

CTC Laboratories, Inc.

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Т	EST REPORT				
Report No. ······:	CTC20231677E02				
FCC ID	2A6MS-K69				
Applicant:	Shenzhen Zhichuang All Technolog	y Co., LTD			
Address	D401, Ganghong Complex Building, Building 2, No. 7, Xiangye Road, Xialilang Community, Nanwan Street, Longgang District, Shenzhen				
Manufacturer:	Dongguan Chiyuan Jizhi Electronic Te	echnology Co., LTD			
Address	Room 402, Building 18, No.3 Yongtai Dongguan City, Guangdong Province	Road, Tangxia Town,			
Product Name:	Magnetic Wireless Charging Power	Bank			
Trade Mark:	/				
Model/Type reference······:	K69Pro				
Listed Model(s) ······:	/				
Standard:	FCC CFR Title 47 Part 15 Subpart C				
Date of receipt of test sample:	Aug. 3, 2023				
Date of testing	Aug. 3, 2023 to Sept. 15, 2023				
Date of issue	Sept. 18, 2023				
Result:	PASS				
Compiled by:		T.: Jiang			
(Printed name+signature)	Jim Jiang	Jim Jiang Zric zhang Lemas			
Supervised by:		Printer in			
(Printed name+signature)	Eric Zhang	UNC 2 UN			
Approved by		1 00-00			
Approved by:	Totti Zhao	100 VILL			
(Printed name+signature)	/				
should not be reproduced except i should not use it to claim product	completely for legal use with the appro n full, without the written approval of ou endorsement by CTC. The test results is shall be invalid without all the signature	Ir laboratory. The client in the report only apply to			

reviewer and approver. Any objections must be raised to CTC within 15 days since the date when the

report is received. It will not be taken into consideration beyond this limit. The test report merely correspond to the test sample.



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1. TEST SUMMARY

1.1. Test Standards

The tests were performed according to following standards: <u>FCC Rules Part 15.209</u>: Radiated emission limits; general requirements. <u>ANSI C63.10-2013</u>: American National Standard for Testing Unlicensed Wireless Devices.

1.2. Report Version

Revised No.	Date of issue	Description	
01	Sept. 18, 2023	Original	

1.3. Test Description

FCC Part 15 Subpart C (15.209)					
Test Item	Result	Test Engineer			
Antenna Requirement	15.203	Pass	Jim Jiang		
AC Power Line Conducted Emissions	15.207	Pass	Jim Jiang		
Spurious Emission	15.209	Pass	Jim Jiang		
20dB Bandwidth	15.215	Pass	Jim Jiang		

Note:

1. The measurement uncertainty is not included in the test result.

2. N/A: means this test item is not applicable for this device according to the technology characteristic of device.



1.4. Test Facility

CTC Laboratories, Inc.

Add: 1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen, Guangdong, China

Laboratory accreditation

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

A2LA-Lab Cert. No.: 4340.01

CTC Laboratories, Inc. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025:2017 General Requirements for r the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

Industry Canada (Registration No.: 9783A, CAB Identifier: CN0029)

CTC Laboratories, Inc. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 9783A on Jan, 2016.

FCC (Registration No.: 951311, Designation Number CN1208)

CTC Laboratories, Inc. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained inour files. Registration 951311, Aug 26, 2017.



1.5. Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01" Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement characteristics; Part 2" and is documented in the CTC Laboratories, Inc. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device. Below is the best measurement capability for CTC Laboratories, Inc.

Test Items	Measurement Uncertainty	Notes
DTS Bandwidth	±0.0196%	(1)
Maximum Conducted Output Power	±0.686 dB	(1)
Maximum Power Spectral Density Level	±0.743 dB	(1)
Band-edge Compliance	±1.328 dB	(1)
Unwanted Emissions In Non-restricted Freq Bands	9kHz-1GHz: ±0.746dB 1GHz-26GHz: ±1.328dB	(1)
Conducted Emissions 9kHz~30MHz	±3.08 dB	(1)
Radiated Emissions 30~1000MHz	±4.51 dB	(1)
Radiated Emissions 1~18GHz	±5.84 dB	(1)
Radiated Emissions 18~40GHz	±6.12 dB	(1)

