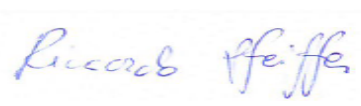
PRS LAB S.r.l. Unipersonale
Sede operativa e Laboratori di prova
Headquarter and Testing lab
Via Campagna, 92 I 22020 Faloppio (CO) I Italy
Tel. +39 031 3500011 I Fax +39 031 991309
info@primaricerca.it I www.primaricerca.it

LAB N° 1347 L

TEST REPORT

Ref. n.	**FCCTR_183543-2**	Issue Date:	**13/12/2023**	Pages:	**19**

Test object	*Type test according to Standard* **FCC Cfr 47 part 15 - Subpart C - §15.207, §15.209**	
Applicant	**DATALOGIC S.r.l.** Via S. Vitalino 13 - 40012 Lippo Di Calderara Di Reno - Bologna - Italy Phone. +39 051 3147196 Fax +39 051 3147561	
Trade mark	DATALOGIC™	
Manufacturer	DATALOGIC S.r.l.	
Product	Base charger station	
Tested model	**BC9620**	
Type	**910**	
FCC ID	**U4FBC9620WRLCHR**	
Date of test samples receipt	26/07/2023	
No. of tested samples	1 – Sampled by the manufacturer	
Test date	From 08/09/2023 to 18/09/2023	
Testing site	PRSLAB S.r.l. Unipersonale - Via Campagna 92 - 22020 Faloppio - Como - Italy	
FCC designation number	IT0012	
Test results	**COMPLIANT**	
Verifications carried out by	**Daniele AOSANI** *Laboratory Engineer*	
Approved by	**Riccardo PFEIFFER** *Laboratory Manager*	

The test results reported in this test report shall refer only to the samples tested.
The sample has been provided by the customer and the results apply to the sample as received.

PRS refuses any responsibility about information provided by the customer contained in this test report.

TABLE OF CONTENTS

0. RELEASE CONTROL RECORD

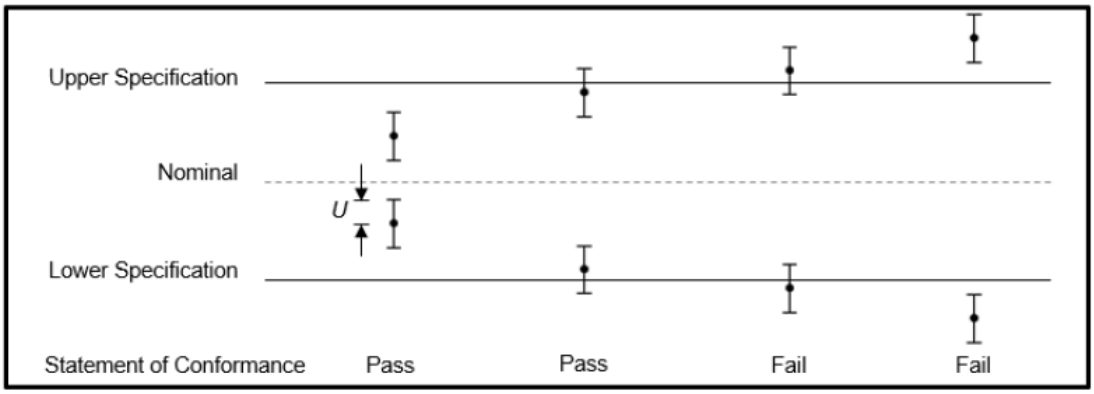
TEST REPORT NUMBER	REASON OF CHANGE	DATE OF ISSUE
FCCTR_183543-0	Original release	18/10/2023
FCCTR_183543-1	Added type	06/12/2023
FCCTR_183543-2	Corrected the graph on page 12 with the Extrapolation factor	13/12/2023

This document is valid in last revision that deletes and replaces the previous one

1. DECISION RULE

PRS LAB specifies that, if the decision rules of conformity of the test results are not indicated in detail in the standard/s object of tests, it takes as a decision rule for the declaration of conformity the simple binary system (w = 0) stated in the ILAC-G8-09:2019 document.

