



TESTING
CERT #803.01, 803.02, 803.05, 803.06

**ZYLIGHT LLC
ADDENDUM TEST REPORT TO FC09-006**

FOR THE

LED CAMERA LIGHT WITH WIRELESS CONNECTIVITY, Z90

**FCC PART 15 SUBPART C SECTIONS 15.207 & 15.247,
SUBPART B SECTIONS 15.107 & 15.109 CLASS B AND RSS-210 ISSUE 7**

TESTING

DATE OF ISSUE: JANUARY 20, 2010

PREPARED FOR:

Zylight LLC
4372 17th Street
San Francisco, CA 94114

PREPARED BY:

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W.O. No.: 88886

Date of test: December 8-17, 2008

Report No.: FC09-006A

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TABLE OF CONTENTS

Administrative Information	3
Approvals	3
Summary of Results	4
Conditions During Testing	4
FCC 15.31(m) Number Of Channels	5
FCC 15.33(a) Frequency Ranges Tested	5
FCC 15.203 Antenna Requirements	5
EUT Operating Frequency	5
Power Output	5
Equipment Under Test (EUT) Description	6
Equipment Under Test	6
Peripheral Devices	6
Report of Emissions Measurements	7
Testing Parameters	7
FCC 15.31(e) – Voltage Variations	9
FCC 15.107 – AC Conducted Emissions	12
FCC 15.109 – Radiated Emissions	21
FCC 15.207 – AC Conducted Emissions	26
FCC 15.247(a)(2) – 6dB Bandwidth	35
FCC 15.247(b)(3) – RF Power Output	39
FCC 15.247(d) – Band Edge	41
FCC 15.247(d) – OATS Radiated Spurious Emissions	44
FCC 15.247(e) – Peak Power Spectral Density	52
RSS-210 – 99% Bandwidth	56

ADMINISTRATIVE INFORMATION

DATE OF TEST: December 8-17, 2008

DATE OF RECEIPT: December 8, 2008

REPRESENTATIVE: Nick Foster

MANUFACTURER:

Zylight LLC
4372 17th Street
San Francisco, CA 94114

TEST LOCATION:

CKC Laboratories, Inc.
1120 Fulton Place
Fremont, CA 94539

TEST METHOD: ANSI C63.4 (2003), RSS-210 Issue 7 and RSS GEN Issue 2

PURPOSE OF TEST:

Original: To perform the testing of the LED Camera Light with wireless connectivity, Z90 with the requirements for FCC Part 15 Subpart C Sections 15.207 & 15.247, Subpart B Sections 15.107 & 15.109 Class B and RSS-210 devices.

Addendum A: To correct an error in the testing dates from 2009 to 2008, to correct the Power Output from .000217 to .000117 on page 41 and to include this corrected Power Output information on page 5.

APPROVALS

Steve Behm, Director of Engineering Services

QUALITY ASSURANCE:

A handwritten signature in black ink, appearing to read "Brar".

Amrinder Brar, EMC Engineer/Lab Manager

TEST PERSONNEL:

A handwritten signature in black ink, appearing to read "Art Rice".

Art Rice, Senior EMC Engineer

SUMMARY OF RESULTS

Test	Specification	Results
Voltage Variations	FCC 15.31(e)	Pass
Conducted Emissions	FCC Part 15 Subpart B Section 15.107 Class B	Pass
Radiated Emissions	FCC Part 15 Subpart B Section 15.109 Class B	Pass
Conducted Emissions	FCC Part 15 Subpart B Section 15.207 Class B	Pass
6dB Bandwidth	FCC 15.247(a)(2)	Pass
RF Power Output	FCC 15.247(b)(3)	Pass
Band Edge	FCC 15.247(d)	Pass
OATS Radiated Spurious Emissions	FCC 15.247(d)	Pass
Peak Power Spectral Density	FCC 15.247(e)	Pass
99% Bandwidth	RSS-210 Issue 7 & RSS GEN Issue 2	Pass
Site File No.	FCC 958979 IC 3082B-1	

CONDITIONS DURING TESTING

One pass through ferrite on DC cord at power supply (Etronic F5-NF-50W-02).

FCC 15.31(m) Number Of Channels

This device was tested on three channels.

FCC 15.33(a) Frequency Ranges Tested

15.107 Conducted Emissions: 150 kHz – 30 MHz

15.109 Radiated Emissions: 9 kHz – 1000 MHz

15.207 Conducted Emissions: 150 kHz – 30 MHz

15.209/15.247 Radiated Emissions: 9 kHz – 25 GHz

FCC 15.203 Antenna Requirements

The antenna is an integral part of the EUT and is non-removable; therefore the EUT complies with Section 15.203 of the FCC rules.

EUT Operating Frequency

The EUT was operating in the 2400-2483.5 MHz range.

Power Output

0.000117 Watts

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The customer declares the EUT tested by CKC Laboratories was representative of a production unit.

EQUIPMENT UNDER TEST

LED Camera Light with Wireless Connectivity

Manuf: Zylight LLC
Model: Z90
Serial: 30000
FCC ID: pending

PERIPHERAL DEVICES

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

Power Supply

Manuf: CINCON
Model: TR36A-12
Serial: 36120-0016027

REPORT OF EMISSIONS MEASUREMENTS

TESTING PARAMETERS

TEMPERATURE AND HUMIDITY DURING TESTING

The temperature during testing was within +15°C and + 35°C.

The relative humidity was between 20% and 75%.

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	(dB μ V)
+	Antenna Factor	(dB)
+	Cable Loss	(dB)
-	Distance Correction	(dB)
-	Preamplifier Gain	(dB)
=	Corrected Reading	(dB μ V/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. 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. When conducted emissions testing was performed, a 10 dB external attenuator was used with internal offset correction in the analyzer.

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 "Peak" mode. Whenever a "Quasi-Peak" or "Average" reading is listed as one of the highest readings, this is indicated as a "QP" or an "Ave" on the appropriate rows of the data sheets. 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/receiver readings were recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature of the measuring device called "peak hold," the measuring device had the ability to measure transients 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

When the true peak values exceeded or were within 2 dB of the specification limit, quasi-peak measurements were taken using the quasi-peak detector.

Average

For certain frequencies, average measurements may be made using the spectrum analyzer/receiver. 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.

FCC 15.31(e) – VOLTAGE VARIATIONS

Test Setup Photos



Test Data Sheets

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

Customer: **Zylight LLC**
 Specification: **FCC 15.247(b) (3) Rad-dBuV (6 dBi antenna)**
 Work Order #: **88886** Date: 12/8/2008
 Test Type: **Voltage Variation on Power** Time: 14:44:46
 Equipment: **LED Camera Light with wireless connectivity** Sequence#: 2
 Manufacturer: Zylight LLC Tested By: Art Rice
 Model: Z90
 S/N: 30000

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A Spectrum Analyzer	US44300408	03/05/2007	03/05/2009	02668
Cable HF FSJ1P-50A-4	HOL-HF-025-06	05/06/2008	05/06/2010	P05138
Cable, HF	n/a	05/06/2008	05/06/2010	P04241
Preamp, HP83017A	3123A00283	05/16/2007	05/16/2009	00785
Antenna, Horn 1-18 GHz	1064	03/19/2007	03/19/2009	02061
HF Cable		03/27/2007	03/27/2009	01952
DMM, Fluke 85	65380320	07/17/2008	07/17/2010	02361
Powerstat Type 126	none	07/16/2007	07/16/2009	00435

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
LED Camera Light with wireless connectivity*	Zylight LLC	Z90	30000

Support Devices:

Function	Manufacturer	Model #	S/N
Power supply	CINCON	TR36A-12	36120-0016027

Test Conditions / Notes:

The EUT is placed on the test table supported by a 3.5cm thick styrofoam block. The EUT is in a normal position with the tripod thread facing down and the display at the top. The power supply is placed on the floor. Transmitting continuously with modulation. Ch1=2405MHz, Ch5=2425MHz, Ch10=2450MHz. RBW=3 MHz VBW=8 MHz (greater than the 6dB BW per KDB 558074) Nominal=120V 115%=138V 85%=102V LEDs are on. Maximum TX fundamental variation was on Ch1=0.6dB.

Transducer Legend:

T1=ANT AN02061 900MHz-18.5GHz	T2=Cable P01952 2'
T3=CAB-ANP04241-050608	T4=CAB-ANP05138-050608
T5=AMP-AN00785-051607	

Ext Attn: 0 dB

Measurement Data: Reading listed by order taken. Test Distance: 3 Meters

#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dB μ V	T5 dB	dB	dB	dB	Table	dB μ V	dB μ V	dB	Ant
1	2404.310M	96.4	+28.5 -36.3	+0.3	+0.8	+2.4	+0.0 238	92.1	133.0 Ch1, 120V nominal	-40.9	Vert 100
2	2404.295M	96.8	+28.5 -36.3	+0.3	+0.8	+2.4	+0.0 238	92.5	133.0 Ch1, 138V	-40.5	Vert 100

3	2404.420M	96.2	+28.5 -36.3	+0.3	+0.8	+2.4	+0.0 238	91.9	133.0 Ch1, 102V	-41.1	Vert 100
4	2424.350M	95.4	+28.5 -36.3	+0.3	+0.8	+2.5	+0.0 238	91.2	133.0 Ch5, 102V	-41.8	Vert 100
5	2424.400M	95.2	+28.5 -36.3	+0.3	+0.8	+2.5	+0.0 238	91.0	133.0 Ch5, 120V	-42.0	Vert 100
6	2424.360M	95.1	+28.5 -36.3	+0.3	+0.8	+2.5	+0.0 238	90.9	133.0 Ch5, 138V	-42.1	Vert 100
7	2449.360M	93.8	+28.5 -36.3	+0.3	+0.8	+2.5	+0.0 238	89.6	133.0 Ch10, 138V	-43.4	Vert 100
8	2449.345M	93.8	+28.5 -36.3	+0.3	+0.8	+2.5	+0.0 238	89.6	133.0 Ch10, 120V	-43.4	Vert 100
9	2449.400M	93.7	+28.5 -36.3	+0.3	+0.8	+2.5	+0.0 238	89.5	133.0 Ch10, 102V	-43.5	Vert 100

FCC 15.107 – AC CONDUCTED EMISSIONS

Test Setup Photos



Test Data Sheets

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

Customer: **Zylight LLC**
 Specification: **FCC 15.107 B COND [AVE]**
 Work Order #: **88886** Date: 12/15/2008
 Test Type: **Conducted Emissions** Time: 09:54:42
 Equipment: **LED Camera Light with wireless connectivity** Sequence#: 37
 Manufacturer: Zylight LLC Tested By: Art Rice
 Model: Z90 120V 60Hz
 S/N: 30000

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
S.A., RF Section HP-8568B	2601A02492	11/20/2007	11/20/2009	02663
S.A., Display HP-85662A	2542A12169	11/20/2007	11/20/2009	02662
QP Adapter HP-85650A	2521A00909	11/20/2007	11/20/2009	00683
Cable, RG214		05/28/2008	05/28/2010	P02410
10 dB Pad		04/05/2007	04/05/2009	00081
LISN, Emco 3816/2	9408-1007	04/03/2007	04/03/2009	00494
TTE High Pass Filter	H4120	01/17/2007	01/17/2009	05258

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
LED Camera Light with wireless connectivity*	Zylight LLC	Z90	30000

Support Devices:

Function	Manufacturer	Model #	S/N
Power supply	CINCON	TR36A-12	36120-0016027

Test Conditions / Notes:

The EUT is placed on the test table supported by a 3.5cm thick Styrofoam block. The EUT is in a normal position with the tripod thread facing down and the display at the top. The power supply is placed on the table 10cm from the EUT. Ch1=2405MHz, Ch5=2425MHz, Ch10=2450MHz. Receiving on Ch5. LEDs are on. Temperature=23°C, Relative Humidity=45%. Frequency range tested: 150kHz – 30MHz.

Transducer Legend:

T1=TTE HP Filter	T2=Cable Calibration ANP02410
T3=AN P00081 10dB Attenuator	T4=LISN – AN00494 – Black – ELC “OUT”

Measurement Data:

Reading listed by margin.

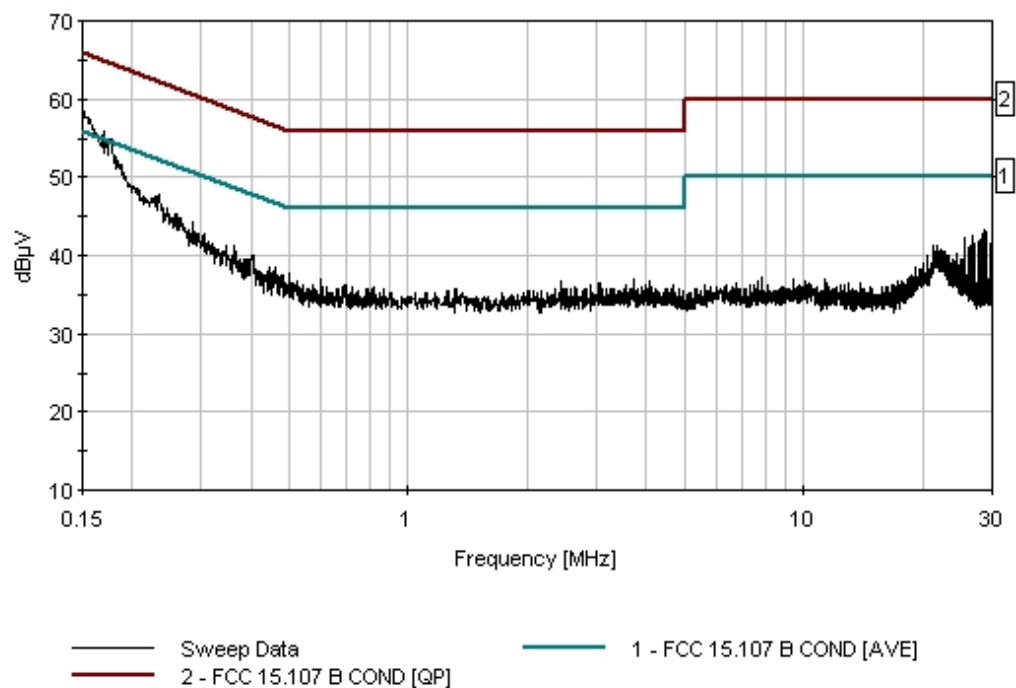
Test Lead: Black

#	Freq MHz	Rdng dBμV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBμV	Spec dBμV	Margin dB	Polar Ant
1	259.807k	35.1	+0.1	+0.1	+10.0	+0.0	+0.0	45.3	51.4	-6.1	Black
2	266.352k	34.7	+0.1	+0.1	+10.0	+0.0	+0.0	44.9	51.2	-6.3	Black
3	284.532k	34.2	+0.1	+0.1	+10.0	+0.0	+0.0	44.4	50.7	-6.3	Black

