FCC TEST REPORT

FCC ID	:	**HV4DTH227**
Equipment	:	**Creative Pen Display**
Brand Name	:	**wacom**
Model Name	:	**DTH227, DTH227K0A, DTH227********(* may be alphanumeric/symbol or blank)**
Applicant	:	**Wacom Co., Ltd. 2-510-1 Toyonodai Kazo-shi, Saitama 349-1148 Japan**
Manufacturer	:	**Wacom Co., Ltd. 2-510-1 Toyonodai Kazo-shi, Saitama 349-1148 Japan**
Standard	:	**47 CFR FCC Part 15.209**

The product was received on May 08, 2023, and testing was started from May 17, 2023 and completed on May 27, 2023. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Hsinhua Laboratory, the test report shall not be reproduced except in full.

Approved by: Jackson Tsai

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FR350310AP	01	Initial issue of report	Jul. 26, 2023

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.209	Transmitter Radiated Emissions	PASS	-
3.3	15.215(c)	Emission Bandwidth	PASS	-

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
None.

Reviewed by: Barry Hsiao

Report Producer: Amber Chiu

1 General Description

1.1 Information

1.1.1 RF General Information

RF General Information			
Modulation	**Ch. Frequency(kHz)**	**Channel Number**	**Field Strength (dBuV/m@3m)**
ASK	667	1	51.72
Note 1: Field strength performed peak level at 3m.			

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	-	-	Array Coil Pointing antenna	N/A

Note 1: The EUT has one antenna.

1.1.3 Type of EUT

Operational Condition	
EUT Power Type	From AC Adapter
Type of EUT	
☒	Stand-alone
☐	Combined (EUT where the radio part is fully integrated within another device) Combined Equipment - Brand Name / Model No.: …
☐	Plug-in radio (EUT intended for a variety of host systems) Host System - Brand Name / Model No.: …
☐	Other:

1.1.4 Test Signal Duty Cycle

Operated Mode for Worst Duty Cycle
☒ Operated normal mode for worst duty cycle
☐ Operated test mode for worst duty cycle
Test Signal Duty Cycle (x)
☒ 100.00%

1.1.5 Table for Multiple Listing

The model names in the following table are all refer to the identical product.

Model Name	Description
DTH227	All the models are identical, the different model served as marketing strategy.
DTH227K0A	
DTH227********(* may be alphanumeric/symbol or blank)	

1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 15
- ANSI C63.10-2013

The following reference test guidance is not within the scope of accreditation of TAF:

- KDB 414788 D01 v01r01

1.3 Testing Location Information

Test Lab.：Sporton International Inc. Hsinhua Laboratory				
☒ Hsinhua	**ADD:** No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)			
(TAF: 3785**)**	**TEL:** 886-3-327-3456		**FAX:** 886-3-327-0973	
Test site Designation No. TW3785 with FCC.				
Test Condition	**Test Site No.**	**Test Engineer**	**Test Environment**	**Test Date**
AC Conduction	CO04-HY	Lego Lin	23.2~24.1°C / 50~ 55%	17/May/2023
RF Conducted	TH06-HY	Johnny Yu	22.2~22.6°C / 53~56%	27/May/2023
Radiated	03CH03-HY	Edward Wang	21.5~23.5°C / 50~55%	20/May/2023
☐ Wen 33rd.St.	**ADD:** No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)			
(TAF: 3785**)**	**TEL:** 886-3-318-0787		**FAX:** 886-3-318-0287	
Test site Designation No. TW0008 with FCC.				

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Test Items	**Uncertainty**	**Remark**
Conducted Emission (150kHz ~ 30MHz)	0.9 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	2.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.7 dB	Confidence levels of 95%
Conducted Emission	1.0 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 The Worst Case Configuration

Mode	Test Channel Frequencies(kHz)	Field Strength (dBuV/m@3m)
Touch Pen	667	51.72

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	CTX
1	Adapter mode

The Worst Case Mode for Following Conformance Tests			
Tests Item	Emission Bandwidth, Field Strength of Fundamental Emissions Transmitter Radiated Unwanted Emissions		
Test Condition	Radiated measurement		
User Position	☐ EUT will be placed in fixed position.		
	☐ EUT will be placed in mobile position and operating multiple positions. EUT shall be performed three orthogonal planes.		
	☒ EUT will be a hand-held or body-worn battery-powered devices and operating multiple positions.		
Operating Mode	CTX		
1	Adapter mode		
Orthogonal Planes of EUT	**X Plane**	**Y Plane**	**Z Plane**
			
Worst Planes of EUT		V	

2.3 Accessory

Accessories Information				
AC Adapter	**Brand Name**	ADAPTER TECH	**Model Name**	ATS160T-P190
	Power Rating	I/P: 100 - 240 Vac, 2.2 A, O/P: 19 Vdc, 8.4 A		
	DC in Power Cord	2 meter, shielded cable, w/o ferrite core		
Power Cord	**Signal Line**	1 meter, shielded cable, w/o ferrite core		
mini DP to DP Cable	**Brand Name**	Hotron	**Model Name**	STJ-A425
	Signal Line	1.8 meter, shielded cable, w/o ferrite core		
USB Type-C to Type-A	**Brand Name**	Hotron	**Model Name**	STJ-A423
	Signal Line	1.8 meter, shielded cable, w/o ferrite core		
HDMI Cable	**Brand Name**	Hotron	**Model Name**	STJ-A424
	Signal Line	1.8 meter, shielded cable, w/o ferrite core		
USB Type-C to Type-C	**Brand Name**	Luxshare	**Model Name**	STJ-A422
	Signal Line	1.8 meter, shielded cable, w/o ferrite core		
Digital Pen	**Brand Name**	Wacom	Model Name	ACP-500-00
Pen Tray	**Brand Name**	Wacom	Model Name	SSB-A003
Bracket	**Brand Name**	Wacom	Model Name	ACK64802KZ

Reminder: Regarding to more detail and other information, please refer to user manual.

