is a battery device. It is placed on 80cm table and at the center of the turning table.

High- Channel

Ext Attn: 0 dB

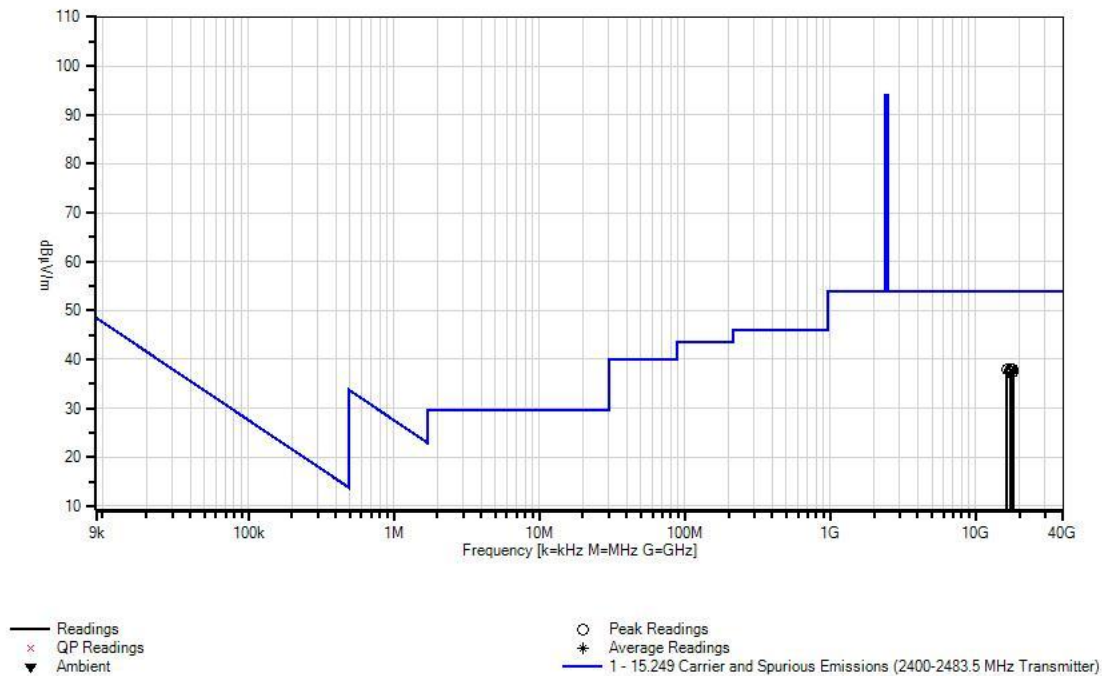
Measurement Data:

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	17402.005 M	43.1	+0.8	+2.6	+3.7	-12.2	+0.0	38.0	54.0	-16.0	Vert
2	16437.433 M	42.3	+0.9	+2.6	+3.6	-11.4	+0.0	38.0	54.0	-16.0	Horiz
3	17974.130 M	41.0	+0.8	+2.7	+3.7	-10.3	+0.0	37.9	54.0	-16.1	Vert
4	17372.155 M	42.8	+0.8	+2.6	+3.7	-12.2	+0.0	37.7	54.0	-16.3	Vert
5	17204.995 M	43.0	+0.8	+2.6	+3.7	-12.6	+0.0	37.5	54.0	-16.5	Horiz
6	17776.125 M	41.1	+0.8	+2.7	+3.7	-11.0	+0.0	37.3	54.0	-16.7	Horiz

CKC Laboratories, Inc Date: 1/18/2013 Time: 09:37:37 Enlighted , Inc WO#: 93965
Test Distance: 3 Meters Sequence#: 19



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

Customer: **Enlighted, Inc**

Specification: **15.249 Carrier and Spurious Emissions (2400-2483.5 MHz Transmitter)**

Work Order #: **93965**

Date: 1/18/2013

Test Type: **Radiated Scan**

Time: 11:05:29

Equipment: **Enlighted Wireless Switch**

Sequence#: 28

Manufacturer: Enlighted Inc

Tested By: Hieu Song Nguyenpham

Model: WS-1-00

S/N: None

Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP05843	Cable	32022-2-29094K-48TC	8/7/2012	8/7/2014
T2	ANP06127	Cable	32022-29094K-29094K-132TC	9/7/2011	9/7/2013
	AN02668	Spectrum Analyzer	E4446A	2/23/2011	2/23/2013
T3	ANP00929	Cable	various	2/16/2012	2/16/2014
T4	AN02742	Active Horn Antenna	AMFW-5F-18002650-20-10P	12/17/2012	12/17/2014

