

# MerchSource, LLC.

# **TEST REPORT**

SCOPE OF WORK EMC TESTING-SEE PAGE 2

**REPORT NUMBER** 241015020GZU-001

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# PAGES

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Intertek Report No:		241015020GZU-001
FCC ID:		2AEVM1019054

#### Test standards

#### 47 CFR PART 15 Subpart C:2023

#### Sample Description

Product	:	Facial Cleanser 3 in 1
Model No.	:	1019054, 101XXXX(where XXXX can be digits 0000-9999 which
		represent different customers)
Electrical Rating	:	Input: DC 5V/1A
Serial No.	:	Not Labeled
Date Received	:	15 October 2024
Date Test	:	16 January 2025
Conducted		

Prepared and Checked By

Approved By:

ona

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Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

 Room101/301/401/102/202/302/402/502/602/702/802, No. 7-2, Caipin Road, Huangpu District, Guangzhou, Guangdong, China

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# **TEST REPORT**

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# **1.0 TEST RESULT SUMMARY**

Test Item	Test Requirement	Test Method	Result
Conducted disturbance voltage at mains ports	FCC PART 15 C section 15.207	ANSI C63.10: Clause 6.2	PASS
Radiated Emission	FCC PART 15 C section 15.209	ANSI C63.10: Clause 6.4 & 6.5	PASS
20dB Bandwidth	FCC PART 15 C section 15.215	FCC PART 15 C section 15.215	PASS

Remark:

1.When determining the test results, measurement uncertainty of tests has been considered. 2.Model numbers are identical in circuitry and electrical, mechanical and physical construction; the only differences are the color and model no. for trading purpose, Model 1019054 is used for testing.



# **TEST REPORT**

#### 2.0 General Description

#### 2.1 Product Description

Operating Frequency	146-186KHz
Type of Modulation:	Load modulation
Antenna Type	Inductive loop coil antenna
Power Supply:	DC 5V/0.5A by Adapter
Power cord:	N/A

#### 2.2 Related Submittal(s) Grants

This is an application for certification of: DCD-Part 15 Low Power Transmitter Below 1705 kHz.

Remaining portions are subject to the following procedures: 1. Receiver portion: exempt from technical requirement of this Part.

#### 2.3 Test Methodology

Both AC mains line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.10. Radiated emission measurement was performed in semi-anechoic chamber and conducted emission measurement was performed in shield room. For radiated emission measurement, preliminary scans and final tests were performed in the semi-anechoic chamber to determine the worst case modes. All radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise.

#### 2.4 Test Facility

All tests were performed at: Intertek Testing Services Shenzhen Ltd. Guangzhou Branch Room102/104, No 203, KeZhu Road, Science City, GETDD Guangzhou, China Except Conducted Emissions was performed at: Room101/301/401/102/202/302/402/502/602/702/802, No. 7-2, Caipin Road, Huangpu District, Guangzhou, Guangdong, China



# **TEST REPORT**

#### A2LA Certificate Number 0078.10

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch is accredited by A2LA and Listed in FCC website. FCC accredited test labs may perform both Certification testing under Parts 15 and 18 and Declaration of Conformity testing.

#### **3.0** System Test Configuration

#### 3.1 Justification

For emissions testing, the equipment under test (EUT) setup to transmit continuously to simplify the measurement methodology. Care was taken to ensure proper power supply voltages during testing. It was powered by AC 120V/60Hz supply.

When below 30MHz, the measurement antenna was positioned with its plane perpendicular to the ground at the specified distance. When perpendicular to the ground plane, the lowest height of the magnetic antenna was 1 m above the ground and was positioned at 3m distance from the EUT. During testing the loop antenna was rotated about its vertical axis for maximum response at each azimuth and also investigated with the loop positioned in the horizontal plane. For each measurement antenna alignment, the EUT shall be rotated through 0° to 360° on a turntable.

When above 30MHz, the antenna height and polarization are varied during the search for maximum signal level. The antenna height is varied from 1 to 4 meters. Radiated emissions are taken at three meters unless the signal level is too low for measurement at that distance. If necessary, a pre-amplifier is used and/or the test is conducted at a closer distance.

