

Test Report

Product: Power bank

Trade Mark: INIU

Model Number: P76-P1

FCC ID: 2A2ND-P76

Prepared for

Shenzhen Topstar Industry Co., Ltd.
Jiaxiye Plaza 931, 328 Minzhi Avenue, Longhua District, Shenzhen City,
Guangdong Province, China

Prepared by

Shenzhen HongBiao Certification& Testing Co., Ltd
Room 102, 201, Building 2, Yuanwanggu RFID Industrial Park, Tongguan
Road, Tianliao Community, Yutang Street, Guangming District, Shenzhen,
China
Tel.: +86-755-2998 9321 Fax.: +86-755-2998 5110
Website: <http://www.sz-hongbiao.com>

Table of Contents

1 GENERAL DESCRIPTION	5
1.1 DESCRIPTION OF EUT	5
1.2 TEST MODE.....	5
1.3 TEST SETUP	6
1.4 POWER SETTING CONFIGURATION PARAMETERS	6
1.5 ANCILLARY EQUIPMENT	6
2 SUMMARY OF TEST RESULT	7
3 TEST FACILITIES AND ACCREDITATIONS	8
3.1 TEST LABORATORY	8
3.2 ENVIRONMENTAL CONDITIONS.....	8
3.3 MEASUREMENT UNCERTAINTY	8
3.4 TEST SOFTWARE.....	8
4 LIST OF TEST EQUIPMENT	10
5 TEST ITEM AND RESULTS.....	12
5.1 ANTENNA REQUIREMENT.....	12
5.2 CONDUCTED EMISSION.....	13
5.3 RADIATED EMISSION	19
5.4 OCCUPIED BANDWIDTH	33
6 PHOTOGRAPHS OF THE TEST SETUP.....	36
7 PHOTOGRAPHS OF THE EUT.....	42

TEST RESULT CERTIFICATION

Applicant's Name.....: Shenzhen Topstar Industry Co., Ltd.
Address: Jiaxiye Plaza 931, 328 Minzhi Avenue, Longhua District,
Shenzhen City, Guangdong Province, China
Manufacturer's Name: Shenzhen Topstar Industry Co., Ltd.
Address: Jiaxiye Plaza 931, 328 Minzhi Avenue, Longhua District,
Shenzhen City, Guangdong Province, China

Product description

Product name: Power bank

Model Number: P76-P1

Standards: FCC Part 15C

Test procedure: IEEE/ANSI C63.10-2020

This device described above has been tested by Shenzhen HongBiao Certification& Testing Co., Ltd and the test results show that the equipment under test (EUT) is in compliance with the EMC requirements. And it is applicable only to the tested sample identified in the report.

Date of Test:

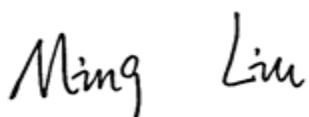
Date (s) of performance of tests: Dec. 25, 2024~ Jan. 13, 2025

Test Result: **Pass**

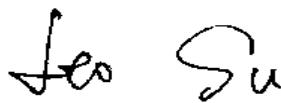
Testing Engineer :


(Zoe Su)

Technical Manager :


(Ming Liu)

Authorized Signatory :


(Leo Su)

Revision History

1 General Description

1.1 Description of EUT

Product name:	Power bank
Model name:	P76-P1
Series Model:	P73
Different of series model:	Except for differences in appearance color, model, and individual components in the battery display area, all models have the same RF circuits and modules.
Operation frequency:	115kHz-205kHz, 360kHz
Operational mode:	Wireless charging
Modulation type:	ASK
Antenna type:	Coil Antenna
Antenna gain:	0dBi
Hardware version:	V1.0
Software version:	V1.0
Battery:	DC 3.87V, 10000mAh, 38.7Wh
Power supply:	IN(C1): DC 5V/3A, DC 9V/3A, DC 12V/2.25A IN(C2): DC 5V/3A, DC 9V/3A, DC 12V/2.25A OUT(C1): DC 5V/3A, DC 9V/3A, DC 12V/3A, DC 15V/3A OUT(C2): DC 5V/3A, DC 9V/3A, DC 12V/3A, DC 15V/3A Battery Capacity: 10000mAh/3.87V/38.7Wh Output Capacity: 7000mAh/5V/35Wh Wireless output: 5W, 7.5W, 10W, 15W
Adapter information:	N/A

Note: The individual components in the power display area of the model P73 listed in the report are different from those of the model P76-P1, but the RF circuit and electronic structure have not changed. In response to this, we conducted a difference test on the model P73, and the final report only reflects the difference test data under the worst case.

1.2 Test Mode

Pretest Test Mode	Description of Mode
1	AC/DC Adapter + Wireless Output: 3W
2	Wireless Output: 5W
3	Wireless Output: 7.5W
4	Wireless Output: 10W
5	Wireless Output: 15W

Note: This EUT can only support 3W wireless power transmission when charging with an AC/DC adapter.

Test Item	Final Test Mode
Conducted Emissions	1
Radiated Emissions	1/5
20dB bandwidth	3/4

1.3 Test Setup

See photographs of the test setup in the report for the actual setup and connections between EUT and support equipment.

1.4 Power setting configuration parameters

Test Software Version	N/A		
Frequency	115kHz-205kHz		360kHz
Parameters	Default		Default
RF cable			
Description	Connector	Length	Supplied by
Antenna Cable	SMA	10cm	Applicant

Note: Disclaimer: the loss of RF cable is too small and can be ignored.

1.5 Ancillary Equipment

Equipment	Model	S/N	Manufacturer
Adapter	CD289	35810	Ugreen Group Limited
Load	YBZ3.1	566733	YBZ

2 Summary of Test Result

Test procedures according to the technical standards:

FCC Part 15C

No.	Standard Section	Test Item	Result	Remark
1	FCC Part 15.203	Antenna Requirement	Pass	
2	FCC Part 15.207	Conducted Emission	Pass	
3	FCC Part 15.209	Radiated Emission	Pass	
4	FCC Part 15.215	20dB Bandwidth	Pass	

Note:

1. "N/A" means the test case does not apply to the test object.

3 Test Facilities and Accreditations

3.1 Test Laboratory

Test Site	Shenzhen HongBiao Certification& Testing Co., Ltd
Test Site Location	Room 102, 201, Building 2, Yuanwanggu RFID Industrial Park, Tongguan Road, Tianliao Community, Yutang Street, Guangming District, Shenzhen, China
Telephone:	(86-755) 2998 9321
Fax:	(86-755) 2998 5110
FCC Registration No.:	CN1341
A2LA Certificate No.:	6765.01

3.2 Environmental Conditions

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

Temperature:	15°C~35°C
Relative Humidity:	20%~75%
Air Pressure:	98kPa~101kPa

3.3 Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

The data and results quoted in this document are true and accurate values, and uncertainties are not involved in the calculations.

In addition, components and mass production processes that are similar to testing equipment may introduce additional deviations, and the manufacturer is solely responsible for the continued compliance of the equipment.

Measurement Frequency Range	U, (dB)	Note
RF frequency	2×10^{-5}	
RF power, conducted	± 0.57 dB	
Conducted emission(150kHz~30MHz)	± 2.5 dB	
Radiated emission(9kHz-30MHz)	± 2.5 dB	
Radiated emission(30MHz~1GHz)	± 4.2 dB	
Occupied Bandwidth	$\pm 3\%$	
Temperature	± 1 degree	
Humidity	± 5 %	

3.4 Test Software

Software name	Manufacturer	Model	Version
Conducted Emission test Software	Farad	EZ-EMC	EMC-CON 3A1.1+
Radiated Emission test Software	Farad	EZ-EMC	FA-03A2
RF Test System	MWRF	MTS 8310	2.0.0.0

4 List of Test Equipment

Radiation emission							
Item	Equipment No.	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	HB-E001	Horn Antenna	Schwarzbeck	BBHA 9120D	02592	2024-05-18	2026-05-17
2	HB-E002	Biconical log-periodic composite antenna	Schwarzbeck	VULB 9168	01340	2024-05-18	2026-05-17
3	HB-E003	SHF-EHF Horn	Schwarzbeck	BBHA 91270	01193	2024-05-18	2026-05-17
4	HB-E005	Preamplifier	Noyetec	LAN-011 8	NYCM1420 102	2024-05-17	2025-05-16
5	HB-E006	Preamplifier	Noyetec	LAN-18 40	NYCM1420 103	2024-05-17	2025-05-16
6	HB-E007	EMI TEST RECEIVER	R&S	ESR7	102520	2024-05-17	2025-05-16
7	HB-E009	POSITINAL COTROLLE R	Noyetec	N/A	N/A	/	/
8	HB-E013	RF switch	Noyetec	NY-RF4	NY0CM142 0204	/	/
9	HB-E066	Illuminance Tester	TASI	TA8121	N/A	2024-05-21	2025-05-20
10	HB-E075	Active loop antenna	Schwarzbeck	FMZB 1519B	1519B-245	2024-05-18	2026-05-17
11	HB-E076	Preamplifier	Hewlett Packard	8447D	1937A0227 8	2024-05-17	2025-05-16

Conduction emission							
Item	Equipment No.	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	HB-E014	4 Path V-LISN	Schwarzbeck	NNLK 8121	00770	2024-05-17	2025-05-16
2	HB-E015	Pulse Limiter	Schwarzbeck	VTSD 9561-F	00949	2024-05-17	2025-05-16
3	HB-E016	ZN23201	Noyetec	ZN23201	N/A	2024-05-21	2025-05-20
4	HB-E059	Attenuator	Xianghua	TS2-6-1	220215166	2024-05-17	2025-05-16
5	HB-E069	EMI TEST RECEIVER	R&S	ESCI	N/A	2024-05-17	2025-05-16

RF							
Item	Equipment No.	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	HB-E041	MXG Anaiog Signal Generator	Agilent	N5181A	MY47070421	2024-05-17	2025-05-16
2	HB-E042	WIDEBAND RADIO COMMUNICA	R&S	CMW500	132108	2024-05-17	2025-05-16

		TION TESTER					
3	HB-E043	MXG Anaiog Signal Generator	Agilent	N5182A	US46240335	2024-05-17	2025-05-16
4	HB-E044	Signal& spectrum Analyzer	R&S	FSV3044	101264	2024-05-17	2025-05-16
5	HB-E045	RF Control Box	Noyetec	NY100-R FCB	N/A	/	/
6	HB-E058	Thermometer Clock Humidity Monitor	N/A	HTC-1	N/A	/	/

Note: the calibration interval of the above test instruments is 12&24 months and the calibrations are traceable to international system unit (SI).

5 Test Item And Results

5.1 Antenna Requirement

5.1.1 Standard Requirement

15.203 requirement: For intentional device, according to 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

5.1.2 Test Result

The EUT antenna is Coil Antenna. It comply with the standard requirement. In case of replacement of broken antenna the same antenna type must be used.

5.2 Conducted Emission

5.2.1 Limits

Limits – Class A		
Frequency (MHz)	Limit (dB μ V)	
	Quasi-Peak	Average
0.15 to 0.5	79	66
0.5 to 30	73	60
Limits – Class B		
Frequency (MHz)	Limit (dB μ V)	
	Quasi-Peak	Average
0.15 to 0.5	66 to 56*	56 to 46*
0.5 to 5	56	46
5 to 30	60	50

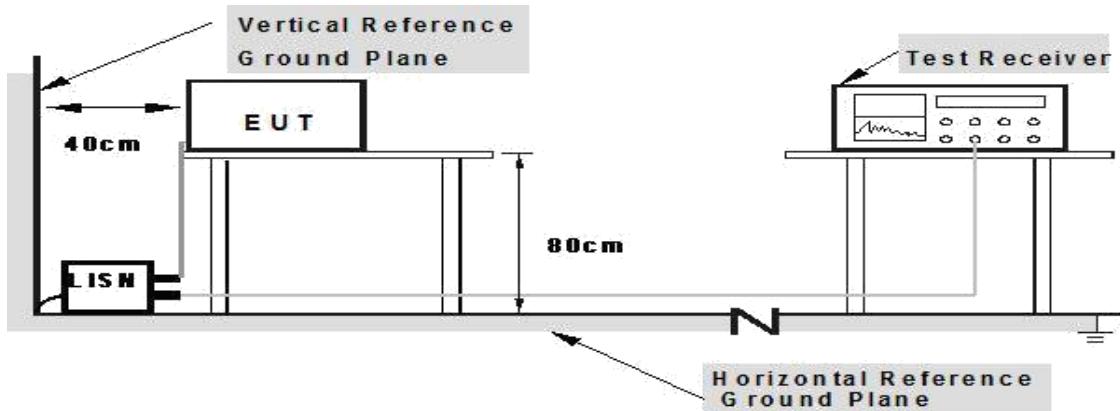
Note:

1. the tighter limit applies at the band edges.
2. the limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

5.2.2 Test Procedures

- a) The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b) Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c) I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d) LISN is at least 80 cm from nearest part of EUT chassis.
- e) For the actual test configuration, please refer to the related Item – photographs of the test setup.

