

TEST REPORT

Application No.: SZCR2506002369AT
Applicant: IPC Mobile
Address of Applicant: 17681 Mitchell N, Irvine, California 92614 United States
Manufacturer: Infinite Peripherals LLC
Address of Manufacturer: 17681 Mitchell N, Irvine, CA 92614
Factory: Concord Intelligent Technology (Huizhou) Ltd.
Address of Factory: No.3 Jiayu Road, Dongxing Sub-district, Dongjiang Science and Technology Park, Zhongkai Hi-tech Industrial

Equipment Under Test (EUT):

EUT Name: TrakBeacon
Model No.: TRKB-300 ♣
 ♣ Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
FCC ID: 2BH40-TRKB300
Standard(s) : 47 CFR Part 15 Subpart F
Date of Receipt: 2025-06-05
Date of Test: 2025-07-03 to 2025-07-17
Date of Issue: 2025-07-18

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.

Keny Xu

Keny Xu
EMC Laboratory Manager



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch EMC Laboratory

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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2025-07-18		Original

Authorized for issue by:				
		Calvin Weng		
		Calvin Weng/Project Engineer		
		Eric Fu		
		Eric Fu/Reviewer		



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2 Test Summary

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
Antenna Requirement	47 CFR Part 15 Subpart F	N/A	47 CFR Part 15F Section 15.517(a3), 15.519(a2), 15.521(b), 15.203	Pass

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Dwell Time	47 CFR Part 15 Subpart F	N/A	47 CFR Part 15F Section 15.519(a)(1)	Pass
EIRP		ANSI C63.10: 2020 section 10.3	47 CFR Part 15, Subpart F Section 15.519 (c)(e), 15.521(d), 15.521(g)	Pass
Spurious Emissions Below 1GHz		ANSI C63.10: 2020 section 10.2 & 10.3	47 CFR Part 15, Subpart F Section 15.519 (c)(d),15.209	Pass
Spurious Emissions Above 1GHz		ANSI C63.10: 2020 section 10.3	47 CFR Part 15, Subpart F Section 15.519 (c)(d),15.209	Pass
UWB Bandwidth		ANSI C63.10:2020 section 10.1	47 CFR Part 15F Section 15.503(a)	Pass

Remark:

Model No.: TRKB-300

Only the model TRKB-300 was tested, since according to the declaration from the applicant, the electrical circuit design, PCB layout, components used, internal wiring and functions were identical for all the above models, with only different on the color and branding.



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4 General Information

4.1 Details of E.U.T.

Power supply:	DC 6V
Cable Loss (for RF conducted test):	1.5dB
Operating Frequency:	7987.2MHz(Ch9)
Sample Type:	Handheld use
Modulation Type:	BPM-BPSK
Antenna Type:	FPC antenna
Antenna Gain:	-4.5 dBi

Remark: The information in this section is provided by the applicant or manufacturer, SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
iPhone 15Pro	Apple	A3104	REF. No.SEA16Q02

4.3 Measurement Uncertainty

Test Item	Measurement Uncertainty
Dwell Time	$\pm 0.37\%$
EIRP	$\pm 4.8\text{dB}$
Spurious Emissions Below 1GHz	$\pm 6.0\text{dB}$ for 3m; $\pm 5.0\text{dB}$ for 10M
Spurious Emissions Above 1GHz	$\pm 4.6\text{dB}(1-18\text{GHz})$; $\pm 4.8\text{dB}(18-40\text{GHz})$
UWB Bandwidth	$\pm 3\%$

Remark:

The U_{lab} (lab Uncertainty) is less than $U_{\text{CISPR/ETSI}}$ (CISPR/ETSI Uncertainty), so the test results
 – compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
 – non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

4.4 Test Location

All tests were performed at:

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No tests were sub-contracted.

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

• VCCI (Member No. 1937)

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen EMC laboratory have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

• FCC –Designation Number: CN1336

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1336. Test Firm Registration Number: 787754.