All readings are extrapolated back to the equivalent three meter reading using inverse scaling with distance. The spurious emissions more than 20 dB below the permissible value are not reported.

For an intentional radiator, the spectrum shall be investigated from the lowest radio frequency signal generated in the device, without going below 9 kHz, up to at least the frequency shown in the following table:

Lowest frequency generated in the device	Upper frequency range of measurement
9 kHz to below 10 GHz	10 <sup>th</sup> harmonic of highest fundamental frequency or to 40 GHz, whichever is lower
At or above 10 GHz to below 30 GHz	5 <sup>th</sup> harmonic of highest fundamental frequency or to 100 GHz, whichever is lower
At or above 30 GHz	5 <sup>th</sup> harmonic of highest fundamental frequency or to 200 GHz, whichever is lower, unless otherwise specified

Frequency range of radiated emission measurements



#### Number of fundamental frequencies to be tested in EUT transmit band

Frequency range in which device	Number of	Location in frequency
operates	frequencies	range of operation
1 MHz or less	1	Middle
1 MHz to 10 MHz	2	1 near top and 1 near bottom
More than 10 MHz	3	1 near top, 1 near middle and 1 near bottom

#### 3.2 EUT Exercising Software

Once it's powered, it keeps transmitting.

#### **3.3** Special Accessories

N/A

#### 3.4 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	20 dB Bandwidth	2.3%
2	Carrier Frequencies Separated	2.3%
		4.24 dB (9KHz-30MHz)
	Radiated Emissions	4.7 dB (25 MHz-1 GHz)
3		4.8 dB (1 GHz-18 GHz)
		5.21dB (18GZH-26GHz)
4	Conducted Emissions at Mains Terminals	2.58dB
5	Temperature	0.5 °C
6	Humidity	0.4 %
7	Time	1.2%

The measurement uncertainty describes the overall uncertainty of the given measured value during the operation of the EUT.

Measurement uncertainty is calculated in accordance with ETSI TR 100 028-2001. The measurement uncertainty is given with a confidence of 95%, k=2.

When determining of the test conclusion, the Measurement Uncertainty of test has been considered.



# **TEST REPORT**

Uncertainty and Compliance – Unless the standard specifically states that measured values are to be extended by the measurement uncertainty in determining compliance, all compliance determinations are based on the actual measured value

#### 3.5 Equipment Modification

Any modifications installed previous to testing by MerchSource, LLC. will be incorporated in each production model sold / leased in the United States.

No modifications were installed by Intertek Testing Services Shenzhen Ltd. Guangzhou Branch.

#### 3.6 Support Equipment List and Description

This product was tested with corresponding support equipment as below:

<u> </u>	
Support	equipment

Description	Model No.	Rating	Supplied by
Facial Cleanser 3 in 1(Receiving end of the base)	1019054	5W	applicant
Adapter	CH-P002	100-240~, 50/60Hz,	Intertek

**Remark:** Facial Cleanser 3 in 1(Receiving end of the base) was the client devices, it's selected such that the EUT was fully exercised at maximum power from its transmitter. It will be sold together.

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above evaluated respectively

Pre-test mode	Description		
Standby Mode	kept transmitting continuously		
	CH: Low	Facial Cleanser 3 in 1(Receiving end of	
Charging Mode	CH: Middle	the base) client is charging at 1% battery	
	CH: High	power, 50% and 99% battery power	
		respectively, keep transmitting	
		continuously.	

For AC port Conducted Emission:

Pre-test all modes listed above, find the worst case as: wireless charging for Facial Cleanser 3 in 1(Receiving end of the base) at 1% battery power.

For Radiated Emission:

Pre-test all modes listed above, find the worst case as: wireless charging(30MHz-1GHz) for Facial Cleanser 3 in 1(Receiving end of the base) at 1% battery power. standby mode for 9KHz-30MHz.



## 4.0 Radiated Emission

Test	Requirement:	
	negan emente	

#### FCC PART 15 C section 15.209 (a)(f)

§ 15.209 (a) Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Measurements were performed at 3m and the data was extrapolated to the specified measurement distance of 30m using the square of an inverse linear distance extrapolation factor (40 dB/decade) as specified in § 15.31(f)(2). Extrapolation Factor = 20 log10(30/3)2 = 40dB.

