



FCC LISTED, REGISTRATION

NUMBER: 2764.01

ISED LISTED REGISTRATION NUMBER: 23595-1

Test report No: 3704ERM.001A4

Test report

FCC Rules and Regulations CFR 47, Part 15, Subpart B & C (2018) ICES-003 ISSUE 7 - October (2020)

(*) Identification of item tested	Whole home leak detection and water monitoring device
(*) Trademark	Water Dragon
(*) Model and /or type reference tested	ADC-SHM-100-A
Other identification of the product	FCC ID: YL6-143SHM100
	IC: 9111A-143SHM100
(*) Features	Z-Wave Mesh, Z-Wave Long Range
Manufacturer	Alarm.com, Inc
	8281 Greensboro Dr, Suite 100 Tyson, VA 22102
	USA
Test method requested, standard	FCC Rules and Regulations CFR 47, Part 15, Subpart B & C (2018)
	ICES-003 ISSUE 7 – October (2020)
Summary	IN COMPLIANCE
Approved by (name / position & signature)	Domingo Galvez EMC&RF Lab Manager
signature)	EWOGN Lab Wanager
Date of issue	03-09-2023
Report template No	FDT08_23
	(*) "Data provided by the client"



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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

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.

<u>IMPORTANT:</u> No parts of this report may be reproduced or quoted out of context, in any form or by any means, except in full, without the previous written permission of DEKRA Certification Inc.

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
Radiated emission	1000-18000	5.89	dB
Conducted emission	0,009 - 30	3.54	dB



Data provided by the client

The Alarm.com Smart H2O Monitor is a non-intrusive water leakage detection device for residential and light commercial installation, giving property owners peace of mind. The Smart H2O Monitor supports whole home water leak detection and reporting to provide a comprehensive water solution. The primary use is for indoor-based water systems.

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 testing have been selected by The Client.

Sample S/01 is composed of the following elements:

Control Nº	Description	Model	Serial Nº	Date of reception
3704/02	Radiated sample	-	146	05/04/2022
3704/04	AC/DC Adapter	-	-	05/04/2022

Following Accessories items were used with Sample S/01 to perform testing:

Control Nº	Description	Model	Serial Nº	Date of reception
3704/07	USB to TTL Serial cable(3.3V) - 1.8m	TTL-232R03V3	-	05/04/2022

Sample S/01 is composed of the following auxiliary elements

Control Nº	Description	Model	Serial Nº
Dekra 01	Laptop DELL	Latitude 5400	89J57Y2

1. Sample S/01 was used for the following test(s): All tests indicated in appendix A

DEKRA Certification, Inc. 405 Glenn Dr. Suite 12, Sterling, VA 20164 United States of America



Test sample description

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

Ports:					Ca	ble		
	Port name and description		Specified length [m]			Shielded		Coupled to patient
	No Da	ata Provided						
Supplementary information to the ports:	No Da	ata Provided						
Rated power supply:	Volto	go and Fraguency		Ref	eren	ce po	oles	
	Volta	ge and Frequency	L1	L2	L	.3	N	PE
		AC:						
		AC:						
		DC: 5Vdc						
		DC:						
Rated Power	5VDC							
Clock frequencies:	No Data Provided							
Other parameters:	No Data Provided							
Software version:	ZGM 0.24, MSP 0.20							
Hardware version:	910-0	0060-001 Rev A						
Dimensions in cm (W x H x D):	No Da	ata Provided						
Mounting position		Table top equipment						
		Wall/Ceiling mounted	<u> </u>					
	☐ Floor standing equipment							
		Hand-held equipmen	t					
		Other: Water pipe					1	
Modules/parts:		le/parts of test item		Туре				nufacturer
		ve 700 Series /	Module				Silic	on Labs
	ZGM	130S037HGN2R						
							+	



Accessories (not part of the test item)	Description	Туре	Manufacturer	
item)	No Data Provided			
Documents as provided by the applicant:	Description	File name	Issue date	
	Declaration Equipment Data	FDT30_18 Declaration Equipment Data_AWACS	05/19/2022	
Copy of marking plate:				
	NO MARKING PLATE	FOUND		

