



TEST REPORT

Reference No..... : WTX21X01003878E
Applicant : Dongguan Olight E-Commerce Technology Co., Ltd
Address : 4th Floor Building 4 Kegou Industrial Park No6 Zhongnan Road,
Changan Town, Dongguan City ,Guangdong, China
Product : Flashlight
Test Model : Baton 3 Premium Edition
Standards : EN 55015:2013/A1:2015
EN 61547:2009
Date of Receipt sample : Jan.14, 2021
Date of Test..... : Jan.14, 2021 to Jan.19, 2021
Date of Issue : Jan.19, 2021
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 compiler and approver.

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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: Dongguan Olight E-Commerce Technology Co., Ltd
Address of applicant: 4th Floor Building 4 Kegou Industrial Park No6
Zhongnan Road, Changan Town, Dongguan City ,
Guangdong, China

Manufacturer: Dongguan Olight E-Commerce Technology Co., Ltd
Address of manufacturer: 4th Floor Building 4 Kegou Industrial Park No6
Zhongnan Road, Changan Town, Dongguan City ,
Guangdong, China

General Description of EUT	
Product Name:	Flashlight
Trade Name:	OLIGHT
Model No.:	Baton 3 Premium Edition
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:	DC 5V
Rated Current:	2.1A
Rated Power:	10.5W
Power Adaptor Model:	/
Highest Internal Frequency:	Below 108MHz



1.2 Test Standards

The tests were performed according to following standards:

EN 55015:2013/A1:2015 Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment

EN 61547:2009 Electromagnetic for general lighting purposes - EMC immunity requirements

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

1.3 Test Methodology

All measurements contained in this report were conducted with the standards EN 55015, and EN 61547 for general lighting purposes equipment, and all related testing and measurement techniques intentional standards.

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1.4 EUT Setup and Operation Mode

The equipment under test (EUT) was configured to measure its highest possible emission/immunity level. 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	Charging port connects to the adapter Flashlight lamp reaches its brightest	DC 5V (With a adapter input AC230V50Hz)
TM2	Charging	Charging port connects to the adapter Flashlight lamp reaches its darkest	DC 5V (With a adapter input AC230V50Hz)
TM3	Discharge	Flashlight lamp reaches its darkest	DC 3.7V
TM4	Discharge	Flashlight lamp reaches its brightest	DC 3.7V

EUT Cable List and Details				
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite	With / Without Core
USBCable	0.62	Unshielded	Without	With

Special Cable List and Details				
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite	With / Without Core
/	/	/	/	/

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
MEIZU	Dongguan Aohai Power Supply Technology Co. LTD	UP0830S	/



1.5 Performance Criteria for EMS

All the test data has been collected, reduced, and analyzed within this report in accordance with Immunity requires the following as specific performance criteria:

- A. The apparatus shall continue to operate as intended during and after the test. The manufacturer specifies some minimum performance level. The performance level may be specified by the manufacturer as a permissible loss of performance.
- B. The apparatus shall continue to operate as intended after the test. This indicates that the EUT does not need to function at normal performance levels during the test, but must recover. Again some minimal performance is defined by the manufacturer. No change in operating state or loss of data is permitted.
- C. Temporary loss of function is allowed. Operation of the EUT may stop as long as it is either automatically reset or can be manually restored by operation of the controls.

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1.6 Test Equipment List and Details

Description	Manufacturer	Model	Serial No.	Cal. Date	Due. Date
Spectrum Analyzer	Rohde & Schwarz	FSP	836079/035	2020-04-28	2021-04-27
EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2020-04-28	2021-04-27
Amplifier	Agilent	8447F	3113A06717	2020-04-28	2021-04-27
Amplifier	C&D	PAP-1G18	2002	2020-04-28	2021-04-27
Trilog Broadband Antenna	Schwarz beck	VULB9163	9163-333	2019-05-05	2021-05-04
Trilog Broadband Antenna	Schwarz beck	VULB9163(B)	9163-635	2019-05-05	2021-05-04
Loop Antenna	EVERFINE	LLA-2	711001	2019-04-30	2021-04-29
EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2020-04-28	2021-04-27
EMI Test Receiver	Rohde & Schwarz	ESPI	101391	2020-04-28	2021-04-27
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2020-04-28	2021-04-27
AC LISN	Schwarz beck	NSLK8126	8126-224	2020-04-28	2021-04-27
8-WIRE LISN	Schwarz beck	8158	CAT3-8158-0059	2020-04-28	2021-04-27
8-WIRE LISN	Schwarz beck	8158	CAT5-8158-0117	2020-04-28	2021-04-27
PMF Generator	LIONCEL	PMF-801C-C	0171101	2020-04-28	2021-04-27
PMF Antenna	LIONCEL	PMF-801C-A	0180302	2020-04-28	2021-04-27
Instantaneous PMF Generator Module	LIONCEL	PMF-801C-T	0171001	2020-04-28	2021-04-27
Digital Power Analyzer	California Instrument	CTS	72831	2020-04-28	2021-04-27
Power Source	California Instrument	5001IX-CTS-400	25965	2020-04-28	2021-04-27
ESD Generator	LIONCEL	ESD-203B	0170901	2020-04-28	2021-04-27
Amplifier	Agilent	8447D	2944A10179	2020-04-28	2021-04-27
Transient 2000	EMC PARTNER	TRA2000	863	2020-04-28	2021-04-27
Couple Clamp	EMC PARTNER	CN-EFT1000	513	2020-04-28	2021-04-27
CONDUCTED IMMUNITY TEST SYSTEM	FRANKONIA	CIT-10/75	126B1247/2013	2021-01-08	2022-01-07
Attenuator	EMTEST	MA-5100/6BF2	1009	2020-04-28	2021-04-27
CDN	Luthi	L-801M2/M3	2665	2020-04-28	2021-04-27
Signal Generator	HP	8688B	3438A00604	2020-04-28	2021-04-27
Power Meter	KEITHLEY	3500	1162591	2020-04-28	2021-04-27
Power Meter	KEITHLEY	3500	1121428	2020-04-28	2021-04-27
RF Power Amplifier	MicoTop	MPA-80-1000-250	MPA1906239	2020-04-28	2021-04-27
RF Power Amplifier	MicoTop	MPA-80-1000-100	MPA1906238	2020-04-28	2021-04-27
Antenna	SCHWARZBECK	STLP 9129	9129 114	N/A	N/A



2. SUMMARY OF TEST RESULTS

Standards	Description of Test Item	Result
EN 55015	Disturbance Voltages	Compliant
	Radiated Electromagnetic Disturbances (Frequency range 9kHz to 30MHz)	Compliant
	Radiated Electromagnetic Disturbances (Frequency range 30MHz to 300MHz)	Compliant
EN 61000-3-2	Harmonic Current Emission	N/A
EN 61000-3-3	Voltage Fluctuation And Flicker	N/A
EN 61547	Electrostatic Discharge Immunity in accordance with EN 61000-4-2	Compliant
	Radio-Frequency Electromagnetic Field Immunity in accordance with EN 61000-4-3	Compliant
	Electrical Fast Transient/Burst Immunity in accordance with EN 61000-4-4	Compliant
	Surges Immunity in accordance with EN 61000-4-5	Compliant
	Injected Currents Immunity in accordance with EN 61000-4-6	Compliant
	Power-frequency Magnetic Field Immunity in accordance with EN 61000-4-8	Compliant
	Voltage Dips/Interruptions Immunity in accordance with EN 61000-4-11	N/A

N/A: not applicable



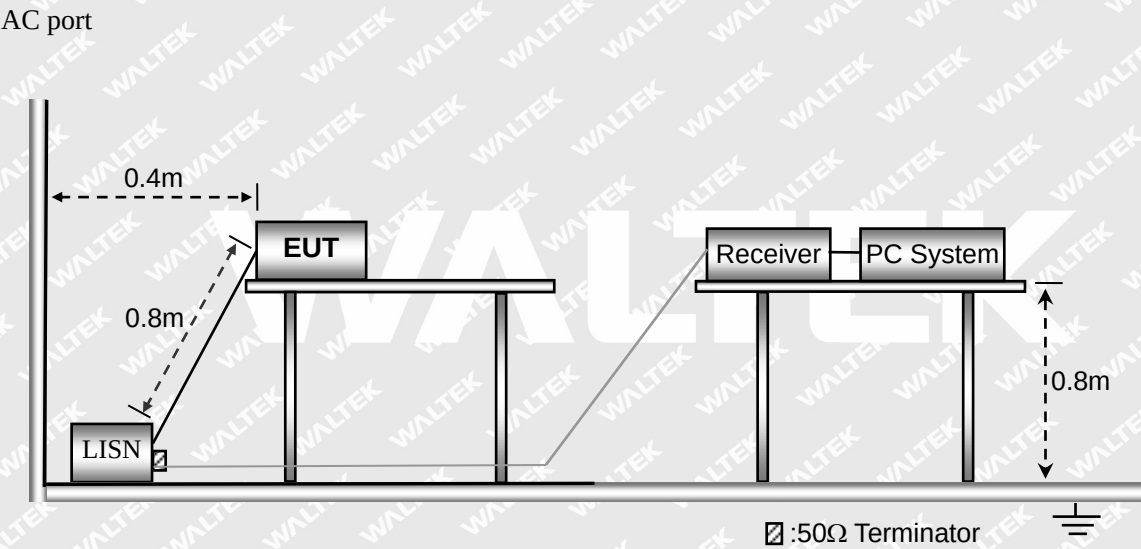
3. Conducted Emission

3.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement:

Measurement uncertainty		
Parameter	Conditions	Uncertainty
Conducted Emissions	Conducted	9-150kHz ±3.74dB
		0.15-30MHz ±3.34dB

3.2 Basic Test Setup Block Diagram





3.3 Environmental Conditions

Temperature:	22.5 ° C
Relative Humidity:	54 %
ATM Pressure:	1015 mbar

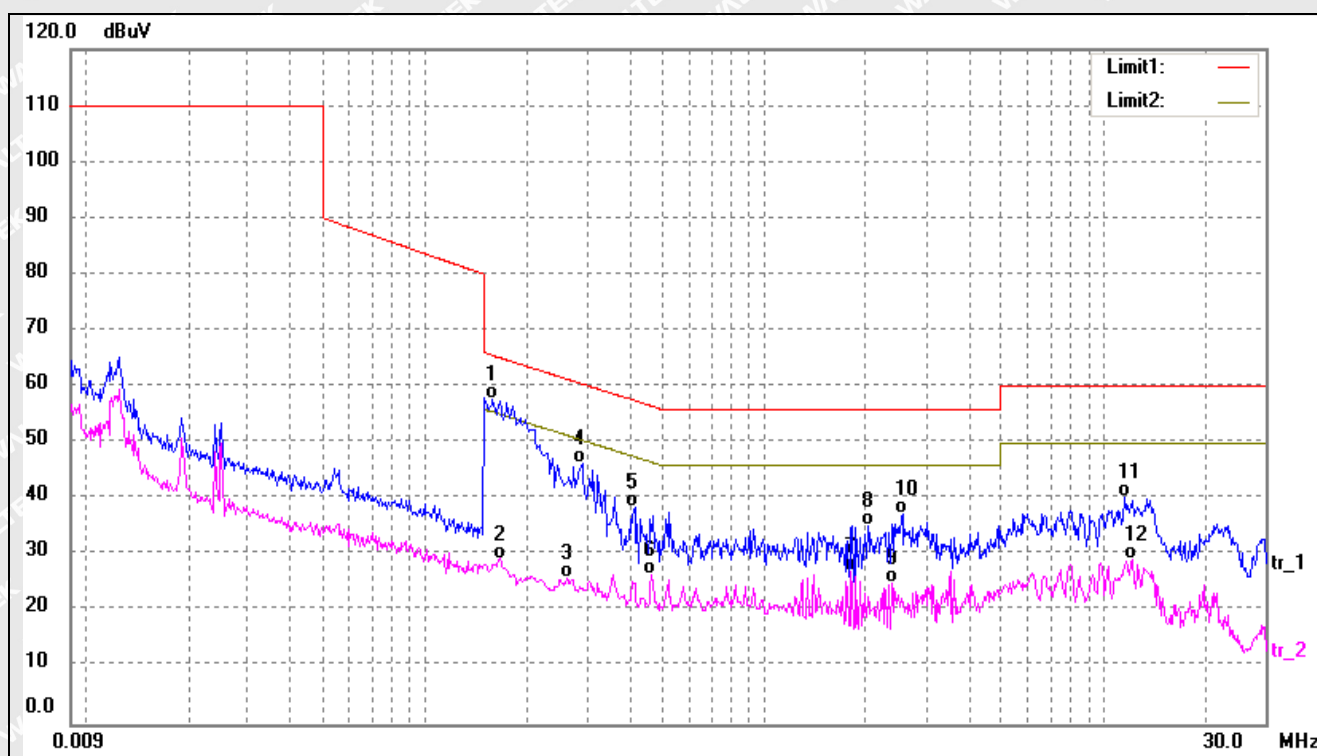
3.4 Summary of Test Results

Look at the graphs and data below:

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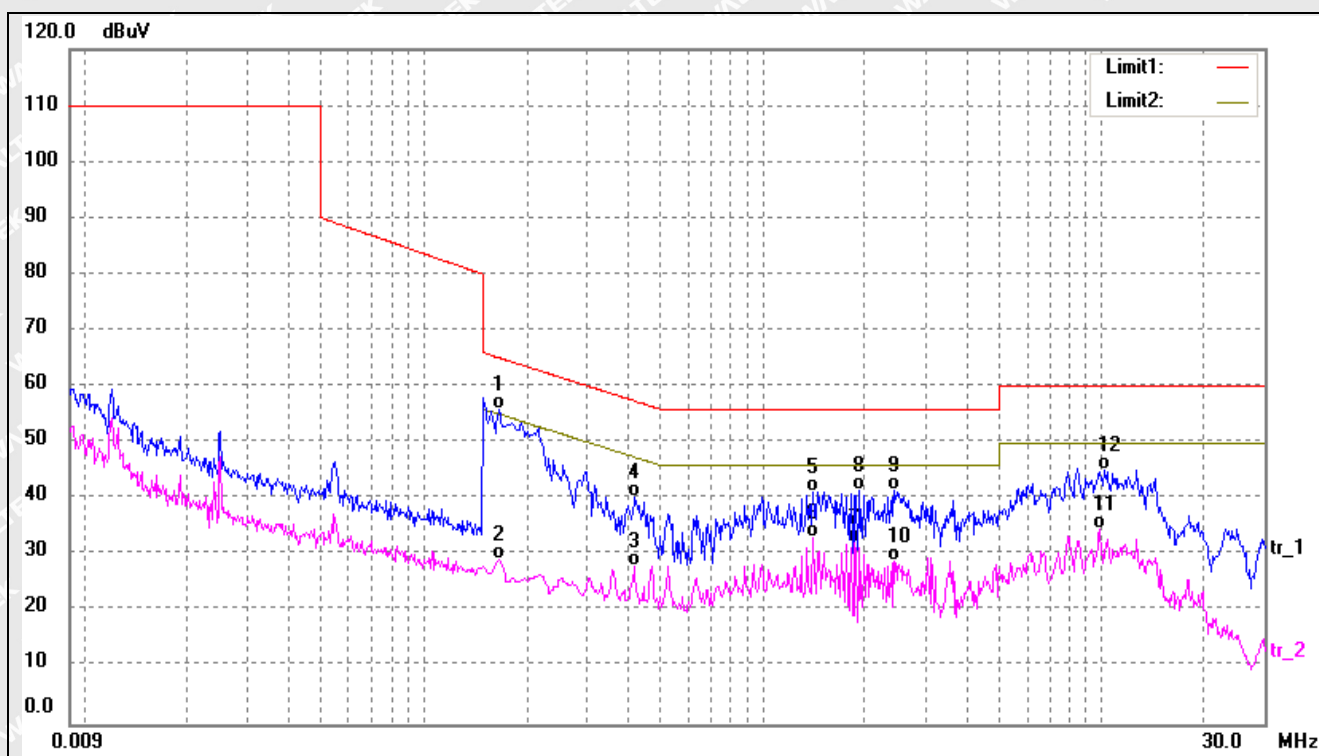
Test mode:	TM1	Polarity:	Line
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1*	0.1580	47.37	10.25	57.62	65.57	-7.95	QP
2	0.1660	19.14	10.26	29.40	55.16	-25.76	AVG
3	0.2620	15.67	10.26	25.93	51.37	-25.44	AVG
4	0.2900	36.07	10.24	46.31	60.52	-14.21	QP
5	0.4140	28.41	10.23	38.64	57.57	-18.93	QP
6	0.4660	16.22	10.23	26.45	46.58	-20.13	AVG
7	1.8100	16.81	10.26	27.07	46.00	-18.93	AVG
8	2.0220	24.95	10.29	35.24	56.00	-20.76	QP
9	2.3860	14.78	10.29	25.07	46.00	-20.93	AVG
10	2.5540	26.93	10.29	37.22	56.00	-18.78	QP
11	11.5660	30.03	10.38	40.41	60.00	-19.59	QP
12	12.1460	18.82	10.41	29.23	50.00	-20.77	AVG



