ENAC ENSAYOS Nº 51/LE147

Informe de ensayo nº:
Test report No:

NIE: 41308REM.001

Test report

Radio frequency devices Subpart B. Unintentional radiators ; ICESS-003 ISSUE 5 & American National standard for Testing Unlicensed Wireless Devices

Identificación del objeto ensayado.....: Identification of item tested	BRCK V1
Marca .....: Trade	BRCK
Modelo y/o referencia tipo .....: Model and /or type reference	BRCK V1
Other identification of the product .....:	S/N: 0001 & 0002 FCC ID: 2ACBL002725001 IC ID: 11959A-002725001
Final HW version .....:	V10
Final SW version .....:	V10
Características .....: Features	N/A
Peticionario .....: Applicant	BRCK Inc. 12472 Lake Underhill Rd #525, Orlando, FL 32828. USA. VAT: 463878519 Reg Orton +254 0700 196 429 reg@brck.com
Método de ensayo solicitado, norma.....: Test method requested, standard	FCC Rules and Regulations 47 CFR Chapter I Part 15 Subpart B (10-01-12 Edition); ICESS-003 ISSUE 5 & ANSI C63.10-2009: American National standard for Testing Unlicensed Wireless Devices.
Resultado.....: Summary	IN COMPLIANCE
Aprobado por (nombre / cargo y firma) .....: Approved by (name / position & signature)	Rafael López EMC LAB Manager Firmado digitalmente por Rafael López Martín Fecha: 2014.05.13 14:49:43 +02'00'
Fecha de realización .....: Date of issue	2014-05-09
Formato de informe No. .....: Report template No	FDT08_15

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Competences and guarantees

AT4 wireless 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.

This certificate of conformity was issued in accordance with the decision Nº 3/2000 of the Joint Committee established under the Agreement on Mutual Recognition between the European Community and the United States of America. By this decision, AT4 wireless can act as Conformity Assessment Body (CAB) on Electromagnetic Compatibility. This Certificate applies to the samples listed at technical reports.

This laboratory is designed by the Federal Communications Commission (ES0004)

AT4 wireless is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, AT4 wireless has a calibration and maintenance program for its measurement equipment.

AT4 wireless 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 AT4 wireless at the time of performance of the test.

AT4 wireless 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.

IMPORTANT: No parts of this report may be reproduced or quoted out of context, in any form or by any means, except in full, without the previous written permission of AT4 wireless.

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 AT4 wireless.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of AT4 wireless and the Accreditation Bodies.

Uncertainty

Uncertainty (factor k=2) was calculated according to the AT4 wireless internal document PODT000.

Usage of samples

Samples under test have been selected by: The client.

Sample S/01 is composed of the following elements:

Control Nº	Description	Model	Serial Nº	Date of reception
41308/002	WiFi / 3G Router BRCK V1	BRCK V1	Prototype	2014-03-27
41308/008	AC/DC Adapter	HUNTKEY HKA00605010-2B	13057000510	2014-03-27

The sample incorporates a ferrite WÜRTH model 742 712 22 with two turns on the USB cable.

Test sample description

The test sample consists of a WiFi / 3G Router.

Test samples supplier

BRCK Inc.
12472 Lake Underhill Rd #525, Orlando, FL. 32828. USA.
VAT: 463878519
Reg Orton
+254 0700 196 429
reg@brck.com

Testing period

The performed test started on 2014-04-07 and finished on 2014-04-11.

The tests have been performed at AT4 wireless.

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. = 20 % Max. = 80 %
Shielding effectiveness	> 100 dB
Electric insulation	> 10 kΩ
Reference resistance to earth	< 0,5 Ω

In the semianechoic chamber (21 meters x 11 meters x 8 meters), the following limits were not exceeded during the test.

Temperature	Min. = 15 ºC Max. = 30 ºC
Relative humidity	Min. = 45 % Max. = 60 %
Air pressure	Min. = 860 mbar Max. = 1060 mbar
Shielding effectiveness	> 100 dB
Electric insulation	> 10 kΩ
Reference resistance to earth	< 0,5 Ω
Normal site attenuation (NSA)	< ±4 dB at 10 m distance between item under test and receiver antenna, (30 MHz to 1000 MHz)
Field homogeneity	More than 75% of illuminated surface is between 0 and 6 dB (26 MHz to 1000 MHz).

