

FCC PART 15, SUBPART B and C SECTION 15.247 TEST REPORT

for

PHOTOGRAPHIC FLASH CONTROLLER

MODEL: PX FCC ID: V4TRPPXTX506

Prepared for

LEAP DEVICES, LLC 20987 N. JOHN WAYNE PKWY. MARICOPA, AZ 805239

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DATE: JANUARY 20, 2009

	REPORT		APPENDICES				TOTAL
	BODY	A	В	C	D	E	
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GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Compatible Electronics Inc., which is an independent testing and consulting firm. The test report is based on testing performed by Compatible Electronics personnel according to the measurement procedures described in the test specifications given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced without the written permission of Compatible Electronics, unless done so in full.

This report must not be used to claim product endorsement by NVLAP, NIST or any other agency of the U.S. Government.

Device Tested: Photographic Flash Controller

Model: PX S/N: N/A

Product Description: This is a portable Photographic Flash Controller.

Modifications: The EUT was not modified during the testing in order to comply with specifications.

Manufacturer: Leap Devices, LLC

20987 N. John Wayne Pkwy.

Maricopa, AZ 85239

Test Dates: Dec. 10, 12, 15 & 18, 2008

Test Specifications: EMI requirements

CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.31, 15.205, 15.209, and 15.247

Test Procedure: ANSI C63.4: 2003

Test Deviations: The test procedure was not deviated from during the testing.



SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Spurious Radiated RF Emissions, 30 MHz – 1000 MHz	Complies with the Class B limits of CFR Title 47, Part 15, Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, section 15.209
2	Spurious Radiated RF Emissions, 9 kHz – 30 MHz and 1000 MHz – 10000 MHz	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.247(c)
3	Fundamental and Emissions produced by the intentional radiator in non-restricted bands, 9 kHz – 10 GHz	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.247(c)
4	Emissions produced by the intentional radiator in restricted bands, 9 kHz – 10 GHz	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.205, 15.209(a), and section 15.247 (c)
5	6 dB Bandwidth	Complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.247 (a)(2)
6	Peak Power Output	Complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.247 (b)(3)
7	RF Conducted Antenna Test	Complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.247 (d)
8	Power Spectral Density	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.247 (e)





1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the Photographic Flash Controller, Model: PX. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4: 2003. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the Class B specification limits defined by CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.31, 15.205, 15.209, and 15.247.

Note: For the unintentional radiator portion of the test, the EUT was within the **Class B** specification limits defined by CFR Title 47, Part 15, Subpart B.

FCC Part 15 Subpart B and FCC Section 15.247

Photographic Flash Controller

Model: PX

2. ADMINISTRATIVE DATA

2.1 Location of Testing

The EMI tests described herein were performed at the test facility of Compatible Electronics, 2337 Troutdale Drive, Agoura, California 91301.

2.2 Traceability Statement

The calibration certificates of all test equipment used during the test are on file at the location of the test. The calibration is traceable to the National Institute of Standards and Technology (NIST).

2.3 Cognizant Personnel

Leap Devices, LLC

Kevin King Owner/Engineer

Compatible Electronics, Inc.

Reynald O. Ramirez Sr. Test Engineer

Ruby A. Hall Lab Manager – Agoura Division

2.4 Date Test Sample was Received

December 10, 2008

2.5 Disposition of the Test Sample

The sample has not been returned to Leap Devices, LLC as of the date of this report.

2.6 Abbreviations and Acronyms

The following abbreviations and acronyms may be used in this document.

RF Radio Frequency

EMI Electromagnetic Interference EUT Equipment Under Test

P/N Part Number

S/N Serial Number
HP Hewlett Packard

ITE Information Technology Equipment

CML Corrected Meter Limit

LISN Line Impedance Stabilization Network



3. APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this EMI Test Report.

SPEC	TITLE
FCC Title 47, Part 15 Subpart C	FCC Rules - Radio frequency devices (including digital devices) – Intentional Radiators
ANSI C63.4 2003	Methods of measurement of radio-noise emissions from low-voltage electrical and electronic equipment in the range of 9 kHz to 40 GHz
FCC Title 47, Part 15 Subpart B	FCC Rules - Radio frequency devices (including digital devices) – Unintentional Radiators
FCC Public Notice – DA 00-705	Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum Systems



4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration - EMI

The Photographic Flash Controller, Model: PX (EUT) was set up on a tabletop configuration. In this setup, the EUT was tested in the X, Y and Z axis. During operation, the transmitter was programmed in a continual loop which causes all circuitry to continually operate at max duty cycle possible during actual intended use.

For the unintentional radiator portion of the test – The EUT was placed on the OATS table and was operating in stand by (receive) mode.

For the intentional radiation portion of the test – The EUT was placed on the OATS table and was operating in transmitting mode.

The final radiated as well as the conducted data was taken in the mode above. Please see Appendix E for the data sheets.

4.1.1 Photograph of Test Configuration - EMI





Photographic Flash Controller

Model: PX

4.1.2 Cable Construction and Termination

The EUT had no cables.



FCC Part 15 Subpart B and FCC Section 15.247

Photographic Flash Controller Model: PX

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

#	EQUIPMENT TYPE	MANUFACTURER	MODEL	SERIAL NUMBER	FCC ID
1	PHOTOGRAPHIC FLASH CONTROLLER. (EUT)	LEAP DEVICES, LLC	PX	N/A	V4TRPPXTX506



5.2 EMI TEST EQUIPMENT

EQUIPMENT TYPE	MANU- FACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. DUE DATE
EMI Receiver	Rohde & Schwarz	ESIB-40	100218	Feb. 28, 2008	Feb. 28, 2009
Preamplifier	Com Power	PA-103	1619	Oct. 22, 2008	Oct 22, 2009
Biconical Antenna	Com Power	AB-900	15283	Oct. 21, 2008	Oct. 21, 2009
Log Periodic Antenna	Com Power	AL-100	16200	Oct. 21, 2008	Oct. 21, 2009
Antenna Mast	Com Power	AM-400	N/A	N/A	N/A
EM Loop Antenna	Com-Power	AL-130	17067	Sep. 09, 2008	Sep. 09, 2009
Horn Antenna	A.R.A	DRG-118	1015	Jul. 07, 2008	Jul. 07, 2010
Turntable	Com Power	TT-112A	N/A	N/A	N/A
EMI Application Software	Rohde & Schwarz	ESIB-K1	1.20	N/A	N/A
Computer	Hewlett Packard	Pavilion 4530	US91912022	N/A	N/A
Printer	Hewlett Packard	C6427B	MY066160TW	N/A	N/A



6. TEST SITE DESCRIPTION

6.1 **Test Facility Description**

Please refer to section 2.1 of this report for EMI test location.

6.2 EUT Mounting, Bonding and Grounding

The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane.

The EUT was not grounded.



Photographic Flash Controller
Model: PX

7. CHARACTERISTICS OF THE TRANSMITTER

7.1 Transmitter Power

Transmit power is herein defined as the power delivered to a 50 Ohm load at the RF output of the EUT. The test sample had one output power level per channel. They are the following:

CHANNEL	OUTPUT	POWER dBm	ACCURACY
Low	1	8.60	+2/-2 dB
Medium	1	8.36	+2/-2 dB
High	1	8.11	+2/-2 dB



8. TEST PROCEDURES

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

8.1 RF Emissions

8.1.1 Radiated Emissions (Spurious and Harmonics) Test

The EMI Receiver was used as a measuring meter. Amplifiers were used to increase the sensitivity of the instrument. The Com Power Preamplifier Model: PA-103 was used for frequencies from 30 MHz to 1 GHz, and the Com-Power Microwave Preamplifier Model: PA-122 was used for frequencies above 1 GHz. The EMI Receiver was used in the peak detect mode with the "Max Hold" feature activated. In this mode, the spectrum analyzer records the highest measured reading over all the sweeps.

The quasi-peak adapter was used only for those readings which are marked accordingly on the data sheets.

The frequencies above 1 GHz were averaged manually by narrowing the video filter down to 10 Hz and setting the sweep time on AUTO on the EMI Receiver to keep the amplitude reading calibrated.

The measurement bandwidths and transducers used for the radiated emissions test were:

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER
9 kHz to 150 kHz	200 Hz	Active Loop Antenna
150 kHz to 30 MHz	9 kHz	Active Loop Antenna
30 MHz to 300 MHz	120 kHz	Biconical Antenna
300 MHz to 1 GHz	120 kHz	Log Periodic Antenna
1 GHz to 10 GHz	1 MHz	Horn Antenna

The open field test site of Compatible Electronics, Inc. was used for radiated emission testing. This test site is set up according to ANSI C63.4: 2003. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst - case (highest emission) configuration of the EUT by the Radiated Emission Manual Test software. At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength). The gunsight method was used when measuring with the horn antenna in order to ensure accurate results. The loop antenna was also rotated in the horizontal and vertical axis in order to ensure accurate results.