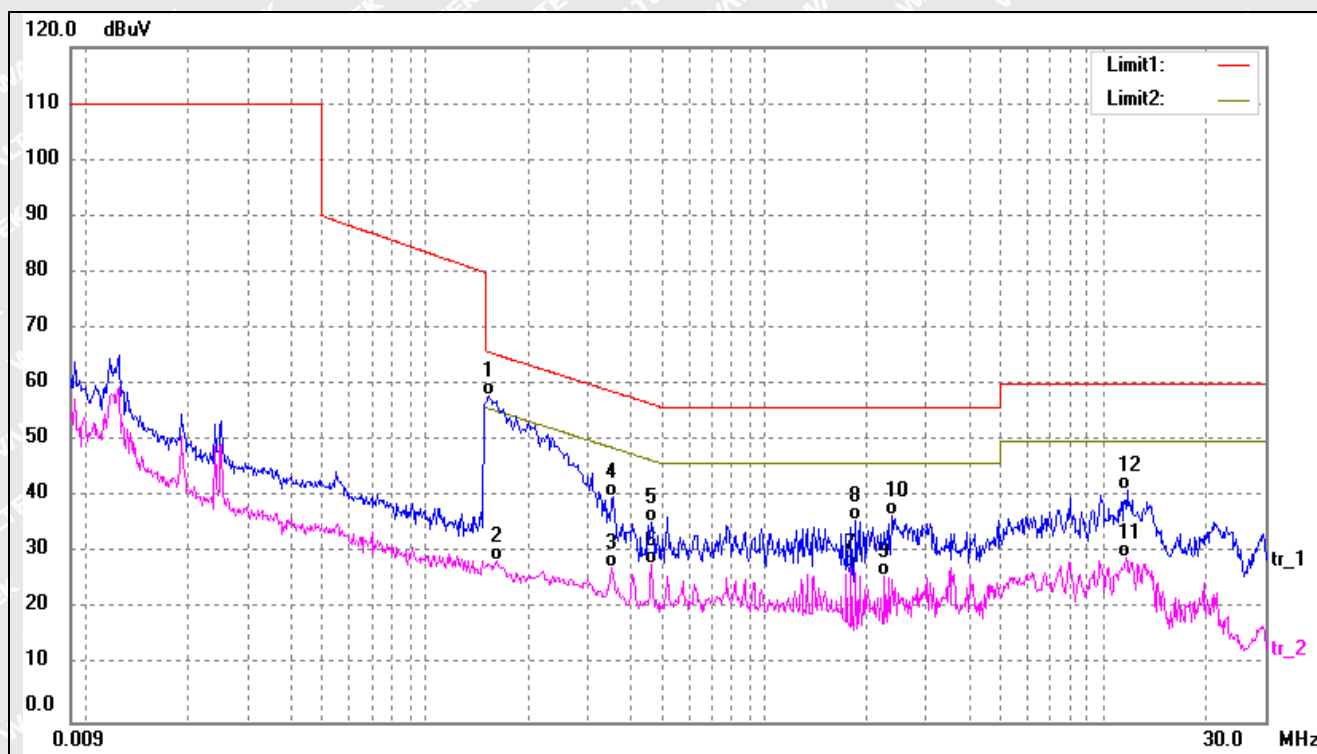
Test mode:	TM1	Polarity:	Neutral
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1*	0.1660	45.68	10.26	55.94	65.16	-9.22	QP
2	0.1660	19.05	10.26	29.31	55.16	-25.85	AVG
3	0.4140	17.77	10.23	28.00	47.57	-19.57	AVG
4	0.4180	30.25	10.23	40.48	57.49	-17.01	QP
5	1.4020	31.17	10.22	41.39	56.00	-14.61	QP
6	1.4020	23.00	10.22	33.22	46.00	-12.78	AVG
7	1.8700	21.85	10.27	32.12	46.00	-13.88	AVG
8	1.9260	31.30	10.28	41.58	56.00	-14.42	QP
9	2.4420	31.13	10.30	41.43	56.00	-14.57	QP
10	2.4420	18.64	10.30	28.94	46.00	-17.06	AVG
11	9.7980	24.49	10.28	34.77	50.00	-15.23	AVG
12	10.1580	34.73	10.29	45.02	60.00	-14.98	QP



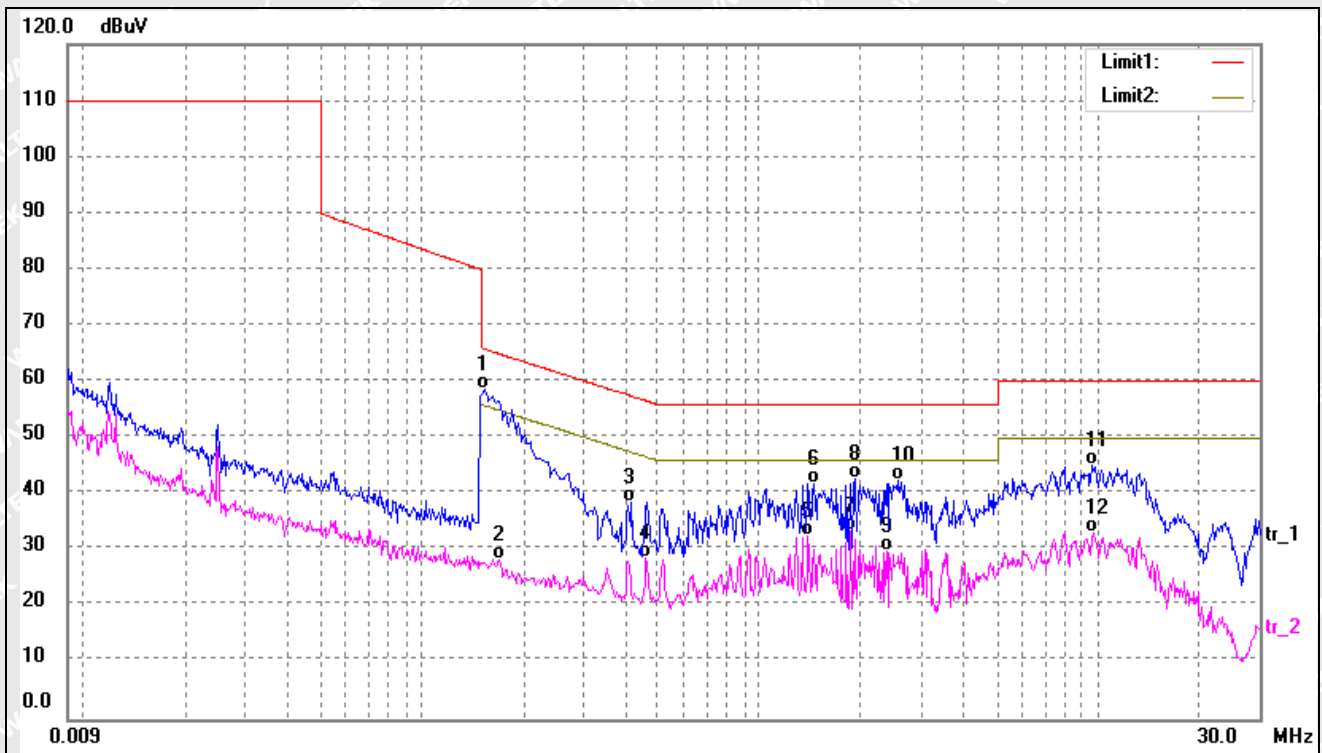
Test mode:	TM2	Polarity:	Line
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1*	0.1540	47.79	10.25	58.04	65.78	-7.74	QP
2	0.1620	18.29	10.26	28.55	55.36	-26.81	AVG
3	0.3540	17.08	10.26	27.34	48.87	-21.53	AVG
4	0.3580	29.72	10.25	39.97	58.77	-18.80	QP
5	0.4660	25.38	10.23	35.61	56.58	-20.97	QP
6	0.4660	17.73	10.23	27.96	46.58	-18.62	AVG
7	1.8060	17.19	10.26	27.45	46.00	-18.55	AVG
8	1.8620	25.51	10.27	35.78	56.00	-20.22	QP
9	2.2700	15.72	10.30	26.02	46.00	-19.98	AVG
10	2.3780	26.34	10.29	36.63	56.00	-19.37	QP
11	11.6540	18.86	10.38	29.24	50.00	-20.76	AVG
12	11.7100	30.88	10.39	41.27	60.00	-18.73	QP



Test mode:	TM2	Polarity:	Neutral
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1*	0.1540	48.46	10.25	58.71	65.78	-7.07	QP
2	0.1700	18.17	10.25	28.42	54.96	-26.54	AVG
3	0.4180	28.42	10.23	38.65	57.49	-18.84	QP
4	0.4620	18.41	10.22	28.63	46.66	-18.03	AVG
5	1.3940	22.45	10.22	32.67	46.00	-13.33	AVG
6	1.4500	31.77	10.23	42.00	56.00	-14.00	QP
7	1.8580	23.06	10.27	33.33	46.00	-12.67	AVG
8	1.9100	32.38	10.28	42.66	56.00	-13.34	QP
9	2.3780	19.48	10.29	29.77	46.00	-16.23	AVG
10	2.5660	32.19	10.29	42.48	56.00	-13.52	QP
11	9.6260	34.92	10.28	45.20	60.00	-14.80	QP
12	9.6820	22.98	10.28	33.26	50.00	-16.74	AVG



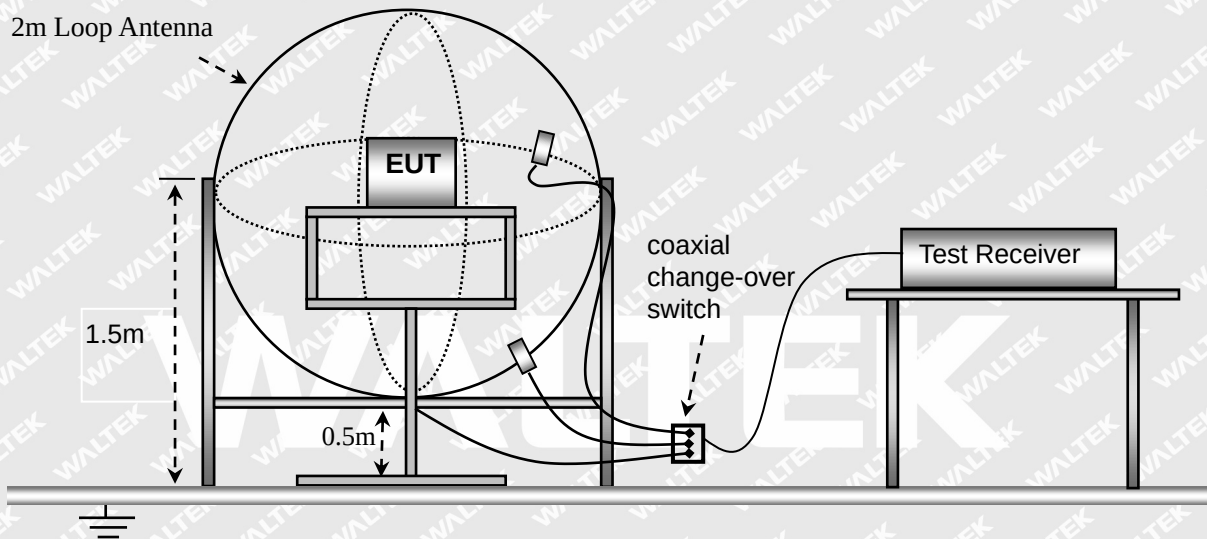
4. Radiated Electromagnetic Disturbances (9kHz to 30MHz)

4.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any radiation emissions measurement is ± 3.6 dB.

4.2 Basic Test Setup Block Diagram

The Radiation Electromagnetic Disturbance (9kHz to 30MHz) test was performed in accordance with the EN 55015



4.3 Environmental Conditions

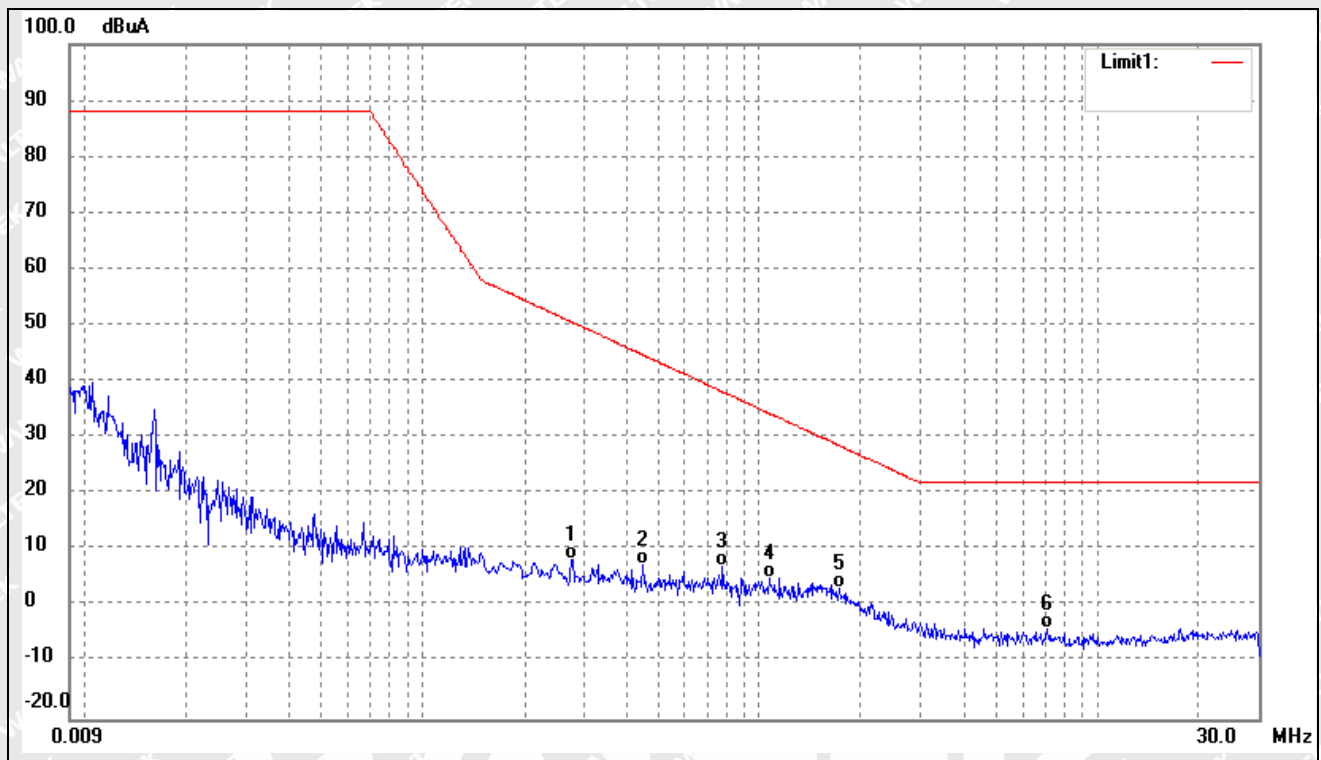
Temperature:	22.5 °C
Relative Humidity:	54 %
ATM Pressure:	1015 mbar

4.4 Summary of Test Results

Look at the graphs and data below:



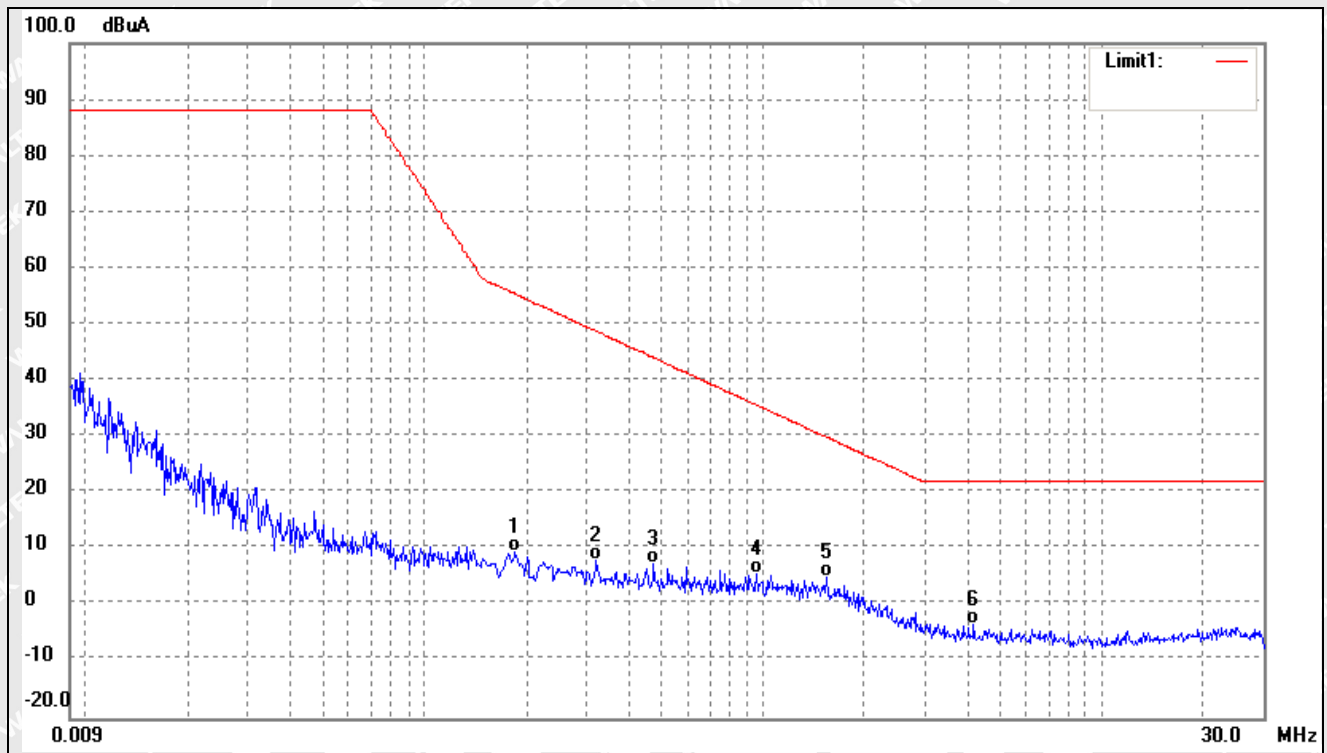
Test mode:	TM1	Polarity:	X
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No.	Frequency (MHz)	Reading (dBuA)	Correct (dB/m)	Result (dBuA)	Limit (dBuA)	Margin (dB)	Detector
1	0.2779	-12.09	20.54	8.45	50.58	-42.13	QP
2	0.4500	-12.88	20.31	7.43	44.79	-37.36	QP
3	0.7740	-13.04	20.07	7.03	38.28	-31.25	QP
4	1.0620	-14.97	20.09	5.12	34.48	-29.36	QP
5*	1.7220	-17.15	20.42	3.27	28.67	-25.40	QP
6	7.1300	-24.42	20.53	-3.89	22.00	-25.89	QP



