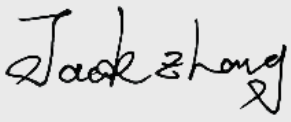
DEKRA Testing and Certification (Suzhou) Co., Ltd.
No.99 Hongye Rd., Suzhou Industrial Park, Suzhou, 215006, Jiangsu, China
TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098

Test report No:
22B0907R-RF-US-P06V01

FCC& ISED TEST REPORT

Product Name	iCG160 GNSS Receiver
Trademark	Leica
Model and /or type reference	iCG160
FCC ID	RFD-iCG160
IC	3177A-iCG160
Applicant´s name / address	LEICA GEOSYSTEMS AG Heinrich-Wild-Strasse, 9435 Heerbrugg, Switzerland
Test method requested, standard	CFR 47, FCC Part 15 C ANSI C63.10: 2013 RSS-Gen Issue 5 /RSS-247 Issue 2
Verdict Summary	IN COMPLIANCE
Tested By (name / position & signature)	Tim Cao/Project Engineer 
Approved by (name / position & signature)	Jack Zhang/ Supervisor 
Date of issue	2023-03-09
Report Version	V1.0
Report template No	Template_FCC Part 15C-RF-V1.0

INDEX

page

COMPETENCES AND GUARANTEES

DEKRA is a testing laboratory competent to carry out the tests described in this report.
In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

GENERAL CONDITIONS

Test Location	No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China
Date(receive sample)	Dec. 08, 2022
Date (start test)	Dec. 15, 2022
Date (finish test)	Jan. 04, 2023

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA.

ENVIRONMENTAL CONDITIONS

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. The climatic conditions during the tests were within the following limits:

Ambient temperature	15 °C – 35 °C
Relative Humidity air	30% - 60%

If explicitly required in the basic standard or applied product / product family standard the climatic values are recorded and documented separately in this test report.

POSSIBLE TEST CASE VERDICTS

Test case does not apply to test object	N/A
Test object does meet requirement	P (Pass) / PASS
Test object does not meet requirement	F (Fail) / FAIL
Not measured	N/M

ABBREVIATIONS

For the purposes of the present document, the following abbreviations apply:

EUT	:	Equipment Under Test
QP	:	Quasi-Peak
CAV	:	CISPR Average
AV	:	Average
CDN	:	Coupling Decoupling Network
SAC	:	Semi-Anechoic Chamber
OATS	:	Open Area Test Site
BW	:	Bandwidth
AM	:	Amplitude Modulation
PM	:	Pulse Modulation
HCP	:	Horizontal Coupling Plane
VCP	:	Vertical Coupling Plane
U_N	:	Nominal voltage
*T*x	:	Transmitter
*R*x	:	Receiver
N/A	:	Not Applicable
N/M	:	Not Measured

DOCUMENT HISTORY

Report No.	Version	Description	Issued Date
22B0907R-RF-US-P06V01	V1.0	Initial issue of report.	2023-03-09

REMARKS AND COMMENTS

1. The equipment under test (EUT) does meet the essential requirements of the stated standard(s)/test(s).
2. These test results on a sample of the device are for the purpose of demonstrating Compliance with Part 15 Subpart C Paragraph 15.247, RSS-Gen Issue 5, RSS-247 Issue 2.
3. The measurement result is considered in conformance with the requirement if it is within the prescribed limit, it is not necessary to account the uncertainty associated with the measurement result.
4. The test results presented in this report relate only to the object tested.
5. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification (Suzhou) Co., Ltd.
6. This report will not be used for social proof function in China market.
7. DEKRA declines any responsibility with the following test data provided by customer that may affect the validity of result:
   - Chapter 1.1 General Description of the Item(s);
   - Chapter 1.2 Antenna Informaion;
   - Chapter 1.3 Test Data Rate;
   - Chapter 1.4 Channel List;
   - Chapter 1.5 Power Setting.

USED EQUIPMENT

Radiated Emission(30MHz-1GHz) / AC3

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EMI Test Receiver	R&S	ESCI	100573	2022.09.17	2023.09.16
Loop Antenna	R&S	HFH2-Z2	833799/003	2022.04.15	2023.04.14
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2022.11.21	2023.11.20
Temperature/Humidity Meter	RTS	RTS-8S	AC3-TH	2022.07.09	2023.07.08
Coaxial Cable	Huber+Suhner	RG 214	AC3-C	2022.03.30	2023.03.29
Dekra test software	Dekra	-	-	-	-

Radiated Emission(1GHz-40GHz) / AC5

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2022.08.12	2023.08.11
Pre-Amplifier	SKET	LNPA_0118G-45	SK2021090101	2022.04.15	2023.04.14
Preamplifier	CHENGYI	EMC184045SE	980263	2022.05.21	2023.05.20
DRG Horn	ETS-Lindgren	3117	00123988	2022.11.01	2023.10.31
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2022.05.19	2023.05.18
Temperature/Humidity Meter	RTS	RTS-8S	AC5-TH	2022.07.07	2023.07.06
Temperature/Humidity Meter	RTS	RTS-8S	AC5-TH	2022.07.07	2023.07.06
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2022.03.21	2023.03.20
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2022.03.21	2023.03.20
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2022.03.21	2023.03.20
Dekra test software	Dekra	-	-	-	-

UNCERTAINTY

Uncertainties have been calculated according to the DEKRA internal document. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

Test item	Uncertainty
Radiated Emission(30MHz~1GHz)	Horizontal: 30MHz~200MHz: 4.60 dB 200MHz~1GHz: 4.10 dB Vertical: 30MHz~200MHz: 4.80 dB 200MHz~1GHz: 4.10 dB
Radiated Emission(1GHz~40GHz)	Horizontal: 1GHz~18GHz: 5.00 dB Vertical: 1GHz~18GHz: 4.80 dB Horizontal: 18GHz~40GHz: 4.70 dB Vertical: 18GHz~40GHz: 4.60 dB

1 GENERAL INFORMATION

1.1 General Description of the Item(s)

Product Name..... :	iCG160 GNSS Receiver
Model No. ..... :	iCG160
FCC ID..... :	RFD-iCG160
IC..... :	3177A-iCG160
Hardware Version ..... :	3
Software Version..... :	0.1.248
Manufacturter..... :	LEICA GEOSYSTEMS AG
Manufacturer Address..... :	Heinrich-Wild-Strasse, 9435 Heerbrugg, Switzerland

Wireless specifiction..... :	SRD 900	
Operating frequency range(s)..... :	902~928MHz	
Type of modulation..... :	GFSK	
Number of channel..... :	3	
Device category ..... :	☐	Fixed point-to-point
	☐	Emit multiple directional beams, simultaneously or sequentially
	☒	Other cases

