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:
75755REM.002

Test report

FCC Rules and Regulations CFR 47, Part 15, Subpart B and C (10-1-21 Edition) & ICES-003 Issue 7 (October 2020)

(*) Identification of item tested	nRF91
(*) Trademark	nRF91
(*) Model and /or type reference	nRF9161
Other identification of the product	FCC ID: 2ANPO00nRF9161 IC: 24529-NRF9161
(*) Features	Features: LTE Cat-M1, LTE NB1&NB2 HW version: nRF9161 LACA A0A SW version: mfw_nrf91x1_2.0.0-77.beta
Manufacturer	NORDIC SEMICONDUCTOR ASA Otto Nielsens Veg 12 7052, Trondheim, NORWAY
Test method requested, standard	FCC Rules and Regulations CFR 47, Part 15, Subpart B and C (10-1-21 Edition) & ICES-003 Issue 7 (October 2020)
Summary	IN COMPLIANCE
Approved by (name / position & signature)	José Manuel Gómez EMC Consumer & RF Lab. Manager Firmado digitalmente por 53680346W JOSE MANUEL GOMEZ (C:A29507456)
Date of issue	2023-08-03
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
MP	Measurement Point
OM	Operation Mode
S/	Sample
V	Verdict
RE	Radiated Emission
LR	Low Range
HR	High Range

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 peak 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 nRF91 module. Development Kit that has nRF9161 IOT Module and GPS. The nRF9161 is capable of LTE Cat-M1, Cat-NB1&NB2 and GPS. The Development kit contains antennas for cellular and GPS.

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	75755B_2.1	nRF91	nRF9161	359746166777602	2023-05-11	Element Under Test
S/01	75755B_10.1	USB cable	--	--	2023-05-11	Auxiliary Element
S/02	75755B_34.1	nRF91	nRF9161	359746166784376	2023-06-14	Element Under Test
S/02	75755B_10.1	USB cable	--	--	2023-05-11	Auxiliary Element

The sample S/01 is used with the following auxiliary equipment property of DEKRA TC:

Description	Model
Laptop DELL	Latitude E5430
AC/DC charger DELL	LA90PS1-00

Notes referenced to samples during the project:

Id	Type
S/01	Sample used for cellular mode
S/02	Sample used for GPS mode

Test sample description

Ports…… :	Port name and description	Cable					
		Specified max length [m]	Attached during test	Shielded	Coupled to patient(3)		
	LTE RF	2	[X]	[X]	[ ]		
	GPS	2	[ ]	[ ]	[ ]		
	--		[ ]	[ ]	[ ]		
Supplementary information to the ports…… :							
Rated power supply .....:	Voltage and Frequency			Reference poles			
				L1	L2	L3	N	PE
	[ ]	AC:		[ ]	[ ]	[ ]	[ ]	[ ]
	[X]	DC: 3.0-5.5V						
Rated Power .....:	1W						
Clock frequencies.....:	32kHz, 32MHz						
Other parameters .....:	--						
Software version .....:	mfw_nrf91x1_2.0.0-77.beta						
Hardware version .....:	nRF9161 LACA A0A						
Dimensions in cm (W x H x D) ....:	155x64x9mm						
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		
	--						
Accessories (not part of the test item) .....:	Description		Type		Manufacturer		
	--						
Documents as provided by the applicant.....:	Description		File name		Issue date		
	--						

(3) Only for Medical Equipment

Identification of the client

NORDIC SEMICONDUCTOR ASA
Otto Nielsens Veg 12
7052, Trondheim, NORWAY

Testing period and place

Test Location	DEKRA Testing and Certification S.A.U.
Date (start)	2023-05-19
Date (finish)	2023-06-14

Document history

Report number	Date	Description
75755REM.002	2023-08-03	First release

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: Antonio Ruiz and Rosa Maria Gallardo.

Testing verdicts

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

List of equipment used during the test

Control No.	Equipment	Model	Manufacturer	Next Calibration
6064	SEMIANECHOIC ABSORBER LINED CHAMBER	SAC-3	FRANKONIA	N/A
6329	SHIELDED ROOM	--	FRANKONIA	N/A
6132	ETHERNET TEMPERATURE AND HUMIDITY LOGGER	HWg-STE	HW GROUP	2024-04-21
6126	ETHERNET TEMPERATURE AND HUMIDITY LOGGER	HWg-STE	HW GROUP	2024-04-21
8866	EMI TEST RECEIVER 2Hz-44GHz	ESW44	ROHDE AND SCHWARZ	2023-09-21
5641	HYBRID BILOG ANTENNA 30MHz-6GHz	3142E	ETS LINDGREN	2024-09-15
6121	PRE-AMPLIFIER G>40dB 10MHz-6GHz	BLNA 0160-01N	BONN ELEKTRONIK	2019-04-30
4612	HORN ANTENNA 1-18GHz	BBHA 9120 D	SCHWARZBECK MESS-ELEKTRONIK	2024-07-13
9360	PRE-AMPLIFIER G>40dB 1-18 GHz	BLMA 0118-1M	BONN ELEKTRONIK	2023-05-11
4848	SOFTWARE FOR EMC/RF TESTING	EMC32	ROHDE AND SCHWARZ	N/A
6129	TEMPERATURE AND HUMIDITY PROBE	HWg-STE	HW GROUP	2024-04-18
6165	EMI TEST RECEIVER 9kHz-7GHz	ESR7	ROHDE AND SCHWARZ	2023-11-08
7772	TRANSIENT LIMITER 10DB N CONNECTOR	VTSD 9561-F	SCHWARZBECK	2023-11-30
4679	THREE-PHASE ARTIFICIAL V-NETWORK 32A	PMM L3-32	NARDA	2024-02-06

Summary

Test Specification	Requirement – Test case	Verdict	Remark
FCC CFR 47, Part 15, Subpart B (10-1-21 Edition) & ICES-003 Issue 7 (October 2020)	RE Radiated emission. Electromagnetic field measure	P	(1)
FCC CFR 47, Part 15, Subpart B and C (10-1-21 Edition) & ICES-003 Issue 7 (October 2020)	CE Continuous conducted emission	P	--

Supplementary information and remarks:

(1) Range: f>12.75 GHz. Test required only to the 5th harmonics of the maximum internal work frequency in the EUT.

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. Cellular searching network. GNSS Module (GPS) pending to receive satellites signals. Equipment transferring data to an auxiliary laptop via USB. Power supply of EUT: 5Vdc (through USB port). Laptop power supply: 115Vac, 60Hz.
OM/02	EUT ON. MS in IDLE mode. NB-IoT Band 28 (NB-IoT worst case). Equipment transferring data to an auxiliary laptop via USB. Power supply of EUT: 5Vdc (through USB port). Laptop power supply: 115Vac, 60Hz.
OM/03	EUT ON. MS in traffic mode. NB-IoT Band 28 (NB-IoT worst case). Equipment transferring data to an auxiliary laptop via USB. Power supply of EUT: 5Vdc (through USB port). Laptop power supply: 115Vac, 60Hz.
OM/04	EUT ON. MS in IDLE mode. LTE Cat. M1 Band 1 (M1 worst case). Equipment transferring data to an auxiliary laptop via USB. Power supply of EUT: 5Vdc (through USB port). Laptop power supply: 115Vac, 60Hz.
OM/05	EUT ON. MS in traffic mode. LTE Cat. M1 Band 1 (M1 worst case). Equipment transferring data to an auxiliary laptop via USB. Power supply of EUT: 5Vdc (through USB port). Laptop power supply: 115Vac, 60Hz.
OM/05	EUT ON. GNSS module (GPS) receiving a valid position signal. Equipment transferring data to an auxiliary laptop via USB. Power supply of EUT: 5Vdc (through USB port). Laptop power supply: 115Vac, 60Hz.