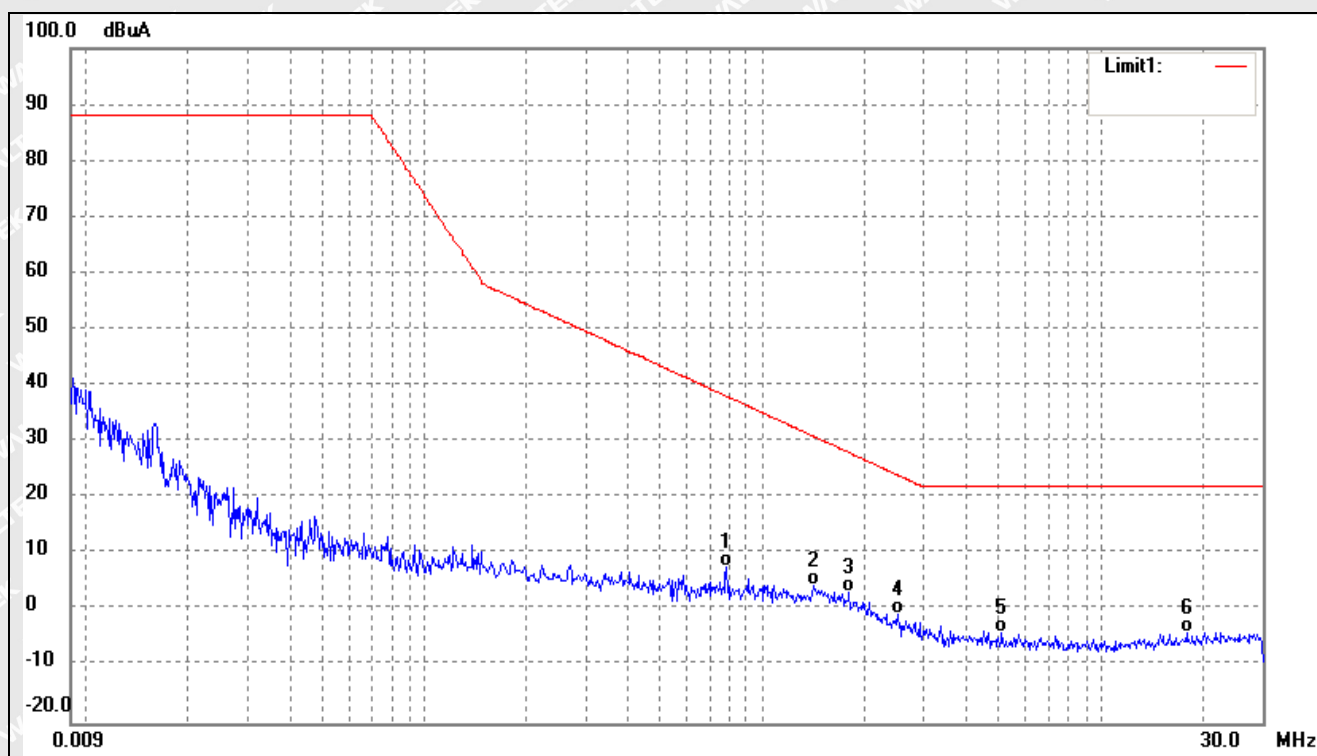
Test mode:	TM1	Polarity:	Y
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No.	Frequency (MHz)	Reading (dBuA)	Correct (dB/m)	Result (dBuA)	Limit (dBuA)	Margin (dB)	Detector
1	0.1860	-11.35	20.79	9.44	55.41	-45.97	QP
2	0.3220	-12.28	20.48	8.20	48.82	-40.62	QP
3	0.4780	-12.86	20.28	7.42	44.07	-36.65	QP
4	0.9620	-14.33	20.06	5.73	35.67	-29.94	QP
5*	1.5460	-15.26	20.33	5.07	29.97	-24.90	QP
6	4.1860	-24.09	20.67	-3.42	22.00	-25.42	QP



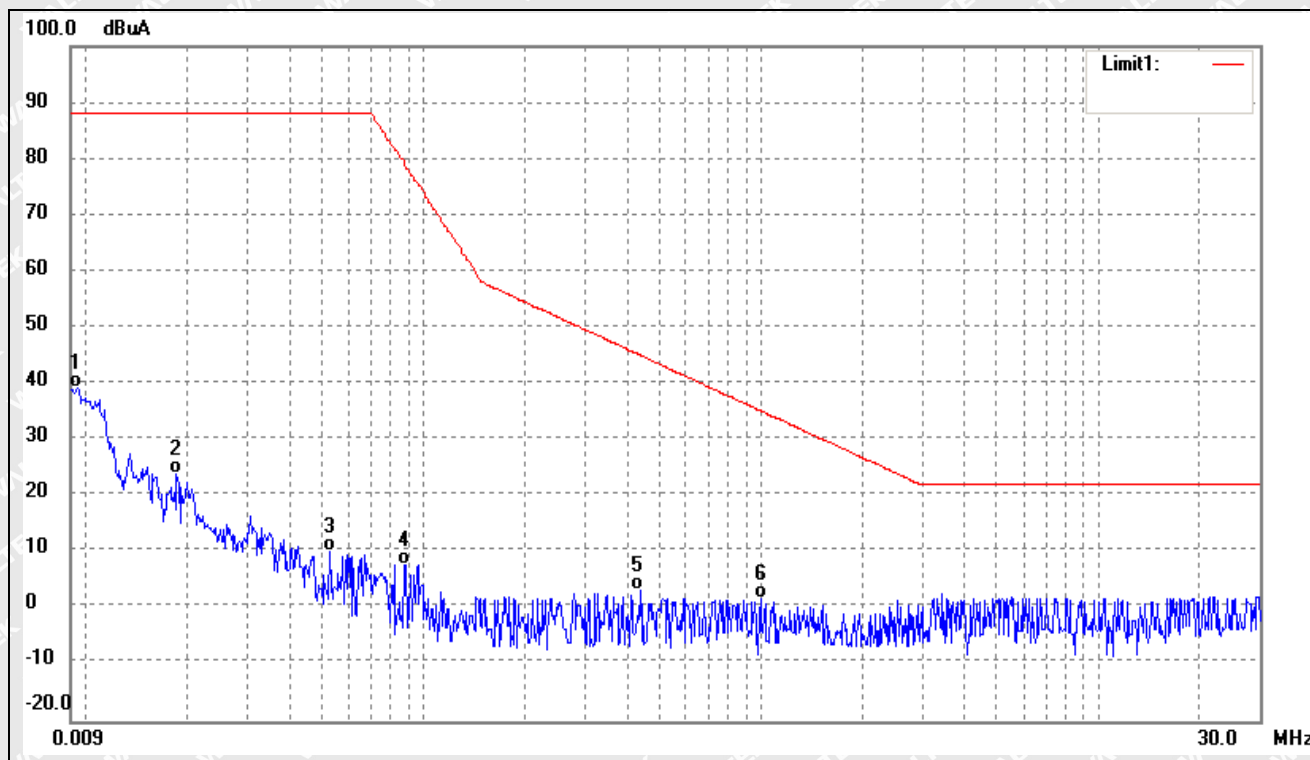
Test mode:	TM1	Polarity:	Z
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No.	Frequency (MHz)	Reading (dBuA)	Correct (dB/m)	Result (dBuA)	Limit (dBuA)	Margin (dB)	Detector
1	0.7820	-12.40	20.07	7.67	38.16	-30.49	QP
2	1.4140	-15.96	20.27	4.31	31.04	-26.73	QP
3	1.7980	-17.25	20.46	3.21	28.15	-24.94	QP
4*	2.5100	-21.28	20.59	-0.69	24.14	-24.83	QP
5	5.0780	-24.54	20.71	-3.83	22.00	-25.83	QP
6	17.9940	-25.15	21.06	-4.09	22.00	-26.09	QP



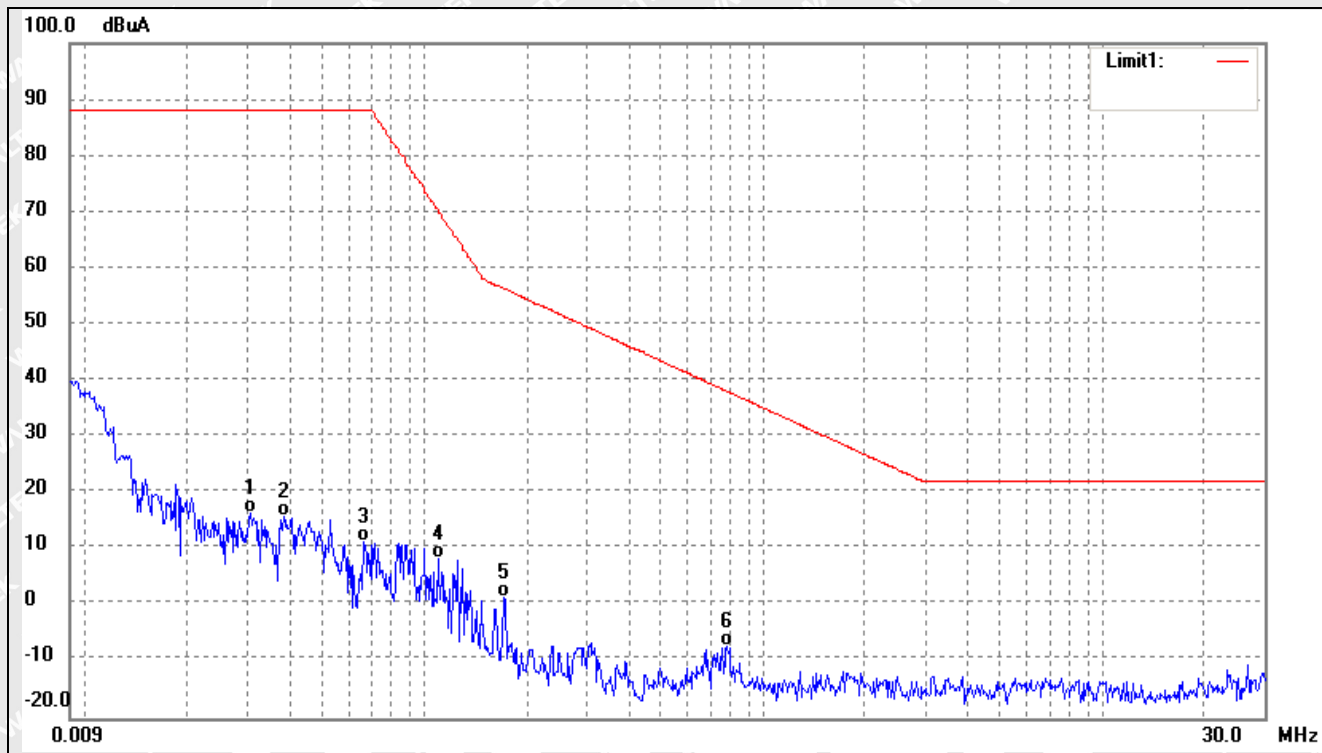
Test mode:	TM2	Polarity:	X
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No.	Frequency (MHz)	Reading (dBuA)	Correct (dB/m)	Result (dBuA)	Limit (dBuA)	Margin (dB)	Detector
1	0.0094	-0.18	39.46	39.28	88.00	-48.72	QP
2	0.0183	-9.63	33.65	24.02	88.00	-63.98	QP
3	0.0529	-13.69	23.83	10.14	88.00	-77.86	QP
4	0.0873	-14.27	21.94	7.67	79.30	-71.63	QP
5	0.4380	-17.07	20.32	3.25	45.12	-41.87	QP
6*	0.9979	-18.45	20.06	1.61	35.22	-33.61	QP



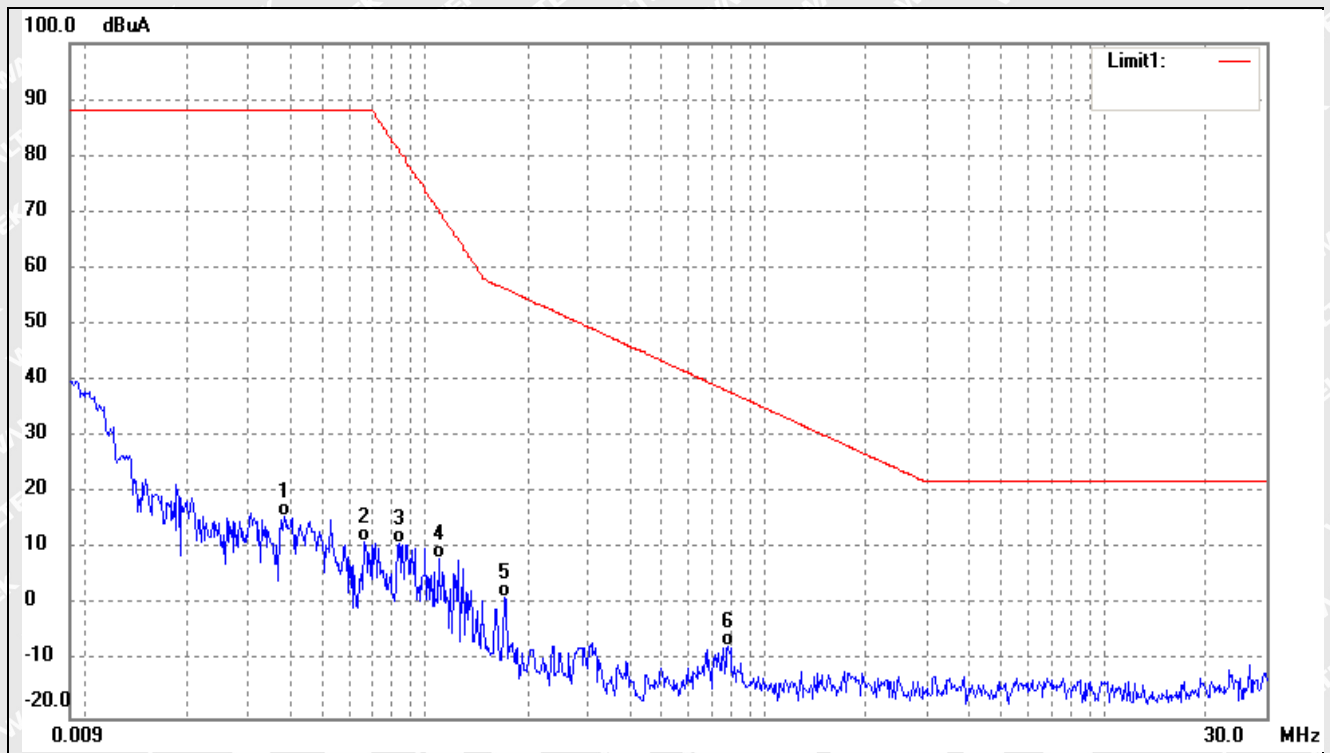
Test mode:	TM2	Polarity:	Y
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No.	Frequency (MHz)	Reading (dBuA)	Correct (dB/m)	Result (dBuA)	Limit (dBuA)	Margin (dB)	Detector
1	0.0305	-12.21	28.73	16.52	88.00	-71.48	QP
2	0.0383	-9.99	25.88	15.89	88.00	-72.11	QP
3	0.0661	-11.39	22.78	11.39	88.00	-76.61	QP
4	0.1097	-13.13	21.47	8.34	70.30	-61.96	QP
5	0.1710	-19.58	20.92	1.34	56.42	-55.08	QP
6*	0.7820	-27.39	20.07	-7.32	38.15	-45.47	QP