Identification of the client

Alarm.com, Inc 8281 Greensboro Dr, Suite 100 Tyson, VA 22102 USA

Testing period and place

Test Location	DEKRA Certification Inc.
Date (start)	05-04-2022
Date (finish)	05-05-2022



Document history

Report number	Date	Description
3704ERM.001	05-31-2022	First release
3704ERM.001A1	11-18-2022	Second release. Model name changed from ADC-SHM-100-A to Water Dragon. This modification of test report cancels and replaces the test report 3704ERM.001.
3704ERM.001A2	12-06-2022	Third release. Spectrum analyzer parameters used for all test cases added. Compliance updated for Continuous Conducted Emission test case at page 17. This modification of test report cancels and replaces the test report 3704ERM.001A1.
3704ERM.001A3	03-01-2023	Fourth release. New operation mode, and Section A.3 was added with the test results for Conducted Emission on Power Leads - Intentional Radiators, on compliance with FCC 15 Subpart C, clause 15.207 (a). This modification of test report cancels and replaces the test report 3704ERM.001A2.
3704ERM.001A4	03-09-2023	Fifth release. Trademark and Model and /or type reference tested were updated per customer request. This modification of test report cancels and replaces the test report 3704ERM.001A3.

Environmental conditions

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

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

In the semi-anechoic chamber, the following limits were not exceeded during the test.

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

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

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 30 % Max. = 60 %
Air pressure	Min. = 860 mbar Max. = 1060 mbar



Remarks and comments

 The tests have been performed by the technical personnel: Koji Nishimoto, Nasir Khan, Cheikhna Ouattara, and Victor Albrecht.

Testing verdicts

Not applicable :	N/A
Pass :	Р
Fail :	F
Not measured :	N/M

Summary

	Emission Test					
Report Section						
A.1	A.1 Radiated Emission Electromagnetic Field – Unintentional Radiators (30 MHz – 1000 MHz)					
A.1	A.1 Radiated Emission Electromagnetic Field – Unintentional Radiators (1 GHz – 18 GHz)					
- Radiated Emission Electromagnetic Field – Unintentional Radiators (18 GHz – 40 GHz)		N/A	Refer 1			
A.2 Continuous Conducted Emission on Power Leads - Unintentional Radiators (150 kHz to 30 MHz)		Р	Refer 2 & 3			
A.3 Continuous Conducted Emission on Power Leads - Intentional Radiators (150 kHz to 30 MHz)		Р	Refer 2 & 3			

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, (b) for unintentional radiators, (1) due to The Highest frequency generated or used in the device above 1000MHz, The Upper frequency of measurement range is up to 5th harmonic of the highest frequency or 40GHz, whichever is lower.
- 2) According with the requirements of FCC Rules and Regulations, title 47, Chapter I, Subchapter A, Part 15, Subpart B & C, §15.107 & §15.207 Conducted limits, (d) & (c), Measurements to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation, and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines. Devices that include, or make provision for, the use of battery chargers which permit operating while charging, AC adaptors or battery eliminators or that connect to the AC power lines indirectly, obtaining their power through another device which is connected to the AC power lines, shall be tested to demonstrate compliance with the conducted limits.
- 3) Exemptions from the scope of ICES-003, clause 1.5.1 ICES-003 does not apply to the following types of equipment (a) ITE or digital apparatus factory-installed in vehicles, boats or devices equipped with internal combustion engines, traction batteries or both (subject to ICES-002). ITE or digital apparatus not factory-installed in vehicles, boats or devices equipped with internal combustion engines, traction batteries or both do not qualify for this exemption.