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 (10-1-21 Edition) & ICES-003 Issue 7 (October 2020)	ANSI C63.4 (2014)	RE Radiated emission.
FCC CFR 47, Part 15, Subpart C (15.207) (10-1-21 Edition)	ANSI C63.4 (2014)	CE Continuous conducted emission

Test Cases Details

RE Radiated emission. Electromagnetic field measure

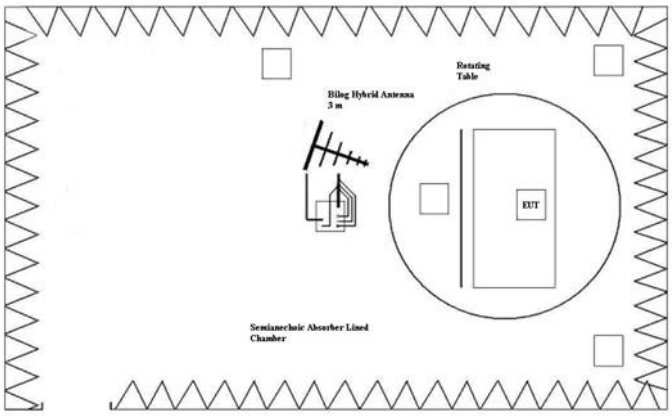
Limits of interference Class B

The applied limit for radiated emissions, 3 m distance, according to the requirements of FCC Rules and Regulations 47 CFR Part 15, Subpart B (10-1-21 Edition), Secs. 15.109 & ICES-003 Issue 7 (October 2020)

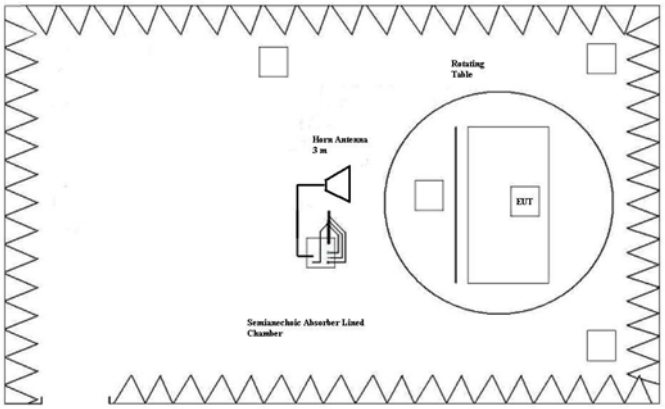
Frequency range (MHz)	FCC Part 15B		ICES-003 Issue 7		FCC Part 15B & ICES-003 Issue 7	
	QP Limit for 3 m		QP Limit for 3 m		PK Limit for 3 m	AVG Limit for 3 m
	(μV/m)	(dBμV/m)	(μV/m)	(dBμV/m)	(dBμV/m)	(dBμV/m)
30 to 88	100	40	100	40	---	---
88 to 216	150	43.5	150	43.5	---	---
216 to 230	200	46	200	46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

Limits according to FCC Part 15B, are equal or 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

Verdict

Pass

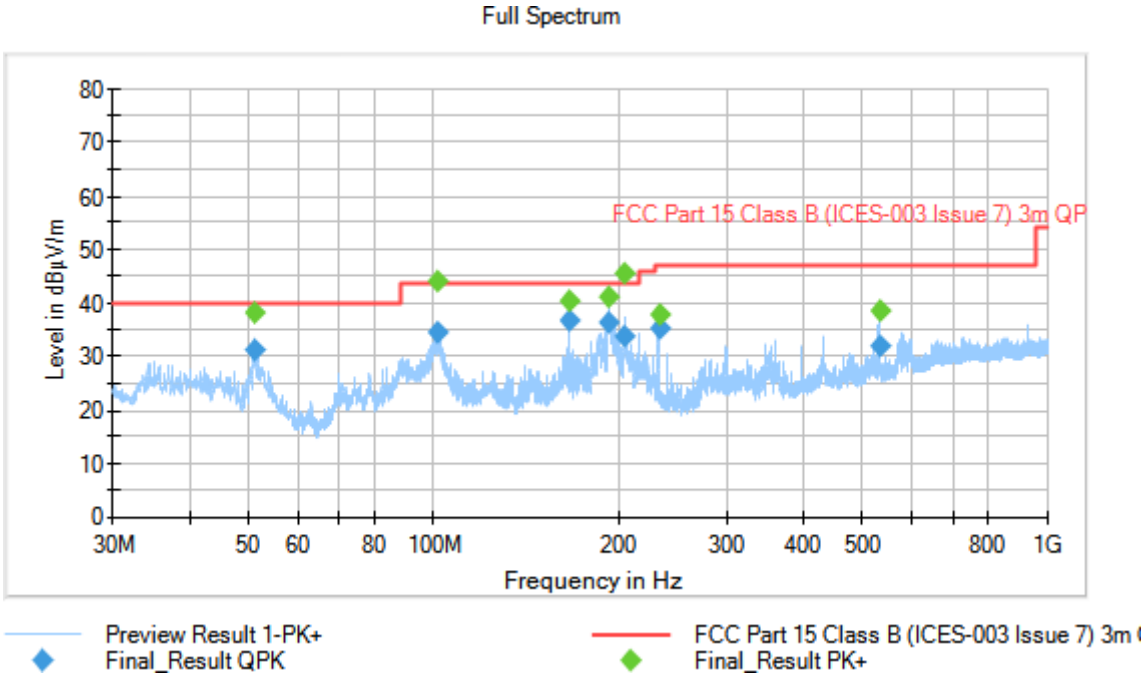
Attachments

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

Sample ID: S/01

Operation Mode: OM/01. EUT ON. Cellular searching network. GNSS Module (GPS) pending to receive satellites signals. Equipment transferring data to an auxiliary laptop via USB. Power supply of EUT: 5Vdc (through USB port). Laptop power supply: 115Vac, 60Hz.

