EMC Test Report

Tested in accordance with
Federal Communications Commission (FCC)
Personal Communications Services
CFR 47, Parts 15.107, 15.109
&
Industry Canada (IC), ICES-003

REPORT NO.: RTS-6066-1509-05

PRODUCT MODEL NO.: RHK211LW (STV100-1)
TYPE NAME: BlackBerry® smartphone
FCC ID: L6ARHK210LW
IC: 2503A-RHK210LW

DATE: September 03, 2015

RTS is accredited
according to
EN ISO/IEC 17025 by:

592

Statement of Performance:

The BlackBerry® smartphone, model RHK211LW (STV100-1), part number CER-62541-001 Rev4-x06-01 and accessories when configured and operated per BlackBerry's operation instructions, performs within the requirements of the test standards.

Declaration:

We hereby certify that:
The test data reported herein is an accurate record of the performance of the sample(s) tested.
The test results are valid for the tested unit(s) only.
The test equipment used was suitable for the tests performed and within manufacturer's published specifications and operating parameters.
The test methods were consistent with the methods described in the relevant standards.

Documented by:

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Reviewed and Approved by:

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A. Scope

This report details the results of compliance tests that were performed in accordance with the requirements of:

- FCC CFR 47 Part 15, Subpart B, October, 2014 Class B Digital Devices, Unintentional Radiators
- IC ICES-003 Issue 5, August 2012, Information Technology Equipment (ITE) – Limits and methods of measurement

B. Associated Documents

1) RHK211LW-R149-HW_CER-62541-001 - Rev3-x06-02
2) RHK211LW-R149-HW_CER-62541-001 - Rev4-x06-01
3) MultiSourceDeclaration_R149_AAC056_upto_AAC273
4) MultiSourceDeclaration_R149_AAC273_upto_AAC380
5) MultiSourceDeclaration_R149_AAC380_upto_AAC396
6) Test Report RTS-6066-1509-05A

C. Product Identification

Manufactured by BlackBerry Limited whose headquarter is located at:

2200 University Ave. East
Waterloo, Ontario
Canada, N2K 0A7
Phone: 519 888 7465
Fax: 519 888 6906

The equipment under test (EUT) was tested at the following locations:

BlackBerry RTS EMC test facilities:

305 Phillip Street
Waterloo, Ontario
Canada, N2L 3W8
Phone: 519 888 7465
Fax: 519 888 6906

440 Phillip Street
Waterloo, Ontario
Canada, N2L 5R9
Phone: 519 888 7465
Fax: 519 888 6906

The testing was performed from July 22 to August 28, 2015.

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The sample EUT included:

SAMPLE	MODEL	HARDWARE	IMEI	Software
1	RHK211LW (STV100-1)	CER-62541-001 Rev3-x06-01	004402243071358	Software Build: AAC056
2	RHK211LW (STV100-1)	CER-62541-001 Rev3-x06-01	004402243071390	Software Build: AAC056
3	RHK211LW (STV100-1)	CER-62541-001 Rev3-x06-01	004402243070640	Software Build: AAC056
4	RHK211LW (STV100-1)	CER-62541-001 Rev4-x06-01	004402243079534	Software Build: AAC273
5	RHK211LW (STV100-1)	CER-62541-001 Rev4-x06-01	004402243079500	Software Build: AAC346
6	RHK211LW (STV100-1)	CER-62541-001 Rev4-x06-01	004402243079518	Software Build: AAC396

AC Powerline conducted testing was performed on samples 4 and 6.
Radiated Emissions testing was performed on samples 1, 2, 3 and 5.

The characteristics that may have been affected by the changes from Rev3-x06-01 to Rev4-x06-01 for RHK211LW were verified/re-tested.
For more details, refer to RHK211LW-R149-HW_CER-62541-001 - Rev3-x06-02, and RHK211LW-R149-HW_CER-62541-001 - Rev4-x06-01.

To view the differences between software builds AAC056 to AAC396 for RHK211LW, see document MultiSourceDeclaration_R149_AAC056_upto_AAC273, MultiSourceDeclaration_R149_AAC273_upto_AAC380, and MultiSourceDeclaration_R149_AAC380_upto_AAC396.

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BlackBerry® smartphone Accessories Tested

1) Fixed Blade Charger, part number HDW-58920-001 with an output voltage of 5.0 volts dc, 1300mA
2) Headset, part number HDW-49299-001, with a lead length of 1.1 metres
3) Alt.1 Headset, part number HDW-61938-001, with a lead length of 1.1 metres
4) Alt.2 Headset, part number 1060399, with a lead length of 1.1 metres
5) Alt.3 Headset, part number 1014826, with a lead length of 1.1 metres
6) USB Data Cable, part number HDW-50071-001, 0.9 metres long
7) Alt.1 USB Data Cable, part number HDW-51800-001, 0.9 metres long
8) Alt.2 USB Data Cable, part number HDW-50071-002, 1.2 metres long
9) Alt.3 USB Data Cable, part number HDW-51800-002, 1.2 metres long

D. Support Equipment Used for the Testing of the EUT

1) Lenovo Thinkpad laptop, type 4236-D84, S/N PB-HX502 12/02, product ID 4236D84
2) Phillips Monitor, Model MWE12244T, Product ID 2444E1SB/27
3) HDMI Cable, Model CTI AWM with a length of 1 metre
4) HDMI-to-USB Adapter, HDW-29572-001
5) Wireless Charger, Energizer, Model Number IC2B