The decision rule is applicable for all parts of standard



U = 95% expanded measurement uncertainty

Statements of conformity are reported as:

- Pass: the measured value is below the acceptance limit, $AL{=}TL$.
- Fail: the measured value is above the acceptance limit, $AL{=}TL$.

Definitions

- Guard Band (w): interval between a tolerance limit and a corresponding acceptance limit where length $w{=}|TL{-}AL|$.
- Tolerance Limit (TL) (Specification Limit): specified upper or lower bound of permissible values of a property.
- Acceptance Limit (AL): specified upper or lower bound of permissible measured quantity values.

2. INFORMATION PROVIDED BY CUSTOMER

There are two model variants of the EUT but there is no difference within the WPT circuitry between the Bluetooth and SRD variants. WPT initial testing was performed on both variants and the SRD variant was deemed the worst case and used for all final measurements.

This device:

Model: BC9620 type BT

Is the alternate variant to

Model: BC9620 type 910

3. GENERAL REMARKS

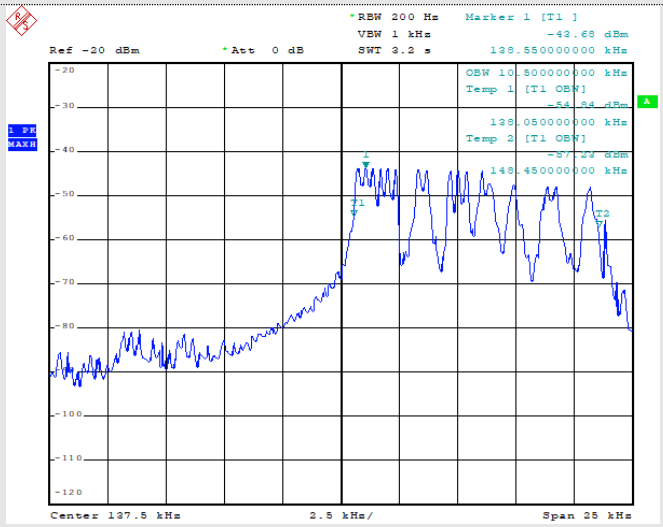
- None

4. TECHNICAL INFORMATION OF EQUIPMENT UNDER TEST (EUT)

4.1 EUT Identification

DESCRIPTION	Base charger station
MODEL NAME	BC9620
TYPE	910
FCC ID	U4FBC9620WRLCHR
SERIAL NO.	B23P02019
PRS LAB INTERNAL REFERENCE	BC 221/2023 2/10
TRADEMARK	DATALOGIC™
MANUFACTURER	DATALOGIC S.r.l.
COUNTRY OF MANUFACTURER	Italy
SINGLE UNIT OR SYSTEM	Single
SOFTWARE VERSION (Information provided by Customer)	A
HARDWARE VERSION (Information provided by Customer)	A
POWER SOURCE	AC/DC adapter (model **PSAA18U-120**) powered at 100-240V ~ 50-60Hz USB Type C PD
SUPPLY VOLTAGE	12Vdc from AC/DC adapter 15Vdc from USB-C
MAX POWER or MAX ABSORBED CURRENT	Max 1.5A
OPERATING TEMPERATURE	0°C ÷ +50°C
DIMENSIONS	See photographic documentation
EUT STANDING	☐WALL; ☐CEILING; ☒TABLE; ☐FLOOR; ☒RACK MOUNTED; ☐BODY WORN; ☐HANDELD; ☐PORTABLE; ☐MOBILE
HIGHEST INTERNAL FREQUENCY (Information provided by Customer)	☐<108MHz; ☐108MHz<F<500MHz; ☒500MHz<F<1GHz; ☐F>1GHz
FCC ID CONTAINS	MIZAR MODULE 915MHZ: U4F0022

4.2 WPT module technical data

CHIP MANUFACTURER	Renesas
CHIP MODEL	**P9242-RB**
ETS CATEGORY	Wireless Power Transmission (WPT)
FREQUENCY RANGE	100-148 kHz f. band
TRANSMITTER MAX POWER	10W
TYPE OF MODULATION	FSK/ASK
ANTENNA TYPE	Internal
MEASURED 99% BW	 99%BW = 10.50kHz

4.3 Ports identification

	PORT	DESCRIPTION	CONNECTION	NOTES
☒	Enclosure	Plastic	Screw	---
☒	AC Power input	115V ~ 60Hz by AC/DC adapter	---	---
☐	DC Power input	Port not present	---	---
☒	Signal / Control port	USB	RJ45	<3m
☐	Telecomm.port	Port not present	---	---
☐	Antenna port	☒Internal; ☐External	---	---
Note: During the tests all cables must be what provided the manufacturer or the same that used in the real employment of the EUT.				

