# FCC (USA)/ISED (Canada) TEST REPORT

FCC 47 CFR Part 15D

**Unlicensed Personal Communications Service Devices** 

Industry Canada RSS-213

2 GHz License-exempt Personal Communications Service Devices (LE-PCS)

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	1020220020 01	ElectroMagnetic	C25
	IG20230928-01	Investigations	

Report Reference No:	LIG20230928-01
Testing Laboratory:	ElectroMagnetic Investigations, LLC
Address:	8531 NE Cornell Road. Suite 600, Hillsboro, OR, USA
Accreditation:	A2LA Accredited Testing Laboratory
Applicant's name:	Lightspeed Technologies, Inc.
Address:	11509 SW Herman Rd.
	Tualatin, OR 97062
	United States
Testing specification	
Standard:	FCC 47 CFR Part 15D
	FCC 47 CFR Part 15C
	FCC 47 CFR Part 15B
	RSS-213, Issue 3, 2015-03
	RSS-Gen, Issue 5, 2018-04
	ANSI C63.17 :2013
	ANSI C63.4 :2014
Equipment Under test (EUT):	Rogue Base
Serial Number:	02-C25-Z-S2340-00028
Product description:	DECT base station
Model No.	C25
Additional Model(s):	N/A
Hardware version:	
Firmware / Software version:	7.1.00
FCC ID:	ORV-LSC25
IC ID	1732B-LSC25
Test result:	Passed

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Possible test case verdicts

Neither assessed nor tested:	N/N
Required by standard but not applicable:	N/A
Required by standard but not tested:	NOT PERFORMED
Not required by standard:	N/R
EUT meets the requirement:	P (Pass)
EUT does not meet the requirement:	F (Fail)

#### Testing

Tested by:

Approved by:

Date of issue:

Test Lab Temperature:	20 – 28 C
Test Lab Humidity:	30 – 38 %
Date EUT received:	October 25, 2023
Date(s) of performance of tests:	October 25, 2023 to November 22, 2023
Complied by:	Ryan Benitez Ryan Benity

Kyan Benity Henry W. Bents

Henry Benitez January 15, 2024

**Ryan Benitez** 

General remarks

Total number of pages:

The test results presented in this report relate only to the object tested. The results contained in this report reflect the results for this particular model and serial number. It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report.

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# **Revision History**

Version	Date Issued	Description of Revision

## **Authorizations**

**FCC (USA):** Accepted by FCC for performance of radiated emissions and conducted emissions measurements. FCC ID: US1092.

**Industry Canada:** Accepted by Industry Canada for performance of radiated emissions and conducted emissions measurements. ISED Canada CAB ID US0203.

**European Union (CE):** ElectroMagnetic Investigations, LLC is equipped and capable of performing EMC CE compliance testing to European Union EMC CE requirements for Information Technology Equipment (ITE), Measurement, Control and Laboratory Equipment (MCL), and other equipment.

American Association of Lab Accreditations (A2LA): ElectroMagnetic Investigations is accredited to perform the tests contained within this report to the standards listed.



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1 Equipment (Test item) description

Description: Model: Additional Model(s): Brand Name(s): Serial number: Hardware version:	DECT Base Station C25 N/A Lightspeed Technologies, Inc. 02-C25-Z-S2340-00028	
Software / Firmware version: FCC-ID: IC: Equipment type: Radio type: Number of radios:	ORV-LSC25 1732B-LSC25 End product DECT fixed part 1 DECT transceiver built into device	
Radio technology: Operating frequency range: Assigned frequency band: Number of RF channels: Supported slots: Number of time slots:	DECT 6.0 1921.536 – 1928.448 MHz 1920 – 1930 MHz 5 even and odd 12 x Tx + 12 x Rx = 24	
Channels	F0CH:0 / 1928.448 MHzF1CH:1 / 1926.720 MHzF2CH:2 / 1924.992 MHzF3CH:3 / 1923.264 MHzF4CH:4 / 1921.536 MHz	
Main test frequencies	Flow         CH:4 / 1921.536 MHz           F <sub>mid</sub> CH:2 / 1924.992 MHz           F <sub>high</sub> CH:0 / 1928.448 MHz	
Modulations Emissions designator Nominal emission bandwidth Channel spacing Spectrum access Nominal lower threshold Nominal upper threshold Number of antennas	GFSK F7D 1.42 MHz 1728 kHz Listen before transmit N/A -60 dBm 2	

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Antenna 0	Type Gain	Bent Monopole 6.7 dBi
Antenna 1	Type Gain	Bent Monopole 6.6 dBi
Manufacturer	Lightspeed Tec 11509 SW Herr Tualatin, OR 97 United States	man Rd.
Power supply	V <sub>nom</sub> V <sub>min</sub> V <sub>max</sub>	120 volts 100 volts 240 volts
AC/DC adaptor	Model Vendor Input Output	DSA-60W-20 1 Lightspeed 100-240 V 50/60 Hz 24 V DC
Temperature	T <sub>nom</sub> T <sub>min</sub> T <sub>max</sub>	20 C -20 C 50 C

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1.1 Photos – Equipment external

See dedicated report

1.2 Photos – Equipment internal

See dedicated report

1.3 Photos – Test setup

See dedicated report

## 1.4 Supporting equipment used during testing

Product type*	Device	Manufacturer	Model No.	Comments	
	None				
*Note: Use the follo	owing abbreviations:				
AE : Auxiliary/Assoc	AE : Auxiliary/Associated Equipment				
SIM : Simulator (Not Subject to Test)					
CABL : Connecting cables					

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#### 1.5 Test modes

Mode #		Description		
TDMA	General conditions:	eneral conditions: EUT powered by a laboratory power supply. Active		
		connection to companion device.		
	Radio conditions:	Mode = Transmit mode		
		Modulation = GFSK		
		Duty cycle = 1/24		
		Power level = Maximum		
Receive	General conditions:	EUT powered by a laboratory power supply.		
	Radio conditions:	Mode = standalone receive		
		Modulation = GFSK		
AC-Powerline	General conditions:	Active data connection between EUT and companion device.		
		EUT connected to AM main via AC/DC Adaptor		
	Radio conditions:	Mode = Transmit mode		
		Modulation = GFSK		
		Duty cycle = 1/24		
		Power level = Maximum		

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1.6	Test equipment used during testing
1.0	rest equipment used during testing

Conducted					
Description	Manufacturer	Model	Cal. Date	Cal. Due	
Analyzer	Agilent	E4440A	2023/05/13	2024/05/13	
DECT Tester	R&S	CMD60	2023/03/16	2024/03/16	
Signal generator	R&S	SME06	2021/09/03	2026/09/03	
Signal generator	R&S	SME06	Cal on use	Cal on use	
Signal generator	R&S	SME03	Cal on use	Cal on use	
Signal generator	Anritsu	68369A	2023/09/14	2026/09/14	
Signal generator	Marconi	2412	Cal on use	Cal on use	
Pulse generator	Agilent	81104A	Cal on use	Cal on use	
Coupler	Narda	4222-16	2022/12/05	2023/12/05	
	Radiated	d spurious emissions			
Description	Manufacturer	Model	Cal. Date	Cal. Due	
Analyzer	Agilent	E4440A	2023/05/13	2024/05/13	
Analyzer	Agilent	E4443A	2023/01/30	2026/01/30	
Antenna	Com-Power	AC-220	2021/08/30	2024/02/30	
Antenna	Com-Power	AHA-118	2021/08/24	2024/02/24	
Antenna	Com-Power	AH-1840	2022/11/11	2027/11/11	
Pre-Amp	Amplifier Research	LN1000	2023/02/18	2024/02/18	
	AC powerlin	ne conducted emissions	5		
Description	Manufacturer	Model	Cal. Date	Cal. Due	
Analyzer	Agilent	E4443A	2023/01/30	2026/01/30	
LISN	Fischer Custom	FCC-50-50-04-02	2020/12/08	2025/12/08	
	Communications				
CDN	Com-Power	T8SE	2023/09/06	2026/09/06	

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#### 1.7 Sample emission level calculation

The following is a description of terms and a sample calculation, as appears in the radiated emissions data table. The numbers used in the calculation are for example only. There is no direct correlation to specific data taken for the product described in this document:

Reading:

This is the reading obtained on the spectrum analyzer in  $dB\mu V$ . Any external preamplifiers used are taken into account through internal analyzer settings.

A.F.:

This is the antenna factor for the receiving antenna. It is a conversion factor, which converts electric field strength to voltage that can be measured directly on the spectrum analyzer. It is treated as a loss in dB. Cable losses have been included with the A.F. to simplify the calculations. The antenna factor is used in calculations as follows:

Reading on analyzer (dB $\mu$ V) + A.F. (dB) = Net field strength (dB $\mu$ V/m)

Measurement Uncertainty:

<i>Test Measurement uncertainties (<math>k=2.05</math>):</i>
Radiated Field strength at 3m measured with:
Bilog Antenna (30 MHz – 1 GHz) ±5.6 dB
<i>Horn Antenna (1-18 GHz)</i> ±4.0 <i>dB</i>

Net:

This is the net field strength measurement (as shown above).

Limit:

This is the FCC Class B radiated emission limit (in units of  $dB\mu V/m$ ). The FCC limits are given in units of  $\mu V/m$ . The following formula is used to convert the units of  $\mu V/m$  to  $dB\mu V/m$ :

Limit (dB $\mu$ V/m) = 20\*log( $\mu$ V/m)

Margin:

This is the margin of compliance below the FCC limit. The units are given in dB. A positive margin indicates the emission was below the limit. A negative margin indicates that the emission exceeds the emission was below the limit.

Example only:

	Reading + A.F. =	Net Reading	:	FCC limit – Net reading =	Margin	
	21.5 dBµV + 26 db =	47.5 dBμV/m	:	57.0 dBμV/m – 47.5 dBμV/m =	9.5 dB	
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## 2 Result summary

	FC	CC 47 CFR Part 15D, 1	L5C, IC RSS-213. IC RSS-Ger	1	
Section	Requirement - Test	FCC	IC	ANSI	Result
3.1	Channel Frequencies	15.303	RSS-213 5.1		PASS
3.2	AC power line	15.107(a)	RSS-213 5.4	C63.4 7	PASS
	conducted emissions	15.207(a)	RSS-Gen 7.2 / 8.8		
3.3	Antenna	15.317, 15.203	RSS-GEN 6.8		PASS
	Requirement				
3.4	Digital modulation	15.319(b)	RSS -213 5.1	6.1.4	PASS
3.5	Occupied Bandwidth	N/A	RSS-GEN 6.7	6.1.3	PASS
3.6	Emission Bandwidth	15.323(a)	RSS-213 5.5	6.1.3	PASS
3.7	Peak Transmit Power	15.319(c)(e)	RSS-213 5.6	6.1.2	PASS
	and Antenna Gain	15.31(e)	RSS-GEN 8.3		
3.8	Power Spectral	15.319(d)	RSS-213 5.7	6.1.5	PASS
	Density				
3.9	Frequency stability	15.323(f)	RSS-213 5.3	6.2.2	PASS
3.10	In-band unwanted	15.323(d)	RSS-213 5.8.2	6.1.6.1	PASS
	emissions				
3.11	Out-of-band-	15.323(d)	RSS-213 5.8.1	6.1.6.2	PASS
	emissions				
3.12	Spurious Emissions	15.319(g)	RSS-GEN 7.3 / 8.9	C63.4	PASS
	(Radiated)	15.109(a)			
		15.209(a)			
3.13	Automatic	15.319(f)	RSS-213 5.2		PASS
	discontinuation of				
	transmission				
3.14	Radiofrequency	15.319(i)	RSS-102		N/A
	radiation exposure				
3.15	Monitoring threshold	15.323(c)(2)(5)(9)	RSS-213 5.2 (2)(5)(9)	7.3.1	N/A
3.16	LIC confirmation	15.323(c)(5)	RSS-213 5.2 (5)	7.3.2	PASS
3.17	LIC selection	15.323(c)(5)	RSS-213 5.2 (5)	7.3.2	PASS
3.18	Monitoring antenna	15.323(c)(8)	RSS-213 5.2 (8)	4	PASS
3.19	Monitoring time	15.323(c)(1)	RSS-213 5.2 (1)	7.3.3	PASS
3.20	Monitoring	15.323(c)(7)	RSS-213 5.2 (7)	7.4	PASS
	bandwidth				
3.21	Monitoring reaction	15.323(c)(7)	RSS-213 5.2 (7)	7.5	PASS
	time				
N/A	Access criteria test	15.323(c)(4)(6)	RSS-213 5.2 (6)		PASS
	interval				
3.22	Access criteria	15.323(c)(4)(6)	RSS-213 5.2 (6)	8.1.2 or 8.1.3	PASS
	functional test				
3.23	Acknowledgments	15.323(c)(4)	RSS-213 5.2 (4)	8.1 or 8.2	PASS

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3.24	Maximum transmit duration	15.323(c)(3)	RSS-213 5.2 (3)	8.2.2	PASS
3.25	Maximum spectrum occupancy	15.323(c)(5)	RSS-213 5.2 (5)		PASS
N/A	Duplex connections	15.323(c)(10)	RSS-213 5.2 (10)	8.3	N/A
N/A	Alternative monitoring interval	15.323(c)(11)	RSS-213 5.2 (11)	8.4	N/A
3.26	Fair access	FCC 15.323(c)(12)	IC RSS-213 5.2(5)		PASS
3.27	Frame period and jitter	15.323(e)	RSS-213 5.2 (13)	6.2.3	PASS
3.28	Frame repetition stability	15.323(e)	RSS-213 5.2 (13)	6.2.2	PASS

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## 3 Test conditions and results

3.1 Channel Frequencies

FCC 15.303, RSS-213 Issue 3, clause 5.1:

Within 1920 – 1930 MHz band for isochronous devices.

UPCS Channel	Frequency (MHz)
Upper Band Edge	1930.000
0 (Highest)	1928.448
1	1926.720
2	1924.992
3	1923.264
4 (Lowest)	1921.536
Lower Band Edge	1920.000

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Conducted emissions acc. to FCC 47	CFR 15D / IC RSS	5-213		Verdict: PASS		
Test performed by: ElectroMagnetic Investigations						
EUT requirement			Reference			
rule parts and clause	FCC 15.107(a), FCC 15.207(a)					
	RSS-213 5.4, RSS-Gen 7.2 / 8.8					
Test according referenc	Reference Method					
standards		ANSI C63.4				
Fully configured sample scanne	Frequency range					
following frequency ran	0.	15 MHz to 30 M	Hz			
Points of Application	Ap	plication Interfa	ce			
AC Mains		LISN				
EUT test mode	AC-Powerline					
Limits and results						
Frequency [MHz]	Quasi-Peak	Result	Average	Result		
	[dBµV]		[dBµV]			
0.15 to 0.5	66 to 56*	PASS	56 to 46*	PASS		
0.5 to 5	56	PASS	46	PASS		
5 to 30	60	PASS	50	PASS		
Comments: *Limit decreases linearly with the logarithm of the frequency.						

#### 3.2 Test conditions and results – AC power line conducted emissions

Conducted Emissions Measurement System uncertainty (k=2.05).....  $\pm 3.7 dB$ Sample conducted emissions measurement:

RF Reading from Spectrum Analyzer (dBuV) + Cable Loss Factor (dB) + LISN Factor (dB) = Final Conducted Emission Level (dBuV).

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	Customer:	Lightspeed 1	<b>Fechnologies</b>		Job	Reference#:	LIG20230928	8
Contact: Rob D'Ange			lo			Date:	10/26/2023	
	DUT:	Rogue Base			Temp	erature (°C):	22.1	
Se	erial Number:	02-C25-Z-S2	2340-00028		Relative H	lumidity (%):	37	
Voltage/Freq: PoE					Barometr	ic Pressure:	30	
Tested by: Ryan Benitez					Location:	Hillsboro		
Produc	ct Standards:	FCC Part 15	Subpart B C	lass B				
		N/A						
	est Standard:		Class B					
TEST RESUL		TEST TYPE			LINE		RUN #	
Pass		Compliance			PoE			1
		- Average Limit	QP Limit	Peak Da	- A	verage Data	QP Data	
120								
100								
							-	
80							-	
<u>≥</u> 60								
<b>∆ngp</b> 60 .					1.1			
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PoE;						Man	Benitey	
PoE;	Peak Data			verage Dat			QP Data	
PoE; Freq	Peak Data Amplitude	Margin	Amplitude	verage Data Limit	a Margin	Amplitude		Margin
		Margin (dB)	Amplitude (dBµV)				QP Data	(dB)
Freq (MHz) 0.47	Amplitude (dBµV) 53.77	(dB) 33.69	Amplitude (dBµV) 52.48	Limit (dBmV) 74.46	Margin (dB) 21.98	Amplitude (dBµV) 53.25	QP Data Limit (dBmV) 87.46	(dB) 34.21
Freq (MHz) 0.47 0.95	Amplitude (dBμV) 53.77 51.97	(dB) 33.69 35.03	Amplitude (dBµV) 52.48 51.09	Limit (dBmV) 74.46 74.00	Margin (dB) 21.98 22.91	Amplitude (dBµV) 53.25 51.53	QP Data Limit (dBmV) 87.46 87.00	(dB) 34.21 35.47
Freq (MHz) 0.47 0.95 1.15	Amplitude (dBμV) 53.77 51.97 52.86	(dB) 33.69 35.03 34.14	Amplitude (dBµV) 52.48 51.09 51.93	Limit (dBmV) 74.46 74.00 74.00	Margin (dB) 21.98 22.91 22.07	Amplitude (dBµV) 53.25 51.53 52.45	QP Data Limit (dBmV) 87.46 87.00 87.00	(dB) 34.21 35.47 34.55
Freq (MHz) 0.47 0.95 1.15 1.18	Amplitude (dBμV) 53.77 51.97 52.86 52.89	(dB) 33.69 35.03 34.14 34.11	Amplitude (dBμV) 52.48 51.09 51.93 52.09	Limit (dBmV) 74.46 74.00 74.00 74.00	Margin (dB) 21.98 22.91 22.07 21.91	Amplitude (dBμV) 53.25 51.53 52.45 52.51	QP Data Limit (dBmV) 87.46 87.00 87.00 87.00	(dB) 34.21 35.47 34.55 34.49
Freq (MHz) 0.47 0.95 1.15 1.18 1.66	Amplitude (dBμV) 53.77 51.97 52.86 52.89 51.37	(dB) 33.69 35.03 34.14 34.11 35.63	Amplitude (dBµV) 52.48 51.09 51.93 52.09 50.21	Limit (dBmV) 74.46 74.00 74.00 74.00 74.00	Margin (dB) 21.98 22.91 22.07 21.91 23.79	Amplitude (dBμV) 53.25 51.53 52.45 52.51 50.67	QP Data Limit (dBmV) 87.46 87.00 87.00 87.00 87.00 87.00	(dB) 34.21 35.47 34.55 34.49 36.33
Freq (MHz) 0.47 0.95 1.15 1.18 1.66 1.89	Amplitude (dBμV) 53.77 51.97 52.86 52.89 51.37 52.75	(dB) 33.69 35.03 34.14 34.11 35.63 34.25	Amplitude (dBµV) 52.48 51.09 51.93 52.09 50.21 52.06	Limit (dBmV) 74.46 74.00 74.00 74.00 74.00 74.00	Margin (dB) 21.98 22.91 22.07 21.91 23.79 21.94	Amplitude (dBμV) 53.25 51.53 52.45 52.51 50.67 52.44	QP Data Limit (dBmV) 87.46 87.00 87.00 87.00 87.00 87.00 87.00	(dB) 34.21 35.47 34.55 34.49 36.33 34.57
Freq (MHz) 0.47 0.95 1.15 1.18 1.66 1.89 2.60	Amplitude (dBμV) 53.77 51.97 52.86 52.89 51.37 52.75 53.78	(dB) 33.69 35.03 34.14 34.11 35.63 34.25 33.22	Amplitude (dBµV) 52.48 51.09 51.93 52.09 50.21 52.06 52.14	Limit (dBmV) 74.46 74.00 74.00 74.00 74.00 74.00 74.00	Margin (dB) 21.98 22.91 22.07 21.91 23.79 21.94 21.86	Amplitude (dBμV) 53.25 51.53 52.45 52.51 50.67 52.44 53.10	QP Data Limit (dBmV) 87.46 87.00 87.00 87.00 87.00 87.00 87.00 87.00	(dB) 34.21 35.47 34.55 34.49 36.33 34.57 33.90
Freq (MHz) 0.47 0.95 1.15 1.18 1.66 1.89 2.60 3.32	Amplitude (dBμV) 53.77 51.97 52.86 52.89 51.37 52.75 53.78 53.24	(dB) 33.69 35.03 34.14 34.11 35.63 34.25 33.22 33.76	Amplitude (dBµV) 52.48 51.09 51.93 52.09 50.21 52.06 52.14 59.99	Limit (dBmV) 74.46 74.00 74.00 74.00 74.00 74.00 74.00 74.00	Margin (dB) 22.91 22.07 21.91 23.79 21.94 21.86 14.01	Amplitude (dBμV) 53.25 51.53 52.45 52.51 50.67 52.44 53.10 52.85	QP Data Limit (dBmV) 87.46 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00	(dB) 34.21 35.47 34.55 34.49 36.33 34.57 33.90 34.16
Freq (MHz) 0.47 0.95 1.15 1.18 1.66 1.89 2.60 3.32 4.02	Amplitude (dBμV) 53.77 51.97 52.86 52.89 51.37 52.75 53.78 53.24 52.96	(dB) 33.69 35.03 34.14 34.11 35.63 34.25 33.22 33.76 34.04	Amplitude (dBµV) 52.48 51.09 51.93 52.09 50.21 52.06 52.14 59.99 52.10	Limit (dBmV) 74.46 74.00 74.00 74.00 74.00 74.00 74.00 74.00 74.00	Margin (dB) 21.98 22.91 22.07 21.91 23.79 21.94 21.86 14.01 21.91	Amplitude (dBμV) 53.25 51.53 52.45 52.51 50.67 52.44 53.10 52.85 52.53	QP Data Limit (dBmV) 87.46 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00	(dB) 34.21 35.47 34.55 34.49 36.33 34.57 33.90 34.16 34.47
Freq (MHz) 0.47 0.95 1.15 1.18 1.66 1.89 2.60 3.32 4.02 4.74	Amplitude (dBμV) 53.77 51.97 52.86 52.89 51.37 52.75 53.78 53.24 52.96 52.77	(dB) 33.69 35.03 34.14 34.11 35.63 34.25 33.22 33.76 34.04 34.23	Amplitude (dBµV) 52.48 51.09 51.93 52.09 50.21 52.06 52.14 59.99 52.10 51.82	Limit (dBmV) 74.46 74.00 74.00 74.00 74.00 74.00 74.00 74.00 74.00 74.00	Margin (dB) 21.98 22.91 22.07 21.91 23.79 21.94 21.86 14.01 21.91 22.18	Amplitude (dBμV) 53.25 51.53 52.45 52.51 50.67 52.44 53.10 52.85 52.53 52.53 52.30	QP Data Limit (dBmV) 87.46 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00	(dB) 34.21 35.47 34.55 34.49 36.33 34.57 33.90 34.16 34.47 34.70
Freq (MHz) 0.47 0.95 1.15 1.18 1.66 1.89 2.60 3.32 4.02	Amplitude (dBμV) 53.77 51.97 52.86 52.89 51.37 52.75 53.78 53.24 52.96 52.77	(dB) 33.69 35.03 34.14 34.11 35.63 34.25 33.22 33.76 34.04	Amplitude (dBµV) 52.48 51.09 51.93 52.09 50.21 52.06 52.14 59.99 52.10	Limit (dBmV) 74.46 74.00 74.00 74.00 74.00 74.00 74.00 74.00 74.00	Margin (dB) 21.98 22.91 22.07 21.91 23.79 21.94 21.86 14.01 21.91	Amplitude (dBμV) 53.25 51.53 52.45 52.51 50.67 52.44 53.10 52.85 52.53	QP Data Limit (dBmV) 87.46 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00	(dB) 34.21 35.47 34.55 34.49 36.33 34.57 33.90 34.16 34.47 34.70
Freq (MHz) 0.47 0.95 1.15 1.18 1.66 1.89 2.60 3.32 4.02 4.74	Amplitude (dBμV) 53.77 51.97 52.86 52.89 51.37 52.75 53.78 53.24 52.96 52.77	(dB) 33.69 35.03 34.14 34.11 35.63 34.25 33.22 33.76 34.04 34.23	Amplitude (dBµV) 52.48 51.09 51.93 52.09 50.21 52.06 52.14 59.99 52.10 51.82	Limit (dBmV) 74.46 74.00 74.00 74.00 74.00 74.00 74.00 74.00 74.00 74.00	Margin (dB) 21.98 22.91 22.07 21.91 23.79 21.94 21.86 14.01 21.91 22.18	Amplitude (dBμV) 53.25 51.53 52.45 52.51 50.67 52.44 53.10 52.85 52.53 52.53 52.30	QP Data Limit (dBmV) 87.46 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00	(dB) 34.21 35.47 34.55 34.49 36.33 34.57 33.90 34.16 34.47 34.70
Freq (MHz) 0.47 0.95 1.15 1.18 1.66 1.89 2.60 3.32 4.02 4.74	Amplitude (dBμV) 53.77 51.97 52.86 52.89 51.37 52.75 53.78 53.24 52.96 52.77	(dB) 33.69 35.03 34.14 34.11 35.63 34.25 33.22 33.76 34.04 34.23	Amplitude (dBµV) 52.48 51.09 51.93 52.09 50.21 52.06 52.14 59.99 52.10 51.82	Limit (dBmV) 74.46 74.00 74.00 74.00 74.00 74.00 74.00 74.00 74.00 74.00	Margin (dB) 21.98 22.91 22.07 21.91 23.79 21.94 21.86 14.01 21.91 22.18	Amplitude (dBμV) 53.25 51.53 52.45 52.51 50.67 52.44 53.10 52.85 52.53 52.53 52.30	QP Data Limit (dBmV) 87.46 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00	(dB) 34.21 35.47 34.55 34.49 36.33 34.57 33.90 34.16 34.47 34.70
Freq (MHz) 0.47 0.95 1.15 1.18 1.66 1.89 2.60 3.32 4.02 4.74	Amplitude (dBμV) 53.77 51.97 52.86 52.89 51.37 52.75 53.78 53.24 52.96 52.77	(dB) 33.69 35.03 34.14 34.11 35.63 34.25 33.22 33.76 34.04 34.23	Amplitude (dBµV) 52.48 51.09 51.93 52.09 50.21 52.06 52.14 59.99 52.10 51.82	Limit (dBmV) 74.46 74.00 74.00 74.00 74.00 74.00 74.00 74.00 74.00 74.00	Margin (dB) 21.98 22.91 22.07 21.91 23.79 21.94 21.86 14.01 21.91 22.18	Amplitude (dBμV) 53.25 51.53 52.45 52.51 50.67 52.44 53.10 52.85 52.53 52.53 52.30	QP Data Limit (dBmV) 87.46 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00	(dB) 34.21 35.47 34.55 34.49 36.33 34.57 33.90 34.16 34.47 34.70
(MHz) 0.47 0.95 1.15 1.18 1.66 1.89 2.60 3.32 4.02 4.74	Amplitude (dBμV) 53.77 51.97 52.86 52.89 51.37 52.75 53.78 53.24 52.96 52.77	(dB) 33.69 35.03 34.14 34.11 35.63 34.25 33.22 33.76 34.04 34.23	Amplitude (dBµV) 52.48 51.09 51.93 52.09 50.21 52.06 52.14 59.99 52.10 51.82	Limit (dBmV) 74.46 74.00 74.00 74.00 74.00 74.00 74.00 74.00 74.00 74.00	Margin (dB) 21.98 22.91 22.07 21.91 23.79 21.94 21.86 14.01 21.91 22.18	Amplitude (dBμV) 53.25 51.53 52.45 52.51 50.67 52.44 53.10 52.85 52.53 52.53 52.30	QP Data Limit (dBmV) 87.46 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00 87.00	(dB) 34.21 35.47 34.55 34.49 36.33 34.57

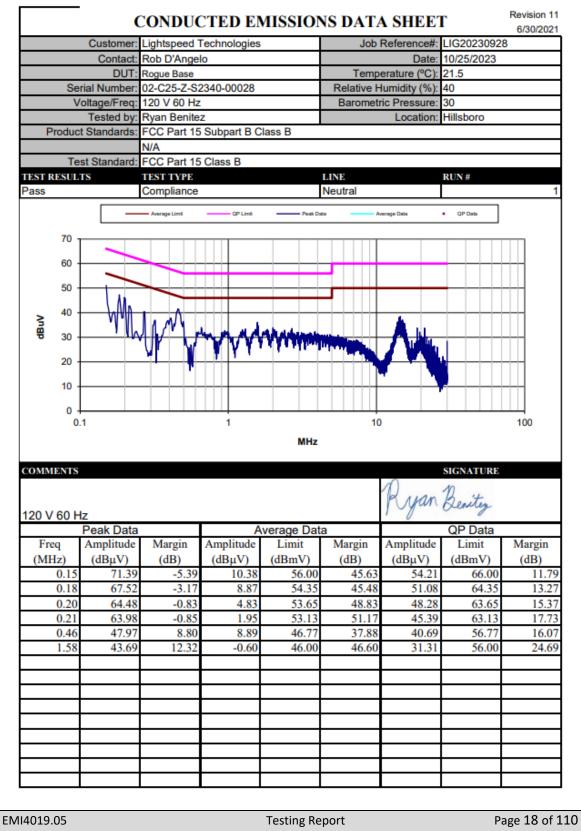
Investigations

	LIG20230928	Reference#:	Job R		<b>Cechnologies</b>	Lightspeed 1	Customer:	
	10/25/2023					Rob D'Angel		
		erature (°C):	Tempe		-	Rogue Base		
		lumidity (%):			2340-00028	02-C25-Z-S2		Seria
		ric Pressure:				120 V 60 Hz		
		Location:				Ryan Benite		
				ass B	Subpart B C			
						N/A		
					Class B	FCC Part 15	t Standard:	Test
	RUN #		LINE	1		TEST TYPE	<b>S</b> :	TEST RESULTS
1			_ine	L		Compliance	(	Pass
	QP Data			Peak Data	OP Limit			
	<ul> <li>QP bits</li> </ul>	verage Data		Peak Data	- OF LINE	- Average Limit		
								70 -
								60 -
								50
			1				10	<sup>50</sup> T
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						M	. ሌ	
	+ + + + + + + + + + + + + + + + + + + +		Martine .	A MANA	MANN	1		₩ 30 -
			Million March	1.	1.4.4.	1º. W		
								20
		· · · · ·						10
								o 🗕
100		)	10		1			0.1
				MHz				
	SIGNATURE	0						COMMENTS
	12	Dura	/					
	Denity	Ryan						
	0	10						120 V 60 Hz
	QP Data			verage Data			Peak Data	
Margin	Limit	Amplitude	-	Limit	Amplitude	Margin	Amplitude	-
(dB)	(dBmV)	(dBµV)	(dB)	(dBmV)	(dBµV)	(dB)	(dBµV)	(MHz)
	65.67	54.26	22.49	55.67	33.18	-5.04	70.71	0.16
11.42	63.61	48.92	24.17	53.61	29.44	-0.89	64.50	0.20
14.69			12.45	46.00	34.37	5.06	51.76	0.45
14.69 16.62	56.82	40.20	12.45	46.82				
14.69 16.62 22.44	56.00	40.20 33.56	8.61	46.00	37.39	10.75	45.25	1.25
14.69 16.62 22.44 25.40	56.00 56.00	40.20 33.56 30.60	8.61 23.18	46.00 46.00	37.39 22.82	10.75 14.86	45.25 41.14	2.16
14.69 16.62 22.44	56.00	40.20 33.56	8.61	46.00	37.39	10.75	45.25	
14.69 16.62 22.44 25.40	56.00 56.00	40.20 33.56 30.60	8.61 23.18	46.00 46.00	37.39 22.82	10.75 14.86	45.25 41.14	2.16
14.69 16.62 22.44 25.40	56.00 56.00	40.20 33.56 30.60	8.61 23.18	46.00 46.00	37.39 22.82	10.75 14.86	45.25 41.14	2.16
14.69 16.62 22.44 25.40	56.00 56.00	40.20 33.56 30.60	8.61 23.18	46.00 46.00	37.39 22.82	10.75 14.86	45.25 41.14	2.16
14.69 16.62 22.44 25.40	56.00 56.00	40.20 33.56 30.60	8.61 23.18	46.00 46.00	37.39 22.82	10.75 14.86	45.25 41.14	2.16
14.69 16.62 22.44 25.40	56.00 56.00	40.20 33.56 30.60	8.61 23.18	46.00 46.00	37.39 22.82	10.75 14.86	45.25 41.14	2.16
14.69 16.62 22.44 25.40	56.00 56.00	40.20 33.56 30.60	8.61 23.18	46.00 46.00	37.39 22.82	10.75 14.86	45.25 41.14	2.16
14.69 16.62 22.44 25.40	56.00 56.00	40.20 33.56 30.60	8.61 23.18	46.00 46.00	37.39 22.82	10.75 14.86	45.25 41.14	2.16
14.69 16.62 22.44 25.40	56.00 56.00	40.20 33.56 30.60	8.61 23.18	46.00 46.00	37.39 22.82	10.75 14.86	45.25 41.14	2.16
14.69 16.62 22.44 25.40	56.00 56.00	40.20 33.56 30.60	8.61 23.18	46.00 46.00	37.39 22.82	10.75 14.86	45.25 41.14	2.16

Investigations

Line

Neutral



3.3 Test conditions and results – Antenna requirement
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Antenna requirement acc. to FCC 47 CFR 15D / IC RSS-GEN Verdict: PASS							
Test performed by: ElectroMagnetic Investigations							
EUT requirement Reference							
rule parts and clause FCC 15.317, FCC 15.203, RSS-GEN 6.8							
Test according to measurement	reference		Reference				
Visual inspection & declaration							
Requirements							
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. When an antenna conducted measurement is used to determine the RF output power of the device, the effective gain of the antenna intended for the device must be stated based on measurement or on data from the measured RF output power before using the power limits.							
	Results						
Antenna No.	Туре	Antenna gain [dBi]		a gain in of 3 dBi			
0	internal	6.7	3	.7			
1	internal	6.6	3	.6			
Comment:							

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## 3.4 Test conditions and results – Digital modulation

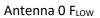
Antenna requirement acc. to FCC 47 CFR 15D / IC RSS-213 Verdict: Pass					
Test performed by: ElectroMagnetic Investigations					
EUT requirement	Reference				
rule parts and clause	FCC 15.319(b), IC RCC-213 5.1				
Test according to	Reference Method				
measurement reference	Declaration				
Requirements					
All transmission must use only digital modulation techniques.					
Results					
The test sample is an isochronous digital modulated device that operates in 1920-1930					
MHz band. This device is based on DECT technology described in European Standards EN					
300 175-2 and EN 300 175-3, now operating in frequency channels mentioned above.					
The operating modes are MC/TDMA/TDD (Mul					
Time Division Duplex) using Digital GFSK modu	lation.				
For further details see operational description	provided by manufacturer.				