E. Summary of Results

SPECIFICATION		TEST TYPE	Meets Requirement	Test Data APPENDIX
FCC CFR 47	IC			
Part 15.107	ICES-003,6.1	AC Powerline Conducted Emission	Yes	1 and Test Report RTS-6066-1509-05A
Part 15.109	ICES-003,6.2	Radiated Unintentional Spurious Emissions	Yes	2 and Test Report RTS-6066-1509-05A

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a) AC POWERLINE CONDUCTED EMISSIONS

The AC Powerline conducted emissions were measured using the test procedure outlined in CISPR Recommendation 32 through a 50 Ohm Line Impedance Stabilization Network (LISN), which was inserted in the powerline to the equipment to provide the specified impedance for measurements. The EUT was placed on a nonconductive wooden table, 80 cm high that was positioned 40 cm from a vertical ground plane. The RF output of the network was connected to an EMI Receiver/Analyzer system with characteristics that duplicate those of the receiver specified in CISPR Publication 16.
BlackBerry® smartphone was in battery charging mode. The input voltage was 120 V, 60 Hz.

Test Configuration	Operating Mode(s)	Charger + Accessories
1	PCS 1900, Idle, Charging and Video Playback, Slider Open	Fixed Blade Charger + Headset + USB Cable
2	LTE FDD 2, Idle, Charging and Audio Playback, Slider Close	Alt.1 Headset + Alt.1 USB Cable + Laptop
3	UMTS FDD II HSDPA+, Idle, Charging and Audio Playback, Slider Close	Fixed Blade Charger + Alt.1 Headset + Alt.1 USB Cable + Monitor + HDMI Cable + HDMI-to-USB Adapter
4	UMTS FDD IV DC HSDPA, Idle, Charging and Video Playback, Slider Close	Wireless Charger + Headset
5	LTE FDD 4+29 (CA), Idle, Charging and Audio Playback, Slider Close	Fixed Blade Charger + Headset + Alt.2 USB Cable
6	FM Radio, Idle, Charging and Audio Playback, Slider Close	***

*** Test results are leveraged from model RHL211LW (STV100-3) based on FM Radio similarity

The sample EUT's AC Powerline conducted emissions were compared with respect to the FCC CFR 47 Part 15.107, Class B Limit, and IC ICES-003, 6.1.
The sample EUT had a worst case test margin of 11.13 dB below the QP limit at 3.975 MHz using the QP detector in Test Configuration 4.

Measurement Uncertainty ±3.2 dB
To view the test data/plots, see APPENDIX 1.

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b) RADIATED UNINTENTIONAL SPURIOUS EMISSIONS

The radiated unintentional spurious emissions from the EUT were measured using the methods outlined in CISPR Recommendation 32. The EUT was placed on a nonconductive Styrofoam table, 80 cm high that was positioned on a remote controlled turntable. The test distance used between the EUT and the receiving antenna was three metres. The turntable was rotated to determine the azimuth of the peak emissions. The emissions were then maximized by elevating the antenna in the range of 1 to 4 metres. The maximum emission level was recorded. The radiated emissions were measured up to the fifth harmonic of the highest frequency of the band tested. Both the horizontal and vertical polarizations of the emissions were measured.

The measurements were done in a semi-anechoic chamber (SAC) below 1 GHz and a CISPR compliant modified semi-anechoic chamber (modified SAC) with floor absorbers above 1 GHz. The SAC's FCC registration number is **778487** and the Industry Canada (IC) file number is **2503B-1**. The modified SAC's FCC registration number is **959115** and the IC file number is **2503C-1**.

The EUT was configured and operated to produce the maximum radiated emissions while still keeping within BlackBerry's specifications.

The BlackBerry® smartphone was in battery charging mode for all configurations. The ac input voltage was 120V, 60Hz.

Test Configuration	Operating Mode(s)	Charger + Accessories
1	PCS 1900, Idle, Charging and Video Playback, Slider Open	Fixed Blade Charger + Headset + USB Cable
2	LTE FDD 2, Idle, Charging and Audio Playback, Slider Close	Alt.1 Headset + Alt.1 USB Cable + Laptop
3	NFC, Tx, Charging and Video Playback, Slider Close	Fixed Blade Charger + Headset + Alt.2 USB Cable
4	UMTS FDD II HSDPA+, Idle, Charging and Audio Playback, Slider Close	Fixed Blade Charger + Alt.1 Headset + Alt.1 USB Cable + Monitor + HDMI Cable + HDMI-to-USB Adapter

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Test Configuration	Operating Mode(s)	Charger + Accessories
5	UMTS FDD IV DC HSDPA, Idle, Charging and Video Playback, Slider Close	Wireless Charger + Headset
6	Bluetooth, Tx, Charging and Video Playback, Slider Open	Fixed Blade Charger + Alt.2 Headset + Alt.3 USB Cable
7	802.11b, Tx, Charging and Audio Playback, Slider Close	Fixed Blade Charger + Alt.3 Headset + Alt.1 USB Cable
8	802.11ac, Tx, Charging and Video Playback, Slider Open	Fixed Blade Charger + Alt.1 Headset + Alt.3 USB Cable
9	LTE FDD 4+29 (CA), Idle, Charging and Audio Playback, Slider Close	Fixed Blade Charger + Headset + Alt.2 USB Cable
10	FM Radio, Idle, Charging and Audio Playback, Slider Close	***

*** Test results are leveraged from model RHL211LW (STV100-3) based on FM Radio similarity

The system's radiated emission levels were compared with respect to the FCC CFR 47 Part 15.109, Class B limit and IC ICES-003, 6.2.
The system met the requirements with a worst case emission test margin of 1.67 dB below the QP limit at 39.95 MHz using QP detector in Test Configuration 1.
To view the test data see APPENDIX 2.