4.4 Modifications incorporated in E.U.T.

The following items are the modifications introduced in the equipment under test:

- None

4.5 Auxiliary equipment

- None

5. REFERENCE STANDARDS

CODE OF FEDERAL REGULATIONS	DESCRIPTION
Title 47 Part 15 Subpart C	Radio frequency devices - Intentional Radiators
Title 47 Part 15 Subpart C § 15.207	Radio frequency devices - Intentional Radiators Conducted Limits
Title 47 Part 15 Subpart C § 15.209	Radio frequency devices - Intentional Radiators Radiated emission limits; general requirements.
ANSI C63.4: 2014	American National Standard for Methods of Measuring of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz – 40 GHz
ANSI C63.10:2013	American National Standard for Testing Unlicensed Wireless Devices

6. OPERATING MODES AND TEST CONDITIONS

In the following table there are the operating conditions adopted during tests identified by an indicator (#) at which has been referred the item "Operating condition of the equipment under test"

OPERATING CONDITION	DESCRIPTION
#1	EUT in maximum output power transfer mode, WPT battery initially discharged[1] Radiated measurements were performed with the reader placed above the base; it produced worst case emissions and output power, therefore this alignment was used for all measurements.

[1] There are two model variants of the EUT but there is no difference within the WPT circuitry between the Bluetooth and SRD 910MHz variants. WPT initial testing was performed on both variants and the SRD 910MHzvariant was deemed the worst case and used for all final measurements.

Special Test Software: None

Special Hardware Used: None

Transmitter Test Antenna: The EUT has been tested with the antenna fitted in a manner typical of normal intended use as integral antenna equipment as described with the test results.

7. UNITS OF MEASUREMENTS

Conducted EMI Data is in dBµV; dB referenced to one microvolt
Radiated EMI Data is in dBµV/m; dB/m referenced to one microvolt per meter

Sample Calculation:

RFS = Radiated Field Strength,
FSM = Field Strength Measured,
A.F. = Receive antenna factor,
Gain = amplification gains and/or cable losses.

RFS (dBµV/m @ 3m) = FSM (dBµV) + A.F. (dB/m) - Gain (dB)

8. SUMMARY OF TEST RESULTS

SUMMARY OF TEST RESULTS				
Port	**Test**	**Reference Standard**	**Operating Condition[1]**	**Results**
Enclosure	Radiated Emissions 9kHz – 30MHz	Title 47 Part 15 Subpart C § 15.209	#1	Within the limits
	Radiated Emissions 30MHz – 1GHz		#1	Within the limits
AC main	Conducted Emissions	Title 47 Part 15 Subpart C § 15.207	#1	Within the limits

[1] Ref. Tab. Of Section 6

9. TESTS RESULTS

TEST 1.	RADIATED EMISSIONS – 9kHz to 1GHz
REFERENCE DOCUMENT	FCC Cfr 47 part 15 - Subpart C - §15.209

