74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Korea
TEL: +82-31-645-6300 FAX: +82-31-645-6401

FCC REPORT

FCC Certification

Applicant Name:
SNPowercom Co. Ltd.

Address:
#805 Anyang K-Center, 25 Simin-daero 248beon-gil,
Dongan-gu, Anyang-si, Gyeonggi-do, Korea, 431-815

Date of Issue:
November 02, 2015

Test Site/Location:
HCT CO., LTD., 74, Seoicheon-ro 578beon-gil,
Majang-myeon, Icheon-si, Gyeonggi-do, Korea

Report No.: HCT-R-1510-F001-2

HCT FRN: 0005866421

FCC ID	**: 2AAZ7-S120**
APPLICANT	**: SNPowercom Co. Ltd.**

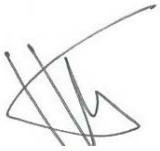
FCC Model(s):	S120
EUT Type:	Wireless Charger
Max. RF Output Power:	5.69 uV/m
Frequency Range:	110 kHz ~ 205 kHz
FCC Classification:	FCC Part 15 Low Power Transmitter Below 1705 kHz
FCC Rule Part(s):	Part 15 subpart C 15.209

Engineering Statement:

The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.

HCT CO., LTD. Certifies that no party to this application has subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998,21 U.S. C.853(a)

Report prepared by
: Kyung Soo Kang
Test Engineer of RF Team



Approved by
: Kyoung Houn Seo
Manager of RF Team

Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-R-1510-F001	October 02, 2015	- First Approval Report
HCT-R-1510-F001-1	October 16, 2015	-Revised the Frequency Range (112-205 kHz -> 125-205 kHz)
HCT-R-1510-F001-2	November 02, 2015	-Revised the Frequency Range (125-205 kHz -> 110-205 kHz)

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1. GENERAL INFORMATION

Applicant:	SNPowercom Co. Ltd.
Address:	#805 Anyang K-Center, 25 Simin-daero 248beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, Korea, 431-815
FCC ID:	2AAZ7-S120
EUT Type:	Wireless Charger
Model name(s):	S120
Date(s) of Tests:	September 24, 2015 ~ October 02, 2015
Place of Tests:	HCT Co., Ltd. 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Korea (IC Recognition No. : 5944A-3)

2. EUT DESCRIPTION

EUT Type	Wireless Charger
FCC Model Name	S120
Power Supply	DC 5.0 V
Frequency Range	110 kHz ~ 205 kHz
Transmit Power	5.69 uV/m(at 300 m)

3. TEST METHODOLOGY

The measurement procedure described in the American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices(ANSI C63.10-2013).

3.1 EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

3.2 EUT EXERCISE

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. According to its specifications, the EUT must comply with the requirements of the Section 15.207, 15.209 under the FCC Rules Part 15 Subpart C.

3.3 GENERAL TEST PROCEDURES

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 6.2 of ANSI C63.10. (Version :2013) Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

According to the requirements in Section 6.11.2 of ANSI C63.10. (Version: 2013).

For radiated emission measurements performed on an EUT operating on frequencies below 30 MHz, a calibrated loop antenna shall be positioned with its plane vertical at the specified distance from the EUT and rotated about its vertical axis for maximum response at each azimuth position around the EUT. For certain applications, the loop antenna might also need to be positioned with its plane horizontal at the specified distance from the EUT. The center of the loop shall be 1 m above the ground.

3.4 DESCRIPTION OF TEST MODES

The EUT has been tested under operating condition. Test program used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

Test channel is one because frequency range is within 1 MHz.

4. INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration

equipments, which is traceable to recognized national standards.

5. FACILITIES AND ACCREDITATIONS

5.1 FACILITIES

The SAC(Semi-Anechoic Chamber) and conducted measurement facility used to collect the radiated data are located at the 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Korea. The site is constructed in conformance with the requirements of ANSI C63.4. (Version :2014) and CISPR Publication 22. Detailed description of test facility was submitted to the Commission and accepted dated July 07, 2015 (Registration Number: 90661)

5.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of Linearly polarized antennas: tuned dipole, bi-conical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements. Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers. Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, “Radio Interference Measuring Apparatus and Measurement Methods.”

6. ANTENNA REQUIREMENTS

According to FCC 47 CFR §15.203:

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.”

* The antennas of this E.U.T are permanently attached.

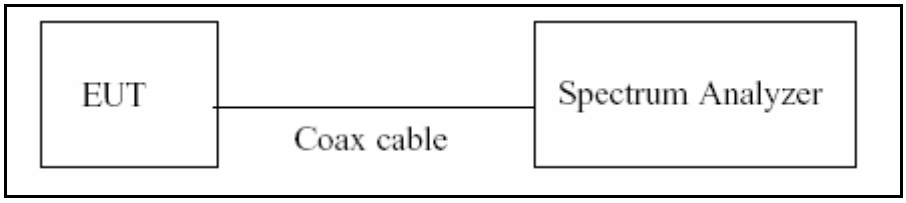
*The E.U.T Complies with the requirement of §15.203

7. SUMMARY OF TEST RESULTS

Test Description	FCC Part Section(s)	Test Limit	Test Condition	Test Result
Occupied Bandwidth	§2.1049	NA	CONDUCTED	NA
AC Power line Conducted Emissions	§15.207(a)	cf. Section 8.7		PASS
Radiated Spurious Emissions	§15.205,15.209	cf. Section 8.6.2	RADIATED	PASS

8. 20 dB BANDWIDTH & OCCUPIED BANDWIDTH(99 % BW)

TEST CONFIGURATION



TEST PROCEDURE

The 20 dB bandwidth and occupied bandwidth(99 % emission bandwidth) are measured with a spectrum analyzer connected via a receiving antenna placed near the EUT while the EUT is operating.

