



Shenzhen DL Testing Technology Co., Ltd.

Report No.:DLE-251209011R

FCC TEST REPORT

FCC ID: 2A7PQ-T18

Applicant: SHENZHEN HAOLONG ELECTRONICS CO.,LTD.

Address: Hongyuan Building No.1006,No.11 Gully Side,Labour Community Team2,Xixiang Street,Bao an District Shenzhen City,Guangdong Province China

Manufacturer: SHENZHEN HAOLONG ELECTRONICS CO.,LTD.

Address: Hongyuan Building No.1006,No.11 Gully Side,Labour Community Team2,Xixiang Street,Bao an District Shenzhen City,Guangdong Province China

EUT: detector

Trade Mark: N/A

Model Number: T18
C6, C7, C9, C10, C17, C19, T7, T8, T9, T10, T12, T15, T16, T17, T19, S500, S501, S502, S503, S504, S505, S506, S507, S508, S509, S510, , S601, S606, S608, S609, S610

Date of Receipt: Nov. 14, 2025

Test Date: Nov. 14, 2025 - Nov. 25, 2025

Date of Report: Dec. 15, 2025

Prepared By: Shenzhen DL Testing Technology Co., Ltd.

Address: 101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1 Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen, China

Applicable Standards: FCC Part 15 Subpart B

Test Result: Pass

Report Number: DLE-251209011R

Prepared (Test Engineer): Dimon Tan

Reviewer (Supervisor): Jack Bu

Approved (Manager): Jade Yang



This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Shenzhen DL Testing Technology Co., Ltd.



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1. VERSION

Report No.	Version	Description	Approved
ZKT-25101524583E	Rev.01	Initial issue of report	Dec. 15, 2025



2. GENERAL INFORMATION

2.1 Description of Device (EUT)

EUT	detector
Trademark	N/A
	T18
Model Number	: C6, C7, C9, C10, C17, C19, T7, T8, T9, T10, T12, T15, T16, T17, T19, S500, S501, S502, S503, S504, S505, S506, S507, S508, S509, S510, S601, S606, S608, S609, S610
Model Difference	: Only for different model name
Receiving frequency range	: 1MHz-6.5GHz
Power Supply	Input: 5V $\overline{\text{---}}$ 1A Battery: 3.7V, 300mAh, 1.11Wh

Note:

2.2 Tested System Details

None.

2.3 Test Facility

Shenzhen DL Testing Technology Co., Ltd.

Add. : 101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1 Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen, China

FCC Test Firm Registration Number: 854456

Designation Number: CN1307

IC Registered No.: 27485

CAB identifier: CN0118

2.4 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Test item	Value (dB)
Conducted Emission (150K-30MHZ)	3.20
Radiated disturbance30MHz-1000MHz	4.80
Radiated disturbance1000MHz-6000MHz	5.10



2.5 Test Instrument Used

Radiation test, Band-edge test and 6db bandwidth test equipment

Item	Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	Spectrum Analyzer (9kHz-26.5GHz)	Agilent	E4408B	MY50140780	Oct. 25, 2025	Oct. 24, 2026
2	Test Receiver (9kHz-7GHz)	R&S	ESRP7	101393	Oct. 27, 2025	Oct. 24, 2026
3	Bilog Antenna (30MHz-1GHz)	R&S	VULB9162	00306	Oct. 27, 2025	Oct. 26, 2026
4	Horn Antenna (1GHz-18GHz)	Schwarzbeck	BBHA9120D	02139	Oct. 25, 2025	Oct. 26, 2026
5	Horn Antenna (18GHz-40GHz)	A.H. Systems	SAS-574	588	Oct. 25, 2025	Oct. 24, 2026
6	Amplifier (9KHz-6GHz)	Schwarzbeck	BBV9743B	00153	Oct. 25, 2025	Oct. 24, 2026
7	Amplifier (1GHz-18GHz)	EMEC	EM01G8GA	00270	Oct. 25, 2025	Oct. 24, 2026
8	Amplifier (18GHz-40GHz)	Quanjuda	DLE-161	97	Oct. 25, 2025	Oct. 24, 2026
9	Loop Antenna (9KHz-30MHz)	Schwarzbeck	FMZB1519B	00014	Oct. 25, 2025	Oct. 24, 2026
10	RF cables1 (9kHz-1GHz)	ChengYu	966	004	Oct. 25, 2025	Oct. 24, 2026
11	RF cables2 (1GHz-40GHz)	ChengYu	966	003	Oct. 25, 2025	Oct. 24, 2026
12	Antenna connector	Florida RF Labs	N/A	RF 01#	Oct. 25, 2025	Oct. 24, 2026
13	Power probe	KEYSIGHT	U2021XA	MY55210018	Oct. 25, 2025	Oct. 24, 2026
14	Signal Analyzer 9kHz-26.5GHz	Agilent	N9020A	MY55370280	Oct. 25, 2025	Oct. 24, 2026
15	Test Receiver 20kHz-40GHz	R&S	ESU 40	100376	Oct. 25, 2025	Oct. 24, 2026
16	D.C. Power Supply	LongWei	PS-305D	010964729	Oct. 25, 2025	Oct. 24, 2026

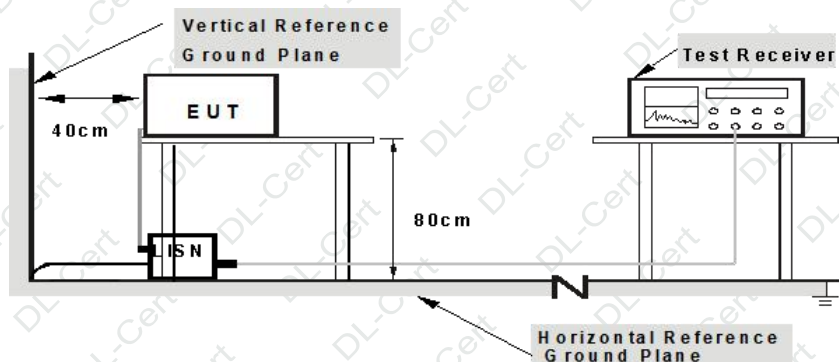
Conduction Test equipment

Item	Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	843 Shielded Room	YIHENG	843 Room	843	Nov. 05, 2023	Nov. 04, 2026
2	EMI Receiver	R&S	ESR	101421	Oct. 25, 2025	Oct. 24, 2026
3	LISN	R&S	ENV216	102417	Oct. 25, 2025	Oct. 24, 2026
4	843 Cable 1#	ChengYu	CE Cable	001	Oct. 25, 2025	Oct. 24, 2026