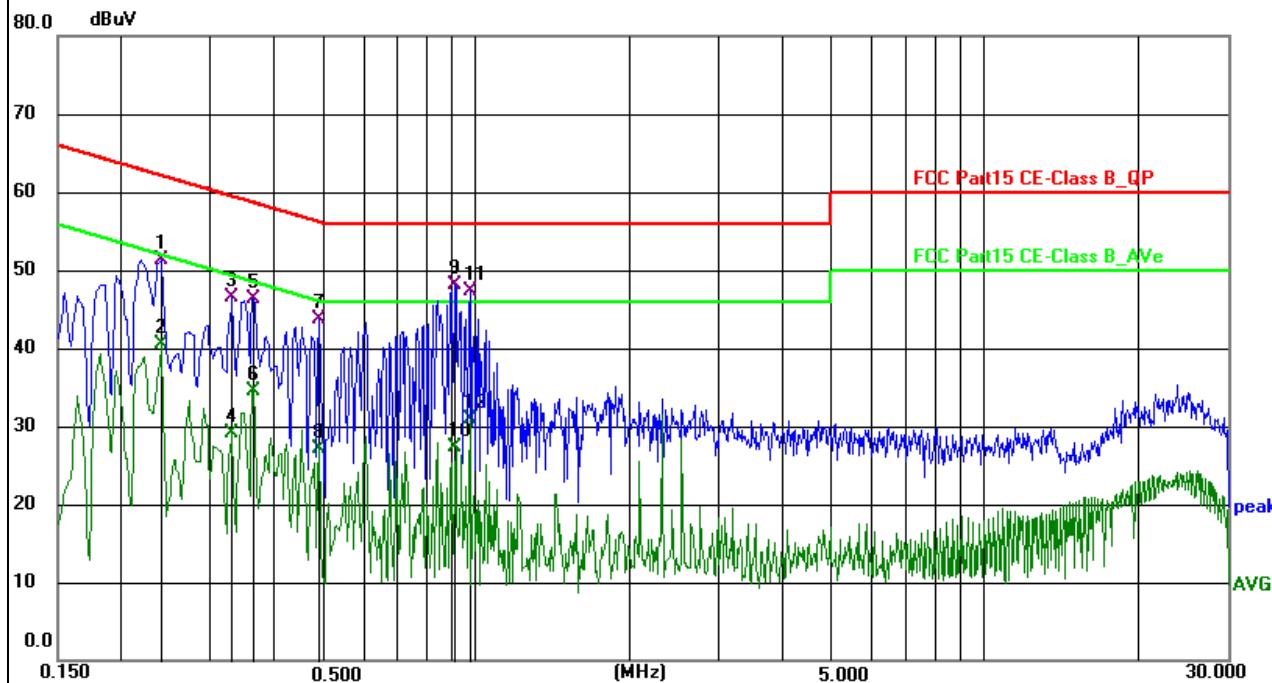
5.2.3 Test setup



5.2.4 Test Result

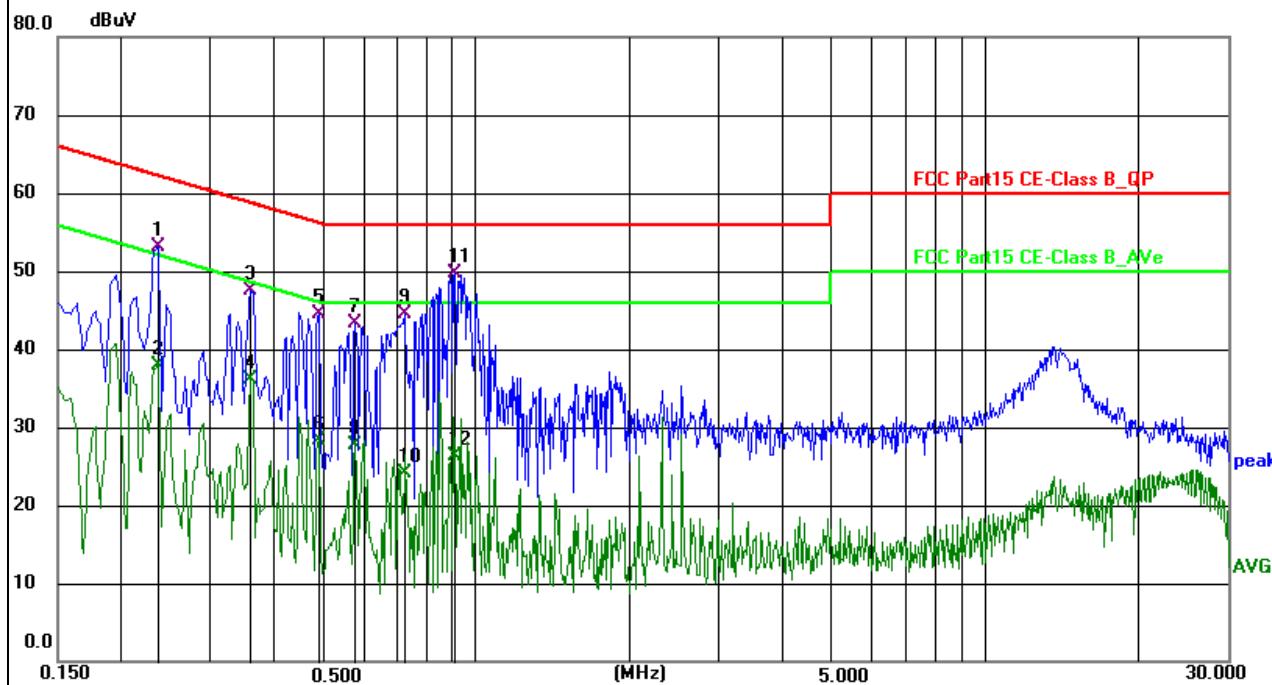
Model: P76-P1

EUT:	Power bank	Model Name:	P76-P1
Test Mode:	Mode 1	Phase:	L
Test Voltage:	DC 9V from adapter AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.240000	40.87	10.48	51.35	62.10	-10.75	QP
2	0.240000	29.93	10.48	40.41	52.10	-11.69	AVG
3	0.330000	35.98	10.48	46.46	59.45	-12.99	QP
4	0.330000	18.53	10.48	29.01	49.45	-20.44	AVG
5	0.361400	35.79	10.48	46.27	58.70	-12.43	QP
6	0.361400	24.01	10.48	34.49	48.70	-14.21	AVG
7	0.487400	33.14	10.51	43.65	56.21	-12.56	QP
8	0.487400	16.54	10.51	27.05	46.21	-19.16	AVG
9 *	0.906000	37.58	10.45	48.03	56.00	-7.97	QP
10	0.906000	16.80	10.45	27.25	46.00	-18.75	AVG
11	0.968900	36.92	10.42	47.34	56.00	-8.66	QP
12	0.968900	20.58	10.42	31.00	46.00	-15.00	AVG

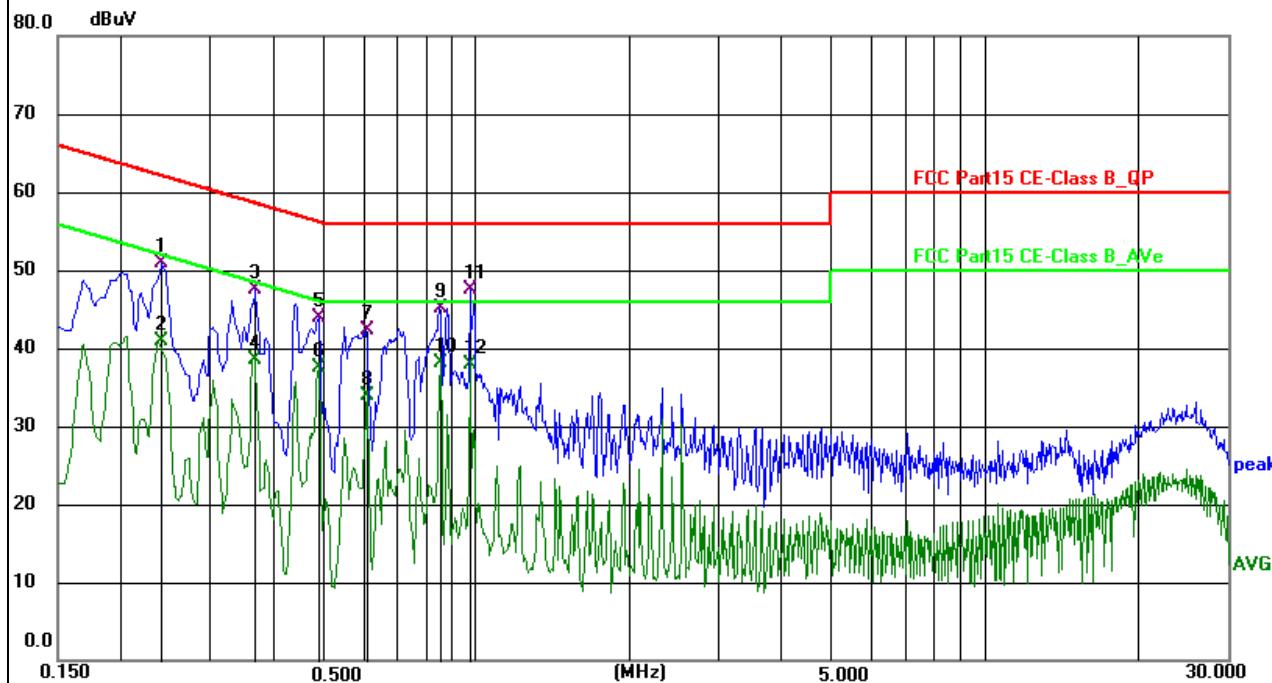
EUT:	Power bank	Model Name:	P76-P1
Test Mode:	Mode 1	Phase:	N
Test Voltage:	DC 9V from adapter AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.235500	42.62	10.52	53.14	62.25	-9.11	QP
2	0.235500	27.46	10.52	37.98	52.25	-14.27	AVG
3	0.357000	36.95	10.46	47.41	58.80	-11.39	QP
4	0.357000	25.58	10.46	36.04	48.80	-12.76	AVG
5	0.487400	34.16	10.41	44.57	56.21	-11.64	QP
6	0.487400	17.89	10.41	28.30	46.21	-17.91	AVG
7	0.577500	32.93	10.39	43.32	56.00	-12.68	QP
8	0.577500	17.37	10.39	27.76	46.00	-18.24	AVG
9	0.721500	34.15	10.38	44.53	56.00	-11.47	QP
10	0.721500	13.77	10.38	24.15	46.00	-21.85	AVG
11 *	0.906000	39.36	10.36	49.72	56.00	-6.28	QP
12	0.906000	15.91	10.36	26.27	46.00	-19.73	AVG

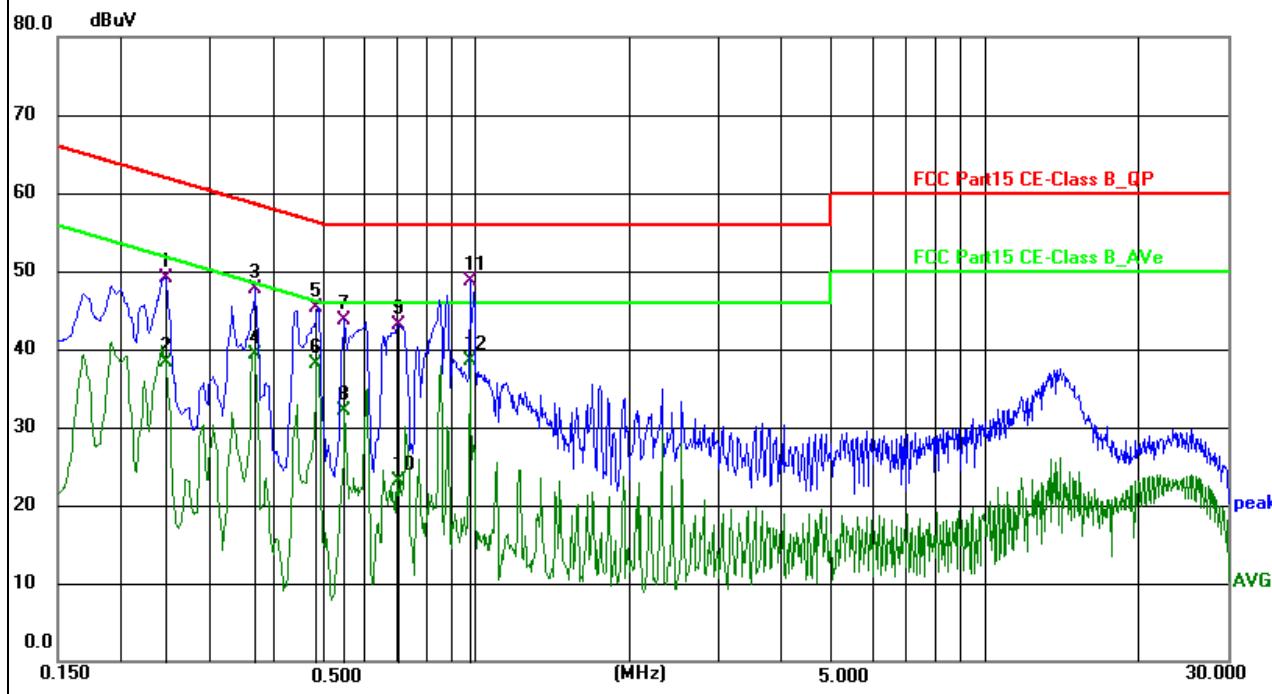
Model: P73

EUT:	Power bank	Model Name:	P73
Test Mode:	Mode 1	Phase:	L
Test Voltage:	DC 9V from adapter AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.240000	40.52	10.48	51.00	62.10	-11.10	QP
2	0.240000	30.52	10.48	41.00	52.10	-11.10	AVG
3	0.365900	36.95	10.48	47.43	58.59	-11.16	QP
4	0.365900	28.12	10.48	38.60	48.59	-9.99	AVG
5	0.487500	33.45	10.51	43.96	56.21	-12.25	QP
6	0.487500	26.93	10.51	37.44	46.21	-8.77	AVG
7	0.609000	31.89	10.51	42.40	56.00	-13.60	QP
8	0.609000	23.46	10.51	33.97	46.00	-12.03	AVG
9	0.852000	34.59	10.45	45.04	56.00	-10.96	QP
10 *	0.852000	27.59	10.45	38.04	46.00	-7.96	AVG
11	0.973500	37.09	10.42	47.51	56.00	-8.49	QP
12	0.973500	27.57	10.42	37.99	46.00	-8.01	AVG

