

TEST REPORT

Reference No...... : WTX25X03077602W
FCC ID..... : 2A6CT-RT-100S
Applicant..... : Shenzhen Wanhe Innovation Technology Co., Ltd.
Address..... : 2nd Floor, Building D, No. 2, Tengfeng 1st Road, Fenghuang Community,
Fuyong Street, Baoan District, Shenzhen, Guangdong, China
Manufacturer..... : The same as Applicant
Address..... : The same as Applicant
Product Name..... : EMF Meter
Model No...... : RT-100S
Standards..... : **FCC PART15 SUBPART B**
Date of Receipt sample..... : 2025-03-31
Date of Test..... : 2025-04-05 to 2025-04-11
Date of Issue..... : 2025-04-11
Test Report Form No...... : WTX_FCC PART15B_001
Test Result..... : **Pass**

Remarks:

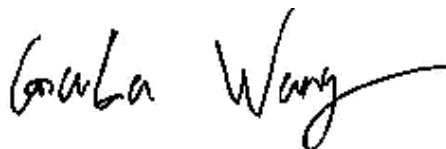
The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of approver.

Prepared By:

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Tested by:



Gala Wang /Project Engineer

Approved by:



Jason Su/Manager

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Report version

Version No.	Date of issue	Description
Rev.00	2025-04-11	Original
/	/	/

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

General Description of EUT	
Product Name:	EMF Meter
Trade Name:	WINTACT
Model No.:	RT-100S
Adding Model(s):	/
<i>Note: The test data is gathered from a production sample, provided by the manufacturer.</i>	

Technical Characteristics of EUT	
Rated Voltage:	Type-C DC5V Battery DC 3.7V
Rated Current:	1A
Battery Capacity	600mAh
Rated Power:	/
Power Adapter Model:	/
Lowest Internal Frequency:	/
Highest Internal Frequency:	Above 108MHz
Classification of ITE:	Class B

1.2 Test Standards

The tests were performed according to following standards:

FCC Rules Part 15 Subpart B:Unintentional Radiators.

ANSI C63.4-2014:American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

1.4 Test Facility

Address of the test laboratory

Laboratory: Waltek Testing Group (Shenzhen) Co., Ltd.

Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road, Block 70 Bao'an District, Shenzhen, Guangdong, China

FCC – Registration No.: 125990

Waltek Testing Group (Shenzhen) Co., Ltd. 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 in our files. The Designation Number is CN5010, and Test Firm Registration Number is 125990.

Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Waltek Testing Group (Shenzhen) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

1.5 EUT Setup and Operation Mode

The equipment under test (EUT) was configured to measure its highest possible emission. The test modes were adapted according to the operation manual for use, more detailed description as follows:

Test Mode List:

Test Mode	Description	Remark	Power Supply Mode
TM1	Charging	Connect to the adapter	Adapter DC5V
TM2	Normal Working	/	Battery DC 3.7V

EUT Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
/	/	/	/

Auxiliary Equipment List and Details

Description	Manufacturer	Model	Serial Number
Adapter	Xiaomi	MDY-08-ES	/

Special Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
Type-C Cable	0.80	Unshielded	Without Ferrite

1.6 Measurement Uncertainty

Measurement uncertainty		
Parameter	Conditions	Uncertainty
Conducted Emissions	Conducted	9-150kHz, 3.74dB
		0.15-30MHz, 3.34dB
Radiated Emissions	Radiated	30-200MHz, 4.52dB
		0.2-1GHz, 5.56dB
		1-6GHz, 3.84dB
		6-18GHz, 3.92dB

1.7 Test Equipment List and Details

Description	Manufacturer	Model	Serial No.	Cal Date	Due Date
☐ Chamber A:Below 1GHz					
Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2025-02-23	2026-02-22
EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2025-02-23	2026-02-22
Amplifier	HP	8447F	2805A03475	2025-02-23	2026-02-22
Loop Antenna	Schwarz beck	FMZB 1516	9773	2024-02-26	2026-02-25
Trilog Broadband Antenna	Schwarz beck	VULB9163	9163-333	2025-02-23	2026-02-22
Coaxial Cable	/	RC_6G-N-M	/	2025-02-23	2026-02-22
Coaxial Cable	/	RC_6G-N-M	/	2025-02-23	2026-02-22
Coaxial Cable	/	RC_6G-N-M	/	2025-02-23	2026-02-22
☐ Chamber A:Above 1GHz					
Amplifier	C&D	PAP-1G18	2002	2025-02-23	2026-02-22
Horn Antenna	ETS	3117	00086197	2025-02-23	2026-02-22
Coaxial Cable	/	C16-07-07	/	2025-02-23	2026-02-22
Coaxial Cable	/	C16-07-07	/	2025-02-23	2026-02-22
Coaxial Cable	/	C16-07-07	/	2025-02-23	2026-02-22
☐ Chamber B:Below 1GHz					
EMI Test Receiver	Rohde & Schwarz	ESPI	101391	2025-02-23	2026-02-22
Trilog Broadband Antenna	Schwarz beck	VULB9163(B)	9163-635	2024-03-17	2027-03-16
Amplifier	Agilent	8447D	2944A10457	2025-02-23	2026-02-22
Coaxial Cable	/	1.5MRFC-LWB3	/	2025-02-23	2026-02-22
Coaxial Cable	/	RG 316	/	2025-02-23	2026-02-22
Coaxial Cable	/	RG 316	/	2025-02-23	2026-02-22
☒ Chamber C:Below 1GHz					
EMI Test Receiver	Rohde & Schwarz	ESIB 26	100401	2025-02-23	2026-02-22
Trilog Broadband Antenna	Schwarz beck	VULB 9168	1194	2024-04-18	2027-04-17
Loop Antenna	Schwarz beck	FMZB 1516	9773	2024-02-26	2026-02-25
Amplifier	HP	8447F	2944A03869	2025-02-23	2026-02-22
Coaxial Cable	/	RC_6G-N-M	/	2025-02-23	2026-02-22
Coaxial Cable	/	RC_6G-N-M	/	2025-02-23	2026-02-22
Coaxial Cable	/	RC_6G-N-M	/	2025-02-23	2026-02-22
☒ Chamber C:Above 1GHz					