(f) In accordance with §15.33(a), in some cases the emissions from an intentional radiator must be measured to beyond the tenth harmonic of the highest fundamental frequency designed to be emitted by the intentional radiator because of the incorporation of a digital device. If measurements above the tenth harmonic are so required, the radiated emissions above the tenth harmonic shall comply with the general radiated emission limits applicable to the incorporated digital device, as shown in §15.109 and as based on the frequency of the emission being measured, or, except for emissions contained in the restricted frequency bands shown in §15.205, the limit on spurious emissions specified for the intentional radiator, whichever is the higher limit. Emissions which must be measured above the tenth harmonic of the highest fundamental frequency designed to be emitted by the intentional radiator and which fall within the restricted bands shall comply with the general radiated emission limits in §15.109 that are applicable to the incorporated digital device.

Test Method:	ANSI C63.10: Clause 6.4 and 6.5.
Test Status:	Pre-Scan has been conducted to determine the worst-case mode from all possible configuration.
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)
Detector:	Quasi-Peak detector: RBW=200 Hz for 9 kHz to 150 kHz
	RBW=9 kHz for 150 kHz to 30 MHz
	RBW=120 kHz for 30 MHz to 1GHz



# **TEST REPORT**

Field Strength Calculation:	Sweep = auto Trace = max hold The field strength is calculated by adding the reading on the Spectrum Analyzer to the factors associated with preamplifiers (if any), antennas, cables, pulse desensitization and average factors (when specified limit is in average and measurements are made with peak detectors). A sample calculation is included below:
Where:	FS = RA + AF + CF - AG + PD + AV FS = RA + Correct Factor + AV FS = Field Strength in dB $\mu$ V/m RA = Receiver Amplitude (including preamplifier) in dB $\mu$ V AF = Antenna Factor in dB CF = Cable Attenuation Factor in dB AG = Amplifier Gain in dB PD = Pulse Desensitization in dB AV = Average Factor in -dB Correct Factor = AF + CF - AG + PD
	In the radiated emission table which follows, the reading shown on the data table may reflect the preamplifier gain. An example of the calculations, where the reading does not reflect the preamplifier gain, follows: FS = RA + AF + CF - AG + PD + AV Assume a receiver reading of 62.0 dBµV is obtained. The antenna factor of 7.4 dB and cable factor of 1.6 dB is added. The amplifier gain of 29 dB is subtracted. The pulse desensitization factor of the spectrum analyzer was 0 dB, and the resultant average factor was - 10 dB. The net field strength for comparison to the appropriate emission limit is 32 dBµV/m. RA = 62.0 dBµV AF = 7.4 dB CF = 1.6 dB AG = 29.0 dB PD = 0 dB AV = -10 dB Correct Factor = 7.4 + 1.6 - 29.0 + 0 = -20 dB FS = 62 + (-20) + (-10) = 32 dBµV/m



# **TEST REPORT**

MHz	MHz	MHz	GHz
$\begin{array}{c} 0.090 - 0.110 \\ {}^{1}0.495 - 0.505 \\ 2.1735 - 2.1905 \\ 4.125 - 4.128 \\ 4.17725 - 4.17775 \\ 4.20725 - 4.20775 \\ 6.215 - 6.218 \\ 6.26775 - 6.26825 \\ 6.31175 - 6.31225 \\ 8.291 - 8.294 \\ 8.362 - 8.366 \\ 8.37625 - 8.38675 \\ 8.41425 - 8.41475 \\ 12.29 - 12.293 \\ 12.51975 - 12.52025 \\ 12.57675 - 12.57725 \\ 13.36 - 13.41 \end{array}$	$\begin{array}{c} 16.42 - 16.423 \\ 16.69475 - 16.69525 \\ 16.80425 - 16.80475 \\ 25.5 - 25.67 \\ 37.5 - 38.25 \\ 73 - 74.6 \\ 74.8 - 75.2 \\ 108 - 121.94 \\ 123 - 138 \\ 149.9 - 150.05 \\ 156.52475 - \\ 156.52525 \\ 156.7 - 156.9 \\ 162.0125 - 167.17 \\ 167.72 - 173.2 \\ 240 - 285 \\ 322 - 335.4 \end{array}$	399.9 - 410 608 - 614 960 - 1240 1300 - 1427 1435 - 1626.5 1645.5 - 1646.5 1660 - 1710 1718.8 - 1722.2 2200 - 2300 2310 - 2390 2483.5 - 2500 2655 - 2900 3260 - 3267 3332 - 3339 3345.8 - 3358 3600 - 4400	$\begin{array}{r} 4.5 - 5.15 \\ 5.35 - 5.46 \\ 7.25 - 7.75 \\ 8.025 - 8.5 \\ 9.0 - 9.2 \\ 9.3 - 9.5 \\ 10.6 - 12.7 \\ 13.25 - 13.4 \\ 14.47 - 14.5 \\ 15.35 - 16.2 \\ 17.7 - 21.4 \\ 22.01 - 23.12 \\ 23.6 - 24.0 \\ 31.2 - 31.8 \\ 36.43 - 36.5 \end{array}$

