EMI TEST REPORT

Filing Type	:	**Supplier's Declaration Of Conformity**
Equipment	:	**Modem**
Brand Name	:	**4G NA1 Modem WM110MW**
Model Name	:	**RB900Q-HS-NA1**
Applicant	:	**ELPROMA ELEKTRONIKA Sp. z o.o. Dunska 2A, 05-152 Czosnow, Poland**
Manufacturer	:	**ELPROMA ELEKTRONIKA Sp. z o.o. Dunska 2A, 05-152 Czosnow, Poland**
Standard	:	**47 CFR FCC Rules and Regulations Part 15 Subpart B, Class B Digital Device**

The product was received on Aug. 11, 2023, and testing was started from Oct. 06, 2023 and completed on Oct. 11, 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 C63.4-2014 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: William Li

SDoC by:

SPORTON INTERNATIONAL INC. Hsinhua Laboratory
No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issued Date
FD372716	01	Initial issue of report	Oct. 30, 2023

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
4	15.107	Conducted Emissions of Powerline	PASS	Under limit 9.52 dB at 240.23 kHz
5.1	15.109	Radiated Emissions below 1 GHz	PASS	Under limit 4.27 dB at 163.86 MHz
5.2	15.109	Radiated Emissions above 1 GHz	PASS	Under limit 23.99 dB at 5.915 GHz

Conformity Assessment Condition:

The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account. Please refer to each test results in Appendix A for measurement uncertainty.

Disclaimer:

1. The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.
2. The test configuration, test mode, and test software presented in this report are as defined by the manufacturer.

Comments and explanations:

None

Reviewed by: Verson Wang

Report Producer: Ann Hou

1. General Description of Equipment under Test

1.1. Basic Description of Equipment under Test

Equipment	:	Modem
Model No.	:	RB900Q-HS-NA1
Power Source	:	Host System
AC Power Cord	:	Non-Shielded, 1.8 m, 2 pin
Highest internal frequency	:	2.69 GHz

1.2. Feature of Equipment under Test

For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

1.3. Modification of EUT

No modifications to the EUT were made.

2. Test Configuration of Equipment under Test

2.1. Details of EUT Test Modes

RB900Q-HS-NA1 as the main test model, the test mode are as follows, and its data are presented in this report.

Conducted Emission		
Test Mode	**Mode 1**	**Mode 2**
WCDMA link	V	-
LTE link	-	V
Mode 2 generated the worst test result; so it was recorded in this report.		

Radiated Emissions <below 1 GHz>		
Test Mode	**Mode 1**	**Mode 2**
WCDMA link	V	-
LTE link	-	V
Mode 2 generated the worst test result; so it was recorded in this report.		

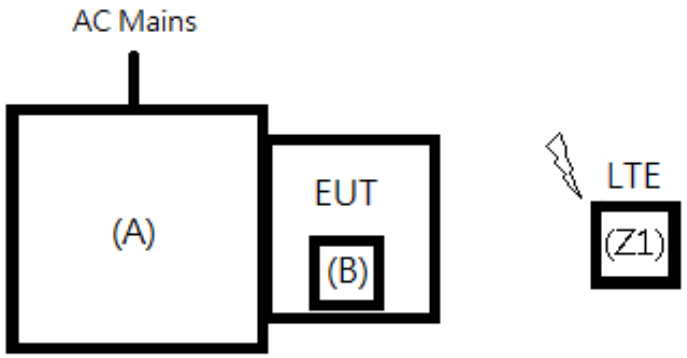
Radiated Emissions <above 1 GHz>	
Test Mode	**Description**
LTE link	V
The measurement of radiated emissions above 1 GHz follows the test configuration for the worst test results below 1 GHz.	

2.2. Description of Test System

Conducted emission and radiated emission

No.	Peripheral	Manufacturer	Model Number	FCC ID	Remarks
For Local					
A	Respiratory	LOWENSTEIN	WM120TD	N/A	Client Provided
B	SIM Card	R&S	N/A	N/A	-
For Remote					
Z1	Radio Communication Analyzer	Anritsu	MT8820C	DoC	-

2.3. Connection Diagram of Test System

Test Setup Diagram


2.4. Details of EUT Test Setup

- EUT powered by respiratory.
- WCDMA or LTE feature on and in communication mode.

3. General Information of Test

3.1. Test Facilities

Test Lab : Sporton International Inc. Hsinhua Laboratory			
☒	Hsinhua (TAF: 3785)	**ADD** : No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)	
		TEL : 886-3-327-3456	**FAX** : 886-3-327-0973
		FCC Designation Number: TW1129	
☐		**ADD :** No.3, Ln. 238, Kangle St., Neihu Dist., Taipei City 114040, Taiwan (R.O.C.)	
		TEL : 886-2-2631-5551	**FAX :** 886-2-2631-9740
		FCC Designation Number: TW1133	

Test Items	Test Site No.	Test Engineer	Test Environment		Test Date	Remark
			temp °C	humidity %		
Powerline Conducted Emissions	CO01-HY	Jeff Li / Ray Lee	22.1~22.4	60~61	11/Oct/2023	-
Radiated Emissions (below 1 GHz)	03CH01-HY	Yen-Liang Ou	24.5~25.5	58~59	06/Oct/2023	-
Radiated Emissions (above 1 GHz)	03CH01-HY	Yen-Liang Ou	24.5~25.5	58~59	06/Oct/2023	-

3.2. Test Standards

Test items	Test Standards and Test Procedures
Radiated and Conducted Emissions	ANSI C63.4-2014 with FCC Method 47 CFR Part 15, Subpart B, Class B Digital Device

3.3. Test Voltage/Frequencies

Input, mains	Voltage/Frequencies
AC	120V / 60Hz

3.4. Test Distance and Frequency Range Investigated

Test Items	Frequency Range	Remark
Powerline Conducted Emissions	150 kHz to 30 MHz	-
Radiated Emissions (below 1 GHz)	30 MHz to 1,000 MHz	Measurement distance is 3 m.
Radiated Emissions (above 1 GHz)	1,000 MHz to 18,000 MHz	Measurement distance is 3 m.
	Above 18,000 MHz	Measurement distance is 1 m.

3.5. Operating Condition

- Full system.

3.6. Labelling requirements

The devices shall bear the following statement in a conspicuous location on the device:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

3.7. User Information

The user's manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.

4. Conducted Emissions Measurement

Conducted Emissions were measured according to the methods defined in ANSI C63.4-2014 Section 7.
The EUT is which satisfies the Class B disturbance limits.

4.1. Limit

Limits for conducted disturbance at the mains ports of class B			
Frequency range MHz	**Coupling device**	**Detector type / bandwidth**	**Class B limits** dB(μV)
0,15 – 0,5	AMN	Quasi-peak / 9 kHz	66 - 56
0,5 – 5			56
5 – 30			60
0,15 – 0,5	AMN	Average / 9 kHz	56 - 46
0,5 – 5			46
5 – 30			50
Note 1: The lower limit shall apply at the transition frequencies. Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.			