EMI Test Receiver	Rohde & Schwarz	ESIB 26	100401	2025-02-23	2026-02-22
Horn Antenna	POAM	RTF-118A	1820	2023-03-10	2026-03-09
Amplifier	Tonscend	TAP010180 50	AP22E80623 5	2025-02-23	2026-02-22
DRG Horn Antenna	A.H. SYSTEMS	SAS-574	571	2024-03-17	2026-03-16
Pre-amplifier	Schwarzbeck	BBV 9721	9721-031	2025-02-23	2026-02-22
Coaxial Cable	/	RC-18G-N- M	/	2025-02-23	2026-02-22
Coaxial Cable	/	RC-18G-N- M	/	2025-02-23	2026-02-22
Coaxial Cable	/	RC-18G-N- M	/	2025-02-23	2026-02-22
☐ Conducted Room 1#					
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2025-02-23	2026-02-22
EMI Test Receiver	Rohde & Schwarz	ESCI	100525	2024-12-08	2025-12-07
AC LISN	Schwarz beck	NSLK8126	8126-279	2025-02-23	2026-02-22
Coaxial Cable	/	RG 316	/	2025-02-23	2026-02-22
Coaxial Cable	/	6MRFC-DP	/	2025-02-23	2026-02-22
☒ Conducted Room 2#					
EMI Test Receiver	Rohde & Schwarz	ESPI	101259	2025-02-23	2026-02-22
LISN	Rohde & Schwarz	ENV 216	100097	2025-02-23	2026-02-22
Coaxial Cable	/	RG 316	/	2025-02-23	2026-02-22

Software List			
Description	Manufacturer	Model	Version
EMI Test Software (Radiated Emission A)	Farad	EZ-EMC	RA-03A1 (1.1.4.2)
EMI Test Software (Radiated Emission B)	Farad	EZ-EMC	RA-03A1 (1.1.4.2)
EMI Test Software (Radiated Emission C)	Farad	EZ-EMC	RA-03A1-2 (1.1.4.2)
EMI Test Software (Conducted Emission Room 1#)	Farad	EZ-EMC	3A1*CE-RE 1.1.4.3
EMI Test Software (Conducted Emission Room 2#)	Farad	EZ-EMC	3A1*CE-RE 1.1.4.3

*Remark: indicates software version used in the compliance certification testing.

2. SUMMARY OF TEST RESULTS

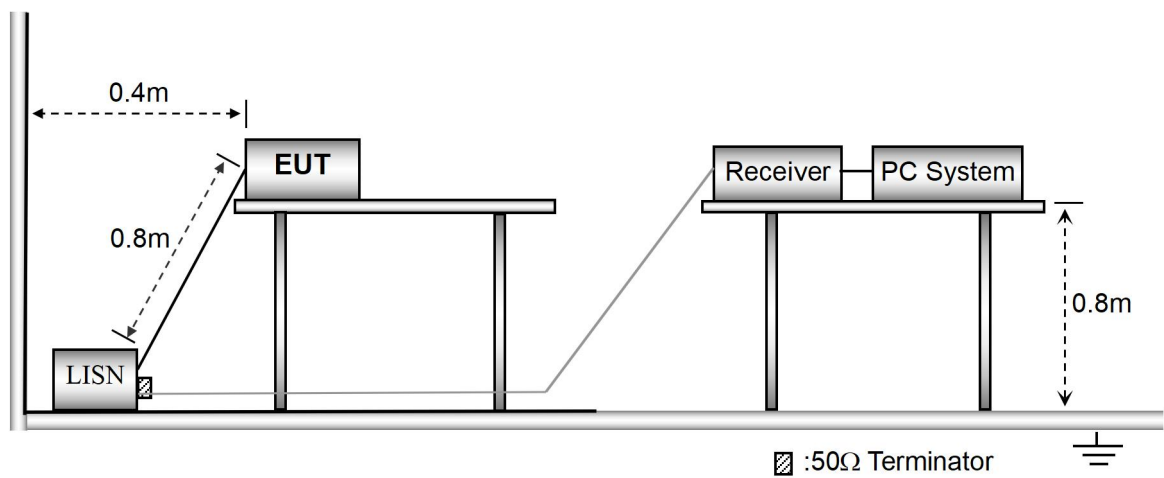
Description of Test	Result
§15.107(a) Conducted Emission	Compliant
§15.109(a) Radiated Emission	Compliant

3. Conducted Emissions

3.1 Test Procedure

Test is conducting under the description of ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