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Occupied Bandwid	th acc. to IC RSS-GEN		Verdict: PASS	
Test performed by: ElectroMagnetic Investigations				
Test	according to		Reference Method	
measure	ement reference		IC RSS-GEN 6.7	
Testeo	d frequencies		F <sub>mid</sub>	
EUT	test mode		TDMA	
		Limits		
	0.05 MHz <= Occu	pied Bandwidth	< 2.5 MHz	
	Т	est results		
	ŀ	Antenna 0		
Channel	Center frequen	cy [MHz]	Occupied Bandwidth [MHz]	
FLOW	1921.53	5	1.2038	
F <sub>MID</sub>	1924.99	2	1.2041	
<b>F</b> <sub>HIGH</sub>	1928.44	3	1.2031	
	l	ntenna 1		
Channel	Center frequen	cy [MHz]	Occupied Bandwidth [MHz]	
FLOW 1921.53		5	1.2054	
F <sub>MID</sub> 1924.992		2	1.2006	
F <sub>HIGH</sub> 1928.44		3	1.2055	
Comments:				

## 3.5 Test conditions and results – Occupied bandwidth

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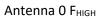


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Antenna 0 F<sub>MID</sub>

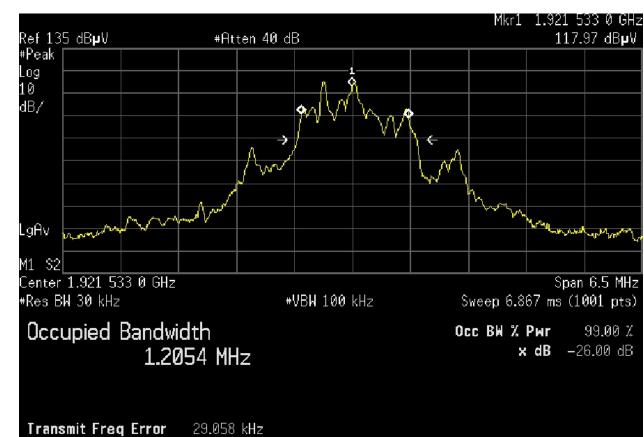


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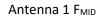


1.339 MHz

x dB Bandwidth

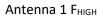
Antenna	1	FLOW
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	Investigations	
	Investigations	





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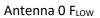


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Emission Bandwidth acc. to FCC 47 CFR 15D and RSS-213Verdict: PASS				Verdict: PASS
Test performed by: ElectroMagnetic Investigations				
Test acc	ording to		Refe	rence
measureme	nt reference		FCC 15.323(a)	, IC RSS-213 5.5
Test acc	ording to		Reference	e Method
measureme	nt reference		ANSI C6	3.17 6.1.3
Tested fro	equencies		Flow	/ F <sub>high</sub>
EUT tes	st mode		TC	MA
			Limits	
	0.05 MH	Iz ≤ Emissio	on Bandwidth < 2.5	5 MHz
	Test results			
		An	tenna 0	
Channel	Center frequen	icy [MHz]	Mode	Emission Bandwidth [MHz]
Flow	1921.53	86	-26 dB	1.334
F <sub>MID</sub>	1924.99	92	-26 dB	1.333
<b>F</b> <sub>high</sub>	1928.44	18	-26 dB	1.338
Antenna 1				
Channel Center frequency [MHz] Mode Emission Bandwidth [M			Emission Bandwidth [MHz]	
F <sub>low</sub> 1921.536		86	-26 dB	1.339
F <sub>MID</sub>	1924.99	92	-26 dB	1.323
F <sub>high</sub>	1928.44	18	-26 dB	1.331
Comments:				

#### 3.6 Test conditions and results – Emission Bandwidth

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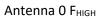


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Antenna 0 F<sub>MID</sub>



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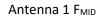


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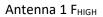
Antenna	1	FLOW
/	-	I LUVV

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## 3.7 Test conditions and results – Peak transmit power

Peak transr	nit power acc. to FC	C 47 CFR 15D /	ICC RSS-213	Ver	dict: PASS
Test perfor	Test performed by: ElectroMagnetic Investigations				
EUT requirement			Reference		
rule parts and clause			FCC 15.319(c),(e	e), IC RSS-5.6, IC RS	S-GEN 8.3
	Test according to		Ref	ference Method	
n	neasurement referen	ce	AN	ISI C63.17 6.1.2	
	Tested frequencies		FL	ow / Fmid / Fhigh	
	EUT test mode			TDMA	
	Antenna excess gair	1		0 dB	
			Limits		
bandwidth	•	ansmit power s	rowatts multiplied by the head by the head by the head by the educed by the eds 3 dBi.	•	
			Antenna 0		
			Test results – FCC		
Channel	Frequency [MHz]	Peak Power [dBm]	Excess gain [dB]	Limit [dBm]	Margin [dB]
FLOW	1921.536	9.72	3.5	20.62	7.40
F <sub>MID</sub>	1924.992	9.70	3.7	20.62	7.22
F <sub>HIGH</sub>	1928.448	9.70	3.6	20.63	7.33
		Te	st results – IC		
FLOW	1921.536	9.72	3.5	20.40	7.18
F <sub>MID</sub>	1924.992	9.70	3.7	20.40	7.00
F <sub>HIGH</sub>	1928.448	9.70	3.6	20.40	7.10
			Antenna 1		
		Test	t results – FCC		
Channel	Frequency [MHz]	Peak Power [dBm]	Excess gain [dB]	Limit [dBm]	Margin [dB]
FLOW	1921.536	13.84	3.5	20.63	3.29
F <sub>MID</sub>	1924.992	13.83	3.4	20.60	3.37
F <sub>HIGH</sub>	1928.448	13.79	3.6n	20.62	3.23
		Te	st results – IC		
FLOW	1921.536	13.84	3.5	20.40	3.06
F <sub>MID</sub>	1924.992	13.83	3.4	20.39	3.16
F <sub>HIGH</sub>	1928.448	13.79	3.6	20.40	3.01
Comments:			1		1

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#### Antenna 0 FLOW

Ref 28 dBm	#Atten 40 d	В		Mkr1 5.76 µs 9.72 dBm
#Peak Log				
10				
dB/			╪┱──	
LgAv				
M1 S2				
S3 BC AA			and mound for a star and	aphenhalanin lankapana dari
<b>£</b> (f):				
FTun				
Center 1.921 536 GH				Span 0 Hz
Res BW 3 MHz	4	ŧVBW 50 MHz	Sweep 6	640 µs (1001 pts)

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### Antenna 0 F<sub>MID</sub>

										Mkr1	5.76 µs
Ref 28	dBm		#At	ten 40 di	3						0.70 dBm
#Peak											
Log										G	
10 dB/	d										
dB/	1 �										
							Ħ				
							┼╂				
							$\vdash$				
LgAv											
								1			
M1 S2											
S3 BC								1.2			
AA								Versiol Construction	hand the prostation of	how when the states	and and the state of the state
<b>£</b> (f):											
FTun											
							$\uparrow$				
							┢				
Contor	1.924 99	)2 CU⇒								¢	pan Ø Hz
						411-			Succe C	ہ 40 µs (11	
Res BW	D PIEZ			#	VBW 50 M	INZ			Sweep o	40 PS (1)	σσι μts/

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LIG20230928-01	ElectroMagnetic	C25
LIG20230928-01	Investigations	

### Antenna 0 F<sub>HIGH</sub>

Ref 28	dBm		#Ĥ+·	ten 40 dE	2						10.24 µs 3.70 dBm
#Peak [	dom.						Г				
Log											
10 dB/	d						┢				
dB/	¢										
i							Ħ				
LgÁv ,											
M1 S2											
S3 BC											
AA								WALLAND, M	alateri e <b>st</b> rajeni e filijen ne	ledgend, Nady Provel, Papalan	attend for the latend
<b>£</b> (f):											
FTun							_				
<u></u>	4 000 4										
Center Res BW	1.928 44 2.MU-	FO GHZ			VBW 50 M	411_			e		pan 0 Hz 001 pts)

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LIG20230928-01	ElectroMagnetic	C25
LIG20230928-01	Investigations	

Antenna 1 FLOW

Ref 28	dBm		#Ati	ten 40 df	3					15.36 µs 3.84 dBm
#Peak Log										
10 dB/										
uD7	( 									
LgAv										
M1 S2 S3 BC										
AA							howayshirs	munum	the Mary share in subsections	Martheophyle and second for
<b>£</b> (f):										
FTun										
	1.921 53	36 GHz								pan 0 Hz
Kes B⊳	3 MHz			#	VBW 50 N	1HZ		-Sweep 6	40 µs (10	001 pts)

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Antenna 1 F<sub>MID</sub>

	· · · · · · · ·										12.16 µs
Ref 28	dBm		#Ati	ten 40 di	3					13	8.83 dBm
#Peak											
Log											
$10^{-1}$	1 �										
10 dB/	×						٦				
,											
	[										
LgAv											
M1 \$2											
S3 BC											
AA								abilition	a dan ka sala a da	-Joonaphelow-angles	and a standard of the s
								U WAY UT	a na na kata ka mata ka	u e de service de la contra de la La contra de la contr	andrea, eisteren
<b>£</b> (f):											
FTun											
Center	1.924 9	92 GHz									pan 0 Hz
Res BW	3 MHz			#	VBW 50 N	1Hz			Sweep 6	40 µs (1)	

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11020220028 01	ElectroMagnetic	C25
LIG20230928-01	Investigations	

Antenna 1 F<sub>HIGH</sub>

Ref 28	dBm		#Ĥt	ten 40 df	3						10.24 µs 3.79 dBm
#Peak											
Log 10 dB/											
10	_1 ♦										
dB/	<u>ر المعالم الم</u>						Π				
	-										
LgAv											
Lariv											
M1 S2											
S3 BC											
AA								and water	y <sup>ha</sup> wangkanaratika	abulletyper byradia	and shares and
<b>£</b> (f):											
FTun											
	1.928 44	48 GHz									pan 0 Hz
Res BW	3 MHz			#	VBW 50 N	1Hz			Sweep 6	40 µs (1)	001 pts)

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## 3.8 Test conditions and results – Power spectral density

Power spectral density acc.	Verdict: PASS						
Test performed by: ElectroMagnetic Investigations							
EUT requireme	EUT requirement						
rule parts and cla	ause	FCC 15.	.319(d) / IC RSS-2	13 5.7			
Test according	to	R	eference Method				
measurement refe	rence	A	NSI C63.17 6.1.5				
Tested frequence	cies		Flow / Fhigh				
EUT test mod	e		TDMA				
Limits							
≤ mW (4.77 dBm) / 3 kHz							
Test results							
Channel	Frequency	Peak Density	Limit	Margin [dB]			
	[MHz]	[dBm/3kHz]	[dBm/3kHz]				
	An	tenna 0					
FLOW	1921.536	-9.986	4.77	14.756			
F <sub>MID</sub>	1924.992	-9.957	4.77	14.727			
F <sub>HIGH</sub>	1928.448	-9.886	4.77	14.656			
	An	tenna 1					
FLOW	1921.536	-5.217	4.77	9.987			
F <sub>MID</sub>	1924.992	-5.684	4.77	10.454			
F <sub>HIGH</sub> 1928.448 -5.365 4.77 10.135							
Comments:							

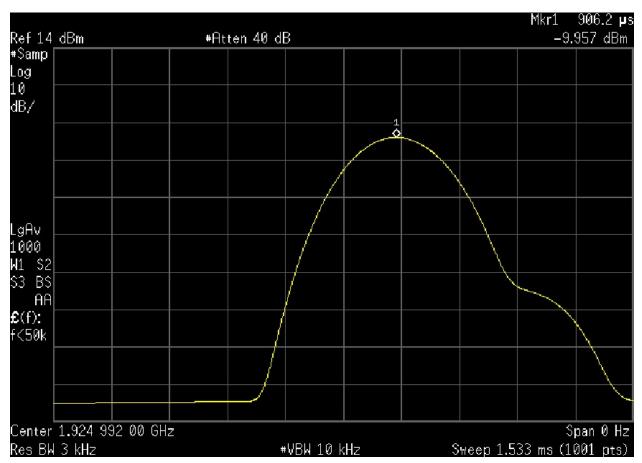
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LIG20250928-01	Investigations	

Antenna 0 FLOW

Ref 14 dBm	#At	ten 40 dE	3					906.2 <b>µ</b> s 986 dBm
#Samp								
L0g								
Log 10 dB/								
				0				
			/					
LgAv						$\mathbf{h}$		
1000 W1 S2								
S3 BS AA			/				-	
<b>£</b> (f): f<50k								
Center 1.921 536 (	GHz							pan Ø Hz
Res BW 3 kHz		#	VBW 10 k	Hz	S	weep 1.5	33 ms (10	001 pts)

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LIG20230928-01	Investigations	

Antenna 0 F<sub>HIGH</sub>

Ref 14_dBm		#At	ten 40 di	3					906.2 µs 886 dBm
#Samp Log									
Log 10 dB/									
					×				
				/			<u> </u>		
LgAv							$\sum$		
1000 W1 S2									
S3 BS AA									
<b>£</b> (f): f<50k			/						
Center 1.928 4 Res BW 3 kHz	48 00 GHz	-	#	VBW 10 k	:Hz	S	weep 1.5	ا\$: 33 ms (10	oan 0 Hz 001 pts)

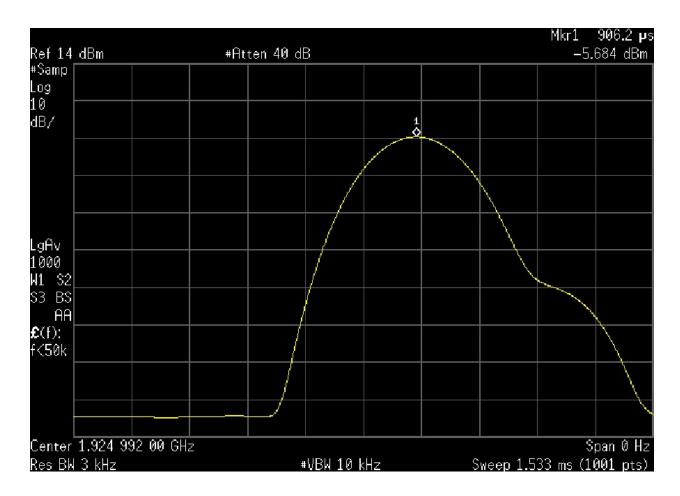
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Antenna 1 FLOW

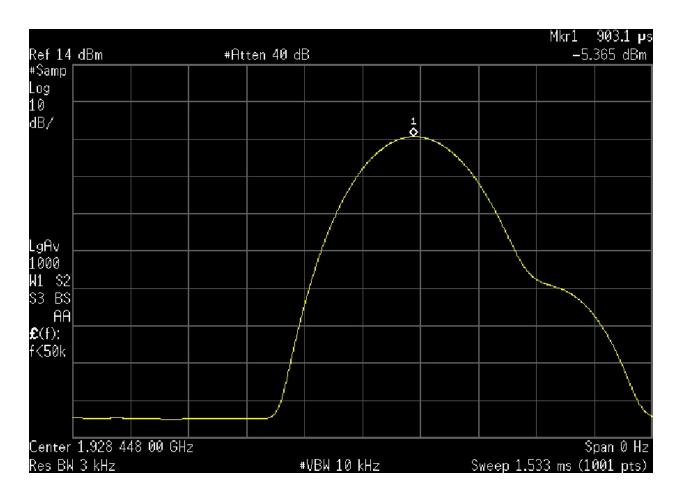
Ref 14 dBm	#At	ten 40 dE	3					<b>904.7 µ</b> s 217 dBm
#Samp								
Log 10								
10 dB/								
			/					
LgAv								
1000 W1 S2			/					
S3 BS AA			/					
<b>£</b> (f): f<50k		(						
Center 1.921 536 00	0 GHz							pan 0 Hz
Res BW 3 kHz		#	VBW 10 k	;Hz	S	weep 1.5	33 ms (10	001 pts)

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Antenna	1	<b>F</b> <sub>MID</sub>



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	Investigations	



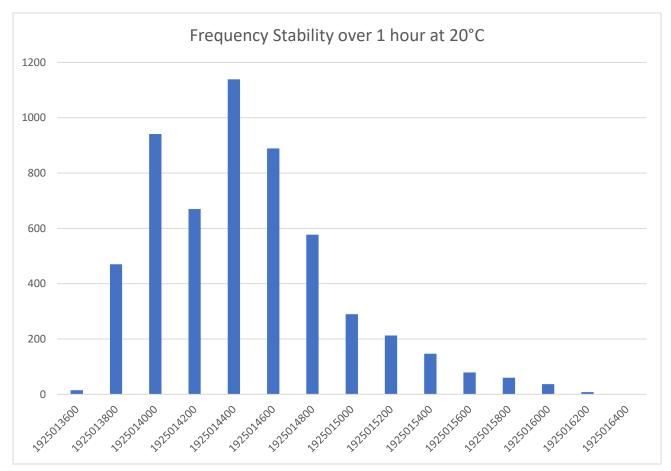
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LIG20230928-01	Investigations	

# 3.9 Test conditions and results – Frequency stability

Frequency sta	bility acc. to FCC		Verdict: PASS		
•	uirement	Reference			
rule parts	and clause	FCC 15.323(f	) / IC RSS	213 5.3	
Test acc	ording to	Referen	ice Meth	od	
measureme	ent reference	ANSI C	53.17 6.2	.1	
Tested fr	equencies		F <sub>mid</sub>		
EUT te	st mode	Т	DMA		
		Limits			
		± 10 ppm / hour			
		Test results			
Voltage	Temperature	Maximum Frequency deviation	Limit	Verdict	
		[ppm]	[ppm]		
		Antenna 0			
Nominal	+20 °C	1.038	±10	PASS	
Nominal	-20 °C	0.623	±10	PASS	
Nominal	+50 °C	0.519	±10	PASS	
85%	+20 °C	0.727	±10	PASS	
115%	+20 °C	0.415	±10	PASS	
		Antenna 1			
Nominal	+20 °C	0.623	±10	PASS	
Nominal	-20 °C	0.519	±10	PASS	
Nominal	+50 °C	0.727	±10	PASS	
85%	+20 °C	2.389	±10	PASS	
115%	+20 °C	0.623	±10	PASS	
Comments:					

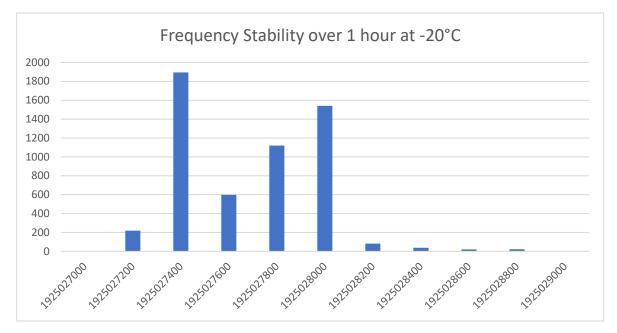
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Antenna 0 +20°C



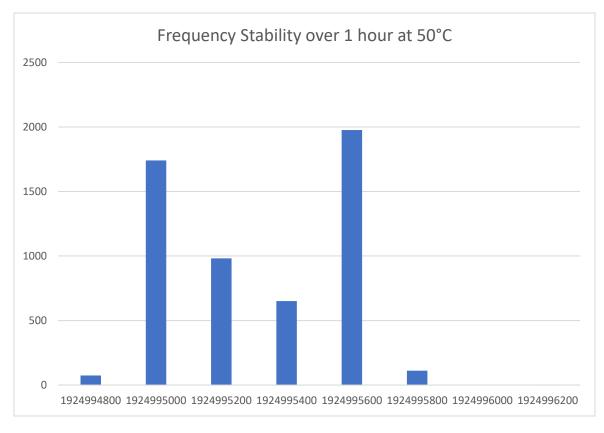
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Antenna 0 -20°C



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LIG20230928-01	Investigations	

Antenna 0 +50°C

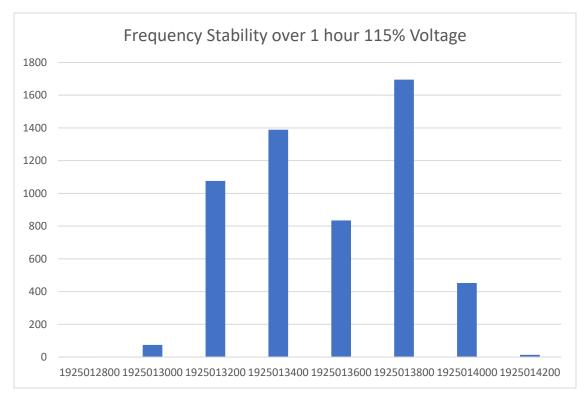


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Frequency Stability over 1 hour at 85% Voltage

Antenna 0 +20°C 85% Voltage

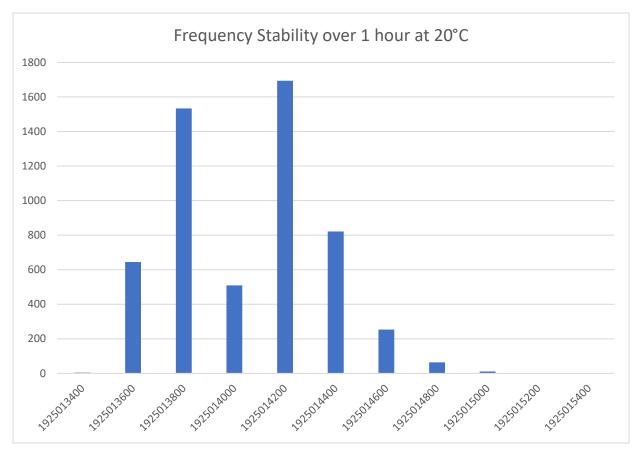
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Antenna 0 +20°C 115% Voltage

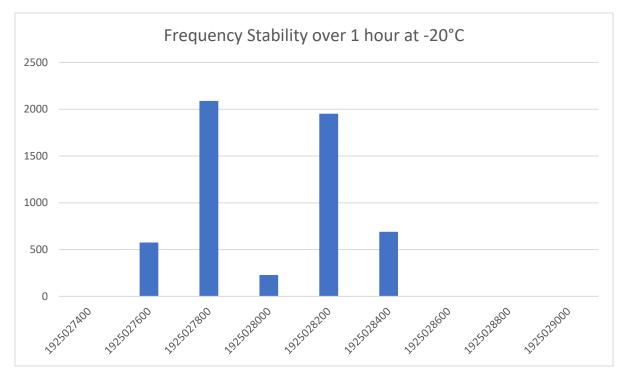
ſ	EMI4019.05	Testing Report	Page 54 of 110
	LIG20230928-01	ElectroMagnetic	C25
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Antenna 1 +20°C



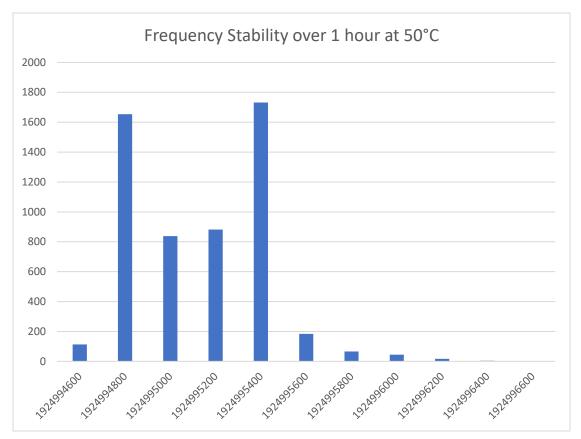
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Antenna 1 -20°C



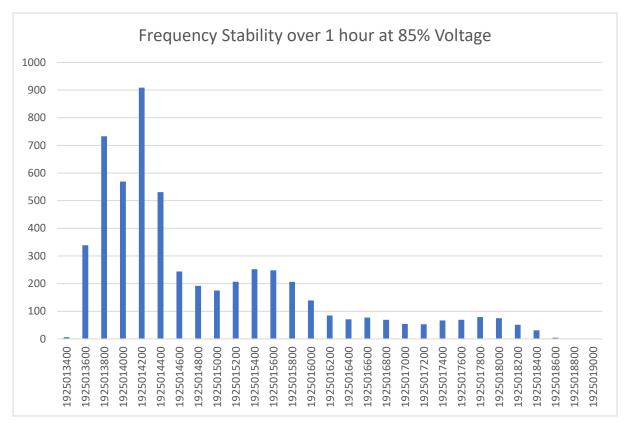
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Antenna 1 +50°C

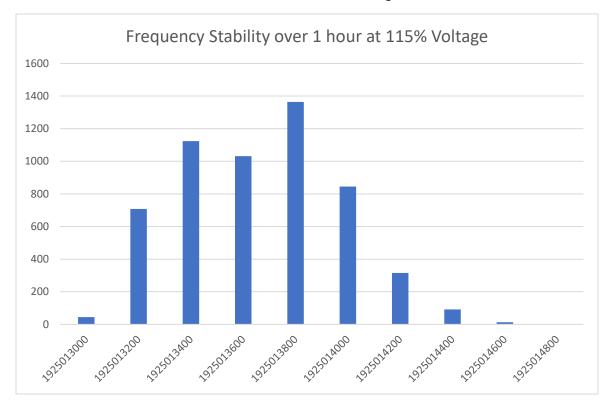


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Antenna 1 +20°C 85% Voltage



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1020230928-01	Investigations	



Antenna 1 +20°C 115% Voltage

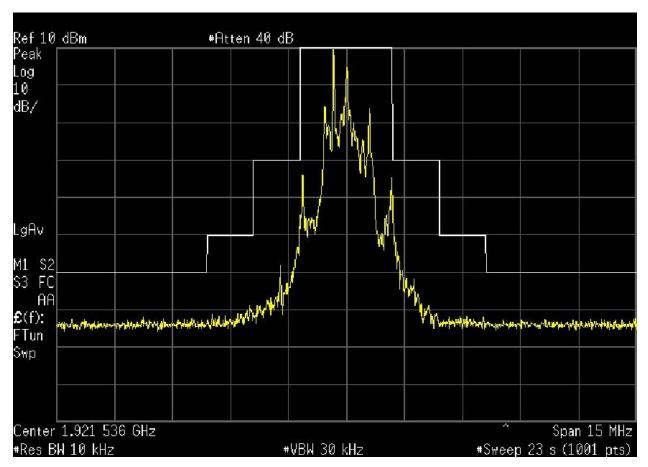
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In-band unwanted emissions acc. to FCC 47 CFR 15D / IC RSS-213			Verdict: PASS
Test performed by: ElectroMagnetic Investigations			
EUT requirement		R	eference
rule parts and clause		FCC 15.323(d) / IC RSS-213 5.8.2	
Test according to		Refere	ence Method
measurement reference		ANSI C	63.17 6.1.6.1
Tested frequencies		F	low / F <sub>high</sub>
Test frequency range		1920	– 1930 MHz
	Limits		
Frequency range [MHz]		Detector	Limit [dBc]
UPCS Band Edge to (F <sub>C</sub> – 3B)		Peak	-60
$(F_{c} - 3B)$ to $(F_{c} - 2B)$		Peak	-50
$(F_{C} - 2B)$ to $(F_{C} - 1B)$		Peak	-30
(F <sub>c</sub> + 1B) to (F <sub>c</sub> + 2B)		Peak	-30
(F <sub>c</sub> + 2B) to (F <sub>c</sub> + 3B)		Peak	-50
(F <sub>c</sub> + 3B) to UPCS Band Edge		Peak	-60
B = occupied bandwidth of selected channel			
F <sub>c</sub> = Center frequency of selected channel			
Τε	st resu	llts	
Channel	Frequ	ency [MHz]	Verdict
A	ntenna	0	
FLOW	1921.536		Pass
F <sub>MID</sub>	1924.992		Pass
F <sub>HIGH</sub>		28.448	Pass
Antenna 1		1	
F <sub>LOW</sub>	19	21.536	Pass
F <sub>MID</sub>	19	24.992	Pass
F <sub>HIGH</sub>	19	28.448	Pass
Comments: The limit calculation was done wit	h the C	Canadian limit becau	se it is worst case