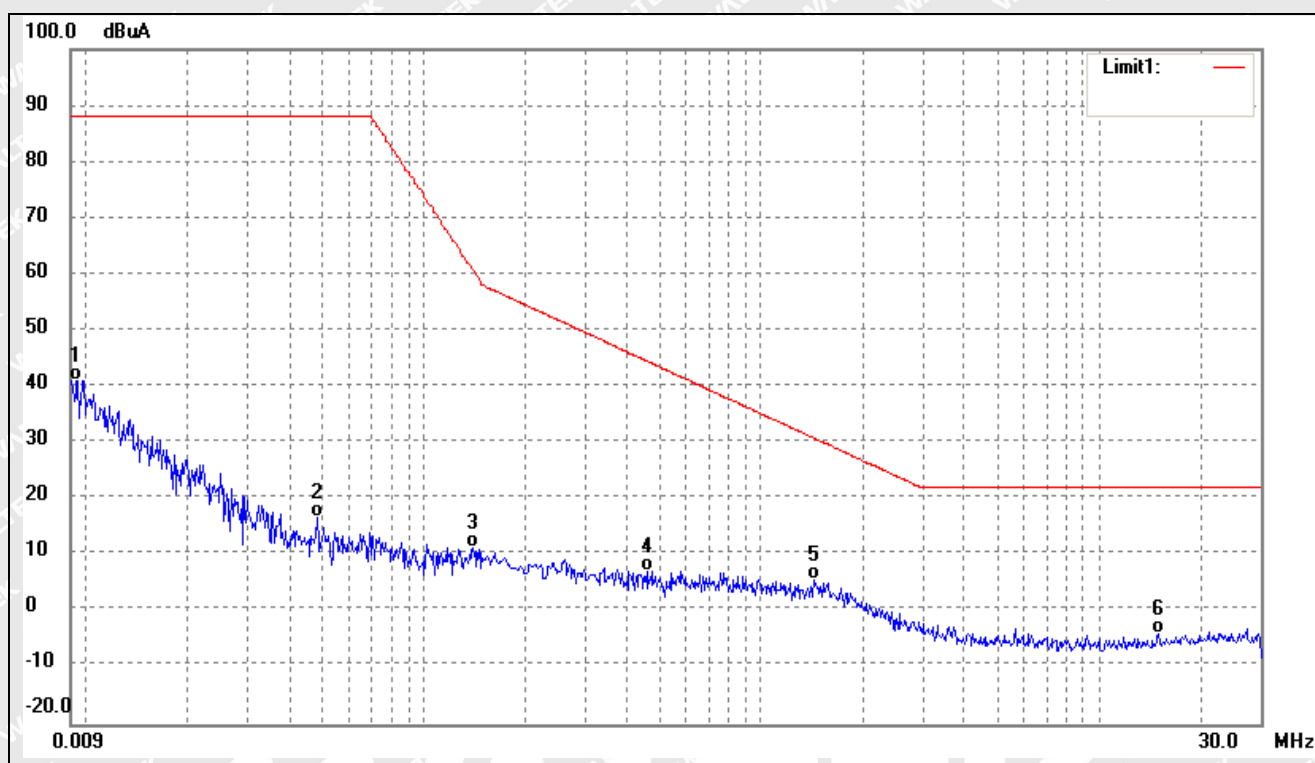
Test mode:	TM2	Polarity:	Z
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No.	Frequency (MHz)	Reading (dBuA)	Correct (dB/m)	Result (dBuA)	Limit (dBuA)	Margin (dB)	Detector
1	0.0383	-9.99	25.88	15.89	88.00	-72.11	QP
2	0.0661	-11.39	22.78	11.39	88.00	-76.61	QP
3	0.0840	-11.06	22.04	10.98	80.82	-69.84	QP
4	0.1097	-13.13	21.47	8.34	70.32	-61.98	QP
5	0.1710	-19.58	20.92	1.34	56.43	-55.09	QP
6*	0.7820	-27.39	20.07	-7.32	38.16	-45.48	QP



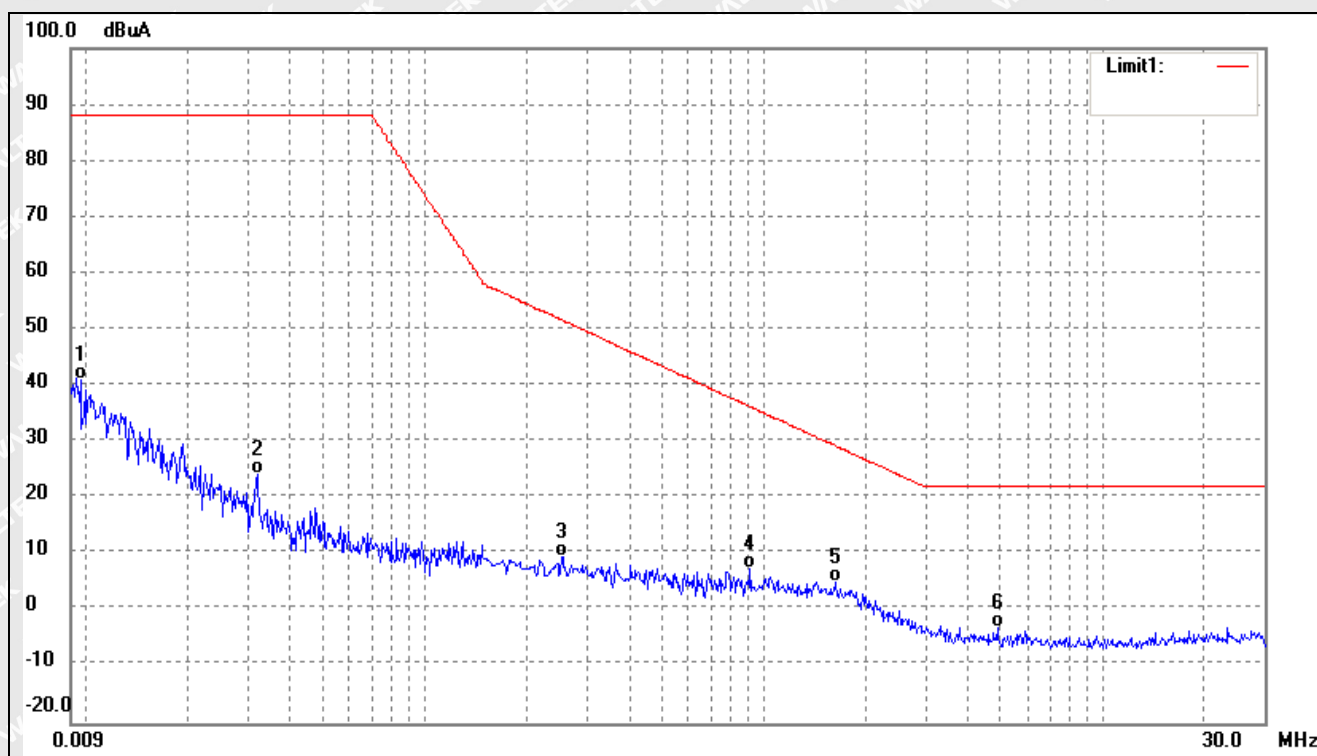
Test mode:	TM3	Polarity:	X
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No.	Frequency (MHz)	Reading (dBuA)	Correct (dB/m)	Result (dBuA)	Limit (dBuA)	Margin (dB)	Detector
1	0.0094	1.68	39.46	41.14	88.00	-46.86	QP
2	0.0486	-7.70	24.31	16.61	88.00	-71.39	QP
3	0.1406	-9.78	21.19	11.41	60.52	-49.11	QP
4	0.4580	-13.06	20.30	7.24	44.58	-37.34	QP
5*	1.4220	-14.76	20.27	5.51	30.97	-25.46	QP
6	14.9540	-24.79	20.76	-4.03	22.00	-26.03	QP



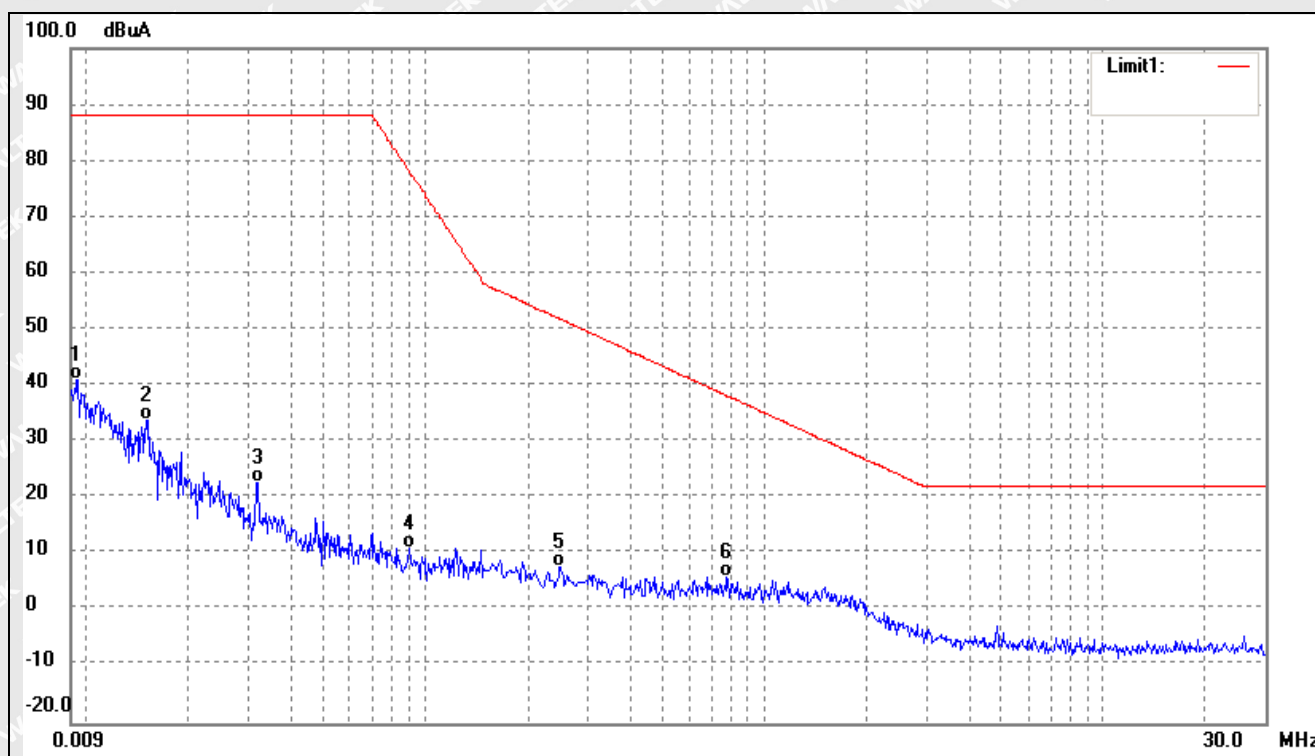
Test mode:	TM3	Polarity:	Y
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No.	Frequency (MHz)	Reading (dBuA)	Correct (dB/m)	Result (dBuA)	Limit (dBuA)	Margin (dB)	Detector
1	0.0096	1.85	39.29	41.14	88.00	-46.86	QP
2	0.0320	-3.89	28.18	24.29	88.00	-63.71	QP
3	0.2540	-10.93	20.58	9.65	51.66	-42.01	QP
4	0.9100	-12.61	20.06	7.45	36.33	-28.88	QP
5*	1.6340	-15.46	20.38	4.92	29.30	-24.38	QP
6	4.9100	-23.87	20.71	-3.16	22.00	-25.16	QP



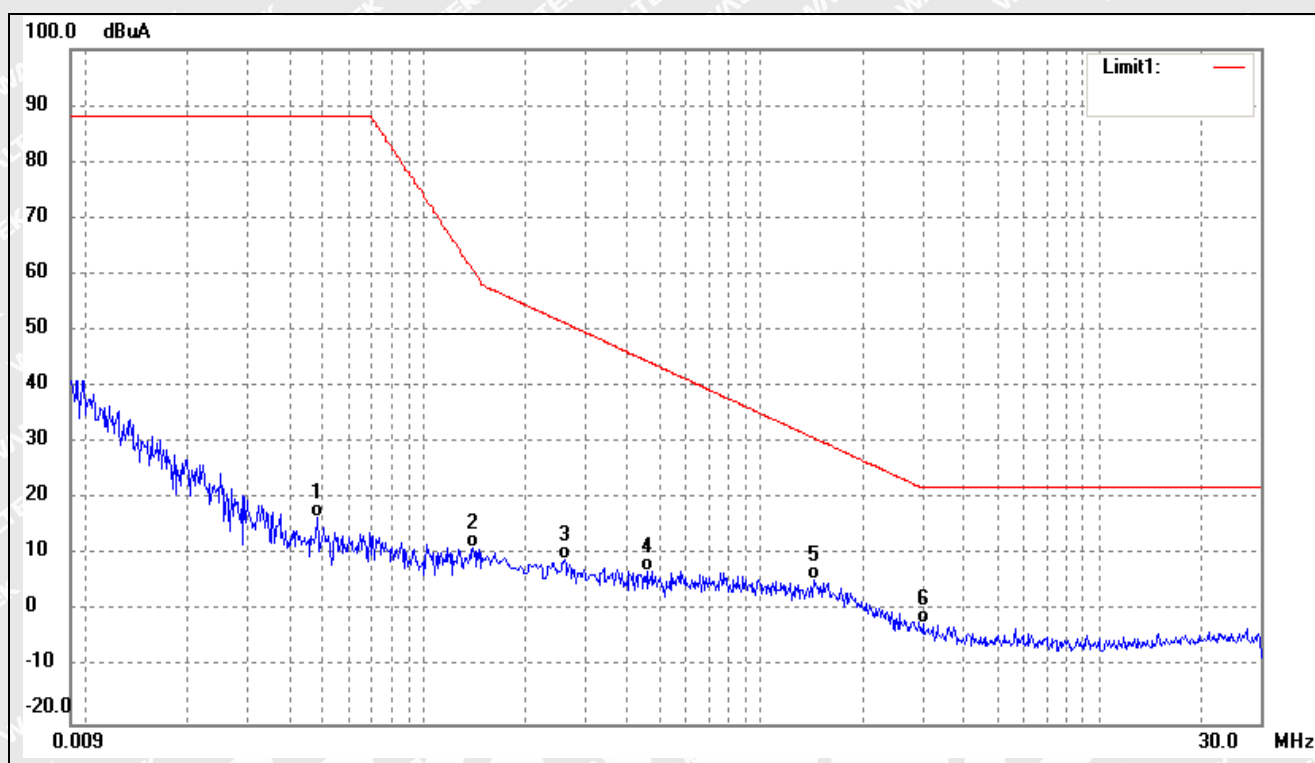
Test mode:	TM3	Polarity:	Z
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No.	Frequency (MHz)	Reading (dBuA)	Correct (dB/m)	Result (dBuA)	Limit (dBuA)	Margin (dB)	Detector
1	0.0094	30.44	10.69	41.13	88.00	-46.87	QP
2	0.0150	23.28	10.60	33.88	88.00	-54.12	QP
3	0.0322	12.33	10.34	22.67	88.00	-65.33	QP
4	0.0900	0.99	10.09	11.08	78.11	-67.03	QP
5	0.2500	-2.39	10.16	7.77	51.86	-44.09	QP
6*	0.7780	-4.32	10.42	6.10	38.22	-32.12	QP



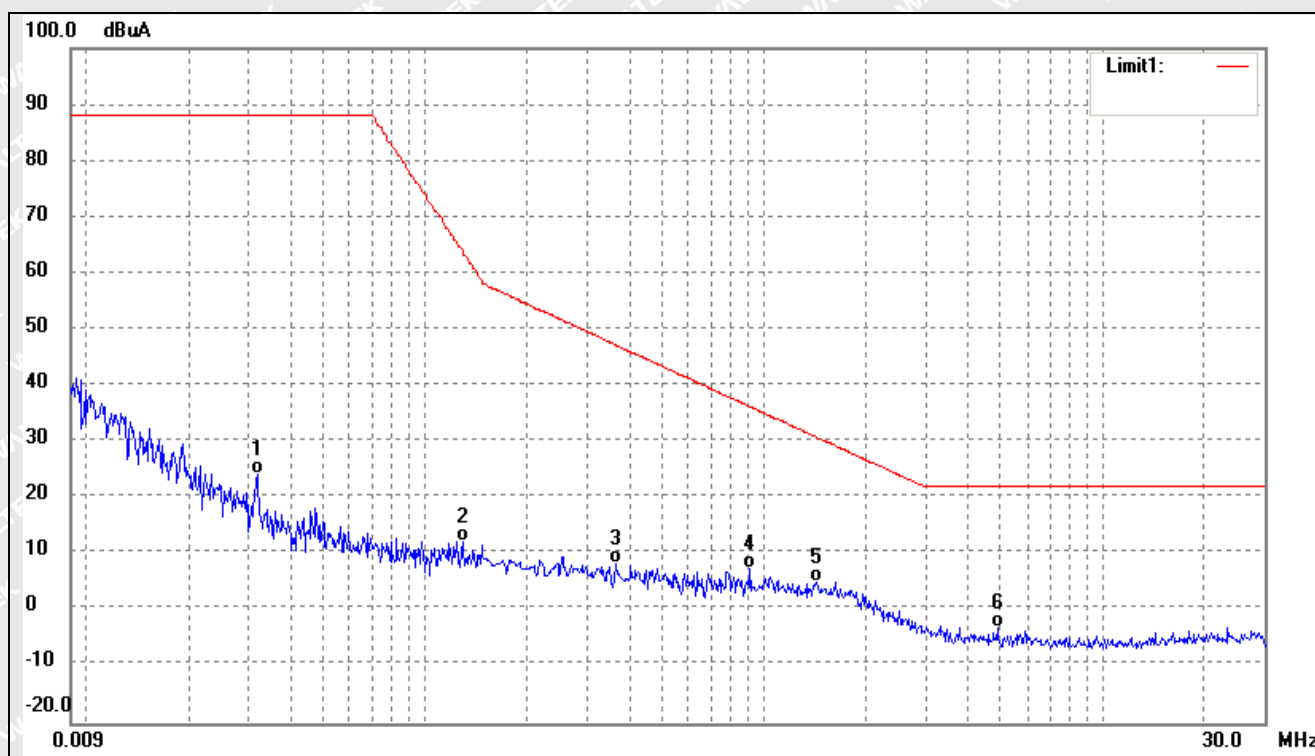
Test mode:	TM4	Polarity:	X
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No.	Frequency (MHz)	Reading (dBuA)	Correct (dB/m)	Result (dBuA)	Limit (dBuA)	Margin (dB)	Detector
1	0.0485	-7.71	24.32	16.61	88.00	-71.39	QP
2	0.1405	-9.79	21.20	11.41	60.55	-49.14	QP
3	0.2620	-11.35	20.57	9.22	51.29	-42.07	QP
4	0.4580	-13.06	20.30	7.24	44.58	-37.34	QP
5	1.4217	-14.76	20.27	5.51	30.97	-25.46	QP
6*	3.0178	-22.78	20.61	-2.17	22.00	-24.17	QP