Note (1): This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

1.6. Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15 °C to 35 °C
Relative Humidity:	20 % to 75 %
Air Pressure:	101 kPa

2. GENERAL INFORMATION

2.1. Client Information

Applicant:	Shenzhen Zhichuang All Technology Co., LTD	
Address:	D401, Ganghong Complex Building, Building 2, No. 7, Xiangye Road, Xialilang Community, Nanwan Street, Longgang District, Shenzhen	
Manufacturer:	Dongguan Chiyuan Jizhi Electronic Technology Co., LTD	
Address:	Room 402, Building 18, No.3 Yongtai Road, Tangxia Town, Dongguan City, Guangdong Province	
Factory:	Dongguan Chiyuan Jizhi Electronic Technology Co., LTD	
Address:	Room 402, Building 18, No.3 Yongtai Road, Tangxia Town, Dongguan City, Guangdong Province	

2.2. General Description of EUT

Product Name:	Magnetic Wireless Charging Power Bank
Trade Mark:	/
Model/Type reference:	K69Pro
Listed Model(s):	/
Model Difference:	/
Power Supply:	Input: 100-240V~ 50/60Hz 0.25A Max Built-in battery: 10000mAh, 3.7V, 37Wh Rated Capacity: 5500mAh (5V-3A) Type-C Input: 5V-3.0A; 9V-2.2A; 12V-1.5A Type-C Output: 5V-3.0A; 9V-2.2A; 12V-1.5A Type-C Line Output: 5V-2.4A Lightning Line Output: 5V-2.0A Wireless charging Power: 5W/7.5W/10W/15W Max
Hardware Version:	1
Software Version:	/
Wireless Charger	
Frequency Range:	112kHz ~ 205kHz
Modulation Type:	ASK
Antenna Type:	Induction Coil
Antenna Gain:	0dBi
Exposure category:	General population/uncontrolled environment
Device Type:	Portable Device



2.3. Accessory Equipment Information

Equipment Information				
Name	Model	S/N	Manufacturer	
Intelligent wireless charging full function test module	1	/	/	
Cable Information				
Name	Shielded Type	Ferrite Core	Length	
/	/	/	/	

2.4. Operation State

The EUT has been tested under test mode condition. The Applicant provides software to control the EUT for staying in continuous transmitting and receiving mode for testing.

Operation Frequency List:

Channel	Frequency (kHz)	
1	148	

Note: The display in grey were the channel selected for testing.

Test Mode:

For RF test items

The engineering test program was provided and enabled to make EUT continuous transmit. (duty cycle>98%).

For AC power line conducted emissions:

The EUT was set to connect with large package sizes transmission.

For Radiated spurious emissions test item:

The engineering test program was provided and enabled to make EUT continuous transmit. The EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.



2.5. Measurement Instruments List

Tonsce	Tonscend RF Test System					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until	
1	MXA Signal Analyzer	Keysight	N9020A	MY46471737	Dec. 16, 2023	
2	Spectrum Analyzer	R&S	FSU26	100105	Dec. 16, 2023	
3	Spectrum Analyzer	R&S	FSV40-N	101331	Mar. 14, 2024	
4	MXG Vector Signal Generator	Agilent	N5182A	MY47420864	Dec. 16, 2023	
5	PSG Analog Signal Generator	Agilent	E8257D	MY46521908	Dec. 16, 2023	
6	Power Sensor	Keysight	U2021XA	MY55130004	Mar. 14, 2024	
7	Power Sensor	Keysight	U2021XA	MY55130006	Mar. 14, 2024	
8	Wideband Radio Communication Tester	R&S	CMW500	102414	Dec. 16, 2023	
9	High and low temperature box	ESPEC	MT3035	/	Mar. 24, 2024	
10	JS1120 RF Test System	TONSCEND	v2.6	/	/	