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

Temperature	Min. = 15 ºC Max. = 30 ºC
Relative humidity	Min. = 45 % Max. = 60 %
Air pressure	Min. = 860 mbar Max. = 1060 mbar
Shielding effectiveness	> 100 dB
Electric insulation	> 10 kΩ
Reference resistance to earth	< 0,5 Ω

Remarks and comments

The tests have been realized by the technical personnel: Pedro Manuel Valenzuela, José Manuel Márquez, Juan Miguel del Pino & José Manuel Gómez.

The total uncertainty of the measurement system for the measured radio disturbance characteristics of EUT from 150 kHz to 30 MHz is I = ± 3,60 dB for quasi-peak measurements, I = ± 3,48 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 1 GHz is I = ± 4,57 dB for quasi-peak measurements, I = ± 4,48 dB for peak measurements (k = 2) and from 1 to 12,75 GHz is I = ± 3,43 dB for average and peak measurements.

The total uncertainty of the measurement system for the measured radio disturbance characteristics of EUT from 12,75 GHz to 26 GHz is I = ± 4,09 dB for average and peak measurements.

Testing verdicts

Not applicable ..... :	N/A
Pass ..... :	P
Fail ..... :	F
Not measured ..... :	N/M

List of equipment used during the test					
CONTROL NUMBER	**DESCRIPTION**	**MANUFACTURER**	**MODEL**	**LAST CALIBRATION**	**NEXT CALIBRATION**
1999	EMI Receptor	ROHDE & SCHWARZ	ESIB 26	2013-05-30	2015-05-30
1935	EMI Receptor	ROHDE & SCHWARZ	ESPI 3	2013-12-11	2015-12-11
2932	Bilog Hybrid Antenna	SUNOL	JB6	2011-05-11	2014-05-11
0245	Horn Antenna	HP	11966E	2011-05-20	2014-05-20
1920	Horn Antenna	AGILENT	11966J	2011-09-27	2014-09-27
1658	RF Amplifier	SCHAFFNER	CPA9231A	2013-06-11	2015-06-11
1975	RF Amplifier	MITEQ	JS4	2013-04-18	2014-04-18
3783	RF Amplifier	BONN ELEKTRONIK	BLMA 0118-3A	2013-04-23	2014-04-23
0258	Transient Limiter	HP	119471A	2012-09-19	2014-09-19
1650	Artificial Network	SCHWARZBECK	NNLK - 8121	2013-06-25	2015-06-25
3545	Temperature & Humidity probe	PICO TECHNOLOGY	HUMIDIPROBE	2014-01-21	2015-01-21
3548	Temperature & Humidity probe	PICO TECHNOLOGY	HUMIDIPROBE	2014-01-21	2015-01-21
3556	Temperature & Humidity probe	T & D	TR-72W	2014-01-21	2015-01-21

Appendix A – Test result

APPENDIX A CONTENT:

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DESCRIPTION OF THE OPERATION MODES

The operation modes described in this paragraph constitute a functionality of the sample under test for itself. Every operation mode takes a failure criteria for the immunity test that they were applying to it and a monitoring to guarantee performance of the same ones.

In the following table appears the operation modes used by the samples tested to that it refers the present test report.

OPERATION MODE	DESCRIPTION
OM#01	EUT ON. Equipment in computer peripherical device mode working in IDLE 900MHz mode with WiFi disabled and charging battery. Power supply: 115Vac.
OM#02	EUT ON. Equipment charging battery, WiFi disabled and working in IDLE 900MHz mode. Power supply: AC/DC Adapter (115Vac).
OM#03	EUT ON. Equipment in computer peripherical device mode working in TCH 900MHz mode with WiFi enabled and charging battery. Power supply: 115Vac.
OM#04	EUT ON. Equipment charging battery, WiFi enabled and working in TCH 900MHz mode. Power supply: AC/DC Adapter (115Vac).