3. CONDUCTED EMISSION AT THE MAINS TERMINALS TEST

3.1 Block Diagram Of Test Setup



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

3.2 Test Standard

FCC Part 15 Subpart B

3.3 Power Line Conducted Emission Limit

Frequency MHz	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

3.4 EUT Configuration on Test

The following equipments are installed on conducted emission test to meet FCC Part 15 Subpart B requirement and operating in a manner which tends to maximize its emission characteristics in a normal application.

3.5 Operating Condition of EUT

- 3.5.1 Setup the EUT and simulators as shown in Section 3.1.
- 3.5.2 Turn on the power of all equipments.
- 3.5.3 Let the EUT work in test modes and test it.

3.6 Test Procedure

The EUT is put on the ground and connected to the AC mains through a Artificial Mains Network (AMN). This provided a 50ohm coupling impedance for the tested equipments. Both sides of AC line are checked to find out the maximum conducted emission levels according to the **FCC Part 15 Subpart B** regulations during conducted emission test.

The bandwidth of the test receiver (R&S Test Receiver ESCI) is set at 10KHz.

The frequency range from 150 KHz to 30 MHz is investigated.

3.7 Test Result

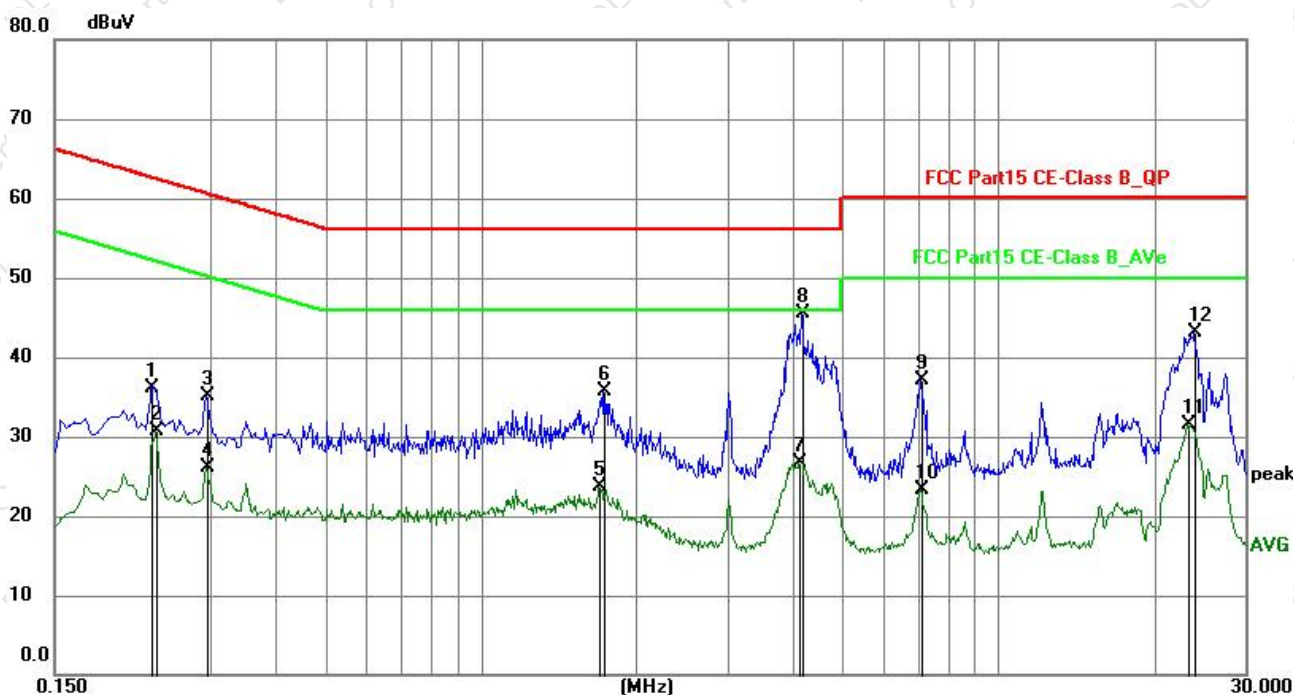
PASS

Please refer to the following page.



Conducted Emission At The Mains Terminals Test Data

Temperature:	24.5 °C	Relative Humidity:	54%
Pressure:	1009hPa	Phase :	Line
Test Voltage :	AC120V/60Hz	Test Mode:	Working



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.2310	16.54	19.66	36.20	62.41	-26.21	QP	P	
2	0.2355	10.95	19.66	30.61	52.25	-21.64	AVG	P	
3	0.2940	15.54	19.65	35.19	60.41	-25.22	QP	P	
4	0.2940	6.54	19.65	26.19	50.41	-24.22	AVG	P	
5	1.6979	4.06	19.67	23.73	46.00	-22.27	AVG	P	
6	1.7294	15.96	19.67	35.63	56.00	-20.37	QP	P	
7	4.1145	7.05	19.71	26.76	46.00	-19.24	AVG	P	
8	4.1640	25.75	19.71	45.46	56.00	-10.54	QP	P	
9	7.0800	17.33	19.74	37.07	60.00	-22.93	QP	P	
10	7.0800	3.63	19.74	23.37	50.00	-26.63	AVG	P	
11	23.2170	11.64	19.78	31.42	50.00	-18.58	AVG	P	
12	23.9325	23.36	19.78	43.14	60.00	-16.86	QP	P	