2.4 Support Equipment

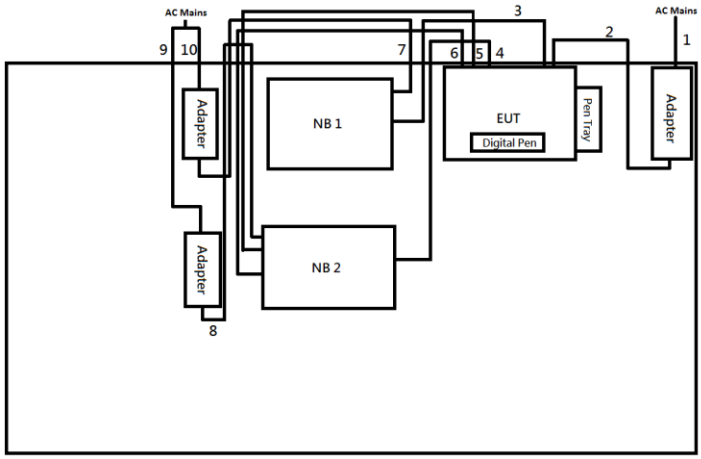
Support Equipment – AC Conduction					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Notebook	Dell	Latitude7290	-	-
2	Adapter for NB	Dell	LA65NM130	-	-
3	AC Power Cable x2	Power Sync	TPCMRN0018	-	-
4	Notebook	HP	HSTNN-142C	-	-
5	Adapter for NB	HP	HSTNN-CA40	-	-

Support Equipment – Conducted					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-

Support Equipment – Radiated					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Notebook	Dell	Latitude7290	-	-
2	Adapter for NB	Dell	LA65NM130	-	-
3	AC Power Cable x2	Power Sync	TPCMRN0018	-	-
4	Notebook	HP	HSTNN-142C	-	-
5	Adapter for NB	HP	HSTNN-CA40	-	-

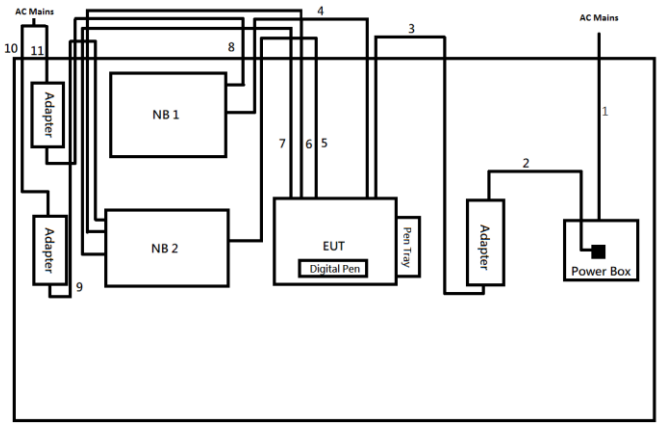
2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	Power Cord	Yes	1.0	-
2	DC Power cable	Yes	2.0	-
3	mini DP to DP cable	Yes	1.8	-
4	USB Type-C to Type-A	Yes	1.8	-
5	USB Type-C to Type-C	Yes	1.8	-
6	HDMI cable	Yes	1.8	-
7	DC Power cable	No	1.5	-
8	DC Power cable	No	1.5	-
9	AC Power cable	No	1.8	-
10	AC Power cable	No	1.8	-

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	Power Cord	Yes	1.0	-
3	DC Power cable	Yes	2.0	-
4	mini DP to DP cable	Yes	1.8	-
5	USB Type-C to Type-A	Yes	1.8	-
6	USB Type-C to Type-C	Yes	1.8	-
7	HDMI cable	Yes	1.8	-
8	DC Power cable	No	1.5	-
9	DC Power cable	No	1.5	-
10	AC Power cable	No	1.8	-
11	AC Power cable	No	1.8	-

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

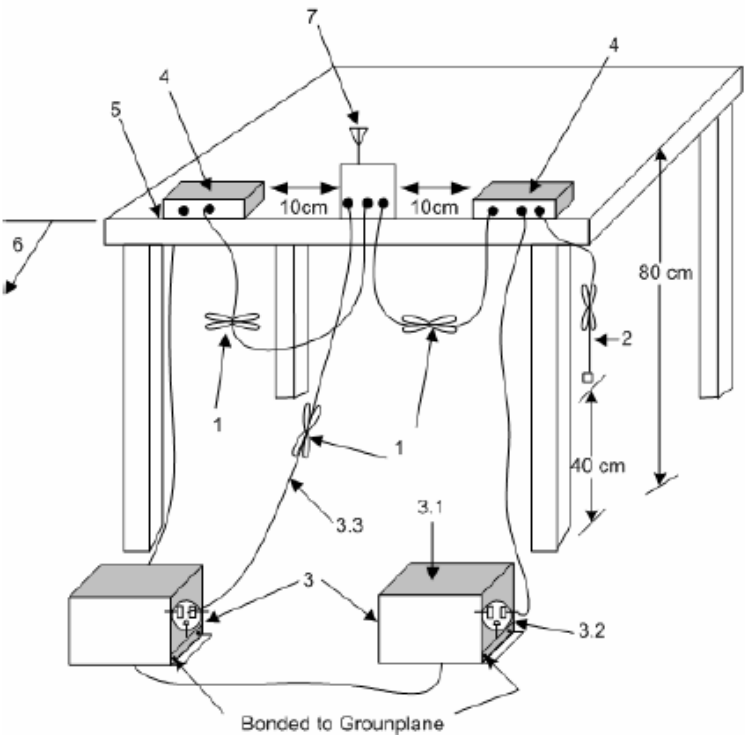
Test Method	
☒	Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.
☒	If AC conducted emissions fall in operating band, then following below test method confirm final result.
☐	Accept measurements done with a suitable dummy load replacing the antenna under the following conditions: (1) Perform the AC line conducted tests with the antenna connected to determine compliance with FCC 15.207 limits outside the transmitter's fundamental emission band; (2) Retest with a dummy load to determine compliance with FCC 15.207 limits within the transmitter's fundamental emission band.
☒	For a device with a permanent antenna operating at or below 30 MHz, accept measurements done with a suitable dummy load, in lieu of the permanent antenna under the following conditions: (1) Perform the AC line conducted tests with the permanent antenna to determine compliance with the FCC 15.207 limits outside the transmitter's fundamental emission band; (2) Retest with a dummy load in lieu of the permanent antenna to determine compliance with the FCC 15.207 limits within the transmitter's fundamental emission band.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading: Raw(Read Level) +LISN(LISN Factor) + CL(Cable Loss) + AT(Attenuator).

