

FCC EMC Test Report

Applicant: Nextivity, Inc.

Address of Applicant: 16550 West Bernardo Drive, Building 5, Suite 550, San Diego, CA 92127 USA

Product Name: Cellphone Signal Booster

Model No.: NU: Q51-SXNU, CU: Q51-SXCU, PU: Q50-XEPU

Brand Name: CEL-FI

FCC ID: NU: YETQ51-SXNU, CU: YETQ51-SXCU

Test Standards: FCC CFR Title 47 Part 15B

Date of Sample Receipt: May. 10, 2026

Date of Test: May. 10, 2026 to Jul. 14, 2026

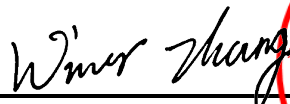
Date of Report Issue:

Jul. 17, 2026

Prepared By:

Shenzhen Acote Technology Co., Ltd.

Room 719, Excellence Times Building, No. 27, Xinqiao 3rd Road, Xinqiao Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong Province, China

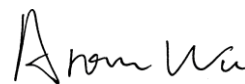


Winner Zhang / Manager
Approved by

测试专用章

Testing Service

Shenzhen Acote Technology Co., Ltd.



Aron Wu / Senior Engineer
Reviewed by

Report Revision History

Rev.	Issue Date	Description
V00	Jul. 17, 2026	Initial Release



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1 Laboratory Introduction

1.1 Laboratory Location

Company Name:	Shenzhen Acote Technology Co., Ltd.
Address of Laboratory:	Room 719, Excellence Times Building, No. 27, Xinqiao 3rd Road, Xinqiao Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong Province, China.
	101, F1, building 15, zhongda 365, Xincheng Road No.9, Songshanhu, Dongguan, Guangdong, China.
Website:	www.acotelabs.com
Email:	Service@acotelabs.com
Tel.:	+86-0755-2788 9963

1.2 Laboratory Facility

Our company's laboratory facilities have received accreditation, certification, or authorization from the following organizations:

- **FCC - Designation No.: CN1450**
Shenzhen Acote Technology Co., Ltd. has been certified by the FCC (Federal Communications Commission) as a testing laboratory. Test Firm Registration Number: **832670**.
- **ISED - CAB Identifier: CN0202**
Shenzhen Acote Technology Co., Ltd. is registered with ISED (Innovation, Science and Economic Development Canada) as a Conformity Assessment Body (CAB) for radio equipment testing.
- **A2LA - Accreditation Number: 7697.01**
Shenzhen Acote Technology Co., Ltd. has been accredited by A2LA (American Association for Laboratory Accreditation) in compliance with the internationally recognized standard ISO/IEC 17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories."

1.3 Announcement

Shenzhen Acote Technology Co., Ltd. tested the equipment in accordance with the requirements set forth in the test standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

This document may not be altered or revised in any way unless done so by Shenzhen Acote Technology Co., Ltd. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Shenzhen Acote Technology Co., Ltd. will constitute fraud and shall nullify the document.

1.4 Disclaimer

For the information or data provided by the client in this report, the relevant results or conclusions of this report are only made for these data or information. The testing laboratory is not responsible for the authenticity and accuracy of these data or information.

2 Equipment Under Test Information

2.1 Application Information

Applicant:	Nextivity, Inc.
Address of Applicant:	16550 West Bernardo Drive, Building 5, Suite 550, San Diego, CA 92127 USA
Manufacturer:	Nextivity, Inc.
Address of Manufacturer:	16550 West Bernardo Drive, Building 5, Suite 550, San Diego, CA 92127 USA

2.2 Product Information

Product Name:	Cellphone Signal Booster
Model No.:	NU: Q51-SXNU, CU: Q51-SXCU, PU: Q50-XEPU
Models of Product Family:	N/A
Description of Model Differentiation:	N/A
Hardware Version:	B
Software Version:	6_3_43
Power Supply:	DC 48V (via EPS-POE)
AC/DC Adapter:	Model No.: Q50-XEPU Input: AC 90-264V, 50/60Hz, 4.85A Output: DC 57V, 1.9A, 90W max.
Test Sample Condition:	The test samples were provided in good working order with no visible defects.