Photographic Flash Controller

Model: PX

Radiated Emissions (Spurious and Harmonics) Test (con't)

The presence of ambient signals was verified by turning the EUT off. In case an ambient signal was detected, the measurement bandwidth was reduced temporarily and verification was made that an additional adjacent peak did not exist. This ensures that the ambient signal does not hide any emissions from the EUT. The EUT was tested at a 3 meter test distance from 9 kHz to 10 GHz to obtain final test data.

The harmonics of the transmitter frequency in the applicable restricted band were also measured utilizing the method mentioned above. See appendix E for datasheets.

FCC Part 15 Subpart B and FCC Section 15.247

Photographic Flash Controller

Model: PX

8.2 6 dB Bandwidth

The 6 dB Bandwidth was measured using the EMI Receiver. The bandwidth was measured using a direct connection from the RF out on the EUT. The resolution and video bandwidths were >= 1% of the 6 dB bandwidth.

Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.247 (a)(2). The bandwidth is at least 500 kHz. Please see the data sheets located in Appendix E.

8.3 Peak Output Power

The Peak Output Power was taken using the EMI Receiver. The Peak Output Power was measured using a direct connection from the RF out on the EUT. The resolution bandwidth was 3 MHz, and the video bandwidth was 10 MHz.

Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.247 (b)(3). The maximum peak output power is less than 1 watt. Please see the data sheets located in Appendix E.

8.4 RF Antenna Conducted Test

The RF antenna conducted test was taken using the EMI Receiver. The RF antenna conducted test was measured using a direct connection from the RF out on the EUT into the input of the analyzer. The resolution bandwidth was 100 kHz, and the video bandwidth 300 kHz. The spans were wide enough to include all the harmonics and emissions that were produced by the intentional radiator.

Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.247 (d). The RF power that is produced by the intentional radiator is at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of desired power. Please see the data sheets located in Appendix E.

8.5 Power Spectral Density Test

The Power Spectral Density test was taken using the Spectrum Analyzer. The Power Spectral Density was measured using a direct connection from the RF out on the EUT. The resolution bandwidth was 3 kHz, and the video bandwidth was 10 kHz.

Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.247 (e). Please see the data sheets located in Appendix E.



Photographic Flash Controller Model: PX

9. CONCLUSIONS

The Photographic Flash Controller, Model: PX meets all of the specification limits defined in FCC Title 47, Part 15, Subpart C, sections 15.31, 15.205, 15.209, and 15.247.

Note: For the unintentional radiator portion of the test, the EUT was within the <u>Class B specification</u> <u>limits defined in CFR Title 47, Part 15, Subpart B.</u>



APPENDIX A

LABORATORY ACCREDITATIONS



LABORATORY ACCREDITATIONS AND RECOGNITIONS



For US, Canada, Australia/New Zealand, Taiwan and the European Union, Compatible Electronics is currently accredited by NVLAP to ISO/IEC 17025 an ISO 9002 equivalent. Please follow the link to the NIST site for each of our facilities NVLAP certificate and scope of accreditation.

Silverado/Lake Forest Division: http://ts.nist.gov/ts/htdocs/210/214/scopes/2005270.htm

Brea Division: http://ts.nist.gov/ts/htdocs/210/214/scopes/2005280.htm
Agoura Division: http://ts.nist.gov/ts/htdocs/210/214/scopes/2000630.htm



Compatible Electronics has been accredited by ANSI and appointed by the FCC to serve as a Telecommunications Certification Body (TCB). Compatible Electronics ANSI TCB listing can be found at: http://www.ansi.org/public/ca/ansi cp.html



Compatible Electronics has been nominated as a Conformity Assessment Body (CAB) for EMC under the US/EU Mutual Recognition Agreement (MRA). Compatible Electronics NIST US/EU CAB listing can be found at: http://ts.nist.gov/ts/htdocs/210/gsig/emc-cabs-mar02.pdf



Compatible Electronics has been nominated as a Conformity Assessment Body (CAB) for Taiwan/BSMI under the US/APEC (Asia-Pacific Economic Cooperation) Mutual Recognition Agreement (MRA). Compatible Electronics NIST US/APEC CAB listing can be found at: http://ts.nist.gov/ts/htdocs/210/gsig/apec/bsmi-cabs-may02.pdf



Compatible Electronics has been validated by NEMKO against ISO/IEC 17025 under the NEMKO EMC Laboratory Authorization (ELA) program to all EN standards required by the European Union (EU) EMC Directive 2004/108/EC. Please follow the link to the Compatible Electronics' web site for each of our facilities NEMKO ELA certificate and scope of accreditation. http://www.celectronics.com/certs.htm

We are also certified/listed for IT products by the following country/agency:



Compatible Electronics VCCI listing can be found at: http://www.vcci.or.jp/vcci_e/member/tekigo/setsubi_index_id.html

Just type "Compatible Electronics" into the Keyword search box.



Compatible Electronics FCC listing can be found at: https://gullfoss2.fcc.gov/prod/oet/index_ie.html

Just type "Compatible Electronics" into the Test Firms search box.



Compatible Electronics IC listing can be found at: http://spectrum.ic.gc.ca/~cert/labs/oats lab c e.html



APPENDIX B

MODIFICATIONS TO THE EUT



MODIFICATIONS TO THE EUT

There were no modifications made to the EUT during the test.



APPENDIX C

ADDITIONAL MODELS COVERED UNDER THIS REPORT



ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST PHOTOGRAPHIC FLASH CONTROLLER

Model: PX S/N: N/A

THERE WERE NO ADDITIONAL MODELS COVERED UNDER THIS REPORT



APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS



FIGURE 1: CONDUCTED EMISSIONS TEST SETUP

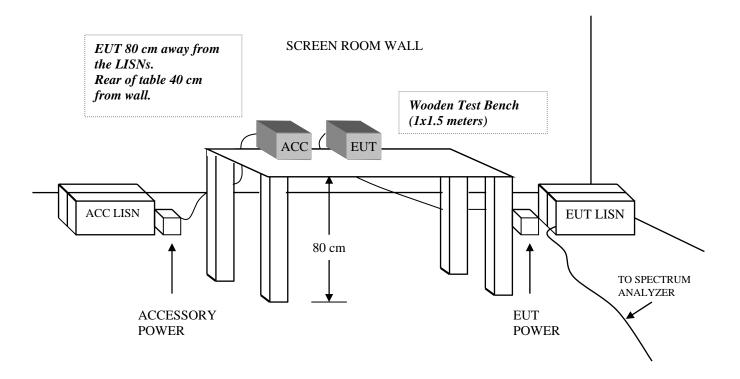
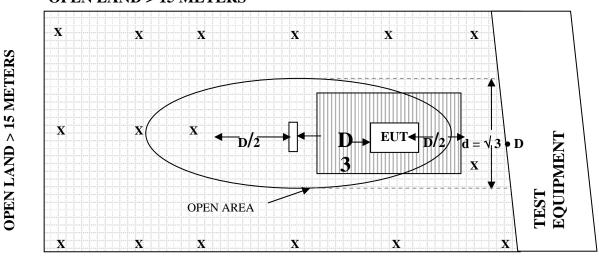


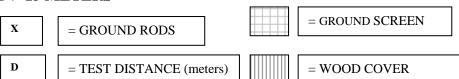


FIGURE 2: PLOT MAP AND LAYOUT OF RADIATED SITE

OPEN LAND > 15 METERS



OPEN LAND > 15 METERS





COM-POWER AL-130

ACTIVE LOOP ANTENNA

S/N: 17067

CALIBRATION DATE: SEPTEMBER 29, 2008

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
0.009	10.53	1	10.47
0.01	9.94	2	10.80
0.02	9.57	3	10.50
0.03	11.14	4	10.40
0.04	10.84	5	11.00
0.05	9.40	6	11.10
0.06	10.00	7	11.80
0.07	9.80	8	10.60
0.08	9.50	9	10.80
0.09	9.67	10	10.70
0.1	9.67	15	9.73
0.2	7.30	20	10.40
0.3	9.77	25	9.30
0.4	9.70	30	8.60
0.5	9.80		
0.6	10.17		
0.7	9.97		
0.8	10.07		
0.9	10.14		