Radiate	Radiated Emission (3m chamber 2)					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until	
1	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	9168-1013	Dec. 07, 2024	
2	Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-648	Dec. 07, 2024	
3	Loop Antenna	ETS	6507	1446	Dec. 13, 2023	
4	Spectrum Analyzer	R&S	FSU26	100105	Dec. 16, 2023	
5	Spectrum Analyzer	R&S	FSV40-N	101331	Mar. 14, 2024	
6	Pre-Amplifier	SONOMA	310	186194	Dec. 16, 2023	
7	Low Noise Pre-Amplifier	EMCI	EMC051835	980075	Dec. 16, 2023	
8	Test Receiver	R&S	ESCI7	100967	Dec. 16, 2023	
9	3m chamber 2	Frankonia	EE025	/	Oct. 23, 2024	

Conduc	ted Emission				
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until
1	LISN	R&S	ENV216	101112	Dec. 16, 2023
2	LISN	R&S	ENV216	101113	Dec. 16, 2023
3	EMI Test Receiver	R&S	ESCS30	100353	Dec. 16, 2023
4	ISN CAT6	Schwarzbeck	NTFM 8158	CAT6-8158-0046	Dec. 16, 2023
5	ISN CAT5	Schwarzbeck	NTFM 8158	CAT5-8158-0046	Dec. 16, 2023

Note: 1. The Cal. Interval was one year.

2. The Cal. Interval was three years of the antenna.

3. The cable loss has been calculated in test result which connection between each test instruments.



3. TEST ITEM AND RESULTS

3.1. Conducted Emission

<u>Limit</u>

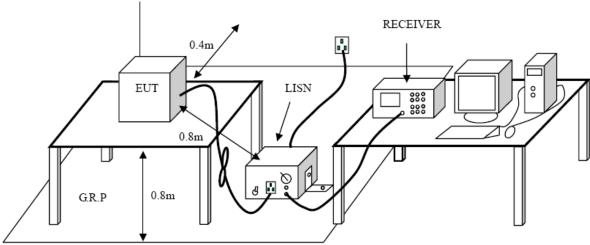
FCC CFR Title 47 Part 15 Subpart C Section 15.207/ RSS - Gen 8.8

	Limit (d	lBuV)
Frequency range (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.

Test Configuration

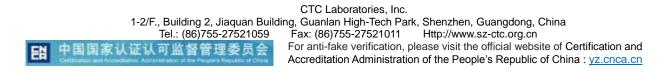
Test Procedure



- 1. The EUT was setup according to ANSI C63.10:2013 requirements.
- 2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.
- The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm / 50 μH coupling impedance for the measuring equipment.
- 4. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
- 5. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
- 6. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
- 7. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
- 8. During the above scans, the emissions were maximized by cable manipulation.

Test Mode

Please refer to the clause 2.4.