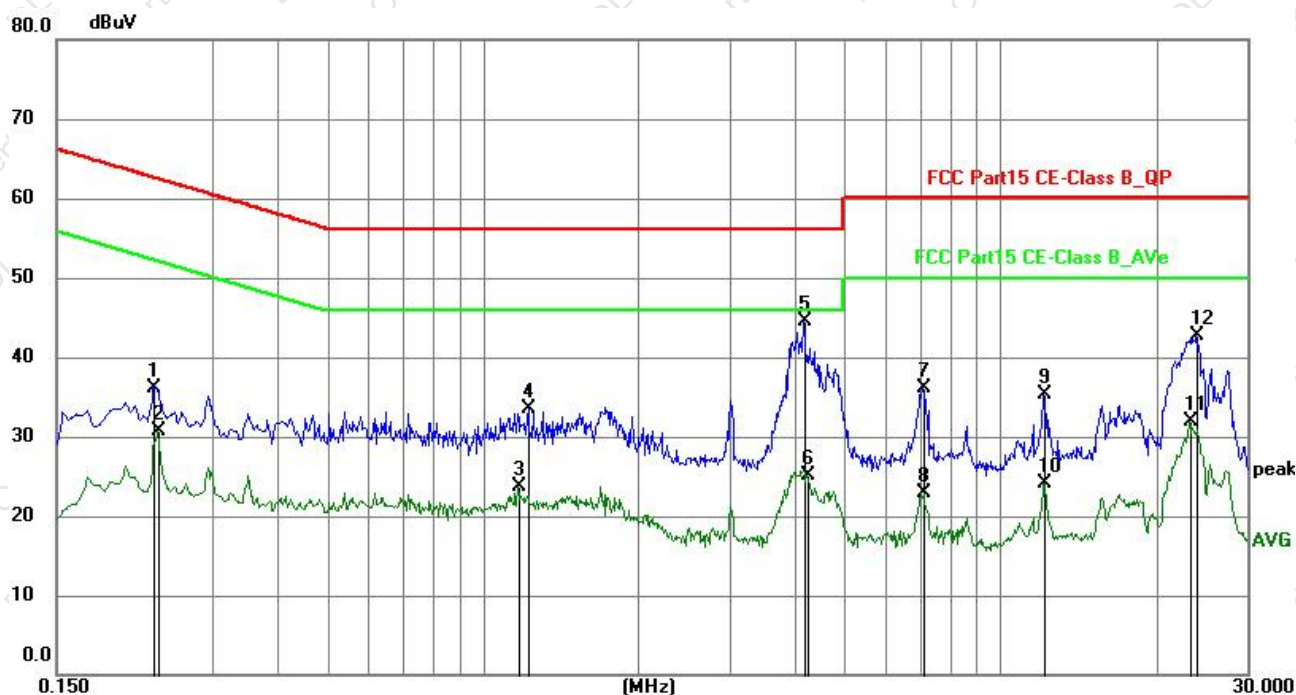
Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level = Reading level + Correct Factor
4. Correct Factor = Lissn factor + Cable loss factor + limiter factor
5. Margin = Measurement Level - Limit



Conducted Emission At The Mains Terminals Test Data

Temperature:	24.5 °C	Relative Humidity:	54%
Pressure:	1009hPa	Phase :	Neutral
Test Voltage :	AC120V/60Hz	Test Mode:	Working



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.2310	16.54	19.66	36.20	62.41	-26.21	QP	P	
2	0.2355	10.95	19.66	30.61	52.25	-21.64	AVG	P	
3	1.1669	4.13	19.66	23.79	46.00	-22.21	AVG	P	
4	1.2254	13.88	19.66	33.54	56.00	-22.46	QP	P	
5	4.1640	24.75	19.71	44.46	56.00	-11.54	QP	P	
6	4.2315	5.34	19.71	25.05	46.00	-20.95	AVG	P	
7	7.0800	16.33	19.74	36.07	60.00	-23.93	QP	P	
8	7.1025	3.20	19.74	22.94	50.00	-27.06	AVG	P	
9	12.1335	15.49	19.76	35.25	60.00	-24.75	QP	P	
10	12.1335	4.41	19.76	24.17	50.00	-25.83	AVG	P	
11	23.2170	12.14	19.78	31.92	50.00	-18.08	AVG	P	
12	23.9325	22.86	19.78	42.64	60.00	-17.36	QP	P	

Notes:

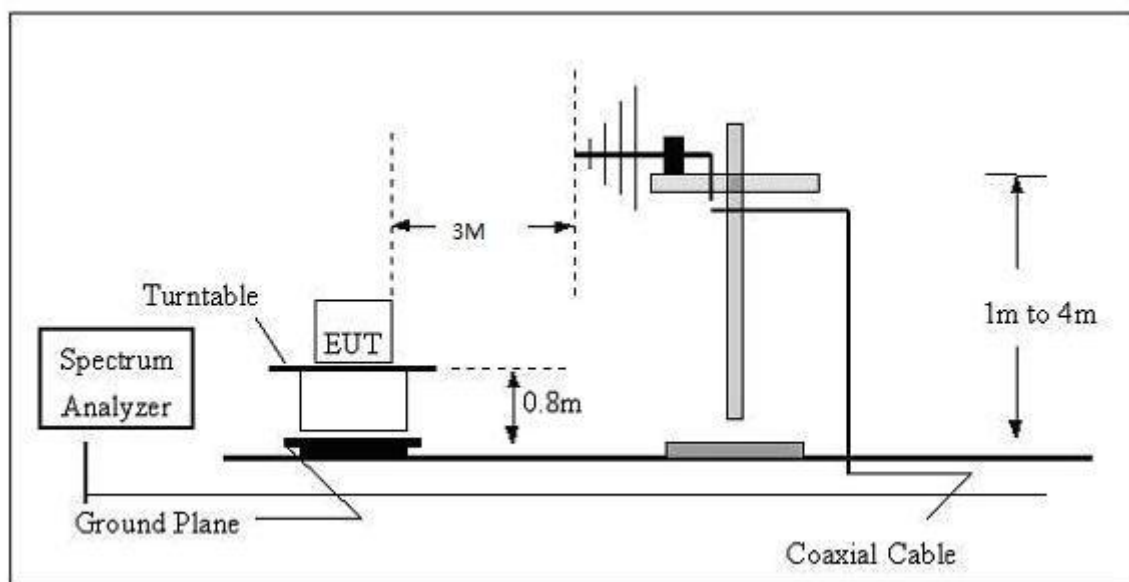
- 1.An initial pre-scan was performed on the line and neutral lines with peak detector.
- 2.Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3.Final Level = Reading level + Correct Factor
- 4.Correct Factor= Lism factor+ Cable loss factor + limiter factor
- 5.Margin= Measurement Level-Limit