3.1.5 Test Setup

AC Power-line Conducted Emissions



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50Ω loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
3.1—All other equipment powered from additional LISN(s).
3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
3.3—LISN at least 80 cm from nearest part of EUT chassis.
4—Non-EUT components of EUT system being tested.
5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Transmitter Radiated Emissions

3.2.1 Transmitter Radiated Emissions Limit

Transmitter Radiated Emissions Limit			
Frequency Range (MHz)	**Field Strength (uV/m)**	**Field Strength (dBuV/m)**	**Measure Distance (m)**
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: the frequency bands 9-90 kHz, 110-490 kHz measurements employing an average detector and other below 1GHz measurements employing a CISPR quasi-peak detector.

3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

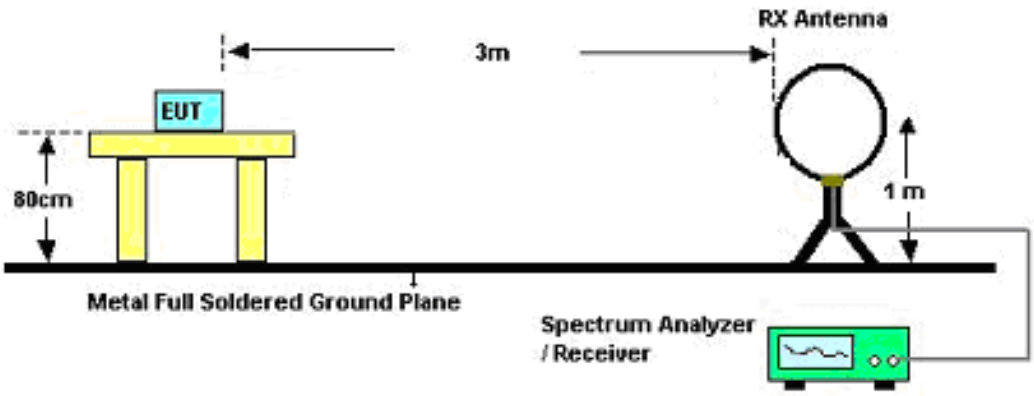
Test Method		
☒	Refer as ANSI C63.10, clause 6.5 for radiated emissions from 30 MHz to 1 GHz and test distance is 3m.	
☒	Refer as ANSI C63.10, clause 6.4 for radiated emissions from below 30 MHz. The frequency bands 9-90 kHz, 110-490 kHz measurements employing an average detector and other below 30MHz measurements employing a CISPR quasi-peak detector. Test distance is 3m.	
☒	At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the requirements; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be following below methods. Note: If fundamental emission level is smaller than noise at 3m , we will change distance to 1m.	
	☐	The results shall be extrapolated to the specified distance by making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor.
	☒	The results shall be by using the square of an inverse linear distance extrapolation factor (40 dB/decade).
☒	For radiated measurement. Loop antenna was rotated about the horizontal and vertical axis and the equipment to be measured and the test antenna shall be oriented to obtain the maximum emitted field strength level.	
☒	The any unwanted emissions level shall not exceed the fundamental emission level.	
☒	All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.	
☒	KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.	
	▪	Based on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field.
	▪	Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

3.2.4 Measurement Results Calculation

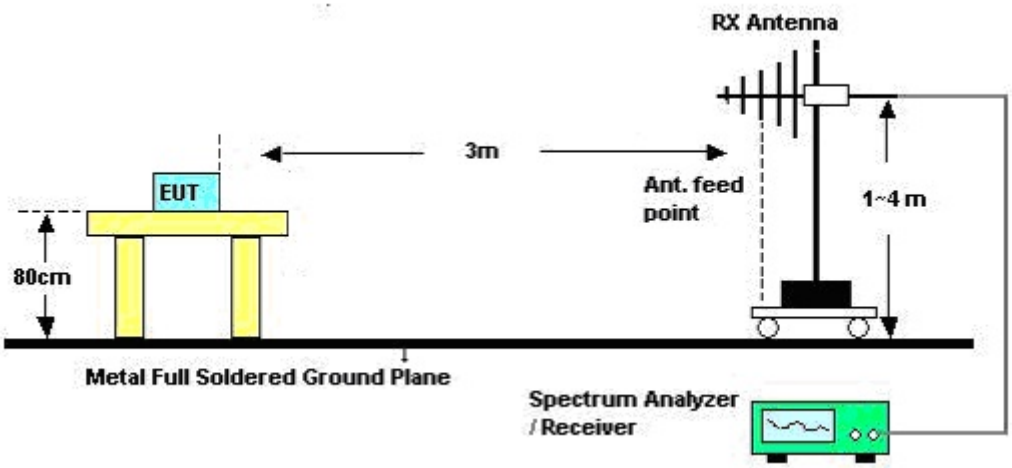
The measured Level is calculated using:
Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

3.2.5 Test Setup

Transmitter Radiated Emissions



Magnetic field tests shall be performed in the frequency range of 9 kHz to 30 MHz using a calibrated loop antenna. The center of the loop shall be 1 m above the ground.