3.10 Test conditions and results – Transmitter in-band unwanted emissions

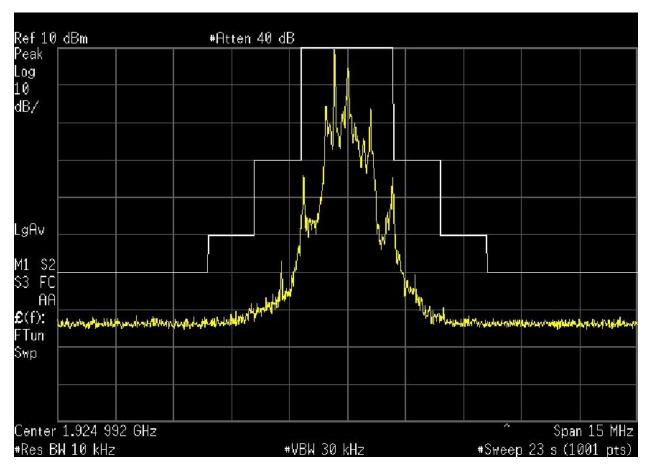
E	MI4019.05	Testing Report	Page 60 of 110
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	1920230928-01	Investigations	

#### Antenna 0 FLOW



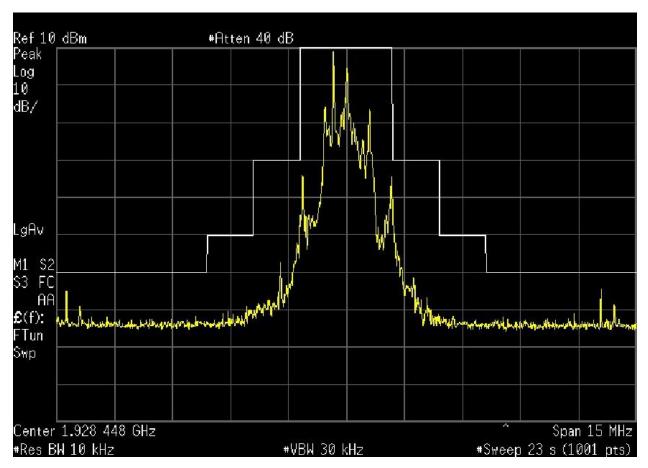
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#### Antenna 0 F<sub>MID</sub>



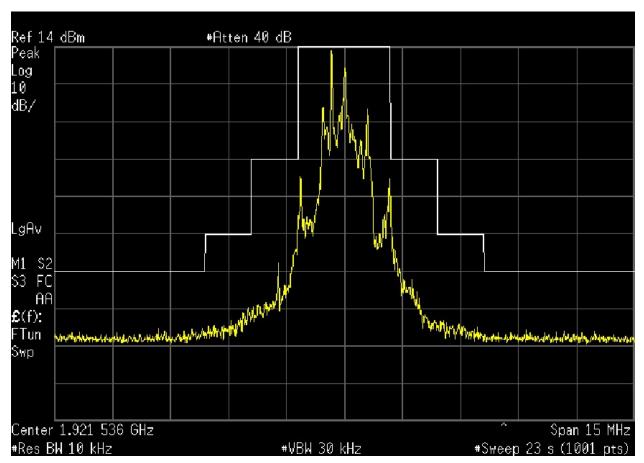
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#### Antenna 0 F<sub>HIGH</sub>



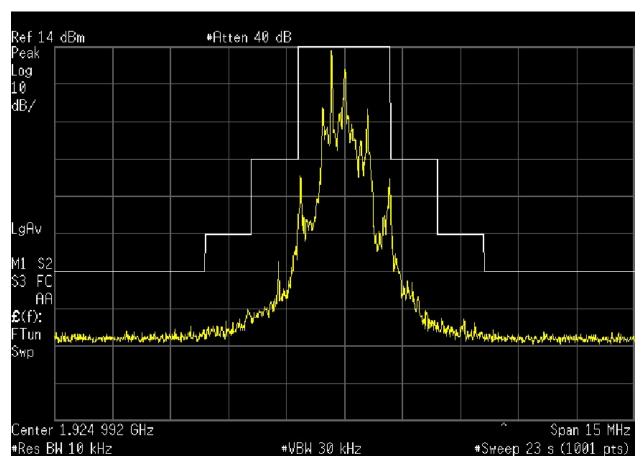
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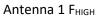


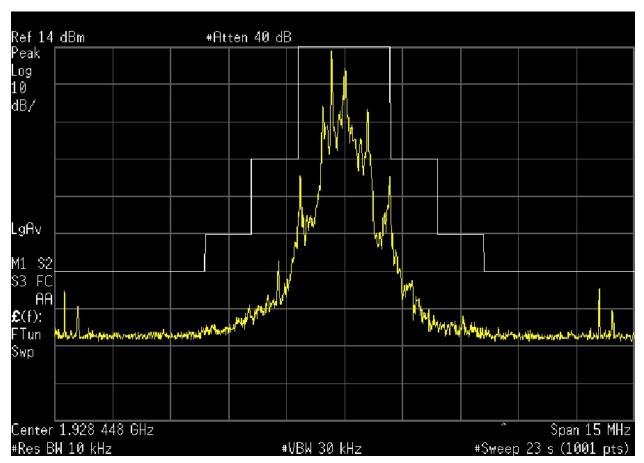
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1620230928-01	Investigations	





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1020230928-01	Investigations	





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LIG20230928-01	Investigations	

#### 3.11 Test conditions and results – Transmitter out-of-band emissions

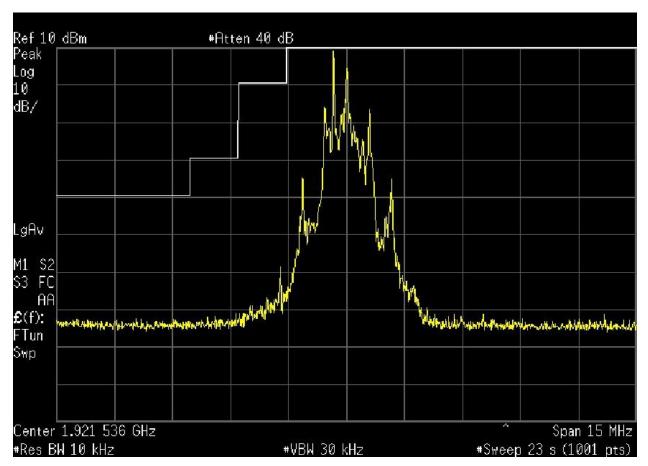
Out-of-band emissions acc. to FCC 47 C Test performed by: ElectroMagnetic In	•			Verdict: PAS
EUT requirement	Vestigations		Reference	
rule parts and clause			FCC 15.323(d) / IC RSS-213	5.8.1
Test according to			Reference Method	
measurement reference	ce		ANSI C63.17 6.1.6	
Tested frequencies			Flow / Fhigh	
Test frequency range	1		30 MHz – 10 <sup>th</sup> Harmoni	ic
	Lim	its		
Frequency range [MHz]	Detecto	r	Limit	Limit Distance [meters]
30 - 88	Quasi-Pea	ak	100 μV/m (40 dBμV/m)	3
88 - 216	Quasi-Pea	ak	150 μV/m (43.5 dBμV/m)	3
216 - 960	Quasi-Pea	ak	200 μV/m (46 dBμV/m)	3
960 - 1000	Quasi-Pea	ak	500 μV/m (54 dBμV/m)	3
1000 – 1917.5	Average	2	500 μV/m (54 dBμV/m)	3
Below 1917.5	Peak		-39.5 dBm *	N/A
1917.5 - 1918.75	Peak		-29.5 dBm *	N/A
1918.75 – 1920	Peak		-9.5 dBm *	N/A
1930 – 1931.25	Peak		-9.5 dBm *	N/A
1931.25 – 1932.5	Peak		-29.5 dBm *	N/A
Above 1932.5	Peak		-39.5 dBm *	N/A
1932.5 - 20000	Average	2	500 μV/m (54 dBμV/m)	3
Radiated emissions which fall in the res adiated emission limits specified in Sec	ction 15.209(a) (see	Section 15.2	205(c)).	
When average radiated emission measu .000 MHz, there also is a limit on the p				
emissions is 20 dB above the maximum			· · · · ·	

emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test. \*Measurement is performed with conducted measurement setup

Comments:

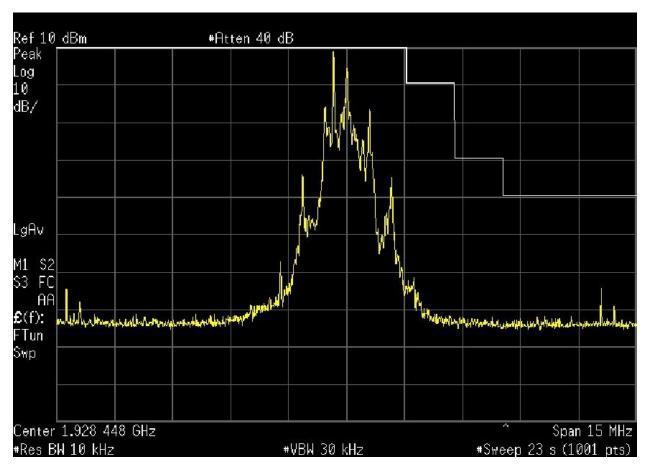
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#### Antenna 0 FLOW



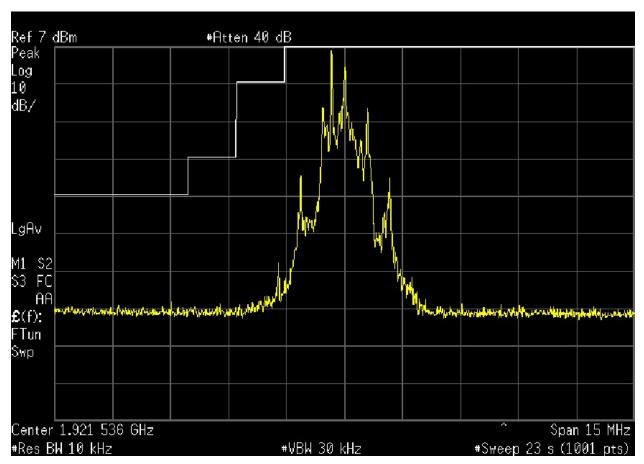
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#### Antenna 0 F<sub>HIGH</sub>



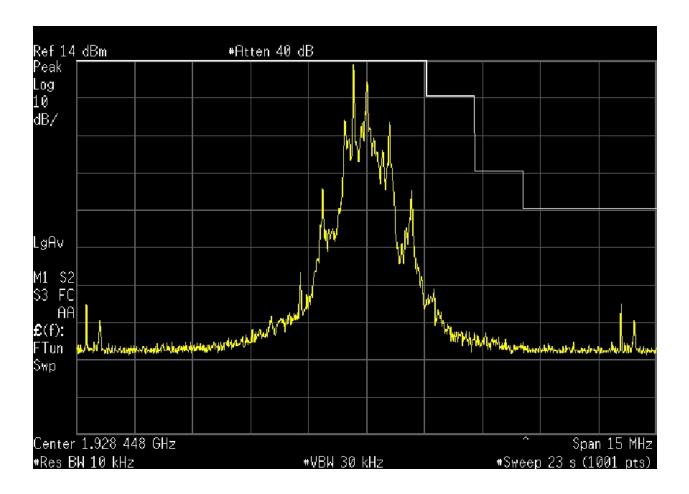
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#### Antenna 1 F<sub>HIGH</sub>



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LIG20230928-01	Investigations	

Antenna 0 / Channel: 0

	Customer	: Lightspeed	<b>Fechnologies</b>	1	Job	Reference#:	LIG2023092	28
	Customer: Lightspeed Technologies Contact: Rob D'Angelo						10/31/2023	
DUT: Rogue Base				Temperature (°C):				
Serial Number: 02-C25-Z-S2340-00028			Relative Humidity (%):					
Voltage/Freq: 120 V 60 Hz				Barometric Pressure:				
		Ryan Benite			Location:		Hillsboro	
Product Standards: FCC Part 15 Subpart D								
		N/A						
Т	est Standard	FCC Part 15	5.209					
EST RESU	LTS	TEST TYPE			DISTANCE		RUN #	
ass		Compliance			3 meters			
		Horizontal Paak		Vertical Peak	Avera;	ge Limit	OP Lint	
80 -								
70 -								
60 -								
50 -								
∧ngp .	<b>──</b>							
₩ 30 -								
- 30	4.1.1.100			-	مصدرهم			
20 -			and the second s				++	
10 -	<b>M</b>							
0 -								
	0 100	200	300 40	0 500	600	700 8	00 900	1000
	0 100	200	300 40	00 500 MHz	600	700 8	00 900	1000
OMMENT		200	300 40		600	700 8	SIGNATURE	
OMMENT	S	200	300 40		600	0	SIGNATURE	
OMMENT	S	200	300 40	MHz	600	0		
	s : 0	200	300 40	MHz Horizontal		Ryan	SIGNATURE Beaity	
OMMENT	S	200 QP (dBµV)	300 40	MHz	600 QP Limit (dBμV)	0	SIGNATURE	
OMMENT nt 0; Ch: Freq (MHz)	S : 0 Peak (dBµV)	QP (dBµV)	Factors (dB)	MHz Horizontal Peak Limit (dBµV)	QP Limit (dBµV)	Turntable (deg) / Height (cm)	Beauty Peak Margin (dB)	QP Margin (d
DMMENT nt 0; Ch: Freq (MHz) 30.0	S : 0 Peak (dBμV) 5 21.87	QP (dBµV) 7 16.72	Factors (dB) 23.05	MHz Horizontal Peak Limit (dBµV) 40.00	QP Limit (dBµV) 40.00	Turntable (deg) / Height (cm) 316º/126cm	SIGNATURE Beauty Peak Margin (dB) 18.13	QP Margin (d
DMMIENT nt 0; Ch: Freq (MHz) 30.0: 72.1:	S Peak (dBµV) 5 21.87 8 27.30	QP (dBµV) 7 16.72 ) 26.40	Factors (dB) 23.05 11.90	MHz Horizontal Peak Limit (dBμV) 40.00 40.00	QP Limit (dBμV) 40.00 40.00	Turntable (deg) / Height (cm) 316º/126cm 164º/400cm	SIGNATURE Beautey Peak Margin (dB) 18.13 12.70	QP Margin (d 23. 13.
DMMIENT nt 0; Ch: Freq (MHz) 30.0: 72.1: 155.1:	S Peak (dBµV) 5 21.87 8 27.30 4 28.08	QP (dBµV) 7 16.72 0 26.40 8 26.79	Factors (dB) 23.05 11.90 14.99	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52	QP Limit (dBµV) 40.00 43.52	Turntable (deg) / Height (cm) 316%/126cm 164%/400cm 157%/311cm	Peak Margin (dB) 18.13 12.70 15.44	QP Margin (d 23. 13. 16.
DMMIENT nt 0; Ch: Freq (MHz) 30.0: 72.1:	S Peak (dBμV) 5 21.87 8 27.30 4 28.08 3 27.69	QP (dBµV) 7 16.72 0 26.40 8 26.79 0 26.57	Factors (dB) 23.05 11.90	MHz Horizontal Peak Limit (dBμV) 40.00 40.00	QP Limit (dBµV) 40.00 43.52 43.52	Turntable (deg) / Height (cm) 316º/126cm 164º/400cm	Peak Margin (dB) 18.13 12.70 15.44 15.83	QP Margin (d 23. 13. 16. 16.
OMMIENT nt 0; Ch: Freq (MHz) 30.0: 72.1: 155.1- 167.4:	S Peak (dBμV) 5 21.87 8 27.30 4 28.08 3 27.65	QP (dBµV) 7 16.72 0 26.40 8 26.79 0 26.57	Factors (dB) 23.05 11.90 14.99 16.00	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52 43.52	QP Limit (dBµV) 40.00 43.52 43.52	Turntable (deg) / Height (cm) 316%/126cm 164%/400cm 157%/311cm 0%/225cm	Peak Margin (dB) 18.13 12.70 15.44	QP Margin (d 23. 13. 16. 16.
OMMIENT nt 0; Ch: Freq (MHz) 30.0: 72.1: 155.1- 167.4:	S Peak (dBμV) 5 21.87 8 27.30 4 28.08 3 27.65	QP (dBµV) 7 16.72 0 26.40 8 26.79 0 26.57	Factors (dB) 23.05 11.90 14.99 16.00	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52 43.52	QP Limit (dBµV) 40.00 43.52 43.52	Turntable (deg) / Height (cm) 316%/126cm 164%/400cm 157%/311cm 0%/225cm	Peak Margin (dB) 18.13 12.70 15.44 15.83	QP Margin (d 23. 13. 16. 16.
DMMIENT nt 0; Ch: Freq (MHz) 30.0 72.1 155.1 167.4 500.0	S Peak (dBμV) 5 21.87 8 27.30 4 28.08 3 27.65	QP (dBµV) 7 16.72 0 26.40 8 26.79 0 26.57	Factors (dB) 23.05 11.90 14.99 16.00	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52 43.52 46.02	QP Limit (dBµV) 40.00 43.52 43.52	Turntable (deg) / Height (cm) 316%/126cm 164%/400cm 157%/311cm 0%/225cm	Peak Margin (dB) 18.13 12.70 15.44 15.83	QP Margin (d 23. 13. 16. 16. 4.
DMMIENT nt 0; Ch: Freq (MHz) 30.0 72.1 155.1 167.4 500.0	S Peak (dBμV) 5 21.87 8 27.30 4 28.08 3 27.65 2 42.25 Peak (dBμV)	QP (dBμV) 7 16.72 0 26.40 8 26.79 0 26.57 5 41.86 QP (dBμV)	Factors (dB) 23.05 11.90 14.99 16.00 24.45	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52 43.52 46.02 Vertical Peak Limit	QP Limit (dBµV) 40.00 43.52 43.52 46.02	Turntable (deg) / Height (cm) 316%/126cm 164%/400cm 157%/311cm 0%/225cm 0%/100cm	Peak Margin (dB) 18.13 12.70 15.44 15.83 3.77 Peak Margin (dB)	QP Margin (d 23. 13. 16.
0MMI9NT nt 0; Ch: Freq (MHz) 30.0 72.1 155.1 167.4 500.0 Freq (MHz)	S Peak (dBμV) 5 21.87 8 27.30 4 28.08 3 27.69 2 42.25 Peak (dBμV) 8 22.77	QP (dBμV) 7 16.72 0 26.40 8 26.79 0 26.57 5 41.86 QP (dBμV) 7 19.81	Factors (dB) 23.05 11.90 14.99 16.00 24.45 Factors (dB)	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52 43.52 46.02 Vertical Peak Limit (dBμV)	QP Limit (dBμV) 40.00 43.52 43.52 46.02 QP Limit (dBμV)	Turntable (deg) / Height (cm) 316°/126cm 164°/400cm 157°/311cm 0°/225cm 0°/100cm Turntable (deg) / Height (cm)	Peak Margin (dB) 18.13 12.70 15.44 15.83 3.77 Peak Margin (dB)	QP Margin (d 23. 13. 16. 16. 4. QP Margin (d
0MMI9NT nt 0; Ch: Freq (MHz) 30.0 72.1 155.1 167.4 500.0 Freq (MHz) State of the second sec	S Peak (dBµV) 5 21.87 8 27.30 4 28.08 3 27.69 2 42.25 Peak (dBµV) 8 22.77 0 27.63	QP (dBμV) 7 16.72 0 26.40 8 26.79 0 26.57 5 41.86 QP (dBμV) 7 19.81 3 26.70	Factors (dB) 23.05 11.90 14.99 16.00 24.45 Factors (dB) 22.58	MHz Horizontal Peak Limit (dBμV) 40.00 43.52 43.52 46.02 Vertical Peak Limit (dBμV) 40.00	QP Limit (dBμV) 40.00 43.52 43.52 46.02 QP Limit (dBμV) 40.00	Turntable (deg) / Height (cm) 316°/126cm 164°/400cm 157°/311cm 0°/225cm 0°/100cm Turntable (deg) / Height (cm) 77°/106cm	SIGNATURE           Beauty           Peak Margin (dB)           18.13           12.70           15.44           15.83           3.77           Peak Margin (dB)           17.23           12.37	QP Margin (d 23. 13. 16. 16. 4. QP Margin (d 20.
DMMI9NT nt 0; Ch: Freq (MHz) 30.0 72.1: 155.1 167.4 500.0 Freq (MHz) 31.9 72.2	S Peak (dBµV) 5 21.87 8 27.30 4 28.08 3 27.69 2 42.25 Peak (dBµV) 8 22.77 0 27.63 4 31.22	QP (dBμV) 7 16.72 0 26.40 8 26.79 0 26.57 5 41.86 QP (dBμV) 7 19.81 3 26.70 2 30.18	Factors (dB) 23.05 11.90 14.99 16.00 24.45 Factors (dB) 22.58 11.90	MHz Horizontal Peak Limit (dBμV) 40.00 43.52 43.52 46.02 Vertical Peak Limit (dBμV) 40.00 40.00 40.00 40.00	QP Limit (dBμV) 40.00 43.52 43.52 46.02 QP Limit (dBμV) 40.00 40.00	Turntable (deg) / Height (cm) 316°/126cm 164°/400cm 157°/311cm 0°/225cm 0°/100cm Turntable (deg) / Height (cm) 77°/106cm 43°/274cm	SIGNATURE           Beauty           Peak Margin (dB)           18.13           12.70           15.44           15.83           3.77           Peak Margin (dB)           17.23           12.30	QP Margin (d 23. 13. 16. 16. 4. QP Margin (d 20. 13.

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LIG20230928-01	ElectroMagnetic	C25
LIG20230920-01	Investigations	

	Customer:	Lightspeed	Technologies	s	Job	Reference#:	LIG2023092	8
		Rob D'Ange					10/30/2023	
		Rogue Base			Temp	perature (°C):		
Se	rial Number:	02-C25-Z-S	2340-00028			Humidity (%):		
V	oltage/Freq:	120 V 60 H	z		Baromet	tric Pressure:	30	
		Ryan Benite				Location:	Hillsboro	
Produc	t Standards:	FCC Part 1	5 Subpart D					
		N/A						
		FCC Part 1	5.209					
ST RESUL	TS	TEST TYPE			DISTANCE		RUN #	
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100		5000	7000	MH	z	Ryan	SIGNATURE Benitey	
100 MMENTS		Final (dBµV)	7000 Factors (dB)	мн	z	-0	SIGNATURE	
100 MMENTS	)	1	Factors (dB)	Horizonta Peak Limit (dBµV)	z Final Limit (dBµV)	Turntable (deg) / Height (cm)	SIGNATURE Beaty Peak Margin	Final Margi (dB)
100 MMENTS at: 0 Ch:C	) Peak (dBµV)	Final (dBµV) 23.76	Factors (dB)	Horizonta Peak Limit (dBµV) 73.	z Final Limit (dBµV) 18 53.98	Turntable (deg) / Height (cm) 302°/132cm	Beauty Peak Margin (dB) 16.27	Final Marg (dB) 30
100 MMENTS at: 0 Ch:0 req (MHz) 1928.09	) Peak (dBµV) 57.71	Final (dBµV) 23.76 40.94	Factors (dB) -10.01 10.76	Horizonta Peak Limit (dBµV) 73.0 73.0	z Final Limit (dBμV) 28 53.98 28 53.98	Turntable (deg) / Height (cm) 302°/132cm 0°/149cm	Peak Margin (dB) 16.27 27.29	Final Marg (dB) 30 13
100 MMENTS nt: 0 Ch:0 req (MHz) 1928.09 7813.36 14689.81 15453.94	Peak (dBµV) 57.71 46.69 48.02 39.76	Final (dBµV) 23.76 40.94 43.18 37.34	Factors (dB) -10.01 10.76 11.91 7.09	Horizonta Peak Limit (dBμV) 73. 73. 73. 73.	z Final Limit (dBμV) 28 53.98 28 53.98 28 53.98 28 53.98 28 53.98	Turntable (deg)/ Height (cm) 302°/132cm 0°/149cm 95°/98cm 234°/173cm	Peak Margin (dB) 16.27 27.29 25.96 34.22	Final Margi (dB) 30 13 10 16
100 MMENTS nt: 0 Ch:0 req (MHz) 1928.09 7813.36 14689.81 15453.94 15746.38	Peak (dBµV) 57.71 46.69 48.02 39.76 38.18	Final (dBµV) 23.76 40.94 43.18 37.34 36.43	Factors (dB) -10.01 10.76 11.91 7.09 7.10	Horizonta Peak Limit (dBμV) 73. 73. 73. 73. 73. 73. 73. 73. 73. 73.	z Final Limit (dBµV) 28 53.98 28 53.98 28 53.98 28 53.98 28 53.98 28 53.98	Turntable (deg) / Height (cm) 302°/132cm 0°/149cm 95°/98cm 234°/173cm 287°/125cm	Beauty Peak Margin (dB) 16.27 27.29 25.96 34.22 35.80	Final Margi (dB) 30 13 10 16 17
100 MMENTS nt: 0 Ch:0 req (MHz) 1928.09 7813.36 14689.81 15453.94	Peak (dBµV) 57.71 46.69 48.02 39.76	Final (dBµV) 23.76 40.94 43.18 37.34 36.43	Factors (dB) -10.01 10.76 11.91 7.09 7.10	Horizonta Peak Limit (dBμV) 73. 73. 73. 73. 73. 73. 73. 73.	z Final Limit (dBμV) 08 53.98 08	Turntable (deg) / Height (cm) 302°/132cm 0°/149cm 95°/98cm 234°/173cm 287°/125cm	Beauty Peak Margin (dB) 16.27 27.29 25.96 34.22 35.80	Final Margi (dB) 30 13 10 16 17
100 MMIENTS at: 0 Ch:0 1928.09 7813.36 14689.81 15453.94 15746.38 17547.45	Peak (dBµV) 57.71 46.69 48.02 39.76 38.18	Final (dBµV) 23.76 40.94 43.18 37.34 36.43	Factors (dB) -10.01 10.76 11.91 7.09 7.10	Horizonta Peak Limit (dBμV) 73. 73. 73. 73. 73. 73. 73. 73. 73. 73.	z Final Limit (dBμV) 08 53.98 08	Turntable (deg) / Height (cm) 302°/132cm 0°/149cm 95°/98cm 234°/173cm 287°/125cm	Beauty Peak Margin (dB) 16.27 27.29 25.96 34.22 35.80	Final Margi (dB) 30 13 10 16 17 12
100 MMIENTS nt: 0 Ch:0 1928.09 7813.36 14689.81 15453.94 15746.38 17547.45	Peak (dBµV) 57.71 46.69 48.02 39.76 38.18 43.89	Final (dBμV) 23.76 40.94 43.18 37.34 36.43 41.80	Factors (dB) -10.01 10.76 11.91 7.10 7.10 Factors (dB)	Horizonta           Peak Limit (dBμV)           73.'           73.'           73.'           73.'           73.'           73.'           Peak Limit (dBμV)	z Final Limit (dBµV) 98 53.98 98	Turntable (deg) / Height (cm) 302°/132cm 0°/149cm 95°/98cm 234°/173cm 287°/125cm 142°/100cm Turntable (deg) / Height (cm)	Peak Margin (dB) 16.27 27.29 25.96 34.22 35.80 30.09 Peak Margin (dB)	Final Marg (dB) 30 13 10 16 17 12 Final Marg (dB)
100 MMIENTS nt: 0 Ch:0 req (MHz) 1928.09 7813.36 14689.81 15453.94 15453.94 15453.94 154547.45 req (MHz)	Peak (dBµV) 57.71 46.69 48.02 39.76 38.18 43.89 Peak (dBµV)	Final (dBµV) 23.76 40.94 43.18 37.34 36.43 41.80 Final (dBµV) 23.49	Factors (dB) -10.01 10.76 11.91 7.10 7.10 Factors (dB) -10.01	Horizonta Peak Limit (dBμV) 73.' 73.' 73.' 73.' 73.' 73.' 73.' 73.'	z Final Limit (dBµV) 98 53.98 98	Turntable (deg) / Height (cm) 302°/132cm 0°/149cm 95°/98cm 234°/173cm 287°/125cm 142°/100cm Turntable (deg) / Height (cm) 288°/100cm	SIGNATURE           Beauty           Peak Margin (dB)           16.27           27.29           25.96           34.22           35.80           30.09           Peak Margin (dB)           22.47	Final Marg (dB) 30 13 10 16 17 12 Final Marg (dB) 30
100 MMENTS nt: 0 Ch:0 ireq (MHz) 1928.09 7813.36 14689.81 15453.94 15453.94 15453.94 15453.94 15746.38 17547.45	Peak (dBµV) 57.71 46.69 48.02 39.76 38.18 43.89 Peak (dBµV) 51.51	Final (dBμV) 23.76 40.94 43.18 37.34 36.43 41.80 Final (dBμV) 23.49 40.75	Factors (dB) -10.01 10.76 11.91 7.10 5.23 Factors (dB) -10.01 10.80	Horizonta Peak Limit (dBμV) 73.! 73.! 73.: 73.: 73.: 73.: Peak Limit (dBμV) 73.! 73.: 73.: 73.: 73.: 73.: 73.: 73.: 73.:	z Final Limit (dBµV) 8 53.98 98	Turntable (deg) / Height (cm) 302°/132cm 0°/149cm 95°/98cm 234°/173cm 287°/125cm 142°/100cm Turntable (deg) / Height (cm) 288°/100cm 55°/100cm	SIGNATURE           Beauty           Peak Margin (dB)           16.27           27.29           25.96           34.22           35.80           30.09           Peak Margin (dB)           22.47           30.92	Final Margi (dB) 30 13 10 16 17 12 Final Margi (dB) 30 13
100 MMIENTS nt: 0 Ch:0 ireq (MHz) 1928.09 7813.36 14689.81 15453.94 15453.94 15453.94 15453.94 154547.45 ireq (MHz) 1928.09 7836.11	Peak (dBµV) 57.71 46.69 48.02 39.76 38.18 43.89 Peak (dBµV) 51.51 43.06	Final (dBμV) 23.76 40.94 43.18 37.34 36.43 41.80 Final (dBμV) 23.49 40.75 39.65	Factors (dB) -10.01 10.76 11.91 7.10 7.10 15.23 Factors (dB) -10.01 10.80 9.37	Horizonta Peak Limit (dBμV) 73.! 73.! 73.! 73.! 73.! Vertical Peak Limit (dBμV) 73.! 73.! 73.! 73.! 73.! 73.! 73.! 73.!	z Final Limit (dBµV) 98 53.98 98	Turntable (deg) / Height (cm) 302°/132cm 0°/149cm 234°/173cm 287°/125cm 142°/100cm Turntable (deg) / Height (cm) 288°/100cm 55°/100cm	SIGNATURE           Beauty           Peak Margin (dB)           16.27           27.29           25.96           34.22           35.80           30.09           Peak Margin (dB)           22.47           30.92           32.40	Final Margi (dB) 30. 13. 10. 16. 17. 12. Final Margi
100 20111201120 20111201120 2011120 2011120	Peak (dBµV) 57.71 46.69 48.02 39.76 38.18 43.89 Peak (dBµV) 51.51 43.06 41.58	Final (dBμV) 23.76 40.94 43.18 37.34 36.43 41.80 Final (dBμV) 23.49 40.75 39.65 42.89 36.99	Factors (dB) -10.01 10.76 11.91 7.10 7.10 15.23 Factors (dB) -10.01 10.80 9.37 11.92 7.77	Horizonta Peak Limit (dBμV) 73.9 73.1 73.1 73.2 73.2 73.2 73.2 Peak Limit (dBμV) 73.2 73.2 73.2 73.2 73.2 73.2 73.2 73.2	z Final Limit (dBµV) 98 53.98 98	Turntable (deg) / Height (cm) 302°/132cm 0°/149cm 234°/173cm 287°/125cm 142°/100cm Turntable (deg) / Height (cm) 288°/100cm 55°/100cm 315°/100cm 121°/125cm 316°/100cm	SIGNATURE           Beauty           Peak Margin (dB)           16.27           27.29           25.96           34.22           35.80           30.09           Peak Margin (dB)           22.47           30.92           32.40           25.60           31.80	Final Margi (dB) 30 13 10 16 17 12 Final Margi (dB) 30 13 14