3 Test Information

3.1 Test Methodology

The tests documented in this report were performed in accordance with:

- FCC CFR Title 47 Part 15B
- ANSI C63.4: 2014

3.2 Test Result Summary

Report Section	Test Items	Standard Clause	Test Result
5.1	AC Power Line Conducted Emission	§15.107	Pass
5.2	Field Strength of Radiated Emission	§15.109	Pass
Remark: a) Pass: The EUT complies with the essential requirements in the standard. b) N/A: Not applicable. c) The EUT belongs to Class A digital device.			

3.3 Environment of test site

Temperature:	15 ~ 35°C
Humidity:	20 ~ 75% RH
Atmospheric Pressure:	990 ~ 1010 mbar

3.4 Measurement Uncertainty

Parameter	Expanded Uncertainty (Confidence of 95%(U = 2Uc(y)))
Conducted Emission (9kHz ~ 150kHz)	±3.02 dB
Conducted Emission (150kHz ~ 30MHz)	±2.52 dB
Radiated Emission (30MHz ~ 1000MHz) (3m SAC)	±4.78 dB
Radiated Emission (1GHz ~ 6GHz) (3m SAC)	±5.16 dB
Radiated Emission (6GHz ~ 18GHz) (3m SAC)	±5.48 dB
Note: All the measurement uncertainty value were shown with a coverage k=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.	

3.5 Description of Support Units

Description	Model	Manufacturer	Serial Number
Laptop	ThinkPad X1 Carbon 7th	Lenovo	PF-28E6G9 20/08
Load	N/A	Nextivity	N/A

3.6 Additions to, Deviations, or Exclusions from the Method

None

3.7 Test Instruments List

Radiated Emission (3m SAC)				
Test Equipment	Manufacturer	Model	Serial No.	Cal Due
3m SAC	YiHeng	9m*6m*6m	20250422	2028/05/28
EMI Test Receiver	Rohde & Schwarz	ESR7	101542	2026/08/31
Spectrum Analyzer	Rohde & Schwarz	FSP40	102129	2027/07/03
TRILOG Broad Band Antenna (30MHz – 1000MHz)	Schwarzbeck	VULB 9168	9168-771	2026/09/08
6dB Attenuator	SRTechnology Corporate	N-ATTENUATOR (6dB)	311248	2026/08/31
Preamplifier (30MHz – 1000MHz)	TESTEK	TK-PA06S	190014-L	2026/08/31
Broadband Horn Antenna (1GHz – 18GHz)	Gwave Technology	GHA0118A-11	20251014010	2026/11/16
Preamplifier (1GHz – 18GHz)	Gwave Technology	GWLAN008018-50	20251014010	2026/10/23
RF Cable (9kHz – 18GHz)	REBES	SF104/10000MM	805225/4	2026/08/31
RF Cable (9kHz – 18GHz)	REBES	SF104/10000MM	805226/4	2026/08/31
Test Software	Frad	EZ EMC	Version: EMEC-3A1	N/A

Conducted Emission				
Test Equipment	Manufacturer	Model	Serial No.	Cal Due
EMI Test Receiver	Rohde & Schwarz	ESR3	101763	2026/08/31
TWO-LINE V-NETWORK	Rohde & Schwarz	ENV216	101078	2026/08/31
RF Cable (9kHz – 30MHz)	REBES	WG4R-60-60-3	210305	2026/08/31
Test Software	Frad	EZ EMC	Version: EMEC-3A1	N/A

4 Test Configuration of EUT

4.1 Test Mode

TM 1:	Keep the EUT in normal working mode (Note: PU was used as the primary test equipment, while NU and CU were used as auxiliary test equipment. NU and CU were configured to operate in transmit mode.)
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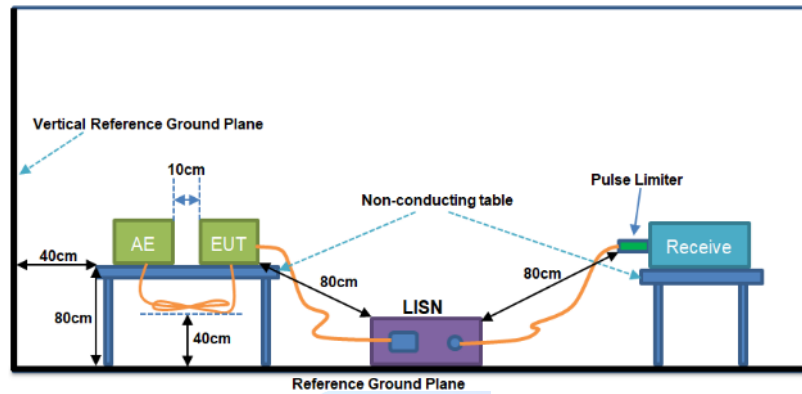
4.2 Worst-case Configuration