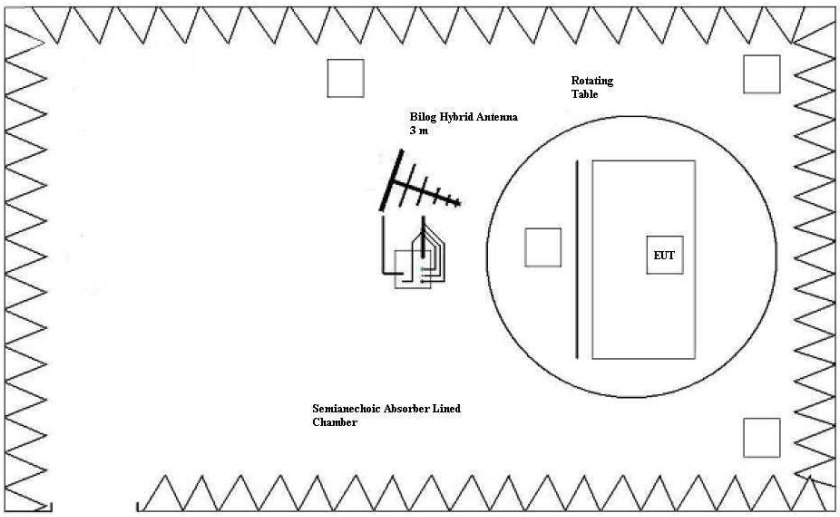
RADIATED EMISSION. ELECTROMAGNETIC FIELD MEASURE.

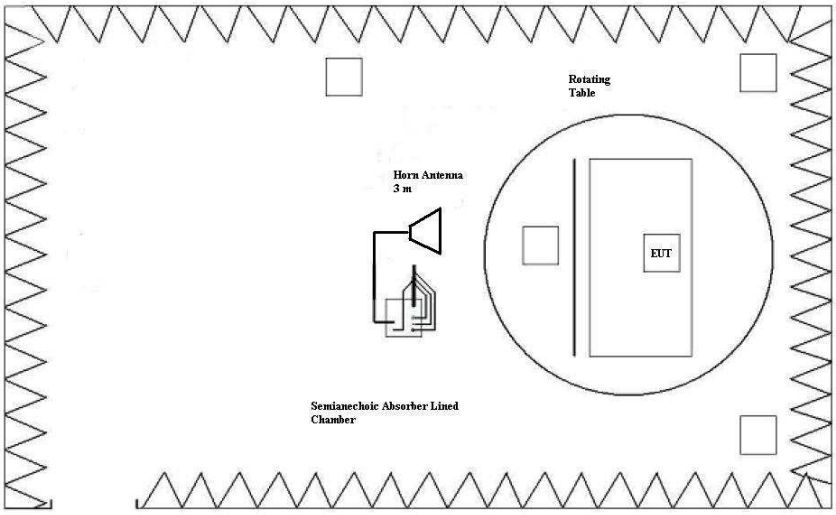
LIMITS:	Product standard:	FCC RULES AND REGULATIONS 47 CFR PART 15, SUBPART B (10-01-12 Edition); ICESS-003 ISSUE 5 & ANSI C63.10-2009
	Test standard:	FCC RULES AND REGULATIONS 47 CFR PART 15, SUBPART B (10-01-12 Edition); ICESS-003 ISSUE 5 & ANSI C63.10-2009

LIMITS OF INTERFERENCE CLASS B

The applied limit for radiated emissions, 3 m distance, according with the requirements of FCC Rules and Regulations 47 CFR Part 15.109, Subpart B (10-01-12 Edition); ICESS-003 ISSUE 5 & ANSI C63.10-2009 in the frequency range 30 MHz to 26 GHz, for Class B equipment, which is a transmitter in a band over 500 MHz, was:

Frequency range (MHz)	Limit for 3 m (µV/m)	Limit for 3 m (dBµV/m)
30 to 88	100	40
88 to 216	150	43,52
216 to 960	200	46,02
Above 960	500	53,98





