DEKRA Testing and Certification, S.A.U.
Parque Tecnológico de Andalucía,
c/ Severo Ochoa nº 2 · 29590 Campanillas · Málaga · España
C.I.F. A29 507 456

Test report No:
NIE: 70437REM.002A1

Test report

FCC Rules and Regulations CFR 47, Part 15, Subpart B (10-1-20 Edition) & ICES-003 Issue 7 (October 2020)

(*) Identification of item tested	AirCurve 11
(*) Trademark	ResMed
(*) Model and /or type reference	39428
(*) Derived model not tested	USA variants: 39491, 39492, 39493, 39494 Canada variants: 39495, 39496, 39497, 39498 USA & Canada variants: 51400
Other identification of the product	HW version: 1.0 SW version: SW04600 FCC ID: 2ACHL-AIR11M1B IC: 9103A-AIR11M1B
(*) Features	LTE Cat-M1, BLE
Manufacturer	ResMed Pty Ltd. 1 Elizabeth Macarthur Drive, Bella Vista, NSW 2153 Australia
Test method requested, standard	FCC Rules and Regulations CFR 47, Part 15, Subpart B (10-1-20 Edition) & ICES-003 Issue 7 (October 2020)
Summary	IN COMPLIANCE
Approved by (name / position & signature)	Rafael López Martín EMC Consumer & RF Lab. Manager  2022.05.06 10:19:14 +02'00'
Date of issue	2022-05-06
Report template No	FDT08_24 (*) "Data provided by the client"

Index

Acronyms

Acronym ID	Acronym Description
Code	EMC Test Code
Freq Rng	Frequency Range
Line	Conducted Emissions - Tested Line
OM	Operation Mode
S/	Sample
V	Verdict

Competences and guarantees

DEKRA Testing and Certification S.A.U. is a testing laboratory accredited by the National Accreditation Body (ENAC -Entidad Nacional de Acreditación), to perform the tests indicated in the Certificate No. 51/LE 147.

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

DEKRA Testing and Certification S.A.U. 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 Testing and Certification S.A.U. at the time of performance of the test.

DEKRA Testing and Certification S.A.U. 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.

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 Testing and Certification S.A.U.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA Testing and Certification S.A.U. and the Accreditation Bodies.

Uncertainty

Uncertainty (factor k=2) was calculated according to the DEKRA Testing and Certification S.A.U. internal document PODT000.

The total uncertainty of the measurement system for the measured conducted disturbance characteristics of EUT from 150 kHz to 30 MHz is I = ± 3,9 dB for quasi-peak measurements, I = ± 3,2 dB for peak measurements (k = 2).

The total uncertainty of the measurement system for the measured radio disturbance characteristics of EUT from 30 MHz to 1000 MHz is I = ± 4,9 dB for quasi-peak measurements, I = ± 4,6 dB for peak measurements (k= 2).

The total uncertainty of the measurement system for the measured radio disturbance characteristics of EUT from 1000 MHz to 12.75 GHz is I = ± 2,6 dB for peaks and average measurements (k = 2).

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 Bilevel device with integrated cellular and bluetooth connectivity.

3. Derived models not tested. These models have been declared by the supplier of the sample as being the same as the model under test.

ResMed
Changing lives with every breath

Date: 01 Dec 2021

DECLARATION OF EQUIVALENCE

This document declares that the following designated products are equivalent to the unit under test **39428**.

For USA:

Model Name / Product Code	Marketing Name
39491	AIRCURVE 11 ASV USA
39492	AIRCURVE 11 S USA
39493	AIRCURVE 11 ST USA
39494	AIRCURVE 11 VAUTO USA

For Canada:

Model Name / Product Code	Marketing Name
39495	AIRCURVE 11 VAUTO CAN
39496	AIRCURVE 11 S CAN
39497	AIRCURVE 11 ST CAN
39498	AIRCURVE 11 ASV CAN

For USA & Canada:

Model Name / Product Code	Marketing Name
51400	AIRCURVE 11 ST NORTH AMERICA

All the above stated products have the same hardware, cellular firmware and Bluetooth firmware.

Applicant:
Company Name: ResMed Pty Ltd
Address: 1 Elizabeth Macarthur Drive,
Bella Vista NSW 2153
Australia

By,

Christopher Jenkins
Christopher Jenkins
Title: Associate Manager – Systems Engineering
Company: ResMed Pty Ltd
Telephone: +61 2 8884 1517
e-mail: Christopher.jenkins@resmed.com.au

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

Usage of samples

Samples undergoing test have been selected by: The client.

Id	Control Number	Description	Model	Serial Nº	Date of Reception	Application
S/01 & S/02	63467B_15.1	ClimateLIne	--	--	2020-10-14	Element Under Test
S/01	70437B_3.1	Respirator	39428	22211762279	2021-11-19	Element Under Test
S/01 & S/02	70437B_4.1	AC Adapter	390001	210002951XB	2021-11-19	Element Under Test
S/02	70437B_5.1	Respirator	39428	22211762278	2021-11-19	Element Under Test

Notes referenced to samples during the project:

- S/01: Used for radiated testing
- S/02: Used for conducted testing.

Test sample description

Ports…… :	Port name and description		Cable				
			Specified max length [m]	Attached during test	Shielded	Coupled to patient(3)	
	Power supply		.....	[X]	[ ]	[ ]	
Supplementary information to the ports…… :	.....						
Rated power supply .....:	Voltage and Frequency		Reference poles				
			L1	L2	L3	N	PE
	[X]	AC: 100-240V~50-60 Hz 1.0-1.5A	[X]	[ ]	[ ]	[X]	[ ]
	[ ]	AC: 115V~400Hz 1.5A	[X]	[ ]	[ ]	[X]	[ ]
Rated Power .....:	24 VDC, 3.75A						
Clock frequencies.....:	N/A						
Other parameters .....:	390001 (PSU Model Number)						
Software version .....:	SW04600						
Hardware version .....:	1.0						
Dimensions in cm (W x H x D) ....:	138.5 mm x 259.4 mm x 94.5 mm						
Mounting position .....:	[X]	Table top equipment					
	[ ]	Wall/Ceiling mounted equipment					
	[ ]	Floor standing equipment					
	[ ]	Hand-held equipment					
	[ ]	Other:					
Modules/parts.....:	Module/parts of test item			Type		Manufacturer	
	Wireless Module			EXS62-W		Thales	
	Bluetooth LE			EFR32BG1		SiLabs	
	Description			Type		Manufacturer	

Accessories (not part of the test item) .....:	Power Supply Unit 390001	N/A	ResMed
Documents as provided by the applicant.....:	Description	File name	Issue date
	.....	.....	.....

(3) Only for Medical Equipment

Identification of the client

ResMed Pty Ltd.
1 Elizabeth Macarthur Drive, Bella Vista,
NSW 2153 Australia

Testing period and place

Test Location	DEKRA Testing and Certification S.A.U.
Date (start)	2021-12-01
Date (finish)	2022-01-27

Document history

Report number	Date	Description
70437REM.002	2022-03-16	First release
70437REM.002A1	2022-05-06	First modification: added clarification for supported power supply. This modification test report cancels and replaces the test report 70437REM.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. = 60 %
Air pressure	Min. = 860mbar Max. = 1060mbar

Remarks and comments

The tests have been performed by the technical personnel: Abel Gil Pensado, Lorena Oviedo Aranda and Salvador Cuellar Guerrero.

Testing verdicts

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

List of equipment used during the test

Control No.	Equipment	Model	Manufacturer	Next Calibration
7816	EMI TEST RECEIVER 1Hz-26.5GHz	ESW26	ROHDE AND SCHWARZ	2023-11-04
4523	EMI TEST RECEIVER 20Hz-26.5GHz	ESU26	ROHDE AND SCHWARZ	2023-11-05
8866	EMI TEST RECEIVER 2Hz-44GHz	ESW44	ROHDE AND SCHWARZ	2023-09-21
6126	ETHERNET TEMPERATURE AND HUMIDITY LOGGER	HWg-STE	HW GROUP	2022-04-05
6607	ETHERNET TEMPERATURE AND HUMIDITY LOGGER	HWg-STE	HW GROUP	2022-04-06
6132	ETHERNET TEMPERATURE AND HUMIDITY LOGGER	HWg-STE	HW GROUP	2022-04-05
6129	ETHERNET TEMPERATURE AND HUMIDITY LOGGER	--	--	2022-04-07
5779	ETHERNET TEMPERATURE AND HUMIDITY LOGGER	HWg-STE	HW GROUP	2022-04-07
4612	HORN ANTENNA 1-18GHz	BBHA 9120 D	SCHWARZBECK MESS-ELEKTRONIK	2024-07-13
6815	HYBRID BILOG ANTENNA 30MHz-6GHz	3142E	ETS LINDGREN	2022-02-01
8788	PREAMPLIFIER 30dB 500MHz-18GHz	BBV 9718 C	SCHWARZBECK	2022-06-07

Control No.	Equipment	Model	Manufacturer	Next Calibration
6064	SEMIANECHOIC ABSORBER LINED CHAMBER	SAC-3	FRANKONIA	--
7614	SEMIANECHOIC ABSORBER LINED CHAMBER V	FACT 3 200 STP	ETS LINDGREN	--
6329	SHIELDED ROOM	---	FRANKONIA	--
7034	TEMPERATURE, HUMIDITY AND PRESSURE PROBE	GP Probe	GP INGENIERÍA	2022-04-21
4679	THREE-PHASE ARTIFICIAL NETWORK 32A	--	--	2023-01-11
5152	TRANSIENT LIMITER 10DB N CONNECTOR	VTSD 9561-F	SCHWARZBECK	2022-10-20

Summary

Test Specification.	Requirement – Test case	Verdict	Remark
FCC 47 CFR Part 15B	RE Radiated emission. Electromagnetic field measure	Pass	---
FCC 47 CFR Part 15B	CE Continuous conducted emission	Pass	---
Supplementary information and remarks: None			

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	EUT ON. Bluetooth in advertising mode. Respirator activated. MS in IDLE mode. Power supply: 115Vac, 60Hz
OM/02	EUT ON. MS in IDLE mode. LTE Cat. M1 Band 2. Power supply: 115Vac, 60Hz
OM/03	EUT ON. MS in IDLE mode. LTE Cat. M1 Band 4. Power supply: 115Vac, 60Hz
OM/04	EUT ON. MS in IDLE mode. LTE Cat. M1 Band 5. Power supply: 115Vac, 60Hz
OM/05	EUT ON. MS in IDLE mode. LTE Cat. M1 Band 12. Power supply: 115Vac, 60Hz
OM/06	EUT ON. MS in IDLE mode. LTE Cat. M1 Band 13. Power supply: 115Vac, 60Hz
OM/07	EUT ON. MS in IDLE mode. LTE Cat. M1 Band 25. Power supply: 115Vac, 60Hz
OM/08	EUT ON. MS in IDLE mode. LTE Cat. M1 Band 26. Power supply: 115Vac, 60Hz
OM/09	EUT ON. MS in IDLE mode. LTE Cat. M1 Band 66. Power supply: 115Vac, 60Hz
OM/10	EUT ON. MS in traffic mode. LTE Cat. M1 Band 2. Power supply: 115Vac, 60Hz
OM/11	EUT ON. MS in traffic mode. LTE Cat. M1 Band 4. Power supply: 115Vac, 60Hz
OM/12	EUT ON. MS in traffic mode. LTE Cat. M1 Band 5. Power supply: 115Vac, 60Hz
OM/13	EUT ON. MS in traffic mode. LTE Cat. M1 Band 12. Power supply: 115Vac, 60Hz
OM/14	EUT ON. MS in traffic mode. LTE Cat. M1 Band 13. Power supply: 115Vac, 60Hz
OM/15	EUT ON. MS in traffic mode. LTE Cat. M1 Band 25. Power supply: 115Vac, 60Hz
OM/16	EUT ON. MS in traffic mode. LTE Cat. M1 Band 26. Power supply: 115Vac, 60Hz
OM/17	EUT ON. MS in traffic mode. LTE Cat. M1 Band 66. Power supply: 115Vac, 60Hz
OM/18	EUT ON. Bluetooth in communication mode. Power supply: 115Vac, 60 Hz
OM/19	EUT ON. Bluetooth in advertising mode. Respirator activated. MS in IDLE mode. Power supply: 115Vac, 400Hz (for aircraft).
OM/20	EUT ON. MS in IDLE mode. LTE Cat. M1 Band 2. Power supply: 115Vac, 400Hz (for aircraft)
OM/21	EUT ON. MS in IDLE mode. LTE Cat. M1 Band 4. Power supply: 115Vac, 400Hz (for aircraft)
OM/22	EUT ON. MS in IDLE mode. LTE Cat. M1 Band 5. Power supply: 115Vac, 400Hz (for aircraft)
OM/23	EUT ON. MS in IDLE mode. LTE Cat. M1 Band 12. Power supply: 115Vac, 400Hz (for aircraft)
OM/24	EUT ON. MS in IDLE mode. LTE Cat. M1 Band 13. Power supply: 115Vac, 400Hz (for aircraft)
OM/25	EUT ON. MS in IDLE mode. LTE Cat. M1 Band 25. Power supply: 115Vac, 400Hz (for aircraft)
OM/26	EUT ON. MS in IDLE mode. LTE Cat. M1 Band 26. Power supply: 115Vac, 400Hz (for aircraft)
OM/27	EUT ON. MS in IDLE mode. LTE Cat. M1 Band 66. Power supply: 115Vac, 400Hz (for aircraft)
OM/28	EUT ON. MS in traffic mode. LTE Cat. M1 Band 2. Power supply: 115Vac, 400Hz (for aircraft)

Id	Description
OM/29	EUT ON. MS in traffic mode. LTE Cat. M1 Band 4. Power supply: 115Vac, 400Hz (for aircraft)
OM/30	EUT ON. MS in traffic mode. LTE Cat. M1 Band 5. Power supply: 115Vac, 400Hz (for aircraft)
OM/31	EUT ON. MS in traffic mode. LTE Cat. M1 Band 12. Power supply: 115Vac, 400Hz (for aircraft)
OM/32	EUT ON. MS in traffic mode. LTE Cat. M1 Band 13. Power supply: 115Vac, 400Hz (for aircraft)
OM/33	EUT ON. MS in traffic mode. LTE Cat. M1 Band 25. Power supply: 115Vac, 400Hz (for aircraft)
OM/34	EUT ON. MS in traffic mode. LTE Cat. M1 Band 26. Power supply: 115Vac, 400Hz (for aircraft)
OM/35	EUT ON. MS in traffic mode. LTE Cat. M1 Band 66. Power supply: 115Vac, 400Hz (for aircraft)
OM/36	EUT ON. Bluetooth in communication mode. Power supply: 115Vac, 400Hz (for aircraft)

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
FCC CFR 47, Part 15, Subpart B (10-1-20 Edition) & ICES-003 Issue 7 (October 2020)	ANSI C63.4 (2014)	RE Radiated emission.
FCC CFR 47, Part 15, Subpart B and C (10-1-20 Edition) & ICES-003 Issue 7 (October 2020)	ANSI C63.4 (2014)	CE Continuous conducted emission

Test Cases Details

FCC CFR 47, Part 15, Subpart B
(10-1-20 Edition), Secs. 15.109 & ICES-003 Issue 7 (October 2020)
RE Radiated emission. Electromagnetic field measure

Limits

Limits of interference Class B

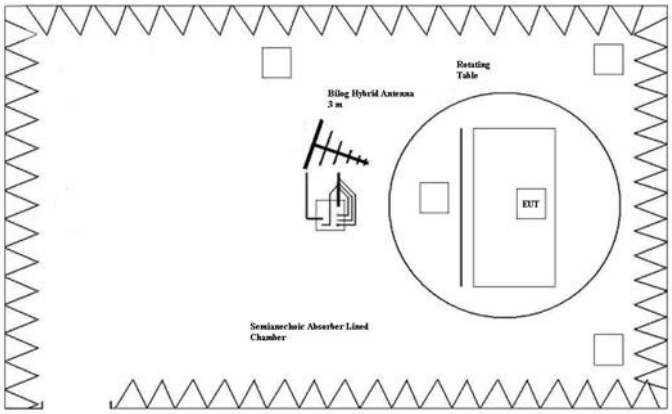
The applied limit for radiated emissions, 3 m distance, according to the requirements of FCC Rules and Regulations 47 CFR Part 15, Subpart B (10-1-20 Edition), Secs. 15.109 & ICES-003 Issue 7 (October 2020)

Frequency range (MHz)	FCC Part 15B		ICES-003 Issue 7		FCC Part 15B & ICES-003 Issue 7	
	QP Limit for 3 m		QP Limit for 3 m		PK Limit for 3 m	AVG Limit for 3 m
	(μV/m)	(dBμV/m)	(μV/m)	(dBμV/m)	(dBμV/m)	(dBμV/m)
30 to 88	100	40	100	40	---	---
88 to 216	150	43.5	150	43.5	---	---
216 to 230	200	46	200	46	---	---
230 to 960	200	46	224	47		
960 to 1000	500	54	500	54	---	---
Above 1000	---	---	---	---	74	54

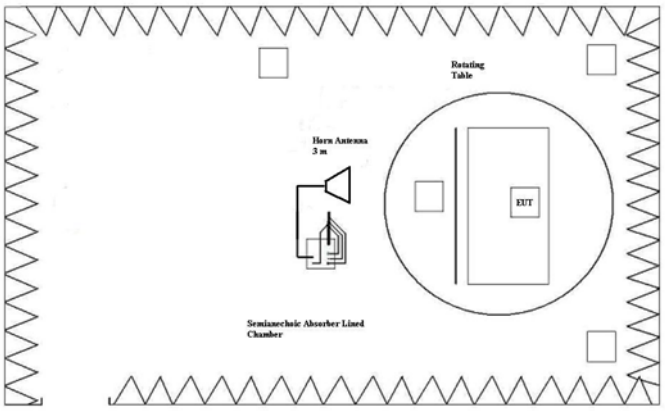
NOTE: FCC QP and AVG limits are in concordance with RSS-Gen Issue 5 (March 2019), Secs. 7.1 and 7.3.