EUT:	Power bank	Model Name:	P73
Test Mode:	Mode 1	Phase:	N
Test Voltage:	DC 9V from adapter AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.244400	38.61	10.52	49.13	61.95	-12.82	QP
2	0.244400	27.70	10.52	38.22	51.95	-13.73	AVG
3	0.365300	37.27	10.45	47.72	58.61	-10.89	QP
4	0.365300	28.83	10.45	39.28	48.61	-9.33	AVG
5	0.482900	34.91	10.41	45.32	56.29	-10.97	QP
6	0.482900	27.60	10.41	38.01	46.29	-8.28	AVG
7	0.550500	33.40	10.40	43.80	56.00	-12.20	QP
8	0.550500	21.78	10.40	32.18	46.00	-13.82	AVG
9	0.703500	32.65	10.38	43.03	56.00	-12.97	QP
10	0.703500	12.66	10.38	23.04	46.00	-22.96	AVG
11 *	0.973500	38.42	10.35	48.77	56.00	-7.23	QP
12	0.973500	28.09	10.35	38.44	46.00	-7.56	AVG

5.3 Radiated Emission

5.3.1 Limits

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (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
Above 960	500	3

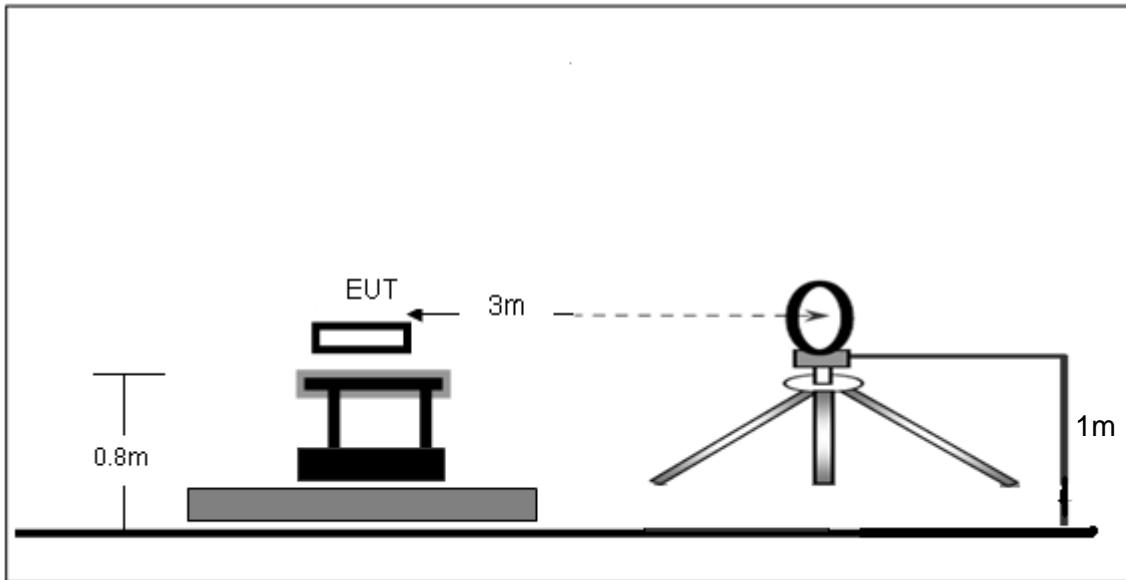
Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

5.3.2 Test Procedures

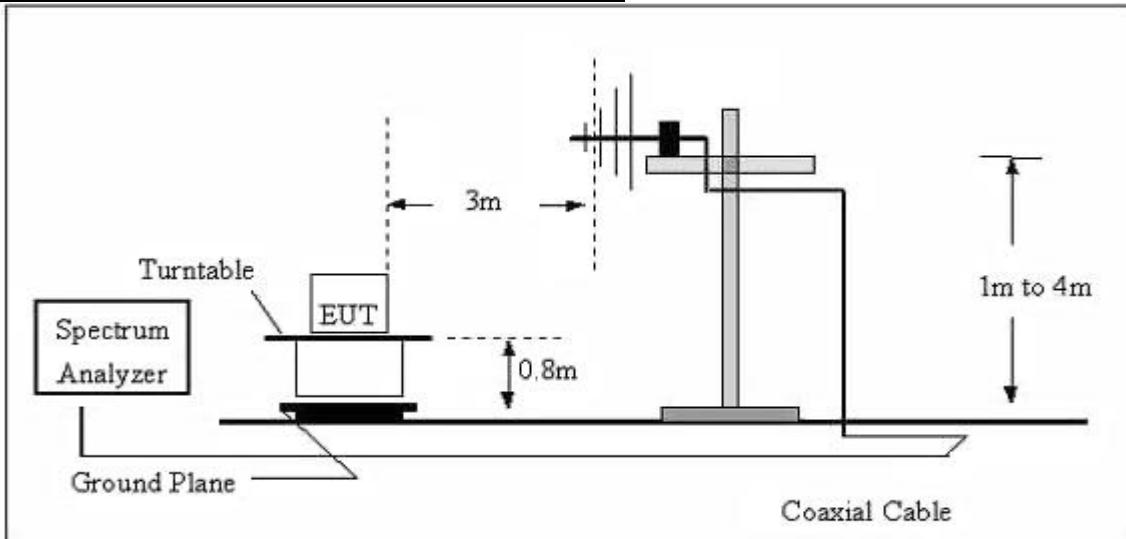
- a) The radiated emission tests were performed in the 3 meters.
- b) The EUT was placed on the top of a rotating table 0.8 meters above the ground. The table was rotated 360 degrees to determine the position of the highest radiation.
- c) The height of the test antenna shall vary between 1m to 4m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d) If the peak mode measured value compliance with and lower than quasi peak mode limit, the EUT shall be deemed to meet QP limits and then no additional QP mode measurement performed.
- e) If the peak mode measured value compliance with and lower than average mode limit, the EUT shall be deemed to meet average limits and then no additional average mode measurement performed.
- f) For the actual test configuration, please refer to the related item – EUT test photos.

5.3.3 Test Setup

Radiated Emission Test-Up Frequency Below 30MHz



Radiated Emission Test-Up Frequency 30MHz~1GHz



5.3.4 Test Result

Model: P76-P1

Frequency range (9kHz – 30MHz)

EUT:	Power bank	Model Name:	P76-P1
Test Mode:	Mode 5 (360kHz)	Phase:	Coaxial
Test Voltage:	DC 3.87V from battery		

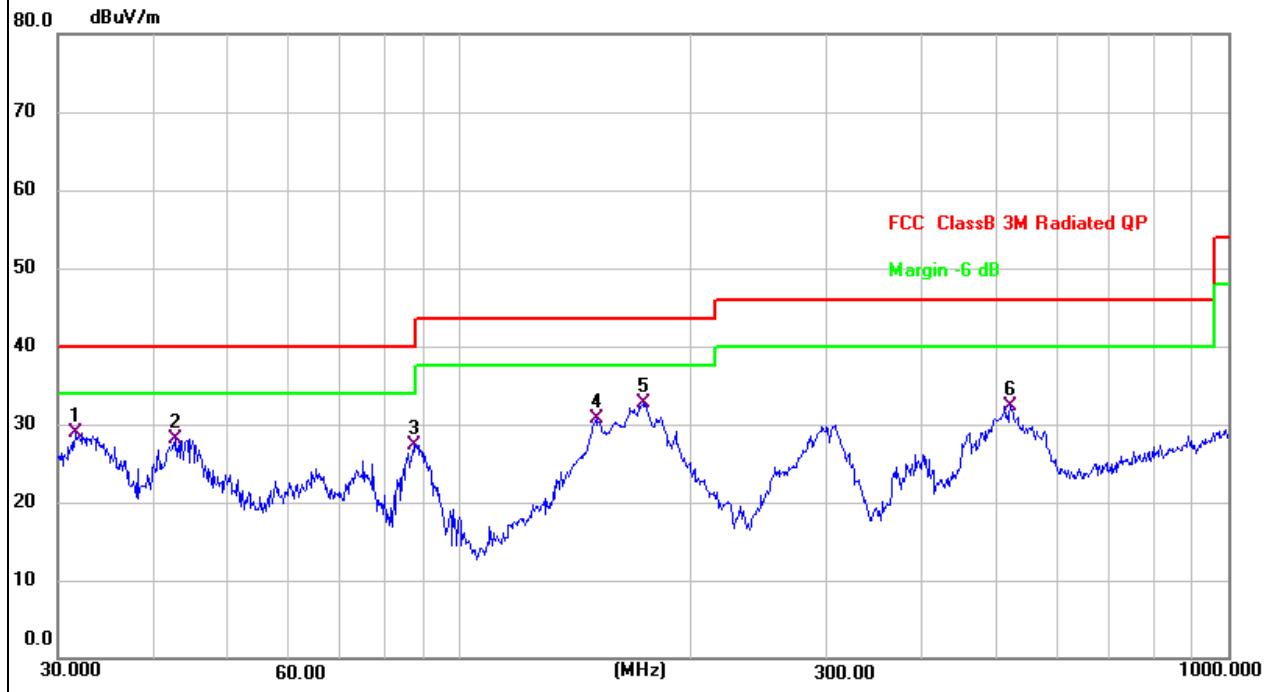


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	0.3220	33.56	20.09	53.65	97.45	-43.80	AVG
2	0.3636	41.91	20.07	61.98	96.40	-34.42	AVG
3	0.4601	32.47	20.05	52.52	94.35	-41.83	AVG
4	0.6262	25.17	20.10	45.27	71.68	-26.41	QP
5	0.6628	25.65	20.12	45.77	71.18	-25.41	QP
6 *	1.0783	21.94	20.24	42.18	66.97	-24.79	QP

EUT:	Power bank	Model Name:	P76-P1																																																								
Test Mode:	Mode 1 (115kHz-205kHz)	Phase:	Coaxial																																																								
Test Voltage:	DC 9V from adapter AC 120V/60Hz																																																										
<table border="1"> <thead> <tr> <th>No.</th><th>Frequency (MHz)</th><th>Reading (dBuV)</th><th>Factor (dB/m)</th><th>Level (dBuV/m)</th><th>Limit (dBuV/m)</th><th>Margin (dB)</th><th>Detector</th></tr> </thead> <tbody> <tr> <td>1</td><td>0.1185</td><td>43.64</td><td>20.50</td><td>64.14</td><td>106.15</td><td>-42.01</td><td>AVG</td></tr> <tr> <td>2</td><td>0.3192</td><td>32.41</td><td>20.09</td><td>52.50</td><td>97.53</td><td>-45.03</td><td>AVG</td></tr> <tr> <td>3</td><td>0.4637</td><td>32.87</td><td>20.05</td><td>52.92</td><td>94.28</td><td>-41.36</td><td>AVG</td></tr> <tr> <td>4</td><td>0.5070</td><td>25.72</td><td>20.04</td><td>45.76</td><td>73.50</td><td>-27.74</td><td>AVG</td></tr> <tr> <td>5 *</td><td>0.6260</td><td>24.86</td><td>20.10</td><td>44.96</td><td>71.68</td><td>-26.72</td><td>QP</td></tr> <tr> <td>6</td><td>0.7607</td><td>17.61</td><td>21.66</td><td>39.27</td><td>69.99</td><td>-30.72</td><td>QP</td></tr> </tbody> </table>				No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	1	0.1185	43.64	20.50	64.14	106.15	-42.01	AVG	2	0.3192	32.41	20.09	52.50	97.53	-45.03	AVG	3	0.4637	32.87	20.05	52.92	94.28	-41.36	AVG	4	0.5070	25.72	20.04	45.76	73.50	-27.74	AVG	5 *	0.6260	24.86	20.10	44.96	71.68	-26.72	QP	6	0.7607	17.61	21.66	39.27	69.99	-30.72	QP
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector																																																				
1	0.1185	43.64	20.50	64.14	106.15	-42.01	AVG																																																				
2	0.3192	32.41	20.09	52.50	97.53	-45.03	AVG																																																				
3	0.4637	32.87	20.05	52.92	94.28	-41.36	AVG																																																				
4	0.5070	25.72	20.04	45.76	73.50	-27.74	AVG																																																				
5 *	0.6260	24.86	20.10	44.96	71.68	-26.72	QP																																																				
6	0.7607	17.61	21.66	39.27	69.99	-30.72	QP																																																				