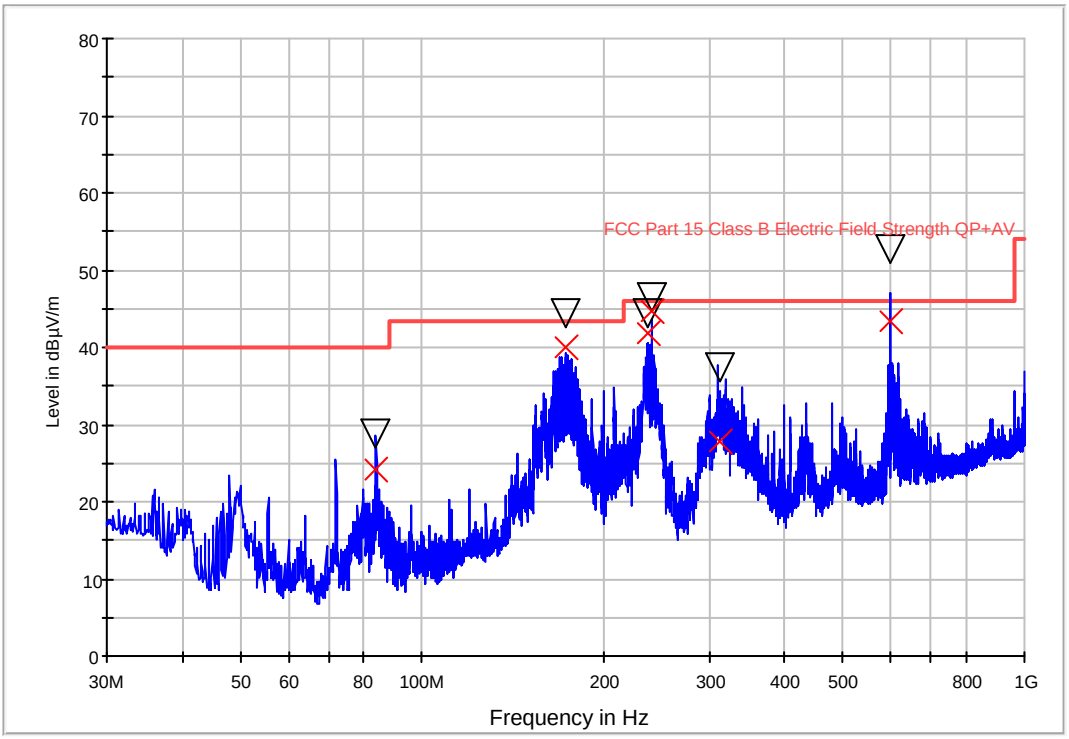
TESTED SAMPLES:	S/01
TESTED OPERATION MODES:	OM#01 & 02
TEST RESULTS :	CRmmnn: CR, Radiation Condition; mm: Sample number; nn: Operation mode, xx: Polarisation.

CRmmnn	Description	Result
CR0101	EUT ON. Equipment in computer peripherical device mode working in IDLE 900MHz mode with WiFi disabled and charging battery. Power supply: 115Vac. Range 30-1000 MHz.	P
CR0101_RA1_PH	EUT ON. Equipment in computer peripherical device mode working in IDLE 900MHz mode with WiFi disabled and charging battery. Power supply: 115Vac. Range 1-18 GHz. Horizontal pol.	P
CR0101_RA1_PV	EUT ON. Equipment in computer peripherical device mode working in IDLE 900MHz mode with WiFi disabled and charging battery. Power supply: 115Vac. Range 1-18 GHz. Vertical pol.	P
CR0101_RA2_PH	EUT ON. Equipment in computer peripherical device mode working in IDLE 900MHz mode with WiFi disabled and charging battery. Power supply: 115Vac. Range 18-26 GHz. Horizontal pol.	P
CR0101_RA2_PV	EUT ON. Equipment in computer peripherical device mode working in IDLE 900MHz mode with WiFi disabled and charging battery. Power supply: 115Vac. Range 18-26 GHz. Vertical pol.	P
CR0102	EUT ON. Equipment charging battery, WiFi disabled and working in IDLE 900MHz mode. Power supply: AC/DC Adapter (115Vac). Range 30-1000 MHz.	P
CR0102_RA1_PH	EUT ON. Equipment charging battery, WiFi disabled and working in IDLE 900MHz mode. Power supply: AC/DC Adapter (115Vac). Range 1-18 GHz. Horizontal pol.	P
CR0102_RA1_PV	EUT ON. Equipment charging battery, WiFi disabled and working in IDLE 900MHz mode. Power supply: AC/DC Adapter (115Vac). Range 1-18 GHz. Vertical pol.	P
CR0102_RA2_PH	EUT ON. Equipment charging battery, WiFi disabled and working in IDLE 900MHz mode. Power supply: AC/DC Adapter (115Vac). Range 18-26 GHz. Horizontal pol.	P
CR0102_RA2_PV	EUT ON. Equipment charging battery, WiFi disabled and working in IDLE 900MHz mode. Power supply: AC/DC Adapter (115Vac). Range 18-26 GHz. Vertical pol.	P