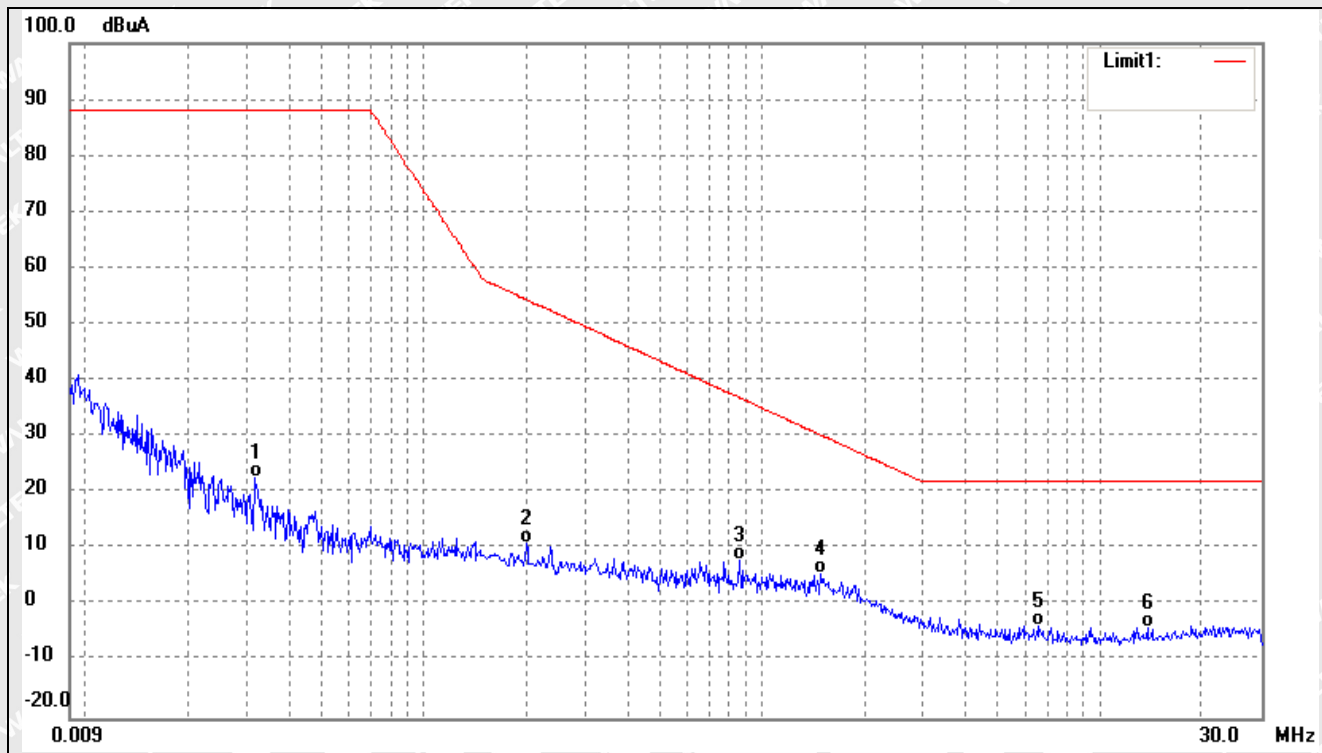
Test mode:	TM4	Polarity:	Y
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No.	Frequency (MHz)	Reading (dBuA)	Correct (dB/m)	Result (dBuA)	Limit (dBuA)	Margin (dB)	Detector
1	0.0320	-3.89	28.18	24.29	88.00	-63.71	QP
2	0.1287	-9.05	21.30	12.25	64.01	-51.76	QP
3	0.3659	-12.15	20.41	8.26	47.28	-39.02	QP
4	0.9100	-12.61	20.06	7.45	36.33	-28.88	QP
5	1.4258	-15.33	20.27	4.94	30.94	-26.00	QP
6*	4.9100	-23.87	20.71	-3.16	22.00	-25.16	QP



Test mode:	TM4	Polarity:	Z
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No.	Frequency (MHz)	Reading (dBuA)	Correct (dB/m)	Result (dBuA)	Limit (dBuA)	Margin (dB)	Detector
1	0.0318	-5.61	28.25	22.64	88.00	-65.36	QP
2	0.2020	-9.64	20.66	11.02	54.42	-43.40	QP
3	0.8659	-12.15	20.06	7.91	36.93	-29.02	QP
4*	1.5020	-14.65	20.31	5.66	30.31	-24.65	QP
5	6.5899	-24.19	20.64	-3.55	22.00	-25.55	QP
6	13.8140	-24.46	20.64	-3.82	22.00	-25.82	QP



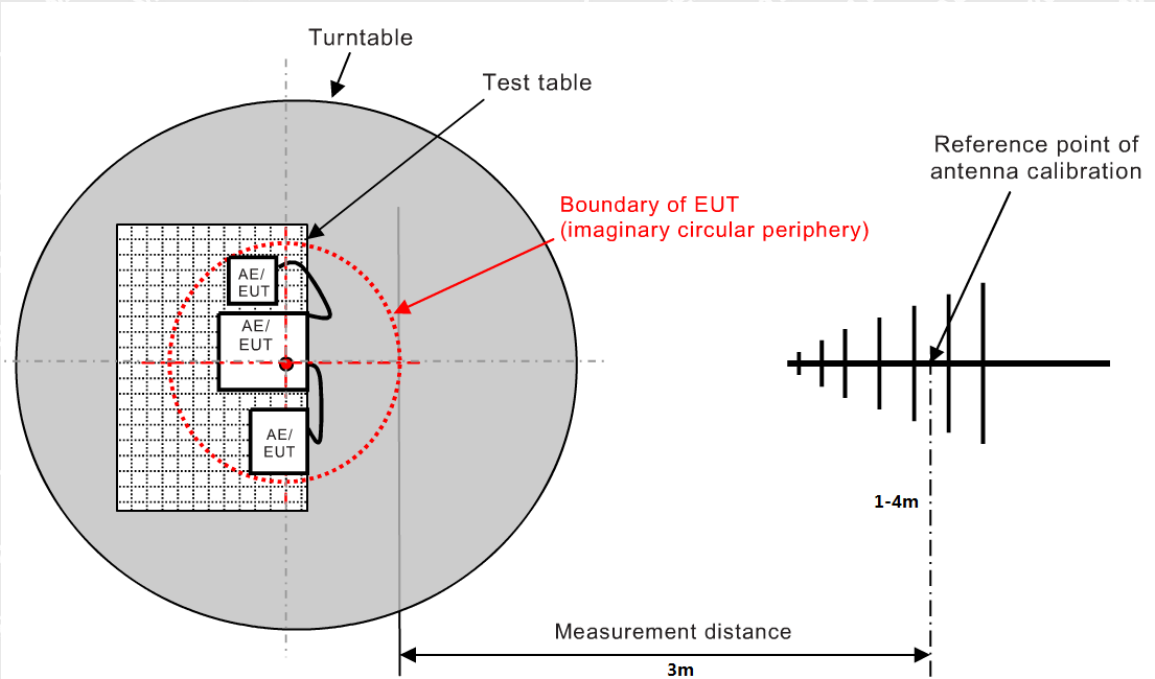
5. Radiated Electromagnetic Disturbances (30MHz to 300MHz)

5.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any radiation emissions measurement:

Measurement uncertainty		
Parameter	Conditions	Uncertainty
Radiated Emissions	Radiated	30-200MHz ±4.52dB
		0.2-1GHz ±5.56dB
		1-6GHz ±3.84dB
		6-18GHz ±3.92dB

5.2 Basic Test Setup Block Diagram





5.3 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 -6dBμV means the emission is 6dBμV below the maximum limit for a lighting device. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{EN 55015 Limit}$$

5.4 Environmental Conditions

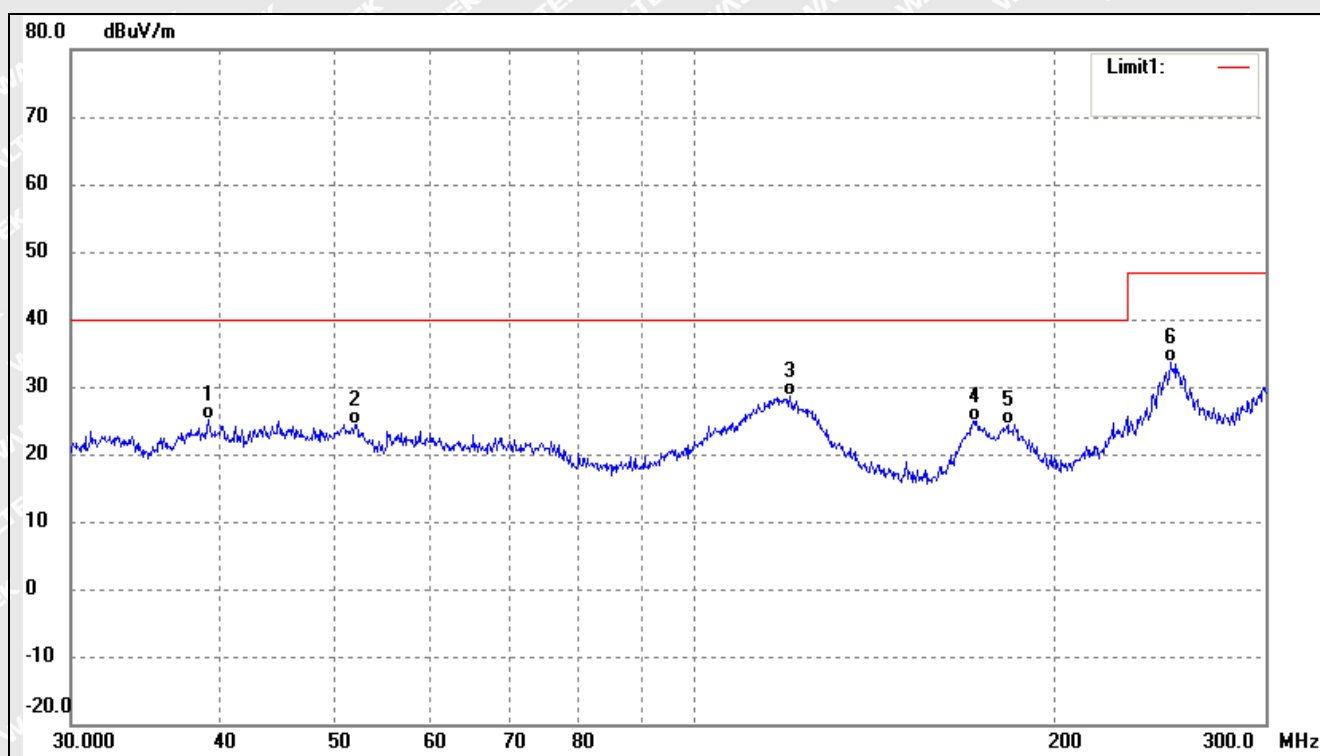
Temperature:	22.5° C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

5.5 Summary of Test Results

Look at the graphs and data below:



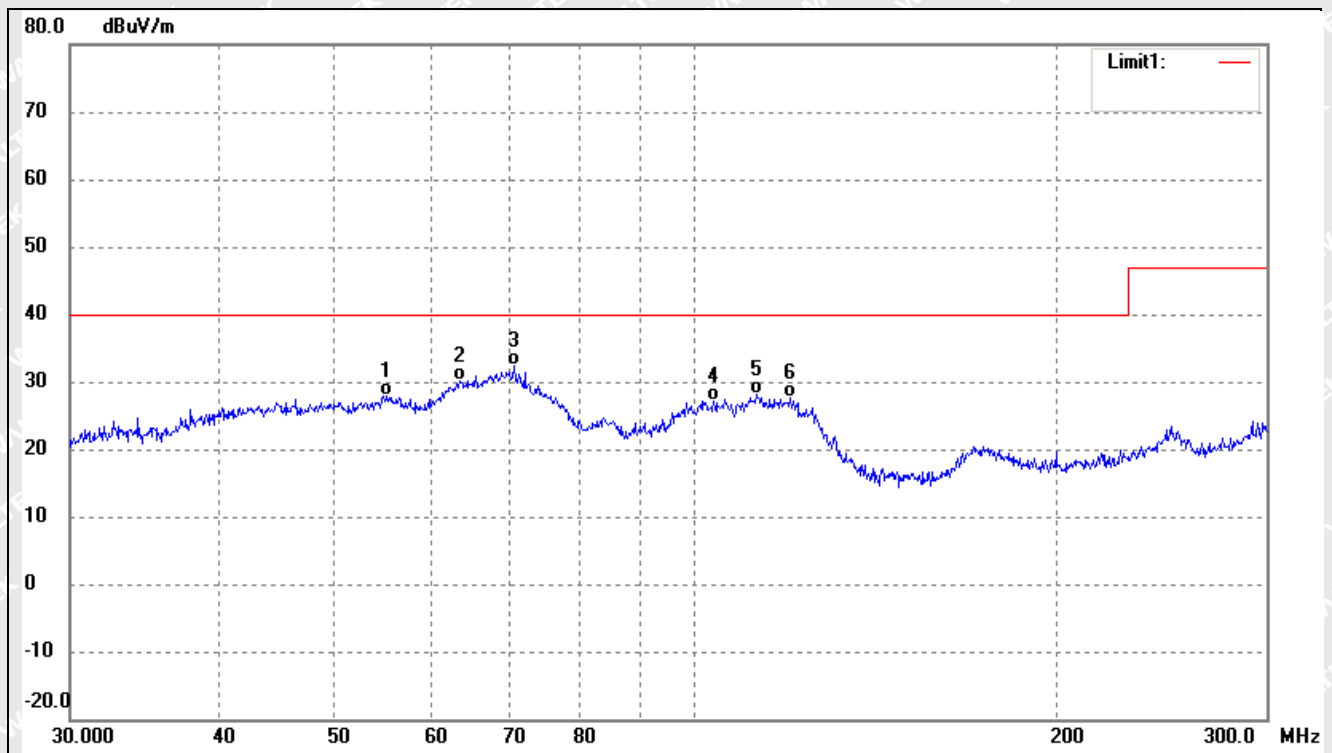
Test mode:	TM1	Polarity:	Horizontal
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No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	39.0950	37.58	-12.33	25.25	40.00	-14.75	281	100	QP
2	51.8945	36.44	-12.06	24.38	40.00	-15.62	92	100	QP
3	119.9834	42.89	-14.30	28.59	40.00	-11.41	331	100	QP
4	171.4436	39.81	-14.92	24.89	40.00	-15.11	97	100	QP
5	182.4405	38.30	-14.01	24.29	40.00	-15.71	217	100	QP
6	249.5291	44.58	-10.96	33.62	47.00	-13.38	115	100	QP



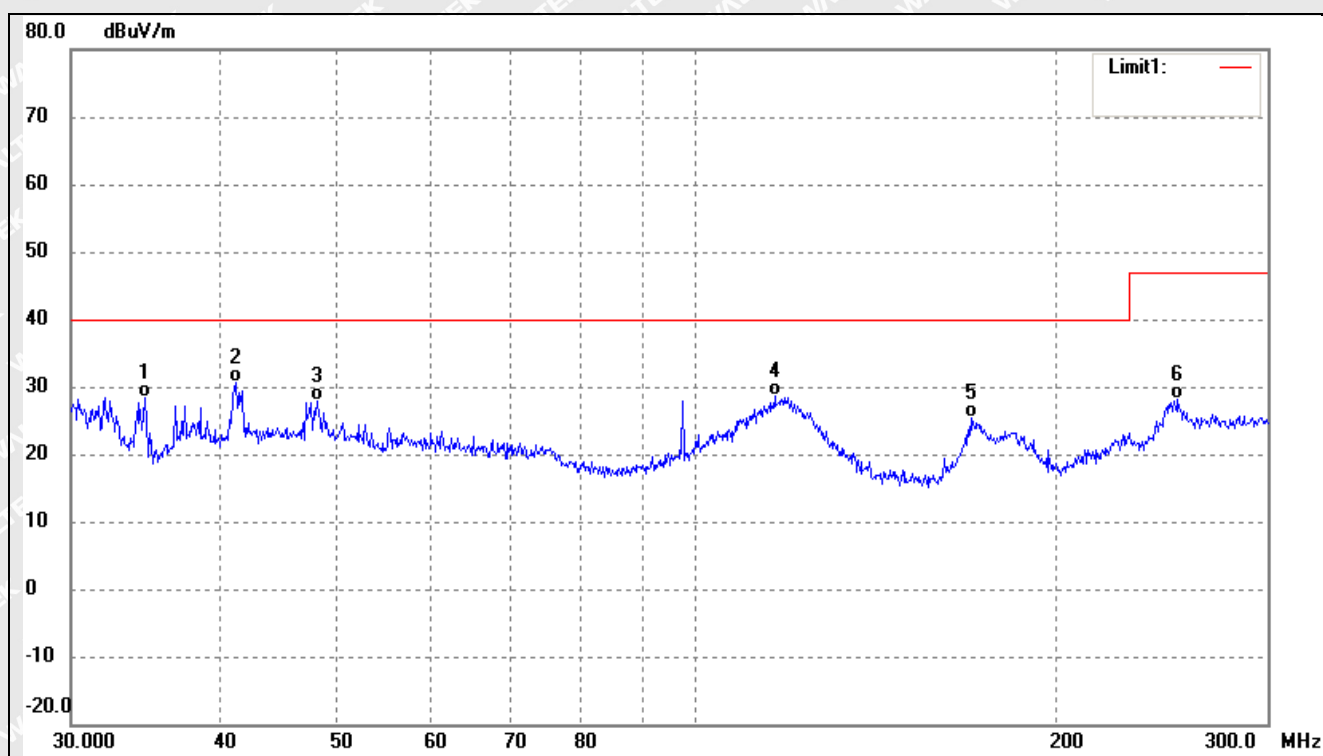
Test mode:	TM1	Polarity:	Vertical
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No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	55.0962	40.87	-12.95	27.92	40.00	-12.08	149	100	QP
2	63.5508	43.74	-13.66	30.08	40.00	-9.92	114	100	QP
3	70.4890	47.04	-14.77	32.27	40.00	-7.73	97	100	QP
4	103.5431	40.55	-13.32	27.23	40.00	-12.77	132	100	QP
5	112.4919	41.61	-13.55	28.06	40.00	-11.94	184	100	QP
6	119.9834	42.03	-14.30	27.73	40.00	-12.27	308	100	QP