Images:



Tables:

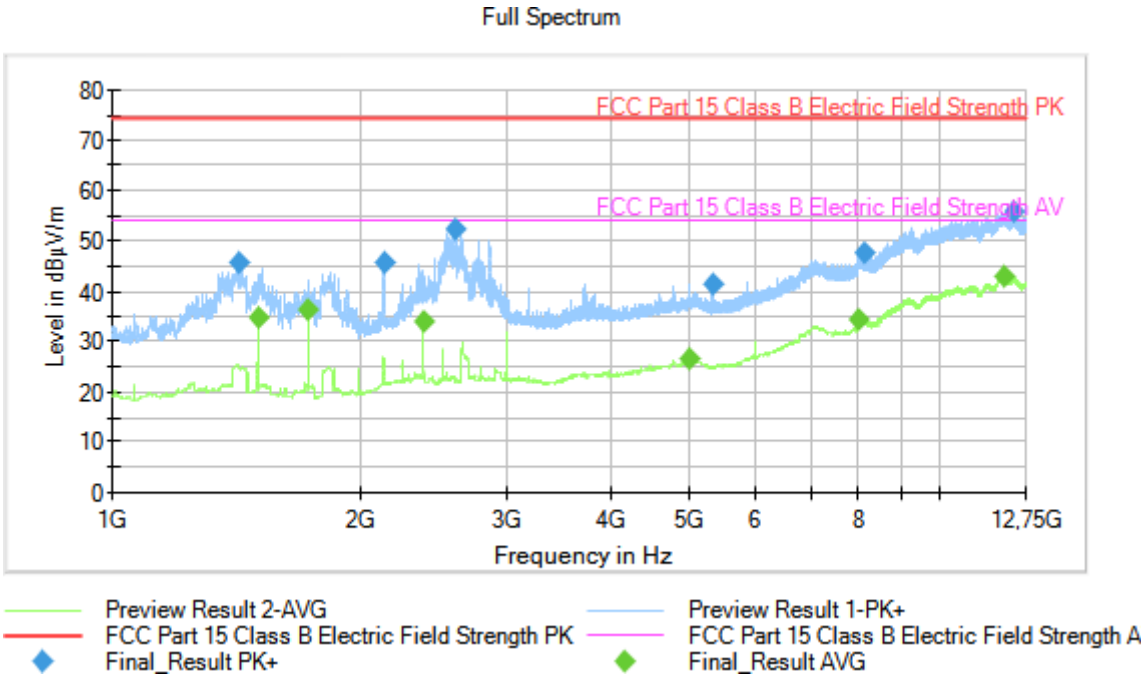
Frequency(MHz)	QuasiPeak(dBµV/m)	MaxPeak(dBµV/m)	Limit(dBµV/m)	Margin(dB)	Height(cm)	Pol	Azimuth(deg)
50.990000	31.14	---	40.00	8.86	100.0	V	113.0
50.990000	---	38.17	---	---	100.0	V	113.0
101.755000	34.40	---	43.52	9.12	324.0	H	-155.0
101.755000	---	44.13	---	---	324.0	H	-155.0
165.974000	36.85	---	43.52	6.67	182.0	H	-81.0
165.974000	---	40.36	---	---	182.0	H	-81.0
192.774000	---	41.09	---	---	126.0	H	-129.0
192.774000	36.41	---	43.52	7.11	126.0	H	-129.0
204.337000	33.59	---	43.52	9.93	151.0	H	-99.0
204.337000	---	45.48	---	---	151.0	H	-99.0
232.791000	35.13	---	47.00	11.87	137.0	H	-124.0
232.791000	---	37.81	---	---	137.0	H	-124.0
532.139000	---	38.58	---	---	222.0	V	89.0
532.139000	31.91	---	47.00	15.09	222.0	V	89.0

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

Sample ID: S/01

Operation Mode: OM/01. EUT ON. Cellular searching network. GNSS Module (GPS) pending to receive satellites signals. Equipment transferring data to an auxiliary laptop via USB. Power supply of EUT: 5Vdc (through USB port). Laptop power supply: 115Vac, 60Hz.

Images:



Tables:

Frequency(MHz)	MaxPeak(dBµV/m)	Average(dBµV/m)	Limit(dBµV/m)	Margin(dB)
1417.750000	45.48	---	73.97	28.49
1500.000000	---	34.83	53.97	19.14
1722.500000	---	36.32	53.97	17.65
2128.500000	45.82	---	73.97	28.15
2385.000000	---	33.93	53.97	20.04
2592.250000	52.40	---	73.97	21.57
4993.250000	---	26.44	53.97	27.53
5317.750000	41.56	---	73.97	32.41
8019.500000	---	34.32	53.97	19.65
8128.500000	47.44	---	73.97	26.53
11980.000000	---	42.94	53.97	11.03
12316.000000	55.81	---	73.97	18.16

CE Continuous conducted emission

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 (10-1-21 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

*Decreases with the logarithm of the frequency.

Results

S/	OM	Code	Freq Rng (MHz)	Line	V
01	OM/02	CE01020N	[0.15, 30]	N	P
01	OM/02	CE0102L1	[0.15, 30]	L1	P
01	OM/03	CE01030N	[0.15, 30]	N	P
01	OM/03	CE0103L1	[0.15, 30]	L1	P
01	OM/04	CE01040N	[0.15, 30]	N	P
01	OM/04	CE0104L1	[0.15, 30]	L1	P
01	OM/05	CE01050N	[0.15, 30]	N	P
01	OM/05	CE0105L1	[0.15, 30]	L1	P
02	OM/06	CE02060N	[0.15, 30]	N	P
02	OM/06	CE0206L1	[0.15, 30]	L1	P

Verdict

Pass

Attachments

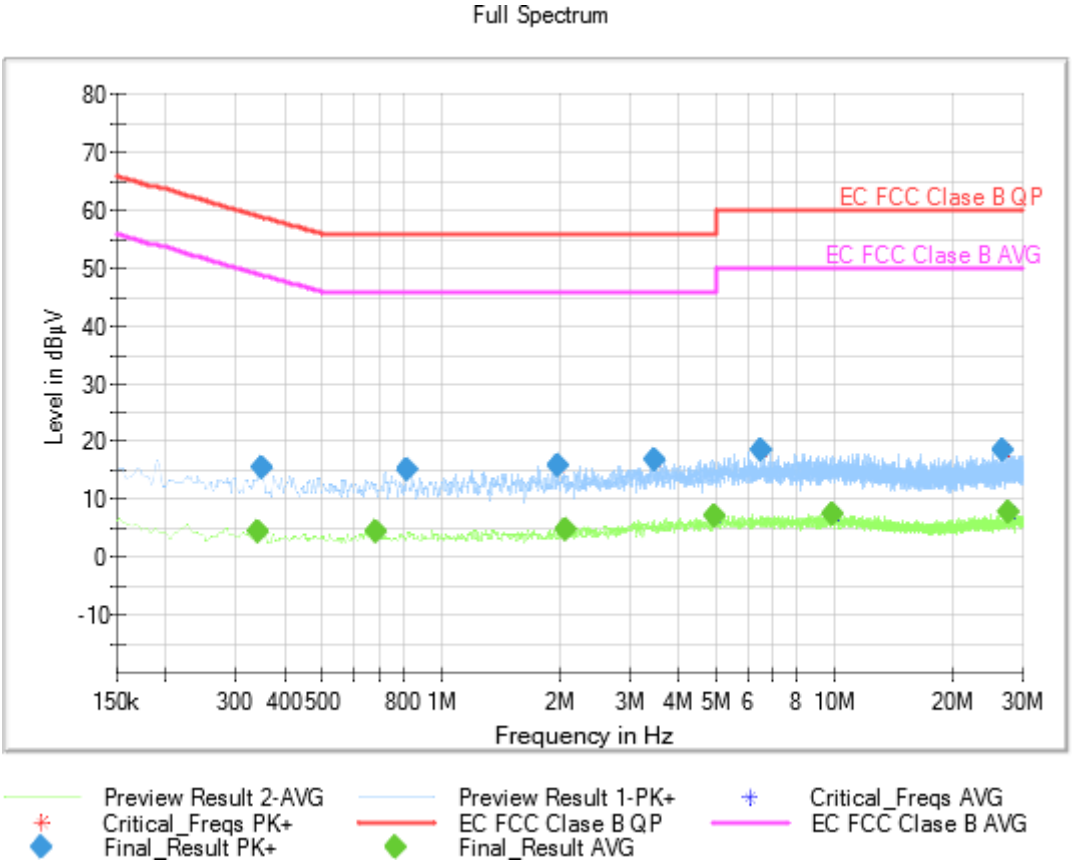
EMC Test Code = CE01020N Frequency Range MHz = [0.15, 30]

Conducted Emissions - Tested Line = N

Sample ID: S/01

Operation Mode: OM/02. EUT ON. MS in IDLE mode. NB-IoT Band 28 (NB-IoT worst case). Equipment transferring data to an auxiliary laptop via USB. Power supply of EUT: 5Vdc (through USB port). Laptop power supply: 115Vac, 60Hz.