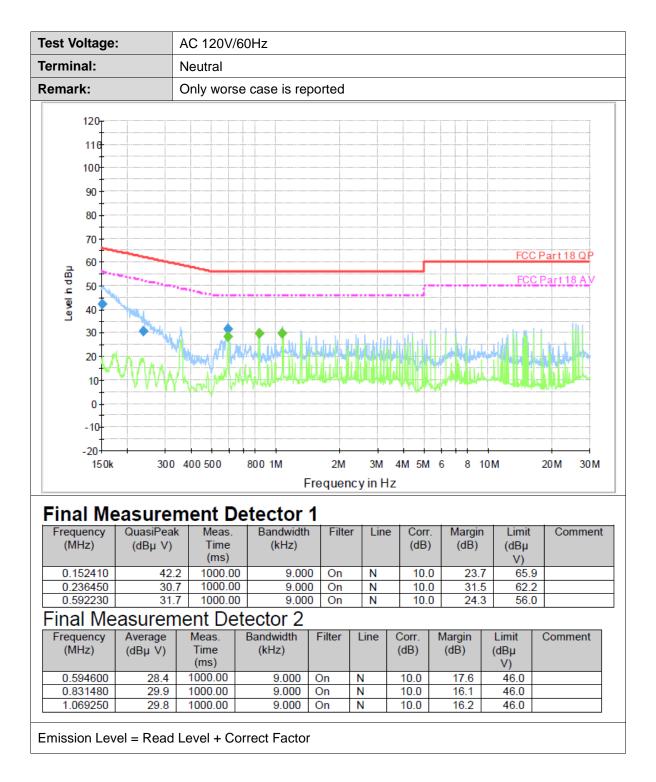




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Test Vo	oltage:	1	AC 120V/6	0Hz						
Termin	al:	I	_ine							
Remar	k:	(Only worse	e case is rep	orted					
	120 .									
	110									
	100									
	90								<u> </u>	
	80									
	70								 	
	70								FCC	Part 18 QP
묘	60									
in dl	50								FCC	Part 18 A V
Level in dBµ	40	L								
	30					 				
	20	AAA.								
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	0								 	
	- 10									
	-20									
	150k	300	400 500	800 1M	2M	3M	4M 5M	6 8 1	ОM	20M 30M
				F	requen	cy in H	z			
		easuren	nent De	etector	1					
	uency	QuasiPeak	Meas.	Bandwidth	Filte	r Line		-		Comment
(171)	Hz)	(dBµ ∨)	Time (ms)	(kHz)			(dB)	(dB)	(dBµ ∨)	
	61180	39.6	1000.00	9.00		L1	9.		65.4	
	87520 24870	27.7 29.6		9.00		L1	9.			
0.0	24070	29.0	1000.00	5.00			9.	20.4	- 38.0	
Fina	l Me	asurem	ent Det	tector 2						
Frequ	uency	Average	Meas.	Bandwidth	Filter	Line	Corr.	Margin	Limit	Comment
(MI	Hz)	(dBµ ∨)	Time (ms)	(kHz)			(dB)	(dB)	(dBµ ∀)	
	24870	28.7	1000.00	9.000	On	L1	9.7	17.3	46.0	
	60740	20.5	1000.00 1000.00	9.000	On	L1	9.7	25.5	46.0	
	35280	30.0	1000.00	9.000	On	L1	9.7	16.0	46.0	







3.2. Radiated Spurious Emission

<u>Limit</u>

FCC CFR Title 47 Part 15 Subpart C Section 15.209&15.249(a)/ RSS - 210 F.1.e

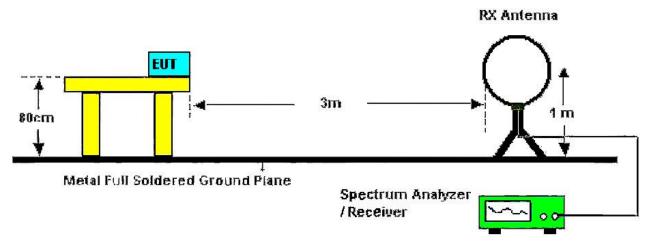
Frequency	Field Strength	Measurement Distance
(MHz)	(microvolts/meter)	(meters)
0.009~0.490	2400/F (kHz)	300
0.490~1.705	24000/F (kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

Frequency Range (MHz)	dBµV/m (at 3 meters)				
	Peak	Average			
Above 1000	74	54			

Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission Level (dBuV/m)=20log Emission Level (uV/m).

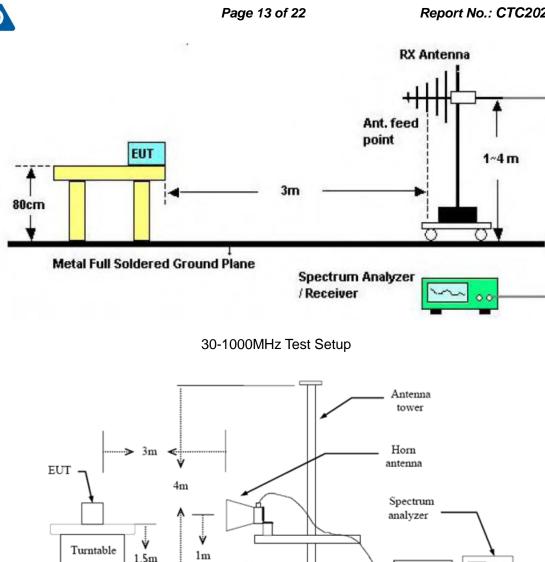
Test Configuration

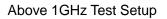


Below 30MHz Test Setup

88

Pre-amp





30cm

Test Procedure

1. The EUT was setup and tested according to ANSI C63.10:2013

2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level. 3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.

