DEKRA Certification, Inc.
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United States of America

FCC LISTED, REGISTRATION NUMBER: 2764.01

ISED LISTED REGISTRATION NUMBER: 23595-1

Test report No:
4507ERM.002A1

Test Report

USA Rules and Regulations CFR 47, Part 15C, subpart 15.207, 15.209; & CANADA RSS-Gen

Conducted limits & Radiated emission limits; general requirements

(*) Identification of item tested	Shaver + Qi-charger + USB-adapter
(*) Trademark	Philips
(*) Model and /or type reference	Shaver: SP9883 Charging pad: HQ 8510 USB-adapter: HQ87
(*) Derived model not tested	Shaver: SP9890, SP 9888, SP9887, SP9886, SP9885, SP9884, SP9882, SP9881, SP9880, SP9879, SP9873, SP9872, SP9871, SP9870, SP9863, SP9862, SP9861, SP9860. Charging pad: HQ 8509
Other identification of the product	FCC ID: 2AICSHQ8510 IC ID: 21912-HQ8510
(*) Features	Adapter: 100-240 Vac, 50/60 Hz, 11W Shaver: 3.6 Vdc, 5W Qi transmitter for wireless charging compliant with Qi standard V1.3.x. 100kHz to 148.5 kHz
Manufacturer	**Philips Consumer Lifestyle B.V.,** Oliemolenstraat 5, 9203 ZN Drachten, the Netherlands
Test method requested, standard	**USA FCC Part 15.207 (2017):** Conducted emission limits **USA FCC Part 15.209 (2021):** Radiated emission limits; general requirements. **CANADA RSS-Gen Issue 5 (April 2018):** General Requirements for Compliance of Radio Apparatus. **ANSI C63.10-2013:** American National Standard for Testing Unlicensed Wireless Devices
Summary	IN COMPLIANCE
Approved by (name / position & signature)	Domingo Galvez EMC&RF Lab Manager  Digitally signed by Domingo Galvez DN: cn=Domingo Galvez, o=Dekra Certification Inc., ou=Regulatory Lab Manager, email=domingo.galvez@dekra.com, c=US
Date of issue	08/20/2024
Report template No	FDT08_23 (*) "Data provided by the client"

Index

Acronyms

Acronym ID	Acronym Description
Code	EMC Test Code
Freq Rng	Frequency Range
MP	Measurement Point
OM	Operation Mode
S/	Sample
V	Verdict

Competences and guarantees

DEKRA Certification Inc. is a testing laboratory accredited by A2LA (The American Association for Laboratory Accreditation), to perform the tests indicated in the Certificate 2764.01 and CAB ID US0215.

DEKRA Certification Inc. is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA Certification Inc. has a calibration and maintenance program for its measurement equipment.

DEKRA Certification Inc. guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated on the report and, it is based on the knowledge and technical facilities available at DEKRA Certification at the time of performance of the test.

DEKRA Certification Inc. is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

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General conditions

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA Certification Inc.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA Certification Inc. and the Accreditation Bodies.

Uncertainty

Uncertainty (factor k=2) was calculated according to the DEKRA Certification internal document PODT000.

	Frequency (MHz)	U (k=2)	Units
Radiated emission	30 - 1000	5.94	dB
	1000-18000	5.89	dB
Conducted emission LISN	0,009 - 30	3.54	dB

Data provided by the client

The following data has been provided by the client:

1. Information relating to the description of the sample ("Identification of the item tested", "Trademark", "Model and/or type reference tested").

2. The sample consists of a Qi-charging pad for shaver.

3. Applicant’s declaration letter shown below for model similarity.

PHILIPS

Identity Declaration

Ref.: AST 230S-246388
Date: 15/03/2024
By: K. Kloosterman

This is to declare that the design of following shavers:

SP9890	SP9884	SP9873	SP9862	
SP9888	SP9883	SP9872	SP9861	
SP9887	SP9882	SP9871	SP9860	
SP9886	SP9880	SP9870		
SP9885	SP9879	SP9863		3.6V⎓ / 5W

(type ref., input rating)

all are identical in electrical and mechanical aspects, except for the following:

- o Software (having washing cycle or not)
- o Outside colors
- o Shaving system click-on
- o Included accesories and Packaging

All can be charged by these wireless chargers:

HQ8510	
HQ8509	230V, 50/60Hz

(type ref., input rating)

which are identical in electrical and mechanical aspects, except for the following:

- o Outside colors

Investigator: Klaas Kloosterman Signature:

Function: Safety & Compliance Engineer Date: 15/03/2024

Philips Consumer Lifestyle Drachten

www.philips.com

DEKRA declines any responsibility with respect to the information provided by the client and that may affect the validity of results.