Test Data

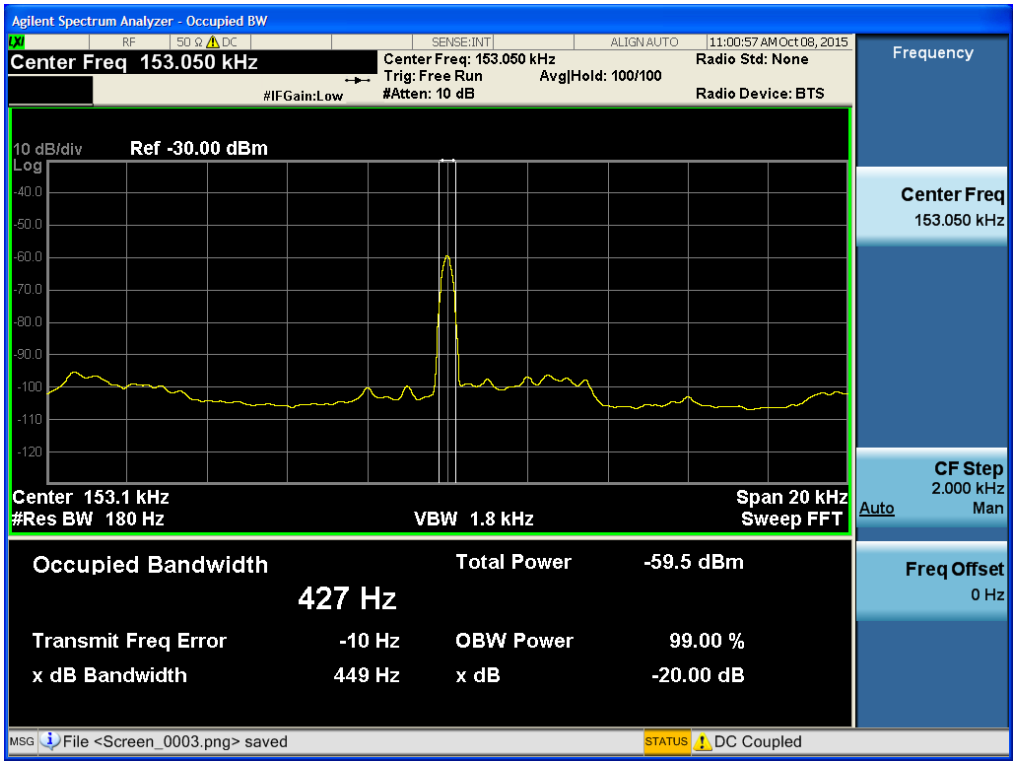
20dB Bandwidth (Hz)	
Load 1 %	**449**
Load 50 %	**452**
Load 100 %	**451**

Occupied Bandwidth (99% BW)

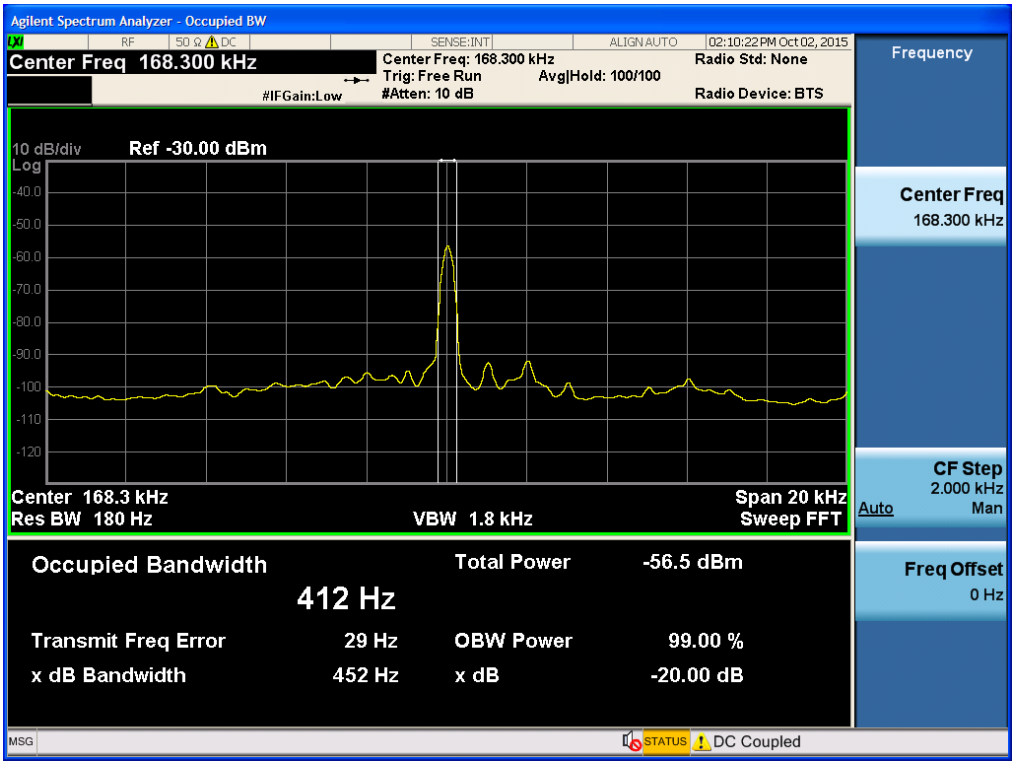
99% BW (Hz)	
Load 1 %	**427**
Load 50 %	**412**
Load 100 %	**385**