Electric field tests shall be performed in the frequency range of 30 MHz to 1000 MHz using a calibrated bi-log antenna. the antenna height shall be varied from 1 m to 4 m.

3.2.6 Test Result of Transmitter Radiated Emissions

Refer as Appendix B

3.3 Emission Bandwidth

3.3.1 Emission Bandwidth Limit

Emission Bandwidth Limit
N/A

3.3.2 Measuring Instruments

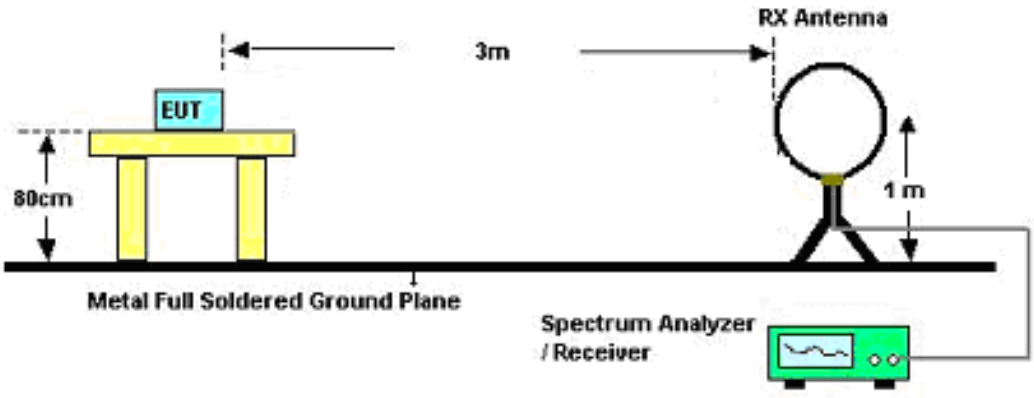
Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

Test Method	
☒	Because the measured signal is CW or CW-like adjusting the RBW per C63.10 would not be practical since measured bandwidth will always follow the RBW and the result will be approximately twice the RBW.
☒	For radiated measurement. Loop antenna was rotated about the horizontal and vertical axis and the equipment to be measured and the test antenna shall be oriented to obtain the maximum emitted field strength level.

3.3.4 Test Setup

Emission Bandwidth



3.3.5 Test Result of Emission Bandwidth

Refer as Appendix C

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer / Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR	102318	9kHz ~ 3.6GHz	29/Dec/2022	28/Dec/2023
Two-Line V-Network	R&S	ENV 216	100003	9kHz ~ 30MHz	16/Feb/2023	15/Feb/2024
LISN (Support Unit)	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	8127477	9kHz ~ 30MHz	10/Apr/2023	09/Apr/2024
RF Cable 5m	TITAN	TITAN	CO04-cable-01	9 kHz~200MHz	28/Feb/2023	27/Feb/2024
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	25/Oct/2022	24/Oct/2023
Software	Sporton	SENSE-EMI	V5.10.8.7	-	NCR	NCR

NCR: No Calibration Required

Instrument for Conducted Test

Instrument	Manufacturer / Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101029	10Hz~40GHz	10/Nov/2022	09/Nov/2023
SENSE-NFC	Agilent	V5.11.0	N/A	N/A	N/A	N/A

Instrument for Radiated Test

Instrument	Manufacturer / Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz~1GHz 3m	01/Aug/2022	31/Jul/2023
Signal Analyzer	R&S	FSV40	101500	10Hz~40GHz	26/Oct/2022	25/Oct/2023
Amplifier	Aglient	8447D	2944A08033	10kHz~1.3GHz	07/Apr/2023	06/Apr/2024
Bilog Antenna & 6dB Attenuator	SCHAFFNER / EMCI	CBL6112B / N-6-05	22237 / AT-N-0603	30MHz~1GHz	16/Oct/2022	15/Oct/2023
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz~30MHz	13/Jun/2022	12/Jun/2023
RF Cable-R03m	Jye Bao	RG142	03CH03-cable-02	30MHz~1GHz	25/Mar/2023	24/Mar/2024
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	23/Mar/2023	22/Mar/2024
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	30/May/2022	29/May/2023
Software	Sporton	SENSE-303417	V5.10.4	-	-	-

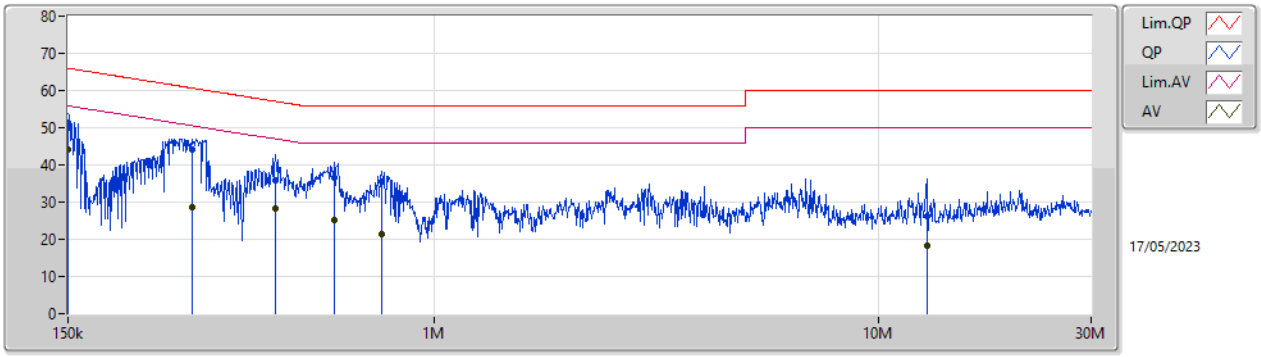
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	153.024k	46.13	55.83	-9.70	Neutral