• **TEST SETUP**	Acc. To ref. Std.					
• **TEST LOCATION**	Semi-Anechoic Chamber					
• **DISTANCE OF MEASUREMENT**	3m					
• **TEST EQUIPMENT USED FOR TEST**	**Instrument**	**Manufacturer**	**Model**	**Serial n°**	**Calibrated On**	**Due to**
	Stabilized Power Supply	Spitzenberger+ Spies	PAS5000	A154201/00595	02/2022	02/2024
	Emi Receiver	Rohde & Schwarz	ESU 40	100111	02/2023	02/2024
	MXE Emi Receiver	Keysight	N9038A	MY57290150	09/2022	09/2023
	Semi-Anechoic Chamber	Siemens	B83117-D6019-T232	003-005-134/94C	02/2023	02/2024
	Loop antenna	Rohde & Schwarz	HFH 2-Z2	841801/012	05/2020	10/2023
	Bi-log antenna	Chase	CBL6111C	2717	04/2022	04/2025
	Radiated Emission Cable (30MHz – 1GHz)	Sucoflex	Sucoflex 126	---	12/2021	12/2023
	Software EMC	Rohde & Schwarz	EMC32-E	V 8.40.0	N.A.	
• **TESTED PORT**	Enclosure port					
• **TEST METHOD**	ANSI C63.10:2013 section 6.5					
• **FREQUENCY RANGE**	9kHz – 1GHz					
• **LIMITS**	Acc. To § 15.209 (a)					
• **UNCERTAINTY OF MEASURE**	Level of confidence = 95% (k=2) Expanded uncertainty 9kHz – 30MHz = 4,18 dB Expanded uncertainty 30MHz – 1GHz = 5,72 dB					

TEST CONDITIONS	REQUIRED	MEASURED
Ambient temperature	**23°C ± 5°C**	23.6 °C
Ambient humidity	**25 - 75%rH**	38%
Pressure	**85 - 106kPa (860mbar - 1060mbar)**	960 mbar
Voltage		115V ~ 60Hz

OPERATING CONDITION: **#1**

RESULT: **WITHIN THE LIMITS**

MEASUREMENT PARAMETER – 9kHz – 150kHz	
Resolution bandwidth	300Hz
Video bandwidth	1kHz
Span	141kHz
Sweep time	Auto couple
Detector	Peak
Trace-Mode	Max. hold

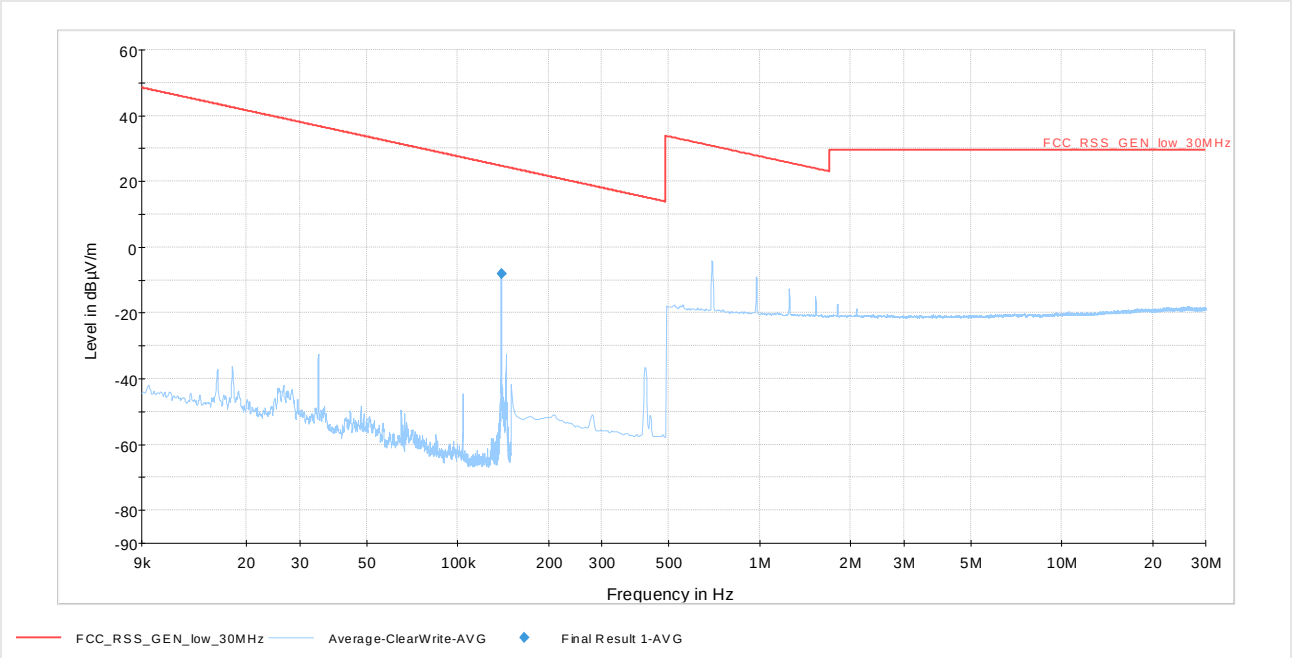
MEASUREMENT PARAMETER – 150kHz – 30MHz	
Resolution bandwidth	10kHz
Video bandwidth	30kHz
Span	29.850MHz
Sweep time	Auto couple
Detector	Peak
Trace-Mode	Max. hold

