

FCC Radio Test Report

FCC ID : 2AA7Y-MOSHIQI006
Equipment : Lounge Q Wireless Charging Stand
Brand Name : moshi
Model Name : 99MO022218
Applicant : Aevoe Inc.
3F, No. 42, Sec. 2, Zhongshan N. Rd., Zhongshan
Dist., Taipei City 104, Taiwan
Manufacturer : Powergene Technology Co., Ltd. Taiwan Branch
1F-5, No.1, Wuquan 1st Rd., Xinzhuang Dist.,
New Taipei City, Taiwan
Standard : 47 CFR FCC Part 15.209

The product was received on Apr. 01, 2020, and testing was started from Apr. 08, 2020 and completed on Jun. 11, 2020. 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: Allen Lin

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

TEL : 886-3-327-3456
FAX : 886-3-327-0973
Report Template No.: HE1-C5 Ver4.0
FCC ID: 2AA7Y-MOSHIQI006



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: Sam Tsai

Report Producer: Ann Hou

1 General Description

1.1 Information

1.1.1 General Information

Wireless Power Transfer General Information			
Frequency Range	Modulation Mode	Charging Freq. (kHz)	Field Strength (dBuV/m)
122-145 kHz	ASK	127.398	76.63
Power Transfer Method	Output power from each primary coil	That may have multiple primary coils	Charging Method
Magnetic induction and only single primary coil	<15W	No	Client directly contact
Note 1: Field strength performed peak level at 3m.			

1.1.2 Antenna Information

Antenna Category	
☐	Equipment placed on the market without antennas
☒	Integral antenna (antenna permanently attached)
☐	Temporary RF connector provided
☒	No temporary RF connector provided Transmit chains bypass antenna and soldered temporary RF connector provided for connected measurement. In case of conducted measurements the transmitter shall be connected to the measuring equipment via a suitable attenuator and correct for all losses in the RF path.
☐	External antenna (dedicated antennas)

Antenna General Information		
No.	Ant. Cat.	Ant. Type
1	Integral	Wireless charging antenna coils

1.1.3 EUT Information

Identify EUT	
WPC Chip	Brand Name : SHANDONG ZHONGRUI ELECTRONICS CO., LTD Model Name : ZR-TX-010
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 normally mode for worst duty cycle
☐	Operated test mode for worst duty cycle
Test Signal Duty Cycle (x)	
☒	100%

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 680106 D01 RF Exposure Wireless Charging Apps v03r01
- ♦ KDB 414788 D01 v01r01

1.3 Testing Location Information

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	
Test site Designation No. TW3785 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Jeff	23.5~26.3°C / 51~62%	11/Jun/2020
RF Conducted	TH01-HY	Barry	24.2~25.3°C / 55~61%	13/Apr/2020
Radiated Emission	03CH03-HY	Jeff	23.5~25.2°C / 52~61%	08/Apr/2020~13/Apr/2020
☐ Wen 33rd. St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)			
	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%
Radiated Emission (1GHz ~ 18GHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 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 Test Condition

Condition Item	Abbreviation/Remark	Remark
Tnom Vnom	Tnom	20°C
-	Vnom	120V

2.2 The Worst Case Configuration

Mode	Field Strength (dBuV/m at 3 m)	Charger Frequencies (kHz)
WPC	76.63	127.398

Note.1: Wireless charger were performed all charging conditions including variable loading and non-charging operation, the worst mode is full charging loading.

Note.2: Wireless charger frequencies are variable frequency range (122-145 kHz) and depend on charging loading.

2.3 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	Transmitter Radiated Emissions, Emission Bandwidth
Test Condition	Radiated measurement
Operating Mode	CTX
	☒ 1. Adapter Mode
Orthogonal Planes of EUT	Z Plane
	



2.4 Support Equipment

Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
1	iPhone	APPLE	A1905	-
2	AC adapter	Moshi	42W	-

Note: Support equipment No.2 was provided by customer.

Support Equipment – Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	iPhone	APPLE	A1905	-
2	AC adapter	Moshi	42W	-

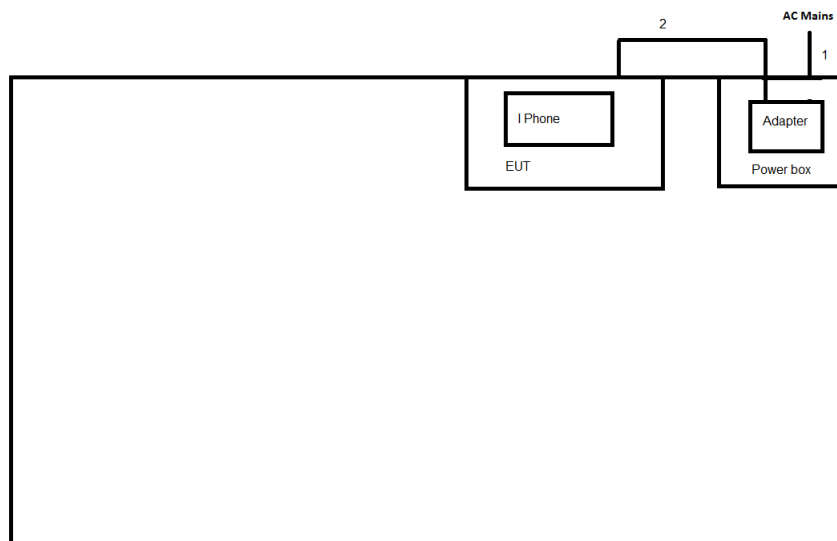
Note: Support equipment No.2 was provided by customer.