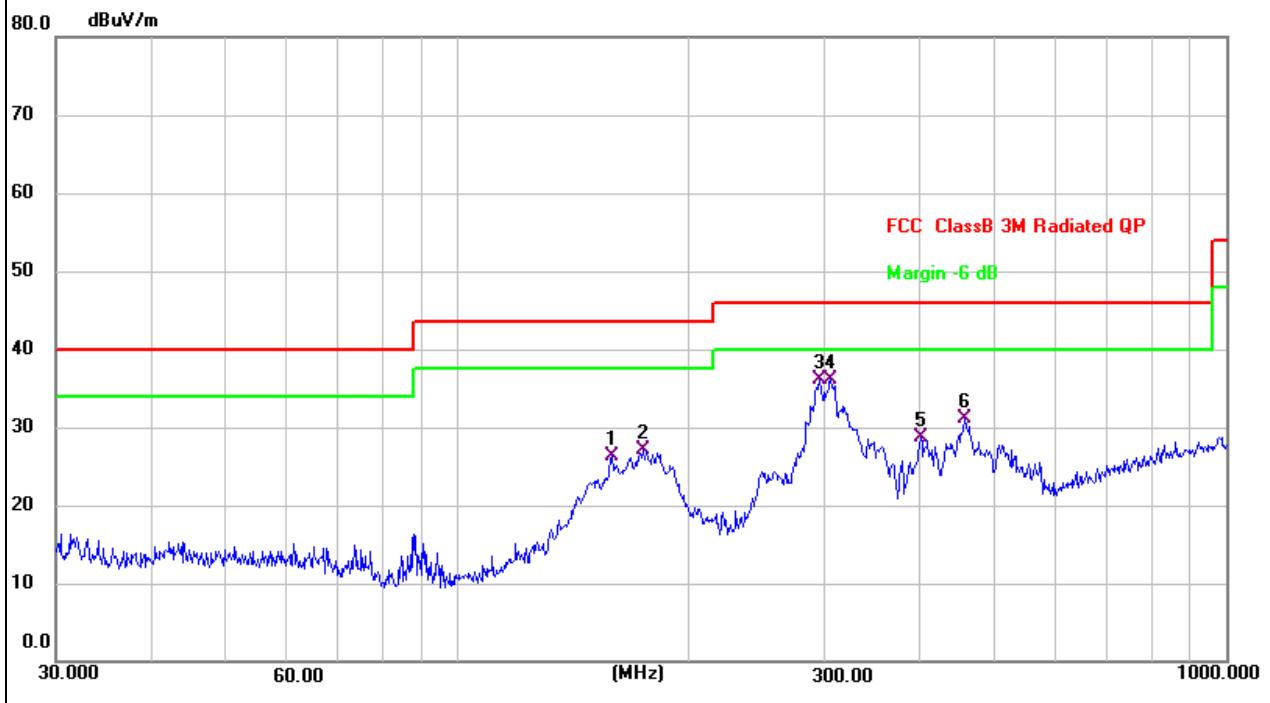
Frequency range (30MHz – 1GHz)

EUT:	Power bank	Model Name:	P76-P1
Test Mode:	Mode 1 (115kHz-205kHz)	Phase:	Vertical
Test Voltage:	DC 9V from adapter AC 120V/60Hz		



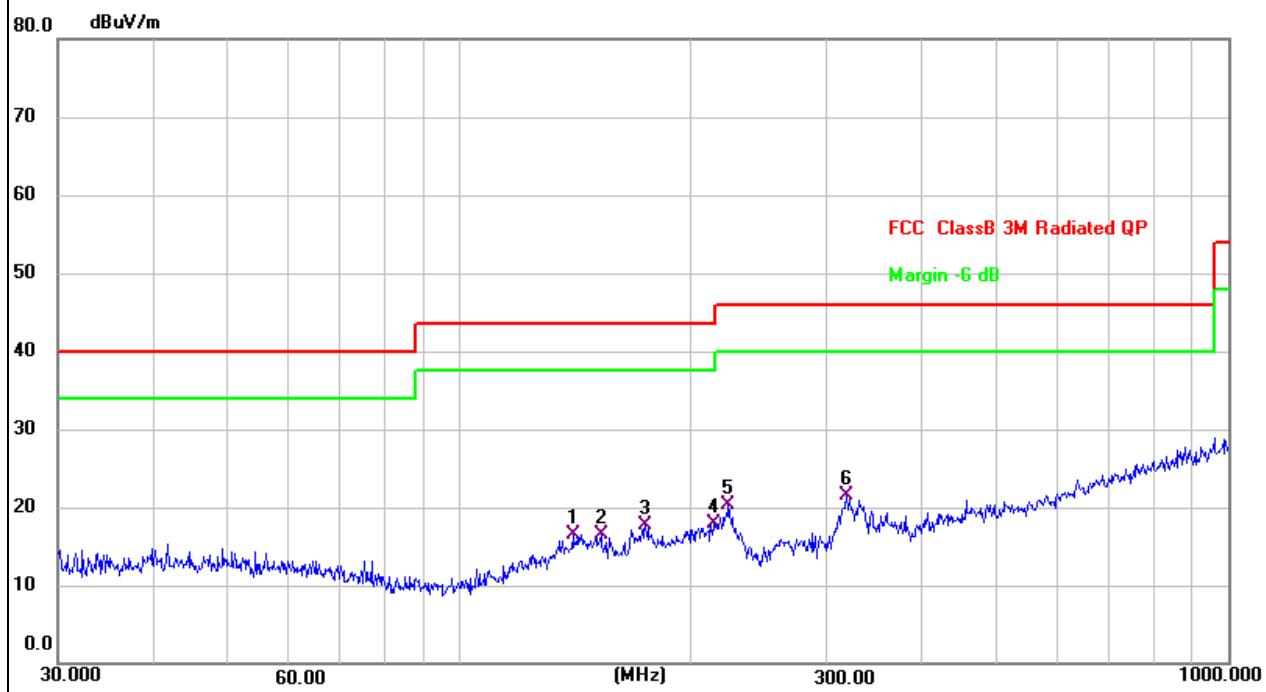
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	31.6202	44.14	-15.15	28.99	40.00	-11.01	QP
2	42.7496	42.29	-14.15	28.14	40.00	-11.86	QP
3	87.1117	45.57	-18.21	27.36	40.00	-12.64	QP
4	150.5378	44.14	-13.47	30.67	43.50	-12.83	QP
5 *	173.8135	46.82	-14.06	32.76	43.50	-10.74	QP
6	520.8882	39.27	-6.87	32.40	46.00	-13.60	QP

EUT:	Power bank	Model Name:	P76-P1
Test Mode:	Mode 1 (115kHz-205kHz)	Phase:	Horizontal
Test Voltage:	DC 9V from adapter AC 120V/60Hz		



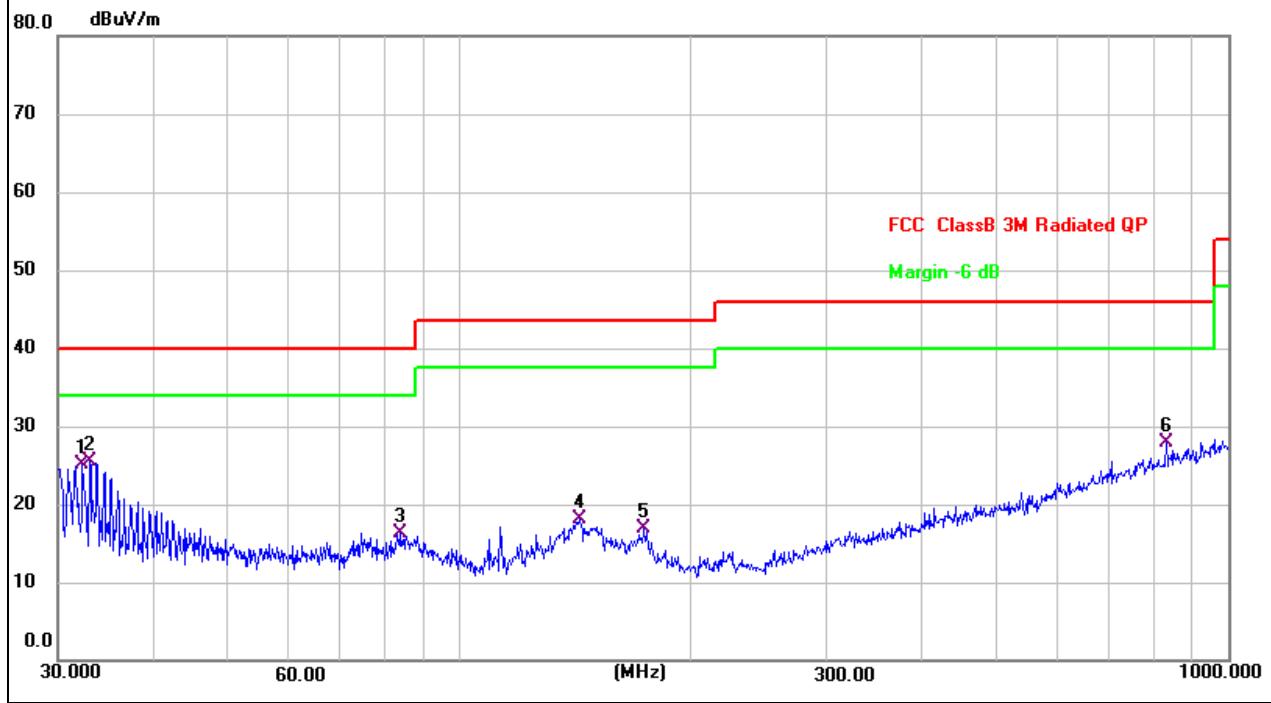
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	158.6677	39.60	-13.36	26.24	43.50	-17.26	QP
2	174.4241	41.39	-14.22	27.17	43.50	-16.33	QP
3	295.1469	48.83	-12.75	36.08	46.00	-9.92	QP
4 *	305.6800	48.54	-12.38	36.16	46.00	-9.84	QP
5	400.4319	38.29	-9.57	28.72	46.00	-17.28	QP
6	457.5073	39.41	-8.29	31.12	46.00	-14.88	QP

EUT:	Power bank	Model Name:	P76-P1
Test Mode:	Mode 5 (360kHz)	Phase:	Horizontal
Test Voltage:	DC 3.87V from battery		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	140.3421	30.64	-14.20	16.44	43.50	-27.06	QP
2	152.6641	29.86	-13.29	16.57	43.50	-26.93	QP
3	174.4241	31.97	-14.22	17.75	43.50	-25.75	QP
4	214.5143	34.63	-16.77	17.86	43.50	-25.64	QP
5	223.7334	36.73	-16.47	20.26	46.00	-25.74	QP
6 *	318.8170	33.71	-12.15	21.56	46.00	-24.44	QP

EUT:	Power bank	Model Name:	P76-P1
Test Mode:	Mode 5 (360kHz)	Phase:	Vertical
Test Voltage:	DC 3.87V from battery		

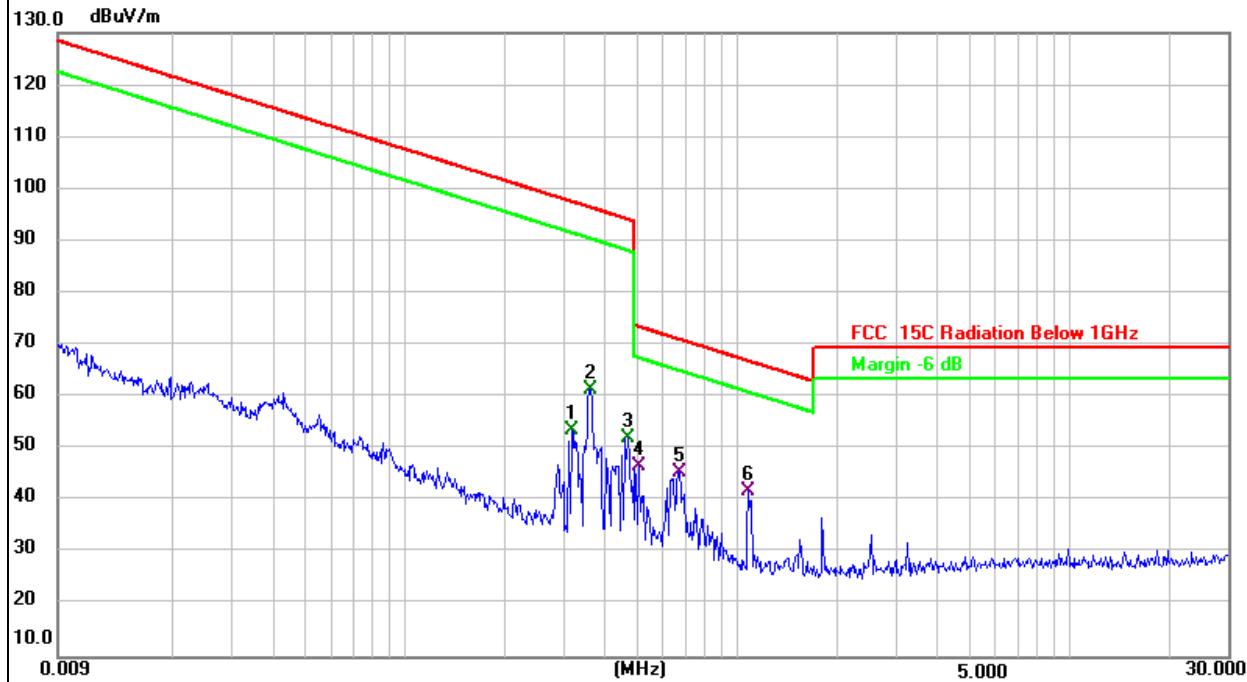


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	32.2924	40.27	-15.09	25.18	40.00	-14.82	QP
2 *	32.9791	40.58	-15.07	25.51	40.00	-14.49	QP
3	83.8155	34.48	-18.18	16.30	40.00	-23.70	QP
4	143.3259	31.93	-13.88	18.05	43.50	-25.45	QP
5	173.8135	30.98	-14.06	16.92	43.50	-26.58	QP
6	830.4000	27.96	-0.04	27.92	46.00	-18.08	QP