COM-POWER AB-900

BICONICAL ANTENNA

S/N: 15283

CALIBRATION DATE: OCT. 21, 2008

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	10.90	120	11.90
35	9.40	125	11.58
40	8.80	140	10.60
45	9.30	150	10.80
50	8.20	160	11.00
55	7.90	175	14.30
60	7.60	180	15.40
65	7.10	200	15.70
70	6.60	225	15.25
80	5.30	250	14.80
90	5.70	275	18.80
100	9.30	300	18.50



COM-POWER AL-100

LOG PERIODIC ANTENNA

S/N: 16200

CALIBRATION DATE: OCT. 21, 2008

FREQUENCY	FACTOR	FREQUENCY	FACTOR
(MHz)	(dB)	(MHz)	(dB)
300	17.50	650	20.20
330	17.80	700	20.30
340	17.90	725	20.60
350	18.00	750	20.90
360	18.10	800	21.50
370	18.20	850	21.80
400	18.50	900	22.10
425	18.95	925	22.50
450	19.40	950	22.90
500	20.30	975	23.30
550	20.20	1000	23.70
600	20.10		



DRG-118/A

DOUBLE RIDGE HORN ANTENNA

S/N: 1015

CALIBRATION DATE: JULY 31, 2008

FREQUENCY	FACTOR	FREQUENCY	FACTOR
(MHz)	(dB)	(MHz)	(dB)
1000	24.2	10000	39.1
1500	25.1	10500	40.0
2000	27.8	11000	39.5
2500	28.3	11500	39.9
3000	30.3	12000	40.1
3500	30.4	12500	40.9
4000	30.7	13000	39.7
4500	31.2	13500	40.5
5000	33.1	14000	41.2
5500	33.3	14500	42.8
6000	33.9	15000	41.8
6500	34.7	15500	38.8
7000	36.8	16000	39.1
7500	38.0	16500	39.1
8000	40.6	17000	41.0
8500	37.8	17500	43.5
9000	37.8	18000	45.0
9500	38.7		



COM-POWER PA-103

PREAMPLIFIER

S/N: 1619

CALIBRATION DATE: OCT. 22, 2008

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	31.5	300	31.3
40	31.5	350	31.1
50	31.5	400	31.4
60	31.4	450	30.9
70	31.5	500	31.2
80	31.5	550	30.9
90	31.5	600	30.7
100	31.4	650	31.1
125	31.5	700	30.5
150	31.6	750	30.5
175	31.3	800	30.7
200	31.6	850	30.0
225	31.5	900	30.4
250	31.5	950	30.1
275	31.2	1000	29.9



COM-POWER PA-122

PREAMPLIFIER

S/N: 181915

CALIBRATION DATE: APRIL 14, 2008

FREQUENCY	FACTOR	FREQUENCY	FACTOR
(MHz)	(dB)	(MHz)	(dB)
1000	32.2	7000	29.1
1100	32.4	7500	28.9
1200	32.1	8000	33.2
1300	31.7	8500	29.5
1400	31.6	9000	29.5
1500	32.0	9500	26.4
1600	31.5	10000	28.9
1700	31.9	11000	33.9
1800	30.9	12000	33.5
1900	31.4	13000	30.0
2000	30.9	14000	32.4
2500	31.2	15000	34.0
3000	31.5	16000	33.9
3500	31.8	17000	33.3
4000	31.4	18000	33.4
4500	32.7	19000	26.0
5000	32.7	20000	24.4
5500	28.9	21000	26.1
6000	26.6	22000	23.8
6500	29.1		





FRONT VIEW

LEAP DEVICES, LLC
PHOTOGRAPHIC FLASH CONTROLLER
MODEL: PX
FCC SUBPART B AND C - RADIATED EMISSIONS – DEC. 15, 2008

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS





REAR VIEW

LEAP DEVICES, LLC
PHOTOGRAPHIC FLASH CONTROLLER
MODEL: PX
FCC SUBPART B AND C - RADIATED EMISSIONS – DEC. 15, 2008

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



APPENDIX E

DATA SHEETS



Pol A

RADIATED EMISSIONS

COMPANY NAME : Leap Devices, LLC			DATE: 12/1	5/08	
EUT: Photographic Flash Controller			EUT	Γ S/N :_ N/A	1
EUT MODEL: PX	LOCAT	TON: ☐ BREA	□ SILVERA	DO X A	GOURA
SPECIFICATION: FCC 15.247	CLASS: B	TEST DISTANC	CE: 3 meters	LAB:	F
ANTENNA: X LOOP ☐ BICONICAL [□LOG □HORN	POLAR	IZATION:	□ VERT	□HORIZ
X QUALIFICATION □ ENGINEERING	☐ MFG. AUDIT	ENGINEER:	R. Ramirez		
NOTES:					

Pol B

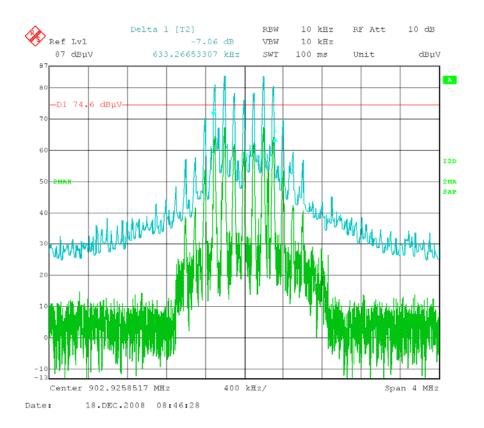
Frequency	Peak	Avg. □	Antenna	Azimuth	Antenna	Cable	Amplifier	* Corrected	Delta	Spec
	Reading	Q.P. □	Height		Factor	Loss	Gain	Reading	**	Limit
(MHz)	(dBuV)	(dBuV)	(meters)	(degrees)	(dB)	(dB)	(dB)	(dBuV)	(dB)	(dBuV)
9KHz- 30MHz								No frequencies found.		