Test Plot

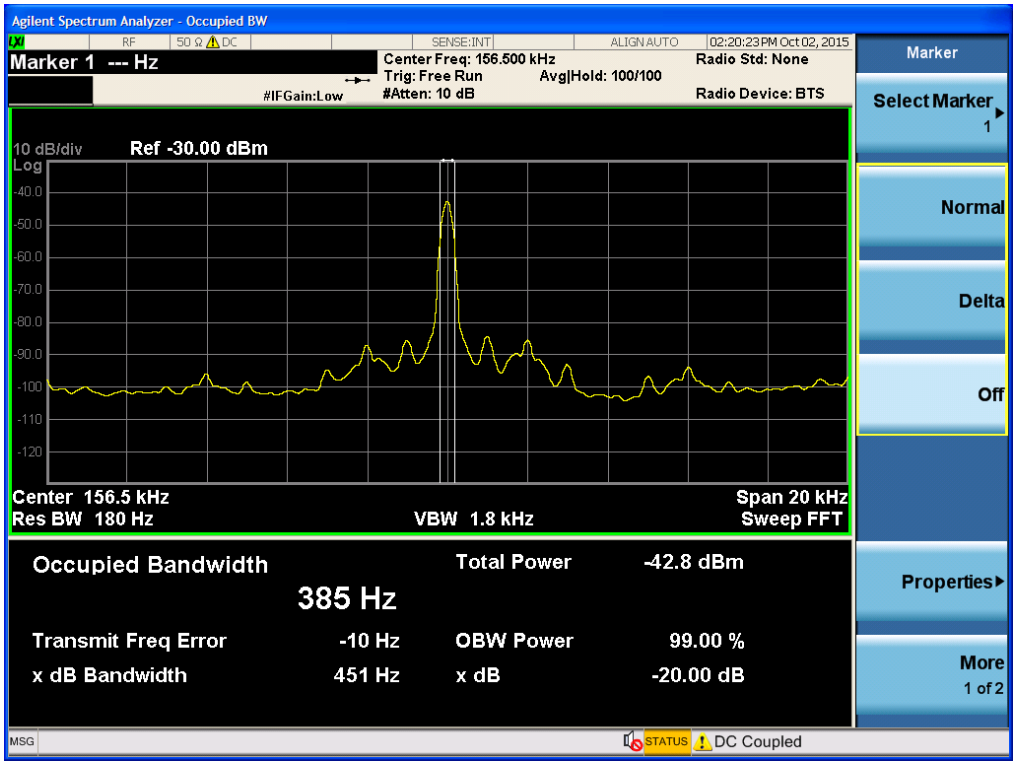
Load 1 %



Load 50 %



Load 100 %


Agilent Spectrum Analyzer - Occupied BW
RF
50 Ω DC
SENSE:INT
ALIGN AUTO
02:20:23 PM Oct 02, 2015
Marker 1 --- Hz
#IFGain:Low
Center Freq: 156.500 kHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 10 dB
Radio Std: None
Radio Device: BTS
10 dB/div
Log
Ref -30.00 dBm
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
-100
-110
-120
Center 156.5 kHz
Res BW 180 Hz
VBW 1.8 kHz
Span 20 kHz
Sweep FFT
Occupied Bandwidth
385 Hz
Total Power
-42.8 dBm
Transmit Freq Error
-10 Hz
OBW Power
99.00 %
x dB Bandwidth
451 Hz
x dB
-20.00 dB
MSG
STATUS
DC Coupled
Marker
Select Marker
1
Normal
Delta
Off
Properties
More
1 of 2

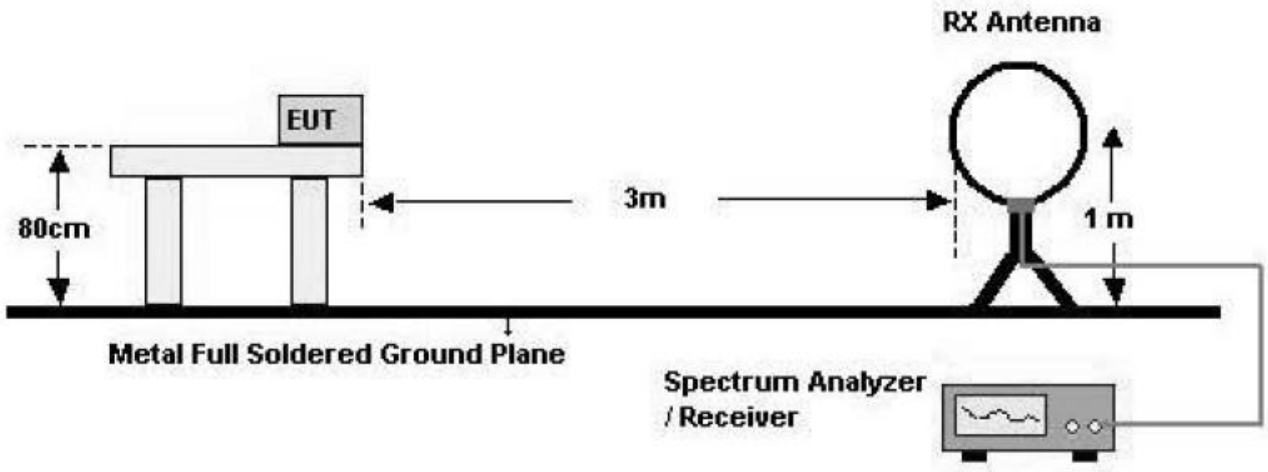
9.RADIATED SPURIOUS EMISSIONS

LIMIT : FCC Part 15.209(a)

Frequency (MHz)	Field Strength (uV/m)	Measurement Distance (m)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

TEST CONFIGURATION

Below 30 MHz



TEST RESULTS

Measurement Distance : 3 m

Load 1 %

Frequency [kHz]	Reading [dBuV]	※A.F+CL [dB]	D.C.F [dB]	ANT. POL [H/V]	Total [dBuV/m]	Total [uV/m]	Limit [uV/m]	Margin [dB]	Detect
*157.2	52.66	20.086	-80	H	-7.254	0.43	15.27	14.84	PK
314.40	22.2	20.136	-80	H	-37.664	0.013	7.63	7.617	PK
472.80	32.57	20.136	-80	H	-27.294	0.04	5.08	5.04	PK
*157.2	43.24	20.086	-80	V	-16.674	0.15	15.29	15.14	PK
314.40	22.4	20.136	-80	V	-37.464	0.013	7.64	7.627	PK
472.80	25.27	20.136	-80	V	-34.594	0.019	5.11	5.091	PK

Notes:

1. PK : Peak, QP : CISPR quasi-peak, D.C.F : Distance Correction Factor
2. Measuring frequencies from 9 kHz to the 30MHz.
3. The reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. D.C.F. = 40 log (specific distance / test distance) (dB)
   40 log (300/3) = 80 (for 0.009 MHz – 0.490 MHz)
   40 log (30/3) = 40 (for 0.490 MHz – 30 MHz)
5. We have done x planes in EUT and horizontal and vertical polarization in detecting antenna.
6. '*' is fundamental frequency.
7. We performed radiated test using the peak detect for Frequency 169.84 kHz and 339.68 kHz. Because peak detect mode is the worst case against average detect mode.