Usage of samples

Samples used for the test have been selected by: The client.

The sample(s) is composed of the following elements, accessories and auxiliary equipment:

Id	Control Number	Description	Manufacturer / Model	Serial Nº	Date of Reception	Application
S/01	4507/01	Charging pad	Philips / HQ8510	--	02/19/2024	Element Under Test
S/01	4388/02	AC/DC Adapter	Philips / HQ87	--	12/01/2023	Element Under Test
S/01	4388/03	Wet & Dry Electric Shaver with SkinIQ Shaver S9000	Philips / SP9883	--	12/01/2023	Accessory

Notes referenced to samples during the project:

Id	Type	Note
S/01	Commercial	Sample S/01 was used for: All test(s) indicated in appendix A.

Test sample description

Test Sample description (compulsory information for EMC and RF testing services)

Ports..... :	Port name and description	Cable				
		Specified length [m]	Attached during test	Shielded	Coupled to patient	
	USB, fixed cable	1	☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
Supplementary information to the ports..... :	No Data Provided					
Rated power supply .....:	Voltage and Frequency		Reference poles			
			L1	L2	L3	N	PE
	☐	AC:	☐	☐	☐	☐	☐
	☐	AC:	☐	☐	☐	☐	☐
	☒	DC: 5 VDC					
	☐	DC:					
Rated Power .....:	7.5 W						
Clock frequencies.....:	No Data Provided						
Other parameters .....:	No Data Provided						
Software version .....:	No Data Provided						
Hardware version .....:	No Data Provided						
Dimensions in (W x H x D).....:	94 x 182 x 13 mm						
Mounting position .....:	☒	Table top equipment					
	☐	Wall/Ceiling mounted equipment					
	☐	Floor standing equipment					
	☐	Hand-held equipment					
	☐	Other:					
Modules/parts.....:	Module/parts of test item		Type		Manufacturer		
	No Data Provided						
Accessories (not part of the test item) .....:	Description		Type		Manufacturer		
	No Data Provided						

Documents as provided by the applicant.....:	Description	File name	Issue date
	Declaration Equipment Data	FDT30_18 Declaration Equipment Data HQ8510	02/27/2024

Copy of marking plate:

Identification of the client

Philips Consumer Lifestyle B.V.,
Oliemolenstraat 5,
9203 ZN Drachten,
the Netherlands.

Testing period and place

Test Location	**DEKRA Certification Inc.**
Date (start)	02-20-2024
Date (finish)	02-23-2024

Document history

Report number	Date	Description
4507ERM.002	05-15-2024	First release.
4507ERM.002A1	08-20-2024	Second release. Updated the test report with the 99% OBW results at 25th page of the report, this modified report cancels and replaces the report 4507ERM.002.

Environmental conditions

In the control chamber, the following limits were not exceeded during the test:

Temperature	Min. = 15 ºC Max. = 35 ºC
Relative humidity	Min. = 30 % Max. = 75 %
Air pressure	Min. = 860mbar Max. = 1060mbar

In the semianechoic chamber, the following limits were not exceeded during the test.

Temperature	Min. = 15 ºC Max. = 35 ºC
Relative humidity	Min. = 30 % Max. = 75 %
Air pressure	Min. = 860mbar Max. = 1060mbar

In the chamber for conducted measurements, the following limits were not exceeded during the test:

Temperature	Min. = 15 ºC Max. = 35 ºC
Relative humidity	Min. = 30 % Max. = 75 %
Air pressure	Min. = 860mbar Max. = 1060mbar

Remarks and comments

The tests have been performed by the technical personnel: Qi Zhang, Victor Albrecht, and Koji Nishimoto.

Testing verdicts

Fail	F
Inconclusive	I
Not applicable	N/A
Not measured	N/M
Pass	P
Partial Passed	P*

Summary

Test Specification	Requirement – Test case	Verdict	Remark
USA Rules and Regulations CFR 47, Part 15C, subpart 15.207, 15.209; RSS-Gen	Continuous conducted emission on Power leads - Intentional radiators	P	N/A
	Radiated emission electromagnetic field – Intentional radiators	P	(1)

Supplementary information and remarks:

(1) According with the requirements of FCC Rules and Regulations, title 47, Chapter I, Subchapter A, Part 15, Subpart A, §15.33 Frequency range of radiated measurements, (a) (1) for an intentional radiator operates below 10 GHz, the Upper frequency of measurement range is up to the tenth harmonic of the highest fundamental frequency or to 40GHz, whichever is lower.

