

Conducted disturbance Test					
Equipment	Manufacturer	Model No.	Serial Number	Cal. date	Cal. Due date
				(mm-dd-yyyy)	(mm-dd-yyyy)
Receiver	R&S	ESCI	100435	04-07-2026	04-06-2027
Temperature/ Humidity Indicator	Defu	TH128	/	03-24-2026	03-23-2027
LISN	R&S	ENV216	100098	09-13-2025	09-12-2026
Barometer	changchun	DYM3	1188	---	---
Test software	Fara	EZ-EMC	EMC-CON 3A1.1	---	---
Capacitive voltage probe	Schwarzbeck	CVP 9222C	00124	06-07-2025	06-06-2026
				06-10-2026	06-09-2027
ISN	TESEQ	ISN T800	30297	11-24-2025	11-23-2026

3M Semi-anechoic Chamber (2)- Radiated disturbance Test					
Equipment	Manufacturer	Model No.	Serial Number	Cal. date	Cal. Due date
				(mm-dd-yyyy)	(mm-dd-yyyy)
3M Chamber & Accessory Equipment	TDK	SAC-3	---	01/13/2024	01/12/2027
Receiver	R&S	ESCI7	100938-003	09/03/2025	09/02/2026
TRILOG Broadband Antenna	schwarzbeck	VULB 9163	9163-618	05/11/2026	05/10/2027
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-076	03/29/2026	03/28/2027
Microwave Preamplifier	Tonscend	EMC051845SE	980380	11/25/2025	11/24/2026
Horn Antenna	A.H.SYSTEMS	SAS-574	374	07/02/2023 05-16-2026	07/01/2026 05-15-2027
Horn Antenna	ETS-LINGREN	BBHA 9120D	9120D-1869	03/31/2026	03/30/2027
Preamplifier	Agilent	11909A	12-1	02/06/2026	02/05/2027
Preamplifier	CD	PAP-1840-60	6041.6042	05/16/2026	05/15/2027
Test software	Fara	EZ-EMC	EMEC-3A1-Pre	---	---
Cable line	Fulai(7M)	SF106	5219/6A	01/13/2024	01/12/2027
Cable line	Fulai(6M)	SF106	5220/6A	01/13/2024	01/12/2027
Cable line	Fulai(3M)	SF106	5216/6A	01/13/2024	01/12/2027
Cable line	Fulai(3M)	SF106	5217/6A	01/13/2024	01/12/2027