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Enlighted Wireless Switch*	Enlighted Inc	WS-1-00	None

Support Devices:

Function	Manufacturer	Model #	S/N
AC/DC Power Adapter	Lenovo	92P1156	11S92P1156ZDXN17B5GG
Laptop	Lenovo	T420	None

Test Conditions / Notes:

Radiated Spurious and Harmonic Emission

Frequency Range: 18000MHz to 25000MHz

Transmitter operating frequency: 2.4GHz

Number of Channel: 16

Low Frequency: 2.405GHz

High Frequency: 2.480GHz

Enlighted Software

Temperature: 20.3° C

Humidity: 30%

Atmospheric Pressure: 101.9kPa

RBW=VBW= 1MHz

Note: The EUT is a battery device. It is placed on 80cm table and at the center of the turning table.

High- Channel

Ext Attn: 0 dB

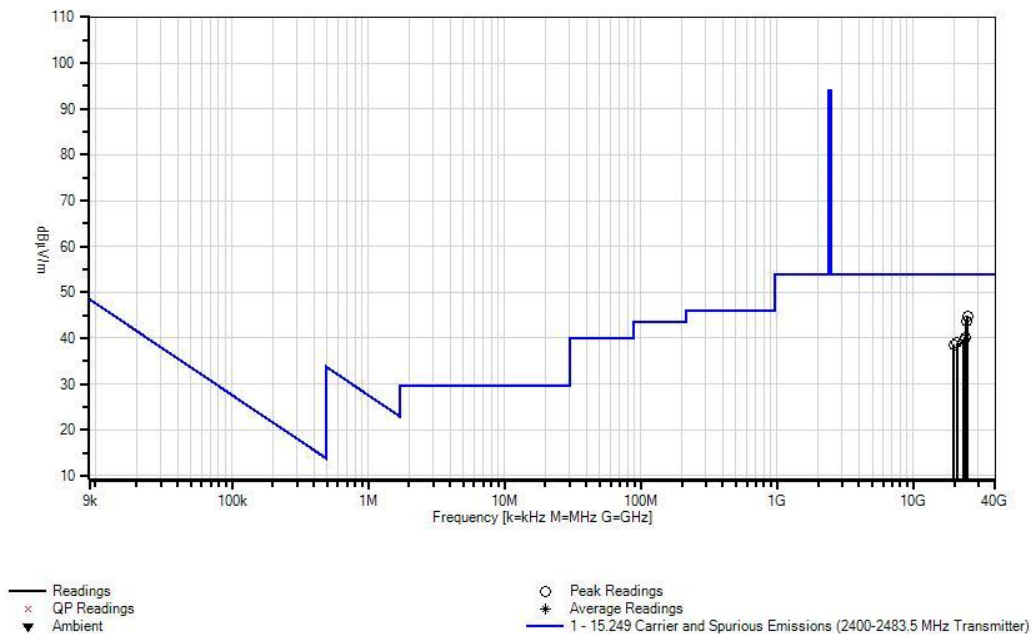
Measurement Data:

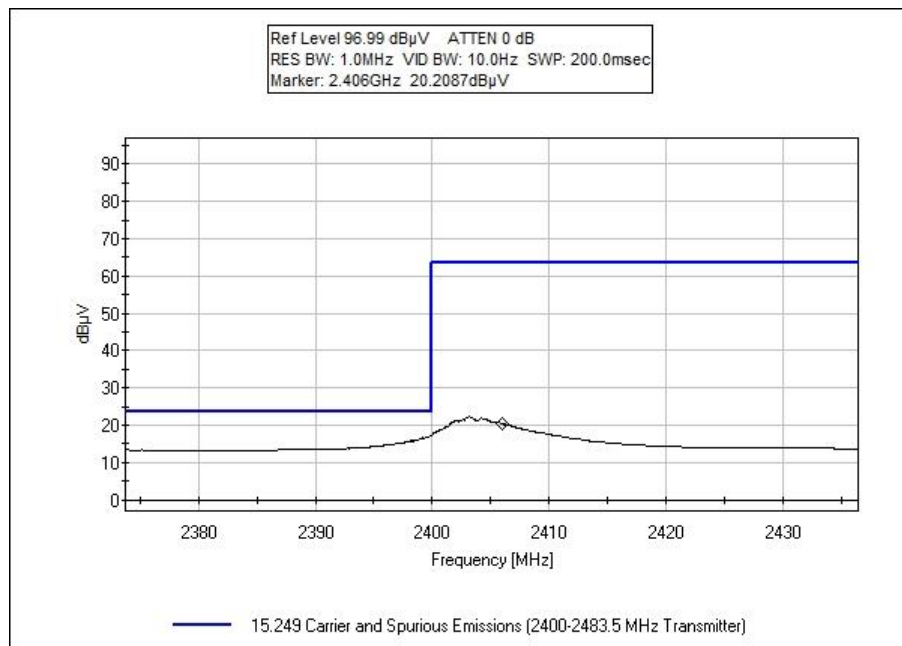
Reading listed by margin.