Measurement Distance : 3 m

Load 50 %

Frequency [kHz]	Reading [dBuV]	※A.F+CL [dB]	D.C.F [dB]	ANT. POL [H/V]	Total [dBuV/m]	[uV/m]	Limit [uV/m]	Margin [dB]	Detect
*169.84	54.1	20.086	-80	H	-5.814	0.51	14.13	13.62	PK
339.68	33.06	20.136	-80	H	-26.804	0.05	7.07	7.02	PK
509.52	34.96	20.136	-40	H	15.096	5.69	47.1	41.41	QP
*169.84	48.5	20.086	-80	V	-11.414	0.27	14.13	13.86	PK
339.68	32.13	20.136	-80	V	-27.734	0.04	7.07	7.03	PK
509.52	33.29	20.136	-40	V	13.426	4.69	47.1	42.41	QP

Notes:

1. PK : Peak, QP : CISPR quasi-peak, D.C.F : Distance Correction Factor
2. Measuring frequencies from 9 kHz to the 30MHz.
3. The reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. D.C.F. = 40 log (specific distance / test distance) (dB)
   40 log (300/3) = 80 (for 0.009 MHz – 0.490 MHz)
   40 log (30/3) = 40 (for 0.490 MHz – 30 MHz)
5. We have done x planes in EUT and horizontal and vertical polarization in detecting antenna.
6. '*' is fundamental frequency.
7. We performed radiated test using the peak detect for Frequency 169.84 kHz and 339.68 kHz. Because peak detect mode is the worst case against average detect mode.

Measurement Distance : 3 m

Load 100 %

Frequency [kHz]	Reading [dBuV]	※A.F+CL [dB]	D.C.F [dB]	ANT. POL [H/V]	Total [dBuV/m]	Total [uV/m]	Limit [uV/m]	Margin [dB]	Detect
*156.64	55.85	20.086	-80	H	-4.064	0.63	15.32	14.69	PK
313.28	31.94	20.136	-80	H	-27.924	0.04	7.66	7.62	PK
469.92	36.85	20.136	-80	H	-23.014	0.07	5.11	5.04	PK
*156.64	48.97	20.086	-80	V	-10.944	0.28	15.32	15.04	PK
313.28	33.04	20.136	-80	V	-26.824	0.05	7.66	7.61	PK
469.92	33.85	20.136	-80	V	-26.014	0.05	5.11	5.06	PK

Notes:

1. PK : Peak, QP : CISPR quasi-peak, D.C.F : Distance Correction Factor
2. Measuring frequencies from 9 kHz to the 30MHz.
3. The reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
4. D.C.F. = 40 log (specific distance / test distance) (dB)
   40 log (300/3) = 80 (for 0.009 MHz – 0.490 MHz)
   40 log (30/3) = 40 (for 0.490 MHz – 30 MHz)
5. We have done x planes in EUT and horizontal and vertical polarization in detecting antenna.
6. '*' is fundamental frequency.
7. We performed radiated test using the peak detect.
   Because peak detect mode is the worst case against average detect mode.

10. POWERLINE CONDUCTED EMISSIONS

LIMIT

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolt (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range is listed as follows:

Frequency Range (MHz)	Limits (dBμV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

Test Configuration

See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

TEST PROCEDURE

1. The EUT is placed on a wooden table 80 cm above the reference ground plane.
2. The EUT is connected via LISN to a test power supply.
3. The measurement results are obtained as described below:
4. Detectors – Quasi Peak and Average Detector.

Sample Calculation

Quasi-peak(Final Result) = Reading Value + Correction Factor

▣ RESULT PLOTS:

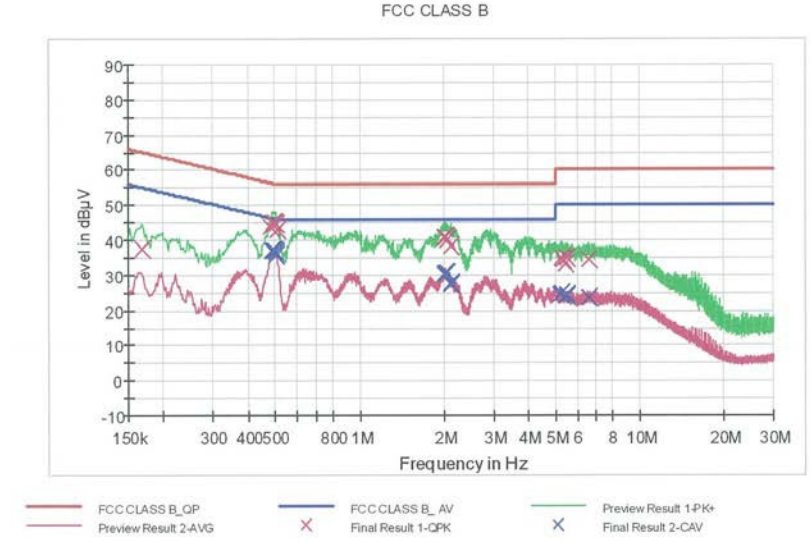
Load 1% Conducted Emissions (Line 1)

EMI Auto Test(10) 1 / 2

HCT TEST Report

Common Information

EUT:	S120
Manufacturer:	SNPowercom
Test Site:	SHIELD ROOM
Operating Conditions:	WIRELESS CHARGING MODE_1% LOAD
Operator Name:	KS KANG



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.168000	37.6	9.000	Off	L1	9.6	27.5	65.1
0.482000	43.9	9.000	Off	L1	9.7	12.4	56.3
0.490000	44.9	9.000	Off	L1	9.7	11.3	56.2
0.498000	45.0	9.000	Off	L1	9.7	11.0	56.0
0.502000	44.4	9.000	Off	L1	9.7	11.6	56.0
0.508000	42.9	9.000	Off	L1	9.7	13.1	56.0
1.994000	40.8	9.000	Off	L1	9.7	15.2	56.0
2.000000	40.9	9.000	Off	L1	9.7	15.1	56.0
2.014000	40.8	9.000	Off	L1	9.7	15.2	56.0
2.026000	40.7	9.000	Off	L1	9.7	15.3	56.0
2.050000	40.1	9.000	Off	L1	9.7	15.9	56.0
2.120000	38.4	9.000	Off	L1	9.7	17.6	56.0
5.218000	34.8	9.000	Off	L1	9.8	25.2	60.0
5.236000	35.1	9.000	Off	L1	9.8	24.9	60.0
5.288000	34.5	9.000	Off	L1	9.8	25.5	60.0
5.406000	33.4	9.000	Off	L1	9.9	26.6	60.0