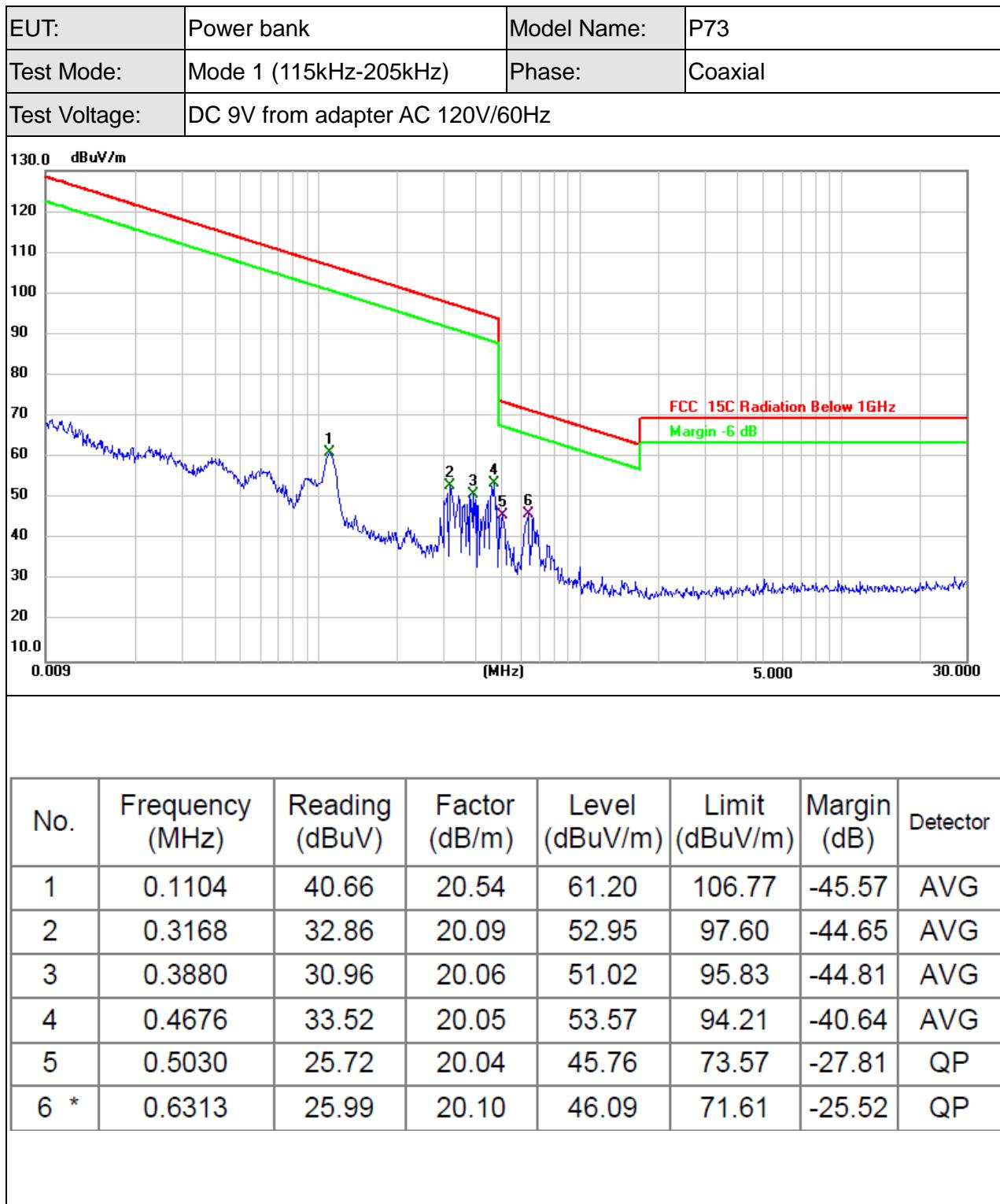
Model: P73

Frequency range (9kHz – 30MHz)

EUT:	Power bank	Model Name:	P73
Test Mode:	Mode 5 (360kHz)	Phase:	Coaxial
Test Voltage:	DC 3.87V from battery		

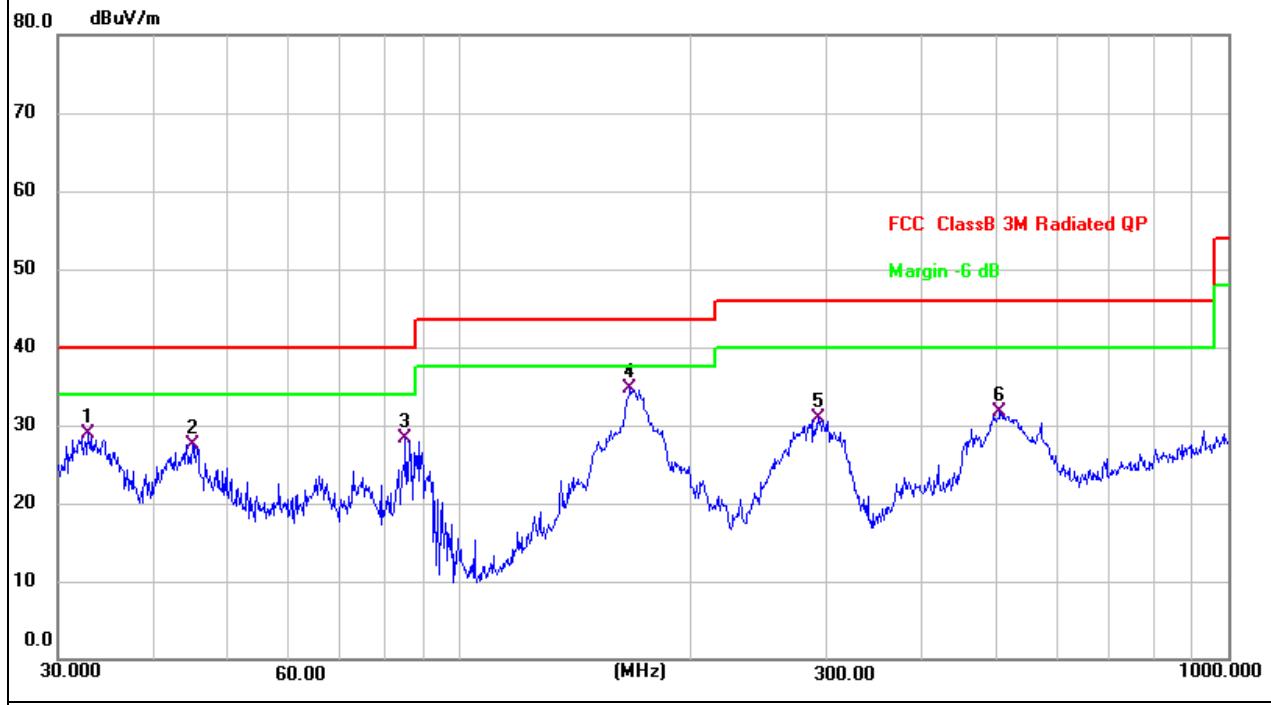


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	0.3168	33.59	20.09	53.68	97.60	-43.92	AVG
2	0.3607	41.27	20.07	61.34	96.47	-35.13	AVG
3	0.4676	31.98	20.05	52.03	94.21	-42.18	AVG
4	0.5030	26.82	20.04	46.86	73.57	-26.71	QP
5	0.6682	25.37	20.12	45.49	71.11	-25.62	QP
6 *	1.0783	21.59	20.24	41.83	66.97	-25.14	QP



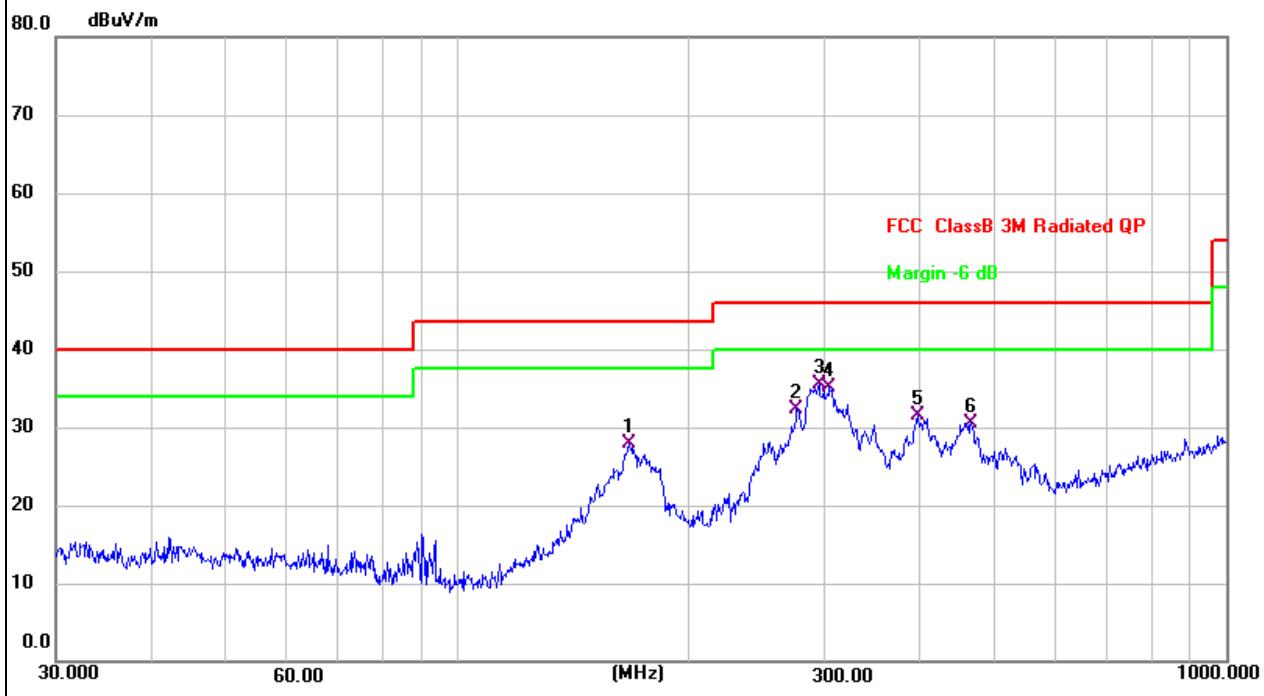
Frequency range (30MHz – 1GHz)

EUT:	Power bank	Model Name:	P73
Test Mode:	Mode 1 (115kHz-205kHz)	Phase:	Vertical
Test Voltage:	DC 9V from adapter AC 120V/60Hz		



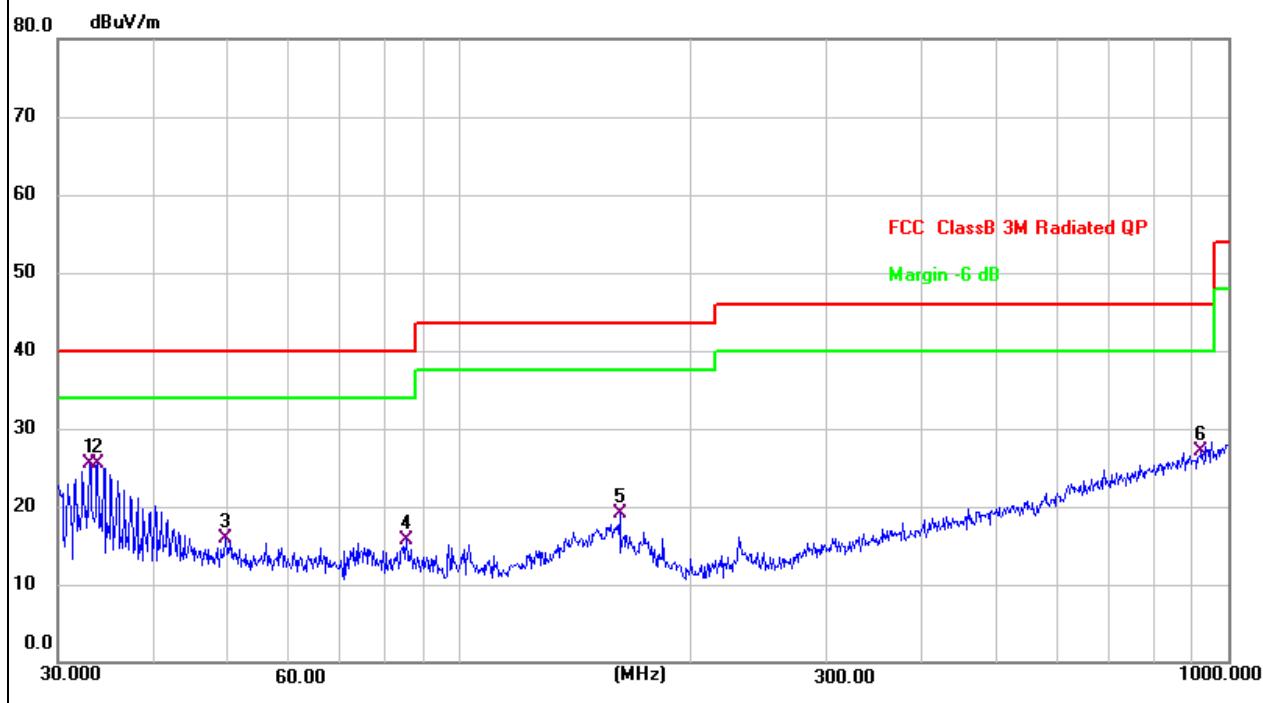
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	32.8637	43.95	-15.08	28.87	40.00	-11.13	QP
2	44.9006	41.82	-14.23	27.59	40.00	-12.41	QP
3	84.9995	46.24	-18.00	28.24	40.00	-11.76	QP
4 *	166.6514	48.22	-13.53	34.69	43.50	-8.81	QP
5	293.0842	43.65	-12.83	30.82	46.00	-15.18	QP
6	504.7062	38.90	-7.29	31.61	46.00	-14.39	QP