4	28.732M	32.7	+0.2	+0.4	+10.0	+0.0	+0.0	43.3	50.0	-6.7	Black
5	29.123M	32.3	+0.2	+0.4	+10.1	+0.0	+0.0	43.0	50.0	-7.0	Black
6	28.342M	32.2	+0.2	+0.4	+10.0	+0.0	+0.0	42.8	50.0	-7.2	Black
7	304.166k	32.6	+0.1	+0.1	+10.0	+0.0	+0.0	42.8	50.1	-7.3	Black
8	363.797k	31.0	+0.0	+0.1	+10.1	+0.0	+0.0	41.2	48.6	-7.4	Black
9	277.987k	33.2	+0.1	+0.1	+10.0	+0.0	+0.0	43.4	50.9	-7.5	Black
10	288.168k	32.8	+0.1	+0.1	+10.0	+0.0	+0.0	43.0	50.6	-7.6	Black
11	26.793M	31.8	+0.2	+0.4	+10.0	+0.0	+0.0	42.4	50.0	-7.6	Black
12	346.344k	31.1	+0.0	+0.1	+10.0	+0.0	+0.0	41.2	49.0	-7.8	Black
13	403.066k	29.8	+0.0	+0.1	+10.1	+0.0	+0.0	40.0	47.8	-7.8	Black
14	25.628M	31.6	+0.2	+0.4	+10.0	+0.0	+0.0	42.2	50.0	-7.8	Black
15	27.958M	31.5	+0.2	+0.4	+10.0	+0.0	+0.0	42.1	50.0	-7.9	Black
16	459.060k	28.2	+0.1	+0.1	+10.1	+0.1	+0.0	38.6	46.7	-8.1	Black
17	499.783k	27.3	+0.1	+0.1	+10.1	+0.1	+0.0	37.7	46.0	-8.3	Black
18	27.568M	31.1	+0.2	+0.4	+10.0	+0.0	+0.0	41.7	50.0	-8.3	Black
19	27.177M	31.0	+0.2	+0.4	+10.0	+0.0	+0.0	41.6	50.0	-8.4	Black
20	29.507M	30.9	+0.2	+0.4	+10.1	+0.0	+0.0	41.6	50.0	-8.4	Black
21	393.612k	29.3	+0.0	+0.1	+10.1	+0.0	+0.0	39.5	48.0	-8.5	Black
22	386.340k	29.3	+0.0	+0.1	+10.1	+0.0	+0.0	39.5	48.1	-8.6	Black
23	388.522k	29.3	+0.0	+0.1	+10.1	+0.0	+0.0	39.5	48.1	-8.6	Black
24	444.516k	28.0	+0.1	+0.1	+10.1	+0.1	+0.0	38.4	47.0	-8.6	Black
25	482.330k	27.2	+0.1	+0.1	+10.1	+0.1	+0.0	37.6	46.3	-8.7	Black
26	26.396M	30.7	+0.2	+0.4	+10.0	+0.0	+0.0	41.3	50.0	-8.7	Black
27	478.694k	27.2	+0.1	+0.1	+10.1	+0.1	+0.0	37.6	46.4	-8.8	Black
28	21.373M	30.4	+0.2	+0.4	+10.1	+0.1	+0.0	41.2	50.0	-8.8	Black

29	21.779M	30.4	+0.2	+0.4	+10.1	+0.1	+0.0	41.2	50.0	-8.8	Black
30	21.851M	30.4	+0.2	+0.4	+10.1	+0.1	+0.0	41.2	50.0	-8.8	Black
31	29.911M	30.5	+0.2	+0.4	+10.1	+0.0	+0.0	41.2	50.0	-8.8	Black
32	451.061k	27.4	+0.1	+0.1	+10.1	+0.1	+0.0	37.8	46.9	-9.1	Black
33	603.773k	26.5	+0.1	+0.1	+10.1	+0.1	+0.0	36.9	46.0	-9.1	Black
34	3.735M	26.5	+0.1	+0.2	+10.1	+0.0	+0.0	36.9	46.0	-9.1	Black
35	26.012M	30.3	+0.2	+0.4	+10.0	+0.0	+0.0	40.9	50.0	-9.1	Black
36	472.877k	26.9	+0.1	+0.1	+10.1	+0.1	+0.0	37.3	46.5	-9.2	Black
37	4.084M	26.3	+0.1	+0.2	+10.1	+0.0	+0.0	36.7	46.0	-9.3	Black
38	2.429M	26.3	+0.1	+0.2	+10.0	+0.0	+0.0	36.6	46.0	-9.4	Black
39	21.589M	29.8	+0.2	+0.4	+10.1	+0.1	+0.0	40.6	50.0	-9.4	Black
40	21.445M	29.7	+0.2	+0.4	+10.1	+0.1	+0.0	40.5	50.0	-9.5	Black
41	3.042M	26.1	+0.1	+0.1	+10.0	+0.1	+0.0	36.4	46.0	-9.6	Black
42	22.842M	29.7	+0.2	+0.4	+10.1	+0.0	+0.0	40.4	50.0	-9.6	Black
43	486.694k	26.1	+0.1	+0.1	+10.1	+0.1	+0.0	36.5	46.2	-9.7	Black
44	689.582k	25.9	+0.1	+0.2	+10.1	+0.0	+0.0	36.3	46.0	-9.7	Black
45	3.548M	25.9	+0.1	+0.2	+10.1	+0.0	+0.0	36.3	46.0	-9.7	Black
46	539.052k	25.8	+0.1	+0.1	+10.1	+0.1	+0.0	36.2	46.0	-9.8	Black
47	3.977M	25.9	+0.1	+0.1	+10.1	+0.0	+0.0	36.2	46.0	-9.8	Black
48	175.000k Ave	27.1	+1.6	+0.0	+10.0	+0.0	+0.0	38.7	54.7	-16.0	Black
^	175.452k	43.4	+1.6	+0.0	+10.0	+0.0	+0.0	55.0	54.7	+0.3	Black
50	234.000k Ave	22.3	+0.1	+0.1	+10.0	+0.0	+0.0	32.5	52.3	-19.8	Black
^	234.355k	37.6	+0.1	+0.1	+10.0	+0.0	+0.0	47.8	52.3	-4.5	Black
52	151.000k Ave	22.5	+3.2	+0.2	+10.0	+0.0	+0.0	35.9	55.9	-20.0	Black
^	151.454k	44.9	+3.2	+0.2	+10.0	+0.0	+0.0	58.3	55.9	+2.4	Black

CKC Laboratories, Inc. Date: 12/15/2008 Time: 09:54:42 Zylight LLC W/O#: 88886
 FCC 15.107 B COND [AVE] Test Lead: Black 120V 60Hz Sequence#: 37



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

Customer: **Zylight LLC**
 Specification: **FCC 15.107 B COND [AVE]**
 Work Order #: **88886** Date: 12/15/2008
 Test Type: **Conducted Emissions** Time: 09:47:16
 Equipment: **LED Camera Light with wireless connectivity** Sequence#: 36
 Manufacturer: **Zylight LLC** Tested By: **Art Rice**
 Model: **Z90** 120V 60Hz
 S/N: **30000**

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
S.A., RF Section HP-8568B	2601A02492	11/20/2007	11/20/2009	02663
S.A., Display HP-85662A	2542A12169	11/20/2007	11/20/2009	02662
QP Adapter HP-85650A	2521A00909	11/20/2007	11/20/2009	00683
Cable, RG214		05/28/2008	05/28/2010	P02410
10 dB Pad		04/05/2007	04/05/2009	00081
LISN, Emco 3816/2	9408-1007	04/03/2007	04/03/2009	00494
TTE High Pass Filter	H4120	01/17/2007	01/17/2009	05258

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
LED Camera Light with wireless connectivity*	Zylight LLC	Z90	30000

Support Devices:

Function	Manufacturer	Model #	S/N
Power supply	CINCON	TR36A-12	36120-0016027

Test Conditions / Notes:

The EUT is placed on the test table supported by a 3.5cm thick Styrofoam block. The EUT is in a normal position with the tripod thread facing down and the display at the top. The power supply is placed on the table 10cm from the EUT. Ch1=2405MHz, Ch5=2425MHz, Ch10=2450MHz. Receiving on Ch5. LEDs are on. Temperature=23°C, Relative Humidity=45%. Frequency range tested: 150kHz – 30MHz.

Transducer Legend:

T1=TTE HP Filter	T2=Cable Calibration ANP02410
T3=AN P00081 10dB Attenuator	T4=LISN – AN00494 – White – ELC “OUT”

Measurement Data:

Reading listed by margin.

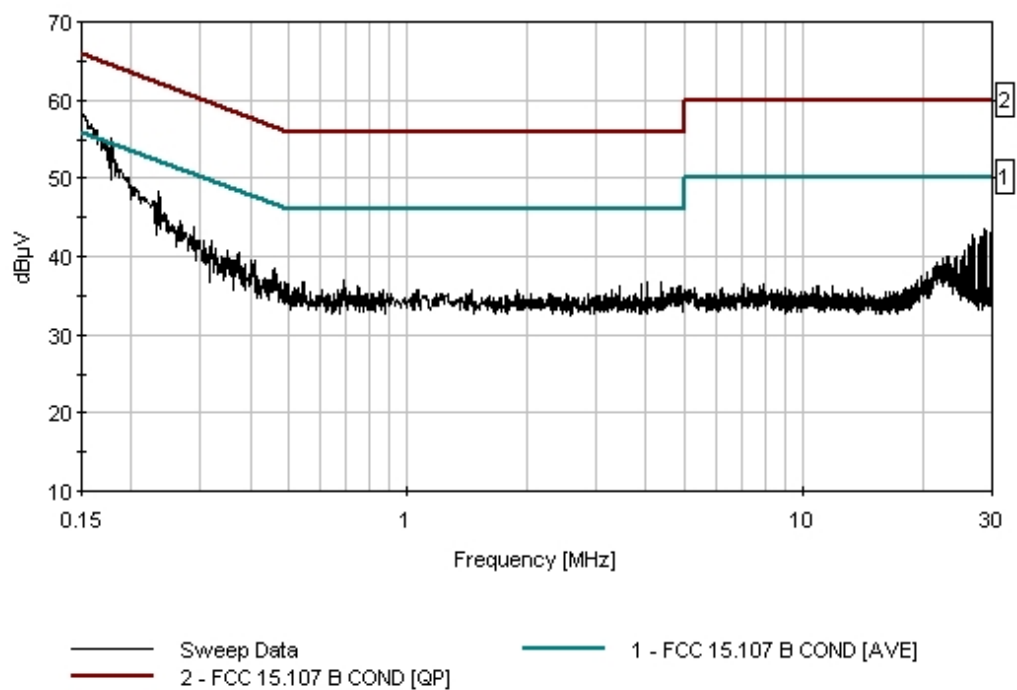
Test Lead: White

#	Freq MHz	Rdng dBμV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBμV	Spec dBμV	Margin dB	Polar Ant
1	242.354k	35.4	+0.1	+0.1	+10.0	+0.0	+0.0	45.6	52.0	-6.4	White
2	28.739M	32.9	+0.2	+0.4	+10.0	+0.0	+0.0	43.5	50.0	-6.5	White
3	266.352k	34.4	+0.1	+0.1	+10.0	+0.0	+0.0	44.6	51.2	-6.6	White
4	287.441k	33.7	+0.1	+0.1	+10.0	+0.0	+0.0	43.9	50.6	-6.7	White

5	29.130M	32.6	+0.2	+0.4	+10.1	+0.0	+0.0	43.3	50.0	-6.7	White
6	29.514M	32.2	+0.2	+0.4	+10.1	+0.0	+0.0	42.9	50.0	-7.1	White
7	26.786M	32.0	+0.2	+0.4	+10.0	+0.1	+0.0	42.7	50.0	-7.3	White
8	27.951M	31.9	+0.2	+0.4	+10.0	+0.0	+0.0	42.5	50.0	-7.5	White
9	28.349M	31.8	+0.2	+0.4	+10.0	+0.0	+0.0	42.4	50.0	-7.6	White
10	29.911M	31.7	+0.2	+0.4	+10.1	+0.0	+0.0	42.4	50.0	-7.6	White
11	320.165k	31.7	+0.1	+0.1	+10.0	+0.0	+0.0	41.9	49.7	-7.8	White
12	27.177M	31.5	+0.2	+0.4	+10.0	+0.1	+0.0	42.2	50.0	-7.8	White
13	375.432k	30.3	+0.0	+0.1	+10.1	+0.0	+0.0	40.5	48.4	-7.9	White
14	461.242k	28.3	+0.1	+0.1	+10.1	+0.0	+0.0	38.6	46.7	-8.1	White
15	297.622k	31.9	+0.1	+0.1	+10.0	+0.0	+0.0	42.1	50.3	-8.2	White
16	350.707k	30.5	+0.0	+0.1	+10.1	+0.0	+0.0	40.7	48.9	-8.2	White
17	411.065k	29.2	+0.0	+0.1	+10.1	+0.0	+0.0	39.4	47.6	-8.2	White
18	369.614k	30.0	+0.0	+0.1	+10.1	+0.0	+0.0	40.2	48.5	-8.3	White
19	403.066k	29.3	+0.0	+0.1	+10.1	+0.0	+0.0	39.5	47.8	-8.3	White
20	376.886k	29.7	+0.0	+0.1	+10.1	+0.0	+0.0	39.9	48.3	-8.4	White
21	307.075k	31.3	+0.1	+0.1	+10.0	+0.0	+0.0	41.5	50.0	-8.5	White
22	25.998M	30.8	+0.2	+0.4	+10.0	+0.1	+0.0	41.5	50.0	-8.5	White
23	27.568M	30.9	+0.2	+0.4	+10.0	+0.0	+0.0	41.5	50.0	-8.5	White
24	326.710k	30.8	+0.0	+0.1	+10.0	+0.0	+0.0	40.9	49.5	-8.6	White
25	455.424k	27.9	+0.1	+0.1	+10.1	+0.0	+0.0	38.2	46.8	-8.6	White
26	26.396M	30.6	+0.2	+0.4	+10.0	+0.1	+0.0	41.3	50.0	-8.7	White
27	464.878k	27.4	+0.1	+0.1	+10.1	+0.0	+0.0	37.7	46.6	-8.9	White
28	400.157k	28.7	+0.0	+0.1	+10.1	+0.0	+0.0	38.9	47.9	-9.0	White
29	688.855k	26.5	+0.1	+0.2	+10.1	+0.1	+0.0	37.0	46.0	-9.0	White

