



FCC PART 101

TEST REPORT

For

Lightpointe Communications, Inc.

11696 Sorento Valley Road, Ste. 101,
San Diego, CA 92121, USA

FCC ID: PHVABG80PLUS

Report Type: CIIPC Report	Product Type: Wireless Point-to-Point Radio
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Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. This report **must not** be used by the customer to claim product certification, approval, or endorsement by A2LA*, NIST, or any agency of the Federal Government.

* This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk “*” (Rev-2)

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	R1608172-101	Original Report	2016-10-11
1	R1608172-101	Adding EIRP	2016-10-31

1 General Description

1.1 Product Description for Equipment Under Test (EUT)

This test and measurement report was prepared on behalf of Lightpointe Communications, Inc., and their product FCC ID: PHVABG80PLUS, models: SAX1-1250-93X-S3S and SAX1-1250-93E-S3S which will henceforth be referred to as the EUT (Equipment Under Test). The EUT is a point-to-point 70/80 GHz radio system for full duplex transfer of data at up to Gigabit Ethernet rates. The models can be DC with AC adapter or Power over Ethernet.

1.2 Mechanical Description of EUT

The EUT measures approximately 22cm (L) x 22cm (W) x 12cm (H), and weighs approximately 5 kg.

The Antenna measures approximately 100cm (L) x 100cm (W) x 28cm (H), and weighs approximately 11 kg.

The test data gathered are from typical production sample provided by Lightpointe Communications, Inc. Serial number R1608172-1 assigned by BACL Sunnyvale.

Please refers to DOS for the detail explanations about other models.

Testing was performed at LAX1-1250-91E-S3S for 72GHz, LAX1-1250-92E-S3S for 82GHz, LAX1-1250-91X-S3S for 74GHz and LAX1-1250-92X-S3S for 84GHz.

1.3 Objective

This report is prepared on behalf of *Lightpointe Communications, Inc.* in accordance with Part 2, Subpart J, and Part 101, Subpart Q of the Federal Communication Commissions rules.

The objective is to determine C2PC compliance with FCC Part 101 rules for RF Output Power, field strength of spurious radiation and RF Exposure based on a new 3 Ft antenna.

1.4 Related Submittal(s)/Grant(s)

N/A

1.5 Test Methodology

All tests and measurements indicated in this document were performed in accordance with the Code of Federal Regulations Title 47 Part 2, Sub-part J as well as the Following parts:

Part 101-Subpart Q Service and Technical Rules for the 70/80/90 GHz Bands

Applicable Standards: TIA603-D.

All radiated and conducted emissions measurement was performed at Bay Area Compliance Laboratory, Corp. The radiated testing was performed at an antenna-to-EUT distance of 3 or 1 meters.

1.6 Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in the field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Based on CISPR16-4-2:2011, The Treatment of Uncertainty in EMC Measurements, the values ranging from ± 2.0 dB for Conducted Emissions tests and ± 4.0 dB for Radiated Emissions tests are the most accurate estimates pertaining to uncertainty of EMC measurements at BACL Corp.

1.7 Test Facility Registrations

BACL's test facilities that are used to perform Radiated and Conducted Emissions tests are currently recognized by the Federal Communications Commission as Accredited with NIST Designation Number US1129.

BACL's test facilities that are used to perform Radiated and Conducted Emissions tests are currently registered with Industry Canada under Registration Numbers: 3062A-1, 3062A-2, and 3062A-3.

BACL is a Chinese Taipei Bureau of Standards Metrology and Inspection (BSMI) validated Conformity Assessment Body (CAB), under Appendix B, Phase I Procedures of the APEC Mutual Recognition Arrangement (MRA). BACL's BSMI Lab Code Number is: SL2-IN-E-1002R

BACL's test facilities that are used to perform AC Line Conducted Emissions, Telecommunications Line Conducted Emissions, Radiated Emissions from 30 MHz to 1 GHz, and Radiated Emissions from 1 GHz to 6 GHz are currently recognized as Accredited in accordance with the Voluntary Control Council for Interference [VCCI] Article 15 procedures under Registration Number A-0027.