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	G20230928-01	ElectroMagnetic	C25
LI	020230928-01	Investigations	

		Custo	mer:	Ligh	ntspe	ed '	Тес	chn	olog	ies	3			Т			Job	Ref	eren	ce#:	LIG	202	2309	928		
		Cor	ntact:	Rob	D'A	nge	lo							Т					0	)ate:	10/	27/2	2023	3		
			DUT:	Rog	jue B	ase	)									Τe	emp	erat	ure	(°C):	20.4	4				
	Se	rial Nur	nber:	02-0	C25-2	z-s	234	10-0	0002	28					Re	elativ	ve H	łum	idity	(%):	33					
	V	oltage/	Freq:	120	V 60	) Hz								Т	В	aro	met	ric F	ress	sure:	30					
		Teste	d by:	Rya	n Be	nite	z							T				l	oca	tion:	Hills	sbo	го			
F	Produc	t Stand	ards:	FCC	C Par	t 15	i Sı	ubp	art	D											-					
				N/A																						
	Te	st Stan	dard:	FCC	C Par	t 15	5.20	)9																		
EST	RESUL	rs		TES	TTY	PE								I	DIST	ANC	E				RU	N #				
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			1900	00	20	0000	D		210	000	)			-		230	000	F		an		NA	TUR	2	20	5000
	0 - 1800		1900	00	20	0000	0		210					z		230	000	10				NA	TUR	E	20	6000
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nt:0 Freq ( 21	0 1800 11ENTS 0 CH:0 (MHz) 1925.16		BμV) 42.46		age (dE	βµV) 0.11			rs (dł	3)	H	Oriz Peak 1	MH: onta Limit V) 73.9	z 11		age Li BμV) 5	imit ) 3.98	Turr H	M table cight ( 47°/1	(deg) / cm) 00cm	B	NA Lani	tey largin 3)	Av 52	erag	e Marg IB) 13.3
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nt:0 Freq ( 21 21 22	0 1800 1800 1800 0 CH:0 1925.16 1988.84 2721.88		BμV) 42.46 42.58 41.62	Aven	age (dE 40 31	3μV) 0.11 9.59	F	actor	rs (dB 8 8 8	3) .92 .79	H	Oriz Peak 1	MH: onta Limit LV) 73.9 73.9 73.9	z 11 18 18		age Li BμV) 5. 5.	imit ) 3.98 3.98	Turr H 2 3 2	M table ( 47°/1 16°/2 93°/1	(deg) / cem) 00cm 00cm	Per	NA Lani	argin 31.5 31.4 32.3	Av 52 10 56	erag	e Marg IB) 13.3 14.3
nt:0 Freq ( 21 21 22 22	0 1800 1800 1800 0 CH:0 1925.16 1988.84 2721.88 2810.56		BμV) 42.46 42.58 41.62 42.22	Aven	age (dE 40 39 39	6μV) 0.11 9.59 9.06 9.33	F	actor	rs (dI 8 8 8 8 8	3) .92 .66		Oriz Peak 1	MH: onta Limit IV) 73.9 73.9 73.9 73.9 73.9	2 18 18 18 18 18		age Li BμV) 55 5.	imit ) 3.98 3.98 3.98	Тит Н 2 3 2	M table ( cight ( 47°/1 16°/2 93°/1 12°/1	(deg) / cm) 00cm 00cm 75cm 24cm	Per	NA Lani	argin 31.5 31.4 32.3 31.7	Av 52 66 76	erag	e Marg IB) 13.3 14.1 14.1
nt:0	0 1800 1800 1800 0 CH:0 1925.16 1988.84 2721.88 2810.56 3233.63		BμV) 42.46 41.62 42.22 42.38	Aven	44 39 39 39 30	6μV) 0.11 9.59 9.06 9.33	F		rs (dł 8 8 8 8 9	3) .92 .79 .66		Oriz Peak 1	MH: onta Limit 1V) 73.9 73.9 73.9 73.9 73.9 73.9 73.9	z 18 18 18 18 18 18		age Li BµV) 55 55 55	imit ) 3.98 3.98 3.98 3.98 3.98	Turr H 2 3 2	M table ( ight ( 47°/1 16°/2 93°/1 12°/1 68°/1	(deg) / cm) 00cm 00cm 75cm 24cm	Per	NA Lani	argin 31.5 31.4 32.3 31.7 31.6	Av 52 60 60	erag	e Marg IB) 13.3 14.3 14.4 14.4
nt:0	0 1800 1800 1800 0 CH:0 1925.16 1988.84 2721.88 2810.56		BμV) 42.46 42.58 41.62 42.22	Aven	44 39 39 39 30	6μV) 0.11 9.59 9.06 9.33	F		rs (dł 8 8 8 8 9	3) .92 .66		Oriz (dBj	MH: onta Limit IV) 73.9 73.9 73.9 73.9 73.9 73.9 73.9 73.9 73.9	z 18 18 18 18 18 18		age Li BµV) 55 55 55	imit ) 3.98 3.98 3.98	Turr H 2 3 2	M table ( ight ( 47°/1 16°/2 93°/1 12°/1 68°/1	(deg) / cm) 00cm 00cm 75cm 24cm	Per	NA Lani	argin 31.5 31.4 32.3 31.7	Av 52 60 60	erag	e Marg IB) 13.3 14.1 14.1 14.1 14.1
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nt:0 Freq ( 21 22 23 24 Freq ( 21 21 24 24 24 24 21 24 24 24 24 24 24 24 24 24 24	0 1800 1800 1800 1800 1800 1800 1800 1800 1925.16 1988.84 2721.88 2810.56 3233.63 4585.96 (MHz) 1756.69 1930.12	Peak (d	BμV) 42.46 42.58 41.62 42.22 42.38 41.49 BμV) 42.83 45.50	Aven	age (dH 3' 3' 3' 3' 3' 3' 3' 3' 3' 3' 3' 3' 3'	6μV) 0.11 9.59 9.06 9.33 9.90 8.60 8.40	F		rs (dł 8 8 9 9 9 5 (dł 9 8	3) .92 .66 .61 .66 .44 3) .60 .91		oriz (dB) Vert	MH: onta Limit IV) 73.9 7 7 7 7 7 7 7 7 7 7 7 7 7	z 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(d	age Li BµV) 5. 5. 5. 5. 5. 5. 5. 5. 8. 8. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9.	imit 3.98 3.98 3.98 3.98 3.98 3.98 imit ) 3.98 3.98	Turr H 2 3 2 2 Turr H 1	M table ( icight ( 47°/1 16°/2 93°/1 12°/1 12°/1 12°/1 12°/1	(deg) / cm) 00cm 00cm 75cm 24cm 01cm (deg) / cm) 74cm 00cm	Per	ak M (dB	argin 31.5 31.4 32.3 31.4 32.4 argin 31.4 32.4 31.1 32.4	Av 32 40 5 5 18 8	verag (d	e Marg IB) 13. 14. 14. 14. 14. 15. 2 Marg IB) 14. 13.
nt:0	0 1800 1800 1800 1800 1800 1800 1800 1800 1800 1925.16 1988.84 2721.88 2810.56 3233.63 4585.96 (MHz) 1756.69	Peak (d	BμV) 42.46 42.58 41.62 42.38 41.49 BμV) 42.83	Aven	age (dH 3' 3' 3' 3' 3' 3' 3' 3' 3' 3' 3' 3' 3'	μV) 0.11 9.59 9.06 9.33 9.90 8.60 8,60 8,40 9.79 0.12	F		rs (dł 8 8 9 9 9 9 rs (dł 9 8 8 8	3) .92 .66 .61 .66 .44 3)		oriz (dB) Vert	MH: onta Limit IV) 73.9 7 7 7 7 7 7 7 7 7 7 7 7 7	z 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(d	age Li BµV) 55 55 55 55 55 55 55 55 55 55 55 55	imit ) 3.98 3.98 3.98 3.98 3.98 3.98 imit ) 3.98	Turr H 2 3 2 2 7 1 1 1 2	M table ( ight ( 47°/1 12°/1 12°/1 12°/1 12°/1 12°/1 12°/1 12°/1 12°/1 12°/1	(deg) / cm) 00cm 00cm 01cm 01cm (deg) / cm) 74cm	Per	ak M (dB	TUR tey 31.5 31.4 32.3 31.4 32.4 argin 31.4 32.4 31.4 32.4 31.4 32.4 31.4 32.4 31.4 32.4 31.5 31.4 32.4 32.4 31.5 31.4 32.4 31.5 31.4 32.4 3	Av 32 40 55 188 14	verag (d	e Marg IB) 13. 14. 14. 14. 14. 14. 15. c Marg IB) 14.

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LIG20230928-01	ElectroMagnetic	C25
LIG20230928-01	Investigations	

MIN)))	Qualaman	Linkton and 7			lah	Deference#	1100000000	6/30/202
		Lightspeed 1			JOD	Reference#:		8
		Rob D'Angel			Tomp	Date:		
C.	erial Number:	Rogue Base				erature (°C): lumidity (%):		
	Voltage/Freq:				Baromet	ric Pressure:	30 Hillsboro	
Brodu	ct Standards:	Ryan Benite				Location:	HIIISDOFO	
Piùdu	ci Standards.	N/A	Subpart D					
Т	est Standard:		200					
EST RESU		TEST TYPE	.203		DISTANCE		RUN #	
ass		Compliance			3 meters		NO IN IT	
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10 - 0 -		200	300 40		600	700 8	00 900 SIGNATURE	1000
10 - 0 -		200	300 40		600		SIGNATURE	1000
10 - 0 - 0	5	200	300 40		600		SIGNATURE	1000
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10 - 0 - 0 0 0 0 0 0 0 0	5	200 QP (dBµV)	300 40	MHz Horizontal Peak Limit	QP Limit	Ryan Turntable (deg)/	SIGNATURE Beatey Peak Margin	
10 - 0 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 Peak (dBµV)	$Q^{p}(dB\mu V)$	Factors (dB)	MHz Horizontal Peak Limit (dBµV)	QP Limit (dBµV)	Turntable (deg) / Height (cm)	Benitey Peak Margin (dB)	QP Margin (dl
10 - 0 - 0 0 0 0 0 0 0 0	0 Реак (dBµV) 5 19.34	QP (dBµV) 15.93		MHz Horizontal Peak Limit	QP Limit	Ryan Turntable (deg)/	Beauty Peak Margin (dB) 20.66	QP Margin (dl 24.(
10 - 0 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 Реак (dBµV) 3 19.34 26.61	$Q^{p}(dB\mu V)$	Factors (dB) 22.57	MHz Horizontal Peak Limit (dBµV) 40.00	QP Limit (dBµV) 40.00	Turntable (deg) / Height (cm) 0°/174cm	Benitey Peak Margin (dB)	QP Margin (dl 24.0 15.2
10 - 0 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 Реак (dBµV) 3 19.34 26.61 4 24.22	QP (dBµV) 15.93 24.77	Factors (dB) 22.57 11.90 11.88	MHz Horizontal Peak Limit (dBµV) 40.00 40.00	QP Limit (dBµV) 40.00 40.00	Turntable (deg) / Height (cm) 0°/174cm 0°/400cm 63°/362cm	Peak Margin (dB) 20.66 13.39 15.78	QP Margin (dl 24.0 15.2 16.7
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10 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	0 Peak (dBµV) 3 19.34 26.61 4 24.22 4 28.00 2 27.88	QP (dBµV) 15.93 24.77 23.21 26.42	Factors (dB) 22.57 11.90 11.88 14.99	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52	QP Limit (dBμV) 40.00 40.00 43.52	Turntable (deg) / Height (cm) 0°/174cm 0°/400cm 63°/362cm 158°/297cm	Peak Margin (dB) 20.66 13.39 15.78 15.52	QP Margin (dl 24.0 15.2 16.7 17.1 16.7
10 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	0 Peak (dBµV) 3 19.34 5 26.61 4 24.22 4 28.00 2 27.88	QP (dBµV) 15.93 24.77 23.21 26.42 26.73	Factors (dB) 22.57 11.90 11.88 14.99 16.00	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52 43.52	QP Limit (dBµV) 40.00 40.00 43.52 43.52	Turntable (deg) / Height (cm) 0°/174cm 0°/400cm 63°/362cm 158°/297cm -1°/211cm	Beatty Beatty Peak Margin (dB) 20.66 13.39 15.78 15.52 15.64	QP Margin (dl 24.0 15.2 16.7 17.1 16.7
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10 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	0 Peak (dBµV) § 19.34 5 26.61 4 24.22 4 28.00 2 27.88 42.24 Peak (dBµV)	QP (dBμV) 15.93 24.77 23.21 26.42 26.73 41.76	Factors (dB) 22.57 11.90 11.88 14.99 16.00 24.45	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 40.00 43.52 43.52 43.52 46.02 Vertical Peak Limit	QP Limit (dBµV) 40.00 40.00 43.52 43.52 46.02 QP Limit	Turntable (deg) / Height (cm) 0°/174cm 0°/400cm 63°/362cm 158°/297cm -1°/211cm 0°/100cm Turntable (deg) /	Beatty Beaty Peak Margin (dB) 20.66 13.39 15.78 15.52 15.64 3.78 Peak Margin	QP Margin (dl 24.0 15.2 16.7 17.1 16.7 4.2
10 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	0 Реак (dBµV) 8 19.34 5 26.61 4 24.22 4 28.00 2 27.88 42.24 Реак (dBµV) 16.52	QP (dBμV) 15.93 24.77 23.21 26.42 26.73 41.76 QP (dBμV)	Factors (dB) 22.57 11.90 11.88 14.99 16.00 24.45 Factors (dB)	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 40.00 43.52 43.52 43.52 43.52 46.02 Vertical Peak Limit (dBμV)	QP Limit (dBμV) 40.00 40.00 43.52 43.52 46.02 QP Limit (dBμV)	Turntable (deg) / Height (cm) 0°/174cm 0°/400cm 63°/362cm 158°/297cm -1°/211cm 0°/100cm Turntable (deg) / Height (cm)	Peak Margin (dB) 20.66 13.39 15.78 15.52 15.64 3.78 Peak Margin (dB)	QP Margin (dl 15.2 16.7 17.1 16.7 4.2 QP Margin (dl
0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 Peak (dBµV) § 19.34 § 26.61 4 24.22 1 28.00 2 27.88 9 42.24 Peak (dBµV) 16.52 0 27.57	QP (dBμV) 15.93 24.77 23.21 26.42 26.73 41.76 QP (dBμV) 12.42	Factors (dB) 22.57 11.90 11.88 14.99 16.00 24.45 Factors (dB) 17.24	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 40.00 43.52 43.52 43.52 43.52 Vertical Peak Limit (dBμV) 40.00	QP Limit (dBμV) 40.00 40.00 43.52 43.52 46.02 QP Limit (dBμV) 40.00	Turntable (deg) / Height (cm) 0°/174cm 0°/400cm 63°/362cm 158°/297cm -1°/211cm 0°/100cm Turntable (deg) / Height (cm) 67°/100cm	Beauty Peak Margin (dB) 20.66 13.39 15.78 15.52 15.64 3.78 Peak Margin (dB) 23.48	QP Margin (df 24.0 15.2 16.7 17.1 16.7 4.2 QP Margin (df 27.5
10 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	0 Peak (dBμV) 3 19.34 5 26.61 4 24.22 4 28.00 2 27.88 0 42.24 Peak (dBμV) 16.52 0 27.57 5 32.11	QP (dBμV) 15.93 24.77 23.21 26.42 26.73 41.76 QP (dBμV) 12.42 26.76	Factors (dB) 22.57 11.90 11.88 14.99 16.00 24.45 Factors (dB) 17.24 11.90	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 40.00 43.52 43.52 43.52 43.52 Vertical Peak Limit (dBμV) 40.00 40.00 40.00 40.00	QP Limit (dBμV) 40.00 40.00 43.52 43.52 43.52 46.02 QP Limit (dBμV) 40.00 40.00	Turntable (deg) / Height (cm) 0°/174cm 0°/100cm 63°/362cm 158°/297cm -1°/211cm 0°/100cm Turntable (deg) / Height (cm) 67°/100cm 50°/273cm	SIGNATURE           Beauty           Peak Margin (dB)           20.66           13.39           15.78           15.52           15.64           3.78           Peak Margin (dB)           23.48           12.43	QP Margin (dl 15.2 16. 17. 16. 4.2 QP Margin (dl 27.: 13.2

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 Testing Report
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 LIG20230928-01
 ElectroMagnetic
 C25

 Investigations
 C25

## Antenna 1 / Channel: 0

	Customer:	Lightspeed 1	[echnologies		Job	Reference#:	LIG2023092	8
		Rob D'Angel				Date:		-
		Rogue Base			Temp	erature (°C):	20.4	
Se	erial Number:	02-C25-Z-S2				Humidity (%):	33	
V	/oltage/Freq:	120 V 60 Hz				ric Pressure:	30	
	Tested by:	Ryan Benite			Darothou	Location:	Hillsboro	
Produc		FCC Part 15						
		N/A						
Te	est Standard:	FCC Part 15	.209					
EST RESUL	TS	TEST TYPE			DISTANCE		RUN #	
ass		Compliance			3 meters			
ſ		Horizontal Peak	,	Vertical Peak	Avera	pe Limit	QP Link	
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0 + 100		5000	7000	MHz	11000	13000 Ryan	SIGNATURE	7000
0 + 100 DMMENTS		5000 Final (dBµV)	7000 Factors (dB)	MHz Horizontal Peak Limit	Final Limit	Ryan Turntable (deg)/	SIGNATURE Beauty Peak Margin	Final Margin
0 + 100 DMMENTS ht: 1 Ch:(	) Peak (dBµV)	Final (dBµV)	Factors (dB)	MHz Horizontal Peak Limit (dBµV)	Final Limit (dBµV)	Turntable (deg) / Height (cm)	Benity Peak Margin (dB)	Final Margin (dB)
0 + 100 0MMENTS nt: 1 Ch:( <sup>7</sup> req (MHz) 1928.11	) Peak (dBµV) 61.06	Final (dBµV) 23.93	Factors (dB) -10.01	MHz Horizontal Peak Limit (dBµV) 73.98	Final Limit (dBµV) 53.98	Turntable (deg) / Height (cm) 95°/100cm	Besitey Peak Margin (dB) 12.92	Final Margir (dB) 30.0
0 + 100 00000000000000000000000000000000	Peak (dBµV) 61.06 42.20	Final (dBµV) 23.93 40.18	Factors (dB) -10.01 10.31	MHz Horizontal Peak Limit (dBµV) 73.98 73.98	Final Limit (dBµV) 53.98 53.98	Turntable (deg) / Height (cm) 95°/100cm 274°/150cm	Peak Margin (dB) 12.92 31.78	Final Margir (dB) 30.1 13.1
0 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 61.06 42.20 37.39	Final (dBµV) 23.93 40.18 35.11	Factors (dB) -10.01 10.31 3.89	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98	Turntable (deg) / Height (cm) 95°/100cm 274°/150cm 316°/101cm	Peak Margin (dB) 12.92 31.78 36.59	Final Margir (dB) 30.1 13.1 18.1
0 100 0 0 0 100 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 61.06 42.20 37.39 48.84	Final (dBµV) 23.93 40.18 35.11 43.26	Factors (dB) -10.01 10.31 3.89 11.91	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 95%100cm 274%150cm 316%101cm 142%123cm	Peak Margin (dB) 12.92 31.78 36.59 25.14	Final Margir (dB) 30.1 13.1 18.1 10.1
0 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 61.06 42.20 37.39 48.84 39.07	Final (dBµV) 23.93 40.18 35.11	Factors (dB) -10.01 10.31 3.89	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98	Turntable (deg) / Height (cm) 95%100cm 274%150cm 316%101cm 142%123cm 120%100cm	Peak Margin (dB) 12.92 31.78 36.59	Final Margir (dB) 30. 13. 18. 10. 16.
0 100 0 0 0 100 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 61.06 42.20 37.39 48.84 39.07	Final (dBµV) 23.93 40.18 35.11 43.26 37.18	Factors (dB) -10.01 10.31 3.89 11.91 7.87	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 95%100cm 274%150cm 316%101cm 142%123cm 120%100cm	Besitey Peak Margin (dB) 12.92 31.78 36.59 25.14 34.91	Final Margir (dB) 30. 13. 18. 10. 16.
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Ant 0; ( Freq (M	0 <b>2NUS</b> <b>Ch: 4</b> (Hz) 34.29 72.26 78.33 67.41	Реак (dBµV) 18.92 25.90 25.10 27.70	QP (dBµV) 15.52 20.68 24.01 26.09	Factors (dB) 22.03 11.90 11.88 16.00	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 40.00 43.52 46.02	QP Limit (dBµV) 40.00 40.00 43.52	Turntable (deg) / Height (cm) 171º/101cm 0°/400cm 67º/400cm 0°/213cm	Peak Margin (dB) 21.08 14.10 14.90 15.82	QP Margin (dB) 24.48 19.32 15.99 17.43
Ant 0; ( Freq (M	0 2000 00 2000 00 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000	Реак (dBµV) 18.92 25.90 25.10 27.70	QP (dBµV) 15.52 20.68 24.01 26.09	Factors (dB) 22.03 11.90 11.88 16.00	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 40.00 43.52	QP Limit (dBµV) 40.00 40.00 43.52	Turntable (deg) / Height (cm) 171º/101cm 0°/400cm 67º/400cm 0°/213cm	Peak Margin (dB) 21.08 14.10 14.90 15.82	QP Margin (dB) 24.48 19.32 15.99 17.43
Ant 0; ( Freq (M)	0 200115 Ch: 4 (Hz) 34.29 72.26 67.41 00.65 (Hz) (Hz)	Peak (dBμV) 18.92 25.90 25.10 27.70 21.88 Peak (dBμV)	QP (dBμV) 15.52 20.68 24.01 26.09 17.79 QP (dBμV)	Factors (dB) 22.03 11.90 11.88 16.00 24.48 Factors (dB)	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52 46.02 Vertical Peak Limit (dBμV)	QP Limit (dBμV) 40.00 40.00 43.52 46.02 QP Limit (dBμV)	Turntable (deg) / Height (cm) 171º/101cm 0°/400cm 0°/213cm -1º/100cm Turntable (deg) / Height (cm)	Peak Margin (dB) 21.08 14.10 14.90 15.82 24.14 Peak Margin (dB)	QP Margin (dB) 24.48 19.32 15.99 17.43 28.23 QP Margin (dB)
Ant 0; ( Freq (M)	0 2NTIS Ch: 4 IHz) 34.29 72.26 67.41 00.65 53.35	Peak (dBμV) 18.92 25.90 25.10 27.70 21.88 Peak (dBμV) 16.95	QP (dBμV) 15.52 20.68 24.01 26.09 17.79 QP (dBμV) 12.24	Factors (dB) 22.03 11.90 11.88 16.00 24.48 Factors (dB) 17.17	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52 46.02 Vertical Peak Limit (dBμV) 40.00	QP Limit (dBμV) 40.00 40.00 43.52 46.02 QP Limit (dBμV) 40.00	Turntable (deg) / Height (cm) 171º/101cm 0°/400cm 0°/213cm -1º/100cm Turntable (deg) / Height (cm) 113º/103cm	Peak Margin (dB) 21.08 14.10 14.90 15.82 24.14 Peak Margin (dB) 23.05	QP Margin (dB) 24.48 19.32 15.99 17.43 28.23 QP Margin (dB) 27.76
Ant 0; (	0 2NTIS Ch: 4 IHz) 34.29 72.26 67.41 00.65 53.35 72.19	Peak (dBμV) 18.92 25.90 25.10 27.70 21.88 Peak (dBμV) 16.95 28.95	QP (dBμV) 15.52 20.68 24.01 26.09 17.79 QP (dBμV) 12.24 28.05	Factors (dB) 22.03 11.90 11.88 16.00 24.48 Factors (dB) 17.17 11.90	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52 46.02 Vertical Peak Limit (dBμV) 40.00 40.00 40.00	QP Limit (dBμV) 40.00 40.00 43.52 46.02 QP Limit (dBμV) 40.00 40.00	Turntable (deg) / Height (cm) 171º/101cm 0°/400cm 0°/213cm -1º/100cm Turntable (deg) / Height (cm) 113º/103cm 61º/308cm	SIGNATURE           Beauty           Peak Margin (dB)           21.08           14.10           14.90           15.82           24.14           Peak Margin (dB)           23.05           11.05	QP Margin (dB) 24.48 19.32 15.99 17.43 28.23 QP Margin (dB) 27.76 11.95
Ant 0; (	0 2NUS Ch: 4 Hz) 34.29 72.26 67.41 00.65 53.35 72.19 42.84	4 Peak (dBμV) 18.92 25.90 25.10 27.70 21.88 Peak (dBμV) 16.95 28.95 31.41	QP (dBμV) 15.52 20.68 24.01 26.09 17.79 QP (dBμV) 12.24 28.05 30.17	Factors (dB) 22.03 11.90 11.88 16.00 24.48 Factors (dB) 17.17 11.90 14.88	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52 46.02 Vertical Peak Limit (dBμV) 40.00 43.52	QP Limit (dBμV) 40.00 40.00 43.52 46.02 QP Limit (dBμV) 40.00 40.00 43.52	Turntable (deg) / Height (cm) 171º/101cm 0°/400cm 67°/400cm 0°/213cm -1°/100cm Turntable (deg) / Height (cm) 113°/103cm 61°/308cm 95°/101cm	SIGNATURE           Beauty           Peak Margin (dB)           21.08           14.10           14.90           15.82           24.14           Peak Margin (dB)           23.05           11.05           12.11	QP Margin (dB) 24.48 19.32 15.99 17.43 28.23 QP Margin (dB) 27.76 11.95 13.35
Ant 0; ( Freq (M)	0 2NTIS Ch: 4 IHz) 34.29 72.26 67.41 00.65 53.35 72.19	Peak (dBμV) 18.92 25.90 25.10 27.70 21.88 Peak (dBμV) 16.95 28.95	QP (dBμV) 15.52 20.68 24.01 26.09 17.79 QP (dBμV) 12.24 28.05	Factors (dB) 22.03 11.90 11.88 16.00 24.48 Factors (dB) 17.17 11.90	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52 46.02 Vertical Peak Limit (dBμV) 40.00 40.00 40.00	QP Limit (dBμV) 40.00 40.00 43.52 46.02 QP Limit (dBμV) 40.00 40.00	Turntable (deg) / Height (cm) 171º/101cm 0°/400cm 0°/213cm -1º/100cm Turntable (deg) / Height (cm) 113º/103cm 61º/308cm	SIGNATURE           Beauty           Peak Margin (dB)           21.08           14.10           14.90           15.82           24.14           Peak Margin (dB)           23.05           11.05           12.11           9.13	QP Margin (dB) 24.48 19.32 15.99 17.43 28.23 QP Margin (dB) 27.76 11.95

