中认信通
CHINA CERTIFICATION ICT CO.,LTD (DONGGUAN)

ACCREDITED
TESTING LABORATORY
CERTIFICATE # 6356.01

TEST REPORT

Applicant: **Shenzhen Jinghua phase control Co.,LTD**

Address: 912 5A Building,ECO-Technology Park,Yuehai street,Nanshan district,Shenzhen city,Guandong province,China

FCC ID: **2A784JRG6TAOPPUB**

Product Name: **JR_G6T_AOP_PUB**

Model: **JR_G6T_AOP_PUB**

Standard(s): **47 CFR Part 15, Subpart C(15.255)**
ANSI C63.10-2013

The above equipment has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

Report Number: **CR22080007-00AM1**

Date Of Issue: **2022-10-21**

Reviewed By: **Sun Zhong**

Sun Zhong

Title: Manager

Test Laboratory: **China Certification ICT Co., Ltd (Dongguan)**
No. 113, Pingkang Road, Dalang Town, Dongguan,
Guangdong, China
Tel: +86-769-82016888

Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 442868, the FCC Designation No. : CN1314.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0123.

Declarations

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol "▲". Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

This report cannot be reproduced except in full, without prior written approval of the Company.

This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

This report may contain data that are not covered by the accreditation scope and shall be marked with an asterisk "★".

CONTENTS

TEST FACILITY 2
DECLARATIONS 2
DOCUMENT REVISION HISTORY 5
1. GENERAL INFORMATION 6
1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT) 6
1.2 DESCRIPTION OF TEST CONFIGURATION 7
1.2.2 Support Equipment List and Details 7
1.2.3 Support Cable List and Details 7
1.2.4 Block Diagram of Test Setup 8
1.3 FAR FIELD BOUNDARY CALCULATIONS 9
1.4 MEASUREMENT UNCERTAINTY 10
2. SUMMARY OF TEST RESULTS 11
3. REQUIREMENTS AND TEST PROCEDURES 12
3.1 AC LINE CONDUCTED EMISSIONS 12
3.1.1 Applicable Standard 12
3.1.2 EUT Setup 13
3.1.3 EMI Test Receiver Setup 13
3.1.4 Test Procedure 14
3.1.5 Corrected Amplitude & Margin Calculation 14
3.2 RADIATED EMISSIONS 15
3.2.1 Applicable Standard 15
3.2.2 EUT Setup 15
3.2.3 EMI Test Receiver & Spectrum Analyzer Setup 17
3.2.4 Test Procedure 17
3.2.5 Corrected Amplitude & Margin Calculation 17
3.3 20DB EMISSION BANDWIDTH: 18
3.3.1 Applicable Standard 18
3.3.2 EUT Setup 18
3.3.3 Test Procedure 18
3.4 EQUIVALENT ISOTROPICALLY RADIATED POWER (EIRP) 19
3.4.1 Applicable Standard 19
3.4.2 Test Procedure 19
3.5 PEAK CONDUCTED OUTPUT POWER 20
3.5.1 Applicable Standard 20
3.5.2 Test Procedure 20
3.6 OPERATION RESTRICTION AND GROUP INSTALLTION 21
3.6.1 Applicable Standard 21
3.6.2 Result of Operation Restriction 21
3.6.3 Result of Group installation 21
3.7 ANTENNA REQUIREMENT 21

3.7.1 Applicable Standard....21
3.7.2 Judgment....21
4. TEST DATA AND RESULTS....22
4.1 AC LINE CONDUCTED EMISSIONS....22
4.2 RADIATION SPURIOUS EMISSIONS....25
4.3 20 DB EMISSION BANDWIDTH:....36
4.4 EQUIVALENT ISOTROPICALLY RADIATED POWER (EIRP):....38
4.5 PEAK CONDUCTED OUTPUT POWER:....40
4.6 FREQUENCY STABILITY:....42
5. RF EXPOSURE EVALUATION....43
5.1 APPLICABLE STANDARD....43
5.2 MEASUREMENT RESULT....43

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	CR22080007-00A	Original Report	2022-09-09
1	CR2208007-00AM1	Revised Report	2022-10-21

Note: This report is to supersede the test report CR2208007-00A which issued on 2022-09-09.

.

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

EUT Name:	JR_G6T_AOP_PUB
EUT Model:	JR_G6T_AOP_PUB
Operation Frequency Range:	61.2-63.9 GHz
Modulation Type:	FMCW
Rated Input Voltage:	DC 5V
Serial Number:	CR22080007-RF-S1
EUT Received Date:	2022.08.11
EUT Received Status:	Good

Antenna Information Detail▲:

Antenna Manufacturer	Antenna Type	input impedance (Ohm)	Antenna Gain /Frequency Range	§15.203, Requirement
Shenzhen Jinghua phase control Co.,LTD	Microstrip Patch	50	5.0 dBi/60~64GHz	**Compliance**

The Method of §15.203 Compliance:

☒Antenna must be permanently attached to the unit.

☐Antenna must use a unique type of connector to attach to the EUT.

☐Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

Accessory Information:

No Accessory.

1.2 Description of Test Configuration

1.2.1 EUT Operation Condition:

EUT Operation Mode:	The system was configured for testing in Engineering Mode, which was provided by the manufacturer. The device has 3T4R, 3TX can not simultaneously transmit.
Equipment Modifications:	No
EUT Exercise Software:	No
Engineering Mode was provided by manufacturer▲. The maximum power was configured default setting.	

1.2.2 Support Equipment List and Details

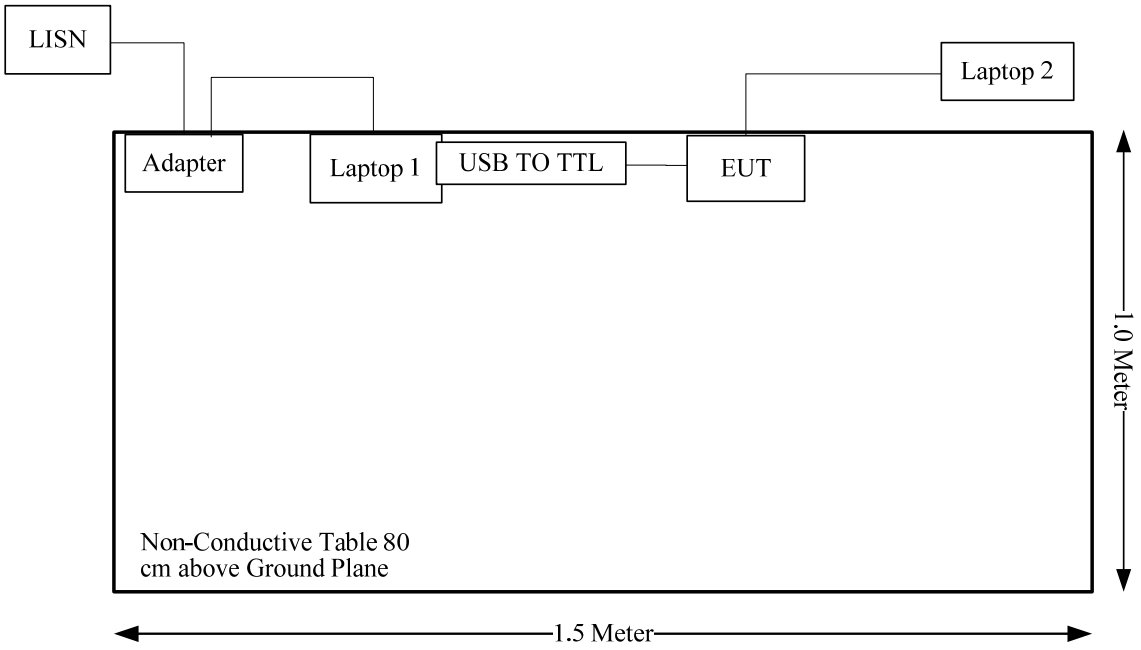
Manufacturer	Description	Model	Serial Number
Lenovo	Laptop 1	T460S	60PDTEK8
Lenovo	Adapter	ADLX65NDC3A	45N0253
Unknown	USB TO TTL	CP2102	M1
DELL	Laptop 2	E6410	GYXJ3 A00 JSD2

1.2.3 Support Cable List and Details

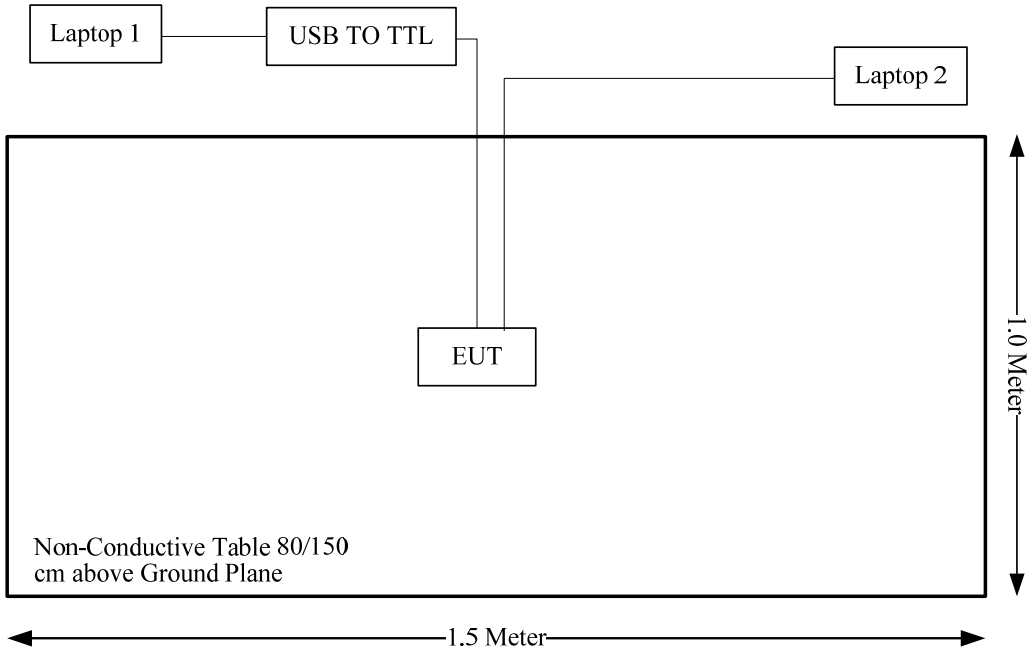
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
Cable	No	No	2	Laptop 2	EUT
Cable	No	No	0.3	USB TO TTL	EUT
Power Cable	No	No	1.5	Laptop 1	Adapter
Power Cable	No	No	1.2	Adapter	LISN

