

TEST REPORT

Applicant: Quanzhou SKYDROID Technology Co., Ltd.

Address of Applicant: 2nd Floor, Building A, Yucheng Base, Fengze District,
Quanzhou City, Fujian Province

Manufacturer: Quanzhou SKYDROID Technology Co., Ltd.

Address of Manufacturer: 2nd Floor, Building A, Yucheng Base, Fengze District,
Quanzhou City, Fujian Province

Factory: Quanzhou SKYDROID Technology Co., Ltd.

Address of Factory: 2nd Floor, Building A, Yucheng Base, Fengze District,
Quanzhou City, Fujian Province

Equipment Under Test (EUT)

Product Name: Remote control

Model No.: H30, H30C, H30Pro, R30, R30Pro

Trade Mark: SKYDROID

Applicable standards: FCC CFR Title 47 Part 15 Subpart B

Date of sample receipt: 12 June, 2024

Date of Test: 13 June, to 18 July, 2024

Date of report issued: 18 July, 2024

Test Result : PASS *

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

Authorized Signature:



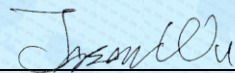
Robinson Luo
Laboratory Manager

This 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.

2 Version

Version No.	Date	Description
00	18 July, 2024	Original

Prepared By:



Project Engineer

Date:

18 July, 2024

Check By:



Reviewer

Date:

18 July, 2024

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4 Test Summary

Test Item	Test Requirement	Test Method	Class / Severity	Result
Conducted Emission	FCC Part15.107	ANSI C63.4	Class B	PASS
Radiated Emissions #	FCC Part15.109	ANSI C63.4	Class B	PASS

Remarks:

1. Pass: The EUT complies with the essential requirements in the standard.
2. # Refer to FCC Part 15.33 (b)(1) conditional testing procedure :

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705-108	1000
108-500	2000
500-1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower.

Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	30MHz-200MHz	3.8039dB	(1)
Radiated Emission	200MHz-1GHz	3.9679dB	(1)
Radiated Emission	1GHz-18GHz	4.29dB	(1)
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	3.44dB	(1)

Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.

5 General Information

5.1 General Description of EUT

Product Name:	Remote control
Model No.:	H30, H30C, H30Pro, R30, R30Pro
Test Model No.:	H30
Remark: all the models are electrical identical including the same software parameter and hardware design, Only the model name is different	
Test sample(s) ID:	GTS0613-1
Sample(s) Status:	Normal sample
Power Supply:	AC Adapter(100~240VAC)

Remark:

The relevant information of the sample is provided by the entrusting company, and the laboratory is not responsible for its authenticity.

5.2 Test mode and Test voltage

Test mode:	
SETUP 1	EUT AC Charging + Display(HDMI)+USB
SETUP 2	EUT AC Charging + LAN Port.
Test voltage	
AC 120V 60Hz	

5.3 Description of Support Units

Manufacturer	Description	Model	Serial Number
Lenovo	Display	LS2013	/

5.4 Deviation from Standards

None.

5.5 Abnormalities from Standard Conditions

None.

5.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations: ● 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. ● ISED—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 ISED 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