Support Equipment – Radiated				
No.	Equipment	Brand Name	Model Name	FCC ID
1	iPhone	APPLE	A1905	-
2	AC adapter	Moshi	42W	-

Note: Support equipment No.2 was provided by customer.

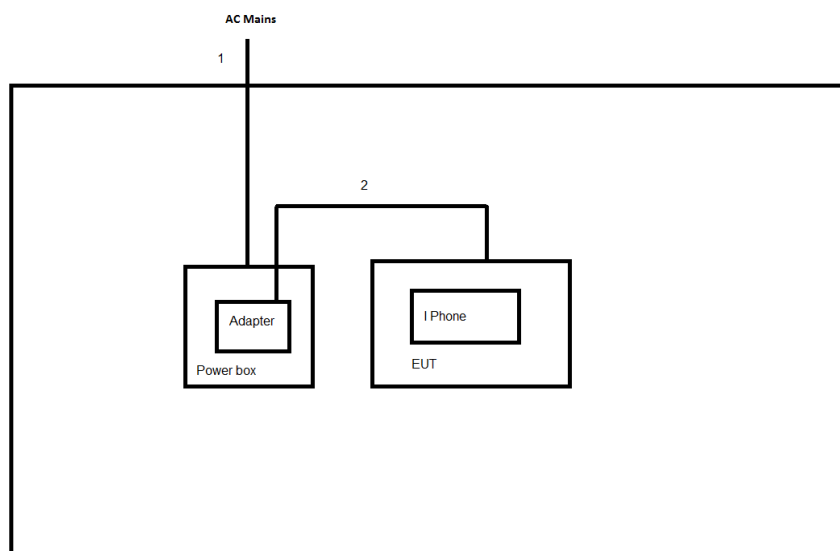
2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)
1	AC Power cable	No	1.8
2	USB Cable	Yes	1.2

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)
1	AC Power cable	No	1.8
2	USB Cable	Yes	1.2

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.

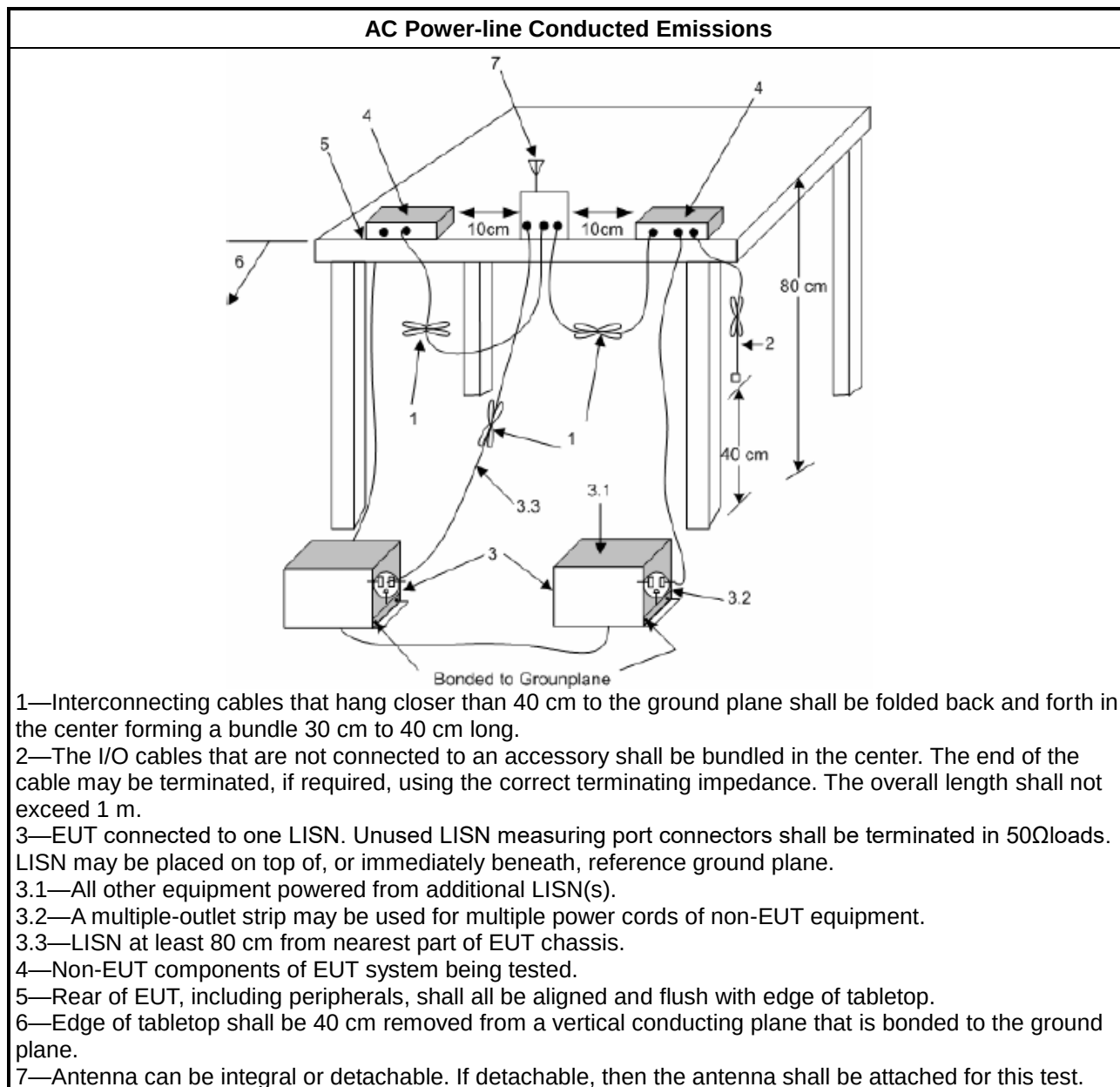
3.1.2 Measuring Instruments

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 Test Setup



3.1.5 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.