Test Distance: 3 Meters

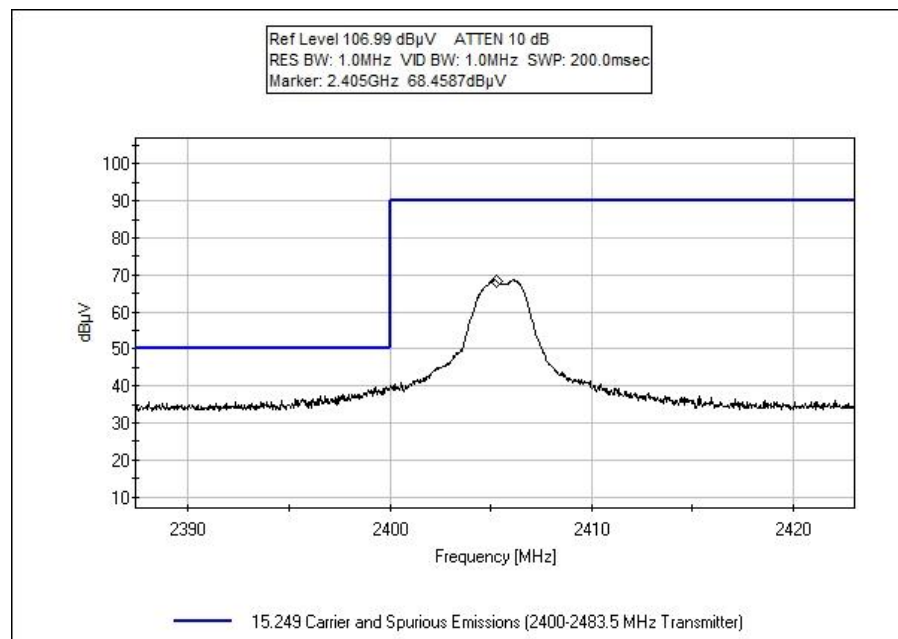
#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	24960.240 M	46.6	+3.2	+4.4	+2.9	-12.3	+0.0	44.8	54.0	-9.2	Horiz
2	24370.798 M	46.6	+3.0	+4.4	+2.9	-13.2	+0.0	43.7	54.0	-10.3	Vert
3	23961.956 M	43.8	+3.1	+4.4	+3.0	-14.1	+0.0	40.2	54.0	-13.8	Horiz
4	23530.525 M	44.2	+3.2	+4.3	+3.0	-15.1	+0.0	39.6	54.0	-14.4	Vert
5	20800.798 M	43.3	+2.8	+4.1	+3.1	-14.4	+0.0	38.9	54.0	-15.1	Horiz
6	19910.909 M	41.9	+2.9	+3.9	+3.2	-13.4	+0.0	38.5	54.0	-15.5	Vert

CKC Laboratories, Inc Date: 1/18/2013 Time: 11:05:29 Enlighted , Inc WO#: 93965
Test Distance: 3 Meters Sequence#: 28