Sample Calculation:

Field Strength (dBµV/m) is calculated as follows:
FS = Measured Level (dBµV) + A.F. (dB/m) + Cable Loss (dB) - Preamp (dB) + Filter Loss (dB)

Measurement Uncertainty ±4.2 dB

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F. Compliance Test Equipment Used

UNIT	MANUFACTURER	MODEL	SERIAL NUMBER	CAL DUE DATE (YY MM DD)	USE
Preamplifier	Sonoma	310N/11909A	185831	15-10-22	Radiated Emissions
Preamplifier system	TDK RF Solutions	PA-02	080010	15-10-22	Radiated Emissions
EMI Receiver	Rohde & Schwarz	ESIB 40	100255	15-12-05	Radiated Emissions
Environment Monitor	OMEGA	iTHX-SD	0380561	16-11-15	Radiated Emission
Environment Monitor	OMEGA	iTHX-SD	0380567	16-11-15	Radiated Emission
L.I.S.N.	Rohde & Schwarz	ENV216	100060	15-10-08	AC Powerline Conducted Emissions
Hybrid Log Antenna	EMC Automation	HLP-3003C	017401	16-02-03	Radiated Emissions
Horn Antenna	EMC Automation	HRN-0118	030101	16-08-14	Radiated Emissions
Preamplifier	Rohde & Schwarz	TS-ANA-SP	001	15-09-10	Radiated Emissions
Universal Radio Communication Tester	Rohde & Schwarz	CMU 200	837493/073	15-12-09	Radiated Emissions
Universal Radio Communication Tester	Rohde & Schwarz	CMU 200	112394	15-12-05	Radiated/AC Powerline Conducted Emission
Universal Radio Communication Tester	Rohde & Schwarz	CMW500	101469	16-11-27	Radiated Emissions
Universal Radio Communication Tester	Rohde & Schwarz	CMW500	109949	16-11-27	Radiated /RF Conducted Emission
EMI Test Receiver	Rohde & Schwarz	ESU 40	100162	15-12-10	Radiated/AC Powerline Conducted Emission
Bluetooth Tester	Rohde & Schwarz	CBT	100368	15-11-25	Radiated Emissions
Bluetooth Tester	Rohde & Schwarz	CBT	100737	15-11-25	Radiated/AC Powerline Conducted Emission

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G. Test Software Used

SOFTWARE	COMPANY	VERSION	USE
EMC32	Rohde & Schwarz	8.52.0	Radiated Emissions
TDK Standard Emission Test	TDK RF Solutions	8.53.1.62	Radiated Emissions

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APPENDIX 1 - AC POWERLINE CONDUCTED EMISSIONS TEST DATA

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AC Powerline Conducted Emissions Test Results

The following tests were performed by Xing Fang.

Test Configuration 1

Date of the test: August 14, 2015
The environmental conditions were: Temperature: 25.4 °C
Humidity: 43.4 %

Frequency (MHz)	Line	Reading (QP) (dBµV)	Correction Factor (dB)	Corrected Reading (QP) (dBµV)	Limit (QP) (dBµV)	Limit (AV) (dBµV)	Margin (QP) Limits (dB)
0.492	N	30.54	9.92	40.46	56.10	46.10	-15.64
0.537	L1	27.74	9.89	37.63	56.00	46.00	-18.37
1.091	N	28.21	9.81	38.01	56.00	46.00	-17.99
1.113	L1	27.74	9.80	37.54	56.00	46.00	-18.46
2.072	N	24.01	9.83	33.84	56.00	46.00	-22.16
3.903	L1	22.87	9.90	32.77	56.00	46.00	-23.23
16.152	L1	29.80	10.13	39.93	60.00	50.00	-20.07

All other emissions are at least 25 dB below the limit.
Measurements were done with the quasi-peak detector.
See figure 1-1 and figure 1-2 for the measurement plot of the L1 and N lines of AC power line conducted emissions.

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AC Powerline Conducted Emissions Test Graphs

Test Configuration 1

Figure 1-1: L1 lines

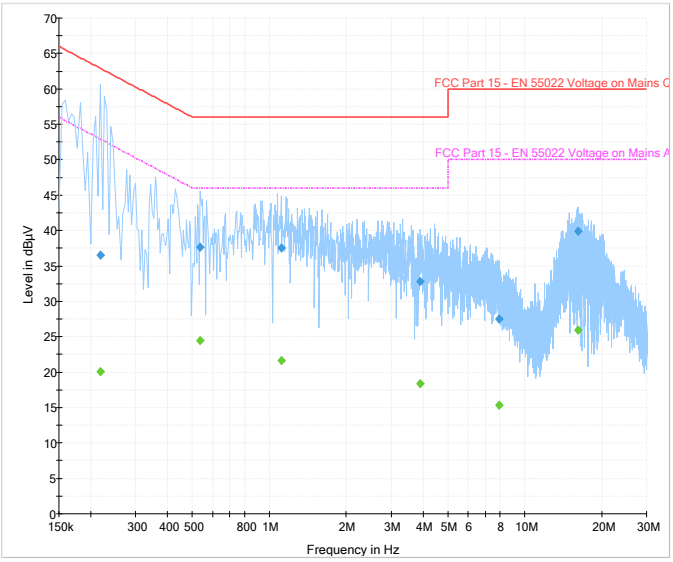
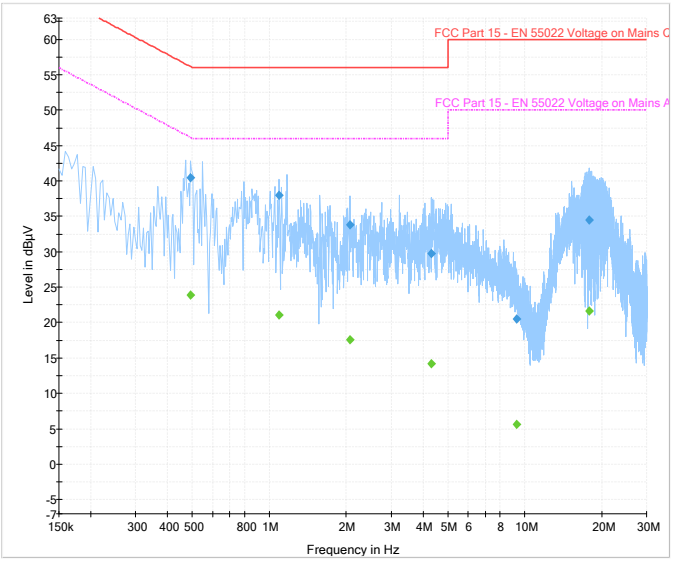