1.2.4 Block Diagram of Test Setup

Conducted emissions:



Radiated emissions:



1.3 FAR Field Boundary Calculations

The far-field boundary is given in ANSI C63.10-2013:

$$R_m = 2D^2 / \lambda$$

Where:

D is the largest dimension of the antenna aperture in m and

λ is the free-space wavelength in m at the frequency of measurement.

The minimum test distance for the frequency range 40GHz-200GHz determine as below:

Model	Frequency Range (GHz)	Largest Dimension of the Horn Antenna (mm)	Minimum Test Distance R_m (m)
M19RH	40-60	46.3	0.57
861V/385	50-75	43.7	0.64
M12RH	60-90	30.02	0.36
M08RH	90-140	19.7	0.23
M05RH	140-220	12.5	0.30

Note: The test distances used were 1.0 m from 40 GHz to 90 GHz, and 0.5 m from 90 GHz to 200 GHz, it can be seen that the EUT was always in the Far-field of the Receive Antenna during all Radiated Emissions Tests.

1.4 Measurement Uncertainty

Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

Parameter	Measurement Uncertainty
Occupied Channel Bandwidth	±5 %
Unwanted Emissions, radiated	30M~200MHz: 4.15 dB,200M~1GHz: 5.61 dB,1G~6GHz: 5.14 dB, 6G~18GHz: 5.93 dB,18G~26.5G:5.47 dB, 26.5G~40G:5.63 dB 40~60G: 4.83dB, 60G~90G: 4.94dB, 90G-140G: 5.46dB, 140G-220G: 6.00dB
Temperature	±1℃
Humidity	±5%
DC and low frequency voltages	±0.4%
Duty Cycle	1%
AC Power Lines Conducted Emission	2.8 dB (150 kHz to 30 MHz)

2. SUMMARY OF TEST RESULTS

Standard(s)/Rule(s)	Description of Test	Result
§15.207(a)	Conduction Emissions	Compliant
15.205, §15.209, §15.255(d)	Radiated Emissions	Compliant
§15.215	20dB Emission Bandwidth	Compliant
§15.255(c)(3)(4) and (e),	Transmitter Power	Compliant
§15.255 (f)	Frequency Stability	Compliant
§15.255 (a)(h)	Operation Restriction And Group Installation	Compliant
§15.203	Antenna Requirement	Compliant
§1.1307	RF Exposure Evaluation	Compliant

3. REQUIREMENTS AND TEST PROCEDURES

3.1 AC Line Conducted Emissions

3.1.1 Applicable Standard

FCC§15.207(a).

(a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

	Conducted limit (dBμV)	
Frequency of emission (MHz)	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

(b) The limit shown in paragraph (a) of this section shall not apply to carrier current systems operating as intentional radiators on frequencies below 30 MHz. In lieu thereof, these carrier current systems shall be subject to the following standards:

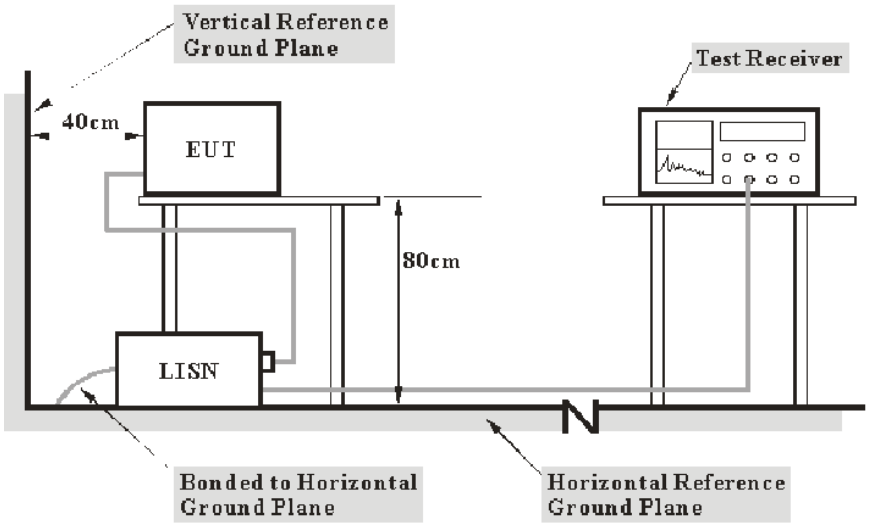
(1) For carrier current system containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.

(2) For all other carrier current systems: 1000 μV within the frequency band 535-1705 kHz, as measured using a 50 μH/50 ohms LISN.

(3) Carrier current systems operating below 30 MHz are also subject to the radiated emission limits in §15.205, §15.209, §15.221, §15.223, or §15.227, as appropriate.

(c) Measurements to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines. Devices that include, or make provisions for, the use of battery chargers which permit operating while charging, AC adapters or battery eliminators or that connect to the AC power lines indirectly, obtainig their power through another device which is connected to the AC power lines, shall be tested to demonstrate compliance with the conducted limits.

3.1.2 EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

3.1.3 EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

3.1.4 Test Procedure

During the conducted emission test, the EUT was connected to the outlet of the first LISN.

The frequency and amplitude of the six highest ac power-line conducted emissions relative to the limit, measured over all the current-carrying conductors of the EUT power cords, and the operating frequency or frequency to which the EUT is tuned (if appropriate), should be reported, unless such emissions are more than 20 dB below the limit. AC power-line conducted emissions measurements are to be separately carried out only on each of the phase ("hot") line(s) and (if used) on the neutral line(s), but not on the ground [protective earth] line(s). If less than six emission frequencies are within 20 dB of the limit, then the noise level of the measuring instrument at representative frequencies should be reported. The specific conductor of the power-line cord for each of the reported emissions should be identified. Measure the six highest emissions with respect to the limit on each current-carrying conductor of each power cord associated with the EUT (but not the power cords of associated or peripheral equipment that are part of the test configuration). Then, report the six highest emissions with respect to the limit from among all the measurements identifying the frequency and specific current-carrying conductor identified with the emission. The six highest emissions should be reported for each of the current-carrying conductors, or the six highest emissions may be reported over all the current-carrying conductors.

3.1.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor
Factor = attenuation caused by cable loss + voltage division factor of AMN