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EMI Auto Test(10) 2 / 2

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
5.488000	34.8	9.000	Off	L1	9.9	25.2	60.0
6.598000	34.4	9.000	Off	L1	9.9	25.6	60.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.488000	36.9	9.000	Off	L1	9.7	9.3	46.2
0.492000	36.9	9.000	Off	L1	9.7	9.2	46.1
0.496000	37.0	9.000	Off	L1	9.7	9.1	46.1
0.500000	36.9	9.000	Off	L1	9.7	9.1	46.0
0.502000	36.6	9.000	Off	L1	9.7	9.4	46.0
0.506000	35.9	9.000	Off	L1	9.7	10.1	46.0
1.994000	30.1	9.000	Off	L1	9.7	15.9	46.0
2.016000	30.5	9.000	Off	L1	9.7	15.5	46.0
2.028000	30.7	9.000	Off	L1	9.7	15.3	46.0
2.050000	30.6	9.000	Off	L1	9.7	15.4	46.0
2.120000	27.9	9.000	Off	L1	9.7	18.1	46.0
2.132000	27.4	9.000	Off	L1	9.7	18.6	46.0
5.204000	24.6	9.000	Off	L1	9.8	25.4	50.0
5.258000	25.0	9.000	Off	L1	9.8	25.0	50.0
5.462000	24.0	9.000	Off	L1	9.9	26.0	50.0
5.482000	24.2	9.000	Off	L1	9.9	25.8	50.0
5.494000	24.4	9.000	Off	L1	9.9	25.6	50.0
6.598000	23.7	9.000	Off	L1	9.9	26.3	50.0

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Conducted Emissions (Line 2)

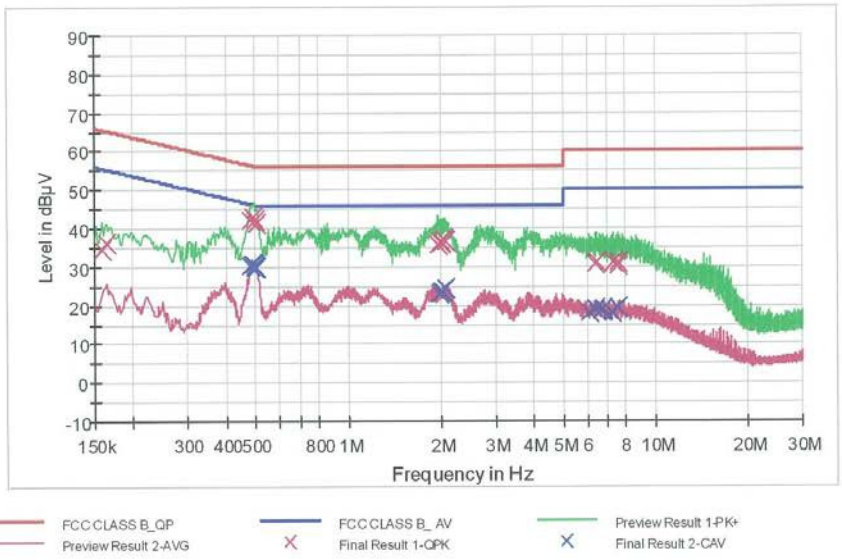
EMI Auto Test(10) 1 / 2

HCT TEST Report

Common Information

EUT:	S120
Manufacturer:	SNPowercom
Test Site:	SHIELD ROOM
Operating Conditions:	WIRELESS CHARGING MODE_1% LOAD
Operator Name:	KS KANG

FCC CLASS B



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	34.5	9.000	Off	N	9.6	31.1	65.6
0.164000	36.3	9.000	Off	N	9.6	29.0	65.3
0.484000	42.0	9.000	Off	N	9.6	14.3	56.3
0.490000	42.8	9.000	Off	N	9.6	13.4	56.2
0.500000	42.3	9.000	Off	N	9.6	13.7	56.0
0.506000	41.2	9.000	Off	N	9.6	14.8	56.0
1.970000	36.0	9.000	Off	N	9.7	20.0	56.0
2.008000	36.7	9.000	Off	N	9.7	19.3	56.0
2.014000	36.4	9.000	Off	N	9.7	19.6	56.0
2.060000	36.9	9.000	Off	N	9.7	19.1	56.0
2.066000	36.4	9.000	Off	N	9.7	19.6	56.0
2.078000	36.7	9.000	Off	N	9.7	19.3	56.0
6.386000	30.9	9.000	Off	N	9.9	29.1	60.0
6.404000	31.3	9.000	Off	N	9.9	28.7	60.0
7.304000	31.0	9.000	Off	N	9.9	29.0	60.0
7.512000	30.3	9.000	Off	N	9.9	29.7	60.0

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EMI Auto Test(10) 2 / 2

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
7.540000	31.2	9.000	Off	N	9.9	28.8	60.0
7.554000	31.3	9.000	Off	N	9.9	28.7	60.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.484000	30.3	9.000	Off	N	9.6	16.0	46.3
0.488000	30.7	9.000	Off	N	9.6	15.5	46.2
0.492000	30.5	9.000	Off	N	9.6	15.6	46.1
0.496000	30.3	9.000	Off	N	9.6	15.8	46.1
0.500000	30.0	9.000	Off	N	9.6	16.0	46.0
0.502000	30.0	9.000	Off	N	9.6	16.0	46.0
1.976000	23.2	9.000	Off	N	9.7	22.8	46.0
1.988000	23.3	9.000	Off	N	9.7	22.7	46.0
2.008000	23.7	9.000	Off	N	9.7	22.3	46.0
2.016000	23.6	9.000	Off	N	9.7	22.4	46.0
2.066000	24.3	9.000	Off	N	9.7	21.7	46.0
2.078000	24.3	9.000	Off	N	9.7	21.7	46.0
6.062000	18.2	9.000	Off	N	9.9	31.8	50.0
6.386000	19.0	9.000	Off	N	9.9	31.0	50.0
6.648000	18.6	9.000	Off	N	9.9	31.4	50.0
6.712000	19.1	9.000	Off	N	9.9	30.9	50.0
7.228000	18.2	9.000	Off	N	9.9	31.8	50.0
7.540000	19.2	9.000	Off	N	9.9	30.8	50.0

10/8/2015 9:46:10

Load 50% Conducted Emissions (Line 1)