EUT:	Power bank	Model Name:	P73
Test Mode:	Mode 1 (115kHz-205kHz)	Phase:	Horizontal
Test Voltage:	DC 9V from adapter AC 120V/60Hz		



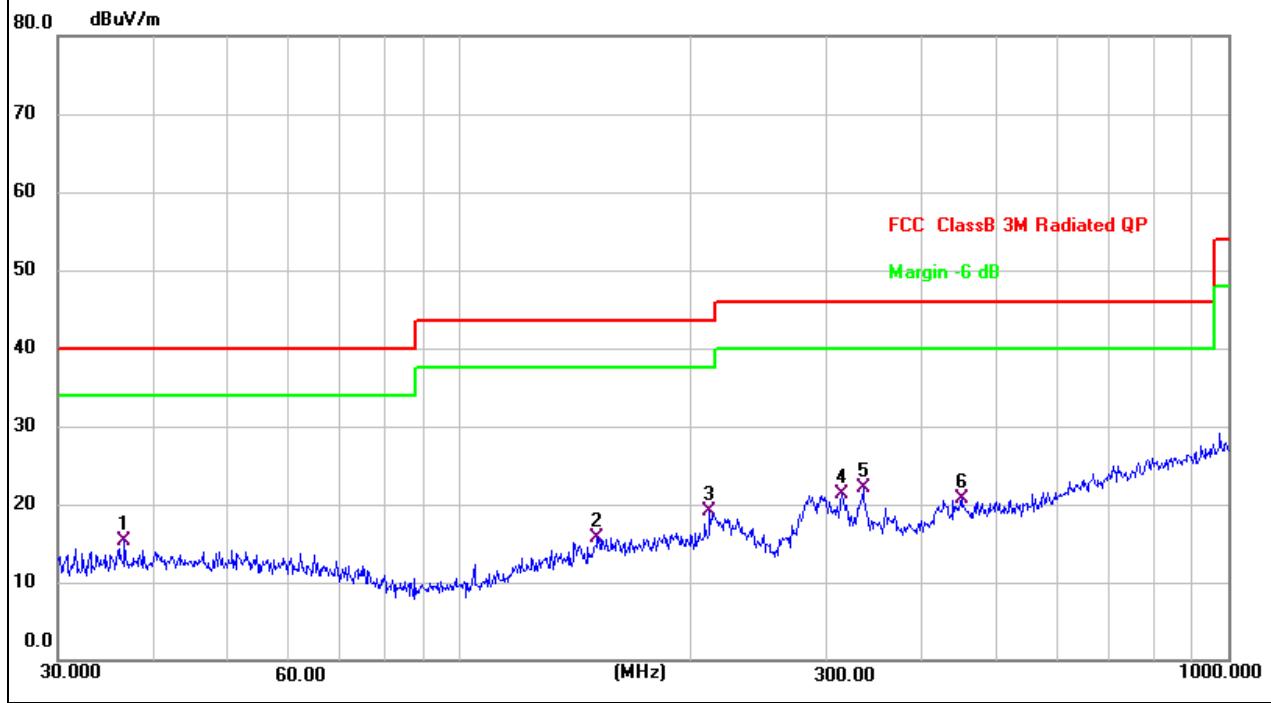
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	167.2368	41.43	-13.50	27.93	43.50	-15.57	QP
2	276.1235	45.86	-13.59	32.27	46.00	-13.73	QP
3 *	295.1469	48.27	-12.75	35.52	46.00	-10.48	QP
4	304.6099	47.57	-12.40	35.17	46.00	-10.83	QP
5	396.2415	41.15	-9.72	31.43	46.00	-14.57	QP
6	465.5994	38.68	-8.08	30.60	46.00	-15.40	QP

EUT:	Power bank	Model Name:	P73
Test Mode:	Mode 5 (360kHz)	Phase:	Vertical
Test Voltage:	DC 3.87V from battery		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	32.9791	40.60	-15.07	25.53	40.00	-14.47	QP
2	33.7986	40.31	-14.90	25.41	40.00	-14.59	QP
3	49.5328	30.16	-14.29	15.87	40.00	-24.13	QP
4	85.2980	33.64	-18.03	15.61	40.00	-24.39	QP
5	161.4740	32.61	-13.53	19.08	43.50	-24.42	QP
6	922.5157	26.27	0.77	27.04	46.00	-18.96	QP

EUT:	Power bank	Model Name:	P73
Test Mode:	Mode 5 (360kHz)	Phase:	Horizontal
Test Voltage:	DC 3.87V from battery		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	36.6375	29.82	-14.46	15.36	40.00	-24.64	QP
2	151.0666	29.17	-13.41	15.76	43.50	-27.74	QP
3	211.5265	35.89	-16.85	19.04	43.50	-24.46	QP
4	314.3765	33.54	-12.22	21.32	46.00	-24.68	QP
5 *	334.8589	33.56	-11.52	22.04	46.00	-23.96	QP
6	449.5558	29.16	-8.39	20.77	46.00	-25.23	QP

5.4 Occupied Bandwidth

5.4.1 Test method

Use the following spectrum analyzer settings:

Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel

RBW \geq 1% of the 20 dB bandwidth

VBW \geq RBW

Sweep = auto

Detector function = peak

Trace = max hold

The EUT should be transmitting at its maximum data rate. Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. Use the marker-delta function to measure 20 dB down one side of the emission. Reset the marker-delta function, and move the marker to the other side of the emission, until it is (as close as possible to) even with the reference marker level. The marker-delta reading at this point is the 20 dB bandwidth and 99% occupied bandwidth of the emission.

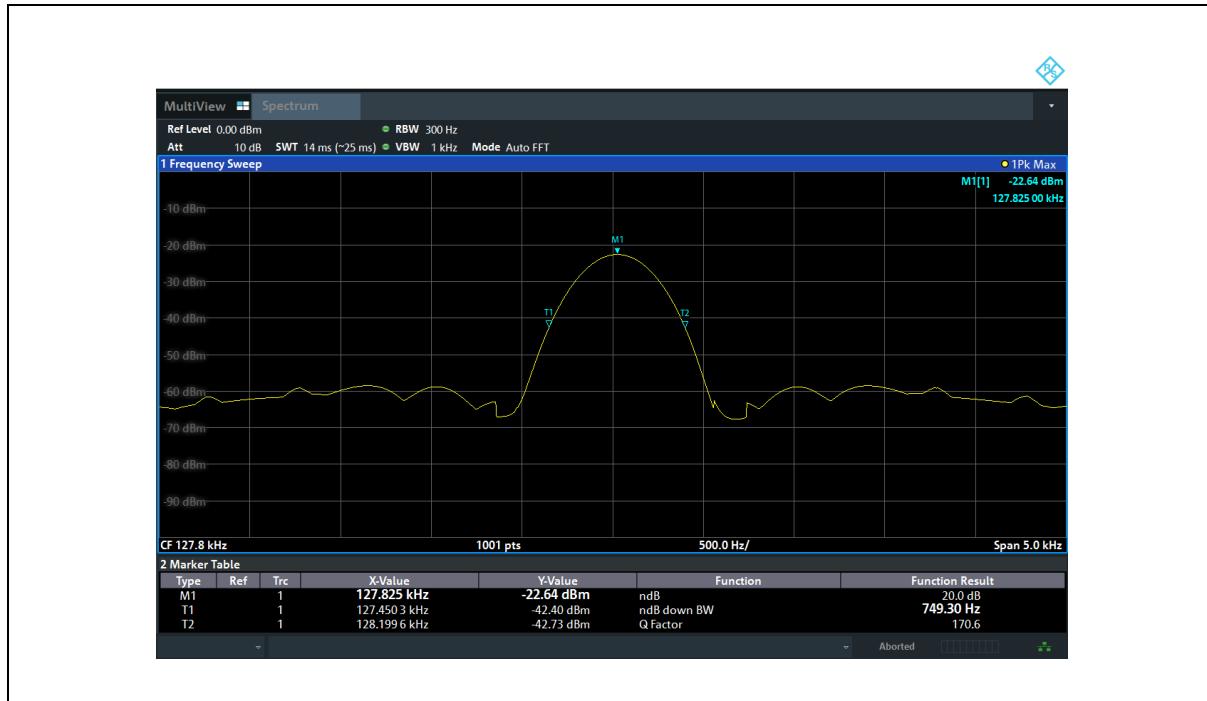
Note: Because the measured signal is CW-like, adjusting the RBW per C63.10 would not be practical since measurement bandwidth will always follow the RBW. The RBW is set to 300 Hz to perform the occupied bandwidth test.

5.4.2 Test result

Model: P76-P1

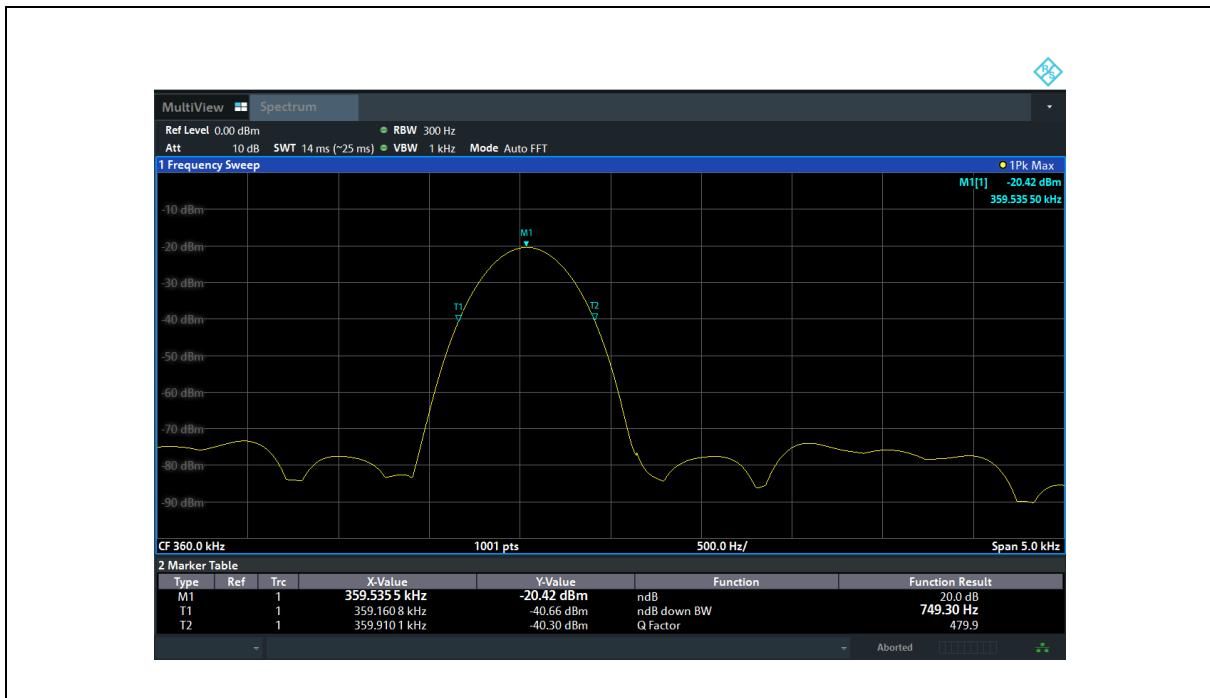
Frequency (kHz)	20dB emission bandwidth (Hz)
127.8	749.30

Test plots as below:



Frequency (kHz)	20dB emission bandwidth (Hz)
360	749.30

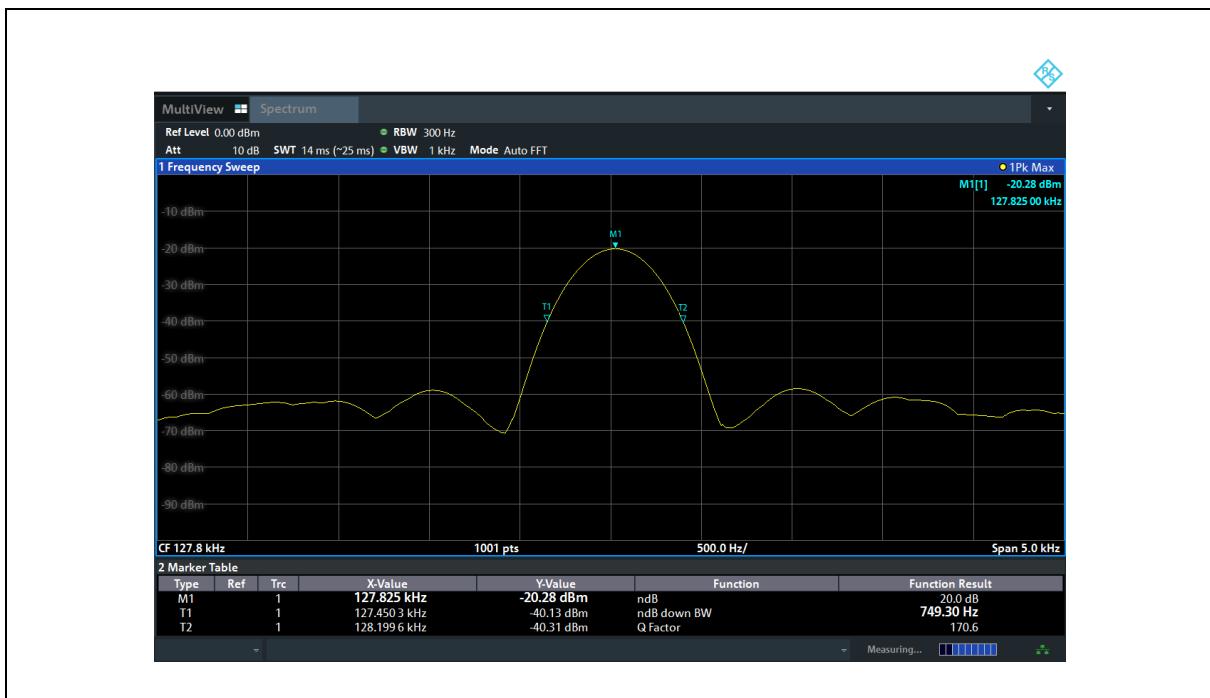
Test plots as below:



Model: P73

Frequency (kHz)	20dB emission bandwidth (Hz)
127.8	749.30

Test plots as below:



Frequency (kHz)	20dB emission bandwidth (Hz)
360	749.30

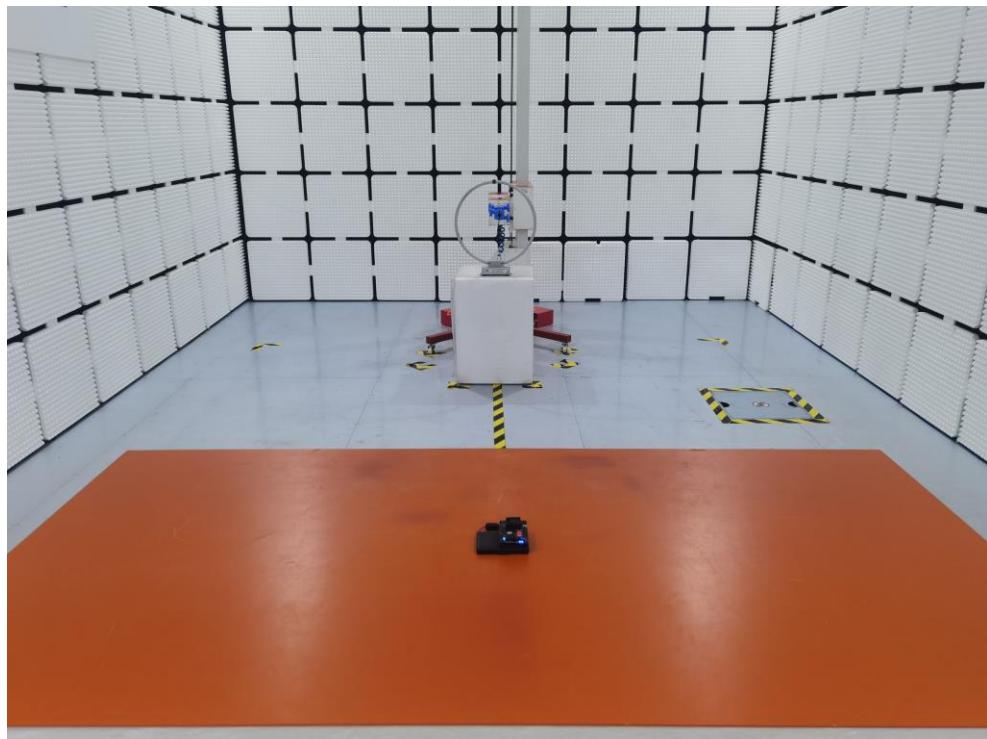
Test plots as below:



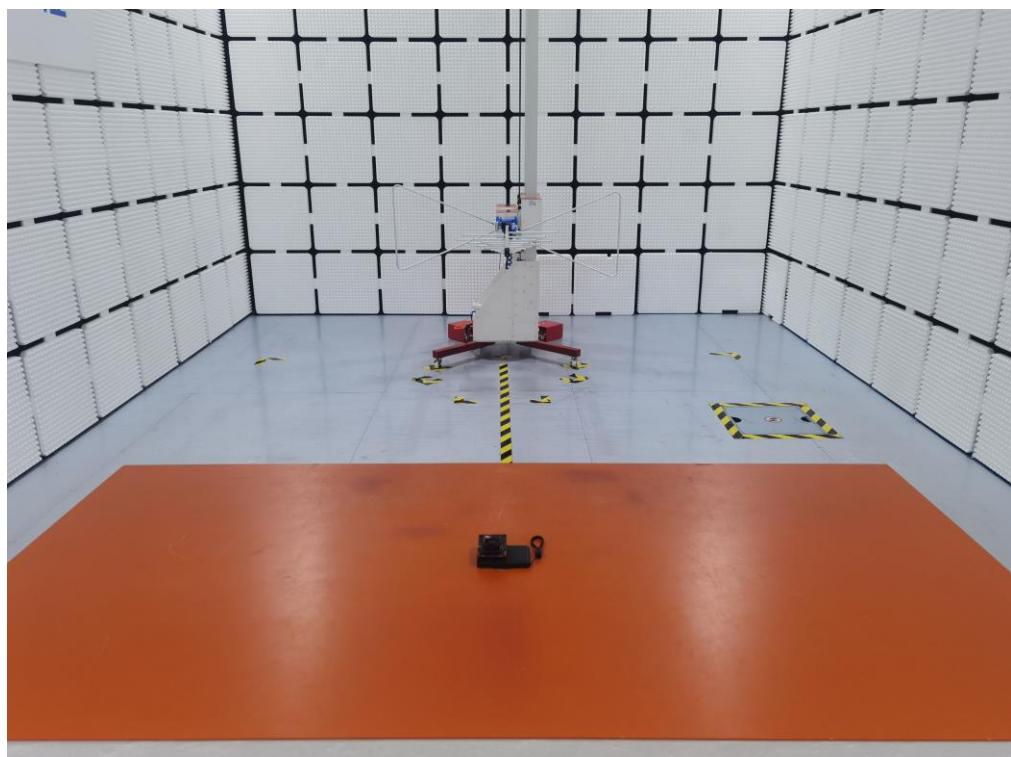
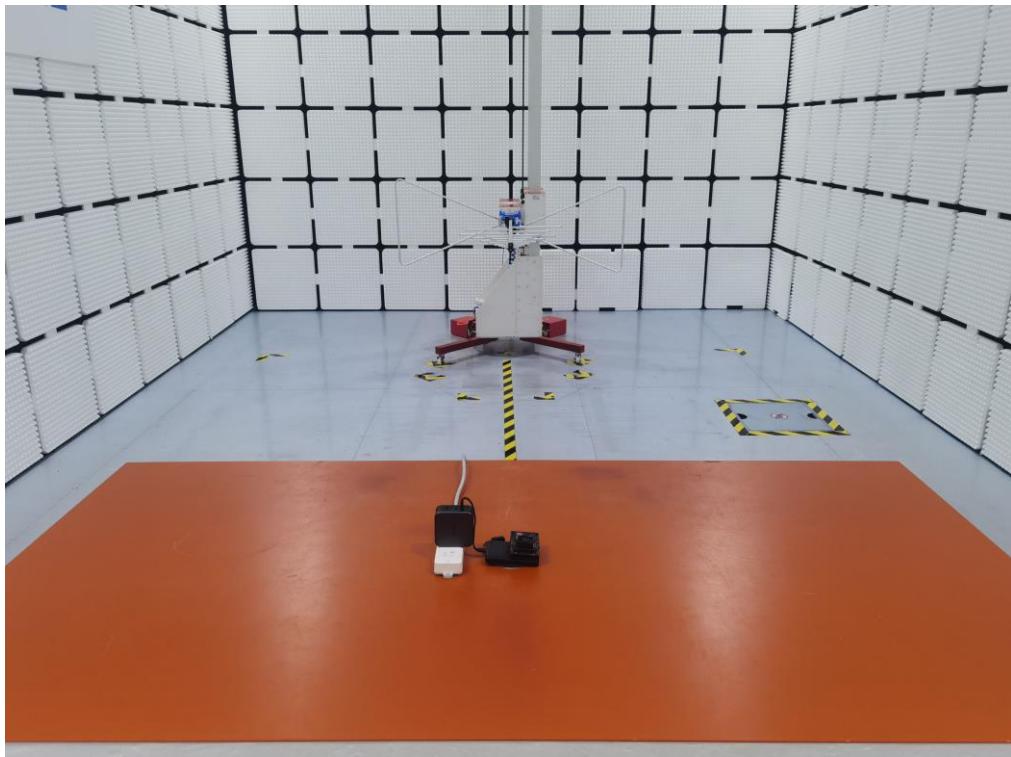
6 Photographs of the Test Setup