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#### Antenna 0 / Channel: 4

	Customer:	Lightspeed 1	Technologies		.lob	Reference#:	LIG2023092	8
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		Rogue Base			Temp	erature (°C):		
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	oltage/Freq:	120 V 60 Hz				ric Pressure:		
		Ryan Benite			Daromot	Location:	Hillsboro	
Produc	t Standards:					Looddorn		
		N/A						
Те	st Standard:	FCC Part 15	5.209					
EST RESUL	TS	TEST TYPE			DISTANCE		RUN #	
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0 100		5000	7000	MHz Horizontal		Ryan	SIGNATURE Benity	
0 100 OMMENTS nt: 0 Ch:4	Peak (dBµV)	Final (dBµV)	Factors (dB)	MHz Horizontal Peak Limit (dBµV)	Final Limit (dBµV)	Turntable (deg) / Height (cm)	Benity Peak Margin (dB)	Final Margin (dB)
0 100 0MMENTS nt: 0 Ch:4 Freq (MHz) 1921.20	Peak (dBµV) 55.72	Final (dBµV) 23.29	Factors (dB) -10.09	MHz Horizontal Peak Limit (dBµV) 73.98	Final Limit (dBµV) 53.98	Turntable (deg) / Height (cm) 22°/143cm	Benity Peak Margin (dB) 18.26	Final Margin (dB) 30.0
0 100 0MMIENTS nt: 0 Ch:4 Freq (MHz) 1921.20 7806.76	Peak (dBµV) 55.72 42.32	Final (dBµV) 23.29 40.93	Factors (dB) -10.09 10.70	MHz Horizontal Peak Limit (dBµV) 73.98 73.98	Final Limit (dBµV) 53.98 53.98	Turntable (deg) / Height (cm) 22°/143cm 234°/200cm	Peak Margin (dB) 18.26 31.66	Final Margin (dB) 30.4 13.0
0 100 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 55.72 42.32 44.58	Final (dBµV) 23.29 40.93 39.72	Factors (dB) -10.09 10.70 9.35	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98	Turntable (deg) / Height (cm) 22º/143cm 234º/200cm 154º/101cm	Peak Margin (dB) 18.26 31.66 29.40	Final Margin (dB) 30.1 13.1 14.2
0 100 0MMIENTS nt: 0 Ch:4 Freq (MHz) 1921.20 7806.76 13854.93 14687.99	Peak (dBµV) 55.72 42.32 44.58 45.36	Final (dBµV) 23.29 40.93 39.72 43.25	Factors (dB) -10.09 10.70 9.35 11.91	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 22º/143cm 234º/200cm 154º/101cm 315º/124cm	Peak Margin (dB) 18.26 31.66 29.40 28.62	Final Margin (dB) 30.1 13.1 14.2 10.2
0 100 0MMIENTS nt: 0 Ch:4 Freq (MHz) 1921.20 7806.76 13854.93 14687.99 15653.28	Peak (dBµV) 55.72 42.32 44.58 45.36 39.23	Final (dBµV) 23.29 40.93 39.72 43.25 36.88	Factors (dB) -10.09 10.70 9.35 11.91 6.93	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg)/ Height (cm) 22°/143cm 234°/200cm 154°/101cm 315°/124cm 22°/198cm	Besitey Peak Margin (dB) 18.26 31.66 29.40 28.62 34.75	Final Margin (dB) 30. 13. 14. 10. 17.
0 100 0MMIENTS nt: 0 Ch:4 Freq (MHz) 1921.20 7806.76 13854.93 14687.99	Peak (dBµV) 55.72 42.32 44.58 45.36	Final (dBµV) 23.29 40.93 39.72 43.25	Factors (dB) -10.09 10.70 9.35 11.91	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 22°/143cm 234°/200cm 154°/101cm 315°/124cm	Peak Margin (dB) 18.26 31.66 29.40 28.62	Final Margin (dB) 30. 13. 14. 10. 17.
0 100 0MMIENTS nt: 0 Ch:4 Freq (MHz) 1921.20 7806.76 13854.93 14687.99 15653.28	Peak (dBµV) 55.72 42.32 44.58 45.36 39.23	Final (dBµV) 23.29 40.93 39.72 43.25 36.88	Factors (dB) -10.09 10.70 9.35 11.91 6.93	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg)/ Height (cm) 22°/143cm 234°/200cm 154°/101cm 315°/124cm 22°/198cm 316°/100cm	Beartey Beartey Peak Margin (dB) 18.26 31.66 29.40 28.62 34.75 29.50	Final Margin (dB) 30.4 13.4 14.1 10. 17.1 11.3
0 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 55.72 42.32 44.58 45.36 39.23	Final (dBµV) 23.29 40.93 39.72 43.25 36.88	Factors (dB) -10.09 10.70 9.35 11.91 6.93	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98 Final Limit (dBµV)	Turntable (deg)/ Height (cm) 22°/143cm 234°/200cm 154°/101cm 315°/124cm 22°/198cm	Besitey Peak Margin (dB) 18.26 31.66 29.40 28.62 34.75	Final Margin (dB) 30.4 13.4 14.1 10. 17.1 11.3
0 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 55.72 42.32 44.58 45.36 39.23 44.48	Final (dBµV) 23.29 40.93 39.72 43.25 36.88 42.66	Factors (dB) -10.09 10.70 9.35 11.91 6.93 16.67	MHz Horizontal Peak Limit (dBμV) 73.98 74.98	Final Limit (dBµV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg)/ Height (cm) 22°/143cm 234°/200cm 154°/101cm 315°/124cm 22°/198cm 316°/100cm	SIGNATURE           Besity           Peak Margin (dB)           18.26           31.66           29.40           28.62           34.75           29.50           Peak Margin	Final Margin (dB) 30. 13. 14. 10. 17. 11. 5 Final Margin (dB)
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0 100 0 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 55.72 42.32 44.58 45.36 39.23 44.48 Peak (dBµV) 42.64 42.53 44.15	Final (dBµV) 23.29 40.93 39.72 43.25 36.88 42.66 Final (dBµV) 40.77	Factors (dB) -10.09 10.70 9.35 11.91 6.93 16.67 Factors (dB) 10.79 7.14 9.40	MHz Horizontal Peak Limit (dBμV) 73.98	Final Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 22°/143cm 234°/200cm 154°/101cm 315°/124cm 22°/198cm 316°/100cm Turntable (deg) / Height (cm) 121°/149cm	SIGNATURE           Benity           Peak Margin (dB)           18.26           31.66           29.40           28.62           34.75           29.50           Peak Margin (dB)           31.34           31.45           29.83	Final Margin (dB) 30.0 13.0 14.1 10.1 11.1 Final Margin (dB) 13.1 14.0
0 100 0 0 100 0 0 100 0 0 0 100 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 55.72 42.32 44.58 45.36 39.23 44.48 Peak (dBµV) 42.64 42.53	Final (dBµV) 23.29 40.93 39.72 43.25 36.88 42.66 Final (dBµV) 40.77 39.55	Factors (dB) -10.09 10.70 9.35 11.91 6.93 16.67 Factors (dB) 10.79 7.14	MHz Horizontal Peak Limit (dBμV) 73.98 74.98 74.98 74.98 74.98 74.98 74.98	Final Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 22°/143cm 234°/200cm 154°/101cm 315°/124cm 22°/198cm 316°/100cm Turntable (deg) / Height (cm) 121°/149cm 315°/199cm	SIGNATURE           Benity           Peak Margin (dB)           18.26           31.66           29.40           28.62           34.75           29.50           Peak Margin (dB)           31.34           31.45	Final Margin (dB) 30.0 13.0 14.1 10.1 11.1 Final Margin (dB) 13.1 14.4 14.1
0 100 0 0 0 100 0 0 100 0 0 100 0 0 100 0 0 100 0 0 100 0 0 100 0 0 100 0 0 0 100 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 55.72 42.32 44.58 45.36 39.23 44.48 Peak (dBµV) 42.64 42.53 44.15	Final (dBµV) 23.29 40.93 39.72 43.25 36.88 42.66 Final (dBµV) 40.77 39.55 39.42	Factors (dB) -10.09 10.70 9.35 11.91 6.93 16.67 Factors (dB) 10.79 7.14 9.40	MHz Horizontal Peak Limit (dBμV) 73.98	Final Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 22°/143cm 234°/200cm 154°/101cm 315°/124cm 22°/198cm 316°/100cm Turntable (deg) / Height (cm) 121°/149cm 315°/199cm 9°/168cm	SIGNATURE           Benity           Peak Margin (dB)           18.26           31.66           29.40           28.62           34.75           29.50           Peak Margin (dB)           31.34           31.45           29.83	Final Margin (dB) 30.4 13.0 14.2 10.7 17.1 11.3 Final Margin

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nt:0	0 1800 MENTS 0 CH:4 (MHz) 1846.77 1938.66 2668.13	Peak (dB	<sup>3μV)</sup> 45.40 42.72 41.62	Avera	age (dE 3) 4( 3)	8µV) 9.70 0.02 8.93			s (dB 9. 8. 8.	) 32 89 70	Pe	M rizon ak Lim dBμV) 73 73 73	Hz tal it 3.98 3.98		rage L dBμV 5 5 5 5	imit ) 3.98 3.98	Turn He 3	M table ( 22º/10 02º/10 13º/12	an (deg)/ cm) 01cm 00cm 25cm	Be	k Ma (dB)	rgin 28.58 31.26	Ave 8 5	rage M (dB)	farg 14.1 13.2
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nt:0	0 1800 <b>STENTIS</b> 0 CH:4 (MHz) 1846.77 1938.66 2668.13 2852.90 3093.30	Peak (dB	3μV) 45.40 42.72 41.62 41.90 42.17	Avera	39 (dB 31) 31 32 32 31 31 31 31	8µV) 9.70 0.02 8.93 8.93 9.48			s (dB 9. 8. 8. 8. 9.	) 32 89 70 73 44	Pe	M rizon ak Lim dBμV) 73 73 73 73 73	Hz tal 3.98 3.98 3.98 3.98		rage L dBμV 5 5 5 5 5 5 5 5 5	imit ) 3.98 3.98 3.98 3.98 3.98	Turn He 3	M table ( cight (c 02°/10 13°/12 22°/11 93°/10	(deg) / rm) 01cm 00cm 25cm 75cm 00cm	Be	k Ma (dB)	rrgin 28.58 31.26 32.36 32.08	Ave 3 5 5 1	(dB)	14.3 13.9 15.0 14.3
nt:0	0 1800 MENTS 0 CH:4 (MHz) 1846.77 1938.66 2668.13 2852.90	Peak (dB	3μV) 45.40 42.72 41.62 41.90	Avera	39 (dB 31) 31 32 32 31 31 31 31	3μV) 9.70 0.02 8.93			s (dB 9. 8. 8. 8. 9.	) 32 89 70 73	Pe (	М rizon tak Lim 73 73 73 73 73 73 73 73 73 73 73 73 73	Hz tal 3.98 3.98 3.98 3.98 3.98 3.98		rage L dBμV 5 5 5 5 5 5 5 5 5	imit ) 3.98 3.98 3.98	Turn He 3	M table ( cight (c 02°/10 13°/12 22°/11 93°/10	deg) / cm) 01cm 00cm 25cm 75cm	Be	k Ma (dB)	rigin 28.58 31.26 32.36	Ave 3 5 5 1	(dB)	14.3 13.9 15.0 14.3
nt:0	0 1800 <b>STENTIS</b> 0 CH:4 (MHz) 1846.77 1938.66 2668.13 2852.90 3093.30	Peak (dB	3μV) 45.40 42.72 41.62 41.90 42.17 46.04	Avera	39 (dB 31) 31 32 32 31 31 31 31	<ul> <li>βµV)</li> <li>9.70</li> <li>0.02</li> <li>8.93</li> <li>8.93</li> <li>9.48</li> <li>9.95</li> </ul>	Fa		s (dB 9. 8. 8. 9. 9.	) 32 89 70 73 44 76	Pe (	M rizon ak Lim dBμV) 73 73 73 73 73	Hz tal 3.98 3.98 3.98 3.98 3.98 3.98 3.98 3.98	Ave	rage L dBμV 5 5 5 5 5 5 5 5 5	imit 3.98 3.98 3.98 3.98 3.98 3.98 3.98	Turm He 30 1	M table ( cight (c 02°/10 13°/12 22°/11 93°/10	deg) / cm) 01cm 00cm 25cm 75cm 00cm 99cm deg) /	Peal	k Ma (dB)	runi runi 28.58 31.26 32.36 32.08 31.81 27.94 rugin	Ave 5 5 5 1 4	(dB)	14.1 13.1 15.1 14.1 14.1 14.1
nt:0	0 1800 MENTIS 0 CH:4 (MHz) 1846.77 1938.66 2668.13 2852.90 3093.30 3191.64	Peak (dB	3μV) 45.40 42.72 41.62 41.90 42.17 46.04	Avera	39 44 31 31 31 31 31 31 31 31 31 31	<ul> <li>βµV)</li> <li>9.70</li> <li>0.02</li> <li>8.93</li> <li>8.93</li> <li>9.48</li> <li>9.95</li> </ul>	Fa	actors	€ (dB 9. 8. 8. 9. 9. € (dB	) 32 89 70 73 44 76	Pe (	М ak Lim dBµV) 73 73 73 73 73 73 73 73 73 73 73 73 73	Hz tal 3.98 3.98 3.98 3.98 3.98 3.98 3.98 3.98	Ave	rage L dBµV 5 5 5 5 5 5 5 5 5 7 5 7 8 8 9 7 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8	imit 3.98 3.98 3.98 3.98 3.98 3.98 3.98	Turm He 30 1	M table ( ight ( 22°/10 02°/10 13°/12 22°/11 93°/10 0°/9 table ( ight (	deg) / cm) 01cm 00cm 25cm 75cm 00cm 99cm deg) /	Peal	k Ma (dB)	runi runi 28.58 31.26 32.36 32.08 31.81 27.94 rugin	Ave 3 3 5 5 5 1 4 Ave	rrage M (dB) ] ] ] ] grage M (dB)	farg 14.1 13.1 15.1 14.1 14.1
nt:0	0 1800 1800 1800 1800 0 CH:4 (MHz) 1846.77 1938.66 2668.13 2852.90 3093.30 3191.64 (MHz)	Peak (dE	3μV) 45.40 42.72 41.62 41.90 42.17 46.04 3μV)	Avera	39 44 33 39 39 39 39 30 30 30 30 30 30 30 30 30 30 30 30 30	<sup>3μV</sup> ) 9.70 0.02 8.93 9.48 9.95 <sup>3μV</sup> )	Fa	actors	s (dB 9. 8. 8. 9. 9. 9. 5. (dB 9.	) 32 89 70 73 44 76	Pe (	М ak Lim dBµV) 73 73 73 73 73 73 73 73 73 73 73 73 73	Hz tal it 3.98 3.98 3.98 3.98 3.98 3.98 3.98 3.98	Ave	rage L dBµV 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	imit ) 3.98 3.98 3.98 3.98 3.98 3.98 3.98 3.98	Turm Ho 30 1 2 Turm Ho	M table ( 22°/10 02°/10 13°/12 22°/11 02°/10 0°/10 table ( 0°/10	(deg) / cm) 00cm 25cm 00cm 99cm deg) / cm)	Peal	k Ma (dB)	rrgin ) 28.58 31.26 32.36 32.36 31.81 27.94 rrgin	Ave 3 5 5 1 1 4	rrage M (dB)	1arg 14.1 13.1 15.1 14.1 14.1 14.1 14.1 14.1 14.1 14
nt:0	0 1800 1800 MENTS 0 CH:4 (MHz) 1846.77 1938.66 2668.13 2852.90 3093.30 3191.64 (MHz) 1113.18	Peak (dE	3μV) 45.40 42.72 41.62 42.17 46.04 3μV) 41.18 42.38 42.62	Avera	age (dB 3) 3) 3) 3) 3) 3) 3) 3) 3) 3) 3) 3) 3)	<ul> <li>βµV)</li> <li>9.70</li> <li>0.02</li> <li>8.93</li> <li>9.48</li> <li>9.95</li> <li>8.48</li> <li>9.95</li> <li>8.80</li> <li>8.79</li> <li>9.79</li> </ul>	Fa	actors	s (dB 9. 8. 8. 9. 9. 9. 9. 9. 9.	) 32 89 70 73 44 76 ) 80	Pe (	М ak Lim dBµV) 73 73 73 73 73 73 73 73 73 73 73 73 73	Hz tal it 3.98 3.98 3.98 3.98 3.98 3.98 3.98 3.98	Ave	rage L dBµV 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	imit ) 3.98 3.98 3.98 3.98 3.98 3.98 imit ) 3.98	Turm Ho 30 1 2 Turm Ho 1	M table ( 22°/10 02°/10 13°/12 22°/11 07/9 07/9 table ( 0°/9 table ( 0°/10 12°/10 55°/12	(deg) / cm) 01cm 00cm 25cm 75cm 00cm 99cm (deg) / cm) 00cm 00cm	Peal	k Ma k Ma k Ma	rurgin 28.58 31.26 32.36 32.08 31.81 27.94	Ave 3 5 5 6 1 1 4 Ave 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	rrage M (dB)	farg 14.1 13.9 15.0 15.0 14.1 14.0
nt:0	0 1800 MENTS 0 CH:4 (MHz) 1846.77 1938.66 2668.13 2852.90 3093.30 3191.64 (MHz) 11113.18 1506.10	Peak (dB	3μV) 45.40 42.72 41.62 41.90 42.17 46.04 3μV) 41.18 42.38	Avera	age (dE 34 36 36 36 36 36 36 36 36 36 36 36 36 36	<ul> <li>βµV)</li> <li>9.70</li> <li>0.02</li> <li>8.93</li> <li>9.48</li> <li>9.95</li> <li>3µV)</li> <li>8.80</li> <li>8.79</li> </ul>	Fa	actors	s (dB 9. 8. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9.	) 32 89 70 73 44 76 ) 80 08	Pe (	М rizon ak Lim dBµV) 72 73 73 73 73 73 73 73 73 73 73 73 73 73	Hz tal it 3.98 3.98 3.98 3.98 3.98 3.98 3.98 3.98	Ave	rage L dBµV 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	imit ) 3.98 3.98 3.98 3.98 3.98 3.98 3.98 3.98	Turm He 30 1 20 Turm He 20	M table ( 22°/10 02°/10 13°/12 22°/10 0°/9 table ( 0°/9 table ( 0°/10	(deg) / cm) 01cm 00cm 25cm 00cm 99cm 00cm 00cm 00cm 56cm 99cm	Peal	k Ma (dB) k Ma	rurr argin 28.58 31.26 32.36 32.36 31.81 27.94 urgin 32.80 31.60	Ave 3 5 5 5 1 1 4 Ave 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	rrage M (dB)	farg 14.1 15.0 14.1 14.0 14.0 14.0 14.0 14.0 14.0 14

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LIG20230928-01	ElectroMagnetic	C25
LIG20230928-01	Investigations	

Antenna 1 /	Channel: 4
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32.09         19.49         15.43         22.56         40.00         40.00         202°/400cm         20.51         24           72.19         27.69         26.68         11.90         40.00         40.00         172°/400cm         12.31         13           152.04         26.18         24.18         14.91         43.52         43.52         157°/310cm         17.34         19           167.41         27.67         26.31         16.00         43.52         43.52         -1°/211cm         15.85         17           500.61         21.82         17.76         24.48         46.02         46.02         -1°/100cm         24.20         28           Vertical	Date:       10/31/2023         Temperature (°C):       22.6         Relative Humidity (%):       33         Barometric Pressure:       30         Location:       Hillsboro         DISTANCE       RUN #         3 meters       RUN #	
DUT:         Rogue Base         Temperature (%):         22.6           Serial Number:         02-C25-Z-S2340-00028         Relative Humidity (%):         33           Voltage/Freq:         120 Vol D4         Barometic Pressure:         30           Tested by:         Ryan Benitez         Location:         Hillsboro           Product Standards:         FCC Part 15 Subpart D         N/A         Location:         Hillsboro           Test Standard:         FCC Part 15 Z09         TestStandard:         FCC Part 15 Z09         TestStandard:         Goropliance         3 meters         RUN #           Pass         Compliance         3 meters         Compliance         3 meters         Compliance         Goropliance         Compliance         Test RSUL         RUN #           40         0	Temperature (°C):       22.6         Relative Humidity (%):       33         Barometric Pressure:       30         Location:       Hillsboro         DISTANCE       RUN #         3 meters       RUN #	
Serial Number         O2-C25-Z-3230-00028         Relative Humidity (%): 33           Voltage/Freq:         120 V 60 Hz         Barometric Pressure: 30           Product Standards:         FCC Part 15 Subpart D         Location: Hillsboro           Product Standard:         FCC Part 15.09         Example: NA         Example: NA           Test Standard:         FCC Part 15.09         StrANCE:         RIN #           Pass         Compliance         3 metres         Image: Name Compliance         StrANCE:           #0	Relative Humidity (%):       33         Barometric Pressure:       30         Location:       Hillsboro         DISTANCE       RUN #         3 meters       RUN #	
Tested by:         Ryan Benitez         Location:         Hillsboro           Product Standard:         FCC Part 15 Subpart D         N/A           Test Standard:         FCC Part 15 209         DISTANCE:         RUN#           Pass         Compliance         3 meters         0         0           0         0         0         0         0         0         0         0           0	Location: Hillsboro DISTANCE RUN # 3 meters	
Tested by:         Figure Benitez         Location:         Hillsboro           N/A         Test Standard:         FCC Part 15 Subpart D         N/A           Test Standard:         FCC Part 15 209         ISTANCE:         RUN#           Pass         Compliance         3 meters         3           0	DISTANCE RUN # 3 meters	
N/A           Test Standard;         FCC Part 15.209           TIST RESULTS         DISTANCE         RUN#           Pass         Compliance         3 meters         RUN#           0	3 meters	
Test Standard: FCC Part 15.209           TEST TYPE         DISTANCE         RUN#           Pass         Compliance         3 meters           Of the compliance         OF the compliance         OF the compliance           A compliance         OF the compl	3 meters	
TIST RESULTS         TIST TYPE         DISTANCE         RUN#           Pass         Compliance         3 meters         0 <td< td=""><td>3 meters</td><td></td></td<>	3 meters	
Pass         Compliance         3 meters           μ	3 meters	
Internet Pask         Average List         of Linst           OF Linst         of Linst         of Linst           OF Linst         of Linst         of Linst         of Linst           OF Linst         of Linst		
And 1; Ch: 4         Sch at 12           Freq (MHz)         Peak (dBµV)         QP (dBµV)         Factors (dB)         Peak Limit (dBµV)         (dBµV) <t< th=""><th>Average Limit OP Limit</th><th></th></t<>	Average Limit OP Limit	
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$ \begin{array}{c} & & & & & & & & & & & & & & & & & & &$		
Image: bit of the second se		
φ         φ		
30         40         50         600         700         800         900         1000         MHz           COMMENTS         SIGN THRE           Ant 1; Ch: 4         Multicum         QP Limit (dBµV)         Turntable (deg)/ Height (cm)         Peak (Magin (dB)         QP Margin (d (dB)         QP Margi	****	
30         40         50         600         700         800         900         1000           MHz           COMMENTS         SIGN THRE           Ant 1; Ch: 4         Multicum         QP Limit (dBµV)         Turntable (deg)/ Height (cm)         Peak (Magin (dB)         QP Margin (d (dB)         QP Margin (d		
20         40		
10       10       200       300       400       500       600       700       800       900       1000         MHz         COMMENTS       SCANTURE         Ant 1; Ch: 4       SCANTURE         More and a start of the start o	dans a surger and the second surger and the second	
10         10         200         300         400         500         600         700         800         900         1000           MHz           COMMENTS         SCNTURE           Ant 1; Ch: 4         SCNTURE           Ant 1; Ch: 4         SCNTURE           Freq (MHz)         Peak (dBµV)         QP (dBµV)         Factors (dB)         Peak Limit (dBµV)         QP Limit (dBµV)         Turntable (deg)         Peak Margin (dBµV)         QP Margin (dBµV)         32.09         19.49         15.43         22.56         40.00         40.00         202"400cm         21.31         131           152.04         26.18         24.18         14.91         43.52         43.52         157'/310cm         17.34         199           167.41         27.67         26.31         16.00         43.52         -1'/211cm         15.85         177           500.61         21.82         17.76         24.48         46.02         -1'/211cm         15.85         177           500.61         21.82         17.76         24.48         46.02         -1'/211cm         15.85         177           500.61         21.82         11.308		
θ       100       200       300       400       500       600       700       800       900       1000         MHz         COMMENTS       SCATURE         Ant 1; Ch: 4         Torratable (dBµV)       QP (dBµV)       Factors (dB)       QP Limit (dBµV)       Turntable (deg)/ (dBµV)       Peak Limit (dBµV)       QP Margin (d (dBµV)         32.09       19.49       15.43       22.56       40.00       40.00       202'/400cm       20.51       24         72.19       27.69       26.68       11.90       40.00       40.00       172'/400cm       12.31       13         152.04       26.18       24.18       14.91       43.52       43.52       157'/310cm       17.34       19         167.41       27.67       26.31       16.00       43.52       -1'/211cm       15.85       17         500.61       21.82       17.76       24.48       46.02       -1'/100cm       24.20       28         Vertical         Freq (MHz)       Peak (dBµV)       QP (dBµV)       Factors (dB)       QP Limit (dBµV)       QP Limit (dBµV)       Peak Margin (dBµV)       QP Margin (dBµV)       QP Margin (dBµV)       QP		
0       100       200       300       400       500       600       700       800       900       1000         MHz             COMMENTS         SIGNATURE         Ant 1; Ch: 4         SIGNATURE         Margin (dBµV)       QP (dBµV)       Factors (dB)       Peak Limit (dBµV)       QP Limit (dBµV)       Turntable (deg) / (dBµV)       QP Margin (dBµV)         32.09       19.49       15.43       22.56       40.00       40.00       202*/400cm       20.51       24         72.19       27.69       26.68       11.90       40.00       40.00       172*/400cm       12.31       13         152.04       26.18       24.18       14.91       43.52       43.52       157*/310cm       17.34       19         167.41       27.67       26.31       16.00       43.32       -1*/211cm       15.85       17         500.61       21.82       17.76       24.48       46.02       -1*/100cm       24.20       28         Vertical         Freq (MHz)       Peak (dBµV)       QP (dBµV)       Factors (dB)       Peak Limit (dBµV)       QP Limit (dBµV)		
MHz         SIGNTURE         MAT 1; Ch: 4         Freq (MHz)       QP (dBµV)       Factors (dB)       QP Limit (dBµV)       QP Limit (dBµV)       Peak Margin (dB)         Freq (MHz)       Peak (dBµV)       QP (dBµV)       Factors (dB)       QP Limit (dBµV)       Turntable (deg)       Peak Margin (dB)         32.09       19.49       15.43       22.56       40.00       40.00       202°/400cm       20.51       24         72.19       27.69       26.68       11.90       43.52       43.52       157'310cm       17.34       19         152.04       26.18       24.18       14.91       43.52       43.52       17'211cm       15.88       17         500.61       21.82       17.76       24.48       46.02       46.02       -1°/100cm       24.20       28         Vertical         Freq (MHz)       Peak (dBµV)       QP (dBµV)       Factors (dB)       Peak Limit (dBµV)       QP Limit (dBµV)       Turntable (deg)       Peak Margin (dB)       QP Margin (dB)         Statistical in the data	600 700 800 900	1000
Horizontal         Freq (MHz)       Peak (dB $\mu$ V)       QP (dB $\mu$ V)       Factors (dB)       Peak Limit (dB $\mu$ V)       QP Limit (dB $\mu$ V)       Turntable (deg) / (dB $\mu$ V)       Peak Margin (dB $\mu$ V)         32.09       19.49       15.43       22.56       40.00       40.00       202°/400cm       20.51       24         72.19       27.69       26.68       11.90       40.00       40.00       172°/400cm       12.31       13         152.04       26.18       24.18       14.91       43.52       43.52       157°/310cm       17.34       19         167.41       27.67       26.31       16.00       43.52       43.52       -1°/211cm       15.85       17         500.61       21.82       17.76       24.48       46.02       46.02       -1°/100cm       24.20       28         Vertical         Freq (MHz)       Peak (dB $\mu$ V)       QP (dB $\mu$ V)       Factors (dB)       Peak Limit (dB $\mu$ V)       Turntable (deg) / (dB $\mu$ V)       Peak Margin (dB $\mu$ V)         53.18       17.01       13.08       17.22       40.00       40.00       23°/175cm       22.99       26         72.49       19.55       14.32       11.88       40.00       40.00 <th>10 10</th> <th></th>	10 10	
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$\begin{array}{c c c c c c c c c c c c c c c c c c c $		QP Margin (o
152.04       26.18       24.18       14.91       43.52       43.52       157°/310cm       17.34       19         167.41       27.67       26.31       16.00       43.52       43.52       -1°/211cm       15.85       17         500.61       21.82       17.76       24.48       46.02       46.02       -1°/100cm       24.20       28         0		24.
167.41       27.67       26.31       16.00       43.52       43.52       -1°/211cm       15.85       17         500.61       21.82       17.76       24.48       46.02       46.02       -1°/100cm       24.20       28         Image: Constraint of the state of		13.
500.61       21.82       17.76       24.48       46.02       -1°/100cm       24.20       28         6               24.20       28         6                24.20       28         6                24.20       28         7        Peak (dBµV)       QP (dBµV)       Factors (dB)       Peak Limit (dBµV)       QP Limit (dBµV)       Turntable (deg) / Height (cm)       Peak Margin (dB)       QP Margin (db)         53.18       17.01       13.08       17.22       40.00       40.00       23°/175cm       22.99       26         72.49       19.55       14.32       11.88       40.00       40.00       54°/286cm       20.45       25         142.85       31.43       30.38       14.88       43.52       43.52       315°/101cm       8.15       10         880.40       28.79       27.69       30.44       46.02       46.02       149°/224cm       17.23       18         880.40       28.79 <td< td=""><td></td><td>19.</td></td<>		19.
Image: Margin (MHz)         Peak (dBμV)         QP (dBμV)         Factors (dB)         Peak Limit (dBμV)         QP Limit (dBμV)         Turntable (deg) / Height (cm)         Peak Margin (dB)         QP Margin (dB)           53.18         17.01         13.08         17.22         40.00         40.00         23°/175cm         22.99         26           72.49         19.55         14.32         11.88         40.00         40.00         54°/286cm         20.45         25           142.85         31.43         30.38         14.88         43.52         43.52         95°/101cm         12.09         13           155.12         35.37         32.86         14.98         43.52         43.52         315°/101cm         8.15         10           880.40         28.79         27.69         30.44         46.02         46.02         149°/224cm         17.23         18		17.
Freq (MHz)         Peak (dBμV)         QP (dBμV)         Factors (dB)         Peak Limit (dBμV)         QP Limit (dBμV)         Turntable (deg)/ Height (cm)         Peak Margin (dB)         QP Margin (dB)           53.18         17.01         13.08         17.22         40.00         40.00         23°/175cm         22.99         26           72.49         19.55         14.32         11.88         40.00         40.00         54°/286cm         20.45         25           142.85         31.43         30.38         14.88         43.52         43.52         95°/101cm         12.09         13           155.12         35.37         32.86         14.98         43.52         43.52         315°/101cm         8.15         10           880.40         28.79         27.69         30.44         46.02         46.02         149°/224cm         17.23         18	46.02 -1º/100cm 24.20	28.
Free (MHz)         Peak (dBµV)         QP (dBµV)         Factors (dB)         (dBµV)         (dBµV)         Height (cm)         (dB)         QP Margin (dB)           53.18         17.01         13.08         17.22         40.00         40.00         23°/175cm         22.99         26           72.49         19.55         14.32         11.88         40.00         40.00         54°/286cm         20.45         255           142.85         31.43         30.38         14.88         43.52         43.52         95°/101cm         12.09         13           155.12         35.37         32.86         14.98         43.52         43.52         315°/101cm         8.15         10           880.40         28.79         27.69         30.44         46.02         46.02         149°/224cm         17.23         18		
72.49         19.55         14.32         11.88         40.00         40.00         54%/286cm         20.45         25           142.85         31.43         30.38         14.88         43.52         43.52         95%/101cm         12.09         13           155.12         35.37         32.86         14.98         43.52         43.52         315%/101cm         8.15         10           880.40         28.79         27.69         30.44         46.02         46.02         149%/224cm         17.23         18	(dBµV) Height (cm) (dB)	QP Margin (d
142.85         31.43         30.38         14.88         43.52         43.52         95%101cm         12.09         13           155.12         35.37         32.86         14.98         43.52         43.52         315%101cm         8.15         10           880.40         28.79         27.69         30.44         46.02         46.02         149%224cm         17.23         18		I
155.12         35.37         32.86         14.98         43.52         43.52         315%/101cm         8.15         10           880.40         28.79         27.69         30.44         46.02         46.02         149%/224cm         17.23         18		
880.40 28.79 27.69 30.44 46.02 46.02 149°/224cm 17.23 18		
	40.02 1497224cm 17.23	18
		Construction         SIGNATURE           Marrie         Marrie           QP Limit (dBµV)         Turntable (deg) / Height (cm)         Peak Margin (dB)           0         40.00         202°/400cm         20.51           0         40.00         172°/400cm         12.31           2         43.52         157°/310cm         17.34           2         43.52         -1°/211cm         15.85           2         46.02         -1°/100cm         24.20           0         40.00         23°/175cm         22.99           0         40.00         54°/286cm         20.45           2         43.52         95°/101cm         12.09           2         43.52         315°/101cm         8.15