Limits according to FCC Part 15B, equal to o more stringent than those of ICES-003 Issue 7.

Setup for measurements



Setup for measurements < 1GHz.



Setup for measurements > 1GHz.

Results

S/	OM	Code	Freq Rng (MHz)	V
01	OM/01	RE0101LR	[30, 1000]	P
01	OM/01	RE0101HR	[1000, 12750]	P
NA	OM/19	NA	[30, 1000]	NA(*)
NA	OM/19	NA	[1000, 12750]	NA(*)

(*) According to FCC §15.103 Exempted devices (a): A digital device utilized exclusively in any transportation vehicle including motor vehicles and aircraft.

Testing not applicable for power supply 115Vac, 400Hz, being this power supply utilized exclusively in aircraft.

Verdict

Pass

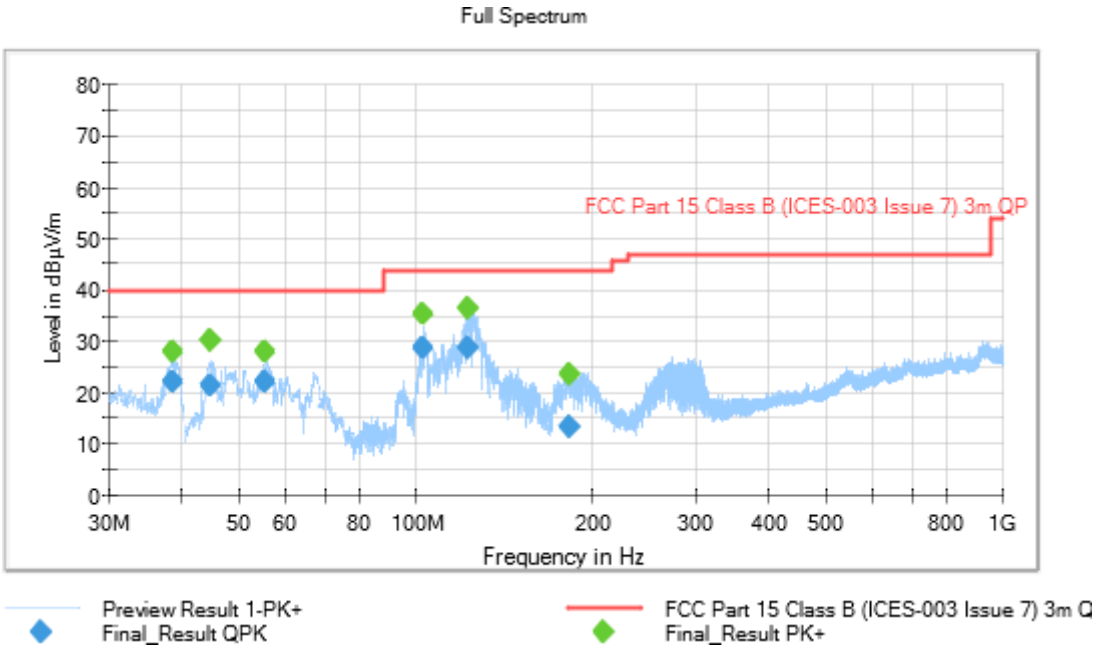
Attachments

EMC Test Code = RE0101LR, Frequency Range MHz = [30, 1000]

Sample ID: S/01

Operation Mode: OM/01. EUT ON. Bluetooth in advertising mode. Respirator activated. MS in IDLE mode. Power supply: 115Vac, 60Hz

Images:



Documents:

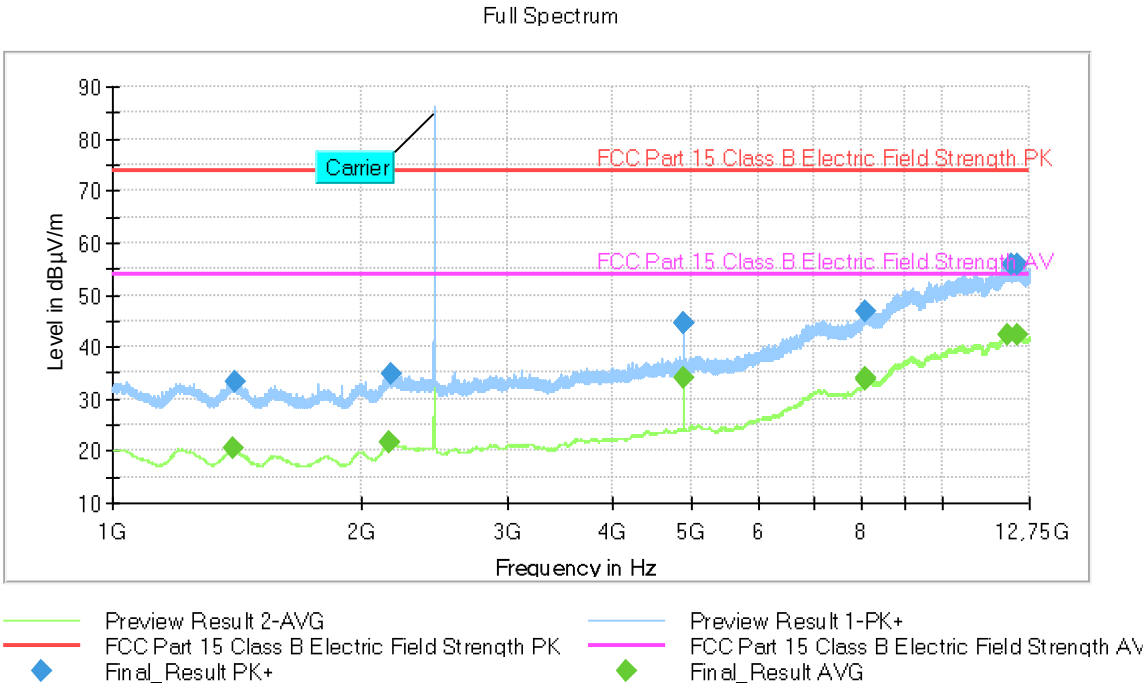
Frequency(MHz)	QuasiPeak(dBµV/m)	MaxPeak(dBµV/m)	Limit(dBµV/m)	Margin(dB)	Height(cm)	Pol	Azimuth(deg)
38.565000	---	27.81	---	---	100.0	V	282.0
38.565000	22.09	---	40.00	17.91	100.0	V	282.0
44.769000	---	30.13	---	---	100.0	V	0.0
44.769000	21.15	---	40.00	18.85	100.0	V	0.0
55.174000	---	28.05	---	---	199.0	V	38.0
55.174000	21.95	---	40.00	18.05	199.0	V	38.0
103.196000	---	35.41	---	---	154.0	V	2.0
103.196000	28.58	---	43.52	14.94	154.0	V	2.0
122.613000	28.61	---	43.52	14.91	126.0	V	248.0
122.613000	---	36.31	---	---	126.0	V	248.0
182.543000	13.36	---	43.52	30.16	220.0	H	75.0
182.543000	---	23.52	---	---	220.0	H	75.0

EMC Test Code = RE0101HR, Frequency Range MHz = [1000, 12750]

Sample ID: S/01

Operation Mode: OM/01. EUT ON. Bluetooth in advertising mode. Respirator activated. MS in IDLE mode. Power supply: 115Vac, 60Hz

Images:



Documents:

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)
1399.000000	---	20.38	53.97	33.59
1406.500000	33.11	---	73.97	40.86
2153.750000	---	21.53	53.97	32.44
2157.750000	---	21.52	53.97	32.45
2166.750000	34.67	---	73.97	39.30
4883.500000	44.38	---	73.97	29.59
4884.000000	---	34.07	53.97	19.90
4884.250000	44.38	---	73.97	29.59
8085.000000	46.79	---	73.97	27.18
8099.250000	---	33.89	53.97	20.08
8100.000000	---	33.80	53.97	20.17
12020.000000	---	42.44	53.97	11.53
12103.000000	55.75	---	73.97	18.22
12317.750000	55.96	---	73.97	18.01
12360.000000	---	42.48	53.97	11.49

FCC CFR 47, Part 15, Subpart B and C; Secs. 15.107 and 15.207 (10-1-20 Edition) & ICES-003 Issue 7 (October 2020) CE Continuous conducted emission

Limits

Limits of interference Class B

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 and C (10-1-20 Edition), Secs. 15.107 and 15.207 & ICES-003 Issue 7 (October 2020), in the frequency range 0,15 to 30 MHz, for Class B equipment was:

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

Results

S/	OM	Code	Freq Rng (MHz)	Line	V
02	OM/01	CE02010N	[0.15, 30]	N	P
02	OM/01	CE0201L1	[0.15, 30]	L1	P
02	OM/02	CE02020N	[0.15, 30]	N	P
02	OM/02	CE0202L1	[0.15, 30]	L1	P
02	OM/03	CE02030N	[0.15, 30]	N	P
02	OM/03	CE0203L1	[0.15, 30]	L1	P
02	OM/04	CE02040N	[0.15, 30]	N	P
02	OM/04	CE0204L1	[0.15, 30]	L1	P
02	OM/05	CE02050N	[0.15, 30]	N	P
02	OM/05	CE0205L1	[0.15, 30]	L1	P
02	OM/06	CE02060N	[0.15, 30]	N	P
02	OM/06	CE0206L1	[0.15, 30]	L1	P
02	OM/07	CE02070N	[0.15, 30]	N	P
02	OM/07	CE0207L1	[0.15, 30]	L1	P
02	OM/08	CE02080N	[0.15, 30]	N	P
02	OM/08	CE0208L1	[0.15, 30]	L1	P
02	OM/09	CE02090N	[0.15, 30]	N	P
02	OM/09	CE0209L1	[0.15, 30]	L1	P
02	OM/10	CE02100N	[0.15, 30]	N	P
02	OM/10	CE0210L1	[0.15, 30]	L1	P
02	OM/11	CE02110N	[0.15, 30]	N	P
02	OM/11	CE0211L1	[0.15, 30]	L1	P
02	OM/12	CE02120N	[0.15, 30]	N	P

S/	OM	Code	Freq Rng (MHz)	Line	V
02	OM/01	CE02010N	[0.15, 30]	N	P
02	OM/01	CE0201L1	[0.15, 30]	L1	P
02	OM/12	CE0212L1	[0.15, 30]	L1	P
02	OM/13	CE02130N	[0.15, 30]	N	P
02	OM/13	CE0213L1	[0.15, 30]	L1	P
02	OM/14	CE02140N	[0.15, 30]	N	P
02	OM/14	CE0214L1	[0.15, 30]	L1	P
02	OM/15	CE02150N	[0.15, 30]	N	P
02	OM/15	CE0215L1	[0.15, 30]	L1	P
02	OM/16	CE02160N	[0.15, 30]	N	P
02	OM/16	CE0216L1	[0.15, 30]	L1	P
02	OM/17	CE02170N	[0.15, 30]	N	P
02	OM/17	CE0217L1	[0.15, 30]	L1	P
02	OM/18	CE02180N	[0.15, 30]	N	P
02	OM/18	CE0218L1	[0.15, 30]	L1	P
NA	OM/19 to OM/36	NA	[0.15, 30]	N	NA(*)
NA	OM/19 to OM/36	NA	[0.15, 30]	L1	NA(*)

(*) According to FCC §15.103 Exempted devices (a): A digital device utilized exclusively in any transportation vehicle including motor vehicles and aircraft.

Testing not applicable for power supply 115Vac, 400Hz, being this power supply utilized exclusively in aircraft.

Verdict

Pass

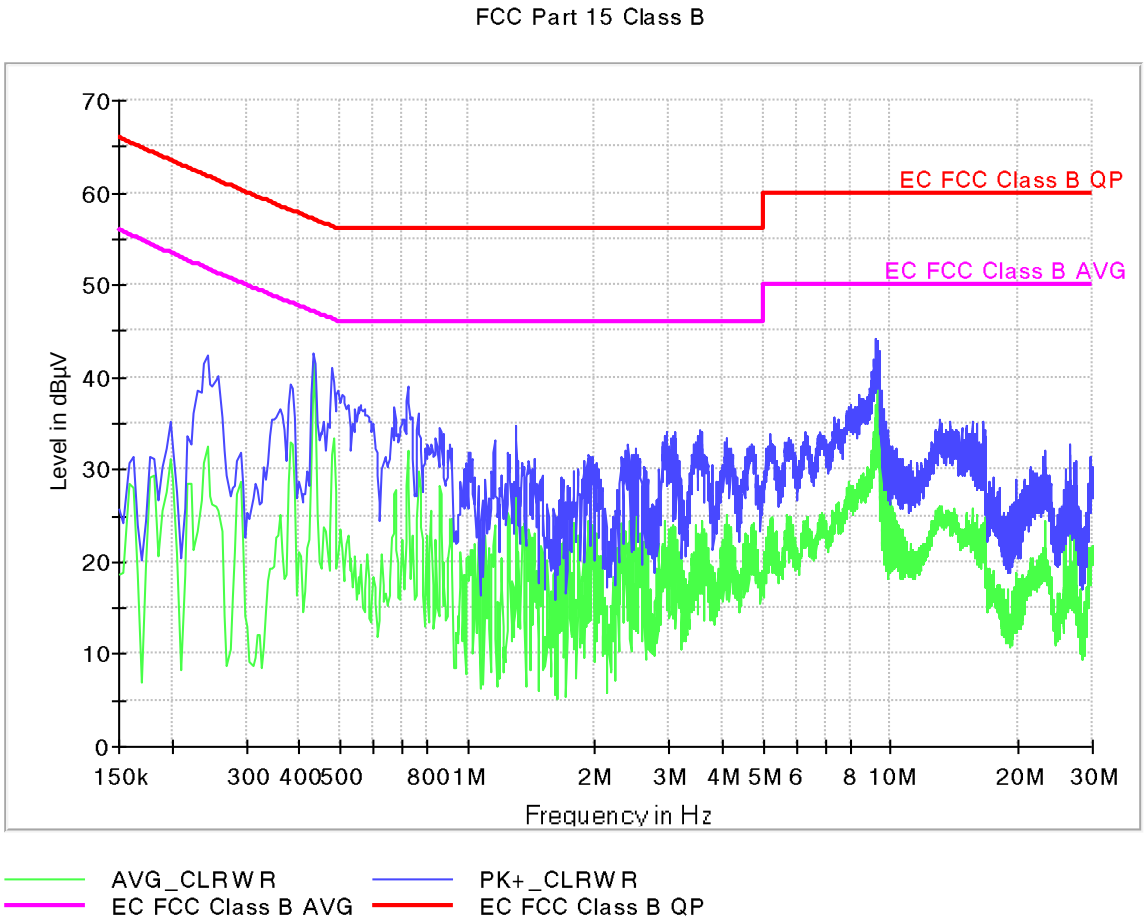
Attachments

EMC Test Code = CE02010N, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = N

Sample ID: S/02

Operation Mode: OM/01. EUT ON. Bluetooth in advertising mode. Respirator activated. MS in IDLE mode. Power supply: 115Vac, 60Hz

Images:



Documents:

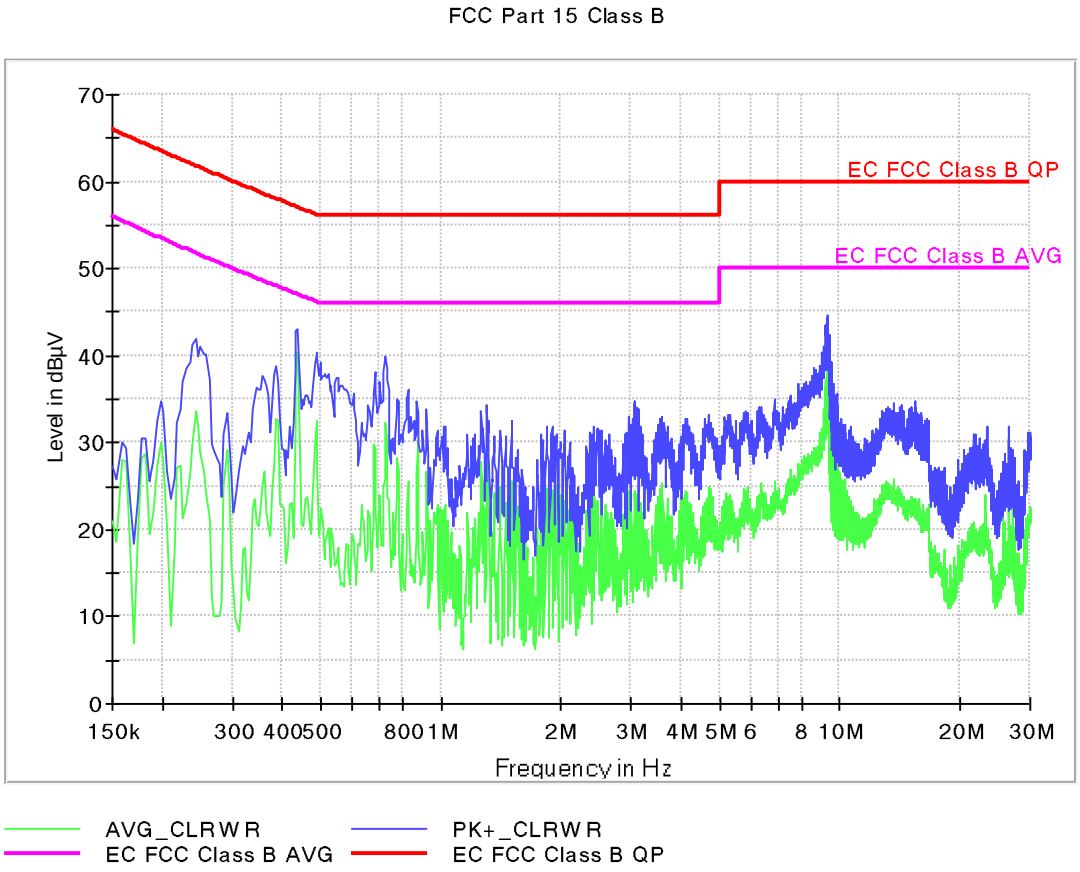
Frequency (MHz)	PK+_CLRWR (dBµV)	AVG_CLRWR (dBµV)	Line
9.343000	44.5	37.2	N

EMC Test Code = CE0201L1, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = L1

Sample ID: S/02

Operation Mode: OM/01. EUT ON. Bluetooth in advertising mode. Respirator activated. MS in IDLE mode. Power supply: 115Vac, 60Hz

Images:



Documents:

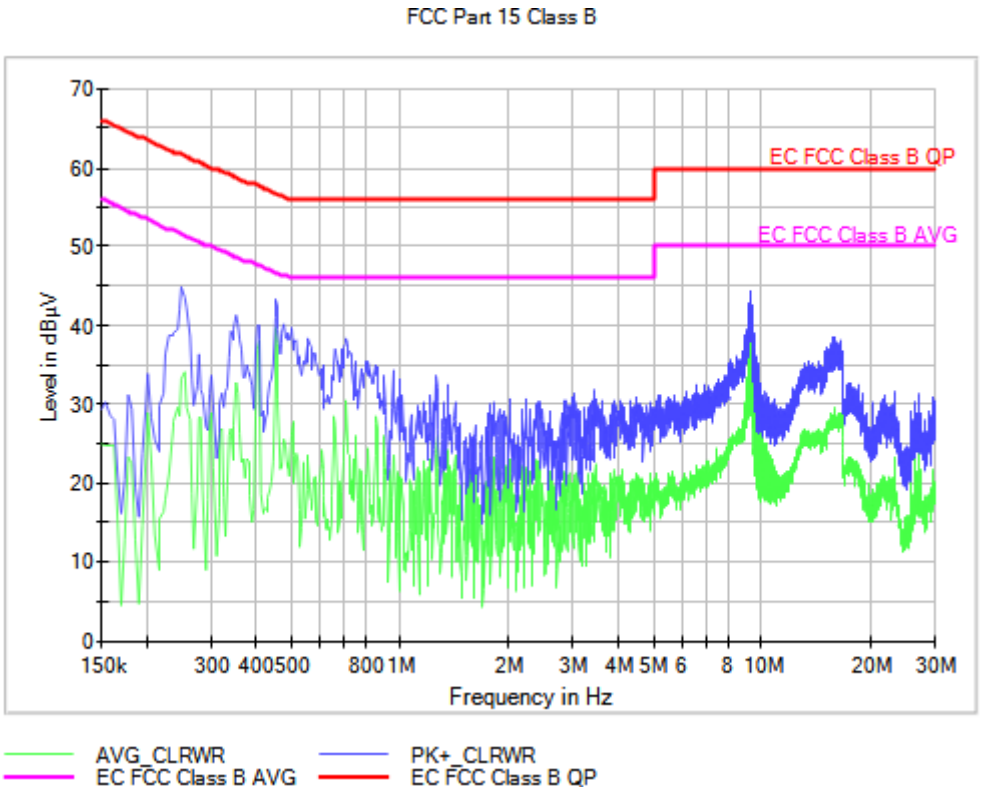
Frequency (MHz)	PK+_CLRWR (dBµV)	AVG_CLRWR (dBµV)	Line
9.22000	43.9	37.8	L1

EMC Test Code = CE02020N, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = N

Sample ID: S/02

Operation Mode: OM/02. EUT ON. MS in IDLE mode. LTE Cat. M1 Band 2. Power supply: 115Vac, 60Hz.

Images:



Documents:

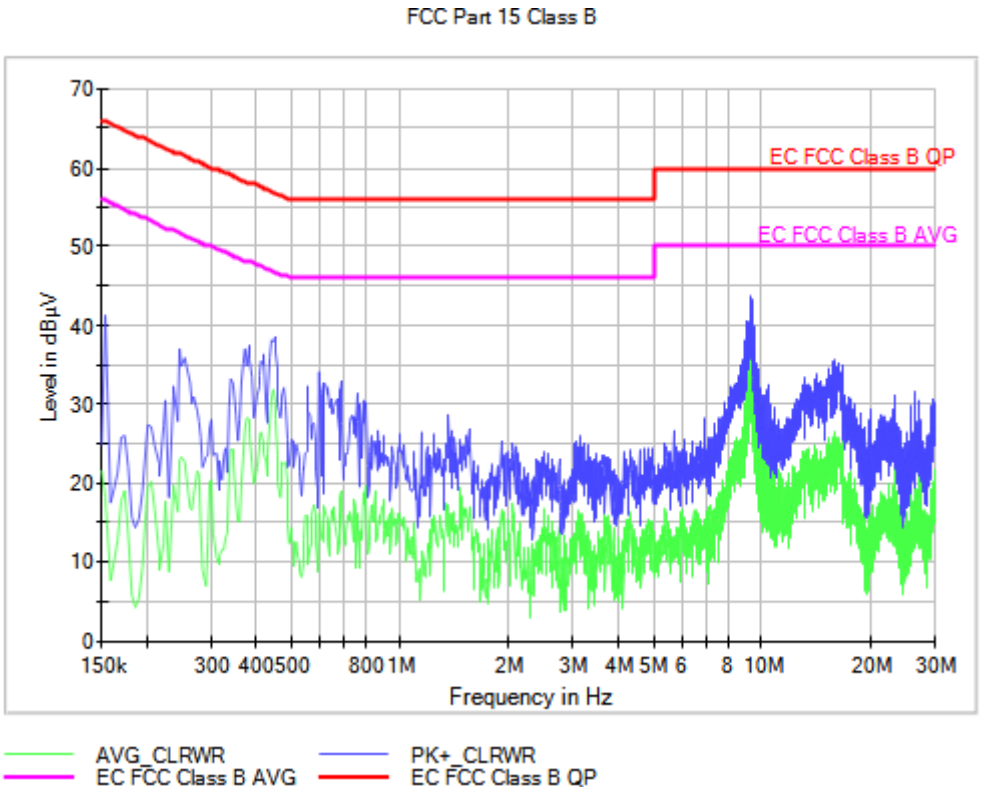
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.198000	46.7	37.7	N

EMC Test Code = CE0202L1, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = L1

Sample ID: S/02

Operation Mode: OM/02. EUT ON. MS in IDLE mode. LTE Cat. M1 Band 2. Power supply: 115Vac, 60Hz.

Images:



Documents:

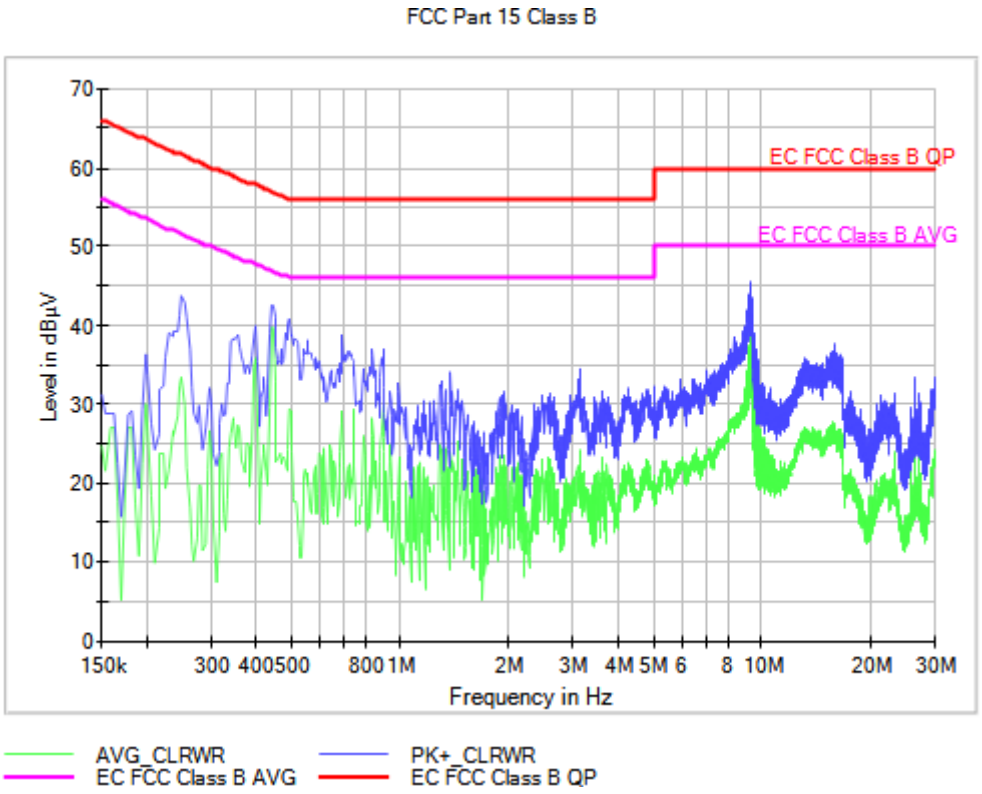
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.298000	43.7	39.8	L1

EMC Test Code = CE02030N, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = N

Sample ID: S/02

Operation Mode: OM/03. EUT ON. MS in IDLE mode. LTE Cat. M1 Band 4. Power supply: 115Vac, 60Hz.

Images:



Documents:

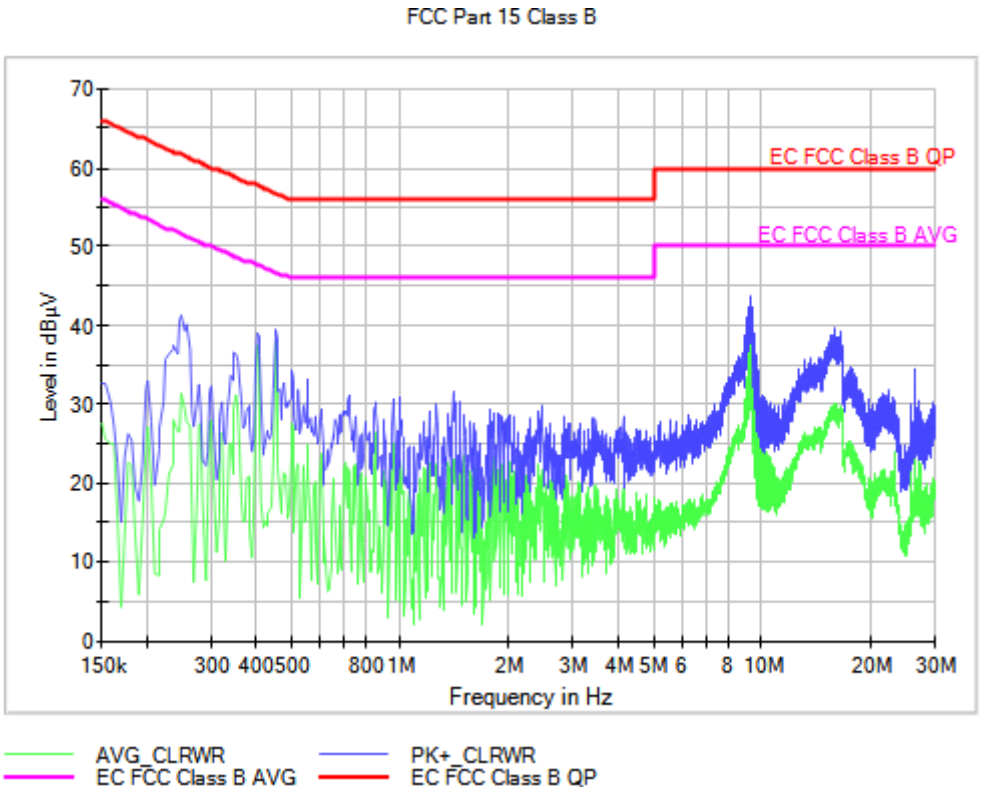
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.302000	45.5	35.1	N

EMC Test Code = CE0203L1, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = L1

Sample ID: S/02

Operation Mode: OM/03. EUT ON. MS in IDLE mode. LTE Cat. M1 Band 4. Power supply: 115Vac, 60Hz.

Images:



Documents:

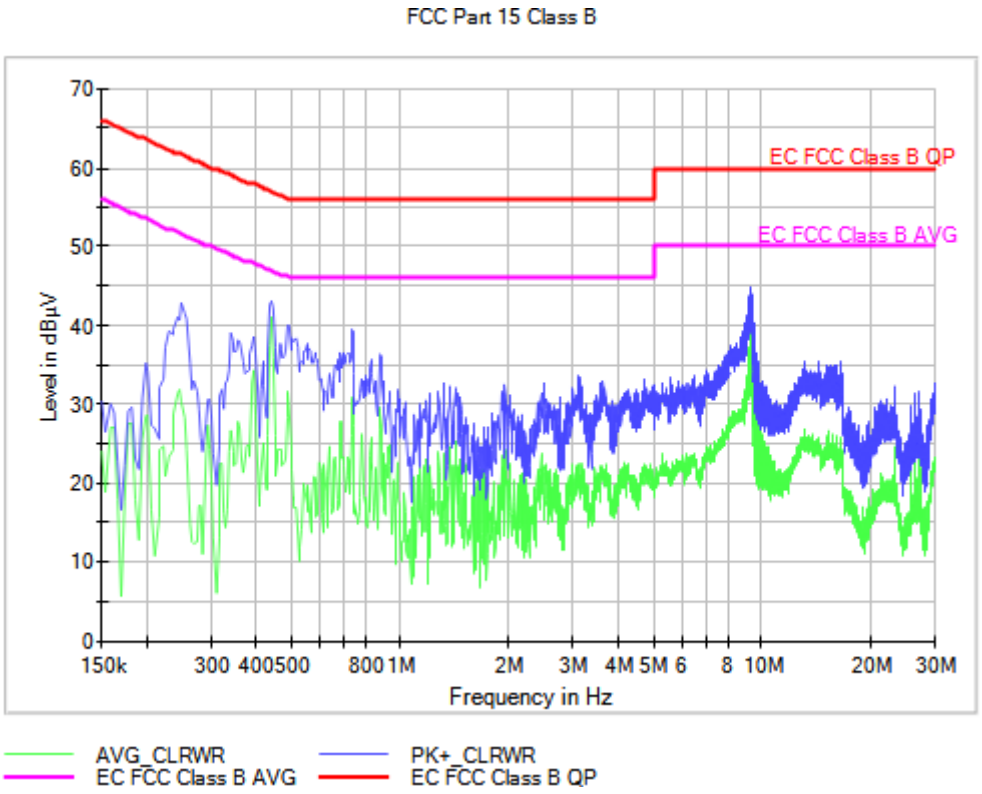
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.346000	43.7	38.3	L1

EMC Test Code = CE02040N, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = N

Sample ID: S/02

Operation Mode: OM/04. EUT ON. MS in IDLE mode. LTE Cat. M1 Band 5. Power supply: 115Vac, 60Hz.