30	387.067k	28.8	+0.0	+0.1	+10.1	+0.0	+0.0	39.0	48.1	-9.1	White
31	339.072k	29.9	+0.0	+0.1	+10.0	+0.0	+0.0	40.0	49.2	-9.2	White
32	547.051k	26.4	+0.1	+0.1	+10.1	+0.1	+0.0	36.8	46.0	-9.2	White
33	4.024M	26.4	+0.1	+0.2	+10.1	+0.0	+0.0	36.8	46.0	-9.2	White
34	25.622M	30.1	+0.2	+0.4	+10.0	+0.1	+0.0	40.8	50.0	-9.2	White
35	344.162k	29.6	+0.0	+0.1	+10.0	+0.0	+0.0	39.7	49.1	-9.4	White
36	357.979k	29.2	+0.0	+0.1	+10.1	+0.0	+0.0	39.4	48.8	-9.4	White
37	541.961k	26.2	+0.1	+0.1	+10.1	+0.1	+0.0	36.6	46.0	-9.4	White
38	4.364M	26.3	+0.1	+0.1	+10.1	+0.0	+0.0	36.6	46.0	-9.4	White
39	3.905M	26.1	+0.1	+0.1	+10.1	+0.0	+0.0	36.4	46.0	-9.6	White
40	331.800k	29.6	+0.0	+0.1	+10.0	+0.0	+0.0	39.7	49.4	-9.7	White
41	4.820M	26.0	+0.1	+0.1	+10.0	+0.1	+0.0	36.3	46.0	-9.7	White
42	437.244k	27.0	+0.1	+0.1	+10.1	+0.0	+0.0	37.3	47.1	-9.8	White
43	3.442M	25.9	+0.1	+0.2	+10.0	+0.0	+0.0	36.2	46.0	-9.8	White
44	747.758k	25.7	+0.1	+0.1	+10.1	+0.1	+0.0	36.1	46.0	-9.9	White
45	176.000k Ave	27.0	+1.6	+0.0	+10.0	+0.0	+0.0	38.6	54.7	-16.1	White
^	177.634k	43.6	+1.5	+0.0	+10.0	+0.0	+0.0	55.1	54.6	+0.5	White
^	180.542k	42.5	+1.3	+0.0	+10.0	+0.0	+0.0	53.8	54.5	-0.7	White
^	176.179k	42.2	+1.6	+0.0	+10.0	+0.0	+0.0	53.8	54.7	-0.9	White
49	151.000k Ave	21.1	+3.2	+0.2	+10.0	+0.0	+0.0	34.4	55.9	-21.5	White
^	151.454k	44.7	+3.2	+0.2	+10.0	+0.0	+0.0	58.1	55.9	+2.2	White
51	236.000k Ave	17.2	+0.1	+0.1	+10.0	+0.0	+0.0	27.4	52.2	-24.8	White
^	235.810k	38.0	+0.1	+0.1	+10.0	+0.0	+0.0	48.2	52.2	-4.0	White
^	231.446k	36.7	+0.1	+0.1	+10.0	+0.0	+0.0	46.9	52.4	-5.5	White

CKC Laboratories, Inc. Date: 12/15/2008 Time: 09:47:16 Zylight LLC VVO#: 88886
 FCC 15.107 B COND [AVE] Test Lead: White 120V 60Hz Sequence#: 36



FCC 15.109 – RADIATED EMISSIONS

Test Setup Photos



Test Data Sheets

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

Customer: **Zylight LLC**
 Specification: **FCC 15.109 Class B Radiated**
 Work Order #: **88886** Date: 12/11/2008
 Test Type: **Spurious Emissions Maximized** Time: 11:50:14
 Equipment: **LED Camera Light with wireless connectivity** Sequence#: 26
 Manufacturer: Zylight LLC Tested By: Art Rice
 Model: Z90
 S/N: 30000

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A Spectrum Analyzer	US44300408	03/05/2007	03/05/2009	02668
Cable HF FSJ1P-50A-4	HOL-HF-025-06	05/06/2008	05/06/2010	P05138
Cable, HF	n/a	05/06/2008	05/06/2010	P04241
Preamp, HP83017A	3123A00283	05/16/2007	05/16/2009	00785
Antenna, Horn 1-18 GHz	1064	03/19/2007	03/19/2009	02061
HF Cable		03/27/2007	03/27/2009	01952
Cable	None	04/21/2008	04/21/2010	P05440
Preamp, HP8447D	2443A03707	02/05/2007	02/05/2009	00730
Cable	None	04/05/2007	04/05/2009	P05300
Cable	None	04/02/2007	04/02/2009	P05299
Antenna, Bilog	2630	12/30/2006	12/30/2008	00852
Mag Loop – 6502	2078	06/11/2007	06/11/2009	00432
3.5GHz HP Filter	PN 84300-80038	04/01/2008	04/01/2010	P01416
Preamp, HP83017A	3123A00283	05/16/2007	05/16/2009	00785
Cable	none	07/16/2008	07/16/2010	05843
Cable	none	04/02/2008	04/02/2010	05735
HF cable 24"	32022-2-29094K-24TC	02/04/2008	02/04/2010	03015
18-26.5GHz WaveGuide	n/a	02/11/2008	02/11/2010	P00929
Active Horn 18-26GHz	1087835	09/21/2007	09/21/2009	02694
2-ft cable, 1-18GHz	HF-HC-02	03/27/2007	03/27/2009	P01952

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
LED Camera Light with wireless connectivity*	Zylight LLC	Z90	30000

Support Devices:

Function	Manufacturer	Model #	S/N
Power supply	CINCON	TR36A-12	36120-0016027

Test Conditions / Notes:

The EUT is placed on the test table supported by a 3.5cm thick styrofoam block. The EUT is in a normal position with the tripod thread facing down and the display at the top. The power supply is placed on the table 10cm from the camera light. The cord is bundled to 40 cm above ground. Receive mode. Ch1=2405MHz, Ch5=2425MHz, Ch10=2450MHz. 30-1000MHz RBW=120kHz, VBW=360kHz 1-25GHz RBW=1 MHz VBW=100 kHz LEDs are on. 1 pass through ferrite on DC cord at power supply. (Etronic F5-NF-50W-02).

Transducer Legend:

T1=ANT AN00852 25-1000MHz	T2=Cable Calibration ANP05299
T3=Cable Calibration ANP05300	T4=Cable Calibration ANP05440
T5=AMP-AN00730-020507	T6=ANT AN02061 900MHz-18.5GHz
T7=Cable P01952 2'	T8=CAB-ANP04241-050608
T9=CAB-ANP05138-050608	T10=AMP-AN00785-051607

Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq	Rdng	T1 T5 T9	T2 T6 T10	T3 T7	T4 T8	Dist	Corr	Spec	Margin	Polar
	MHz	dBμV	dB	dB	dB	dB	Table	dBμV/m	dBμV/m	dB	Ant
1	59.357M	58.9	+6.6	+0.1	+0.2	+0.5	+0.0	39.1	40.0	-0.9	Vert
QP			-27.2	+0.0	+0.0	+0.0	358				99
			+0.0	+0.0							
^	59.345M	59.7	+6.6	+0.1	+0.2	+0.5	+0.0	39.9	40.0	-0.1	Vert
			-27.2	+0.0	+0.0	+0.0	358				99
			+0.0	+0.0							
3	36.859M	48.8	+16.4	+0.0	+0.2	+0.3	+0.0	38.5	40.0	-1.5	Vert
QP			-27.2	+0.0	+0.0	+0.0	145				99
			+0.0	+0.0							
^	36.854M	51.0	+16.4	+0.0	+0.2	+0.3	+0.0	40.7	40.0	+0.7	Vert
			-27.2	+0.0	+0.0	+0.0	145				99
			+0.0	+0.0							
5	55.459M	57.3	+7.5	+0.1	+0.2	+0.4	+0.0	38.3	40.0	-1.7	Vert
QP			-27.2	+0.0	+0.0	+0.0	42				99
			+0.0	+0.0							
^	55.489M	58.8	+7.5	+0.1	+0.2	+0.4	+0.0	39.8	40.0	-0.2	Vert
			-27.2	+0.0	+0.0	+0.0	42				99
			+0.0	+0.0							
7	37.625M	49.0	+15.9	+0.1	+0.1	+0.4	+0.0	38.2	40.0	-1.8	Vert
QP			-27.3	+0.0	+0.0	+0.0	145				99
			+0.0	+0.0							
^	37.658M	51.1	+15.8	+0.1	+0.1	+0.4	+0.0	40.2	40.0	+0.2	Vert
			-27.3	+0.0	+0.0	+0.0	145				99
			+0.0	+0.0							
9	55.085M	57.0	+7.6	+0.1	+0.2	+0.4	+0.0	38.1	40.0	-1.9	Vert
QP			-27.2	+0.0	+0.0	+0.0	42				99
			+0.0	+0.0							
^	55.071M	58.9	+7.6	+0.1	+0.2	+0.4	+0.0	40.0	40.0	+0.0	Vert
			-27.2	+0.0	+0.0	+0.0	42				99
			+0.0	+0.0							
11	55.853M	57.2	+7.4	+0.1	+0.2	+0.4	+0.0	38.1	40.0	-1.9	Vert
QP			-27.2	+0.0	+0.0	+0.0	42				99
			+0.0	+0.0							
^	55.863M	58.6	+7.4	+0.1	+0.2	+0.4	+0.0	39.5	40.0	-0.5	Vert
			-27.2	+0.0	+0.0	+0.0	42				99
			+0.0	+0.0							

13	56.248M	57.1	+7.3	+0.1	+0.2	+0.4	+0.0	37.9	40.0	-2.1	Vert
	QP		-27.2	+0.0	+0.0	+0.0	42				99
			+0.0	+0.0							
^	56.242M	58.5	+7.3	+0.1	+0.2	+0.4	+0.0	39.3	40.0	-0.7	Vert
			-27.2	+0.0	+0.0	+0.0	42				99
			+0.0	+0.0							
15	60.887M	57.2	+6.4	+0.1	+0.2	+0.4	+0.0	37.1	40.0	-2.9	Vert
	QP		-27.2	+0.0	+0.0	+0.0	10				99
			+0.0	+0.0							
^	60.878M	58.1	+6.4	+0.1	+0.2	+0.4	+0.0	38.0	40.0	-2.0	Vert
			-27.2	+0.0	+0.0	+0.0	10				99
			+0.0	+0.0							
17	50.429M	54.7	+8.9	+0.0	+0.2	+0.4	+0.0	36.9	40.0	-3.1	Vert
	QP		-27.3	+0.0	+0.0	+0.0	160				99
			+0.0	+0.0							
^	50.408M	57.8	+8.9	+0.0	+0.2	+0.4	+0.0	40.0	40.0	+0.0	Vert
			-27.3	+0.0	+0.0	+0.0	160				99
			+0.0	+0.0							
19	51.204M	54.6	+8.7	+0.0	+0.2	+0.5	+0.0	36.7	40.0	-3.3	Vert
	QP		-27.3	+0.0	+0.0	+0.0	30				99
			+0.0	+0.0							
^	51.225M	57.2	+8.7	+0.0	+0.2	+0.5	+0.0	39.3	40.0	-0.7	Vert
			-27.3	+0.0	+0.0	+0.0	30				99
			+0.0	+0.0							
21	46.156M	52.2	+10.9	+0.1	+0.1	+0.4	+0.0	36.4	40.0	-3.6	Vert
			-27.3	+0.0	+0.0	+0.0	205				100
			+0.0	+0.0							
22	66.719M	55.8	+6.5	+0.1	+0.2	+0.4	+0.0	35.8	40.0	-4.2	Vert
	QP		-27.2	+0.0	+0.0	+0.0	9				99
			+0.0	+0.0							
^	66.716M	59.4	+6.5	+0.1	+0.2	+0.4	+0.0	39.4	40.0	-0.6	Vert
			-27.2	+0.0	+0.0	+0.0	9				99
			+0.0	+0.0							
24	35.690M	43.1	+17.1	+0.0	+0.2	+0.4	+0.0	33.6	40.0	-6.4	Vert
	QP		-27.2	+0.0	+0.0	+0.0	367				99
			+0.0	+0.0							
^	35.686M	46.8	+17.1	+0.0	+0.2	+0.4	+0.0	37.3	40.0	-2.7	Vert
			-27.2	+0.0	+0.0	+0.0	367				99
			+0.0	+0.0							
26	158.283M	51.4	+11.1	+0.2	+0.2	+0.8	+0.0	36.5	43.5	-7.0	Vert
	QP		-27.2	+0.0	+0.0	+0.0	258				99
			+0.0	+0.0							
^	158.288M	56.1	+11.1	+0.2	+0.2	+0.8	+0.0	41.2	43.5	-2.3	Vert
			-27.2	+0.0	+0.0	+0.0	258				99
			+0.0	+0.0							
28	4895.966M	43.1	+0.0	+0.0	+0.0	+0.0	+0.0	46.9	54.0	-7.1	Vert
			+0.0	+33.3	+0.6	+1.2	142				118
			+3.7	-35.0							
29	160.937M	50.8	+10.9	+0.2	+0.2	+0.8	+0.0	35.7	43.5	-7.8	Horiz
			-27.2	+0.0	+0.0	+0.0	154				196
			+0.0	+0.0							

30	4805.981M	42.5	+0.0 +0.0 +3.6	+0.0 +33.1 -34.9	+0.0 +0.5	+0.0 +1.1	+0.0 237	45.9	54.0 Ch1	-8.1	Horiz 100
31	4895.842M	41.0	+0.0 +0.0 +3.7	+0.0 +33.3 -35.0	+0.0 +0.6	+0.0 +1.2	+0.0 243	44.8	54.0	-9.2	Horiz 100
32	4805.930M Ave	41.3	+0.0 +0.0 +3.6	+0.0 +33.1 -34.9	+0.0 +0.5	+0.0 +1.1	+0.0 145	44.7	54.0 Ch1	-9.3	Vert 118
^	4805.876M	45.4	+0.0 +0.0 +3.6	+0.0 +33.1 -34.9	+0.0 +0.5	+0.0 +1.1	+0.0 145	48.8	54.0 Ch1	-5.2	Vert 118
34	4845.923M Ave	40.8	+0.0 +0.0 +3.7	+0.0 +33.2 -34.9	+0.0 +0.6	+0.0 +1.2	+0.0 139	44.6	54.0 Ch5	-9.4	Vert 118
^	4845.899M	45.3	+0.0 +0.0 +3.7	+0.0 +33.2 -34.9	+0.0 +0.6	+0.0 +1.2	+0.0 139	49.1	54.0 Ch5	-4.9	Vert 118
36	4845.917M Ave	38.0	+0.0 +0.0 +3.7	+0.0 +33.2 -34.9	+0.0 +0.6	+0.0 +1.2	+0.0 238	41.8	54.0 Ch5	-12.2	Horiz 99
^	4845.971M	43.2	+0.0 +0.0 +3.7	+0.0 +33.2 -34.9	+0.0 +0.6	+0.0 +1.2	+0.0 238	47.0	54.0 Ch5	-7.0	Horiz 99

FCC 15.207 – AC CONDUCTED EMISSIONS

Test Setup Photos



Test Data Sheets

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

Customer: **Zylight LLC**
 Specification: **FCC 15.207 COND [AVE]**
 Work Order #: **88886** Date: 12/15/2008
 Test Type: **Conducted Emissions** Time: 09:26:01
 Equipment: **LED Camera Light with wireless connectivity** Sequence#: 34
 Manufacturer: Zylight LLC Tested By: Art Rice
 Model: Z90 120V 60Hz
 S/N: 30000

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
S.A., RF Section HP-8568B	2601A02492	11/20/2007	11/20/2009	02663
S.A., Display HP-85662A	2542A12169	11/20/2007	11/20/2009	02662
QP Adapter HP-85650A	2521A00909	11/20/2007	11/20/2009	00683
Cable, RG214		05/28/2008	05/28/2010	P02410
10 dB Pad		04/05/2007	04/05/2009	00081
LISN, Emco 3816/2	9408-1007	04/03/2007	04/03/2009	00494
TTE High Pass Filter	H4120	01/17/2007	01/17/2009	05258

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
LED Camera Light with wireless connectivity*	Zylight LLC	Z90	30000

Support Devices:

Function	Manufacturer	Model #	S/N
Power supply	CINCON	TR36A-12	36120-0016027

Test Conditions / Notes:

The EUT is placed on the test table supported by a 3.5cm thick styrofoam block. The EUT is in a normal position with the tripod thread facing down and the display at the top. The power supply is placed on the table 10cm from the EUT. Transmitting continuously with modulation. Ch1=2405MHz, Ch5=2425MHz, Ch10=2450MHz. Transmitting on Ch5. LEDs are on. Temperature=23°C, Relative Humidity=45%. Frequency range tested: 0.15-30 MHz, RBW=9kHz, VBW=30kHz.