Radiated Emission: CR0101 (30MHz to 1GHz)

Project:	41308REM.001
Company:	BRCK Inc.
Sample:	S/01
Operation mode:	OM#01
Description:	EUT ON. Equipment in computer peripherical device mode working in IDLE 900MHz mode with WiFi disabled and charging battery. Power supply: 115Vac.

FCC class B Bilog Hybrid



FCC Part 15 Class B Electric Field Strength QP+AV — Peak Preview
MaxPeak — QuasiPeak

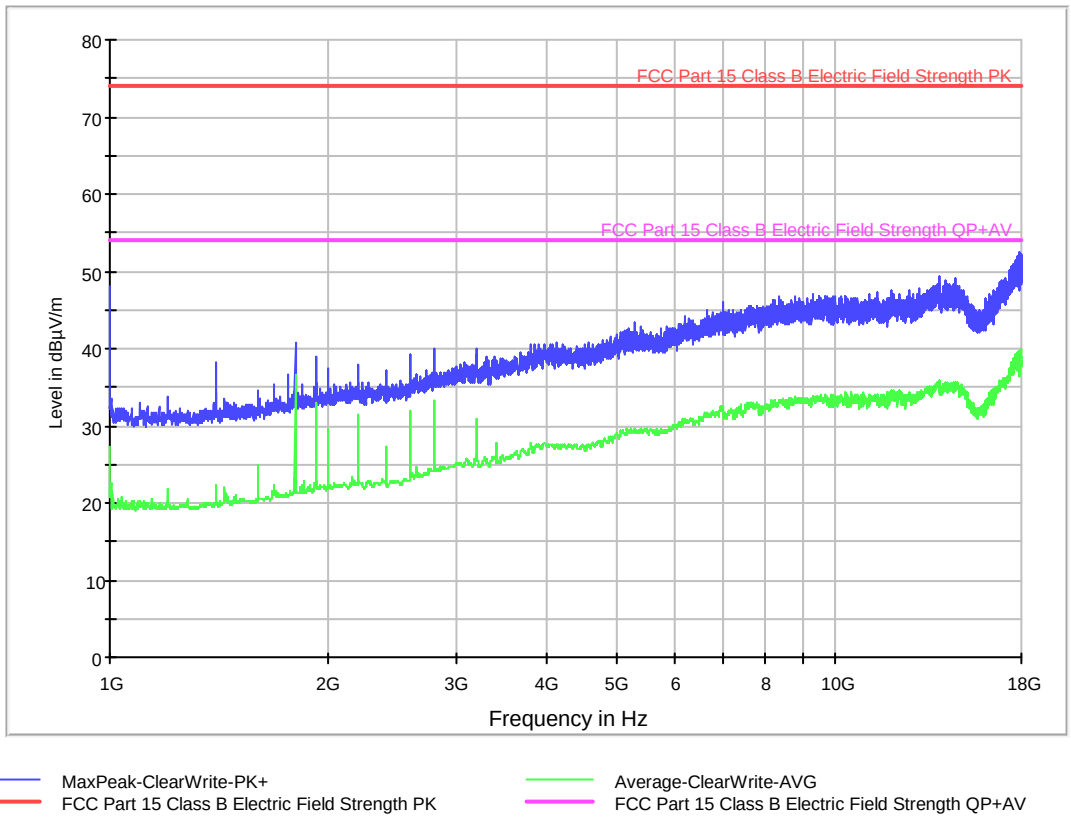
Maximizations

Frequency (MHz)	MaxPeak (dBµV/m)	QuasiPeak (dBµV/m)	Height (cm)	Polarization	Azimuth (deg)
83.982966	28.9	24.1	101.0	V	91.0
172.915030	44.3	39.9	142.0	H	311.0
236.561122	44.4	41.8	138.0	H	141.0
240.015030	46.5	44.8	116.0	H	132.0
311.233868	37.3	27.7	118.0	H	274.0
599.956914	52.8	43.5	123.0	H	123.0