Section 15.205 Restricted bands of operation.

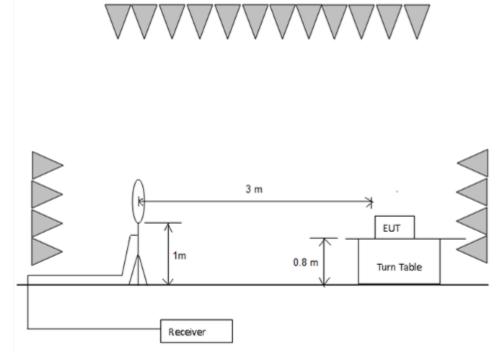
The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in 15.209.



# **TEST REPORT**

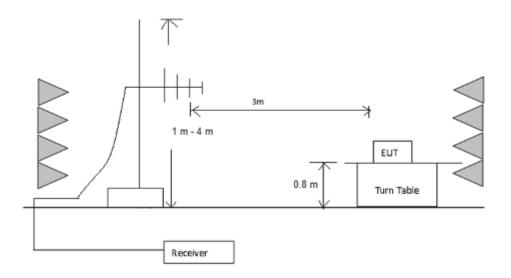
Test Configuration:

1) 9 kHz to 30 MHz emissions:



2) 30 MHz to 1 GHz emissions:







**TEST REPORT** 

#### **Test Procedure:**

1) 9 kHz to 30 MHz emissions:

For testing performed with the loop antenna. The lowest of the loop was positioned 1 m above the ground and positioned with its plane vertical at the special distance from the EUT. During testing the loop was rotated about its vertical axis for maximum response at each azimuth and also investigated with the loop positioned in the horizontal plane.

2) 30 MHz to 1 GHz emissions:

For testing performed with the bi-log type antenna. The measurement is performed with the EUT rotated 360°, the antenna height scanned between 1m and 4m, and the antenna rotated to repeat the measurement for both the horizontal and vertical antenna polarizations.

3) The receiver was scanned from 9 kHz to 1 GHz. When an emission was found, the table was rotated to produce the maximum signal strength. An initial pre-scan was performed for in peak detection mode using the receiver. The EUT was measured for both the Horizontal and Vertical polarities and performed a pre-test three orthogonal planes. For intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage. The worst case emissions were reported.

#### Used Test Equipment List:

3m Semi-Anechoic Chamber, EMI Test Receiver (9 kHz~7 GHz), Signal and Spectrum Analyzer (10 Hz~40 GHz), Loop antenna (9 kHz-30 MHz). TRILOG Super Broadband test Antenna(30 MHz-3 GHz) (RX), Bouble-Ridged Waveguide Horn Antenna (800 MHz-18 GHz)(RX) and High Frequency Antenna & preamplifier(18 GHz~26.5 GHz) (RX). Refer to Clause 5 Test Equipment List for details.