The "**Margin**" column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

3.2 Radiated Emissions

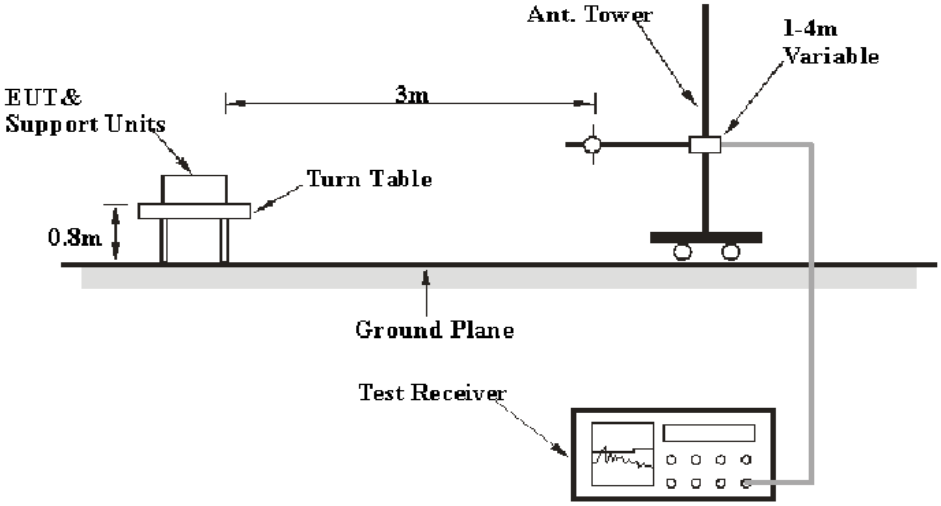
3.2.1 Applicable Standard

FCC §15.255

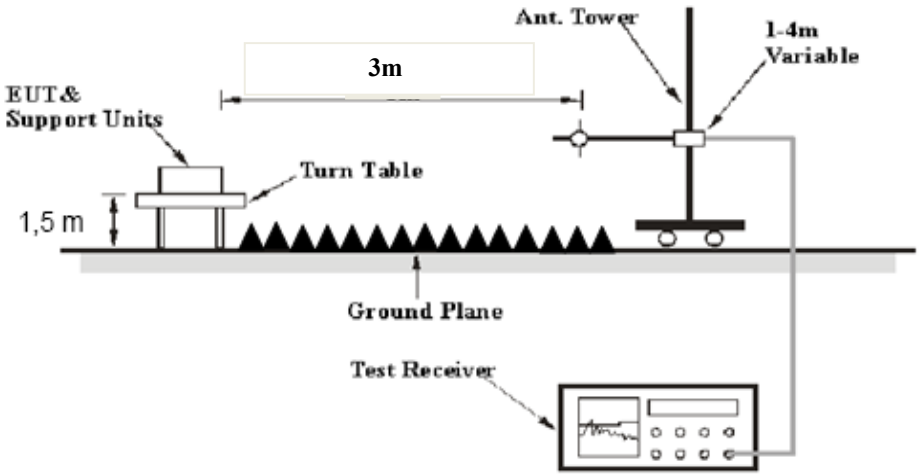
(d) Limits on spurious emissions:
(1) The power density of any emissions outside the 57-71 GHz band shall consist solely of spurious emissions.
(2) Radiated emissions below 40 GHz shall not exceed the general limits in § 15.209.
(3) Between 40 GHz and 200 GHz, the level of these emissions shall not exceed 90 pW/cm^2 at a distance of 3 meters.
(4) The levels of the spurious emissions shall not exceed the level of the fundamental emission.

3.2.2 EUT Setup

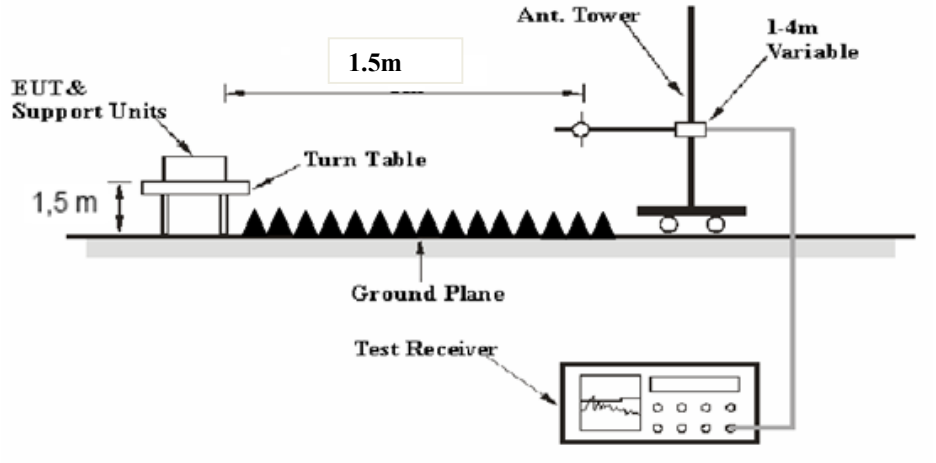
Below 1GHz:



1-26.5 GHz:



26.5-40 GHz:



Above 40GHz:

The antenna is scanned around the entire perimeter surface of the EUT, in both horizontal and vertical polarizations, at the distance of 1.0 m from 40 GHz to 90 GHz, and 0.5 m from 90 GHz to 200 GHz.

The radiated emission and out of band emission tests were performed in the 3 meters chamber test site A, using the setup accordance with the ANSI C63.10-2013 The specification used was the FCC 15.209/15.205 and FCC 15.255 limits.

3.2.3 EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 200 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Detector
30 MHz – 1000 MHz	120 kHz	300 kHz	120 kHz	QP
1-40 GHz	1MHz	3 MHz	/	PK
	1MHz	10 Hz	/	Ave
40 GHz – 200 GHz	1MHz	3 MHz	/	PK

If the maximized peak measured value complies with under the QP/Average limit more than 6dB, then it is unnecessary to perform an QP/Average measurement.

3.2.4 Test Procedure

Refer to ANSI C63.10-2013 Clauses 9.9, 9.12, and 9.13.

A Maximizing procedure was performed to ensure that the highest emissions from the EUT were actually measured in all of the Test Arrangements of the EUT and Local Support Equipment.

In accordance with FCC Rules Part 15 Subpart A Section 15.35, from 30 MHz to 1 GHz all radiated emissions measurements were made using a Quasi-peak Detector, and from 1 GHz to 40 GHz, all radiated emissions measurements were made using a Peak Detector and CISPR Average Detector. In accordance with FCC Rules Part 15 Subpart C Section 15.255, from 40 GHz to 200 GHz, all radiated emissions measurements were made using a Peak Detector.

According to C63.10, the 26.5-40GHz test result shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade from 3m to 1.5m

Distance extrapolation factor =20 log (specific distance [3m]/test distance [1.5m]) dB= 6.02 dB

All emissions under the average limit and under the noise floor have not recorded in the report.

3.2.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Factor = Antenna Factor + Cable Loss- Amplifier Gain

For 30MHz-1GHz:
Result = Reading + Factor

For 1GHz-40GHz
Result = Reading + Factor-Distance extrapolation Factor

The "**Margin**" column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

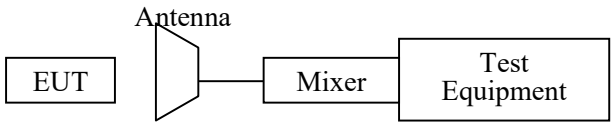
3.3 20dB Emission Bandwidth:

3.3.1 Applicable Standard

FCC §15.215

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. In the case of intentional radiators operating under the provisions of subpart E, the emission bandwidth may span across multiple contiguous frequency bands identified in that subpart. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

3.3.2 EUT Setup



3.3.3 Test Procedure

a) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, unless otherwise specified by the applicable requirement.
b) Set the video bandwidth (VBW) ≥ 3×RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.
g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20 dB relative to the maximum level measured in the fundamental emission.

3.4 Equivalent Isotropically Radiated Power (EIRP)

3.4.1 Applicable Standard

FCC §15.255(c)

(c) Within the 57-71 GHz band, emission levels shall not exceed the following equivalent isotropically radiated power (EIRP):

(3) For fixed field disturbance sensors other than those operating under the provisions of paragraph (c)(2) of this section, and short-range devices for interactive motion sensing, the peak transmitter conducted output power shall not exceed −10 dBm and the peak EIRP level shall not exceed 10 dBm.
(4) The peak power shall be measured with an RF detector that has a detection bandwidth that encompasses the 57-71 GHz band and has a video bandwidth of at least 10 MHz. The average emission levels shall be measured over the actual time period during which transmission occurs.

3.4.2 Test Procedure

Refer to ANSI C63.10-2013 Clause 9.11

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

3.5 Peak Conducted Output Power

3.5.1 Applicable Standard

FCC §15.255(c)

(c) Within the 57-71 GHz band, emission levels shall not exceed the following equivalent isotropically radiated power (EIRP):

(3) For fixed field disturbance sensors other than those operating under the provisions of paragraph (c)(2) of this section, and short-range devices for interactive motion sensing, the peak transmitter conducted output power shall not exceed −10 dBm and the peak EIRP level shall not exceed 10 dBm.
(4) The peak power shall be measured with an RF detector that has a detection bandwidth that encompasses the 57-71 GHz band and has a video bandwidth of at least 10 MHz. The average emission levels shall be measured over the actual time period during which transmission occurs.

3.5.2 Test Procedure

Refer to ANSI C63.10-2013 Clause 9.7: equation to calculate power output.

3.6 Operation Restriction And Group Installtion

3.6.1 Applicable Standard

§15.255 (a) Operation under the provisions of this section is not permitted for the following products:
(1) Equipment used on aircraft or satellites.
(2) Field disturbance sensors, including vehicle radar systems, unless the field disturbance sensors are employed for fixed operation. For the purposes of this section, the reference to fixed operation includes field disturbance sensors installed in fixed equipment, even if the sensor itself moves within the equipment.

§15.255 (h) Any transmitter that has received the necessary FCC equipment authorization under the rules of this chapter may be mounted in a group installation for simultaneous operation with one or more other transmitter(s) that have received the necessary FCC equipment authorization, without any additional equipment authorization. However, no transmitter operating under the provisions of this section may be equipped with external phase-locking inputs that permit beam-forming arrays to be realized.

3.6.2 Result of Operation Restriction

The Manufacturer declared that the EUT will not be advertised or sold for use on aircraft or satellites. The user manual includes a statement that cautions users that it is not permitted to use the product on aircraft or satellites.

3.6.3 Result of Group installation

The frequency, amplitude and phase of the transmit signal are set within the EUT. There are no external phase-locking inputs or any other means of combining two or more units together to realize a beam-forming array

3.7 Antenna Requirement

3.7.1 Applicable Standard

FCC §15.203

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 user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

a. Antenna must be permanently attached to the unit.
b. Antenna must use a unique type of connector to attach to the EUT.
c. Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

3.7.2 Judgment

Please refer to the Antenna Information detail in Section 1.