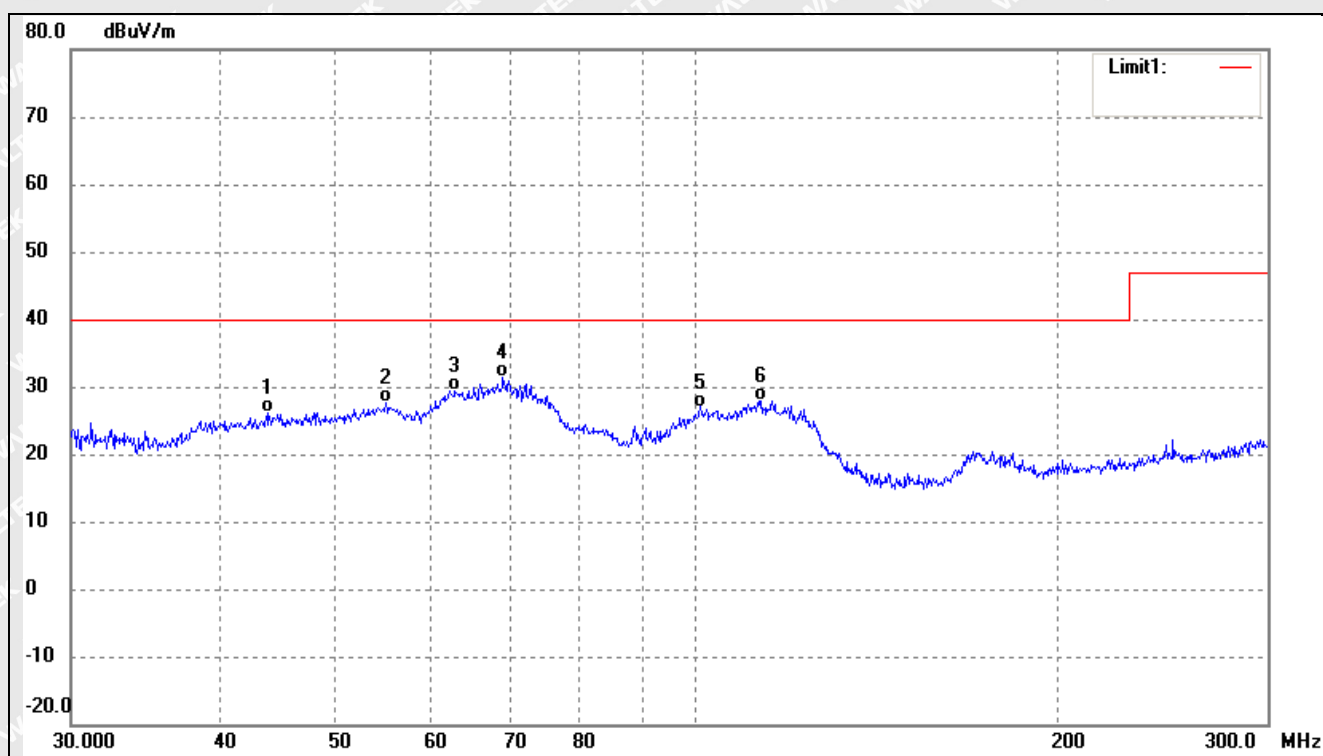
Test mode:	TM2	Polarity:	Horizontal
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No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	34.6036	42.33	-13.90	28.43	40.00	-11.57	102	100	QP
2	41.2213	42.46	-11.94	30.52	40.00	-9.48	176	100	QP
3	48.2082	39.53	-11.63	27.90	40.00	-12.10	96	100	QP
4	116.1773	42.61	-13.92	28.69	40.00	-11.31	108	100	QP
5	169.4811	40.44	-15.05	25.39	40.00	-14.61	175	100	QP
6	252.4185	38.93	-10.91	28.02	47.00	-18.98	314	100	QP



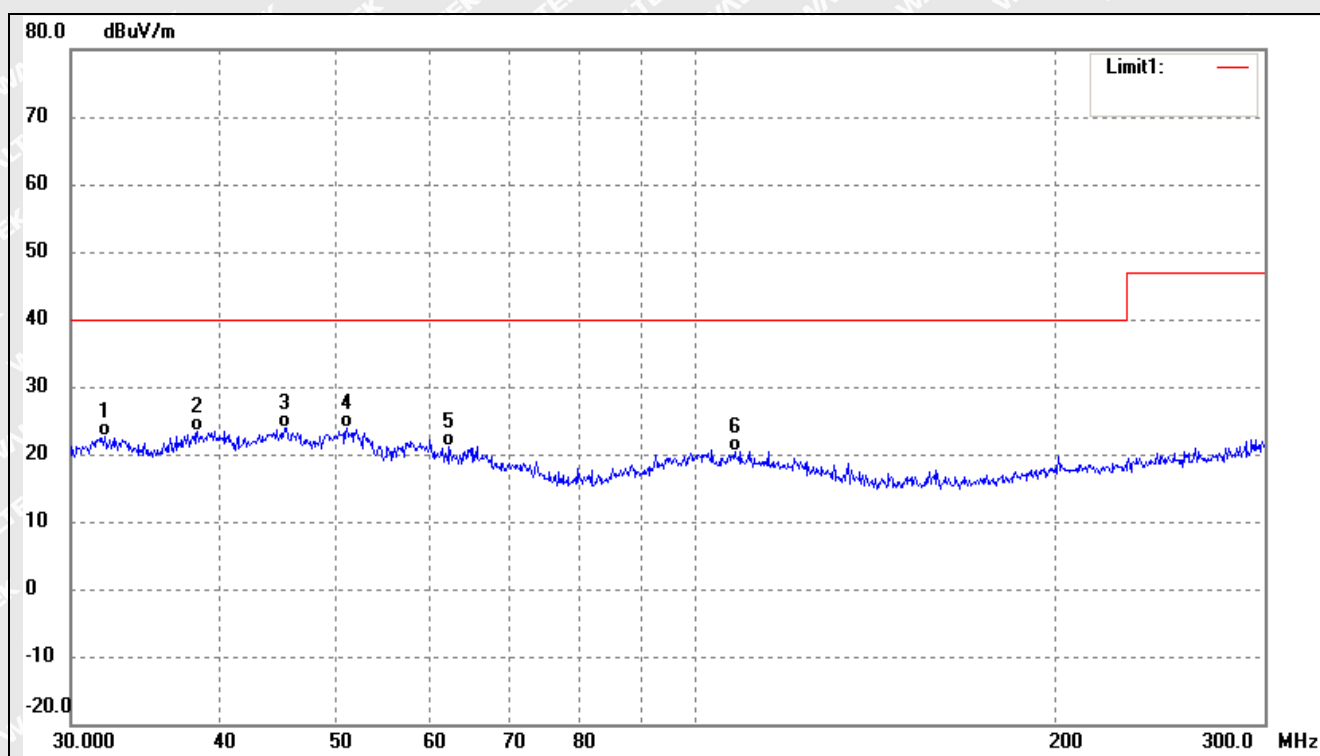
Test mode:	TM2	Polarity:	Vertical
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No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	43.8653	38.04	-11.84	26.20	40.00	-13.80	73	100	QP
2	54.9694	40.51	-12.94	27.57	40.00	-12.43	105	100	QP
3	62.8234	42.99	-13.52	29.47	40.00	-10.53	136	100	QP
4	68.8845	45.75	-14.48	31.27	40.00	-8.73	106	100	QP
5	100.7213	40.33	-13.33	27.00	40.00	-13.00	266	100	QP
6	113.2717	41.48	-13.63	27.85	40.00	-12.15	213	100	QP



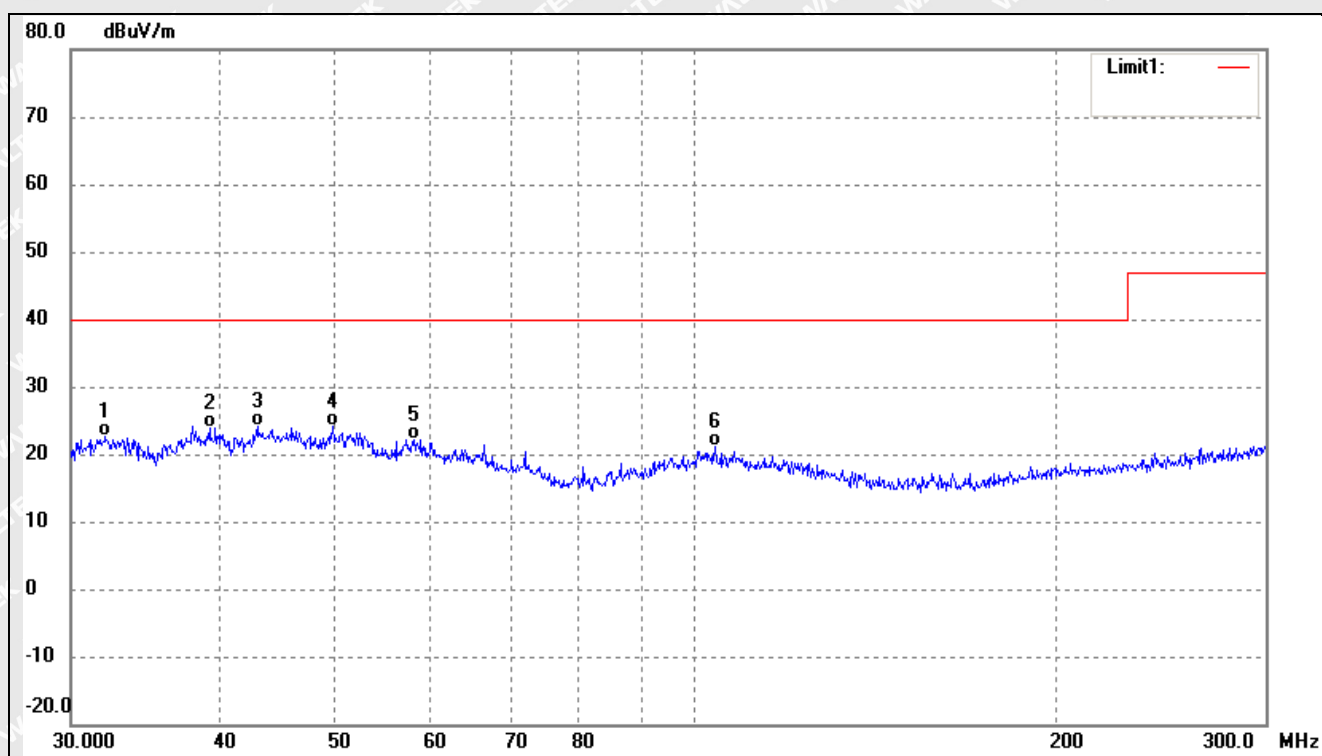
Test mode:	TM3	Polarity:	Horizontal
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No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	31.9979	36.62	-14.03	22.59	40.00	-17.41	136	100	QP
2	38.2932	36.09	-12.62	23.47	40.00	-16.53	179	100	QP
3	45.3024	35.66	-11.78	23.88	40.00	-16.12	137	100	QP
4	51.0648	35.77	-11.83	23.94	40.00	-16.06	129	100	QP
5	62.2474	34.58	-13.41	21.17	40.00	-18.83	245	100	QP
6	107.9248	33.73	-13.31	20.42	40.00	-19.58	257	100	QP



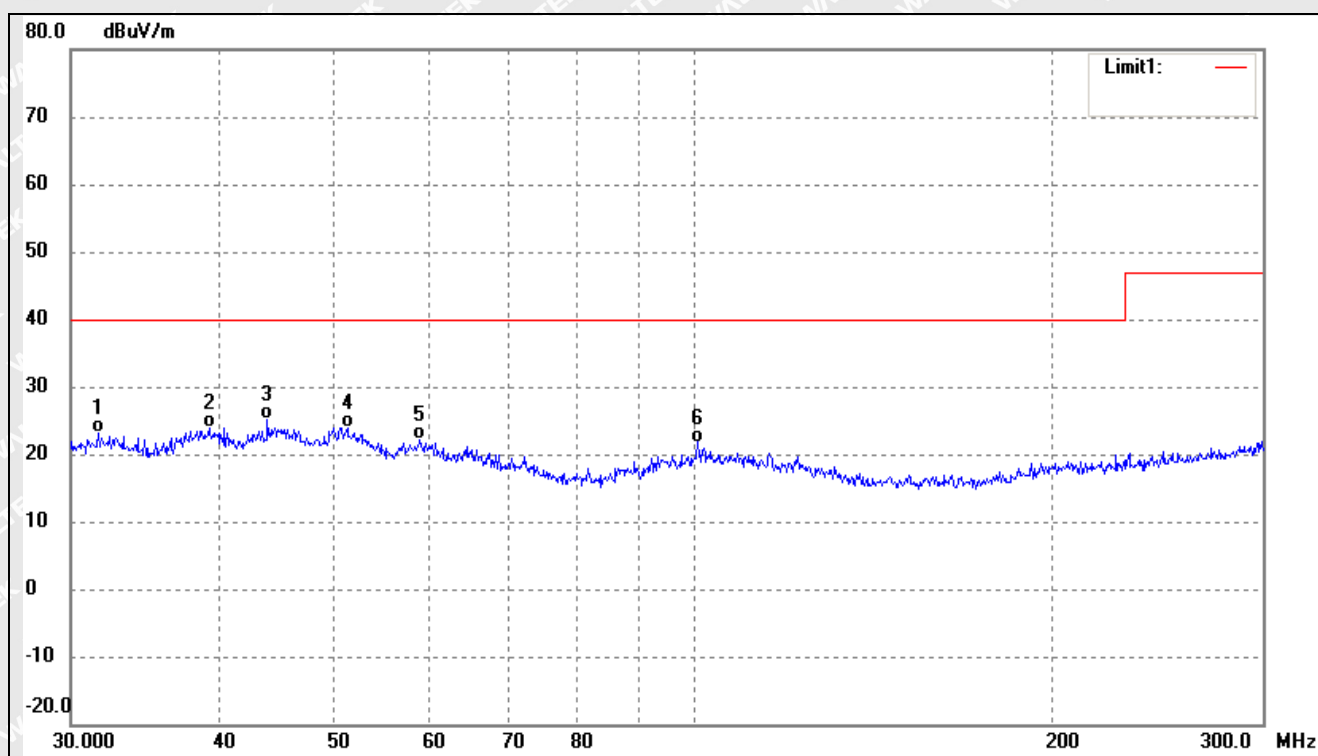
Test mode:	TM3	Polarity:	Vertical
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No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	32.0716	36.66	-14.04	22.62	40.00	-17.38	84	100	QP
2	39.1851	36.13	-12.29	23.84	40.00	-16.16	169	100	QP
3	42.9656	35.98	-11.87	24.11	40.00	-15.89	89	100	QP
4	49.6731	35.64	-11.55	24.09	40.00	-15.91	121	100	QP
5	58.0927	35.20	-12.96	22.24	40.00	-17.76	154	100	QP
6	103.7818	34.47	-13.32	21.15	40.00	-18.85	321	100	QP