Result

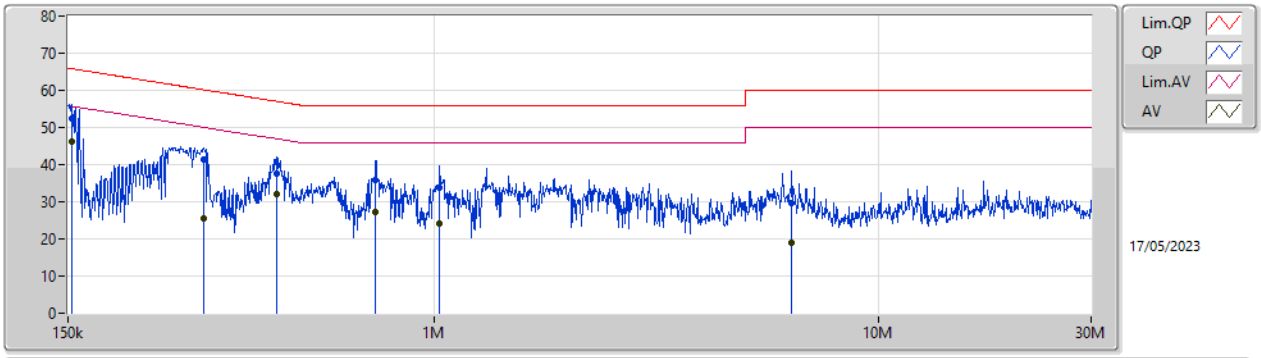
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	150k	51.36	66.00	-14.64	Line	-
Mode 1	Pass	AV	150k	44.04	56.00	-11.96	Line	-
Mode 1	Pass	QP	285.246k	43.98	60.67	-16.69	Line	-
Mode 1	Pass	AV	285.246k	28.69	50.67	-21.98	Line	-
Mode 1	Pass	QP	438.995k	35.88	57.09	-21.21	Line	-
Mode 1	Pass	AV	438.995k	28.37	47.09	-18.72	Line	-
Mode 1	Pass	QP	596.975k	36.70	56.00	-19.30	Line	-
Mode 1	Pass	AV	596.975k	25.04	46.00	-20.96	Line	-
Mode 1	Pass	QP	761.574k	35.42	56.00	-20.58	Line	-
Mode 1	Pass	AV	761.574k	21.32	46.00	-24.68	Line	-
Mode 1	Pass	QP	12.807M	26.33	60.00	-33.67	Line	-
Mode 1	Pass	AV	12.807M	18.20	50.00	-31.80	Line	-
Mode 1	Pass	QP	153.024k	52.32	65.83	-13.51	Neutral	-
Mode 1	Pass	AV	153.024k	46.13	55.83	-9.70	Neutral	-
Mode 1	Pass	QP	302.848k	41.37	60.17	-18.80	Neutral	-
Mode 1	Pass	AV	302.848k	25.45	50.17	-24.72	Neutral	-
Mode 1	Pass	QP	440.751k	37.73	57.05	-19.32	Neutral	-
Mode 1	Pass	AV	440.751k	32.19	47.05	-14.86	Neutral	-
Mode 1	Pass	QP	737.637k	36.01	56.00	-19.99	Neutral	-
Mode 1	Pass	AV	737.637k	27.36	46.00	-18.64	Neutral	-
Mode 1	Pass	QP	1.027M	33.82	56.00	-22.18	Neutral	-
Mode 1	Pass	AV	1.027M	24.25	46.00	-21.75	Neutral	-
Mode 1	Pass	QP	6.369M	29.55	60.00	-30.45	Neutral	-
Mode 1	Pass	AV	6.369M	18.87	50.00	-31.13	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	51.36	66.00	-14.64	19.61	Line	-	31.75	9.65	0.03	9.93
AV	150k	44.04	56.00	-11.96	19.61	Line	-	24.43	9.65	0.03	9.93
QP	285.246k	43.98	60.67	-16.69	19.63	Line	-	24.35	9.64	0.04	9.95
AV	285.246k	28.69	50.67	-21.98	19.63	Line	-	9.06	9.64	0.04	9.95
QP	438.995k	35.88	57.09	-21.21	19.64	Line	-	16.24	9.64	0.04	9.96
AV	438.995k	28.37	47.09	-18.72	19.64	Line	-	8.73	9.64	0.04	9.96
QP	596.975k	36.70	56.00	-19.30	19.63	Line	-	17.07	9.64	0.04	9.95
AV	596.975k	25.04	46.00	-20.96	19.63	Line	-	5.41	9.64	0.04	9.95
QP	761.574k	35.42	56.00	-20.58	19.65	Line	-	15.77	9.65	0.05	9.95
AV	761.574k	21.32	46.00	-24.68	19.65	Line	-	1.67	9.65	0.05	9.95
QP	12.807M	26.33	60.00	-33.67	19.99	Line	-	6.34	9.80	0.22	9.97
AV	12.807M	18.20	50.00	-31.80	19.99	Line	-	-1.79	9.80	0.22	9.97

Conducted Emissions at Powerline_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	153.024k	52.32	65.83	-13.51	19.59	Neutral	-	32.73	9.63	0.03	9.93
AV	153.024k	46.13	55.83	-9.70	19.59	Neutral	-	26.54	9.63	0.03	9.93
QP	302.848k	41.37	60.17	-18.80	19.62	Neutral	-	21.75	9.63	0.04	9.95
AV	302.848k	25.45	50.17	-24.72	19.62	Neutral	-	5.83	9.63	0.04	9.95
QP	440.751k	37.73	57.05	-19.32	19.63	Neutral	-	18.10	9.63	0.04	9.96
AV	440.751k	32.19	47.05	-14.86	19.63	Neutral	-	12.56	9.63	0.04	9.96
QP	737.637k	36.01	56.00	-19.99	19.64	Neutral	-	16.37	9.64	0.05	9.95
AV	737.637k	27.36	46.00	-18.64	19.64	Neutral	-	7.72	9.64	0.05	9.95
QP	1.027M	33.82	56.00	-22.18	19.64	Neutral	-	14.18	9.65	0.05	9.94
AV	1.027M	24.25	46.00	-21.75	19.64	Neutral	-	4.61	9.65	0.05	9.94
QP	6.369M	29.55	60.00	-30.45	19.86	Neutral	-	9.69	9.75	0.16	9.95
AV	6.369M	18.87	50.00	-31.13	19.86	Neutral	-	-0.99	9.75	0.16	9.95