The worst-case scenario for all measurements is based on an engineering evaluation made on all modulation types at different data rate. The details are as follows:

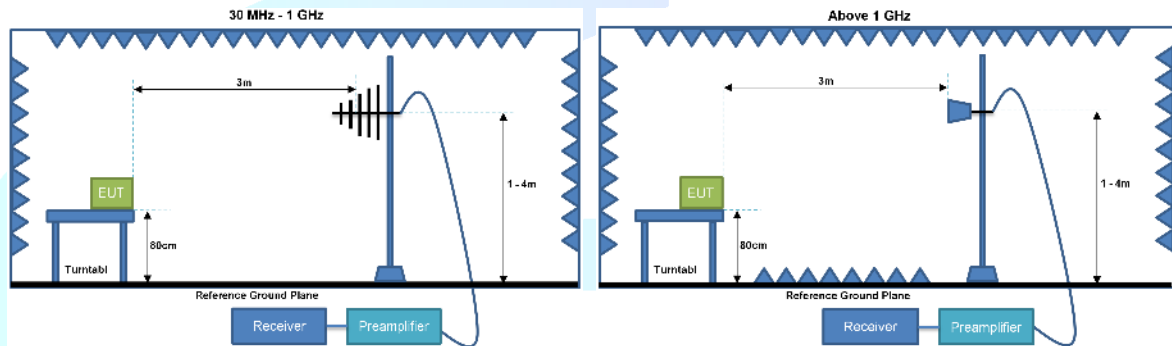
Report Section	Test Mode	Description
5.1	TM 1	Full Load
5.2	TM 1	Full Load

4.3 Test Setup Block

Setup 1 (Conducted Emission):



Setup 2 (Radiated Emission):



5 Technical requirements specification

5.1 AC Power Line Conducted Emission

5.1.1 Limits

Frequency (MHz)	Limit (dBμV)			
	Class A		Class B	
	Quasi-peak	Average	Quasi-peak	Average
0.15 – 0.5	79	66	66 to 56 ^{Note 1}	56 to 46 ^{Note 1}
0.5 – 5	73	60	56	46
5 – 30	73	60	60	50
Note 1: The limit level in dBμV decreases linearly with the logarithm of frequency.				
Note 2: The more stringent limit applies at transition frequencies.				

5.1.2 Test Procedure

- The EUT was placed on a non-conductive table, 40 cm from the vertical ground plane and 80 cm from the horizontal ground plane. The EUT was arranged in accordance with ANSI C63.4.
- The EUT operates in the corresponding mode as specified in Section 4.1, based on the worst-case mode evaluated in Section 4.2.
- The phase of the LISN was set to L1.
- Open the test software, load the conducted emission test script, or create a new conducted emission test script, and configure the test parameters, including the test frequency range, RBW = 9kHz, VBW = 30kHz, test standard, LISN, receiver, and other related settings.
- The test script was executed, the measurement was performed. Save the test data.
- The phase of the LISN was set to N, and steps d) and e) were repeated.

5.1.3 Test Setup

See setup 1 in section 4.3.