MEASUREMENT PARAMETER – 30MHz – 1GHz	
Resolution bandwidth	120kHz
Video bandwidth	300kHz
Span	970MHz
Sweep time	Auto couple
Detector	Peak
Trace-Mode	Max. hold

TEST RESULTS

Operating condition: EUT in Wireless Power Transfer mode

Frequency Range: 9kHz – 30MHz



Final Results:

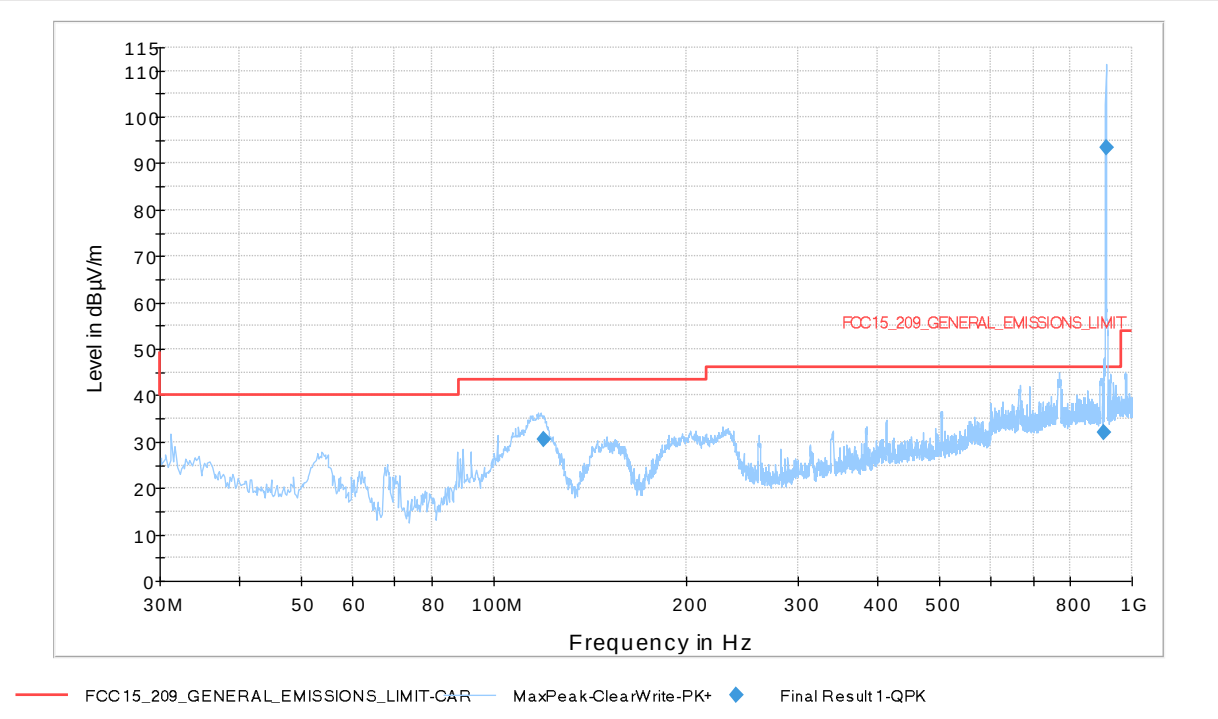
Frequency (MHz)	Average (dBµV/m)	Height (cm)	Axis	Azimuth (deg)	Margin (dB)	Limit (dBµV/m)
0.139550	-8.1	104.8	Y	270.0	32.8	24.7

NOTA: The results reported are for the worst axis only.