Rated power supply .....:	Voltage and Frequency	
	☐	AC: 220 – 240 V, 50/60 Hz
	☒	DC: 12.0Vdc
	☐	Adapter: ……
	☐	Battery:……
Mounting position.....:	☐	Table top equipment
	☐	Wall/Ceiling mounted equipment
	☒	Floor standing equipment
	☐	Hold-mounted equipment
	☐	Other: Module

1.2 Antenna Information

Antenna serial number ..... :	S161TC-915			
Antenna Delivery ..... :	☒	1TX + 1RX		
	☐	2TX + 2RX		
	☐	Others:……		
Antenna technology..... :	☒	SISO		
	☐	MIMO	☐	CDD
			☐	Beam-forming
Antenna Type..... :	☒	External	☒	Dipole
			☐	Sectorized
			☐	PCB
	☐	Internal	☐	FPC
			☐	PCB
			☐	Metal Monopole Antenna
			☐	Ceramic chip
			☐	Others……..
Antenna Gain..... :	2.50 dBi			

1.3 Channel List

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	902 MHz	2	915 MHz	3	928 MHz	N/A	N/A

Note: The General Description of the Item, antenna information,Test Data Rate and Channel List in clause 1 are provided and confirmed by the client.

2 DESCRIPTION OF TEST SETUP

2.1 Operating mode(s) used for tests

During the tests the following operating mode(s) has(have) been used.

Test Mode	Mode 1: Transmit by SRD 900

Note : For client device, radiated tests was verified over X, Y, Z axis, and shown the worst case Z axis on this report.

2.2 Accessories Information

Accessories Information	Brand/model name	Cable		
		Length used during test [m]	Attached during test	Shielded
USB Cable	N/A	10	☒	☒
USB Cable	N/A	0.5	☒	☒

2.3 Support / Auxiliary equipment / unit / Test software for the EUT

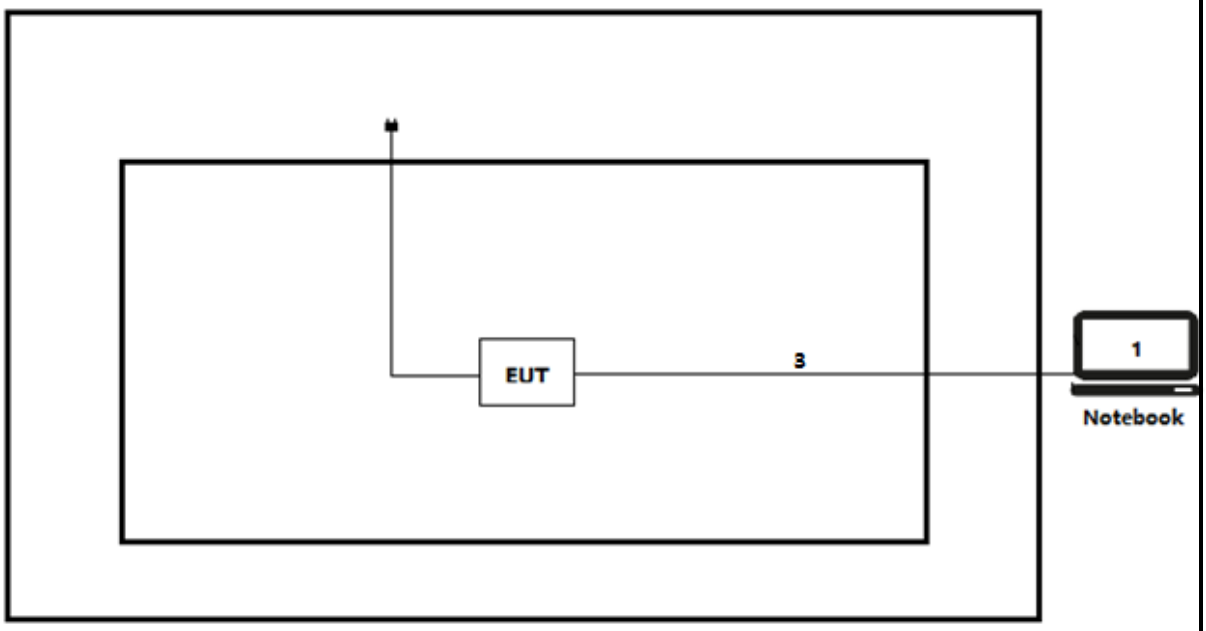
The EUT has been tested with the following auxiliary equipment / unit / software:

Auxiliary equipment	Type / Version	Manufacturer	Supplied by
Notebook	Think pad x220	Lenovo	Adapter
software	Type / Version	Manufacturer	Supplied by
PUTTY	N/A	N/A	N/A

2.4 Test Configuration / Block diagram used for tests

The following test setup / configuration / block diagram has been used during the tests:

Test setup Diagram- Ratiated test



2.5 Testing process

1	Setup the EUT as shown in Section 2.4.
2	Run the software “PUTTY” and enter the corresponding instructions on the notebook computer.
3	Open the serial port and enter the corresponding commands to configure the test mode, test channel, test power and data rate.
4	Verify that the EUT works properly.

3 VERDICT SUMMARY SECTION

This chapter presents an overview of standards and results. Refer to the next chapters for details of measured test results and applied test levels.

3.1 Standards

Standard	Year	Description
FCC CFR Title 47 Part 15 Subpart C Section 15.247	2020	Operation within the bands 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz.
ANSI C63.10	2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
KDB 558074 D01V05r02	2019	Guidance for performing compliance measurements on Digital Transmission System (DTS) operating under section 15.247
RSS-Gen Issue 5 Amendment 2	2021	General Requirements for Compliance of Radio Apparatus
RSS-247 Issue 2	2017	Digital Transmission Systems (DTSs),Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network(LE-LAN) Devices

3.2 Overview of results

For FCC

Requirement – Test case	Basic standard(s)	Verdict	Remark
Emissions in restricted frequency bands	FCC 15.247(b)(3)	PASS	---

For ISED

Requirement – Test case	Basic standard(s)	Verdict	Remark
Emissions in restricted frequency bands	RSS-Gen Issue 5 Section 8.9	PASS	---

3.3 Test Facility

USA	**:**	**FCC Designation Number: CN1199**
CA	**:**	**ISED CAB identifier: CN0040**