Transducer Legend:

T1=TTE HP Filter	T2=Cable Calibration ANP02410
T3=AN P00081 10dB Attenuator	T4=LISN - AN00494 - Black - ELC "OUT"

Measurement Data:

Reading listed by margin.

Test Lead: Black

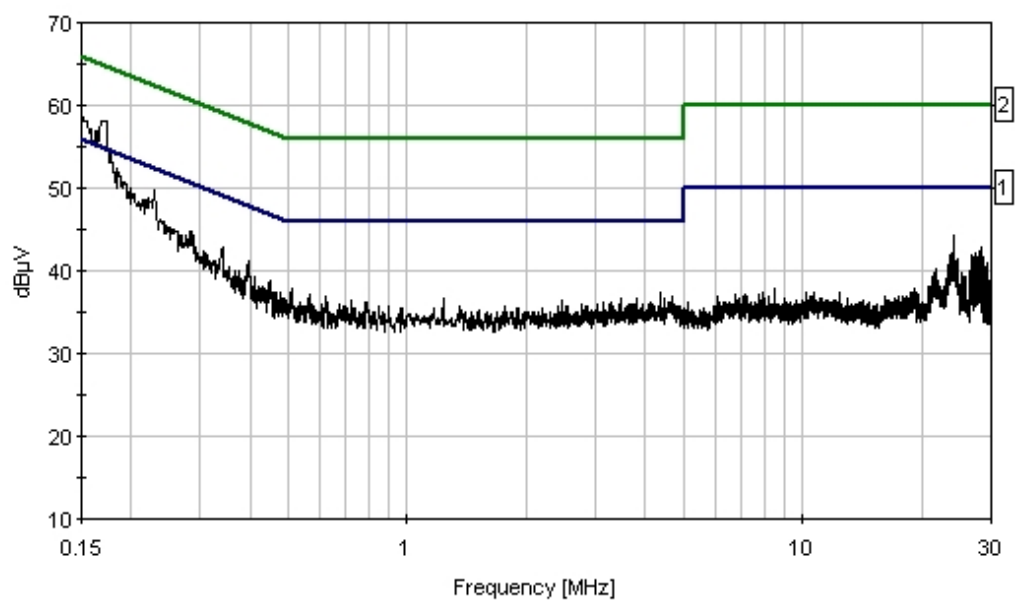
#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	341.981k	32.7	+0.0	+0.1	+10.0	+0.0	+0.0	42.8	49.2	-6.4	Black
2	398.702k	30.9	+0.0	+0.1	+10.1	+0.0	+0.0	41.1	47.9	-6.8	Black

3	28.308M	32.3	+0.2	+0.4	+10.0	+0.0	+0.0	42.9	50.0	-7.1	Black
4	27.917M	31.9	+0.2	+0.4	+10.0	+0.0	+0.0	42.5	50.0	-7.5	Black
5	23.813M	31.6	+0.2	+0.4	+10.0	+0.0	+0.0	42.2	50.0	-7.8	Black
6	27.520M	31.6	+0.2	+0.4	+10.0	+0.0	+0.0	42.2	50.0	-7.8	Black
7	450.334k	28.5	+0.1	+0.1	+10.1	+0.1	+0.0	38.9	46.9	-8.0	Black
8	512.146k	27.5	+0.1	+0.1	+10.1	+0.1	+0.0	37.9	46.0	-8.1	Black
9	23.689M	31.3	+0.2	+0.4	+10.0	+0.0	+0.0	41.9	50.0	-8.1	Black
10	26.752M	31.2	+0.2	+0.4	+10.0	+0.0	+0.0	41.8	50.0	-8.2	Black
11	411.792k	29.1	+0.0	+0.1	+10.1	+0.0	+0.0	39.3	47.6	-8.3	Black
12	23.511M	31.1	+0.2	+0.4	+10.0	+0.0	+0.0	41.7	50.0	-8.3	Black
13	27.136M	31.0	+0.2	+0.4	+10.0	+0.0	+0.0	41.6	50.0	-8.4	Black
14	28.691M	31.0	+0.2	+0.4	+10.0	+0.0	+0.0	41.6	50.0	-8.4	Black
15	24.546M	31.0	+0.2	+0.3	+10.0	+0.0	+0.0	41.5	50.0	-8.5	Black
16	4.390M	27.1	+0.1	+0.1	+10.1	+0.0	+0.0	37.4	46.0	-8.6	Black
17	23.881M	30.7	+0.2	+0.4	+10.0	+0.0	+0.0	41.3	50.0	-8.7	Black
18	23.998M	30.7	+0.2	+0.3	+10.0	+0.0	+0.0	41.2	50.0	-8.8	Black
19	24.422M	30.7	+0.2	+0.3	+10.0	+0.0	+0.0	41.2	50.0	-8.8	Black
20	475.786k	27.1	+0.1	+0.1	+10.1	+0.1	+0.0	37.5	46.4	-8.9	Black
21	565.231k	26.7	+0.1	+0.1	+10.1	+0.1	+0.0	37.1	46.0	-8.9	Black
22	23.634M	30.5	+0.2	+0.4	+10.0	+0.0	+0.0	41.1	50.0	-8.9	Black
23	29.472M	30.3	+0.2	+0.4	+10.1	+0.0	+0.0	41.0	50.0	-9.0	Black
24	4.683M	26.6	+0.1	+0.2	+10.0	+0.0	+0.0	36.9	46.0	-9.1	Black
25	430.699k	27.6	+0.1	+0.1	+10.1	+0.1	+0.0	38.0	47.2	-9.2	Black
26	467.059k	27.0	+0.1	+0.1	+10.1	+0.1	+0.0	37.4	46.6	-9.2	Black

27	624.134k	26.4	+0.1	+0.1	+10.1	+0.1	+0.0	36.8	46.0	-9.2	Black
28	23.477M	30.2	+0.2	+0.4	+10.0	+0.0	+0.0	40.8	50.0	-9.2	Black
29	24.347M	30.3	+0.2	+0.3	+10.0	+0.0	+0.0	40.8	50.0	-9.2	Black
30	463.423k	26.9	+0.1	+0.1	+10.1	+0.1	+0.0	37.3	46.6	-9.3	Black
31	1.234M	26.2	+0.2	+0.1	+10.1	+0.1	+0.0	36.7	46.0	-9.3	Black
32	3.480M	26.3	+0.1	+0.2	+10.1	+0.0	+0.0	36.7	46.0	-9.3	Black
33	3.829M	26.4	+0.1	+0.1	+10.1	+0.0	+0.0	36.7	46.0	-9.3	Black
34	422.700k	27.8	+0.0	+0.1	+10.1	+0.0	+0.0	38.0	47.4	-9.4	Black
35	4.458M	26.3	+0.1	+0.1	+10.1	+0.0	+0.0	36.6	46.0	-9.4	Black
36	23.347M	30.0	+0.2	+0.4	+10.0	+0.0	+0.0	40.6	50.0	-9.4	Black
37	29.863M	29.9	+0.2	+0.4	+10.1	+0.0	+0.0	40.6	50.0	-9.4	Black
38	401.611k	28.1	+0.0	+0.1	+10.1	+0.0	+0.0	38.3	47.8	-9.5	Black
39	2.476M	26.2	+0.1	+0.1	+10.0	+0.1	+0.0	36.5	46.0	-9.5	Black
40	24.436M	30.0	+0.2	+0.3	+10.0	+0.0	+0.0	40.5	50.0	-9.5	Black
41	459.060k	26.7	+0.1	+0.1	+10.1	+0.1	+0.0	37.1	46.7	-9.6	Black
42	723.034k	26.0	+0.1	+0.2	+10.1	+0.0	+0.0	36.4	46.0	-9.6	Black
43	29.082M	29.7	+0.2	+0.4	+10.1	+0.0	+0.0	40.4	50.0	-9.6	Black
44	229.000k Ave	22.8	+0.1	+0.1	+10.0	+0.0	+0.0	33.0	52.5	-19.5	Black
^	229.265k	39.5	+0.1	+0.1	+10.0	+0.0	+0.0	49.7	52.5	-2.8	Black
46	150.000k Ave	22.1	+3.3	+0.2	+10.0	+0.0	+0.0	35.6	56.0	-20.4	Black
^	150.000k	45.2	+3.3	+0.2	+10.0	+0.0	+0.0	58.7	56.0	+2.7	Black
48	173.000k Ave	20.7	+2.4	+0.1	+10.0	+0.0	+0.0	33.2	55.3	-22.1	Black
^	172.543k	46.3	+1.8	+0.0	+10.0	+0.0	+0.0	58.1	54.8	+3.3	Black
50	24.018M Ave	15.9	+0.2	+0.3	+10.0	+0.0	+0.0	26.4	50.0	-23.6	Black
^	24.018M	33.8	+0.2	+0.3	+10.0	+0.0	+0.0	44.3	50.0	-5.7	Black

52	285.000k	16.5	+0.1	+0.1	+10.0	+0.0	+0.0	26.7	50.7	-24.0	Black
Ave											
^	285.259k	34.6	+0.1	+0.1	+10.0	+0.0	+0.0	44.8	50.7	-5.9	Black
54	183.000k	17.7	+1.2	+0.1	+10.0	+0.0	+0.0	29.0	54.3	-25.3	Black
Ave											
^	183.451k	41.1	+1.1	+0.1	+10.0	+0.0	+0.0	52.3	54.3	-2.0	Black
^	185.633k	40.7	+1.0	+0.1	+10.0	+0.0	+0.0	51.8	54.2	-2.4	Black

CKC Laboratories, Inc. Date: 12/15/2008 Time: 09:26:01 Zylight LLC WO#: 88886
FCC 15.207 COND [AVE] Test Lead: Black 120V 60Hz Sequence#: 34



— Sweep Data — 1 - FCC 15.207 COND [AVE] — 2 - FCC 15.207 COND [QP]

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

Customer: **Zylight LLC**
 Specification: **FCC 15.207 COND [AVE]**
 Work Order #: **88886** Date: 12/15/2008
 Test Type: **Conducted Emissions** Time: 09:35:09
 Equipment: **LED Camera Light with wireless connectivity** Sequence#: 35
 Manufacturer: Zylight LLC Tested By: Art Rice
 Model: Z90 120V 60Hz
 S/N: 30000

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
S.A., RF Section HP-8568B	2601A02492	11/20/2007	11/20/2009	02663
S.A., Display HP-85662A	2542A12169	11/20/2007	11/20/2009	02662
QP Adapter HP-85650A	2521A00909	11/20/2007	11/20/2009	00683
Cable, RG214		05/28/2008	05/28/2010	P02410
10 dB Pad		04/05/2007	04/05/2009	00081
LISN, Emco 3816/2	9408-1007	04/03/2007	04/03/2009	00494
TTE High Pass Filter	H4120	01/17/2007	01/17/2009	05258

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
LED Camera Light with wireless connectivity*	Zylight LLC	Z90	30000

Support Devices:

Function	Manufacturer	Model #	S/N
Power supply	CINCON	TR36A-12	36120-0016027

Test Conditions / Notes:

The EUT is placed on the test table supported by a 3.5cm thick styrofoam block. The EUT is in a normal position with the tripod thread facing down and the display at the top. The power supply is placed on the table 10cm from the EUT. Transmitting continuously with modulation. Ch1=2405MHz, Ch5=2425MHz, Ch10=2450MHz. Transmitting on Ch5. LEDs are on. Temperature=23°C, Relative Humidity=45%. Frequency range tested: 0.15-30 MHz, RBW=9kHz, VBW=30kHz.

Transducer Legend:

T1=TTE HP Filter	T2=Cable Calibration ANP02410
T3=AN P00081 10dB Attenuator	T4=LISN - AN00494 - White - ELC "OUT"

Measurement Data:

Reading listed by margin.