Radiated Emission: CR0101_RA1_PH (1 – 18 GHz)

Project:	41308REM.001
Company:	BRCK Inc.
Sample:	S/01
Operation mode:	OM#01
Description:	EUT ON. Equipment in computer peripherical device mode working in IDLE 900MHz mode with WiFi disabled and charging battery. Power supply: 115Vac. Horizontal polarization.

FCC 1-18GHz class B ESIB Horn 0245 AMP3783



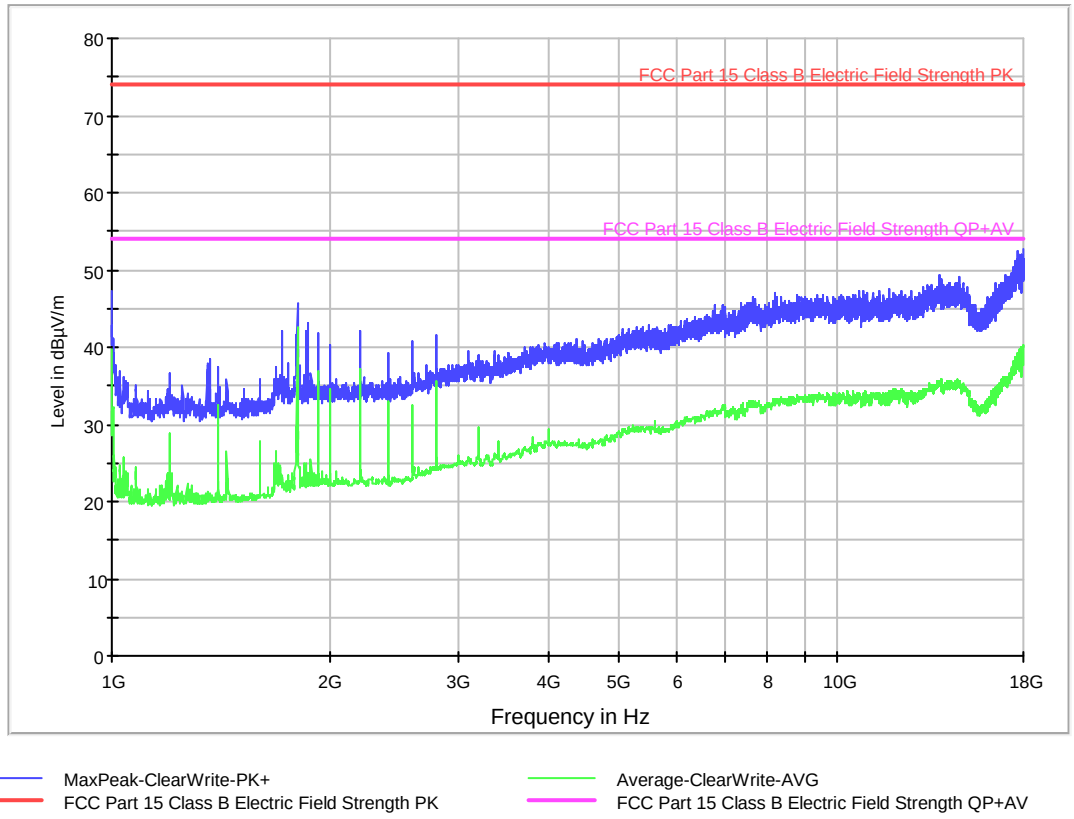
Max PK-AVG

Frequency (MHz)	MaxPeak-ClearWrite (dBµV/m)	Average-ClearWrite (dBµV/m)
1000.000000	48.0	27.3
1400.000000	38.3	22.5
1800.000000	40.8	36.7
2800.000000	39.9	33.2
4134.000000	40.7	27.5
5271.000000	43.3	29.4
6996.000000	46.0	32.0
9302.000000	47.0	33.5
12988.000000	47.8	33.8
17884.000000	52.5	39.1

Radiated Emission: CR0101_RA1_PV (1 – 18 GHz)

Project:	41308REM.001
Company:	BRCK Inc.
Sample:	S/01
Operation mode:	OM#01
Description:	EUT ON. Equipment in computer peripherical device mode working in IDLE 900MHz mode with WiFi disabled and charging battery. Power supply: 115Vac. Vertical polarization.