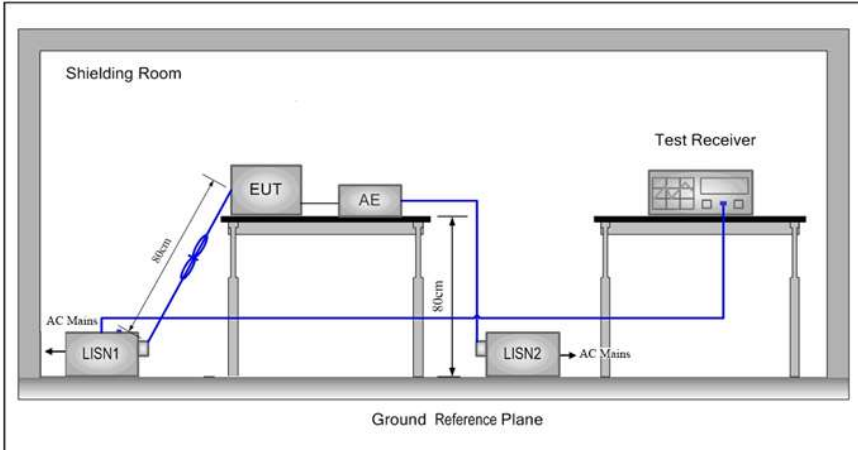
3M full-anechoic Chamber					
Equipment	Manufacturer	Model No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
Fully Anechoic Chamber	TDK	FAC-3	---	01-29-2024	01-28-2027
Receiver	Keysight	N9038A	MY57290136	12-22-2025	12-21-2026
Spectrum Analyzer	Keysight	N9020B	MY57111112	12-21-2025	12-20-2026
Spectrum Analyzer	Keysight	N9030B	MY57140871	12-21-2025	12-20-2026
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	9163-1148	03-29-2026	03-28-2027
Horn Antenna	Schwarzbeck	BBHA 9170	9170-832	04-03-2026	04-02-2027
Horn Antenna	ETS-LINDGREN	3117	57407	05-10-2026	05-09-2027
Preamplifier	EMCI	EMC001330	980563	02-06-2026	02-05-2027
Preamplifier	EMCI	EMC051845SE	980380	11-25-2025	11-24-2026
Preamplifier	Tonscend	TAP-011858	AP21B806112	07-07-2025 06-22-2026	07-06-2026 06-21-2027
Communication test set	R&S	CMW500	104466	11-25-2025	11-24-2026
Temperature/ Humidity Indicator	biaozhi	GM1360	EE1186631	03-24-2026	03-23-2027
RSE Automatic test software	JS Tonscend	JS36-RSE	V5.0.0.1	---	---
Cable line	Times	SFT205-NMSM-2.50M	394812-0001	01-29-2024	01-28-2027
Cable line	Times	SFT205-NMSM-2.50M	394812-0002	01-29-2024	01-28-2027
Cable line	Times	SFT205-NMSM-2.50M	394812-0003	01-29-2024	01-28-2027
Cable line	Times	SFT205-NMSM-2.50M	393495-0001	01-29-2024	01-28-2027
Cable line	Times	EMC104-NMNM-1000	SN160710	01-29-2024	01-28-2027
Cable line	Times	SFT205-NMSM-3.00M	394813-0001	01-29-2024	01-28-2027
Cable line	Times	SFT205-NMNM-1.50M	381964-0001	01-29-2024	01-28-2027
Cable line	Times	SFT205-NMSM-7.00M	394815-0001	01-29-2024	01-28-2027
Cable line	Times	HF160-KMKM-3.00M	393493-0001	01-29-2024	01-28-2027

5 Test results and Measurement Data

5.1 Antenna Requirement

Standard requirement:	47 CFR Part 15C Section 15.203 /247(c)
15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. 15.247(b) (4) requirement: The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.	
EUT Antenna:	Please see Internal photos
The antenna is PCB antenna. The best case gain of the antenna is 3.26dBi.	