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
SRD	-	-	-	-	-	-	-	-	-	-	-
SRD	Pass	PK	666k	51.72	71.15	-19.43	20.20	3	Horizontal	0	1.00

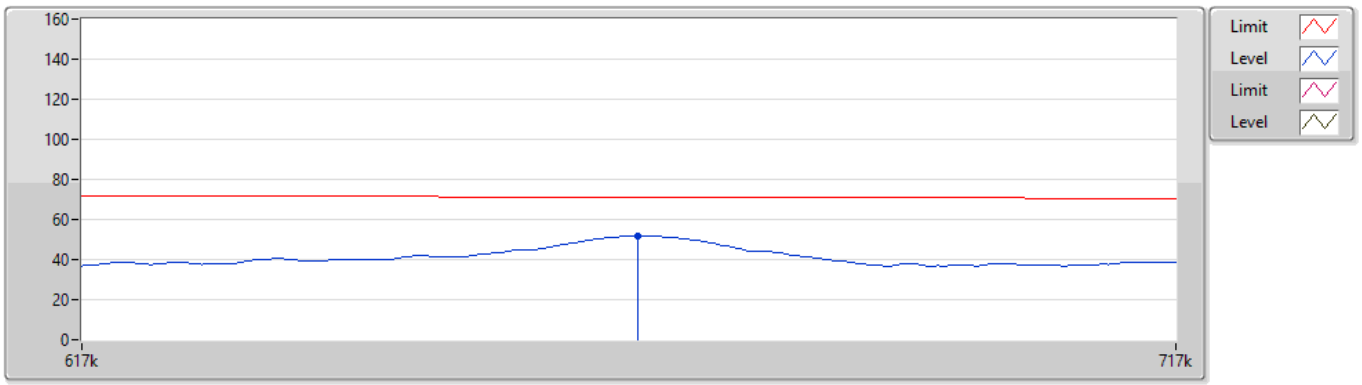
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
SRD	-	-	-	-	-	-	-	-	-	-	-
0.667MHz_TX	Pass	PK	666k	51.72	71.15	-19.43	20.20	3	Horizontal	0	1.00
0.667MHz_TX	Pass	PK	30.432k	30.07	137.94	-107.87	21.09	3	Horizontal	360	1.00
0.667MHz_TX	Pass	PK	46.506k	25.07	134.24	-109.17	20.51	3	Horizontal	360	1.00
0.667MHz_TX	Pass	PK	145.77k	42.50	124.32	-81.82	19.87	3	Horizontal	360	1.00
0.667MHz_TX	Pass	PK	747k	34.85	70.15	-35.30	20.15	3	Horizontal	0	1.00
0.667MHz_TX	Pass	PK	2.06M	42.64	69.50	-26.86	19.86	3	Horizontal	0	1.00
0.667MHz_TX	Pass	PK	6.896M	36.24	69.50	-33.26	21.93	3	Horizontal	0	1.00

SRD

0.667MHz_TX

20/05/2023

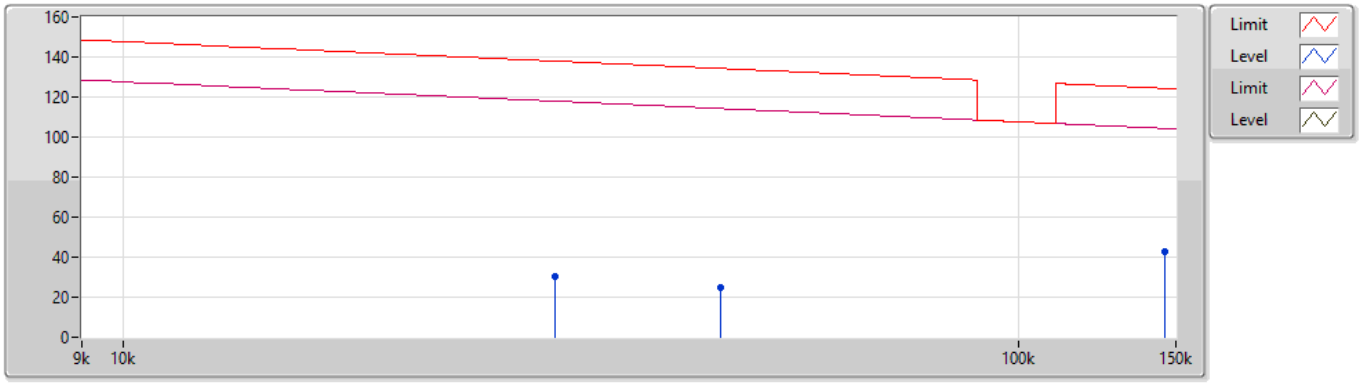


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
PK	666k	51.72	71.15	-19.43	20.20	3	Horizontal	0	1.00	31.52	20.10	0.10	-