4 TEST RESULTS

4.1 Emissions in restricted frequency bands	VERDICT: PASS

4.1.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.205; 15.209

Restricted Bands of operation for FCC

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
0.495 – 0.505	16.69475 –16.69525	608 – 614	5.35 – 5.46
2.1735 – 2.1905	16.80425 – 16.80475	960 – 1240	7.25 – 7.75
4.125 – 4.128	25.5 – 25.67	1300 – 1427	8.025 – 8.5
4.17725 – 4.17775	37.5 – 38.25	1435 – 1626.5	9.0 – 9.2
4.20725 – 4.20775	73 – 74.6	1645.5 – 1646.5	9.3 – 9.5
6.215 – 6.218	74.8 – 75.2	1660 – 1710	10.6 – 12.7
6.26775 – 6.26825	108 – 121.94	1718.8 – 1722.2	13.25 – 13.4
6.31175 – 6.31225	123 – 138	2200 – 2300	14.47 – 14.5
8.291 – 8.294	149.9 – 150.05	2310 – 2390	15.35 – 16.2
8.362 – 8.366	156.52475 – 156.52525	2483.5 – 2500	17.7 – 21.4
8.37625 – 8.38675	156.7 – 156.9	2690 – 2900	22.01 – 23.12
8.81425 – 8.81475	162.0125 – 167.17	3260 – 3267	23.6 – 24.0
12.29 – 12.293	167.72 – 173.2	3332 – 3339	31.2 – 31.8
12.51975–12.52025	240 – 285	3345.8 – 3358	36.43 – 36.5
12.57675–12.57725	322 – 335.4	3600 – 4400	
13.36 – 13.41			

Restricted Bands of operationfor ISED

0.090 - 0.110	13.36 - 13.41	960 - 1427	9.0 - 9.2
0.495 - 0.505	16.42 - 16.423	1435 - 1626.5	9.3 - 9.5
2.1735 - 2.1905	16.69475 - 16.69525	1645.5 - 1646.5	10.6 - 12.7
3.020 - 3.026	16.80425 - 16.80475	1660 - 1710	13.25 - 13.4
4.125 - 4.128	25.5 - 25.67	1718.8 - 1722.2	14.47 - 14.5
4.17725 - 4.17775	37.5 - 38.25	2200 - 2300	15.35 - 16.2
4.20725 - 4.20775	73 - 74.6	2310 - 2390	17.7 - 21.4
5.677 - 5.683	74.8 - 75.2	2483.5 - 2500	22.01 - 23.12
6.215 - 6.218	108 - 138	2655 - 2900	23.6 - 24.0
6.26775 - 6.26825	149.9 - 150.05	3260 - 3267	31.2 - 31.8
6.31175 - 6.31225	156.52475 - 156.52525	3332 - 3339	36.43 - 36.5
8.291 - 8.294	156.7 - 156.9	3345.8 - 3358	Above 38.6
8.362 - 8.366	162.0125 - 167.17	3500 - 4400	
8.37625 - 8.38675	167.72 - 173.2	4500 - 5150	
8.41425 - 8.41475	240 - 285	5350 - 5460	
12.29 - 12.293	322 - 335.4	7250 - 7750	
12.51975 - 12.52025	399.9 - 410	8025 - 8500	

12.57675 - 12.57725	608 - 614	--	

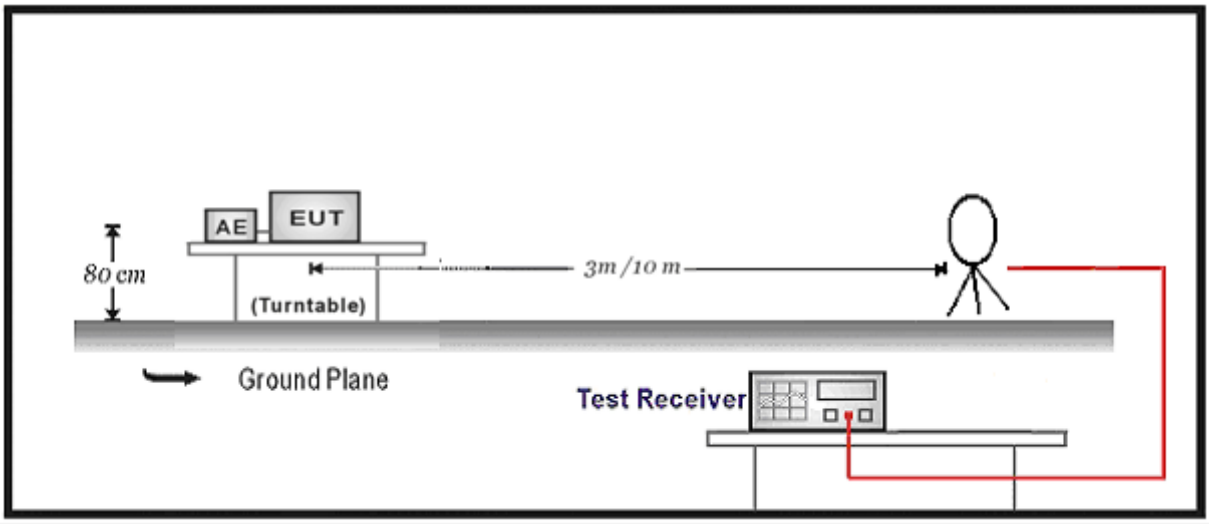
Restricted Band Emissions Limit			
Frequency (MHz)	Field strength (μ V/m)	Field strength (dB μ V/m)	Measurement distance (m)
0.009 - 0.49	2400/F(kHz)	48.5 – 13.8	300(Note 1)
0.49 - 1.705	24000/F(kHz)	33.8 - 23	30(Note 1)
1.705 - 30	30	29.5	30(Note 1)
30 -88	100	40	3(Note 2)
88-216	150	43.5	3(Note 2)
216 - 960	200	46	3(Note 2)
Above 960	500	54	3(Note 2)

Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

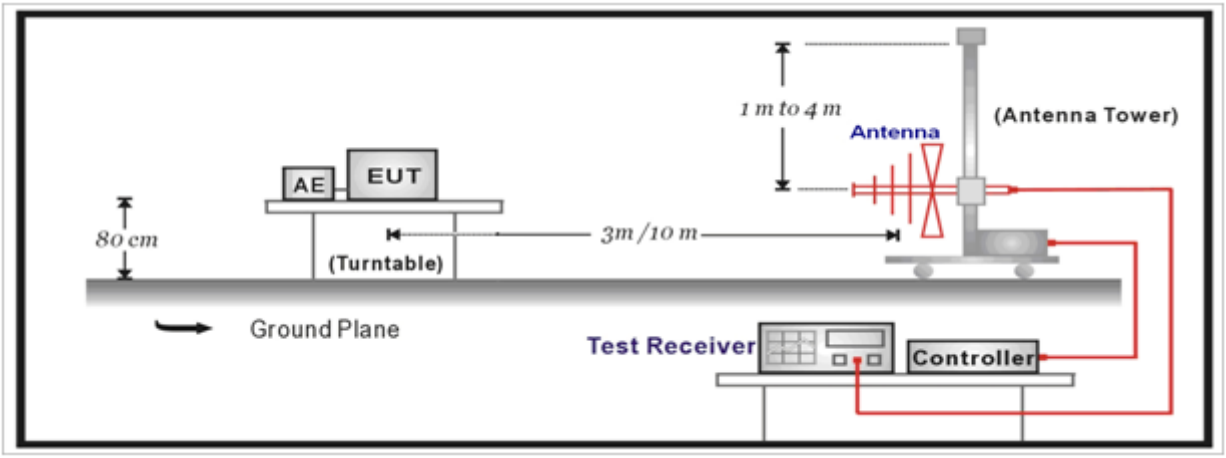
Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

4.1.2 Test Setup

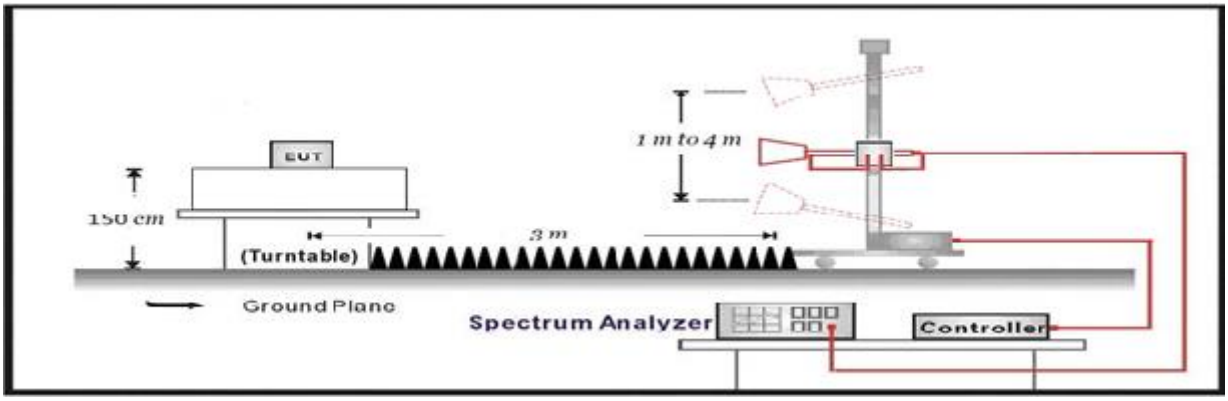
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:

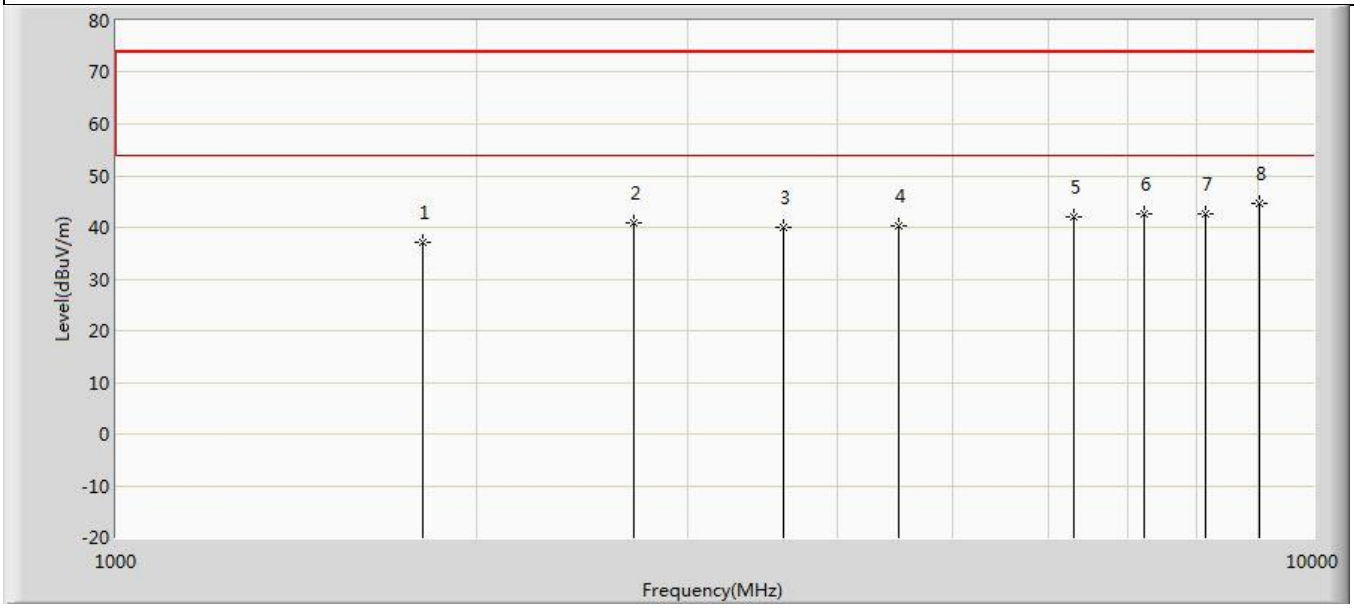


4.1.3 Test Procedure

	References Rule	Chapter	Description
☒	ANSI C63.10	11.12	Emissions in restricted frequency bands
	☒ ANSI C63.10	11.12.1	Radiated emission measurements
	☒ ANSI C63.10	6.3	Radiated spurious emission test
	☒ ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
	☒ ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
	☒ ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz
	☐ ANSI C63.10	11.12.2	Antenna-port conducted measurements
	☐ ANSI C63.10	11.12.2.3	Quasi-peak measurement procedure
	☐ ANSI C63.10	11.12.2.4	Peak power measurement procedure
	☐ ANSI C63.10	11.12.2.5	Average power measurement procedures
	☐ ANSI C63.10	11.12.2.5.1	Trace averaging with continuous EUT transmission at full power
	☐ ANSI C63.10	11.12.2.5.2	Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction
	☐ ANSI C63.10	11.12.2.5.3	Reduced VBW averaging across ON and OFF times of the EUT transmissions with max hold