1.8 Test Facility Accreditations

Bay Area Compliance Laboratories Corp. (BACL) is:

A- An independent, 3rd-Party, Commercial Test Laboratory accredited to ISO/IEC 17025:2005 by A2LA (Test Laboratory Accreditation Certificate Number 3279.02), in the fields of: Electromagnetic Compatibility and Telecommunications. Unless noted by an Asterisk (*) in the Compliance Matrix (See Section 3 of this Test Report), BACL's ISO/IEC 17025:2005 Scope of Accreditation includes all of the Test Method Standards and/or the Product Family Standards detailed in this Test Report..

BACL's ISO/IEC 17025:2005 Scope of Accreditation includes a comprehensive suite of EMC Emissions, EMC Immunity, Radio, RF Exposure, Safety and wireline Telecommunications test methods applicable to a wide range of product categories. These product categories include Central Office Telecommunications Equipment [including NEBS - Network Equipment Building Systems], Unlicensed and Licensed Wireless and RF devices, Information Technology Equipment (ITE); Telecommunications Terminal Equipment (TTE); Medical Electrical Equipment; Industrial, Scientific and Medical Test Equipment; Professional Audio and Video Equipment; Industrial and Scientific Instruments and Laboratory Apparatus; Cable Distribution Systems, and Energy Efficient Lighting.

B- A Product Certification Body accredited to ISO/IEC 17065:2012 by A2LA (Product Certification Body Accreditation Certificate Number 3279.03) to certify

- For the USA (Federal Communications Commission):
 - 1- All Unlicensed radio frequency devices within FCC Scopes A1, A2, A3, and A4;
 - 2- All Licensed radio frequency devices within FCC Scopes B1, B2, B3, and B4;
 - 3- All Telephone Terminal Equipment within FCC Scope C.
- For the Canada (Industry Canada):
 - 1 All Scope 1-Licence-Exempt Radio Frequency Devices;
 - 2 All Scope 2-Licensed Personal Mobile Radio Services;
 - 3 All Scope 3-Licensed General Mobile & Fixed Radio Services;
 - 4 All Scope 4-Licensed Maritime & Aviation Radio Services;
 - 5 All Scope 5-Licensed Fixed Microwave Radio Services
 - 6 All Broadcasting Technical Standards (BETS) in the Category I Equipment Standards List.
- For Singapore (Info-Communications Development Authority (IDA)):
 - 1 All Line Terminal Equipment: All Technical Specifications for Line Terminal Equipment – Table 1 of IDA MRA Recognition Scheme: 2011, Annex 2
 - 2. All Radio-Communication Equipment: All Technical Specifications for Radio-Communication Equipment – Table 2 of IDA MRA Recognition Scheme: 2011, Annex 2
- For the Hong Kong Special Administrative Region:
 - 1 All Radio Equipment, per KHCA 10XX-series Specifications;
 - 2 All GMDSS Marine Radio Equipment, per HKCA 12XX-series Specifications;
 - 3 All Fixed Network Equipment, per HKCA 20XX-series Specifications.
- For Japan:
 - 1 MIC Telecommunication Business Law (Terminal Equipment):
 - All Scope A1 - Terminal Equipment for the Purpose of Calls;
 - All Scope A2 - Other Terminal Equipment
 - 2 Radio Law (Radio Equipment):
 - All Scope B1 - Specified Radio Equipment specified in Article 38-2-2, paragraph 1, item 1 of the Radio Law
 - All Scope B2 - Specified Radio Equipment specified in Article 38-2-2, paragraph 1, item 2 of the Radio Law
 - All Scope B3 - Specified Radio Equipment specified in Article 38-2-2, paragraph 1, item 3 of the Radio Law

C- A Product Certification Body accredited to ISO/IEC 17065:2012 by A2LA (Product Certification Body Accreditation Certificate Number 3279.01) to certify Products to USA's Environmental Protection Agency (EPA) ENERGY STAR Product Specifications for:

- 1 Electronics and Office Equipment:
 - for Telephony (ver. 3.0)
 - for Audio/Video (ver. 3.0)
 - for Battery Charging Systems (ver. 1.1)
 - for Set-top Boxes & Cable Boxes (ver. 4.1)
 - for Televisions (ver. 6.1)
 - for Computers (ver. 6.0)
 - for Displays (ver. 6.0)
 - for Imaging Equipment (ver. 2.0)
 - for Computer Servers (ver. 2.0)
- 2 Commercial Food Service Equipment
 - for Commercial Dishwashers (ver. 2.0)
 - for Commercial Ice Machines (ver. 2.0)
 - for Commercial Ovens (ver. 2.1)