3.2 Basic Test Setup Block Diagram



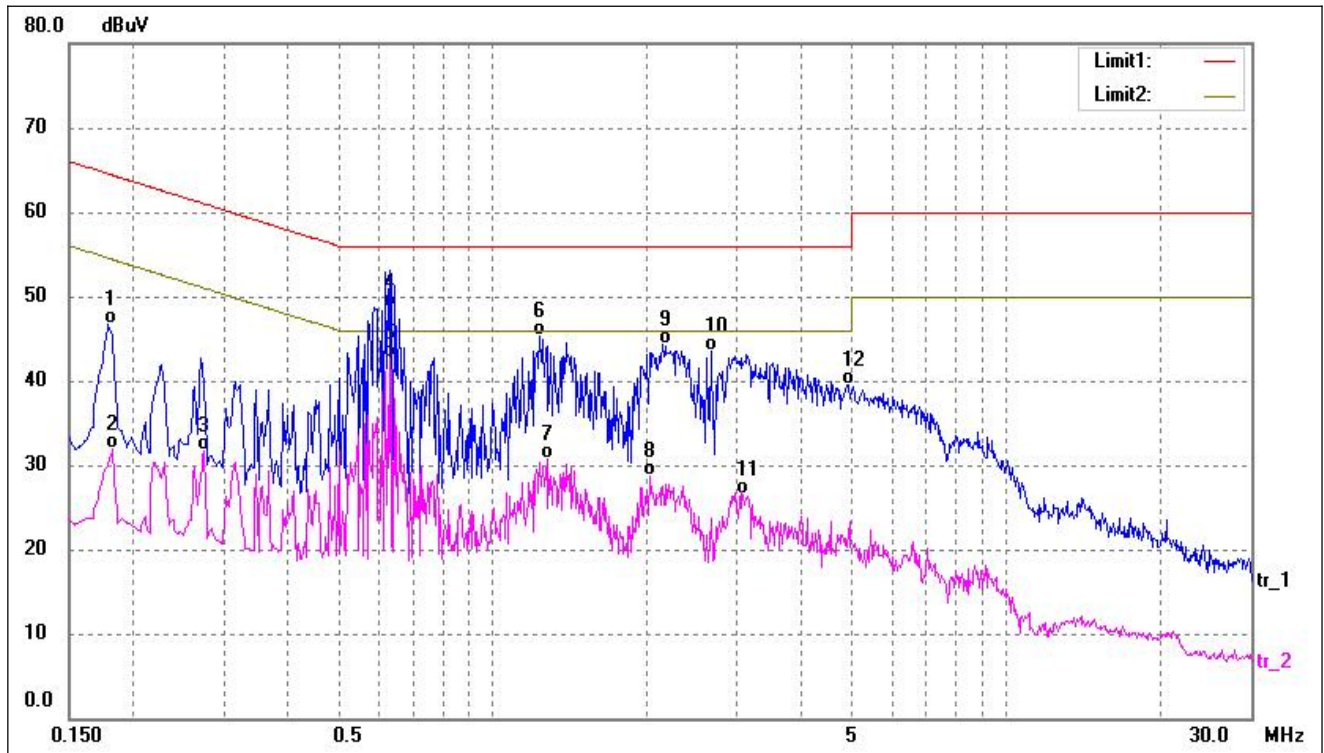
3.3 Environmental Conditions

Temperature:	23.5°C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

3.4 Summary of Test Results

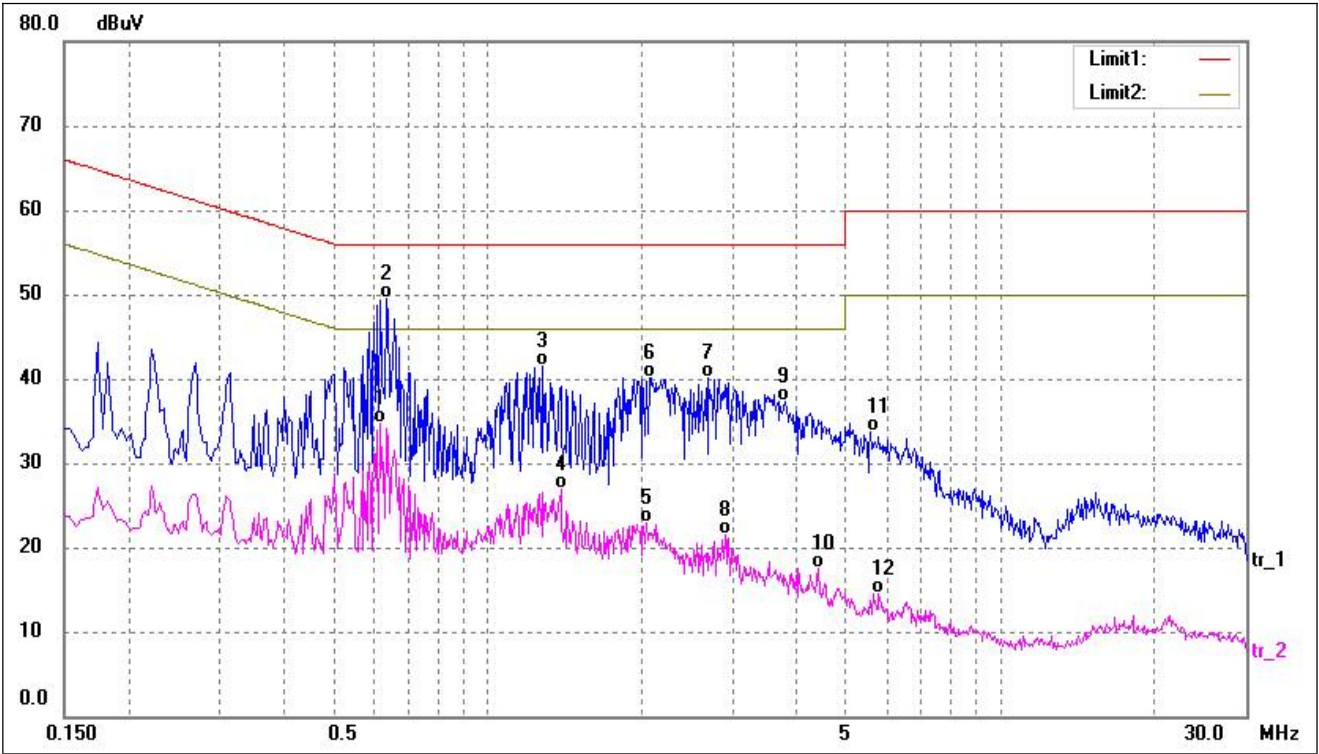
Look at the graphs and data below:

Test mode:	TM1	Polarity:	Line
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1780	37.01	9.64	46.65	64.57	-17.92	QP
2	0.1819	22.15	9.66	31.81	54.39	-22.58	AVG
3	0.2740	21.98	9.66	31.64	50.99	-19.35	AVG
4	0.6300	39.15	9.51	48.66	56.00	-7.34	QP
5*	0.6300	33.24	9.51	42.75	46.00	-3.25	AVG
6	1.2380	35.81	9.58	45.39	56.00	-10.61	QP
7	1.2780	21.01	9.60	30.61	46.00	-15.39	AVG
8	2.0260	18.79	9.95	28.74	46.00	-17.26	AVG
9	2.1500	34.34	9.93	44.27	56.00	-11.73	QP
10	2.6700	33.72	9.82	43.54	56.00	-12.46	QP
11	3.0820	16.70	9.73	26.43	46.00	-19.57	AVG
12	4.9300	29.95	9.60	39.55	56.00	-16.45	QP

Test mode:	TM1	Polarity:	Neutral
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.6180	25.29	9.50	34.79	46.00	-11.21	AVG
2*	0.6340	40.08	9.51	49.59	56.00	-6.41	QP
3	1.2820	31.81	9.60	41.41	56.00	-14.59	QP
4	1.3900	17.24	9.66	26.90	46.00	-19.10	AVG
5	2.0500	12.94	9.95	22.89	46.00	-23.11	AVG
6	2.0820	30.19	9.94	40.13	56.00	-15.87	QP
7	2.7060	30.34	9.81	40.15	56.00	-15.85	QP
8	2.9060	11.65	9.77	21.42	46.00	-24.58	AVG
9	3.8140	27.67	9.60	37.27	56.00	-18.73	QP
10	4.4220	7.94	9.57	17.51	46.00	-28.49	AVG
11	5.5900	24.04	9.63	33.67	60.00	-26.33	QP
12	5.7940	4.82	9.64	14.46	50.00	-35.54	AVG

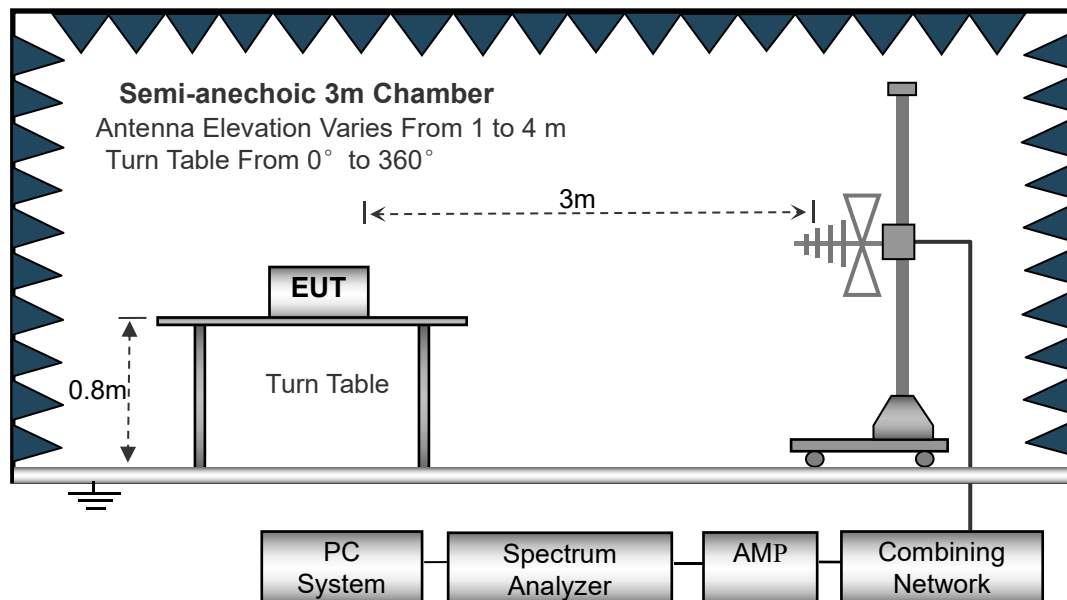
4. RADIATED EMISSION

4.1 Test Procedure

The setup of EUT is according with per ANSI C63.4-2014 measurement procedure. The specification used was with the FCC Part 15.109 Limit.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle. The spacing between the peripherals was 10 cm.

4.2 Block Diagram of Test Setup



4.3 Test Receiver Setup

Frequency :9kHz-30MHz

RBW=10kHz,

VBW =30kHz

Sweep time= Auto

Trace = max hold

Detector function = peak

Frequency :30MHz-1GHz

RBW=120kHz,

VBW=300kHz

Sweep time= Auto

Trace = max hold

Detector function = peak, QP

Frequency :Above 1GHz

RBW=1MHz,

VBW=3MHz(Peak), 10Hz(AV)

Sweep time= Auto

Trace = max hold

Detector function = peak, AV

4.4 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

$$\begin{aligned}\text{Corr. Ampl.} &= \text{Indicated Reading} + \text{Correct} \\ \text{Correct} &= \text{Ant. Factor} + \text{Cable Loss} - \text{Ampl. Gain}\end{aligned}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dB μ V means the emission is 6dB μ V below the maximum limit for a Class B device. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{FCC Part 15.109(a) Limit}$$