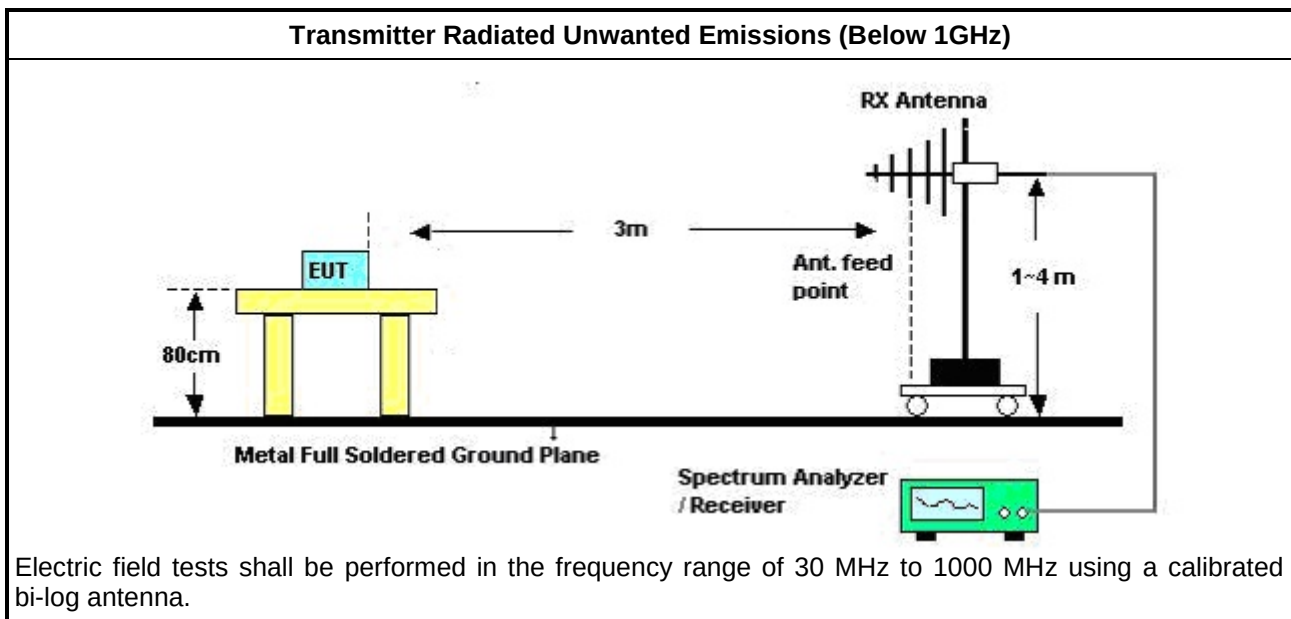
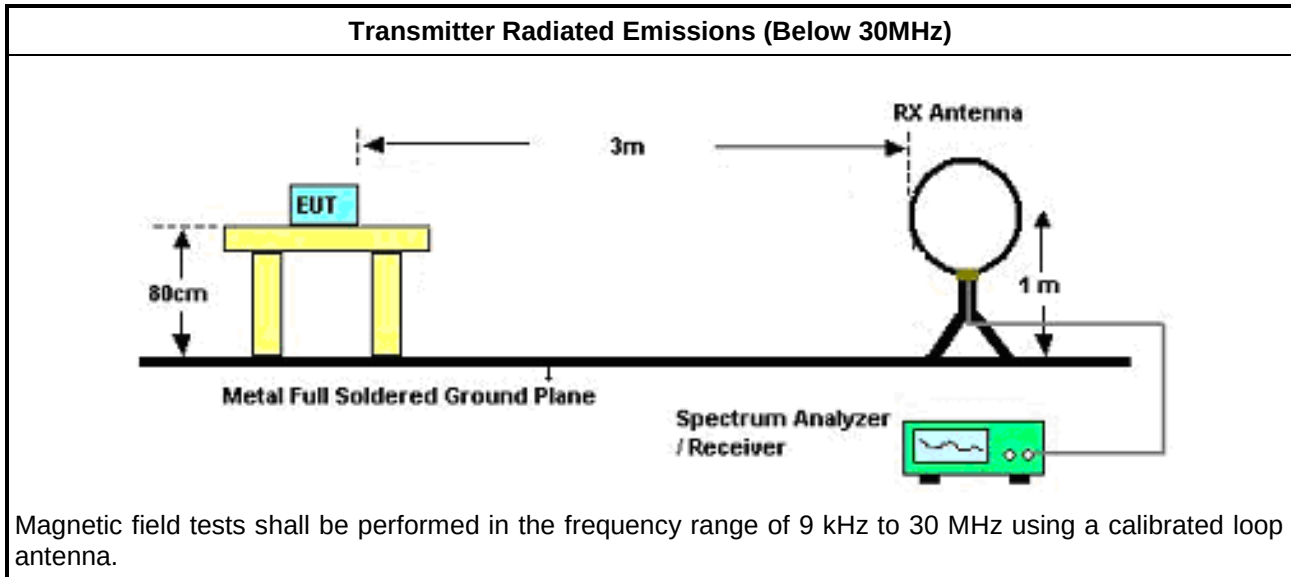
3.2.2 Measuring Instruments