0928-01	ElectroMagnetic
0928-01	Investigations

MUJUI	Customer:	Lightspeed 1	<b>Fechnologies</b>	1	Job	Reference#:	LIG2023092	8
		Rob D'Angel				Date:	10/30/2023	
		Rogue Base			Temp	erature (°C):		
Se		02-C25-Z-S2				Humidity (%):		
V	oltage/Freg:	120 V 60 Hz				ric Pressure:		
		Ryan Benite				Location:		
Produc	t Standards:	FCC Part 15	Subpart D					
		N/A						
Te	st Standard:	FCC Part 15	.209					
EST RESUL	TS	TEST TYPE			DISTANCE		RUN #	
ass		Compliance			3 meters			
		- Horizontal Peak		Vertical Peak	Avera	pe Limit	QP Linit	
<sup>80</sup> T								
70								
60								
						4	ارم المقالين	
> 50							Contraction of the	
	and the second second							+
30 F								
20								
20 T								
10								+
10 0 100	0 3000	5000	7000	9000	11000	13000	15000 1	7000
0 100	0 3000	5000	7000	9000 MHz	11000	13000	15000 1 SIGNATURE	7000
0 + 100		5000	7000	MHz	11000	13000 Ryan	SIGNATURE	7000
0 + 100		5000	7000	MHz Horizontal		Ryan	SIGNATURE Benity	
0 + 100 0MMENTS		5000	7000 Factors (dB)	MHz	final Limit (dBµV)	0	SIGNATURE	
0 + 100 0MMENTS nt: 1 Ch:4	Peak (dBµV)	Final (dBµV)	Factors (dB)	MHz Horizontal Peak Limit (dBµV)	Final Limit (dBµV)	Turntable (deg) / Height (cm)	Benity Peak Margin (dB)	Final Margin (dB)
0 100 OMMENTS nt: 1 Ch:4	4			MHz Horizontal Peak Limit	Final Limit	Turntable (deg) / Height (cm) 55%/199cm	SIGNATURE Beauty Peak Margin	Final Margin (dB) 30.7
0 100 0MMIENTS nt: 1 Ch:4 Freq (MHz) 1921.21 7823.96	Peak (dBµV) 56.24	Final (dBµV) 23.19 40.85	Factors (dB) -10.09 10.79	MHz Horizontal Peak Limit (dBµV) 73.98 73.98	Final Limit (dBµV) 53.98 53.98	Turntable (deg) / Height (cm) 55%199cm 9%149cm	Peak Margin (dB) 17.74 30.48	Final Margin (dB) 30.7 13.1
0 100 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 56.24 43.50	Final (dBµV) 23.19	Factors (dB) -10.09	MHz Horizontal Peak Limit (dBµV) 73.98	Final Limit (dBµV) 53.98 53.98	Turntable (deg) / Height (cm) 55%199cm 9%149cm 162%198cm	Benity Peak Margin (dB) 17.74 30.48	Final Margin (dB) 30.1 13.1 14.2
0 100 0MMIENTES nt: 1 Ch:4 Freq (MHz) 1921.21 7823.96 13841.41	Peak (dBµV) 56.24 43.50 44.86	Final (dBµV) 23.19 40.85 39.74	Factors (dB) -10.09 10.79 9.37	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98	Turntable (deg) / Height (cm) 55%/199cm 9%/149cm 162%/198cm 8%/149cm	Peak Margin (dB) 17.74 30.48 29.12	Final Margin (dB) 30.7 13.1 14.2 10.7
0 100 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 56.24 43.50 44.86 45.09	Final (dBµV) 23.19 40.85 39.74 43.20	Factors (dB) -10.09 10.79 9.37 11.91	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 55°/199cm 9°/149cm 162°/198cm 8°/149cm 221°/174cm	Peak Margin (dB) 17.74 30.48 29.12 28.89	Final Margin (dB) 30.7 13.1 14.2 10.7 16.8
0 100 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 56.24 43.50 44.86 45.09 43.29	Final (dBµV) 23.19 40.85 39.74 43.20 37.16	Factors (dB) -10.09 10.79 9.37 11.91 7.46	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 55°/199cm 9°/149cm 162°/198cm 8°/149cm 221°/174cm	Beaten Beaten (dB) 17.74 30.48 29.12 28.89 30.69	Final Margin (dB) 30.1 13.1 14.2 10.7 16.8
0 100 0 0 0 100 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 56.24 43.50 44.86 45.09 43.29	Final (dBµV) 23.19 40.85 39.74 43.20 37.16	Factors (dB) -10.09 10.79 9.37 11.91 7.46	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 55°/199cm 9°/149cm 162°/198cm 8°/149cm 221°/174cm	Beaten Beaten (dB) 17.74 30.48 29.12 28.89 30.69	Final Margin (dB) 30.7 13.1 14.2 10.7 16.8 12.5
0 100 0 0 0 100 0 0 100 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 56.24 43.50 44.86 45.09 43.29 44.32	Final (dBµV) 23.19 40.85 39.74 43.20 37.16 41.48	Factors (dB) -10.09 10.79 9.37 11.91 7.46 14.97	MHz Horizontal Peak Limit (dBμV) 73.98 74.99	Final Limit (dBµV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 55%/199cm 9%/149cm 221%/174cm 55%/174cm Turntable (deg) / Height (cm)	Beattey Beattey Peak Margin (dB) 17.74 30.48 29.12 28.89 30.69 29.66 Peak Margin	Final Margin (dB) 30.7 13.1 14.2 10.7 16.8 12.5 Final Margin (dB)
0 100 0 0 0 0 0 100 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 56.24 43.50 44.86 45.09 43.29 44.32 Peak (dBµV)	Final (dBµV) 23.19 40.85 39.74 43.20 37.16 41.48 Final (dBµV)	Factors (dB) -10.09 10.79 9.37 11.91 7.46 14.97 Factors (dB)	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 Vertical Peak Limit (dBμV) 73.98	Final Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98 Final Limit (dBμV)	Turntable (deg) / Height (cm) 55°/199cm 9°/149cm 162°/198cm 8°/149cm 221°/174cm 55°/174cm Turntable (deg) / Height (cm) 9°/144cm -1°/125cm	Peak Margin (dB) 17.74 30.48 29.12 28.89 30.69 29.66 Peak Margin (dB)	Final Margin (dB) 30.7 13.1 14.2 10.7 16.8 12.5 Final Margin (dB) 30.8
0 100 0 0 0 0 0 100 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 56.24 43.50 44.86 45.09 43.29 44.32 Peak (dBµV) 56.18 43.29 42.09	Final (dBµV) 23.19 40.85 39.74 43.20 37.16 41.48 Final (dBµV) 23.17 40.91 39.51	Factors (dB) -10.09 10.79 9.37 11.91 7.46 14.97 Factors (dB) -10.09 10.76 9.40	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 Vertical Peak Limit (dBμV) 73.98	Final Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 Final Limit (dBμV) 53.98 53.98 53.98	Turntable (deg) / Height (cm) 55°/199cm 9°/149cm 162°/198cm 8°/149cm 221°/174cm 55°/174cm Turntable (deg) / Height (cm) 9°/144cm -1°/125cm 242°/149cm	Beaty Beaty Peak Margin (dB) 17.74 30.48 29.12 28.89 30.69 29.66 Peak Margin (dB) 17.80 30.69 31.89	Final Margin (dB) 30.7 13.1 14.2 10.7 16.8 12.5 Final Margin (dB) 30.8 13.0 14.4
0 100 0 0 0 0 0 100 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 56.24 43.50 44.86 45.09 43.29 44.32 Peak (dBµV) 56.18 43.29	Final (dBµV) 23.19 40.85 39.74 43.20 37.16 41.48 Final (dBµV) 23.17 40.91	Factors (dB) -10.09 10.79 9.37 11.91 7.46 14.97 Factors (dB) -10.09 10.76	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 Vertical Peak Limit (dBμV) 73.98	Final Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 Final Limit (dBμV) 53.98 53.98	Turntable (deg) / Height (cm) 55°/199cm 9°/149cm 162°/198cm 8°/149cm 221°/174cm 55°/174cm Turntable (deg) / Height (cm) 9°/144cm -1°/125cm 242°/149cm 0°/129cm	Beaty Beaty Peak Margin (dB) 17.74 30.48 29.12 28.89 30.69 29.66 Peak Margin (dB) 17.80 30.69	Final Margin (dB) 30.7 13.1 14.2 10.7 16.8 12.5 Final Margin

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LIG20230928-01	ElectroMagnetic	C25
LIG20230928-01	Investigations	

	C	ustomer:	Lightspeed 1	Technologie	s	Job	Reference#:	LIG2023092	28
			Rob D'Ange				Date:	10/27/2023	
		DUT:				Temp	erature (°C):	20.4	
	Serial	Number:					Humidity (%):	33	
	Volta	ae/Frea:	120 V 60 Hz	,			ric Pressure:	30	
			Ryan Benite			Duronio	Location:	Hillsboro	
Prod			FCC Part 15				20044011.	111100010	
			N/A						
	Test S	tandard:	FCC Part 15	5.209					
EST RESU			TEST TYPE			DISTANCE		RUN #	
ass			Compliance			3 meters			
						-			
			Horizontal Peak		Vertical Peak	Avera	ge Limit	OP Lint	
80									
70									
60			بعلم إحلابها. 📥	يطيبا واساسا	والمتعلقين والعيا	and an a start of the start of	حلير أبياهم مراجع		
50	<b>F</b>								
<b>∧ngp</b> 40									
30									
20	+								
10									
10									
0 18	8000	1900	0 20000	0 21000	) 22000 MHz		24000	25000	26000
18	8000	1900	0 20000	0 2100			0	SIGNATURE	
18 OMMEN	8000 TS	1900	0 20000	0 21000			24000 Ryan	SIGNATURE	
18 OMMENT	8000 TS	1900	0 20000	0 21000			0	SIGNATURE	
ommen nt:1 CH	8000 TS 1:4	1900 ak (dBµV)	Average (dBµV)	D 21000	MHz		0	SIGNATURE	
ommen nt:1 CH	8000 TS 1:4	sk (dBµV) 46.17	Average (dBµV) 39.19		MHz Horizontal Peak Limit (dBμV) 73.98	Average Limit (dBµV) 53.98	Turntable (deg) / Height (cm)	SIGNATURE Beauty Peak Margin	Average Marg (dB)
18 OMMENI nt:1 CH	8000 TS 1:4 99	sk (dBµV)	Average (dBµV) 39.19	Factors (dB)	Horizontal Peak Limit (dBµV) 73.98	Average Limit (dBµV) 53.98	Turntable (deg) / Height (cm) 93°/100cm	Beauty Peak Margin (dB) 27.81	Average Marg (dB) 14.
18 OMMIENT nt:1 CH Freq (MHz) 21357. 21988. 23226.	8000 TS 1:4 ) Per 99 91 .14	ak (dBµV) 46.17 41.70 41.95	Average (dBµV) 39.19 39.63 39.99	Factors (dB) 9.17 8.79 9.69	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98	Average Limit (dBμV) 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 93°/100cm 66°/156cm 292°/176cm	Beauty Peak Margin (dB) 27.81 32.28	Average Marg (dB) 14. 14.
18 OMMIENT nt:1 CH Freq (MHz) 21357. 21357. 21382. 23226. 25643.	8000 TS 1:4 99 91 14 32	ak (dBμV) 46.17 41.70 41.95 43.91	Average (dBμV) 39.19 39.63 39.99 39.08	Factors (dB) 9.17 8.79 9.69 9.80	МНz Horizontal Реак Limit (dBµV) 73.98 73.98 73.98 73.98 73.98 73.98	Average Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 93°/100cm 66°/156cm 292°/176cm 78°/124cm	Peak Margin (dB) 27.81 32.28 32.03 30.07	Average Marg (dB) 14. 13. 13. 14.
18 OMMIENT nt:1 CH Freq (MHz) 21357. 21357. 21358. 23226. 23226. 25643. 25681.	8000 115 1:4 99 91 1.14 32 .77	ak (dBμV) 46.17 41.70 41.95 43.91 40.79	Average (dBμV) 39.19 39.63 39.99 39.08 38.90	Factors (dB) 9.17 8.79 9.69 9.80 9.77	МНz Нorizontal Реак Limit (dBµV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98	Average Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 93°/100cm 66°/156cm 292°/176cm 78°/124cm 12°/199cm	Beauty Beauty Peak Margin (dB) 27.81 32.28 32.03 30.07 33.19	Average Marg (dB) 14. 14. 13. 14. 15.
18 OMMIENT nt:1 CH Freq (MHz) 21357. 21357. 21382. 23226. 25643.	8000 115 1:4 99 91 1.14 32 .77	ak (dBμV) 46.17 41.70 41.95 43.91	Average (dBμV) 39.19 39.63 39.99 39.08	Factors (dB) 9.17 8.79 9.69 9.80	МНz Horizontal Реак Limit (dBµV) 73.988 73.9888 73.9888 73.9888 73.9888 73.9888 73.9888 73.9888 73.9888 73.9888 73.9888 73.9888 73.9888 73.9888 73.9888 73.9888 73.9888 73.9888 73.9888 73.9888 73.9888 74.9888 74.9888 74.9888 74.9888 74.9888 74.9888 74.9888 74.9888 74.98888 74.9888888 74.98888 74.988888888888888888888	Average Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 93°/100cm 66°/156cm 292°/176cm 78°/124cm 12°/199cm	Peak Margin (dB) 27.81 32.28 32.03 30.07	Average Marg (dB) 14. 14. 13.9 14.9 15.0
18 <b>OMMIENT</b> <b>Int:1 CH</b> Freq (MHz) 21357. 21357. 21358. 23226. 25643. 25681.	8000 115 1:4 99 91 1.14 32 .77	ak (dBμV) 46.17 41.70 41.95 43.91 40.79	Average (dBμV) 39.19 39.63 39.99 39.08 38.90	Factors (dB) 9.17 8.79 9.69 9.80 9.77	МНz Horizontal Peak Limit (dBµV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98	Average Limit (dBµV) 3 53.98 5 53.98 5 53.98 5 53.98 5 53.98 5 53.98	Turntable (deg) / Height (cm) 93°/100cm 66°/156cm 292°/176cm 78°/124cm 12°/199cm 235°/156cm	Beauty Beauty Peak Margin (dB) 27.81 32.28 32.03 30.07 33.19 29.31	Average Marg (dB) 14. 13. 14. 15. 14. 14.
18 OMIMIENT Int:1 CH Freq (MHz) 21357. 21988. 23226. 25643. 25803.	8000 TS 	ak (dBμV) 46.17 41.70 41.95 43.91 40.79	Average (dBμV) 39.19 39.63 39.99 39.08 38.90	Factors (dB) 9.17 8.79 9.69 9.80 9.77	МНz Horizontal Peak Limit (dBµV) 73.98 73.98 73.98 73.98 73.98 73.98 Vertical Peak Limit (dBµV)	Average Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 Average Limit (dBμV)	Turntable (deg) / Height (cm) 93°/100cm 66°/156cm 292°/176cm 78°/124cm 12°/199cm 235°/156cm Turntable (deg) / Height (cm)	Beauty Beauty Peak Margin (dB) 27.81 32.28 32.03 30.07 33.19	Average Marg (dB) 14.7
18 OMMIENT nt:1 CH Freq (MHz) 21357: 21988: 23226. 25643. 25681. 25803. Freq (MHz) 21742.	8000 TS 1:4 99 91 14 32 77 95 95 99 91 14 32 77 95 95 95 95 95 95 95 95 95 95	ак (dBµV) 46.17 41.70 41.95 43.91 40.79 44.67 ак (dBµV) 41.90	Average (dBμV) 39.19 39.63 39.99 39.08 38.90 39.35 Average (dBμV) 39.49	Factors (dB) 9.17 8.79 9.69 9.80 9.77 9.50 Factors (dB) 9.58	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 Vertical Peak Limit (dBμV) 73.98 74 74 74 74 74 74 74 74 74 74 74 74 74	Average Limit (dBµV) 53.98 53.98 53.98 53.98 53.98 Average Limit (dBµV) 53.98	Turntable (deg) / Height (cm) 93°/100cm 66°/156cm 292°/176cm 78°/124cm 12°/199cm 235°/156cm Turntable (deg) / Height (cm) -1°/143cm	SIGNATURE           Beautey           Peak Margin (dB)           27.81           32.28           32.03           30.07           33.19           29.31           Peak Margin (dB)           32.08	Average Marg (dB) 14. 14. 13. 14. 15. 14. Average Marg (dB) 14.
18 OMIMIENS nt:1 CH Freq (MHz) 21357: 21988: 23226. 25643. 25803: Freq (MHz) 21742. 21893:	8000 TS H:4 99 91 14 32 77 95 95 97 95 97 95 97 95 97 95 97 97 97 97 97 97 97 97 97 97	ak (dBµV) 46.17 41.70 41.95 43.91 40.79 44.67 ak (dBµV) 41.90 42.60	Average (dBµV) 39.19 39.63 39.99 39.08 38.90 39.35 Average (dBµV) 39.49 39.89	Factors (dB) 9.17 8.79 9.69 9.80 9.77 9.50 Factors (dB) 9.58 9.02	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 Vertical Peak Limit (dBμV) 73.98 74 74 74 74 74 74 74 74 74 74 74 74 74	Average Limit (dBµV) 53.98 53.98 53.98 53.98 53.98 53.98 Average Limit (dBµV) 53.98 53.98	Turntable (deg) / Height (cm) 93°/100cm 66°/156cm 292°/176cm 78°/124cm 12°/199cm 235°/156cm Turntable (deg) / Height (cm) -1°/143cm 221°/125cm	SIGNATURE           Beautey           Peak Margin (dB)           27.81           32.28           32.03           30.07           33.19           29.31           Peak Margin (dB)           32.08           31.38	Average Marg (dB) 14. 14. 13. 14. 15. 14. 14. (dB) 14. 14.
18 OMIMIENS nt:1 CH Freq (MHz) 21357: 21988: 23226. 25643. 25803: Freq (MHz) 21742. 21893. 22379:	8000 TS H:4 99 91 14 32 77 95 95 95 95	ak (dBµV) 46.17 41.70 41.95 43.91 40.79 44.67 ak (dBµV) 41.90 41.90 41.39	Average (dBμV) 39.19 39.63 39.99 39.08 38.90 39.35 Average (dBμV) 39.49 39.89 39.51	Factors (dB) 9.17 8.79 9.69 9.80 9.77 9.50 Factors (dB) 9.58 9.02 8.97	MHz Horizontal Peak Limit (dBμV) 73.98 73	Average Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98 Average Limit (dBμV) 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 93°/100cm 66°/156cm 292°/176cm 78°/124cm 12°/199cm 235°/156cm Turntable (deg) / Height (cm) -1°/143cm 221°/125cm 158°/199cm	SIGNATURE           Beautey           Peak Margin (dB)           27.81           32.28           32.03           30.07           33.19           29.31           Peak Margin (dB)           32.08           31.38           32.59	Average Marg (dB) 14. 14. 13. 14. 15. (14.) Average Marg (dB) 14. 14. 14. (14.)
18 OMIMIENT Int:1 CH Freq (MHz) 21357: 21988: 23226. 25643. 25803. 25681. 25803. Freq (MHz) 21742. 21893. 22379. 22498.	8000 TS 4:4 99 91 14 32 .77 .95 .12 	ak (dBµV) 46.17 41.70 41.95 43.91 40.79 44.67 ak (dBµV) 41.90 42.60 41.39 42.81	Average (dBμV) 39.19 39.63 39.99 39.08 38.90 39.35 Average (dBμV) 39.49 39.89 39.51 39.34	Factors (dB) 9.17 8.79 9.69 9.80 9.77 9.50 Factors (dB) 9.58 9.02 8.97 9.11	MHz Horizontal Peak Limit (dBμV) 73.98 73	Average Limit (dBµV) 5 53.98 5 53.98 5 53.98 5 53.98 5 53.98 5 53.98 Average Limit (dBµV) 5 53.98 5 53.98 5 53.98 5 53.98 5 53.98 5 53.98 5 53.98	Turntable (deg) / Height (cm) 93°/100cm 66°/156cm 292°/176cm 78°/124cm 12°/199cm 235°/156cm Turntable (deg) / Height (cm) -1°/143cm 221°/125cm 158°/199cm 34°/100cm	SIGNATURE Beauty Peak Margin (dB) 27.81 32.28 32.03 30.07 33.19 29.31 Peak Margin (dB) 32.08 31.38 32.59 31.17	Average Marg (dB) 14. 14. 13. 14. 15. 14. 14. (dB) 14. 14. 14. 14. 14.
18 OMIMIENS Int:1 CH Freq (MHz) 21357: 21988: 23226. 25643. 25803: 57eq (MHz) 21742. 21893. 22379:	8000 11S 1:4 99 91 1:4 32 .77 .95 	ak (dBµV) 46.17 41.70 41.95 43.91 40.79 44.67 ak (dBµV) 41.90 41.90 41.39	Average (dBμV) 39.19 39.63 39.99 39.08 38.90 39.35 Average (dBμV) 39.49 39.89 39.51 39.34	Factors (dB) 9.17 8.79 9.69 9.80 9.77 9.50 Factors (dB) 9.58 9.02 8.97	MHz Horizontal Peak Limit (dBμV) 73.98 73	Average Limit (dBµV) 5 53.98 5 53.98	Turntable (deg) / Height (cm) 93°/100cm 66°/156cm 292°/176cm 78°/124cm 12°/199cm 235°/156cm Turntable (deg) / Height (cm) -1°/143cm 221°/125cm 158°/199cm 34°/100cm 302°/101cm	SIGNATURE Beauty Peak Margin (dB) 27.81 32.28 32.03 30.07 33.19 29.31 Peak Margin (dB) 32.08 31.38 32.59 31.17	Average Marg (dB) 14. 14. 13. 14. 15. (14.) Average Marg (dB) 14. 14. 14. (14.)

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1020230928-01	Investigations	

3.12 Test conditions and results – Receiver spurious emissions
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Ref	erence	
IC RSS-G	EN 7.3 / 8.9	
Referen	ce Method	
ANS	I C63.4	
Sca	n (All)	
30 MHz –	5 <sup>th</sup> Harmonic	
Re	ceive	
ts		
cor Limit [μV/m	] Limit	Limit
	[dBµV/m]	Distance
		[meters]
eak 100	40	3
eak 150	43.5	3
eak 200	46	3
eak 500	54	3
ge 500	54	3
	I	ı
	Referen ANS Sca 30 MHz – Re ts cor Limit [μV/m eak 100 eak 150 eak 200 eak 500	cor         Limit [μV/m]         Limit [dBμV/m]           eak         100         40           eak         150         43.5           eak         200         46           eak         500         54

\*\*Emission level corresponds to ambient noise floor.

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LIG20230928-01	ElectroMagnetic	C25
LIG20230928-01	Investigations	

		Customor	Lightenood 1	Footpologiog		lab	Reference#:	1102022002	6/30/202
			Lightspeed 1 Rob D'Angel		•	300		10/31/2023	.0
			Rogue Base			Tama	erature (°C):		
	Sor	rial Number:	02-C25-Z-S2				Humidity (%):		
	V	oltage/Freq:				Baromet	ric Pressure:		
			Ryan Benite				Location:	Hillsboro	
Р	roduci	t Standards:	FCC Part 15 N/A	Subpart D					
	Ter	at Clandard.	FCC Part 15	200					
ет р	15SUD		TEST TYPE	.209		DISTANCE		RUN #	
ass	LOUL1	10	Compliance			3 meters		KUN#	
100			Compliance			o metera			
			Horizontal Peak		Vertical Peak	Avera;	pe Limit	OP Linit	
	<sup>80</sup>								
	70 +								
	60 +								
	50								
>			╾╾┶┛╾╾						<b>→</b> ┩
dBuV	40 +								
-	30 +							and the second designed	
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			The Color						
	10 +								
	0   0	100	200	300 40		600	700 8	00 900	1000
OMM	0	100	200	300 40	00 500 MHz	600	700 8		1000
			200	300 40	MHz	600	0	00 900 SIGNATURE Benitez	1000
	0 ENTS	2		300 40	MHz Horizontal		Ryan	SIGNATURE Benitey	1000
nt 0;	0 ENTS Ch: 2		200 QP (dBµV)	300 40	MHz	QP Limit (dBµV)	0	SIGNATURE	1000 QP Margin (d
nt 0;	0 ENTS Ch: 2	2			MHz Horizontal Peak Limit	QP Limit	Ryan Turntable (deg)/	SIGNATURE Benitey Peak Margin	
nt 0;	0 ENTS Ch: 2 (fHz)	2 Peak (dBµV)	$Q^{p}\left(dB\mu V\right)$	Factors (dB)	MHz Horizontal Peak Limit (dBµV)	QP Limit (dBµV)	Turntable (deg) / Height (cm) 0°/100cm	SIGNATURE Benitey Peak Margin (dB) 18.75	QP Margin (d
nt O; <sup>?</sup> req (N	0 ENTS Ch: 2 (Hz) 30.01	2 Peak (dBµV) 21.25	QP (dBµV) 16.88	Factors (dB) 23.06	MHz Horizontal Peak Limit (dBµV) 40.00	QP Limit (dBµV) 40.00	Turntable (deg) / Height (cm) 0°/100cm 163°/400cm	Beauty Peak Margin (dB) 18.75 13.66	QP Margin (d 23. 14.
nt O; <sup>?</sup> req (M	0 ENTS Ch: 2 (Hz) 30.01 72.19	2 Peak (dBµV) 21.25 26.34	QP (dBµV) 16.88 25.34	Factors (dB) 23.06 11.90	MHz Horizontal Peak Limit (dBµV) 40.00 40.00	QP Limit (dBµV) 40.00 40.00	Turntable (deg) / Height (cm) 0°/100cm	SIGNATURE Benitey Peak Margin (dB) 18.75	QP Margin (d 23. 14. 17.
nt O; <sup>?</sup> req (M	0 ENTS Ch: 2 4(Hz) 30.01 72.19 167.43	2 Peak (dBµV) 21.25 26.34 27.60	QP (dBµV) 16.88 25.34 26.44	Factors (dB) 23.06 11.90 16.00	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52	QP Limit (dBμV) 40.00 43.52	Turntable (deg) / Height (cm) 0°/100cm 163°/400cm 13°/208cm	Peak Margin (dB) 18.75 13.66 15.92	QP Margin (d 23. 14. 17.
nt O; <sup>?</sup> req (M	0 ENTS Ch: 2 4(Hz) 30.01 72.19 167.43	2 Peak (dBµV) 21.25 26.34 27.60	QP (dBµV) 16.88 25.34 26.44	Factors (dB) 23.06 11.90 16.00	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52 46.02	QP Limit (dBμV) 40.00 43.52	Turntable (deg) / Height (cm) 0°/100cm 163°/400cm 13°/208cm	Peak Margin (dB) 18.75 13.66 15.92	QP Margin (d 23. 14. 17.
nt 0; řreq (N	0 ENTS Ch: 2 30.01 72.19 167.43 500.32	2 Peak (dBµV) 21.25 26.34 27.60	QP (dBµV) 16.88 25.34 26.44	Factors (dB) 23.06 11.90 16.00	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52	QP Limit (dBμV) 40.00 43.52	Turntable (deg) / Height (cm) 0°/100cm 163°/400cm 13°/208cm	Peak Margin (dB) 18.75 13.66 15.92	QP Margin (d 23.
nt 0; <sup>r</sup> req (N	0 ENTS Ch: 2 4Hz) 30.01 72.19 167.43 500.32 4Hz)	2 Peak (dBµV) 21.25 26.34 27.60 23.93 Peak (dBµV)	QP (dBμV) 16.88 25.34 26.44 17.93 QP (dBμV)	Factors (dB) 23.06 11.90 16.00 24.46 Factors (dB)	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52 46.02 Vertical Peak Limit (dBμV)	QP Limit (dBμV) 40.00 43.52 46.02 QP Limit (dBμV)	Turntable (deg) / Height (cm) 0°/100cm 13°/208cm 0°/101cm Turntable (deg) / Height (cm)	Peak Margin (dB) 18.75 13.66 15.92 22.09 Peak Margin (dB)	QP Margin (d 23. 14. 17. 28. QP Margin (d
nt 0; <sup>r</sup> req (N	0 ENTS Ch: 2 4Hz) 30.01 72.19 167.43 500.32 4Hz) 53.17	2 Peak (dBµV) 21.25 26.34 27.60 23.93 Peak (dBµV) 17.69	QP (dBμV) 16.88 25.34 26.44 17.93 QP (dBμV) 13.66	Factors (dB) 23.06 11.90 16.00 24.46 Factors (dB) 17.22	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52 46.02 Vertical Peak Limit (dBμV) 40.00	QP Limit (dBμV) 40.00 43.52 46.02 QP Limit (dBμV) 40.00	Turntable (deg) / Height (cm) 0°/100cm 13°/208cm 0°/101cm Turntable (deg) / Height (cm) 67°/101cm	SIGNATURE Beaty Peak Margin (dB) 18.75 13.66 15.92 22.09 Peak Margin (dB) 22.31	QP Margin (d 23. 14. 17. 28. QP Margin (d 26.
nt 0; Freq (N	0 ENTS Ch: 2 4(Hz) 30.01 72.19 167.43 500.32 4(Hz) 53.17 72.19	2 Peak (dBµV) 21.25 26.34 27.60 23.93 Peak (dBµV) 17.69 27.32	QP (dBμV) 16.88 25.34 26.44 17.93 QP (dBμV) 13.66 25.69	Factors (dB) 23.06 11.90 16.00 24.46 Factors (dB) 17.22 11.90	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52 46.02 Vertical Peak Limit (dBμV) 40.00 40.00 40.00	QP Limit (dBμV) 40.00 43.52 46.02 QP Limit (dBμV) 40.00 40.00	Turntable (deg) / Height (cm) 0°/100cm 13°/208cm 0°/101cm Turntable (deg) / Height (cm) 67°/101cm 64°/273cm	SIGNATURE           Beauty           Peak Margin (dB)           18.75           13.66           15.92           22.09           Peak Margin (dB)           22.31           12.68	QP Margin (d 23. 14. 17. 28. QP Margin (d 26. 14.
nt 0; Freq (M	0 ENTS Ch: 2 4Hz) 30.01 72.19 167.43 500.32 4Hz) 53.17	2 Peak (dBµV) 21.25 26.34 27.60 23.93 Peak (dBµV) 17.69	QP (dBμV) 16.88 25.34 26.44 17.93 QP (dBμV) 13.66	Factors (dB) 23.06 11.90 16.00 24.46 Factors (dB) 17.22	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52 46.02 Vertical Peak Limit (dBμV) 40.00	QP Limit (dBμV) 40.00 43.52 46.02 QP Limit (dBμV) 40.00	Turntable (deg) / Height (cm) 0°/100cm 13°/208cm 0°/101cm Turntable (deg) / Height (cm) 67°/101cm	SIGNATURE Beaty Peak Margin (dB) 18.75 13.66 15.92 22.09 Peak Margin (dB) 22.31	QP Margin (d 23. 14. 17. 28. QP Margin (d 26.