Images:



Documents:

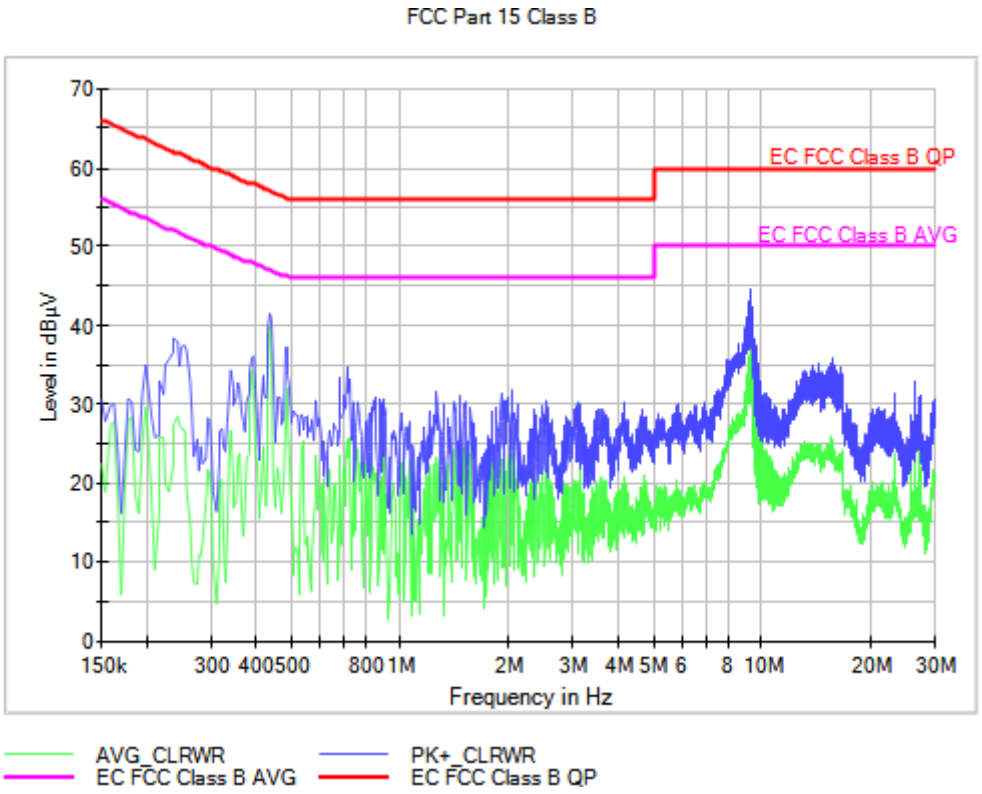
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.298000	44.9	39.7	N

EMC Test Code = CE0204L1, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = L1

Sample ID: S/02

Operation Mode: OM/04. EUT ON. MS in IDLE mode. LTE Cat. M1 Band 5. Power supply: 115Vac, 60Hz.

Images:



Documents:

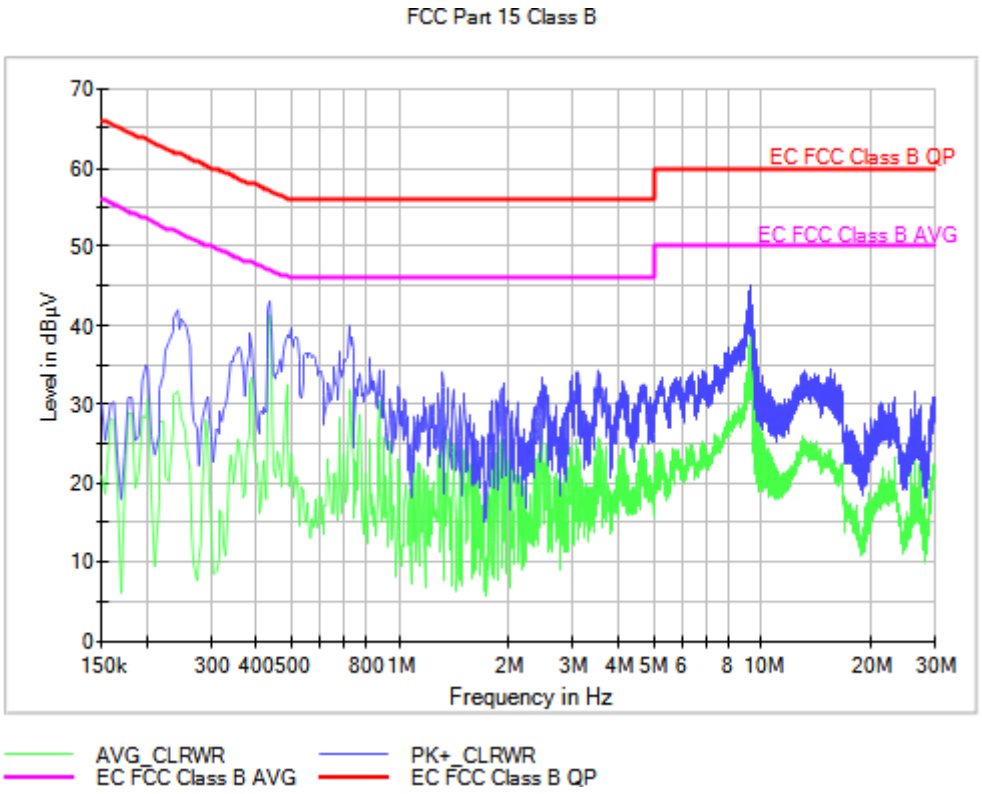
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.298000	44.6	39.7	L1

EMC Test Code = CE02050N, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = N

Sample ID: S/02

Operation Mode: OM/05. EUT ON. MS in IDLE mode. LTE Cat. M1 Band 12. Power supply: 115Vac, 60Hz.

Images:



Documents:

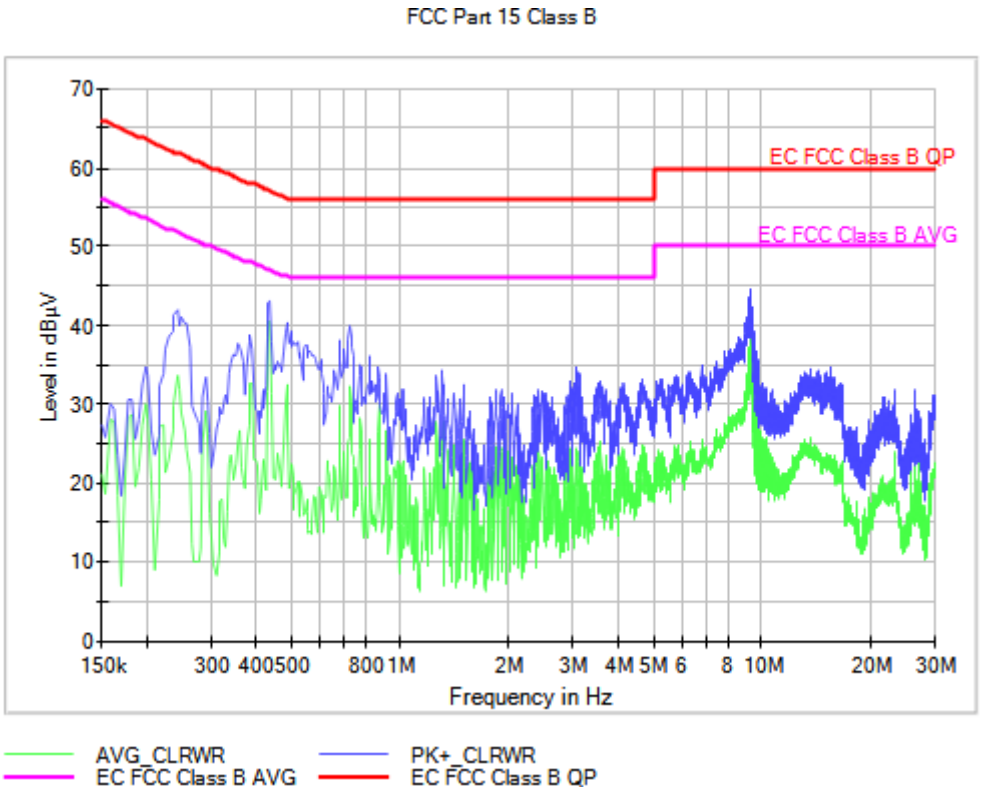
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.298000	45.1	39.5	N

EMC Test Code = CE0205L1, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = L1

Sample ID: S/02

Operation Mode: OM/05. EUT ON. MS in IDLE mode. LTE Cat. M1 Band 12. Power supply: 115Vac, 60Hz.

Images:



Documents:

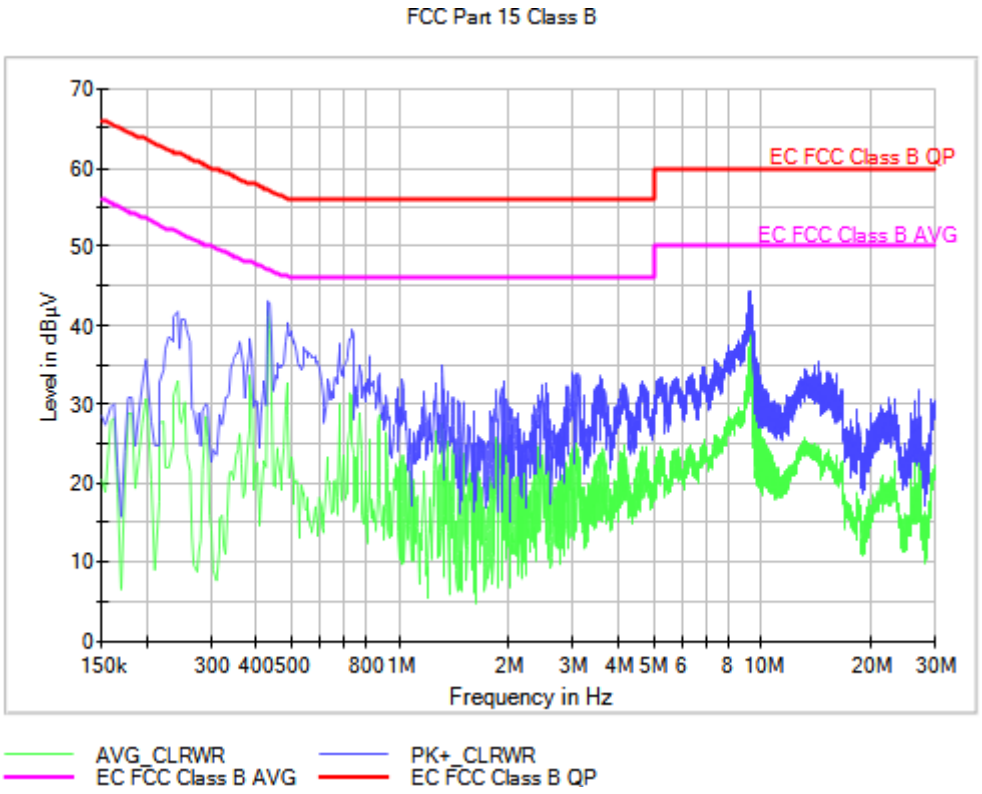
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.346000	44.6	38.4	L1

EMC Test Code = CE02060N, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = N

Sample ID: S/02

Operation Mode: OM/06. EUT ON. MS in IDLE mode. LTE Cat. M1 Band 13. Power supply: 115Vac, 60Hz.

Images:



Documents:

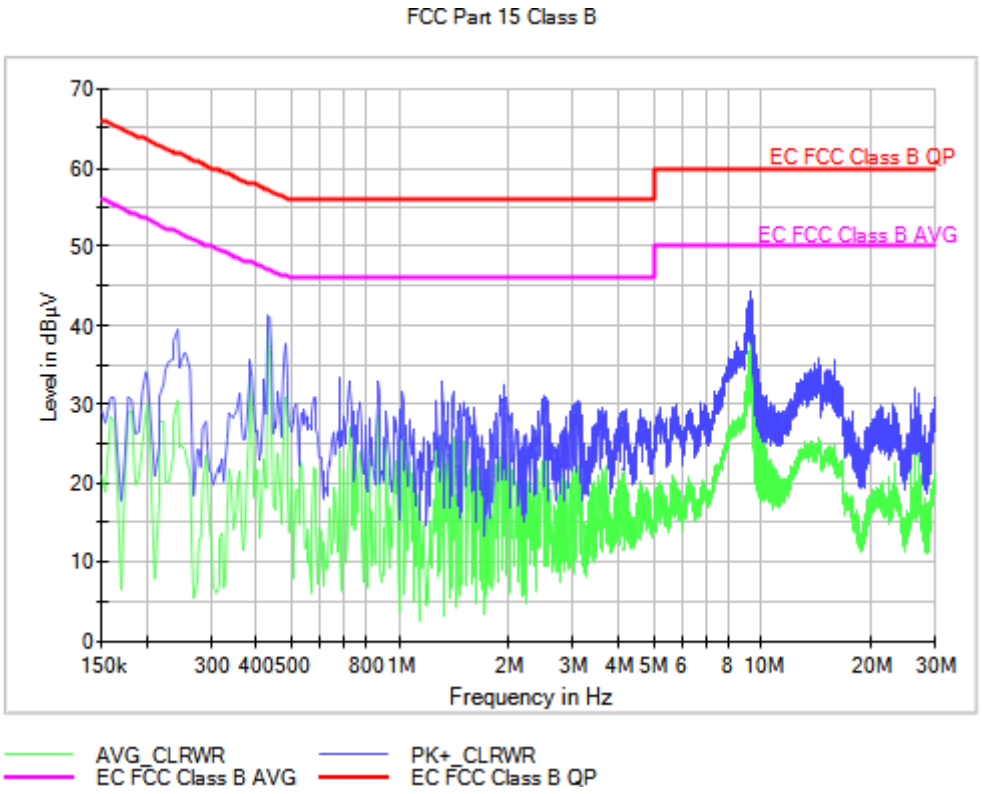
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.298000	44.5	39.4	N

EMC Test Code = CE0206L1, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = L1

Sample ID: S/02

Operation Mode: OM/06. EUT ON. MS in IDLE mode. LTE Cat. M1 Band 13. Power supply: 115Vac, 60Hz.

Images:



Documents:

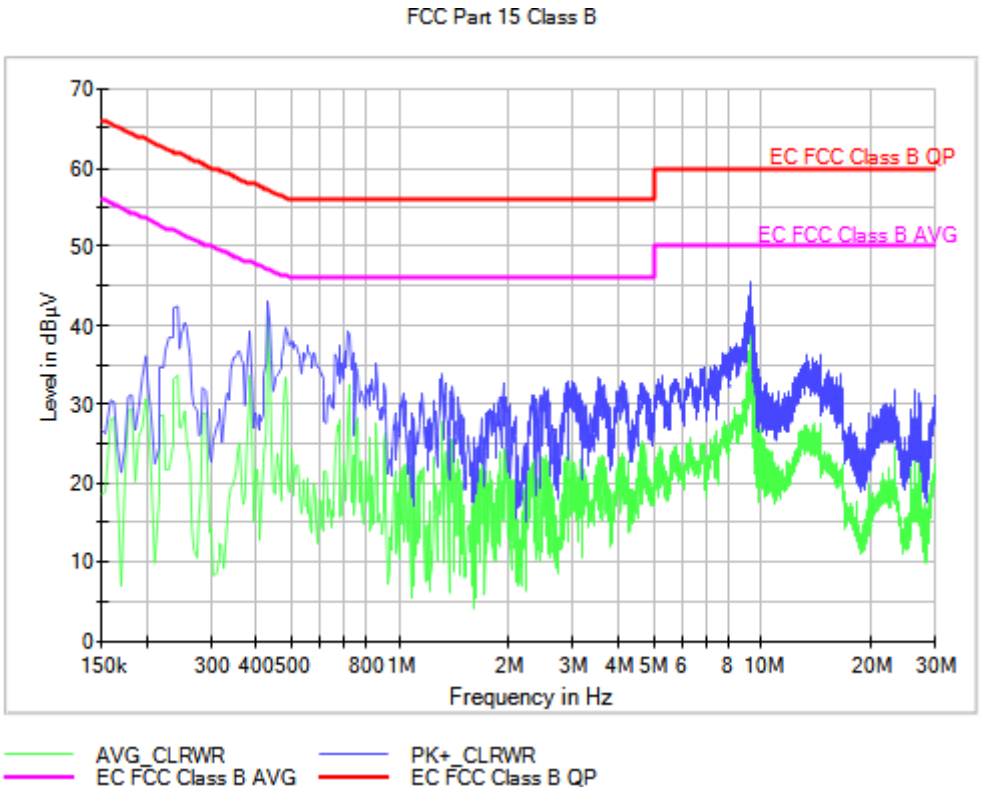
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.298000	44.4	38.5	L1

EMC Test Code = CE02070N, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = N

Sample ID: S/02

Operation Mode: OM/07. EUT ON. MS in IDLE mode. LTE Cat. M1 Band 25. Power supply: 115Vac, 60Hz.