- for Commercial Refrigerators and Freezers
- 3 Lighting Products
 - For Decorative Light Strings (ver. 1.5)
 - For Luminaires (including sub-components) and Lamps (ver. 1.2)
 - For Compact Fluorescent Lamps (CFLs) (ver. 4.3)
 - For Integral LED Lamps (ver. 1.4)
- 4 Heating, Ventilation, and AC Products
 - for Residential Ceiling Fans (ver. 3.0)
 - for Residential Ventilating Fans (ver. 3.2)
- 5 Other
 - For Water Coolers (ver. 3.0)

D- A NIST Designated Phase-I and Phase-II Conformity Assessment Body (CAB) for the following economies and regulatory authorities under the terms of the stated MRAs/Treaties:

- Australia: ACMA (Australian Communication and Media Authority) – APEC Tel MRA -Phase I;
- Canada: (Industry Canada - IC) Foreign Certification Body – FCB – APEC Tel MRA -Phase I & Phase II;
- Chinese Taipei (Republic of China – Taiwan):
 - o BSMI (Bureau of Standards, Metrology and Inspection) APEC Tel MRA -Phase I;
 - o NCC (National Communications Commission) APEC Tel MRA -Phase I;
- European Union:
 - o Radio & Teleterminal Equipment (R&TTE) Directive 1995/5/EC
 - US -EU EMC & Telecom MRA CAB
- Hong Kong Special Administrative Region: (Office of the Telecommunications Authority – OFTA)
APEC Tel MRA -Phase I & Phase II
- Israel – US-Israel MRA Phase I
- Republic of Korea (Ministry of Communications - Radio Research Laboratory) APEC Tel MRA -Phase I
- Singapore: (Infocomm Development Authority - IDA) APEC Tel MRA -Phase I & Phase II;
- Japan: VCCI - Voluntary Control Council for Interference US-Japan Telecom Treaty VCCI Side Letter-
- USA:
 - o ENERGY STAR Recognized Test Laboratory – US EPA
 - o Telecommunications Certification Body (TCB) – US FCC;
- Vietnam: APEC Tel MRA -Phase I;

2 System Test Configuration

2.1 Justification

The EUT was configured for testing according to TIA/EIA-603 D.

2.2 EUT Exercise Software

N/A, EUT is operating at normal mode.

2.3 Special Equipment

N/A

2.4 Equipment Modifications

No modifications were made to the EUT.

2.5 Local Support Equipment

N/A

2.6 EUT Internal Configuration Details

72 GHz Band

Manufacturers	Descriptions	Models	Serial Numbers
LightPointe, Inc.	Main PCB	LP-CCIU-10A001	05160022
LightPointe, Inc.	RF Module	-	S0831608116

82 GHz Band

Manufacturers	Descriptions	Models	Serial Numbers
LightPointe, Inc.	Main PCB	LP-CCIU-10A001	05160048
LightPointe, Inc.	RF Module	-	S0841608116

74 GHz Band

Manufacturers	Descriptions	Models	Serial Numbers
LightPointe, Inc.	Main PCB	LP-CCIU-10A001	0515213
LightPointe, Inc.	RF Module	-	S0731603119

84 GHz Band

Manufacturers	Descriptions	Models	Serial Numbers
LightPointe, Inc.	Main PCB	LP-CCIU-10A001	0515206
LightPointe, Inc.	RF Module	-	S0741603119

2.7 External I/O Cabling List and AC Cord

Cable Description	Length (m)	From	To
RJ45	>1	EUT (MGMT Port)	POE
RJ45	>1	POE	Internet
RJ45	>1	EUT (Data Port)	Internet
Fiber cable	>1	EUT	Media Converter

2.8 Power Supply List and Details

Manufacturer	Description	Model	Serial Number
Cincon Electronics Co., Ltd.	POE	TRG60A-POE-L	046513

3 Summary of Test Results

Results reported relate only to the product tested.