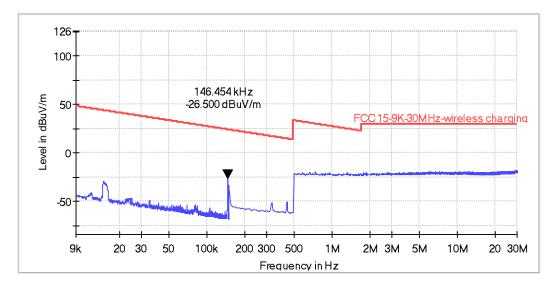


# **TEST REPORT**

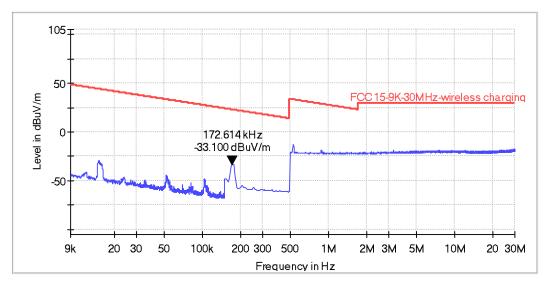
#### Radiated Emissions (Below 30 MHz)

#### Vertical:

Standby mode



#### Operating mode



Frequency (kHz)	Receiver Reading Level (dBµV)	Correction factors (dB/m)	Emission Level (dBµV/m)@ 3m	Emission Level (dBµV/m) @300m	Limit (dBµV/m) @300m	Margin (dB)
146.5	34.2	19.3	53.5	-26.5	24.3	50.8
172.6	27.6	19.3	46.9	-33.1	22.9	56.0

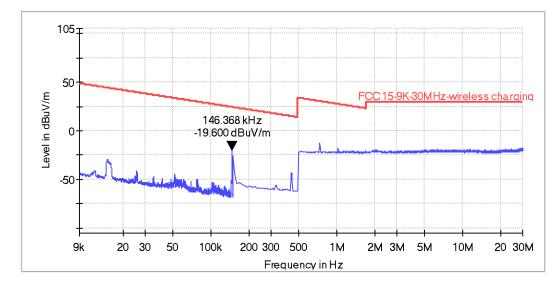
All emission levels are more than 6 dB below the limit.



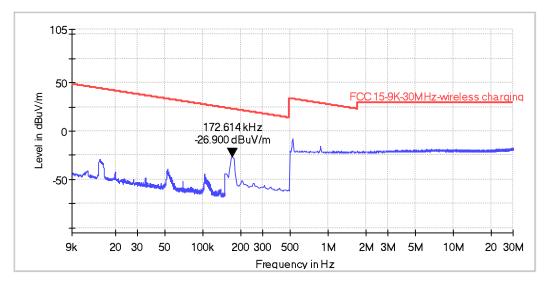
# **TEST REPORT**

#### Horizontal:

Standby mode



Operating mode



Frequency (kHz)	Receiver Reading Level (dBμV)	Correction factors (dB/m)	Emission Level (dBµV/m)@ 3m	Emission Level (dBµV/m) @300m	Limit (dBµV/m) @300m	Margin (dB)
146.4	41.1	19.3	60.4	-19.6	24.3	43.9
172.6	33.8	19.3	53.1	-26.9	22.9	49.8

All emission levels are more than 6 dB below the limit.

The emission limits shown above are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated



# **TEST REPORT**

emission limits in these three bands are based on measurements employing an average detector.

Remark:

1. Corr. (dB) = Antenna Factor (dB) + Cable Loss (dB)

2. Level  $(dB\mu V/m) = Corr. (dB) + Read Level (dB\mu V)$ 

3. Margin (dB) = Limit (dB $\mu$ V/m) –Level (dB $\mu$ V/m)

4.Limit  $[dB\mu V/m] = 20*Log (Limit [\mu V/m])$ 

5. Only record the date closed to limit

6. The emission is worst case on Horizontal

7. When Peak emission level was below AV or QP limit, the AV and QP emission level was not recorded.

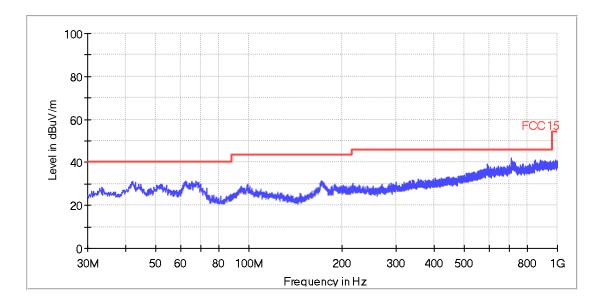
8.Distance Extrapolation Factor dB] = 20 log10(300/3)2 = 80dB [For emissions within 9kHz-490kHz]