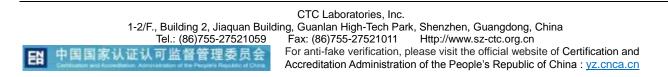
For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower 4. (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.

- 5. Set to the maximum power setting and enable the EUT transmit continuously.
- Use the following spectrum analyzer settings 6.
- Span shall wide enough to fully capture the emission being measured;
- (2) 9k 150kHz:

RBW=300 Hz, VBW=1 kHz, Sweep=auto, Detector function=peak, Trace=max hold (3) 0.15M – 30MHz:

RBW=10 kHz, VBW=30 kHz, Sweep=auto, Detector function=peak, Trace=max hold (4) 30M - 1 GHz:

RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold; If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the





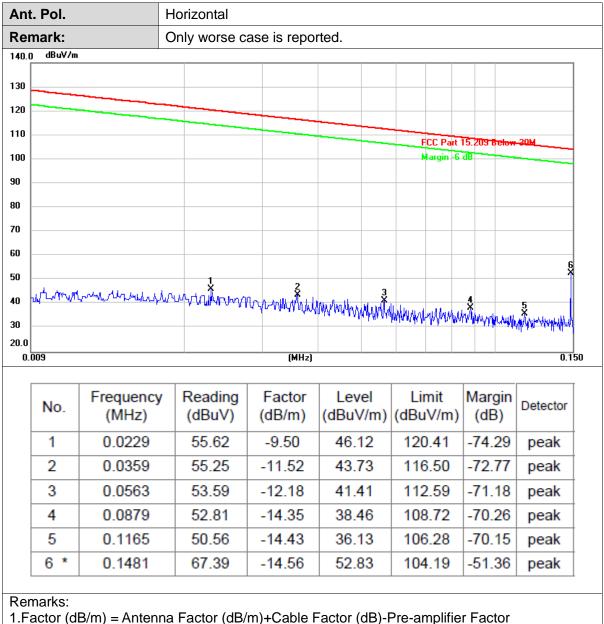
quasi-peak detector and reported. (5) From 1 GHz to 10th harmonic: RBW=1MHz, VBW=3MHz Peak detector for Peak value. RBW=1MHz, VBW=10Hz with Peak Detector for Average Value.

Test Mode

Please refer to the clause 2.4.