FCC Rules	Description of Test	Results
§101.1525, §2.1091	RF Exposure	Compliant
§101.113, §2.1046	RF Output Power (EIRP)	Compliant
§101.141, §2.1047	Modulation Characteristics	N/A ¹
§101.109, §2.1049	Occupied Bandwidth	N/A ²
§101.111, §2.1053	Field Strength of Spurious Radiation	Compliant
§101.107, §2.1055	Frequency stability vs. temperature Frequency stability vs. voltage	N/A ³

Note 1: As per FCC §2.1047 (d) and FCC §101.141, there is no requirement for transmitters operating at 70 and 80 GHz

Note 2: testing items are not required for CIIPC application.

Note 3: Frequency Stability is not required for the frequencies of this EUT

4 FCC §101.1525 & §2.1091 – RF Exposure

4.1 Applicable Standard

According to FCC §1.1307 (b) (1) and §101.1525, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to §1.1310 and §2.1091 RF exposure is calculated.

Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	* (100)	30
1.34-30	824/f	2.19/f	* (180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f = frequency in MHz

* = Plane-wave equivalent power density

4.2 MPE Prediction

Predication of MPE limit at a given distance, Equation from OET Bulletin 65, Edition 97-01

$$S = PG/4\pi R^2$$

Where: S = power density

P = power input to antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

4.3 MPE Results

72 GHz band:

Maximum peak output power at antenna input terminal (dBm):	20.64
Maximum peak output power at antenna input terminal (mW):	115.8777
Prediction distance (cm):	1522
Prediction frequency (MHz):	72.375
Maximum Antenna Gain, typical (dBi):	54
Maximum Antenna Gain (numeric):	251188.6
Power density of prediction frequency at 20 cm (mW/cm ²):	0.99991
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²):	1.0

82 GHz band:

<u>Maximum peak output power at antenna input terminal (dBm):</u>	<u>20.46</u>
<u>Maximum peak output power at antenna input terminal (mW):</u>	<u>111.17</u>
<u>Prediction distance (cm):</u>	<u>1522</u>
<u>Prediction frequency (MHz):</u>	<u>82,375</u>
<u>Maximum Antenna Gain, typical (dBi):</u>	<u>54</u>
<u>Maximum Antenna Gain (numeric):</u>	<u>251188.6</u>
<u>Power density of prediction frequency at 20 cm (mW/cm²):</u>	<u>0.959314</u>
<u>MPE limit for uncontrolled exposure at prediction frequency (mW/cm²):</u>	<u>1.0</u>

74 GHz band:

<u>Maximum peak output power at antenna input terminal (dBm):</u>	<u>20.97</u>
<u>Maximum peak output power at antenna input terminal (mW):</u>	<u>125.026</u>
<u>Prediction distance (cm):</u>	<u>1581</u>
<u>Prediction frequency (MHz):</u>	<u>74,875</u>
<u>Maximum Antenna Gain, typical (dBi):</u>	<u>54</u>
<u>Maximum Antenna Gain (numeric):</u>	<u>251188.6</u>
<u>Power density of prediction frequency at 20 cm (mW/cm²):</u>	<u>0.99983</u>
<u>MPE limit for uncontrolled exposure at prediction frequency (mW/cm²):</u>	<u>1.0</u>

84 GHz band:

<u>Maximum peak output power at antenna input terminal (dBm):</u>	<u>20.59</u>
<u>Maximum peak output power at antenna input terminal (mW):</u>	<u>114.551</u>
<u>Prediction distance (cm):</u>	<u>1581</u>
<u>Prediction frequency (MHz):</u>	<u>84,875</u>
<u>Maximum Antenna Gain, typical (dBi):</u>	<u>54</u>
<u>Maximum Antenna Gain (numeric):</u>	<u>251188.6</u>
<u>Power density of prediction frequency at 20 cm (mW/cm²):</u>	<u>0.916065</u>
<u>MPE limit for uncontrolled exposure at prediction frequency (mW/cm²):</u>	<u>1.0</u>

72/82 GHz Band:

The worst power density level at 1522 cm is 0.99991 mW/cm² antenna, which is below the uncontrolled exposure limit of 1.0 mW/cm².

74/84 GHz Band:

The worst power density level at 1581 cm is 0.99983 mW/cm² antenna, which is below the uncontrolled exposure limit of 1.0 mW/cm².

Note: The conducted output power was performed by the manufacturer.

5 FCC §2.1046 & §101.113 – RF Output Power

5.1 Applicable Standards

FCC §2.1046 and §101.113.