5.1.4 Test Instruments

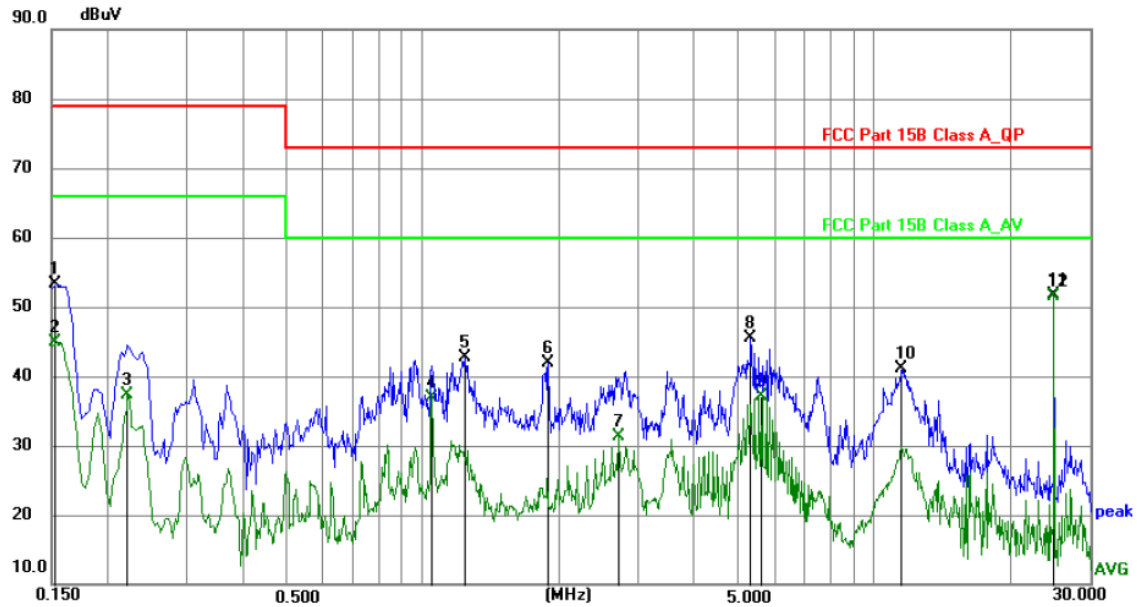
Refer to section 3.7.

5.1.5 Test Results

Pass.

5.1.6 Test Data

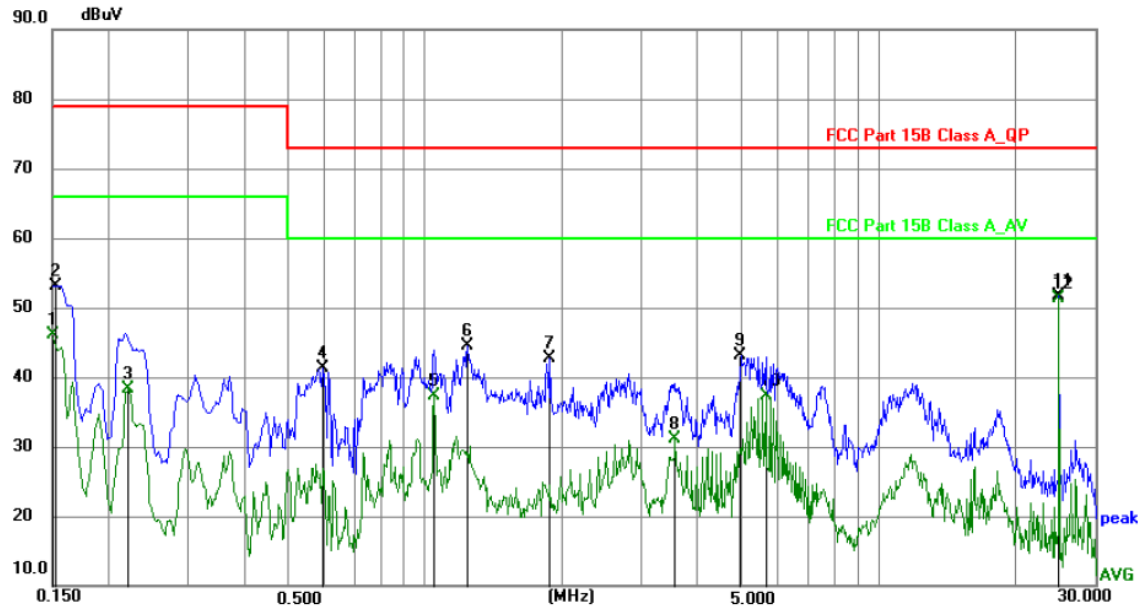
Product Name:	Cellphone Signal Booster	Model No.:	Q50-XEPU
Test By:	Tom Ye	Test Mode:	TM 1
Test Frequency:	150kHz ~ 30MHz	Phase:	Line
Test Voltage:	AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1539	43.66	9.69	53.35	79.00	-25.65	peak	P
2	0.1539	35.22	9.69	44.91	66.00	-21.09	AVG	P
3	0.2220	27.64	9.65	37.29	66.00	-28.71	AVG	P
4	1.0460	27.34	9.59	36.93	60.00	-23.07	AVG	P
5	1.2420	33.15	9.58	42.73	73.00	-30.27	peak	P
6	1.8900	32.23	9.58	41.81	73.00	-31.19	peak	P
7	2.7180	21.64	9.57	31.21	60.00	-28.79	AVG	P
8	5.3300	35.87	9.61	45.48	73.00	-27.52	peak	P
9	5.6459	27.43	9.62	37.05	60.00	-22.95	AVG	P
10	11.5379	31.46	9.67	41.13	73.00	-31.87	peak	P
11	25.0020	41.93	9.74	51.67	73.00	-21.33	peak	P
12 *	25.0020	41.69	9.74	51.43	60.00	-8.57	AVG	P

Remark: Level = Read level + LISN Factor + Cable Loss.