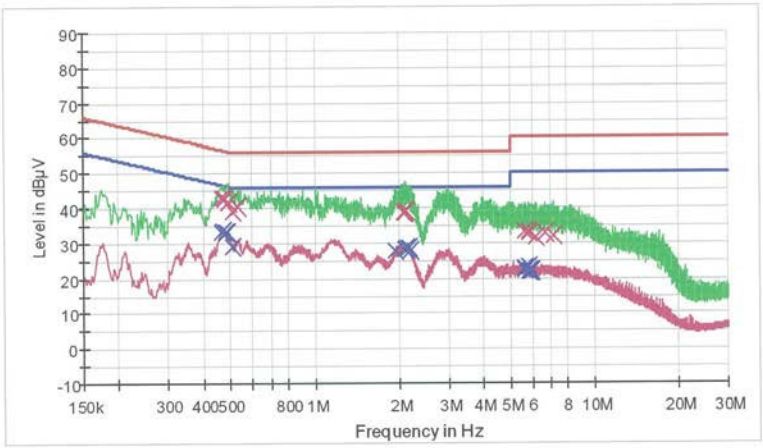
50 LOAD N 1 / 2

HCT TEST Report

Common Information

EUT:	S120
Manufacturer:	SNPowercom
Test Site:	SHIELD ROOM
Operating Conditions:	WIRELESS CHARGING MODE _50% LOAD
Operator Name:	KS KANG

FCC CLASS B



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.466000	42.8	9.000	Off	N	9.6	13.8	56.6
0.474000	43.0	9.000	Off	N	9.6	13.4	56.4
0.478000	42.5	9.000	Off	N	9.6	13.9	56.4
0.490000	41.8	9.000	Off	N	9.6	14.4	56.2
0.510000	39.0	9.000	Off	N	9.6	17.0	56.0
0.532000	40.3	9.000	Off	N	9.6	15.7	56.0
2.074000	38.7	9.000	Off	N	9.7	17.3	56.0
2.088000	38.8	9.000	Off	N	9.7	17.2	56.0
2.098000	39.2	9.000	Off	N	9.7	16.8	56.0
2.102000	39.1	9.000	Off	N	9.7	16.9	56.0
2.112000	39.0	9.000	Off	N	9.7	17.0	56.0
2.122000	39.0	9.000	Off	N	9.7	17.0	56.0
5.646000	33.4	9.000	Off	N	9.8	26.6	60.0
5.802000	33.1	9.000	Off	N	9.8	26.9	60.0
5.816000	32.9	9.000	Off	N	9.8	27.1	60.0
6.136000	31.7	9.000	Off	N	9.9	28.3	60.0

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50 LOAD N 2 / 2

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
6.680000	32.7	9.000	Off	N	9.9	27.3	60.0
7.152000	32.0	9.000	Off	N	9.9	28.0	60.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.464000	33.4	9.000	Off	N	9.6	13.2	46.6
0.468000	33.6	9.000	Off	N	9.6	12.9	46.5
0.472000	33.5	9.000	Off	N	9.6	13.0	46.5
0.484000	33.1	9.000	Off	N	9.6	13.2	46.3
0.488000	33.2	9.000	Off	N	9.6	13.0	46.2
0.510000	29.0	9.000	Off	N	9.6	17.0	46.0
1.940000	27.7	9.000	Off	N	9.7	18.3	46.0
2.098000	28.4	9.000	Off	N	9.7	17.6	46.0
2.102000	28.4	9.000	Off	N	9.7	17.6	46.0
2.122000	28.5	9.000	Off	N	9.7	17.5	46.0
2.168000	28.5	9.000	Off	N	9.7	17.5	46.0
2.188000	28.0	9.000	Off	N	9.7	18.0	46.0
5.604000	22.5	9.000	Off	N	9.8	27.5	50.0
5.646000	22.6	9.000	Off	N	9.8	27.4	50.0
5.802000	23.1	9.000	Off	N	9.8	26.9	50.0
5.816000	22.0	9.000	Off	N	9.8	28.0	50.0
5.852000	21.9	9.000	Off	N	9.8	28.1	50.0
5.936000	22.1	9.000	Off	N	9.8	27.9	50.0

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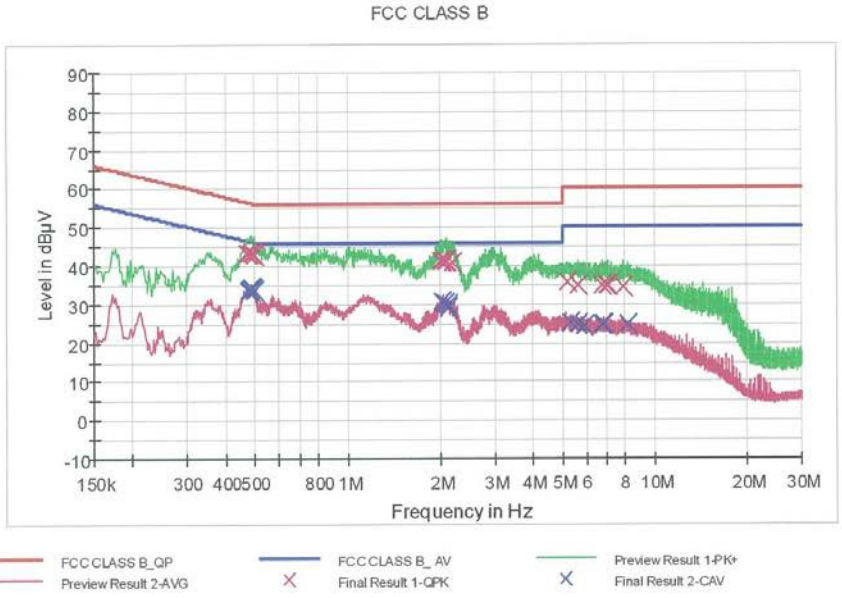
Conducted Emissions (Line 2)

50 LOAD L1 1 / 2

HCT TEST Report

Common Information

EUT:	S120
Manufacturer:	SNPowercom
Test Site:	SHIELD ROOM
Operating Conditions:	WIRELESS CHARGING MODE _50% LOAD
Operator Name:	KS KANG