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 3 m.
☒	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.
☐	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 Test Setup



3.2.5 Transmitter Radiated Emissions (Below 30MHz)

Refer as Appendix B.1

3.2.6 Transmitter Radiated Emissions (Above 30MHz)

Refer as Appendix B.2

3.3 Emission Bandwidth

3.3.1 Emission Bandwidth Limit

Emission Bandwidth Limit
N/A

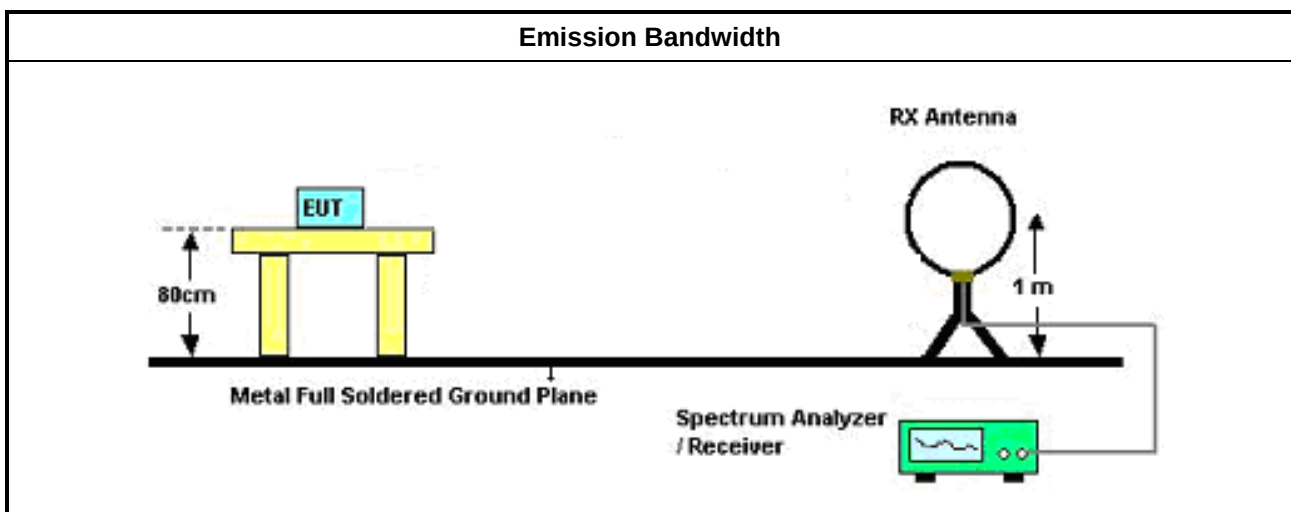
3.3.2 Measuring Instruments

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



3.3.5 Test Result of Emission Bandwidth

Refer as Appendix C

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR3	102051	9kHz ~ 3.6GHz	28/May/2019	27/May/2020
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	05/Nov/2019	04/Nov/2020
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz ~ 200MHz	23/Sep/2019	22/Sep/2020
AC POWER	APC	AFC-11005G	F310050055	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9 kHz ~ 30 MHz	24/Sep/2019	23/Sep/2020

NCR : Non-Calibration Require

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	10Hz~40GHz	19/Mar/2020	18/Mar/2021
Loop Antenna	TESEQ	HLA 6120	31244	9kHz ~ 30MHz	16/Mar/2020	15/Mar/2021

Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	30/Aug/2019	29/Aug/2020
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	22/Apr/2019	21/Apr/2020
EMI Test Receiver	R&S	ESR3	102051	9kHz ~ 3.6GHz	28/May/2019	27/May/2020
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112D / MTJ6102-05	2723 / 2	30MHz ~ 1GHz	28/Feb/2020	27/Feb/2021
Signal Analyzer	R&S	FSP40	100305	9kHz ~ 40GHz	10/Jun/2019	09/Jun/2020
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 30MHz	20/Jul/2019	19/Jul/2020
RF Cable-R03m	Jye Bao	RG142	CB021	30MHz ~ 1GHz	18/Mar/2020	17/Mar/2021
Loop Antenna	TESEQ	HLA 6120	31244	9k-30MHz	16/Mar/2020	15/Mar/2021

Summary

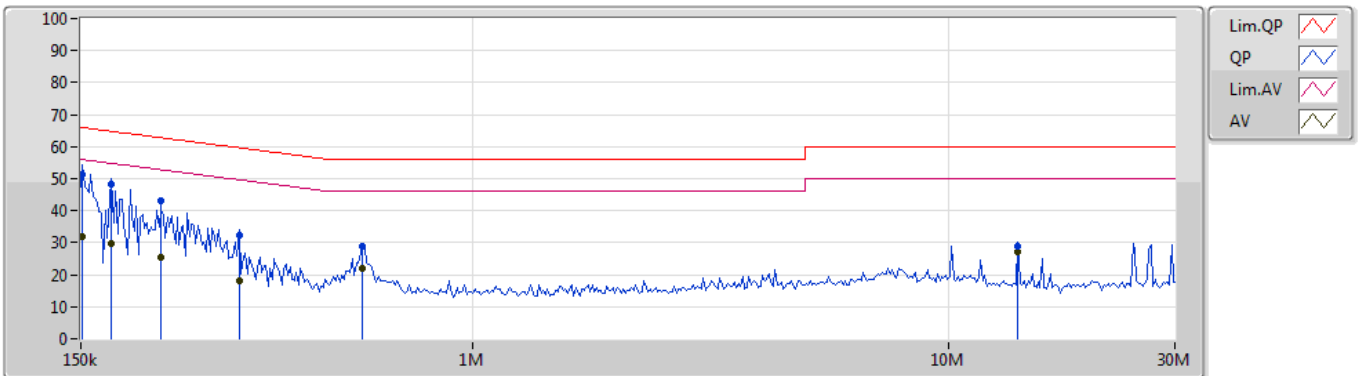
Mode	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition
Mode 1	QP	153.015k	51.53	65.83	-14.30	19.63	Neutral