Product Name:	Cellphone Signal Booster	Model No.:	Q50-XEPU
Test By:	Tom Ye	Test Mode:	TM 1
Test Frequency:	150kHz ~ 30MHz	Phase:	Neutral
Test Voltage:	AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1500	36.37	9.67	46.04	66.00	-19.96	AVG	P
2	0.1539	43.46	9.67	53.13	79.00	-25.87	peak	P
3	0.2220	28.69	9.64	38.33	66.00	-27.67	AVG	P
4	0.5940	31.61	9.61	41.22	73.00	-31.78	peak	P
5	1.0460	27.66	9.59	37.25	60.00	-22.75	AVG	P
6	1.2420	34.88	9.59	44.47	73.00	-28.53	peak	P
7	1.8780	33.04	9.58	42.62	73.00	-30.38	peak	P
8	3.5540	21.48	9.60	31.08	60.00	-28.92	AVG	P
9	4.9699	33.41	9.61	43.02	73.00	-29.98	peak	P
10	5.6460	27.61	9.62	37.23	60.00	-22.77	AVG	P
11	25.0020	41.86	9.78	51.64	73.00	-21.36	peak	P
12 *	25.0020	41.60	9.78	51.38	60.00	-8.62	AVG	P

Remark: Level = Read level + LISN Factor + Cable Loss.

5.2 Field Strength of Radiated Emission

5.2.1 Limits

Radiated Emissions Limits (30 MHz to 1GHz)		
Frequency (MHz)	Limit (dBμV/m)	
	Class A	Class B
	Quasi-peak (3m Distance)	Quasi-peak (3m Distance)
30 – 88	49.6	40.0
88 – 216	54.0	43.5
216 – 960	56.9	46.0
960 – 1000	60.0	54.0
Note 2: The more stringent limit applies at transition frequencies.		

Radiated Emissions Limits at 3m Distance (Above 1GHz)				
Frequency	Limit (dBμV/m)			
	Class A		Class B	
	Peak	Average	Peak	Average
Above 1GHz	80	60	74	54
Note 1: The measurement bandwidth shall be 1 MHz or greater.				

5.2.2 Test Procedure

- The EUT is placed on a non-conducting table of the 3m SAC turntable, 80 cm above the ground plane. The measurement receiving antenna to EUT distance is 3 meters. The EUT was arranged in accordance with ANSI C63.4
- The EUT operates in the corresponding mode as specified in Section 4.1, based on the worst-case mode evaluated in Section 4.2.
- Open the test software, load the radiated emissions test script, or create a new radiated emissions test script, and configure the test parameters, including the test frequency range, RBW = 100kHz (for below 1GHz) or 1MHz (for above 1GHz), VBW = 300kHz (for below 1GHz) or 3MHz (for above 1GHz), test standard, test antenna, spectrum analyzer, and other related settings.
- The test script was executed, the measurement was performed.
- The turntable rotates 360 degrees, and the test antenna is raised and lowered within a range of 1 to 4 meters.
- Use the spectrum analyzer's Max Hold function to record the maximum test trace. For frequencies below 1 GHz, mark the maximum Quasi-peak value. For frequencies above 1 GHz, mark the maximum Peak and Average values. Save the test data.
- Both vertical and horizontal polarizations of the test antenna need to be tested.

5.2.3 Test Setup

See setup 2 in section 4.3.

5.2.4 Test Instruments

Refer to section 3.7.