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.468000	43.3	9.000	Off	L1	9.7	13.2	56.5
0.472000	43.4	9.000	Off	L1	9.7	13.1	56.5
0.478000	43.3	9.000	Off	L1	9.7	13.1	56.4
0.486000	43.5	9.000	Off	L1	9.7	12.7	56.2
0.492000	43.3	9.000	Off	L1	9.7	12.8	56.1
0.496000	43.0	9.000	Off	L1	9.7	13.1	56.1
2.014000	41.1	9.000	Off	L1	9.7	14.9	56.0
2.028000	41.4	9.000	Off	L1	9.7	14.6	56.0
2.036000	41.3	9.000	Off	L1	9.7	14.7	56.0
2.078000	41.2	9.000	Off	L1	9.7	14.8	56.0
2.100000	41.1	9.000	Off	L1	9.7	14.9	56.0
2.196000	40.7	9.000	Off	L1	9.7	15.3	56.0
5.172000	35.7	9.000	Off	L1	9.8	24.3	60.0
5.600000	35.1	9.000	Off	L1	9.9	24.9	60.0
6.708000	34.8	9.000	Off	L1	9.9	25.2	60.0
6.948000	35.0	9.000	Off	L1	9.9	25.0	60.0

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50 LOAD L1 2 / 2

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
7.014000	35.0	9.000	Off	L1	9.9	25.0	60.0
7.908000	34.7	9.000	Off	L1	9.9	25.3	60.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.476000	33.6	9.000	Off	L1	9.7	12.8	46.4
0.480000	33.8	9.000	Off	L1	9.7	12.5	46.3
0.484000	34.2	9.000	Off	L1	9.7	12.1	46.3
0.488000	34.4	9.000	Off	L1	9.7	11.8	46.2
0.492000	34.1	9.000	Off	L1	9.7	12.0	46.1
0.496000	33.7	9.000	Off	L1	9.7	12.4	46.1
2.028000	30.6	9.000	Off	L1	9.7	15.4	46.0
2.036000	30.7	9.000	Off	L1	9.7	15.3	46.0
2.078000	30.5	9.000	Off	L1	9.7	15.5	46.0
2.082000	30.5	9.000	Off	L1	9.7	15.5	46.0
2.110000	29.8	9.000	Off	L1	9.7	16.2	46.0
2.132000	29.3	9.000	Off	L1	9.7	16.7	46.0
5.314000	25.1	9.000	Off	L1	9.8	24.9	50.0
5.646000	25.0	9.000	Off	L1	9.9	25.0	50.0
5.850000	24.6	9.000	Off	L1	9.9	25.4	50.0
6.754000	24.9	9.000	Off	L1	9.9	25.1	50.0
6.842000	24.7	9.000	Off	L1	9.9	25.3	50.0
8.194000	24.8	9.000	Off	L1	9.9	25.2	50.0

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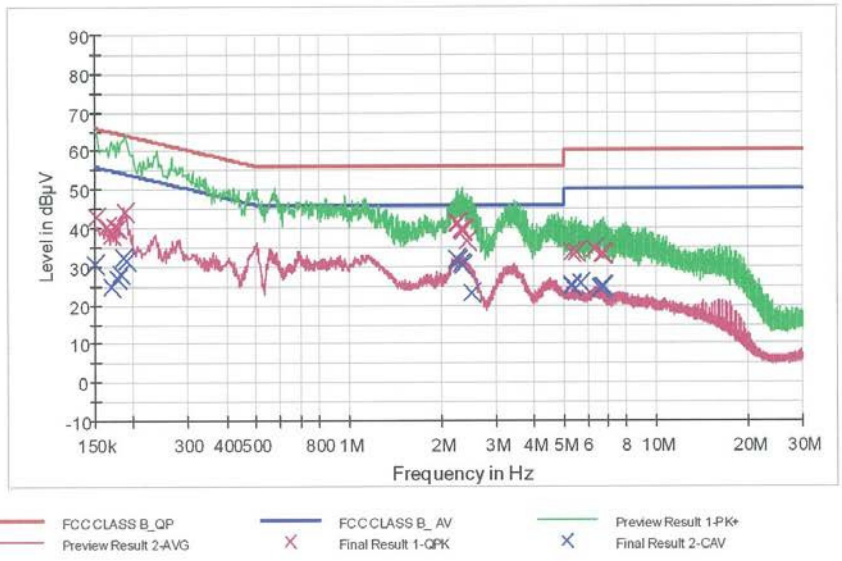
Load 100% Conducted Emissions (Line 1)

HCT TEST Report

Common Information

EUT:	S120
Manufacturer:	SNPowercom
Test Site:	SHIELD ROOM
Operating Conditions:	WIRELESS CHARGING MODE _100% LOAD
Operator Name:	KS KANG

FCC CLASS B



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.152000	43.0	9.000	Off	N	9.6	22.9	65.9
0.164000	40.6	9.000	Off	N	9.6	24.7	65.3
0.170000	38.2	9.000	Off	N	9.6	26.8	65.0
0.174000	40.3	9.000	Off	N	9.6	24.5	64.8
0.178000	39.9	9.000	Off	N	9.6	24.7	64.6
0.188000	44.4	9.000	Off	N	9.6	19.7	64.1
2.252000	41.2	9.000	Off	N	9.7	14.8	56.0
2.274000	41.2	9.000	Off	N	9.7	14.8	56.0
2.322000	39.8	9.000	Off	N	9.7	16.2	56.0
2.344000	39.5	9.000	Off	N	9.7	16.5	56.0
2.362000	39.3	9.000	Off	N	9.7	16.7	56.0
2.428000	36.7	9.000	Off	N	9.7	19.3	56.0
5.302000	33.9	9.000	Off	N	9.8	26.1	60.0
5.492000	33.7	9.000	Off	N	9.8	26.3	60.0
6.258000	34.7	9.000	Off	N	9.9	25.3	60.0
6.644000	33.3	9.000	Off	N	9.9	26.7	60.0