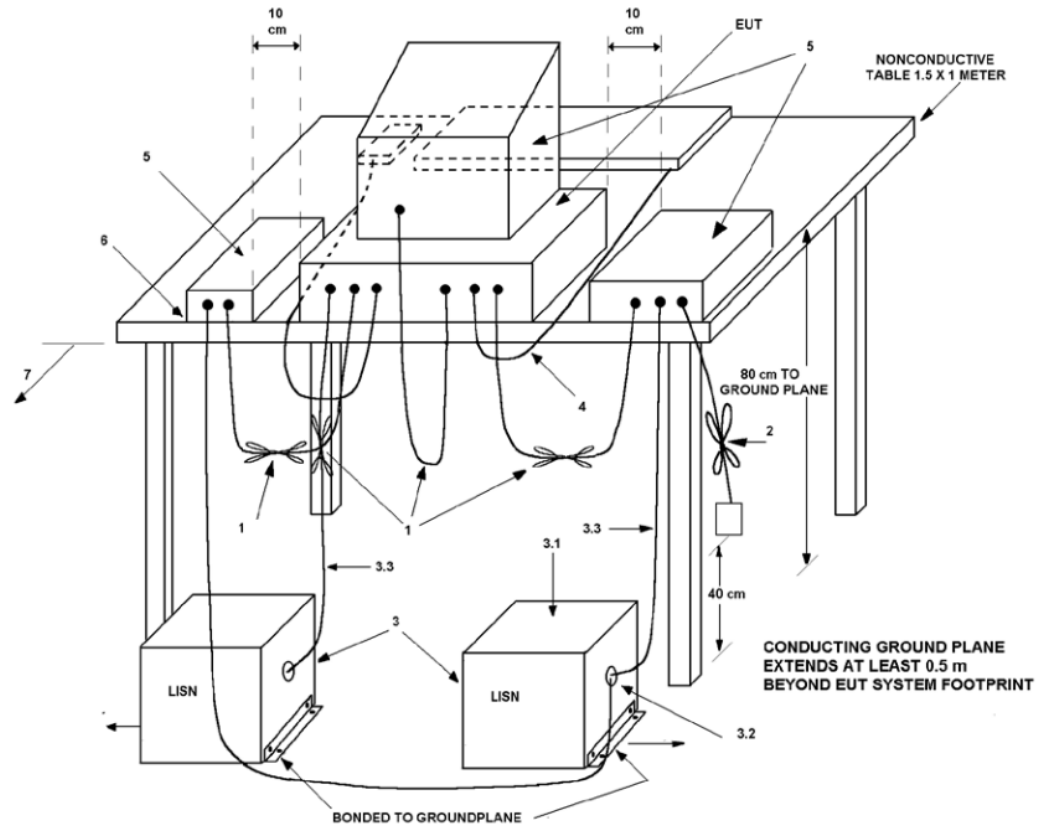
4.2. Test Procedures

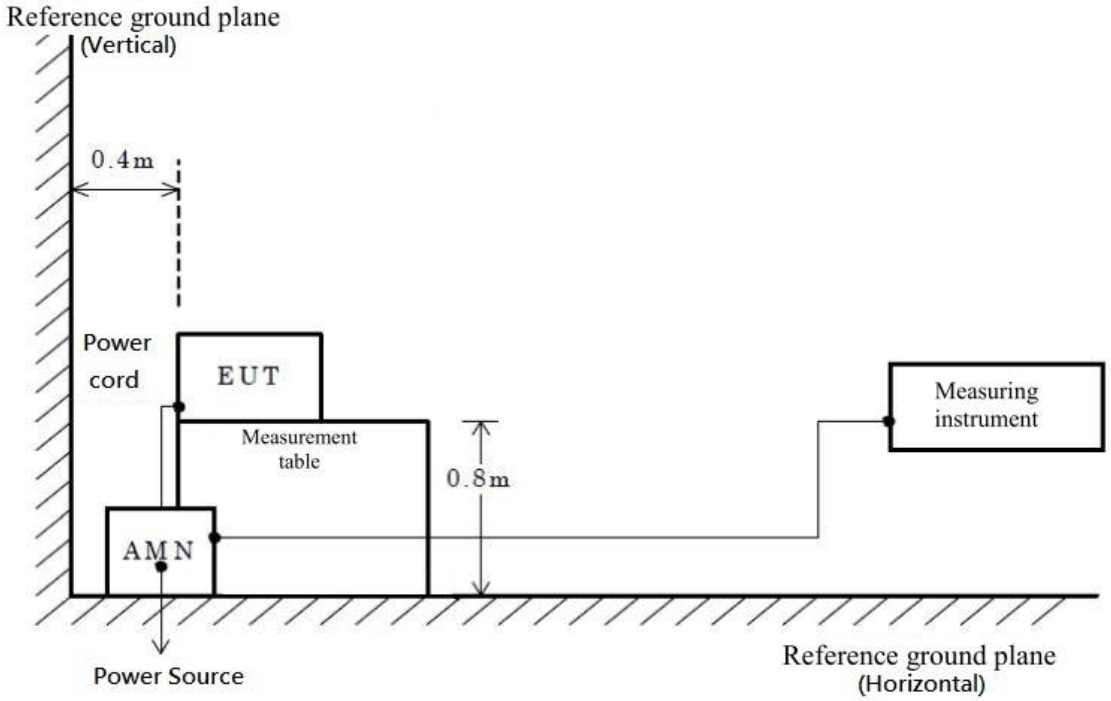
a). The EUT was warmed up for 15 minutes before testing started.
b). The EUT was placed on a desk 0.8 meter height from the metal ground plane and 0.4 meter from the conducting wall of the shielding room and it was kept at least 0.8 meter from any other grounded conducting surface.
c). Connect EUT to the power mains through a line impedance stabilization network (LISN).
d). All the support units are connect to the other LISN.
e). The LISN provides 50 ohm, coupling impedance for the measuring instrument.
f). The FCC states that a 50 ohm, 50 microhenry LISN should be used.
g). Both sides of AC line were checked for maximum conducted interference.
h). The frequency range from 150 kHz to 30 MHz was searched.
i). Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
j). All emissions not reported here are more than 10 dB below the prescribed limit.

4.3. Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading (dBμV) = Raw(Read Level)+(LISN Factor) + CL(Cable Loss) +AT(Attenuator)
For example at 0.3 MHz if the LISN Factor is 10.48 dB, the cable loss is 0.10 dB, the measured voltage is 36.39 dBμV, attenuation 10dB, the signal strength would be calculated:
Corrected Reading (dBμV) = 36.39 dBμV+10.48 dB + 0.10 dB + 10 dB = 56.97 dBμV

4.4. Typical Test Setup Layout





a).	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.
b).	Input/output (I/O) cables that are not connected to a peripheral 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.
c).	EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated into 50 Ω loads. LISN can be placed on top of, or immediately beneath, reference ground plane.
	3.1 All other equipment powered from additional LISN(s).
	3.2 Multiple outlet strips can be used for multiple power cords of non-EUT equipment.
	3.3 LISN at least 80 cm from nearest part of EUT chassis.
d).	Cables of hand-operated devices, such as keyboards and mice, shall be placed as for normal use.
e).	Non-EUT components of EUT system being tested.
f).	Rear of EUT, including peripherals, shall all be aligned and flush with rear of tabletop.
g).	Rear of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.