• Innovation, Science and Economic Development Canada

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None



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5 Equipment List

Dwell Time					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
DC Power Supply	Chroma	62012P-80-60	SEM011-11	2024-08-14	2025-08-13
MXA Signal Analyzer	KEYSIGHT	N9020A	SEM004-25	2025-03-04	2026-03-03
Measurement Software	TST PASS	TST PASS V2.0	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-01	2024-07-06 2025-07-05	2025-07-05 2026-07-04
Attenuator	Huber+Suhner	6620_SMA-50-1	SEM021-09	2025-03-03	2026-03-02

EIRP					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
3m Fully-Anechoic Chamber	AUDIX	N/A	SEM001-02	2025-05-07	2028-05-06
Signal Analyzer	Rohde & Schwarz	FSV40	SEM008-04	2025-03-04	2026-03-03
Horn Antenna	Rohde&Schwarz	HF907	SEM003-07	2023-07-23	2025-07-22
Microwave system amplifier	Agilent	83017A	SEM005-25	2024-09-14	2025-09-13
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2024-07-06 2025-07-05	2025-07-05 2026-07-04

Spurious Emissions Below 1GHz					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEM001-01	2023-06-19	2026-06-18
MXE EMI Receiver	Agilent Technologies	N9038A	SEM004-15	2024-08-14	2025-08-13
BiConiLog Antenna	ETS-LINDGREN	3142C	SEM003-01	2023-09-16	2025-09-15
Pre-Amplifier	Agilent Technologies	8447D	SEM005-01	2025-03-04	2026-03-03
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM025-01	2024-07-06 2025-07-05	2025-07-05 2026-07-04



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Spurious Emissions Above 1GHz					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
3m Fully-Anechoic Chamber	AUDIX	N/A	SEM001-02	2025-05-07	2028-05-06
Signal Analyzer	Rohde & Schwarz	FSV40	SEM008-04	2025-03-04	2026-03-03
Horn Antenna	Rohde&Schwarz	HF907	SEM003-07	2023-07-23	2025-07-22
Microwave system amplifier	Agilent	83017A	SEM005-25	2024-09-14	2025-09-13
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2024-07-06 2025-07-05	2025-07-05 2026-07-04

UWB Bandwidth					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
DC Power Supply	Chroma	62012P-80-60	SEM011-11	2024-08-14	2025-08-13
MXA Signal Analyzer	KEYSIGHT	N9020A	SEM004-25	2025-03-04	2026-03-03
Measurement Software	TST PASS	TST PASS V2.0	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-01	2024-07-06 2025-07-05	2025-07-05 2026-07-04
Attenuator	Huber+Suhner	6620_SMA-50-1	SEM021-09	2025-03-03	2026-03-02

General used equipment					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Humidity/ Temperature Indicator	deli	8838	SEM002-32	2024-07-24	2025-07-23
Humidity/ Temperature Indicator	deli	8838	SEM002-33	2024-07-24	2025-07-23
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2025-03-03	2026-03-02



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6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15F 15.519(a2), 15.521(b), 15.203

6.1.2 Conclusion

§ 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 use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§ 15.211, 15.213, 15.217, 15.219, 15.221, or § 15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

§15.519a(2)

The use of antennas mounted on outdoor structures, e.g., antennas mounted on the outside of a building or on a telephone pole, or any fixed outdoors infrastructure is prohibited. Antennas may be mounted only on the hand held UWB device.

15.521(a) UWB devices may not be employed for the operation of toys. Operation onboard an aircraft, a ship or a satellite is prohibited.

15.521(b)

Manufacturers and users are reminded of the provisions of § 15.203.

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is -4.5dBi.

Antenna location: Refer to internal photos.



7 Radio Spectrum Matter Test Results

7.1 Dwell Time

Test Requirement	47 CFR Part 15F Section 15.519(a)(1)
Test Method:	ANSI C63.10:2020 section 7.8.4
Limit:	The UWB intentional radiator shall cease transmission within 10 seconds unless it receives an acknowledgement from the associated receiver that its transmission is being received. An acknowledgment of reception must continue to be received by the UWB intentional radiator at least every 10 seconds or the UWB device must cease transmitting.