Images:



Documents:

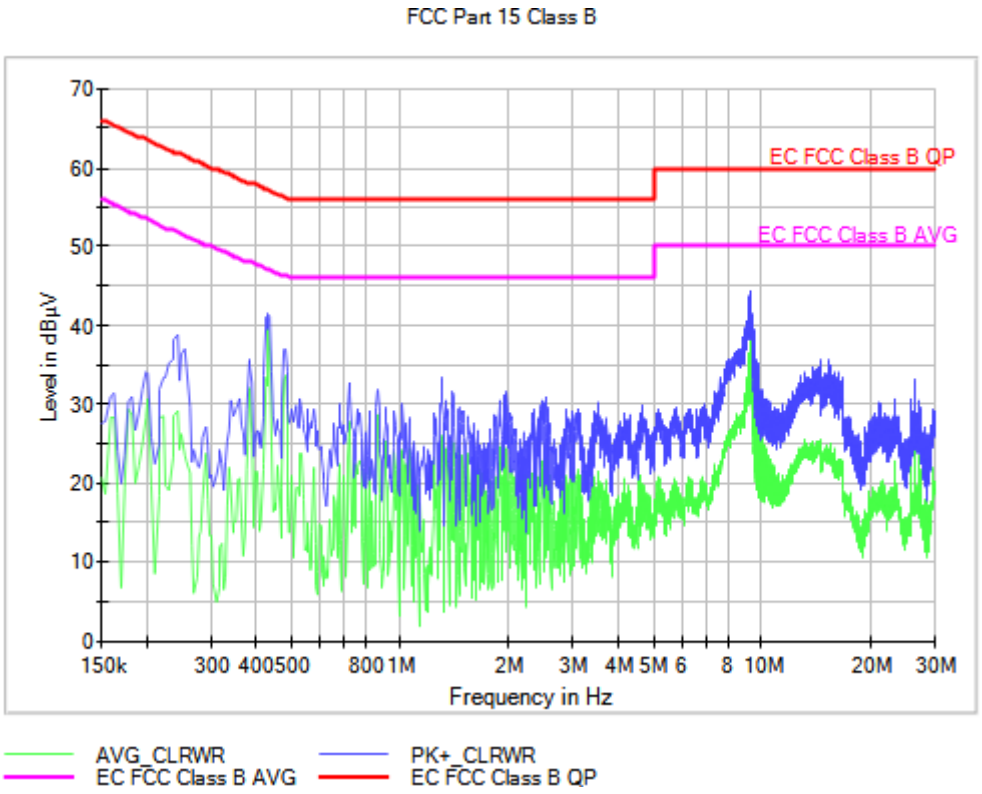
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.298000	45.5	39.5	N

EMC Test Code = CE0207L1, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = L1

Sample ID: S/02

Operation Mode: OM/07. EUT ON. MS in IDLE mode. LTE Cat. M1 Band 25. Power supply: 115Vac, 60Hz.

Images:



Documents:

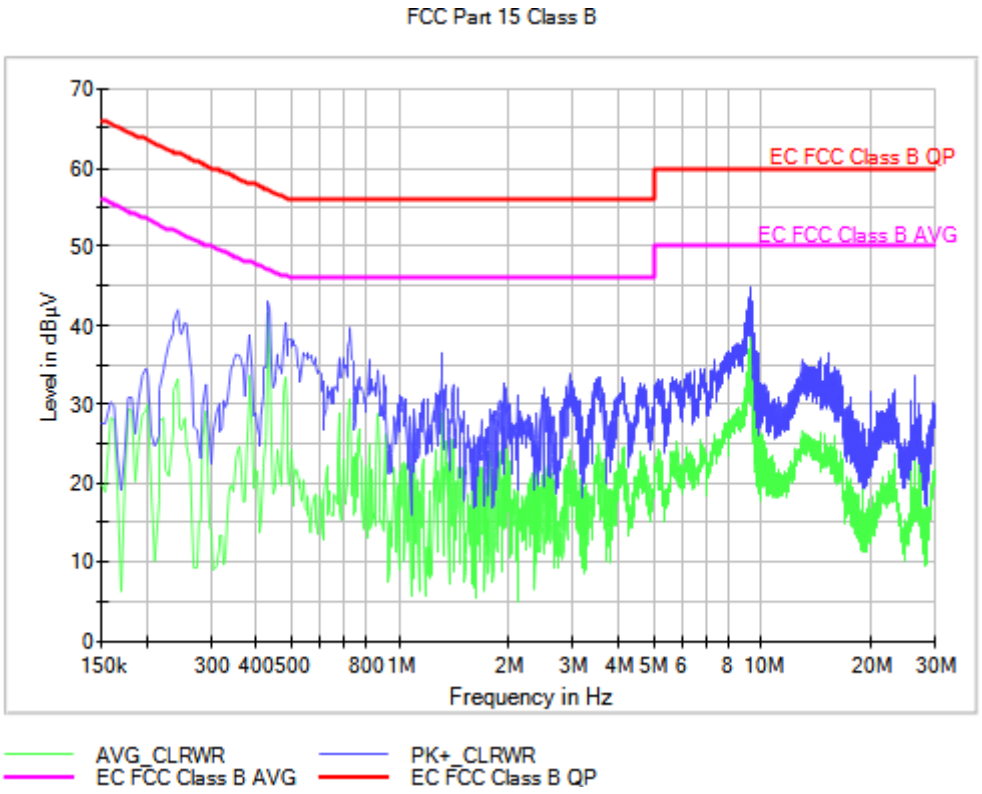
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.298000	44.3	39.0	L1

EMC Test Code = CE02080N, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = N

Sample ID: S/02

Operation Mode: OM/08. EUT ON. MS in IDLE mode. LTE Cat. M1 Band 26. Power supply: 115Vac, 60Hz.

Images:



Documents:

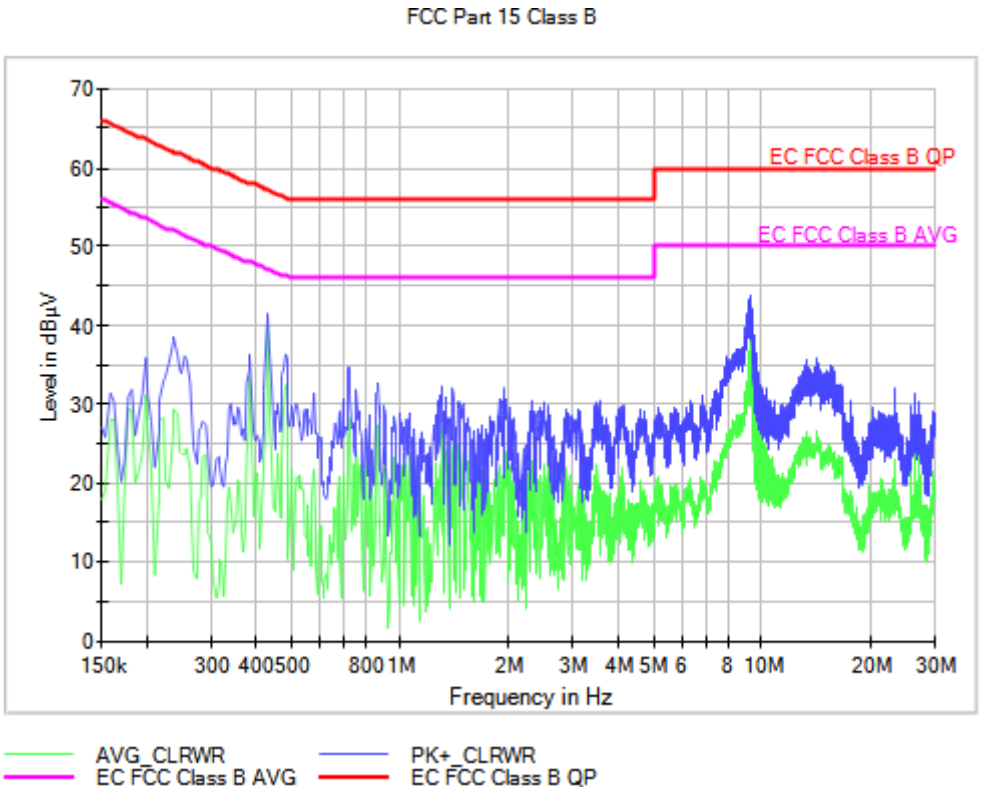
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.298000	44.8	38.6	N

EMC Test Code = CE0208L1, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = L1

Sample ID: S/02

Operation Mode: OM/08. EUT ON. MS in IDLE mode. LTE Cat. M1 Band 26. Power supply: 115Vac, 60Hz.

Images:



Documents:

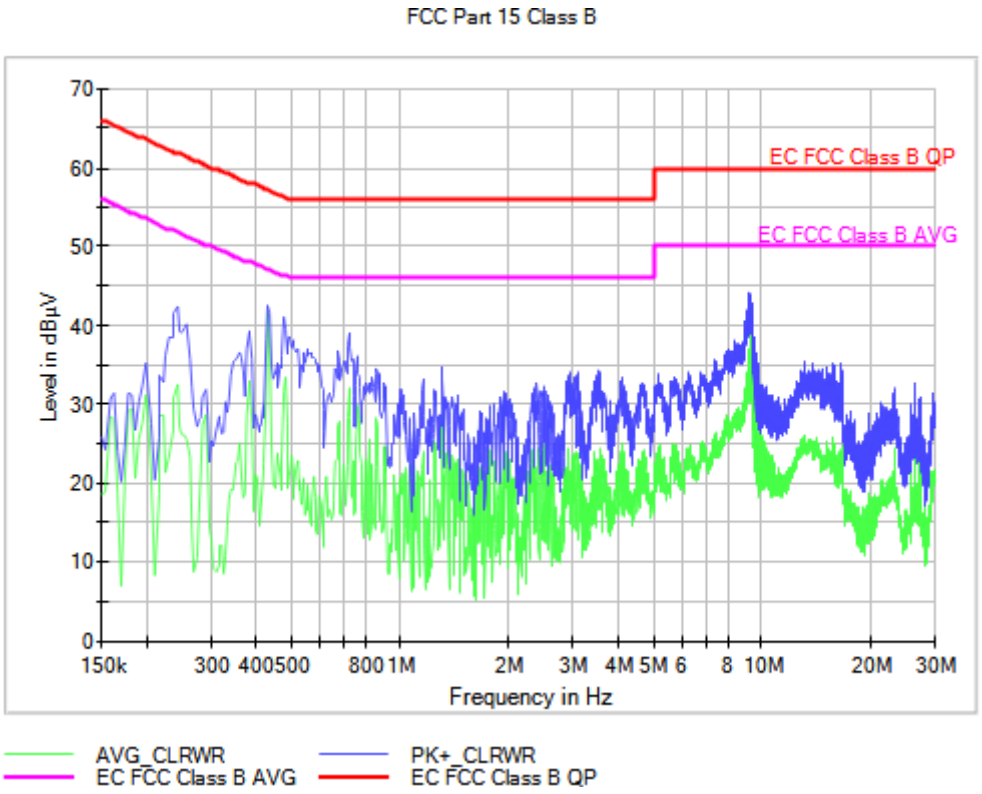
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.350000	43.7	37.2	L1

EMC Test Code = CE02090N, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = N

Sample ID: S/02

Operation Mode: OM/09. EUT ON. MS in IDLE mode. LTE Cat. M1 Band 66. Power supply: 115Vac, 60Hz.

Images:



Documents:

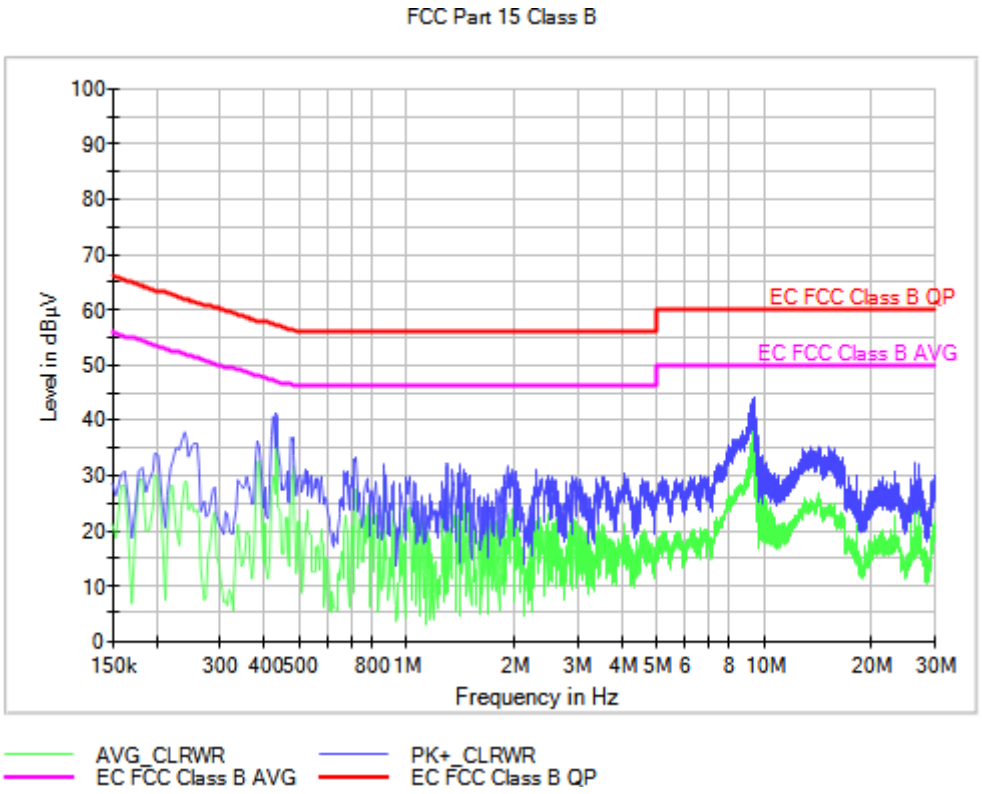
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.246000	44.1	37.0	N

EMC Test Code = CE0209L1, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = L1

Sample ID: S/02

Operation Mode: OM/09. EUT ON. MS in IDLE mode. LTE Cat. M1 Band 66. Power supply: 115Vac, 60Hz.