The test was 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

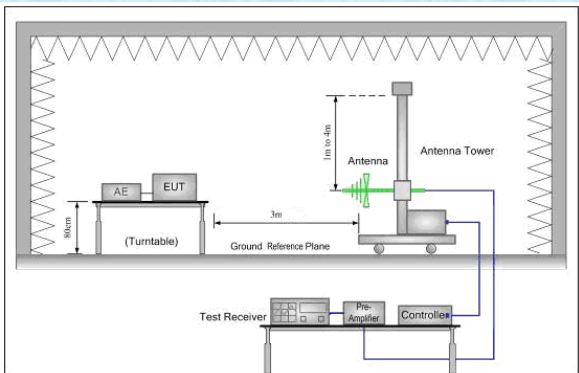
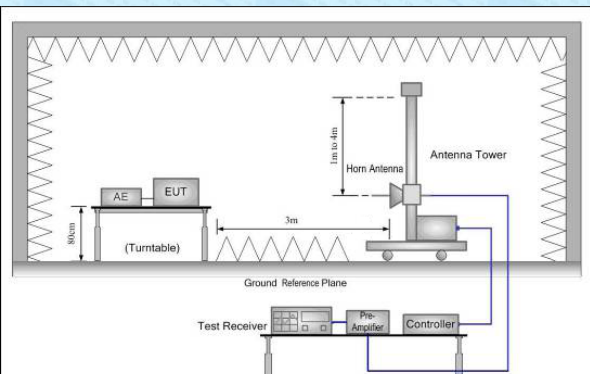
Radiated Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	June 22, 2024	June 21, 2027
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	April 11, 2024	April 10, 2025
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	GTS640	March 19, 2023	March 18, 2025
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	April 17, 2023	April 16, 2025
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
7	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	April 11, 2024	April 10, 2025
8	Loop Antenna	ZHINAN	ZN30900A	GTS534	Nov. 13, 2023	Nov.12, 2024
9	Broadband Preamplifier	SCHWARZBECK	BBV9718	GTS535	April 11, 2024	April 10, 2025
10	Amplifier(1GHz-26.5GHz)	HP	8449B	GTS601	April 11, 2024	April 10, 2025
11	Horn Antenna (18-26.5GHz)	/	UG-598A/U	GTS664	Oct. 29, 2023	Oct. 28, 2024
12	Horn Antenna (26.5-40GHz)	A.H Systems	SAS-573	GTS665	Oct. 29, 2023	Oct. 28, 2024
13	FSV·Signal Analyzer (10Hz-40GHz)	Keysight	FSV-40-N	GTS666	March 12, 2024	March 11, 2025
14	Amplifier	/	LNA-1000-30S	GTS650	April 11, 2024	April 10, 2025
15	CDNE M2+M3-16A	HCT	30MHz-300MHz	GTS692	Nov. 08, 2023	Nov.07, 2024
16	Wideband Amplifier	/	WDA-01004000-15P35	GTS602	April 11, 2024	April 10, 2025
17	Thermo meter	JINCHUANG	GSP-8A	GTS643	April 18, 2024	April 17, 2025
18	RE cable 1	GTS	N/A	GTS675	July 02. 2024	July 01. 2025
19	RE cable 2	GTS	N/A	GTS676	July 02. 2024	July 01. 2025
20	RE cable 3	GTS	N/A	GTS677	July 02. 2024	July 01. 2025
21	RE cable 4	GTS	N/A	GTS678	July 02. 2024	July 01. 2025
22	RE cable 5	GTS	N/A	GTS679	July 02. 2024	July 01. 2025
23	RE cable 6	GTS	N/A	GTS680	July 02. 2024	July 01. 2025
24	RE cable 7	GTS	N/A	GTS681	July 05. 2024	July 04. 2025
25	RE cable 8	GTS	N/A	GTS682	July 05. 2024	July 04. 2025

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	July 12, 2022	July 11, 2027
2	EMI Test Receiver	R&S	ESCI 7	GTS552	April 11, 2024	April 10, 2025
3	LISN	ROHDE & SCHWARZ	ENV216	GTS226	April 11, 2024	April 10, 2025
4	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A
5	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
6	Thermo meter	JINCHUANG	GSP-8A	GTS642	April 18, 2024	April 17, 2025
7	Absorbing clamp	Elektronik-Feinmechanik	MDS21	GTS229	April 11, 2024	April 10, 2025
8	ISN	SCHWARZBECK	NTFM 8158	GTS565	April 11, 2024	April 10, 2025
9	High voltage probe	SCHWARZBECK	TK9420	GTS537	April 11, 2024	April 10, 2025
10	Antenna end assembly	Weinschel	1870A	GTS560	April 11, 2024	April 10, 2025

General used equipment:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Barometer	KUMAO	SF132	GTS647	April 18, 2024	April 17, 2025