4.5 Environmental Conditions

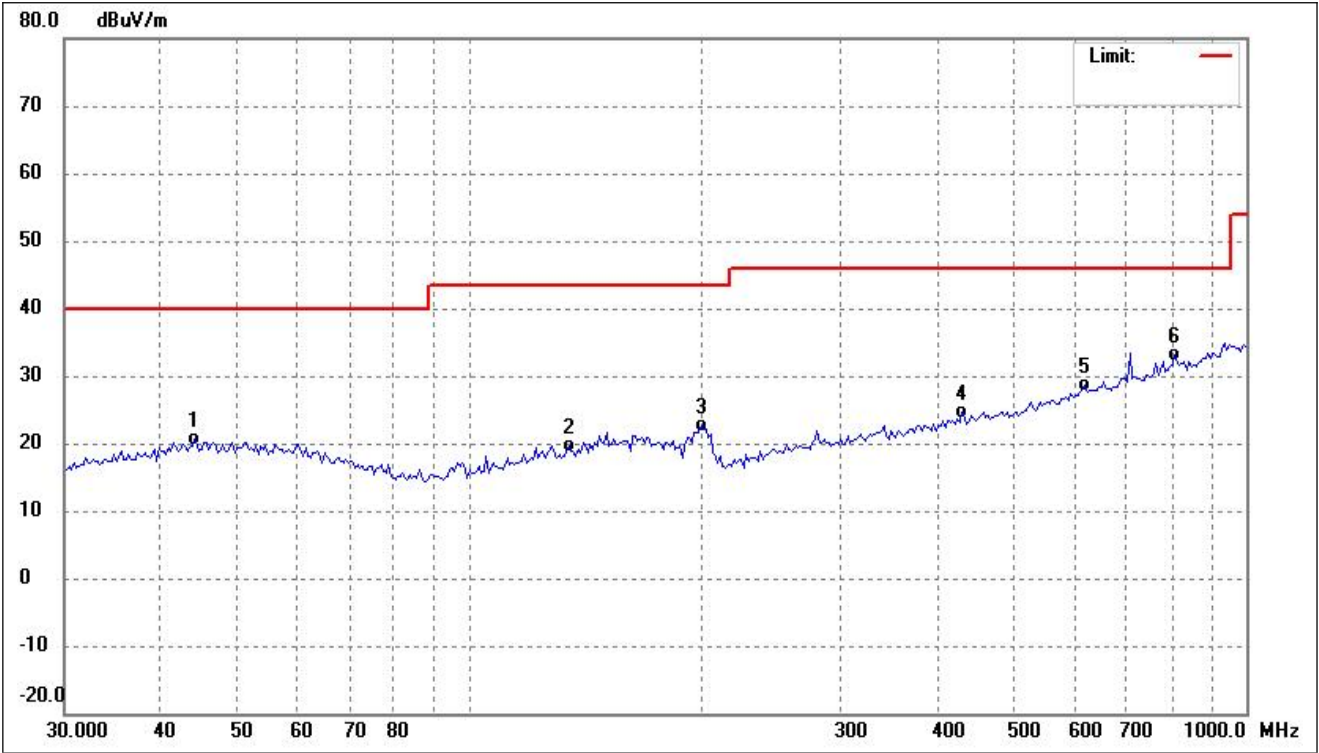
Temperature:	23.5 °C
Relative Humidity:	54 %
ATM Pressure:	1011 mbar

4.6 Summary of Test Results

Look at the graphs and data below:

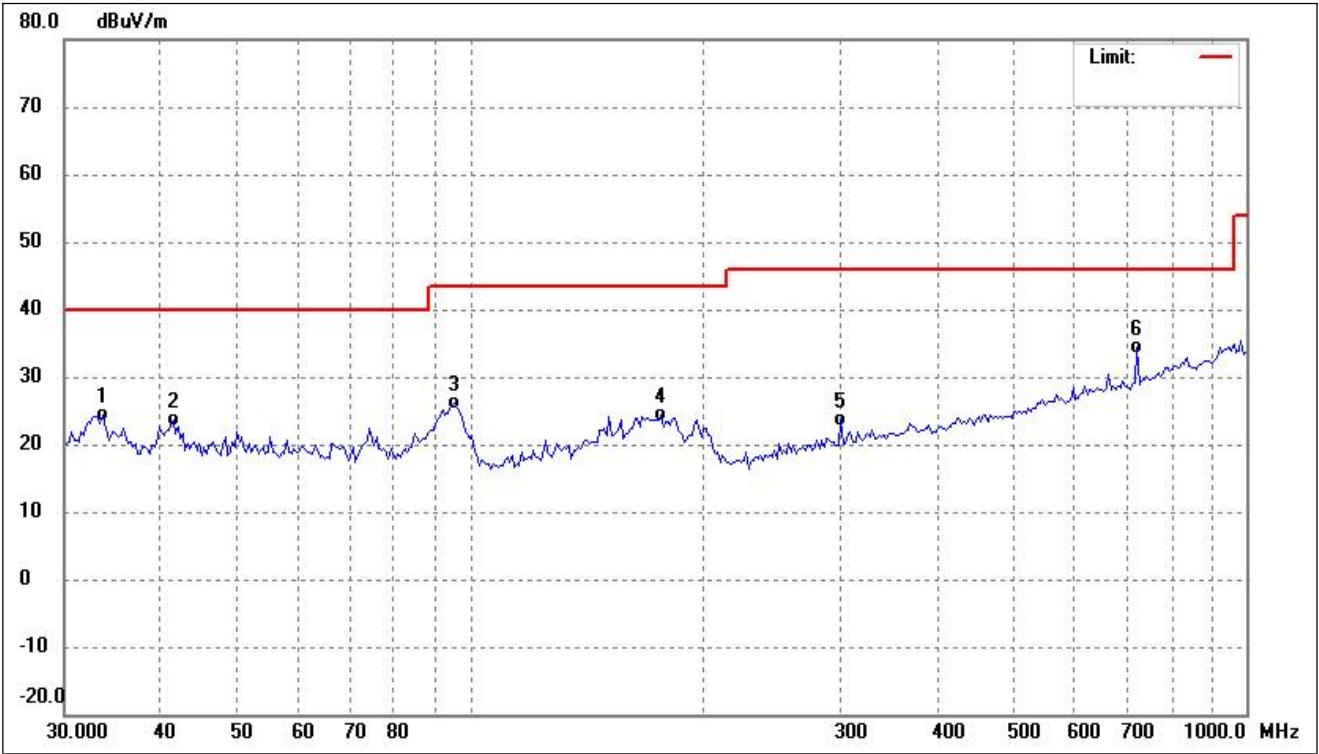
➤ Below 1GHz

Test mode:	TM1	Polarity:	Horizontal
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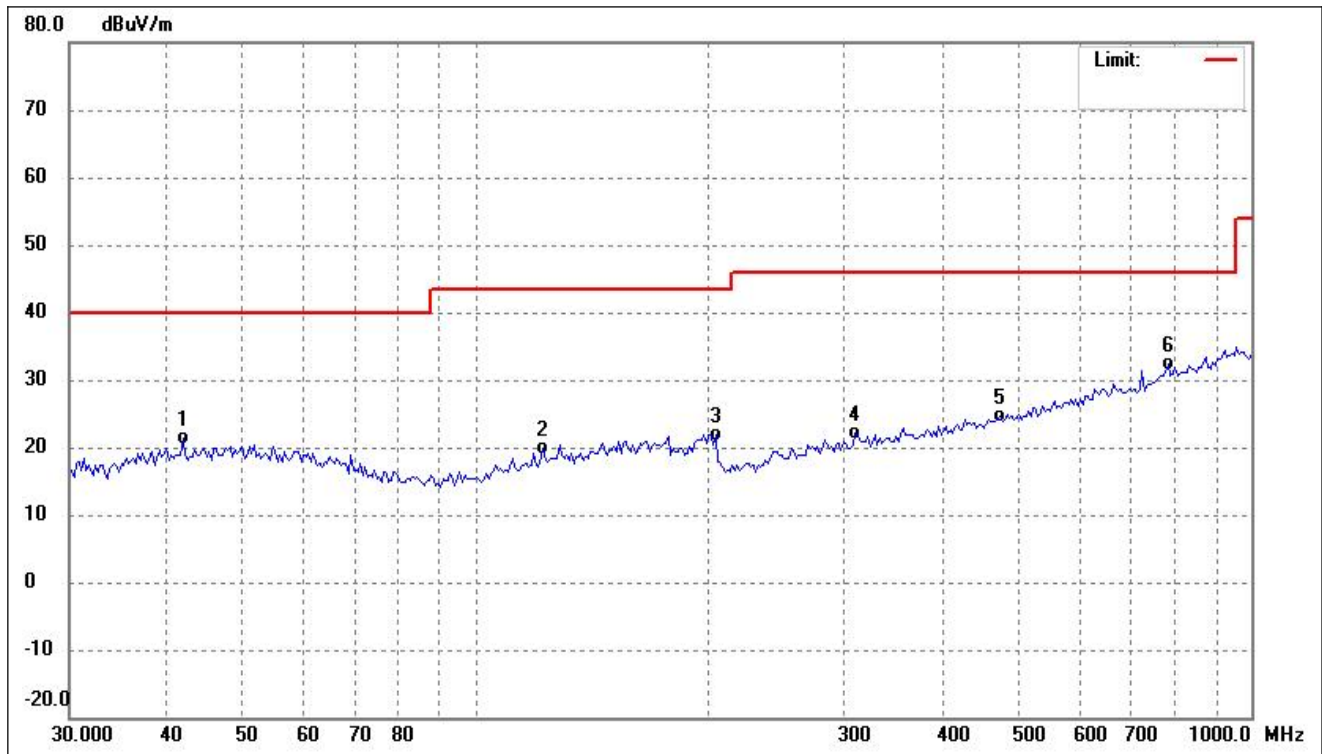
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	44.1544	28.66	-7.96	20.70	40.00	-19.30	-	-	QP
2	134.0194	28.76	-9.15	19.61	43.50	-23.89	-	-	QP
3	198.6424	34.05	-11.31	22.74	43.50	-20.76	-	-	QP
4	430.3053	30.24	-5.62	24.62	46.00	-21.38	-	-	QP
5	620.1167	30.54	-1.86	28.68	46.00	-17.32	-	-	QP
6	809.9238	32.03	1.11	33.14	46.00	-12.86	-	-	QP

Test mode:	TM1	Polarity:	Vertical
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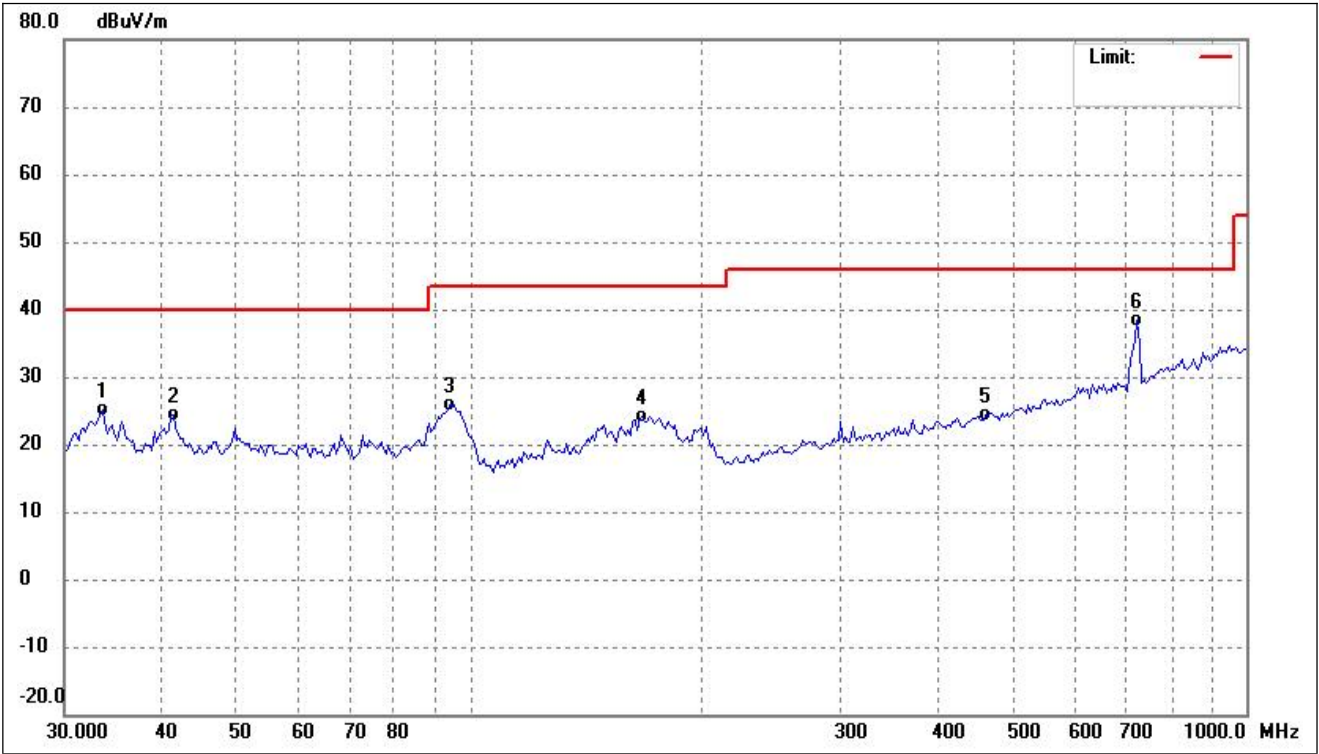
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	33.5700	33.64	-9.19	24.45	40.00	-15.55	-	-	QP
2	41.4483	31.52	-7.96	23.56	40.00	-16.44	-	-	QP
3	95.6485	38.50	-12.25	26.25	43.50	-17.25	-	-	QP
4	176.2748	33.67	-9.21	24.46	43.50	-19.04	-	-	QP
5	300.6988	31.41	-7.85	23.56	46.00	-22.44	-	-	QP
6	723.7930	34.92	-0.49	34.43	46.00	-11.57	-	-	QP