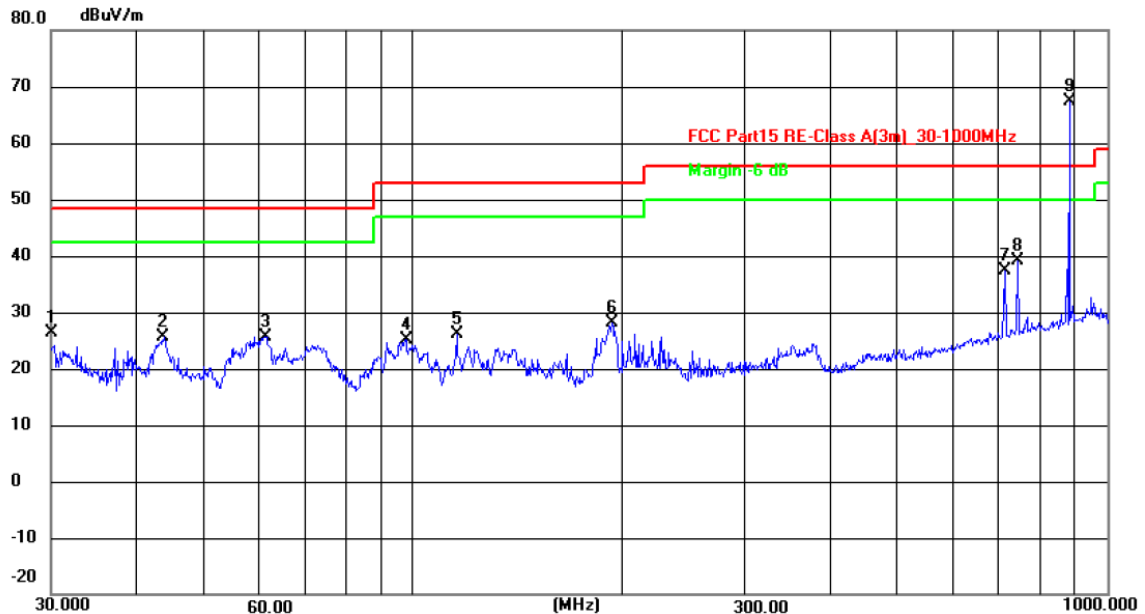
5.2.5 Test Results

Pass.

5.2.6 Test Data

1) Test Frequency Range: Below 1GHz

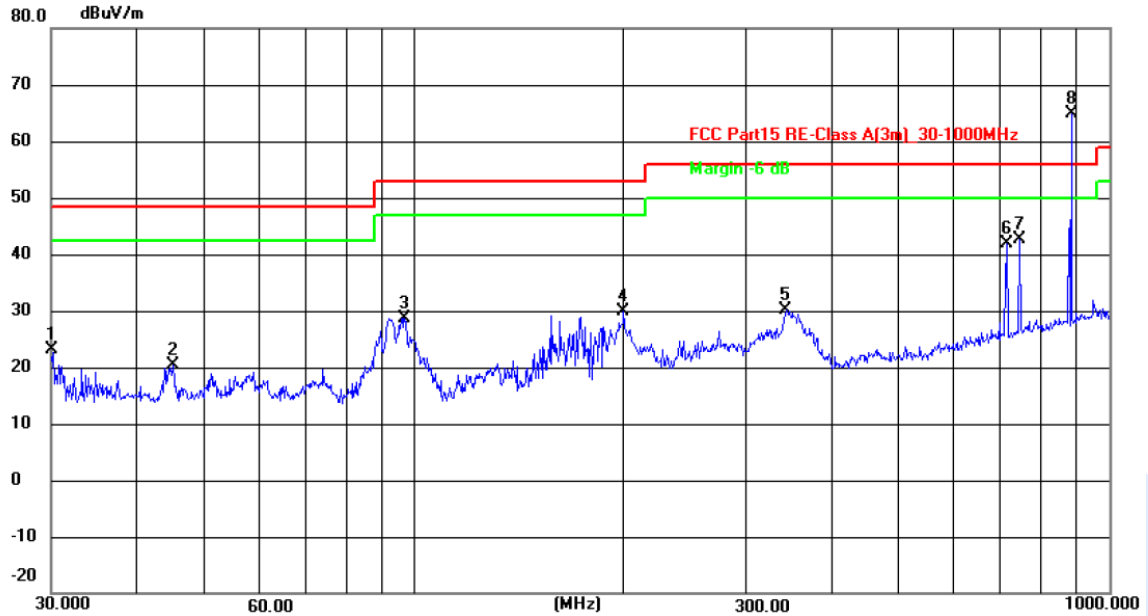
Product Name:	Cellphone Signal Booster	Model No.:	Q50-XEPU
Test By:	Albers Liu	Test Mode:	TM 1
Test Frequency:	30MHz ~ 1GHz	Polarization:	Vertical
Test Voltage:	AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	30.0000	48.86	-22.48	26.38	48.50	-22.12	peak	P
2	43.7542	51.98	-26.34	25.64	48.50	-22.86	peak	P
3	61.3194	51.71	-26.12	25.59	48.50	-22.91	peak	P
4	97.7555	59.55	-34.41	25.14	53.00	-27.86	peak	P
5	115.3711	60.32	-34.27	26.05	53.00	-26.95	peak	P
6	193.2638	61.77	-33.76	28.01	53.00	-24.99	peak	P
7	711.6734	68.36	-30.94	37.42	-----	LTE B12 and NR n12 UL		
8	744.5396	69.80	-30.74	39.06	-----	LTE B12 and NR n12 DL		
9 *	883.3405	97.59	-30.13	67.46	-----	LTE B5 and NR n5 DL		