Test Lead: White

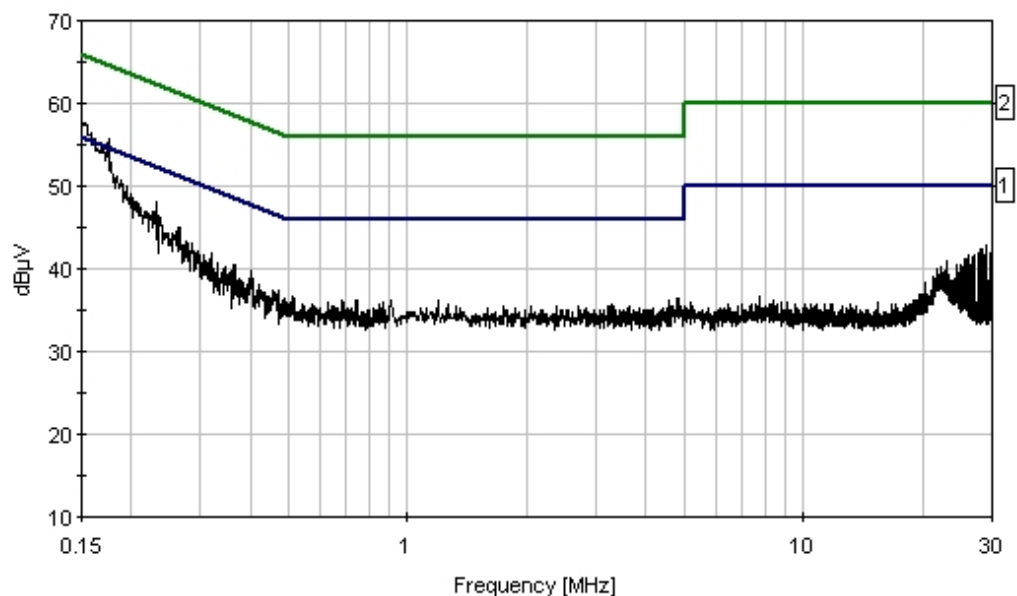
#	Freq MHz	Rdng dBμV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBμV	Spec dBμV	Margin dB	Polar Ant
1	264.170k	34.7	+0.1	+0.1	+10.0	+0.0	+0.0	44.9	51.3	-6.4	White
2	259.807k	34.4	+0.1	+0.1	+10.0	+0.0	+0.0	44.6	51.4	-6.8	White
3	29.116M	32.2	+0.2	+0.4	+10.1	+0.0	+0.0	42.9	50.0	-7.1	White
4	27.944M	31.9	+0.2	+0.4	+10.0	+0.0	+0.0	42.5	50.0	-7.5	White

5	274.351k	33.2	+0.1	+0.1	+10.0	+0.0	+0.0	43.4	51.0	-7.6	White
6	279.442k	33.0	+0.1	+0.1	+10.0	+0.0	+0.0	43.2	50.8	-7.6	White
7	285.259k	32.8	+0.1	+0.1	+10.0	+0.0	+0.0	43.0	50.7	-7.7	White
8	28.342M	31.7	+0.2	+0.4	+10.0	+0.0	+0.0	42.3	50.0	-7.7	White
9	319.438k	31.7	+0.1	+0.1	+10.0	+0.0	+0.0	41.9	49.7	-7.8	White
10	27.561M	31.4	+0.2	+0.4	+10.0	+0.0	+0.0	42.0	50.0	-8.0	White
11	400.884k	29.5	+0.0	+0.1	+10.1	+0.0	+0.0	39.7	47.8	-8.1	White
12	29.897M	31.2	+0.2	+0.4	+10.1	+0.0	+0.0	41.9	50.0	-8.1	White
13	272.170k	32.7	+0.1	+0.1	+10.0	+0.0	+0.0	42.9	51.1	-8.2	White
14	364.524k	30.2	+0.0	+0.1	+10.1	+0.0	+0.0	40.4	48.6	-8.2	White
15	29.507M	31.1	+0.2	+0.4	+10.1	+0.0	+0.0	41.8	50.0	-8.2	White
16	293.986k	31.9	+0.1	+0.1	+10.0	+0.0	+0.0	42.1	50.4	-8.3	White
17	27.170M	31.0	+0.2	+0.4	+10.0	+0.1	+0.0	41.7	50.0	-8.3	White
18	307.075k	31.4	+0.1	+0.1	+10.0	+0.0	+0.0	41.6	50.0	-8.4	White
19	26.005M	30.9	+0.2	+0.4	+10.0	+0.1	+0.0	41.6	50.0	-8.4	White
20	28.719M	31.0	+0.2	+0.4	+10.0	+0.0	+0.0	41.6	50.0	-8.4	White
21	291.077k	31.7	+0.1	+0.1	+10.0	+0.0	+0.0	41.9	50.5	-8.6	White
22	26.786M	30.7	+0.2	+0.4	+10.0	+0.1	+0.0	41.4	50.0	-8.6	White
23	315.074k	30.9	+0.1	+0.1	+10.0	+0.0	+0.0	41.1	49.8	-8.7	White
24	331.073k	30.6	+0.0	+0.1	+10.0	+0.0	+0.0	40.7	49.4	-8.7	White
25	347.071k	30.1	+0.0	+0.1	+10.1	+0.0	+0.0	40.3	49.0	-8.7	White
26	360.161k	29.6	+0.0	+0.1	+10.1	+0.0	+0.0	39.8	48.7	-8.9	White
27	25.622M	30.4	+0.2	+0.4	+10.0	+0.1	+0.0	41.1	50.0	-8.9	White
28	22.914M	30.2	+0.2	+0.4	+10.1	+0.1	+0.0	41.0	50.0	-9.0	White

29	341.981k	29.9	+0.0	+0.1	+10.0	+0.0	+0.0	40.0	49.2	-9.2	White
30	355.070k	29.4	+0.0	+0.1	+10.1	+0.0	+0.0	39.6	48.8	-9.2	White
31	472.877k	27.0	+0.1	+0.1	+10.1	+0.0	+0.0	37.3	46.5	-9.2	White
32	343.435k	29.7	+0.0	+0.1	+10.0	+0.0	+0.0	39.8	49.1	-9.3	White
33	456.878k	27.1	+0.1	+0.1	+10.1	+0.0	+0.0	37.4	46.7	-9.3	White
34	300.530k	30.6	+0.1	+0.1	+10.0	+0.0	+0.0	40.8	50.2	-9.4	White
35	421.973k	27.8	+0.0	+0.1	+10.1	+0.0	+0.0	38.0	47.4	-9.4	White
36	513.600k	26.2	+0.1	+0.1	+10.1	+0.1	+0.0	36.6	46.0	-9.4	White
37	4.858M	26.2	+0.1	+0.1	+10.0	+0.1	+0.0	36.5	46.0	-9.5	White
38	26.396M	29.8	+0.2	+0.4	+10.0	+0.1	+0.0	40.5	50.0	-9.5	White
39	488.148k	26.1	+0.1	+0.1	+10.1	+0.1	+0.0	36.5	46.2	-9.7	White
40	685.219k	25.8	+0.1	+0.2	+10.1	+0.1	+0.0	36.3	46.0	-9.7	White
41	1.192M	25.8	+0.2	+0.1	+10.1	+0.1	+0.0	36.3	46.0	-9.7	White
42	466.332k	26.5	+0.1	+0.1	+10.1	+0.0	+0.0	36.8	46.6	-9.8	White
43	742.668k	25.7	+0.1	+0.2	+10.1	+0.1	+0.0	36.2	46.0	-9.8	White
44	22.364M	29.4	+0.2	+0.4	+10.1	+0.1	+0.0	40.2	50.0	-9.8	White
45	4.556M	25.7	+0.1	+0.2	+10.0	+0.1	+0.0	36.1	46.0	-9.9	White
46	176.000k	26.9	+1.6	+0.0	+10.0	+0.0	+0.0	38.5	54.7	-16.2	White
^	Ave 176.179k	44.0	+1.6	+0.0	+10.0	+0.0	+0.0	55.6	54.7	+0.9	White
48	231.000k	20.7	+0.1	+0.1	+10.0	+0.0	+0.0	30.9	52.4	-21.5	White
^	Ave 231.446k	37.9	+0.1	+0.1	+10.0	+0.0	+0.0	48.1	52.4	-4.3	White
^	235.810k	36.3	+0.1	+0.1	+10.0	+0.0	+0.0	46.5	52.2	-5.7	White

51	151.000k	21.0	+3.2	+0.2	+10.0	+0.0	+0.0	34.4	55.9	-21.5	White
Ave											
^	151.454k	44.3	+3.2	+0.2	+10.0	+0.0	+0.0	57.7	55.9	+1.8	White
53	205.000k	16.7	+0.2	+0.1	+10.0	+0.0	+0.0	27.0	53.4	-26.4	White
Ave											
^	205.267k	37.9	+0.2	+0.1	+10.0	+0.0	+0.0	48.2	53.4	-5.2	White

CKC Laboratories, Inc. Date: 12/15/2008 Time: 09:35:09 Zylight LLC WVO#: 88886
FCC 15.207 COND [AVE] Test Lead: White 120V 60Hz Sequence#: 35



— Sweep Data — 1 - FCC 15.207 COND [AVE] — 2 - FCC 15.207 COND [QP]

FCC 15.247(a)(2) – 6dB BANDWIDTH

Test Setup Photos



Test Data Sheets

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

Customer: **Zylight LLC**
 Specification: **FCC 15.247(a) (2)**
 Work Order #: **88886** Date: 12/8/2008
 Test Type: **Fundamentals** Time: 11:27:56
 Equipment: **LED Camera Light with wireless connectivity** Sequence#: 1
 Manufacturer: **Zylight LLC** Tested By: Art Rice
 Model: **Z90**
 S/N: **30000**

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A Spectrum Analyzer	US44300408	03/05/2007	03/05/2009	02668
Cable HF FSJ1P-50A-4	HOL-HF-025-06	05/06/2008	05/06/2010	P05138
Cable, HF	n/a	05/06/2008	05/06/2010	P04241
Preamplifier, HP83017A	3123A00283	05/16/2007	05/16/2009	00785
Antenna, Horn 1-18 GHz	1064	03/19/2007	03/19/2009	02061
HF Cable		03/27/2007	03/27/2009	01952

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
LED Camera Light with wireless connectivity*	Zylight LLC	Z90	30000

Support Devices:

Function	Manufacturer	Model #	S/N
Power supply	CINCON	TR36A-12	36120-0016027

Test Conditions / Notes:

The EUT is placed on the test table supported by a 3.5cm thick styrofoam block. The EUT is in a normal position with the tripod thread facing down and the display at the top. The power supply is placed on the floor. Transmitting continuously with modulation. Ch1=2405MHz, Ch5=2425MHz, Ch10=245 MHz. RBW=100 kHz VBW=300 kHz.

Transducer Legend:

T1=ANT AN02061 900MHz-18.5GHz	T2=Cable P01952 2'
T3=CAB-ANP04241-050608	T4=CAB-ANP05138-050608
T5=AMP-AN00785-051607	

Ext Attn: 0 dB

Test results from spectrum analyzer plots:

Ch1 6dB BW=1.590MHz.

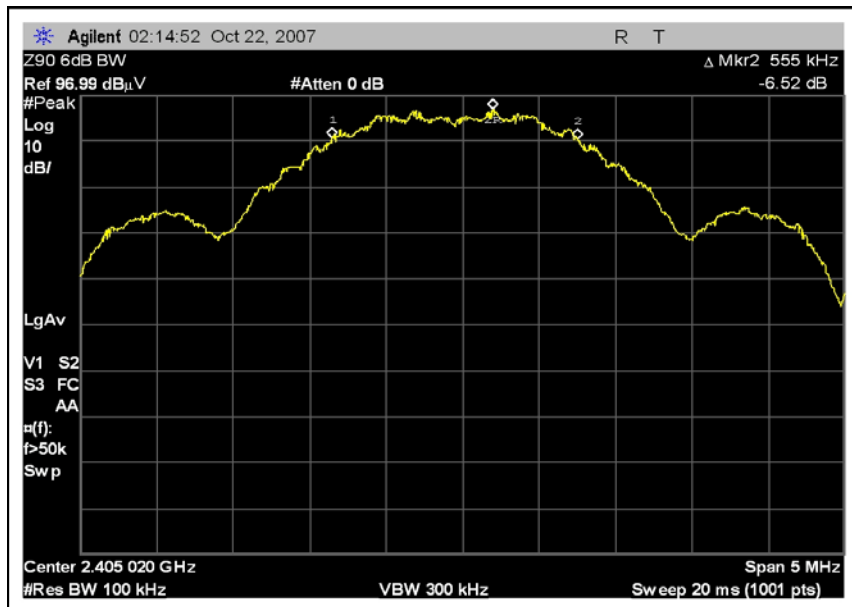
Ch5 6dB BW=1.600MHz

Ch10 6dB BW=1.605MHz

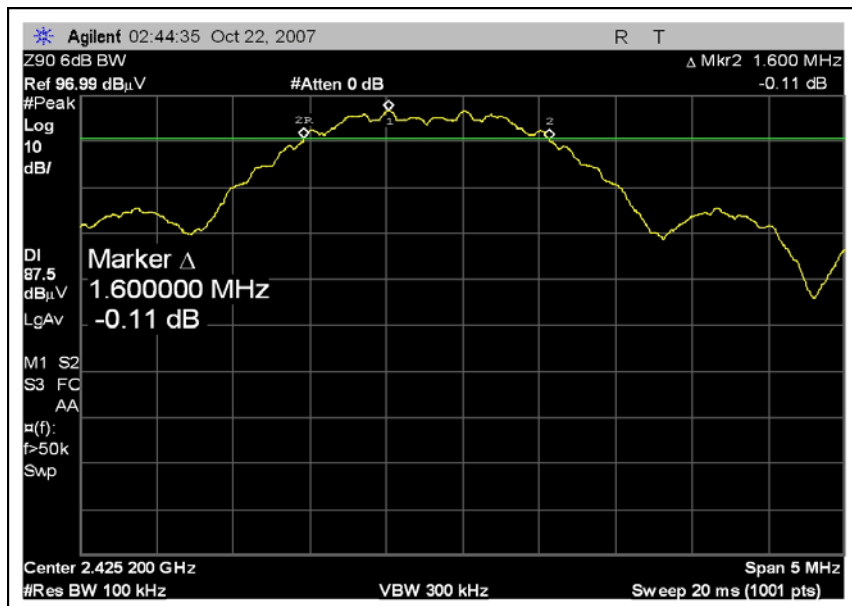
These pass the 15.247(a)(2) minimum requirement of 500kHz.