5.2 Test Procedure

$\text{EIRP (dBm)} = \text{Rated Conducted Output Power (dBm)} + \text{Antenna Gain (dBi)}$

$\text{Limit (dBm)} = \text{Limit (dBW)} + 30$

5.3 Test Results

Frequency Band	Rated Conducted Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Result
72/82 GHz	23	54	77	85	Compliant
74/84 GHz	23	54	77	85	Compliant

6 FCC §2.1053 & §101.111 – Field Strength of Spurious Radiation

6.1 Applicable Standards

Requirements: FCC §2.1053 and §101.111 (2) (iii)

For operating frequencies above 15 GHz, In any 1 MHz band, the center frequency of which is removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least $43 + 10 \log_{10}$ (the mean output power in watts) decibels, or 80 decibels, whichever is the lesser attenuation. The authorized bandwidth includes the nominal radio frequency bandwidth of an individual transmitter/modulator in block-assigned bands. Equipment licensed prior to April 1, 2005 shall only be required to meet this standard in any 4 kHz band.

72/82 GHz Bands:

The maximum EIRP power ($21 + 54 = 75$ dBm) decrease 80dBc, so limit is -5dBm

74/84 GHz Bands:

The maximum EIRP power ($21 + 54 = 75$ dBm) decrease 80dBc, so limit is -5dBm

6.2 Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into antenna which was also placed on the turntable.

The measurements antenna was placed at a distance of 1 or 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.

The frequency range up to 200 GHz.

6.3 Test Equipment List and Details

Manufacturer	Description	Model No.	Serial No.	Calibration Due
OML	Diplexer for Agilent Spectrum Analyzer	DPL.26	N/A	N/A ¹
OML	WR-12 Harmonic Mixer with Horn Antenna	M12HWD	130529-1	N/A ¹
OML	WR19 Harmonic Mixer with Horn Antenna	M19HWD	U60313-1	N/A ¹
OML	WR08 Harmonic Mixer with Horn Antenna	M08HWD	F60313-1	N/A ¹
OML	G Band Harmonic Mixer with Horn Antenna	M05HWD	G60106-1	N/A ¹
Wisewave	Horn Antenna	ARH-4223-02	10555-02	2016-09-20
Wisewave	Horn Antenna	ARH-2823-02	10555-01	2016-09-20
Sunol Sciences Corp	Horn Antenna	DRH-118	A052704	2017-03-09
Wisewave	Amplifier, Low Noise	ALN-33144030-01	11424-01	2017-05-16
Hewlett	Pre-Amplifier	8449B	3008A01978	2017-05-22
Hewlett & Packard	Amplifier, Pre	8447D	2944A10187	2017-03-08
Agilent	Analyzer, Spectrum	E4446A	MY48250238	2015-10-22
Sunol Science Corp	System Controller	SC99V	011003-1	N/R
Sunol Sciences	Antenna, Biconi-Log	JB3	A020106-2	2016-07-11
Agilent	Analyzer, Spectrum	E4446A	MY48250238	2016-10-22
Rohde & Schwarz	EMI Test Receiver	ESCI 1166.5950K03	100044	2017-06-24

Note 1. Verification was performed at system level and not at the individual component level

Statement of Traceability: BACL attests that all calibrations have been performed per the A2LA requirements, traceable to NIST.

6.4 Test Environmental Conditions

Temperature:	27° C
Relative Humidity:	45 %
ATM Pressure:	102.2 kPa

The testing was performed by Jin Yang on 2015-09-15~16 at 5m chamber 3

6.5 Test Results

72/82 GHz Band Low

Freq. (MHz)	S.A. Amp. (dBμV)	Table Azimuth (Degrees)	Test Antenna		Substitution				Absolute Level (dBm)	Limit	
			Height (cm)	Polar (H/V)	Freq. (MHz)	S.G. Level (dBm)	Antenna Gain (dB)	Cable Loss (dB)		(dBm)	Margin (dB)
1860	55.33	0	150	H	1860	-39.67	8.372	0.86	-32.158	-5	-27.158
1860	54.77	0	150	V	1860	-40.23	8.372	0.86	-32.718	-5	-27.718
6300	58.51	180	150	H	6300	-24.49	11.643	1.45	-14.297	-5	-9.297
6300	60.09	180	150	V	6300	-22.91	11.643	1.45	-12.717	-5	-7.717
37310	57.7	0	150	H	37310	-12.3	4.809	3.33	-10.821	-5	-5.821
37310	57.65	0	150	V	37310	-12.35	4.809	3.33	-10.871	-5	-5.871
44.6	67.19	0	150	H	44.6	-42.81	0	0.1	-42.91	-5	-37.91
68.8	54.88	0	150	V	68.8	-55.12	0	0.1	-55.22	-5	-50.22