Images:



Documents:

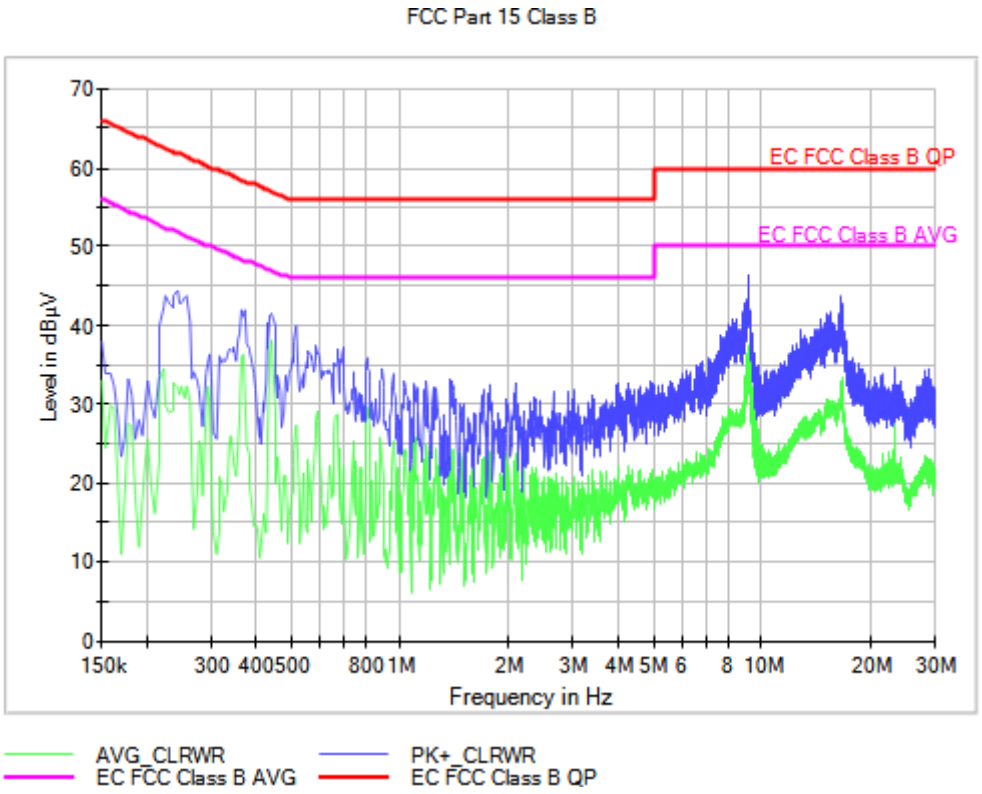
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.346000	44.1	37.9	L1

EMC Test Code = CE02100N, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = N

Sample ID: S/02

Operation Mode: OM/10. EUT ON. MS in traffic mode. LTE Cat. M1 Band 2. Power supply: 115Vac, 60Hz.

Images:



Documents:

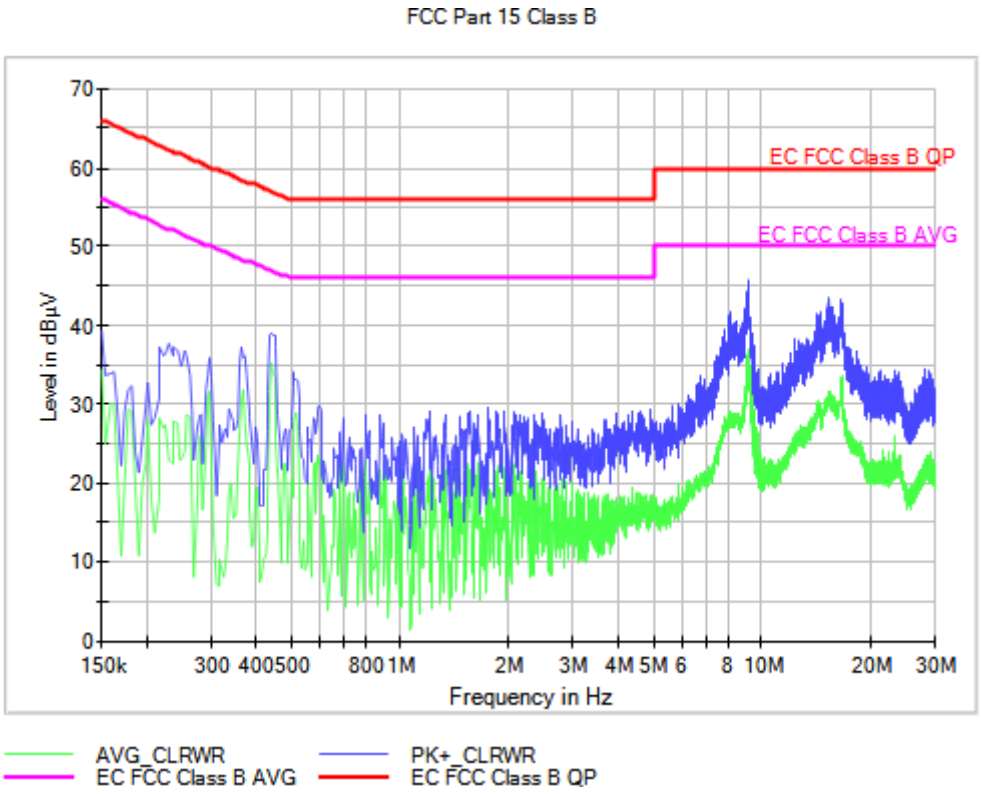
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.198000	46.4	37.4	N

EMC Test Code = CE0210L1, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = L1

Sample ID: S/02

Operation Mode: OM/10. EUT ON. MS in traffic mode. LTE Cat. M1 Band 2. Power supply: 115Vac, 60Hz.

Images:



Documents:

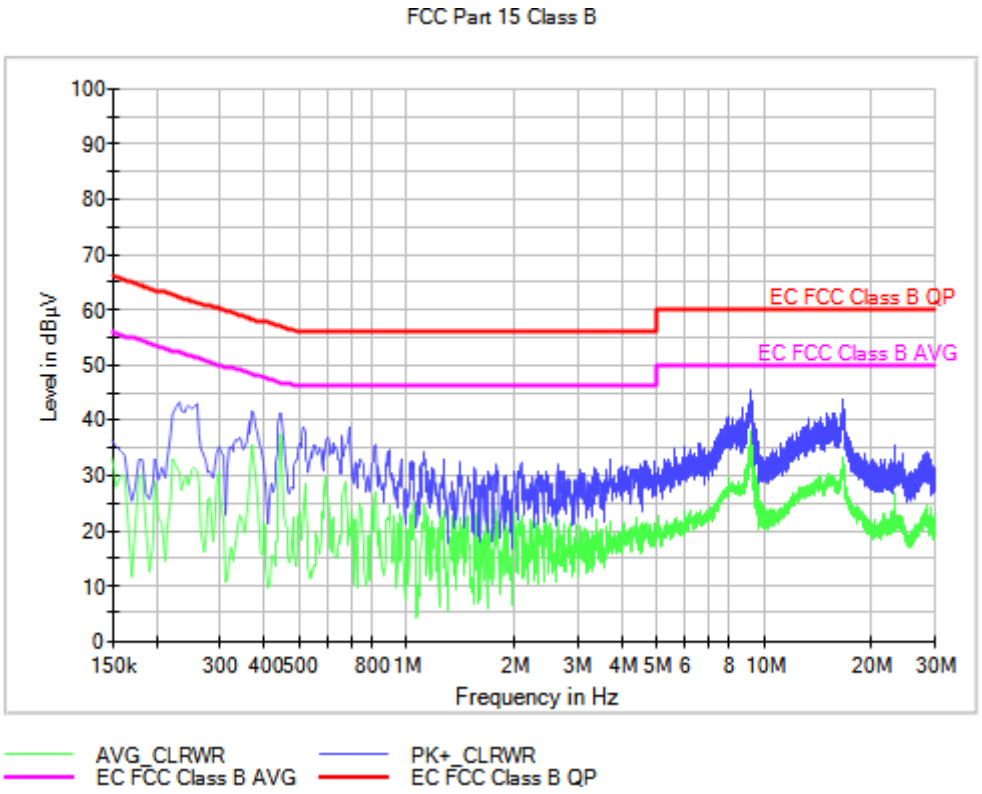
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.186000	45.7	33.2	L1

EMC Test Code = CE02110N, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = N

Sample ID: S/02

Operation Mode: OM/11. EUT ON. MS in traffic mode. LTE Cat. M1 Band 4. Power supply: 115Vac, 60Hz.

Images:



Documents:

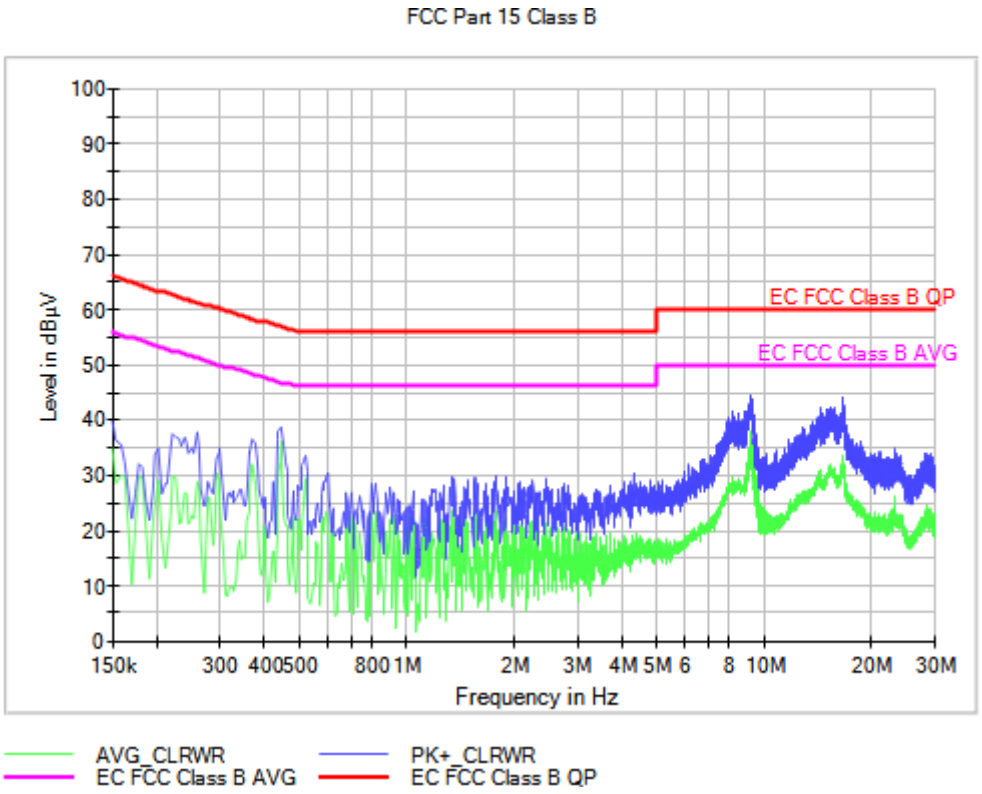
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.198000	45.5	38.0	N

EMC Test Code = CE0211L1, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = L1

Sample ID: S/02

Operation Mode: OM/11. EUT ON. MS in traffic mode. LTE Cat. M1 Band 4. Power supply: 115Vac, 60Hz.

Images:



Documents:

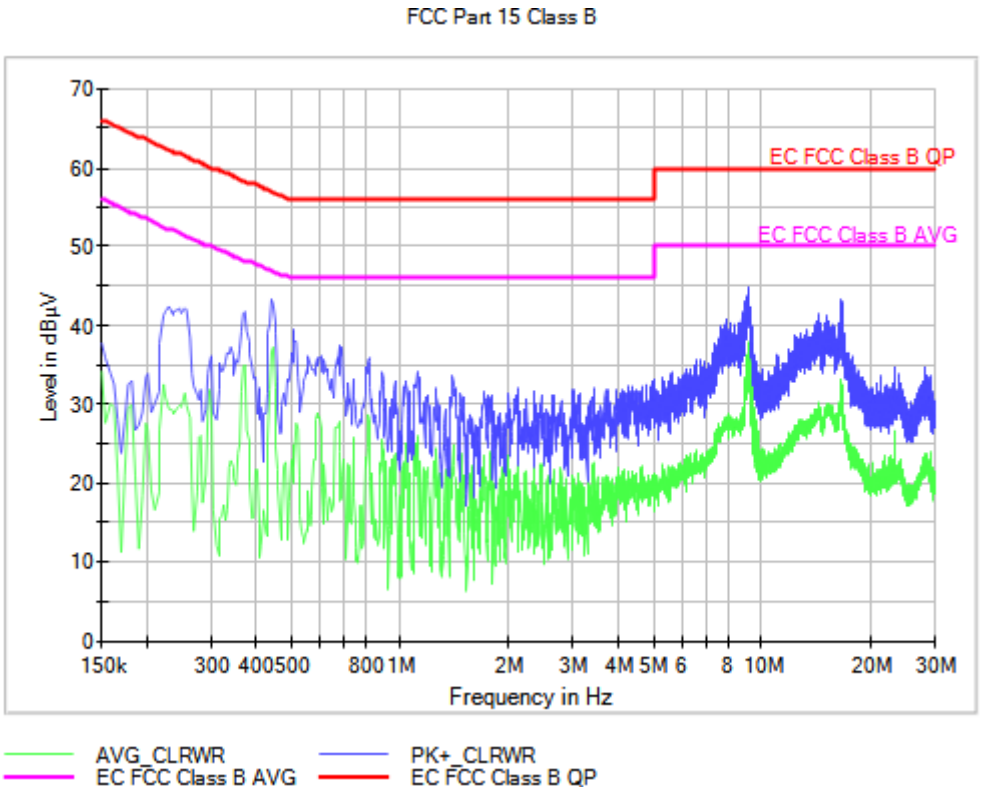
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.198000	44.7	38.0	L1

EMC Test Code = CE02120N, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = N

Sample ID: S/02

Operation Mode: OM/12. EUT ON. MS in traffic mode. LTE Cat. M1 Band 5. Power supply: 115Vac, 60Hz.

Images:



Documents:

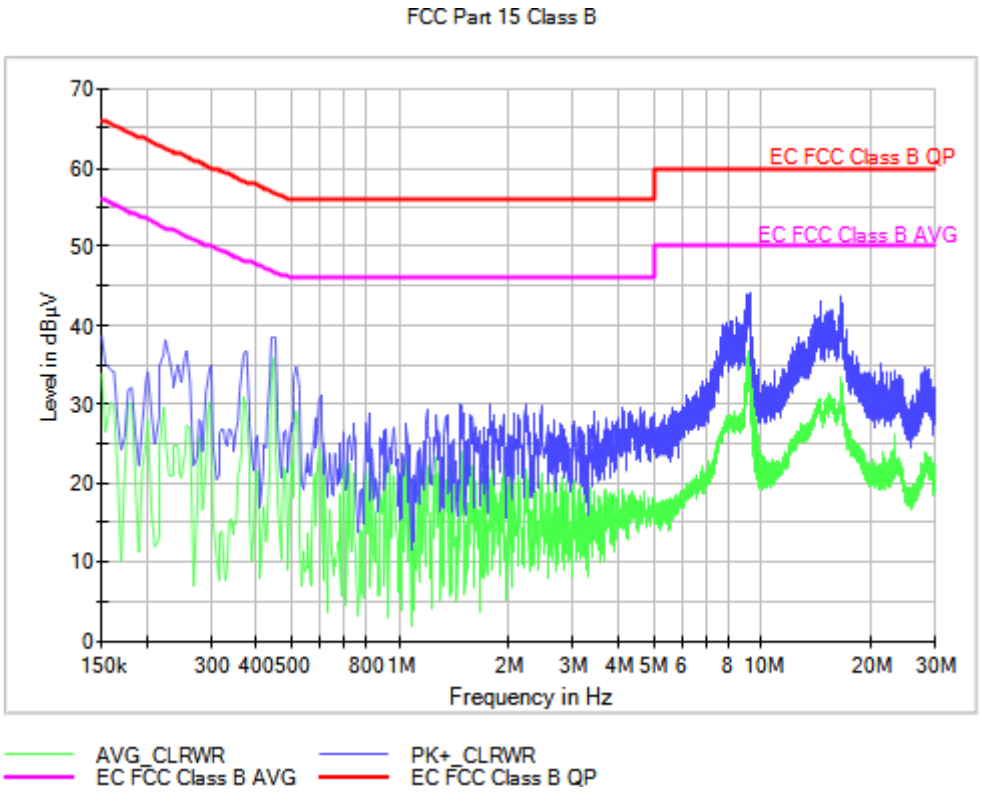
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.246000	44.9	36.1	N

EMC Test Code = CE0212L1, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = L1

Sample ID: S/02

Operation Mode: OM/12. EUT ON. MS in traffic mode. LTE Cat. M1 Band 5. Power supply: 115Vac, 60Hz.