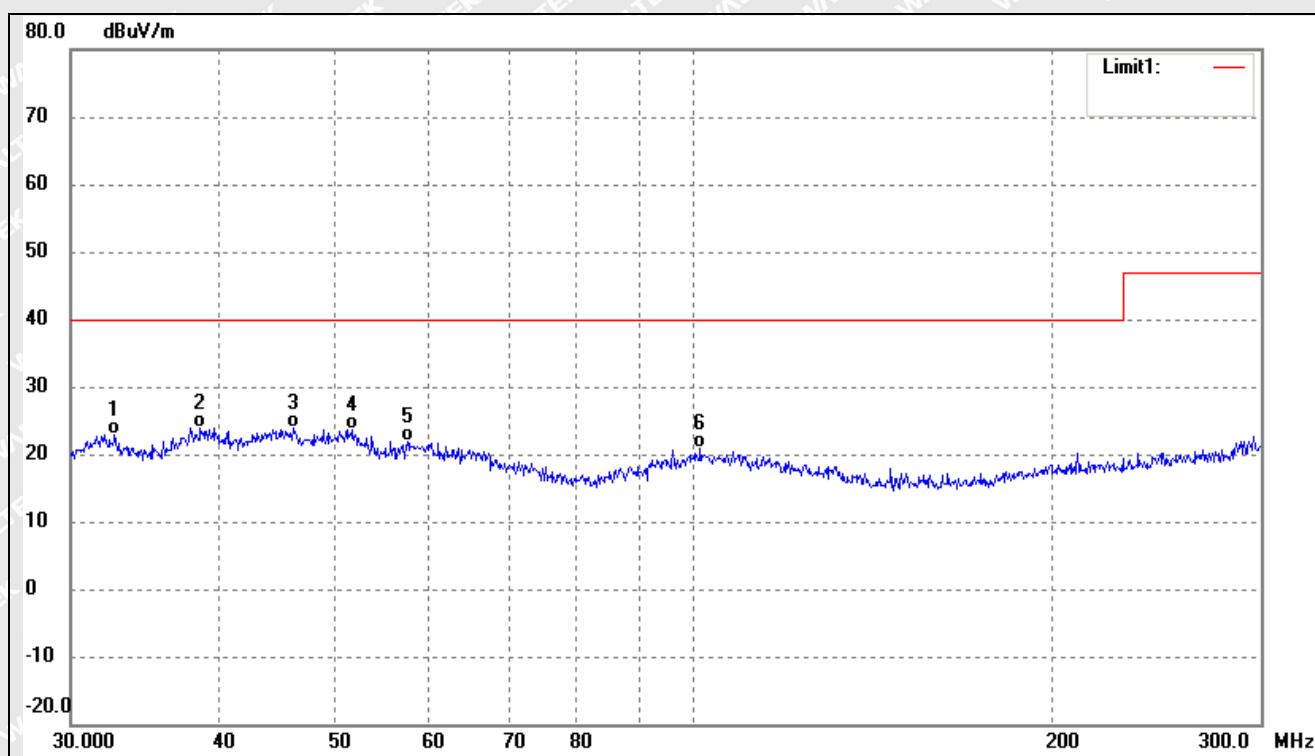
Test mode:	TM4	Polarity:	Horizontal
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No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	31.6316	37.14	-14.05	23.09	40.00	-16.91	99	100	QP
2	39.1851	36.18	-12.29	23.89	40.00	-16.11	106	100	QP
3	43.8653	37.05	-11.84	25.21	40.00	-14.79	140	100	QP
4	51.1825	35.83	-11.87	23.96	40.00	-16.04	108	100	QP
5	58.9008	35.16	-12.97	22.19	40.00	-17.81	256	100	QP
6	100.7213	35.08	-13.33	21.75	40.00	-18.25	181	100	QP



Test mode:	TM4	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	32.6679	37.00	-14.00	23.00	40.00	-17.00	71	100	QP
2	38.5586	36.51	-12.53	23.98	40.00	-16.02	113	100	QP
3	46.1446	35.73	-11.73	24.00	40.00	-16.00	105	100	QP
4	51.7751	35.74	-12.02	23.72	40.00	-16.28	142	100	QP
5	57.5601	34.93	-12.96	21.97	40.00	-18.03	316	100	QP
6	101.4195	34.31	-13.31	21.00	40.00	-19.00	162	100	QP



6. Electrostatic Discharges (ESD)

6.1 Test Procedure

Test is conducting under the description of EN 61000-4-2.

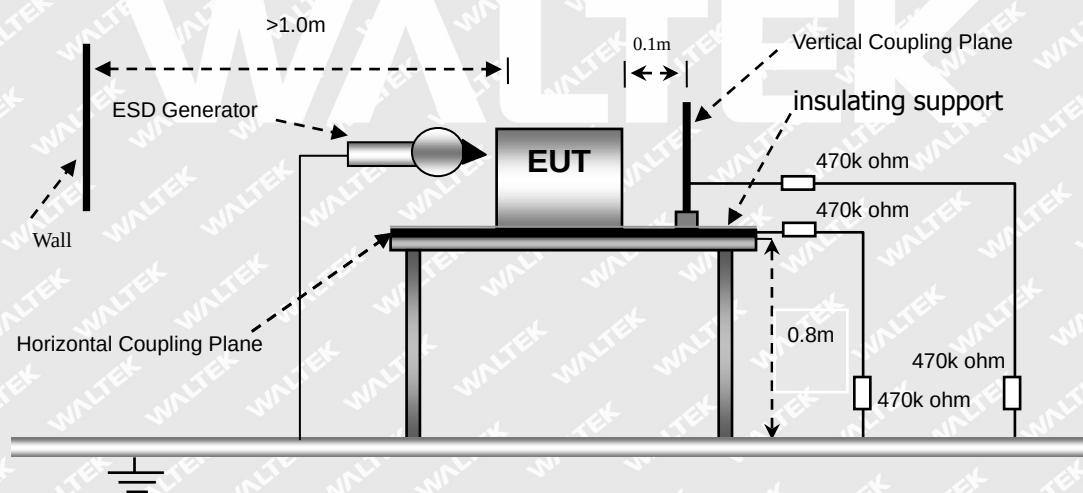
6.2 Test Performance

Performance Criterion: B

6.3 Environmental Conditions

Temperature:	22.5 °C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

6.4 Basic Test Setup Block Diagram





6.5 Electrostatic Discharge Immunity Test Data

Table 1: Electrostatic Discharge Immunity (Air Discharge)

EN 61000-4-2	Test Voltage (kV)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Seams	A	A	A	A	B	B	B	B	/	/
Buttons	A	A	A	A	B	B	B	B	/	/
Surface	A	A	A	A	B	B	B	B	/	/
Indicator ligh	A	A	A	A	B	B	B	B	/	/

Table 2: Electrostatic Discharge Immunity (Direct Contact)

EN 61000-4-2	Test Voltage (kV)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Metal shell	A	A	B	B	/	/	/	/	/	/
Type-C port	A	A	B	B	/	/	/	/	/	/

Table 3: Electrostatic Discharge Immunity (Indirect Contact HCP & VCP)

EN 61000-4-2	Test Voltage (kV)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
HCP (6 Sides)	A	A	A	A	/	/	/	/	/	/
VCP (4 Sides)	A	A	A	A	/	/	/	/	/	/

Test Result: Pass



7. Continuous RF electromagnetic field Disturbances (RS)

7.1 Test Procedure

Test is conducting under the description of EN 61000-4-3.

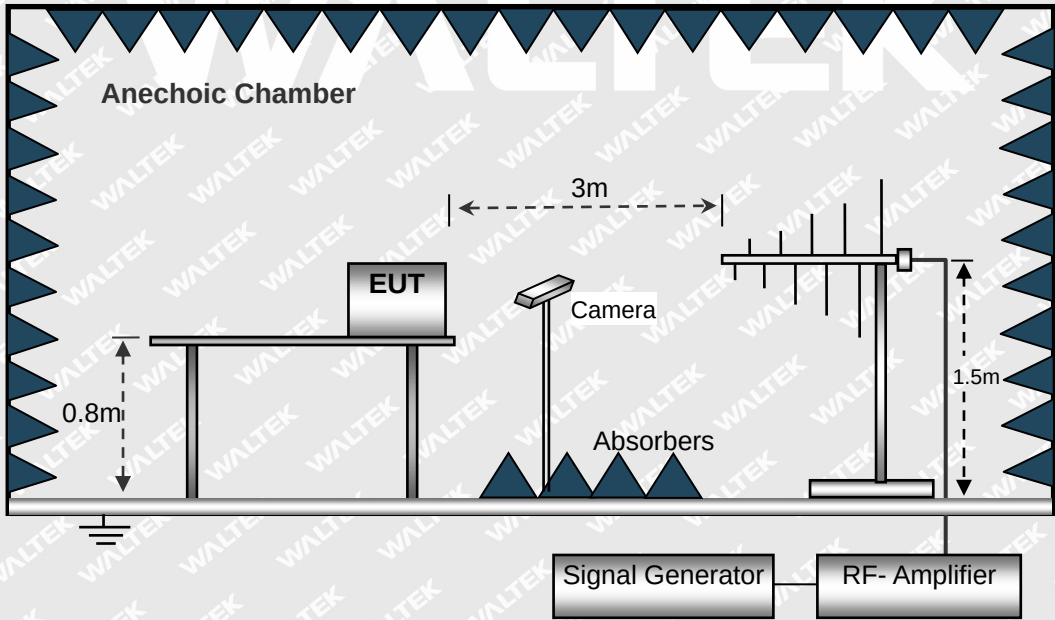
7.2 Test Performance

Performance Criterion: A

7.3 Environmental Conditions

Temperature:	22.5 °C
Relative Humidity:	54%
ATM Pressure:	1010 mbar

7.4 Basic Test Setup Block Diagram





7.5 Continuous Radiated Disturbances Test Data

Frequency step: 1% of fundamental
Dwell time: 1 second
Modulation: AM by 1kHz sine wave with 80% modulation depth

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	A	A	A	A	A	A	A	A

Test Result: Pass

WALTEK



8. Electrical Fast Transients (EFT)

8.1 Test Procedure

Test is conducting under the description of EN 61000-4-4.

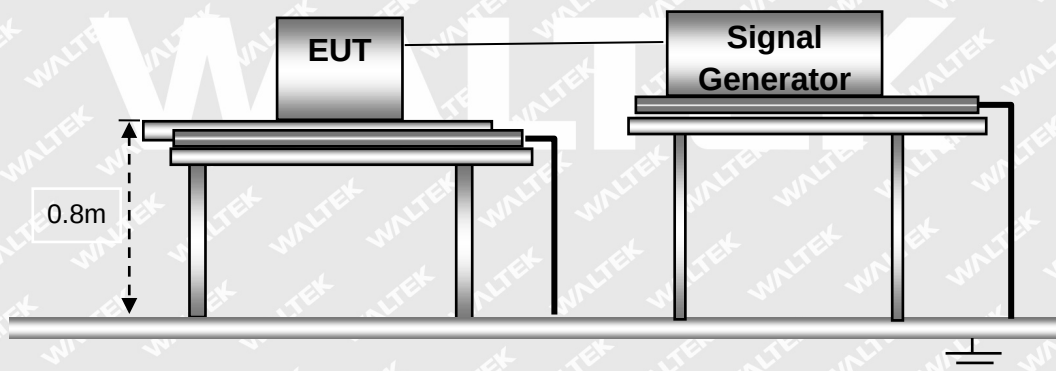
8.2 Test Performance

Performance Criterion: B

8.3 Environmental Conditions

Temperature:	22.5 °C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

8.4 Basic Test Setup Block Diagram



**8.5 Electrical Fast Transients Test Data**

EN 61000-4-4 Test Points		Test Voltage (kV)							
		+0.5	-0.5	+1.0	-1.0	+2.0	-2.0	+4.0	-4.0
Power Supply Power Port of EUT	L1	/	/	B	B	/	/	/	/
	L2	/	/	B	B	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	/	/	B	B	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	RJ45	/	/	/	/	/	/	/	/

Test Result: Pass

WALTEK



9. Surges

9.1 Test Procedure

Test is conducting under the description of EN 61000-4-5.

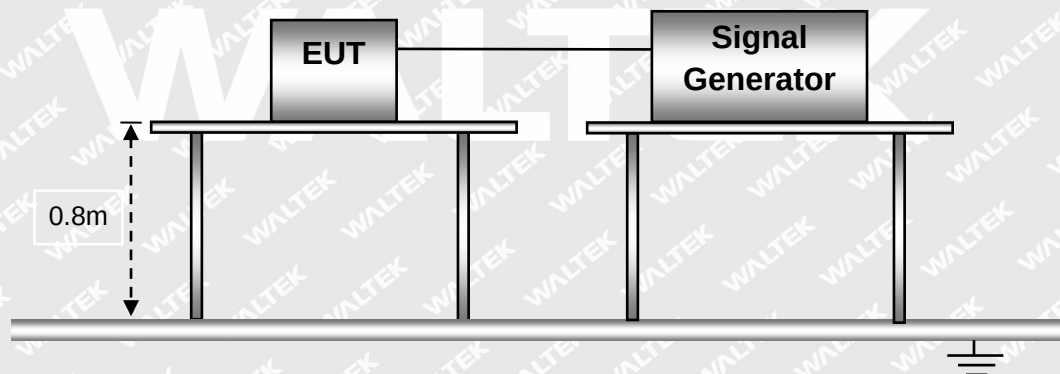
9.2 Test Performance

Performance Criterion: C

9.3 Environmental Conditions

Temperature:	22.5 °C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

9.4 Basic Test Setup Block Diagram





9.5 Surge Test Data

Test Voltage	Poll	Path	Pass	Fail
0.5kV	±	L-N	B	/
1kV	±	L-N	/	/
2kV	±	L-PE, N-PE	/	/
4kV	±	L-N, L-PE, N-PE	/	/

Test Result: Pass

WALTEK



10. Continuous induced RF disturbances (C/S)

10.1 Test Procedure

Test is conducting under the description of EN 61000-4-6.

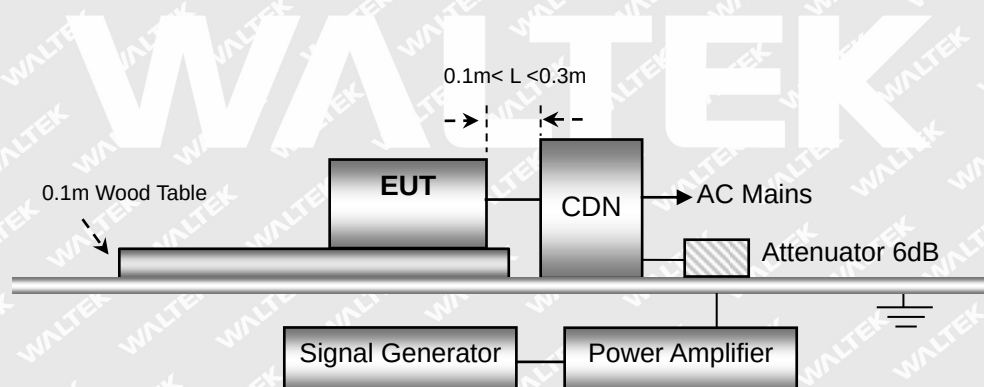
10.2 Test Performance

Performance Criterion: A

10.3 Environmental Conditions

Temperature:	22.5 °C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

10.4 Basic Test Setup Block Diagram





10.5 Continuous Conducted Disturbances Test Data

Sweep frequency range: 0.15 MHz to 80 MHz
Frequency step: 1% of fundamental
Dwell time: 1 second

AC Port

Frequency MHz	Injected Position	Voltage level (e.m.f.)	Observations (Performance Criterion)	Result
0.15-80	AC Mains	1V	/	/
0.15-80	AC Mains	3V	A	Pass
0.15-80	AC Mains	10V	/	/

Test Result: Pass

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11. Power-Frequency Magnetic Fields (PFMF)

11.1 Test Procedure

Test is conducting under the description of EN 61000-4-8.