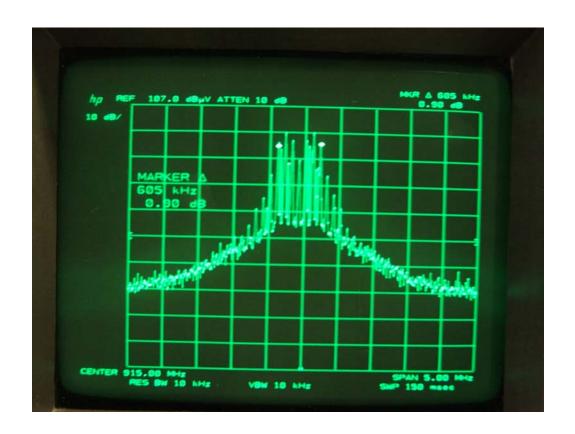
-6 dB BANDWIDTH

DATA SHEETS

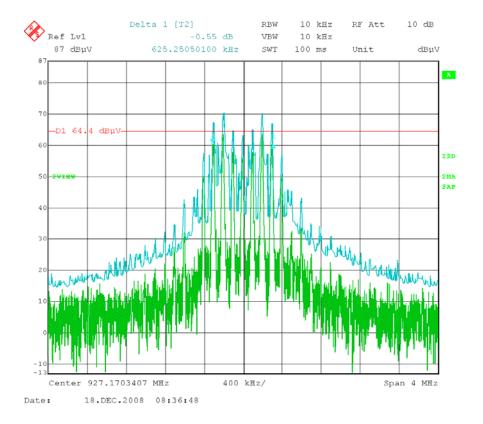








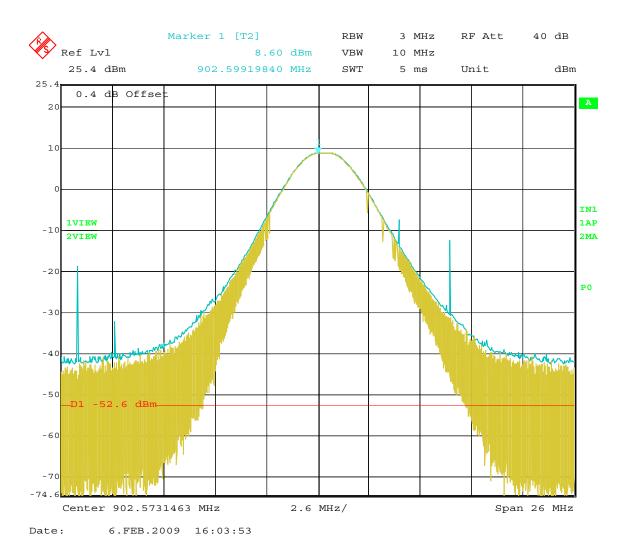




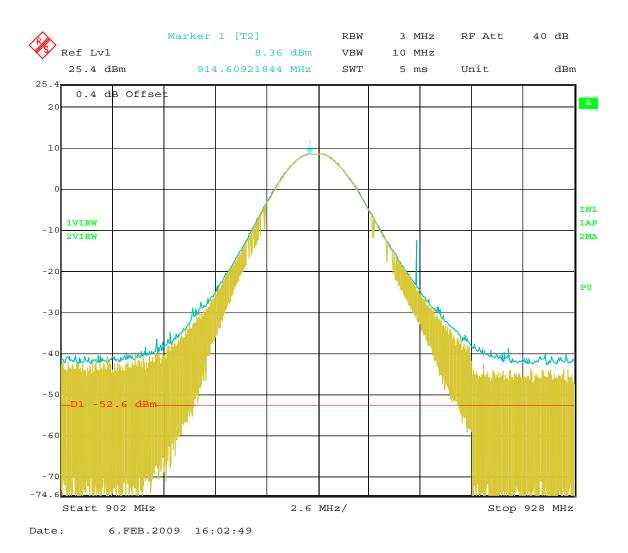


PEAK POWER OUTPUT

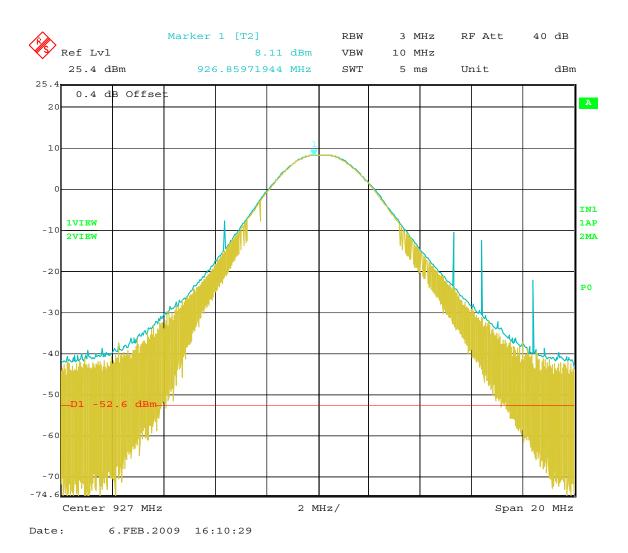
DATA SHEETS



Peak Power Output - Low Channel



Peak Power Output - Middle Channel



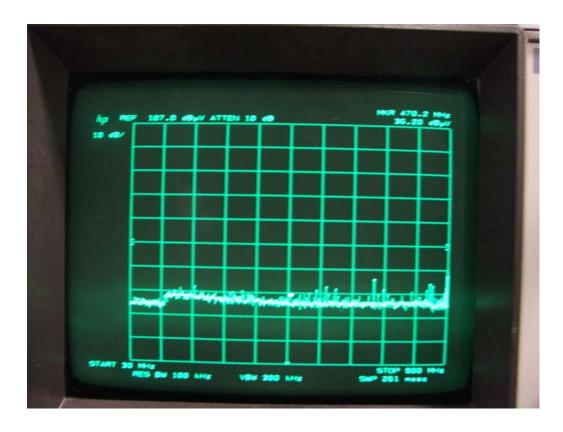
Peak Power Output – High Channel



RF CONDUCTED ANTENNA TEST

DATA SHEETS



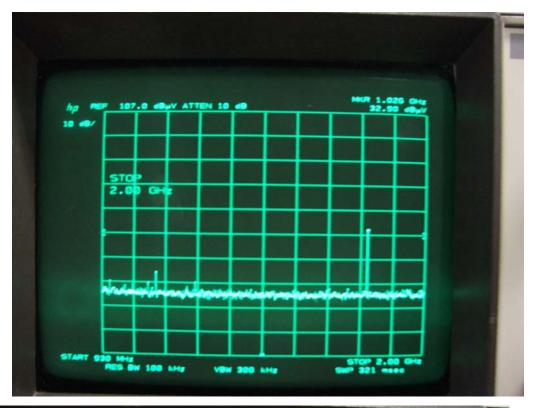


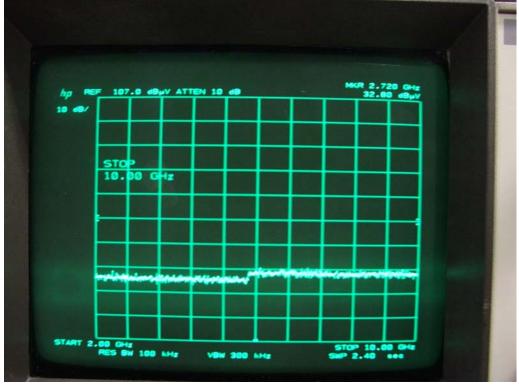


Brea Division 114 Olinda Drive Brea, CA 92823 (714) 579-0500

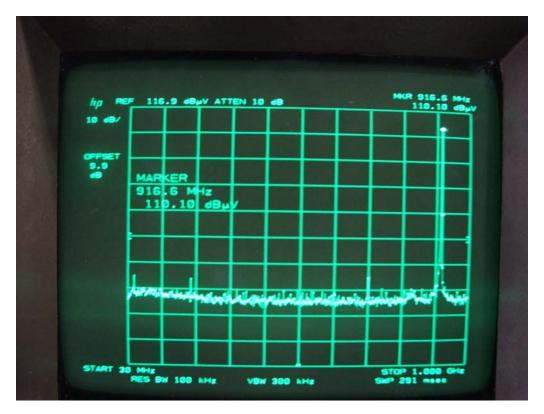
Agoura Division 2337 Troutdale Drive Agoura, CA 91301 (818) 597-0600