Images:



Tables:

Frequency(MHz)	MaxPeak(dBµV)	Average(dBµV)
0.341250	---	4.56
0.350250	15.55	---
0.681000	---	4.58
0.820500	15.18	---
1.974750	15.84	---
2.071500	---	4.82
3.498000	16.91	---
4.967250	---	6.96
6.535500	18.53	---
9.890250	---	7.53
26.778750	18.44	---
27.687750	---	7.61

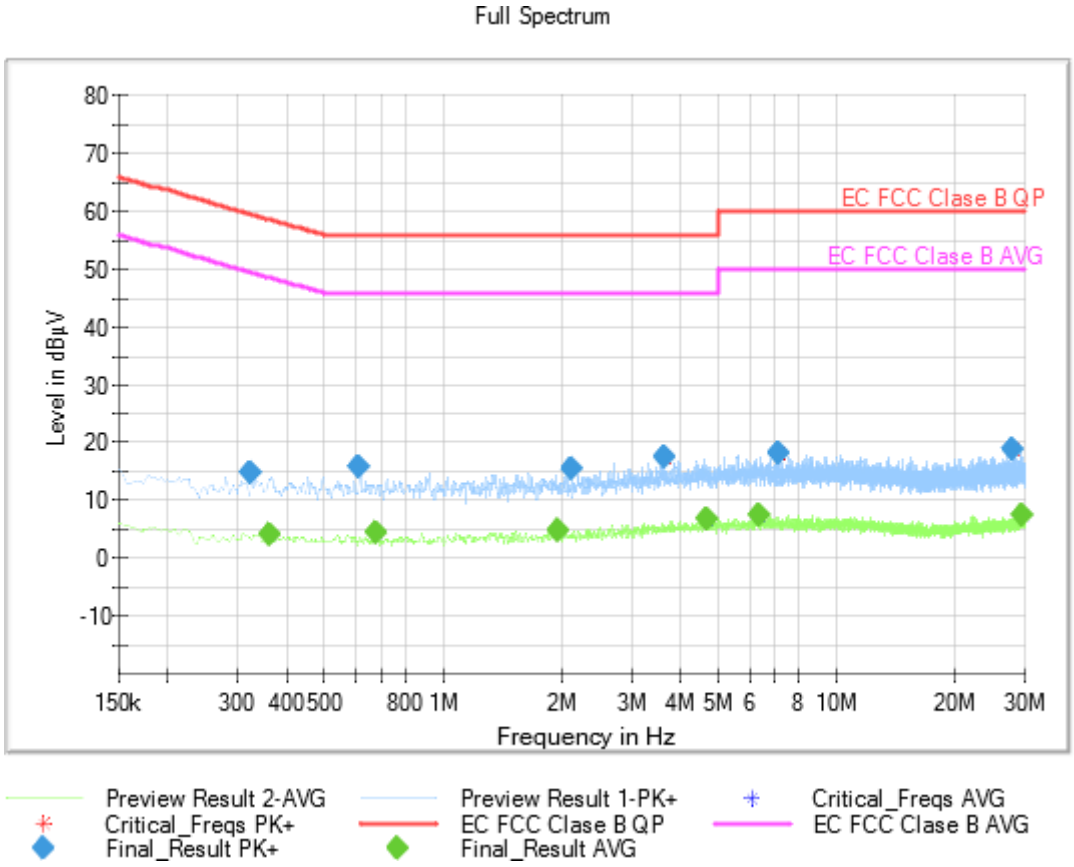
EMC Test Code = CE0102L1 Frequency Range MHz = [0.15, 30]

Conducted Emissions - Tested Line = L1

Sample ID: S/01

Operation Mode: OM/02. EUT ON. MS in IDLE mode. NB-IoT Band 28 (NB-IoT worst case). Equipment transferring data to an auxiliary laptop via USB. Power supply of EUT: 5Vdc (through USB port). Laptop power supply: 115Vac, 60Hz.

Images:



Tables:

Frequency(MHz)	MaxPeak(dBµV)	Average(dBµV)
0.325500	14.88	---
0.361500	---	4.00
0.613500	15.85	---
0.678750	---	4.42
1.959000	---	4.86
2.121000	15.36	---
3.660000	17.49	---
4.670250	---	6.79
6.333000	---	7.56
7.107000	18.29	---
27.872250	18.87	---
29.598000	---	7.38

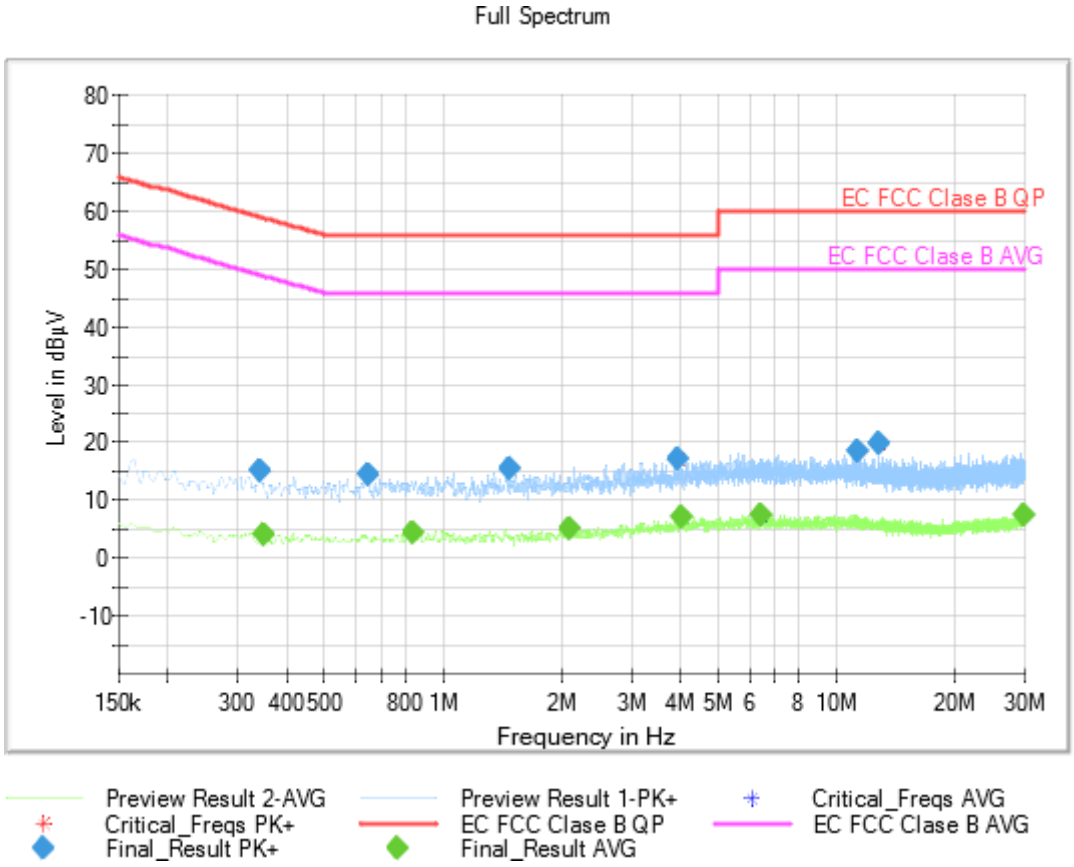
EMC Test Code = CE01030N Frequency Range MHz = [0.15, 30]