Figure 1-2: N Lines



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AC Powerline Conducted Emissions Test Results cont'd

Test Configuration 2

Date of the test: August 14, 2015
The environmental conditions were: Temperature: 25.4 °C
Humidity: 43.4 %

Frequency (MHz)	Line	Reading (QP) (dBµV)	Correction Factor (dB)	Corrected Reading (QP) (dBµV)	Limit (QP) (dBµV)	Limit (AV) (dBµV)	Margin (QP) Limits (dB)
0.245	N	32.57	10.57	43.14	61.90	51.90	-18.76
0.515	L1	30.57	9.90	40.47	56.00	46.00	-15.53
0.798	N	28.32	9.82	38.14	56.00	46.00	-17.86
0.879	L1	22.98	9.81	32.79	56.00	46.00	-23.21
1.986	L1	24.37	9.82	34.20	56.00	46.00	-21.80
14.618	N	26.94	10.09	37.03	60.00	50.00	-22.98
15.810	L1	27.24	10.08	37.32	60.00	50.00	-22.68

All other emissions are at least 25 dB below the limit.
Measurements were done with the quasi-peak detector.
See figure 1-3 and figure 1-4 for the measurement plot of the L1 and N lines of AC power line conducted emissions.

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AC Powerline Conducted Emissions Test Graphs

Test Configuration 2

Figure 1-3: L1 lines

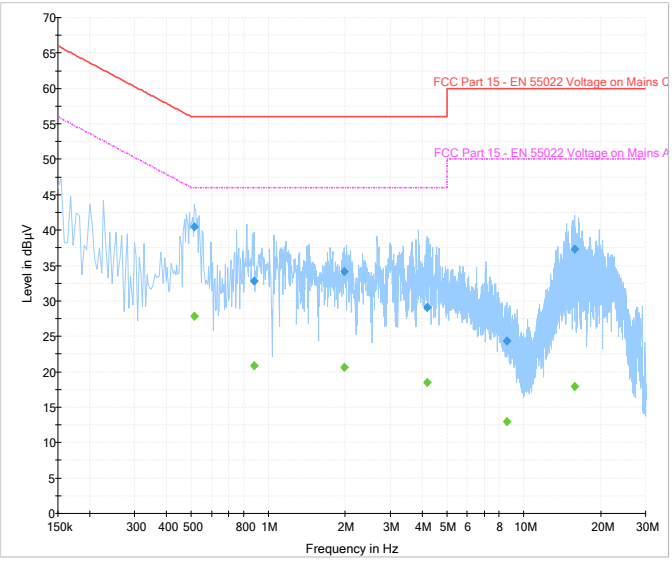
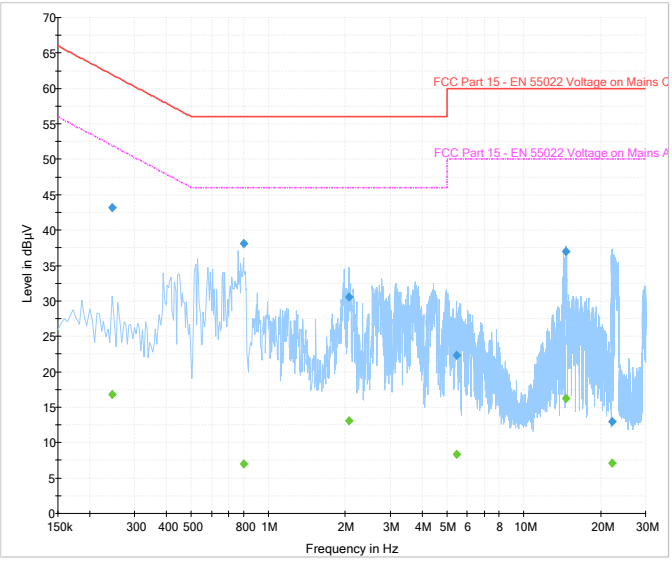


Figure 1-4: N Lines



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AC Powerline Conducted Emissions Test Results cont'd

Test Configuration 3

Date of the test: August 14, 2015
The environmental conditions were: Temperature: 25.4 °C
Humidity: 43.4 %

Frequency (MHz)	Line	Reading (QP) (dBµV)	Correction Factor (dB)	Corrected Reading (QP) (dBµV)	Limit (QP) (dBµV)	Limit (AV) (dBµV)	Margin (QP) Limits (dB)
0.222	L1	33.23	10.70	43.93	62.70	52.70	-18.77
0.479	L1	33.81	9.92	43.73	56.40	46.40	-12.67
0.488	N	32.18	9.92	42.11	56.20	46.20	-14.09
1.104	L1	29.51	9.80	39.32	56.00	46.00	-16.69
1.163	N	28.88	9.80	38.68	56.00	46.00	-17.32
2.382	L1	21.78	9.84	31.62	56.00	46.00	-24.38
2.774	N	23.91	9.87	33.78	56.00	46.00	-22.22
16.512	L1	27.79	10.14	37.93	60.00	50.00	-22.07
18.186	N	25.42	10.23	35.66	60.00	50.00	-24.34

All other emissions are at least 25 dB below the limit.
Measurements were done with the quasi-peak detector.
See figure 1-5 and figure 1-6 for the measurement plot of the L1 and N lines of AC power line conducted emissions.