List of equipment used during the test

Test Equipment for Conducted emission, and Radiated emission testing

Control No.	Equipment	Model	Manufacturer	Next Calibration
1010	ESR7 EMI TEST RECEIVER	ESR7	ROHDE & SCHWARZ	2024-10-14
1012	ESR26 EMI TEST RECEIVER	ESR26	ROHDE & SCHWARZ	2025-03-10
1064	3142E BICONILOG ANTENNA	3142E	ETS LINDGREN	2024-12-12
1073	PULSE LIMITER	PMM PL01	NARDA	N/A
1108	ETHERNET SNMP THERMOMETER	HWg-STE Plain	HW GROUP	2024-10-17
1110	ETHERNET SNMP THERMOMETER	HWg-STE Plain	HW GROUP	2024-10-17
1111	ETHERNET SNMP THERMOMETER	HWg-STE Plain	HW GROUP	2024-10-18
1179	SEMI-ANECHOIC CHAMBER	SAC 3plus 'L'	FRANKONIA	--
1217	FRANKONIA TRANSPARENT TEST TABLE 1	FFT-Square	FRANKONIA	--
1314	WIRELESS MEASUREMENT SOFTWARE R&S EMC32	--	RHODE & SCHWARZ	--
1379	TWO LINE V-NETWORK	ENV216	RHODE & SCHWARZ	2024-05-31
1461	LOW NOISE PREAMPLIFIER (1-18GHz)	BLMA0118-4A	BONN ELEKTRONIK	2024-06-01

Appendix A: Test results

Appendix A content

Description of the operation modes

The operation modes described in this paragraph constitute a functionality of the sample under test for itself.
The operation modes used by the samples to which the present report refers, are shown in the following table:

Id	Description
OM/01	DUT ON. Charging pad in charging mode. Power supply 5 Vdc.

Test standards version applied

The product standards and test standards applied for each test cases are shown in the following table:

Product Test Standard	Test standard	Requirement – Test case
USA Rules and Regulations CFR 47, Part 15C, subpart 15.207, 15.209; & RSS-Gen	ANSI C63.10-2013	Continuous conducted emission on Power leads - Intentional radiators
	ANSI C63.10-2013	Radiated emission electromagnetic field - Intentional radiators

Test Conditions

CONDUCTED MEASUREMENTS:

The EUT is placed on the test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rest of the EUT.

The EUT is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50 ohms LISN port.

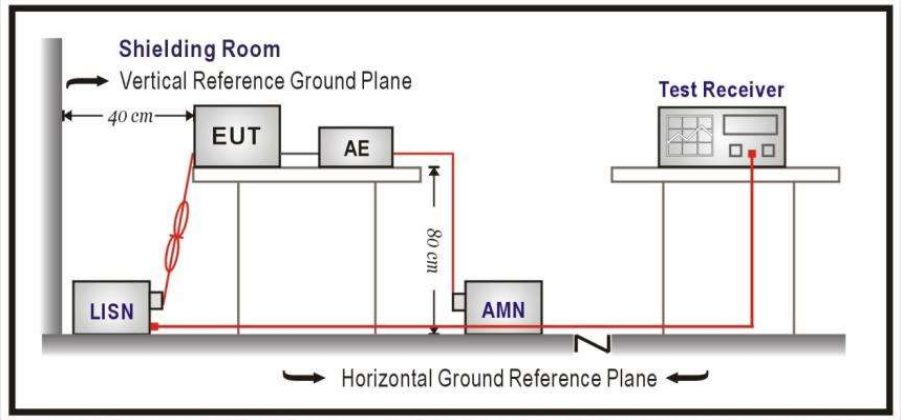


Fig A1: Generic setup for measurements from 0.150 to 30 mHz

RADIATED MEASUREMENTS:

All radiated tests were performed in a semi-anechoic chamber. The measurement antenna is situated at a distance of 3 m for the frequency range 9kHz-30 MHz (Loop antenna), and 30-1000 MHz (Bilog antenna).

The center of the loop antenna shall be 1 m above the ground then to find out the highest emissions.