Model: P76-P1

Radiated Emission Below 30MHz



Radiated Emission Above 30MHz

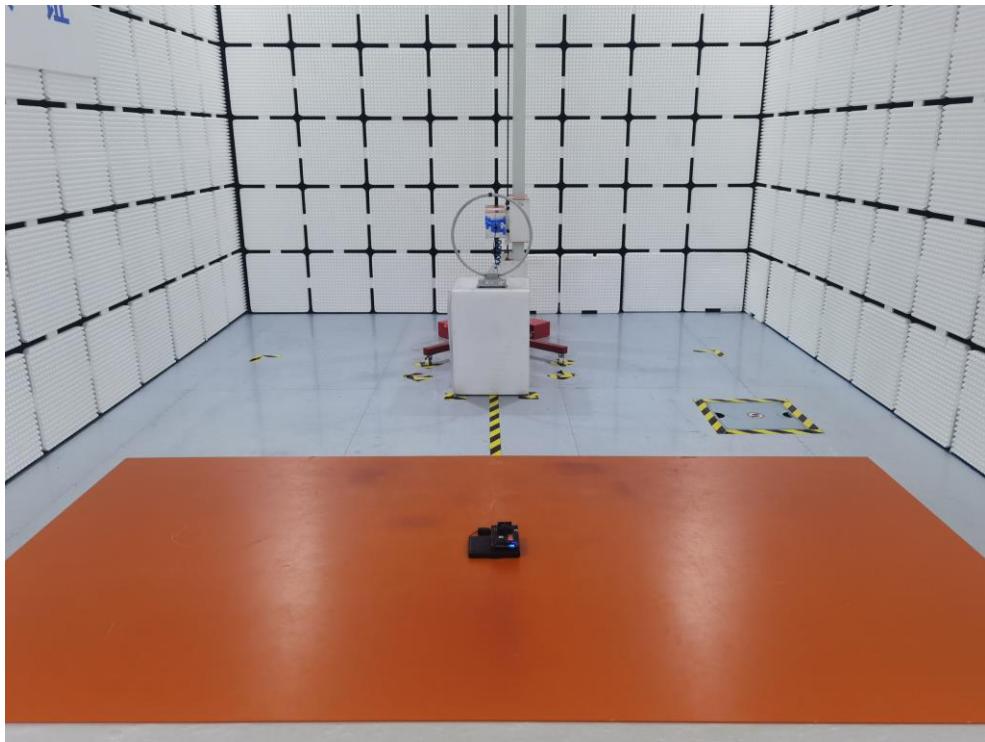


Conducted Emission

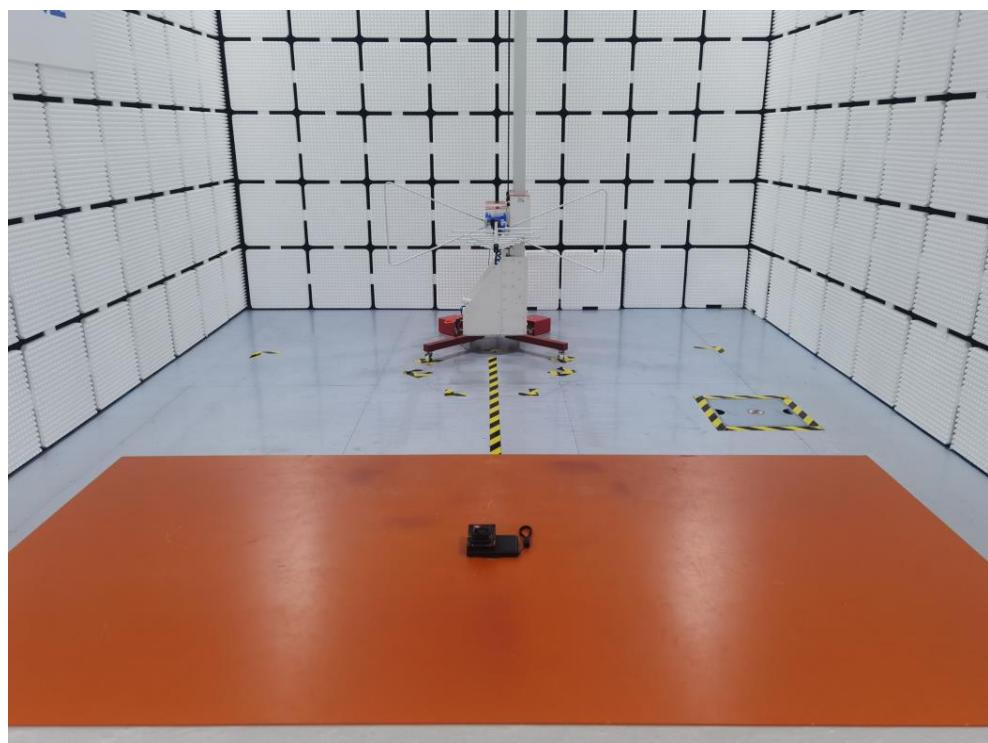
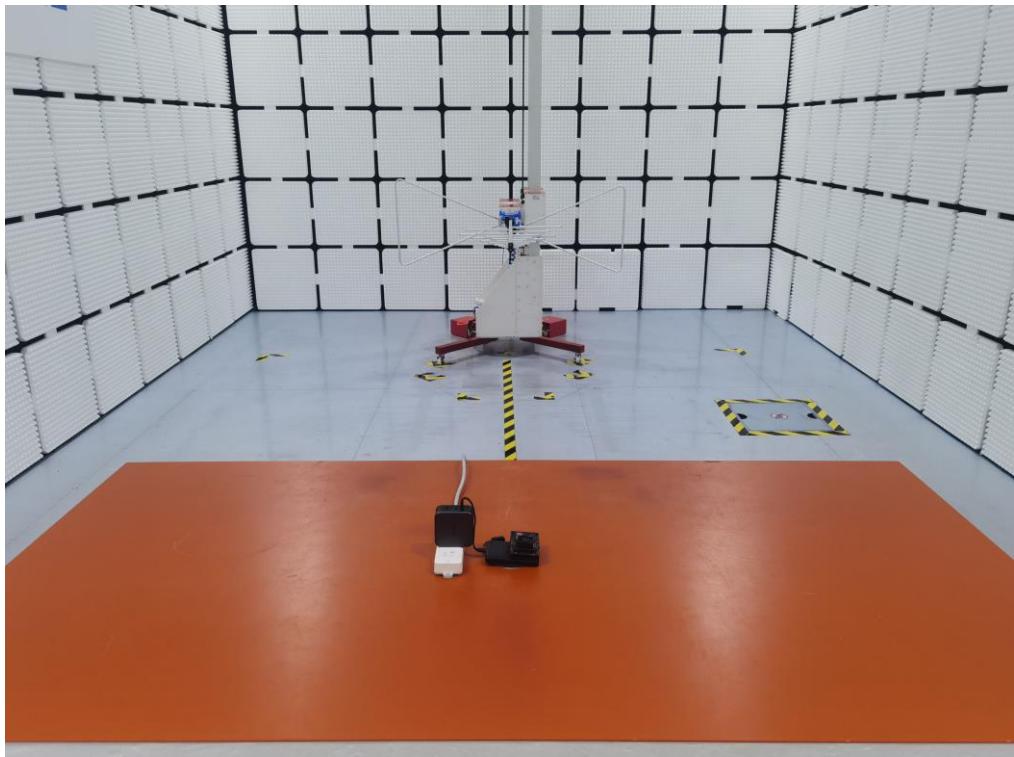


Model: P73

Radiated Emission Below 30MHz



Radiated Emission Above 30MHz



Conducted Emission



7 Photographs of the EUT

Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7

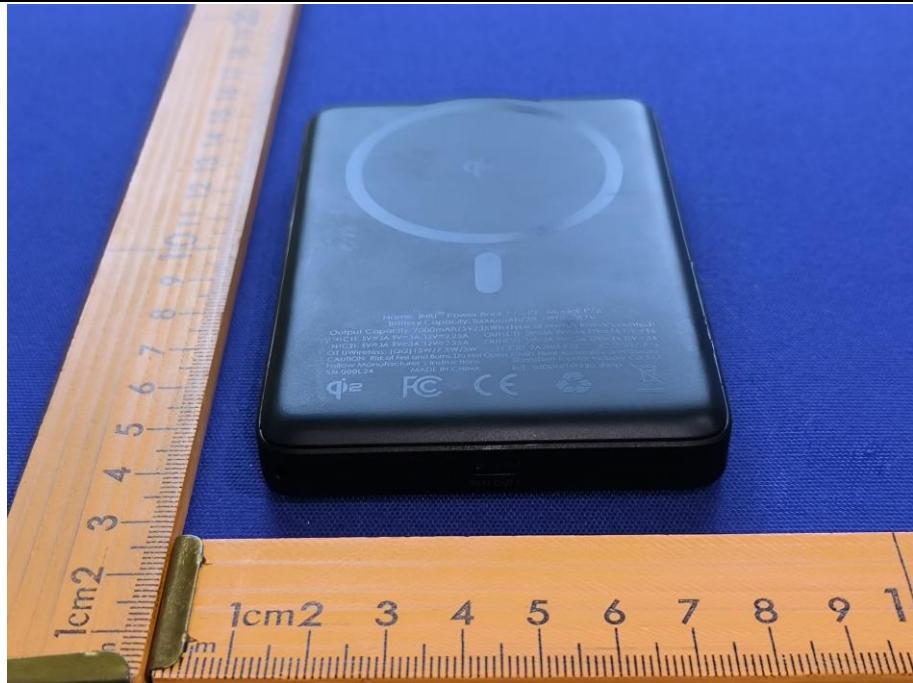


Photo 8

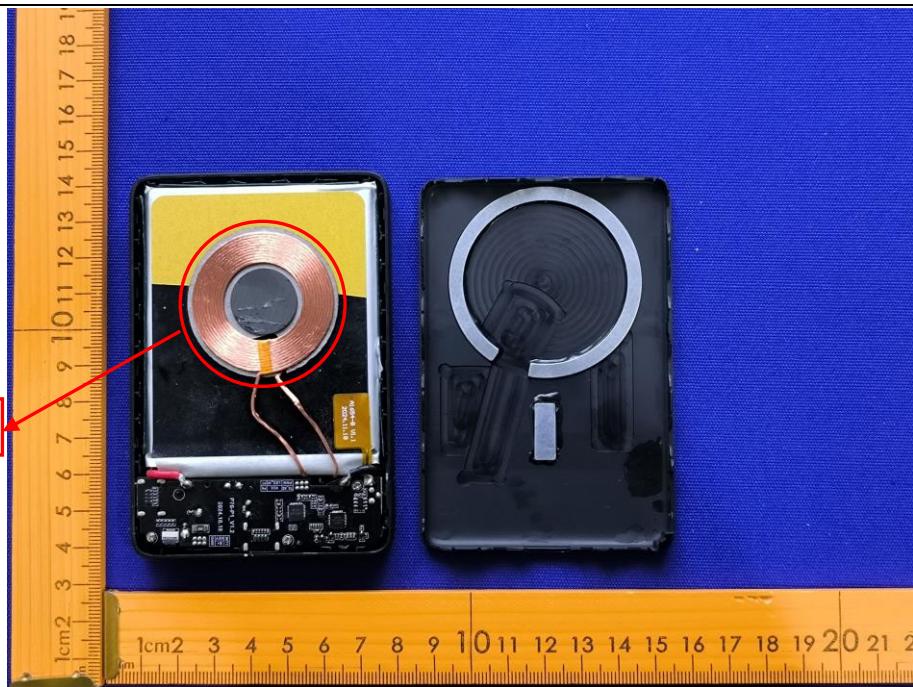


Photo 9

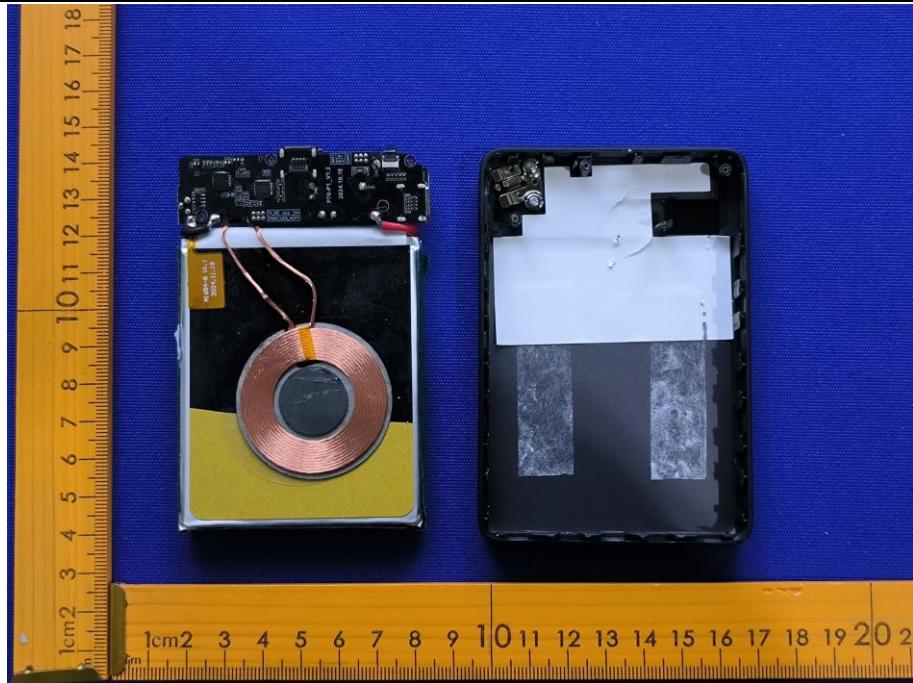


Photo 10

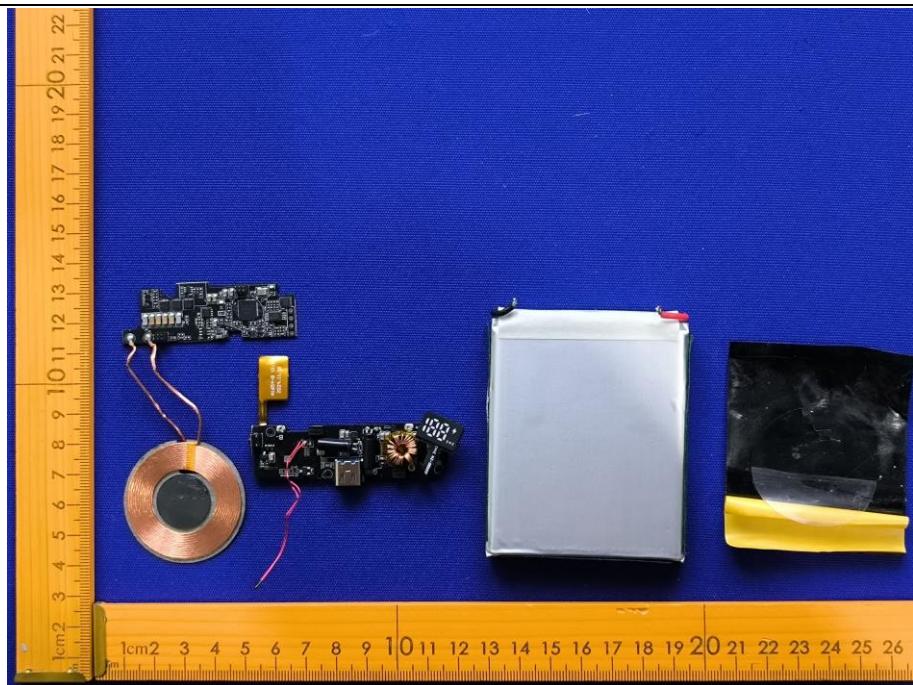
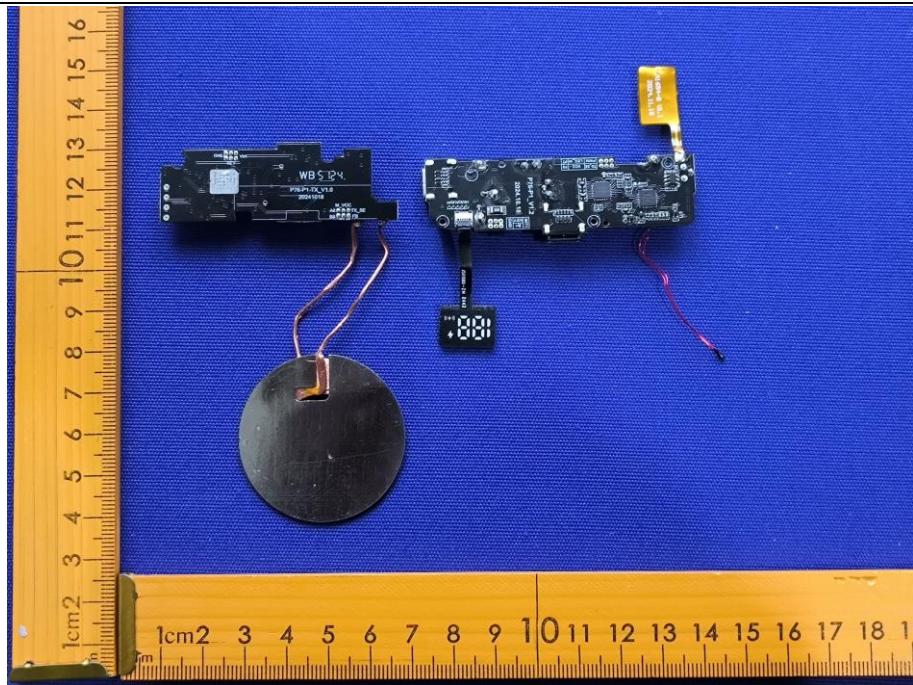


Photo 11



***** END OF REPORT *****