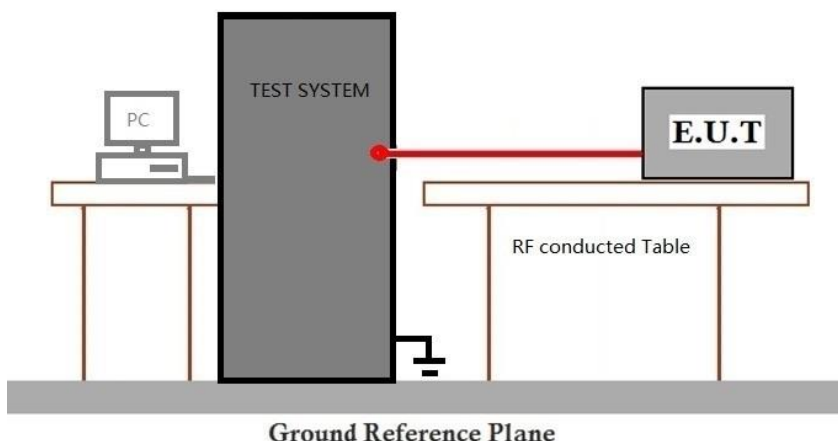
7.1.1 E.U.T. Operation

Operating Environment:			
Temperature:	23.8 °C	Humidity:	42.5 % RH
		Atmospheric Pressure:	1020 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	02	Normal Operating Mode: Keep the EUT Paring with Other Device and Operating Normally

7.1.3 Test Setup Diagram



7.1.4 Measurement Procedure and Data

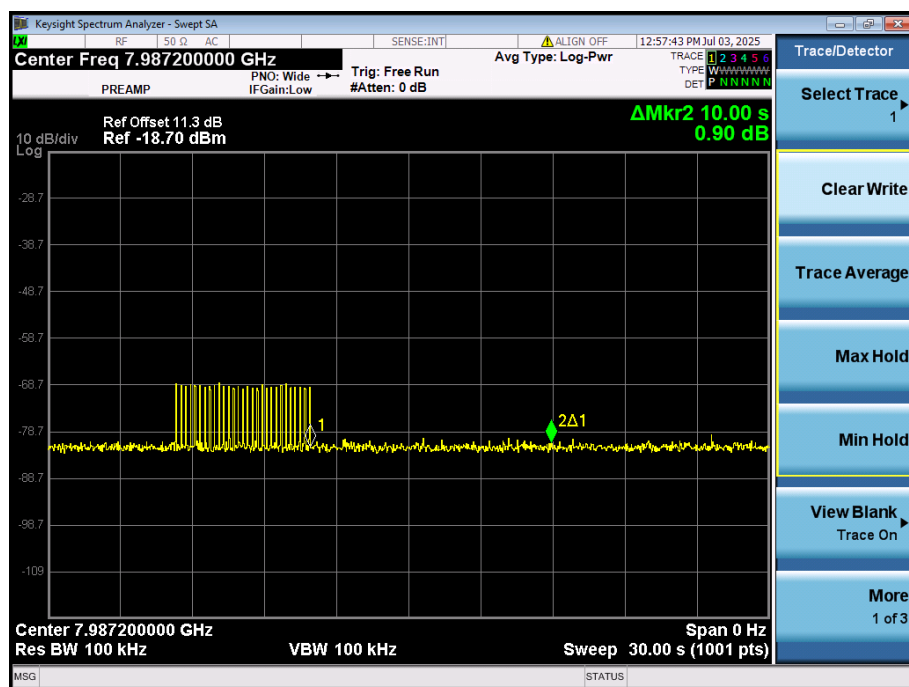


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7.2 EIRP

Test Requirement 47 CFR Part 15, Subpart F Section 15.519 (c)(e), 15.521(d), 15.521(g)

Test Method: ANSI C63.10: 2020 section 10.3

Measurement Distance: 3m

Limit:

Frequency	Limit	Detector	Measurement distance (m)
960MHz-1610MHz	-75.3 dBm (EIRP, RBW=1MHz)	AV	3
1610MHz-1990MHz	-53.3 dBm (EIRP, RBW=1MHz)	AV	3
1990MHz-3100MHz	-51.3 dBm (EIRP, RBW=1MHz)	AV	3
3100MHz-10600MHz	-41.3 dBm (EIRP, RBW=1MHz)	AV	3
Above 10600MHz	-51.3 dBm (EIRP, RBW=1MHz)	AV	3
Fundamental	0 dBm (EIRP, RBW=50MHz)	Peak	3

Remark: Due to some spectrum analyzer does not support 50MHz RBW setting, RBW set to the maximum value, and add a correction factor is allowed for Max Peak EIRP measurement. According to ANSI 63.10 Clause 10.3.9, the EIRP to field strength at a specified measurement distance of 3 m is below:

$$E \text{ (dBuV/m)} = \text{EIRP(dBm)} + 95.3$$

For peak power test, the spectrum analyzer was set to RBW=8MHz, VBW=10MHz, and add a conversion factor of $20 \cdot \log(50\text{MHz}/8\text{MHz})=15.92\text{dB}$.