The measurement from 9 kHz to 490 kHz was performed at a distance of 3m and reported at 300m using the square of an inverse linear distance extrapolation factor (40 dB/decade), as described in FCC Cfr 47 part 15 - Subpart A - §15.31 (f) (2). Extrapolation factor from 300m to 3m = 80dB

The measurement from 490 kHz to 30 MHz was performed at a distance of 3m and reported at 30m using the square of an inverse linear distance extrapolation factor (40 dB/decade), as described in FCC Cfr 47 part 15 - Subpart A - §15.31 (f) (2). Extrapolation factor from 30m to 3m = 40dB

Frequency Range: 30MHz – 1GHz	Vertical polarization

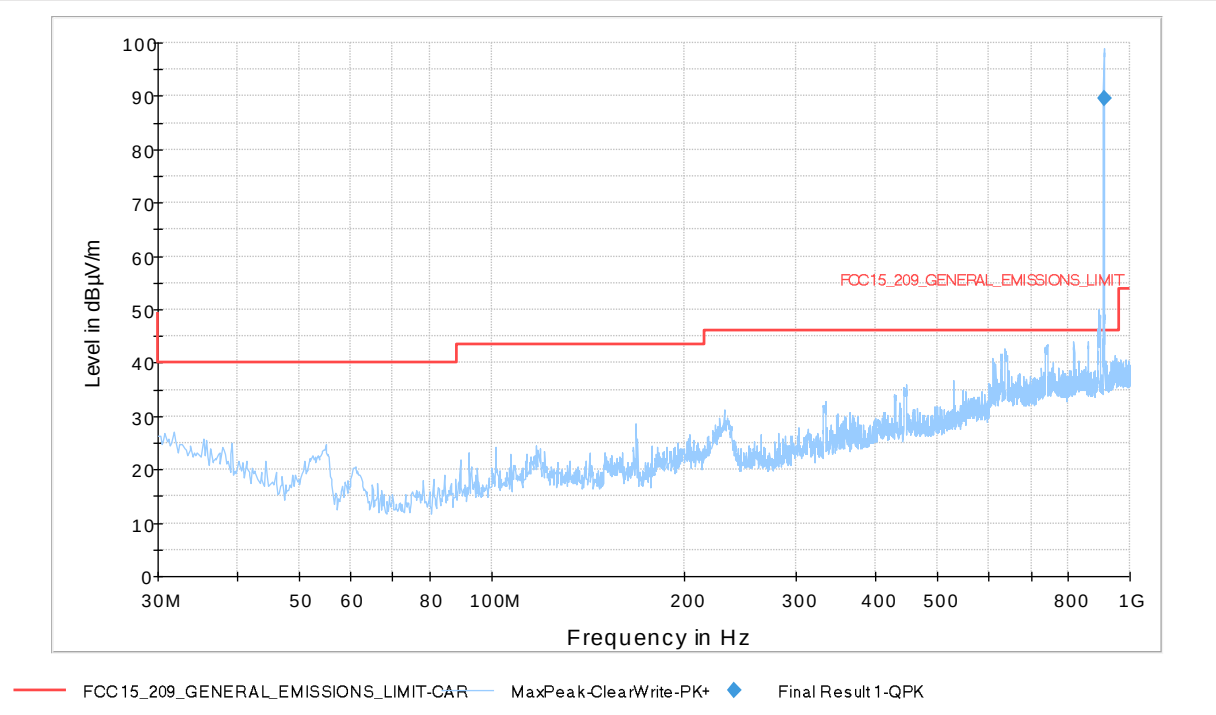


Final Results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Height (cm)	Azimuth (deg)	Margin (dB)	Limit (dBµV/m)
119.730000	30.4	99.8	97.0	13.10	43.50
904.860000	32.1	233.9	271.0	13.90	46.00
910.230000	93.4	99.7	97.0	-47.40	46.00

NOTE: Peaks out of limits are due to 910MHz Radio communication, these peaks are not evaluated in this report.