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AC Powerline Conducted Emissions Test Graphs

Test Configuration 3

Figure 1-5: L1 lines

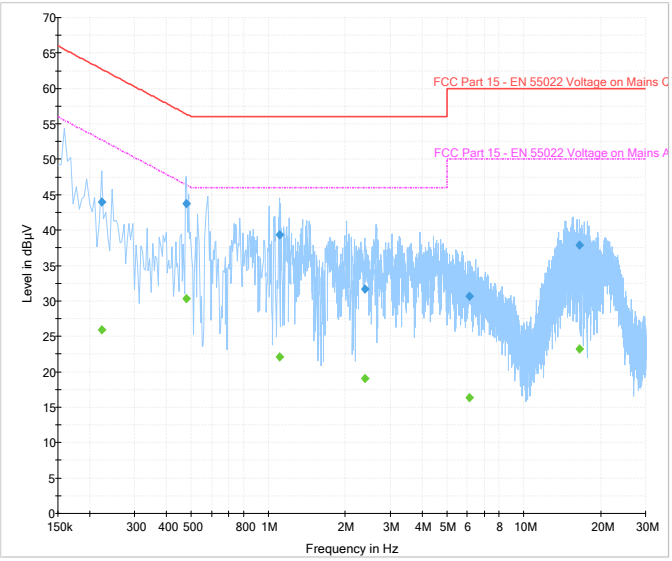
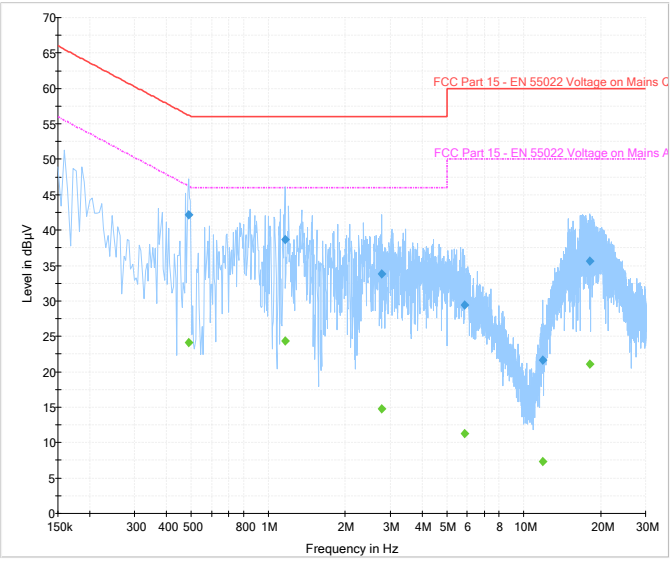


Figure 1-6: N Lines



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AC Powerline Conducted Emissions Test Results cont'd

Test Configuration 4

Date of the test: August 27, 2015
The environmental conditions were: Temperature: 27.1 °C
Humidity: 37.3 %

Frequency (MHz)	Line	Reading (QP) (dBµV)	Correction Factor (dB)	Corrected Reading (QP) (dBµV)	Limit (QP) (dBµV)	Limit (AV) (dBµV)	Margin (QP) Limits (dB)
0.182	N	38.12	11.01	49.13	64.40	54.40	-15.27
0.195	L1	39.87	10.89	50.76	63.80	53.80	-13.04
0.357	L1	27.61	10.08	37.69	58.80	48.80	-21.11
0.600	N	30.00	9.86	39.86	56.00	46.00	-16.14
1.401	L1	23.77	9.80	33.57	56.00	46.00	-22.43
1.829	N	30.80	9.82	40.62	56.00	46.00	-15.38
3.975	N	34.96	9.90	44.87	56.00	46.00	**-11.13**
5.478	N	35.08	9.91	45.00	60.00	50.00	-15.00

All other emissions are at least 25 dB below the limit.
Measurements were done with the quasi-peak detector.
See figure 1-7 and figure 1-8 for the measurement plot of the L1 and N lines of AC power line conducted emissions.

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AC Powerline Conducted Emissions Test Graphs