Remark: Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).

Product Name:	Cellphone Signal Booster	Model No.:	Q50-XEPU
Test By:	Albers Liu	Test Mode:	TM 1
Test Frequency:	30MHz ~ 1GHz	Polarization:	Horizontal
Test Voltage:	AC 120V/60Hz		

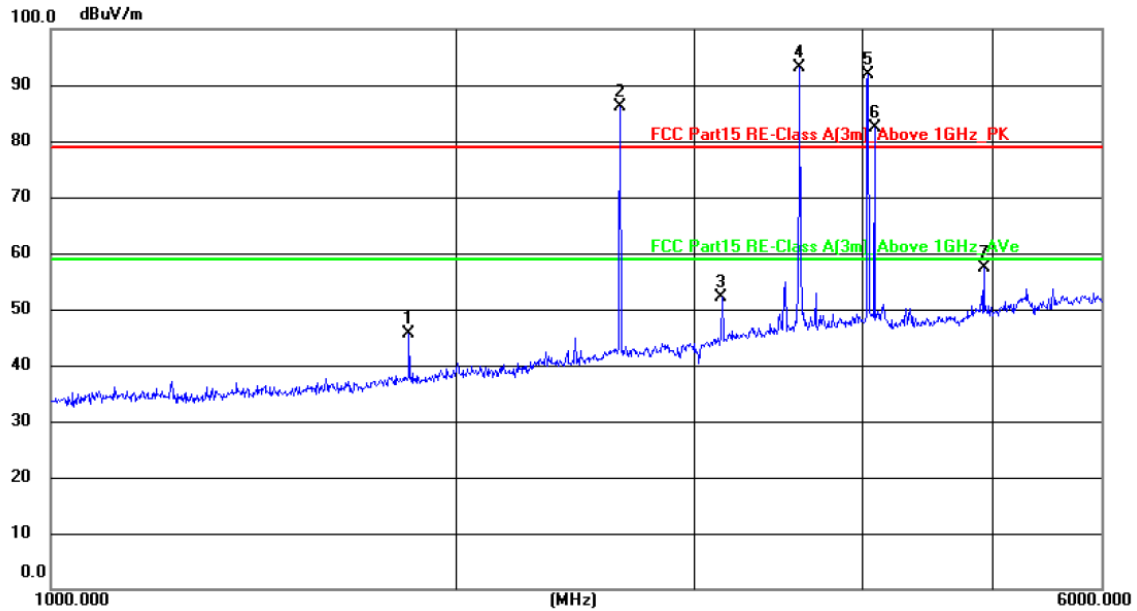


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	30.0000	45.73	-22.48	23.25	48.50	-25.25	peak	P
2	45.0189	46.75	-26.33	20.42	48.50	-28.08	peak	P
3	96.9022	63.13	-34.41	28.72	53.00	-24.28	peak	P
4	199.9856	63.52	-33.71	29.81	53.00	-23.19	peak	P
5	343.9329	62.86	-32.78	30.08	55.90	-25.82	peak	P
6	711.6734	72.87	-30.94	41.93	-----	LTE B12 and NR n12 UL		
7	744.5396	73.29	-30.74	42.55	-----	LTE B12 and NR n12 DL		
8 *	883.3405	94.91	-30.13	64.78	-----	LTE B5 and NR n5 DL		

Remark: Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).