Thus, the field strength limit for the test above 1GHz is below:

Frequency	Limit	Detector	Measurement Distance
	Field Strength (dBuV/m)		
960MHz-1610MHz	20.00	AV	3
1610MHz-1990MHz	42.00	AV	3
1990MHz-3100MHz	44.00	AV	3
3100MHz-10600MHz	54.00	AV	3
Above 10600MHz	44.00	AV	3
Fundamental	95.3	Peak	3

7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

Humidity: 56.3 % RH

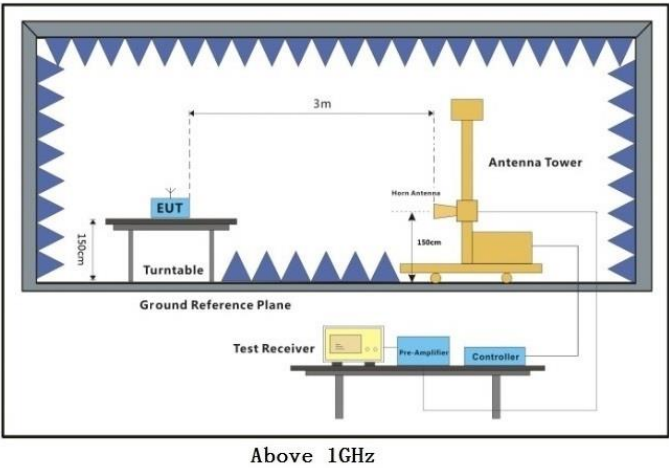
Atmospheric Pressure: 1020 mbar



7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	Continuous Tx Mode: Keep the EUT Transmitting with Modulation

7.2.3 Test Setup Diagram



7.2.4 Measurement Procedure and Data

- 1) The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- 2) The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- 3) The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 4) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- 5) The test-receiver system was set to Peak detector with Maximum Hold Mode for Max Peak EIRP measurement and RMS/AV detector for Average EIRP measurement.
- 6) Test the EUT in the lowest channel, the middle channel, the Highest channel
- 7) The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case.
- 8) Repeat above procedures until all frequencies measured was complete.

Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
2. Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.



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Peak Field Strength for fundamental @ RBW=8MHz						
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Polarization
8146.31	36.5	9.21	53.18	83.20	75.73	Horizontal
8103.53	36.5	9.15	53.15	84.36	76.86	Vertical

Calculated Peak Field Strength of fundamental @ RBW=50MHz						
Frequency (MHz)	Measured Field Strength of fundamental (FS _M) (dBuV/m)	Calculated Field Strength of fundamental (FS _C) (dBuV/m)	Calculated Field Strength of fundamental (FS _C) (dBm)	Limit (dBm)	Margin (dBm)	Polarization
8146.31	75.73	91.65	-3.65	0	3.65	Horizontal
8103.53	76.86	92.78	-2.52	0	2.52	Vertical
Note: FS _C = FS _M + 20log(50MHz/8MHz) = FS _M + 15.92						

Average Field Strength for fundamental @ RBW=1MHz								
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBm)	Limit (dBm)	Margin (dBm)	Polarization
8075.14	36.45	9.12	53.14	52.57	-50.30	-41.3	9.00	Horizontal
8085.27	36.47	9.13	53.15	54.02	-48.83	-41.3	7.53	Vertical



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7.3 Spurious Emissions Below 1GHz

Test Requirement 47 CFR Part 15, Subpart F Section 15.519 (c)(d),15.209

Test Method: ANSI C63.10: 2020 section 10.2 & 10.3

Measurement Distance: 3m

Limit:

Frequency	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)
0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
1.705MHz-30MHz	30	-	-	30
30MHz-88MHz	100	40.0	Quasi-peak	3
88MHz-216MHz	150	43.5	Quasi-peak	3
216MHz-960MHz	200	46.0	Quasi-peak	3
960MHz-1000MHz	500	54.0	Quasi-peak	3
960MHz-1000MHz	-	40.0	RMS/AV	3

Remark: for frequency above 960MHz AV emission measurement, limit is -75.3dBm with RBW=1MHz, that's 20dBuV/MHz, a RBW conversion factor of $20 \cdot \log(1\text{MHz}/0.1\text{MHz})=20\text{dB}$ was added.