Test Configuration 4

Figure 1-7: L1 lines

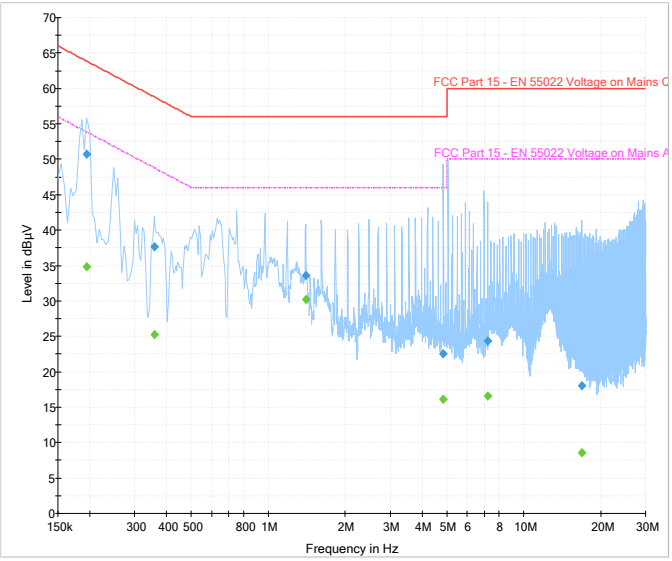
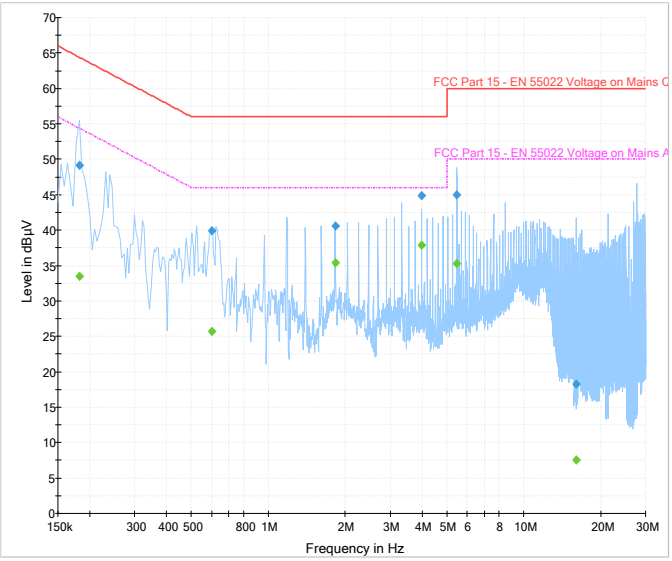


Figure 1-8: N Lines



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AC Powerline Conducted Emissions Test Results cont'd

Test Configuration 5

Date of the test: August 28, 2015
The environmental conditions were: Temperature: 23.1 °C
Humidity: 43.4 %

Frequency (MHz)	Line	Reading (QP) (dBµV)	Correction Factor (dB)	Corrected Reading (QP) (dBµV)	Limit (QP) (dBµV)	Limit (AV) (dBµV)	Margin (QP) Limits (dB)
0.195	L1	38.63	10.89	49.52	63.80	53.80	-14.28
0.276	N	30.99	10.34	41.33	60.90	50.90	-19.57
0.488	L1	28.14	9.92	38.05	56.20	46.20	-18.15
1.041	N	28.99	9.81	38.80	56.00	46.00	-17.20
1.109	L1	28.53	9.80	38.33	56.00	46.00	-17.67
2.004	N	24.88	9.83	34.71	56.00	46.00	-21.29
2.405	L1	23.16	9.84	33.00	56.00	46.00	-23.00
4.079	N	22.36	9.90	32.26	56.00	46.00	-23.74
14.946	L1	26.72	10.07	36.78	60.00	50.00	-23.22
17.214	N	29.53	10.20	39.73	60.00	50.00	-20.27

All other emissions are at least 25 dB below the limit.
Measurements were done with the quasi-peak detector.
See figure 1-9 and figure 1-10 for the measurement plot of the L1 and N lines of AC power line conducted emissions.

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AC Powerline Conducted Emissions Test Graphs

Test Configuration 5

Figure 1-9: L1 lines

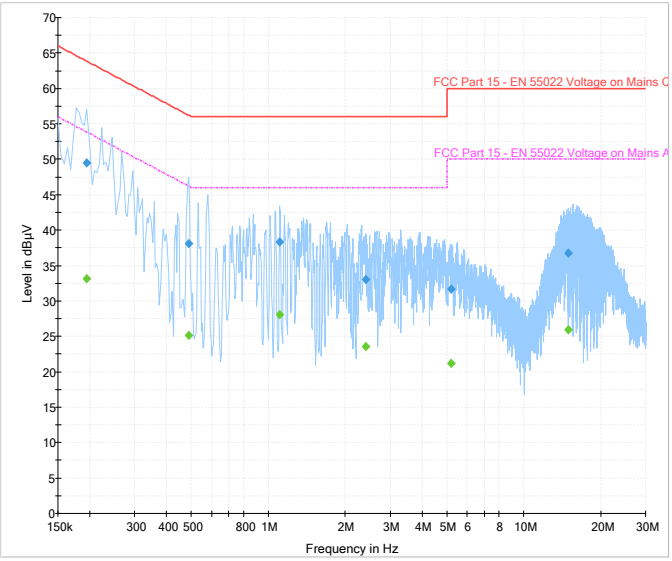
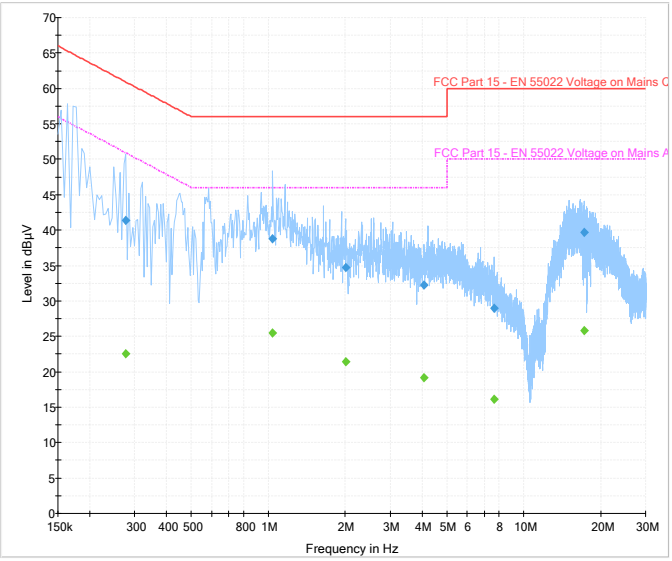


Figure 1-10: N Lines



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APPENDIX 2 - RADIATED UNINTENTIONAL SPURIOUS EMISSIONS TEST DATA

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Radiated Unintentional Spurious Emissions Test Results

The following tests were performed by Imran Kanji and Kevin Guo.