Mode Configure

Mode	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comments
Mode 1	QP	151.5k	51.33	65.92	-14.59	19.64	Line	"Worst"
Mode 1	AV	151.5k	32.06	55.92	-23.86	19.64	Line	-
Mode 1	QP	174.145k	48.09	64.76	-16.67	19.63	Line	-
Mode 1	AV	174.145k	29.78	54.76	-24.98	19.63	Line	-
Mode 1	QP	221.118k	43.08	62.77	-19.69	19.63	Line	-
Mode 1	AV	221.118k	25.52	52.77	-27.25	19.63	Line	-
Mode 1	QP	322.728k	32.44	59.63	-27.19	19.63	Line	-
Mode 1	AV	322.728k	18.31	49.63	-31.32	19.63	Line	-
Mode 1	QP	586.299k	28.74	56.00	-27.26	19.64	Line	-
Mode 1	AV	586.299k	22.03	46.00	-23.97	19.64	Line	-
Mode 1	QP	14.016M	29.04	60.00	-30.96	19.85	Line	-
Mode 1	AV	14.016M	27.10	50.00	-22.90	19.85	Line	-
Mode 1	QP	153.015k	51.53	65.83	-14.30	19.63	Neutral	"Worst"
Mode 1	AV	153.015k	32.23	55.83	-23.60	19.63	Neutral	-
Mode 1	QP	202.177k	45.01	63.51	-18.50	19.62	Neutral	-
Mode 1	AV	202.177k	27.13	53.51	-26.38	19.62	Neutral	-
Mode 1	QP	251.653k	39.52	61.70	-22.18	19.63	Neutral	-
Mode 1	AV	251.653k	23.74	51.70	-27.96	19.63	Neutral	-
Mode 1	QP	346.008k	30.04	59.06	-29.02	19.62	Neutral	-
Mode 1	AV	346.008k	17.78	49.06	-31.28	19.62	Neutral	-
Mode 1	QP	586.299k	30.45	56.00	-25.55	19.63	Neutral	-
Mode 1	AV	586.299k	23.86	46.00	-22.14	19.63	Neutral	-
Mode 1	QP	14.016M	24.39	60.00	-35.61	19.89	Neutral	-
Mode 1	AV	14.016M	20.59	50.00	-29.41	19.89	Neutral	-

Conducted Emissions at Powerline_Mode 1

10/04/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	151.5k	51.33	65.92	-14.59	19.64	Line	"Worst"	31.69	9.66	0.11	9.87			
AV	151.5k	32.06	55.92	-23.86	19.64	Line	-	12.42	9.66	0.11	9.87			
QP	174.145k	48.09	64.76	-16.67	19.63	Line	-	28.46	9.65	0.11	9.87			
AV	174.145k	29.78	54.76	-24.98	19.63	Line	-	10.15	9.65	0.11	9.87			
QP	221.118k	43.08	62.77	-19.69	19.63	Line	-	23.45	9.65	0.11	9.87			
AV	221.118k	25.52	52.77	-27.25	19.63	Line	-	5.89	9.65	0.11	9.87			
QP	322.728k	32.44	59.63	-27.19	19.63	Line	-	12.81	9.64	0.12	9.87			
AV	322.728k	18.31	49.63	-31.32	19.63	Line	-	-1.32	9.64	0.12	9.87			
QP	586.299k	28.73	56.00	-27.27	19.63	Line	-	9.10	9.64	0.12	9.87			
AV	586.299k	22.02	46.00	-23.98	19.63	Line	-	2.39	9.64	0.12	9.87			
QP	14.016M	29.04	60.00	-30.96	19.85	Line	-	9.19	9.67	0.30	9.88			
AV	14.016M	27.10	50.00	-22.90	19.85	Line	-	7.25	9.67	0.30	9.88			

Remark:

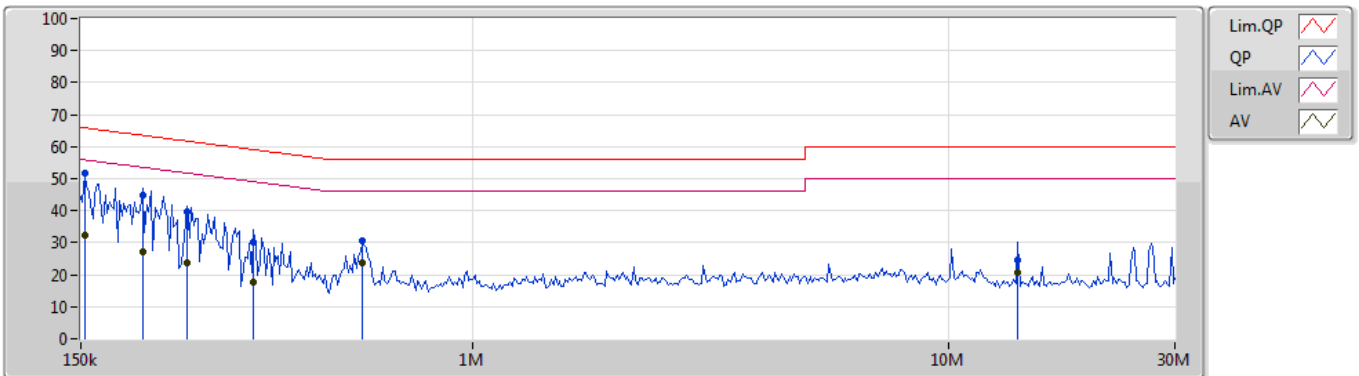
Level (dBuV/m) = Raw(Read Level) + LISN(LISN Factor) + CL(Cable Loss) + AT(Attenuator)

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Report No. : FR040114AW

Conducted Emissions at Powerline_Mode 1

10/04/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	153.015k	51.53	65.83	-14.30	19.63	Neutral	"Worst"	31.90	9.65	0.11	9.87			
AV	153.015k	32.23	55.83	-23.60	19.63	Neutral	-	12.60	9.65	0.11	9.87			
QP	202.177k	45.01	63.51	-18.50	19.62	Neutral	-	25.39	9.64	0.11	9.87			
AV	202.177k	27.13	53.51	-26.38	19.62	Neutral	-	7.51	9.64	0.11	9.87			
QP	251.653k	39.52	61.70	-22.18	19.63	Neutral	-	19.89	9.64	0.12	9.87			
AV	251.653k	23.74	51.70	-27.96	19.63	Neutral	-	4.11	9.64	0.12	9.87			
QP	346.008k	30.05	59.06	-29.01	19.63	Neutral	-	10.42	9.63	0.13	9.87			
AV	346.008k	17.79	49.06	-31.27	19.63	Neutral	-	-1.84	9.63	0.13	9.87			
QP	586.299k	30.44	56.00	-25.56	19.62	Neutral	-	10.82	9.63	0.12	9.87			
AV	586.299k	23.85	46.00	-22.15	19.62	Neutral	-	4.23	9.63	0.12	9.87			
QP	14.016M	24.39	60.00	-35.61	19.89	Neutral	-	4.50	9.71	0.30	9.88			
AV	14.016M	20.59	50.00	-29.41	19.89	Neutral	-	0.70	9.71	0.30	9.88			

Remark:

Level (dBuV/m) = Raw(Read Level) + LISN(LISN Factor) + CL(Cable Loss) + AT(Attenuator)

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Radiated Emissions below 30MHz

Appendix B.1

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	8.21M	43.27	69.54	-26.27	Horizontal

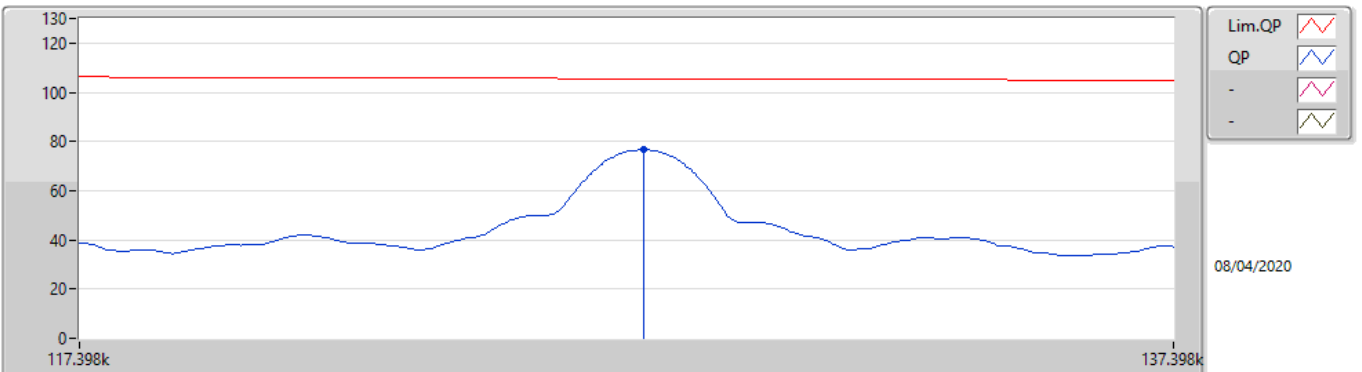
Remark :