List of equipment used during the test

Radiated Emission Equipment

CONTROL NUMBER	DESCRIPTION	MANUFACTURER	MODEL	LAST CALIBRATION	NEXT CALIBRATION
981	RF pre-amplifier 1-18 GHz	Bonn Elektronik	BLMA 0118-2A	2020/11	2022/11
1012	ESR26 EMI Test Receiver	Rohde & Schwarz	ESR26	2022/04	2024/02
1057	Double-ridge Waveguide Horn antenna	ETS Lindgren	3115	2020/06	2023/06
1064	D64 Biconical log Antenna ETS Lindgro		3142E	2021/12	2024/12
1108	Ethernet SNMP Thermometer- CR Room HW Group		HWg-STE Plain	2020/08	2022/08
1111	Ethernet SNMP Thermometer- SAC	HW Group	HWg-STE Plain	2020/08	2022/08
1179	Semi-Anechoic Chamber	Frankonia	SAC 3plus 'L'	N/A	N/A
1217	Frankonia Transparent Test Table 1	Frankonia	FFT-Square	N/A	N/A
1314	Wireless measurement software EMC 32	Rohde & Schwarz	-	N/A	N/A

Conducted Emission Equipment

CONTROL NUMBER	DESCRIPTION	MANUFACTURER	MODEL	LAST CALIBRATION	NEXT CALIBRATION
1010	EMI Test Receiver	Rohde & Schwarz	ESR7	2020/10	2022/10
1073	Pulse Limiter	Narda	PMM PL01	2020/10	2023/10
1082	Line Impedance Stabilization Network			2021/10	2023/10
1110	Ethernet SNMP Thermometer- MR	HW Group	HWg-STE Plain	2020/08	2022/08
1314	Wireless measurement software EMC 32	Rohde & Schwarz	-	N/A	N/A



Appendix A: Test results



Appendix A Content

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DESCRIPTION OF THE OPERATION MODES

The operation modes described in this paragraph represent functionalities of the sample under test.

The following operation modes of the samples were used during the test executions:

OPERATION MODE	DESCRIPTION	
OM/01(*)	DUT ON. Powered by 5 V DC by AC adapter. • Z-Wave in idle mode.	
OM/02(*)	DUT ON. Powered by 5 V DC by AC adapter. • Z-Wave in Tx/Rx Communication mode.	

^{*}Worst configuration detected



A.1. RADIATED EMISSION ELECTROMAGNETIC FIELD – UNINTENTIONAL RADIATORS				
L IMITO.	Product standard:	FCC CFR 47, Part 15, Subpart B (2018), Secs. 15.109 & ICES-003 Issue 7 – October (2021)		
LIMITS:	Test standard:	FCC CFR 47, Part 15, Subpart B (2018), Secs. 15.109 & ICES-003 Issue 7 – October (2020); ANSI C63.4 (2014)		

Limits of interference Class B

The applied limit for radiated emissions, 3 m distance, in the frequency range 30 MHz to 40 GHz for class B equipment, according with the requirements of:

FCC Rules and Regulations 47 CFR Part 15, Subpart B, Secs. 15.109 (a).

[54 FR 17714, Apr. 25, 1989, as amended at 56 FR 373, Jan. 4, 1991; 58 FR 51249, Oct. 1, 1993; 66 FR 19098, Apr. 13, 2001; 67 FR 48993, July 29, 2002; 69 FR 2849, Jan. 21, 2004; 80 FR 33447, June 12, 2015]

Frequency range	QP Limit for 3 m		
(MHz)	(μV/m)	(dBμV/m)	
30 to 88	100	40	
88 to 216	150	43.5	
216 to 960	200	46	
Above 960	500	54	

Frequency range	AVG Limit for 3 m (μV/m) (dBμV/m)		PK Limit for 3 m (1)
(MHz)			(dBμV/m)
Above 1000	500	54	74

⁽¹⁾ 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)

ICES-003 Issue 7, Secs 3.2.2, table 2 & 4 (October 2020).