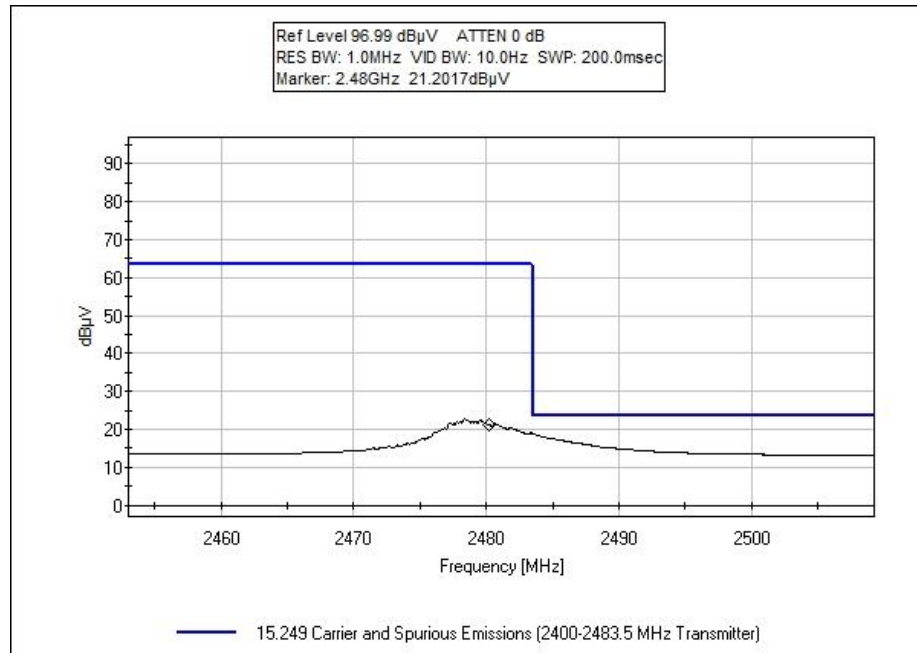




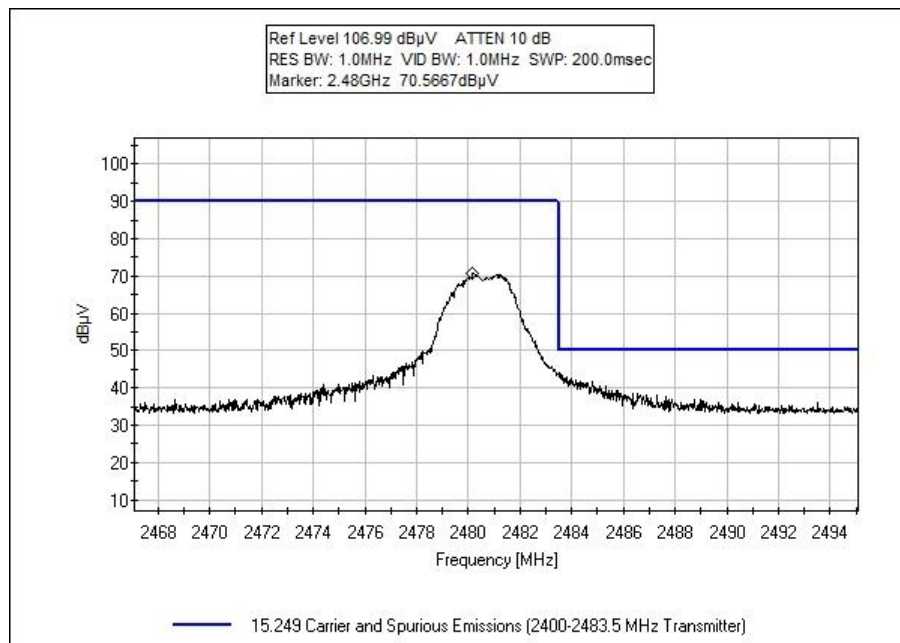
Low Channel Bandedge



Low Channel Bandedge



High Channel Bandedge

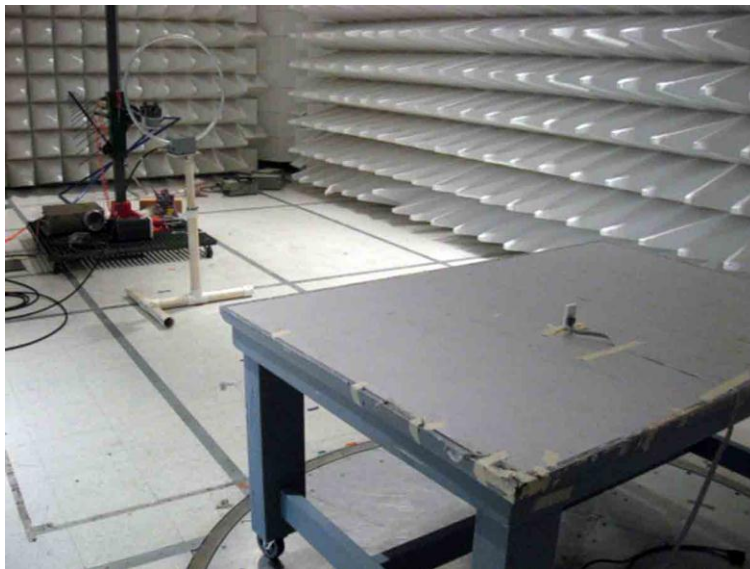


High Channel Bandedge