Images:



Documents:

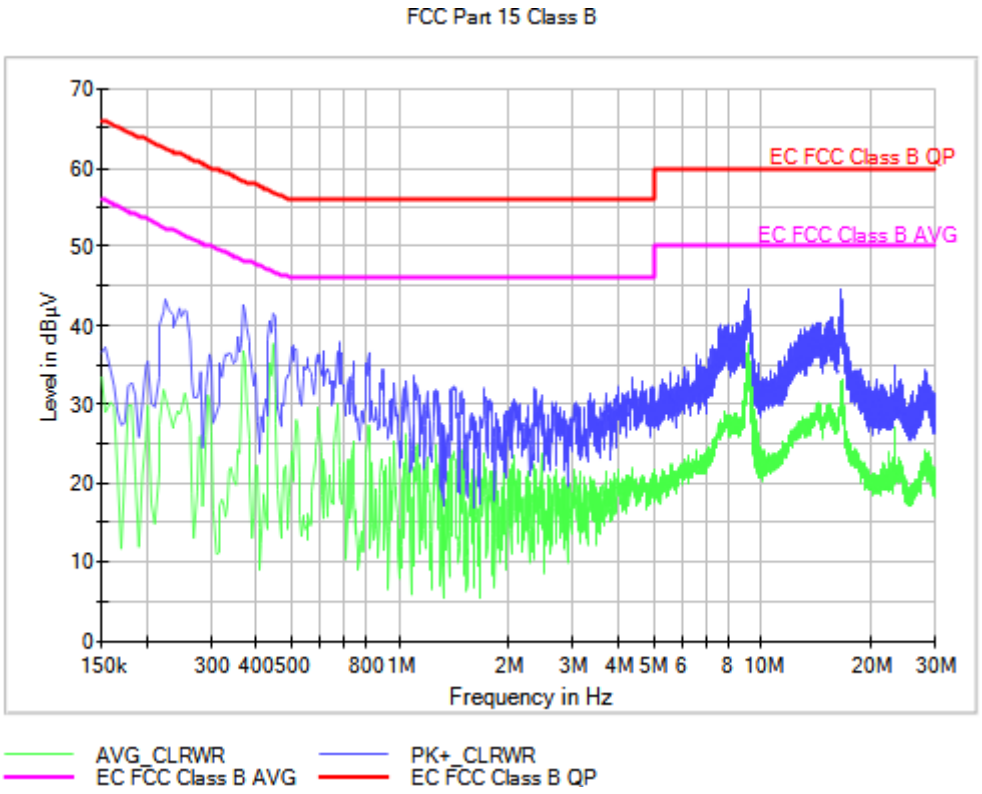
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.298000	44.2	35.7	L1

EMC Test Code = CE02130N, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = N

Sample ID: S/02

Operation Mode: OM/13. EUT ON. MS in traffic mode. LTE Cat. M1 Band 12. Power supply: 115Vac, 60Hz.

Images:



Documents:

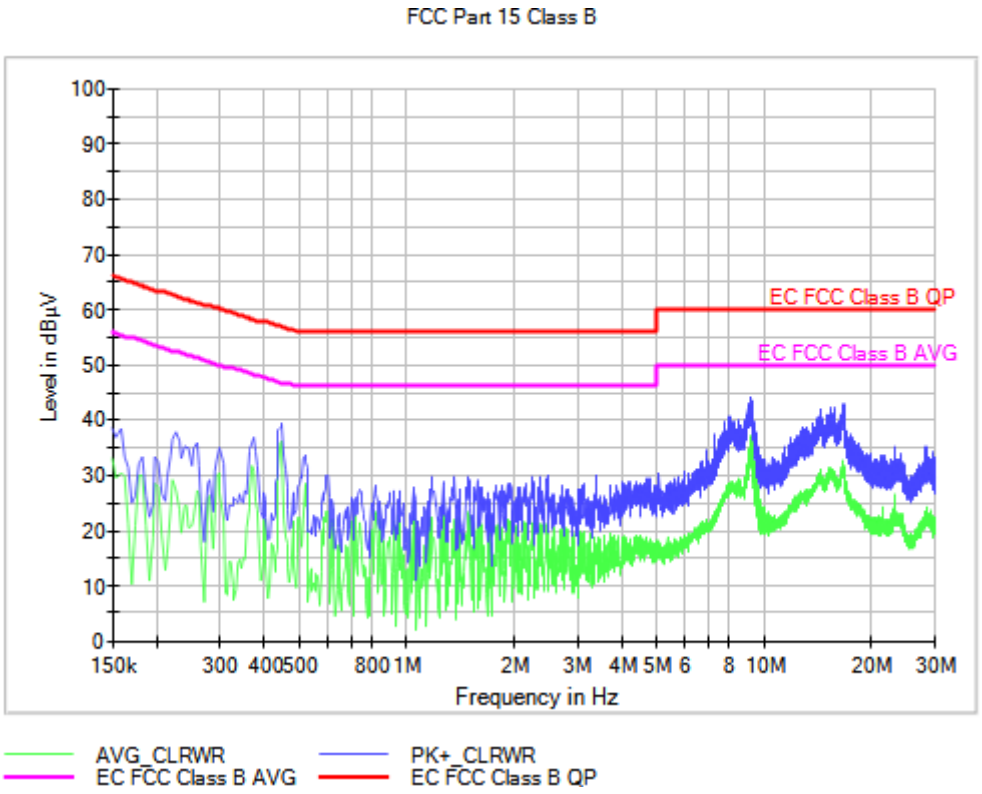
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
16.594000	44.7	32.9	N

EMC Test Code = CE0213L1, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = L1

Sample ID: S/02

Operation Mode: OM/13. EUT ON. MS in traffic mode. LTE Cat. M1 Band 12. Power supply: 115Vac, 60Hz.

Images:



Documents:

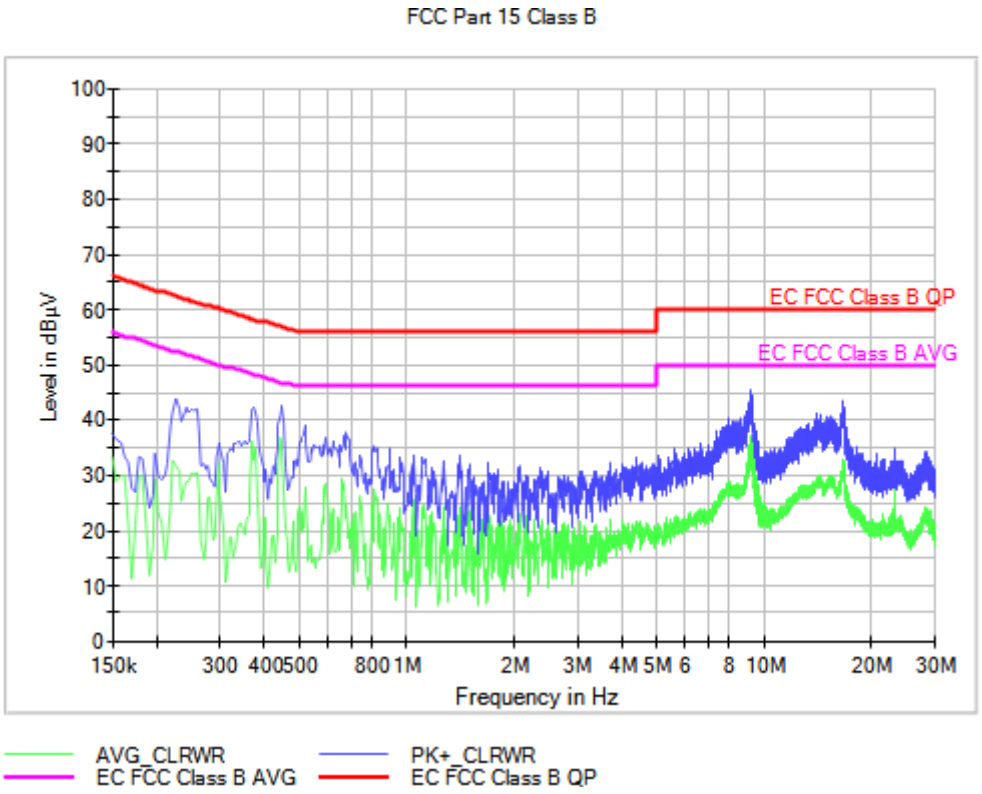
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.202000	44.2	34.5	L1

EMC Test Code = CE02140N, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = N

Sample ID: S/02

Operation Mode: OM/14. EUT ON. MS in traffic mode. LTE Cat. M1 Band 13. Power supply: 115Vac, 60Hz.

Images:



Documents:

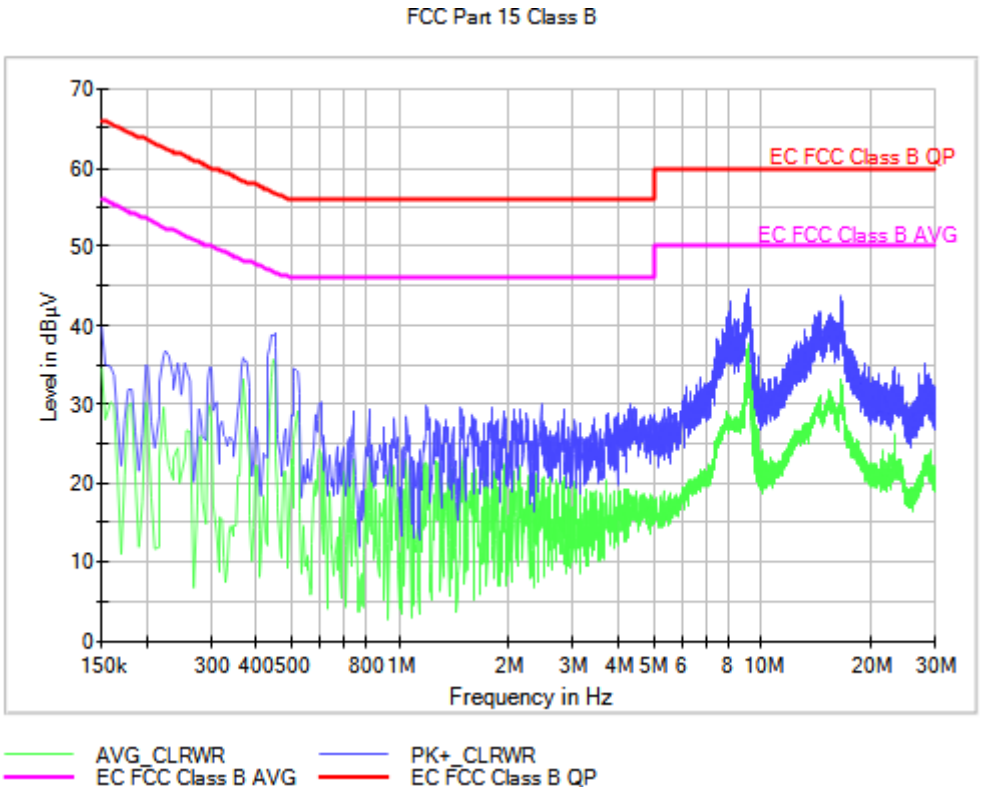
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.198000	45.6	37.0	N

EMC Test Code = CE0214L1, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = L1

Sample ID: S/02

Operation Mode: OM/14. EUT ON. MS in traffic mode. LTE Cat. M1 Band 13. Power supply: 115Vac, 60Hz.

Images:



Documents:

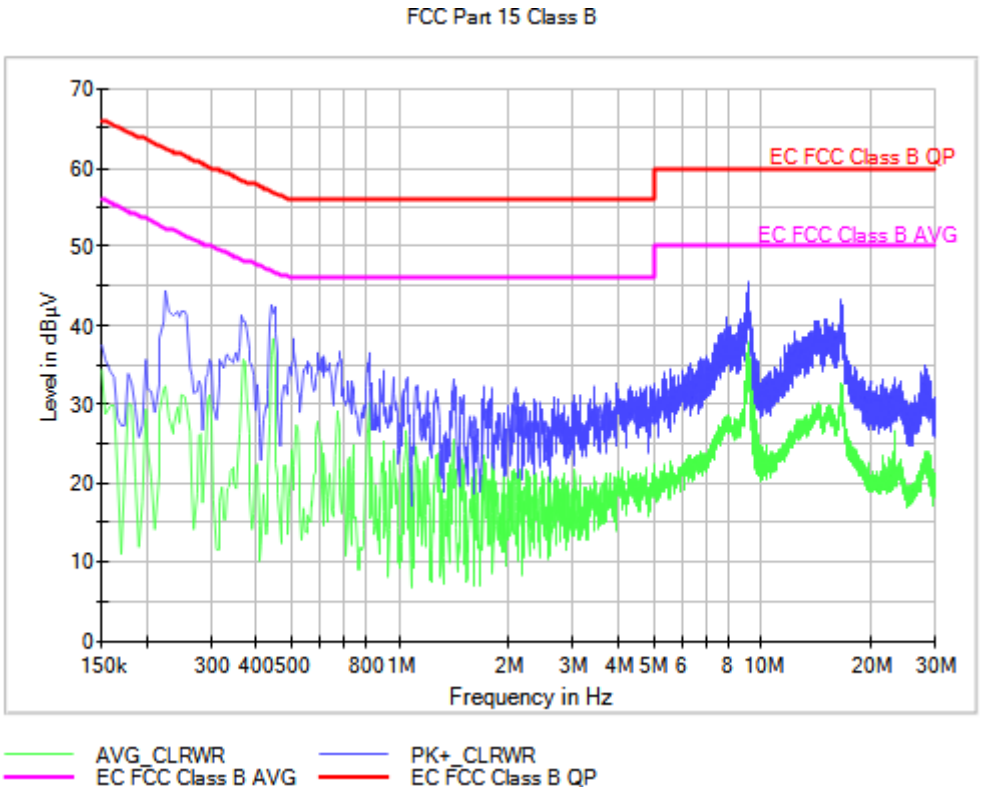
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.194000	44.7	35.1	L1

EMC Test Code = CE02150N, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = N

Sample ID: S/02

Operation Mode: OM/15. EUT ON. MS in traffic mode. LTE Cat. M1 Band 25. Power supply: 115Vac, 60Hz.

Images:



Documents:

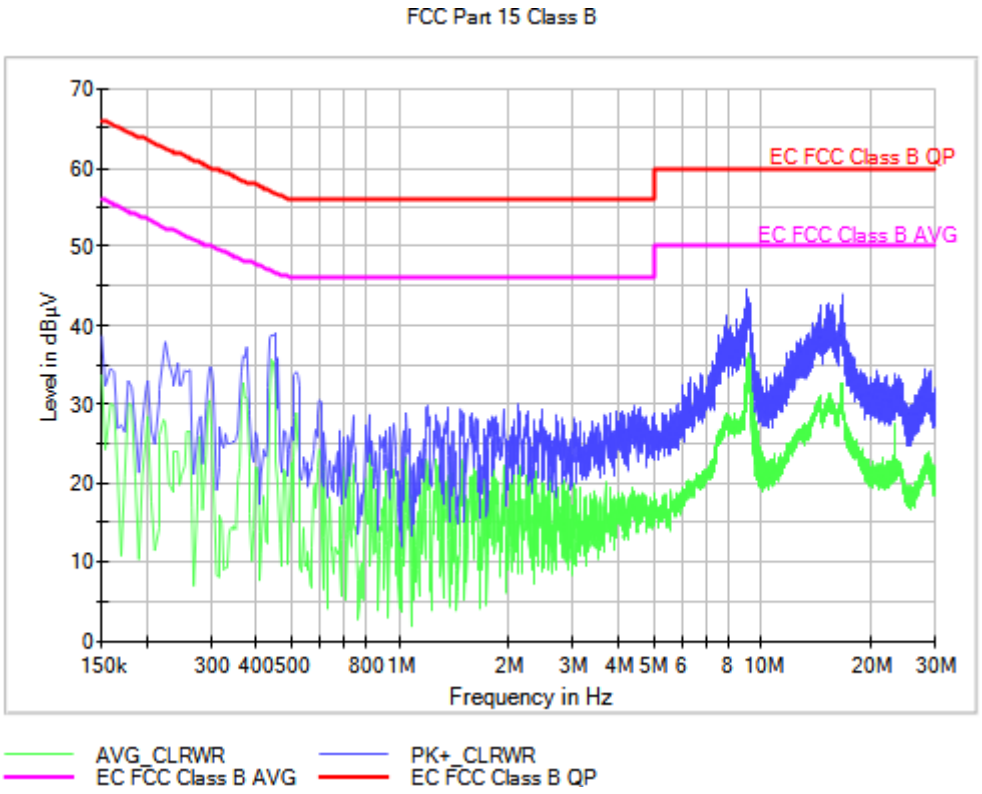
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.198000	45.5	37.9	N

EMC Test Code = CE0215L1, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = L1

Sample ID: S/02

Operation Mode: OM/15. EUT ON. MS in traffic mode. LTE Cat. M1 Band 25. Power supply: 115Vac, 60Hz.