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

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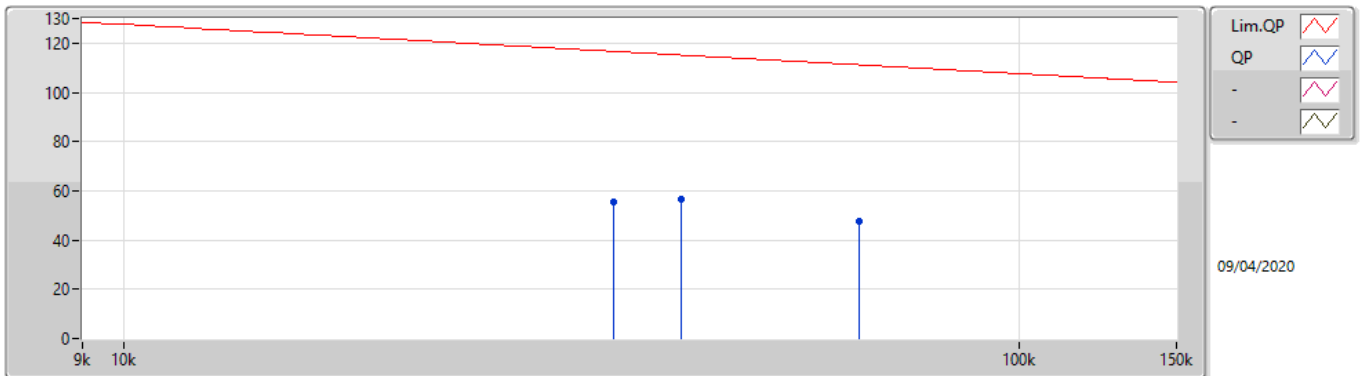
Report No. : FR040114AW

Radiated Emissions below 30MHz_Mode 1



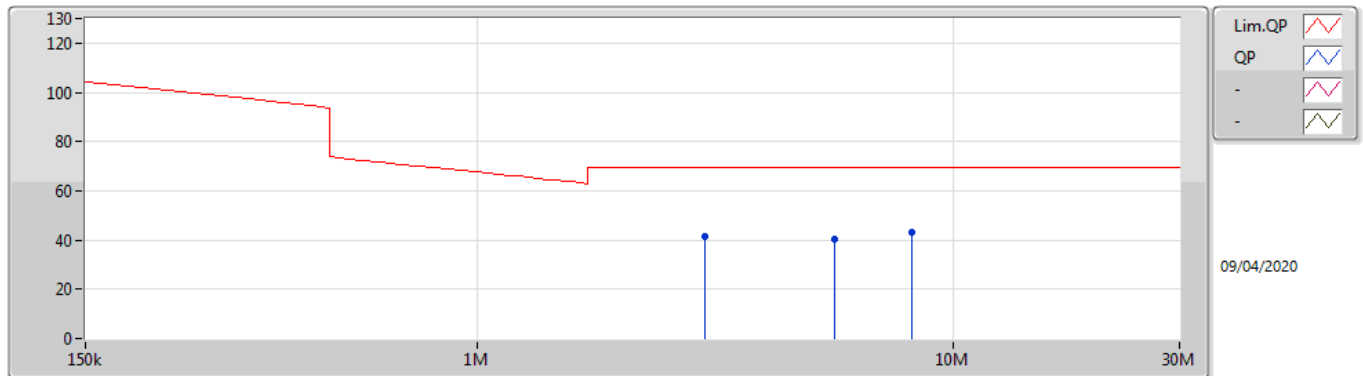
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	127.318k	76.56	105.51	-28.95	20.04	3	Horizontal	4	1.00	-	56.52	20.01	0.03	-

Radiated Emissions below 30MHz_Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	35.226k	55.73	116.67	-60.94	21.23	3	Horizontal	0	1.00	-	34.50	21.20	0.03	-
PK	41.994k	56.76	115.15	-58.39	21.23	3	Horizontal	0	1.00	-	35.53	21.20	0.03	-
PK	66.246k	47.41	111.19	-63.78	20.70	3	Horizontal	0	1.00	-	26.71	20.67	0.03	-

Radiated Emissions below 30MHz_Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	3.016M	41.78	69.54	-27.76	20.06	3	Horizontal	360	1.00	-	21.72	19.81	0.25	-
PK	5.642M	40.20	69.54	-29.34	21.25	3	Horizontal	360	1.00	-	18.95	20.92	0.33	-
PK	8.21M	43.27	69.54	-26.27	22.04	3	Horizontal	360	1.00	-	21.23	21.63	0.41	-



Radiated Emissions above 30MHz

Appendix B.2

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	QP	57.16M	36.04	40.00	-3.96	Horizontal

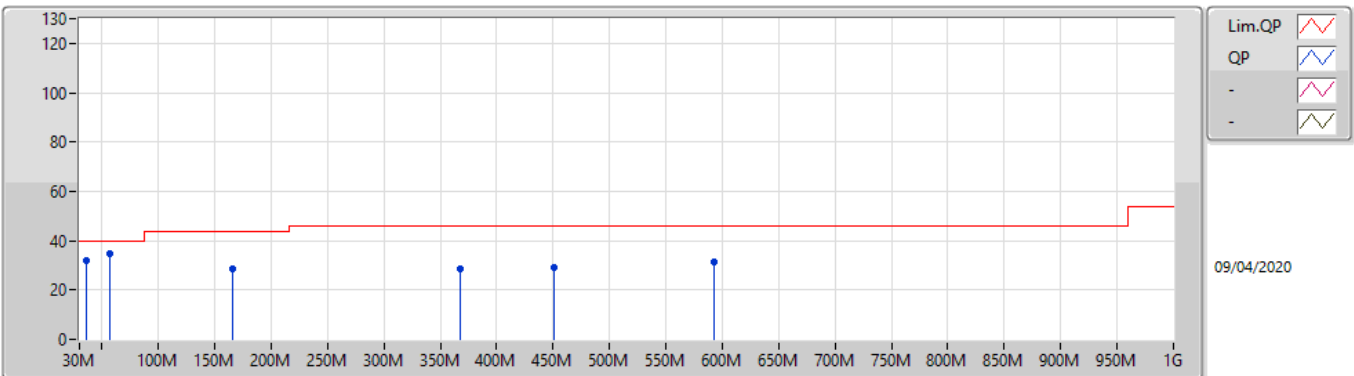
Remark :