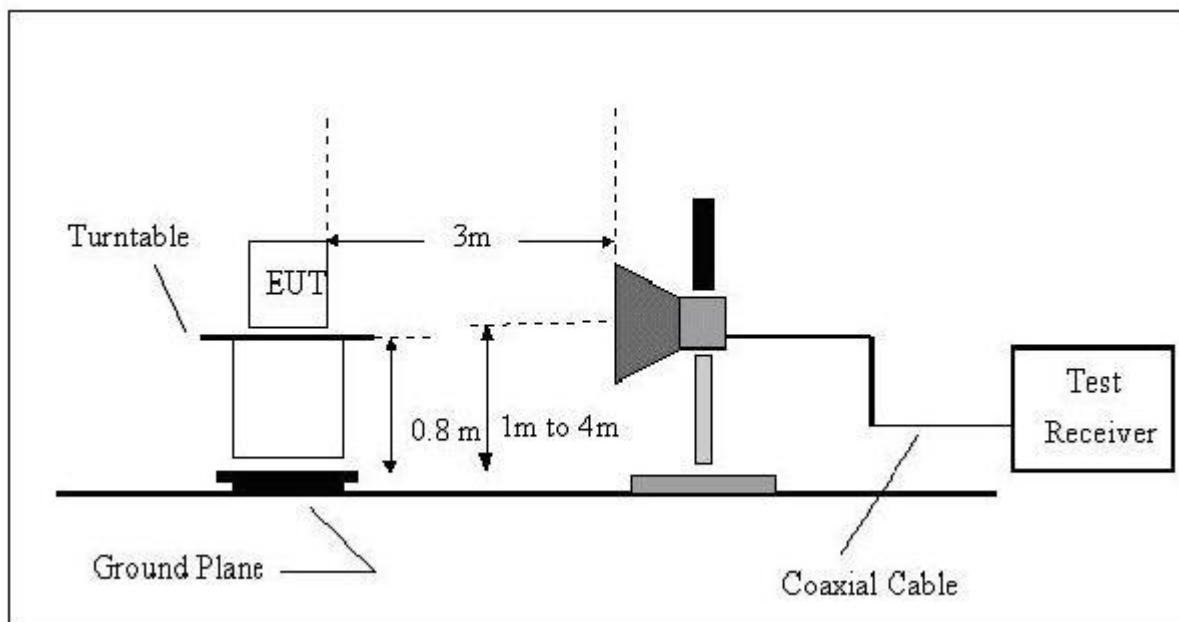
4. RADIATION EMISSION TEST

4.1 Block Diagram of Test Setup

A Radiated Emission Test Set-Up Frequency below 1 GHz



B Radiated Emission Test Set-Up Frequency above 1GHz



4.2 Test Standard

FCC CFR Title 47 Part 15 Subpart B Section 15.109/ IECS-003 Section 6.2



4.3 Radiation Limit

FREQUENCY (MHz)	Class A (at 10m)	Class B (at 3m)	Value
	dBuV/m	dBuV/m	
30 ~ 88	39.0	40.0	Quasi-peak
88 ~ 216	43.5	43.5	Quasi-peak
216 ~ 960	46.5	46.0	Quasi-peak
960 ~1000	49.5	54.0	Quasi-peak
Above 1000	69.5	74	Peak
	49.5	54	Average

4.4 EUT Configuration on Test

The FCC Part 15 Subpart B regulations test method must be used to find the maximum emission during radiated emission test. The configuration of EUT is the same as used in conducted emission test. Please refer to Section 2.2.

4.5 Operating Condition of EUT

Same as conducted emission test, which is listed in Section 2.2 except the test set up replaced as Section 4.1.

4.6 Test Procedure

1. The EUT was tested according to ANSI C63.4:2014.

2. The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.

3. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna.

5. The initial step in collecting radiated emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured, above 1G Average detector mode will be instead.

6. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP(AV) Limits and then no additional QP Mode measurement performed.