9. Distance Extrapolation Factor[dB] = 20 log10(30/3)2 = 40dB [For emissions within 490kHz-30MHz]

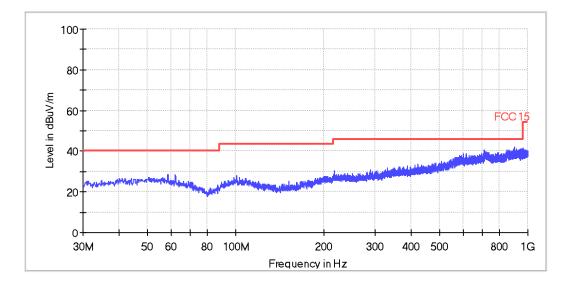


# **TEST REPORT**

# 30 MHz~1 GHz Spurious Emissions. Quasi-Peak Measurement **Vertical:**



All emission levels are more than 6 dB below the limit.



## Horizontal:

All emission levels are more than 6 dB below the limit.



# **TEST REPORT**

# 5.0 Occupied Bandwidth

Test Method:	FCC PART 15 C section 15.215
Test Status:	Test in transmitting mode.
Requirements:	Bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.
Method of measurement:	The useful radiated emission from the EUT was detected by the spectrum analyzer with peak detector. Record the 99% bandwidth of the main frequency.

Used Test Equipment List

Spectrum Analyzer. Refer to Clause 7 Test Equipment List for details.

#### Test result:

Test Channel	bandwidth	Limit
146.5 kHz	123.0 Hz	/
185.4 kHz	120.1 Hz	/

Spectrum			
Ref Level -10.00 dBm	🔵 RBW 3 Hz		( = )
● Att 20 dB SV	<b>VT</b> 631.6 ms 👄 <b>VBW</b> 10 Hz	Mode Auto FFT	
Controlled by EMC32 🔵 1Pk Ma:	<		
		D2[1]	-0.52 dB
			123.010 Hz
-20 dBm-D1 -20.360 dBm-		M1[1]	-40.88 dBm
			146.460080 kHz
-30 dBm			
-40 dBm	M1	200	
-40 dBm	······································	1 Anno	
		1 min	
-50 dBm	~	be	Month -
m			James James
-60 dBm			
-70 dBm			
-80 dBm			
-80 0811			
-90 dBm			
-100 dBm			
CF 146.5281 kHz	691	pts	Span 500.0 Hz