Conducted Emissions - Tested Line = N

Sample ID: S/01

Operation Mode: OM/03. EUT ON. MS in traffic mode. NB-IoT Band 28 (NB-IoT worst case). Equipment transferring data to an auxiliary laptop via USB. Power supply of EUT: 5Vdc (through USB port). Laptop power supply: 115Vac, 60Hz.

Images:



Tables:

Frequency(MHz)	MaxPeak(dBµV)	Average(dBµV)
0.343500	14.98	---
0.352500	---	3.95
0.647250	14.51	---
0.843000	---	4.39
1.477500	15.32	---
2.087250	---	5.02
3.945750	17.01	---
4.051500	---	7.08
6.402750	---	7.58
11.292000	18.48	---
12.894000	19.68	---
29.987250	---	7.58

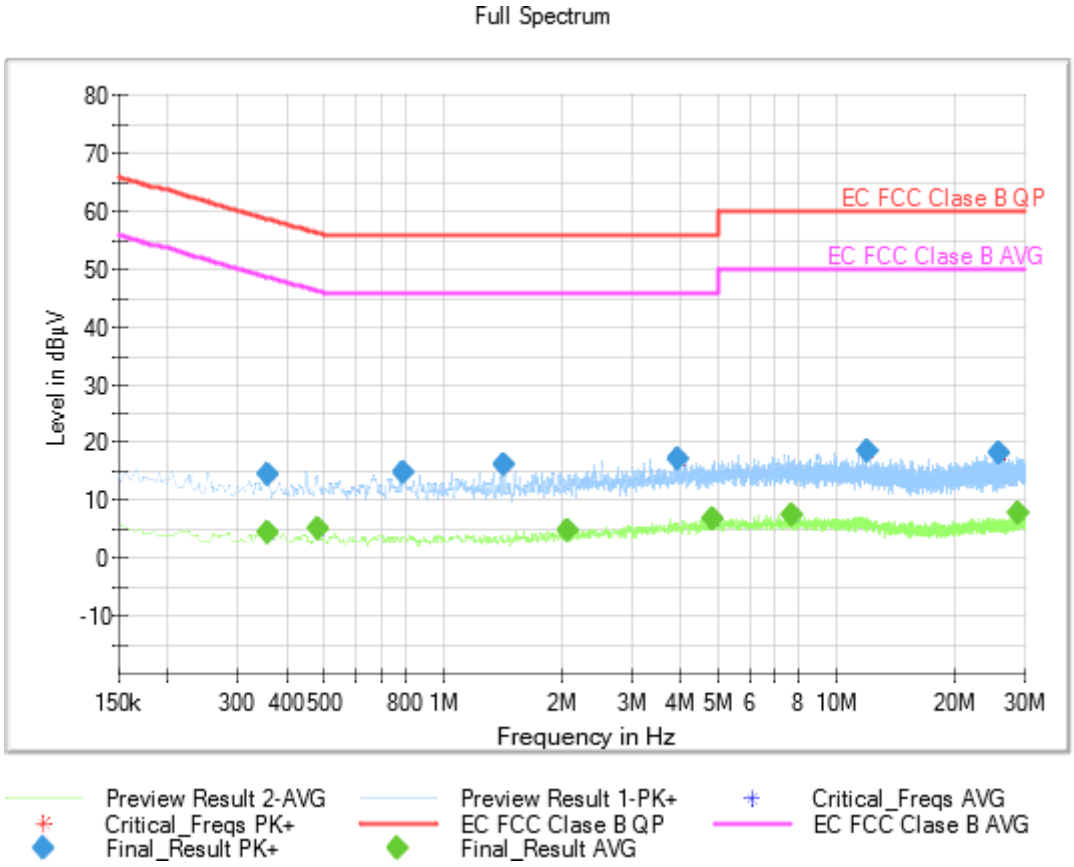
EMC Test Code = CE0103L1 Frequency Range MHz = [0.15, 30]

Conducted Emissions - Tested Line = L1

Sample ID: S/01

Operation Mode: OM/03. EUT ON. MS in traffic mode. NB-IoT Band 28 (NB-IoT worst case). Equipment transferring data to an auxiliary laptop via USB. Power supply of EUT: 5Vdc (through USB port). Laptop power supply: 115Vac, 60Hz.

Images:



Tables:

Frequency(MHz)	MaxPeak(dBµV)	Average(dBµV)
0.359250	---	4.40
0.359250	14.46	---
0.480750	---	4.99
0.795750	14.73	---
1.434750	16.19	---
2.080500	---	4.86
3.945750	17.09	---
4.861500	---	6.64
7.723500	---	7.45
11.960250	18.56	---
25.827000	18.08	---
29.044500	---	7.68