7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

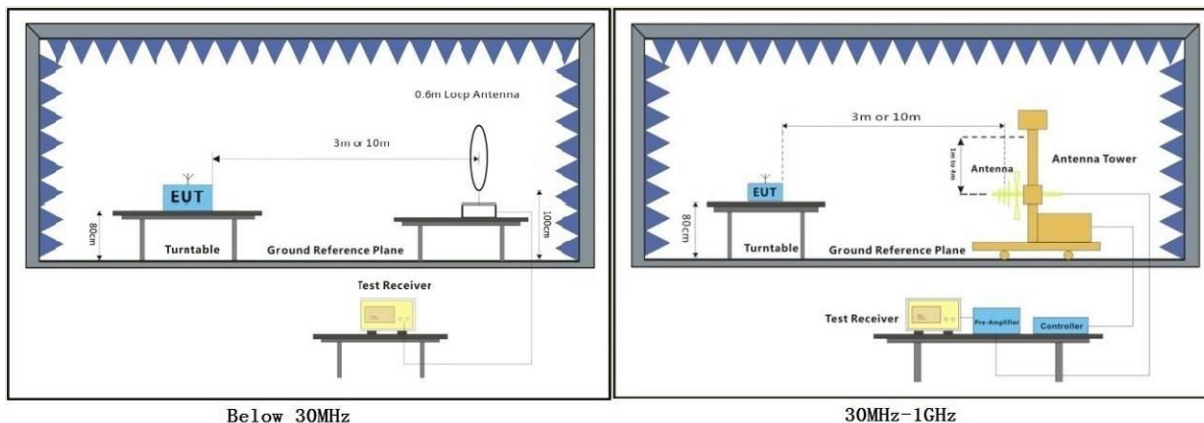
Humidity: 46.8 % RH

Atmospheric Pressure: 1020 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	Continuous Tx Mode: Keep the EUT Transmitting with Modulation

7.3.3 Test Setup Diagram



7.3.4 Measurement Procedure and Data

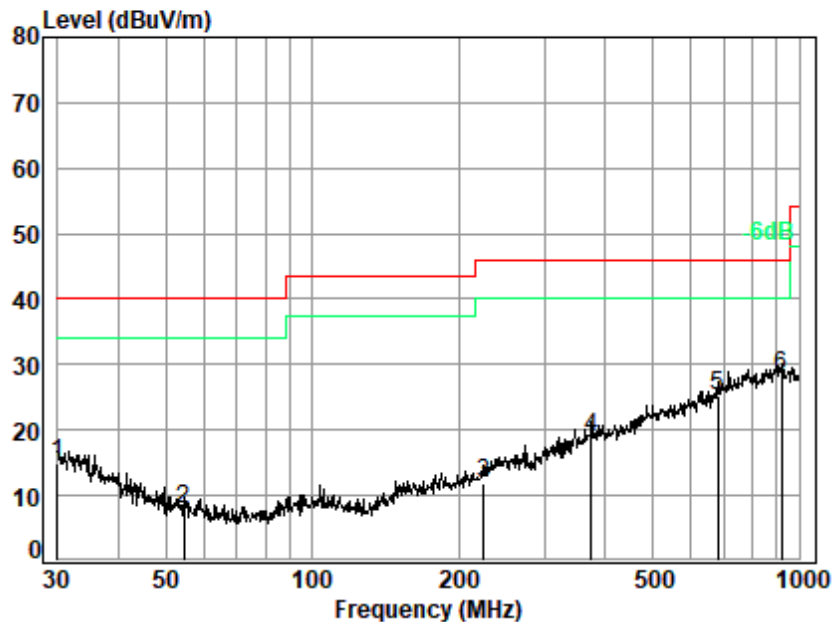
- 1) The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- 2) The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- 3) The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 4) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- 5) The test-receiver system was set to Peak detector with Maximum Hold Mode. And use Quasi-Peak to measure the six highest frequencies.
- 6) Test the EUT in the lowest channel, the middle channel, the Highest channel and only recorded worst channel--Lowest channel in the test report.
- 7) The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case.
- 8) Repeat above procedures until all frequencies measured was complete

Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
2. Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.



