


TEST REPORT

Applicant: EMPIRE OF LIGHT PTY LTD
Address of Applicant: 8 Rowany Cl, Bonnyrigg, 2177, NSW, Australia.
Manufacturer/Factory: EMPIRE OF LIGHT PTY LTD
Address of Manufacturer/Factory: 8 Rowany Cl, Bonnyrigg, 2177, NSW, Australia.
Equipment Under Test (EUT)
Product Name: LED POWER SUPPLY
Model No.: EOL.CE.DR12-36, EOL.CE.DR24-36, EOL.CE.DR12-60, EOL.CE.DR24-60, EOL.CE.DR12-100, EOL.CE.DR24-100, EOL.CE.DR12-150, EOL.CE.DR24-150, EOL.CE.DR12-200, EOL.CE.DR24-200, EOL.CE.DR12-60IP, EOL.CE.DR24-60IP
Trade Mark: 
Applicable standards: AS CISPR15:2017
Date of sample receipt: September 27, 2022
Date of Test: September 27- October 10, 2022
Date of report issued: November 25, 2022
Test Result : PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Robinsen Luo
Laboratory Manager

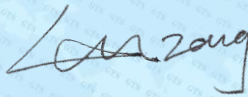


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2 Version

Report No.	Version No.	Date	Description
GTS202209000206R01	00	October 10, 2022	Original
GTS202209000207R01	01	November 25, 2022	Change applicant, manufacturer, factory, model number, trade mark.

Prepared By:



Date:

November 25, 2022

Project Engineer

Check By:



Date:

November 25, 2022

Reviewer

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4 Test Summary

Test	Test Requirement	Test Method	Class / Severity	Result
Radiated Emission	AS CISPR15	AS CISPR15	Table 3b	PASS
Conducted Emission	AS CISPR15	AS CISPR15	Table 2a	PASS
Radiated electromagnetic disturbances(9kHz-30MHz)	AS CISPR15	AS CISPR15	Table 3a	PASS

5 General Information

5.1 General Description of EUT

Product Name:		LED POWER SUPPLY				
Model	Rated output voltage (V ₋₋₋)	Rated output voltage (V ₋₋₋)	Rated output current (A)	Rated output power(W)	Transformer	Value of ta; tc
EOL.CE.DR12-36	100-240V~, 50/60Hz	12	3	36	T1	ta:40°C; tc:85°C
EOL.CE.DR24-36	100-240V~, 50/60Hz	24	1.5	36	T2	ta:40°C; tc:85°C
EOL.CE.DR12-60	100-240V~, 50/60Hz	12	5	60	T3	ta:40°C; tc:85°C
EOL.CE.DR24-60	100-240V~, 50/60Hz	24	2.5	60	T4	ta:40°C; tc:85°C
EOL.CE.DR12-100	100-240V~, 50/60Hz	12	8.33	100	T5	ta:40°C; tc:85°C
EOL.CE.DR24-100	100-240V~, 50/60Hz	24	4.16	100	T6	ta:40°C; tc:85°C
EOL.CE.DR12-150	100-240V~, 50/60Hz	12	12.5	150	T7	ta:40°C; tc:85°C
EOL.CE.DR24-150	100-240V~, 50/60Hz	24	6.25	150	T8	ta:40°C; tc:85°C
EOL.CE.DR12-200	100-240V~, 50/60Hz	12	16.67	200	T7	ta:40°C; tc:85°C
EOL.CE.DR24-200	100-240V~, 50/60Hz	24	8.33	200	T8	ta:40°C; tc:85°C
EOL.CE.DR12-60IP	100-240V~, 50/60Hz	12	5	60	T9	ta:40°C; tc:85°C
EOL.CE.DR24-60IP	100-240V~, 50/60Hz	24	2.5	60	T10	ta:40°C; tc:85°C
Test Model No.:	EOL.CE.DR24-36, EOL.CE.DR24-60, EOL.CE.DR24-100, EOL.CE.DR24-150, EOL.CE.DR24-60IP					

5.2 Test mode and Test voltage

Test mode:	
Operation mode	Keep the EUT lighting.
Test voltage:	
AC 220V/50Hz	

5.3 Description of Support Units

None.

5.4 Deviation from Standards

None.

5.5 Abnormalities from Standard Conditions

None.

5.6 Test Facility

<p>The test facility is recognized, certified, or accredited by the following organizations:</p> <ul style="list-style-type: none">● FCC —Registration No.: 381383 Designation Number: CN5029 Global United Technology Services Co., Ltd., Shenzhen 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 files.● IC —Registration No.: 9079A CAB identifier: CN0091 The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.● NVLAP (LAB CODE:600179-0) Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).
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5.7 Test Location

All test items were performed at:
Global United Technology Services Co., Ltd. Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102 Tel: 0755-27798480 Fax: 0755-27798960

6 Test Instruments List

Radiated Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	July 02, 2020	July 01, 2025
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	April 22, 2022	April 21, 2023
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	GTS640	March 21, 2022	March 20, 2023
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	June 12, 2022	June 11, 2023
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	June 23, 2022	June 22, 2023
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	April 22, 2022	April 21, 2023
9	Coaxial Cable	GTS	N/A	GTS211	April 22, 2022	April 21, 2023
10	Coaxial cable	GTS	N/A	GTS210	April 22, 2022	April 21, 2023
11	Coaxial Cable	GTS	N/A	GTS212	April 22, 2022	April 21, 2023
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	April 22, 2022	April 21, 2023
13	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June 23, 2022	June 22, 2023
14	Band filter	Amindeon	82346	GTS219	June 23, 2022	June 22, 2023
15	Power Meter	Anritsu	ML2495A	GTS540	June 23, 2022	June 22, 2023
16	Power Sensor	Anritsu	MA2411B	GTS541	June 23, 2022	June 22, 2023
17	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	April 22, 2022	April 21, 2023
18	Splitter	Agilent	11636B	GTS237	June 23, 2022	June 22, 2023
19	Loop Antenna	ZHINAN	ZN30900A	GTS534	Nov. 30, 2021	Nov. 29, 2022
20	Broadband Preamplifier	SCHWARZBECK	BBV9718	GTS535	April 22, 2022	April 21, 2023
21	Breitband hornantenna	SCHWARZBECK	BBHA 9170	GTS579	Oct. 17, 2021	Oct. 16, 2022
22	Amplifier	TDK	PA-02-02	GTS574	Oct. 17, 2021	Oct. 16, 2022
23	Amplifier	TDK	PA-02-03	GTS576	Oct. 17, 2021	Oct. 16, 2022
24	PSA Series Spectrum Analyzer	Rohde & Schwarz	FSP	GTS578	June 23, 2022	June 22, 2023
25	Amplifier(1GHz-26.5GHz)	HP	8449B	GTS601	April 22, 2022	April 21, 2023

Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Shielding Room	ZhongYu Electron	7.3(L)x3.1(W)x2.9(H)	GTS252	May 14, 2022	May 13, 2025
2	EMI Test Receiver	R&S	ESCI 7	GTS552	April 24, 2022	April 23, 2023
3	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	June 23, 2022	June 22, 2023
4	ENV216 2-L-V-NETZNACHB.DE	ROHDE&SCHWARZ	ENV216	GTS226	April 22, 2022	April 21, 2023
5	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
7	Thermo meter	JINCHUANG	GSP-8A	GTS639	April 28, 2022	April 27, 2023
8	Absorbing clamp	Elektronik-Feinmechanik	MDS21	GTS229	April 15, 2022	April 14, 2023
9	ISN	SCHWARZBECK	NTFM 8158	GTS565	April 22, 2022	April 21, 2023
10	High voltage probe	SCHWARZBECK	TK9420	GTS537	April 22, 2022	April 21, 2023

Loop						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Shielding Room	ZhongYu Electron	7.3(L)x3.1(W)x2.9(H)	GTS252	May 14, 2022	May 13, 2025
2	EMI Test Receiver	R&S	ESCI 7	GTS552	April 24, 2022	April 23, 2023
3	TPIPLE-LOOP ANTENNA	EVERFINE	LLA-2	GTS539	April 22, 2022	April 21, 2023

General used equipment:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Humidity/ Temperature Indicator	KTJ	TA328	GTS243	April 25, 2022	April 24, 2023
2	Barometer	KUMAO	SF132	GTS647	July 26, 2022	July 25, 2023

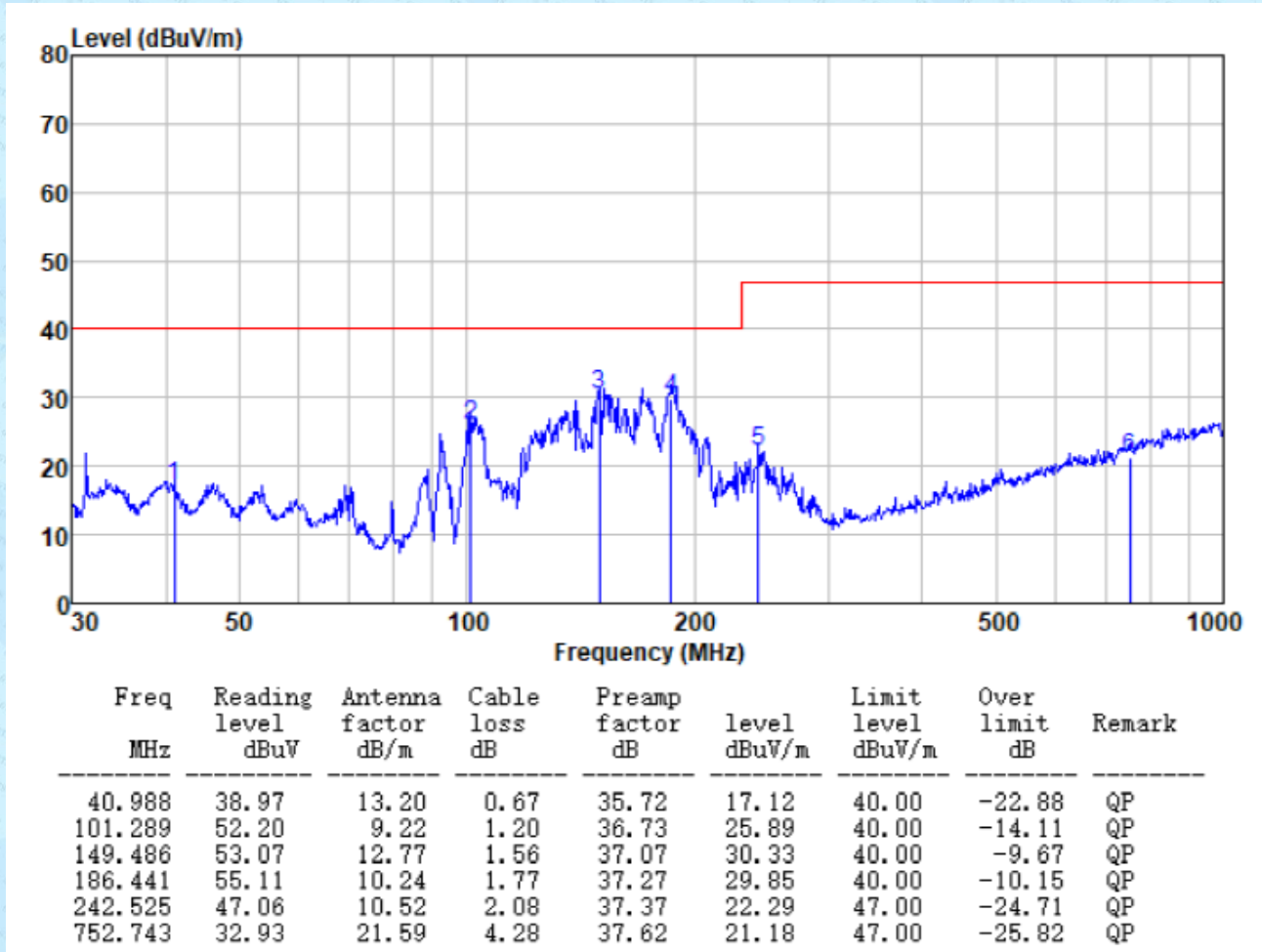
7 Emission Test Results

7.1 Radiated Emission

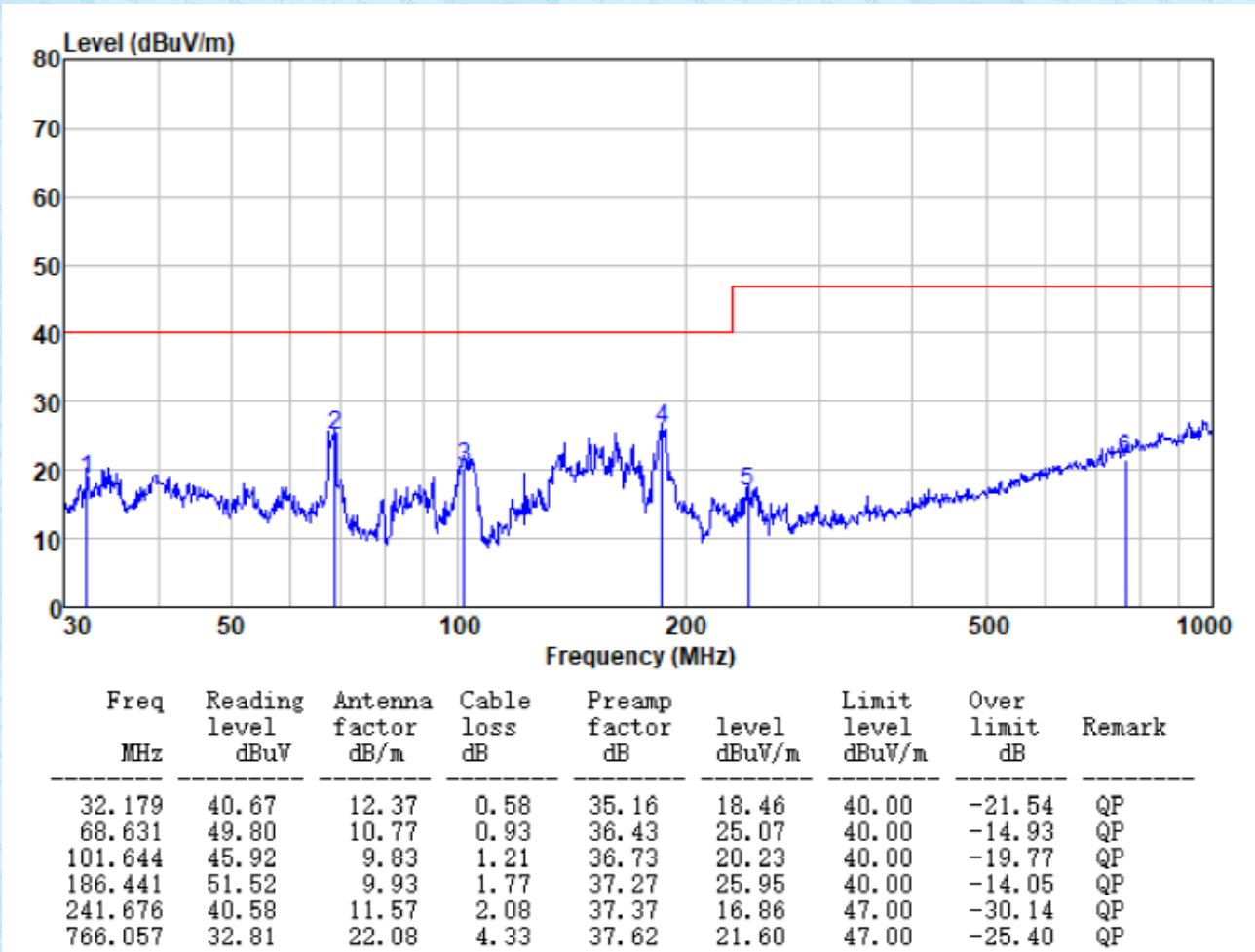
Test Requirement:	AS CISPR 15
Test Method:	AS CISPR 15
Test Frequency Range:	30MHz to 300MHz
Test site:	Measurement Distance: 3m
Limit:	Table 3b of AS CISPR 15
Test setup:	
Test environment:	Temp.: 25 °C Humid.: 52% Press.: 1 012mbar
Measurement Record:	Uncertainty: 3.8039dB (30MHz-200MHz) 3.9679dB (200MHz-1GHz)
Test Instruments:	Refer to section 6 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Measurement Data
EOL.CE.DR24-36

Test mode:	Operation mode	Antenna Polarity:	Horizontal
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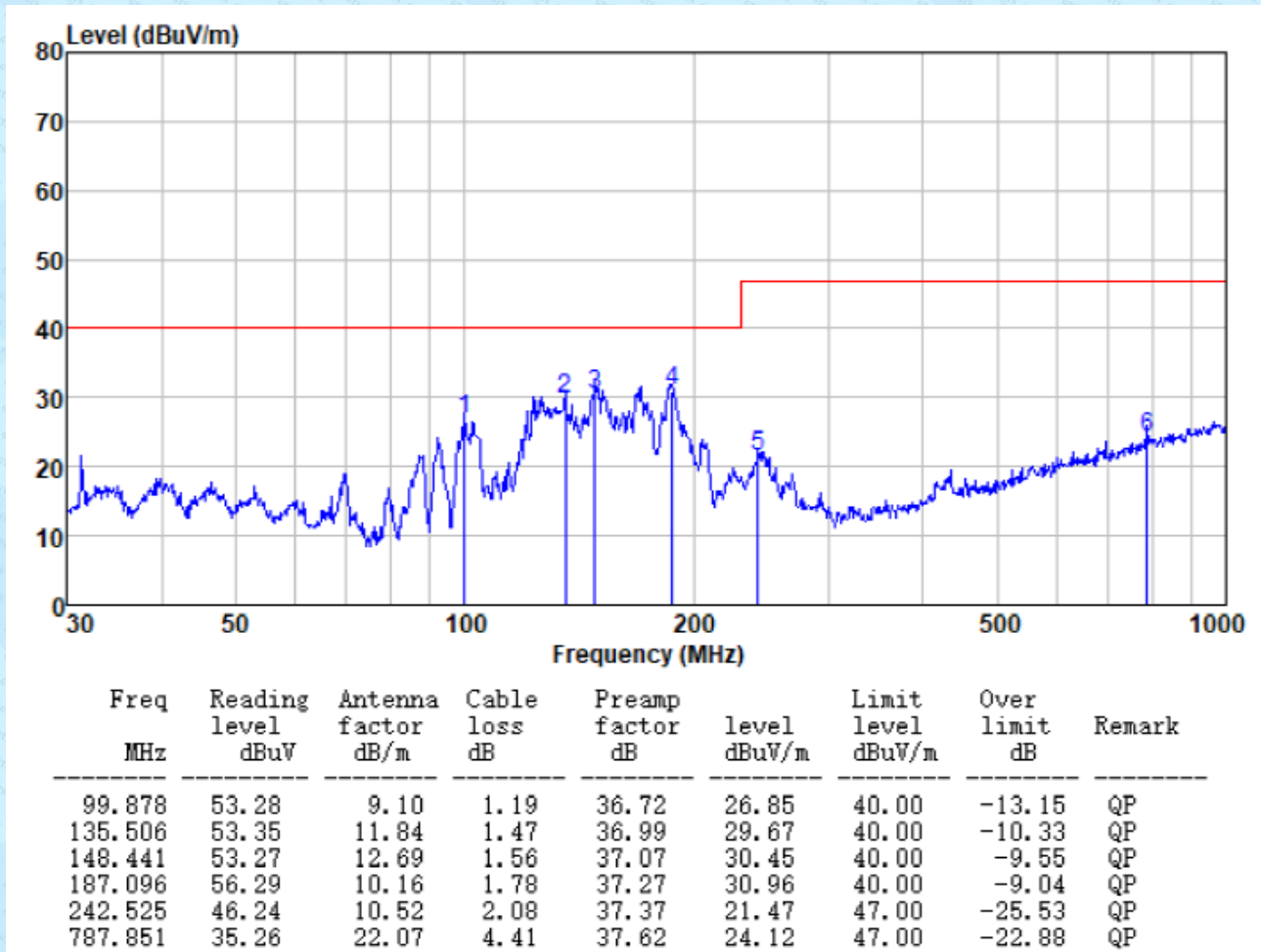
Test mode:	Operation mode	Antenna Polarity:	Vertical
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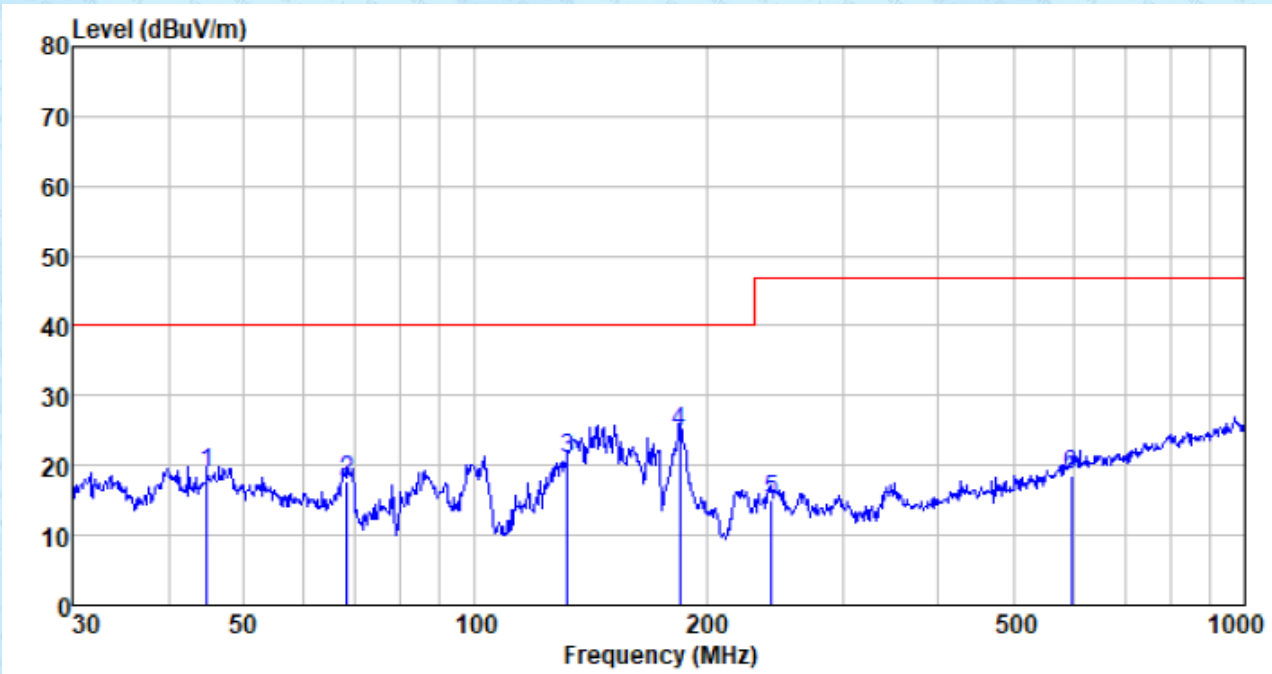
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
32.179	40.67	12.37	0.58	35.16	18.46	40.00	-21.54	QP
68.631	49.80	10.77	0.93	36.43	25.07	40.00	-14.93	QP
101.644	45.92	9.83	1.21	36.73	20.23	40.00	-19.77	QP
186.441	51.52	9.93	1.77	37.27	25.95	40.00	-14.05	QP
241.676	40.58	11.57	2.08	37.37	16.86	47.00	-30.14	QP
766.057	32.81	22.08	4.33	37.62	21.60	47.00	-25.40	QP