4. TEST DATA AND RESULTS

4.1 AC Line Conducted Emissions

Serial Number:	CR22080007-RF-S1	Test Date:	2022-08-25
Test Site:	CE	Test Mode:	Transmitting(Chain 0 worst the worst)
Tester:	Vic Du	Test Result:	Pass

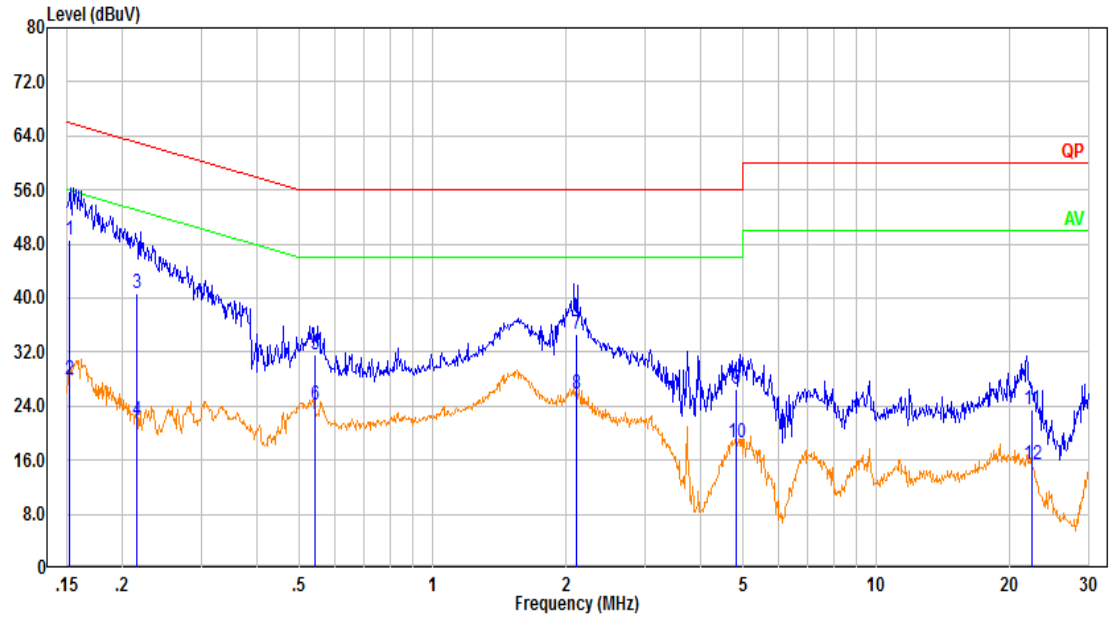
Environmental Conditions:					
Temperature: (℃)	28.1	Relative Humidity: (%)	69	ATM Pressure: (kPa)	100.2

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101134	2022-04-01	2023-03-31
R&S	EMI Test Receiver	ESR3	102726	2022-07-15	2023-07-14
MICRO-COAX	Coaxial Cable	UTIFLEX	C-0200-01	2022-08-07	2023-08-06
Audix	Test Software	E3	190306 (V9)	N/A	N/A

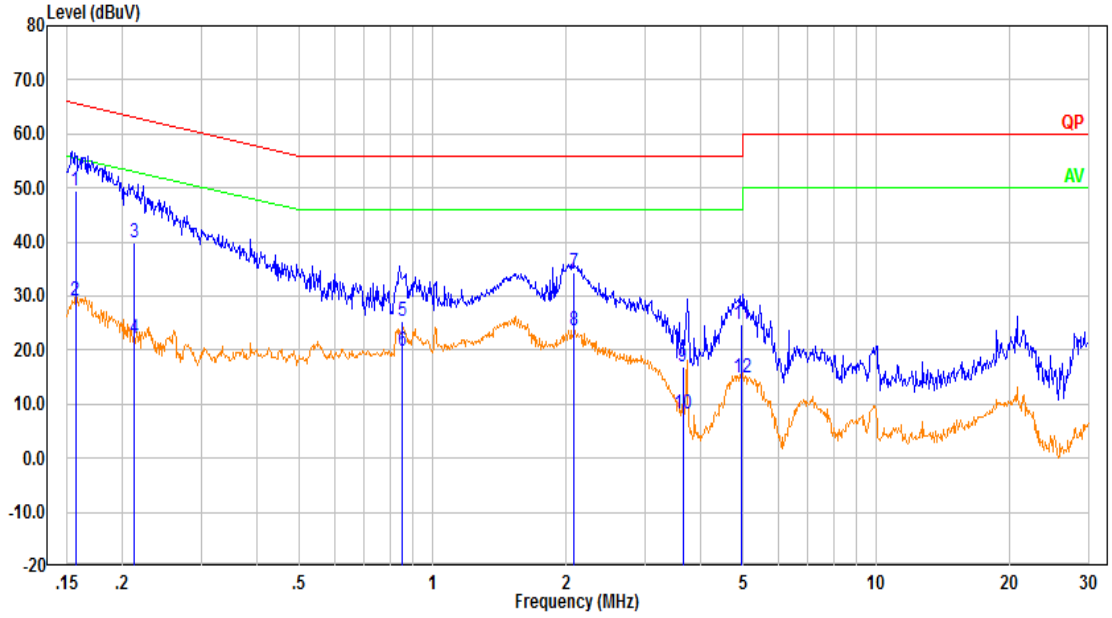
** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Line:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.152	39.01	9.61	48.62	65.90	17.28	QP
2	0.152	18.23	9.61	27.84	55.90	28.06	Average
3	0.214	31.03	9.61	40.64	63.03	22.39	QP
4	0.214	12.35	9.61	21.96	53.03	31.07	Average
5	0.541	22.05	9.61	31.67	56.00	24.33	QP
6	0.541	14.47	9.61	24.08	46.00	21.92	Average
7	2.103	25.08	9.63	34.71	56.00	21.29	QP
8	2.103	16.16	9.63	25.79	46.00	20.21	Average
9	4.822	16.85	9.66	26.51	56.00	29.49	QP
10	4.822	9.05	9.66	18.71	46.00	27.29	Average
11	22.419	13.76	9.81	23.57	60.00	36.43	QP
12	22.419	5.57	9.81	15.38	50.00	34.62	Average

Neutral:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.156	39.73	9.61	49.34	65.65	16.31	QP
2	0.156	19.56	9.61	29.17	55.65	26.48	Average
3	0.212	30.25	9.61	39.86	63.13	23.27	QP
4	0.212	12.66	9.61	22.27	53.13	30.86	Average
5	0.855	15.73	9.62	25.35	56.00	30.65	QP
6	0.855	10.25	9.62	19.87	46.00	26.13	Average
7	2.082	24.60	9.63	34.23	56.00	21.77	QP
8	2.082	13.93	9.63	23.56	46.00	22.44	Average
9	3.658	7.28	9.65	16.93	56.00	39.07	QP
10	3.658	-1.48	9.65	8.17	46.00	37.83	Average
11	4.962	15.19	9.66	24.85	56.00	31.15	QP
12	4.962	5.33	9.66	14.99	46.00	31.01	Average

4.2 Radiation Spurious Emissions

Serial Number:	CR22080007-RF-S1	Test Date:	2022-08-26~2022-08-29
Test Site:	966-2, 966-1	Test Mode:	Transmitting
Tester:	Nick Tang, Carl Xue	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25.6~26.6	Relative Humidity: (%)	53~59	ATM Pressure: (kPa)	100.2~100.4

Test Equipment List and Details:

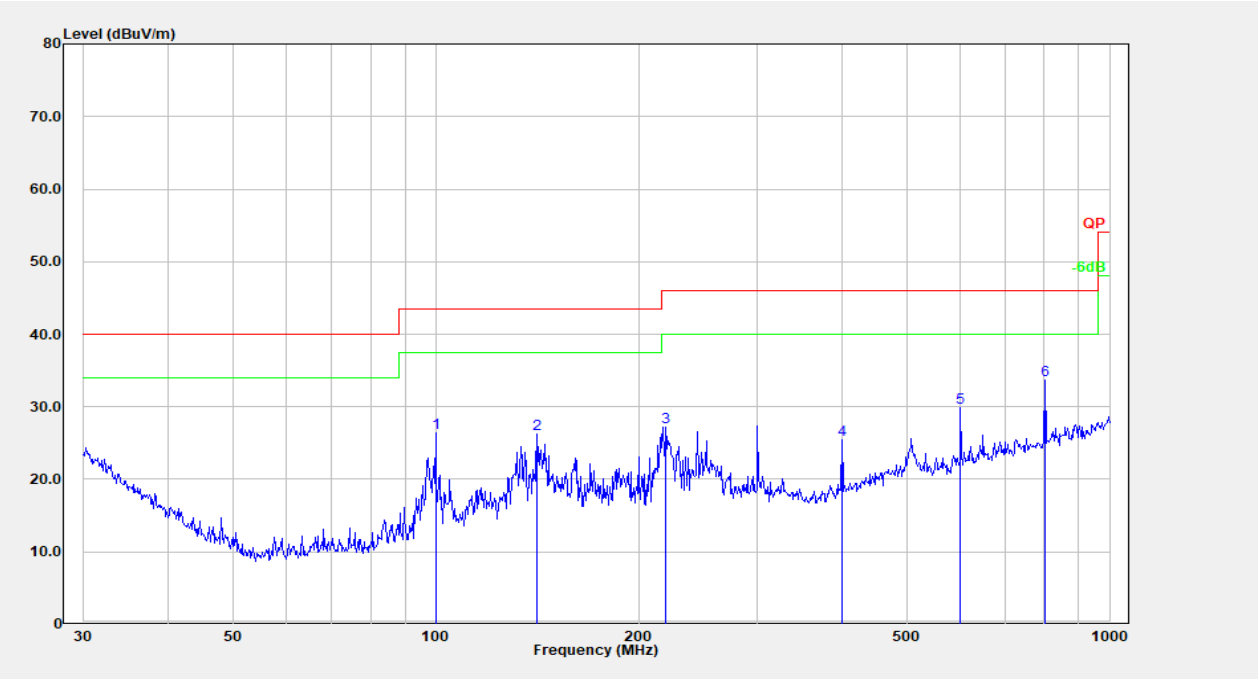
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Antenna	JB6	A082520-5	2020-10-19	2023-10-18
R&S	EMI Test Receiver	ESR3	102724	2022-07-15	2023-07-14
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0470-02	2022-07-17	2023-07-16
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0780-01	2022-07-17	2023-07-16
Sonoma	Amplifier	310N	186165	2022-07-17	2023-07-16
ETS-Lindgren	Horn Antenna	3115	9912-5985	2020-10-13	2023-10-12
R&S	Spectrum Analyzer	FSV40	101591	2022-07-15	2023-07-14
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2022-08-07	2023-08-06
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2022-08-07	2023-08-06
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2021-11-10	2022-11-09
Audix	Test Software	E3	201021 (V9)	N/A	N/A
PASTERNACK	Horn Antenna	PE9852/2F-20	112002	2021-02-05	2024-02-04
AH	Preamplifier	PAM-1840VH	190	2021-11-19	2022-11-18
MICRO-COAX	Coaxial Cable	UFB142A-1-2362-200200	235772-001	2022-08-07	2023-08-06
PASTERNACK	Horn Antenna	PE9850/2F-20	072001	2021-02-05	2024-02-04
OML	Harmonic Mixer	WR19/M19HWD	U60314-1	2020-10-16	2023-10-15
OML	Horn Antenna	M19RH	11648-03	2020-10-16	2023-10-15
OML	Harmonic Mixer	WR12/M12HWD	E60119-1	2020-10-17	2023-10-16
OML	Horn Antenna	M12RH	E60119-2	2020-10-18	2023-10-17
OML	Harmonic Mixer	WR08/M08HWD	F60315-1	2020-10-22	2023-10-21
OML	Horn Antenna	M08RH	F60315-2	2020-10-24	2023-10-23
OML	Harmonic Mixer	WR05/M05HWD	G60107-1	2020-10-25	2023-10-24
OML	Horn Antenna	M05RH	G60107-2	2020-10-26	2023-10-25
R&S	Spectrum Analyzer	FSV40	101943	2021-10-10	2022-10-09

** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:
Please refer to the below table and plots.
Note: The device can be mounted in multiple orientations, test was performed with X,Y, Z Axis according to C63.10 figure 8, the worst orientation was photographed and it`s data was recorded.

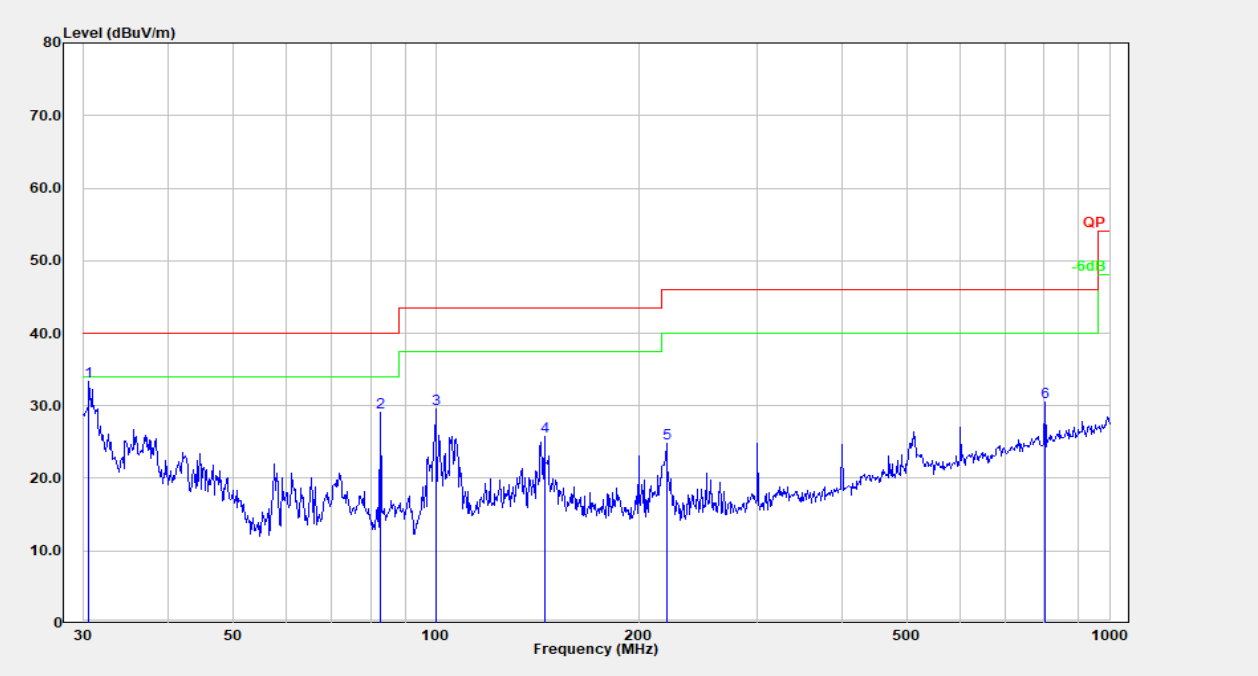
Test Data:
1) 30MHz-1GHz(Chain 0 was the worst):

Horizontal:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	99.878	40.95	-14.62	26.33	43.50	17.17	Peak
2	141.330	38.50	-12.18	26.32	43.50	17.18	Peak
3	219.075	40.20	-12.93	27.26	46.00	18.74	Peak
4	400.432	34.48	-9.00	25.49	46.00	20.51	Peak
5	601.427	35.15	-5.27	29.87	46.00	16.13	Peak
6	801.786	36.11	-2.45	33.66	46.00	12.34	Peak

Vertical:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.531	37.63	-4.20	33.43	40.00	6.57	Peak
2	82.648	46.69	-17.53	29.16	40.00	10.84	Peak
3	99.878	44.12	-14.62	29.50	43.50	14.00	Peak
4	144.842	37.92	-12.19	25.73	43.50	17.77	Peak
5	219.845	37.83	-12.96	24.88	46.00	21.12	Peak
6	801.786	33.04	-2.45	30.59	46.00	15.41	Peak

2) 1GHz-40GHz:

Chain0

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
61.2 GHz							
2399.97	42.23	PK	H	3.53	45.76	74.00	28.24
2399.97	37.10	AV	H	3.53	40.63	54.00	13.37
2399.98	37.28	PK	V	3.53	40.81	74.00	33.19
2399.98	26.49	AV	V	3.53	30.02	54.00	23.98
19389.80	46.10	PK	H	6.04	52.14	74.00	21.86
19389.80	33.05	AV	H	6.04	39.09	54.00	14.91
18975.00	45.50	PK	V	6.07	51.57	74.00	22.43
18975.00	32.11	AV	V	6.07	38.18	54.00	15.82
33688.80	45.94	PK	H	15.73	55.65	74.00	18.35
33688.80	32.76	AV	H	15.73	42.47	54.00	11.53
34369.20	45.97	PK	V	15.85	55.80	74.00	18.20
34369.20	22.28	AV	V	15.85	32.11	54.00	21.89
62.5GHz							
2399.85	42.38	PK	H	3.53	45.91	74.00	28.09
2399.85	37.46	AV	H	3.53	40.99	54.00	13.01
2399.89	36.98	PK	V	3.53	40.51	74.00	33.49
2399.89	26.70	AV	V	3.53	30.23	54.00	23.77
18980.10	46.02	PK	H	6.07	52.09	74.00	21.91
18980.10	33.04	AV	H	6.07	39.11	54.00	14.89
20008.60	45.01	PK	V	6.40	51.41	74.00	22.59
20008.60	31.93	AV	V	6.40	38.33	54.00	15.67
34350.30	46.75	PK	H	15.82	56.55	74.00	17.45
34350.30	33.52	AV	H	15.82	43.32	54.00	10.68
35254.80	46.13	PK	V	17.19	57.30	74.00	16.70
35254.80	33.05	AV	V	17.19	44.22	54.00	9.78
63.9 GHz							
2463.25	38.44	PK	H	3.63	42.07	74.00	31.93
2463.25	25.94	AV	H	3.63	29.57	54.00	24.43
2456.67	35.28	PK	V	3.63	38.91	74.00	35.09
2456.67	22.66	AV	V	3.63	26.29	54.00	27.71
18269.50	46.57	PK	H	6.13	52.70	74.00	21.30
18269.50	33.20	AV	H	6.13	39.33	54.00	14.67
19925.30	45.71	PK	V	6.33	52.04	74.00	21.96
19925.30	22.34	AV	V	6.33	28.67	54.00	25.33
39013.20	46.19	PK	H	20.69	60.86	74.00	13.14
39013.20	33.14	AV	H	20.69	47.81	54.00	6.19
37188.00	45.99	PK	V	18.81	58.78	74.00	15.22
37188.80	22.61	AV	V	18.81	35.40	54.00	18.60