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

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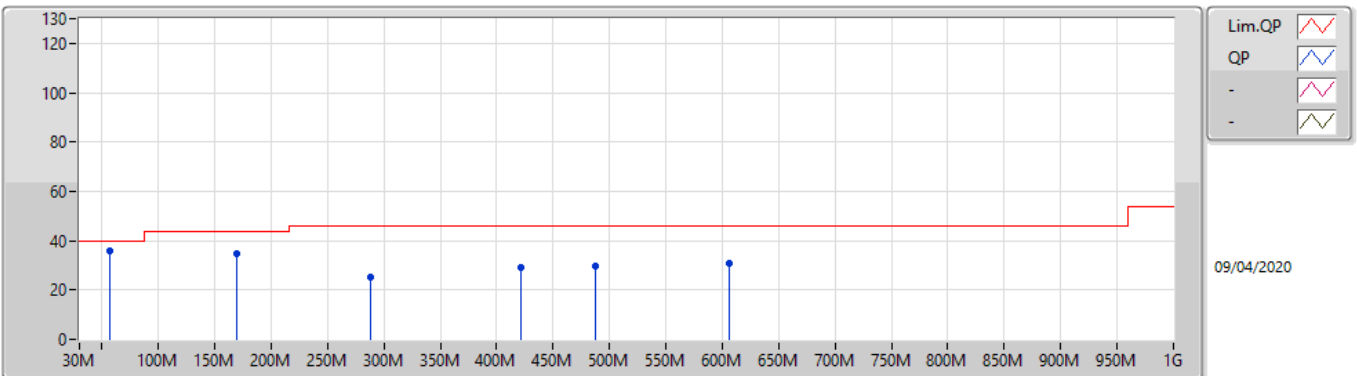
Report No. : FR040114AW

Radiated Emissions above 30MHz_Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	35.82M	31.99	40.00	-8.01	-6.54	3	Vertical	360	1.00	-	38.53	20.10	0.92	27.56
PK	57.16M	34.76	40.00	-5.24	-14.74	3	Vertical	360	1.00	-	49.50	11.56	1.20	27.50
PK	165.8M	28.61	43.50	-14.89	-10.25	3	Vertical	360	1.00	-	38.86	14.80	2.06	27.11
PK	367.56M	28.49	46.00	-17.51	-3.90	3	Vertical	360	1.00	-	32.39	20.02	3.17	27.09
PK	450.98M	29.16	46.00	-16.84	-2.40	3	Vertical	360	1.00	-	31.56	21.89	3.41	27.70
PK	592.6M	31.24	46.00	-14.76	-0.12	3	Vertical	360	1.00	-	31.36	23.86	4.07	28.05

Radiated Emissions above 30MHz_Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	169.68M	34.85	43.50	-8.65	-10.21	3	Horizontal	0	1.00	-	45.06	14.78	2.10	27.09
PK	288.02M	25.25	46.00	-20.75	-5.69	3	Horizontal	0	1.00	-	30.94	18.19	2.83	26.71
PK	421.88M	29.13	46.00	-16.87	-2.30	3	Horizontal	0	1.00	-	31.43	21.83	3.34	27.47
PK	487.84M	29.71	46.00	-16.29	-1.33	3	Horizontal	0	1.00	-	31.04	22.83	3.63	27.79
PK	606.18M	30.66	46.00	-15.34	-0.07	3	Horizontal	0	1.00	-	30.73	23.87	4.12	28.06
QP	57.16M	36.04	40.00	-3.96	-14.74	3	Horizontal	228	2.61	-	50.78	11.56	1.20	27.50

Summary

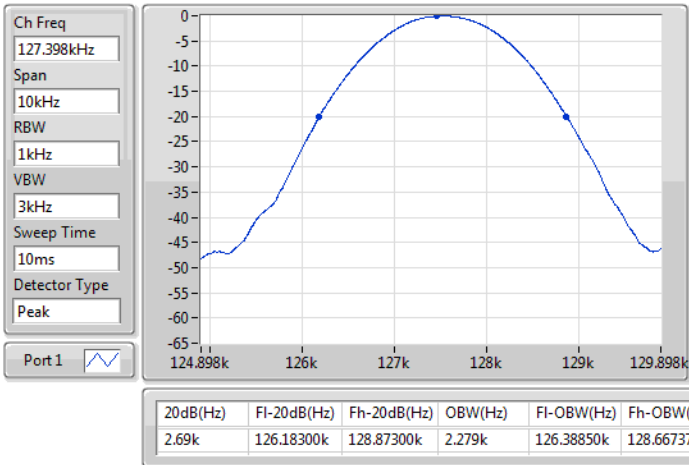
Mode	20dB (Hz)	FI-20dB (Hz)	Fh-20dB (Hz)	OBW (Hz)	Limit (Range)
122-145kHz	-	-	-	-	-
WPC	2.69k	126.18300k	128.87300k	2.279k	Inf

Result

Mode	Result	20dB (Hz)	FI-20dB (Hz)	Fh-20dB (Hz)	OBW (Hz)	FI-OBW (Hz)	Fh-OBW (Hz)	Limit (Range)
WPC	-	-	-	-	-	-	-	-
0.127398MHz_TnomVnom	Pass	2.69k	126.18300k	128.87300k	2.279k	126.38850k	128.66737k	Inf

WPC

0.127398MHz_TnomVnom



EBW

13/04/2020