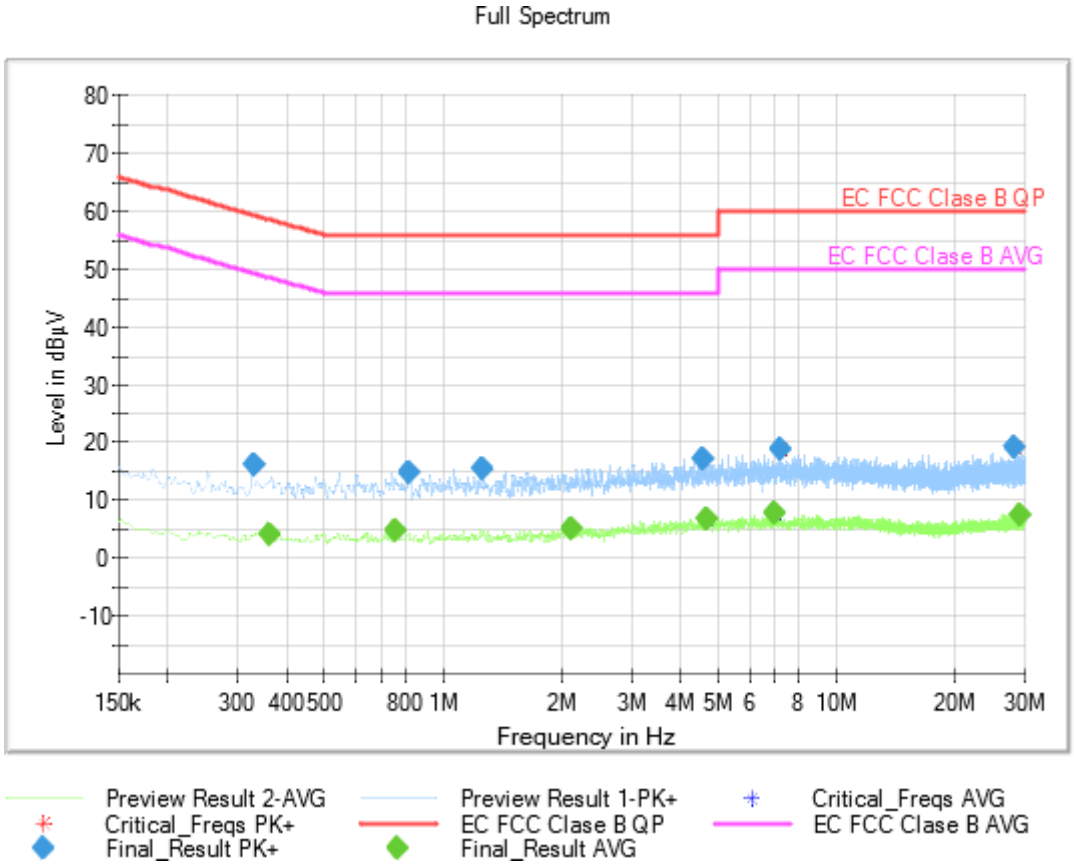
EMC Test Code = CE01040N Frequency Range MHz = [0.15, 30]

Conducted Emissions - Tested Line = N

Sample ID: S/01

Operation Mode: OM/04. EUT ON. MS in IDLE mode. LTE Cat. M1 Band 1 (M1 worst case). Equipment transferring data to an auxiliary laptop via USB. Power supply of EUT: 5Vdc (through USB port). Laptop power supply: 115Vac, 60Hz.

Images:



Tables:

Frequency(MHz)	MaxPeak(dBµV)	Average(dBµV)
0.330000	16.19	---
0.361500	---	4.16
0.755250	---	4.58
0.820500	14.94	---
1.259250	15.43	---
2.118750	---	5.02
4.564500	17.17	---
4.677000	---	6.80
6.960750	---	7.60
7.228500	18.86	---
28.360500	19.07	---
29.325750	---	7.59

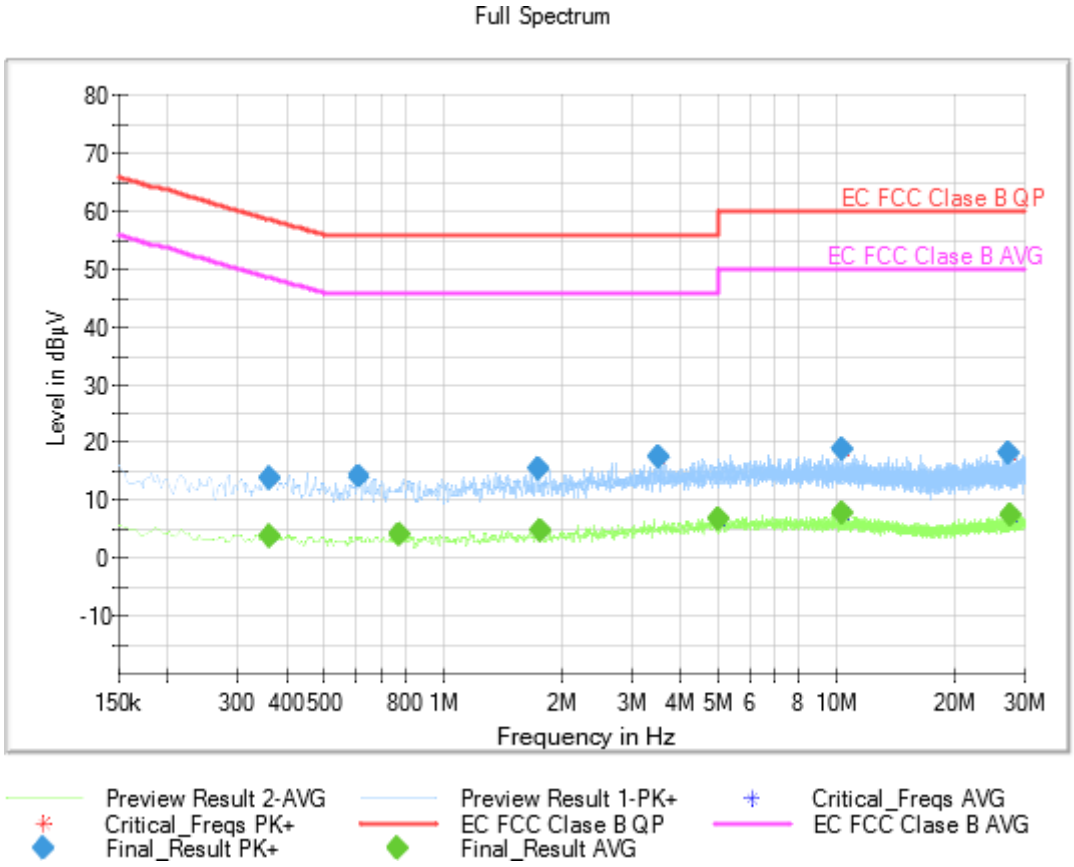
EMC Test Code = CE0104L1 Frequency Range MHz = [0.15, 30]

Conducted Emissions - Tested Line = L1

Sample ID: S/01

Operation Mode: OM/04. EUT ON. MS in IDLE mode. LTE Cat. M1 Band 1 (M1 worst case). Equipment transferring data to an auxiliary laptop via USB. Power supply of EUT: 5Vdc (through USB port). Laptop power supply: 115Vac, 60Hz.

Images:



Tables:

Frequency(MHz)	MaxPeak(dBµV)	Average(dBµV)
0.361500	---	3.79
0.361500	13.75	---
0.613500	14.16	---
0.775500	---	4.02
1.758750	15.46	---
1.761000	---	4.85
3.538500	17.36	---
4.994250	---	6.64
10.322250	18.87	---
10.396500	---	7.78
27.330000	18.27	---
27.852000	---	7.40