Test Mode: 01; Polarity: Horizontal

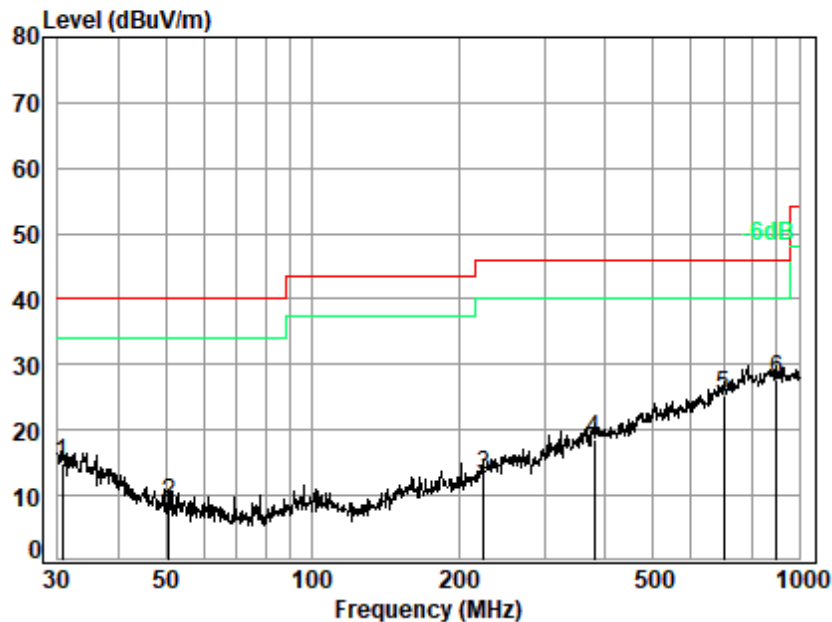


Site : chamber
Condition: 3m HORIZONTAL
Job No. : 02369AT/02370AT
Test Mode: 01

	Ant	Cable	Preamp	Read		Limit	Over	
Freq	Factor	Loss	Factor	Level	Level	Line	Limit	Remark
MHz	dB/m	dB	dB	dBuV	dBuV/m	dBuV/m	dB	
1	30.000	21.20	0.74	27.65	20.75	15.04	40.00	-24.96 QP
2	54.452	12.05	0.91	27.63	22.70	8.03	40.00	-31.97 QP
3	224.519	15.67	1.82	27.71	22.22	12.00	46.00	-34.00 QP
4	374.623	20.68	2.40	27.69	23.34	18.73	46.00	-27.27 QP
5	682.348	25.80	3.36	27.88	24.00	25.28	46.00	-20.72 QP
6 q	922.516	28.19	4.02	26.83	22.85	28.23	46.00	-17.77 QP



Test Mode: 01; Polarity: Vertical



Site : chamber
Condition: 3m VERTICAL
Job No. : 02369AT/02370AT
Test Mode: 01

		Ant	Cable	Preamp	Read		Limit	Over	
	Freq	Factor	Loss	Factor	Level	Level	Line	Limit	Remark
	MHz	dB/m	dB	dB	dBuV	dBuV/m	dBuV/m	dB	
1	30.638	20.90	0.75	27.65	21.03	15.03	40.00	-24.97	QP
2	50.764	12.64	0.90	27.63	22.90	8.81	40.00	-31.19	QP
3	224.519	15.67	1.82	27.71	23.24	13.02	46.00	-32.98	QP
4	379.914	20.91	2.42	27.70	22.81	18.44	46.00	-27.56	QP
5	699.305	25.93	3.41	27.83	23.72	25.23	46.00	-20.77	QP
6 q	896.997	27.93	3.97	26.98	22.88	27.80	46.00	-18.20	QP



7.4 Spurious Emissions Above 1GHz

Test Requirement 47 CFR Part 15, Subpart F Section 15.519 (c)(d),15.209

Test Method: ANSI C63.10: 2020 section 10.3

Measurement Distance: 3m

Limit:				
Frequency	Limit (dBuV/m)@3m	RBW	Detector	Measurement distance (m)
1000MHz-1610MHz	20.0	1MHz	AV	0.5
1610MHz-1990MHz	42.0	1MHz	AV	0.5
1990MHz-3100MHz	44.0	1MHz	AV	0.5
3100MHz-10600MHz	54.0	1MHz	AV	0.5
Above 10600MHz	44.0	1MHz	AV	0.5
1164MHz-1240MHz	10.0	1KHz	AV	3
1559MHz-1610MHz	10.0	1KHz	AV	3