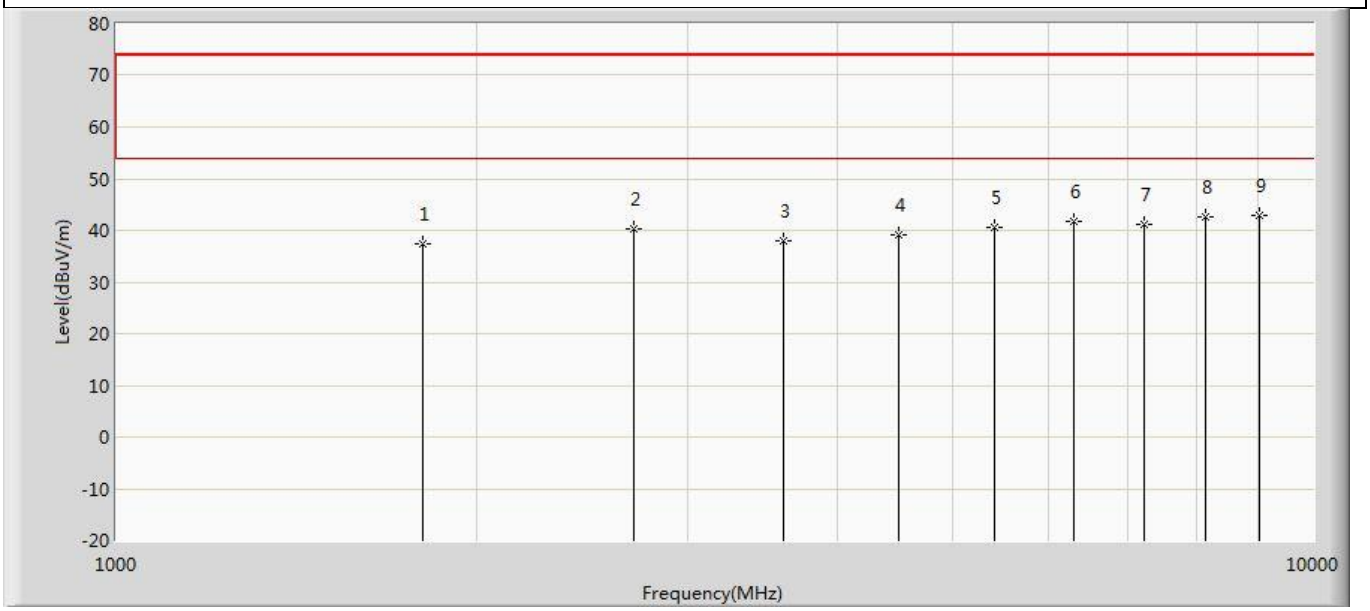
4.1.4 Test Data

Profile: 22B0907R	Page No.: 13
Engineer: Yuliu	
Site: AC5	Time: 2022/12/29 - 21:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: ICG160	Power: DC 12Vdc
Note: Mode 1：Transmit at 902MHz by SRD	



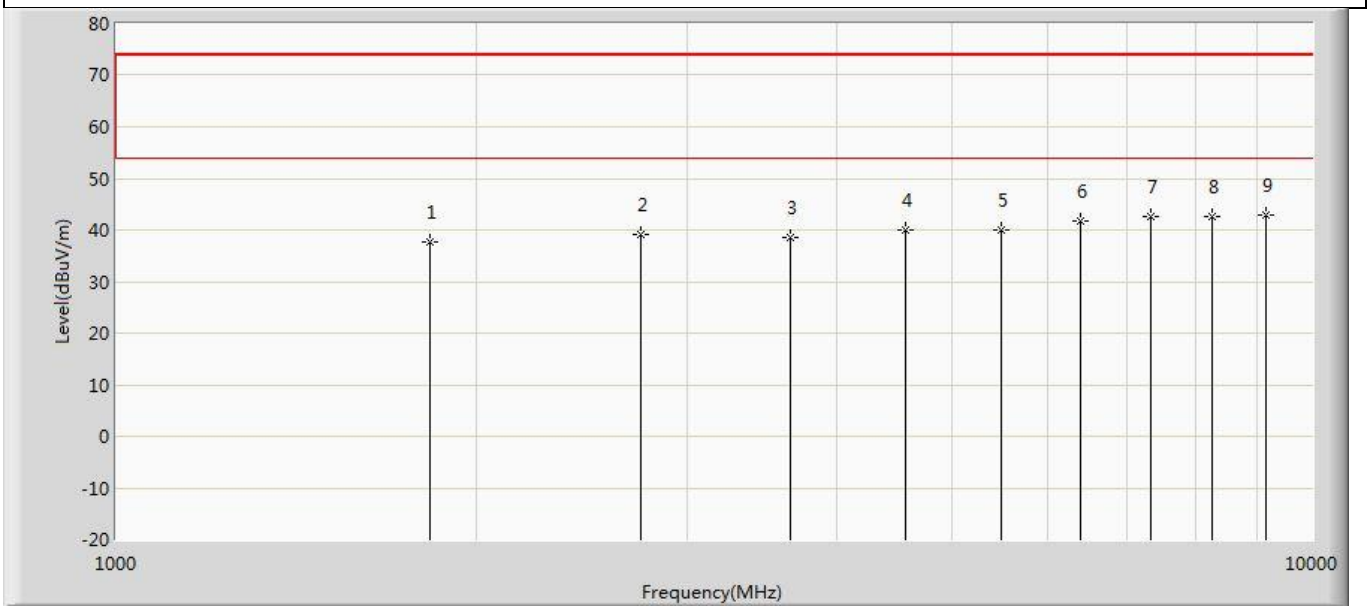
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		1804.000	37.208	56.478	-36.792	74.000	-19.270	PK
2		2706.000	40.989	58.259	-33.011	74.000	-17.270	PK
3		3608.000	39.934	56.840	-34.066	74.000	-16.906	PK
4		4510.000	40.283	55.676	-33.717	74.000	-15.393	PK
5		6314.000	42.010	53.151	-31.990	74.000	-11.141	PK
6		7216.000	42.538	53.430	-31.462	74.000	-10.893	PK
7		8118.000	42.732	53.253	-31.268	74.000	-10.522	PK
8	*	9020.000	44.649	54.077	-29.351	74.000	-9.429	PK

Profile: 22B0907R	Page No.: 14
Engineer: Yuliu	
Site: AC5	Time: 2022/12/29 - 21:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: ICG160	Power: DC 12Vdc
Note: Mode 1：Transmit at 902MHz by SRD	