4.5. Test Result

Refer as Appendix B

5. Radiated Emissions Measurement

Radiated Emissions were measured according to the methods defined in ANSI C63.4-2014 Section 8.
The EUT is which satisfies the Class B disturbance limits.

5.1. Radiated Emission below 1 GHz

5.1.1. Limit

radiated emissions at frequencies up to 1 GHz for Class B equipment				
Frequency range MHz	**Measurement**		**Class B limits**	
	Distance (m)	**Detector type / bandwidth**	**μV/m**	**dB(μV/m)**
30 – 88	3	Quasi Peak / 120 kHz	100	40
88 – 216			150	43.5
216 – 960			200	46
Above 960			500	54
Note: dB(μV/m) = 20 log μV/m				

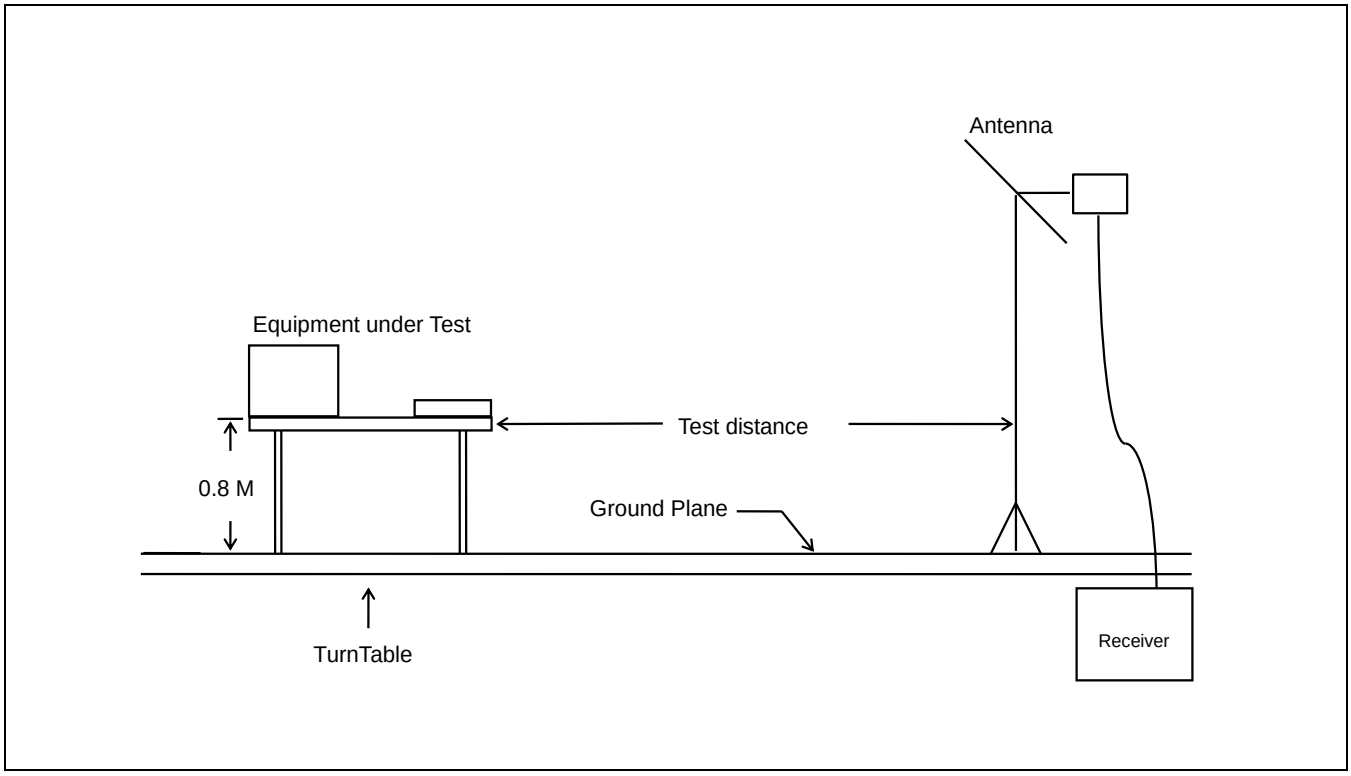
5.1.2. Test Procedures

a). The EUT was placed on a rotatable table top 0.8 meter above ground.
b). The EUT was set 3 meters from the interference-receiving antenna which was mounted on the top of a variable height antenna tower.
c). The table was rotated 360 degrees to determine the position of the highest radiation.
d). The antenna is a half wave dipole and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna are set to make the measurement.
e). For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 M to 4 M) and turn table (from 0 degree to 360 degrees) to find the maximum reading.
f). Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.
g). If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method and reported.
h). If the EUT is having a Wireless modular, can choose to install the filter at the input connector of test-receiver system.

5.1.3. Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading (dBμV/m) = Raw(Read Level)+AF(Antenna Factor)+CL(Cable Loss)−PA(Preamp Factor)
For example at 125 MHz if the Antenna Factor is 17.24 dB/m, the cable loss is 1.20 dB, the measured voltage is 35.80 dBμV and the Preamp Factor is 27.18 dB, the signal strength would be calculated:
Corrected Reading (dBμV/m) = 35.80 dBμV + 17.24 dB/m + 1.20 dB - 27.18 dB = 27.06 dBμV/m
Note: If a hybrid antenna is used, the antenna factor shall be the sum of the Antenna Factor + Attenuator Factor.

5.1.4. Typical Test Setup Layout



5.1.5. Test Result

Refer as Appendix C

5.2. Radiated Emission above 1 GHz

The EUT is which satisfies the Class B disturbance limits.

5.2.1. Limit

radiated emissions at frequencies above 1 GHz for Class B equipment			
Frequency range GHz	**Measurement**		**Class B limits**
	Distance (m)	**Detector type / bandwidth**	**dB(μV/m)**
1 – 18	3	Average / 1 MHz	54
1 – 18		Peak / 1 MHz	74
18 – 40	1	Average / 1 MHz	63.54
18 – 40		Peak / 1 MHz	83.54
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).			
Remark: It should be noted that the field strength is inversely proportional to distance, so the field strength at 3m is 1/3 the strength at 1m, i.e. L3m/Lx = X/3. Ex. L3m dB-Lx dB = 20log(3/x); L1m dB = 54 + 20log (3/1) = 63.54 dB(μV/m)			

Required highest frequency for radiated measurement	
Highest internal frequency (F_x)	**Highest measured frequency**
$F_x \leq 108$ MHz	1 GHz
108 MHz < $F_x \leq 500$ MHz	2 GHz
500 MHz < $F_x \leq 1$ GHz	5 GHz
$F_x > 1$ GHz	5 x F_x up to a maximum of 40 GHz