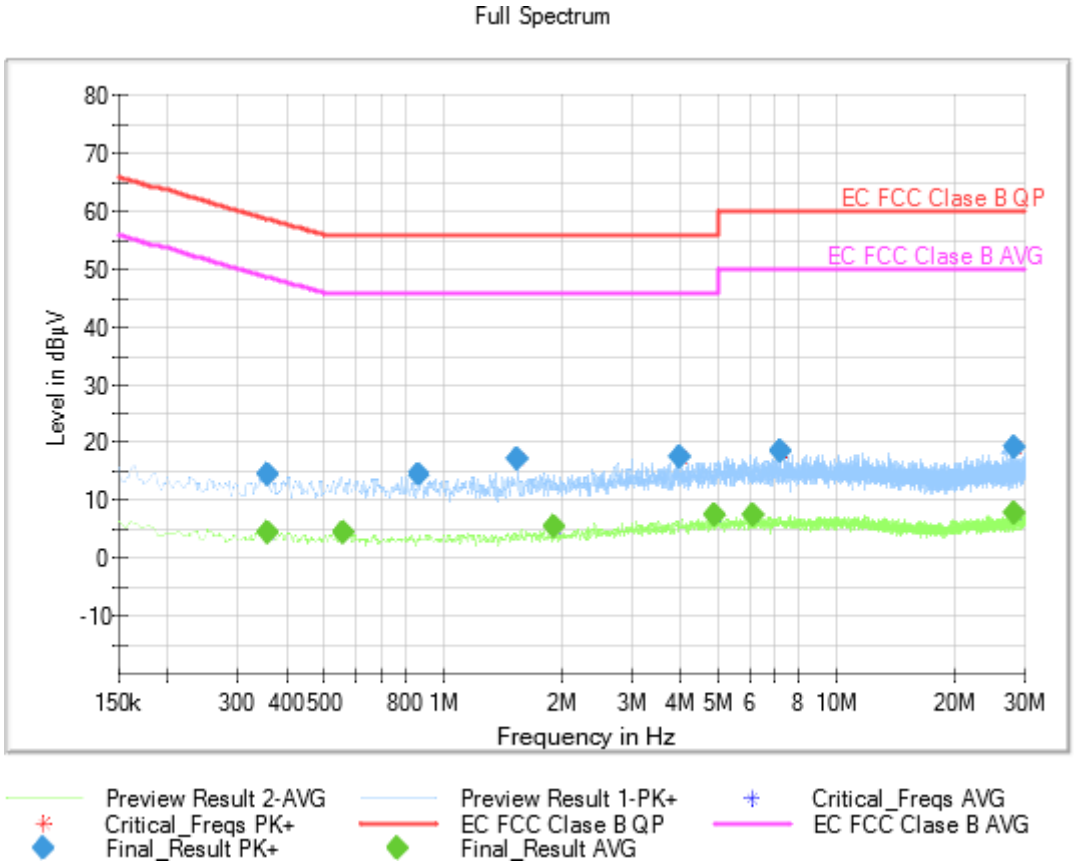
EMC Test Code = CE01050N Frequency Range MHz = [0.15, 30]

Conducted Emissions - Tested Line = N

Sample ID: S/01

Operation Mode: OM/05. EUT ON. MS in traffic mode. LTE Cat. M1 Band 1 (M1 worst case). Equipment transferring data to an auxiliary laptop via USB. Power supply of EUT: 5Vdc (through USB port). Laptop power supply: 115Vac, 60Hz.

Images:



Tables:

Frequency(MHz)	MaxPeak(dBµV)	Average(dBµV)
0.357000	---	4.36
0.359250	14.42	---
0.555000	---	4.37
0.872250	14.52	---
1.545000	17.23	---
1.918500	---	5.38
4.020000	17.30	---
4.924500	---	7.40
6.182250	---	7.43
7.221750	18.55	---
28.452750	19.11	---
28.475250	---	7.60

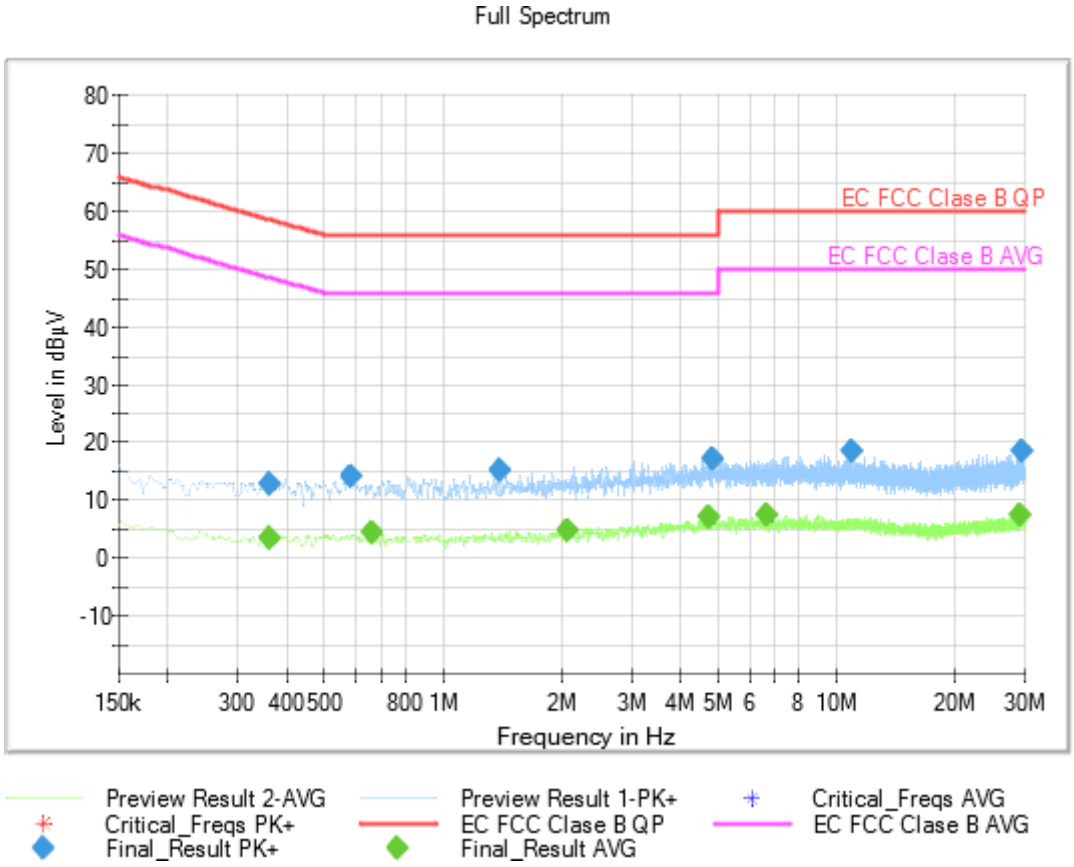
EMC Test Code = CE0105L1 Frequency Range MHz = [0.15, 30]

Conducted Emissions - Tested Line = L1

Sample ID: S/01

Operation Mode: OM/05. EUT ON. MS in traffic mode. LTE Cat. M1 Band 1 (M1 worst case). Equipment transferring data to an auxiliary laptop via USB. Power supply of EUT: 5Vdc (through USB port). Laptop power supply: 115Vac, 60Hz.