Chain1

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
61.2 GHz							
2399.92	40.69	PK	H	3.53	44.22	74.00	29.78
2399.92	34.81	AV	H	3.53	38.34	54.00	15.66
2399.88	38.74	PK	V	3.53	42.27	74.00	31.73
2399.88	31.28	AV	V	3.53	34.81	54.00	19.19
19007.30	45.78	PK	H	6.08	51.86	74.00	22.14
19007.30	22.30	AV	H	6.08	28.38	54.00	25.62
19058.30	46.41	PK	V	6.07	52.48	74.00	21.52
19058.30	32.98	AV	V	6.07	39.05	54.00	14.95
34401.60	46.75	PK	H	15.89	56.62	74.00	17.38
34401.60	33.18	AV	H	15.89	43.05	54.00	10.95
36699.30	45.65	PK	V	18.34	57.97	74.00	16.03
36699.30	32.34	AV	V	18.34	44.66	54.00	9.34
62.5GHz							
2390.40	39.09	PK	H	3.49	42.58	74.00	31.42
2390.40	27.10	AV	H	3.49	30.59	54.00	23.41
1276.26	38.66	PK	V	-1.72	36.94	74.00	37.06
1276.26	25.93	AV	V	-1.72	24.21	54.00	29.79
19197.70	46.55	PK	H	6.06	52.61	74.00	21.39
19197.70	33.22	AV	H	6.06	39.28	54.00	14.72
18725.10	46.00	PK	V	5.92	51.92	74.00	22.08
18725.10	32.85	AV	V	5.92	38.77	54.00	15.23
34355.70	46.24	PK	H	15.83	56.05	74.00	17.95
34355.70	33.11	AV	H	15.83	42.92	54.00	11.08
36164.70	46.14	PK	V	17.97	58.09	74.00	15.91
36164.70	33.06	AV	V	17.97	45.01	54.00	8.99
63.9 GHz							
2391.18	35.31	PK	H	3.49	38.80	74.00	35.20
2391.18	22.82	AV	H	3.49	26.31	54.00	27.69
1248.57	39.54	PK	V	-1.70	37.84	74.00	36.16
1248.57	26.77	AV	V	-1.70	25.07	54.00	28.93
19714.50	47.18	PK	H	6.18	53.36	74.00	20.64
19714.50	34.09	AV	H	6.18	40.27	54.00	13.73
19544.50	46.18	PK	V	6.06	52.24	74.00	21.76
19544.50	33.07	AV	V	6.06	39.13	54.00	14.87
37196.10	45.79	PK	H	18.84	58.61	74.00	15.39
37196.10	32.55	AV	H	18.84	45.37	54.00	8.63
34293.60	45.78	PK	V	15.74	55.50	74.00	18.50
34293.60	32.63	AV	V	15.74	42.35	54.00	11.65

Chain2

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
61.2 GHz							
2469.10	35.41	PK	H	3.63	39.04	74.00	34.96
2469.10	22.74	AV	H	3.63	26.37	54.00	27.63
2399.89	38.72	PK	V	3.53	42.25	74.00	31.75
2399.89	30.90	AV	V	3.53	34.43	54.00	19.57
18997.10	46.47	PK	H	6.08	52.55	74.00	21.45
18997.10	33.26	AV	H	6.08	39.34	54.00	14.66
18329.00	46.05	PK	V	6.04	52.09	74.00	21.91
18329.00	32.94	AV	V	6.04	38.98	54.00	15.02
36764.10	46.37	PK	H	18.31	58.66	74.00	15.34
36764.10	33.65	AV	H	18.31	45.94	54.00	8.06
35130.60	46.59	PK	V	17.24	57.81	74.00	16.19
35130.60	33.44	AV	V	17.24	44.66	54.00	9.34
62.5GHz							
2459.76	38.60	PK	H	3.63	42.23	74.00	31.77
2459.76	25.96	AV	H	3.63	29.59	54.00	24.41
2399.00	36.00	PK	V	3.53	39.53	74.00	34.47
2399.00	23.20	AV	V	3.53	26.73	54.00	27.27
18527.90	46.22	PK	H	5.80	52.02	74.00	21.98
18527.90	33.47	AV	H	5.80	39.27	54.00	14.73
19940.60	46.30	PK	V	6.34	52.64	74.00	21.36
19940.60	33.51	AV	V	6.34	39.85	54.00	14.15
37244.70	45.89	PK	H	19.00	58.87	74.00	15.13
37244.70	22.39	AV	H	19.00	35.37	54.00	18.63
35190.00	46.61	PK	V	17.22	57.81	74.00	16.19
35190.00	33.49	AV	V	17.22	44.69	54.00	9.31
63.9 GHz							
2460.00	37.84	PK	H	3.63	41.47	74.00	32.53
2460.00	24.99	AV	H	3.63	28.62	54.00	25.38
15689.70	37.33	PK	V	22.29	59.62	74.00	14.38
15689.70	24.52	AV	V	22.29	46.81	54.00	7.19
18981.80	46.10	PK	H	6.07	52.17	74.00	21.83
18981.80	33.02	AV	H	6.07	39.09	54.00	14.91
19602.30	45.72	PK	V	6.10	51.82	74.00	22.18
19602.30	22.31	AV	V	6.10	28.41	54.00	25.59
37190.70	46.47	PK	H	18.82	59.27	74.00	14.73
37190.70	33.45	AV	H	18.82	46.25	54.00	7.75
34420.50	46.36	PK	V	15.92	56.26	74.00	17.74
34420.50	33.12	AV	V	15.92	43.02	54.00	10.98

Result = Reading + Factor- Distance extrapolation Factor
For 1-26.5GHz:
Distance extrapolation Factor =20 log (specific distance [3m]/test distance [3m]) dB= 0 dB
For 26.5-40GHz:
Distance extrapolation Factor =20 log (specific distance [3m]/test distance [1.5m]) dB= 6.02 dB

40GHz-200GHz:

Chain0

Frequency (GHz)	Receiver		Polar (H/V)	Factor (dB/m)	Field Strength (dBμV/m)	Power Density (pW/cm^2)	Limit (pW/cm^2)
	Reading (dBμV)	Detector					
61.2GHz							
48.524	30.70	PK	H	40.12	61.28	0.36	90.00
42.010	38.05	PK	V	39.10	67.61	1.53	90.00
72.525	35.63	PK	H	43.86	69.95	2.62	90.00
75.043	40.69	PK	V	43.26	74.41	7.32	90.00
90.050	42.27	PK	H	45.11	71.82	4.03	90.00
90.350	41.60	PK	V	45.15	71.19	3.49	90.00
192.142	47.11	PK	H	51.18	82.73	49.73	90.00
192.055	47.32	PK	V	51.17	82.93	52.08	90.00
62.5GHz							
48.524	29.85	PK	H	40.12	60.43	0.29	90.00
48.495	31.04	PK	V	40.12	61.62	0.39	90.00
72.482	33.81	PK	H	43.86	68.13	1.72	90.00
74.870	37.72	PK	V	44.23	72.41	4.62	90.00
90.326	41.72	PK	H	45.15	71.31	3.59	90.00
90.326	42.29	PK	V	45.15	71.88	4.09	90.00
192.315	47.25	PK	H	51.18	82.87	51.36	90.00
192.315	47.01	PK	V	51.18	82.63	48.60	90.00
63.9GHz							
47.685	30.84	PK	H	39.99	61.29	0.36	90.00
42.851	35.37	PK	V	39.23	65.06	0.85	90.00
72.438	33.87	PK	H	43.85	68.18	1.74	90.00
76.520	39.32	PK	V	43.44	73.22	5.57	90.00
93.540	41.67	PK	H	45.54	71.65	3.88	90.00
120.290	39.04	PK	V	48.03	71.51	3.76	90.00
192.315	45.86	PK	H	51.18	81.48	37.30	90.00
192.402	45.06	PK	V	51.19	80.69	31.09	90.00

Chain1

Frequency (GHz)	Receiver		Polar (H/V)	Factor (dB/m)	Field Strength (dBμV/m)	Power Density (pW/cm^2)	Limit (pW/cm^2)
	Reading (dBμV)	Detector					
61.2GHz							
48.813	30.24	PK	H	40.16	60.86	0.32	90.00
42.010	37.34	PK	V	39.10	66.90	1.30	90.00
72.135	34.68	PK	H	43.80	68.94	2.08	90.00
75.043	39.35	PK	V	43.26	73.07	5.38	90.00
91.150	41.43	PK	H	45.25	71.12	3.43	90.00
90.750	41.62	PK	V	45.20	71.26	3.55	90.00
191.708	46.97	PK	H	51.16	82.57	47.94	90.00
188.495	46.83	PK	V	51.02	82.29	44.94	90.00
62.5GHz							
48.553	30.27	PK	H	40.12	60.85	0.32	90.00
48.379	30.47	PK	V	40.10	61.03	0.34	90.00
73.003	33.67	PK	H	43.94	68.07	1.70	90.00
74.870	38.58	PK	V	44.23	73.27	5.63	90.00
90.398	42.23	PK	H	45.16	71.83	4.04	90.00
92.713	41.50	PK	V	45.44	71.38	3.64	90.00
192.142	48.22	PK	H	51.18	83.84	64.22	90.00
190.926	47.47	PK	V	51.12	83.03	53.29	90.00
63.9GHz							
48.669	30.26	PK	H	40.14	60.86	0.32	90.00
52.431	33.60	PK	V	40.73	64.79	0.80	90.00
72.525	33.48	PK	H	43.86	67.80	1.60	90.00
76.520	38.12	PK	V	43.44	72.02	4.22	90.00
91.950	41.45	PK	H	45.35	71.24	3.53	90.00
91.122	41.98	PK	V	45.24	71.66	3.89	90.00
192.402	45.91	PK	H	51.19	81.54	37.81	90.00
191.621	45.29	PK	V	51.15	80.88	32.48	90.00