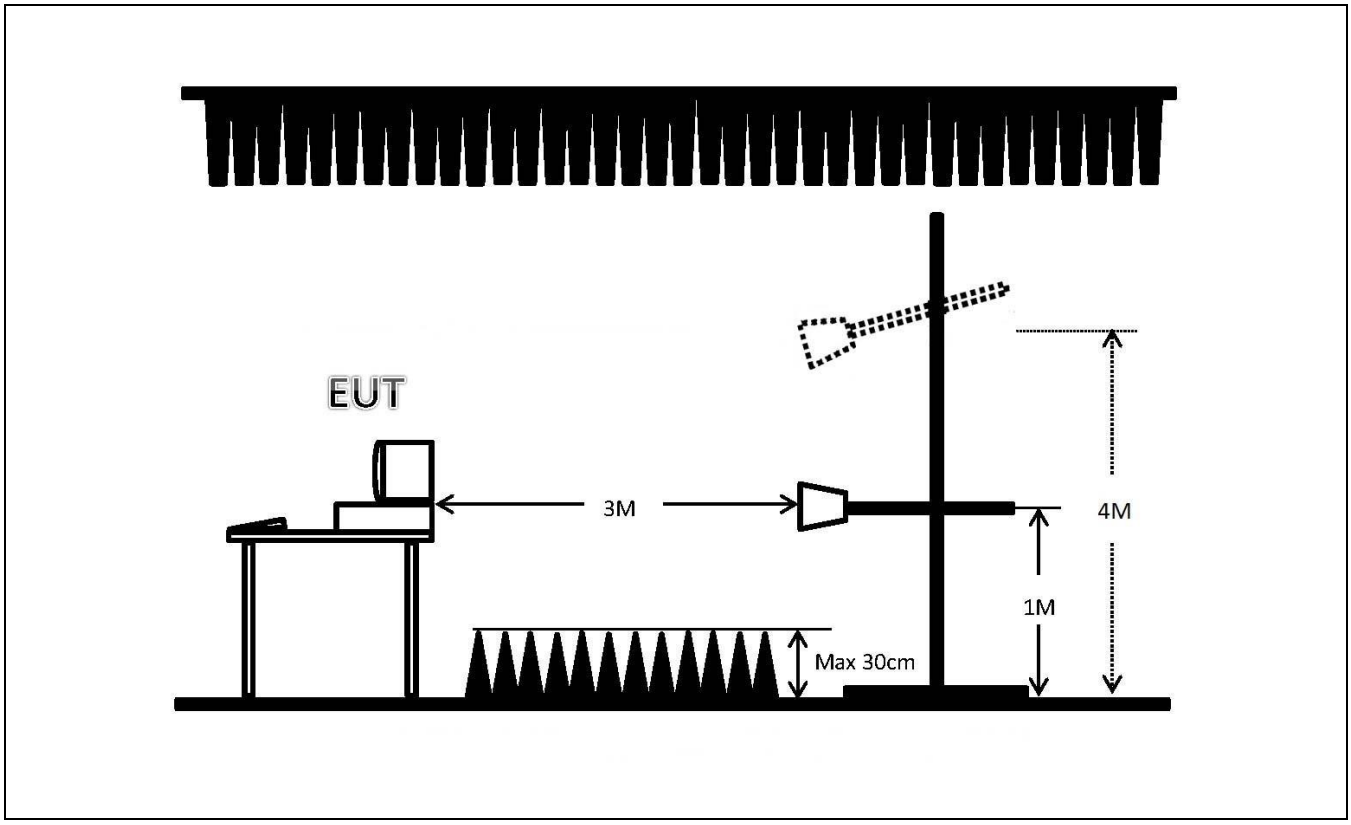
5.2.2. Test Procedures

a). Same test set up as below 1 GHz radiated testing.
b). The EUT was set 3m (1 – 18 GHz) / 1m (18 – 40 GHz) from the interference-receiving antenna which was mounted on the top of a variable height antenna tower.
c). There should be absorber placed between the EUT and Antenna and its located size should let the test site meet CISPR16-1-4 requirement.
d). The table was rotated 360 degrees to determine the position of the highest radiation.
e). The measured using a test-receiver system with both a peak and CISPR average detector.
f). If the EUT is having a Wireless or Bluetooth modular, can choose to install the filter at the input connector of test-receiver system.
g). Set the DRG Horn Antenna at 1M height, then run the turn table to get the maximum noise reading from Horizontal and Vertical polarity separately the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.
h). When EUT locating on the turn-table, and its height is over 172cm (Antenna's 3dB beam width of 6 GHz is 27∘), the DRG Horn Antenna must be raised up and descended down, while keeping the antenna in the cone of radiation from that area and pointed at the area both in azimuth and elevation, then turning around the turn-table to get the maximum noise reading of the Horizontal and Vertical polarity separately.
i). If emission level of the EUT in peak mode was 23dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

5.2.3. Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading (dBμV/m) = Raw(Read Level)+AF(Antenna Factor)+CL(Cable Loss)-PA(Preamp Factor)
For example at 1980 MHz if the Antenna Factor is 26.19 dB/m, the cable loss is 4.08 dB, the measured voltage is 51.30 dBμV and the Preamp Factor is 33.34 dB, the signal strength would be calculated:
Corrected Reading (dBμV/m) = 51.30 dBμV + 26.19 dB/m + 4.08 dB - 33.34 dB = 48.23 dBμV/m
Note: If a band reject filter is used, this factor is added to the sum of the factors.

5.2.4. Typical Test Setup Layout



5.2.5. Test Result

Refer as Appendix D

6. List of Measuring Equipment Used

Conducted Emission - Test Date: 11/Oct/2023

Instrument	Manufacturer/ Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Test Receiver	R&S	ESR	102052	9kHz ~ 3.6GHz	26/May/2023	25/May/2024	Conduction (CO01-HY)
LISN- Two-Line V-Network	R&S	ENV216	101274	9 kHz ~ 30 MHz	26/Jun/2023	25/Jun/2024	Conduction (CO01-HY)
Cable	MTJ	RG 142	CO01-cable-01	9 kHz ~ 1GHz	10/Jul/2023	09/Jul/2024	Conduction (CO01-HY)
Pulse Limiter	R&S	EHS3-Z2	100920	9kHz ~ 30MHz	28/Oct/2022	27/Oct/2023	Conduction (CO01-HY)
Software	Sporton	SENSE-EMI	V5.11	-	NCR	NCR	Conduction (CO01-HY)

NCR: No Calibration Required

Radiated Emission below 1 GHz - Test Date: 06/Oct/2023

Instrument	Manufacturer/ Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
N.S.A. Measurement	Riken	SAC-3M	03CH01-HY	30 MHz ~ 1 GHz 3m	29/Dec/2022	28/Dec/2023	Radiation (03CH01-HY)
EMI Test Receiver	R&S	ESU26	100422	20Hz ~ 26.5GHz	28/Nov/2022	27/Nov/2023	Radiation (03CH01-HY)
PreAmplifier	COM-POWER	PA-103	161046	1 MHz ~ 1 GHz	29/Nov/2022	28/Nov/2023	Radiation (03CH01-HY)
Bilog Antenna with 5dB Attenuator	SCHAFFNER & MTJ	CBL 6112D & MTJ6102-05	2678 / 001	30 MHz ~ 1GHz	09/Jul/2023	08/Jul/2024	Radiation (03CH01-HY)
RF Cable-R03m	Jye Bao	RG142	CB019	30MHz ~ 1 GHz	28/Nov/2022	27/Nov/2023	Radiation (03CH01-HY)
Turn Table	MF	DS 420	420/648/00	0 ~ 360 degree	NCR	NCR	Radiation (03CH01-HY)
Antenna Mast	MF	MFA-515BSN	MFA-515BSN13 08261	1 m ~ 4 m	NCR	NCR	Radiation (03CH01-HY)
Software	Sporton	SENSE-EMI	V5.11	-	NCR	NCR	Radiation (03CH01-HY)