Test Configuration 1

Date of the test: July 22 and 24, 2015
The environmental conditions were: Temperature: 24.9 °C
Humidity: 34.7 %

Frequency (MHz)	Antenna Pol. (V/H)	Antenna Height (metres)	Test Angle (Deg.)	Detector (Q.P. or Peak)	Measured Level (dBµV)	Correction Factor for preamp/antenna / cables/ filter (dB/m)	Field Strength Level (reading +corr) (dBµV/m)	Limit @ 3.0 m (dBµV/m)	Test Margin (dB)
41.250	V	2.36	201.00	Q.P.	31.89	-13.97	17.92	40.00	-22.08
65.150	V	1.66	58.00	Q.P.	33.94	-15.12	18.82	40.00	-21.18
67.750	V	1.46	84.00	Q.P.	33.89	-14.79	19.10	40.00	-20.90
86.500	V	2.46	67.00	Q.P.	34.16	-13.15	21.01	40.00	-18.99
191.800	V	1.72	354.00	Q.P.	32.33	-9.00	23.33	43.50	-20.17

All other emissions are at least 25 dB below the limit.

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Radiated Unintentional Spurious Emissions Test Results cont'd

Test Configuration 2

Date of the test: July 24 and August 07, 2015
The environmental conditions were: Temperature: 25.9 °C
Humidity: 31.2 %

Frequency (MHz)	Antenna Pol. (V/H)	Antenna Height (metres)	Test Angle (Deg.)	Detector (Q.P. or Peak)	Measured Level (dBµV)	Correction Factor for preamp/antenna / cables/ filter (dB/m)	Field Strength Level (reading +corr) (dBµV/m)	Limit @ 3.0 m (dBµV/m)	Test Margin (dB)
33.800	V	1.88	229.00	Q.P.	44.65	-12.09	32.56	40.00	-7.44
39.950	V	1.40	191.00	Q.P.	52.19	-13.86	38.33	40.00	**-1.67**
58.350	V	2.46	69.00	Q.P.	46.08	-15.38	30.70	40.00	-9.30
76.850	H	1.84	173.00	Q.P.	42.07	-13.81	28.26	40.00	-11.74
119.850	V	1.47	68.00	Q.P.	39.71	-10.98	28.73	43.50	-14.77
236.550	H	1.59	287.00	Q.P.	32.87	-8.61	24.26	46.00	-21.74
999.950	H	1.38	7.00	Q.P.	22.70	9.80	32.50	54.00	-21.50

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Radiated Unintentional Spurious Emissions Test Results cont'd

Test Configuration 3

Date of the test: August 20, 2015
The environmental conditions were: Temperature: 26.1 °C
Humidity: 37.7 %

Frequency (MHz)	Antenna Pol. (V/H)	Antenna Height (metres)	Test Angle (Deg.)	Detector (Q.P. or Peak)	Measured Level (dBµV)	Correction Factor for preamp/antenna / cables/ filter (dB/m)	Field Strength Level (reading +corr) (dBµV/m)	Limit @ 3.0 m (dBµV/m)	Test Margin (dB)
30.250	V	1.39	30.00	Q.P.	35.44	-11.14	24.30	40.00	-15.70
90.650	V	1.55	48.00	Q.P.	35.75	-12.68	23.07	43.50	-20.43
186.600	V	1.40	317.00	Q.P.	34.61	-9.70	24.91	43.50	-18.59

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Radiated Unintentional Spurious Emissions Test Results cont'd

Test Configuration 4

Date of the test: July 24 and August 07, 2015
The environmental conditions were: Temperature: 26.7 °C
Humidity: 30.0 %

Frequency (MHz)	Antenna Pol. (V/H)	Antenna Height (metres)	Test Angle (Deg.)	Detector (Q.P. or Peak)	Measured Level (dBµV)	Correction Factor for preamp/antenna / cables/ filter (dB/m)	Field Strength Level (reading+corr) (dBµV/m)	Limit @ 3.0 m (dBµV/m)	Test Margin (dB)
31.100	V	1.48	185.00	Q.P.	28.19	-11.37	16.82	40.00	-23.18
75.450	V	1.92	125.00	Q.P.	43.03	-13.99	29.04	40.00	-10.96
100.050	H	2.54	187.00	Q.P.	36.14	-11.96	24.18	43.50	-19.32
126.000	V	1.50	14.00	Q.P.	46.45	-10.93	35.52	43.50	-7.98
146.150	V	1.43	187.00	Q.P.	33.86	-10.84	23.02	43.50	-20.48
253.600	H	1.87	334.00	Q.P.	46.05	-8.31	37.74	46.00	-8.26
364.200	H	1.72	334.00	Q.P.	42.01	-3.76	38.25	46.00	-7.75
378.000	V	1.48	354.00	Q.P.	44.16	-3.62	40.54	46.00	-5.46

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Radiated Unintentional Spurious Emissions Test Results cont'd

Test Configuration 5

Date of the test: July 24 and August 21, 2015
The environmental conditions were: Temperature: 26.1 °C
Humidity: 37.7 %