# **TEST REPORT**

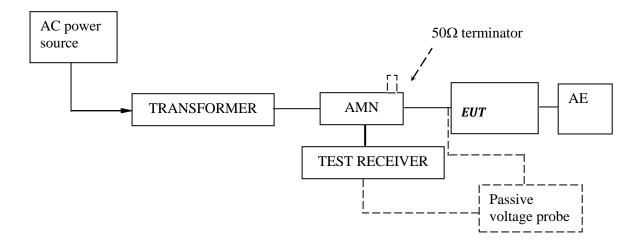
Spectrum				
Ref Level -10.00 dBm	👄 RBW 3 Hz			
	1.6 ms 👄 <b>VBW</b> 10 Hz	Mode Auto FFT		
Controlled by EMC32 😑 1Pk Max				
		D2[1]		1.07 dB
				120.120 Hz
-20 dBm		M1[1]		-46.03 dBm 85.300250 kHz
D1 -23.400 dBm	Marrie Marriellan	1		63.300230 KH2
-30 dBm		\		
		\		
-40 dBm				
D2 -43.400 dBm		42		
		A		
-50 dBm		- MV		
~~~		- N		
-60 dBm		- h.		
-70 dBm-1				
-70 dBm		· · ·	monda.	A A A
-70 dBm on the second s				M ~ ~ ~
				°
-80 dBm				
-90 dBm				
-100 dBm				
CF 185.40879 kHz	691	pts		Span 500.0 Hz



# **TEST REPORT**

#### 6.0 Conducted Emission Test

Test Configuration:



Test Setup and Procedure:

Test was performed according to ANSI C63.10 Clause 6.2. The EUT was set to achieve the maximum emission level. The mains terminal disturbance voltage was measured with the EUT in a shielded room. The EUT was connected to AC power source through an Artificial Mains Network which provides a  $50\Omega$  linear impedance Artificial hand is used if appropriate (for handheld apparatus). The load/control terminal disturbance voltage was measured with passive voltage probe if appropriate.

The table-top EUT was placed on a 0.8m high non-metallic table above earthed ground plane (Ground Reference Plane). And for floor standing EUT, was placed on a 0.1m high non-metallic supported on GRP. The EUT keeps a distance of at least 0.8m from any other of the metallic surface. The Artificial Mains Network is situated at a distance of 0.8m from the EUT.

During the test, mains lead of EUT excess 0.8m was folded back and forth parallel to the lead so as to form a horizontal bundle with a length between 0.3m and 0.4m

The bandwidth of test receiver was set at 9 kHz. The frequency range from 150 kHz to 30MHz was checked.



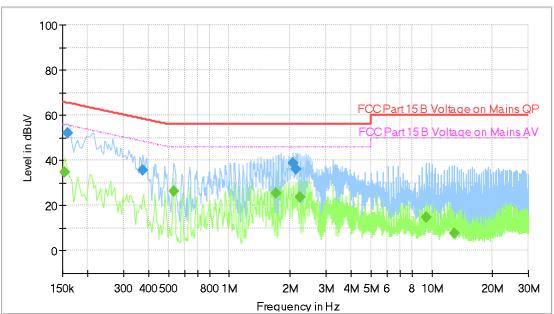
# **TEST REPORT**

Test Data and Curve

At main terminal: Pass

Tested Wire: Live

Operation Mode: transmitting mode



# Full Spectrum

# Final\_Result

—							1	1	
Frequency	QuasiPeak	CAverage	Limit	Margin	Meas.	Bandwidth	Line	Filter	Corr.
(MHz)	(dBuV)	(dBuV)	(dBuV)	(dB)	Time	(kHz)			(dB)
()	(	(	(,	()	(ms)	()			()
					(1113)				
0.154000		34.60	55.78	21.18	1000.0	9.000	L1	ON	9.6
0.158000	52.12		65.57	13.45	1000.0	9.000	L1	ON	9.6
0.374000	35.86		58.41	22.55	1000.0	9.000	L1	ON	9.6
0.534000		26.23	46.00	19.77	1000.0	9.000	L1	ON	9.6
1.698000		25.35	46.00	20.65	1000.0	9.000	L1	ON	9.6
2.066000	38.77		56.00	17.23	1000.0	9.000	L1	ON	9.7
2.126000	35.97		56.00	20.03	1000.0	9.000	L1	ON	9.7
2.230000		23.79	46.00	22.21	1000.0	9.000	L1	ON	9.7
9.350000		14.67	50.00	35.33	1000.0	9.000	L1	ON	9.8
12.946000		7.76	50.00	42.24	1000.0	9.000	L1	ON	9.9

Remark:

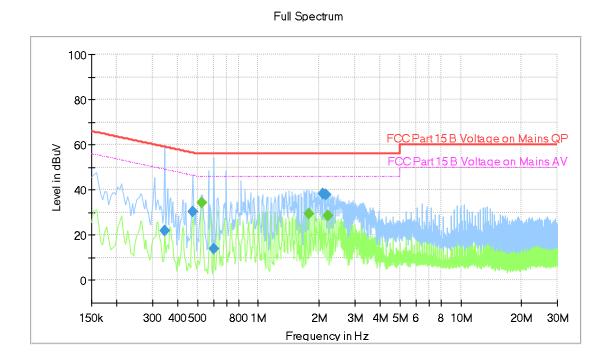
- 1. Corr. (dB) = LISN Factor (dB) + Cable Loss (dB)