7. For the actual test configuration, please refer to the related Item –EUT Test Photos.

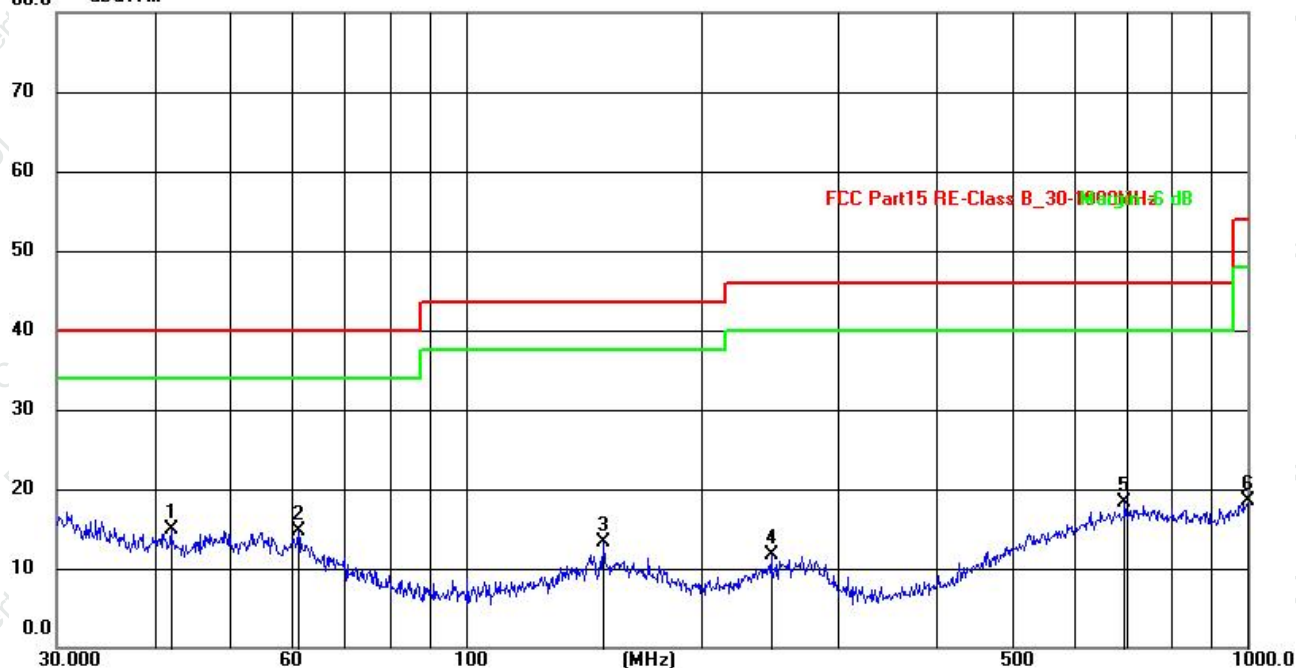


4.7 Test Result

Radiation Emission Test Data			
Temperature:	26℃	Relative Humidity:	54%
Pressure:	1009hPa	Phase :	Horizontal
Test Voltage :	DC 3.7V	Test Mode:	Working

30-1000MHz

80.0 dBuV/m



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	42.0065	30.37	-15.37	15.00	40.00	-25.00	QP
2	61.1315	30.57	-15.91	14.66	40.00	-25.34	QP
3	150.0107	32.32	-18.94	13.38	43.50	-30.12	QP
4	245.9507	31.52	-19.86	11.66	46.00	-34.34	QP
5	696.8567	30.83	-12.52	18.31	46.00	-27.69	QP
6	1000.0000	30.11	-11.54	18.57	54.00	-35.43	QP

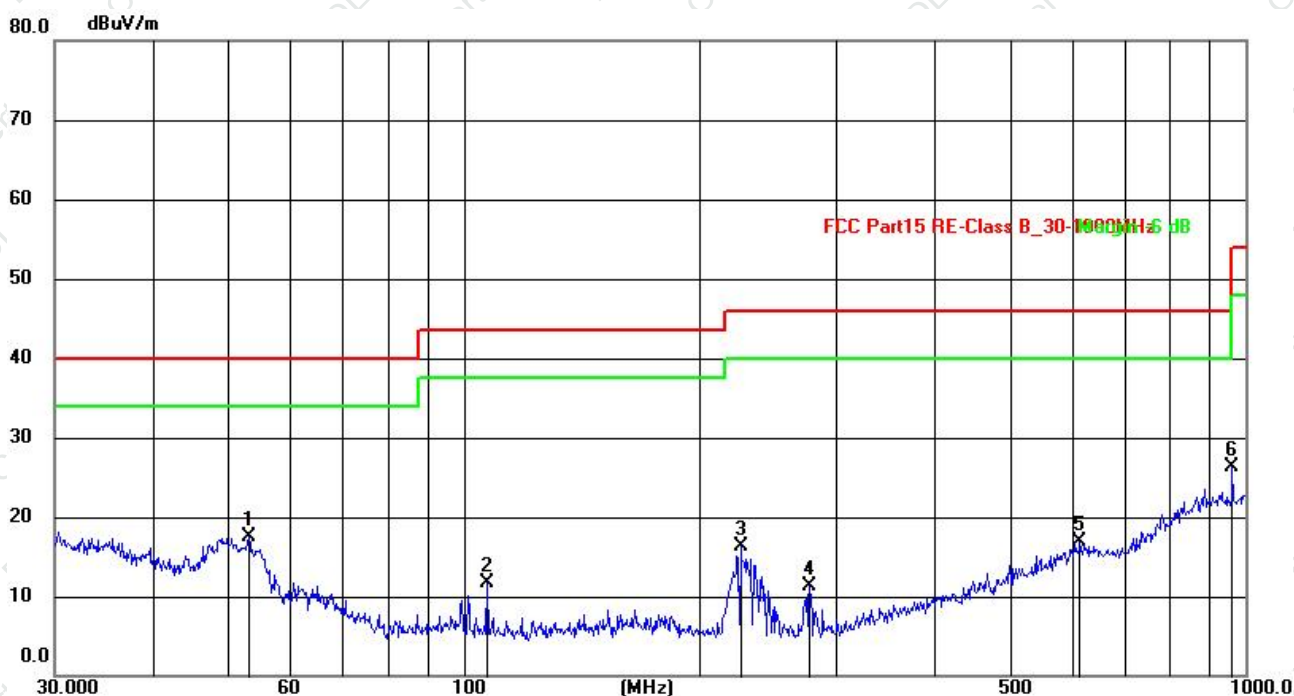
Notes:

1. An initial pre-scan was performed on the peak detector.
2. Quasi-Peak measurement were performed at the frequencies with maximized peak emission.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Final Level = Reading level + Correct Factor
5. Correct Factor = Antenna factor + Cable loss factor - Amplifier factor
6. Margin = Measurement Level - Limit



Radiation Emission Test Data

Temperature:	26℃	Relative Humidity:	54%
Pressure:	1009hPa	Phase :	Vertical
Test Voltage :	DC 3.7V	Test Mode:	Working



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	53.1313	36.50	-18.93	17.57	40.00	-22.43	QP
2	107.1337	34.66	-23.01	11.65	43.50	-31.85	QP
3	226.0994	40.10	-23.88	16.22	46.00	-29.78	QP
4	277.0935	34.65	-23.29	11.36	46.00	-34.64	QP
5	614.2142	30.16	-13.22	16.94	46.00	-29.06	QP
6	962.1621	33.21	-7.00	26.21	54.00	-27.79	QP

Notes:

- 1.An initial pre-scan was performed on the peak detector.
- 2.Quasi-Peak measurement were performed at the frequencies with maximized peak emission.
- 3.The emission levels of other frequencies are very lower than the limit and not show in test report.
- 4.Final Level = Reading level + Correct Factor
- 5.Correct Factor= Antenna factor+ Cable loss factor - Amplifier factor
- 6.Margin= Measurement Level-Limit

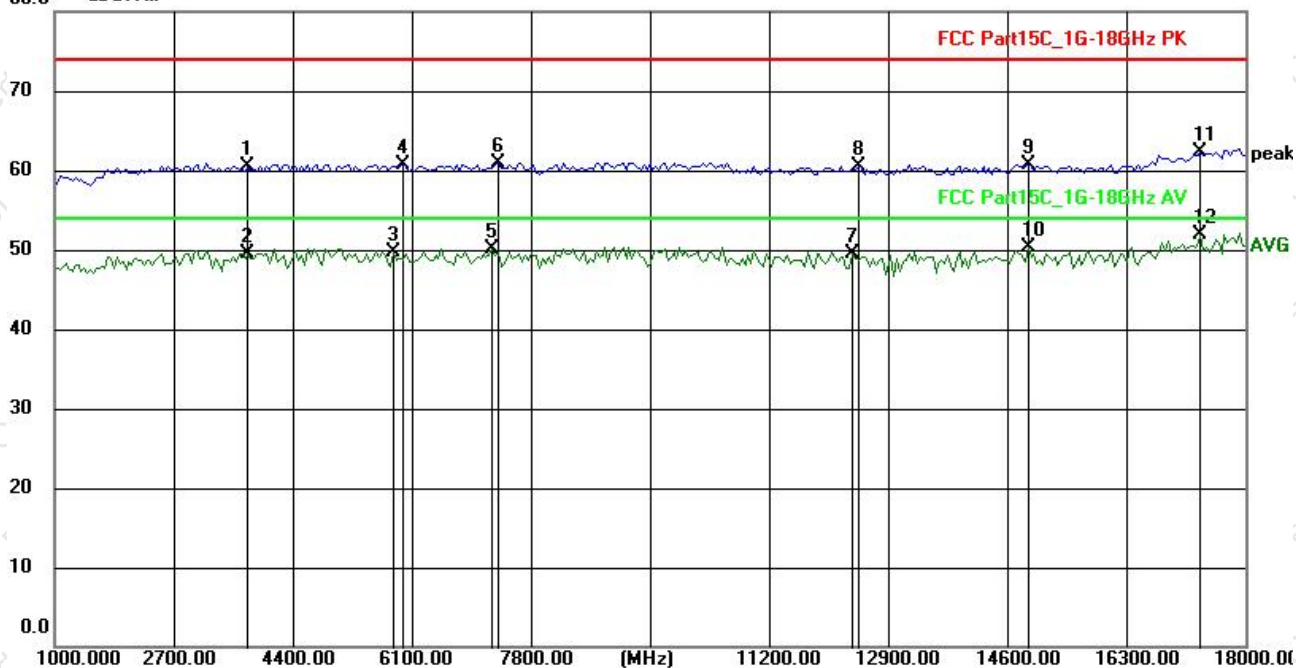


Radiation Emission Test Data

Temperature:	26°C	Relative Humidity:	54%
Pressure:	1009hPa	Phase :	Horizontal
Test Voltage :	DC 3.7V	Test Mode:	Working

1-18GHz

80.0 dBuV/m



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	3762.500	60.54	0.04	60.58	74.00	-13.42	peak
2	3762.500	49.47	0.04	49.51	54.00	-4.49	AVG
3	5845.000	48.05	1.66	49.71	54.00	-4.29	AVG
4	5972.500	58.89	1.76	60.65	74.00	-13.35	peak
5	7247.500	47.61	2.45	50.06	54.00	-3.94	AVG
6	7332.500	58.49	2.50	60.99	74.00	-13.01	peak
7	12390.000	44.74	4.74	49.48	54.00	-4.52	AVG
8	12475.000	55.72	4.77	60.49	74.00	-13.51	peak
9	14897.500	54.77	5.89	60.66	74.00	-13.34	peak
10	14897.500	44.50	5.89	50.39	54.00	-3.61	AVG
11	17362.500	53.94	8.36	62.30	74.00	-11.70	peak
12	17362.500	43.47	8.36	51.83	54.00	-2.17	AVG

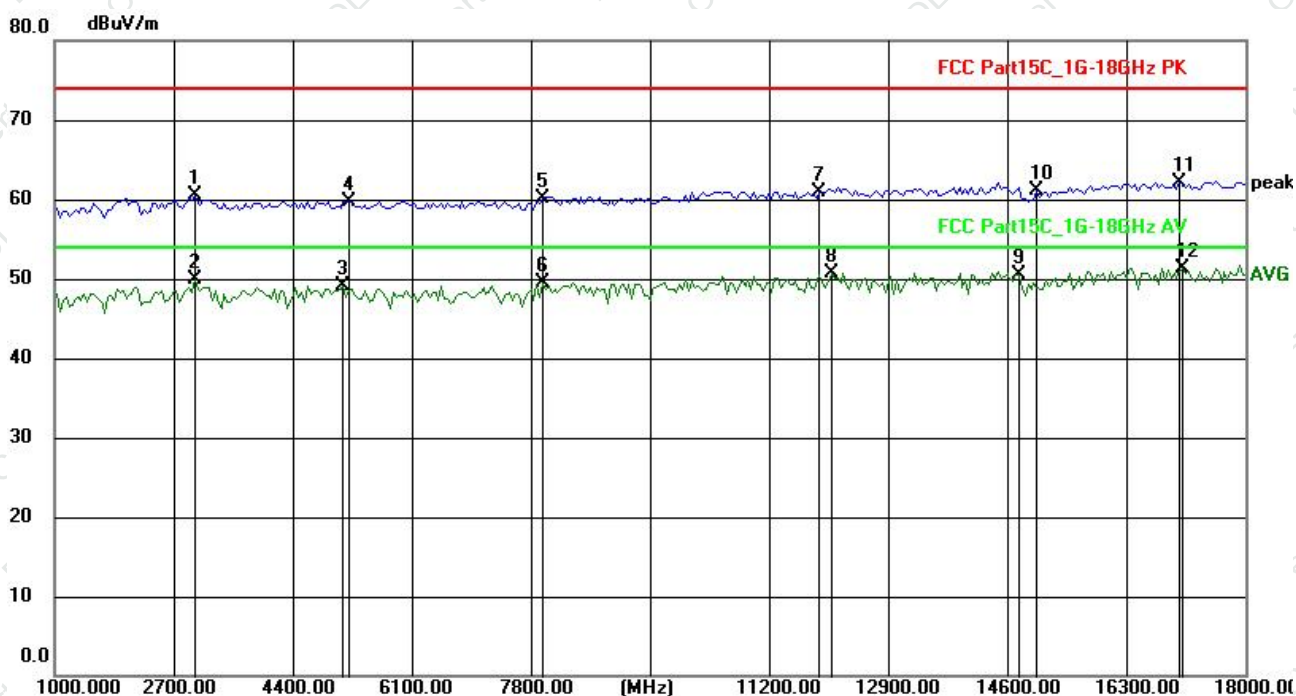
Notes:

1. An initial pre-scan was performed on the peak detector.
2. Quasi-Peak measurements were performed at the frequencies with maximized peak emission.
3. The emission levels of other frequencies are very lower than the limit and not shown in test report.
4. Final Level = Reading level + Correct Factor
5. Correct Factor = Antenna factor + Cable loss factor - Amplifier factor
6. Margin = Measurement Level - Limit



Radiation Emission Test Data

Temperature:	26℃	Relative Humidity:	54%
Pressure:	1009hPa	Phase :	Vertical
Test Voltage :	DC 3.7V	Test Mode:	Working



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2997.500	61.04	-0.55	60.49	74.00	-13.51	peak
2	2997.500	50.42	-0.55	49.87	54.00	-4.13	AVG
3	5122.500	47.92	1.10	49.02	54.00	-4.98	AVG
4	5207.500	58.61	1.17	59.78	74.00	-14.22	peak
5	7970.000	57.29	2.85	60.14	74.00	-13.86	peak
6	7970.000	46.57	2.85	49.42	54.00	-4.58	AVG
7	11922.500	56.36	4.58	60.94	74.00	-13.06	peak
8	12092.500	46.03	4.64	50.67	54.00	-3.33	AVG
9	14770.000	44.76	5.80	50.56	54.00	-3.44	AVG
10	15025.000	55.06	5.99	61.05	74.00	-12.95	peak
11	17065.000	53.95	8.06	62.01	74.00	-11.99	peak
12	17107.500	43.12	8.11	51.23	54.00	-2.77	AVG

Notes:

1. An initial pre-scan was performed on the peak detector.
2. Quasi-Peak measurement were performed at the frequencies with maximized peak emission.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Final Level = Reading level + Correct Factor
5. Correct Factor = Antenna factor + Cable loss factor - Amplifier factor
6. Margin = Measurement Level - Limit

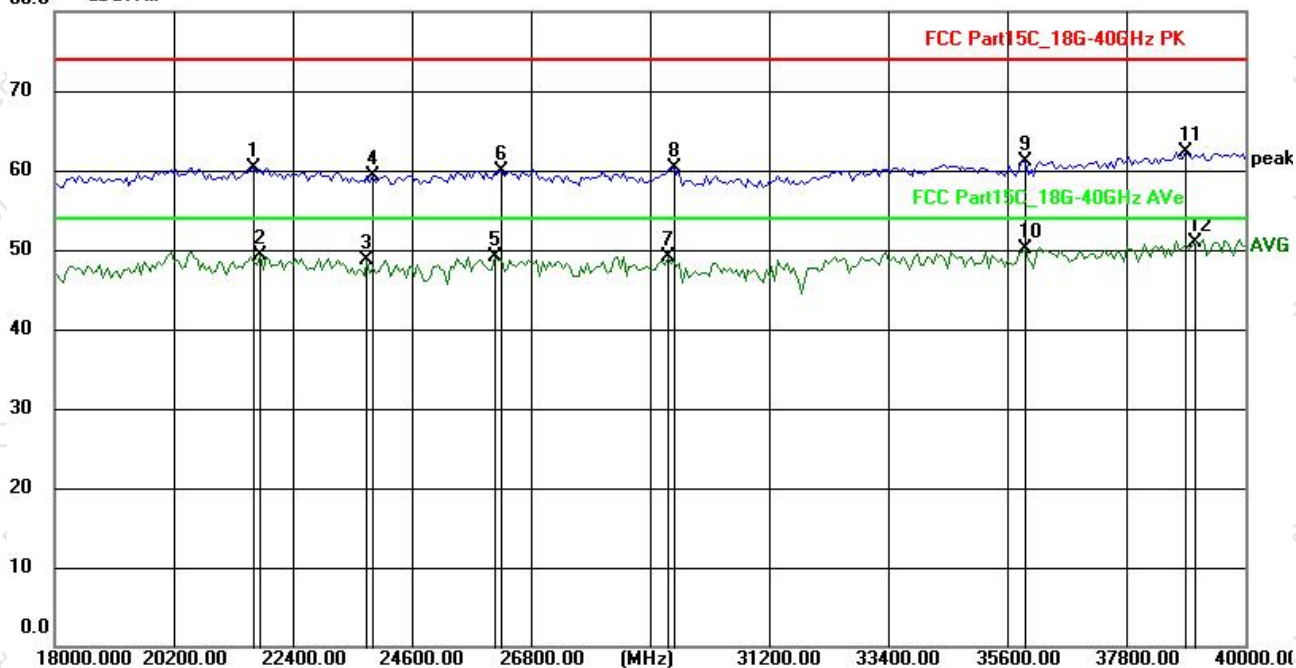


Radiation Emission Test Data

Temperature:	26℃	Relative Humidity:	54%
Pressure:	1009hPa	Phase :	Horizontal
Test Voltage :	DC 3.7V	Test Mode:	Working