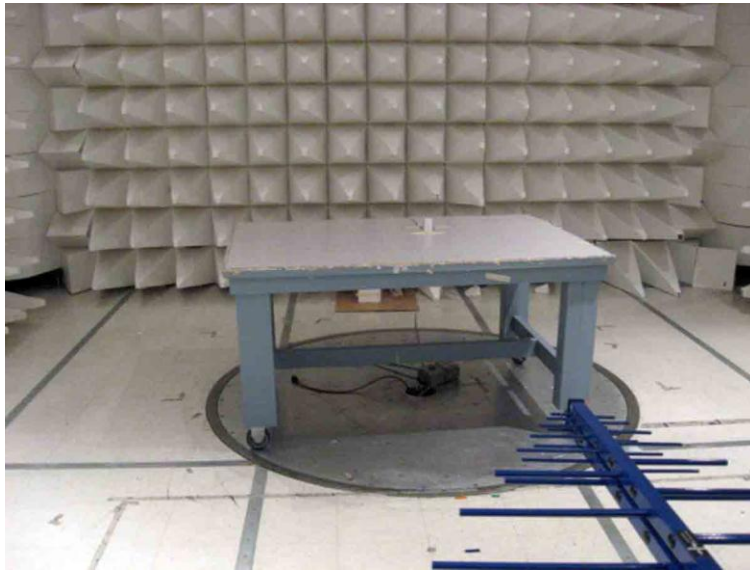
Test Setup Photos



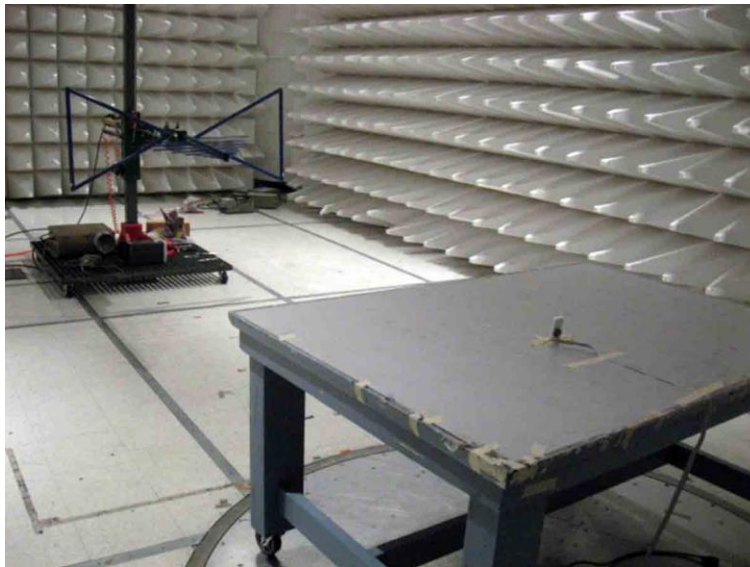
9kHz to 30MHz



9kHz to 30MHz



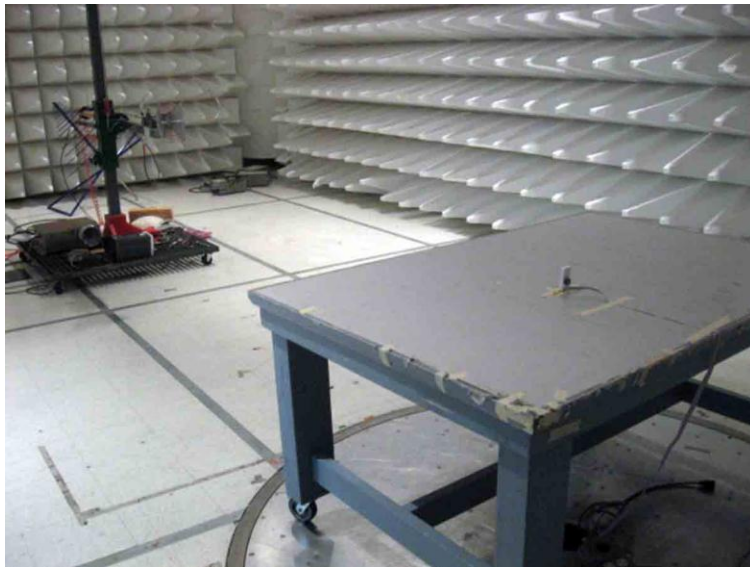
30MHz to 1GHz



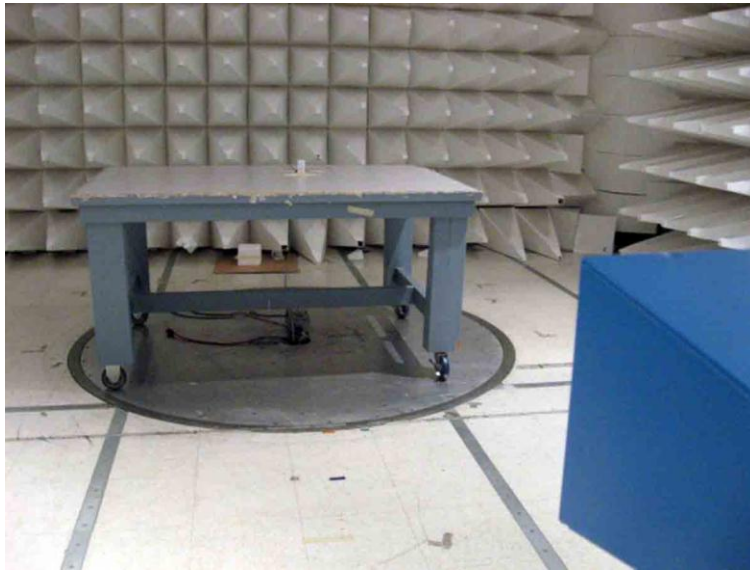