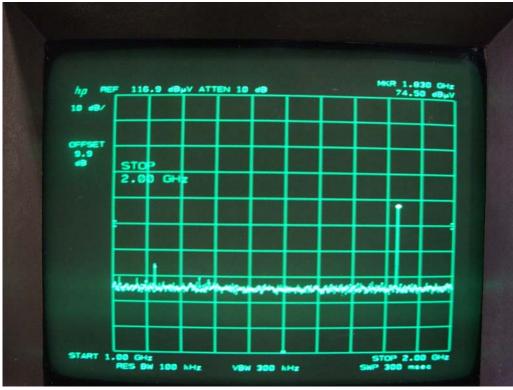




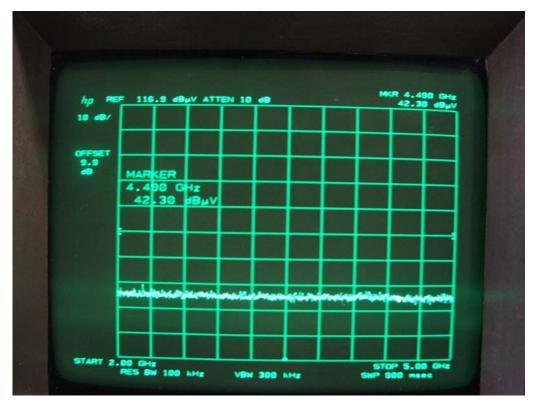


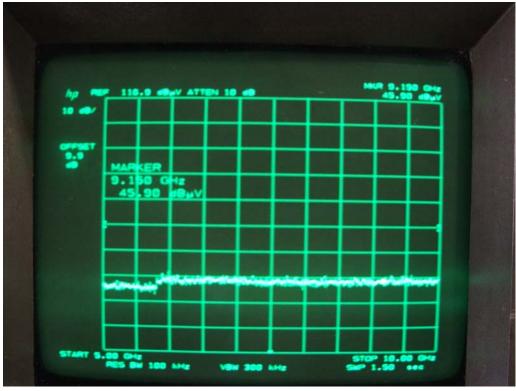




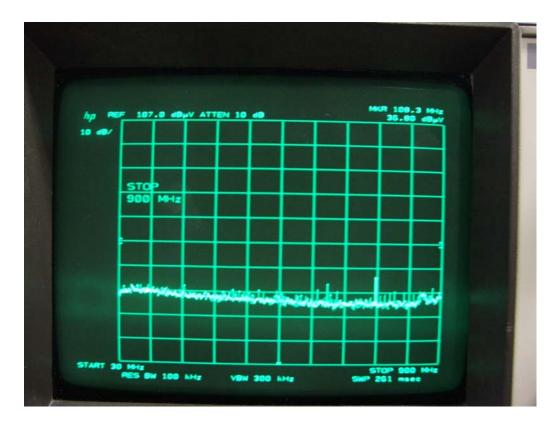






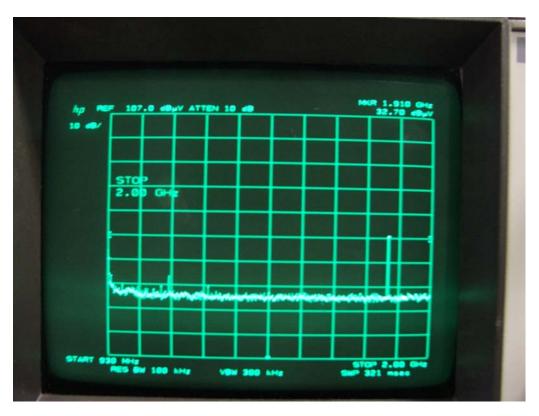












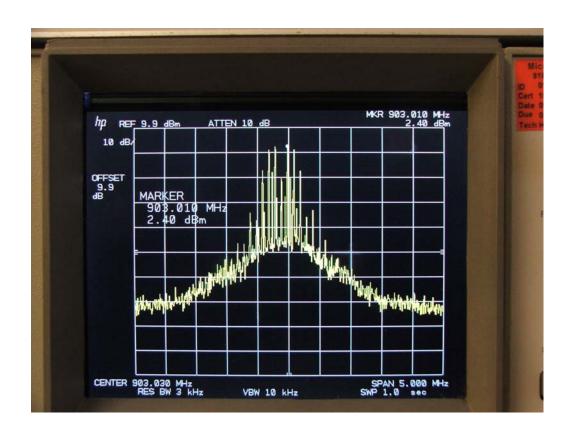




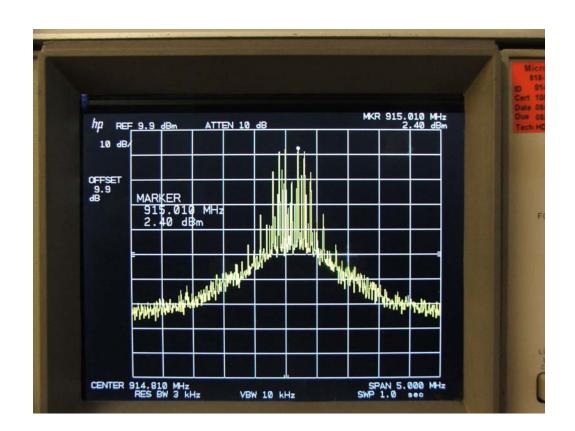
POWER SPECTRAL DENSITY

DATA SHEET

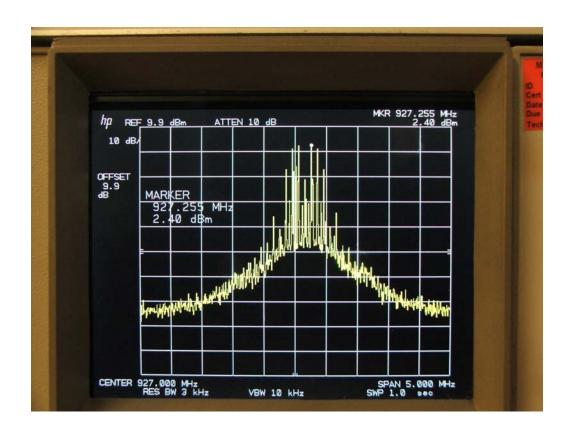












COMPANY	Leap Devices, LLC	DATE	12/10/2008	
EUT	Photographic Flash Controller	DUTY CYCLE	N/A	%
MODEL	PX	PEAK TO AVG	N/A	dB
S/N	N/A	TEST DIST.	3	Meters
TEST ENGINEER	Rey Ramirez	LAB	F	

Frequency	Peak Reading	Average (` '	Antenna Polar.	Antenna Height	EUT Azimuth	EUT Axis	EUT Tx	Antenna Factor	Cable Loss	Amplifier Gain	Distance Factor	Mixer Factor	*Corrected Reading	Delta **	Spec Limit	
MHz	(dBuV)	or Quas Peak (Ql			0	(degrees)			(dB)	(dB)	(dB)	(dB)	(dB)	(dBuV/m)	(dB)	(dBuV/m)	Comments
1805.8760	49.9	40.0	A	Н	1.0	180	X	LOW	26.8	7.0	30.9	0.0	0.0	42.8	-11.2	54.0	
1805.8760	51.5	42.0	A	Н	2.0	0	Y	LOW	26.8	7.0	30.9	0.0	0.0	44.8	-9.2	54.0	
1805.8760	50.7	40.0	A	Н	1.0	0	Z	LOW	26.8	7.0	30.9	0.0	0.0	42.8	-11.2	54.0	
1805.8760	54.8	47.0	A	V	1.0	180	X	LOW	26.8	7.0	30.9	0.0	0.0	49.8	-4.2	54.0	
1805.8760	53.1	43.0	A	V	1.0	0	Y	LOW	26.8	7.0	30.9	0.0	0.0	45.8	-8.2	54.0	
1805.8760	55.1	45.0	A	V	1.0	0	Z	LOW	26.8	7.0	30.9	0.0	0.0	47.8	-6.2	54.0	
1829.8000	47.1		A	Н	1.0	0	X	MED.	26.9	7.0	31.0	0.0	0.0	49.9	-4.1	54.0	
1829.8000	47.4		A	Н	1.0	90	Y	MED.	26.9	7.0	31.0	0.0	0.0	50.3	-3.7	54.0	
1829.8000	48.9	32.0	A	Н	1.0	270	Z	MED.	26.9	7.0	31.0	0.0	0.0	34.8	-19.2	54.0	
1829.8000	55.2	48.0	A	V	1.0	0	X	MED.	26.9	7.0	31.0	0.0	0.0	50.8	-3.2	54.0	
1829.8000	48.7	41.0	A	V	1.0	0	Y	MED.	26.9	7.0	31.0	0.0	0.0	43.8	-10.2	54.0	
1829.8000	50.0	42.0	A	V	1.0	180	Z	MED.	26.9	7.0	31.0	0.0	0.0	44.8	-9.2	54.0	
1854.3260	48.0		A	Н	1.0	0	X	HIGH	27.0	7.0	31.2	0.0	0.0	50.8	-3.2	54.0	
1854.3260	51.0	40.0	A	Н	2.0	90	Y	HIGH	27.0	7.0	31.2	0.0	0.0	42.8	-11.2	54.0	
1854.3260	48.0	36.0	A	Н	2.0	90	Z	HIGH	27.0	7.0	31.2	0.0	0.0	38.8	-15.2	54.0	
1854.3260	53.0	40.0	A	V	1.0	90	X	HIGH	27.0	7.0	31.2	0.0	0.0	42.8	-11.2	54.0	
1854.3260	50.0	39.0	A	V	1.0	0	Y	HIGH	27.0	7.0	31.2	0.0	0.0	41.8	-12.2	54.0	
1854.3260	49.0	35.0	A	V	1.0	0	Z	HIGH	27.0	7.0	31.2	0.0	0.0	37.8	-16.2	54.0	

^{*} CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

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^{**} DELTA = SPEC LIMIT - CORRECTED READING

COMPANY	Leap Devices, LLC	DATE	12/10/2008	
EUT	Photographic Flash Controller	DUTY CYCLE	N/A	%
MODEL	PX	PEAK TO AVG	N/A	dB
S/N	N/A	TEST DIST.	3	Meters
TEST ENGINEER	Rey Ramirez	LAB	F	

Frequency	Peak	Average (A)		Antenna		EUT	EUT	Antenna	Cable	Amplifier		Mixer	*Corrected	Delta	Spec	
MHz	Reading (dBuV)	or Quasi- Peak (OP)	Polar.	0	Azimuth		Tx Channel	Factor (dB)	Loss (dB)	Gain (dB)	Factor (dB)	Factor (dB)	Reading (dBuV/m)	** (dB)	Limit (dBuV/m)	Comments
2708.8140	(uDu v)	A	H	(meters)	(degrees)	X	LOW	29.1	8.5	31.3	0.0	(ub)	(uDu v/III)	(ub)	,	No Frequencies Found
																1 to 1 requencies 1 ound
2708.8140		A	Н			Y	LOW	29.1	8.5	31.3	0.0				54.0	
2708.8140		A	Н			Z	LOW	29.1	8.5	31.3	0.0				54.0	
2708.8140		A	V			X	LOW	29.1	8.5	31.3	0.0				54.0	
2708.8140		A	V			Y	LOW	29.1	8.5	31.3	0.0				54.0	
2708.8140		A	V			Z	LOW	29.1	8.5	31.3	0.0				54.0	
2744.7000		A	Н			X	MED.	29.3	8.5	31.3	0.0				54.0	
2744.7000		A	Н			Y	MED.	29.3	8.5	31.3	0.0				54.0	
2744.7000		A	Н			Z	MED.	29.3	8.5	31.3	0.0				54.0	
2744.7000		A	V			X	MED.	29.3	8.5	31.3	0.0				54.0	
2744.7000		A	V			Y	MED.	29.3	8.5	31.3	0.0				54.0	
2744.7000		A	V			Z	MED.	29.3	8.5	31.3	0.0				54.0	
2781.4890		A	Н			X	HIGH	29.4	8.6	31.4	0.0				54.0	
2781.4890		A	Н			Y	HIGH	29.4	8.6	31.4	0.0				54.0	
2781.4890		A	Н			Z	HIGH	29.4	8.6	31.4	0.0				54.0	
2781.4890		A	V			X	HIGH	29.4	8.6	31.4	0.0				54.0	
2781.4890		A	V			Y	HIGH	29.4	8.6	31.4	0.0				54.0	
2781.4890		A	V			Z	HIGH	29.4	8.6	31.4	0.0				54.0	