18-40GHz

80.0 dBuV/m



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	21685.000	39.80	20.48	60.28	74.00	-13.72	peak
2	21795.000	28.77	20.53	49.30	54.00	-4.70	AVG
3	23775.000	27.34	21.41	48.75	54.00	-5.25	AVG
4	23885.000	37.78	21.45	59.23	74.00	-14.77	peak
5	26140.000	26.74	22.46	49.20	54.00	-4.80	AVG
6	26250.000	37.37	22.51	59.88	74.00	-14.12	peak
7	29330.000	25.19	23.87	49.06	54.00	-4.94	AVG
8	29440.000	36.38	23.92	60.30	74.00	-13.70	peak
9	35930.000	36.52	24.68	61.20	74.00	-12.80	peak
10	35930.000	25.36	24.68	50.04	54.00	-3.96	AVG
11	38900.000	37.44	24.94	62.38	74.00	-11.62	peak
12	39065.000	26.05	24.95	51.00	54.00	-3.00	AVG

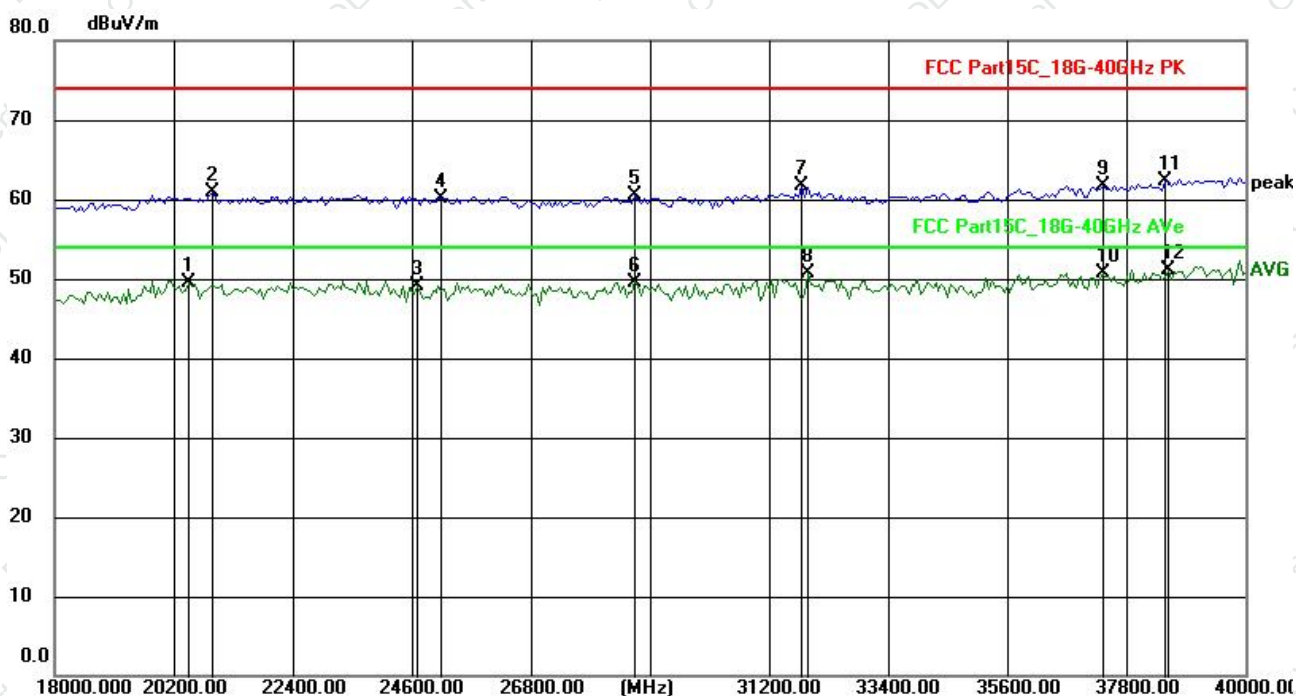
Notes:

1. An initial pre-scan was performed on the peak detector.
2. Quasi-Peak measurements were performed at the frequencies with maximized peak emission.
3. The emission levels of other frequencies are very lower than the limit and not shown in the test report.
4. Final Level = Reading level + Correct Factor
5. Correct Factor = Antenna factor + Cable loss factor - Amplifier factor
6. Margin = Measurement Level - Limit



Radiation Emission Test Data

Temperature:	26℃	Relative Humidity:	54%
Pressure:	1009hPa	Phase :	Vertical
Test Voltage :	DC 3.7V	Test Mode:	Working



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	20475.000	29.51	19.94	49.45	54.00	-4.55	AVG
2	20915.000	40.71	20.14	60.85	74.00	-13.15	peak
3	24710.000	27.35	21.82	49.17	54.00	-4.83	AVG
4	25150.000	38.18	22.02	60.20	74.00	-13.80	peak
5	28725.000	36.81	23.60	60.41	74.00	-13.59	peak
6	28725.000	26.00	23.60	49.60	54.00	-4.40	AVG
7	31805.000	37.45	24.33	61.78	74.00	-12.22	peak
8	31915.000	26.37	24.33	50.70	54.00	-3.30	AVG
9	37360.000	36.97	24.80	61.77	74.00	-12.23	peak
10	37360.000	25.98	24.80	50.78	54.00	-3.22	AVG
11	38515.000	37.47	24.90	62.37	74.00	-11.63	peak
12	38570.000	26.26	24.91	51.17	54.00	-2.83	AVG

Notes:

1. An initial pre-scan was performed on the peak detector.
2. Quasi-Peak measurement were performed at the frequencies with maximized peak emission.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Final Level = Reading level + Correct Factor
5. Correct Factor = Antenna factor + Cable loss factor - Amplifier factor
6. Margin = Measurement Level - Limit



5. EUT PHOTOGRAPHS

Reference to the appendix II for details.

6. EUT TEST PHOTOGRAPHS

Reference to the appendix I for details.

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