Test Plots

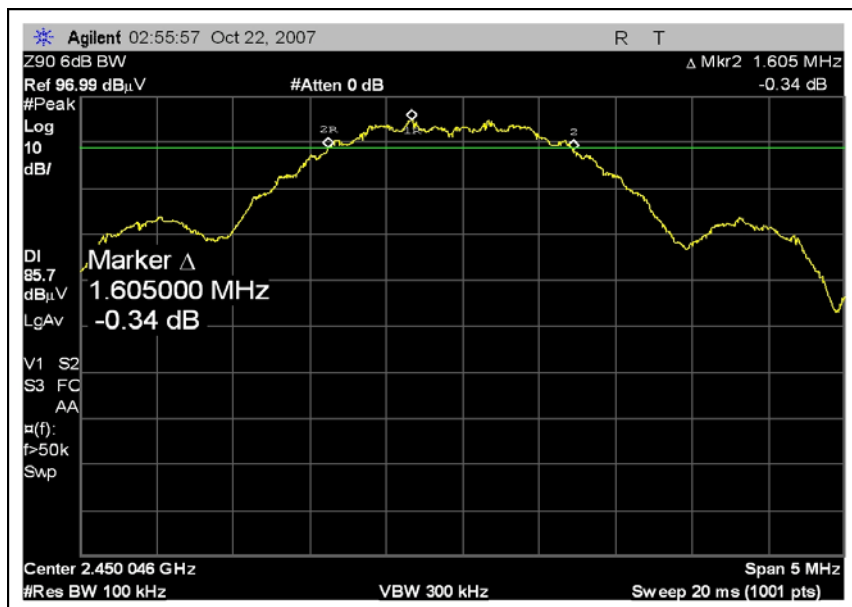
FCC 15.247(a)(2) 6dB BANDWIDTH CHANNEL 1



FCC 15.247(a)(2) 6dB BANDWIDTH CHANNEL 5



FCC 15.247(a)(2) 6dB BANDWIDTH CHANNEL 10



FCC 15.247(b)(3) – RF POWER OUTPUT

Test Setup Photos



Test Data Sheets

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

Customer: **Zylight LLC**
 Specification: **FCC 15.247(b) (3) Rad-dBuV (6 dBi antenna)**
 Work Order #: **88886** Date: 12/8/2008
 Test Type: **Fundamentals** Time: 11:27:56
 Equipment: **LED Camera Light with wireless connectivity** Sequence#: 1
 Manufacturer: Zylight LLC Tested By: Art Rice
 Model: Z90
 S/N: 30000

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A Spectrum Analyzer	US44300408	03/05/2007	03/05/2009	02668
Cable HF FSJ1P-50A-4	HOL-HF-025-06	05/06/2008	05/06/2010	P05138
Cable, HF	n/a	05/06/2008	05/06/2010	P04241
Preamp, HP83017A	3123A00283	05/16/2007	05/16/2009	00785
Antenna, Horn 1-18 GHz	1064	03/19/2007	03/19/2009	02061
HF Cable		03/27/2007	03/27/2009	01952

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
LED Camera Light with wireless connectivity*	Zylight LLC	Z90	30000

Support Devices:

Function	Manufacturer	Model #	S/N
Power supply	CINCON	TR36A-12	36120-0016027

Test Conditions / Notes:

The EUT is placed on the test table supported by a 3.5cm thick styrofoam block. The EUT is in a normal position with the tripod thread facing down and the display at the top. The power supply is placed on the floor. Transmitting continuously with modulation. Ch1=2405MHz, Ch5=2425MHz, Ch10=2450MHz. RBW=3 MHz VBW=8 MHz (greater than the 6dB BW per KDB 558074).

Transducer Legend:

T1=ANT AN02061 900MHz-18.5GHz	T2=Cable P01952 2'
T3=CAB-ANP04241-050608	T4=CAB-ANP05138-050608
T5=AMP-AN00785-051607	

Ext Attn: 0 dB

Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBμV	T5 dB	dB	dB	dB	Table	dBμV	dBμV	dB	Ant
1	2404.330M	96.2	+28.5 -36.3	+0.3	+0.8	+2.4	+0.0 229	91.9	133.0 Ch1	-41.1	Horiz 99
2	2424.380M	96.1	+28.5 -36.3	+0.3	+0.8	+2.5	+0.0 230	91.9	133.0 Ch5	-41.1	Horiz 99
3	2449.261M	95.4	+28.5 -36.3	+0.3	+0.8	+2.5	+0.0 242	91.2	133.0 Ch10	-41.8	Horiz 99

4	2404.330M	93.5	+28.5 -36.3	+0.3	+0.8	+2.4	+0.0 350	89.2	133.0 Ch1	-43.8	Vert 100
5	2424.400M	92.7	+28.5 -36.3	+0.3	+0.8	+2.5	+0.0 308	88.5	133.0 Ch5	-44.5	Vert 100
6	2450.000M	91.6	+28.5 -36.3	+0.3	+0.8	+2.5	+0.0 258	87.4	133.0 Ch10	-45.6	Vert 100

The maximum measured field strength was 91.9 dBuV/m at 3 meters. This calculates to .000117 Watts. Passes, as this is less than the 1 watt limit for 15.247(b).

FCC 15.247(d) – BAND EDGE

Test Setup Photos



Test Data Sheets

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • 510-249-1170
 Customer: **Zylight LLC**
 Specification: **FCC 15.247d+15.209 Band Edge**
 Work Order #: **88886** Date: 12/8/2008
 Test Type: **Band Edge Measurements** Time: 16:13:34
 Equipment: **LED Camera Light with wireless connectivity** Sequence#: 4
 Manufacturer: Zylight LLC Tested By: Art Rice
 Model: Z90
 S/N: 30000

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A Spectrum Analyzer	US44300408	03/05/2007	03/05/2009	02668
Cable HF FSJ1P-50A-4	HOL-HF-025-06	05/06/2008	05/06/2010	P05138
Cable, HF	n/a	05/06/2008	05/06/2010	P04241
Preamplifier, HP83017A	3123A00283	05/16/2007	05/16/2009	00785
Antenna, Horn 1-18 GHz	1064	03/19/2007	03/19/2009	02061
HF Cable		03/27/2007	03/27/2009	01952

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
LED Camera Light with wireless connectivity*	Zylight LLC	Z90	30000

Support Devices:

Function	Manufacturer	Model #	S/N
Power supply	CINCON	TR36A-12	36120-0016027

Test Conditions / Notes:

The EUT is placed on the test table supported by a 3.5cm thick styrofoam block. The EUT is in a normal position with the tripod thread facing down and the display at the top. The power supply is placed on the floor. Transmitting continuously with modulation. Ch1=2405MHz, Ch5=2425MHz, Ch10=2450MHz. RBW=100 kHz VBW=300 kHz Measuring maximum emission in authorized band using 100kHz RBW.

Transducer Legend:

T1=ANT AN02061 900MHz-18.5GHz	T2=Cable P01952 2'
T3=CAB-ANP04241-050608	T4=CAB-ANP05138-050608
T5=AMP-AN00785-051607	

Measurement Data:

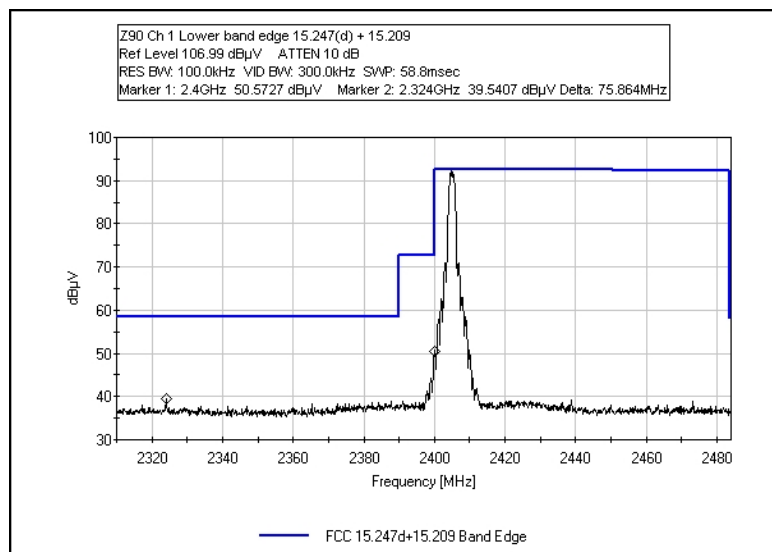
Reading listed by margin.

Test Distance: 3 Meters

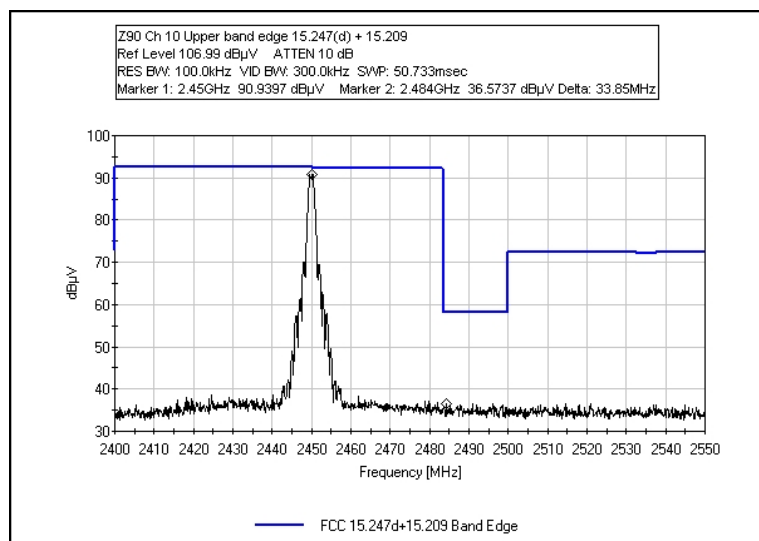
#	Freq MHz	Rdng dBμV	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	2450.250M	90.9	+28.5 -36.3	+0.3	+0.8	+2.5	+0.0 230	86.7	88.3 Fundamental Ch10	-1.6	Horiz 100
2	2405.004M	90.7	+28.5 -36.3	+0.3	+0.8	+2.4	+0.0 231	86.4	88.3 Fundamental Ch1	-1.9	Horiz 100
3	2324.094M	39.5	+28.6 -36.4	+0.2	+0.8	+2.4	+0.0 231	35.1	54.0 TX Ch1	-18.9	Horiz 100
4	2484.150M	36.6	+28.5 -36.2	+0.3	+0.8	+2.5	+0.0 230	32.5	54.0 TX Ch10	-21.5	Horiz 100
5	2399.958M	50.6	+28.5 -36.3	+0.3	+0.8	+2.4	+0.0 231	46.3	68.3 TX Ch1	-22.0	Horiz 100

Plots

FCC 15.247(d) LOWER BAND EDGE CHANNEL 1



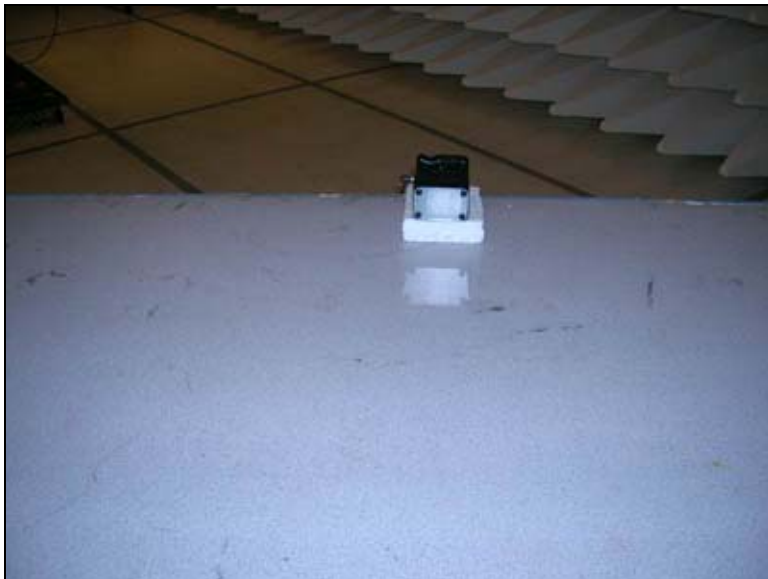
FCC 15.247(d) UPPER BAND EDGE CHANNEL 10

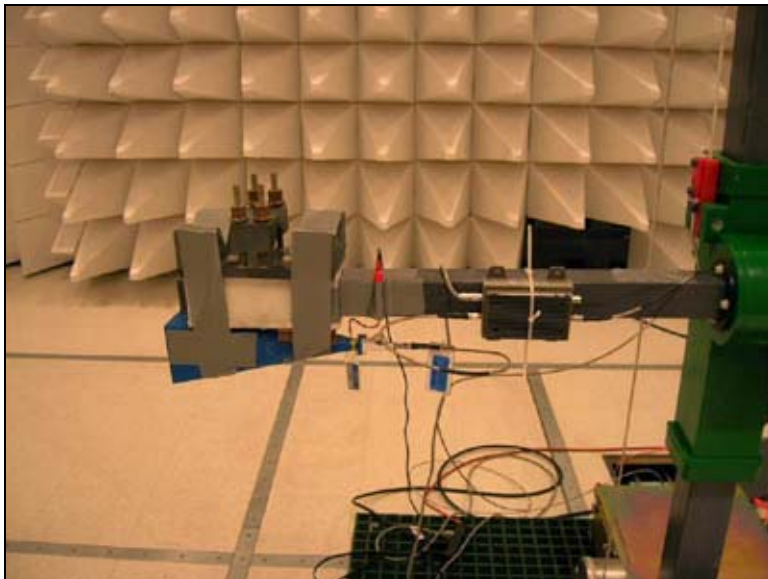


FCC 15.247(d) – OATS RADIATED SPURIOUS EMISSIONS

Test Setup Photos







Test Data Sheets

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

Customer: **Zylight LLC**
 Specification: **FCC 15.247(d)/15.209 Spurious/Harmonics 30MHz to 100 GHz**
 Work Order #: **88886** Date: 12/10/2008
 Test Type: **Spurious Emissions Maximized** Time: 16:37:49
 Equipment: **LED Camera Light with wireless connectivity** Sequence#: 21
 Manufacturer: Zylight LLC Tested By: Art Rice
 Model: Z90
 S/N: 30000

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A Spectrum Analyzer	US44300408	03/05/2007	03/05/2009	02668
Cable HF FSJ1P-50A-4	HOL-HF-025-06	05/06/2008	05/06/2010	P05138
Cable, HF	n/a	05/06/2008	05/06/2010	P04241
Preamp, HP83017A	3123A00283	05/16/2007	05/16/2009	00785
Antenna, Horn 1-18 GHz	1064	03/19/2007	03/19/2009	02061
HF Cable		03/27/2007	03/27/2009	01952
Cable	None	04/21/2008	04/21/2010	P05440
Preamp, HP8447D	2443A03707	02/05/2007	02/05/2009	00730
Cable	None	04/05/2007	04/05/2009	P05300
Cable	None	04/02/2007	04/02/2009	P05299
Antenna, Bilog	2630	12/30/2006	12/30/2008	00852
Mag Loop - 6502	2078	06/11/2007	06/11/2009	00432
3.5GHz HP Filter	PN 84300-80038	04/01/2008	04/01/2010	P01416
Preamp, HP83017A	3123A00283	05/16/2007	05/16/2009	00785
Cable	none	07/16/2008	07/16/2010	05843
Cable	none	04/02/2008	04/02/2010	05735
HF cable 24"	32022-2-29094K-24TC	02/04/2008	02/04/2010	03015
18-26.5GHz WaveGuide	n/a	02/11/2008	02/11/2010	P00929
Active Horn 18-26GHz	1087835	09/21/2007	09/21/2009	02694

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
LED Camera Light with wireless connectivity*	Zylight LLC	Z90	30000

Support Devices:

Function	Manufacturer	Model #	S/N
Power supply	CINCON	TR36A-12	36120-0016027

Test Conditions / Notes:

The EUT is placed on the test table supported by a 3.5cm thick styrofoam block. The EUT is in a normal position with the tripod thread facing down and the display at the top. The power supply is placed on the table 10cm from the camera light. The cord is bundled to 40 cm above ground. Transmitting continuously with modulation. Ch1=2405MHz, Ch5=2425MHz, Ch10=2450MHz. 9kHz-150kHz, RBW=200Hz, VBW=200Hz, 150kHz-30MHz, RBW=9kHz, VBW=30kHz, 30-1000MHz RBW=120kHz, VBW=360kHz, 1-25GHz RBW=1 MHz VBW=30 kHz. Transmit on Ch 1, 5, 10. LEDs are on. 1 pass through ferrite on DC cord at power supply. (Etronic F5-NF-50W-02). Emissions below 1000 MHz were not affected by the transmitter channel selection.