7 Test Results and Measurement Data

7.1 Radiated Emission

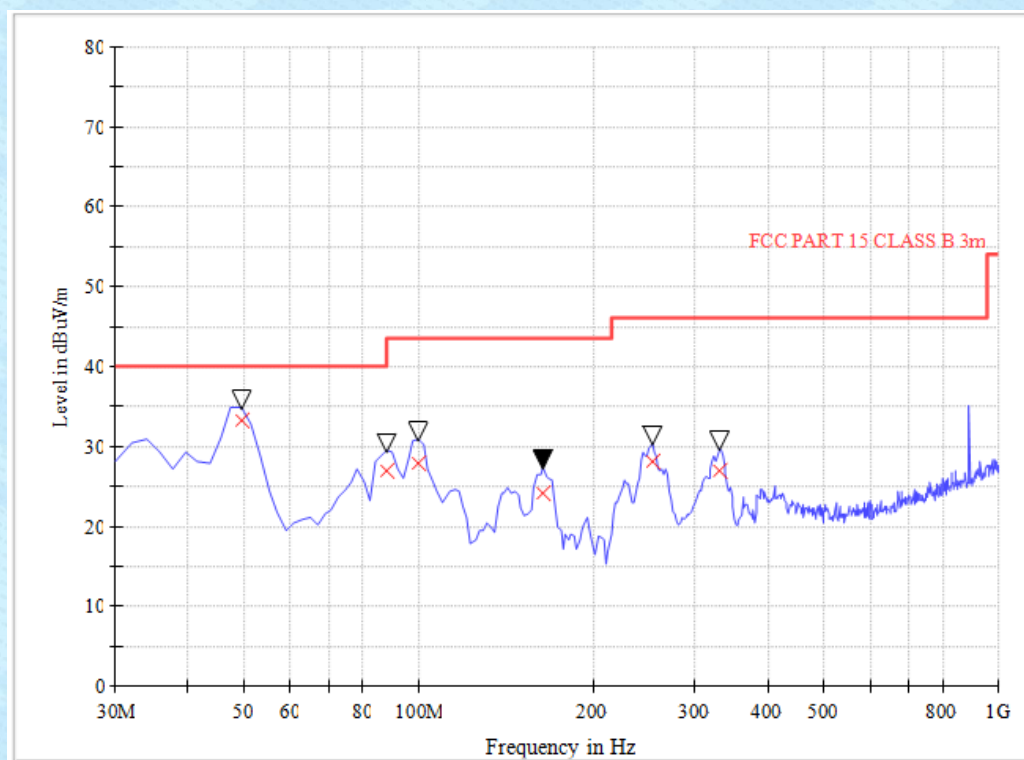
Test Requirement:	FCC Part15 B Section 15.109				
Test Method:	ANSI C63.4:2014				
Test Frequency Range:	30MHz to 6000MHz				
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)				
Receiver setup:	Frequency	Detector	RBW	VBW	Remark
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
Limit:	Frequency		Limit (dBuV/m @3m)		Remark
	30MHz-88MHz		40.00		Quasi-peak Value
	88MHz-216MHz		43.50		Quasi-peak Value
	216MHz-960MHz		46.00		Quasi-peak Value
	960MHz-1GHz		54.00		Quasi-peak Value
	Above 1GHz		54.00		Average Value
Test setup:	74.00				
	Peak Value				
Test setup:	For radiated emissions from 30MHz to1GHz				
					