Frequency range	QP Limit for 3 m		
(MHz)	(μV/m)	(dBμV/m)	
30 to 88	100	40	
88 to 216	150	43.5	
216 to 230	200	46	
230 to 960	224	47	
Above 960	500	54	

Frequency range	AVG Limit for 3 m		PK Limit for 3 m (1)
(MHz)	(μV/m)	(dBμV/m)	(dBμV/m)
Above 1000	500	54	74

TEST SETUP

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 30-100 MHz (Bilog antenna) and 1-18 GHz (Double ridge horn antenna).

The equipment under test was set up on a non-conductive platform above the ground plane and the situation and orientation was varied to find the maximum radiated emission. It was also rotated 360° and the antenna height was varied from 1 to 4 meters to find the maximum radiated emission.

Measurements were made in both horizontal and vertical planes of polarization.

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.



TEST SETUP (CONT.)

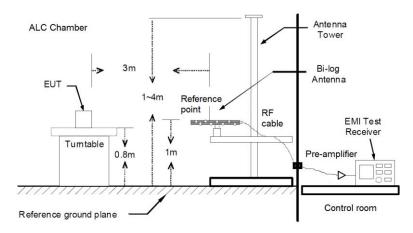


Fig A1: Generic setup for measurements from 30 to 1000MHz

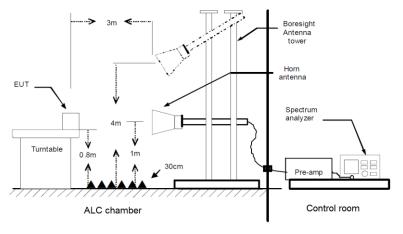


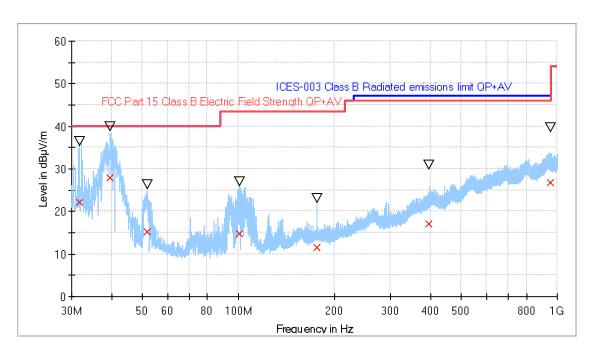
Fig A2: Generic setup for measurements from 1 to 18GHz

TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	OM/01
TEST RESULTS:	CRmmnnxx: CR: Radiation Condition, mm: Sample number, nn: Operation mode, xx: Frequency Range

CRmmnnxx	Description	Result
CR0101LR	Range: 30 MHz - 1000 MHz Horizontal and Vertical Polarization	Р
CR0101HR	Range: 1GHz - 18 GHz Horizontal and Vertical Polarization	Р



CR0101LR





Preview Result 1-PK+

ICES-003 Class B Radiated emissions limit QP+AV FCC Part 15 Class B Electric Field Strength QP+AV

Final_Result QPK Final_Result PK+

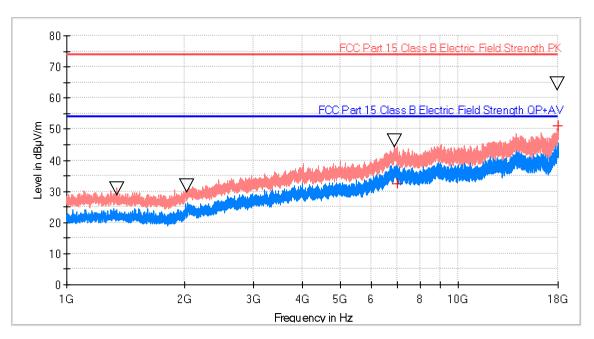
Frequency (MHz)	QuasiPeak (dBµV/m)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
31.751000	22.17	36.51	40.00	17.83	100.0	V	114.0
39.670000	27.99	39.81	40.00	12.01	129.0	V	4.0
51.583500	15.34	26.30	40.00	24.66	115.0	V	71.0
100.606000	14.67	26.90	43.50	28.83	115.0	V	37.0
175.881000	11.54	23.17	43.50	31.96	129.0	V	123.0
396.693500	17.06	31.00	46.00	28.94	152.0	Н	113.0
951.915000	26.75	39.78	46.00	19.25	286.0	V	165.0