Test mode:	TM2	Polarity:	Horizontal
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No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	42.0350	29.45	-7.95	21.50	40.00	-18.50	-	-	QP
2	122.3189	29.62	-9.85	19.77	43.50	-23.73	-	-	QP
3	204.3052	33.45	-11.47	21.98	43.50	-21.52	-	-	QP
4	309.2710	29.80	-7.66	22.14	46.00	-23.86	-	-	QP
5	474.7913	29.51	-4.99	24.52	46.00	-21.48	-	-	QP
6	781.9606	31.67	0.70	32.37	46.00	-13.63	-	-	QP

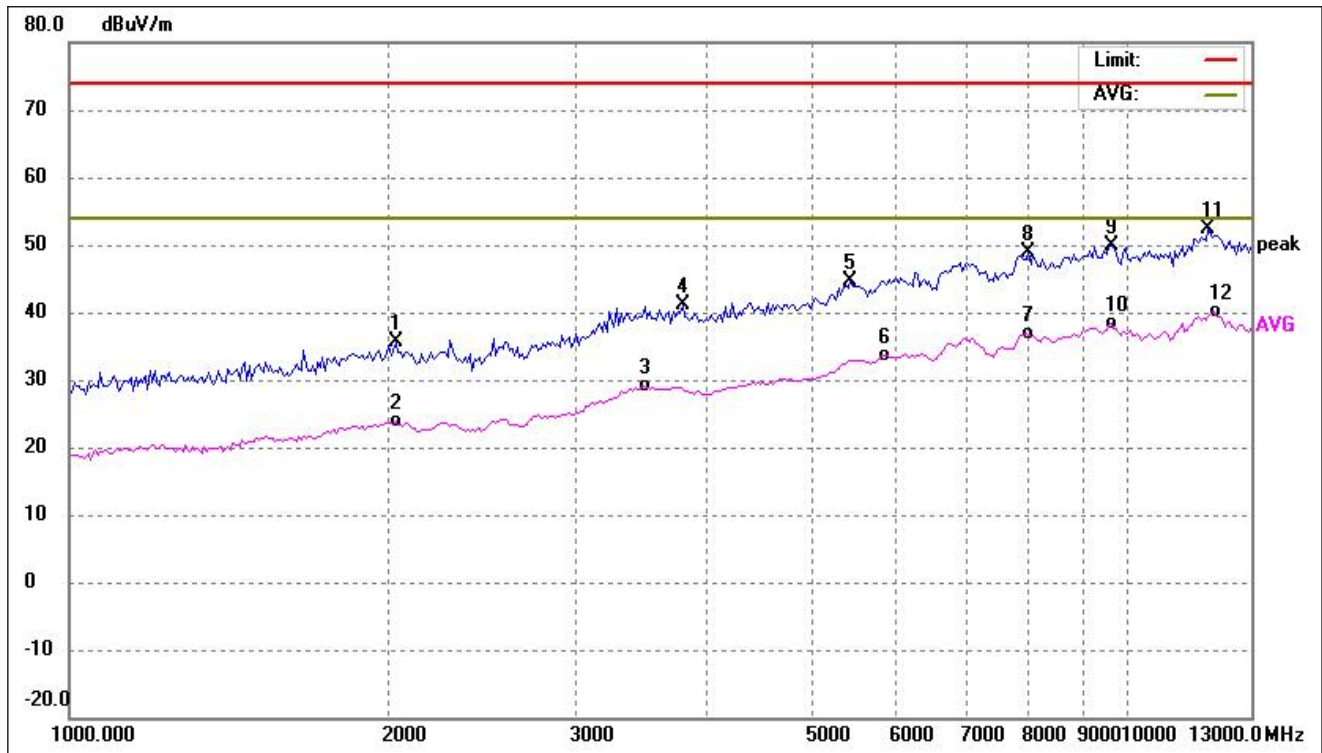
Test mode:	TM2	Polarity:	Vertical
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No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	33.5700	34.24	-9.19	25.05	40.00	-14.95	-	-	QP
2	41.4483	32.46	-7.96	24.50	40.00	-15.50	-	-	QP
3	94.3137	38.31	-12.33	25.98	43.50	-17.52	-	-	QP
4	166.6385	32.33	-8.23	24.10	43.50	-19.40	-	-	QP
5	461.6313	29.59	-5.09	24.50	46.00	-21.50	-	-	QP
6	723.7930	38.95	-0.49	38.46	46.00	-7.54	-	-	QP