Antenna 0 / Channel: 2

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 Testing Report
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 LIG20230928-01
 ElectroMagnetic
 C25

 Investigations
 C25

	Customer:	Lightspeed 7	<b>Fechnologies</b>	3	Job	Reference#:	LIG2023092	8
	Contact:	Rob D'Ange	lo			Date:	10/30/2023	
	DUT:	Rogue Base			Temp	erature (°C):	20.4	
Se	rial Number:	02-C25-Z-S2	2340-00028		Relative H	Humidity (%):	33	
V	/oltage/Freq:	120 V 60 Hz			Baromet	ric Pressure:	30	
	Tested by:	Ryan Benite	z			Location:	Hillsboro	
Produc	t Standards:	FCC Part 15	Subpart D					
		N/A						
Te	st Standard:	FCC Part 15	.209					
EST RESUL	TS	TEST TYPE			DISTANCE		RUN #	
ass		Compliance			3 meters			
Γ	_	Horizontal Peak		Vertical Peak	Avera	ge Limit	OP Linit	
<sup>80</sup> T								
70								
60								
								a la la librar
< <sup>50</sup>			a second second					
								+
30								
20								
40								
10 +								+
0	0 3000	5000	7000	9000	11000	13000	15000 12	7000
0 4		5000	7000	9000 MHz	11000	13000		7000
0 + 100		5000	7000	MHz	11000	13000 Ryan	SIGNATURE	7000
0 + 100		5000	7000	MHz Horizontal		Ryan	SIGNATURE Benity	
0 + 100 0MMENTS		Final (dBµV)	7000 Factors (dB)	MHz	11000 Final Limit (dBµV)		SIGNATURE	Final Margin (dB)
0 100 OMMENTS nt: 0 Ch:2 Freq (MHz)	Peak (dBµV)	Final (dBµV)	Factors (dB)	Horizontal Peak Limit (dBµV)	Final Limit (dBµV)	Turntable (deg) / Height (cm)	Benity Peak Margin (dB)	Final Margin (dB)
0 + 100 0MMENTS nt: 0 Ch:2	2			MHz Horizontal Peak Limit	Final Limit	Ryan Turntable (deg)/	SIGNATURE Beauty Peak Margin	Final Margin (dB) 30.4
0 100 0MMIENTS nt: 0 Ch:2 Freq (MHz) 1924.65 7810.38	Peak (dBμV) 56.00 42.51	Final (dBµV) 23.50 40.90	Factors (dB) -10.05 10.74	MHz Horizontal Peak Limit (dBµV) 73.98 73.98	Final Limit (dBµV) 53.98 53.98	Turntable (deg) / Height (cm) 36°/125cm 43°/101cm	Benitey Peak Margin (dB) 17.98 31.47	Final Margin (dB) 30.4 13.0
0 100 0MMIENTS nt: 0 Ch:2 Freq (MHz) 1924.65	Peak (dBμV) 56.00 42.51	Final (dBµV) 23.50 40.90 40.12	Factors (dB) -10.05 10.74	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98	Turntable (deg) / Height (cm) 36%125cm 43%101cm 76%100cm	Peak Margin (dB) 17.98 31.47 31.91	Final Margin (dB) 30.4 13.0 13.8
0 100 0MMIENTS nt: 0 Ch:2 Freq (MHz) 1924.65 7810.38 13761.36	Peak (dBµV) 56.00 42.51 42.07	Final (dBµV) 23.50 40.90 40.12 43.02	Factors (dB) -10.05 10.74 9.34	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98	Turntable (deg) / Height (cm) 36%125cm 43%101cm 76%100cm 36%100cm	Peak Margin (dB) 17.98 31.47 31.91 28.05	Final Margin (dB) 30.4 13.6 13.8 10.5
0 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 56.00 42.51 42.07 45.93	Final (dBµV) 23.50 40.90 40.12 43.02 37.25	Factors (dB) -10.05 10.74 9.34 11.92	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 36%125cm 43%101cm 76%100cm 36%100cm 0%100cm	Peak Margin (dB) 17.98 31.47 31.91 28.05	Final Margin (dB) 30.4 13.0
0 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 56.00 42.51 42.07 45.93 39.65	Final (dBµV) 23.50 40.90 40.12 43.02 37.25	Factors (dB) -10.05 10.74 9.34 11.92 7.08	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 36%125cm 43%101cm 76%100cm 36%100cm 0%100cm	Beatey Peak Margin (dB) 17.98 31.47 31.91 28.05 34.33	Final Margin (dB) 30.4 13.6 13.8 10.9 16.7
0 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 56.00 42.51 42.07 45.93 39.65	Final (dBµV) 23.50 40.90 40.12 43.02 37.25	Factors (dB) -10.05 10.74 9.34 11.92 7.08	MHz Horizontal Peak Limit (dBμV) 73.98 74.99	Final Limit (dBµV) 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 36%125cm 43%101cm 76%100cm 36%100cm 0%100cm	Beatey Peak Margin (dB) 17.98 31.47 31.91 28.05 34.33	Final Margin (dB) 30.4 13.0 13.8 10.9 16.7
0 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Реак (dBµV) 56.00 42.51 42.07 45.93 39.65 48.66 Реак (dBµV) 49.89	Final (dBµV) 23.50 40.90 40.12 43.02 37.25 42.64 Final (dBµV) 23.31	Factors (dB) -10.05 10.74 9.34 11.92 7.08 16.52 Factors (dB) -10.05	MHz Horizontal Peak Limit (dBμV) 73.98	Final Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 Final Limit (dBμV) 53.98	Turntable (deg) / Height (cm) 36°/125cm 43°/101cm 76°/100cm 0°/100cm 76°/100cm 76°/100cm Turntable (deg) / Height (cm) 103°/148cm	Beatey Peak Margin (dB) 17.98 31.47 31.91 28.05 34.33 25.32 Peak Margin (dB) 24.09	Final Margin (dB) 30.4 13.0 13.8 10.5 16.7 11.3 Final Margin (dB) 30.0
0 100 0 0 0 100 0 0 100 0 0 100 100	Реак (dBµV) 56.00 42.51 42.07 45.93 39.65 48.66 Реак (dBµV) 49.89 44.26	Final (dBµV) 23.50 40.90 40.12 43.02 37.25 42.64 Final (dBµV) 23.31 40.86	Factors (dB) -10.05 10.74 9.34 11.92 7.08 16.52 Factors (dB) -10.05 10.69	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 Vertical Peak Limit (dBμV) 73.98 73.98 73.98	Final Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 36°/125cm 43°/101cm 76°/100cm 0°/100cm 76°/100cm 76°/100cm Turntable (deg) / Height (cm) 103°/148cm 302°/169cm	Beatey Beaty Peak Margin (dB) 17.98 31.47 31.91 28.05 34.33 25.32 Peak Margin (dB) 24.09 29.72	Final Margin (dB) 30.4 13.0 13.8 10.5 16.7 11.3 Final Margin (dB) 30.0 13.1
0 100 0 0 0 0 0 100 0 0 0 0 0 0 0 0 0 0 0 0	Реак (dBµV) 56.00 42.51 42.07 45.93 39.65 48.66 Реак (dBµV) 49.89 44.26 44.47	Final (dBµV) 23.50 40.90 40.12 43.02 37.25 42.64 Final (dBµV) 23.31 40.86 39.76	Factors (dB) -10.05 10.74 9.34 11.92 7.08 16.52 Factors (dB) -10.05 10.69 9.36	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 Vertical Peak Limit (dBμV) 73.98	Final Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 Final Limit (dBμV) 53.98 53.98 53.98	Turntable (deg) / Height (cm) 36°/125cm 43°/101cm 76°/100cm 0°/100cm 76°/100cm 76°/100cm Turntable (deg) / Height (cm) 103°/148cm 302°/169cm 315°/175cm	Beatey Peak Margin (dB) 17.98 31.47 31.91 28.05 34.33 25.32 Peak Margin (dB) 24.09 29.72 29.51	Final Margin (dB) 30.4 13.0 13.8 10.5 16.7 11.3 Final Margin (dB) 30.0 13.1 14.2
0 100 0 0 0 0 100 0 0 0 0 100 0 0 0 0 0 0 0 0 0 0 0 0	Реак (dBµV) 56.00 42.51 42.07 45.93 39.65 48.66 Реак (dBµV) 49.89 44.26	Final (dBµV) 23.50 40.90 40.12 37.25 42.64 Final (dBµV) 23.31 40.86 39.76 43.24	Factors (dB) -10.05 10.74 9.34 11.92 7.08 16.52 Factors (dB) -10.05 10.69	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 Vertical Peak Limit (dBμV) 73.98 73.98 73.98	Final Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 36°/125cm 43°/101cm 76°/100cm 36°/100cm 0°/100cm 76°/100cm Turntable (deg) / Height (cm) 103°/148cm 302°/169cm 315°/175cm 316°/198cm	Beatey Peak Margin (dB) 17.98 31.47 31.91 28.05 34.33 25.32 Peak Margin (dB) 24.09 29.72 29.51 28.13	Final Margin (dB) 30.4 13.6 10.5 16.7 11.3 Final Margin

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LIG20230928-01	ElectroMagnetic	C25
LIG20230928-01	Investigations	

		Customer	Linking and	Technologie		leb.	Deference#	LIG2023092	0
			: Lightspeed		S	JOD			8
			: Rob D'Ange			Tama		10/27/2023	
	C.e.	DUT rial Number					erature (°C):		
							lumidity (%):		
	V		: 120 V 60 Hz			Baromet	ric Pressure:	30	
	no du oi		: Ryan Benite				Location:	Hillsboro	
PI	roduc	t Standards	: FCC Part 15 N/A	Subpart D					
	То	et Standard	: FCC Part 15	: 200					
EST R	DSUD		TEST TYPE	.209		DISTANCE		RUN #	
ass			Compliance			3 meters			
	Г							•	
		_	Horizontal Peak		Vertical Peak	Avera;	plint	OP Linit	
	<sup>80</sup> T								
	70 F								
	60 L								
								and had be	
	50								
dBuV	40 +								
	30 +								
	20								
	20 T								
	10 0 1800	00 190	00 2000	0 21000	0 22000 MHz	23000	24000	25000	26000
	0 - 1800	00 190	00 2000	0 21000		23000	0	SIGNATURE	26000
ОММІ	0 - 1800		00 2000	0 21000		23000	24000 Ryan	SIGNATURE	26000
ОММІ	0		00 2000	0 21000		23000	0	SIGNATURE	26000
DMMI nt:0 (	0 - 1800 1800 ENTS CH:2		00 2000	D 21000	MHz	23000 Average Limit (dBµV)	0	SIGNATURE	
DMIMI nt:0 ( Freq (M 187	0 1800 ENTS CH:2 (HIz) 787.23	Peak (dBµV) 40.8	Average (dBµV) 8 38.90		MHz Horizontal Peak Limit (dBµV)	Average Limit (dBµV) 53.98	Turntable (deg)/ Height (cm) 112º/154cm	Benitey Peak Margin (dB) 33.10	Average Mar (dB) 15.
DMIMI nt:0 ( Freq (M 187	0 + 1800 1800 CH:2	Peak (dBµV) 40.8 44.5	Average (dBµV) 8 38.90 2 39.21	Factors (dB) 10.34 9.16	MHz Horizontal Peak Limit (dBµV) 73.98 73.98	Average Limit (dBµV) 53.98 53.98	Turntable (deg) / Height (cm) 112°/154cm 235°/101cm	Peak Margin (dB) 29.46	Average Mar (dB) 15. 14.
DMIMI nt:0 ( Freq (M 187 213 218	0 1800 PNTS CH:2 (Hrz) 787.23 562.35 (25.81	Peak (dBµV) 40.8 44.5 42.7	Average (dBµV) 8 38.90 2 39.21 0 39.82	Factors (dB) 10.34 9.16 9.47	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98	Average Limit (dBμV) 53.98 53.98 53.98	Turntable (deg) / Height (cm) 112º/154cm 235º/101cm 202º/200cm	Peak Margin (dB) 33.10 29.46 31.28	Average Mar (dB) 15. 14. 14.
DMM1 nt:0 ( 187 213 218 231	0 1800 ENTS CH:2 (Hz) 787.23 362.35 325.81 149.23	Peak (dBµV) 40.8 44.5 42.7 43.9	Average (dBµV) 8 38.90 2 39.21 0 39.82 3 39.81	Factors (dB) 10.34 9.16 9.47 9.62	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98	Average Limit (dBμV) 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 112°/154cm 235°/101cm 202°/200cm 176°/198cm	Peak Margin (dB) 33.10 29.46 31.28 30.05	Average Mar (dB) 15. 14. 14. 14.
00000000000000000000000000000000000000	0 1800 ENTS CH:2 (Hz) 787.23 362.35 362.35 362.35 312.02	Peak (dBµV) 40.8 44.5 42.7 43.9 42.6	Average (dBµV) 8 38.90 2 39.21 0 39.82 3 39.81 2 39.29	Factors (dB) 10.34 9.16 9.47 9.62 9.41	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98	Average Limit (dBμV) 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 112º/154cm 235º/101cm 202º/200cm 176º/198cm 316º/198cm	Beaten Beaten (dB) 33.10 29.46 31.28 30.05 31.36	Average Mar (dB) 15. 14. 14. 14. 14. 14.
OMIMI nt:0 ( 1877 213 218 231 233	0 1800 ENTS CH:2 (Hz) 787.23 362.35 325.81 149.23	Peak (dBµV) 40.8 44.5 42.7 43.9	Average (dBµV) 8 38.90 2 39.21 0 39.82 3 39.81 2 39.29	Factors (dB) 10.34 9.16 9.47 9.62	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98	Average Limit (dBμV) 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 112°/154cm 235°/101cm 202°/200cm 176°/198cm	Peak Margin (dB) 33.10 29.46 31.28 30.05	Average Mar (dB) 15. 14. 14. 14. 14. 14.
00000000000000000000000000000000000000	0 1800 ENTS CH:2 (Hz) 787.23 362.35 362.35 362.35 312.02	Peak (dBµV) 40.8 44.5 42.7 43.9 42.6	Average (dBµV) 8 38.90 2 39.21 0 39.82 3 39.81 2 39.29	Factors (dB) 10.34 9.16 9.47 9.62 9.41	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98	Average Limit (dBµV) 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg)/ Height (cm) 112º/154cm 235º/101cm 202º/200cm 176º/198cm 316º/198cm 124º/155cm	Beaty Beaty (dB) 33.10 29.46 31.28 30.05 31.36 33.69	Average Mary (dB) 15. 14. 14. 14. 14. 14. 15.
DMM1 nt:0 ( 187 213 218 233 242 Freq (M	0 1800 ENTS CH:2 (Hz) 787.23 362.35 325.81 49.23 312.02 263.88 (Hz)	Реак (dBµV) 40.8 44.5 42.7 43.9 42.6 40.2 Реак (dBµV)	Average (dBµV) 8 38.90 2 39.21 0 39.82 3 39.81 2 39.29 9 38.31 Average (dBµV)	Factors (dB) 10.34 9.16 9.47 9.62 9.41 9.30 Factors (dB)	MHz Horizontal Peak Limit (dBμV) 73.98 74.99	Average Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 4verage Limit (dBμV)	Turntable (deg)/ Height (cm) 112°/154cm 235°/101cm 202°/200cm 176°/198cm 316°/198cm 124°/155cm Turntable (deg)/ Height (cm)	Peak Margin (dB) 33.10 29.46 31.28 30.05 31.36 33.69 Peak Margin (dB)	Average Mar (dB) 15. 14. 14. 14. 14. 14. 15. Average Mar (dB)
DMM1 nt:0 ( 187 213 218 233 242 Freq (M 233 242	0 1800 ENTS CH:2 (Hz) 787.23 362.35 325.81 (49.23 312.02 263.88 (Hz) 304.38	Реак (dBµV) 40.8 44.5 42.7 43.9 42.6 40.2 Реак (dBµV) 44.5	Average (dBµV) 8 38.90 2 39.21 0 39.82 3 39.81 2 39.29 9 38.31 Average (dBµV) 7 39.80	Factors (dB) 10.34 9.16 9.47 9.62 9.41 9.30 Factors (dB) 9.61	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98 Peak Limit (dBμV) 73.98	Average Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98 (dBμV) 53.98	Turntable (deg)/ Height (cm) 112º/154cm 235º/101cm 202º/200cm 176º/198cm 316º/198cm 124º/155cm Turntable (deg)/ Height (cm) 145º/155cm	Beaty Beaty Peak Margin (dB) 33.10 29.46 31.28 30.05 31.36 33.69 Peak Margin (dB) 29.41	Average Mar (dB) 15. 14. 14. 14. 14. 14. 15. Average Mar (dB) 14.
DMM1 nt:0 ( 187 213 218 231 233 242 Freq (M 218 222	0 1800 ENTS CH:2 (Hz) 787.23 362.35 325.81 149.23 312.02 263.88 312.02 263.88 449.23 312.02 263.88 263	Peak (dBµV) 40.8 44.5 42.7 43.9 42.6 40.2 Peak (dBµV) 44.5 41.7	Average (dBµV) 8 38.90 2 39.21 0 39.82 3 39.81 2 39.29 9 38.31 Average (dBµV) 7 39.80 0 39.22	Factors (dB) 10.34 9.16 9.47 9.62 9.41 9.30 Factors (dB) 9.61 8.80	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98	Average Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 Average Limit (dBμV) 53.98 53.98	Turntable (deg) / Height (cm) 112°/154cm 235°/101cm 202°/200cm 176°/198cm 316°/198cm 124°/155cm Turntable (deg) / Height (cm) 145°/155cm 175°/175cm	Beaty Beaty Peak Margin (dB) 33.10 29.46 31.28 30.05 31.36 31.36 33.69 Peak Margin (dB) 29.41 32.28	Average Mar (dB) 15. 14. 14. 14. 14. 14. 15. Average Mar (dB) 14. 14.
OMMI nt:0 ( 187 213 218 231 233 242 Freq (M 218 222 225	0 1800 ENTS CH:2 (Hz) 787.23 362.35 312.02 263.88 312.02 263.88 449.23 312.02 263.88 449.86 393.88 449.88 312.02 312	Peak (dBµV) 40.8 44.5 42.7 43.9 42.6 40.2 Peak (dBµV) 44.5 41.7 41.4	Average (dBµV) 8 38.90 2 39.21 0 39.82 3 39.81 2 39.29 9 38.31 Average (dBµV) 7 39.80 0 39.22 7 39.25	Factors (dB) 10.34 9.16 9.47 9.62 9.41 9.30 Factors (dB) 9.61 8.80 8.76	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98	Average Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 112°/154cm 235°/101cm 202°/200cm 176°/198cm 316°/198cm 124°/155cm Turntable (deg) / Height (cm) 145°/155cm 175°/175cm 202°/153cm	SIGNATURE           Benity           Peak Margin (dB)           33.10           29.46           31.28           30.05           31.36           33.69           Peak Margin (dB)           29.41           32.28           32.51	Average Mar (dB) 15. 14. 14. 14. 14. 15. Average Mar (dB) 14. 14. 14.
OMMI nt:0 ( 187 213 218 231 242 5 Freq (M 218 242 225 227	0 1800 ENTS CH:2 (Hz) 787.23 362.35 325.81 149.23 312.02 263.88 312.02 263.88 449.23 312.02 263.88 263	Peak (dBµV) 40.8 44.5 42.7 43.9 42.6 40.2 Peak (dBµV) 44.5 41.7	Average (dBμV) 8 38.90 2 39.21 0 39.82 3 39.81 2 39.29 9 38.31 Average (dBμV) 7 39.80 0 39.22 7 39.25 0 39.21	Factors (dB) 10.34 9.16 9.47 9.62 9.41 9.30 Factors (dB) 9.61 8.80	MHz  Horizontal  Peak Limit (dBμV)  73.98	Average Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 112°/154cm 235°/101cm 202°/200cm 176°/198cm 316°/198cm 124°/155cm Turntable (deg) / Height (cm) 145°/155cm 175°/175cm	SIGNATURE           Bearty           Peak Margin (dB)           33.10           29.46           31.28           30.05           31.36           33.69           Peak Margin (dB)           29.41           32.28           32.51           32.08	Average Mar (dB) 15. 14. 14. 14. 14. 14. 15. Average Mar (dB) 14. 14.

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LIG20230928-01	ElectroMagnetic	C25
1020230928-01	Investigations	

1								Revision 1
((((IM)))		RADIA	FED EM	ISSION	S DATA	SHEET		6/30/202
	Customer:	Lightspeed 1	<b>Fechnologies</b>		Job	Reference#:	LIG2023092	
		Rob D'Ange				Date:	10/31/2023	
	DUT:				Temp	erature (°C):	22.6	
S	erial Number:	02-C25-Z-S2	2340-00028		Relative H	Humidity (%):	33	
١	Voltage/Freq:	120 V 60 Hz			Baromet	ric Pressure:	30	
	Tested by:	Ryan Benite				Location:	Hillsboro	
Produ	ct Standards:	FCC Part 15	Subpart D					
		N/A						
T	est Standard:		.209					
EST RESU	LTS	TEST TYPE			DISTANCE		RUN #	
ass		Compliance			3 meters			
		Horizontal Peak		Vertical Peak	Averag	je Limit	QP Limit	
80								
70 -								
60 -								
50 -								
								╺╼┛
Λngp	┝╌┿┿┿┩┠╌╴							
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	a hall			مسيسيوس	and a second			
20			A THE REPORT OF					
20 -		P Number						
20 - 10 -								
10 - 0 -								
10 -		200	300 40	0 500	600	700 8	00 900	1000
10 - 0 -			300 40	0 500 MHz	600	700 8	00 900	1000
10 - 0 -	0 100		300 40		600	700 8	00 900 SIGNATURE	1000
10 - 0 - C	0 100		300 40		600	700 8 Ryan	SIGNATURE	1000
10 - 0 - 0	0 100		300 40		600	-0	SIGNATURE	1000
10 - 0 - 0 0 0 0 0 0 0 0 0	0 100		300 40	MHz	GOO GOO QP Limit (dBµV)	Turntable (deg) / Height (cm)	SIGNATURE	1000 QP Margin (d
10 - 0 - 0 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 100 S : 2 Реак (dBµV) 1 20.08	200 QP (dBµV) 16.11	Factors (dB) 23.06	MHz Horizontal Peak Limit (dBµV) 40.00	QP Limit (dBµV) 40.00	Turntable (deg)/ Height (cm) 132°/100cm	SIGNATURE Benity Peak Margin (dB) 19.92	QP Margin (d 23.
10 - 0 - 0 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 100 S 2 Реак (dBµV) 1 20.08 8 25.62	200 200 QP (dBµV) 16.11 24.26	Factors (dB) 23.06 11.90	MHz Horizontal Peak Limit (dBµV) 40.00 40.00	QP Limit (dBµV) 40.00 40.00	Turntable (deg) / Height (cm) 132°/100cm 6°/400cm	Peak Margin (dB) 19.92 14.38	QP Margin (d 23. 15.
10 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	родо 100 100 8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	200 200 QP (dBµV) 16.11 24.26 22.28	Factors (dB) 23.06 11.90 11.88	MHz Horizontal Peak Limit (dBμV) 40.00 40.00	QP Limit (dBµV) 40.00 40.00 40.00	Turntable (deg) / Height (cm) 132°/100cm 6°/400cm 63°/400cm	Peak Margin (dB) 19.92 14.38 16.31	QP Margin (d 23. 15. 17.
10 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	родологи и политика 2 Политика 1 Политика 2 Полити	QP (dBµV) 16.11 24.26 22.28 26.08	Factors (dB) 23.06 11.90 11.88 16.00	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52	QP Limit (dBµV) 40.00 40.00 43.52	Turntable (deg) / Height (cm) 132°/100cm 6°/400cm 63°/400cm 188°/334cm	Besitey Peak Margin (dB) 19.92 14.38 16.31 16.10	QP Margin (d 23. 15. 17. 17.
10 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	родологи и политика 2 Политика 1 Политика 2 Полити	200 200 QP (dBµV) 16.11 24.26 22.28	Factors (dB) 23.06 11.90 11.88	MHz Horizontal Peak Limit (dBμV) 40.00 40.00	QP Limit (dBµV) 40.00 40.00 40.00	Turntable (deg) / Height (cm) 132°/100cm 6°/400cm 63°/400cm	Peak Margin (dB) 19.92 14.38 16.31	QP Margin (d 23. 15. 17. 17.
10 - 0 - 0 - 0 - 0 0 0 0 0 0 0 0 0 0 0 0	родологи и политики и политики Политики и политики и по Политики и политики и по Политики и политики и полити Политики и политики и политики и политики и полити	QP (dBµV) 16.11 24.26 22.28 26.08	Factors (dB) 23.06 11.90 11.88 16.00	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52 46.02	QP Limit (dBµV) 40.00 40.00 43.52	Turntable (deg) / Height (cm) 132°/100cm 6°/400cm 63°/400cm 188°/334cm	Besitey Peak Margin (dB) 19.92 14.38 16.31 16.10	QP Margin (d 23. 15. 17. 17.
10 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	родологи и политики и политики Политики и политики и по Политики и политики и по Политики и политики и полити Политики и политики и политики и политики и полити	QP (dBµV) 16.11 24.26 22.28 26.08	Factors (dB) 23.06 11.90 11.88 16.00	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52	QP Limit (dBµV) 40.00 40.00 43.52	Turntable (deg) / Height (cm) 132°/100cm 6°/400cm 63°/400cm 188°/334cm	Besitey Peak Margin (dB) 19.92 14.38 16.31 16.10	QP Margin (d 23. 15. 17. 17. 5.
10 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	с 2 Реак (dBµV) 1 20.08 8 25.62 6 23.69 2 27.42 3 40.95 Реак (dBµV)	200 200 200 16.11 24.26 22.28 26.08 40.95	Factors (dB) 23.06 11.90 11.88 16.00 24.45	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 40.00 43.52 46.02 Vertical Peak Limit	QP Limit (dBµV) 40.00 40.00 43.52 46.02 QP Limit	Turntable (deg) / Height (cm) 132°/100cm 6°/400cm 63°/400cm 188°/334cm -1°/102cm Turntable (deg) /	Peak Margin (dB) 19.92 14.38 16.31 16.10 5.07 Peak Margin	QP Margin (d 23. 15. 17. 17. 5. QP Margin (d
10 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	с 2 Реак (dBµV) 1 20.08 8 25.62 6 23.69 2 27.42 3 40.95 Реак (dBµV) 2 16.88	QP (dBµV) 200 200 200 200 200 200 200 20	Factors (dB) 23.06 11.90 11.88 16.00 24.45 Factors (dB)	МНz Horizontal Peak Limit (dBµV) 40.00 40.00 40.00 43.52 46.02 Vertical Peak Limit (dBµV)	QP Limit (dBμV) 40.00 40.00 43.52 46.02 QP Limit (dBμV)	Turntable (deg) / Height (cm) 132°/100cm 6°/400cm 188°/334cm -1°/102cm Turntable (deg) / Height (cm)	SIGNATURE Beaty Peak Margin (dB) 19.92 14.38 16.31 16.10 5.07 Peak Margin (dB)	QP Margin (d 23. 15. 17.
10 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	с 2 Реак (dBµV) 1 20.08 8 25.62 6 23.69 2 27.42 3 40.95 Реак (dBµV) 2 16.88 9 26.75	QP (dBµV) 200 200 200 16.11 24.26 22.28 26.08 40.95 QP (dBµV) 12.26	Factors (dB) 23.06 11.90 11.88 16.00 24.45 Factors (dB) 17.18	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 40.00 43.52 46.02 Vertical Peak Limit (dBμV) 40.00	QP Limit (dBμV) 40.00 40.00 43.52 46.02 QP Limit (dBμV) 40.00	Turntable (deg) / Height (cm) 132°/100cm 6°/400cm 188°/334cm -1°/102cm Turntable (deg) / Height (cm) 68°/117cm	SIGNATURE Beaty Peak Margin (dB) 19.92 14.38 16.31 16.10 5.07 Peak Margin (dB) 23.12	QP Margin (d 23. 15. 17. 17. 5. QP Margin (d 27.
10 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	реак (dBµV) 1 20.08 8 25.62 6 23.69 2 27.42 3 40.95 9 26.75 3 31.51	QP (dBµV) 200 200 200 16.11 24.26 22.28 26.08 40.95 QP (dBµV) 12.26 25.70	Factors (dB) 23.06 11.90 11.88 16.00 24.45 Factors (dB) 17.18 11.90	MHz Horizontal Peak Limit (dBμV) 40.00 40.00 43.52 46.02 Vertical Peak Limit (dBμV) 40.00 40.00 40.00	QP Limit (dBμV) 40.00 40.00 43.52 46.02 QP Limit (dBμV) 40.00 40.00	Turntable (deg) / Height (cm) 132°/100cm 6°/400cm 188°/334cm -1°/102cm Turntable (deg) / Height (cm) 68°/117cm 68°/294cm	SIGNATURE Beatey Peak Margin (dB) 19.92 14.38 16.31 16.10 5.07 Peak Margin (dB) 23.12 13.25	QP Margin (d 23. 15. 17. 17. 5. QP Margin (d 27. 14.