- 2. Level (dBµV) = Corr. (dB) + Read Level (dBµV)
- 3. Delta Limit (dB) = Level (dB $\mu$ V)-Limit (dB $\mu$ V)



## **TEST REPORT**

#### Tested Wire: Neutral

#### Operation Mode: transmitting mode



# Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.346000	21.79		59.06	37.27	1000.0	9.000	Ν	ON	9.5
0.474000	30.27		56.44	26.17	1000.0	9.000	Ν	ON	9.5
0.526000		34.34	46.00	11.66	1000.0	9.000	Ν	ON	9.5
0.602000	14.09		56.00	41.91	1000.0	9.000	Ν	ON	9.5
1.786000		29.67	46.00	16.33	1000.0	9.000	Ν	ON	9.5
2.094000	38.49		56.00	17.51	1000.0	9.000	Ν	ON	9.5
2.154000	37.97		56.00	18.03	1000.0	9.000	Ν	ON	9.5
2.210000		28.43	46.00	17.57	1000.0	9.000	Ν	ON	9.5

Remark:

1. Corr. (dB) = LISN Factor (dB) + Cable Loss (dB)

2. Level (dB $\mu$ V) = Corr. (dB) + Read Level (dB $\mu$ V)

3. Delta Limit (dB) = Level (dB $\mu$ V)-Limit (dB $\mu$ V)



# 7.0 Test Equipment List

Radiated Emissio	<b>n/ kadio</b>				
Equipment No.	Equipment	Model	Manufacturer	Cal. Due date	Calibration
				(YYYY-MM-DD)	Interval
EM030-04	3m Semi-Anechoic Chamber	9×6×6 m <sup>3</sup>	ETS · LINDGREN	2025-04-09	1Y
EM031-02	EMI Test Receiver (9 kHz~7 GHz)	R&S ESR7	R&S	2025-11-10	1Y
EM031-03	Signal and Spectrum Analyzer (10 Hz~40 GHz)	R&S FSV40	R&S	2025-11-10	1Y
EM011-04	Loop antenna (9 kHz-30 MHz)	HFH2-Z2	R&S	2025-07-07	1Y
EM033-01	TRILOG Super Broadband test Antenna(30 MHz-3 GHz) (RX)	VULB 9163	SCHWARZBECK	2025-12-08	1Y
EM033-02	Bouble-Ridged Waveguide Horn Antenna (800 MHz-18 GHz)(RX)	R&S HF907	R&S	2025-07-02	1Y
EM033-03	High Frequency Antenna & preamplifier(18 GHz~26.5 GHz) (RX)	R&S SCU-26	R&S	2025-04-22	1Y
EM033-04	High Frequency Antenna & preamplifier (26 GHz-40 GHz)	R&S SCU-40	R&S	2025-04-22	1Y
EM031-02-01	Coaxial cable(9 kHz-1 GHz)	N/A	R&S	2025-04-09	1Y
EM033-02-02	Coaxial cable(1 GHz-18 GHz)	N/A	R&S	2025-04-09	1Y
EM033-04-02	Coaxial cable(18 GHz~40 GHz)	N/A	R&S	2025-04-25	1Y
EM031-01	Signal Generator (9 kHz~6 GHz)	SMB100A	R&S	2025-03-17	1Y
EM040-01	Band Reject/Notch Filter	WRHFV	Wainwright	N/A	1Y
EM040-02	Band Reject/Notch Filter	WRCGV	Wainwright	N/A	1Y
EM040-03	Band Reject/Notch Filter	WRCGV	Wainwright	N/A	1Y
EM022-03	2.45 GHz Filter	BRM50702	Micro-Tronics	2025-05-15	1Y
SA016-29	Climatic Test Chamber	MHU-80L	JIANQIAO	2026-01-05	1Y
EM046-05	Power meter	NPR6A	R&S	2025-04-22	1Y
EM046-06	Power meter	NPR6A	R&S	2025-05-09	1Y
EM045-01-01	EMC32 software (RE/RS)	V10.01.00	R&S	N/A	N/A
EM045-01-10	10dB Attenuator	N/A	R&S	2025-12-24	1Y
Conducted Di	sturbance-Mains Terminal(1	)			
Equipment No.	Equipment	Model	Manufacturer	Cal. Due date	Calibration
				(DD-MM-YYYY)	Interval
EM080-05	EMI receiver	ESCI	R&S	06/06/2025	1Y
EM006-05	LISN	ENV216	R&S	04/06/2025	1Y
SA047-112	Digital Temperature-Humidity Recorder	RS210	YIJIE	20/10/2025	1Y
EM004-04	EMC shield Room	8m×3m×3m	Zhongyu	05/01/2026	1Y