Transducer Legend:

T1=ANT AN00852 25-1000MHz	T2=Cable Calibration ANP05299
T3=Cable Calibration ANP05300	T4=Cable Calibration ANP05440
T5=AMP-AN00730-020507	T6=ANT AN02061 900MHz-18.5GHz
T7=Cable P01952 2'	T8=CAB-ANP04241-050608
T9=CAB-ANP05138-050608	T10=AMP-AN00785-051607
T11=HPF 3.5 GHz High Pass	T12=Mag Loop - AN 00432- 9kHz-30M

Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq	Rdng	T1 T5 T9	T2 T6 T10	T3 T7 T11	T4 T8 T12	Dist	Corr	Spec	Margin	Polar
	MHz	dBμV	dB	dB	dB	dB	Table	dBμV/m	dBμV/m	dB	Ant
1	59.357M	58.9	+6.6	+0.1	+0.2	+0.5	+0.0	39.1	40.0	-0.9	Vert
	QP		-27.2	+0.0	+0.0	+0.0	358				99
			+0.0	+0.0	+0.0						
^	59.345M	59.7	+6.6	+0.1	+0.2	+0.5	+0.0	39.9	40.0	-0.1	Vert
			-27.2	+0.0	+0.0	+0.0	358				99
			+0.0	+0.0	+0.0						
3	36.859M	48.8	+16.4	+0.0	+0.2	+0.3	+0.0	38.5	40.0	-1.5	Vert
	QP		-27.2	+0.0	+0.0	+0.0	145				99
			+0.0	+0.0	+0.0						
^	36.854M	51.0	+16.4	+0.0	+0.2	+0.3	+0.0	40.7	40.0	+0.7	Vert
			-27.2	+0.0	+0.0	+0.0	145				99
			+0.0	+0.0	+0.0						
5	55.459M	57.3	+7.5	+0.1	+0.2	+0.4	+0.0	38.3	40.0	-1.7	Vert
	QP		-27.2	+0.0	+0.0	+0.0	42				99
			+0.0	+0.0	+0.0						
^	55.489M	58.8	+7.5	+0.1	+0.2	+0.4	+0.0	39.8	40.0	-0.2	Vert
			-27.2	+0.0	+0.0	+0.0	42				99
			+0.0	+0.0	+0.0						
7	37.625M	49.0	+15.9	+0.1	+0.1	+0.4	+0.0	38.2	40.0	-1.8	Vert
	QP		-27.3	+0.0	+0.0	+0.0	145				99
			+0.0	+0.0	+0.0						
^	37.658M	51.1	+15.8	+0.1	+0.1	+0.4	+0.0	40.2	40.0	+0.2	Vert
			-27.3	+0.0	+0.0	+0.0	145				99
			+0.0	+0.0	+0.0						
9	55.853M	57.2	+7.4	+0.1	+0.2	+0.4	+0.0	38.1	40.0	-1.9	Vert
	QP		-27.2	+0.0	+0.0	+0.0	42				99
			+0.0	+0.0	+0.0						
^	55.863M	58.6	+7.4	+0.1	+0.2	+0.4	+0.0	39.5	40.0	-0.5	Vert
			-27.2	+0.0	+0.0	+0.0	42				99
			+0.0	+0.0	+0.0						
11	55.085M	57.0	+7.6	+0.1	+0.2	+0.4	+0.0	38.1	40.0	-1.9	Vert
	QP		-27.2	+0.0	+0.0	+0.0	42				99
			+0.0	+0.0	+0.0						
^	55.071M	58.9	+7.6	+0.1	+0.2	+0.4	+0.0	40.0	40.0	+0.0	Vert
			-27.2	+0.0	+0.0	+0.0	42				99
			+0.0	+0.0	+0.0						

13	56.248M	57.1	+7.3	+0.1	+0.2	+0.4	+0.0	37.9	40.0	-2.1	Vert
	QP		-27.2	+0.0	+0.0	+0.0	42				99
			+0.0	+0.0	+0.0						
^	56.242M	58.5	+7.3	+0.1	+0.2	+0.4	+0.0	39.3	40.0	-0.7	Vert
			-27.2	+0.0	+0.0	+0.0	42				99
			+0.0	+0.0	+0.0						
15	60.887M	57.2	+6.4	+0.1	+0.2	+0.4	+0.0	37.1	40.0	-2.9	Vert
	QP		-27.2	+0.0	+0.0	+0.0	10				99
			+0.0	+0.0	+0.0						
^	60.878M	58.1	+6.4	+0.1	+0.2	+0.4	+0.0	38.0	40.0	-2.0	Vert
			-27.2	+0.0	+0.0	+0.0	10				99
			+0.0	+0.0	+0.0						
17	50.429M	54.7	+8.9	+0.0	+0.2	+0.4	+0.0	36.9	40.0	-3.1	Vert
	QP		-27.3	+0.0	+0.0	+0.0	160				99
			+0.0	+0.0	+0.0						
^	50.408M	57.8	+8.9	+0.0	+0.2	+0.4	+0.0	40.0	40.0	+0.0	Vert
			-27.3	+0.0	+0.0	+0.0	160				99
			+0.0	+0.0	+0.0						
19	51.204M	54.6	+8.7	+0.0	+0.2	+0.5	+0.0	36.7	40.0	-3.3	Vert
	QP		-27.3	+0.0	+0.0	+0.0	30				99
			+0.0	+0.0	+0.0						
^	51.225M	57.2	+8.7	+0.0	+0.2	+0.5	+0.0	39.3	40.0	-0.7	Vert
			-27.3	+0.0	+0.0	+0.0	30				99
			+0.0	+0.0	+0.0						
21	46.156M	52.2	+10.9	+0.1	+0.1	+0.4	+0.0	36.4	40.0	-3.6	Vert
			-27.3	+0.0	+0.0	+0.0	205				100
			+0.0	+0.0	+0.0						
22	66.719M	55.8	+6.5	+0.1	+0.2	+0.4	+0.0	35.8	40.0	-4.2	Vert
	QP		-27.2	+0.0	+0.0	+0.0	9				99
			+0.0	+0.0	+0.0						
^	66.716M	59.4	+6.5	+0.1	+0.2	+0.4	+0.0	39.4	40.0	-0.6	Vert
			-27.2	+0.0	+0.0	+0.0	9				99
			+0.0	+0.0	+0.0						
24	35.690M	43.1	+17.1	+0.0	+0.2	+0.4	+0.0	33.6	40.0	-6.4	Vert
	QP		-27.2	+0.0	+0.0	+0.0	367				99
			+0.0	+0.0	+0.0						
^	35.686M	46.8	+17.1	+0.0	+0.2	+0.4	+0.0	37.3	40.0	-2.7	Vert
			-27.2	+0.0	+0.0	+0.0	367				99
			+0.0	+0.0	+0.0						
26	158.283M	51.4	+11.1	+0.2	+0.2	+0.8	+0.0	36.5	43.5	-7.0	Vert
	QP		-27.2	+0.0	+0.0	+0.0	258				99
			+0.0	+0.0	+0.0						
^	158.288M	56.1	+11.1	+0.2	+0.2	+0.8	+0.0	41.2	43.5	-2.3	Vert
			-27.2	+0.0	+0.0	+0.0	258				99
			+0.0	+0.0	+0.0						

28	4809.939M Ave	42.6	+0.0 +0.0 +3.6	+0.0 +33.1 -34.9	+0.0 +0.5 +0.4	+0.0 +1.1 129	+0.0	46.4	54.0 Ch1	-7.6	Vert 127
^	4809.942M	44.6	+0.0 +0.0 +3.6	+0.0 +33.1 -34.9	+0.0 +0.5 +0.4	+0.0 +1.1 129	+0.0	48.4	54.0 Ch1	-5.6	Vert 127
30	160.937M	50.8	+10.9 -27.2 +0.0	+0.2 +0.0 +0.0	+0.2 +0.0 +0.0	+0.8 +0.0 154	+0.0	35.7	43.5	-7.8	Horiz 196
31	4809.931M Ave	41.3	+0.0 +0.0 +3.6	+0.0 +33.1 -34.9	+0.0 +0.5 +0.4	+0.0 +1.1 242	+0.0	45.1	54.0 Ch1	-8.9	Horiz 108
^	4809.838M	44.3	+0.0 +0.0 +3.6	+0.0 +33.1 -34.9	+0.0 +0.5 +0.4	+0.0 +1.1 240	+0.0	48.1	54.0 Ch1	-5.9	Horiz 108
33	4849.938M Ave	40.6	+0.0 +0.0 +3.7	+0.0 +33.2 -35.0	+0.0 +0.6 +0.4	+0.0 +1.2 133	+0.0	44.7	54.0 Ch5	-9.3	Vert 127
^	4849.958M	43.1	+0.0 +0.0 +3.7	+0.0 +33.2 -35.0	+0.0 +0.6 +0.4	+0.0 +1.2 133	+0.0	47.2	54.0 Ch5	-6.8	Vert 127
35	4899.936M Ave	40.2	+0.0 +0.0 +3.7	+0.0 +33.3 -35.0	+0.0 +0.7 +0.4	+0.0 +1.2 121	+0.0	44.5	54.0 Ch10	-9.5	Vert 127
^	4899.958M	42.3	+0.0 +0.0 +3.7	+0.0 +33.3 -35.0	+0.0 +0.7 +0.4	+0.0 +1.2 121	+0.0	46.6	54.0 Ch10	-7.4	Vert 127
37	4849.927M Ave	39.3	+0.0 +0.0 +3.7	+0.0 +33.2 -35.0	+0.0 +0.6 +0.4	+0.0 +1.2 245	+0.0	43.4	54.0 Ch5	-10.6	Horiz 108
^	4849.920M	42.1	+0.0 +0.0 +3.7	+0.0 +33.2 -35.0	+0.0 +0.6 +0.4	+0.0 +1.2 245	+0.0	46.2	54.0 Ch5	-7.8	Horiz 108
39	4899.933M Ave	38.6	+0.0 +0.0 +3.7	+0.0 +33.3 -35.0	+0.0 +0.7 +0.4	+0.0 +1.2 245	+0.0	42.9	54.0 Ch10	-11.1	Horiz 104
^	4899.981M	41.4	+0.0 +0.0 +3.7	+0.0 +33.3 -35.0	+0.0 +0.7 +0.4	+0.0 +1.2 245	+0.0	45.7	54.0 Ch10	-8.3	Horiz 104
41	578.605k Ave	28.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.1 +0.0 +9.8	-20.0 300	17.9	32.3	-14.4	Vert 100
^	578.688k	41.3	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.1 +0.0 +9.8	-20.0 300	31.2	32.3	-1.1	Vert 100

43	373.800k Ave	30.8	+0.0 +0.0 +0.0	+0.1 +0.0 +0.0	+0.0 +0.0 +0.0	+0.1 +0.0 +9.7	-40.0 285	0.7	16.1	-15.4	Vert 100
^	373.691k	42.9	+0.0 +0.0 +0.0	+0.1 +0.0 +0.0	+0.0 +0.0 +0.0	+0.1 +0.0 +9.7	-40.0 285	12.8	16.2	-3.4	Vert 100
45	450.903k Ave	29.4	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.1 +0.0 +9.6	-40.0 182	-0.9	14.5	-15.4	Horiz 100
^	450.955k	40.8	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.1 +0.0 +9.6	-40.0 182	10.5	14.5	-4.0	Horiz 100
47	421.886k Ave	29.7	+0.0 +0.0 +0.0	+0.1 +0.0 +0.0	+0.0 +0.0 +0.0	+0.1 +0.0 +9.7	-40.0 194	-0.4	15.1	-15.5	Vert 100
^	421.806k	42.3	+0.0 +0.0 +0.0	+0.1 +0.0 +0.0	+0.0 +0.0 +0.0	+0.1 +0.0 +9.7	-40.0 194	12.2	15.1	-2.9	Vert 100
49	409.150k Ave	30.0	+0.0 +0.0 +0.0	+0.1 +0.0 +0.0	+0.0 +0.0 +0.0	+0.1 +0.0 +9.7	-40.0 15	-0.1	15.4	-15.5	Horiz 100
^	409.301k	42.0	+0.0 +0.0 +0.0	+0.1 +0.0 +0.0	+0.0 +0.0 +0.0	+0.1 +0.0 +9.7	-40.0 15	11.9	15.4	-3.5	Horiz 100
51	361.044k Ave	30.9	+0.0 +0.0 +0.0	+0.1 +0.0 +0.0	+0.0 +0.0 +0.0	+0.1 +0.0 +9.7	-40.0 88	0.8	16.5	-15.7	Horiz 100
^	361.001k	42.9	+0.0 +0.0 +0.0	+0.1 +0.0 +0.0	+0.0 +0.0 +0.0	+0.1 +0.0 +9.7	-40.0 88	12.8	16.5	-3.7	Horiz 100

FCC 15.247(e) – PEAK POWER SPECTRAL DENSITY

Test Setup Photos



Test Data Sheets

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

Customer: **Zylight LLC**
 Specification: **FCC 15.247(e) PSD-dBuV**
 Work Order #: **88886** Date: 12/11/2008
 Test Type: **Power Spectral Density** Time: 15:31:24
 Equipment: **LED Camera Light with wireless connectivity** Sequence#: 31
 Manufacturer: Zylight LLC Tested By: Art Rice
 Model: Z90
 S/N: 30000

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A Spectrum Analyzer	US44300408	03/05/2007	03/05/2009	02668
Cable HF FSJ1P-50A-4	HOL-HF-025-06	05/06/2008	05/06/2010	P05138
Cable, HF	n/a	05/06/2008	05/06/2010	P04241
Preamp, HP83017A	3123A00283	05/16/2007	05/16/2009	00785
Antenna, Horn 1-18 GHz	1064	03/19/2007	03/19/2009	02061
HF Cable		03/27/2007	03/27/2009	01952

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
LED Camera Light with wireless connectivity*	Zylight LLC	Z90	30000

Support Devices:

Function	Manufacturer	Model #	S/N
Power supply	CINCON	TR36A-12	36120-0016027

Test Conditions / Notes:

The EUT is placed on the test table supported by a 3.5cm thick styrofoam block. The EUT is in a normal position with the tripod thread facing down and the display at the top. The power supply is placed on the floor. Transmitting continuously with modulation. Ch1=2405MHz, Ch5=2425MHz, Ch10=2450MHz. RBW=3 kHz VBW=9 kHz sweep=100s. Frequency range 2404-2451 MHz.