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LIG20230928-01	ElectroMagnetic	C25
LIG20230928-01	Investigations	

MUJUI	Customer	Lightspeed 1	[echnologies		Job	Reference#	LIG2023092	8
		Rob D'Angel			000			-
		Rogue Base			Temp	erature (°C):	20.4	
Se	erial Number:	02-C25-Z-S2				lumidity (%):	33	
	/oltage/Freq:	120 V 60 Hz				ric Pressure:	30	
		Ryan Benite:			Daromet	Location:	Hillsboro	
Produ	ct Standards:	FCC Part 15						
		N/A						
Te	est Standard:	FCC Part 15	.209					
EST RESUL		TEST TYPE			DISTANCE		RUN #	
ass		Compliance			3 meters			
[		Horizontal Peak		Vertical Peak	Averaç	e Limit	OP Limit	
80 T								
70								
60 -								
001								
50						the state of the s		
Ang 40								++++
<b>U</b> 30								
20								
10								
10 0 - 10	00 3000	5000	7000	9000	11000	13000	15000 17	7000
0 100		5000	7000	9000 MHz	11000	13000		7000
0 + 100	6	5000	7000	MHz	11000	0	15000 17 SIGNATURE Benity	7000
O 100 DMMIENTS	6	5000	7000 Factors (dB)	MHz Horizontal Peak Limit	Final Limit	Ryan Turntable (deg)/	SIGNATURE Beauty Peak Margin	Final Margin
0 100 DMMIENTS nt: 1 Ch::	2 Peak (dBµV)	Final (dBµV)	Factors (dB)	MHz Horizontal Peak Limit (dBµV)	Final Limit (dBµV)	Turntable (deg) / Height (cm)	Benity Peak Margin (dB)	Final Margir (dB)
0 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 Реак (dBµV) 56.12	Final (dBµV) 23.50	Factors (dB) -10.05	MHz Horizontal Peak Limit (dBµV) 73.98	Final Limit (dBµV) 53.98	Turntable (deg) / Height (cm) 154%/154cm	Benity Peak Margin (dB) 17.86	Final Margir (dB) 30
0 100 00000000000000000000000000000000	2 Peak (dBµV) 56.12 43.31	Final (dBµV) 23.50 40.94	Factors (dB) -10.05 10.76	MHz Horizontal Peak Limit (dBµV) 73.98 73.98	Final Limit (dBµV) 53.98 53.98	Turntable (deg) / Height (cm) 154%154cm 8%102cm	Peak Margin (dB) 17.86 30.67	Final Margir (dB) 30 13.0
0 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 Peak (dBµV) 56.12 43.31 44.64	Final (dBµV) 23.50	Factors (dB) -10.05	MHz Horizontal Peak Limit (dBµV) 73.98	Final Limit (dBµV) 53.98	Turntable (deg) / Height (cm) 154%/154cm	Benity Peak Margin (dB) 17.86	Final Margir (dB) 30 13.1 10.2
0 100 00000000000000000000000000000000	2 Peak (dBµV) 56.12 43.31 44.64 38.98	Final (dBµV) 23.50 40.94 43.13	Factors (dB) -10.05 10.76 11.92	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98	Turntable (deg) / Height (cm) 154%154cm 8%102cm 55%101cm	Peak Margin (dB) 17.86 30.67 29.34	Final Margin (dB) 30 13.( 10.3 17.:
0 100 0 0 0 0 0 0 0 0 0 0 0 0	2 Peak (dBµV) 56.12 43.31 44.64 38.98 42.37	Final (dBµV) 23.50 40.94 43.13 36.66	Factors (dB) -10.05 10.76 11.92 6.85	MHz Horizontal Peak Limit (dBµV) 73.98 73.98 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 154°/154cm 8°/102cm 55°/101cm 103°/200cm	Besity Peak Margin (dB) 17.86 30.67 29.34 35.00	Final Margin (dB) 30 13.( 10.3 17.: 16.3
0 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 Peak (dBµV) 56.12 43.31 44.64 38.98 42.37	Final (dBµV) 23.50 40.94 43.13 36.66 37.15	Factors (dB) -10.05 10.76 11.92 6.85 7.57	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 154°/154cm 8°/102cm 55°/101cm 103°/200cm 109°/175cm	Besity Peak Margin (dB) 17.86 30.67 29.34 35.00 31.61	Final Margir (dB) 30 13 10 17 16
0 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 Peak (dBµV) 56.12 43.31 44.64 38.98 42.37	Final (dBµV) 23.50 40.94 43.13 36.66 37.15	Factors (dB) -10.05 10.76 11.92 6.85 7.57	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98	Final Limit (dBµV) 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 154°/154cm 8°/102cm 55°/101cm 103°/200cm 109°/175cm	Besity Peak Margin (dB) 17.86 30.67 29.34 35.00 31.61	Final Margir (dB) 30. 13. 10. 17. 16. 11.
0 100 0 0 0 100 0 0 0 0 0 0 0 0 0 0 0 0	2 Peak (dBμV) 56.12 43.31 44.64 38.98 42.37 46.28 Peak (dBμV)	Final (dBµV) 23.50 40.94 43.13 36.66 37.15 42.60	Factors (dB) -10.05 10.76 11.92 6.85 7.57 16.52	MHz Horizontal Peak Limit (dBμV) 73.98 74.98 74.98 74.98 74.98 74.98 74.98 74.98 74.98 74.98 74.98 74.98 74.98 74.98 74.98 74.98 74.98 74.98 74.98 75.98	Final Limit (dBµV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 154°/154cm 8°/102cm 55°/101cm 103°/200cm 109°/175cm 135°/149cm Turntable (deg) /	SIGNATURE           Beasty           Peak Margin (dB)           17.86           30.67           29.34           35.00           31.61           27.70           Peak Margin	Final Margir (dB) 30. 13. 10. 11. 16. 11. Final Margir (dB)
0 100 0 0 100 0 0 0 0 0 0 0 0 0 0 0 0	2 Peak (dBμV) 56.12 43.31 44.64 38.98 42.37 46.28 Peak (dBμV) 57.53	Final (dBµV) 23.50 40.94 43.13 36.66 37.15 42.60 Final (dBµV)	Factors (dB) -10.05 10.76 11.92 6.85 7.57 16.52 Factors (dB)	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98	Final Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 Final Limit (dBμV)	Turntable (deg) / Height (cm) 154°/154cm 8°/102cm 55°/101cm 103°/200cm 109°/175cm 135°/149cm Turntable (deg) / Height (cm)	Benity Peak Margin (dB) 17.86 30.67 29.34 35.00 31.61 27.70 Peak Margin (dB)	Final Margir (dB) 30 13 10 11 16 11 Final Margir (dB) 30
0 100 0 0 100 0 0 0 100 0 0 0 0 0 0 0 0 0 0 0 0	2 Peak (dBμV) 56.12 43.31 44.64 38.98 42.37 46.28 Peak (dBμV) 57.53 42.45 42.20	Final (dBµV) 23.50 40.94 43.13 36.66 37.15 42.60 Final (dBµV) 23.47	Factors (dB) -10.05 10.76 11.92 6.85 7.57 16.52 Factors (dB) -10.05	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98 Vertical Peak Limit (dBμV) 73.98	Final Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 Final Limit (dBμV) 53.98	Turntable (deg) / Height (cm) 154°/154cm 8°/102cm 55°/101cm 103°/200cm 109°/175cm 135°/149cm Turntable (deg) / Height (cm) 0°/154cm	SIGNATURE           Benity           Peak Margin (dB)           17.86           30.67           29.34           35.00           31.61           27.70           Peak Margin (dB)           16.45	Final Margir (dB) 30. 13. 10. 10. 11. Final Margir (dB) 30. 13.
0 100 0 0 0 0 0 0 0 0 0 0 0 0	2 Peak (dBμV) 56.12 43.31 44.64 38.98 42.37 46.28 Peak (dBμV) 57.53 42.45 42.20 47.96	Final (dBµV) 23.50 40.94 43.13 36.66 37.15 42.60 Final (dBµV) 23.47 40.92	Factors (dB) -10.05 10.76 11.92 6.85 7.57 16.52 Factors (dB) -10.05 10.77	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98	Final Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 Final Limit (dBμV) 53.98 53.98	Turntable (deg) / Height (cm) 154°/154cm 8°/102cm 55°/101cm 103°/200cm 109°/175cm 135°/149cm Turntable (deg) / Height (cm) 0°/154cm 76°/100cm	Benty Benty (dB) 17.86 30.67 29.34 35.00 31.61 27.70 Peak Margin (dB) 16.45 31.53	Final Margin (dB) 30 13.1 10.3 17.: 16.3 11.; Final Margin

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LIG20230928-01	ElectroMagnetic	C25
1020230928-01	Investigations	

	Customer:	Lightspeed 1	Technologies	3	Job	Reference#:	LIG2023092	8
		Rob D'Ange		-			10/27/2023	
	DUT:				Temp	erature (°C):		
Se	rial Number:					lumidity (%):		
		120 V 60 Hz				ric Pressure:		
v		Ryan Benite			Daromet	Location:		
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0 1800 DMMENTS nt:1 CH:2	Peak (dBµV) 41.77	Average (dBµV) 39.22	Factors (dB) 10.38	MHz Horizontal Peak Limit (dBμV) 73.98	Average Limit (dBµV) 53.98	Turntable (deg) / Height (cm) 0%174cm	Benitey Peak Margin (dB)	Average Mar (dB) 14.
0 1800 DMMENTS nt:1 CH:2 Freq (MHz) 20980.02	Peak (dBµV) 41.77	Average (dBμV) 39.22 39.90	Factors (dB) 10.38	MHz Horizontal Peak Limit (dBµV) 73.98 73.98	Average Limit (dBµV) 53.98 53.98	Turntable (deg) / Height (cm) 0%174cm	Peak Margin (dB) 32.21 31.68	Average Mar (dB) 14. 14.
0 1800 0 0 0 0 0 0 0 0 0 0 0 0	Peak (dBµV) 41.77 42.30	Average (dBμV) 39.22 39.90	Factors (dB) 10.38 9.33	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98	Average Limit (dBμV) 53.98 53.98 53.98	Turntable (deg) / Height (cm) 0°/174cm 315°/154cm	Peak Margin (dB) 32.21 31.68 31.32	Average Mar (dB) 14. 14. 13.
0 1800 DMMENTS nt:1 CH:2 Freq (MHz) 20980.02 21845.64 21916.97	Peak (dBµV) 41.77 42.30 42.66 42.21	Average (dBµV) 39.22 39.90 40.11 39.32	Factors (dB) 10.38 9.33 8.94	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98	Average Limit (dBµV) 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 0°/174cm 315°/154cm 258°/200cm 139°/199cm	Peak Margin (dB) 32.21 31.68 31.32 31.77	Average Man (dB) 14. 14. 13. 14.
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0 1800 0 0 1800 0 0 1800 180	Peak (dBµV) 41.77 42.30 42.66 42.21 42.37	Average (dBμV) 39.22 39.90 40.11 39.32 39.75	Factors (dB) 10.38 9.33 8.94 8.67 9.63	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98	Average Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 0°/174cm 315°/154cm 258°/200cm 139°/199cm 67°/100cm	Beaten Beaten (dB) 32.21 31.68 31.32 31.77 31.61	Average Mary (dB) 14. 14. 13. 14. 14.
0 1800 0 0 1800 0 0 1800 180	Peak (dBµV) 41.77 42.30 42.66 42.21 42.37	Average (dBμV) 39.22 39.90 40.11 39.32 39.75	Factors (dB) 10.38 9.33 8.94 8.67 9.63	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98	Average Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 0°/174cm 315°/154cm 258°/200cm 139°/199cm 67°/100cm	Beaten Beaten (dB) 32.21 31.68 31.32 31.77 31.61	Average Marg (dB) 14. 14. 13. 14.
0 1800 0 0 1800 0 0 1800 180	Peak (dBµV) 41.77 42.30 42.66 42.21 42.37 41.71	Average (dBμV) 39.22 39.90 40.11 39.32 39.75 38.71	Factors (dB) 10.38 9.33 8.94 8.67 9.63 9.37	MHz Horizontal Peak Limit (dBμV) 73.98 74.99	Average Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 0°/174cm 315°/154cm 258°/200cm 139°/199cm 67°/100cm 22°/100cm Turntable (deg) /	Beatty Beaty (dB) 32.21 31.68 31.32 31.77 31.61 32.27 Peak Margin	Average Marg (dB) 14. 14. 13. 14. 14. 15. Average Marg
0 1800 1800 1800 0 1800 0 1800 0 1805 1800 1805	Реак (dBµV) 41.77 42.30 42.66 42.21 42.37 41.71 Реак (dBµV)	Average (dBμV) 39.22 39.90 40.11 39.32 39.75 38.71 Average (dBμV) 38.77	Factors (dB) 10.38 9.33 8.94 8.67 9.63 9.37 Factors (dB)	MHz Horizontal Peak Limit (dBμV) 73.98 74.798 75.798 75.798 75.798 75.798 75.798 75.798 75.798 75.79	Average Limit (dBµV) 53.98 53.98 53.98 53.98 53.98 53.98 Average Limit (dBµV) 53.98	Turntable (deg) / Height (cm) 0°/174cm 315°/154cm 258°/200cm 139°/199cm 67°/100cm 22°/100cm Turntable (deg) / Height (cm)	SIGNATURE           Beautey           Peak Margin (dB)           32.21           31.68           31.32           31.77           31.61           32.27           Peak Margin (dB)           30.36	Average Mar (dB) 14. 14. 14. 13. 14. 14. 15. Average Mar (dB) 15.
0 1800 0 0 1800 0 0 1800 0 0 1800 1800 1800 0 1800	Peak (dBµV) 41.77 42.30 42.66 42.21 42.37 41.71 Peak (dBµV) 43.62	Average (dBμV) 39.22 39.90 40.11 39.32 39.75 38.71 Average (dBμV) 38.77 38.95	Factors (dB) 10.38 9.33 8.94 8.67 9.63 9.37 Factors (dB) 10.94	MHz Horizontal Peak Limit (dBμV) 73.98	Average Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98 Average Limit (dBμV) 53.98 53.98	Turntable (deg) / Height (cm) 0°/174cm 315°/154cm 258°/200cm 139°/199cm 67°/100cm 22°/100cm Turntable (deg) / Height (cm) 41°/199cm	SIGNATURE           Beauty           Peak Margin (dB)           32.21           31.68           31.32           31.77           31.61           32.27           Peak Margin (dB)           30.36           29.88	Average Marg (dB) 14. 14. 14. 14. 14. 15. Average Marg (dB) 15. 15.
0 1800 0 0 1800 0 0 1800 0 1845.64 21845.64 23637.05 1 1805 180	Peak (dBµV) 41.77 42.30 42.66 42.21 42.37 41.71 Peak (dBµV) 43.62 44.10	Average (dBμV) 39.22 39.90 40.11 39.32 39.75 38.71 Average (dBμV) 38.77 38.95	Factors (dB) 10.38 9.33 8.94 8.67 9.63 9.37 Factors (dB) 10.94 10.94	MHz Horizontal Peak Limit (dBμV) 73.98	Average Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98 Average Limit (dBμV) 53.98 53.98	Turntable (deg) / Height (cm) 0°/174cm 315°/154cm 258°/200cm 139°/199cm 67°/100cm 22°/100cm Turntable (deg) / Height (cm) 41°/199cm 21°/100cm	SIGNATURE           Beaity           Peak Margin (dB)           32.21           31.68           31.32           31.77           31.61           32.27           Peak Margin (dB)           30.36           29.88           33.23	Average Mar (dB) 14. 14. 14. 14. 14. 14. 15. (dB) 15. 15. 15.
0 1800 0 0 1800 0 0 1800 0 1800 0 0 1800 0 0 1800 0 0 1800 0 0 1800 0 0 1800 0 0 1805 1805	Peak (dBµV) 41.77 42.30 42.66 42.21 42.37 41.71 Peak (dBµV) 43.62 44.10 40.75	Average (dBμV) 39.22 39.90 40.11 39.32 39.75 38.71 Average (dBμV) 38.77 38.95 38.85	Factors (dB) 10.38 9.33 8.94 8.67 9.63 9.37 Factors (dB) 10.94 10.33 9.76	MHz Horizontal Peak Limit (dBμV) 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98 73.98	Average Limit (dBμV) 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98 53.98	Turntable (deg) / Height (cm) 0°/174cm 315°/154cm 258°/200cm 139°/199cm 67°/100cm 22°/100cm Turntable (deg) / Height (cm) 41°/199cm 21°/100cm 41°/125cm	SIGNATURE           Beaity           Peak Margin (dB)           32.21           31.68           31.32           31.77           31.61           32.27           Peak Margin (dB)           30.36           29.88           33.23	Average Mary (dB) 14. 14. 14. 14. 14. 15. (dB) 15. 15. 15. 15. 15.

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#### 3.13 Test conditions and results – Automatic discontinuation of transmission

Automatic discontinuation of transmission acc. to FCC 15D / RSS-213 Verdict: PASS		Verdict: PASS	
EUT requirement	Refere	ence	
rule parts and clause	IC RSS-2	13 5.2	
Test according to	Reference	Method	
measurement reference	ANSI C	63.4	
EUT equipment type	Scan (	(All)	
Requirements			
The device shall automatically discontinue transmission in case of either absence of information to			
transmit or operational failure. This is not intended to preclude transmission of control and signaling			
information or use of repetitive codes used by certain digital technologies to complete frame or burst			
intervals.			

Result				
Test	Reaction	Verdict		
Power removed: EUT	A	PASS		
Power removed: Companion device	A	PASS		
Switch -off: EUT	A	PASS		
Switch -off: Companion device	A	PASS		
Hook-on: EUT	N/A	N/A		
Hook-on: Companion device	N/A	N/A		
Comments:				
A – Cease of all transmissions				
B – EUT transmits control and signaling information				
C – Companion device transmits control and signaling information				
N/A – Not applicable				

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## 3.14 Test conditions and results – Radiofrequency radiation exposure

Radiofrequency radiation exposure acc. to FCC 47 CFR 15D / IC RSS-213		dict: N/A	
Test performed by: ElectroMagnetic Investigations			
EUT requirement	Reference		
rule parts and clause	FCC 15.319(i) / IC RSS-102		
Requiren	nents		
FCC: Unlicensed PCS devices are subject to the radiofrequency radiation exposure requirements specified in §§1.1307(b), 2.1091 and 2.1093. All equipment shall be considered to operate in a "general population/uncontrolled" environment. Applications for equipment authorization of devices operating under this section must contain a statement confirming compliance with these requirements for both fundamental emissions and unwanted emissions. Technical information showing the basis for thus statement must be submitted to the Commission upon request.			
IC: Category I and Category II equipment shall comply with the applicable requirements of RSS-102.			
Result			
Reference		Verdict	
RF Exposure is addressed in a separate exhibit. N/A		N/A	

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## 3.15 Test conditions and results – Monitoring threshold

Monitoring threshold acc. to FCC 47 CFR 15D / IC	RSS-213 Verdict: N/A
FUT requirement	Deference
EUT requirement	Reference
rule parts and clause	FCC 15.323(c)(2),(5),(9) / IC RSS-213 5.2 (2)(5)(9)
Test according to referenced standards	Reference Method
	ANSI C63.17 7.3.4
Number of duplex channels used	5 carrier with 12 duplex timeslots = 60 duplex channels
	Requirements
equivalent to the emission/occupied bandwidth c	30 dB above the thermal noise power (KTB) of a bandwidth f the device.
	maximum permitted under this standard may increase their transmitter power is below the maximum permitted.
channels are defined for the system, the time and	nined by the above, a minimum of 40 duplex system access I spectrum windows with a power level below a monitoring er determined for the occupied bandwidth may be accessed.
	andwidth [Hz]) $M_U + P_{MAX}[dBm] - P_{EUT}[dBm]$ andwidth [Hz]) $M_L + P_{MAX}[dBm] - P_{EUT}[dBm]$
With $M_{U}$ = 50 dB and $M_{L}$ = 30 dB, $P_{MAX}$ as given un occupied bandwidth. The power threshold limit is	der "Peak transmit power" and bandwidth as emission or given by $T_U+U_M$ ( $U_M$ = 6 dB).
Comments:	

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#### 3.16 Test conditions and results – LIC confirmation

LIC confirmation acc. to FCC 47 CFR 15D / IC RSS-213		Verdict: PASS	
EUT requirement	Refere	nce	
rule parts and clause	FCC 15.323(c)(5) / 10	C RSS-213 5.2(5)	
Test according to referenced	Reference I	Vethod	
standards	ANSI C63.1	.7 7.3.2	
Requirements			
A device utilizing the provisions of FCC 47 CFR 15.323(c)(5) / IC RSS-213(b)(5) must have monitored all access channels			
defined for its system within the last 10 seconds and must verify, within the 20 milliseconds (40 milliseconds for			
devices designed to use a 20 millisecond frame period) immediately preceding actual channel access, that the detected			
power of the selection time and spectrum windows is no higher than the previously detected value.			
Test Result			
Evaluation		Verdict	
The requirement is verified using the "Monitoring time" and "LIC Selection" test.		PASS	
Comments:		·	

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#### 3.17 Test conditions and results – LIC selection

LIC confirmation acc. to FC	C 47 CFR 15D / IC RSS-213		Verdict: PASS		
EUT requirement		Reference			
rule parts and clause	FC	C 15.323(c)(5) / IC RSS-213 5.	2 (5)		
Test according to		Reference Method			
referenced standards		ANSI C63.17 7.3.3			
	Requir	ements			
may be accessed. IC: If access to spectrum is access channels are define	not available as determined d for the system, the time a	nd spectrum windows with the by the above, and a minimune of spectrum windows with a power determined for the o	n of 40 duplex system power level below a		
	Test	Result			
	Interferer Level f <sub>2</sub>	Communication channel			
Interferer Level f <sub>1</sub>		eenmanication ename	Verdict		
Interferer Level $f_1$ $T_L + U_M + 7 dB$	T <sub>L</sub> + U <sub>M</sub>	f <sub>2</sub>	Verdict PASS		
	T <sub>L</sub> + U <sub>M</sub> T <sub>L</sub> + U <sub>M</sub> + 7 dB				
$T_L + U_M + 7 dB$		f <sub>2</sub>	PASS		
$T_{L} + U_{M} + 7 \text{ dB}$ $T_{L} + U_{M}$	T <sub>L</sub> + U <sub>M</sub> + 7 dB	f <sub>2</sub> f <sub>1</sub>	PASS PASS		

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#### 3.18 Test conditions and results – Monitoring antenna

Monitoring antenna acc. to FCC 47 CFR 15D / IC RSS-213 Verd			
EUT requirement Reference			
rule parts and clause	FCC 15.319(c)(8) / IC RSS-213 5.2(8)		
Test according to referenced	Reference Method		
standards	ANSI C63.17 4.6		
Monitoring antenna	The same as transmitting antenna		
Requirements			
The monitoring system shall use the same antenna used for transmission, or antenna that yields equivalent			
reception at the location.			
	Results		
Connection status Verdict			
N/A (monitoring ante	N/A (monitoring antenna identical to transmitting antenna) PASS		
Comments:			

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## 3.19 Test conditions and results – Monitoring time

Monitoring Time acc. to FCC 47 CFR 15D / IC RSS-213		Verdict: PASS		
EUT requirement		Reference		
rule parts and clause		FCC 15.323(c)(1) / IC RSS-213 5.	2(1)	
Test according to reference	d	Reference Method		
standards		ANSI C63.17 7.3.4		
	Requirements			
Immediately prior to initiating transmission, devices must monitor the combined time and spectrum windows in				
which they intend to transmit	for a period of at least 10	milliseconds for systems designed	to use a 10 millisecond or	
shorter frame period or at least	st 20 milliseconds for syste	ems designed to use a 20 milliseco	nd frame period.	
	Tes	t results		
Initial transmit channel	Interferer level	Final transmit channel	Verdict	
F <sub>1</sub>	T <sub>U</sub> + U <sub>M</sub> + 20 dB	F <sub>2</sub>	PASS	
F <sub>2</sub>	T <sub>U</sub> + U <sub>M</sub> + 20 dB	F <sub>1</sub>	PASS	
Comments:				

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## 3.20 Test conditions and results – Monitoring bandwidth

Monitoring bandwidth acc. to	FCC 47 CFR 15D / IC RSS-21	.3	Verdict: PASS
EUT requirement		Reference	
rule parts and clause		FCC 15.323(c)(7) / IC RSS-213 5.2	2(7)
Test according to reference	d	Reference Method	
standards		ANSI C63.17 7.4	
	Requi	rements	
The monitoring system bandw	idth must be equal or grea	ter than the emission bandwidth o	of the intended
transmission.			
	Test	results	
Initial transmit channel	Interferer level	Transmission status	Verdict
F <sub>LOW</sub> + 30% BW	T <sub>U</sub> + U <sub>M</sub> + 10 dB	None	PASS
F <sub>LOW</sub> - 30% BW	T <sub>U</sub> + U <sub>M</sub> + 10 dB	None	PASS
F <sub>HIGH</sub> + 30% BW	T <sub>U</sub> + U <sub>M</sub> + 10 dB	None	PASS
F <sub>ніGH</sub> - 30% BW	T <sub>U</sub> + U <sub>M</sub> + 10 dB	None	PASS

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#### 3.21 Test conditions and results – Monitoring reaction time

Monitoring reaction time acc. to FCC 47 CFR 15D / IC RSS-213		
EUT requirement	Reference	
rule parts and clause	FCC 15.323(c)(7) / IC RSS-213 5.2(7)	
Test according to referenced	Reference Method	
standards	ANSI C63.17 7.5	
Requirements		
The monitor shall have a maximum reaction time less than 50xSQRT (1.25/emission(occupied) bandwidth in MHz) microseconds for signal at the applicable threshold level but shall not be required to be less than 50 microseconds. If a signal is detected that is 6 dB or more above the applicable threshold level the maximum reaction time shall be 35xSQRT (1.25/emission(occupied) bandwidth in MHz) microseconds but shall not be required to be less than 35 microseconds.		

	Test results			
Channel	Pulse width	Level	Connection possible	Result
F <sub>LOW</sub>	50	$T_L + U_M + 0 dB$	No	PASS
F <sub>MID</sub>	50	$T_L + U_M + 0 dB$	No	PASS
F <sub>HIGH</sub>	50	$T_L + U_M + 0 dB$	No	PASS
F <sub>LOW</sub>	35	$T_L + U_M + 6 dB$	No	PASS
F <sub>MID</sub>	35	$T_L + U_M + 6 dB$	No	PASS
F <sub>HIGH</sub>	35	$T_L + U_M + 6 dB$	No	PASS

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#### 3.22 Random Waiting

Random Waiting acc. to FCC 47 CFR 15D / IC RSS-213 Verdict: PA		
EUT requirement	Reference	
rule parts and clause	FCC 15.323(c)(6) / IC RSS-213 5.2(6)	
Test according to referenced standards	Reference Method	
ANSI C63.17 8.1.2 / 8.1.3		
Option implemented No		
Requirements		
If the selected combined time and spectrum windows are unavailable the device may either monitor and select different windows or seek to use the same window after waiting an amount of time randomly chosen from a uniform distribution between 10 and 150 milliseconds commencing from the time when the channel becomes available.		

Test results – Access criteria functional test option not implemented			
Initial channel / timeslot         Interferer level         Final Channel / timeslot         Verdict			
F <sub>1</sub> / Slot 2	0	F <sub>1</sub> / Slot 2	PASS
F <sub>1</sub> / Slot 2	Tu + Um	F1 / Slot 4	PASS
Comments:			

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#### 3.23 Test conditions and results – Acknowledgements

Acknowledgements acc. to FCC 47 CFR 15D	/ IC RSS-213	Verdict: PASS	
EUT requirement	Reference		
rule parts and clause	FCC 15.323(c)(4) / IC RSS-213 5	5.2(4)	
Test according to referenced standards	Reference Method		
	ANSI C63.17 8.2.1		
EUT can initiate a communication session	No		
	Requirements		
Once access to specific combined time and spectrum windows is obtained an acknowledgement from a system participant must be received by the initial transmitter within one second or transmission must cease. Periodic acknowledgements must be received at least every 30 seconds or transmission must cease.			
	Test results		
Maximum initial transmission [s]	Transmission time limit [s]	Verdict	
1	30	PASS	
Time needed to cease Traffic Channel [s]	Transmission time limit [s]	Verdict	
4	30	PASS	
Comments:			

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#### 3.24 Maximum transmit duration

Maximum transmit duration acc. to FCC 47 CFR 15D / IC RSS-213		Verdict: PASS	
EUT requirement	Reference		
rule parts and clause	FCC 15.323(c)(3) / IC RSS-213 5	.2(3)	
	Requirements		
If no signal above the threshold level is detected, transmission may commence and continue with the same			
emission bandwidth in the monitoring time and spectrum windows without further monitoring. However,			
occupation of the same combined time and spectrum window by an EUT or group of cooperative EUTs continuously			
over a period of time longer than 8 hours is not permitted without repeating the access criteria.			
Test results			
Measured Maximum Transmission	Limit (minutes)	Verdict	
Duration (minutes)			
475	480	PASS	
Comments:			

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#### 3.25 Test conditions and results – Maximum spectral occupancy

Maximum spectral occupancy acc. to FCC 47 CFR 15D / IC RSS-213		Verdict: PASS
Test performed by: ElectroMagnetic Investig	gations	
EUT requirement	Reference	
rule parts and clause	FCC 15.323(c)(5) / IC RSS-213 5.2(5)	
Test according to referenced standards	Reference Method	
	Customer declaration	
	Requirements	
Once access to specific combined time and s	pectrum windows is obtained an acknowledgement fro	m a system
participant must be received by the initial transmitter within one second or transmission muse cease.		
Periodic acknowledgements must be received at least every 30 seconds or transmission must cease.		
Test result		
	Evaluation	Verdict
According to the technical documentation the total number of time and spectrum windows is: 5 x		PASS
12 = 60		
According to customer declaration the total number of concurrent time and spectrum windows is:		
12		
The number of concurrent allocated time and spectrum windows is less than one third of the total		
time and spectrum windows of the EUT		
Comments:		

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#### 3.26 Test conditions and results – Fair access

Fair access acc. to FCC 47 CFR 15D / IC RSS-213Verdict: PA		
Test performed by: ElectroMagnetic Investig	gations	
EUT requirement	Reference	
rule parts and clause	FCC 15.323(c)(12) / IC RSS-213 4.3.4(b)(12)	
Test according to measurement reference Reference Method		
	Customer declaration	
Requirements		
The provisions of FCC 47 CFR 15.323(c)(10), IC RSS-213(b)(10) or FCC 47 CFR 15.323(c)(12), IC RSS – 213(b)(12) shall		
not be used to extend the range of spectrum occupied over space or time for the purpose of denying fair access to		
spectrum to other devices.		
Declaration		
The manufacturer declares that the device does not work in a mode which denies fair access to spectrum for other		
participants.		

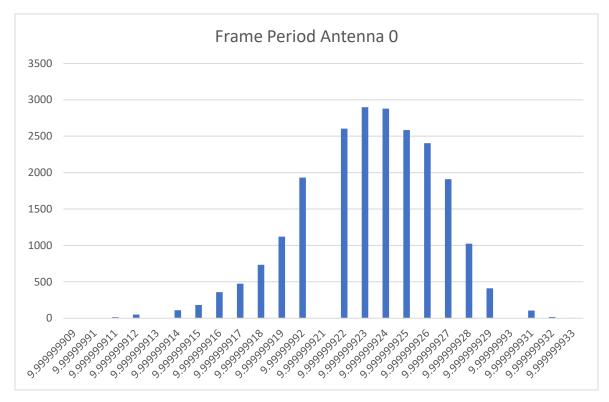
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## 3.27 Test conditions and results – Frame period and jitter

Frame period and jitter acc. to FCC 47 CFR 1	5D / IC RSS-213 Verdict	: PASS	
EUT requirement	Reference		
rule parts and clause	FCC 15.323(e) / IC RSS-213 5.2(13	3)	
Test according to referenced standards	Reference Method		
	ANSI C63.17 6.2.3		
	Requirements		
The frame period (a set of consecutive time	slots in which the position of each time slot can be ic	lentified by	
reference to a synchronizing source) of an in	tentional radiator operating in the sub-band shall be	20 milliseconds/X	
where X is a positive whole number.			
The jitter (time-related, abrupt, spurious variations in the duration of the duration of the frame interval) introduced			
at the two ends of a communication link sha	Il not exceed 25 microseconds for any two consecuti	ve transmissions.	
Test results – Frame period			
Antenna 0			
Mean value [ms]	Divider X (10 ms/X)	Verdict	
9.99999975	1	PASS	
	Test results – Jitter		
Maximum difference between frames [µs]	Limit [µs]	Verdict	
0.00009	25	PASS	
	Antenna 1		
Mean value [ms]	Divider X (10 ms/X)	Verdict	
9.99999926	1	PASS	
Maximum difference between frames [µs]	Limit [µs]	Verdict	
0.000082	25	PASS	
Comments:			

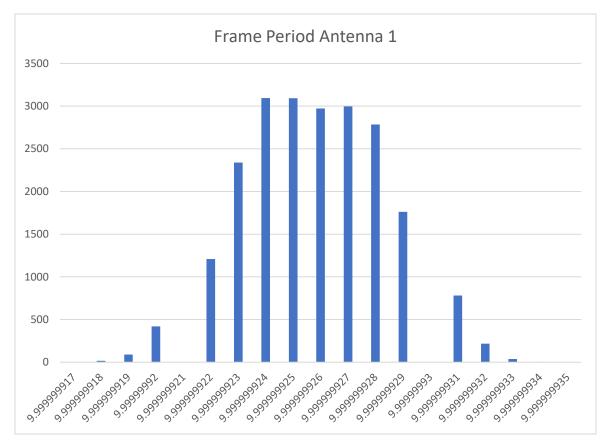
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#### Antenna 0



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Antenna 1

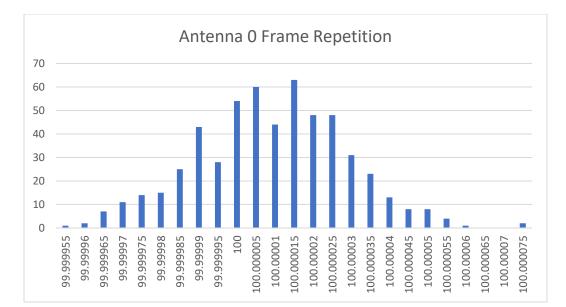


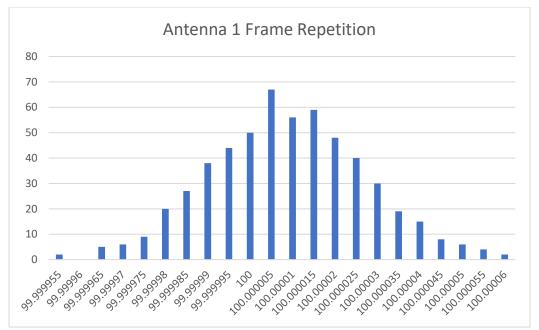
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## 3.28 Test conditions and results – Frame and repetition stability

Frame and TDMA repetition stability acc. to FCC 47 CFR 15D / IC RSS-213		-213 Vero	dict: PASS	
EUT requirement	Reference			
rule parts and clause	FCC 15.323(e) / IC RSS-213 5.2(13)			
Test according to referenced standards	Reference Method			
		ANSI C63.17 6.2.2		
Access scheme used	Time Division Multiple Access			
Requirements				
Each device that implements time division for the purpose of maintaining a duplex connection on a given frequency				
carrier shall maintain a frame repetition rate with a frequency stability of at least 50 parts per million (ppm).				
Each device which further divides access in time in order to support multiple communication links on a given				
frequency carrier shall maintain a frame repetition rate with a frequency stability of at least 10 ppm.				
Test results				
Access scheme	Error [ppm]	Limit [ppm]	Verdict	
Antenna 0				
Time Division multiple Access	0.549	10	PASS	
Antenna 1				
Time Division multiple Access	0.550	10	PASS	
Comments:				

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