SRD

0.667MHz_TX

20/05/2023

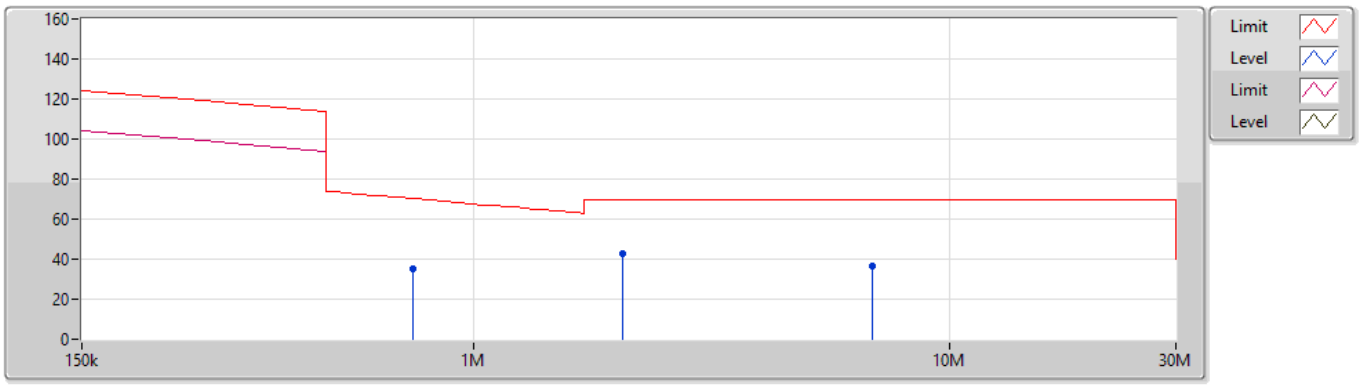


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
PK	30.432k	30.07	137.94	-107.87	21.09	3	Horizontal	360	1.00	8.98	21.06	0.03	-
PK	46.506k	25.07	134.24	-109.17	20.51	3	Horizontal	360	1.00	4.56	20.47	0.04	-
PK	145.77k	42.50	124.32	-81.82	19.87	3	Horizontal	360	1.00	22.63	19.82	0.05	-

SRD

0.667MHz_TX

20/05/2023



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
PK	747k	34.85	70.15	-35.30	20.15	3	Horizontal	0	1.00	14.70	20.05	0.10	-
PK	2.06M	42.64	69.50	-26.86	19.86	3	Horizontal	0	1.00	22.78	19.70	0.16	-
PK	6.896M	36.24	69.50	-33.26	21.93	3	Horizontal	0	1.00	14.31	21.59	0.34	-

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
SRD	-	-	-	-	-	-	-	-	-	-	-
SRD	Pass	QP	296.7M	45.81	46.00	-0.19	-5.44	3	Horizontal	0	1.00

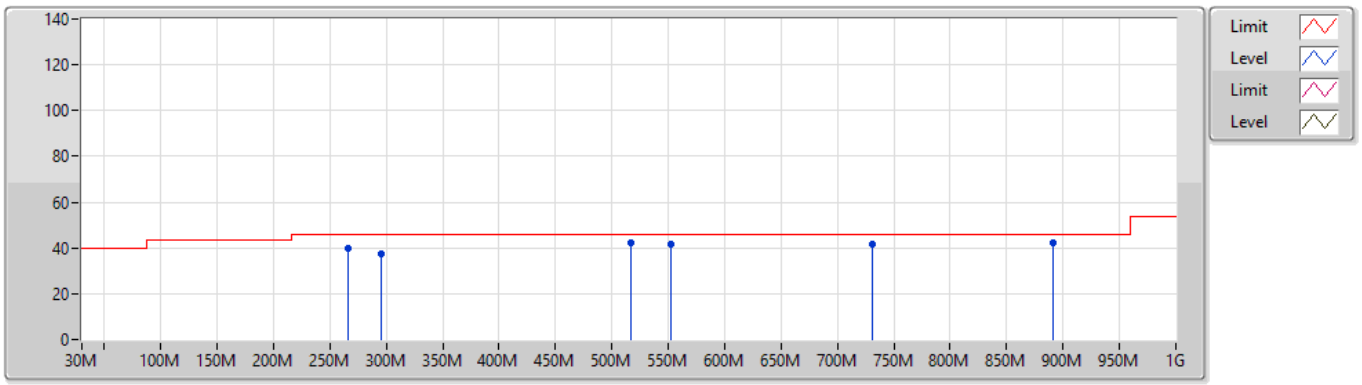
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
SRD	-	-	-	-	-	-	-	-	-	-	-
0.667MHz_TX	Pass	PK	266.68M	39.85	46.00	-6.15	-5.88	3	Vertical	360	1.00
0.667MHz_TX	Pass	PK	295.78M	37.43	46.00	-8.57	-5.46	3	Vertical	360	1.00
0.667MHz_TX	Pass	PK	516.94M	42.25	46.00	-3.75	-0.94	3	Vertical	360	3.00
0.667MHz_TX	Pass	PK	551.86M	41.84	46.00	-4.16	0.49	3	Vertical	360	3.00
0.667MHz_TX	Pass	PK	730.34M	41.38	46.00	-4.62	1.94	3	Vertical	360	1.00
0.667MHz_TX	Pass	PK	891.36M	42.39	46.00	-3.61	3.47	3	Vertical	360	3.00
0.667MHz_TX	Pass	PK	53.28M	31.60	40.00	-8.40	-14.14	3	Horizontal	0	1.00
0.667MHz_TX	Pass	PK	163.86M	37.68	43.50	-5.82	-10.03	3	Horizontal	0	1.00
0.667MHz_TX	Pass	PK	266.68M	41.17	46.00	-4.83	-5.88	3	Horizontal	0	1.00
0.667MHz_TX	Pass	PK	891.36M	42.98	46.00	-3.02	3.47	3	Horizontal	195	1.00
0.667MHz_TX	Pass	QP	296.7M	45.81	46.00	-0.19	-5.44	3	Horizontal	0	1.00
0.667MHz_TX	Pass	QP	516.98M	40.12	46.00	-5.88	-0.94	3	Horizontal	0	1.00