7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

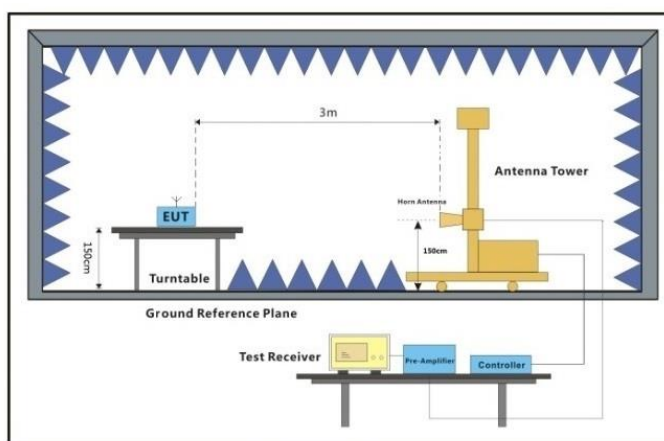
Humidity: 56.3 % RH

Atmospheric Pressure: 1020 mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	Continuous Tx Mode: Keep the EUT Transmitting with Modulation

7.4.3 Test Setup Diagram



Above 1GHz



7.4.4 Measurement Procedure and Data

- 1) The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- 2) The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- 3) The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 4) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- 5) The test-receiver system was set to Peak detector with Maximum Hold Mode.
- 6) Test the EUT in the lowest channel, the middle channel, the Highest channel
- 7) The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case.
- 8) Repeat above procedures until all frequencies measured was complete

Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor



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Freq (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit	Polarity
1029.325	25.36	5.84	54.61	31.25	7.84	20	-12.16	Horizontal
1354.577	24.51	5.22	54.73	31.78	6.78	20	-13.22	Horizontal
1716.864	26.4	5	54.83	31.74	8.31	32	-23.69	Horizontal
2610.661	30.28	5.52	54.97	29.69	10.52	34	-23.48	Horizontal
7076.516	35.75	8.54	53.19	29.56	20.66	54	-33.34	Horizontal
15942.3	41.48	14.1	51.84	25.28	29.02	34	-4.98	Horizontal
1185.936	24.26	5.52	54.67	31.02	6.13	10	-3.87	Horizontal
1578.822	26.88	4.99	54.8	30.41	7.48	10	-2.52	Horizontal

Freq (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit	Polarity
1096.904	23.76	5.7	54.64	33.55	8.37	20	-11.63	Vertical
1410.514	24.77	5.13	54.75	31.71	6.86	20	-13.14	Vertical
1751.955	26.81	5	54.84	31.59	8.56	32	-23.44	Vertical
2588.122	30.06	5.5	54.96	30.46	11.06	34	-22.94	Vertical
7179.527	35.74	8.5	53.18	27.59	18.65	54	-35.35	Vertical
16221.19	41.84	14.05	52.05	24.1	27.94	34	-6.06	Vertical
1227.791	24.79	5.44	54.69	31.7	7.24	10	-2.76	Vertical
1587.975	26.85	4.99	54.8	30.9	7.94	10	-2.06	Vertical



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7.5 UWB Bandwidth

Test Requirement 47 CFR Part 15F Section 15.503(a)
 Test Method: ANSI C63.10:2020 section 10.1
 Limit: $\geq 500\text{MHz}$ or fractional bandwidth equal to or greater than 0.20

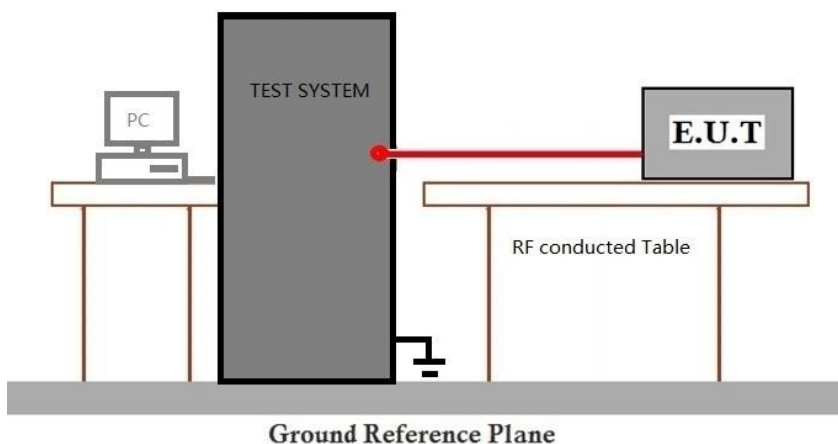
7.5.1 E.U.T. Operation

Operating Environment:
 Temperature: 23.8 °C Humidity: 42.5 % RH Atmospheric Pressure: 1020 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	Continuous Tx Mode: Keep the EUT Transmitting with Modulation