Chain2

Frequency (GHz)	Receiver		Polar (H/V)	Factor (dB/m)	Field Strength (dBμV/m)	Power Density (pW/cm^2)	Limit (pW/cm^2)
	Reading (dBμV)	Detector					
61.2GHz							
48.640	29.98	PK	H	40.14	60.58	0.30	90.00
41.020	35.60	PK	V	38.95	65.01	0.84	90.00
67.793	36.06	PK	H	43.13	69.65	2.45	90.00
73.307	39.14	PK	V	43.99	73.59	6.06	90.00
90.350	42.64	PK	H	45.15	72.23	4.43	90.00
91.950	41.63	PK	V	45.35	71.42	3.68	90.00
191.795	47.15	PK	H	51.16	82.75	49.96	90.00
192.229	46.99	PK	V	51.18	82.61	48.38	90.00
62.5GHz							
48.611	30.98	PK	H	40.13	61.57	0.38	90.00
48.871	29.81	PK	V	40.17	60.44	0.29	90.00
72.612	34.30	PK	H	43.88	68.64	1.94	90.00
74.870	38.25	PK	V	44.23	72.94	5.22	90.00
104.436	40.02	PK	H	46.89	71.35	3.62	90.00
110.803	39.62	PK	V	47.62	71.68	3.91	90.00
190.579	47.13	PK	H	51.11	82.68	49.17	90.00
191.621	47.07	PK	V	51.15	82.66	48.94	90.00
63.9GHz							
48.582	30.18	PK	H	40.13	60.77	0.32	90.00
42.851	34.54	PK	V	39.23	64.23	0.70	90.00
72.959	33.73	PK	H	43.93	68.12	1.72	90.00
72.656	35.15	PK	V	43.88	69.49	2.36	90.00
92.640	42.44	PK	H	45.43	72.31	4.52	90.00
126.796	38.36	PK	V	48.32	71.12	3.43	90.00
191.708	46.66	PK	H	51.16	82.26	44.63	90.00
192.315	47.26	PK	V	51.18	82.88	51.48	90.00

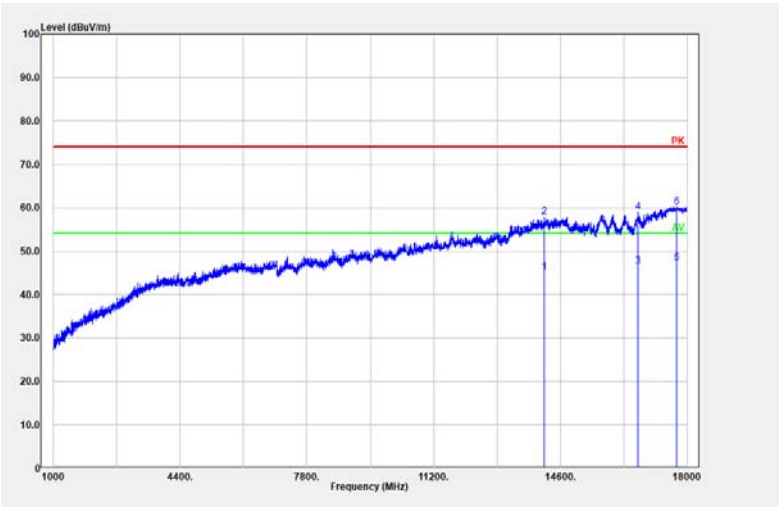
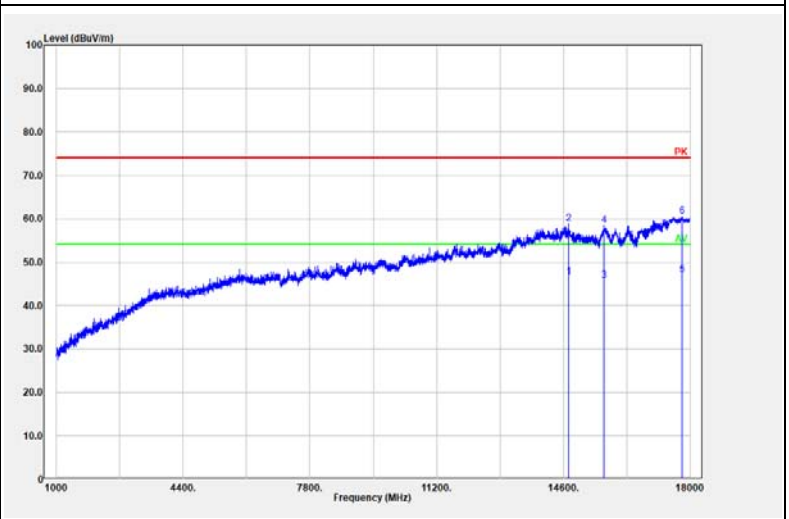
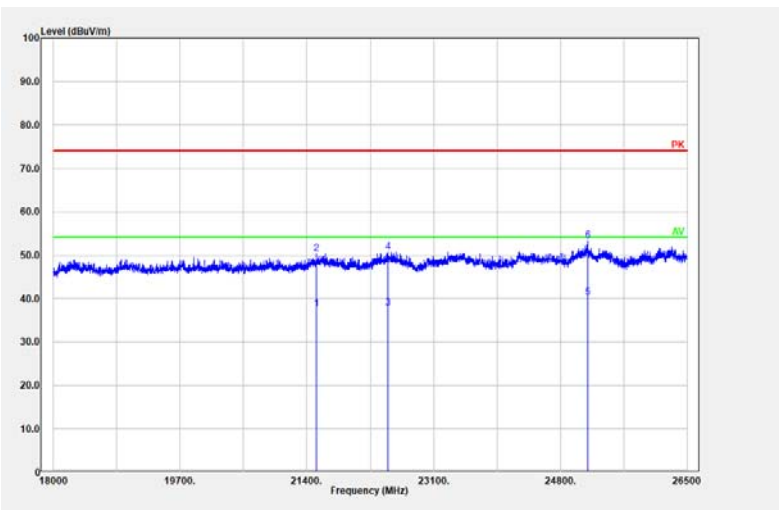
Note:
Factor = Antenna Factor
Field Strength = Reading + Factor + 20log(d_{Meas}/$d_{SpecLimit}$)
d_{Meas} is the measurement distance, in m
$d_{SpecLimit}$ is the distance specified by the limit, in m

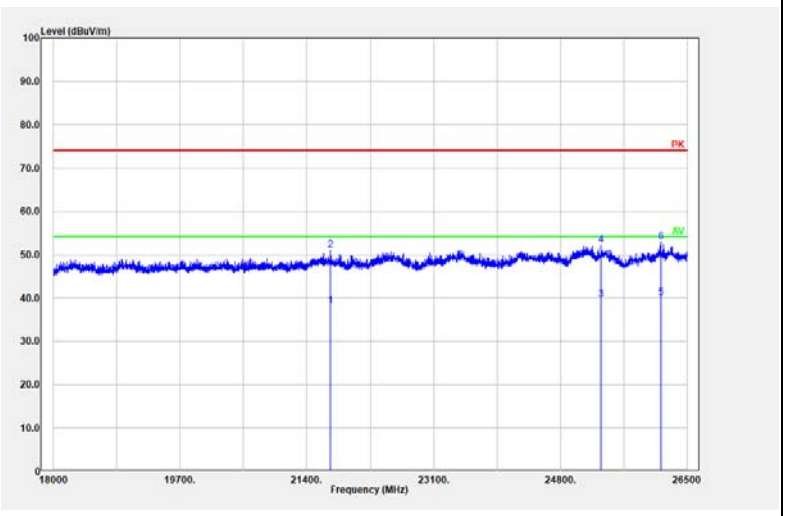
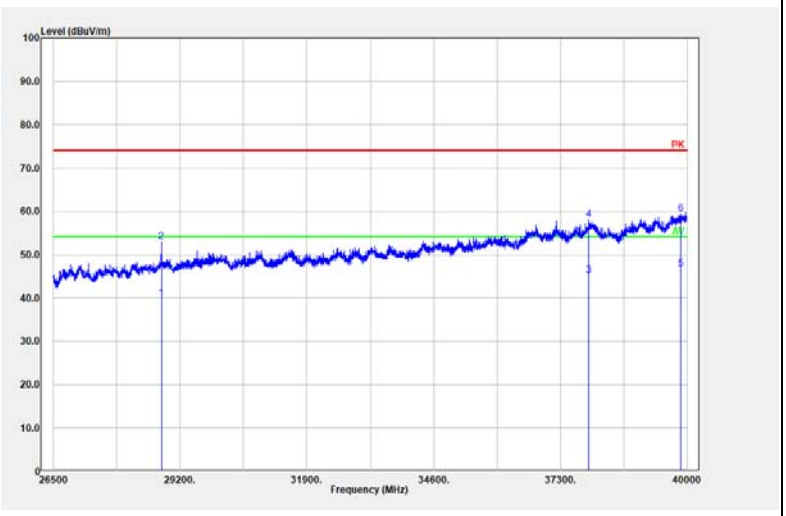
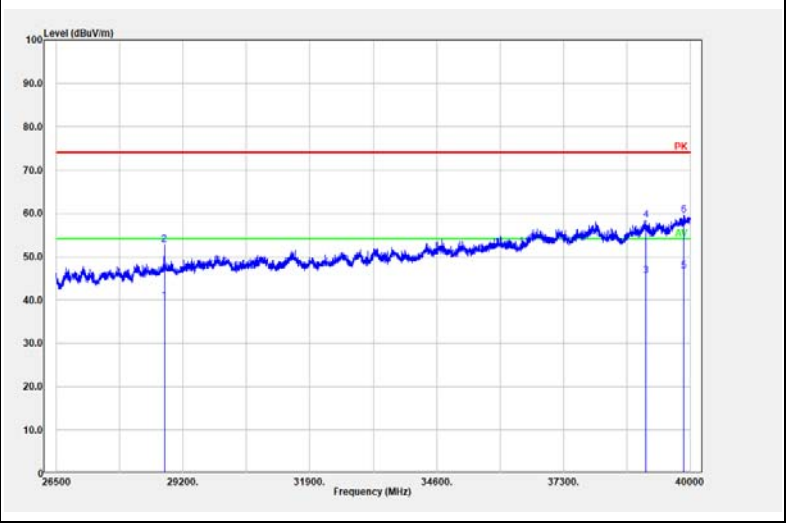
$$PD = \frac{E_{SpecLimit}^2}{377}$$

where

PD is the power density at the distance specified by the limit, in W/m^2
$E_{SpecLimit}$ is the field strength at the distance specified by the limit, in V/m

The Specified distance is 3m.