Test Result

9 kHz~150 kHz

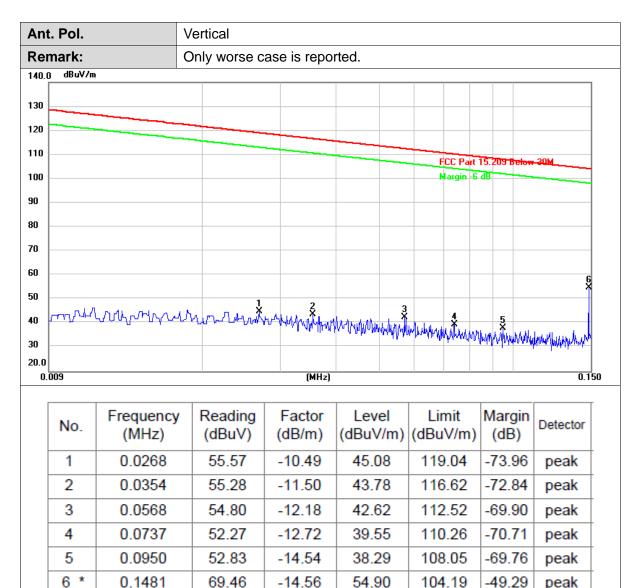


2.Margin value = Level -Limit value

Tel.: (86)755-27521059 可监督管理委员会 中国国家认证认

peak



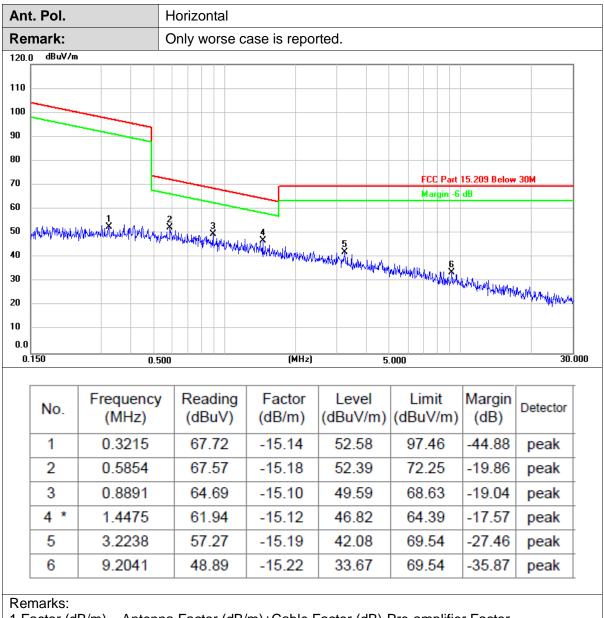


Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value

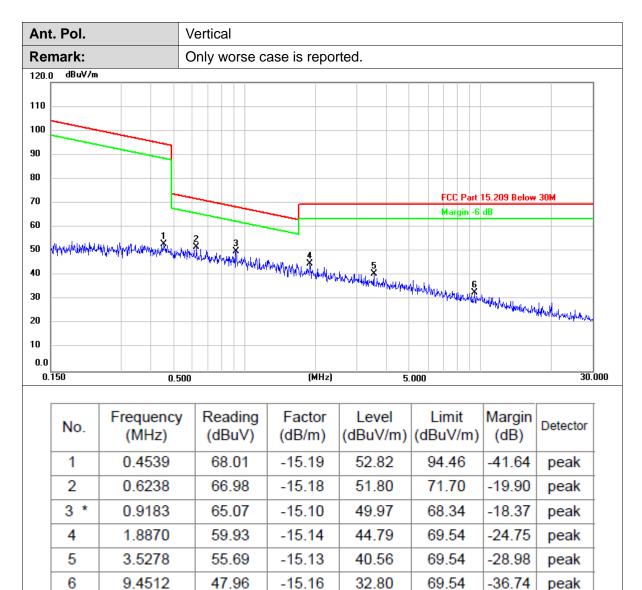


150 kHz~30 MHz



1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value



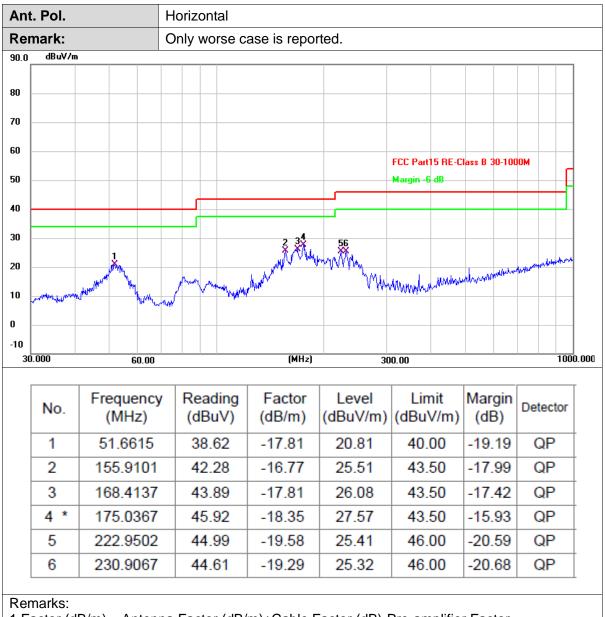


Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value

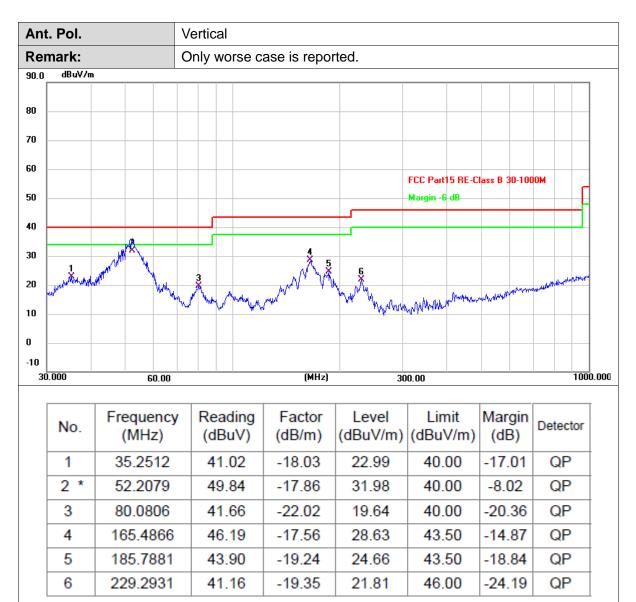


30 MHz~1000 MHz



1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value





Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor 2.Margin value = Level -Limit value

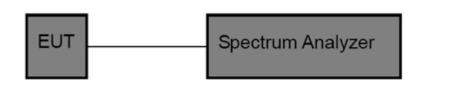


3.3. 20dB Bandwidth

<u>Limit</u>

/

Test Configuration



Test Procedure

- 1. The transmitter output was connected to the spectrum analyzer through an attenuator, the path loss was compensated to the results for each measurement.
- 2. Set to the maximum power setting and enable the EUT transmit continuously
- Use the following spectrum analyzer settings: Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a test channel RBW ≥ 1% of the 20 dB bandwidth, VBW ≥ RBW Sweep = auto, Detector function = peak, Trace = max hold
- 4. Measure and record the results in the test report.

Test Mode

Please refer to the clause 2.4

Test Results

Frequency	20dB Bandwidth	Occupied Bandwidth	Result
(kHz)	(kHz)	(kHz)	
148	2.533	/	Pass