7.5.3 Test Setup Diagram



7.5.4 Measurement Procedure and Data

The frequency at which the maximum power level is measured with the peak detector is designated fM. The peak power measurements shall be made using a spectrum analyzer or EMI receiver with a 1 MHz resolution bandwidth and a video bandwidth of 1 MHz or greater. The instrument shall be set to peak detection using the maximum-hold trace mode. The outermost 1 MHz segments above and below fM, where the peak power falls by 10 dB relative to the level at fM, are designated as fH and fL, respectively:

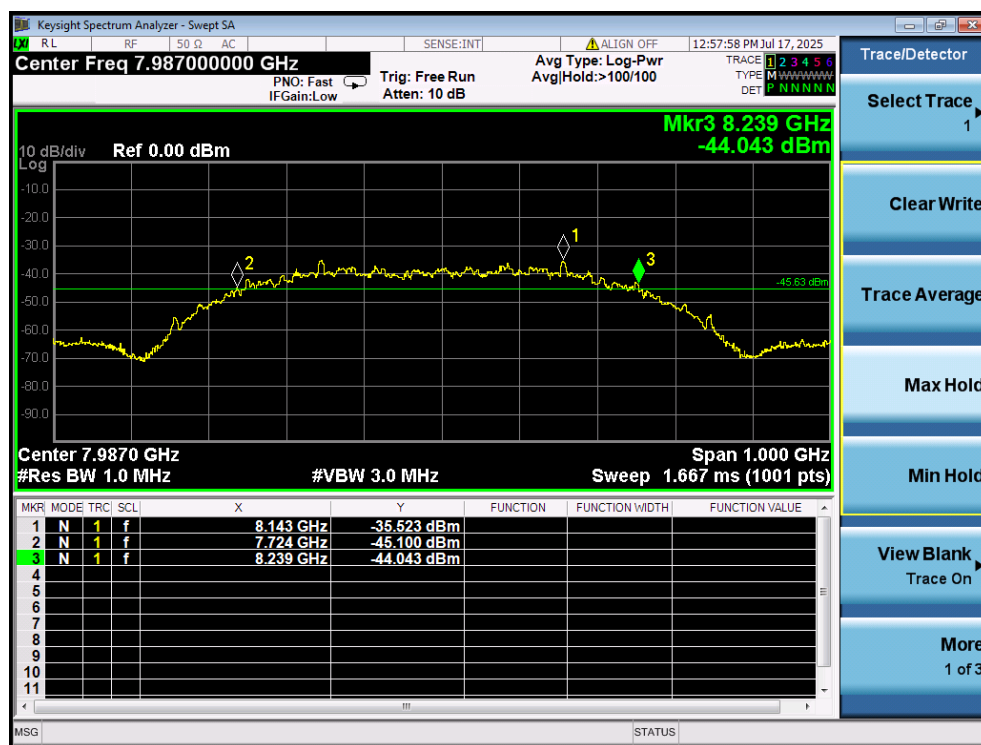
a) For the lowest frequency bound fL, the emission is searched from a frequency lower than fM that has, by inspection, a peak power much lower than 10 dB less than the power at fM and increased toward fM until the peak power indicates 10 dB less than the power at fM. The frequency of that segment is recorded.

b) This process is repeated for the highest frequency bound fH, beginning at a frequency higher than fM that has, by inspection, a peak power much lower than 10 dB below the power at fM. The frequency of that segment is recorded.

c) The two recorded frequencies represent the highest fH and lowest fL bounds of the UWB transmission, and the 10 dB bandwidth (B - 10) is defined as (fH - fL). The center frequency (fc) is mathematically determined from (fH - fL) / 2.

d) The fractional bandwidth is defined as 2(fH - fL) / (fH + fL).

e) Determine whether the -10 dB bandwidth (fH - fL) is ≥ 500 MHz, or whether the fractional bandwidth 2(fH - fL) / (fH + fL) is ≥ 0.2 .



8 Test Setup Photo

Refer to Appendix - Test Setup Photo for SZCR2506002369AT

9 EUT Constructional Details (EUT Photos)

Refer to External and Internal Photos for SZCR2506002369AT

- End of the Report -