Test setup:	For radiated emissions above 1GHz				
					
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.: 1 012mbar

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

Measurement Data

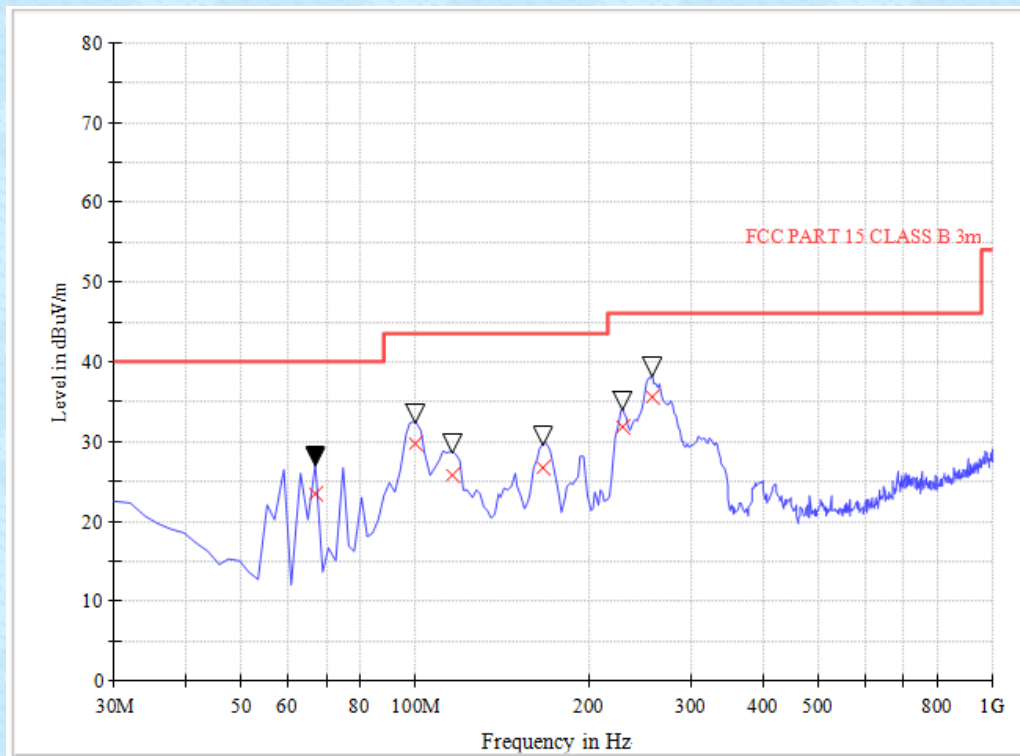
Below 1GHz

Test mode:	Line in mode	Antenna Polarity:	Horizontal
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Frequency (MHz)	QuasiPeak (dB μ V/m)	Bandwidth (kHz)	Antenna height (cm)	Limit (dB μ V/m)	Margin (dB)	Antenna	Verdict
49.44	33.16	120.000	106	40.0	6.84	Vertical	Pass
88.32	26.85	120.000	102	43.5	16.65	Vertical	Pass
99.96	27.95	120.000	105	43.5	15.55	Vertical	Pass
164.12	24.21	120.000	101	43.5	19.29	Vertical	Pass
253.56	28.04	120.000	104	46.0	17.96	Vertical	Pass
331.32	26.98	120.000	106	46.0	19.02	Vertical	Pass

Test mode:	Line in mode	Antenna Polarity:	Vertical
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Frequency (MHz)	QuasiPeak (dBμ V/m)	Bandwidth (kHz)	Antenna height (cm)	Limit (dBμ V/m)	Margin (dB)	Antenna	Verdict
66.92	23.40	120.000	105	40.0	16.60	Horizontal	Pass
99.96	29.77	120.000	102	43.5	13.73	Horizontal	Pass
115.52	25.73	120.000	107	43.5	17.77	Horizontal	Pass
166.08	26.78	120.000	105	43.5	16.72	Horizontal	Pass
228.28	31.88	120.000	104	46.0	14.12	Horizontal	Pass
257.44	35.66	120.000	106	46.0	10.34	Horizontal	Pass

Note:

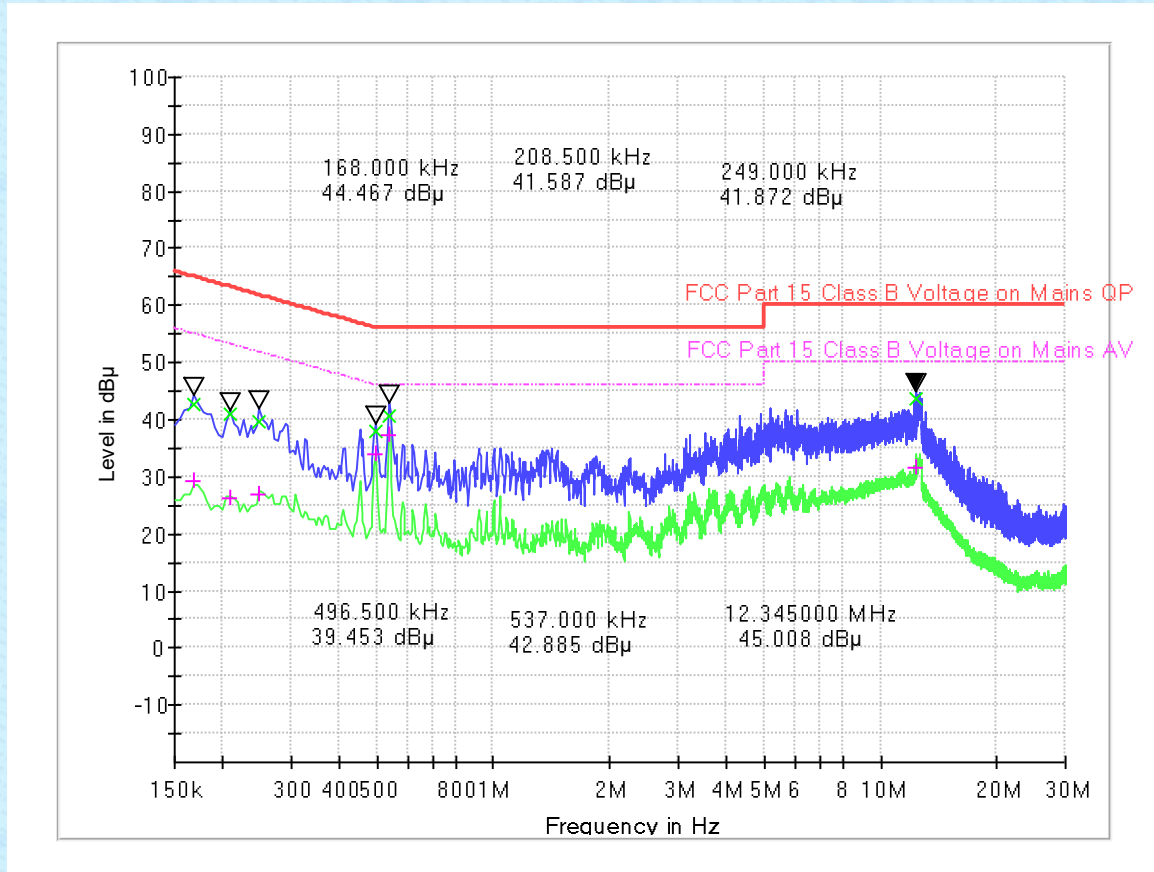
- The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
- If the average limit is met when using a Peak detector, the EUT shall be deemed to meet both peak and average limits. And measurement with the average detector is unnecessary.
- Note: All radiated emission tests were performed in X, Y, Z axis direction, and only the worst axis test condition was recorded in this test report.
- The amplitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be reported for above 1GHz.

7.2 Conducted Emissions

Test Requirement:	FCC Part15 B Section 15.107				
Test Method:	ANSI C63.4:2014				
Test Frequency Range:	150kHz to 30MHz				
Class / Severity:	Class B				
Receiver setup:	RBW=9kHz, VBW=30kHz				
Limit:	Frequency range (MHz)		Limit (dBμV)		
			Quasi-peak	Average	
	0.15-0.5	66 to 56*	56 to 46*		
	0.5-5	56	46		
	5-30	60	50		
Test setup:					
	Remark E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m				
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.: 1 012mbar
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				