Spectrum Analyzer Parameters

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



CR0101HR



Preview Result 2-AVG
Preview Result 1-PK+
FCC Part 15 Class B Electric Field Strength PK
FCC Part 15 Class B Electric Field Strength QP+AV
Final_Result PK+
Final_Result AVG

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
1338.600000	30.69		73.90	43.21	242.0	Н	-9.0
2024.400000	31.68		73.90	42.22	137.0	V	79.0
6887.000000	46.19		73.90	27.71	211.0	V	-26.0
6975.100000		32.30	53.90	21.60	164.0	Н	82.0
17891.900000	64.43		73.90	9.47	250.0	V	87.0
17960.600000		51.22	53.90	2.68	218.0	V	-125.0

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time
1 GHz - 3 GHz	500 kHz	PK+; AVG	1 MHz	1 s
3 GHz - 18 GHz	500 kHz	PK+; AVG	1 MHz	1 s



A.2. CONTINUOUS CONDUCTED EMISSION ON POWER LEADS - UNINTENTIONAL RADIATORS

 LIMITS:
 FCC CFR 47, Part 15, Subpart B (2018), Secs. 15.107 & ICES-003 Issue 7 – Update October (2021)

 Test standard:
 FCC CFR 47, Part 15, Subpart B (2018), Secs. 15.107 & ICES-003 Issue 7 – Update October (2021); ANSI C63.4 (2014)

The applied limit for continuous conducted emissions in power leads, according with the requirements of FCC Rules and Regulations 47 CFR Part 15, Subpart B (2018), Secs. 15.107 & ICES Issue 7 (2020), in the frequency range 0,15 to 30 MHz, for Class B equipment was:

FCC Rules and Regulations 47 CFR Part 15, Subpart B, Secs. 15.107 (a).

[54 FR 17714, Apr. 25, 1989, as amended at 57 FR 33448, July 29, 1992; 58 FR 51249, Oct. 1, 1993; 66 FR 19098, Apr. 13, 2001; 67 FR 45670, July 10, 2002]

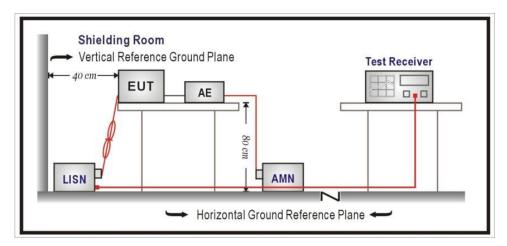
Frequency range	Limit					
(MHz)	Quasi-peak [dB(μV) ¹⁾]	Average [dB(μV) ¹⁾]				
0,15 to 0,5	66-56 ²⁾	56-46 ²⁾				
0,5 to 5	56	46				
5 to 30	60	50				
1) At the transition for more than Level Book and the						

¹⁾ At the transition frequency, the lower limit applies.

TEST SETUP

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.



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	OM/01
TEST RESULTS:	CCmmnnhh: CC: Conducted Condition, mm: Sample number, nn: Test condition mode, hh: wire

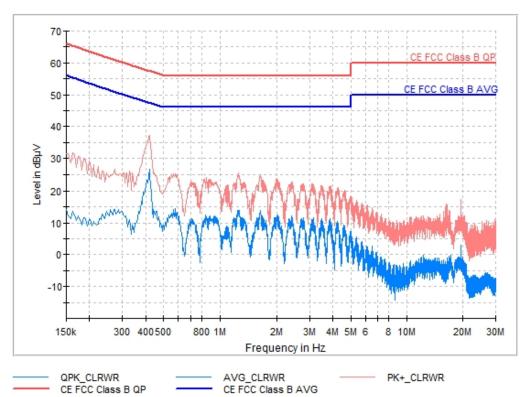
CRmmnnhh	DESCRIPTION	RESULT
CC0101L1	Phase wire noise.	Р
CC0101N	Neutral wire noise.	Р

²⁾ The limit decreases linearly with the logarithm of the frequency.