SRD

20/05/2023

0.667MHz_TX

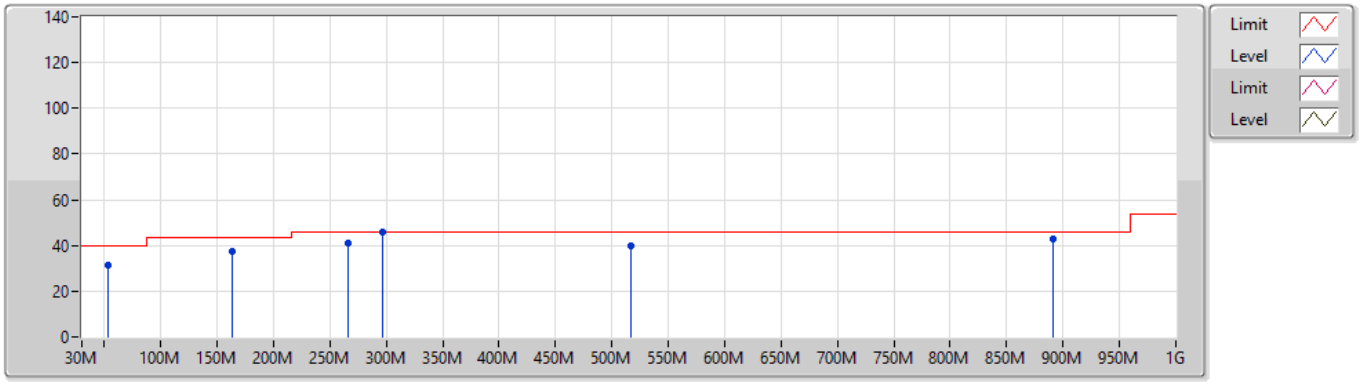


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
PK	266.68M	39.85	46.00	-6.15	-5.88	3	Vertical	360	1.00	45.73	18.01	2.77	26.66
PK	295.78M	37.43	46.00	-8.57	-5.46	3	Vertical	360	1.00	42.89	18.23	2.93	26.62
PK	516.94M	42.25	46.00	-3.75	-0.94	3	Vertical	360	3.00	43.19	22.97	3.93	27.84
PK	551.86M	41.84	46.00	-4.16	0.49	3	Vertical	360	3.00	41.35	24.41	4.07	27.99
PK	730.34M	41.38	46.00	-4.62	1.94	3	Vertical	360	1.00	39.44	25.02	4.72	27.80
PK	891.36M	42.39	46.00	-3.61	3.47	3	Vertical	360	3.00	38.92	25.77	5.25	27.55

SRD

20/05/2023

0.667MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
PK	53.28M	31.60	40.00	-8.40	-14.14	3	Horizontal	0	1.00	45.74	12.14	1.22	27.50
PK	163.86M	37.68	43.50	-5.82	-10.03	3	Horizontal	0	1.00	47.71	14.91	2.15	27.09
PK	266.68M	41.17	46.00	-4.83	-5.88	3	Horizontal	0	1.00	47.05	18.01	2.77	26.66
PK	891.36M	42.98	46.00	-3.02	3.47	3	Horizontal	195	1.00	39.51	25.77	5.25	27.55
QP	296.7M	45.81	46.00	-0.19	-5.44	3	Horizontal	0	1.00	51.25	18.24	2.93	26.61
QP	516.98M	40.12	46.00	-5.88	-0.94	3	Horizontal	0	1.00	41.06	22.97	3.93	27.84

Summary

Mode	20dB (Hz)	Fl-20dB (Hz)	Fh-20dB (Hz)	OBW (Hz)	Limit (Range)
SRD	-	-	-	-	-
SRD	11.568k	658.25000k	669.81750k	14.369k	Inf

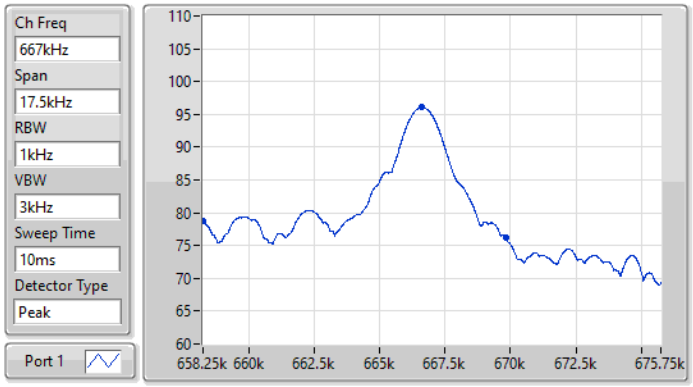
Result

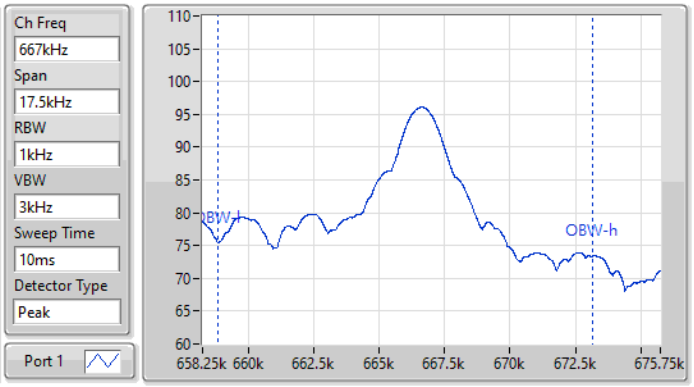
Mode	Result	20dB (Hz)	Fl-20dB (Hz)	Fh-20dB (Hz)	OBW (Hz)	Fl-OBW (Hz)	Fh-OBW (Hz)	Limit (Range)
SRD	-	-	-	-	-	-	-	-
0.667MHz_TnomVnom	Pass	11.568k	658.25000k	669.81750k	14.369k	658.81409k	673.18316k	Inf

SRD **EBW**

0.667MHz_TnomVnom

27/05/2023





20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Range
11.568k	658.25000k	669.81750k	14.369k	658.81409k	673.18316k	Inf