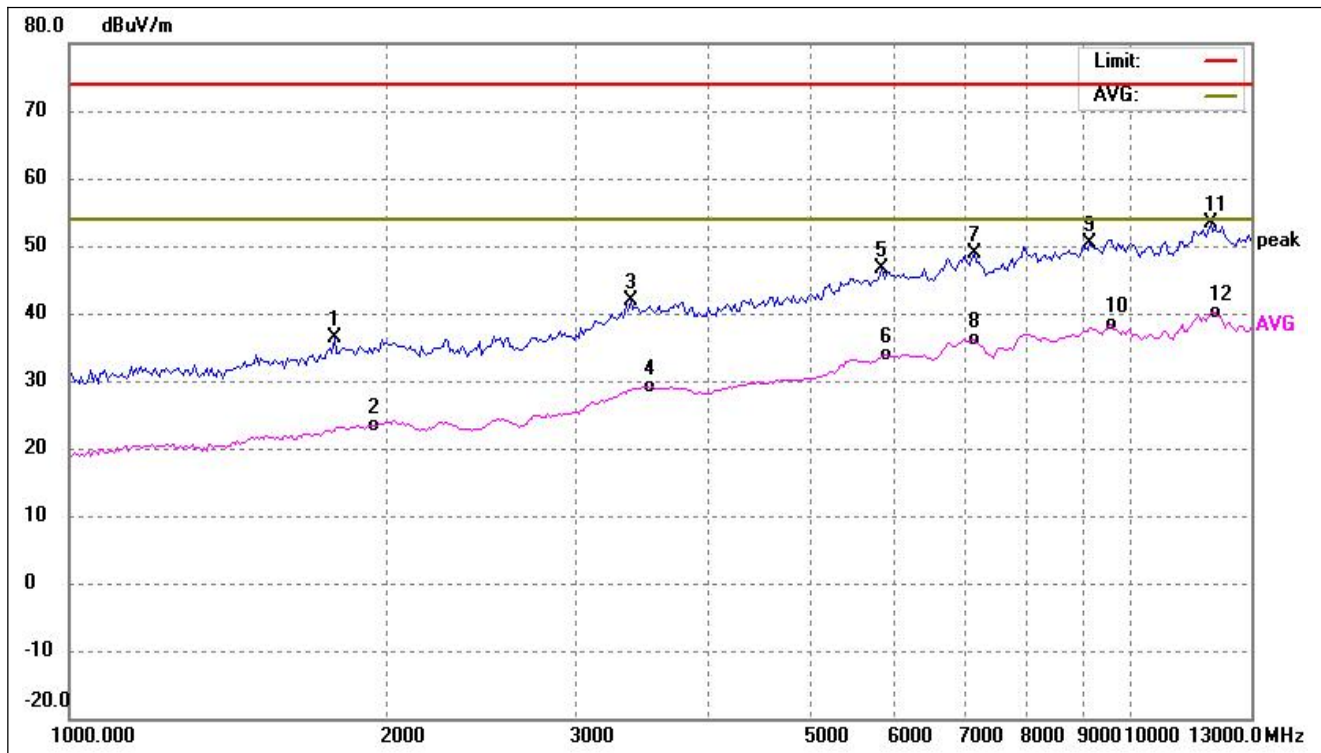
➤ Above 1GHz

Test mode:	TM1(worst case)	Polarity:	Horizontal
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No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	2032.659	55.87	-20.15	35.72	74.00	-38.28	-	-	peak
2	2032.659	44.15	-20.15	24.00	54.00	-30.00	-	-	AVG
3	3469.198	43.75	-14.69	29.06	54.00	-24.94	-	-	AVG
4	3785.986	55.94	-14.89	41.05	74.00	-32.95	-	-	peak
5	5453.508	55.37	-10.64	44.73	74.00	-29.27	-	-	peak
6	5860.422	43.18	-9.46	33.72	54.00	-20.28	-	-	AVG
7	7977.558	42.82	-5.94	36.88	54.00	-17.12	-	-	AVG
8	8018.670	54.68	-5.87	48.81	74.00	-25.19	-	-	peak
9	9599.191	54.33	-4.34	49.99	74.00	-24.01	-	-	peak
10	9599.191	42.62	-4.34	38.28	54.00	-15.72	-	-	AVG
11	11851.165	54.01	-1.53	52.48	74.00	-21.52	-	-	peak
12	11973.627	41.35	-1.30	40.05	54.00	-13.95	-	-	AVG

Test mode:	TM1(worst case)	Polarity:	Vertical
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No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	1778.375	57.68	-21.33	36.35	74.00	-37.65	-	-	peak
2	1930.816	44.07	-20.57	23.50	54.00	-30.50	-	-	AVG
3	3381.172	57.09	-15.29	41.80	74.00	-32.20	-	-	peak
4	3505.046	43.67	-14.50	29.17	54.00	-24.83	-	-	AVG
5	5830.376	56.15	-9.54	46.61	74.00	-27.39	-	-	peak
6	5860.422	43.34	-9.46	33.88	54.00	-20.12	-	-	AVG
7	7124.563	55.39	-6.62	48.77	74.00	-25.23	-	-	peak
8	7124.563	42.82	-6.62	36.20	54.00	-17.80	-	-	AVG
9	9165.232	55.23	-4.95	50.28	74.00	-23.72	-	-	peak
10	9599.191	42.74	-4.34	38.40	54.00	-15.60	-	-	AVG
11	11912.238	54.89	-1.42	53.47	74.00	-20.53	-	-	peak
12	11973.627	41.53	-1.30	40.23	54.00	-13.77	-	-	AVG

Remark: '-Means' the test Degree and Height are not recorded by the test software and only show the worst case in the test report.

APPENDIX PHOTOGRAPHS

Please refer to “ANNEX”

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