EOL.CE.DR24-60

Test mode:	Operation mode	Antenna Polarity:	Horizontal
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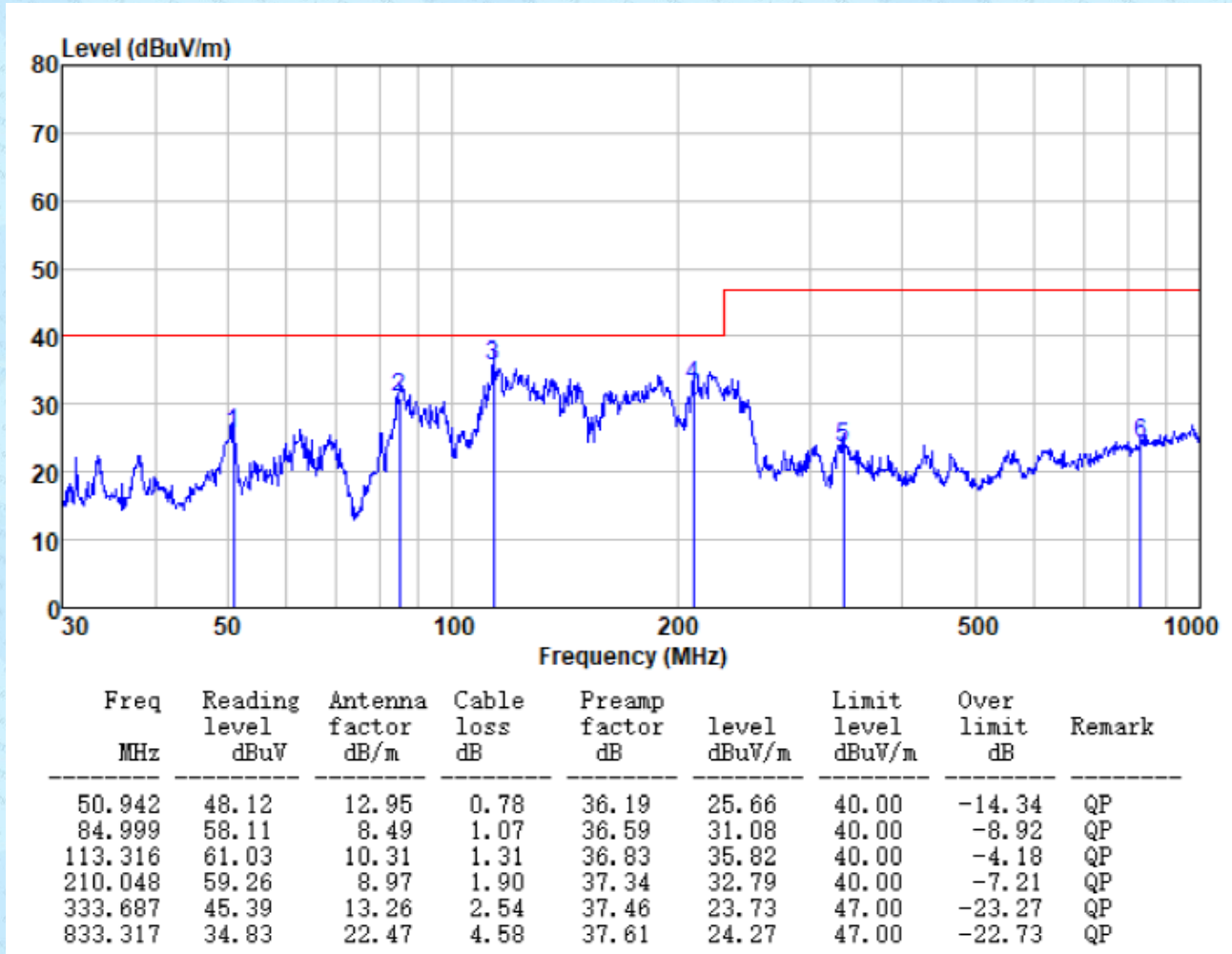
Test mode:	Operation mode	Antenna Polarity:	Vertical
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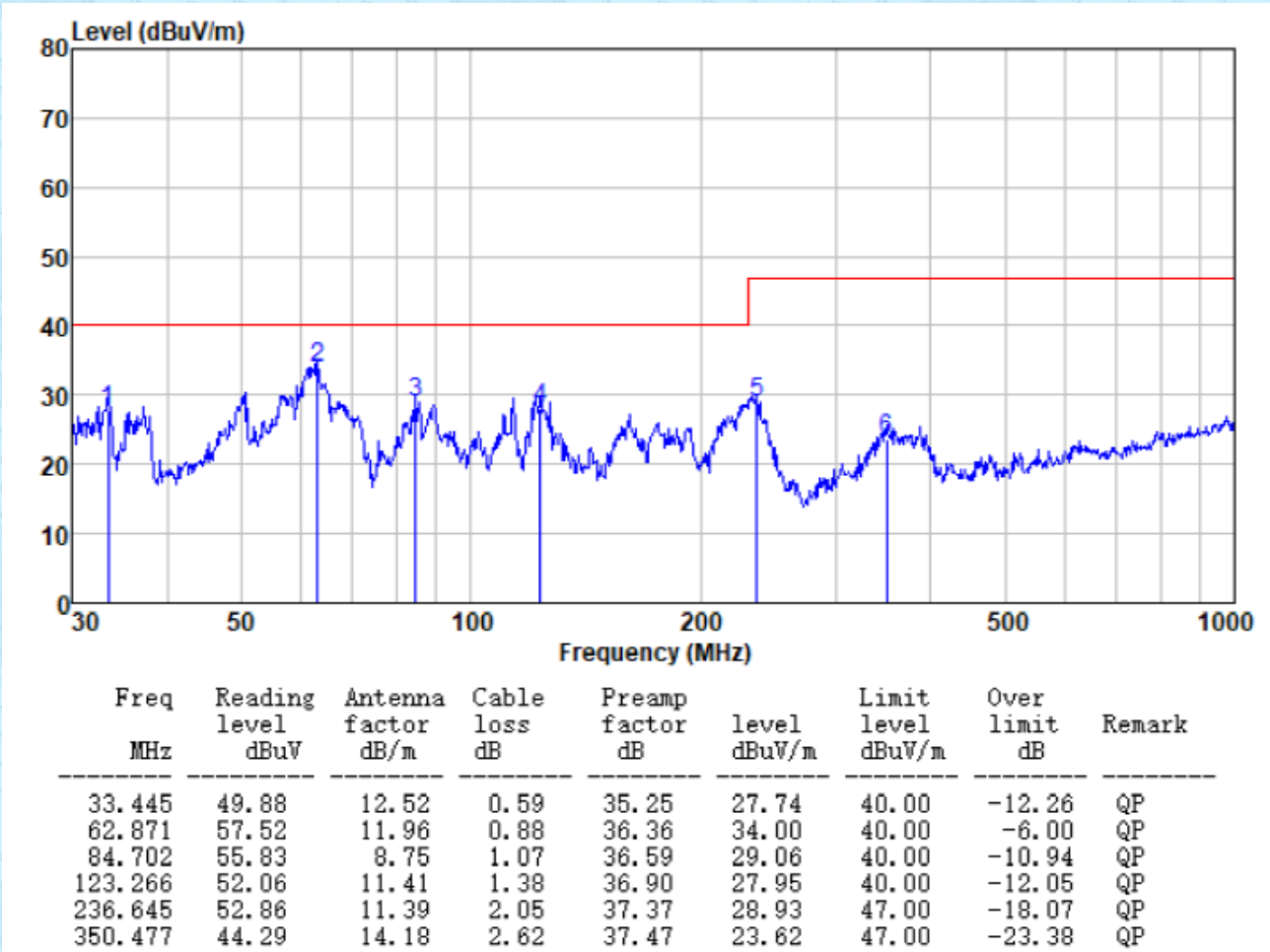
Freq MHz	Reading level dBUV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBUV/m	Limit level dBUV/m	Over limit dB	Remark
44.901	40.70	13.34	0.72	35.93	18.83	40.00	-21.17	QP
68.151	42.26	10.86	0.93	36.42	17.63	40.00	-22.37	QP
131.758	44.53	11.93	1.45	36.96	20.95	40.00	-19.05	QP
184.490	50.39	10.04	1.76	37.26	24.93	40.00	-15.07	QP
242.525	38.84	11.56	2.08	37.37	15.11	47.00	-31.89	QP
595.133	33.23	19.22	3.70	37.54	18.61	47.00	-28.39	QP

EOL.CE.DR24-100

Test mode:	Operation mode	Antenna Polarity:	Horizontal
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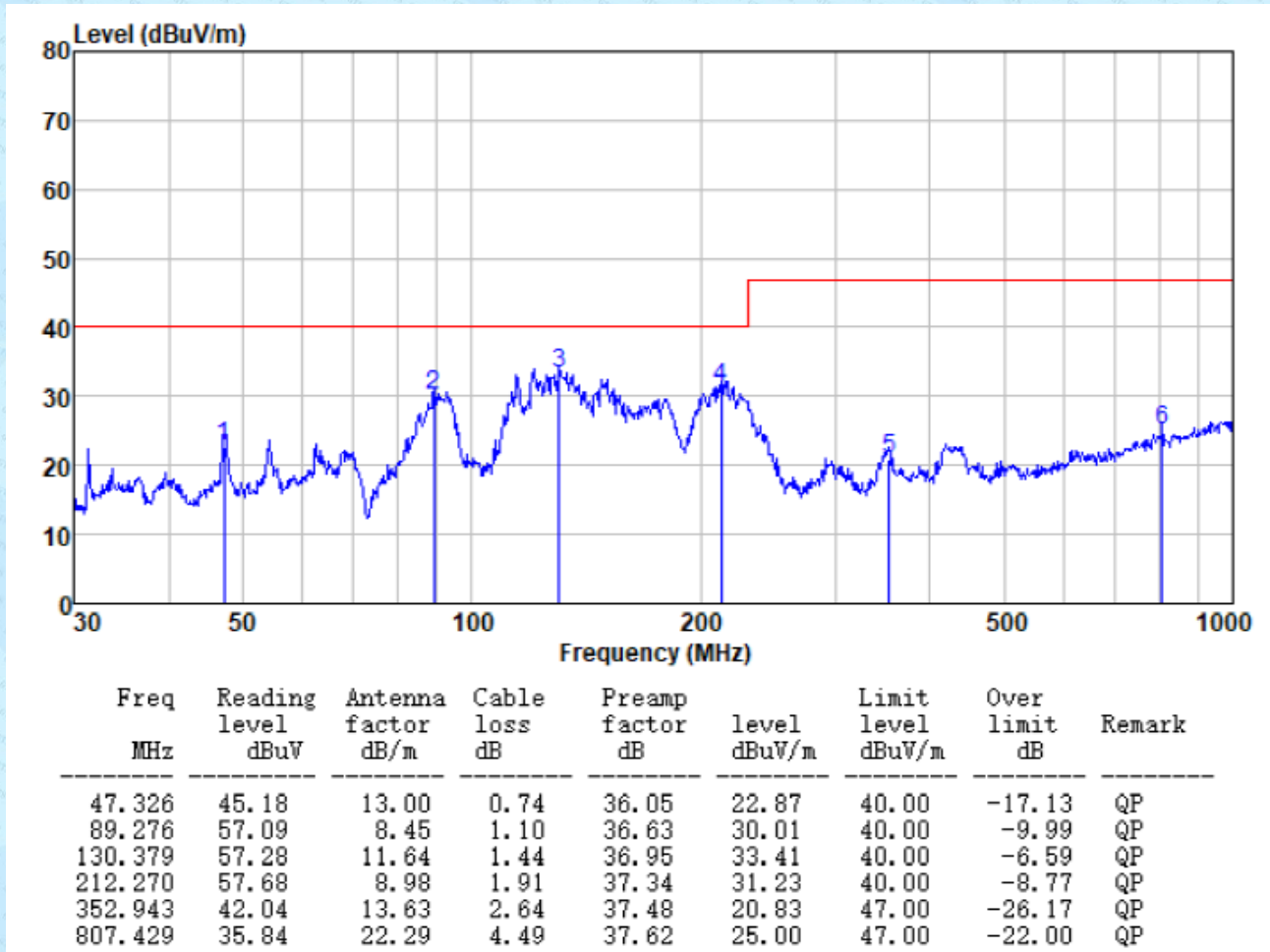


Test mode:	Operation mode	Antenna Polarity:	Vertical
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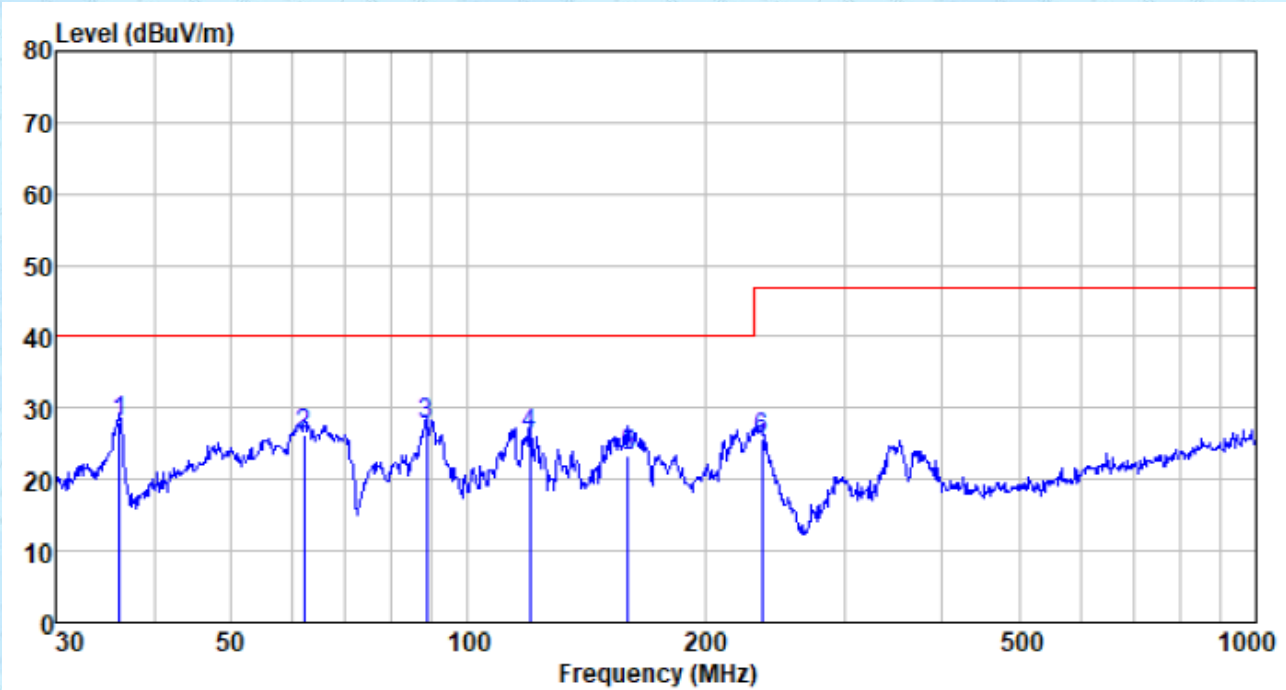


EOL.CE.DR24-150

Test mode:	Operation mode	Antenna Polarity:	Horizontal
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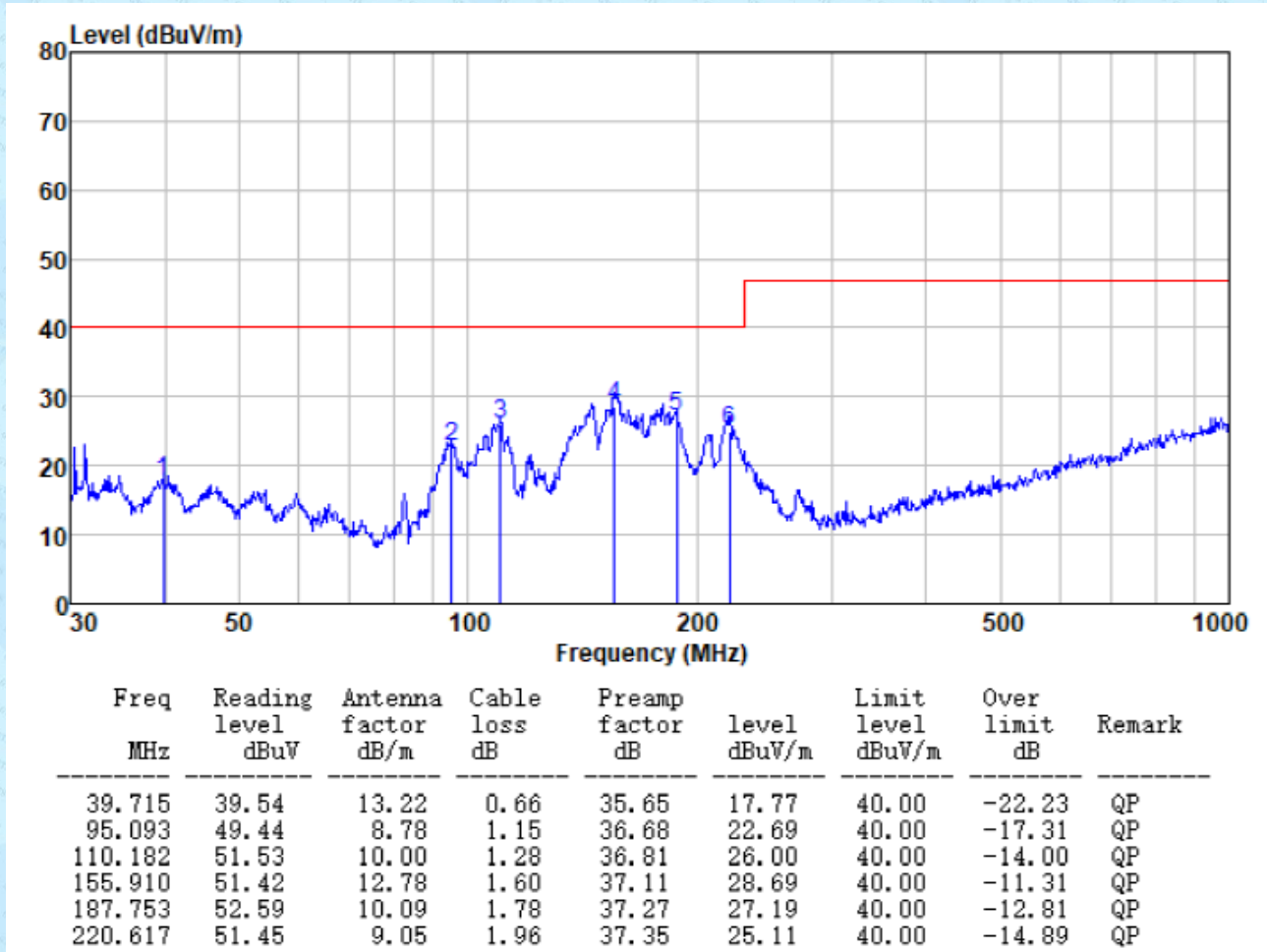
Test mode:	Operation mode	Antenna Polarity:	Vertical
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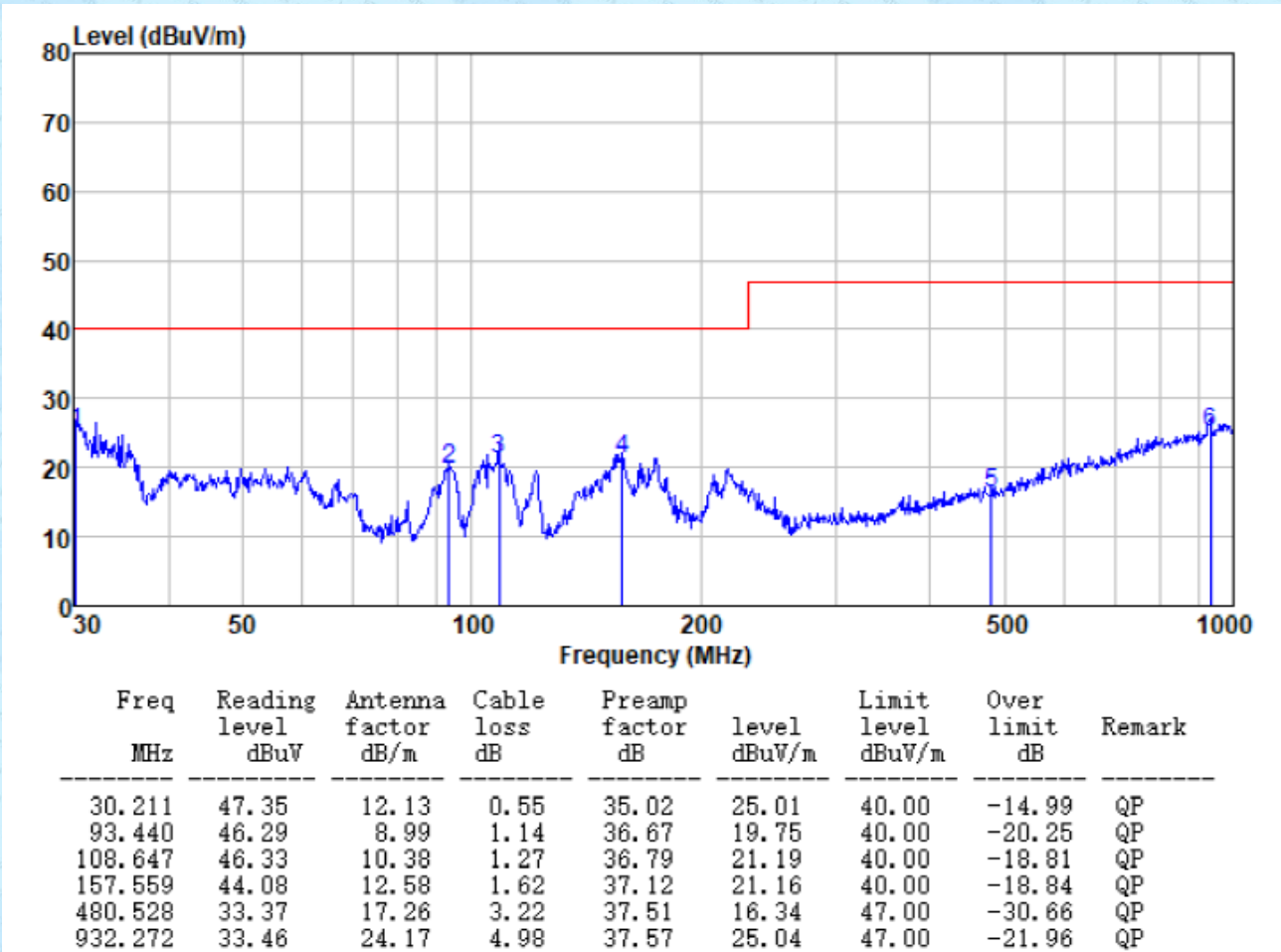
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
36.127	50.03	12.89	0.62	35.43	28.11	40.00	-11.89	QP
61.995	49.63	12.15	0.88	36.35	26.31	40.00	-13.69	QP
88.652	54.64	8.64	1.10	36.63	27.75	40.00	-12.25	QP
119.856	50.53	11.19	1.36	36.88	26.20	40.00	-13.80	QP
159.784	46.31	12.60	1.63	37.13	23.41	40.00	-16.59	QP
235.816	49.81	11.34	2.05	37.37	25.83	47.00	-21.17	QP