Frequency Range: 30MHz – 1GHz	Horizontal polarization



Final Results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Height (cm)	Azimuth (deg)	Margin (dB)	Limit (dBµV/m)
909.780000	89.6	179.7	187.0	-43.60	46.00

NOTE: Peaks out of limits are due to 910MHz Radio communication, these peaks are not evaluated in this report.

TEST **2.**	**CONDUCTED EMISSION**
REFERENCE DOCUMENT	**FCC Cfr 47 part 15 - Subpart C - §15.207**

• **TEST SETUP**	Acc. to ANSI C63.10:2013 section 6.2					
• **TEST LOCATION**	Shielded room					
• **TEST EQUIPMENT USED FOR TEST**	**Instrument**	**Manufacturer**	**Model**	**Serial n°**	**Calibrated On**	**Due to**
	Stabilized Power Supply	Spitzenberger+ Spies	PAS5000	A154201/0059 5	02/2022	02/2024
	MXE Emi Receiver	Keysight	N9038A	MY57290150	09/2022	09/2023
	LISN	Narda	L3-32	243ZT00202	08/2022	08/2024
	Software EMC	Rohde & Schwarz	EMC32-E	V 8.40.0	N.A.	
	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100837	07/2023	07/2025
• **TESTED PORT**	AC mains power port					
• **TEST METHOD**	ANSI C63.10:2013 section 6.2					
• **FREQUENCY RANGE**	150kHz - 30MHz					
• **LIMITS**	Acc. To § 15.207 (a)					
• **UNCERTAINTY OF MEASURE**	Level of confidence = 95% (k=2) Expanded uncertainty 150kHz – 30 MHz = 2,81 dB					

TEST CONDITIONS	REQUIRED	MEASURED
Ambient temperature	**23°C ± 5°C**	24°C
Ambient humidity	**25 - 75%rH**	45%
Pressure	**85 - 106kPa (860mbar - 1060mbar)**	960mbar
Voltage		115V ~ 60Hz