72/82 GHz Band High

Freq. (MHz)	S.A. Amp. (dBμV)	Table Azimuth (Degrees)	Test Antenna		Substitution				Absolute Level (dBm)	Limit	
			Height (cm)	Polar (H/V)	Freq. (MHz)	S.G. Level (dBm)	Antenna Gain (dB)	Cable Loss (dB)		(dBm)	Margin (dB)
1875	61.83	0	150	H	1875	-33.17	8.372	0.86	-25.658	-5	-20.658
1875	64.05	0	150	V	1875	-30.95	8.372	0.86	-23.438	-5	-18.438
3700	59.2	180	150	H	3700	-26.8	9.69	1.45	-18.56	-5	-13.56
3700	66.6	180	150	V	3700	-19.4	9.69	1.45	-11.16	-5	-6.16
37150	57.7	0	150	H	37150	-12.3	4.809	3.33	-10.821	-5	-5.821
37190	58.19	0	150	V	37190	-11.81	4.809	3.33	-10.331	-5	-5.331
44.6	68.23	0	150	H	44.6	-41.77	0	0.1	-41.87	-5	-36.87
68.8	55.15	0	150	V	68.8	-54.85	0	0.1	-54.95	-5	-49.95

74/84 GHz Band Low

Freq. (MHz)	S.A. Amp. (dBμV)	Table Azimuth (Degrees)	Test Antenna		Substitution				Absolute Level (dBm)		
			Height (cm)	Polar (H/V)	Freq. (MHz)	S.G. Level (dBm)	Antenna Gain (dB)	Cable Loss (dB)		Limit (dBm)	Margin (dB)
1863	60.36	0	150	H	1863	-34.64	8.372	0.86	-27.128	-5	-22.128
1877	63.24	0	150	V	1877	-31.76	8.372	0.86	-24.248	-5	-19.248
3700	56.18	180	150	H	3700	-29.82	9.69	1.45	-21.58	-5	-16.58
3700	58.63	180	150	V	3700	-27.37	9.69	1.45	-19.13	-5	-14.13
37310	57.7	0	150	H	37310	-12.3	4.809	3.33	-10.821	-5	-5.821
37200	58.02	0	150	V	37200	-11.98	4.809	3.33	-10.501	-5	-5.501
45	67.94	0	150	H	45	-42.06	0	0.1	-42.16	-5	-37.16
68.9	55.23	0	150	V	68.9	-54.77	0	0.1	-54.87	-5	-49.87

74/84 GHz Band High

Freq. (MHz)	S.A. Amp. (dBμV)	Table Azimuth (Degrees)	Test Antenna		Substitution				Absolute Level (dBm)		
			Height (cm)	Polar (H/V)	Freq. (MHz)	S.G. Level (dBm)	Antenna Gain (dB)	Cable Loss (dB)		Limit (dBm)	Margin (dB)
1877	63.1	0	150	H	1877	-31.9	8.372	0.86	-24.388	-5	-19.388
1880	64.35	0	150	V	1880	-30.65	8.372	0.86	-23.138	-5	-18.138
6300	54.37	180	150	H	6300	-28.63	11.643	1.45	-18.437	-5	-13.437
6300	55.89	180	150	V	6300	-27.11	11.643	1.45	-16.917	-5	-11.917
43430	57.98	0	150	H	43430	-12.02	4.809	3.33	-10.541	-5	-5.541
37430	57.52	0	150	V	37430	-12.48	4.809	3.33	-11.001	-5	-6.001
45	69.47	0	150	V	45	-40.53	0	0.1	-40.63	-5	-35.63
69.58	56.88	0	150	H	69.58	-53.12	0	0.1	-53.22	-5	-48.22

Note: All other emissions are at the noise floor and/or more than 20 dB below the limit.