NCR: No Calibration Required

Radiated Emission above 1 GHz - Test Date: 06/Oct/2023

Instrument	Manufacturer/ Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Microwave Preamplifier	Agilent	8449B	3008A02602	1GHz~26.5GHz	16/Mar/2023	15/Mar/2024	Radiation (03CH01-HY)
EMI Test Receiver	R&S	ESU26	100422	20Hz ~ 26.5GHz	28/Nov/2022	27/Nov/2023	Radiation (03CH01-HY)
Site V.S.W.R	Riken	3m SAC	03CH01-HY	1 GHz ~ 18 GHz 3m	06/Jan/2023	05/Jan/2024	Radiation (03CH01-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120D01834	1 ~ 18 GHz	23/Mar/2023	22/Mar/2024	Radiation (03CH01-HY)
RF Cable	SUHNER	SUCOFLEX 104	CB001-03CH01	30MHz~18GHz	21/Feb/2023	20/Feb/2024	Radiation (03CH01-HY)
Turn Table	MF	DS 420	420/648/00	0 ~ 360 degree	NCR	NCR	Radiation (03CH01-HY)
Antenna Mast	MF	MFA-515BSN	MFA-515BSN13 08261	1 m ~ 4 m	NCR	NCR	Radiation (03CH01-HY)
Software	Sporton	SENSE-EMI	V5.11	-	NCR	NCR	Radiation (03CH01-HY)

NCR: No Calibration Required

Uncertainty of Test Site

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).

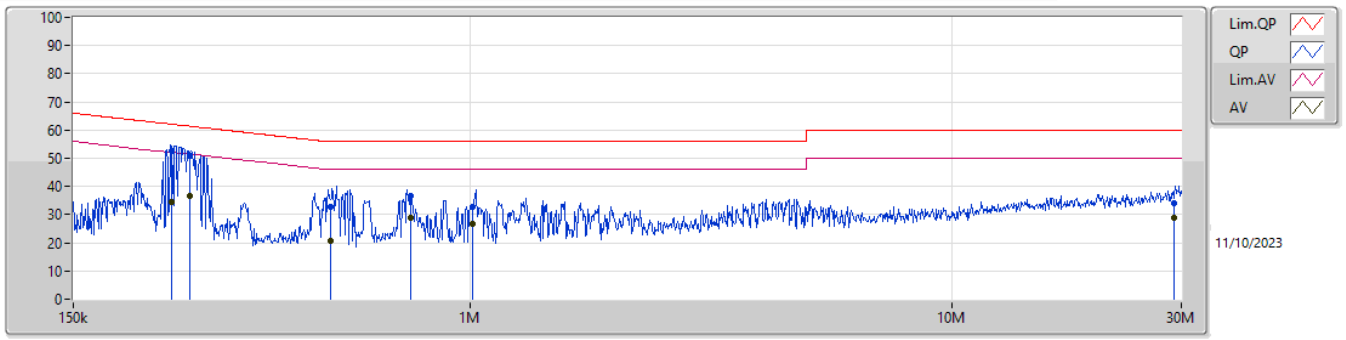
Measurement Uncertainty

Test Items	Test Site No.	U_{LAB}
Conducted Emissions	CO01-HY	2.66 dB
Radiated Emissions below 1 GHz	03CH01-HY	6.26 dB
Radiated Emissions 1 GHz to 6 GHz	03CH01-HY	4.94 dB
Radiated Emissions 6 GHz to 18 GHz	03CH01-HY	5.22 dB

Summary

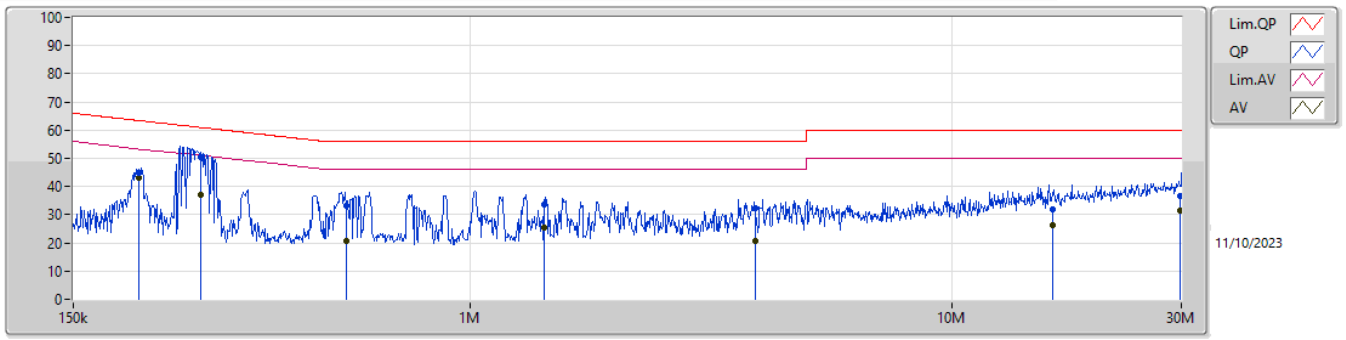
Mode	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition
Mode 2	QP	240.23k	52.56	62.08	-9.52	19.56	Line

Mode 2



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	240.23k	52.56	62.08	-9.52	19.56	Line	"Worst"	33.00	9.57	0.03	9.96
AV	240.23k	34.52	52.08	-17.56	19.56	Line	-	14.96	9.57	0.03	9.96
QP	261.98k	50.87	61.37	-10.50	19.57	Line	-	31.30	9.57	0.03	9.97
AV	261.98k	36.79	51.37	-14.58	19.57	Line	-	17.22	9.57	0.03	9.97
QP	512.216k	32.64	56.00	-23.36	19.58	Line	-	13.06	9.56	0.04	9.98
AV	512.216k	20.65	46.00	-25.35	19.58	Line	-	1.07	9.56	0.04	9.98
QP	751.268k	36.82	56.00	-19.18	19.59	Line	-	17.23	9.57	0.05	9.97
AV	751.268k	29.05	46.00	-16.95	19.59	Line	-	9.46	9.57	0.05	9.97
QP	1.015M	32.74	56.00	-23.26	19.58	Line	-	13.16	9.57	0.05	9.96
AV	1.015M	26.74	46.00	-19.26	19.58	Line	-	7.16	9.57	0.05	9.96
QP	28.948M	33.95	60.00	-26.05	19.99	Line	-	13.96	9.50	0.34	10.15
AV	28.948M	28.99	50.00	-21.01	19.99	Line	-	9.00	9.50	0.34	10.15