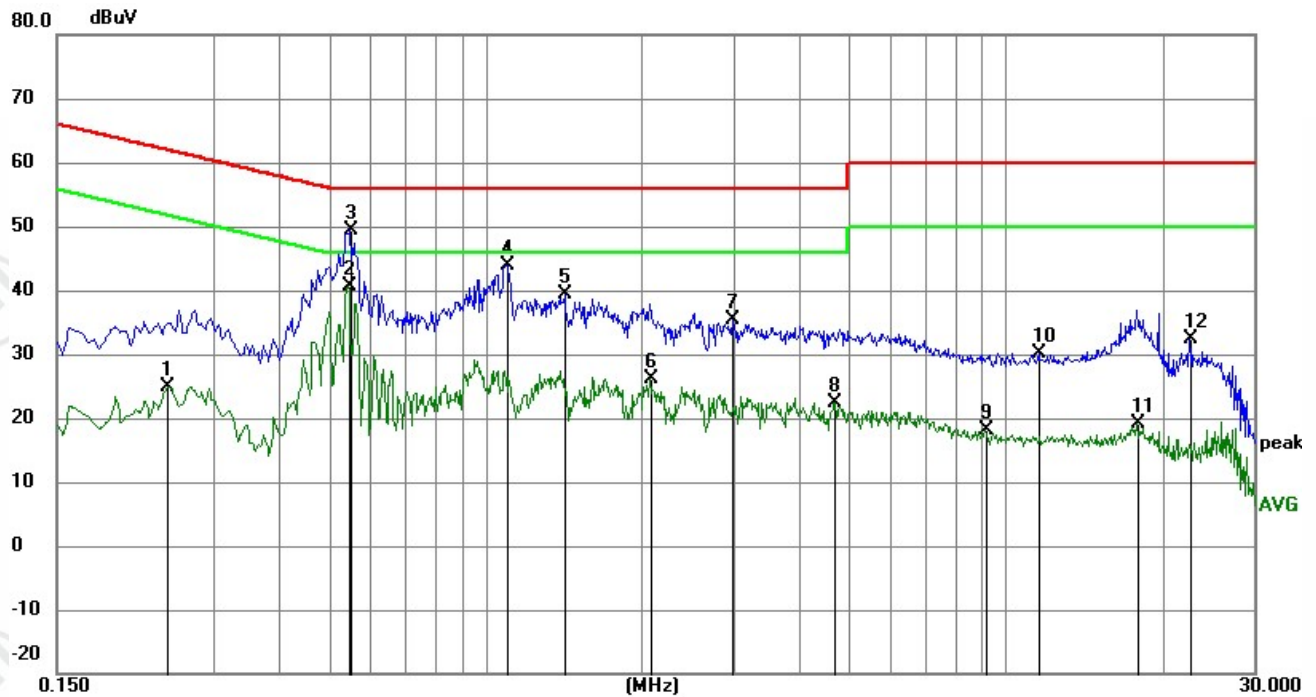
5.2 AC Power Line Conducted Emissions

Test Requirement:	47 CFR Part 15C Section 15.207		
Test Method:	ANSI C63.10-2020		
Test Frequency Range:	150kHz to 30MHz		
Receiver setup:	RBW=9 kHz, VBW=30 kHz, Sweep time=auto		
Limit:	Frequency range (MHz)	Limit (dBuV)	
		Quasi-peak	Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
	5-30	60	50
* Decreases with the logarithm of the frequency.			
Test Setup:			
Test Procedure:	1) The mains terminal disturbance voltage test was conducted in a shielded room. 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a $50\Omega/50\mu\text{H} + 5\Omega$ linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded. 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane. 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2. 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10-2020 on conducted measurement.		
Test Mode:	All modes were tested, only the worse case lowest channel of 1Mbps for		

	802.11b was recorded in the report.
Test Results:	Pass

Measurement Data

Live line:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.2445	14.73	10.17	24.90	51.94	-27.04	AVG	
2	*	0.5460	30.64	10.09	40.73	46.00	-5.27	AVG	
3		0.5505	39.22	10.09	49.31	56.00	-6.69	QP	
4		1.0950	33.77	10.18	43.95	56.00	-12.05	QP	
5		1.4190	29.21	10.18	39.39	56.00	-16.61	QP	
6		2.0670	15.84	10.17	26.01	46.00	-19.99	AVG	
7		2.9805	25.37	10.13	35.50	56.00	-20.50	QP	
8		4.6905	12.27	10.07	22.34	46.00	-23.66	AVG	
9		9.1230	8.11	9.97	18.08	50.00	-31.92	AVG	
10		11.5890	20.22	9.92	30.14	60.00	-29.86	QP	
11		17.9295	9.21	9.82	19.03	50.00	-30.97	AVG	
12		22.6545	22.58	9.81	32.39	60.00	-27.61	QP	