2) Test Frequency Range: Above 1GHz

Product Name:	Cellphone Signal Booster	Model No.:	Q50-XEPU
Test By:	Albers Liu	Test Mode:	TM 1
Test Frequency:	1 ~ 6GHz	Polarization:	Vertical
Test Voltage:	AC 120V/60Hz		

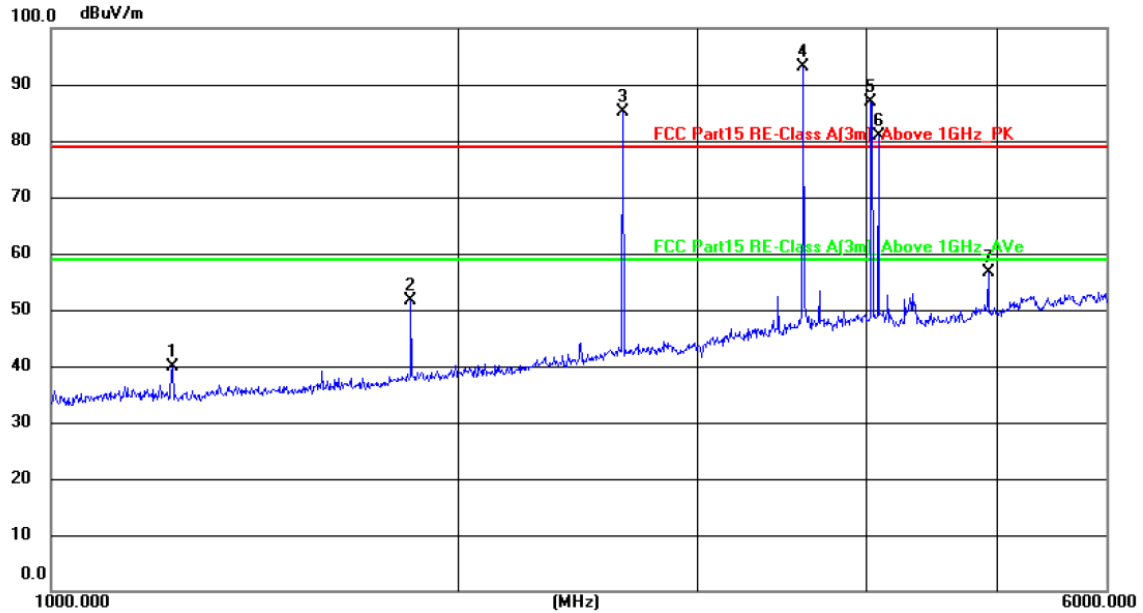


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	1843.080	68.72	-22.98	45.74	79.00	-33.26	peak	P
2 X	2642.120	106.71	-20.49	86.22	----	LTE B7 and NR n7 DL		
3	3146.460	71.69	-19.65	52.04	79.00	-26.96	peak	P
4 *	3588.551	111.30	-18.24	93.06	----	NR n77(3450-3550)		
5 X	4030.897	109.33	-17.50	91.83	----	NR n77(3700-3980)		
6 X	4075.378	99.94	-17.55	82.39	----			
7	4915.661	73.90	-16.59	57.31	79.00	-21.69	peak	P

Remark:

- Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).
- Since the measured peak value is lower than the average limit, the average value is not measured.
- Test Frequency up to 18GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.

Product Name:	Cellphone Signal Booster	Model No.:	Q50-XEPU
Test By:	Albers Liu	Test Mode:	TM 1
Test Frequency:	1 ~ 6GHz	Polarization:	Horizontal
Test Voltage:	AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	1228.818	64.16	-24.32	39.84	79.00	-39.16	peak	P
2	1843.080	74.52	-22.98	51.54	79.00	-27.46	peak	P
3 X	2642.120	105.73	-20.49	85.24	-----	LTE B7 and NR n7 DL		
4 *	3588.551	111.30	-18.24	93.06	-----	NR n77(3450-3550)		
5 X	4029.994	104.32	-17.50	86.82	-----	NR n77(3700-3980)		
6 X	4075.378	98.52	-17.55	80.97	-----			
7	4915.661	73.29	-16.59	56.70	79.00	-22.30	peak	P

Remark:

- Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).
- Since the measured peak value is lower than the average limit, the average value is not measured.
- Test Frequency up to 18GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.