Mode 2

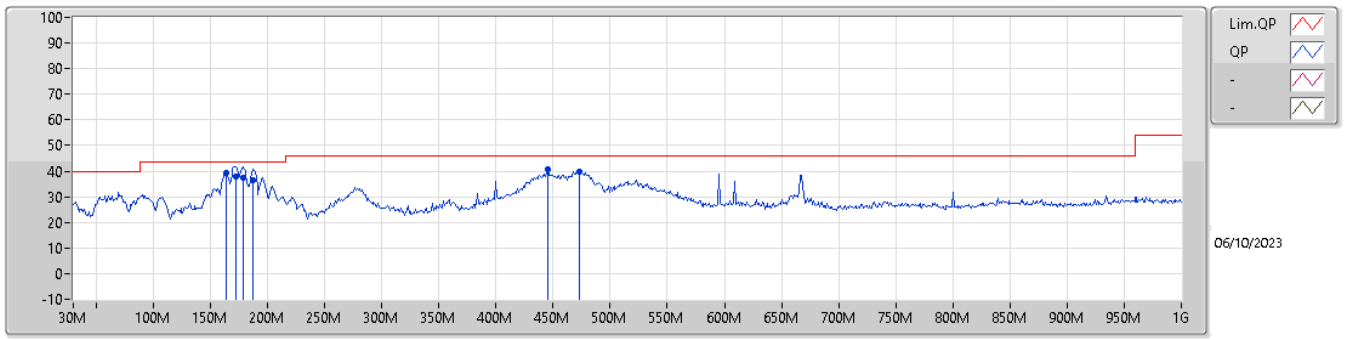


Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	204.87k	44.78	63.42	-18.64	19.57	Neutral	-	25.21	9.59	0.03	9.95
AV	204.87k	43.30	53.42	-10.12	19.57	Neutral	"Worst"	23.73	9.59	0.03	9.95
QP	276.45k	50.54	60.91	-10.37	19.59	Neutral	-	30.95	9.59	0.03	9.97
AV	276.45k	37.28	50.91	-13.63	19.59	Neutral	-	17.69	9.59	0.03	9.97
QP	552.959k	33.17	56.00	-22.83	19.60	Neutral	-	13.57	9.58	0.04	9.98
AV	552.959k	20.69	46.00	-25.31	19.60	Neutral	-	1.09	9.58	0.04	9.98
QP	1.424M	33.83	56.00	-22.17	19.63	Neutral	-	14.20	9.60	0.07	9.96
AV	1.424M	25.46	46.00	-20.54	19.63	Neutral	-	5.83	9.60	0.07	9.96
QP	3.915M	32.46	56.00	-23.54	19.70	Neutral	-	12.76	9.61	0.13	9.96
AV	3.915M	20.80	46.00	-25.20	19.70	Neutral	-	1.10	9.61	0.13	9.96
QP	16.198M	31.69	60.00	-28.31	19.97	Neutral	-	11.72	9.67	0.25	10.05
AV	16.198M	26.31	50.00	-23.69	19.97	Neutral	-	6.34	9.67	0.25	10.05
QP	29.855M	36.61	60.00	-23.39	20.18	Neutral	-	16.43	9.67	0.35	10.16
AV	29.855M	31.42	50.00	-18.58	20.18	Neutral	-	11.24	9.67	0.35	10.16

Summary

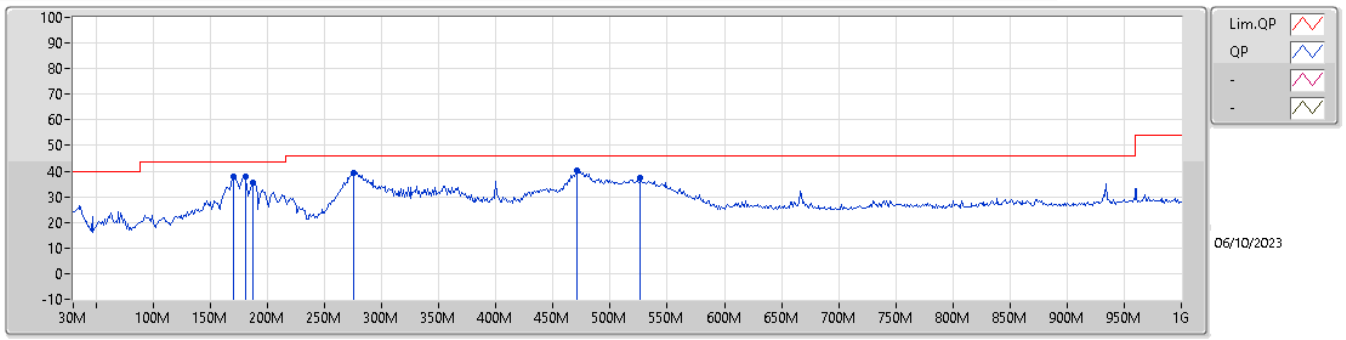
Mode	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Condition	Azimuth (°)	Height (m)
Mode 2	PK	163.86M	39.23	43.50	-4.27	-15.04	Vertical	359	1

Mode 2



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV)	(dB/m)	(dB)	(dB)
PK	163.86M	39.23	43.50	-4.27	-15.04	3	Vertical	359	1	"Worst"	54.27	14.98	1.50	31.52
QP	172.59M	37.96	43.50	-5.54	-15.29	3	Vertical	1	1	-	53.25	14.65	1.54	31.48
QP	178.41M	37.31	43.50	-6.19	-15.55	3	Vertical	2	1	-	52.86	14.35	1.56	31.46
QP	187.14M	36.62	43.50	-6.88	-15.81	3	Vertical	260	1	-	52.43	14.08	1.60	31.49
PK	445.16M	40.59	46.00	-5.41	-6.58	3	Vertical	-	-	-	47.17	21.86	2.74	31.18
PK	473.29M	39.95	46.00	-6.05	-5.82	3	Vertical	-	-	-	45.77	22.49	2.80	31.11