30MHz to 1GHz



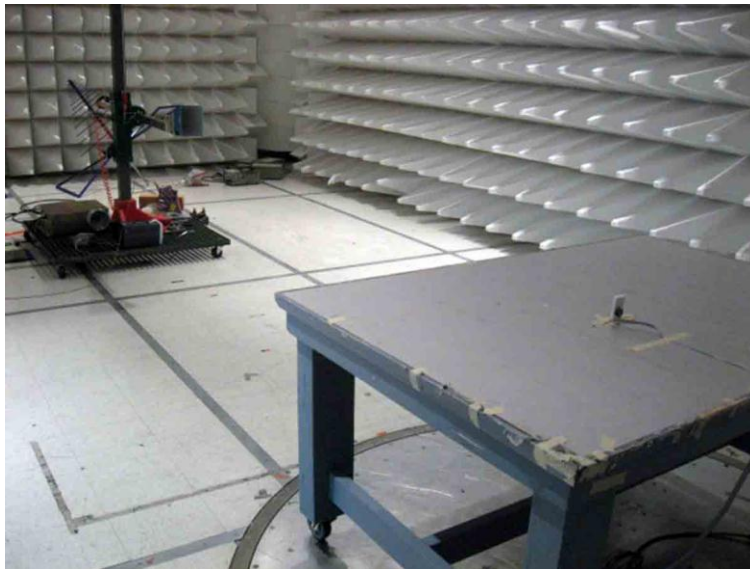
1GHz to 12GHz



1GHz to 12GHz



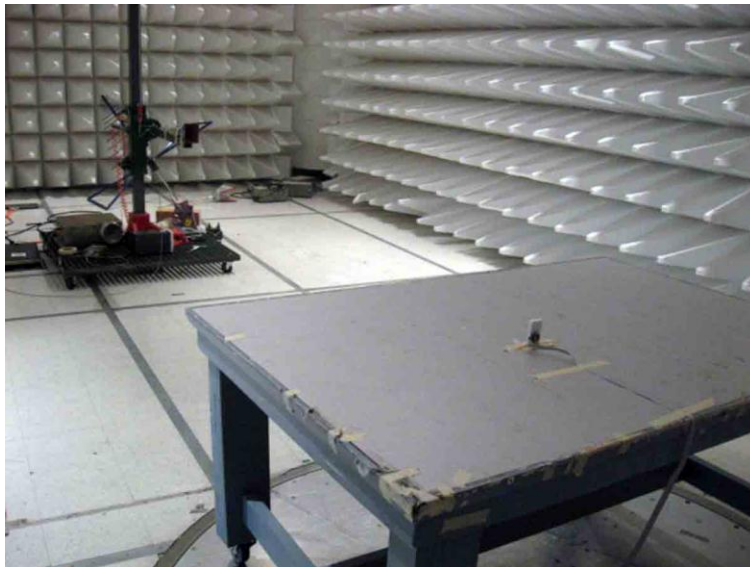
12GHz to 18GHz



12GHz to 18GHz



18GHz to 25GHz



18GHz to 25GHz