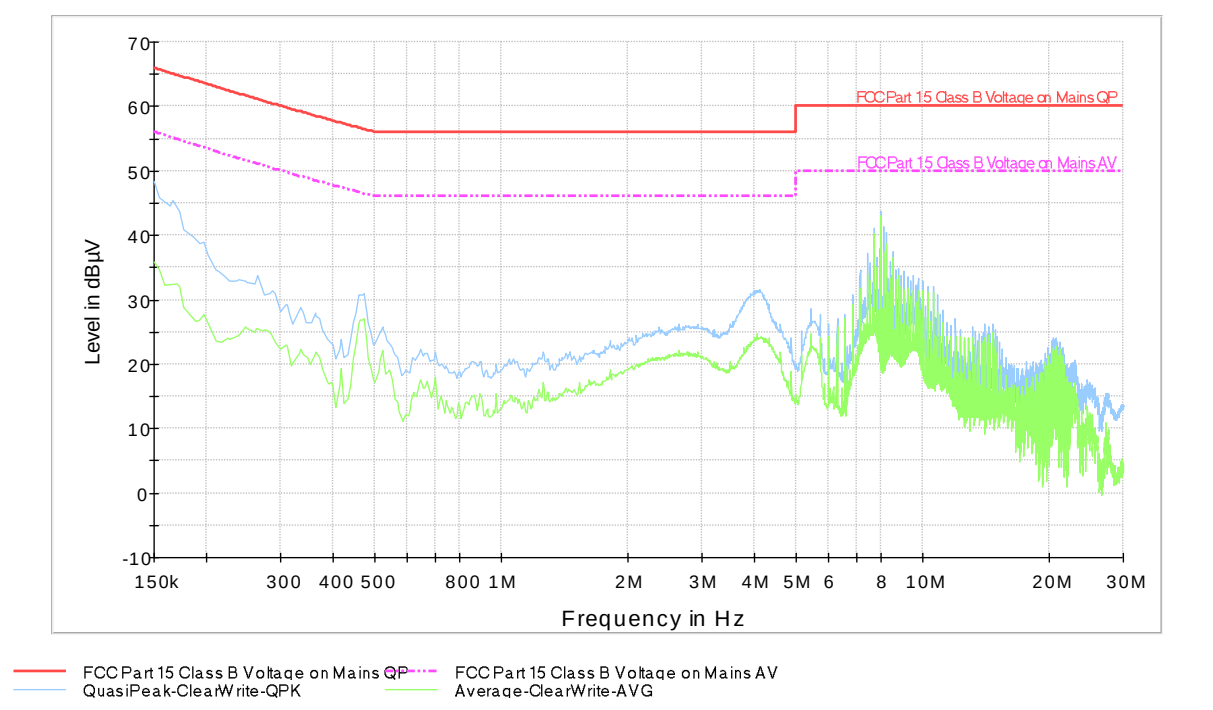
OPERATING CONDITION: **#1**

RESULT: **Within the Limits**

MEASUREMENT PARAMETER – 150kHz – 30MHz	
Resolution bandwidth	9kHz
Video bandwidth	30kHz
Span	29.850MHz
Sweep time	Auto couple
Detector	Quasi Peak - Average
Trace-Mode	Max. hold

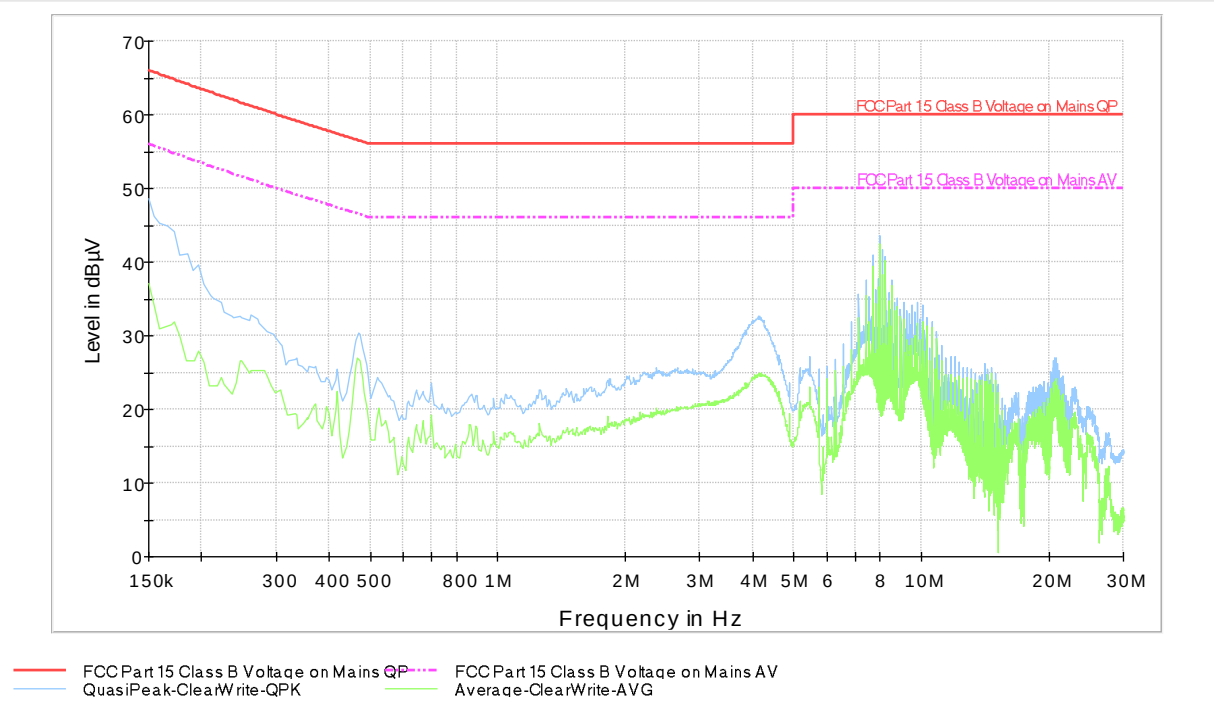
TEST RESULTS

Operating condition: EUT in Wireless Power Transfer mode	
Line: L	**Frequency Range: 150MHz – 30MHz**



Final Results:

Line: N	Frequency Range: 150MHz – 30MHz



Final Results:

END OF TEST REPORT