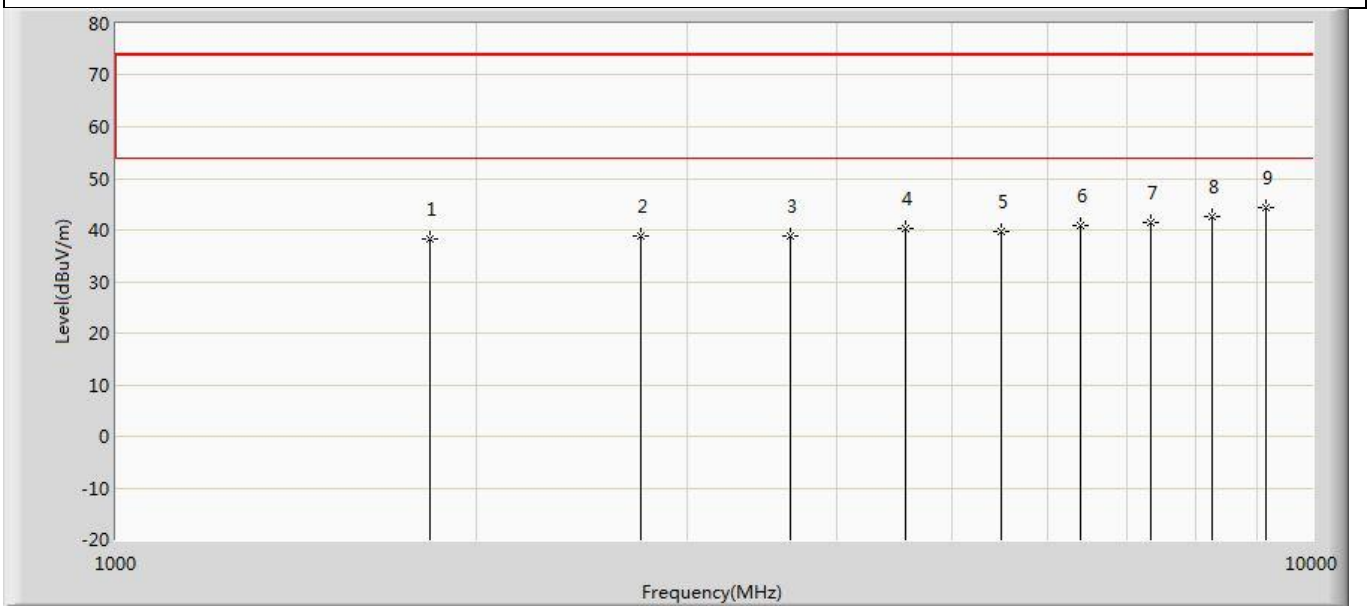
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		1804.000	37.252	56.522	-36.748	74.000	-19.270	PK
2		2706.000	40.306	57.576	-33.694	74.000	-17.270	PK
3		3608.000	37.991	54.897	-36.009	74.000	-16.906	PK
4		4510.000	38.994	54.387	-35.006	74.000	-15.393	PK
5		5412.000	40.710	54.027	-33.290	74.000	-13.318	PK
6		6314.000	41.681	52.822	-32.319	74.000	-11.141	PK
7		7216.000	41.186	52.078	-32.814	74.000	-10.893	PK
8		8118.000	42.580	53.101	-31.420	74.000	-10.522	PK
9	*	9020.000	42.809	52.237	-31.191	74.000	-9.429	PK

Profile: 22B0907R	Page No.: 35
Engineer: Yuliu	
Site: AC5	Time: 2022/12/29 - 19:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: ICG160	Power: DC 12V
Note: Mode 1：Transmit at 915MHz by SRD	



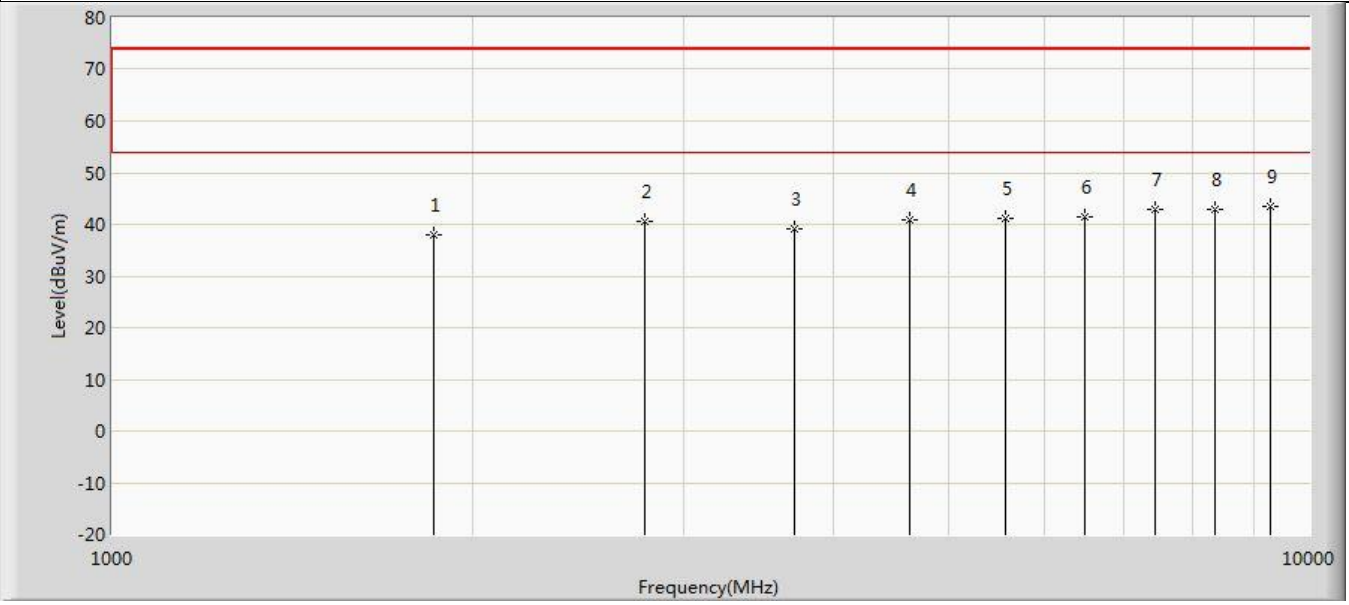
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		1830.000	37.598	56.665	-36.402	74.000	-19.067	PK
2		2745.000	39.251	56.672	-34.749	74.000	-17.421	PK
3		3660.000	38.535	55.209	-35.465	74.000	-16.674	PK
4		4575.000	39.912	55.269	-34.088	74.000	-15.356	PK
5		5490.000	39.904	53.112	-34.096	74.000	-13.208	PK
6		6405.000	41.790	53.070	-32.210	74.000	-11.280	PK
7		7320.000	42.541	53.409	-31.459	74.000	-10.868	PK
8		8235.000	42.568	53.306	-31.432	74.000	-10.738	PK
9	*	9150.000	42.798	51.909	-31.202	74.000	-9.112	PK