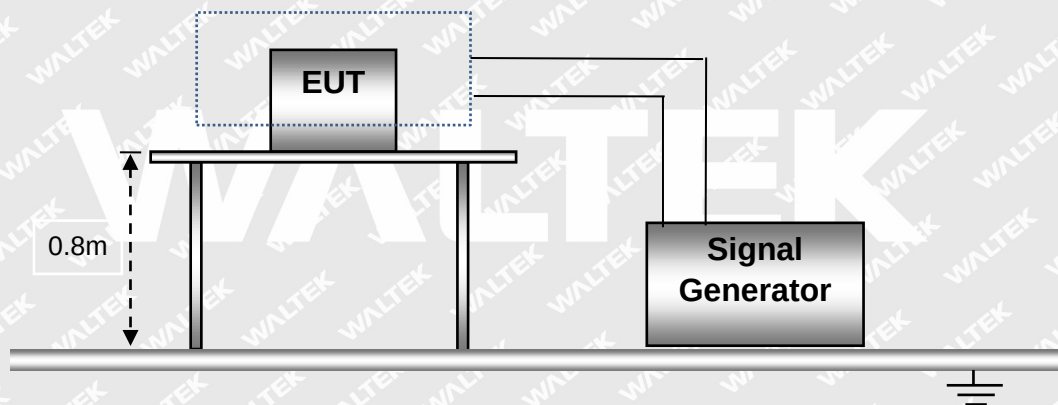
11.2 Test Performance

Performance Criterion: A

11.3 Environmental Conditions

Temperature:	22.5 °C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

11.4 Basic Test Setup Block Diagram





11.5 Power-Frequency Magnetic Field Test Data

Level	Magnetic Field Strength (r.m.s) A/m	Frequency Hz	Induction Coil Postion	Pass	Fail
1	1	50	X, Y, Z	/	/
2	3	50	X, Y, Z	A	/
3	10	50	X, Y, Z	/	/
X	Special	/	/	/	/

Test Result: Pass

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EXHIBIT 1 - PRODUCT LABELING

Proposed CE Label Format

Flashlight

Model: Baton 3 Premium Edition

Brand: OLIGHT

Importer Name: XXX

Importer Address: XXX

Dongguan Olight E-Commerce Technology Co., Ltd

4th Floor Building 4 Kegou Industrial Park No6

Zhongnan Road, Changan Town, Dongguan City ,

Guangdong, China



Specifications: Text is Black in color and is justified. Labels are printed in indelible ink on permanent adhesive backing or silk-screened onto the EUT or shall be affixed at a conspicuous location on the EUT. The 'CE' marking must be affixed to the EUT or to its data plate. Where this is not possible or not warranted on account of the nature of the apparatus, it must be affixed to the packaging, if any, and to the accompanying documents. The 'CE' marking is allowed less than 5 mm but must clear. If the 'CE' marking is reduced or enlarged the proportions given in the above graduated drawing must be respected. The Importer name, address and Manufacturer name and address should indicate on marking label or packaging or in a document accompanying

Proposed Label Location on EUT

CE Label Location





EXHIBIT 2 - EUT PHOTOGRAPHS

EUT View 1

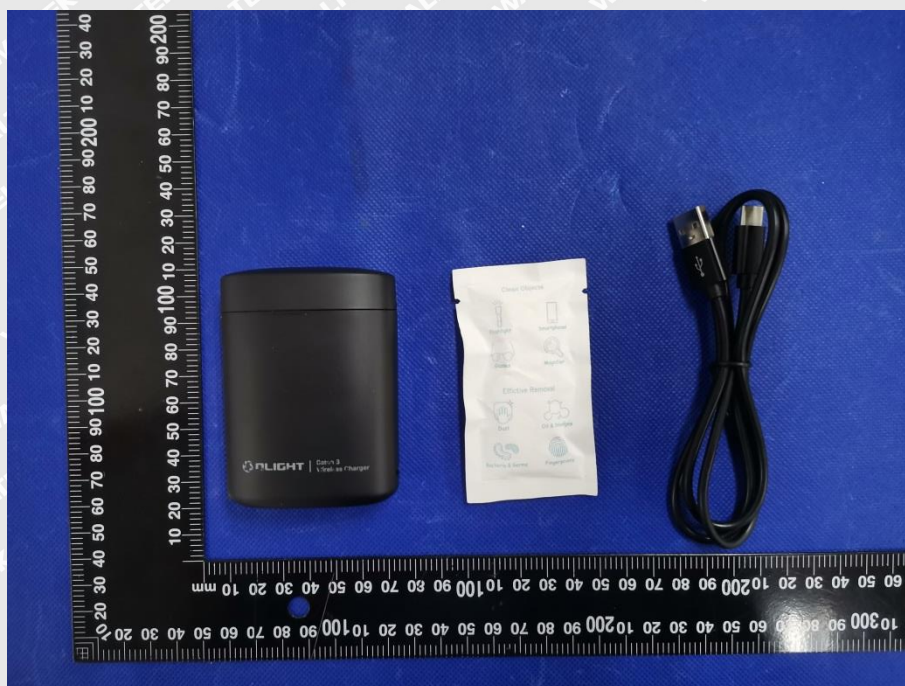


EUT View 2





EUT View 3



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EUT View 4





EUT View 5



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EUT View 6





EUT View 7



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EUT Housing and Board View 1

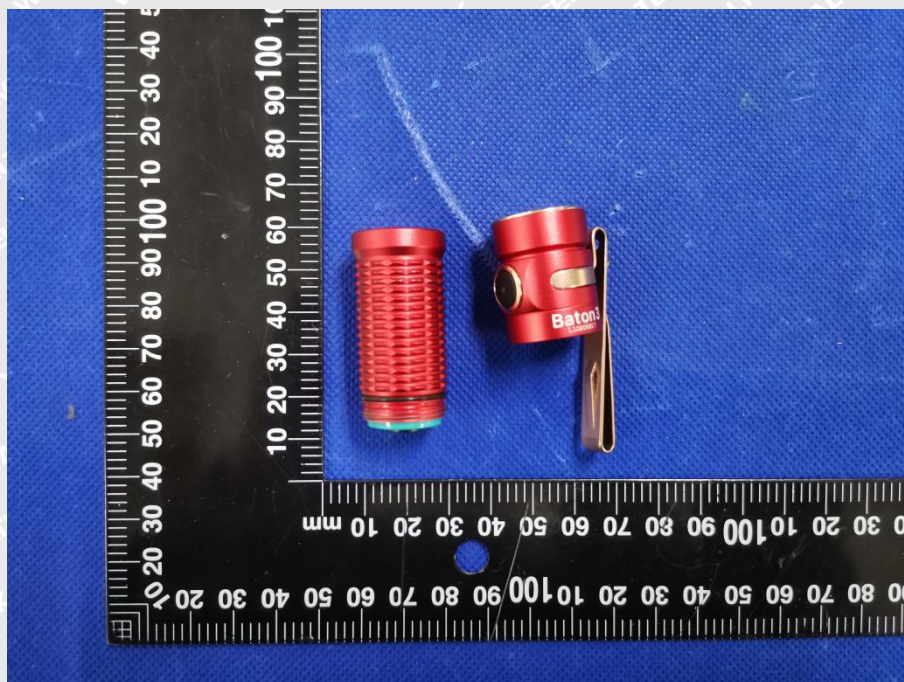


EUT Housing and Board View 2

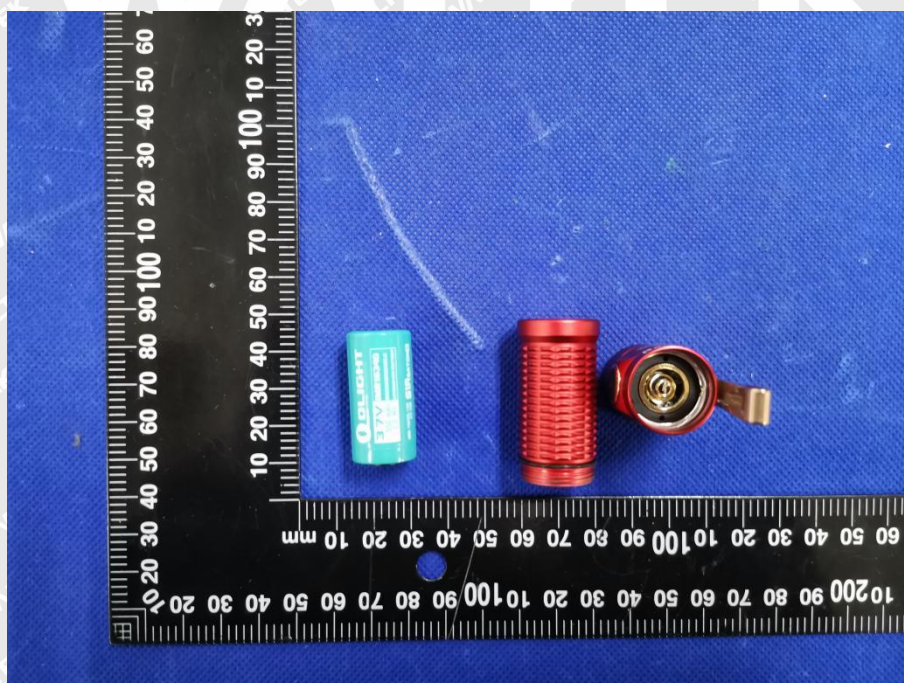




EUT Housing and Board View 3

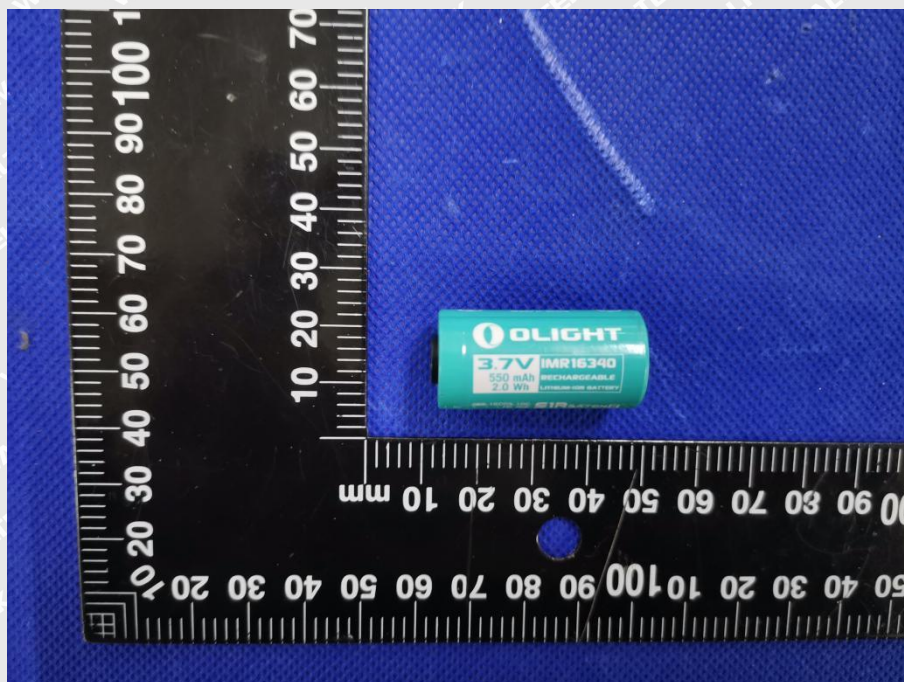


EUT Housing and Board View 4





EUT Housing and Board View 5



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EXHIBIT 3 - TEST SETUP PHOTOGRAPHS

Conduction Emission Test View

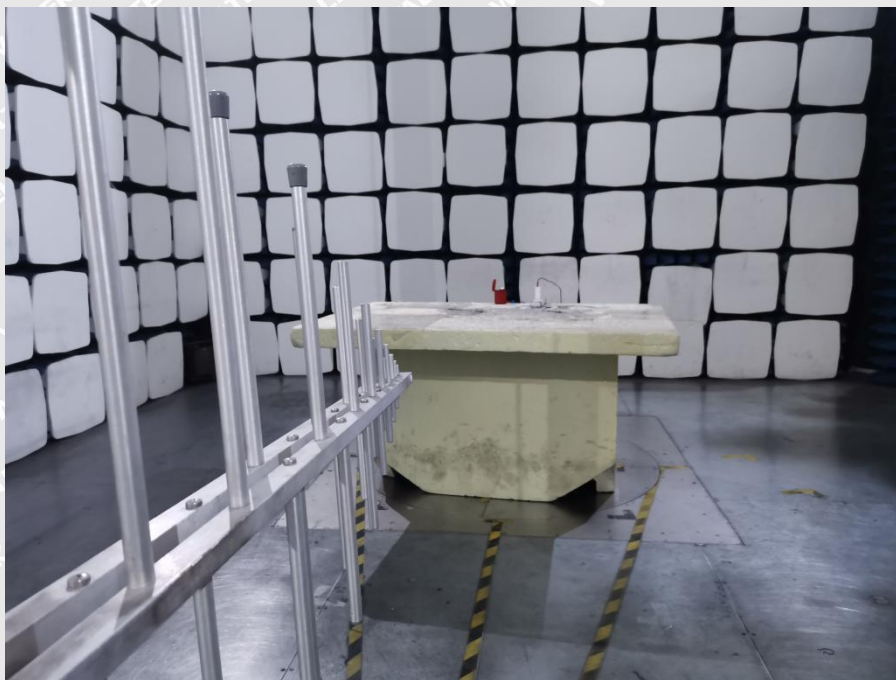


Radiation Emission Test View (9kHz to 30MHz)





Radiation Emission Test View (30MHz to 300MHz)

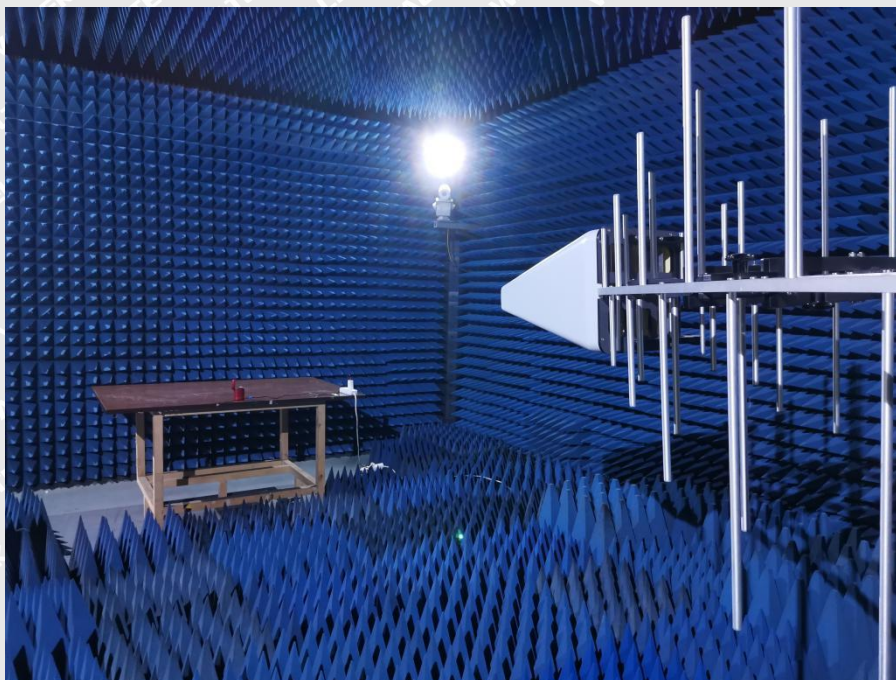


EN 61000-4-2 Test View

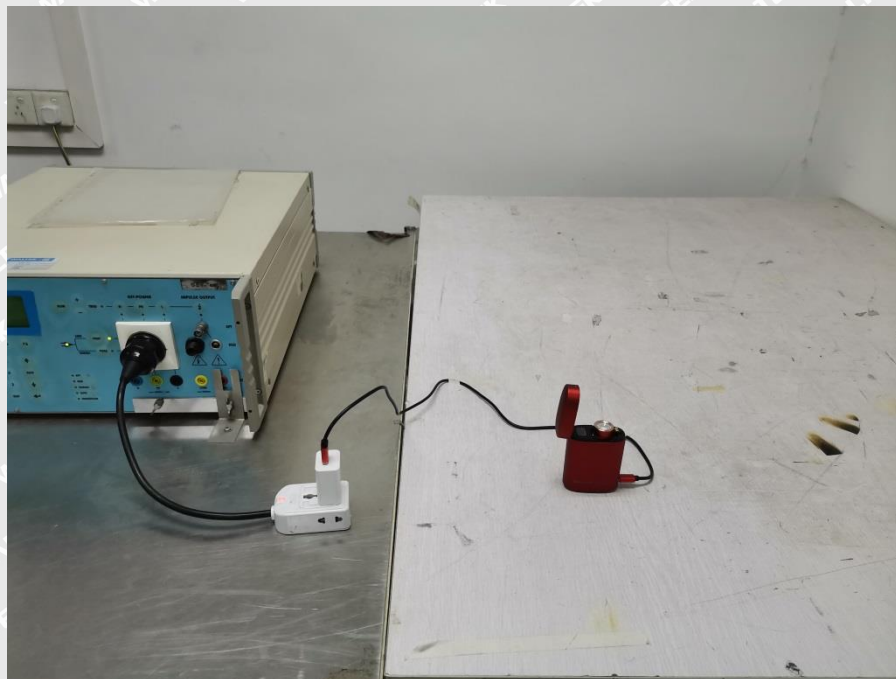




EN 61000-4-3 Test View



EN 61000-4-4/5 Test View

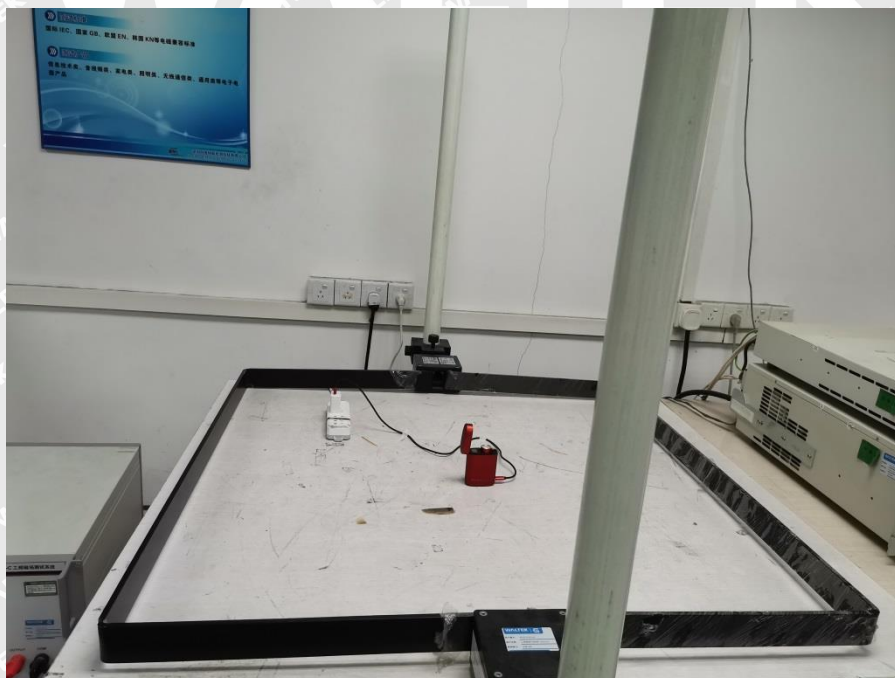




EN 61000-4-6 Test View



EN 61000-4-8 Test View



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