EOL.CE.DR24-60IP

Test mode:	Operation mode	Antenna Polarity:	Horizontal
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Test mode:	Operation mode	Antenna Polarity:	Vertical
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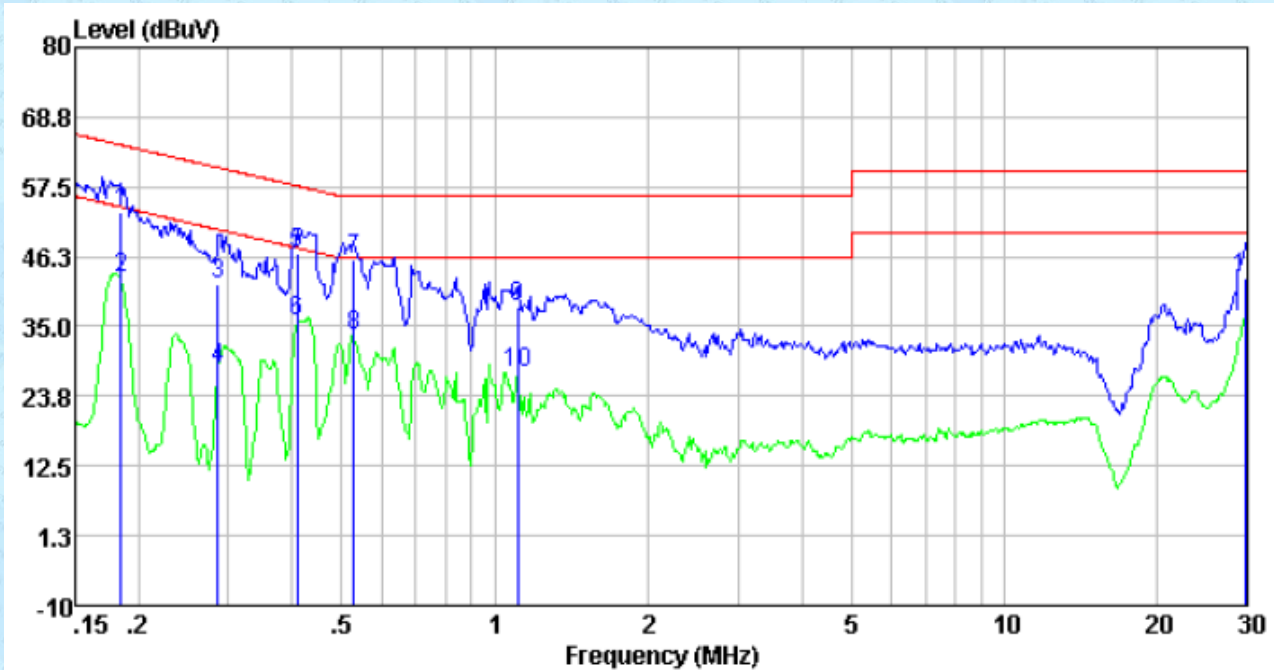


7.2 Conducted Emission

Test Requirement:	AS CISPR 15																								
Test Method:	AS CISPR 15																								
Test Frequency Range:	9kHz to 30MHz																								
Receiver setup:	RBW=9kHz, VBW=30kHz																								
Limit:	<table border="1"> <thead> <tr> <th rowspan="2">Frequency range (MHz)</th> <th colspan="2">Limit (dBuV)</th> </tr> <tr> <th>Quasi-peak</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td>0.009-0.05</td> <td>110</td> <td>-</td> </tr> <tr> <td>0.05-0.15</td> <td>90-80*</td> <td>-</td> </tr> <tr> <td>0.15-0.5</td> <td>66 to 56*</td> <td>56 to 46*</td> </tr> <tr> <td>0.5-5</td> <td>56</td> <td>46</td> </tr> <tr> <td>5-30</td> <td>60</td> <td>50</td> </tr> </tbody> </table> <p>* Decreases with the logarithm of the frequency.</p>					Frequency range (MHz)	Limit (dBuV)		Quasi-peak	Average	0.009-0.05	110	-	0.05-0.15	90-80*	-	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
Frequency range (MHz)	Limit (dBuV)																								
	Quasi-peak	Average																							
0.009-0.05	110	-																							
0.05-0.15	90-80*	-																							
0.15-0.5	66 to 56*	56 to 46*																							
0.5-5	56	46																							
5-30	60	50																							
Test setup:	<p>Remark E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.1m</p>																								
Test procedure	<p>The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to CISPR 16-2-1 on conducted measurement.</p>																								
Test Instruments:	Temp.:	24 °C	Humid.:	51%	Press.:	1 012mbar																			
Measurement Record:	Uncertainty: 3.44dB																								
Test Instruments:	Refer to section 6 for details																								
Test mode:	Refer to section 5.2 for details																								
Test results:	Pass																								

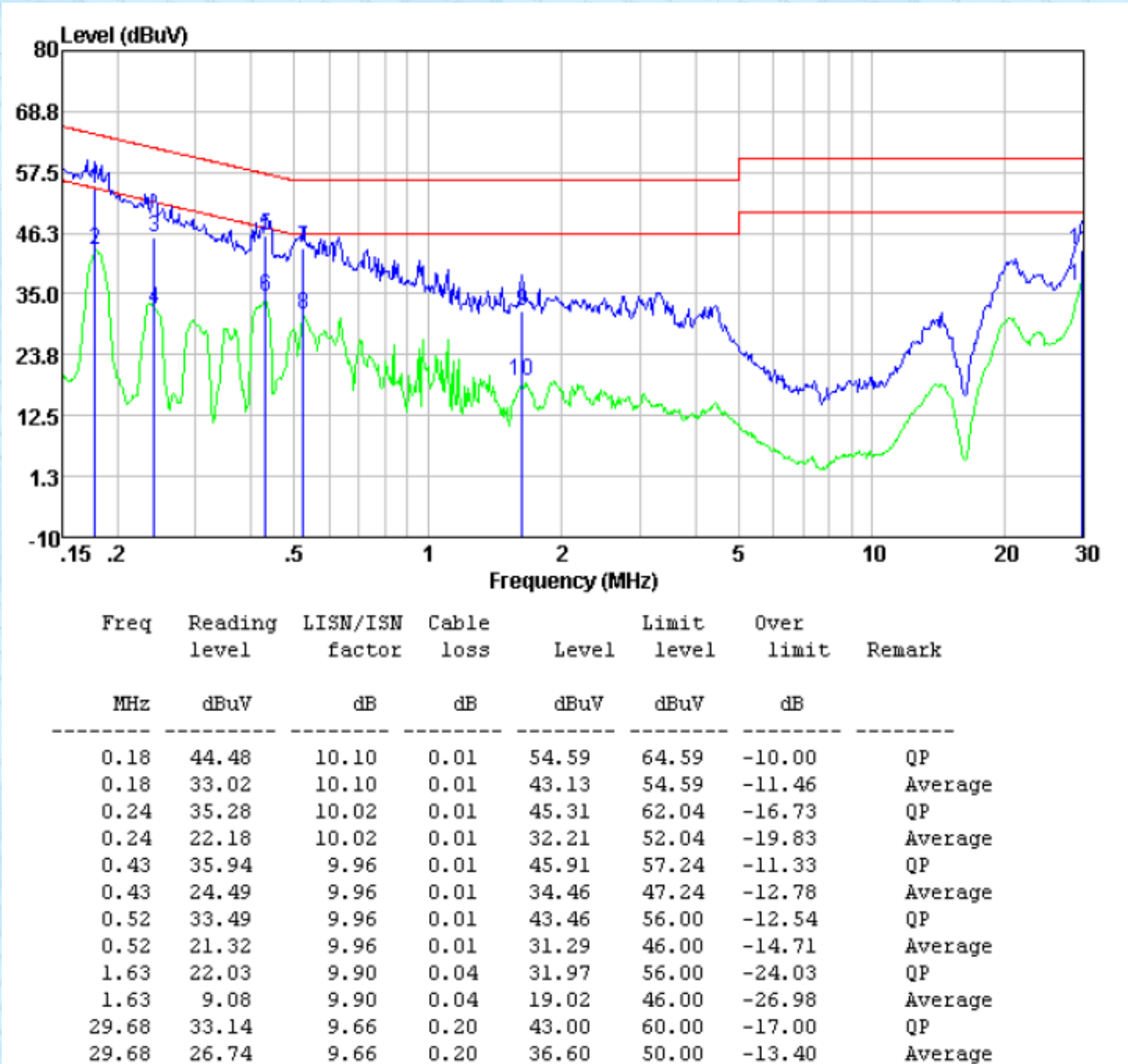
Measurement Data
EOL.CE.DR24-36

Test mode:	Operation mode	Phase Polarity:	Line
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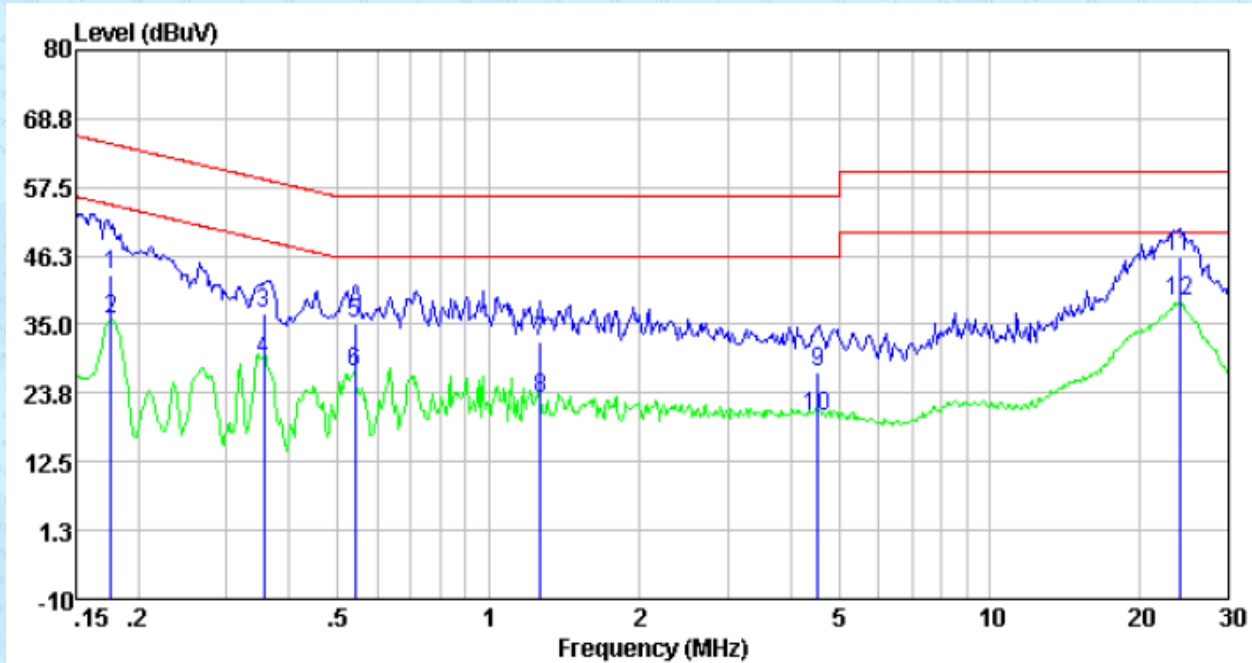
Freq	Reading level	LISN/ISN factor	Cable loss	Limit Level	Over limit	Remark
MHz	dBuV	dB	dB	dBuV	dB	
0.18	43.34	10.07	0.01	53.42	-10.86	QP
0.18	32.63	10.07	0.01	42.71	-11.57	Average
0.29	31.84	9.99	0.01	41.84	-18.79	QP
0.29	18.33	9.99	0.01	28.33	-22.30	Average
0.41	36.74	9.97	0.01	46.72	-10.96	QP
0.41	26.00	9.97	0.01	35.98	-11.70	Average
0.53	35.70	9.96	0.01	45.67	-10.33	QP
0.53	23.67	9.96	0.01	33.64	-12.36	Average
1.11	28.22	9.94	0.03	38.19	-17.81	QP
1.11	17.56	9.94	0.03	27.53	-18.47	Average
29.84	32.97	9.72	0.20	42.89	-17.11	QP
29.84	26.45	9.72	0.20	36.37	-13.63	Average

Test mode:	Operation mode	Phase Polarity:	Neutral
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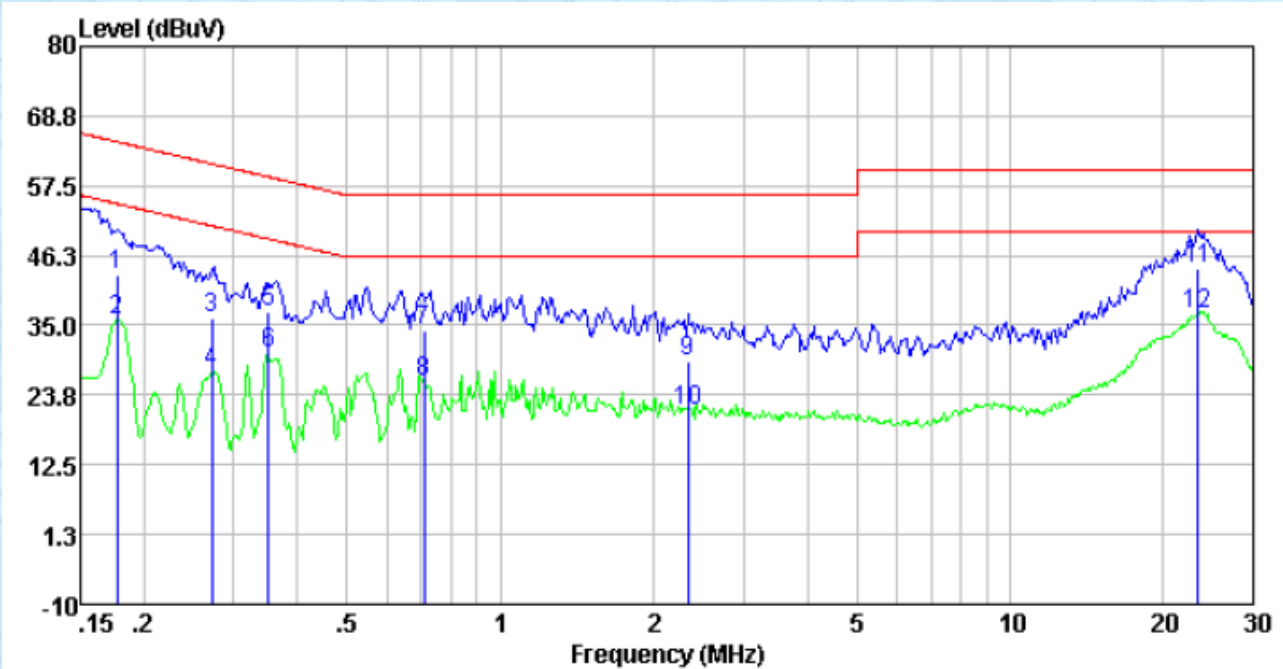
EOL.CE.DR24-60

Test mode:	Operation mode	Phase Polarity:	Line
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Freq	Reading level	LISN/ISN factor	Cable loss	Level	Limit level	Over limit	Remark
MHz	dBuV	dB	dB	dBuV	dBuV	dB	
0.18	32.70	10.40	0.01	43.11	64.68	-21.57	QP
0.18	25.40	10.40	0.01	35.81	54.68	-18.87	Average
0.36	26.35	10.37	0.01	36.73	58.83	-22.10	QP
0.36	18.89	10.37	0.01	29.27	48.83	-19.56	Average
0.54	24.77	10.30	0.01	35.08	56.00	-20.92	QP
0.54	16.89	10.30	0.01	27.20	46.00	-18.80	Average
1.27	21.96	10.20	0.03	32.19	56.00	-23.81	QP
1.27	12.53	10.20	0.03	22.76	46.00	-23.24	Average
4.55	16.98	10.20	0.06	27.24	56.00	-28.76	QP
4.55	9.56	10.20	0.06	19.82	46.00	-26.18	Average
23.89	35.46	10.34	0.19	45.99	60.00	-14.01	QP
23.89	28.24	10.34	0.19	38.77	50.00	-11.23	Average

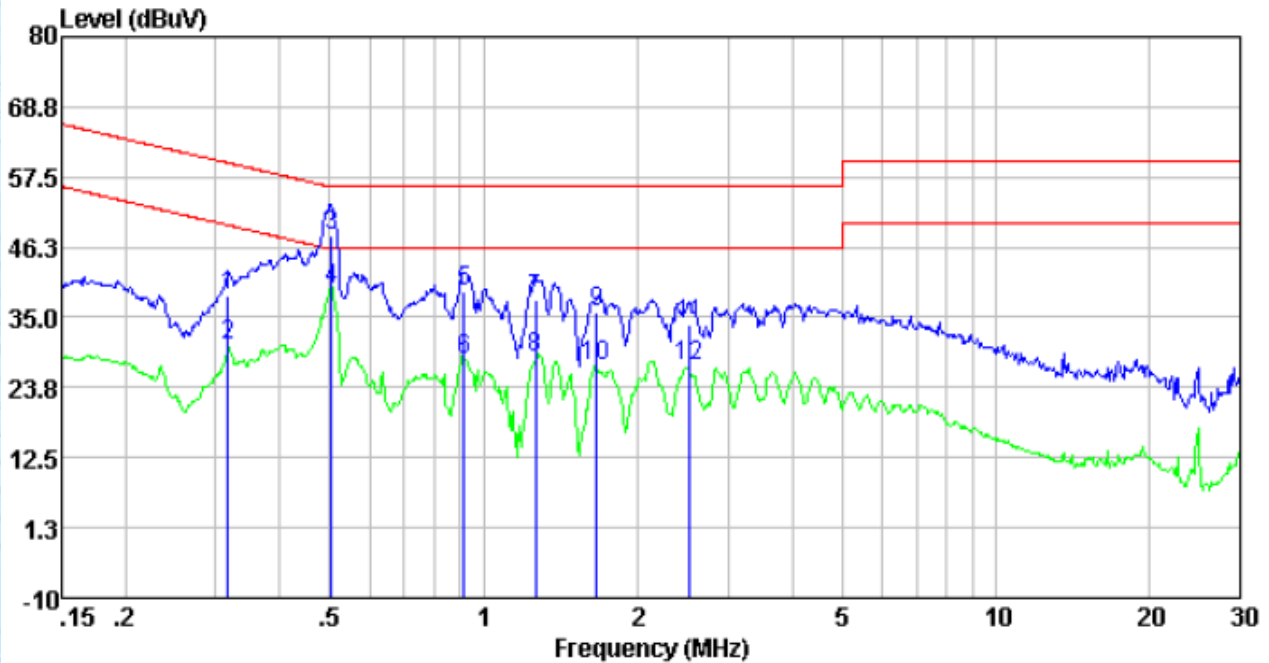
Test mode:	Operation mode	Phase Polarity:	Neutral
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Freq	Reading level	LISM/ISN factor	Cable loss	Level	Limit level	Over limit	Remark
MHz	dBuV	dB	dB	dBuV	dBuV	dB	
0.18	32.60	10.40	0.01	43.01	64.64	-21.63	QP
0.18	25.46	10.40	0.01	35.87	54.64	-18.77	Average
0.27	25.81	10.40	0.01	36.22	61.07	-24.85	QP
0.27	17.21	10.40	0.01	27.62	51.07	-23.45	Average
0.35	26.80	10.37	0.01	37.18	58.96	-21.78	QP
0.35	20.08	10.37	0.01	30.46	48.96	-18.50	Average
0.71	23.82	10.26	0.02	34.10	56.00	-21.90	QP
0.71	15.59	10.26	0.02	25.87	46.00	-20.13	Average
2.33	18.86	10.20	0.05	29.11	56.00	-26.89	QP
2.33	11.08	10.20	0.05	21.33	46.00	-24.67	Average
23.39	33.51	10.34	0.19	44.04	60.00	-15.96	QP
23.39	26.21	10.34	0.19	36.74	50.00	-13.26	Average

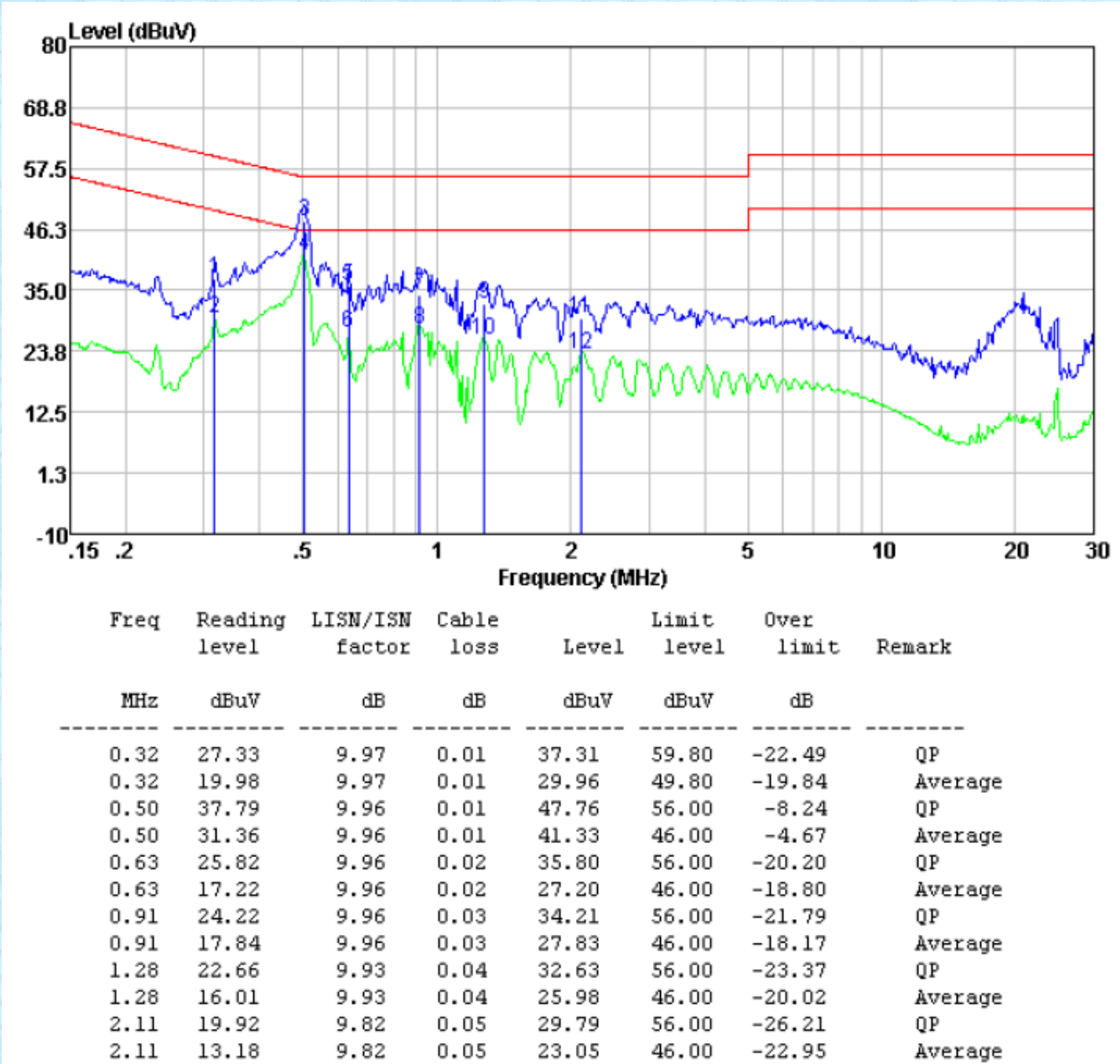
EOL.CE.DR24-100

Test mode:	Operation mode	Phase Polarity:	Line
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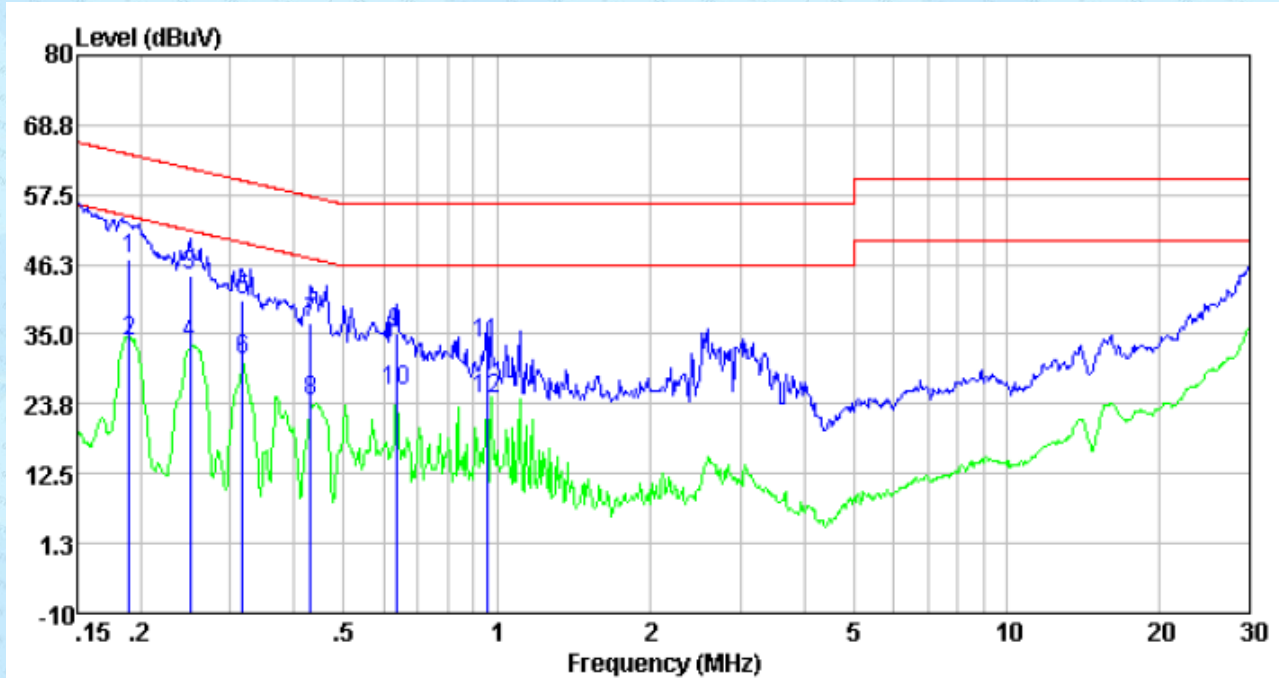
Freq	Reading level	LISN/ISN factor	Cable loss	Level	Limit level	Over limit	Remark
MHz	dBuV	dB	dB	dBuV	dBuV	dB	
0.32	28.59	9.98	0.01	38.58	59.80	-21.22	QP
0.32	20.49	9.98	0.01	30.48	49.80	-19.32	Average
0.50	38.28	9.96	0.01	48.25	56.00	-7.75	QP
0.50	29.45	9.96	0.01	39.42	46.00	-6.58	Average
0.91	29.14	9.96	0.03	39.13	56.00	-16.87	QP
0.91	18.29	9.96	0.03	28.28	46.00	-17.72	Average
1.26	27.80	9.92	0.03	37.75	56.00	-18.25	QP
1.26	18.47	9.92	0.03	28.42	46.00	-17.58	Average
1.66	26.01	9.87	0.04	35.92	56.00	-20.08	QP
1.66	17.16	9.87	0.04	27.07	46.00	-18.93	Average
2.53	23.95	9.78	0.05	33.78	56.00	-22.22	QP
2.53	17.30	9.78	0.05	27.13	46.00	-18.87	Average