FCC 1-18GHz class B ESIB Horn 0245 AMP3783



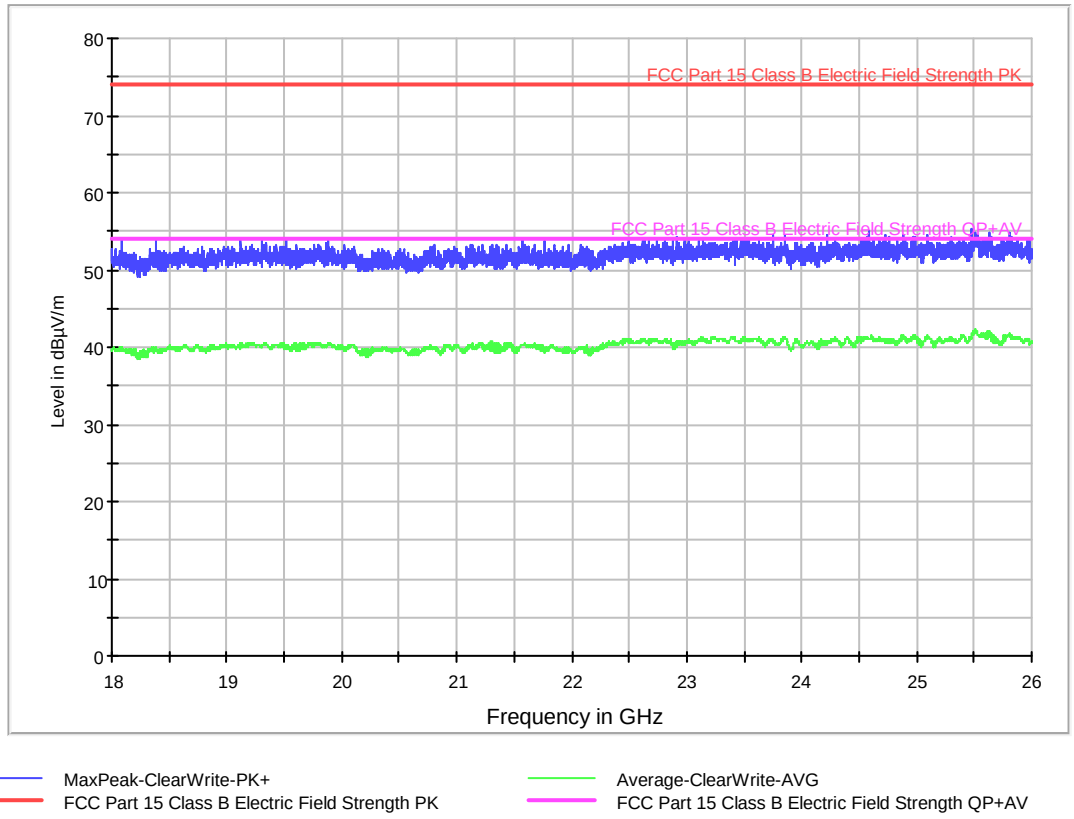
Max PK-AVG

Frequency (MHz)	MaxPeak-ClearWrite (dBµV/m)	Average-ClearWrite (dBµV/m)
1000.000000	47.1	39.8
1717.000000	42.2	23.1
1800.000000	45.7	42.5
2800.000000	41.5	35.5
4093.000000	40.6	27.2
5499.000000	42.8	29.4
7531.000000	45.7	32.6
8164.000000	47.0	33.1
13416.000000	48.1	34.7
18000.000000	52.7	40.1

Radiated Emission: CR0101_RA2_PH (18 – 26 GHz)

Project:	41308REM.001
Company:	BRCK Inc.
Sample:	S/01
Operation mode:	OM#01
Description:	EUT ON. Equipment in computer peripherical device mode working in IDLE 900MHz mode with WiFi disabled and charging battery. Power supply: 115Vac. Horizontal polarization.