Transducer Legend:

T1=ANT AN02061 900MHz-18.5GHz	T2=Cable P01952 2'
T3=CAB-ANP04241-050608	T4=CAB-ANP05138-050608
T5=AMP-AN00785-051607	

Ext Attn: 0 dB

Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

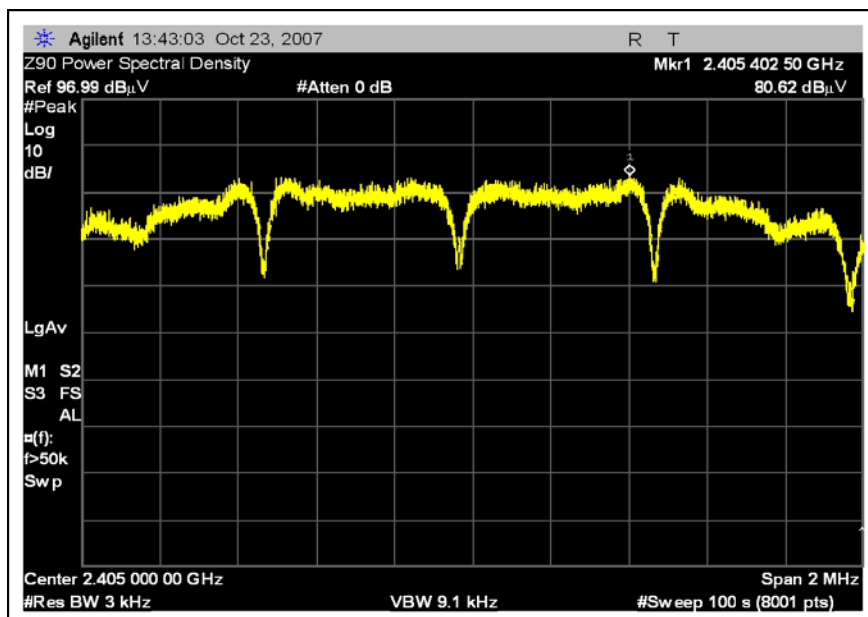
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dBμV	T5 dB	dB	dB	dB	Table	dBμV	dBμV	dB	Ant
1	2425.079M	80.8	+28.5 -36.3	+0.3	+0.8	+2.5	+10.0 241	86.6	115.0 Ch5	-28.4	Horiz 101
2	2405.403M	80.6	+28.5 -36.3	+0.3	+0.8	+2.4	+10.0 241	86.3	115.0 Ch1	-28.7	Horiz 101
3	2449.533M	80.4	+28.5 -36.3	+0.3	+0.8	+2.5	+10.0 241	86.2	115.0 Ch10	-28.8	Horiz 101

15.247(e) Power Spectral Density

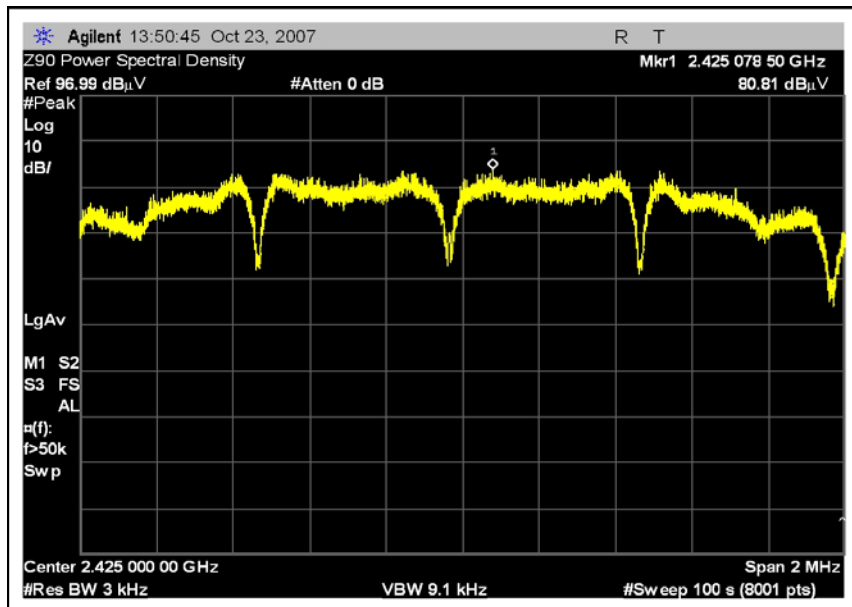
Frequency (MHz)	Power Spectral Density (dBm)	Pass/Fail
2405	-22.2	Pass
2425	-21.9	Pass
2450	-22.3	Pass

Plots

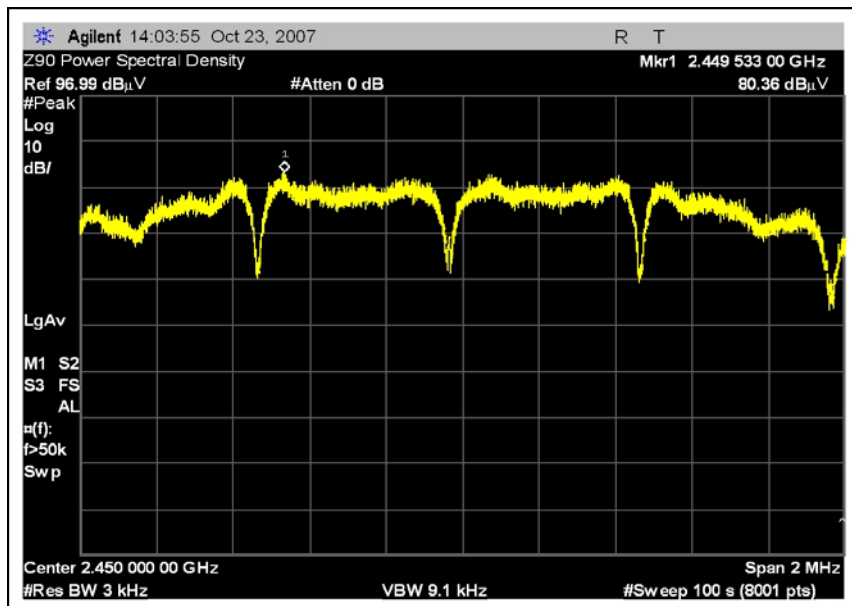
FCC 15.247(e) PEAK POWER SPECTRAL DENSITY CHANNEL 1



FCC 15.247(e) PEAK POWER SPECTRAL DENSITY CHANNEL 5



FCC 15.247(e) PEAK POWER SPECTRAL DENSITY CHANNEL 10



RSS-210 – 99% BANDWIDTH

Test Setup Photos



Test Data Sheets

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

Customer: **Zylight LLC**

Specification:

Work Order #: **88886**

Date: 12/8/2008

Test Type: **Occupied Bandwidth**

Time: 16:37:39

Equipment: **LED Camera Light with wireless connectivity**

Sequence#: 5

Manufacturer: Zylight LLC

Tested By: Art Rice

Model: Z90

S/N: 30000

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A Spectrum Analyzer	US44300408	03/05/2007	03/05/2009	02668
Cable HF FSJ1P-50A-4	HOL-HF-025-06	05/06/2008	05/06/2010	P05138
Cable, HF	n/a	05/06/2008	05/06/2010	P04241
Preamplifier, HP83017A	3123A00283	05/16/2007	05/16/2009	00785
Antenna, Horn 1-18 GHz	1064	03/19/2007	03/19/2009	02061
HF Cable		03/27/2007	03/27/2009	01952

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
LED Camera Light with wireless connectivity*	Zylight LLC	Z90	30000

Support Devices:

Function	Manufacturer	Model #	S/N
Power supply	CINCON	TR36A-12	36120-0016027

Test Conditions / Notes:

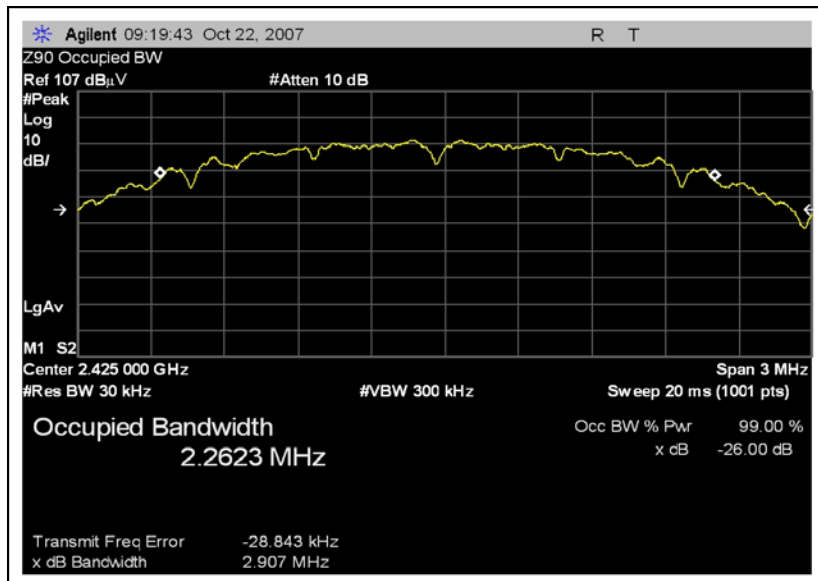
The EUT is placed on the test table supported by a 3.5cm thick styrofoam block. The EUT is in a normal position with the tripod thread facing down and the display at the top. The power supply is placed on the floor. Transmitting continuously with modulation. Ch1=2405MHz, Ch5=2425MHz, Ch10=2450MHz. RBW=30 kHz VBW=300 kHz.

Test Plots

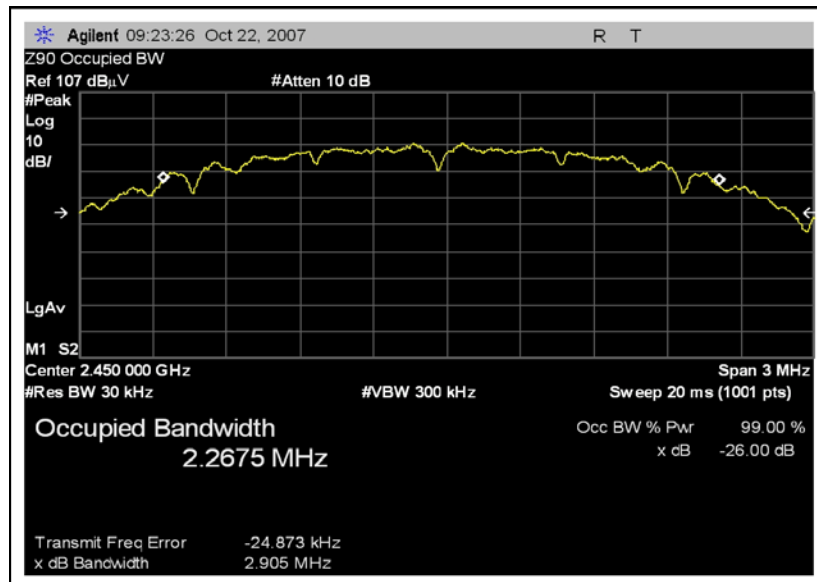
RSS-210 99% BANDWIDTH CHANNEL 1



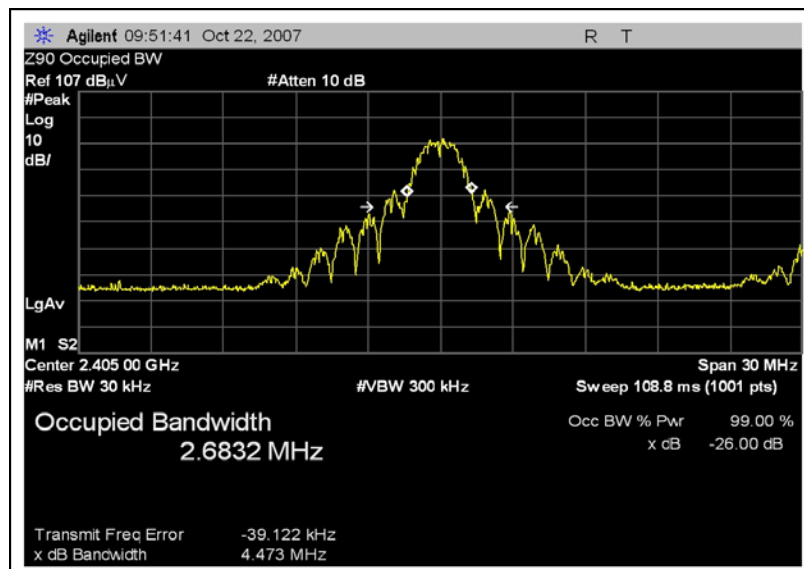
RSS-210 99% BANDWIDTH CHANNEL 5



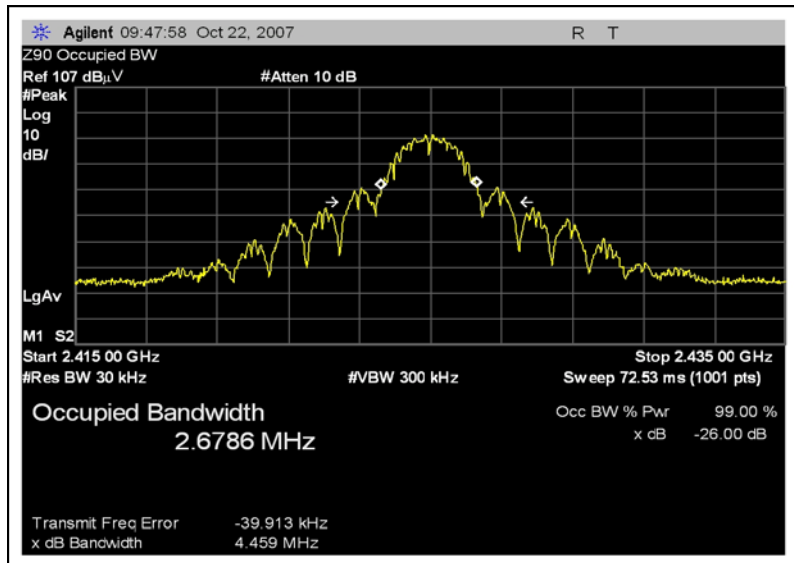
RSS-210 99% BANDWIDTH CHANNEL 11



RSS-210 99% BANDWIDTH 20M SPAN CHANNEL 1



RSS-210 99% BANDWIDTH 20M SPAN CHANNEL 5



RSS-210 99% BANDWIDTH 20M SPAN CHANNEL 11