Measurement Data

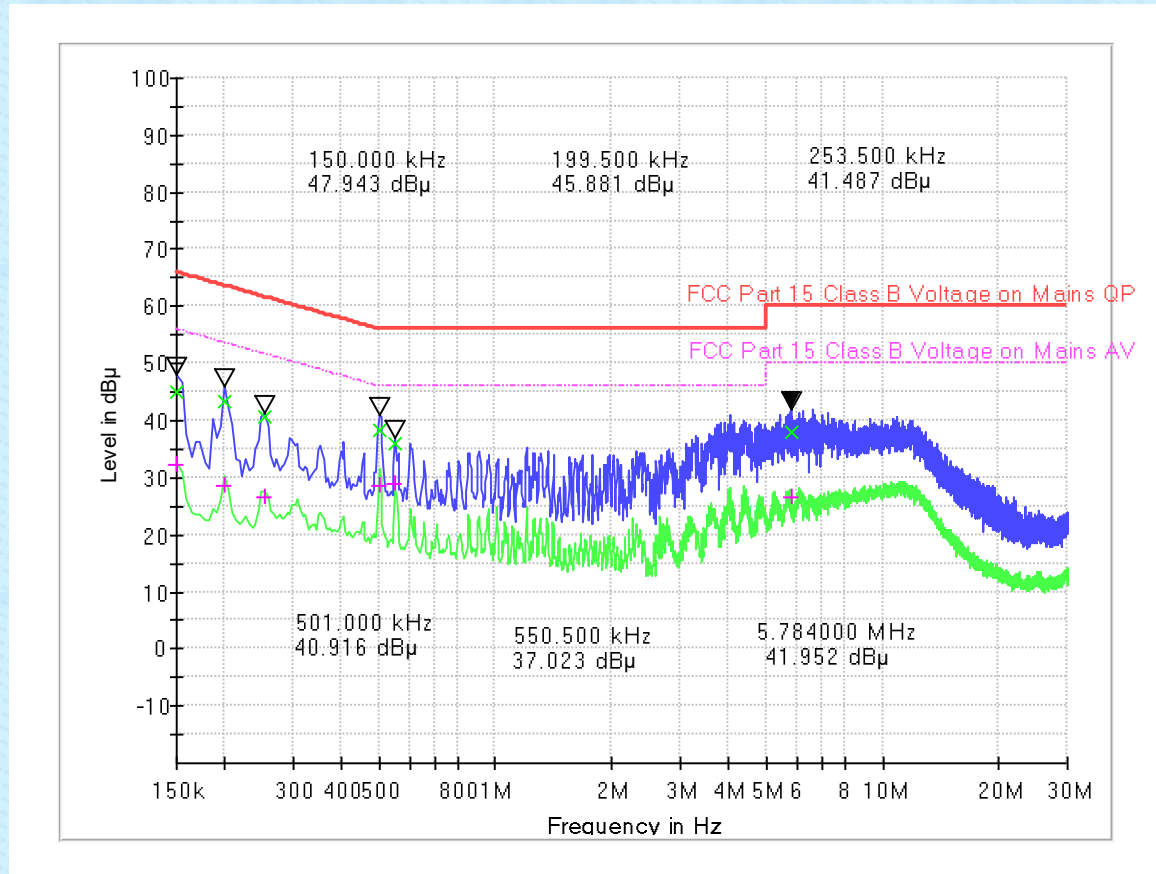
Test mode:	Line in mode	Phase Polarity:	Line
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(Plot A: L Phase)

Frequency (MHz)	QuasiPeak (dBμ V)	CAverage (dBμ V)	Cabel Loss (dB)	Corr. (dB)	Margin - QPK	Limit - QPK	Margin - AV	Limit - AV (dBμ V)
0.168000	42.59	29.39	0.1	10.1	22.47	65.1	25.67	55.1
0.208500	40.91	26.18	0.1	10.1	22.35	63.3	27.08	53.3
0.249000	39.61	26.91	0.1	10.1	22.18	61.8	24.88	51.8
0.496500	37.89	33.94	0.1	10.1	18.17	56.1	12.12	46.1
0.537000	40.54	37.37	0.1	10.1	15.46	56.0	8.63	46.0
12.345000	43.67	31.54	0.5	10.5	16.33	60.0	18.46	50.0

Test mode:	Line in mode	Phase Polarity:	Neutral
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(Plot B: N Phase)

Frequency (MHz)	QuasiPeak (dBμ V)	CAverage (dBμ V)	Cabel Loss (dB)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBμ V)	Margin - AV (dBμ V)	Limit - AV (dBμ V)
0.150000	45.15	32.32	0.1	10.1	20.85	66.0	23.68	56.0
0.199500	43.35	28.44	0.1	10.1	20.28	63.6	25.19	53.6
0.253500	40.64	26.71	0.1	10.1	21.00	61.6	24.93	51.6
0.501000	38.33	28.68	0.1	10.1	17.67	56.0	17.32	46.0
0.550500	35.86	28.96	0.1	10.1	20.14	56.0	17.04	46.0
5.784000	37.99	26.45	0.5	10.5	22.01	60.0	23.55	50.0

Notes:

- The following Quasi-Peak and Average measurements were performed on the EUT:
- Final Test Level = Receiver Reading + LISN Factor + Cable Loss.

8 Test Setup Photo

Reference to the **appendix I** for details.

9 EUT Constructional Details

Reference to the **appendix II** for details.

-----End-----