Test mode:	Operation mode	Phase Polarity:	Neutral
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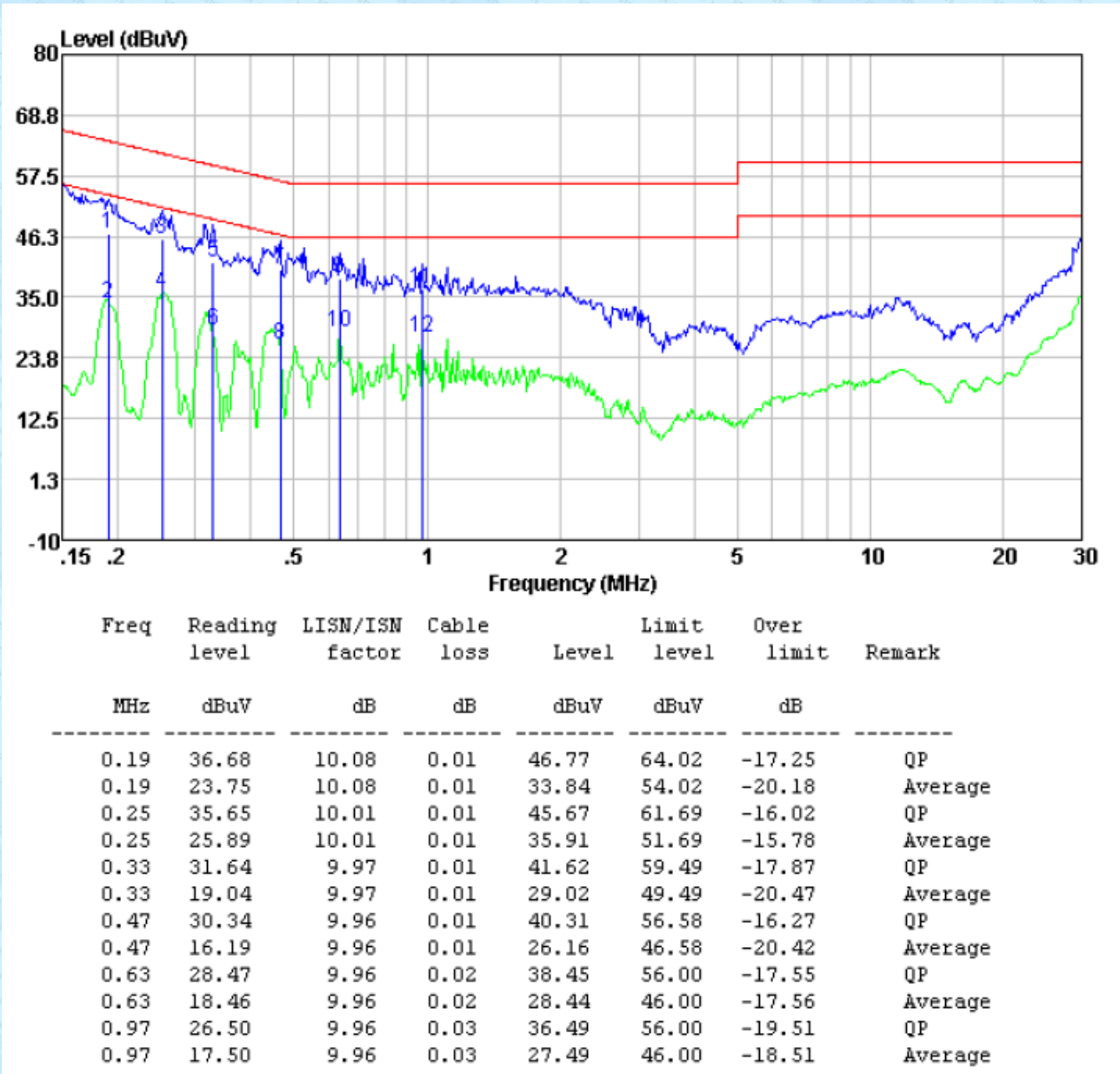
EOL.CE.DR24-150

Test mode:	Operation mode	Phase Polarity:	Line
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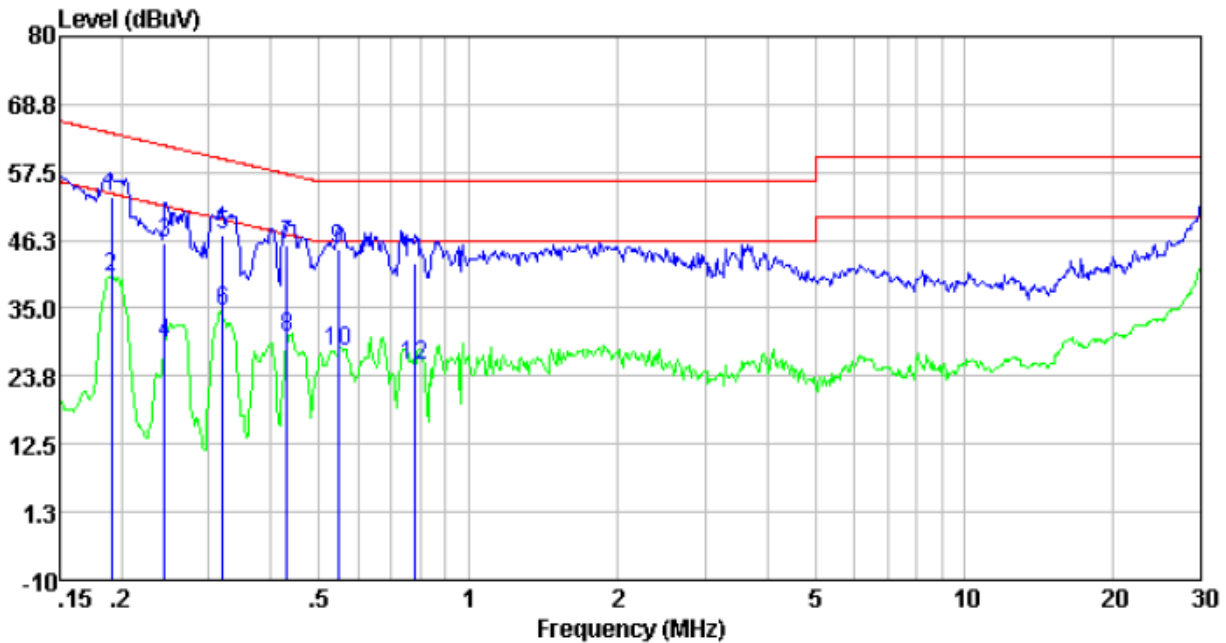
Freq	Reading level	LISN/ISN factor	Cable loss	Limit Level	Over limit	Remark
MHz	dBuV	dB	dB	dBuV	dB	
0.19	36.92	10.07	0.01	47.00	-17.06	QP
0.19	23.65	10.07	0.01	33.73	-20.33	Average
0.25	34.45	10.01	0.01	44.47	-17.31	QP
0.25	23.48	10.01	0.01	33.50	-18.28	Average
0.32	30.38	9.98	0.01	40.37	-19.43	QP
0.32	20.90	9.98	0.01	30.89	-18.91	Average
0.43	26.72	9.97	0.01	36.70	-20.54	QP
0.43	14.36	9.97	0.01	24.34	-22.90	Average
0.63	25.23	9.96	0.02	35.21	-20.79	QP
0.63	15.99	9.96	0.02	25.97	-20.03	Average
0.95	23.42	9.96	0.03	33.41	-22.59	QP
0.95	14.55	9.96	0.03	24.54	-21.46	Average

Test mode:	Operation mode	Phase Polarity:	Neutral
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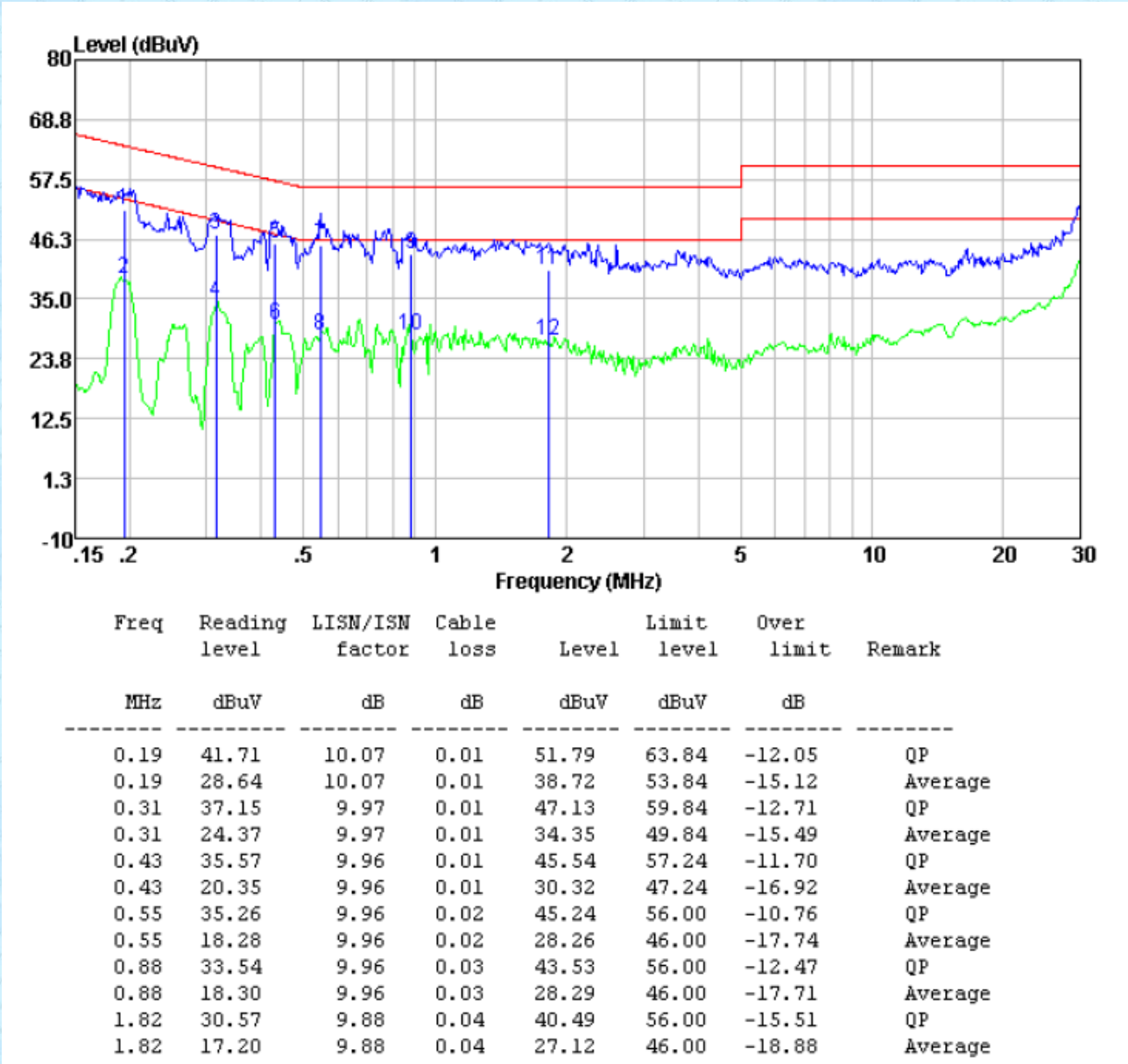
EOL.CE.DR24-60IP

Test mode:	Operation mode	Phase Polarity:	Line
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Freq	Reading level	LISN/ISN factor	Cable loss	Level	Limit level	Over limit	Remark
MHz	dBuV	dB	dB	dBuV	dBuV	dB	
0.19	43.32	10.06	0.01	53.39	64.02	-10.63	QP
0.19	30.10	10.06	0.01	40.17	54.02	-13.85	Average
0.24	35.81	10.02	0.01	45.84	61.95	-16.11	QP
0.24	19.00	10.02	0.01	29.03	51.95	-22.92	Average
0.32	37.17	9.98	0.01	47.16	59.71	-12.55	QP
0.32	24.40	9.98	0.01	34.39	49.71	-15.32	Average
0.43	35.39	9.97	0.01	45.37	57.24	-11.87	QP
0.43	20.07	9.97	0.01	30.05	47.24	-17.19	Average
0.55	34.75	9.96	0.02	44.73	56.00	-11.27	QP
0.55	17.82	9.96	0.02	27.80	46.00	-18.20	Average
0.78	32.50	9.96	0.02	42.48	56.00	-13.52	QP
0.78	15.47	9.96	0.02	25.45	46.00	-20.55	Average

Test mode:	Operation mode	Phase Polarity:	Neutral
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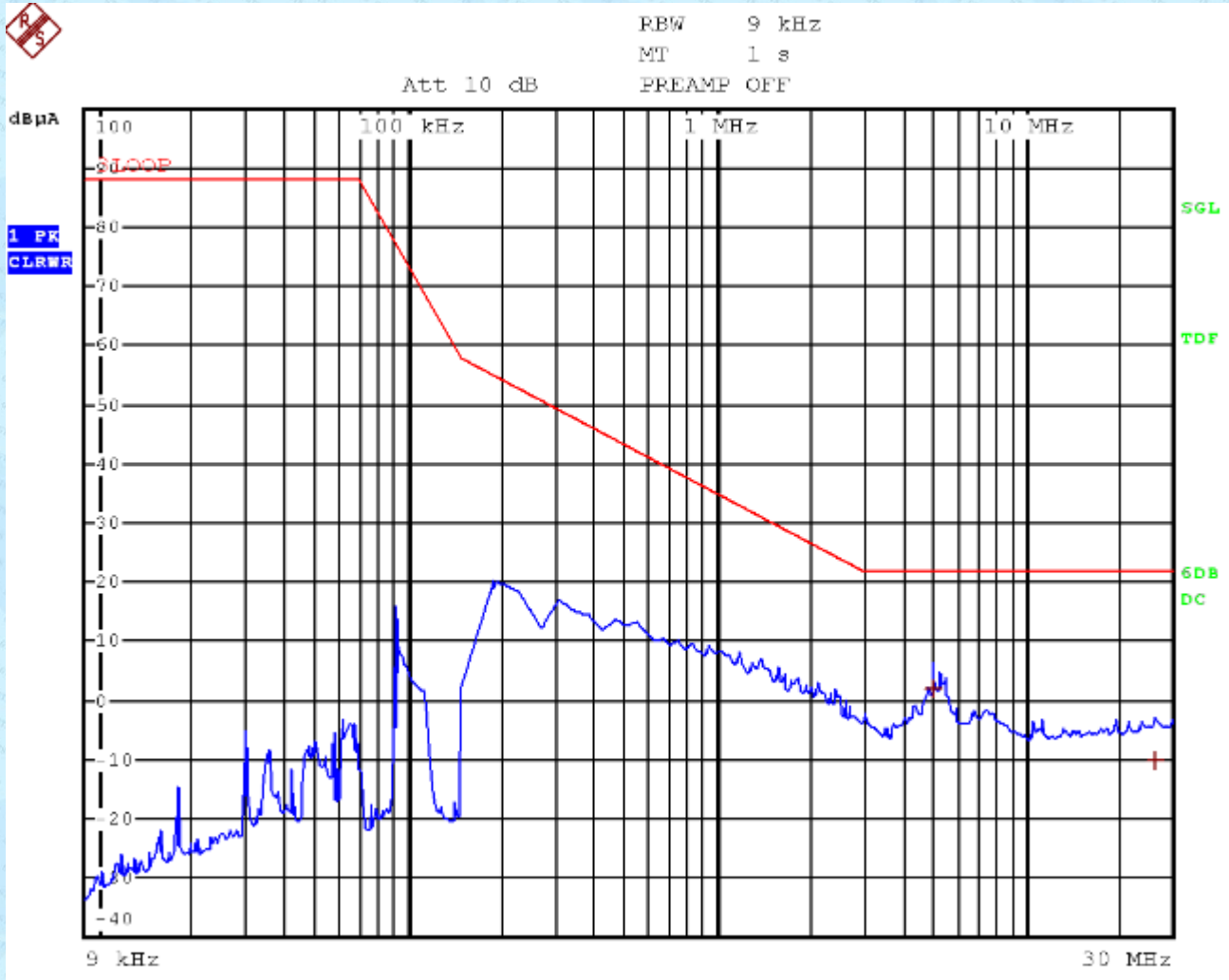
7.3 Radiated Electromagnetic Disturbance (9kHz-30MHz)

Test Requirement:	AS CISPR 15					
Test Method:	AS CISPR 15					
Test Frequency Range:	9kHz to 30MHz					
Class / Severity:	Table 3a of AS CISPR15					
Limit:	Frequency range (MHz)		Limits for loop diameter dB(μA) _a			
			2m			
	0.009-0.070		88			
	0.070-0.150		88 to 58*			
	0.15-3.0		58 to 22*			
	3.0-30.		22			
*Decreasing linearly with the logarithm of the frequency. For electrodeless lamps and luminaires, the limit in the frequency range of 2,2 MHz to 3,0 MHz is 58 dB(μA) for 2 m, 51dB(μA) for 3 m and 45 dB(μA) for 4 m loop diameter.						
Detector:	Peak for pre-scan 200Hz resolution bandwidth between 9kHz & 150kHz 9kHz resolution bandwidth between 150kHz & 30MHz Quasi-peak scan if maximised peak with 6dB of quasi-peak limit					
Test Instruments:	Temp.:	25 °C	Humid.:	50%	Press.:	1 012mbar
Measurement Record:	Uncertainty: 3.26dB					
Test Instruments:	Refer to section 6 for details					
Test mode:	Refer to section 5.2 for details. Only show the worst case.					
Test results:	Pass					
Test procedure	An initial pre-scan was performed in the 2m loop antenna using the spectrum analyser in peak detection mode. The EUT was measured for X(A), Y(B), Z(C) polarities. No further quasi-peak measurements were performed since no peak emissions from the EUT were detected within 6dB of the limit for 2m diameter loop antenna.					

Measurement Data

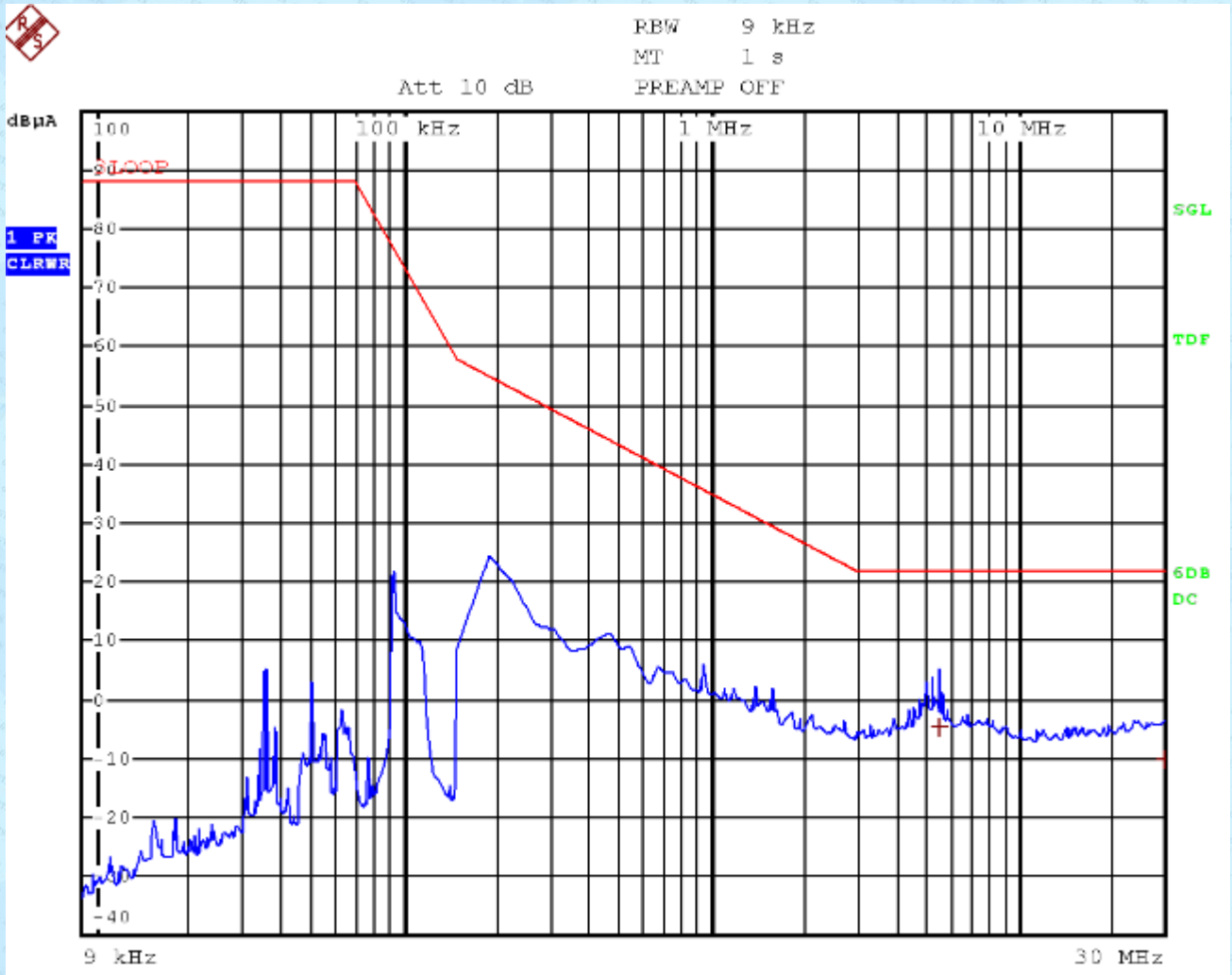
EOL.CE.DR24-36

X:



TRACE	FREQUENCY	LEVEL dBμA	DELTA LIMIT dB
1 Quasi Peak	5.03 MHz	2.02	-19.97
1 Quasi Peak	26.11 MHz	-10.19	-32.19

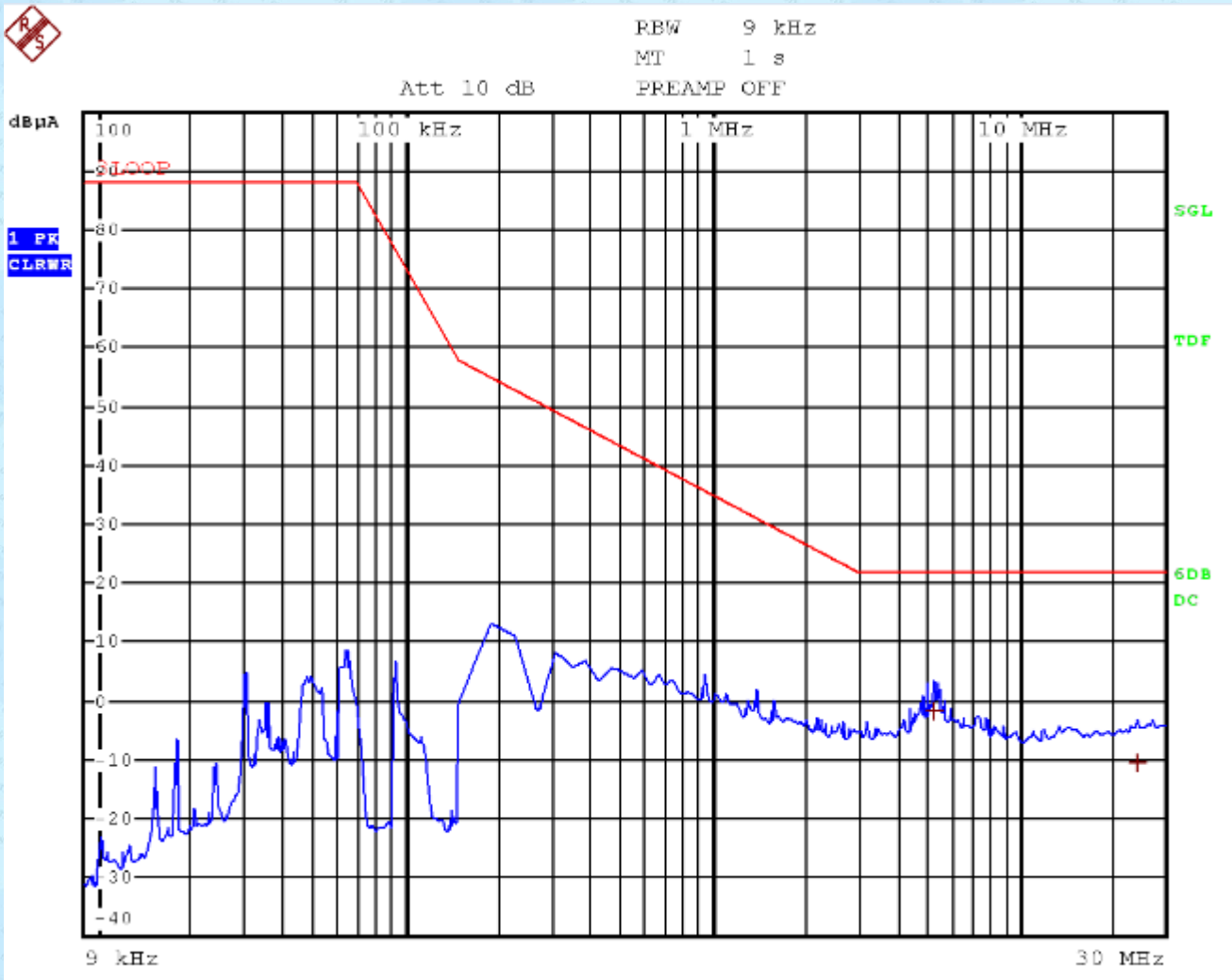
Y:



Trace1: 3100P
Trace2: ---
Trace3: ---

TRACE	FREQUENCY	LEVEL dBµA	DELTA LIMIT dB
1 Quasi Peak	5.51 MHz	-4.47	-26.47
1 Quasi Peak	29.67 MHz	-10.13	-32.13

Z:

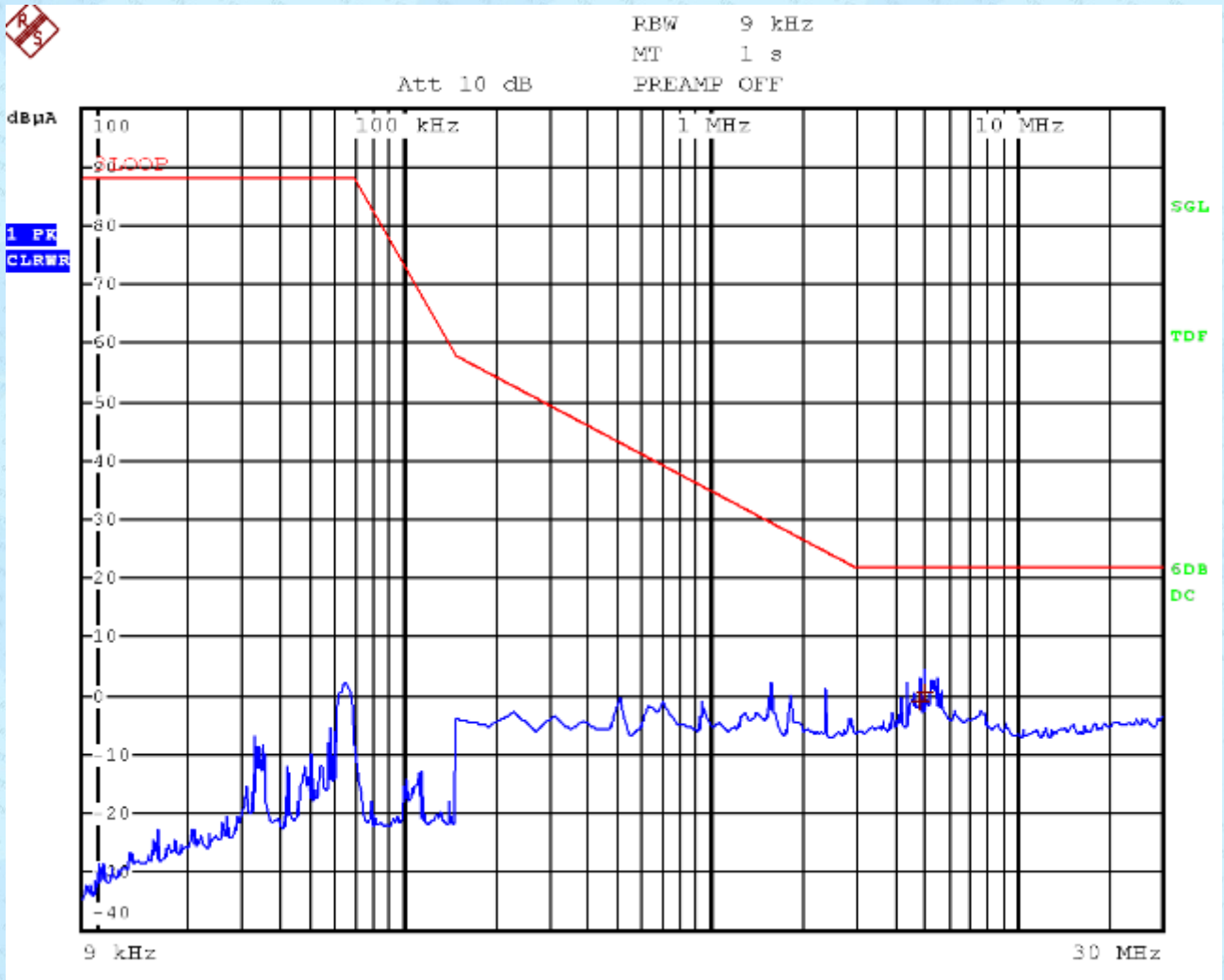


Trace1: 3LOOP
Trace2: ---
Trace3: ---

TRACE	FREQUENCY	LEVEL dBµA	DELTA LIMIT dB
1 Quasi Peak	5.27 MHz	-1.42	-23.42
1 Quasi Peak	24.11 MHz	-10.57	-32.57

EOL.CE.DR24-60

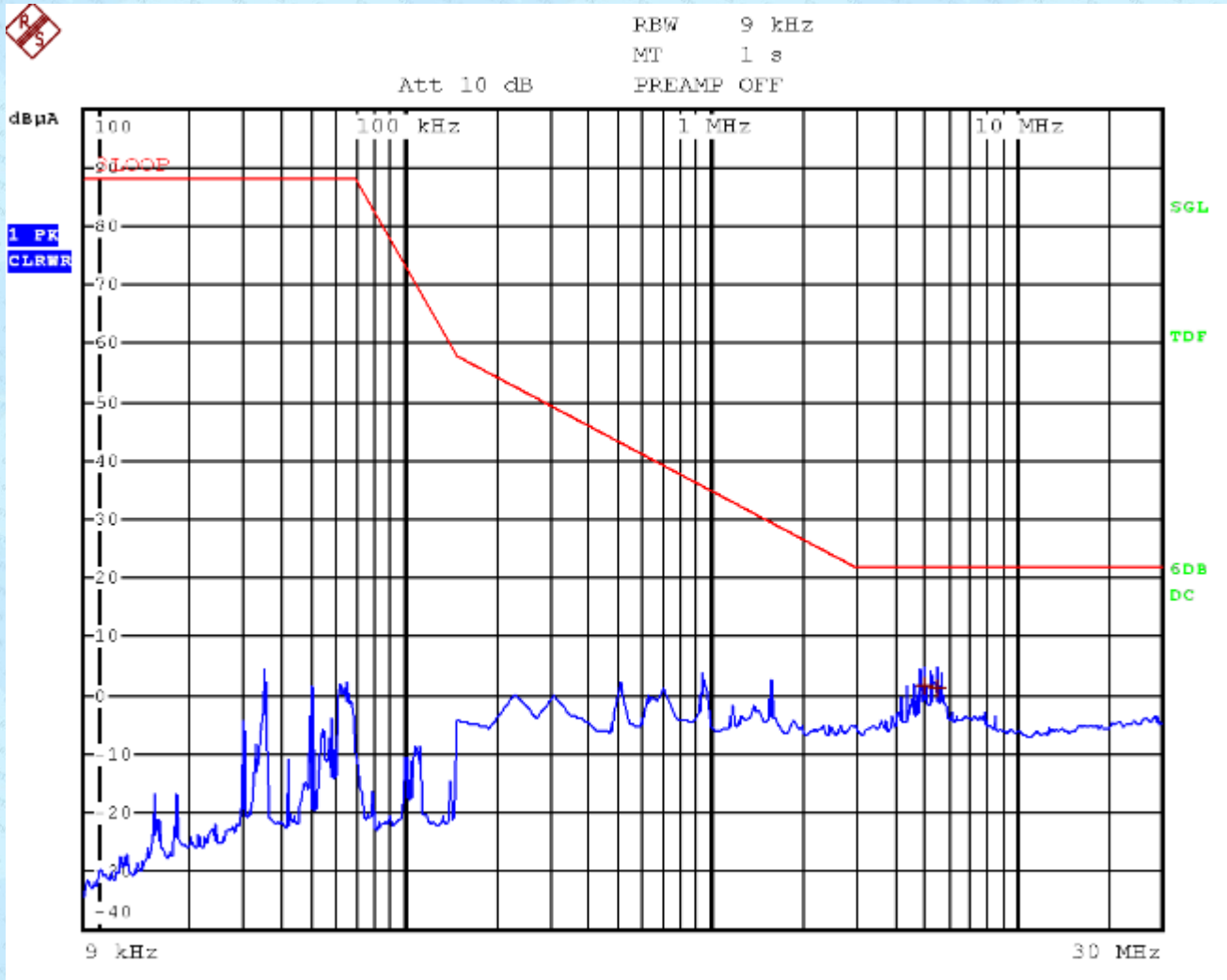
X:



Trace1: 3LOOP
Trace2: ---
Trace3: ---

TRACE	FREQUENCY	LEVEL dBµA	DELTA LIMIT dB
1 Quasi Peak	4.83 MHz	-0.87	-22.87
1 Quasi Peak	5.03 MHz	0.62	-21.37

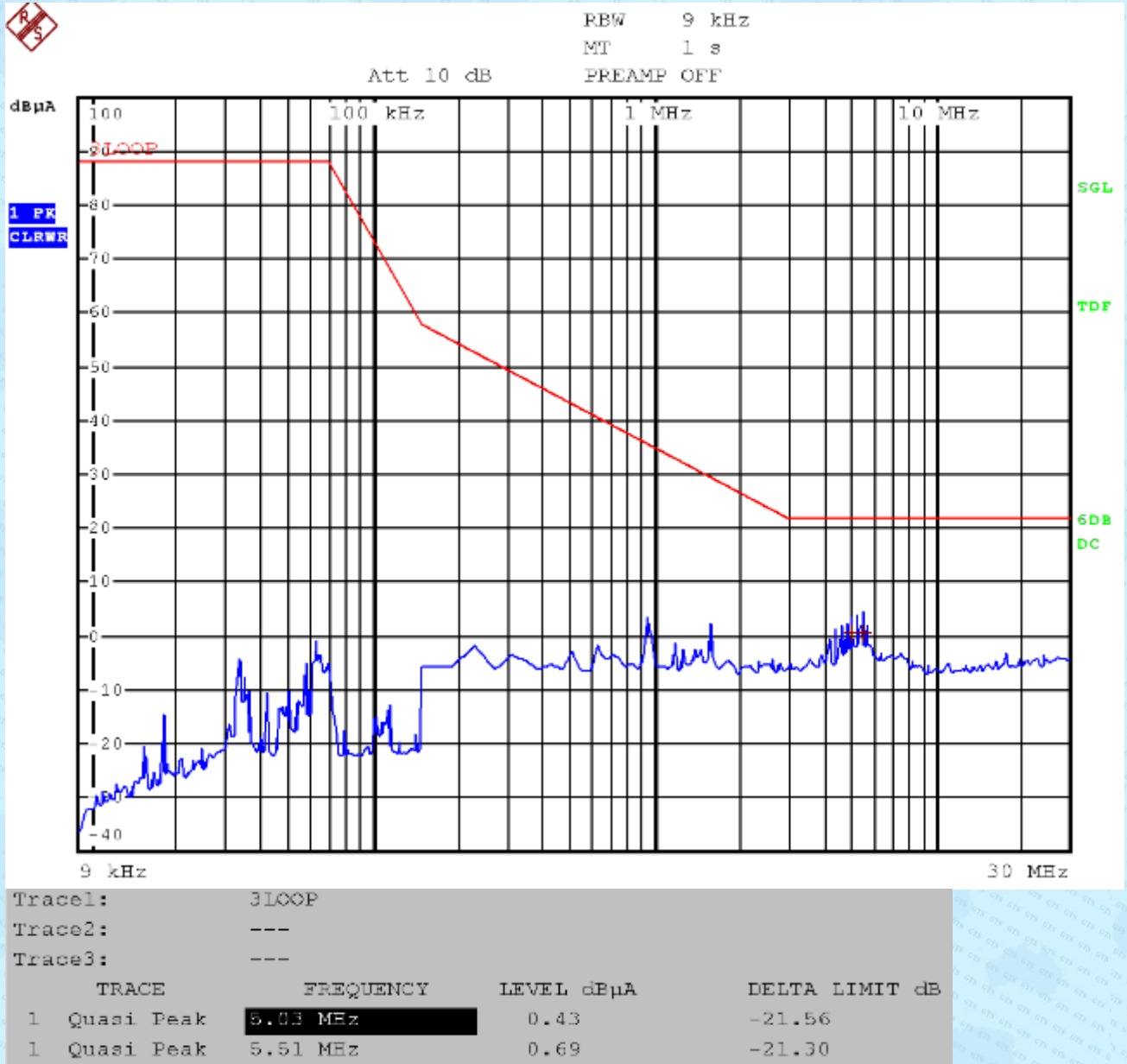
Y:



Trace1: 3LOOP
Trace2: ---
Trace3: ---

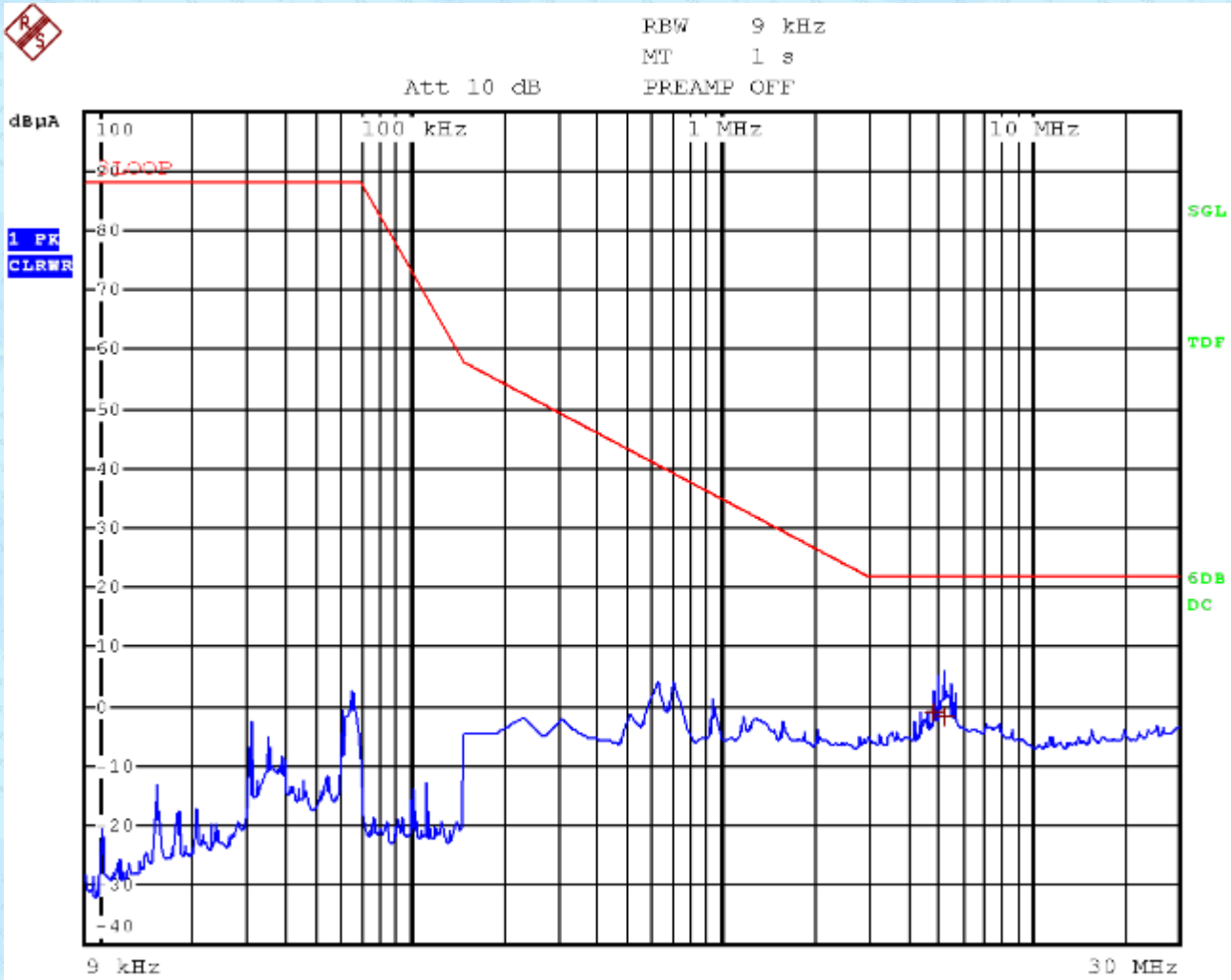
TRACE	FREQUENCY	LEVEL dBμA	DELTA LIMIT dB
1 Quasi Peak	5.53 MHz	1.84	-20.15
1 Quasi Peak	5.51 MHz	1.27	-20.72

Z:



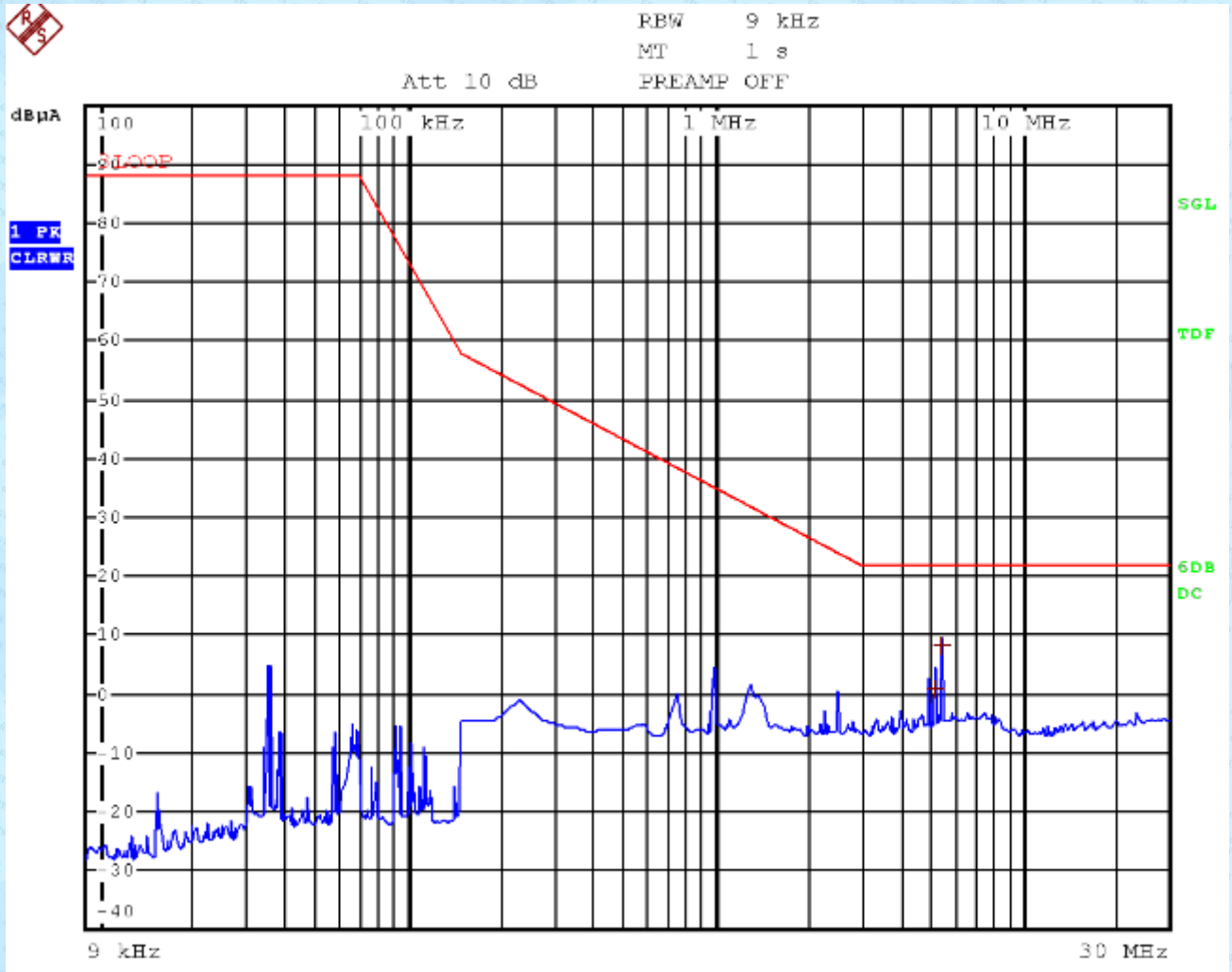
EOL.CE.DR24-100

X:



TRACE	FREQUENCY	LEVEL dBµA	DELTA LIMIT dB
1 Quasi Peak	4.83 MHz	-0.76	-22.76
1 Quasi Peak	5.23 MHz	-1.42	-23.42

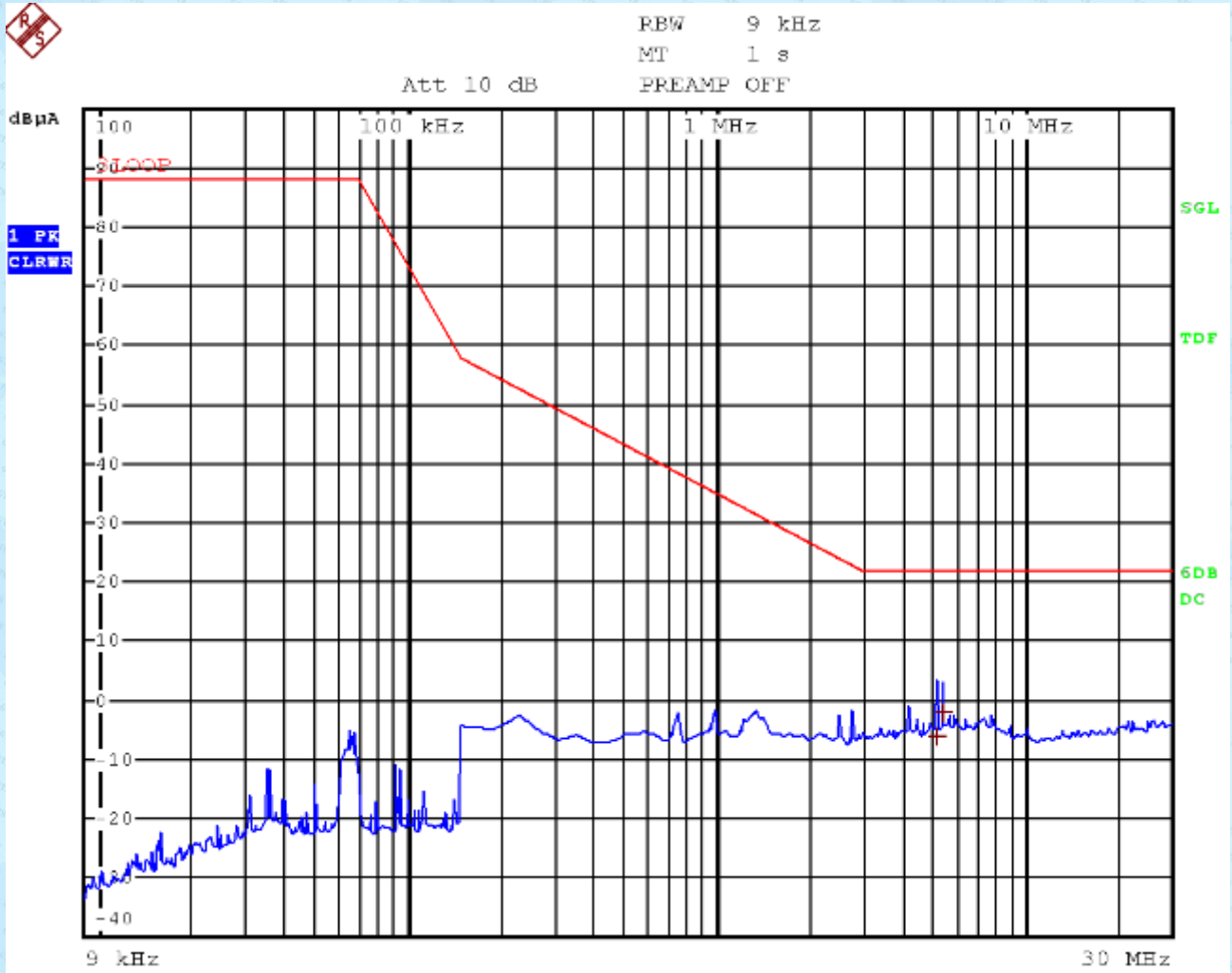
Y:



Trace1: 3LOOP
Trace2: ---
Trace3: ---

TRACE	FREQUENCY	LEVEL dBµA	DELTA LIMIT dB
1 Quasi Peak	5.19 MHz	0.84	-21.15
1 Quasi Peak	5.43 MHz	8.46	-13.53

Z:

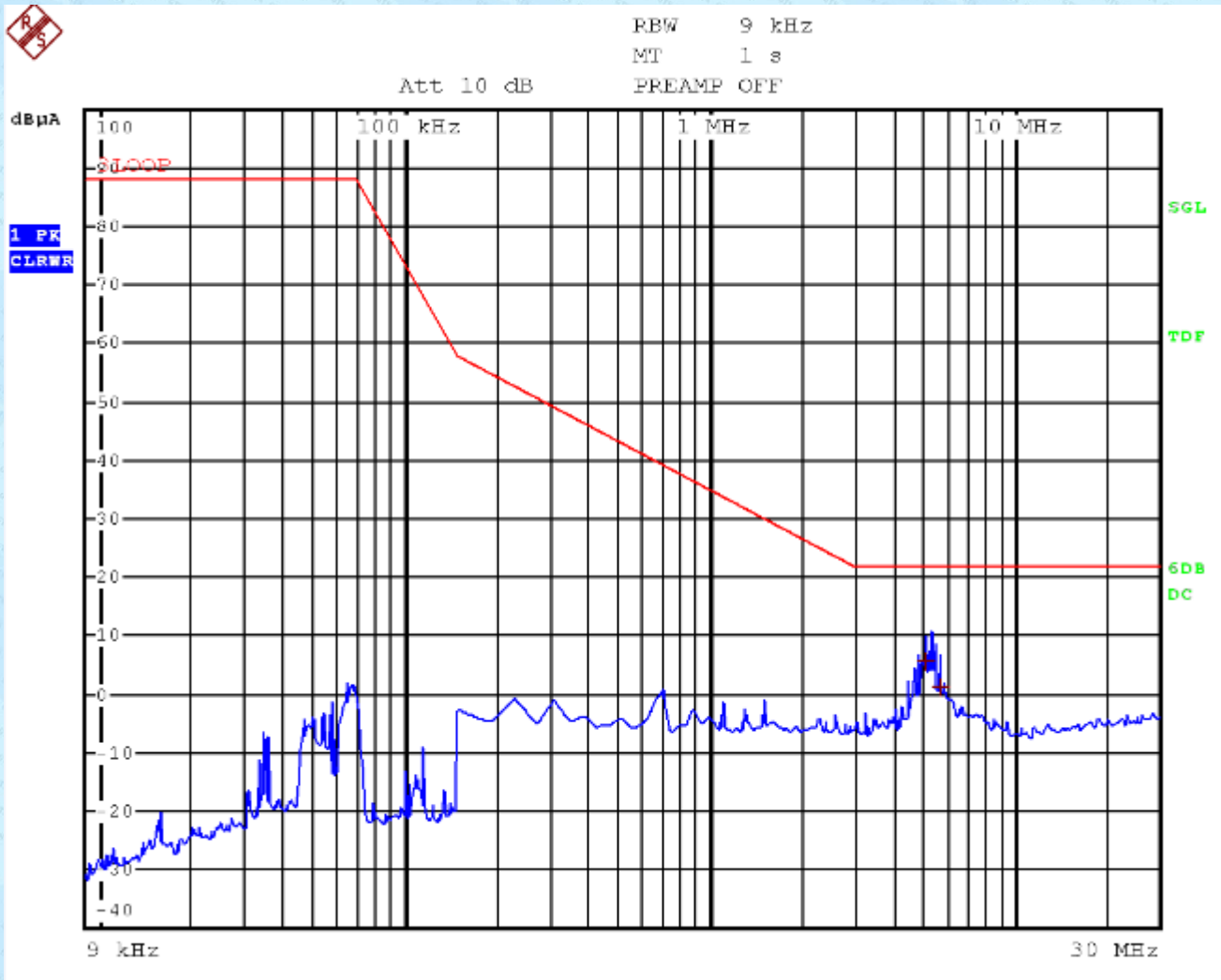


Trace1: 3LOOP
Trace2: ---
Trace3: ---

TRACE	FREQUENCY	LEVEL dBμA	DELTA LIMIT dB
1 Quasi Peak	5.19 MHz	-5.91	-27.91
1 Quasi Peak	5.43 MHz	-2.09	-24.09

EOL.CE.DR24-150

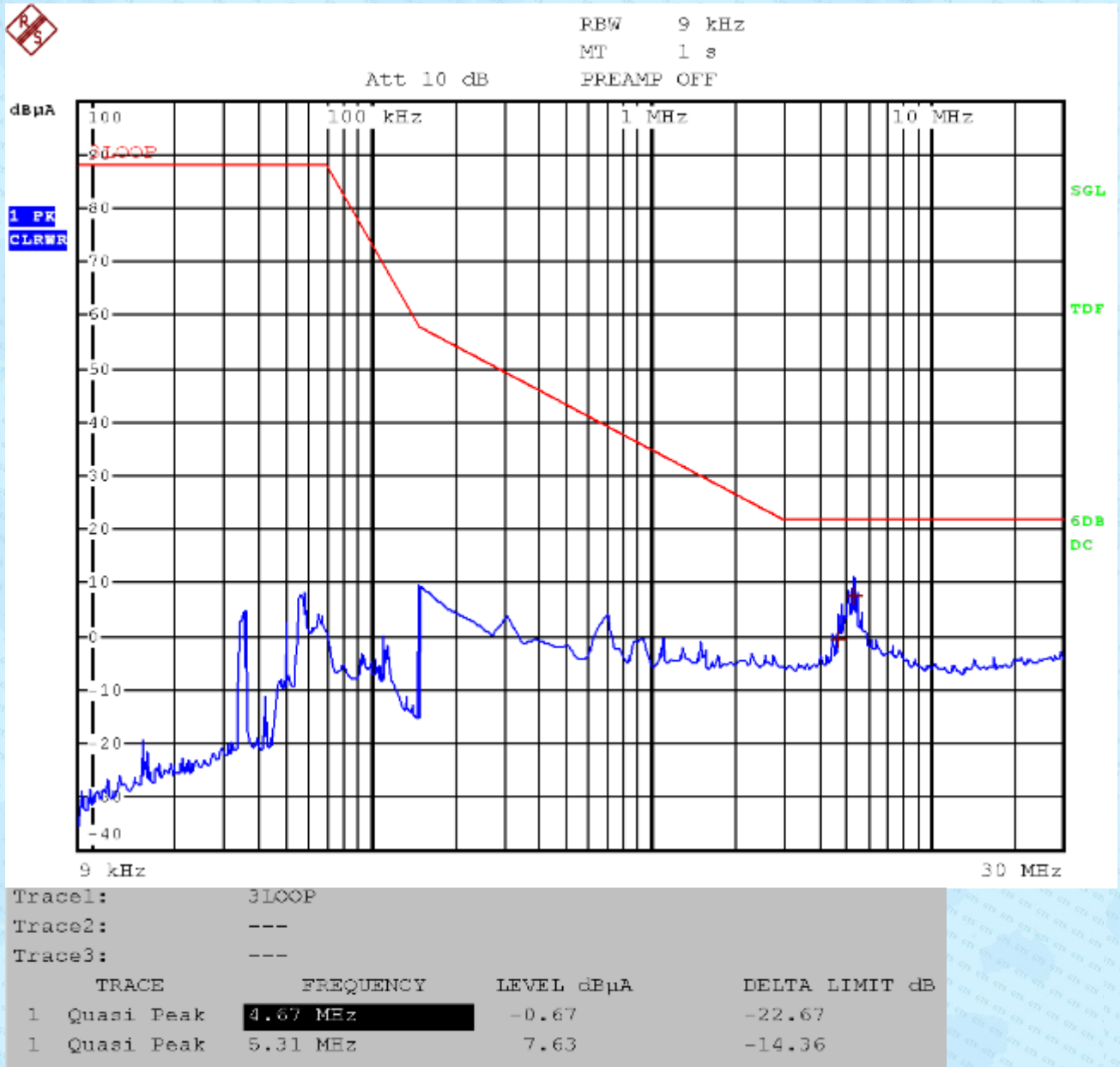
X:



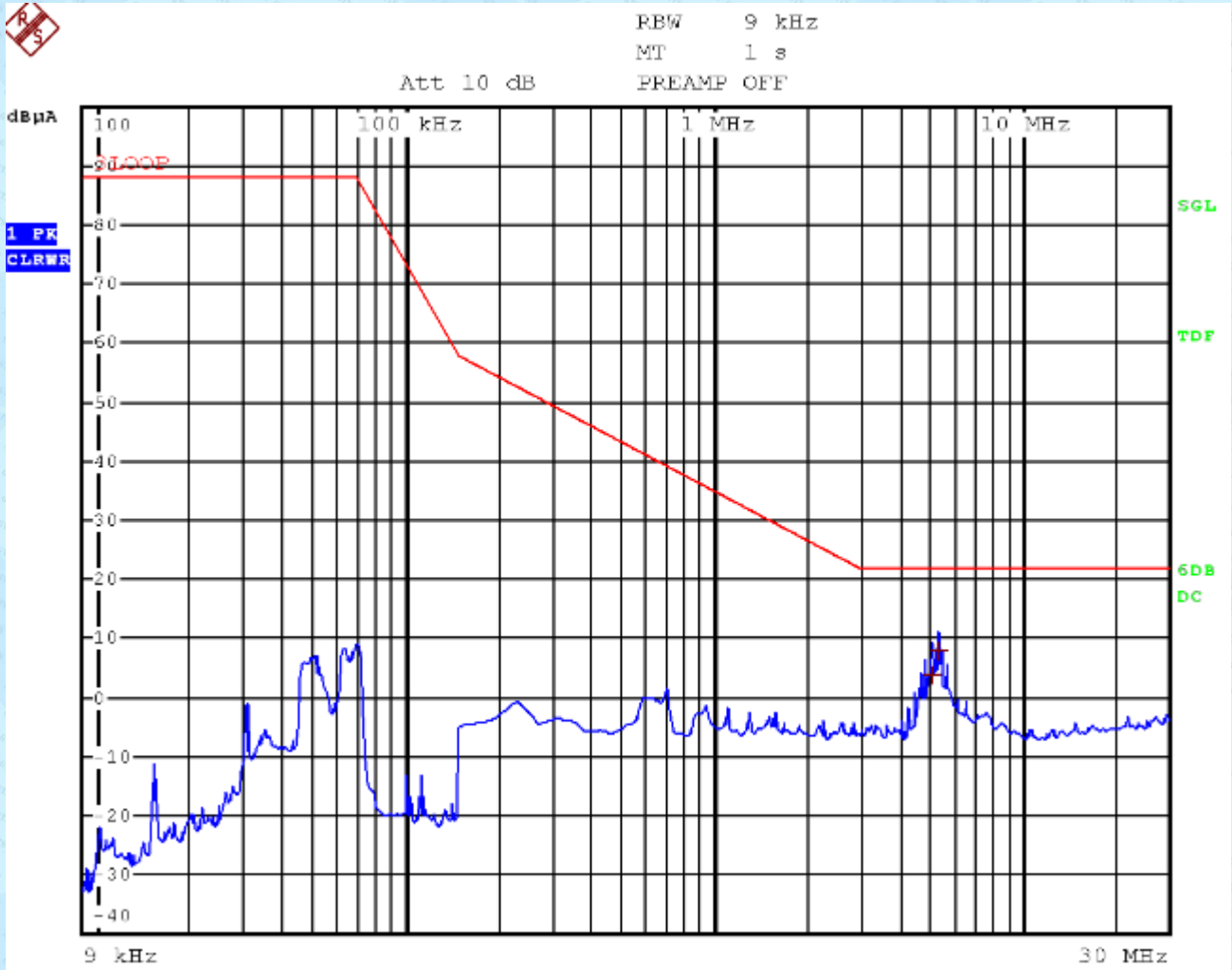
Trace1: 3LOOP
Trace2: ---
Trace3: ---

TRACE	FREQUENCY	LEVEL dBμA	DELTA LIMIT dB
1 Quasi Peak	5.11 MHz	5.60	-16.39
1 Quasi Peak	5.71 MHz	1.49	-20.50

Y:



Z:

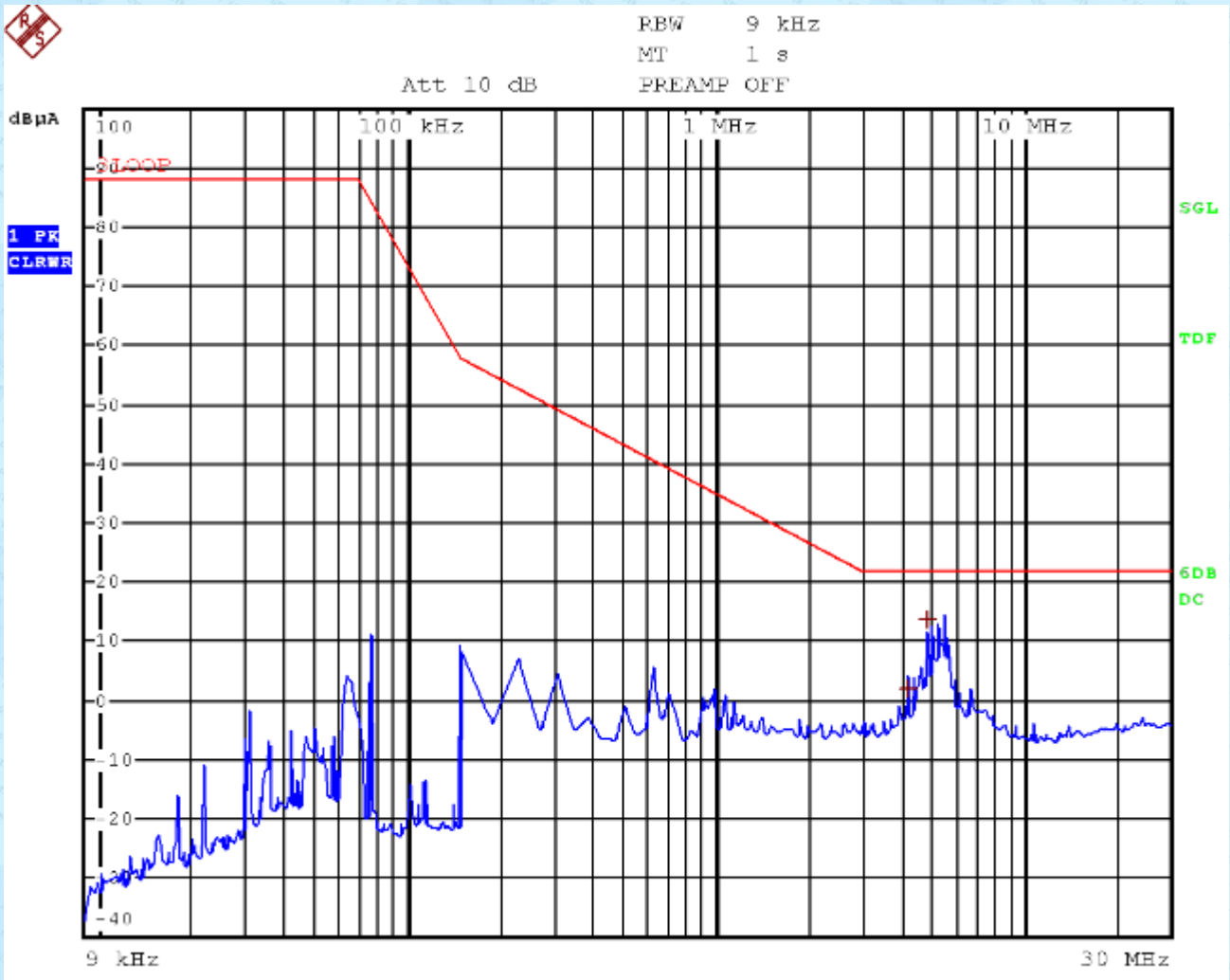


Trace1: 3100P
Trace2: ---
Trace3: ---

TRACE	FREQUENCY	LEVEL dBμA	DELTA LIMIT dB
1 Quasi Peak	5.07 MHz	4.04	-17.95
1 Quasi Peak	5.31 MHz	7.83	-14.16

EOL.CE.DR24-60IP

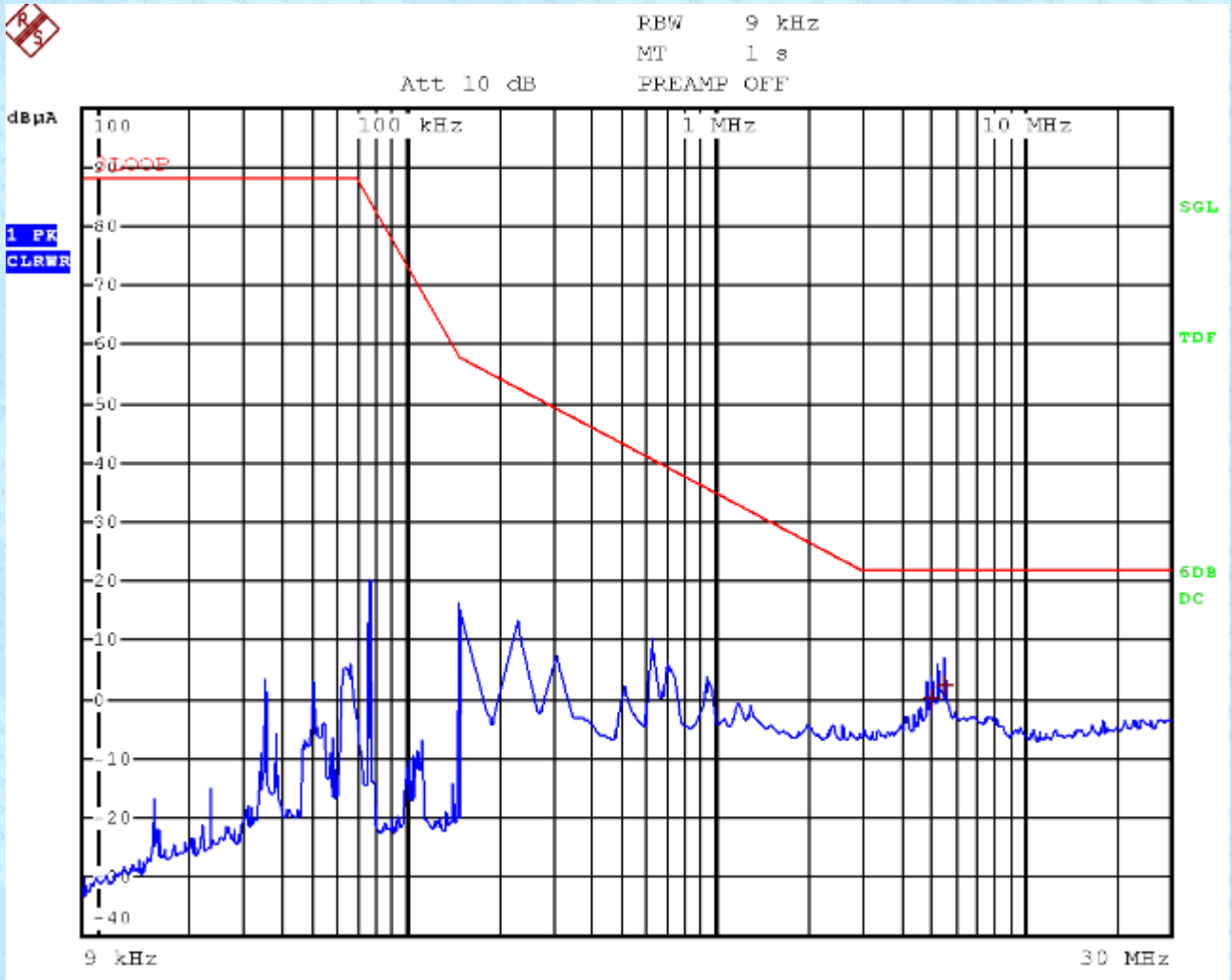
X:



Trace1: 3LOOP
Trace2: ---
Trace3: ---

TRACE	FREQUENCY	LEVEL dBµA	DELTA LIMIT dB
1 Quasi Peak	4.15 MHz	1.96	-20.03
1 Quasi Peak	4.83 MHz	13.93	-8.06

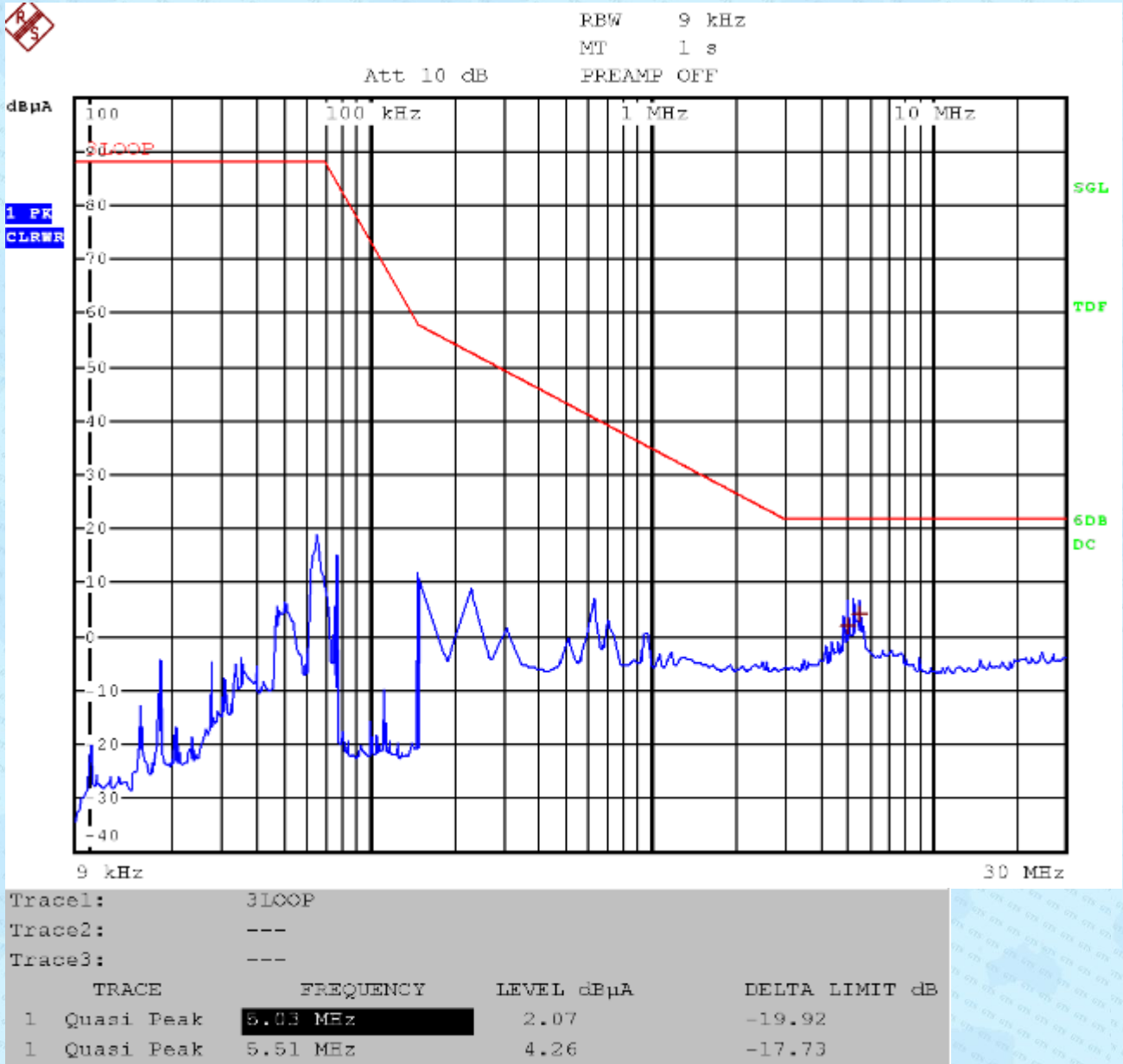
Y:



Trace1: 3100P
Trace2: ---
Trace3: ---

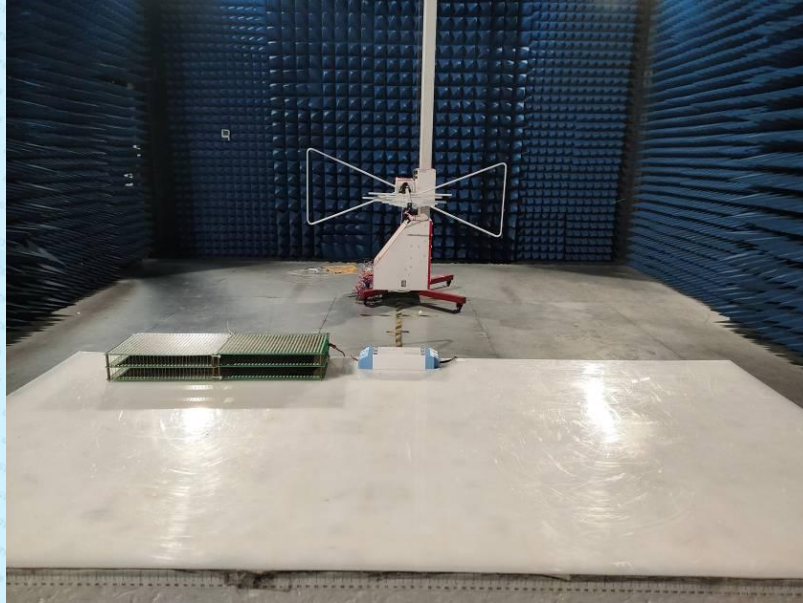
TRACE	FREQUENCY	LEVEL dBμA	DELTA LIMIT dB
1 Quasi Peak	5.03 MHz	0.24	-21.75
1 Quasi Peak	5.51 MHz	2.35	-19.64

Z:

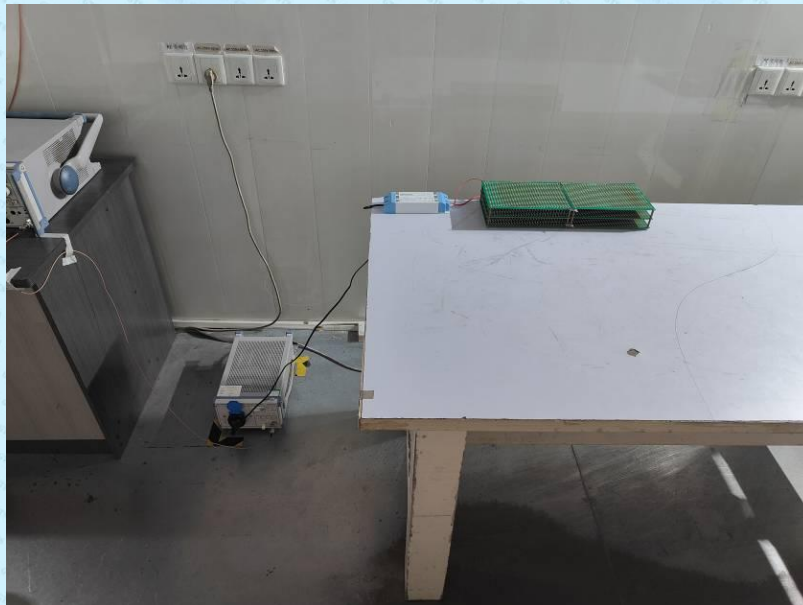


8 Test Setup Photo

Radiated Emission



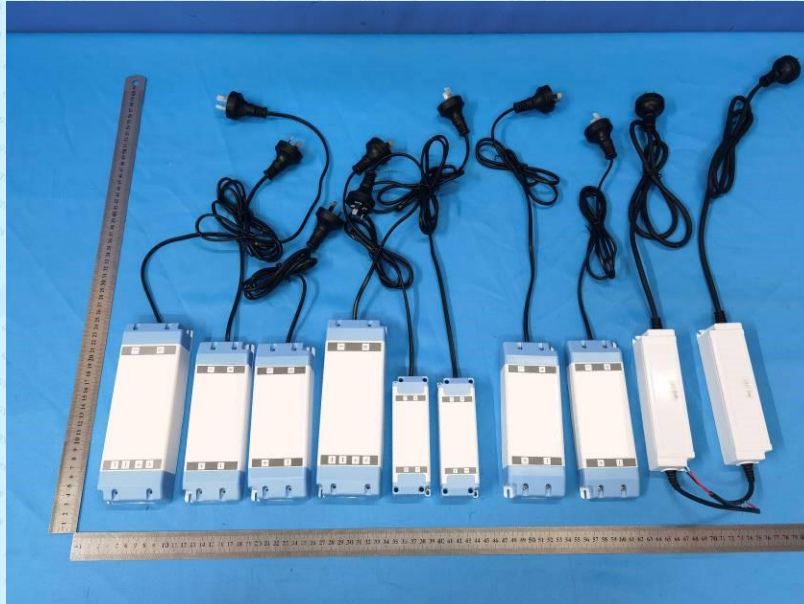
Conducted Emission

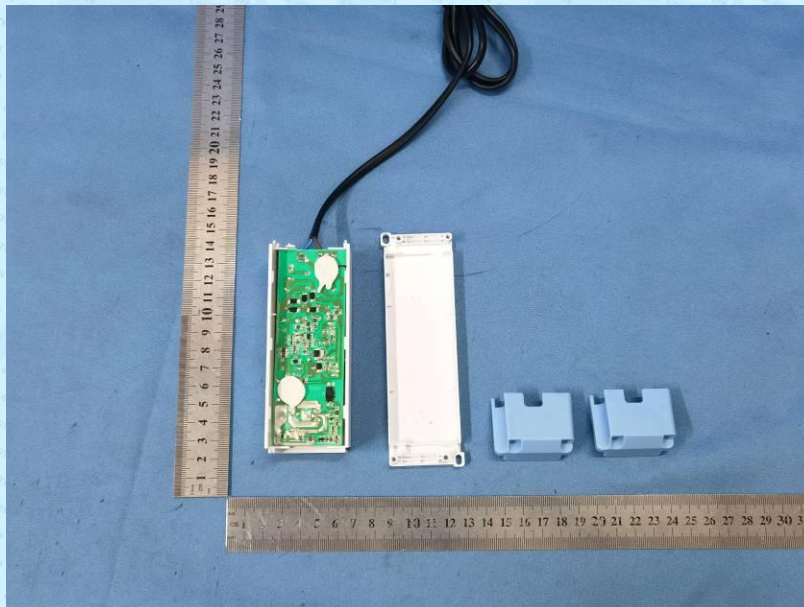
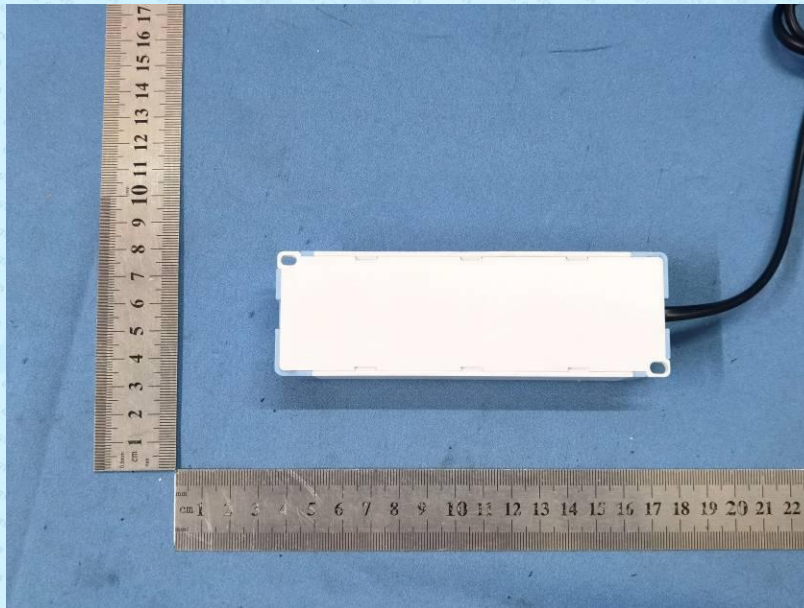


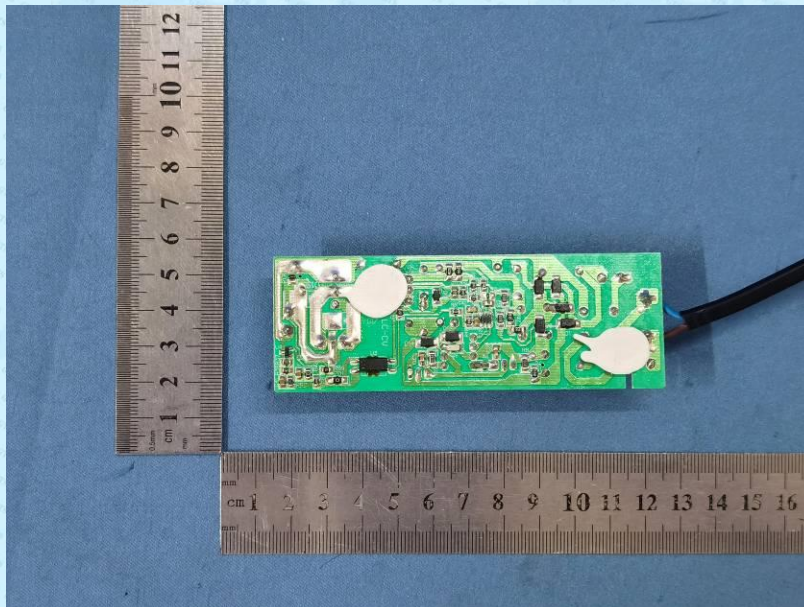
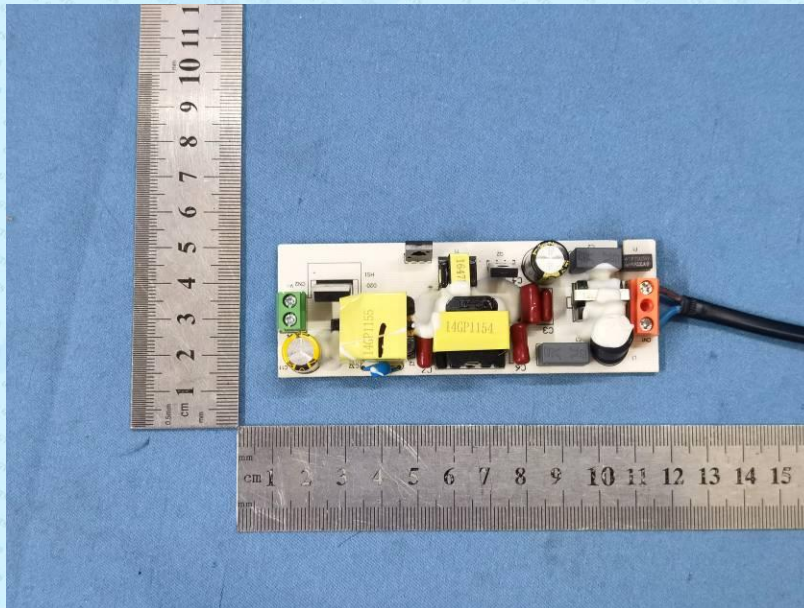
Radiated electromagnetic disturbances



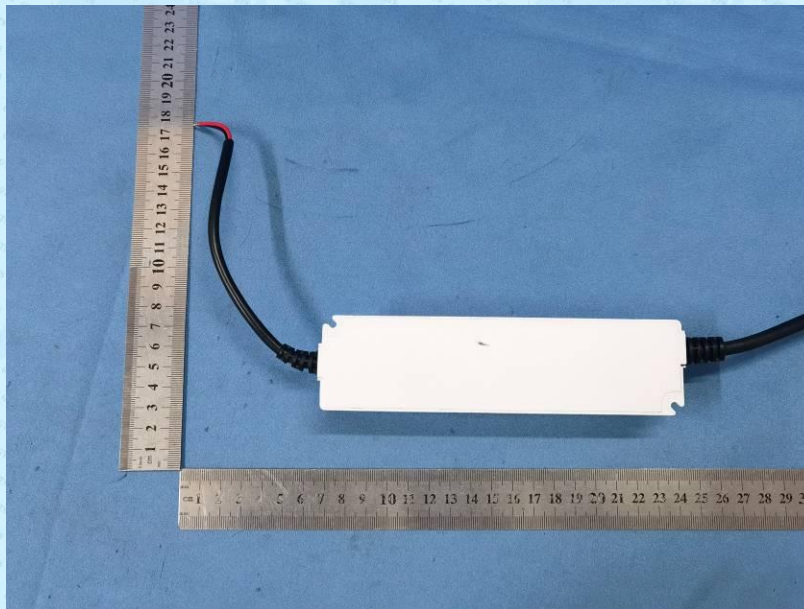
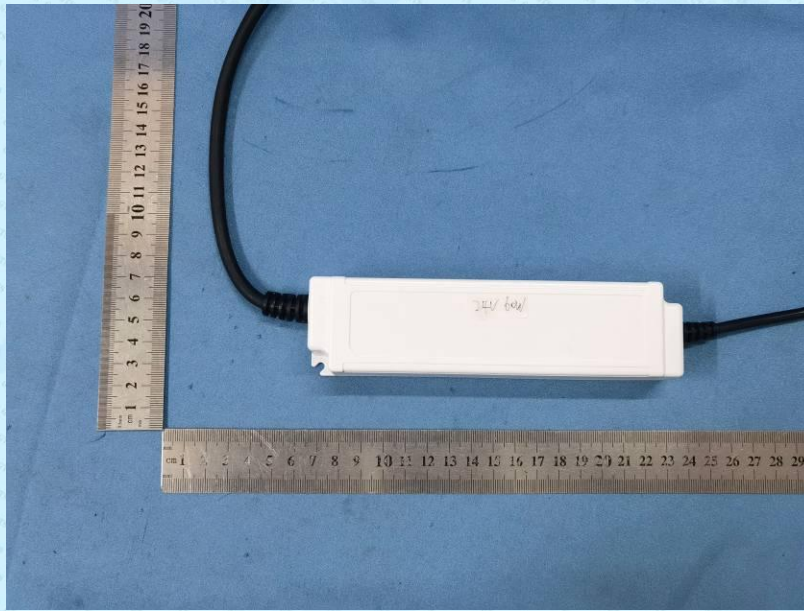
9 EUT Constructional Details

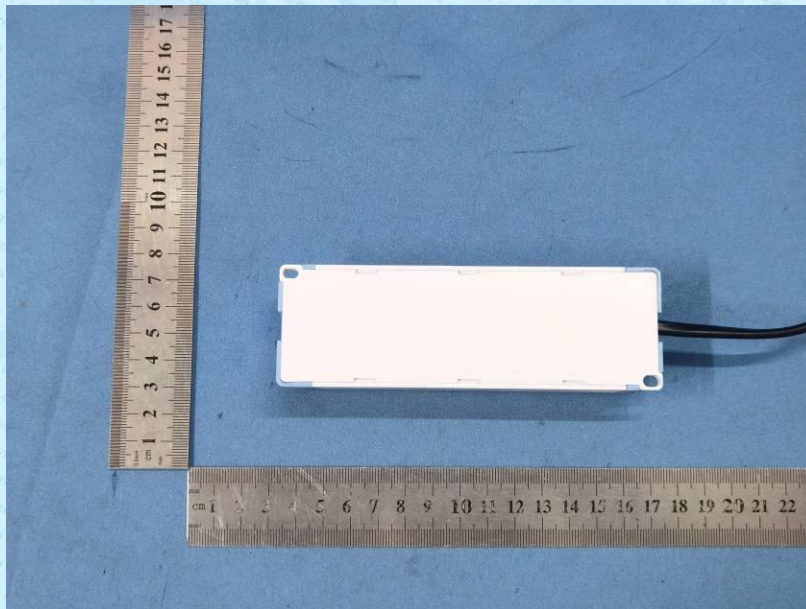
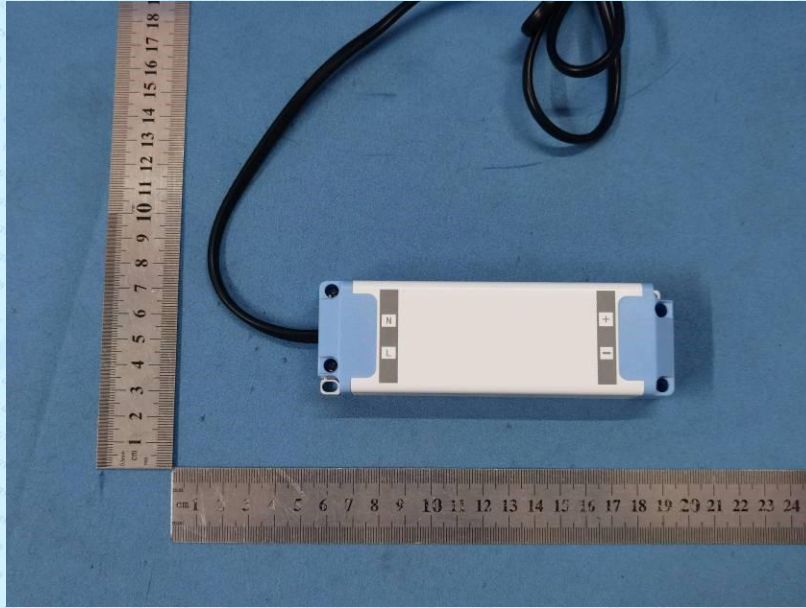


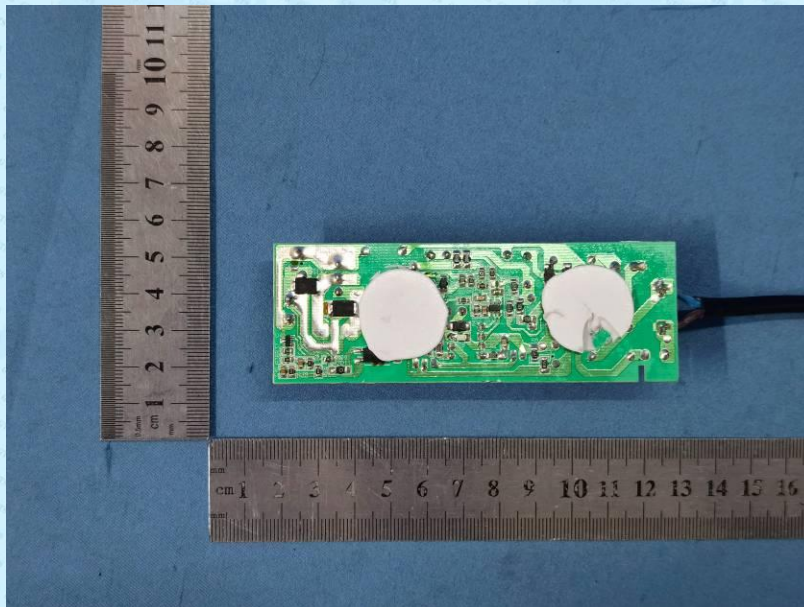
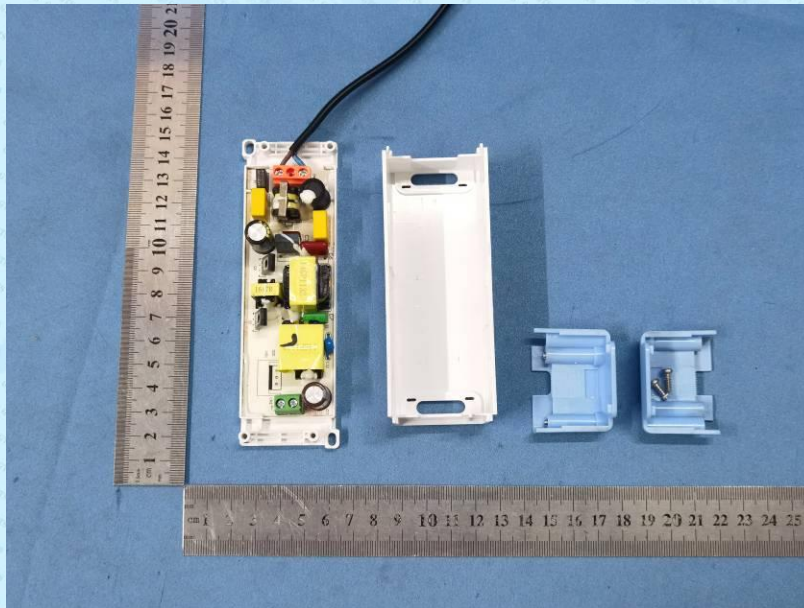