^{*} CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

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^{**} DELTA = SPEC LIMIT - CORRECTED READING

COMPANY	Leap Devices, LLC	DATE	12/10/2008	
EUT	Photographic Flash Controller	DUTY CYCLE	N/A	%
MODEL	PX	PEAK TO AVG	N/A	dB
S/N	N/A	TEST DIST.	3	Meters
TEST ENGINEER	Rey Ramirez	LAB	F	

Frequency	Peak	Average (A)		Antenna		EUT	EUT	Antenna	Cable	Amplifier		Mixer	*Corrected	Delta	Spec	
MHz	Reading (dBuV)	or Quasi- Peak (OP)	Polar.	0	Azimuth		Tx Channel	Factor (dB)	Loss (dB)	Gain (dB)	Factor (dB)	Factor (dB)	Reading (dBuV/m)	** (dB)	Limit (dBuV/m)	Comments
	(авиу)			(meters)	(degrees)	. , , ,		. ,	` /	. ,	,	(ab)	(abuv/m)	(ab)	,	
3611.7520		A	Н			X	LOW	30.5	11.7	31.7	0.0				54.0	No Frequencies Found
3611.7520		A	Н			Y	LOW	30.5	11.7	31.7	0.0				54.0	
3611.7520		A	Н			Z	LOW	30.5	11.7	31.7	0.0				54.0	
3611.7520		A	V			X	LOW	30.5	11.7	31.7	0.0				54.0	
3611.7520		A	V			Y	LOW	30.5	11.7	31.7	0.0				54.0	
3611.7520		A	V			Z	LOW	30.5	11.7	31.7	0.0				54.0	
3659.6000		A	Н			X	MED.	30.5	11.9	31.7	0.0				54.0	
3659.6000		A	Н			Y	MED.	30.5	11.9	31.7	0.0				54.0	
3659.6000		A	Н			Z	MED.	30.5	11.9	31.7	0.0				54.0	
3659.6000		A	V			X	MED.	30.5	11.9	31.7	0.0				54.0	
3659.6000		A	V			Y	MED.	30.5	11.9	31.7	0.0				54.0	
3659.6000		A	V			Z	MED.	30.5	11.9	31.7	0.0				54.0	
3708.6520		A	Н			X	HIGH	30.5	12.1	31.6	0.0				54.0	
3708.6520		A	Н			Y	HIGH	30.5	12.1	31.6	0.0				54.0	
3708.6520		A	Н			Z	HIGH	30.5	12.1	31.6	0.0				54.0	
3708.6520		A	V			X	HIGH	30.5	12.1	31.6	0.0				54.0	
3708.6520		A	V			Y	HIGH	30.5	12.1	31.6	0.0				54.0	
3708.6520		A	V			Z	HIGH	30.5	12.1	31.6	0.0				54.0	

^{*} CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

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^{**} DELTA = SPEC LIMIT - CORRECTED READING

COMPANY	Leap Devices, LLC	DATE	12/10/2008	
EUT	Photographic Flash Controller	DUTY CYCLE	N/A	%
MODEL	PX	PEAK TO AVG	N/A	dB
S/N	N/A	TEST DIST.	3	Meters
TEST ENGINEER	Rey Ramirez	LAB	F	

Frequency	Peak	Average (A)		Antenna		EUT	EUT	Antenna	Cable	Amplifier		Mixer	*Corrected	Delta	Spec	
MHz	Reading	or Quasi- Peak (OP)	Polar.		Azimuth		Tx	Factor (dB)	Loss (dB)	Gain (dB)	Factor (dB)	Factor (dB)	Reading	** (dB)	Limit (dBuV/m)	Comments
	(dBuV)			(meters)	(degrees)			. ,	` /	. ,	,	(ab)	(dBuV/m)	(ab)	,	
4514.6900		A	Н			X	LOW	31.3	12.2	32.7	0.0				54.0	No Frequencies Found
4514.6900		A	Н			Y	LOW	31.3	12.2	32.7	0.0				54.0	
4514.6900		A	Н			Z	LOW	31.3	12.2	32.7	0.0				54.0	
4514.6900		A	V			X	LOW	31.3	12.2	32.7	0.0				54.0	
4514.6900		A	V			Y	LOW	31.3	12.2	32.7	0.0				54.0	
4514.6900		A	V			Z	LOW	31.3	12.2	32.7	0.0				54.0	
4574.5000		A	Н			X	MED.	31.5	12.4	32.7	0.0				54.0	
4574.5000		A	Н			Y	MED.	31.5	12.4	32.7	0.0				54.0	
4574.5000		A	Н			Z	MED.	31.5	12.4	32.7	0.0				54.0	
4574.5000		A	V			X	MED.	31.5	12.4	32.7	0.0				54.0	
4574.5000		A	V			Y	MED.	31.5	12.4	32.7	0.0				54.0	
4574.5000		A	V			Z	MED.	31.5	12.4	32.7	0.0				54.0	
4635.8150		A	Н			X	HIGH	31.7	12.6	32.7	0.0				54.0	
4635.8150		A	Н			Y	HIGH	31.7	12.6	32.7	0.0				54.0	
4635.8150		A	Н			Z	HIGH	31.7	12.6	32.7	0.0				54.0	
4635.8150		A	V			X	HIGH	31.7	12.6	32.7	0.0				54.0	
4635.8150		A	V			Y	HIGH	31.7	12.6	32.7	0.0				54.0	
4635.8150		A	V			Z	HIGH	31.7	12.6	32.7	0.0				54.0	

^{*} CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

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^{**} DELTA = SPEC LIMIT - CORRECTED READING

COMPANY	Leap Devices, LLC	DATE	12/10/2008	
EUT	Photographic Flash Controller	DUTY CYCLE	N/A	%
MODEL	PX	PEAK TO AVG	N/A	dB
S/N	N/A	TEST DIST.	3	Meters
TEST ENGINEER	Rey Ramirez	LAB	F	

Frequency	Peak	Average (A)		Antenna		EUT	EUT	Antenna	Cable	Amplifier		Mixer	*Corrected	Delta	Spec	
MHz	Reading (dBuV)	or Quasi- Peak (OP)	Polar.		Azimuth		Tx Channel	Factor (dB)	Loss (dB)	Gain (dB)	Factor (dB)	Factor (dB)	Reading (dBuV/m)	** (dB)	Limit (dBuV/m)	Comments
	(ави у)			(meters)	(degrees)	,,,,		. ,	` /	. ,	,	(ab)	(abuv/m)	(ab)	,	
5417.6280		A	Н			X	LOW	33.3	12.9	29.5	0.0				54.0	No Frequencies Found
5417.6280		A	Н			Y	LOW	33.3	12.9	29.5	0.0				54.0	
5417.6280		A	Н			Z	LOW	33.3	12.9	29.5	0.0				54.0	
5417.6280		A	V			X	LOW	33.3	12.9	29.5	0.0				54.0	
5417.6280		A	V			Y	LOW	33.3	12.9	29.5	0.0				54.0	
5417.6280		A	V			Z	LOW	33.3	12.9	29.5	0.0				54.0	
5489.4000		A	Н			X	MED.	33.3	12.5	29.0	0.0				54.0	
5489.4000		A	Н			Y	MED.	33.3	12.5	29.0	0.0				54.0	
5489.4000		A	Н			Z	MED.	33.3	12.5	29.0	0.0				54.0	
5489.4000		A	V			X	MED.	33.3	12.5	29.0	0.0				54.0	
5489.4000		A	V			Y	MED.	33.3	12.5	29.0	0.0				54.0	
5489.4000		A	V			Z	MED.	33.3	12.5	29.0	0.0				54.0	
5562.9780		A	Н			X	HIGH	33.4	12.7	28.6	0.0				54.0	
5562.9780		A	Н			Y	HIGH	33.4	12.7	28.6	0.0				54.0	
5562.9780		A	Н			Z	HIGH	33.4	12.7	28.6	0.0				54.0	
5562.9780		A	V			X	HIGH	33.4	12.7	28.6	0.0				54.0	
5562.9780		A	V			Y	HIGH	33.4	12.7	28.6	0.0				54.0	
5562.9780		A	V			Z	HIGH	33.4	12.7	28.6	0.0				54.0	