The equipment under test was set up on a non-conductive platform 0.8 m above the ground plane, and the situation and orientation were varied to find the maximum radiated emission. It was also rotated 360º and the antenna height (for the Freq. range 30-1000 MHz) was varied from 1 to 4 meters to find the maximum radiated emission.

Measurements were made in X, Y, and Z orientation using the Loop antenna, and horizontal and vertical planes of polarization using the Bilog antenna.

The field strength is calculated by adding correction factor to the measured level from the spectrum analyzer. This correction factor includes antenna factor, cable loss and pre-amplifiers gain.

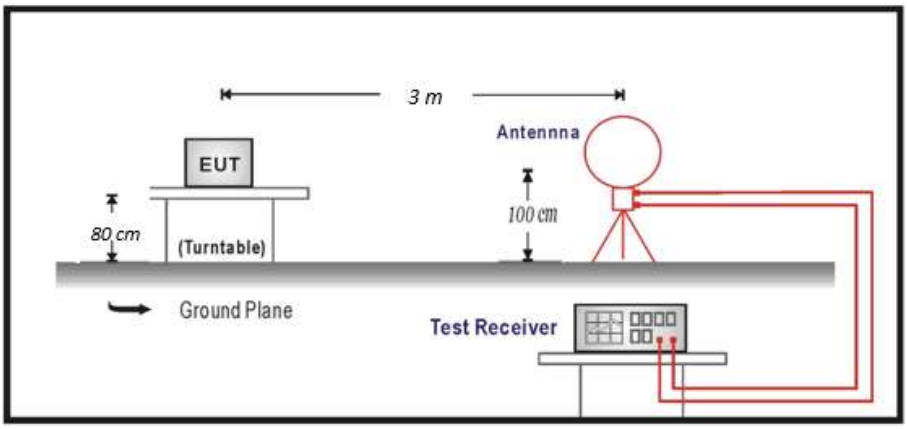


Fig A1: Generic setup for measurements from 9kHz to 30 MHz

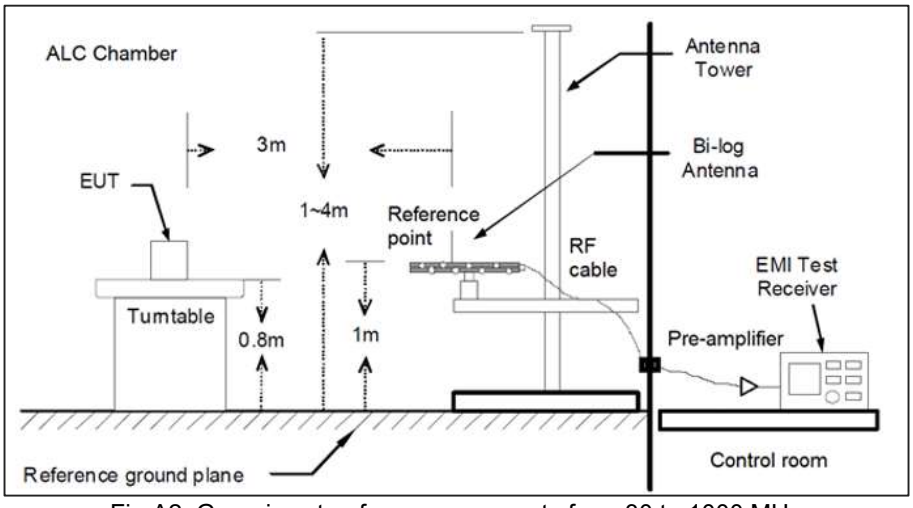


Fig A2: Generic setup for measurements from 30 to 1000 MHz

Test Cases Details

FCC 47 CFR Part 15C

Continuous conducted emission on Power leads - Intentional radiators

Limits of interference

The applied limit for continuous conducted emissions in power leads, according with the requirements of:

a) **FCC Rules and Regulations 47 CFR Part 15, Subpart C, Secs. 15.207 (a).** [54 FR 17714, Apr. 25, 1989, as amended at 56 FR 373, Jan. 4, 1991; 57 FR 33448, July 29, 1992; 58 FR 51249, Oct. 1, 1993; 67 FR 45671, July 10, 2002]

for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal:

Frequency range	Limit (dBμV) (1)	
(MHz)	Quasi-Peak	Average
0,15 to 0,5	66 – 56 (2)	56 – 46 (2)
0,5 to 5	56	46
5 to 30	60	50

(1) At the transition frequency, the lower limit applies.
(2) The limit decreases linearly with the logarithm of the frequency.

b) **RSS-Gen Issue 5, Secs 8.8, AC power-line conducted emissions limits:** Unless stated otherwise in the applicable RSS, for radio apparatus that are designed to be connected to the public utility AC power network, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the range 150 kHz to 30 MHz shall not exceed the limits:

Frequency range	Limit (dBμV) (1)	
(MHz)	Quasi-Peak	Average
0,15 to 0,5	66 – 56 (1)	56 – 46 (1)
0,5 to 5	56	46
5 to 30	60	50

(1) The limit decreases linearly with the logarithm of the frequency.