Mode 2

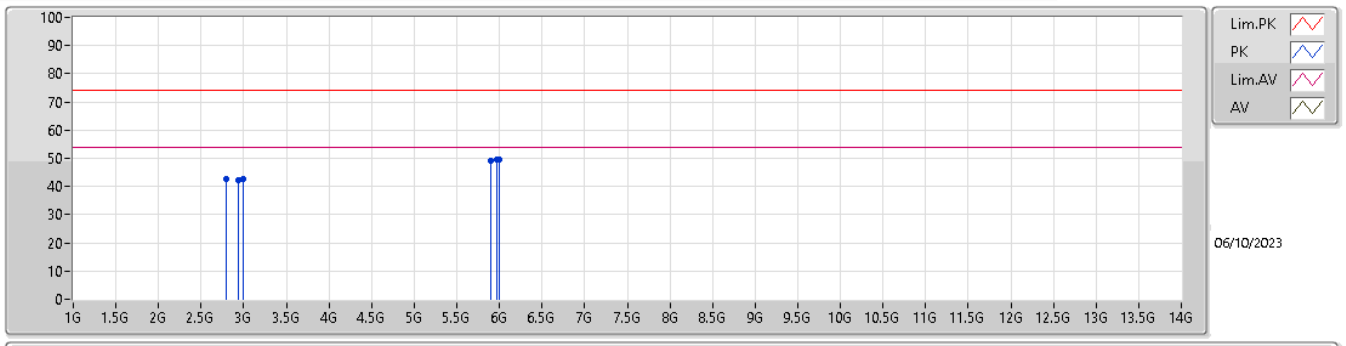


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV)	(dB/m)	(dB)	(dB)
PK	170.65M	38.00	43.50	-5.50	-15.19	3	Horizontal	-	-	-	53.19	14.77	1.53	31.49
PK	180.35M	38.09	43.50	-5.41	-15.60	3	Horizontal	240	2	"Worst"	53.69	14.28	1.57	31.45
PK	187.14M	35.61	43.50	-7.89	-15.81	3	Horizontal	-	-	-	51.42	14.08	1.60	31.49
PK	275.41M	39.28	46.00	-6.72	-11.50	3	Horizontal	-	-	-	50.78	17.93	1.99	31.42
PK	471.35M	40.07	46.00	-5.93	-5.86	3	Horizontal	-	-	-	45.93	22.46	2.80	31.12
PK	526.64M	37.18	46.00	-8.82	-5.37	3	Horizontal	-	-	-	42.55	22.64	3.00	31.01

Summary

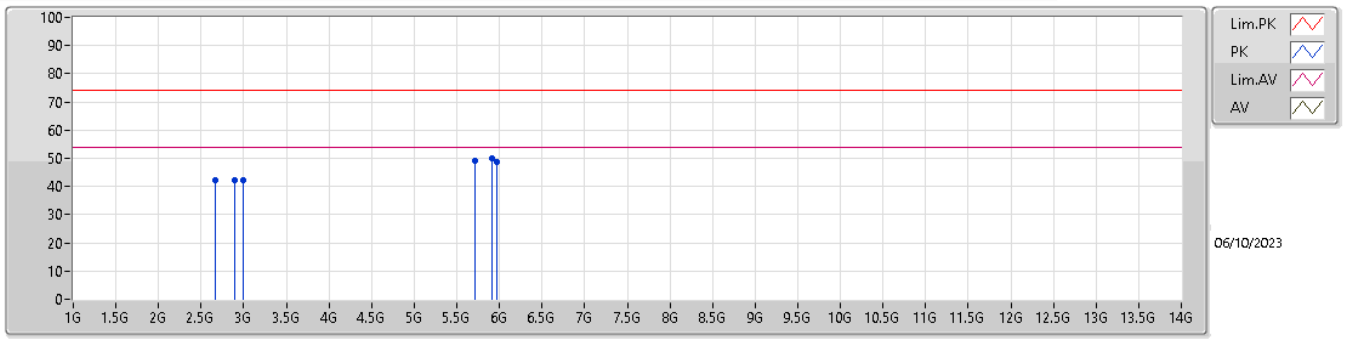
Mode	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Condition	Azimuth (°)	Height (m)
Mode 1	PK	5.915G	50.01	74.00	-23.99	7.19	Horizontal	184	1

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV)	(dB/m)	(dB)	(dB)		
PK	2.795G	42.85	74.00	-31.15	-2.07	3	Vertical	-	-	-	44.92	28.50	5.01	35.58		
PK	2.93G	42.38	74.00	-31.62	-1.39	3	Vertical	-	-	-	43.77	29.10	5.10	35.59		
PK	2.995G	42.69	74.00	-31.31	-0.90	3	Vertical	-	-	-	43.59	29.55	5.15	35.60		
PK	5.895G	49.25	74.00	-24.75	7.14	3	Vertical	-	-	-	42.11	34.48	7.89	35.23		
PK	5.965G	49.64	74.00	-24.36	7.25	3	Vertical	163	1	"Worst"	42.39	34.37	8.14	35.26		
PK	5.995G	49.38	74.00	-24.62	7.29	3	Vertical	-	-	-	42.09	34.31	8.25	35.27		

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV)	(dB/m)	(dB)	(dB)
PK	2.665G	42.13	74.00	-31.87	-2.31	3	Horizontal	-	-	-	44.44	28.35	4.90	35.56
PK	2.9G	42.24	74.00	-31.76	-1.61	3	Horizontal	-	-	-	43.85	28.90	5.08	35.59
PK	3G	42.31	74.00	-31.69	-0.85	3	Horizontal	-	-	-	43.16	29.60	5.15	35.60
PK	5.71G	49.06	74.00	-24.94	6.13	3	Horizontal	-	-	-	42.93	33.66	7.63	35.16
PK	5.915G	50.01	74.00	-23.99	7.19	3	Horizontal	184	1	"Worst"	42.82	34.47	7.96	35.24
PK	5.975G	48.84	74.00	-25.16	7.27	3	Horizontal	-	-	-	41.57	34.35	8.18	35.26