Profile: 22B0907R	Page No.: 36
Engineer: Yuliu	
Site: AC5	Time: 2022/12/29 - 19:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: ICG160	Power: DC 12V
Note: Mode 1：Transmit at 915MHz by SRD	



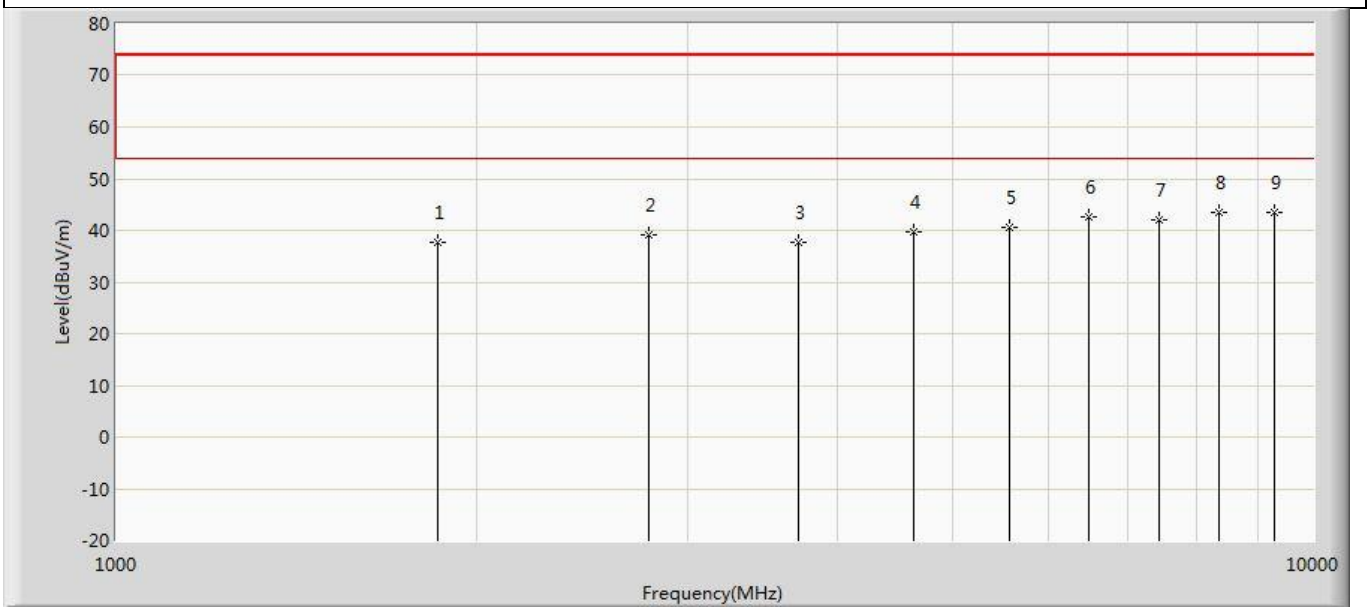
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		1830.000	38.381	57.448	-35.619	74.000	-19.067	PK
2		2745.000	38.830	56.251	-35.170	74.000	-17.421	PK
3		3660.000	38.744	55.418	-35.256	74.000	-16.674	PK
4		4575.000	40.191	55.548	-33.809	74.000	-15.356	PK
5		5490.000	39.781	52.989	-34.219	74.000	-13.208	PK
6		6405.000	40.897	52.177	-33.103	74.000	-11.280	PK
7		7320.000	41.493	52.361	-32.507	74.000	-10.868	PK
8		8235.000	42.684	53.422	-31.316	74.000	-10.738	PK
9	*	9150.000	44.220	53.331	-29.780	74.000	-9.112	PK

Profile: 22B0907R	Page No.: 15
Engineer: Yuliu	
Site: AC5	Time: 2022/12/29 - 21:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: ICG160	Power: DC 12Vdc
Note: Mode 1：Transmit at 928MHz by SRD	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		1856.000	38.112	57.004	-35.888	74.000	-18.892	PK
2		2784.000	40.713	58.060	-33.287	74.000	-17.346	PK
3		3712.000	39.130	55.793	-34.870	74.000	-16.663	PK
4		4640.000	40.775	55.903	-33.225	74.000	-15.128	PK
5		5568.000	41.270	54.053	-32.730	74.000	-12.784	PK
6		6496.000	41.324	52.867	-32.676	74.000	-11.542	PK
7		7424.000	42.810	53.375	-31.190	74.000	-10.565	PK
8		8352.000	42.965	54.024	-31.035	74.000	-11.060	PK
9	*	9280.000	43.386	52.098	-30.614	74.000	-8.712	PK

Profile: 22B0907R	Page No.: 16
Engineer: Yuliu	
Site: AC5	Time: 2022/12/29 - 21:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: ICG160	Power: DC 12Vdc
Note: Mode 1：Transmit at 928MHz by SRD	