Test Plots(Worst for chain0 high Channel)	
1GHz-18GHz Horizontal	
1GHz-18GHz Vertical	
18GHz-26.5GHz Horizontal	

Test Plots(Worst for Low Channel)	
18GHz-26.5GHz Vertical	
26.5GHz-40GHz Horizontal	
26.5GHz-40GHz Vertical	

4.3 20 dB Emission Bandwidth:

Serial Number:	CR22080007-RF-S1	Test Date:	2022.08.26
Test Site:	966-1	Test Mode:	Transmitting
Tester:	Nick Tang	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25.6	Relative Humidity: (%)	59	ATM Pressure: (kPa)	100.2

Test Equipment List and Details:

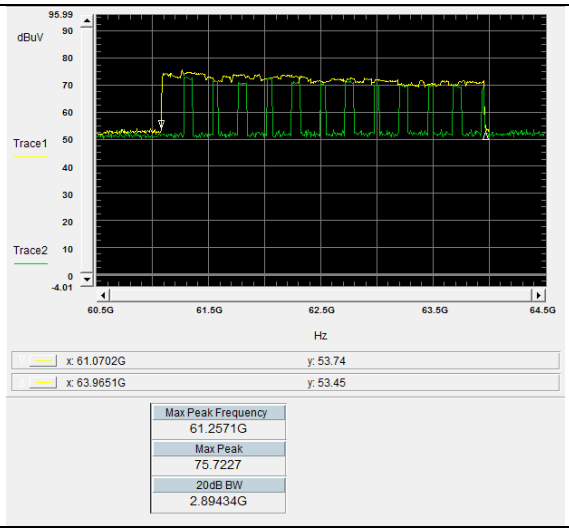
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Agilent	Spectrum Analyzer	E4440A	MY44303354	2022-07-15	2023-07-14
Agilent	Harmonic Mixer	Agilent 11970V	2521A01768	2020-11-08	2023-11-07
Flann Micowave	Horn Antenna	861V/385	738	2020-11-08	2023-11-07
BACL	Test Software	E4440A	V1.1	N/A	N/A

**** Statement of Traceability:*** *China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

Test Mode	20dB Emission Bandwidth (GHz)
Sweep	2.894
Note: Test only was performed at Chain 0.	

Occupied Bandwidth



4.4 Equivalent Isotropically Radiated Power (EIRP):

Serial Number:	CR22080007-RF-S1	Test Date:	2022.08.26
Test Site:	966-1	Test Mode:	Transmitting
Tester:	Nick Tang	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25.6	Relative Humidity: (%)	59	ATM Pressure: (kPa)	100.2

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Flann Micowave	Horn Antenna	861V/385	738	2020-11-08	2023-11-07
millitech	RF Detector	DET-15-RPFW0	A18521	2019-12-15	2022-12-15
Tektronix	Digital Phosphor Oscilloscope	TDS 3054	B015264	2022-01-05	2023-01-04

**** Statement of Traceability:*** *China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

Chain0

Frequency (GHz)	DSO		Polar (H/V)	Substituted Level (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)
	Reading (mV)	Detector					
61.20	0.015	PK	V	-50.22	24.00	-5.93	10.00
62.50	0.017	PK	V	-49.65	24.00	-5.17	10.00
63.90	0.017	PK	V	-49.95	24.00	-5.28	10.00

Chain1

Frequency (GHz)	DSO		Polar (H/V)	Substituted Level (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)
	Reading (mV)	Detector					
61.20	0.016	PK	V	-49.94	24.00	-5.65	10.00
62.50	0.016	PK	V	-49.92	24.00	-5.44	10.00
63.90	0.018	PK	V	-49.71	24.00	-5.04	10.00

Chain2

Frequency (GHz)	DSO		Polar (H/V)	Substituted Level (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)
	Reading (mV)	Detector					
61.20	0.018	PK	V	-49.43	24.00	-5.14	10.00
62.50	0.017	PK	V	-49.65	24.00	-5.17	10.00
63.90	0.017	PK	V	-49.95	24.00	-5.28	10.00

EIRP = E_{meas}+ 20log(Measurement distance) - 104.7
E_{meas} = 126.8 - 20log(λ) + Substitued level - Antenna Gain
Measurement distance = 1m

4.5 Peak Conducted Output Power:

Serial Number:	CR22080007-RF-S1	Test Date:	2022.08.26
Test Site:	966-1	Test Mode:	Transmitting
Tester:	Nick Tang	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25.6	Relative Humidity: (%)	59	ATM Pressure: (kPa)	100.2

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Flann Micowave	Horn Antenna	861V/385	738	2020-11-08	2023-11-07
millitech	RF Detector	DET-15-RPFW0	A18521	2019-12-15	2022-12-15
Tektronix	Digital Phosphor Oscilloscope	TDS 3054	B015264	2022-01-05	2023-01-04

**** Statement of Traceability:*** *China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

Chain0:

Frequency (GHz)	Peak EIPR Power (dBm)	Antenna Gain (dBi)	Peak Conducted Power (dBm)	Limit (dBm)	Margin (dB)
61.20	-5.93	5.0	-10.93	-10	0.93
62.50	-5.17	5.0	-10.17	-10	0.17
63.90	-5.28	5.0	-10.28	-10	0.28

Chain1:

Frequency (GHz)	Peak EIPR Power (dBm)	Antenna Gain (dBi)	Peak Conducted Power (dBm)	Limit (dBm)	Margin (dB)
61.20	-5.65	5	-10.65	-10	0.65
62.50	-5.44	5	-10.44	-10	0.44
63.90	-5.04	5	-10.04	-10	0.04

Chain2:

Frequency (GHz)	Peak EIPR Power (dBm)	Antenna Gain (dBi)	Peak Conducted Power (dBm)	Limit (dBm)	Margin (dB)
61.20	-5.14	5	-10.14	-10	0.14
62.50	-5.17	5	-10.17	-10	0.17
63.90	-5.28	5	-10.28	-10	0.28

Note: For radiated emissions measurements, calculated transmitter conducted output power P(con)
P(con)=EIRP-Antenna gain(dBi)

4.6 Frequency Stability:

Serial Number:	CR22080007-RF-S1	Test Date:	2022.08.26
Test Site:	RF	Test Mode:	Transmitting
Tester:	Nick Tang	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25.6	Relative Humidity: (%)	59	ATM Pressure: (kPa)	100.2

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101943	2021-10-10	2022-10-09
Agilent	Harmonic Mixer	Agilent 11970V	2521A01768	2020-11-08	2023-11-07
Flann Micowave	Horn Antenna	861V/385	738	2020-11-08	2023-11-07
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2022-04-06	2023-04-05
UNI-T	Multimeter	UT39A+	C210582554	2021-09-30	2022-09-29

**** Statement of Traceability:*** *China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

Temperature	Voltage	Frequency (GHz)			
℃	V_{DC}	f_L	f_H	f_L Limit	f_H Limit
-20	5	61.08802	63.93578	57	71
-10	5	61.08805	63.93580	57	71
0	5	61.08807	63.93584	57	71
10	5	61.08812	63.93585	57	71
20	5	61.08820	63.93590	57	71
30	5	61.08813	63.93588	57	71
40	5	61.08822	63.93589	57	71
50	5	61.08816	63.93592	57	71
20	4.6	61.08817	63.93594	57	71
20	5.5	61.08825	63.93597	57	71

Note: Test only was performed at Chain 0.

5. RF EXPOSURE EVALUATION

5.1 Applicable Standard

According to §1.1307(b)(3)(i)

(C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least $\lambda/2\pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	1,920 R^2.
1.34-30	3,450 R^2/f^2.
30-300	3.83 R^2.
300-1,500	0.0128 R^2f.
1,500-100,000	19.2R^2.

5.2 Measurement Result

Frequency (GHz)	λ/2Π (mm)	Distance (mm)	Exemption ERP		Maximum Conducted Power including Tune-up Tolerance (dBm)	Antenna Gain (dBi)	ERP (dBm)	MPE-Based Exemption
			(mW)	(dBm)				
61.2-63.9	0.78	200	768	28.85	-10	5	-7.15	Compliant

Result: The device compliant the MPE-Based Exemption at 20cm distances.

===== END OF REPORT =====