Frequency (MHz)	Antenna Pol. (V/H)	Antenna Height (metres)	Test Angle (Deg.)	Detector (Q.P. or Peak)	Measured Level (dBµV)	Correction Factor for preamp/antenna / cables/ filter (dB/m)	Field Strength Level (reading+corr) (dBµV/m)	Limit @ 3.0 m (dBµV/m)	Test Margin (dB)
40.800	V	1.67	249.00	Q.P.	39.87	-13.94	25.93	40.00	-14.07
58.800	V	1.88	266.00	Q.P.	52.49	-15.41	37.08	40.00	-2.92
77.100	V	1.49	198.00	Q.P.	50.96	-13.81	37.15	40.00	-2.85
85.300	V	1.78	55.00	Q.P.	42.41	-13.35	29.06	40.00	-10.94
167.150	V	1.78	327.00	Q.P.	41.06	-10.76	30.30	43.50	-13.20
223.200	V	1.54	345.00	Q.P.	38.78	-7.99	30.79	46.00	-15.21

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Radiated Unintentional Spurious Emissions Test Results cont'd

Test Configuration 6

Date of the test: July 24 and 27, 2015
The environmental conditions were: Temperature: 26.6 °C
Humidity: 36.7 %

Frequency (MHz)	Antenna Pol. (V/H)	Antenna Height (metres)	Test Angle (Deg.)	Detector (Q.P. or Peak)	Measured Level (dBµV)	Correction Factor for preamp/antenna / cables/ filter (dB/m)	Field Strength Level (reading+corr) (dBµV/m)	Limit @ 3.0 m (dBµV/m)	Test Margin (dB)
35.600	V	1.77	291.00	Q.P.	31.21	-12.70	18.51	40.00	-21.49
45.900	V	1.50	107.00	Q.P.	33.89	-14.57	19.32	40.00	-20.68
87.000	V	1.49	263.00	Q.P.	41.91	-13.01	28.90	40.00	-11.10
158.150	H	2.26	196.00	Q.P.	31.76	-10.99	20.77	43.50	-22.73
188.600	V	1.48	141.00	Q.P.	29.39	-9.53	19.86	43.50	-23.64
283.900	H	1.33	185.00	Q.P.	28.62	-7.52	21.10	46.00	-24.90
415.000	H	2.61	21.00	Q.P.	30.84	-1.97	28.87	46.00	-17.13

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Radiated Unintentional Spurious Emissions Test Results cont'd

Test Configuration 7

Date of the test: August 06, 2015
The environmental conditions were: Temperature: 25.8 °C
Humidity: 35.7 %

Frequency (MHz)	Antenna Pol. (V/H)	Antenna Height (metres)	Test Angle (Deg.)	Detector (Q.P. or Peak)	Measured Level (dBµV)	Correction Factor for preamp/antenna / cables/ filter (dB/m)	Field Strength Level (reading+corr) (dBµV/m)	Limit @ 3.0 m (dBµV/m)	Test Margin (dB)
48.750	V	1.76	354.00	Q.P.	32.71	-15.01	17.70	40.00	-22.30
58.200	V	1.40	83.00	Q.P.	36.11	-15.37	20.74	40.00	-19.26
90.300	V	1.52	114.00	Q.P.	38.17	-12.72	25.45	43.50	-18.05
187.950	H	1.71	11.00	Q.P.	34.83	-9.62	25.21	43.50	-18.29

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Radiated Unintentional Spurious Emissions Test Results cont'd

Test Configuration 8

Date of the test: August 06, 2015
The environmental conditions were: Temperature: 25.9 °C
Humidity: 36.4 %

Frequency (MHz)	Antenna Pol. (V/H)	Antenna Height (metres)	Test Angle (Deg.)	Detector (Q.P. or Peak)	Measured Level (dBµV)	Correction Factor for preamp/antenna / cables/ filter (dB/m)	Field Strength Level (reading+corr) (dBµV/m)	Limit @ 3.0 m (dBµV/m)	Test Margin (dB)
47.500	V	1.40	10.00	Q.P.	35.81	-14.91	20.90	40.00	-19.10
58.250	V	1.50	71.00	Q.P.	33.48	-15.37	18.11	40.00	-21.89
92.100	V	1.40	50.00	Q.P.	40.41	-12.54	27.87	43.50	-15.63
172.400	V	1.45	305.00	Q.P.	36.35	-10.50	25.85	43.50	-17.65
187.300	H	2.06	354.00	Q.P.	34.29	-9.66	24.63	43.50	-18.87

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Radiated Unintentional Spurious Emissions Test Results cont'd

Test Configuration 9

Date of the test: August 25 and 26, 2015
The environmental conditions were: Temperature: 26.2 °C
Humidity: 33.3 %

Frequency (MHz)	Antenna Pol. (V/H)	Antenna Height (metres)	Test Angle (Deg.)	Detector (Q.P. or Peak)	Measured Level (dBµV)	Correction Factor for preamp/antenna / cables/ filter (dB/m)	Field Strength Level (reading+corr) (dBµV/m)	Limit @ 3.0 m (dBµV/m)	Test Margin (dB)
31.200	V	1.48	202.00	Q.P.	31.29	-11.41	19.88	40.00	-20.12
36.850	V	1.54	153.00	Q.P.	27.96	-12.96	15.00	40.00	-25.00
56.550	V	1.42	173.00	Q.P.	37.62	-15.33	22.29	40.00	-17.71
186.800	V	1.42	325.00	Q.P.	35.75	-9.69	26.06	43.50	-17.44

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