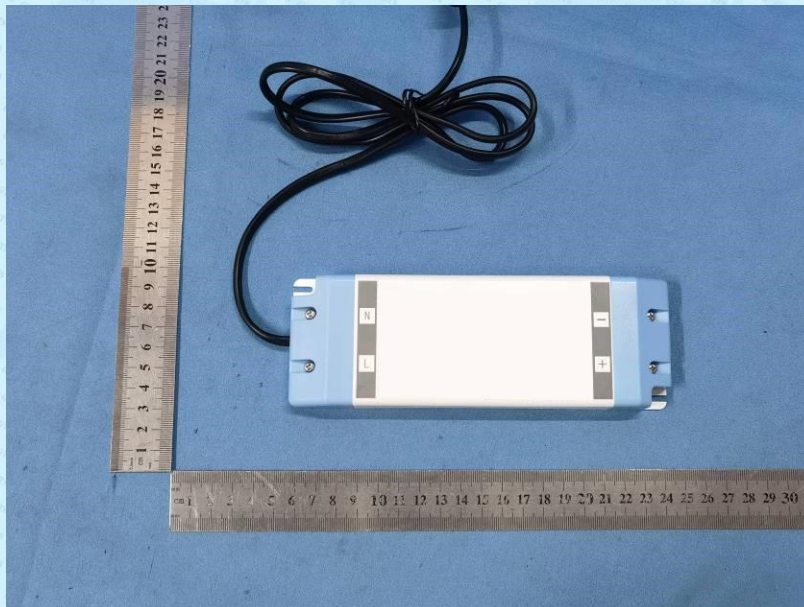
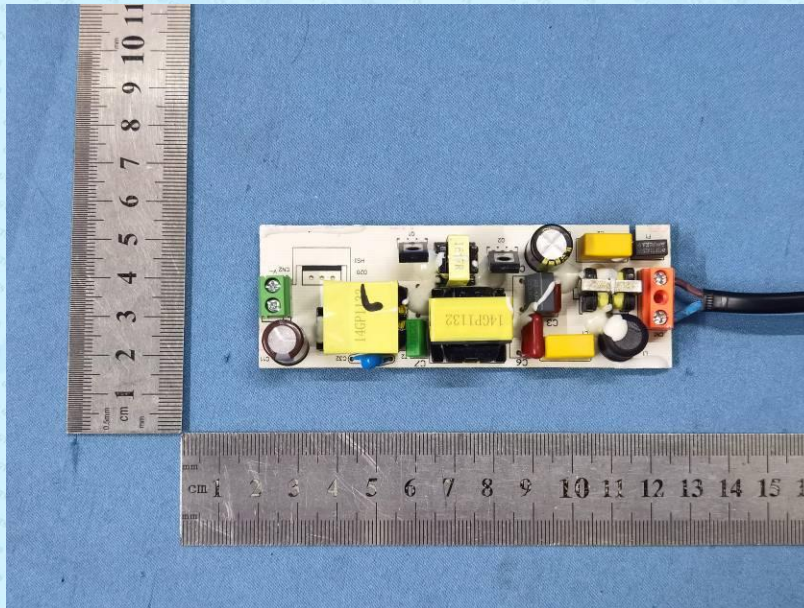


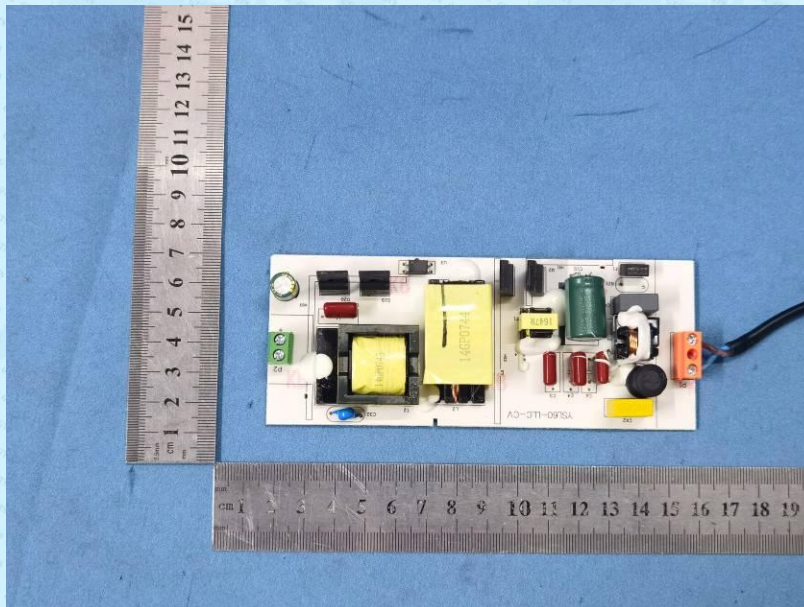


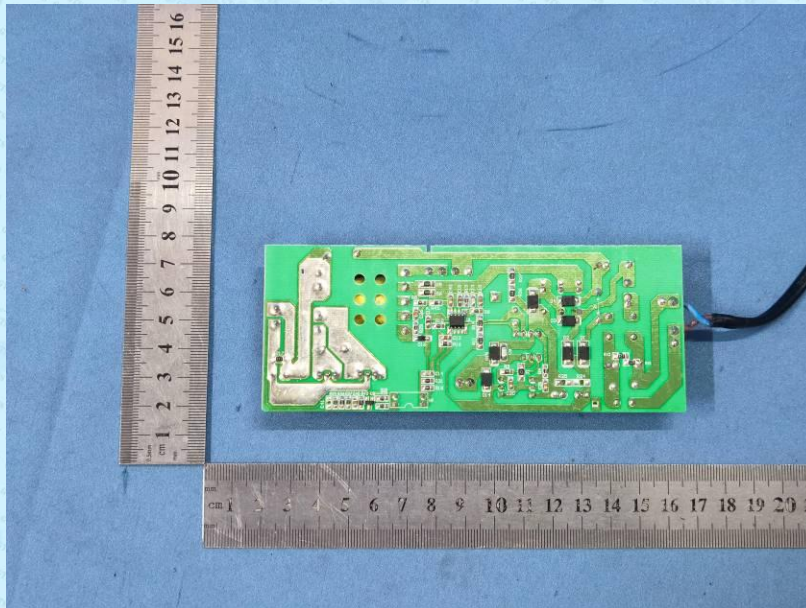




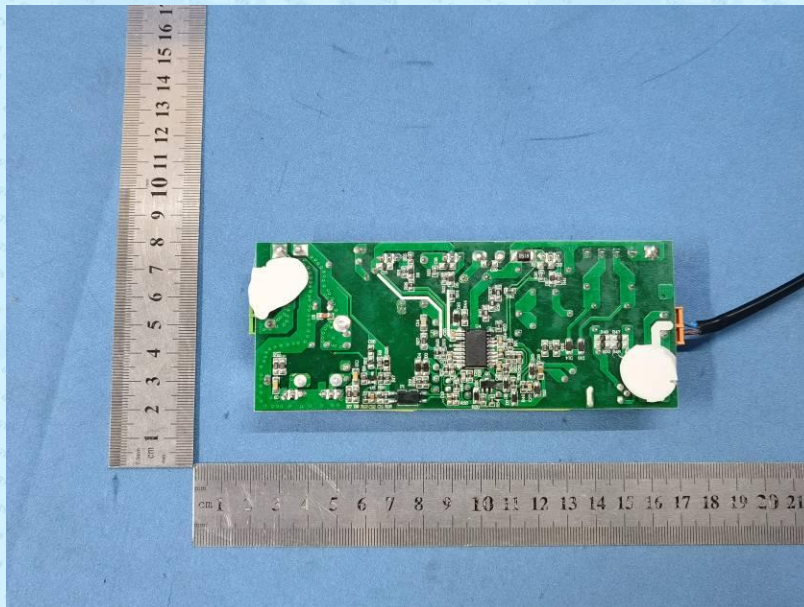
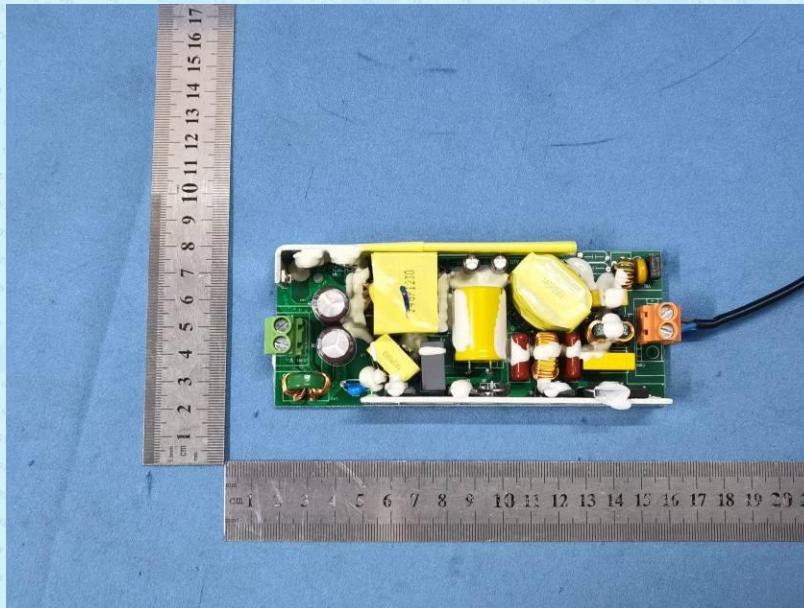


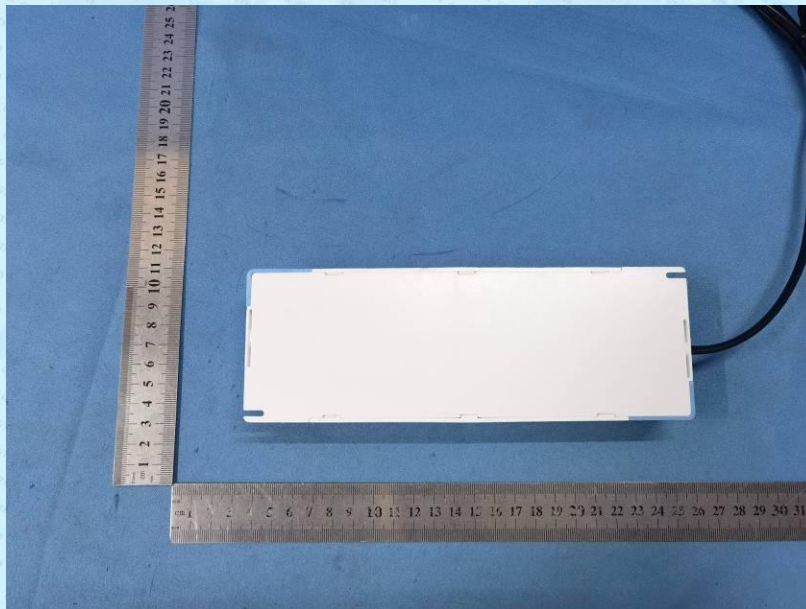
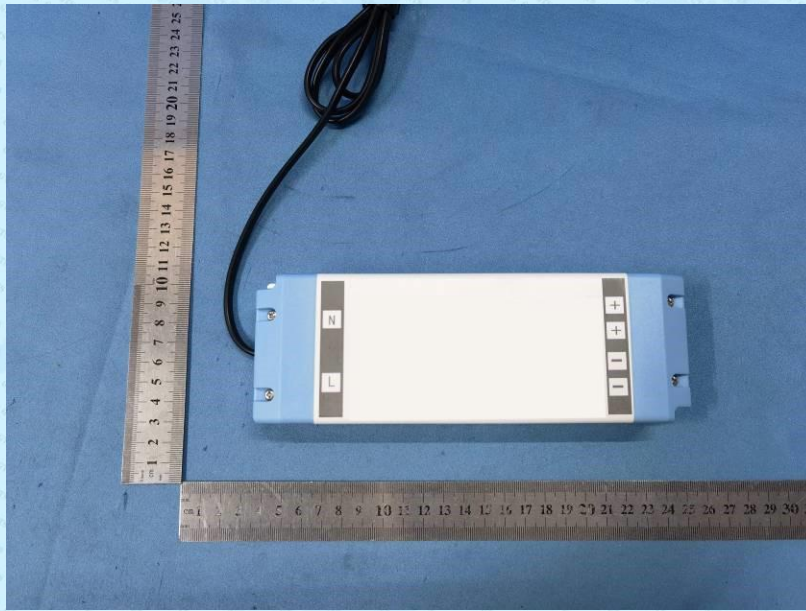


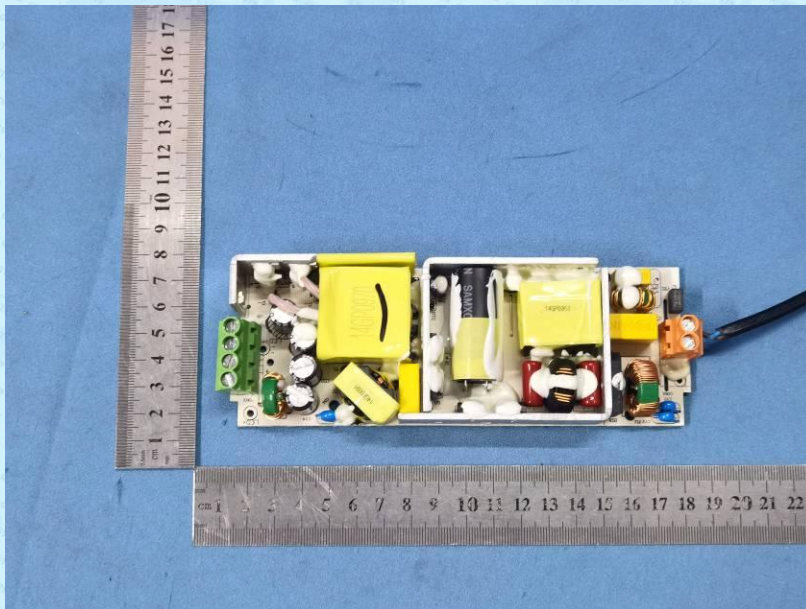


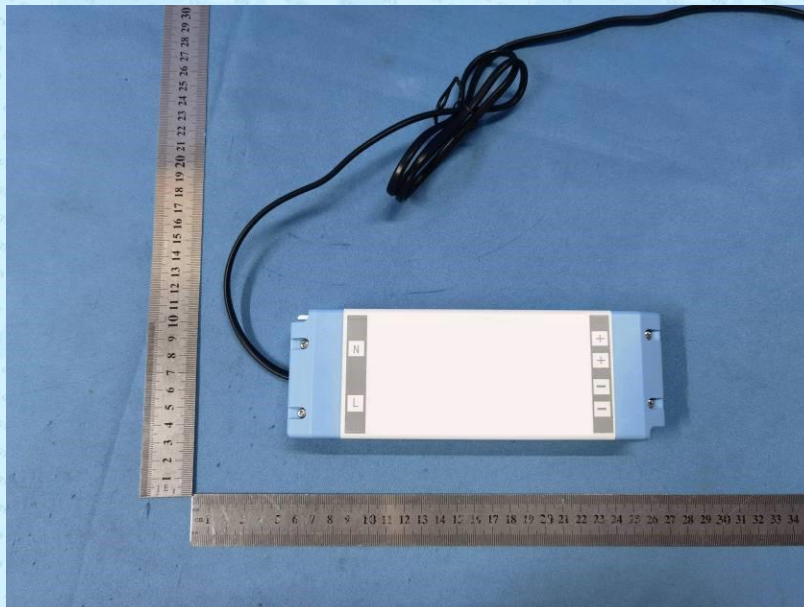
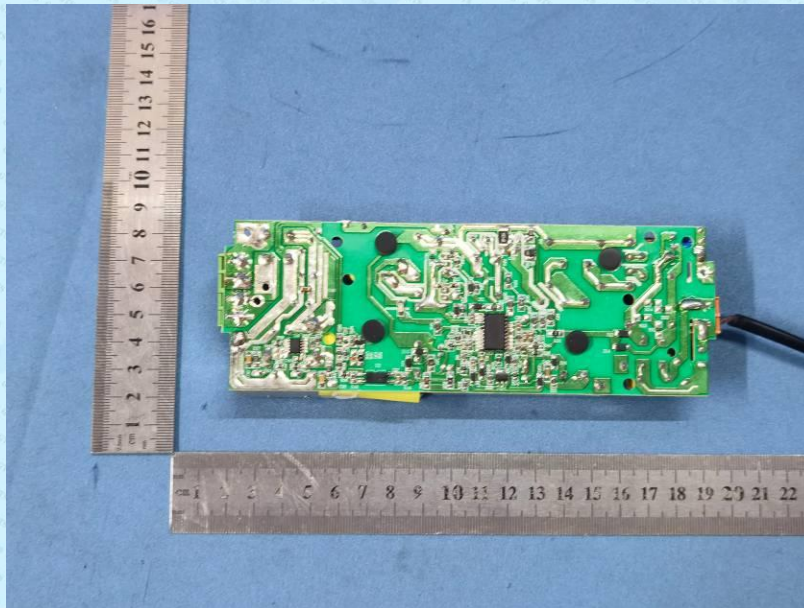


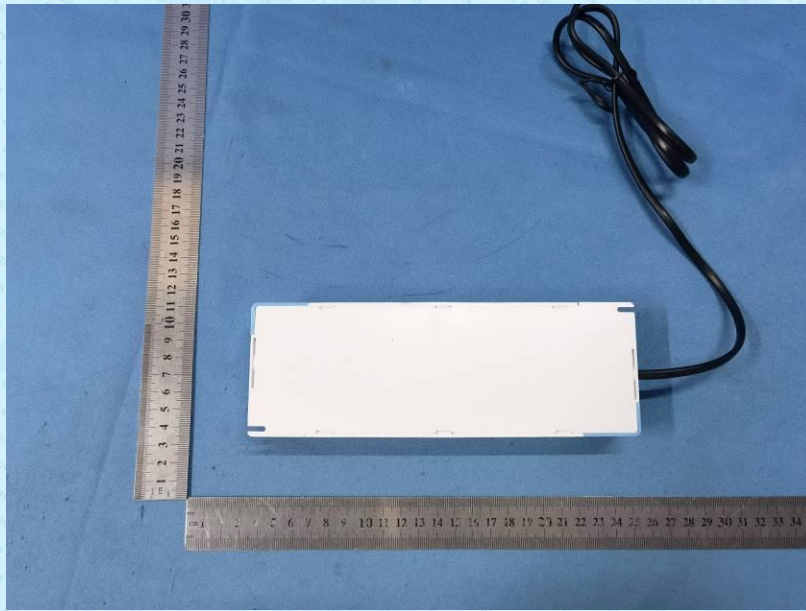




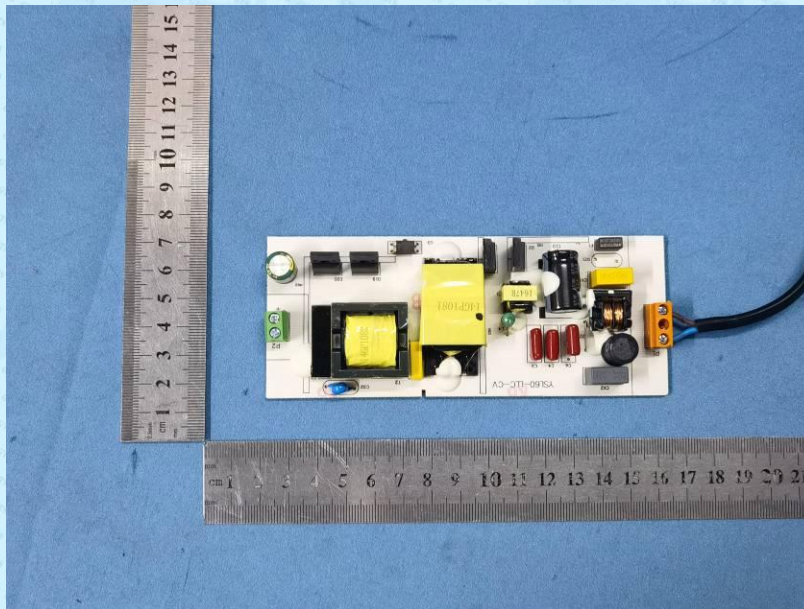
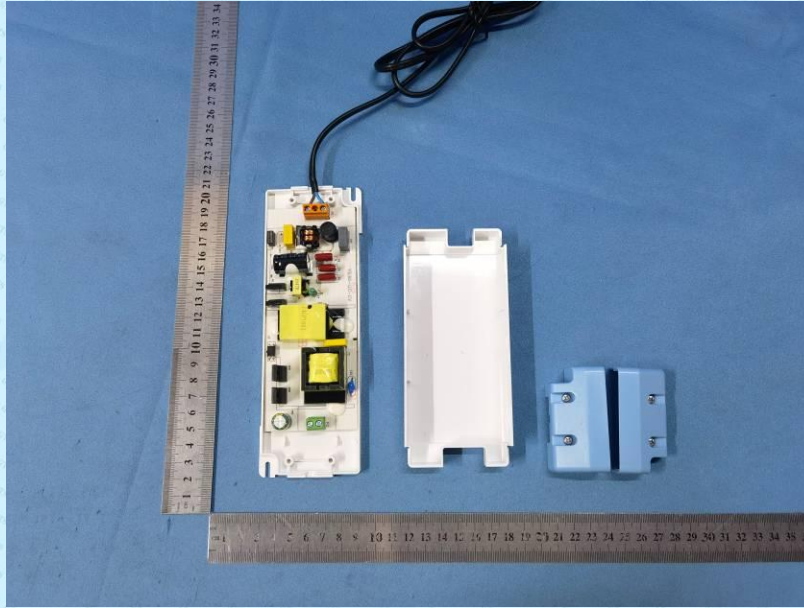


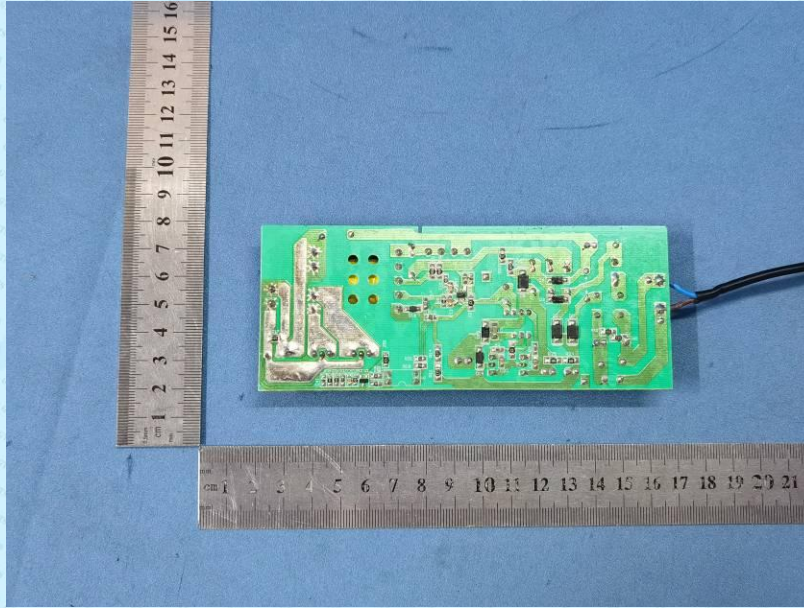












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