^{*} CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

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^{**} DELTA = SPEC LIMIT - CORRECTED READING

COMPANY	Leap Devices, LLC	DATE	12/10/2008	
EUT	Photographic Flash Controller	DUTY CYCLE	N/A	%
MODEL	PX	PEAK TO AVG	N/A	dB
S/N	N/A	TEST DIST.	3	Meters
TEST ENGINEER	Rey Ramirez	LAB	F	

Frequency	Peak	Average (A)		Antenna		EUT	EUT	Antenna	Cable	Amplifier		Mixer	*Corrected	Delta	Spec	
MII-	Reading	or Quasi-	Polar.	Height			Tx	Factor	Loss	Gain	Factor	Factor	Reading	**	Limit	Community
MHz	(dBuV)	Peak (QP)		(meters)	(degrees)	. , , , ,	Channel	(dB)	(dB)	(dB)	(dB)	(dB)	(dBuV/m)	(dB)	(dBuV/m)	
6320.5660		A	Н			X	LOW	29.9	13.9	28.2	0.0				54.0	No Frequencies Found
6320.5660		A	Н			Y	LOW	29.9	13.9	28.2	0.0				54.0	
6320.5660		A	Н			Z	LOW	29.9	13.9	28.2	0.0				54.0	
6320.5660		A	V			X	LOW	29.9	13.9	28.2	0.0				54.0	
6320.5660		A	V			Y	LOW	29.9	13.9	28.2	0.0				54.0	
6320.5660		A	V			Z	LOW	29.9	13.9	28.2	0.0				54.0	
6404.3000		A	Н			X	MED.	30.0	14.0	28.6	0.0				54.0	
6404.3000		A	Н			Y	MED.	30.0	14.0	28.6	0.0				54.0	
6404.3000		A	Н			Z	MED.	30.0	14.0	28.6	0.0				54.0	
6404.3000		A	V			X	MED.	30.0	14.0	28.6	0.0				54.0	
6404.3000		A	V			Y	MED.	30.0	14.0	28.6	0.0				54.0	
6404.3000		A	V			Z	MED.	30.0	14.0	28.6	0.0				54.0	
6490.1410		A	Н			X	HIGH	30.0	14.0	29.1	0.0				54.0	
6490.1410		A	Н			Y	HIGH	30.0	14.0	29.1	0.0				54.0	
6490.1410		A	Н			Z	HIGH	30.0	14.0	29.1	0.0				54.0	
6490.1410		A	V			X	HIGH	30.0	14.0	29.1	0.0				54.0	
6490.1410		A	V			Y	HIGH	30.0	14.0	29.1	0.0				54.0	
6490.1410		A	V			Z	HIGH	30.0	14.0	29.1	0.0				54.0	

^{*} CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

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^{**} DELTA = SPEC LIMIT - CORRECTED READING

COMPANY	Leap Devices, LLC	DATE	12/10/2008	
EUT	Photographic Flash Controller	DUTY CYCLE	N/A	%
MODEL	PX	PEAK TO AVG	N/A	dB
S/N	N/A	TEST DIST.	3	Meters
TEST ENGINEER	Rey Ramirez	LAB	F	

Frequency	Peak	Average (A)		Antenna		EUT	EUT	Antenna	Cable	Amplifier		Mixer	*Corrected	Delta	Spec	
MHz	Reading	or Quasi- Peak (OP)	Polar.	0	Azimuth		Tx	Factor (dB)	Loss (dB)	Gain (dB)	Factor (dB)	Factor (dB)	Reading	**	Limit (dBuV/m)	Comments
	(dBuV)			(meters)	(degrees)			. ,	` /	. ,	,	(aB)	(dBuV/m)	(dB)	,	
7223.5040		A	Н			X	LOW	30.0	17.9	29.0	0.0				54.0	No Frequencies Found
7223.5040		A	Н			Y	LOW	30.0	17.9	29.0	0.0				54.0	
7223.5040		A	Н			Z	LOW	30.0	17.9	29.0	0.0				54.0	
7223.5040		A	V			X	LOW	30.0	17.9	29.0	0.0				54.0	
7223.5040		A	V			Y	LOW	30.0	17.9	29.0	0.0				54.0	
7223.5040		A	V			Z	LOW	30.0	17.9	29.0	0.0				54.0	
7319.2000		A	Н			X	MED.	30.0	17.8	29.0	0.0				54.0	
7319.2000		A	Н			Y	MED.	30.0	17.8	29.0	0.0				54.0	
7319.2000		A	Н			Z	MED.	30.0	17.8	29.0	0.0				54.0	
7319.2000		A	V			X	MED.	30.0	17.8	29.0	0.0				54.0	
7319.2000		A	V			Y	MED.	30.0	17.8	29.0	0.0				54.0	
7319.2000		A	V			Z	MED.	30.0	17.8	29.0	0.0				54.0	
7417.3040		A	Н			X	HIGH	30.0	17.4	28.9	0.0				54.0	
7417.3040		A	Н			Y	HIGH	30.0	17.4	28.9	0.0				54.0	
7417.3040		A	Н			Z	HIGH	30.0	17.4	28.9	0.0				54.0	
7417.3040		A	V			X	HIGH	30.0	17.4	28.9	0.0				54.0	
7417.3040		A	V			Y	HIGH	30.0	17.4	28.9	0.0				54.0	
7417.3040		A	V			Z	HIGH	30.0	17.4	28.9	0.0				54.0	

^{*} CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

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^{**} DELTA = SPEC LIMIT - CORRECTED READING

COMPANY	Leap Devices, LLC	DATE	12/10/2008	
EUT	Photographic Flash Controller	DUTY CYCLE	N/A	%
MODEL	PX	PEAK TO AVG	N/A	dB
S/N	N/A	TEST DIST.	3	Meters
TEST ENGINEER	Rey Ramirez	LAB	F	

Frequency	Peak	Average (A)		Antenna		EUT	EUT	Antenna	Cable	Amplifier		Mixer	*Corrected	Delta	Spec	
MHz	Reading (dBuV)	or Quasi- Peak (OP)	Polar.	0	Azimuth		Tx Channel	Factor (dB)	Loss (dB)	Gain (dB)	Factor (dB)	Factor (dB)	Reading (dBuV/m)	** (dB)	Limit (dBuV/m)	Comments
8126,4420	(uDu v)	A	H	(meters)	(degrees)	X	LOW	29.9	17.5	32.3	0.0	(uD)	(uDu v/III)	(ub)	,	No Frequencies Found
																rio rrequeneres rouna
8126.4420		A	Н			Y	LOW	29.9	17.5	32.3	0.0				54.0	
8126.4420		A	Н			Z	LOW	29.9	17.5	32.3	0.0				54.0	
8126.4420		A	V			X	LOW	29.9	17.5	32.3	0.0				54.0	
8126.4420		A	V			Y	LOW	29.9	17.5	32.3	0.0				54.0	
8126.4420		A	V			Z	LOW	29.9	17.5	32.3	0.0				54.0	
8234.1000		A	Н			X	MED.	33.5	17.4	31.5	0.0				54.0	
8234.1000		A	Н			Y	MED.	33.5	17.4	31.5	0.0				54.0	
8234.1000		A	Н			Z	MED.	33.5	17.4	31.5	0.0				54.0	
8234.1000		A	V			X	MED.	33.5	17.4	31.5	0.0				54.0	
8234.1000		A	V			Y	MED.	33.5	17.4	31.5	0.0				54.0	
8234.1000		A	V			Z	MED.	33.5	17.4	31.5	0.0				54.0	
8344.4670		A	Н			X	HIGH	33.5	17.4	30.7	0.0				54.0	
8344.4670		A	Н			Y	HIGH	33.5	17.4	30.7	0.0				54.0	
8344.4670		A	Н			Z	HIGH	33.5	17.4	30.7	0.0				54.0	
8344.4670		A	V			X	HIGH	33.5	17.4	30.7	0.0				54.0	
8344.4670		A	V			Y	HIGH	33.5	17.4	30.7	0.0				54.0	
8344.4670		A	V			Z	HIGH	33.5	17.4	30.7	0.0				54.0	

^{*} CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

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^{**} DELTA = SPEC LIMIT - CORRECTED READING