Images:



Documents:

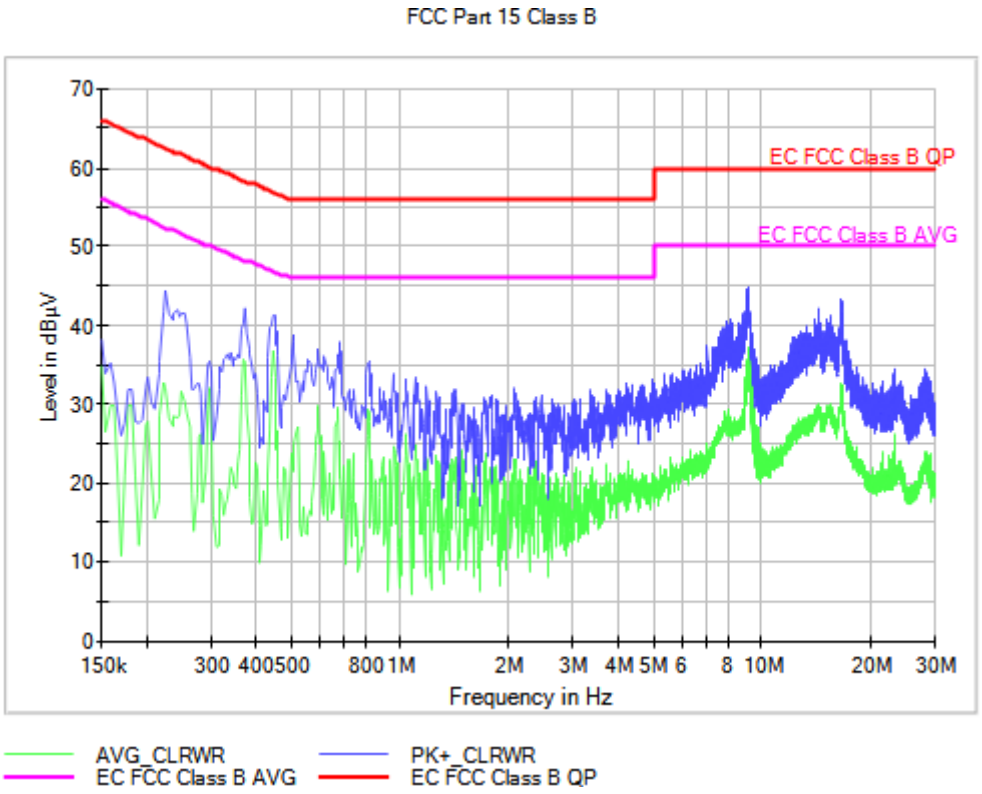
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.146000	44.7	36.0	L1

EMC Test Code = CE02160N, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = N

Sample ID: S/02

Operation Mode: OM/16. EUT ON. MS in traffic mode. LTE Cat. M1 Band 26. Power supply: 115Vac, 60Hz.

Images:



Documents:

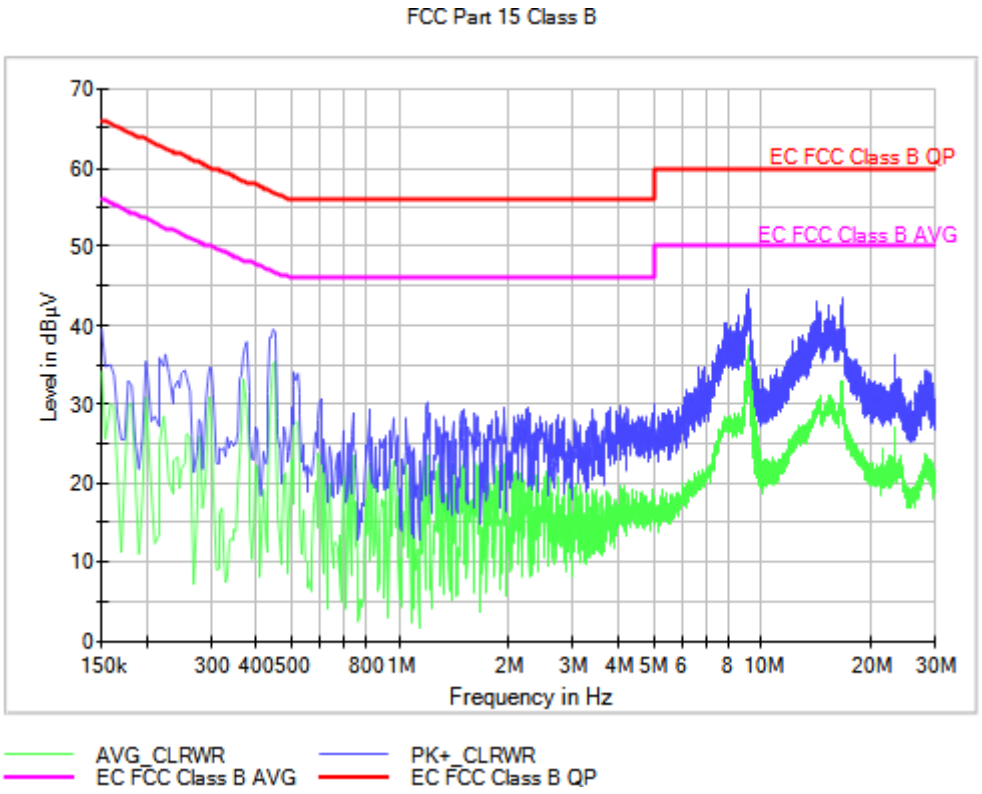
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.198000	44.8	37.3	N

EMC Test Code = CE0216L1, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = L1

Sample ID: S/02

Operation Mode: OM/16. EUT ON. MS in traffic mode. LTE Cat. M1 Band 26. Power supply: 115Vac, 60Hz.

Images:



Documents:

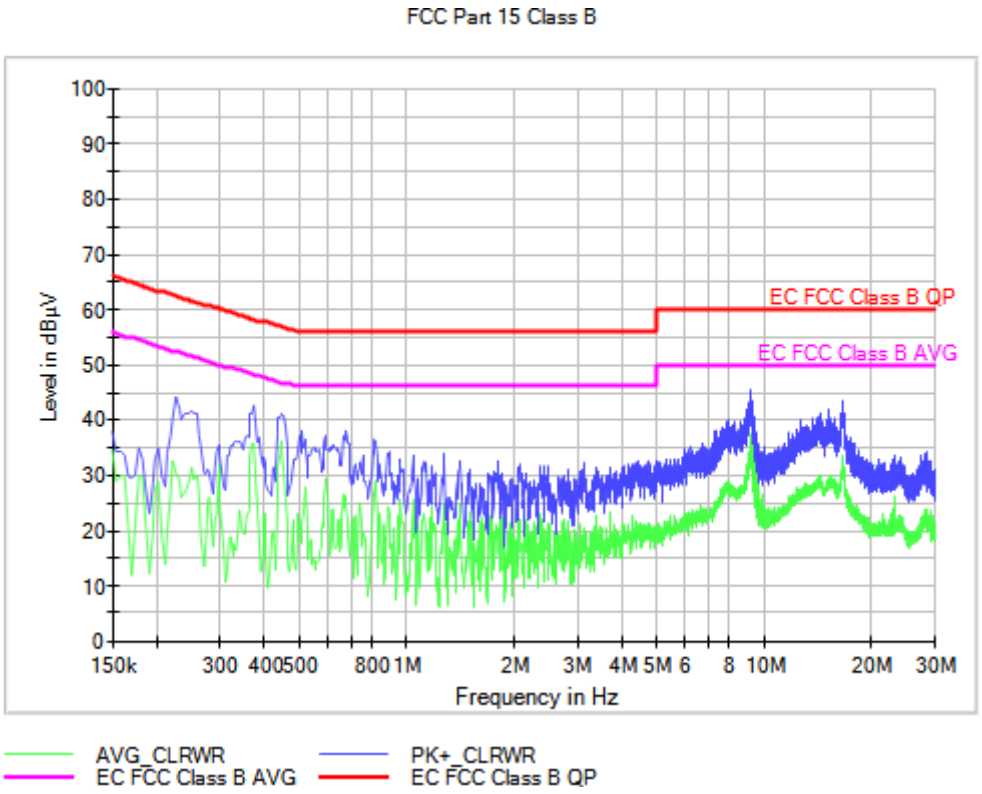
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.198000	44.7	37.6	L1

EMC Test Code = CE02170N, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = N

Sample ID: S/02

Operation Mode: OM/17. EUT ON. MS in traffic mode. LTE Cat. M1 Band 66. Power supply: 115Vac, 60Hz.

Images:



Documents:

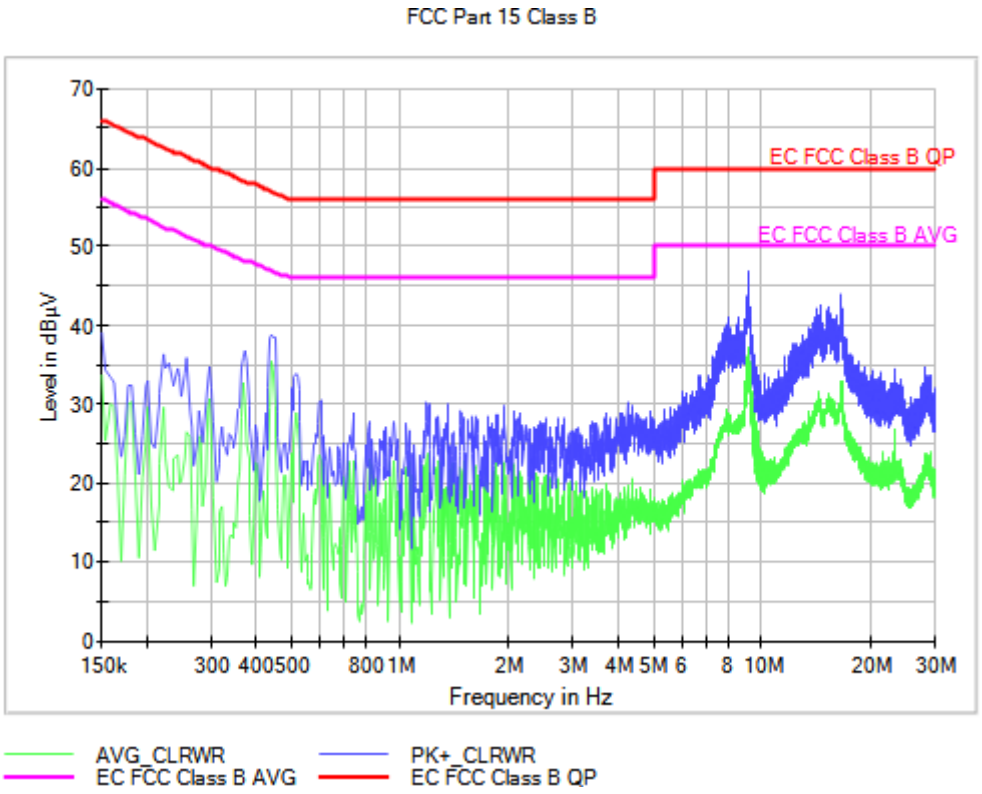
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.198000	45.5	37.6	N

EMC Test Code = CE0217L1, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = L1

Sample ID: S/02

Operation Mode: OM/17. EUT ON. MS in traffic mode. LTE Cat. M1 Band 66. Power supply: 115Vac, 60Hz.

Images:



Documents:

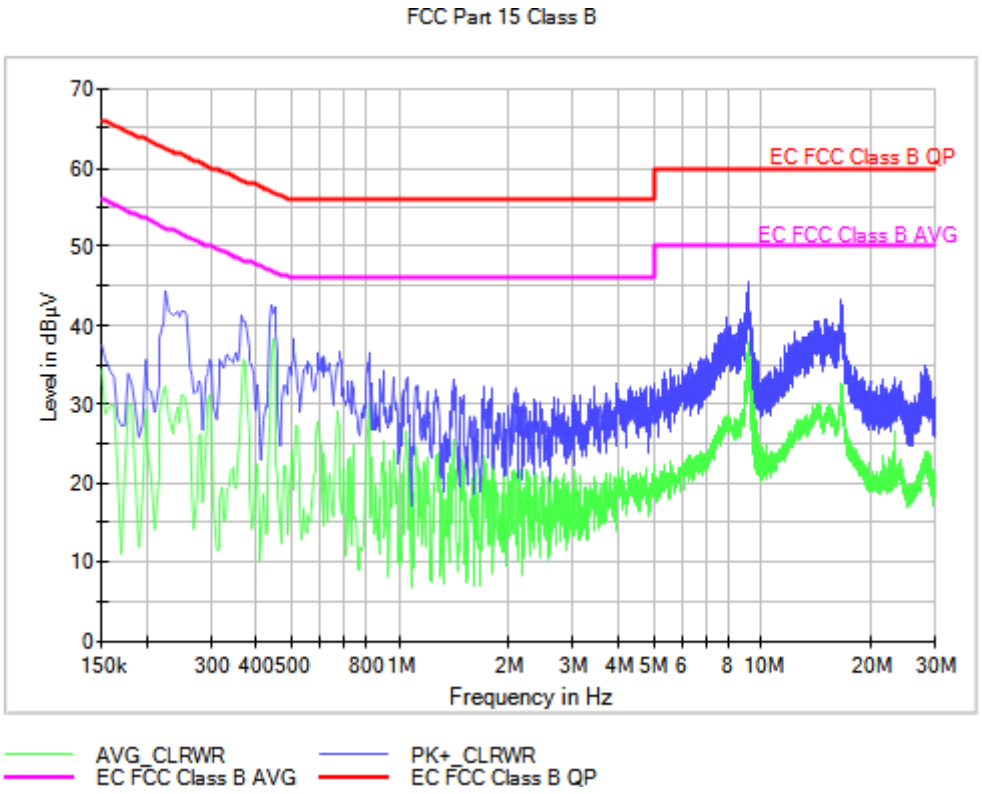
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.198000	46.9	37.1	L1

EMC Test Code = CE02180N, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = N

Sample ID: S/02

Operation Mode: OM/18. EUT ON. Bluetooth in communication mode. Power supply: 115 Vac, 60 Hz

Images:



Documents:

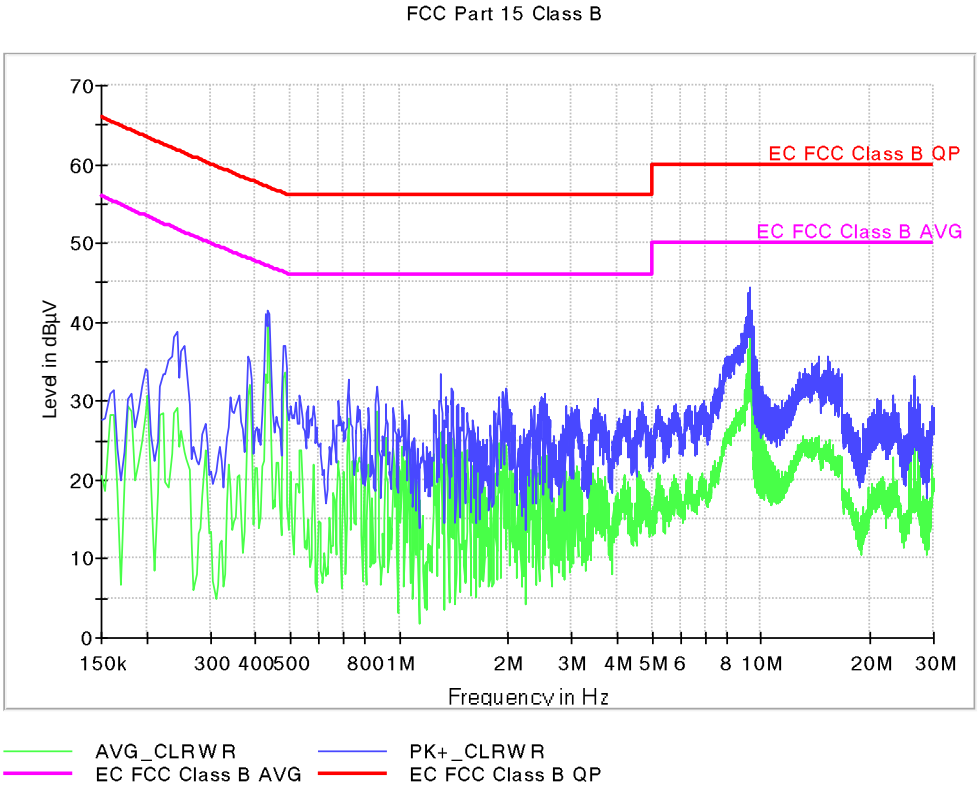
Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.22200	45.5	38.3	N

EMC Test Code = CE0218L1, Frequency Range MHz = [0.15, 30], Conducted Emissions - Tested Line = L1

Sample ID: S/02

Operation Mode: OM/18. EUT ON. Bluetooth in communication mode. Power supply: 115 Vac, 60 Hz

Images:



Documents:

Frequency(MHz)	PK+_CLRWR(dBµV)	AVG_CLRWR(dBµV)	Line
9.278000	43.9	38.8	L1