EN

Spectrum T Ref Level -10.00 dBm Offset 20.00 dB RBW 1 kHz Att 0 dB SWT 1.9 ms VBW 3 kHz Mode Auto FFT ●1Pk View M2[1] -31.91 dBr 147.9860 kH -20 dBm M2[1] -31.91 dBr 147.9860 kH -20 dBm M2[1] -32.68 dBr -30 dBm M2 146.7260 kH -50 dBm D1 -51.910 dBm M1 -50 dBm D1 -51.910 dBm M1 -60 dBm -70 dBm -70 dBm -90 dBm -90 dBm -90 dBm -100 dBm -100 dBm -52.68 dBm -100 dBm -100 dBm -52.68 dBm -100 dBm -10.0 kHz 691 pts Span 10.0 kHz Marker -10.0 dBm -52.68 dBm -52.68 dBm 1 1 -52.68 dBm -52.68 dBm 01 1 -52.58 dBm -52.68 dBm 01 1 -52.58 dBm -52.68 dBm 01 1 -52.58 dBm <td< th=""><th>Frequency</th><th>/ (kHz)</th><th></th><th></th><th>148</th></td<>	Frequency	/ (kHz)			148
Ref Level -10.00 dBm Offset 20.00 dB RBW 1 Hz Att 0 dB SWT 1.9 ms VBW 3 kHz Mode Auto FFT IPk View	Spectrum				ſ
M2[1] -31.91 dBr -20 dBm 147.9860 kH -30 dBm 146.7260 kH -30 dBm 146.7260 kH -40 dBm 146.7260 kH -50 dBm 01 -50 dBm 01 -60 dBm 01 -70 dBm 01 -90 dBm 01 -100 dBm 01 11 146.726 kHz -52.68 dBm 52.68 dBm 01 m 01 11 146.726 kHz -90 dBm -90 dBm -100 dBm -90 dBm -101 dBm -90 dBm -101 dBm -90 dBm -101 dBm -90 dBm -101 d1 1 146.726 kHz -52.68 dBm				Mode Auto FFT	
-20 dBm 147.9860 kH -30 dBm -52.68 dBr -40 dBm 146.7260 kH -50 dBm 01 -51.910 dBm -60 dBm 01 -51.910 dBm -70 dBm 01 -51.910 dBm -90 dBm 01 -51.910 dBm -70 dBm 01 -51.910 dBm -70 dBm 01 -51.910 dBm -90 dBm </td <td>●1Pk View</td> <td></td> <td></td> <td></td> <td></td>	●1Pk View				
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-30 dBm M2 146.7260 kH -40 dBm -51.910 dBm -51.910 dBm -51.910 dBm -50 dBm -51.910 dBm -51.910 dBm -51.910 dBm -60 dBm -60 dBm -60 dBm -70 dBm -90 dBm -90 dBm -90 dBm -90 dBm -100 dBm -100 dBm -100 dBm -10.0 kHz Ype Ref Trc X-value Y-value Function Marker -92.68 dBm -92.68 dBm -92.68 dBm D1 M1 1 2.533 kHz 0.19 dB M2 1 147.986 kHz -31.91 dBm	-20 dBm				
-30 dBm -40 dBm -40 dBm -51.910 dBm -50 dBm -51.910 dBm -60 dBm -60 dBm -70 dBm -70 dBm -90 dBm -90 dBm -100 dBm -90 dBm -11 1 46.726 kHz -52.68 dBm -11 1 47.996 kHz -31.91 dBm			MD	WILI	
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-50 dBm D1 -51.910 dBm Sta -60 dBm -60 dBm -60 dBm -60 dBm -70 dBm -90 dBm -90 dBm -90 dBm -90 dBm -100 dBm -60 dBm -60 dBm -100 dBm -90 dBm -90 dBm -90 dBm -100 dBm -100 dBm -90 dBm -90 dBm -100 dBm -90 dBm -90 dBm -90 dBm -101 M1 1 -90 dBm -90 dBm -101 M1	-40 uBm				
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-70 dBm -89 dBm -90 dBm -100 dBm -100 dBm -100 dBm -100 dBm -101 dBm	D1 -51.910 d	IBM /		À	
B0 dBm -90 dBm -90 dBm -90 dBm -100 dBm -90 dBm CF 148.0 kHz 691 pts Span 10.0 kHz 691 pts Marker Yvelue Type Ref Trc X-value Marker -52.68 dBm D1 1 D1 1 1 2.533 kHz 0.19 dB -31.91 dBm	-60 dBm				
OB dBm OB dBm -90 dBm -90 dBm -100 dBm -90 dBm CF 148.0 kHz 691 pts Span 10.0 kHz 691 pts Marker Type Type Ref Trc X-value Y-value Function Function Result D1 1 D1 1 1 147.986 kHz -31.91 dBm -31.91 dBm	70 40-				
-90 dBm -100 dBm 691 pts Span 10.0 kHz -100 dBm -100 dBm -100 dBm -100 dBm -100 dBm CF 148.0 kHz 691 pts Span 10.0 kHz Marker	-70 aBm				
-90 dBm -100 dBm 691 pts Span 10.0 kHz -100 dBm -100 dBm -100 dBm -100 dBm -100 dBm CF 148.0 kHz 691 pts Span 10.0 kHz Marker	-99.dBm-				
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Type Ref Trc X-value Y-value Function Function Result M1 1 146.726 kHz -52.68 dBm -52.68 dBm <td< td=""><td></td><td></td><td>691 pts</td><td></td><td>Span 10.0 KH</td></td<>			691 pts		Span 10.0 KH
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M2 1 147.986 kHz -31.91 dBm				- unotion	r unotion Rosan
Measuring 11.09.2023	M2 1	147.986 kHz	-31.91 dBm		
				Measuring	13.09.2023
Date: 13.SEP.2023 14:18:57	D	10.57			



3.4. Antenna Requirement

Requirement

FCC CFR Title 47 Part 15 Subpart C Section 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 antenna that uses a unique coupling to the intentional radiator, 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.

FCC CFR Title 47 Part 15 Subpart C Section 15.247(c) (1)(i):

(i) Systems operating in the 2400~2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

Test Result

The directional gain of the antenna less than 6dBi, please refer to the EUT internal photographs antenna photo.