1. Photographs of Conducted Emissions Test Configuration

Front View

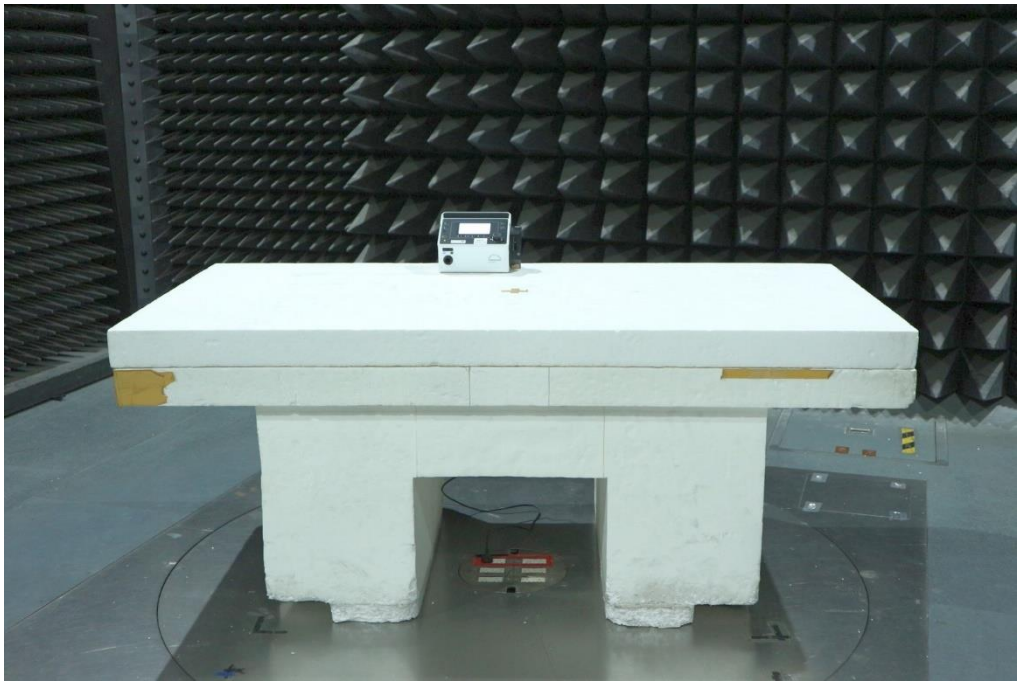
Side View

Under Table View

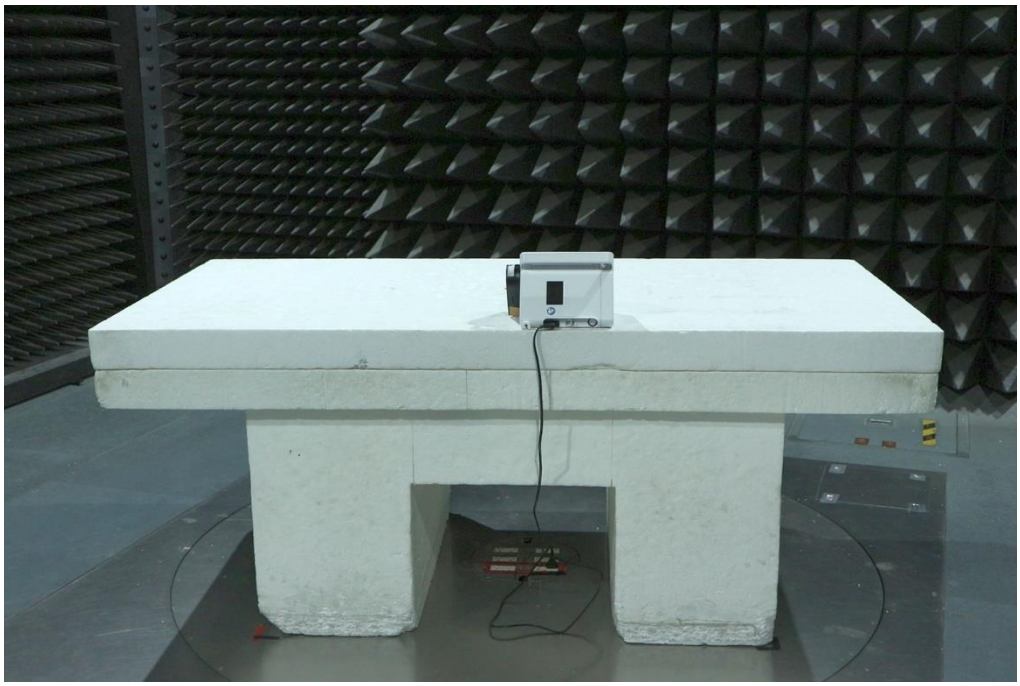
2. Photographs of Radiated Emissions Test Configuration

For radiated emissions below 1GHz

Front View

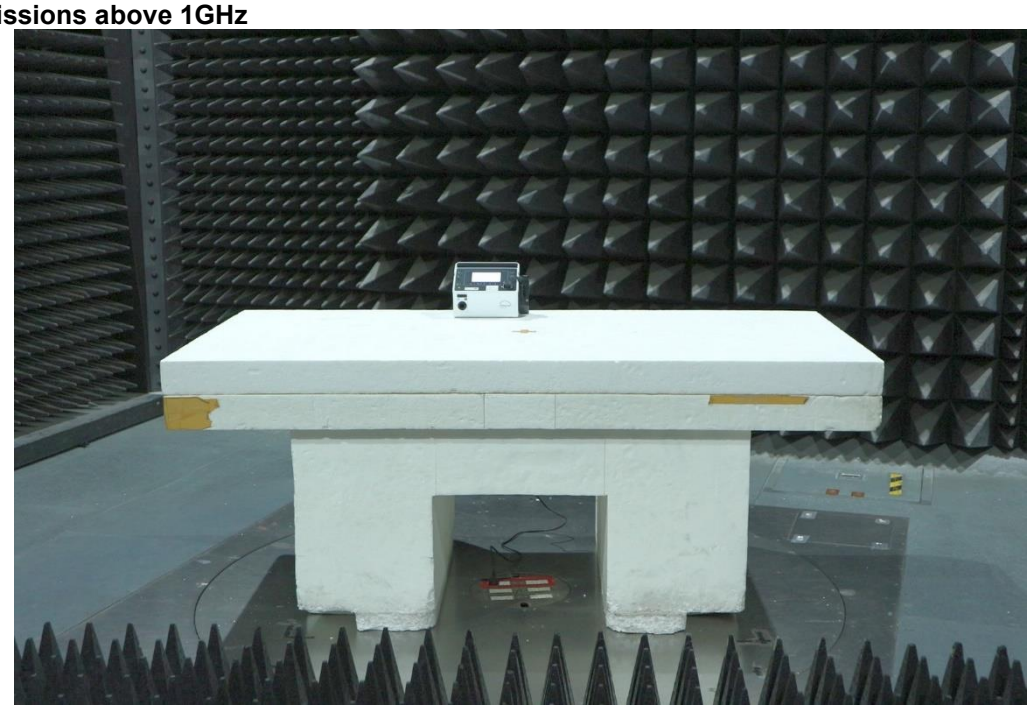


Rear View

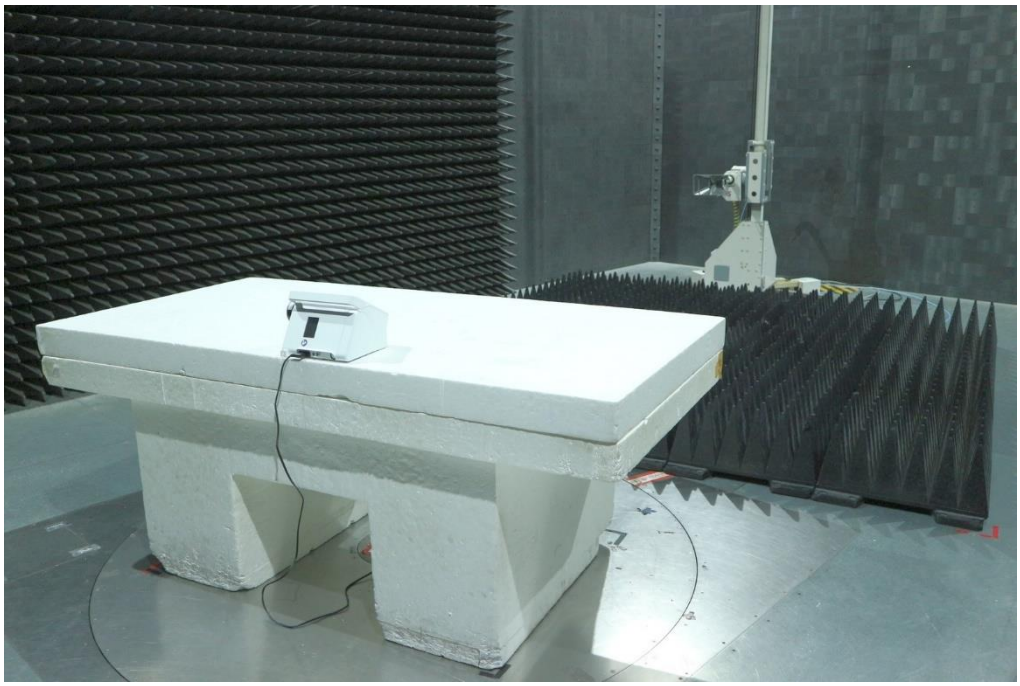


For radiated emissions above 1GHz

Front View



Rear View



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