Images:



Tables:

Frequency(MHz)	MaxPeak(dBµV)	Average(dBµV)
0.361500	---	3.36
0.361500	12.90	---
0.586500	14.22	---
0.658500	---	4.42
1.403250	15.05	---
2.076000	---	4.86
4.758000	---	7.09
4.872750	17.16	---
6.686250	---	7.42
10.914000	18.45	---
29.373000	---	7.38
29.643000	18.33	---

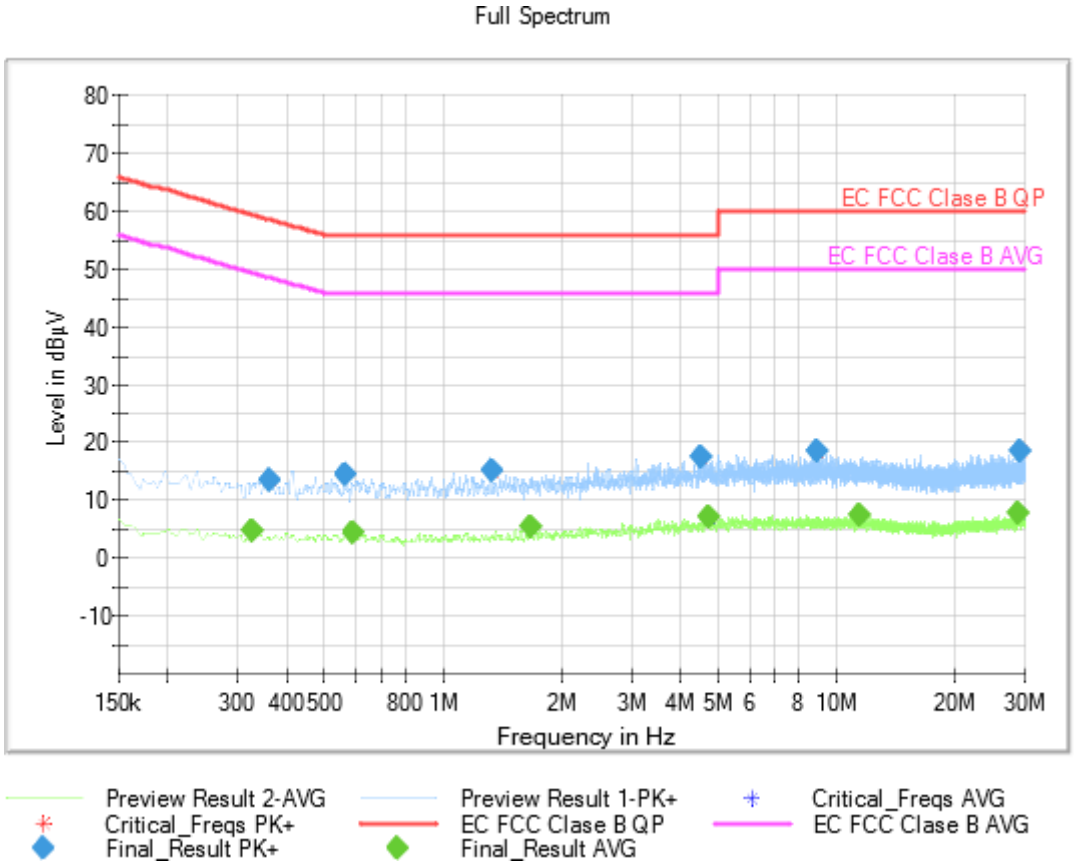
EMC Test Code = CE02060N Frequency Range MHz = [0.15, 30]

Conducted Emissions - Tested Line = N

Sample ID: S/02

Operation Mode: OM/06. EUT ON. GNSS module (GPS) receiving a valid position signal. Equipment transferring data to an auxiliary laptop via USB. Power supply of EUT: 5Vdc (through USB port). Laptop power supply: 115Vac, 60Hz.

Images:



Tables:

Frequency(MHz)	MaxPeak(dBµV)	Average(dBµV)
0.327750	---	4.75
0.361500	13.49	---
0.566250	14.38	---
0.591000	---	4.58
1.326750	15.14	---
1.677750	---	5.37
4.526250	17.36	---
4.740000	---	6.95
8.945250	18.34	---
11.427000	---	7.46
29.148000	---	7.74
29.449500	18.32	---

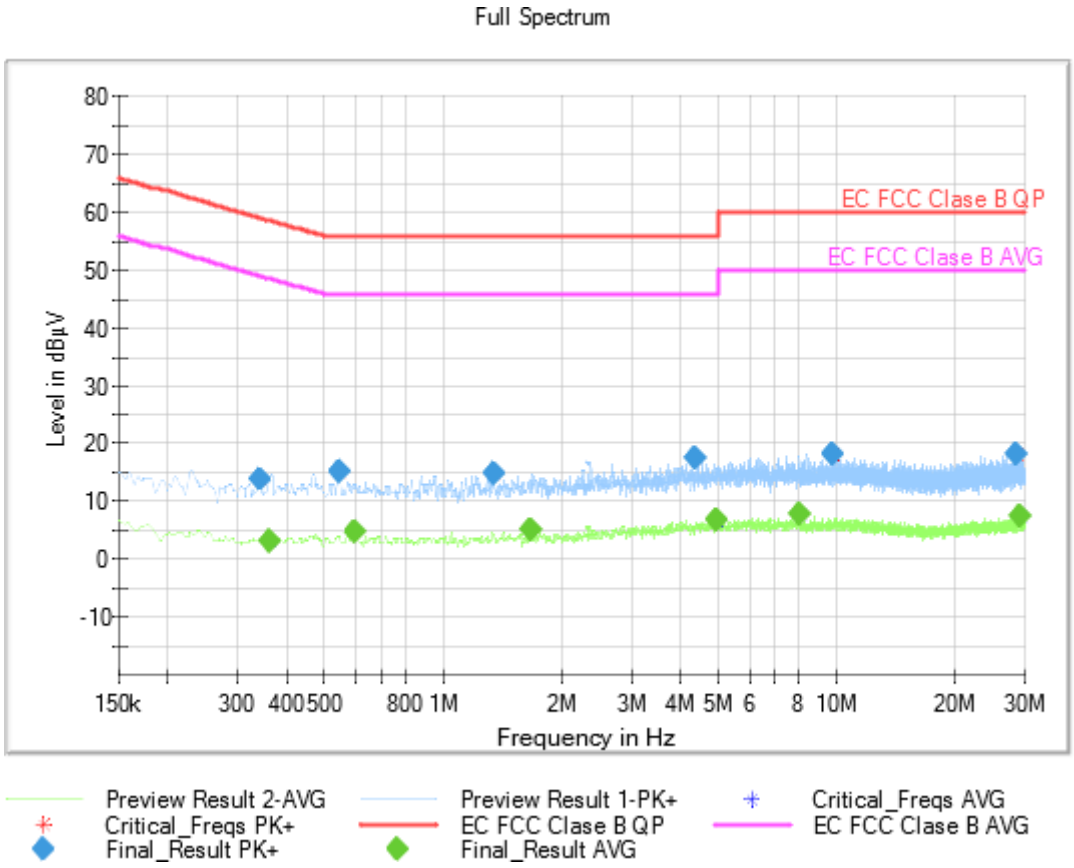
EMC Test Code = CE0206L1 Frequency Range MHz = [0.15, 30]

Conducted Emissions - Tested Line = L1

Sample ID: S/02

Operation Mode: OM/06. EUT ON. GNSS module (GPS) receiving a valid position signal. Equipment transferring data to an auxiliary laptop via USB. Power supply of EUT: 5Vdc (through USB port). Laptop power supply: 115Vac, 60Hz.

Images:



Tables:

Frequency(MHz)	MaxPeak(dBµV)	Average(dBµV)
0.341250	13.81	---
0.361500	---	3.13
0.546000	15.01	---
0.600000	---	4.62
1.351500	14.87	---
1.664250	---	5.03
4.402500	17.38	---
4.944750	---	6.64
8.056500	---	7.59
9.782250	18.23	---
28.639500	18.13	---
29.323500	---	7.53