COMPANY	Leap Devices, LLC	DATE	12/10/2008	
EUT	Photographic Flash Controller	DUTY CYCLE	N/A	%
MODEL	PX	PEAK TO AVG	N/A	dB
S/N	N/A	TEST DIST.	3	Meters
TEST ENGINEER	Rey Ramirez	LAB	F	

Frequency	Peak	Average (A)		Antenna		EUT	EUT	Antenna	Cable	Amplifier		Mixer	*Corrected	Delta	Spec	
MIII-	Reading		Polar.	Height			Tx	Factor	Loss	Gain	Factor	Factor (dB)	Reading	**	Limit	Comments
MHz	(dBuV)	Peak (QP)		(meters)	(degrees)	. , , ,		(dB)	(dB)	(dB)	(dB)	(aB)	(dBuV/m)	(dB)	(dBuV/m)	Comments
9029.3800		A	Н			X	LOW	33.6	17.9	29.3	0.0				54.0	No Frequencies Found
9029.3800		A	Н			Y	LOW	33.6	17.9	29.3	0.0				54.0	
9029.3800		A	Н			Z	LOW	33.6	17.9	29.3	0.0				54.0	
9029.3800		A	V			X	LOW	33.6	17.9	29.3	0.0				54.0	
9029.3800		A	V			Y	LOW	33.6	17.9	29.3	0.0				54.0	
9029.3800		A	V			Z	LOW	33.6	17.9	29.3	0.0				54.0	
9149.0000		A	Н			X	MED.	33.6	17.9	28.6	0.0				54.0	
9149.0000		A	Н			Y	MED.	33.6	17.9	28.6	0.0				54.0	
9149.0000		A	Н			Z	MED.	33.6	17.9	28.6	0.0				54.0	
9149.0000		A	V			X	MED.	33.6	17.9	28.6	0.0				54.0	
9149.0000		A	V			Y	MED.	33.6	17.9	28.6	0.0				54.0	
9149.0000		A	V			Z	MED.	33.6	17.9	28.6	0.0				54.0	
9271.6300		A	Н			X	HIGH	33.6	18.0	27.8	0.0				54.0	
9271.6300		A	Н			Y	HIGH	33.6	18.0	27.8	0.0				54.0	
9271.6300		A	Н			Z	HIGH	33.6	18.0	27.8	0.0				54.0	
9271.6300		A	V			X	HIGH	33.6	18.0	27.8	0.0				54.0	
9271.6300		A	V			Y	HIGH	33.6	18.0	27.8	0.0				54.0	
9271.6300		A	V			Z	HIGH	33.6	18.0	27.8	0.0				54.0	

^{*} CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN

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^{**} DELTA = SPEC LIMIT - CORRECTED READING

Leap Devices, LLC Date: 12/10/2008

Photographic Flash Controller Lab:

PX Tested By: R. Ramirez
Test Distance 3 meters

Configuration: Spurious Emissions

Low Channel

Freq. (MHz)	Level (dBuV/m)	` ,	Limit (dBuV/m)	Margin (dB)	Peak / QP / Avg	Comments
45.15	21.89	V	40.00	-18.11	Peak	
64.22	22.17	V	40.00	-17.83	Peak	
87.00	21.40	V	40.00	-18.60	Peak	
112.94	18.41	V	43.52	-25.11	Peak	
128.96	17.13	V	43.52	-26.39	Peak	
150.41	15.45	V	43.52	-28.07	Peak	
175.97	18.60	V	43.52	-24.92	Peak	
202.02	18.55	V	43.52	-24.97	Peak	
218.44	17.27	V	46.02	-28.75	Peak	
240.88	17.96	V	46.02	-28.06	Peak	
263.32	18.22	V	46.02	-27.80	Peak	
45.15	16.57	Н	40.00	-23.43	Peak	
64.23	19.12	Н	40.00	-20.88	Peak	
87.00	19.10	Н	40.00	-20.90	Peak	
112.94	21.88	Н	43.52	-21.64	Peak	
128.96	19.14	Н	43.52	-24.38	Peak	
150.41	16.62	Н	43.52	-26.90	Peak	
175.98	19.50	Н	43.52	-24.02	Peak	
202.02	18.08	Н	43.52	-25.44	Peak	
218.44	19.84	Н	46.02	-26.18	Peak	
240.89	17.07	Н	46.02	-28.95	Peak	
263.32	17.97	Н	46.02	-28.05	Peak	

Leap Devices, LLC Date: 12/10/2008

Photographic Flash Controller Lab:

PX Tested By: R. Ramirez
Test Distance 3 meters

Configuration: Spurious Emissions

Low Channel

Freq. (MHz)	Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Peak / QP / Avg	Comments
311.12	20.12	V	46.02	-25.90	Peak	
337.88	19.33	V	46.02	-26.69	Peak	
466.94	21.91	V	46.02	-24.11	Peak	
520.24	25.03	V	46.02	-20.99	Peak	
850.75	35.64	V	46.02	-10.38	Peak	
941.08	29.83	V	46.02	-16.19	Peak	
311.13	20.13	Н	46.02	-25.89	Peak	
337.89	23.15	Н	46.02	-22.87	Peak	
466.94	25.45	Н	46.02	-20.57	Peak	
520.26	30.12	Н	46.02	-15.90	Peak	
850.74	28.98	Н	46.02	-17.04	Peak	
850.77	29.73	Н	46.02	-16.29	Peak	
941.09	28.67	Н	46.02	-17.35	Peak	

Leap Devices, LLC Date: 12/10/2008

Photographic Flash Controller Lab:

PX Tested By: R. Ramirez
Test Distance 3 meters

Configuration: Spurious Emissions

Mid Channel

Freq. (MHz)	Level (dBuV/m)	` '	Limit (dBuV/m)	Margin (dB)	Peak / QP / Avg	Comments
46.00	19.20	V	40.00	-20.80	Peak	
60.00	20.86	V	40.00	-19.14	Peak	
82.69	19.48	V	40.00	-20.52	Peak	
106.79	29.85	V	43.52	-13.67	Peak	
121.68	15.86	V	43.52	-27.66	Peak	
143.48	13.57	V	43.52	-29.95	Peak	
184.01	19.17	V	43.52	-24.35	Peak	
209.29	16.67	V	43.52	-26.85	Peak	
46.00	15.24	Н	40.00	-24.76	Peak	
60.01	15.86	Н	40.00	-24.14	Peak	
82.70	15.03	Н	40.00	-24.97	Peak	
106.79	28.00	Н	43.52	-15.52	Peak	
121.69	16.26	Н	43.52	-27.26	Peak	
143.48	16.98	Н	43.52	-26.54	Peak	
184.02	16.41	Н	43.52	-27.11	Peak	
209.30	17.27	Н	43.52	-26.25	Peak	
526.34	26.99	V	46.02	-19.03	Peak	
688.81	24.33	V	46.02	-21.69	Peak	
526.35	27.24	Н	46.02	-18.78	Peak	
688.82	24.33	Н	46.02	-21.69	Peak	

Leap Devices, LLC Date: 12/10/2008

Photographic Flash Controller Lab:

PX Tested By: R. Ramirez
Test Distance 3 meters

Configuration: Spurious Emissions

High Channel

Freq. (MHz)	Level (dBuV/m)	, ,	Limit (dBuV/m)	,	Peak / QP / Avg	Comments
50.28	23.04	V	40.00	-16.96	Peak	
128.04	19.25	V	43.52	-24.27	Peak	
153.53	14.71	V	43.52	-28.81	Peak	
192.18	18.01	V	43.52	-25.51	Peak	
217.53	17.49	V	46.02	-28.53	Peak	
281.60	21.80	V	46.02	-24.22	Peak	
50.28	16.35	Н	40.00	-23.65	Peak	
128.01	17.64	Н	43.52	-25.88	Peak	
153.55	15.13	Н	43.52	-28.39	Peak	
192.19	18.50	Н	43.52	-25.02	Peak	
217.53	19.12	Н	46.02	-26.90	Peak	
281.60	21.57	Н	46.02	-24.45	Peak	
374.92	22.11	V	46.02	-23.91	Peak	
446.81	21.76	V	46.02	-24.26	Peak	
528.47	25.89	V	46.02	-20.13	Peak	
650.98	23.59	V	46.02	-22.43	Peak	
850.05	31.10	V	46.02	-14.92	Peak	
912.14	33.66	V	46.02	-12.36	Peak	
374.92	23.65	Н	46.02	-22.37	Peak	
446.82	21.99	Н	46.02	-24.03	Peak	
528.46	26.85	Н	46.02	-19.17	Peak	
650.94	22.01	Н	46.02	-24.01	Peak	
850.00	31.17	Н	46.02	-14.85	Peak	
912.15	29.39	Н	46.02	-16.63	Peak	