CC0101L1

CE FCC part 15 Class B

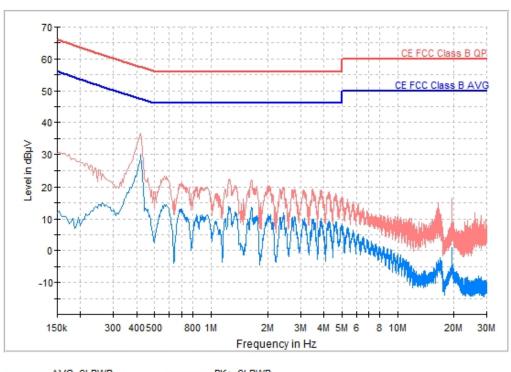


Frequency (MHz)	PK+_CLRWR (dBµV)	AVG_CLRWR (dBµV)	Line	Margin - AVG (dB)	Limit - AVG (dBµV)
0.246000	25.3	13.6	L1	38.0	51.7
0.418000	37.2	26.5	L1	20.9	47.4
0.574000	25.2	14.6	L1	31.4	46.0
1.246000	24.5	13.9	L1	32.1	46.0
1.258000	25.4	14.0	L1	32.0	46.0
2.402000	22.7	12.2	L1	33.8	46.0
3.850000	20.9	11.2	L1	34.8	46.0
6.526000	14.9	2.6	L1	47.4	50.0
12.314000	12.1	-0.1	L1	50.1	50.0
19.446000	17.5	3.0	L1	47.0	50.0



CC0101N

CE FCC part 15 Class B



AVG_CLRWR PK+_CLRWR
CE FCC Class B QP CE FCC Class B AVG

Frequency (MHz)	PK+_CLRWR (dBµV)	AVG_CLRWR (dBµV)	Line	Margin - AVG (dB)	Limit - AVG (dBµV)
0.250000	25.1	14.6	N	36.9	51.5
0.422000	36.5	29.8	N	17.5	47.3
0.434000	27.1	19.3	N	27.8	47.1
1.246000	21.2	12.2	N	33.8	46.0
1.250000	22.1	13.9	N	32.1	46.0
2.434000	19.8	11.8	N	34.2	46.0
3.858000	18.8	10.3	N	35.7	46.0
6.150000	14.7	5.4	N	44.6	50.0
16.814000	9.8	-2.2	N	52.2	50.0
19.446000	10.4	1.0	N	49.0	50.0

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
150 kHz - 30	4 kHz	PK+; AVG	9 kHz	0.01 s	0 dB



A.3. CONTINUOUS CONDUCTED EMISSION ON POWER LEADS - INTENTIONAL RADIATORS

Product standard:

LIMITS:

FCC CFR 47, Part 15, Subpart C (2018), Secs. 15.207 & ICES-003 Issue 7 – Update October (2021)

issue 7 – Update October (2021

Test standard: FCC CFR 47, Part 15, Subpart C (2018), Secs. 15.207 & ICES-003 Issue 7 – Update October (2021); ANSI C63.4 (2014)

The applied limit for continuous conducted emissions in power leads, according with the requirements of FCC Rules and Regulations 47 CFR Part 15, Subpart C (2018), Secs. 15.207 & ICES Issue 7 (2020), in the frequency range 0,15 to 30 MHz, for Class B equipment was:

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]

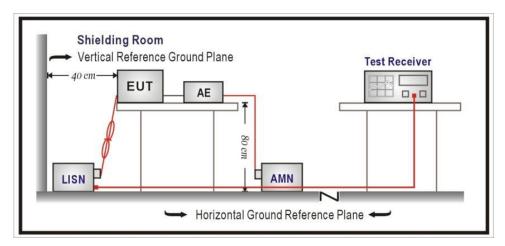
Frequency range	Limit			
(MHz)	Quasi-peak [dB(μV) ¹⁾]	Average [dB(μV) ¹⁾]		
0,15 to 0,5	66-56 ²⁾	56-46 ²⁾		
0,5 to 5	56	46		
5 to 30	60	50		

¹⁾ At the transition frequency, the lower limit applies.