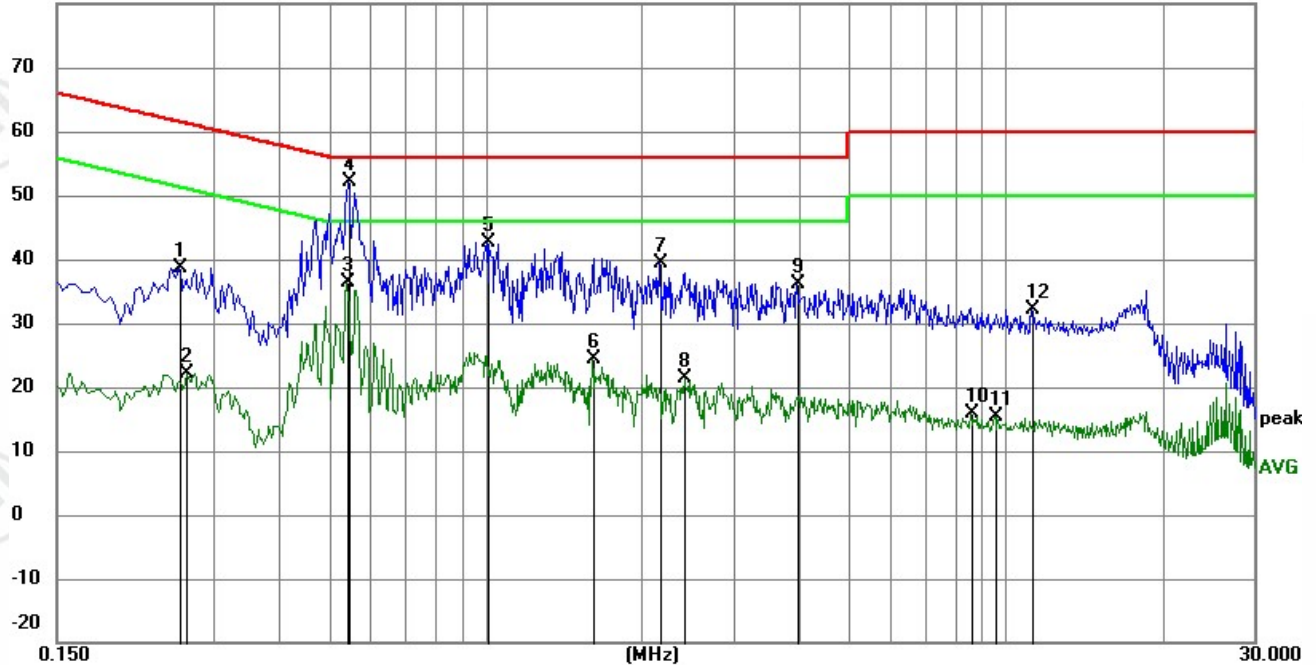
Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:

2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. Margin=Measurement-Limit.
4. Measurement=Reading Level+Correct Factor.
5. In the test results, an asterisk (*) indicates Maximum Data, a cross (X) indicates over Limit.
6. If the Peak value under Average limit, the Average value is not recorded in the report.

Neutral line:

80.0 dBuV

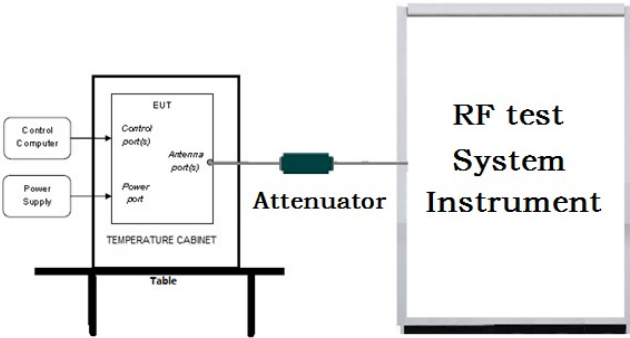


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.2580	28.58	10.16	38.74	61.50	-22.76	QP	
2		0.2670	11.98	10.16	22.14	51.21	-29.07	AVG	
3		0.5415	26.41	10.09	36.50	46.00	-9.50	AVG	
4	*	0.5460	42.14	10.09	52.23	56.00	-3.77	QP	
5		1.0050	32.52	10.18	42.70	56.00	-13.30	QP	
6		1.6080	14.24	10.17	24.41	46.00	-21.59	AVG	
7		2.1570	29.14	10.16	39.30	56.00	-16.70	QP	
8		2.4180	11.17	10.15	21.32	46.00	-24.68	AVG	
9		3.9660	25.99	10.10	36.09	56.00	-19.91	QP	
10		8.5695	5.95	9.99	15.94	50.00	-34.06	AVG	
11		9.5595	5.40	9.96	15.36	50.00	-34.64	AVG	
12		11.2290	22.29	9.93	32.22	60.00	-27.78	QP	

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.
3. Margin = Measurement - Limit.
4. Measurement = Reading Level + Correct Factor.
5. In the test results, an asterisk (*) indicates Maximum Data, a cross (X) indicates over Limit.
6. If the Peak value under Average limit, the Average value is not recorded in the report.

5.3 Maximum Conducted Output Power

Test Requirement:	47 CFR Part 15C Section 15.247 (b)(3)
Test Method:	ANSI C63.10-2020
Test Setup:	
Test Procedure:	1. PKPM1 Peak power meter measurement The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall use a fast-responding diode detector.
Limit:	30dBm
Test Mode:	Refer to clause 3.3
Test Results:	Refer to Appendix A