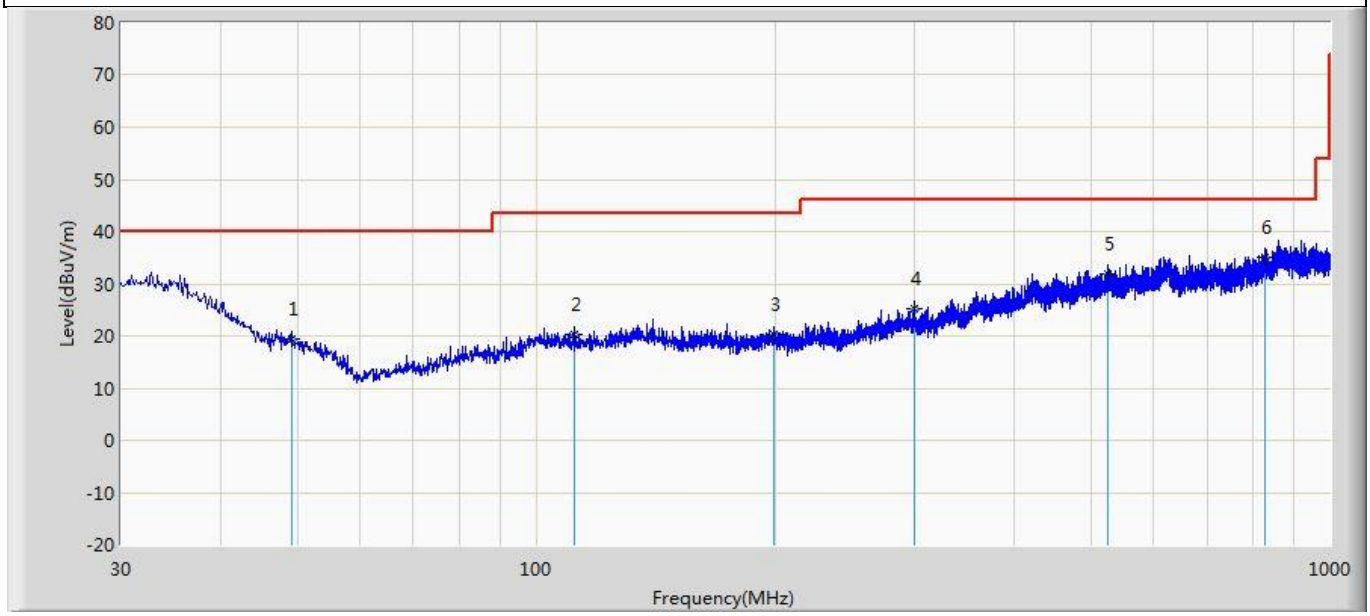
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		1856.000	37.646	56.538	-36.354	74.000	-18.892	PK
2		2784.000	39.176	56.523	-34.824	74.000	-17.346	PK
3		3712.000	37.667	54.330	-36.333	74.000	-16.663	PK
4		4640.000	39.771	54.899	-34.229	74.000	-15.128	PK
5		5568.000	40.460	53.243	-33.540	74.000	-12.784	PK
6		6496.000	42.545	54.088	-31.455	74.000	-11.542	PK
7		7424.000	41.888	52.453	-32.112	74.000	-10.565	PK
8		8352.000	43.343	54.402	-30.657	74.000	-11.060	PK
9	*	9280.000	43.587	52.299	-30.413	74.000	-8.712	PK

Note:

1. Measured Level = Reading Level + Factor.
2. The test frequency range, 9kHz~30MHz, worst case are at least 20dB below the limits, therefore no data appear in the report.
3. This limit applies for both peak and average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.
4. The points in graph are the highest data in test frequency range.
5. We evaluated all the batteries and only showed the worst data.

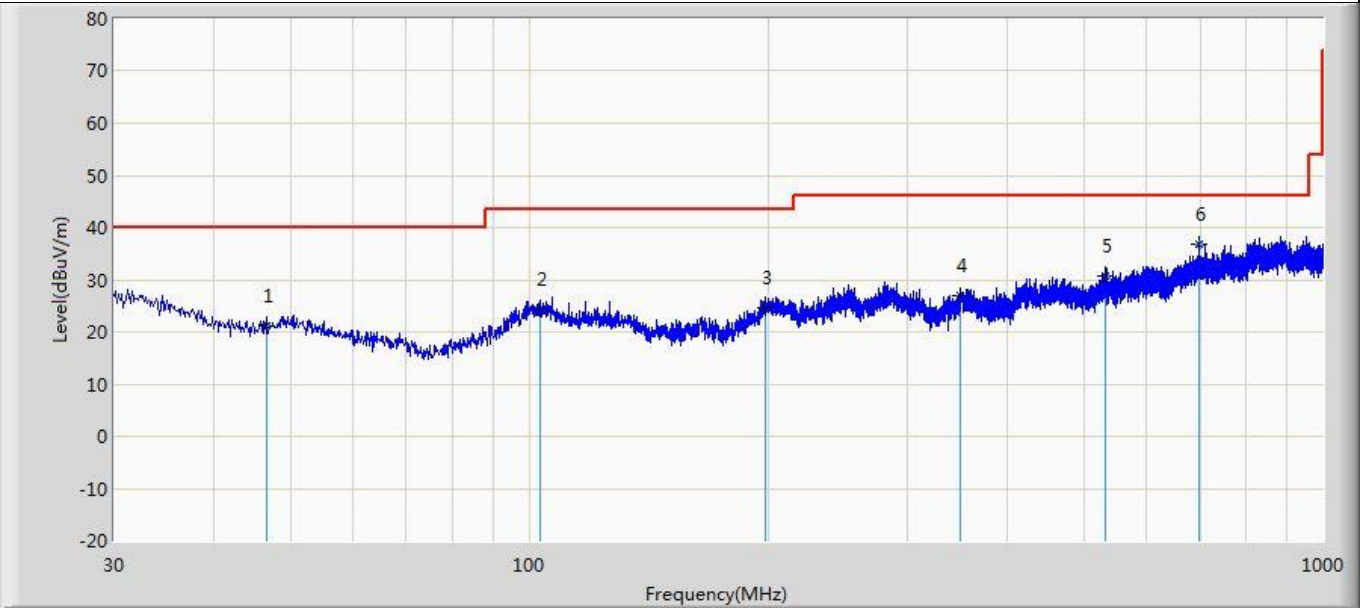
The worst case of Radiated Emission below 1GHz:

Profile: 22B0907R	Page No.: 5
Engineer: Yuliu	
Site: AC3	Time: 2023/01/05 - 20:40
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: AC3_3M(30-1000M)	Polarity: Horizontal
EUT: ICG160	Power: DC 12Vdc
Note: Transmit at 928MHz by SRD	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		49.158	19.362	3.332	-20.638	40.000	16.030	QP
2		111.965	20.146	3.675	-23.354	43.500	16.471	QP
3		199.144	20.393	2.635	-23.107	43.500	17.759	QP
4		299.296	25.342	4.688	-20.658	46.000	20.654	QP
5		524.943	31.901	2.821	-14.099	46.000	29.080	QP
6	*	828.068	35.193	3.483	-10.807	46.000	31.711	QP

Profile: 22B0907R	Page No.: 6
Engineer: Yuliu	
Site: AC3	Time: 2023/01/05 - 20:41
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: AC3_3M(30-1000M)	Polarity: Vertical
EUT: ICG160	Power: DC 12Vdc
Note: Transmit at 928MHz by SRD	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		46.611	21.028	2.687	-18.972	40.000	18.342	QP
2		103.356	24.393	2.196	-19.107	43.500	22.196	QP
3		198.538	24.617	1.509	-18.883	43.500	23.108	QP
4		349.858	26.951	2.064	-19.049	46.000	24.887	QP
5		532.703	30.749	3.647	-15.251	46.000	27.102	QP
6	*	698.573	36.763	5.952	-9.237	46.000	30.811	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp)

5 TEST SETUP PHOTO AND EUT PHOTO

Remark: The test setup photo and EUT Photo please see appendix.

The End