Code: CEmmnnHH

- CE: Conducted Emission,
- mm: Sample number,
- nn: Operation mode,
- HH: Wire (L1: Phase1, 0N: Neutro)

Results

S/	OM	Code	Freq Rng (MHz)	Line	V
01	OM/01	CE01010N	[0.15, 30]	N	P
01	OM/01	CE0101L1	[0.15, 30]	L1	P

Verdict

Pass

Attachments

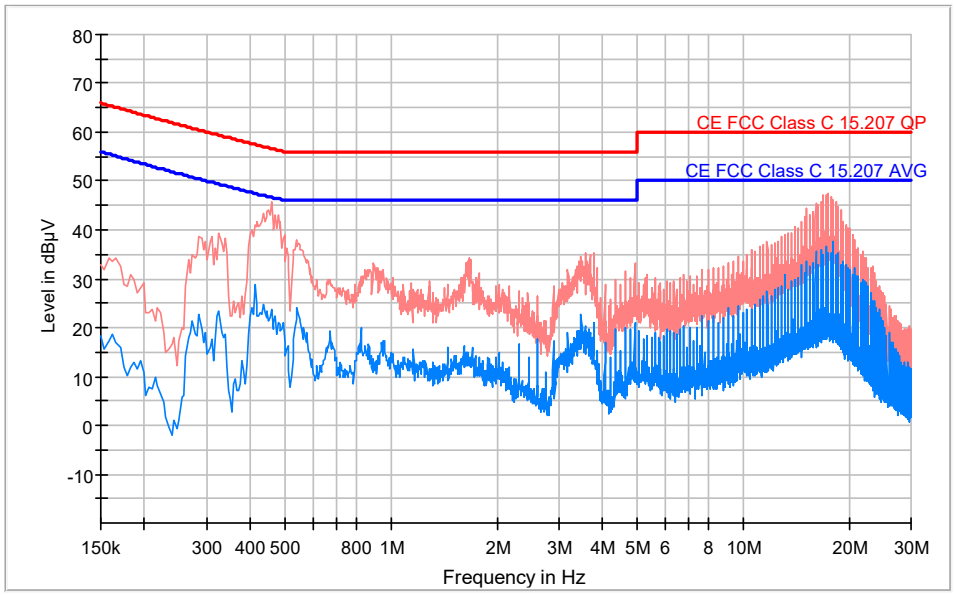
EMC Test Code = CE01010N Frequency Range MHz = [0.15, 30]

Conducted Emissions - Tested Line = N

Sample ID: S/01

Operation Mode: OM/01. DUT ON. Charging pad in charging mode. Power supply 5 Vdc.

Images:



Tables:

Frequency (MHz)	PK+_CLRWR (dBµV)	AVG_CLRWR (dBµV)	Line	Margin – AVG (dB)	Limit – AVG (dBµV)
0.162000	33.5	18.5	N	36.8	55.3
0.410000	41.1	28.7	N	18.8	47.5
0.542000	36.6	24.0	N	22.0	46.0
0.822000	30.6	19.9	N	26.1	46.0
1.610000	30.5	16.3	N	29.7	46.0
3.474000	34.6	22.7	N	23.3	46.0
4.922000	33.3	21.1	N	24.9	46.0
9.698000	34.7	24.3	N	25.7	50.0
17.226000	47.0	36.5	N	13.5	50.0
18.098000	46.2	37.7	N	12.3	50.0

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	IF BW	Meas. Time
150 kHz - 30 MHz	4 kHz	PK+ ; AVG	9 kHz	0.01 s