TEST SETUP

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.



TESTED SAMPLES:	S/01			
TESTED CONDITIONS MODES:	OM/02			
TEST RESULTS:	CCmmnnhh: CC: Conducted Condition, mm: Sample number, nn: Test condition mode, hh: wire			

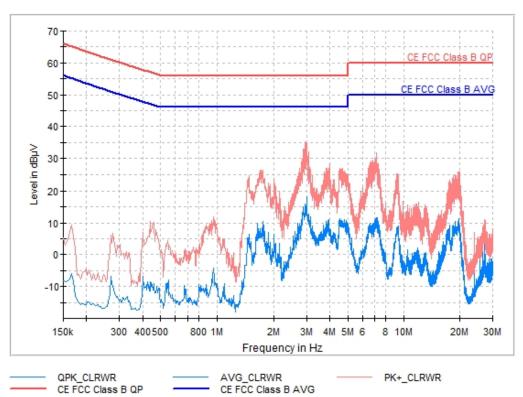
CRmmnnhh	DESCRIPTION	RESULT
CC0102L1	Phase wire noise.	Р
CC0102N	Neutral wire noise.	Р

²⁾ The limit decreases linearly with the logarithm of the frequency.



CC0102L1

CE FCC part 15 Class B

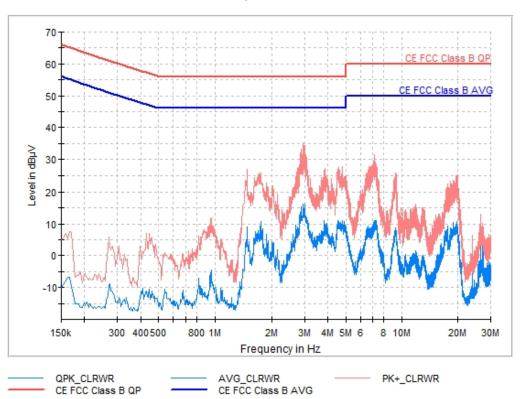


Frequency (MHz)	PK+_CLRWR (dBµV)	AVG_CLRWR (dBµV)	Line	Margin - AVG (dB)	Limit - AVG (dBµV)
0.166000	9.2	-6.0	L1	61.1	55.1
0.402000	7.1	-6.8	L1	54.5	47.7
0.550000	2.5	-7.9	L1	53.9	46.0
0.962000	9.2	-4.3	L1	50.3	46.0
1.746000	25.2	10.6	L1	35.4	46.0
3.010000	34.3	18.1	L1	27.9	46.0
4.554000	26.6	11.5	L1	34.5	46.0
7.130000	27.0	11.7	L1	38.3	50.0
17.326000	19.0	8.1	L1	41.9	50.0
19.710000	24.0	11.2	L1	38.8	50.0



CC0102N

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Frequency (MHz)	PK+_CLRWR (dBµV)	AVG_CLRWR (dBµV)	Line	Margin - AVG (dB)	Limit - AVG (dBµV)
0.166000	7.5	-6.6	N	61.7	55.1
0.410000	1.3	-10.3	N	57.8	47.5
0.542000	0.1	-10.5	N	56.5	46.0
0.958000	11.8	-4.5	N	50.5	46.0
1.742000	23.9	10.8	N	35.2	46.0
3.006000	31.8	16.3	N	29.7	46.0
3.834000	26.1	11.2	N	34.8	46.0
7.134000	31.5	11.2	N	38.8	50.0
17.390000	18.9	8.2	N	41.8	50.0
19.710000	23.0	10.8	N	39.2	50.0

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
150 kHz - 30	4 kHz	PK+ ; AVG	9 kHz	0.01 s	0 dB