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100 LOAD N 2 / 2

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
6.710000	33.3	9.000	Off	N	9.9	26.7	60.0
6.734000	33.4	9.000	Off	N	9.9	26.6	60.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	30.6	9.000	Off	N	9.6	25.4	56.0
0.170000	24.9	9.000	Off	N	9.6	30.1	55.0
0.178000	27.0	9.000	Off	N	9.6	27.6	54.6
0.182000	28.1	9.000	Off	N	9.6	26.3	54.4
0.186000	32.3	9.000	Off	N	9.6	21.9	54.2
0.190000	31.8	9.000	Off	N	9.6	22.2	54.0
2.252000	32.1	9.000	Off	N	9.7	13.9	46.0
2.274000	31.8	9.000	Off	N	9.7	14.2	46.0
2.314000	30.7	9.000	Off	N	9.7	15.3	46.0
2.322000	30.7	9.000	Off	N	9.7	15.4	46.0
2.344000	30.3	9.000	Off	N	9.7	15.7	46.0
2.518000	23.2	9.000	Off	N	9.7	22.8	46.0
5.298000	25.1	9.000	Off	N	9.8	24.9	50.0
5.302000	25.2	9.000	Off	N	9.8	24.8	50.0
5.654000	25.7	9.000	Off	N	9.8	24.3	50.0
6.548000	24.3	9.000	Off	N	9.9	25.7	50.0
6.680000	24.8	9.000	Off	N	9.9	25.2	50.0
6.734000	24.9	9.000	Off	N	9.9	25.1	50.0

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Conducted Emissions (Line 2)

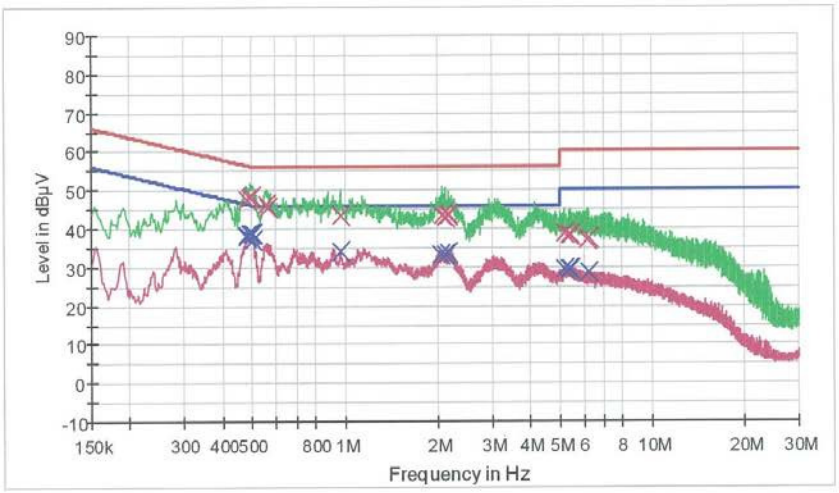
100 LOAD L1 1 / 2

HCT TEST Report

Common Information

EUT:	S120
Manufacturer:	SNPowercom
Test Site:	SHIELD ROOM
Operating Conditions:	WIRELESS CHARGING MODE _100% LOAD
Operator Name:	KS KANG

FCC CLASS B



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.480000	47.4	9.000	Off	L1	9.7	8.9	56.3
0.484000	47.5	9.000	Off	L1	9.7	8.8	56.3
0.494000	48.0	9.000	Off	L1	9.7	8.1	56.1
0.500000	48.4	9.000	Off	L1	9.7	7.6	56.0
0.556000	46.4	9.000	Off	L1	9.7	9.6	56.0
0.562000	45.5	9.000	Off	L1	9.7	10.5	56.0
0.966000	43.5	9.000	Off	L1	9.7	12.5	56.0
2.070000	43.2	9.000	Off	L1	9.7	12.8	56.0
2.084000	43.4	9.000	Off	L1	9.7	12.6	56.0
2.110000	43.0	9.000	Off	L1	9.7	13.0	56.0
2.164000	43.7	9.000	Off	L1	9.7	12.3	56.0
2.172000	43.5	9.000	Off	L1	9.7	12.5	56.0
5.176000	38.8	9.000	Off	L1	9.8	21.2	60.0
5.202000	38.9	9.000	Off	L1	9.8	21.1	60.0
5.348000	38.5	9.000	Off	L1	9.9	21.5	60.0
5.418000	38.3	9.000	Off	L1	9.9	21.7	60.0

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100 LOAD L1 2 / 2

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
6.126000	36.9	9.000	Off	L1	9.9	23.1	60.0
6.222000	37.3	9.000	Off	L1	9.9	22.7	60.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.480000	37.9	9.000	Off	L1	9.7	8.4	46.3
0.484000	38.3	9.000	Off	L1	9.7	8.0	46.3
0.492000	38.7	9.000	Off	L1	9.7	7.4	46.1
0.500000	38.6	9.000	Off	L1	9.7	7.4	46.0
0.502000	38.6	9.000	Off	L1	9.7	7.4	46.0
0.506000	37.2	9.000	Off	L1	9.7	8.8	46.0
0.966000	33.9	9.000	Off	L1	9.7	12.1	46.0
2.060000	33.5	9.000	Off	L1	9.7	12.5	46.0
2.110000	33.3	9.000	Off	L1	9.7	12.7	46.0
2.124000	33.1	9.000	Off	L1	9.7	12.9	46.0
2.164000	33.7	9.000	Off	L1	9.7	12.3	46.0
2.172000	33.5	9.000	Off	L1	9.7	12.5	46.0
5.202000	29.6	9.000	Off	L1	9.8	20.4	50.0
5.348000	29.6	9.000	Off	L1	9.9	20.4	50.0
5.414000	29.5	9.000	Off	L1	9.9	20.5	50.0
5.418000	29.5	9.000	Off	L1	9.9	20.5	50.0
5.430000	29.5	9.000	Off	L1	9.9	20.5	50.0
6.222000	28.5	9.000	Off	L1	9.9	21.5	50.0

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11.LIST OF TEST EQUIPMENT

Manufacturer	Model / Equipment	Calibration Date	Calibration Interval	Serial No.
HD	MA240/ Antenna Position Tower	N/A	N/A	556
EMCO	1050/ Turn Table	N/A	N/A	114
HD GmbH	HD 100/ Controller	N/A	N/A	13
HD GmbH	KMS 560/ SlideBar	N/A	N/A	12
Agilent	N9020A / SIGNAL ANALYZER	06/30/2016	Annual	MY51110085
Rohde & Schwarz	FSP / Spectrum Analyzer	10/21/2015	Annual	836650/016
Rohde & Schwarz	LOOP ANTENNA	09/03/2016	Biennial	1513-175