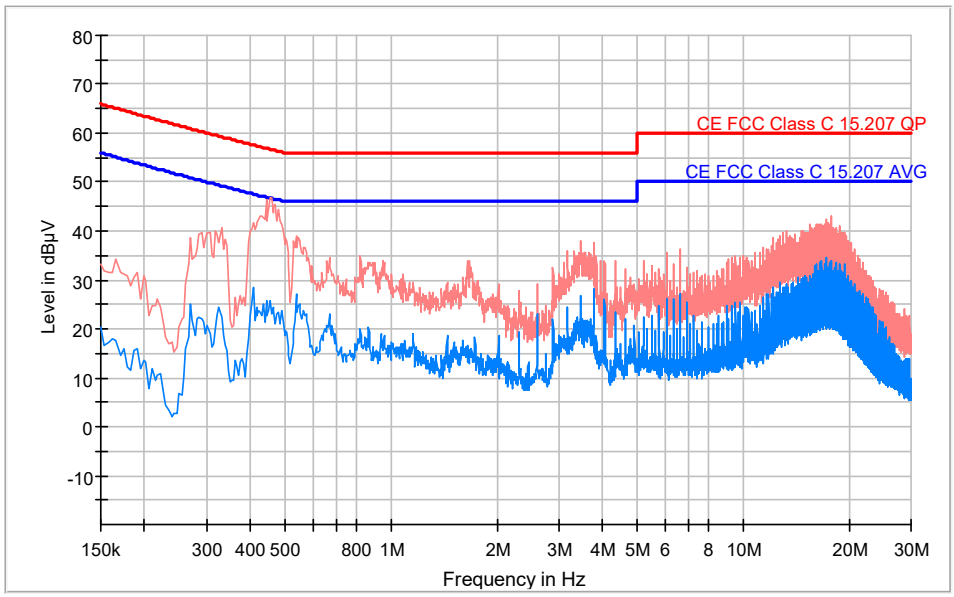
EMC Test Code = CE0101L1 Frequency Range MHz = [0.15, 30]

Conducted Emissions - Tested Line = L1

Sample ID: S/01

Operation Mode: DUT ON. Charging pad in charging mode. Power supply 5 Vdc.

Images:



Tables:

Frequency (MHz)	PK+_CLRWR (dBµV)	AVG_CLRWR (dBµV)	Line	Margin – AVG (dB)	Limit – AVG (dBµV)
0.150000	33.2	20.4	L1	35.6	56.0
0.406000	41.6	28.6	L1	19.0	47.6
0.538000	39.2	27.3	L1	18.7	46.0
0.866000	32.8	20.4	L1	25.6	46.0
2.022000	29.2	18.6	L1	27.4	46.0
3.470000	38.1	26.9	L1	19.1	46.0
3.758000	37.5	28.1	L1	17.9	46.0
6.650000	36.2	27.2	L1	22.8	50.0
17.202000	42.4	34.7	L1	15.3	50.0
17.782000	43.0	34.0	L1	16.0	50.0

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	IF BW	Meas. Time
150 kHz - 30 MHz	4 kHz	PK+ ; AVG	9 kHz	0.01 s

Radiated emission electromagnetic field – Intentional radiators

Limits

Limits of interference

The applied limit for radiated emissions, according to the requirements of:

(a) **FCC Rules and Regulations 47 CFR Part 15, Subpart C:**
Secs. 15.209 (a): [54 FR 17714, Apr. 25, 1989; 54 FR 32339, Aug. 7, 1989; 55 FR 18340, May 2, 1990; 62 FR 58658, Oct. 30, 1997].

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 Range (MHz)	Field strength (µV/m)	Field strength (dBµV/m)	Measurement distance (m)
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(1)	40	3
88 - 216	150(1)	43.5	3
216 - 960	200(1)	46	3
Above 960	500	54	3

(1) Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54–72 MHz, 76–88 MHz, 174–216 MHz or 470–806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241

Secs. 15.209 (d): The emission limits shown in the above table 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 emission limits in these three bands are based on measurements employing an average detector.

Secs. 15.209 (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.

Secs. 15.109 (g): As an alternative to the radiated emission limits shown in paragraphs (a) and (b) of this section, digital devices may be shown to comply with the standards contained in the Third Edition of the International Special Committee on Radio Interference (CISPR), Pub. 22, “Information Technology Equipment—Radio Disturbance Characteristics—Limits and Methods of Measurement” (incorporated by reference, see § 15.38). In addition:

(g) (2): If, in accordance with § 15.33 of this part, measurements must be performed above 1000 MHz, compliance above 1000 MHz shall be demonstrated with the emission limit in paragraph (a) or (b) of this section, as appropriate. Measurements above 1000 MHz may be performed at the distance specified in the CISPR 22 publications for measurements below 1000 MHz provided the limits in paragraphs (a) and (b) of this section are extrapolated to the new measurement distance using an inverse linear distance extrapolation factor (20 dB/decade), e.g., the radiated limit above 1000 MHz for a Class B digital device is 150 µV/m, as measured at a distance of 10 meters.

Frequency range (MHz)	AVG Limit for 10 m		AVG Limit for 3 m (1)	PK Limit for 3 m (1,2)
	(µV/m)	(dBµV/m)	(dBµV/m)	(dBµV/m)
1000 - 3000	1000	10000	54	74
3000 - 6000	1000	10000	54	74
6000 - 40000(3)	1000	10000	54	74

(1) Class B limits are specified by FCC at a distance of 10m and extrapolated here for 3m by adding inverse linear distance (1/d) proportionality factor of 20dB/decade, used per §15.31(f)(1)
(2) Frequencies above 1 GHz, the limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test, as per §15.35(b)
(3) According with the CISPR 22 (third Edition) There are no limits in the frequency range of 6 - 40 GHz, so expand the frequency range beyond 6GHz using the same limits.

(b) CANADA RSS-Gen Issue 5, Secs 8.9, Transmitter emission limits: Except where otherwise indicated in the applicable RSS, radiated emissions shall comply with the field strength limits shown in table 5 and table 6. Additionally, the level of any transmitter unwanted emission shall not exceed the level of the transmitter's fundamental emission.

General field strength limits at frequencies above 30 MHz

Frequency Range (MHz)	Field strength (µV/m)	Field strength (dBµV/m)	Measurement distance (m)
30 - 88	100	40	3
88 - 216	150	43.5	3
216 - 960	200	46	3
Above 960	500	54	3

General field strength limits at frequencies below 30 MHz

Frequency Range (MHz)	Field strength (µA/m)	Field strength (dBµA/m)	Measurement distance (m)
0.009-0.490 (1)	6.37/F(kHz)	-	300
0.490-1.705	63.7/F(kHz)	-	30
1.705 - 30.0	0.08	-	30

(1) The emission limits f or the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

Code: REmmnnRR

- RE: Radiated Emission,
- mm: Sample number,
- nn: Operation mode,
- RR: Frequency range Low Range 1 = LR1: [0.009, 30];
  Low Range 2 = LR2: [30, 1000]

Results

S/	OM	Code	Freq Rng (MHz)	Comments	V
01	OM/01	RE0101LR1	[0.009, 30]	No fails detected	P
01	OM/01	RE0101LR2	[30, 1000]	No fails detected	P

Verdict

Pass

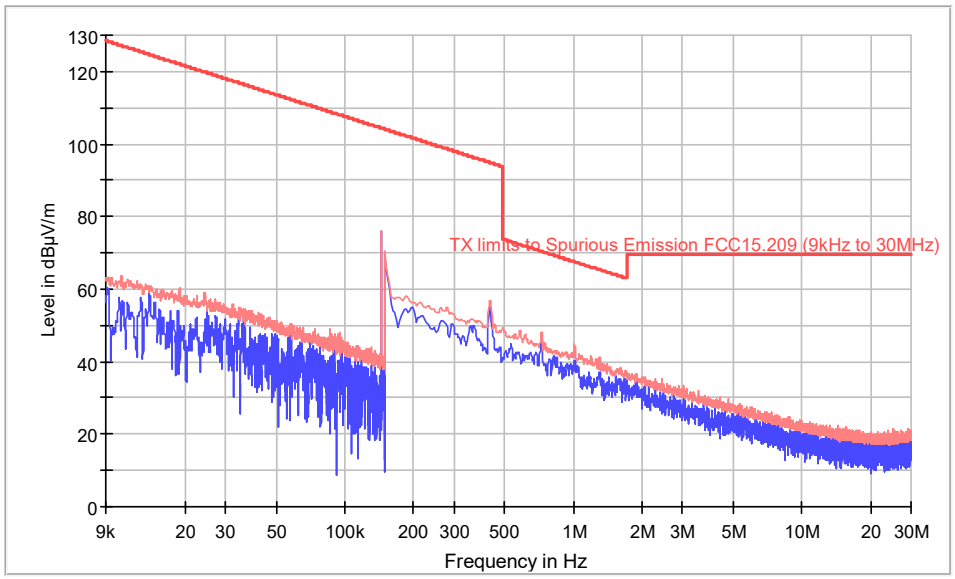
Attachments

EMC Test Code = RE0101LR1 Frequency Range MHz = [0.009, 30]

Sample ID: S/01

Operation Mode: OM/01. DUT ON. Charging pad in charging mode. Power supply 5 Vdc.

Images:



PK+_CLRWR
PK+_MAXH
TX limits to Spurious Emission FCC15.209 (9kHz to 30MHz)

Tables:

Frequency (MHz)	PK+_CLRWR (dBµV/m)	PK+_MAXH (dBµV/m)	Pol	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)	Comment
0.010537	52.0	63.5	H	63.6	127.1	
0.144980	75.7	75.9	H	28.5	104.4	WPT Fundamental
0.436560	54.3	56.6	H	38.2	94.8	
1.006695	39.3	44.8	H	22.8	67.6	

Spectrum Analyzer Parameters

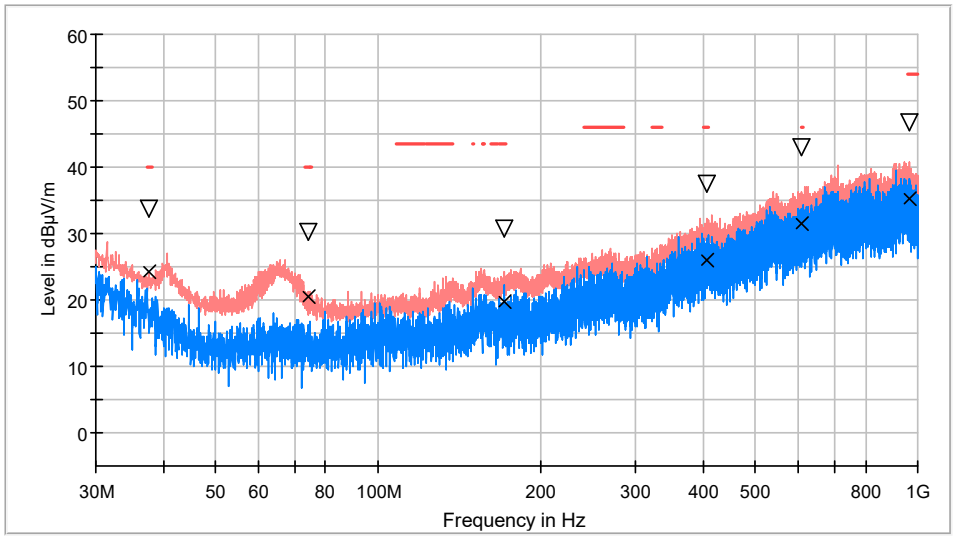
Subrange	Step Size	Detectors	Bandwidth	Sweep Time
9 kHz - 150 kHz	14.1 Hz	PK+	200 Hz	0.01 s
150 kHz - 30 MHz	2.985 kHz	PK+	10 kHz	0.01 s

EMC Test Code = RE0101LR2 Frequency Range MHz = [30, 1000]

Sample ID: S/01

Operation Mode: OM/01. DUT ON. Charging pad in charging mode. Power supply 5 Vdc.

Images:



PK+_MAXH
PK+_CLRWR
TX limits to Spurious Emission FCC15.209 (30MHz to 1GHz) Restricted Bands QPK Limit
MaxPeak-PK+ (Single)
QuasiPeak-QPK (Single)

Tables:

Frequency (MHz)	MaxPeak (dBµV/m)	QuasiPeak (dBµV/m)	Pol	Margin - QPK (dB)	Limit - QPK (dBµV/m)
37.663000	33.8	24.3	V	15.7	40.0
74.474500	30.4	20.5	V	19.5	40.0
171.814000	30.8	19.7	V	23.8	43.5
406.651000	37.4	26.1	V	19.9	46.0
608.556500	43.1	31.5	V	14.5	46.0
963.285500	46.7	35.2	H	18.8	54.0

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time
30 MHz - 1 GHz	48.5 kHz	PK+	100 kHz	1 s

Occupied bandwidth (or 99% emission bandwidth)

Limits

RSS Gen Issue 5 – April, clause 6.7 (2018).

The occupied bandwidth or the "99% emission bandwidth" is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained. The occupied bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs.

Compliance with RSS-Gen and the limits set out in the applicable RSS shall be demonstrated using the methods of measurement specified in section 3 of the Std. RSS-Gen Issue 5 (April 2018).

Verdict

Pass

Attachments

Operation mode: DUT ON. Charging pad in charging mode. Power supply 5 Vdc.

Freq (kHz)	Bandwidth (kHz)	Occ Ch BW (Hz)
145	1	362.004