FCC 18-26GHz class B ESIB Horn 1920 AMP1975



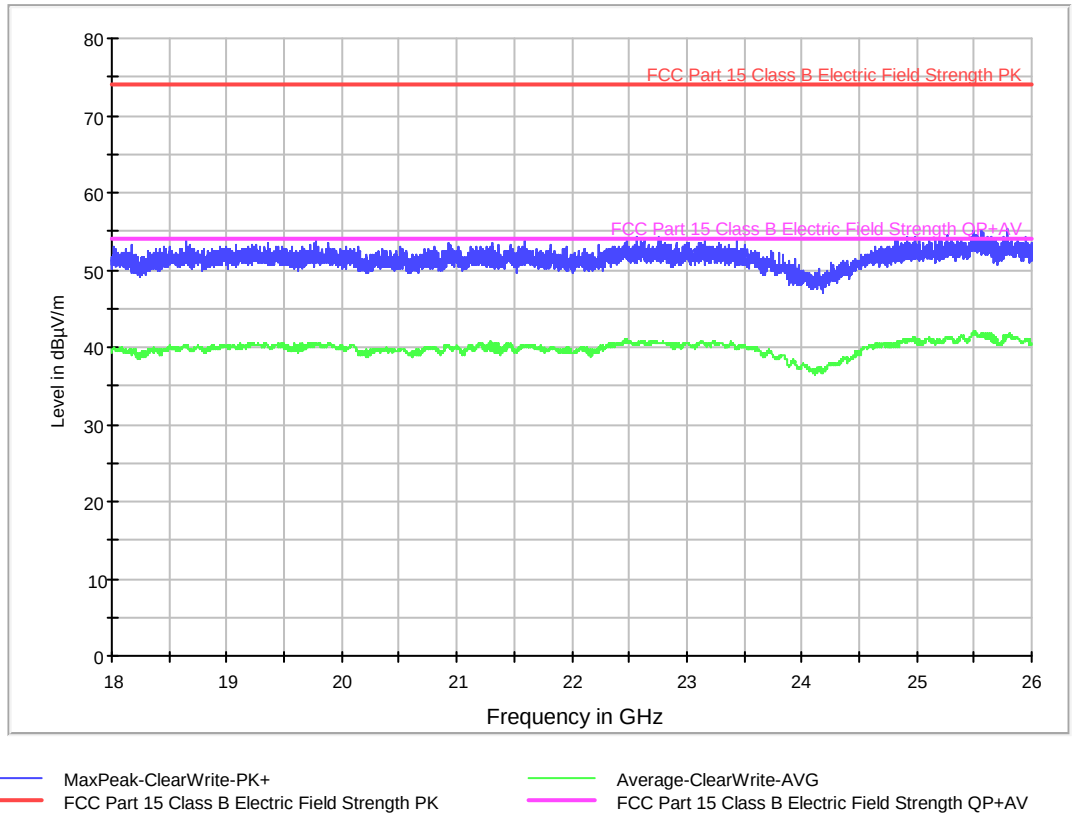
Max PK-AVG

Frequency (MHz)	MaxPeak-ClearWrite (dBµV/m)	Average-ClearWrite (dBµV/m)
18085.000000	54.0	39.7
19124.000000	53.9	40.1
19521.000000	54.1	40.2
20813.000000	53.2	40.0
21577.000000	53.9	40.3
21758.000000	53.7	39.8
22920.000000	54.4	40.7
23857.000000	54.6	41.3
24580.000000	54.9	41.0
25477.000000	55.2	41.4

Radiated Emission: CR0101_RA2_PV (18 -26 GHz)

Project:	41308REM.001
Company:	BRCK Inc.
Sample:	S/01
Operation mode:	OM#01
Description:	EUT ON. Equipment in computer peripherical device mode working in IDLE 900MHz mode with WiFi disabled and charging battery. Power supply: 115Vac. Vertical polarization.

FCC 18-26GHz class B ESIB Horn 1920 AMP1975



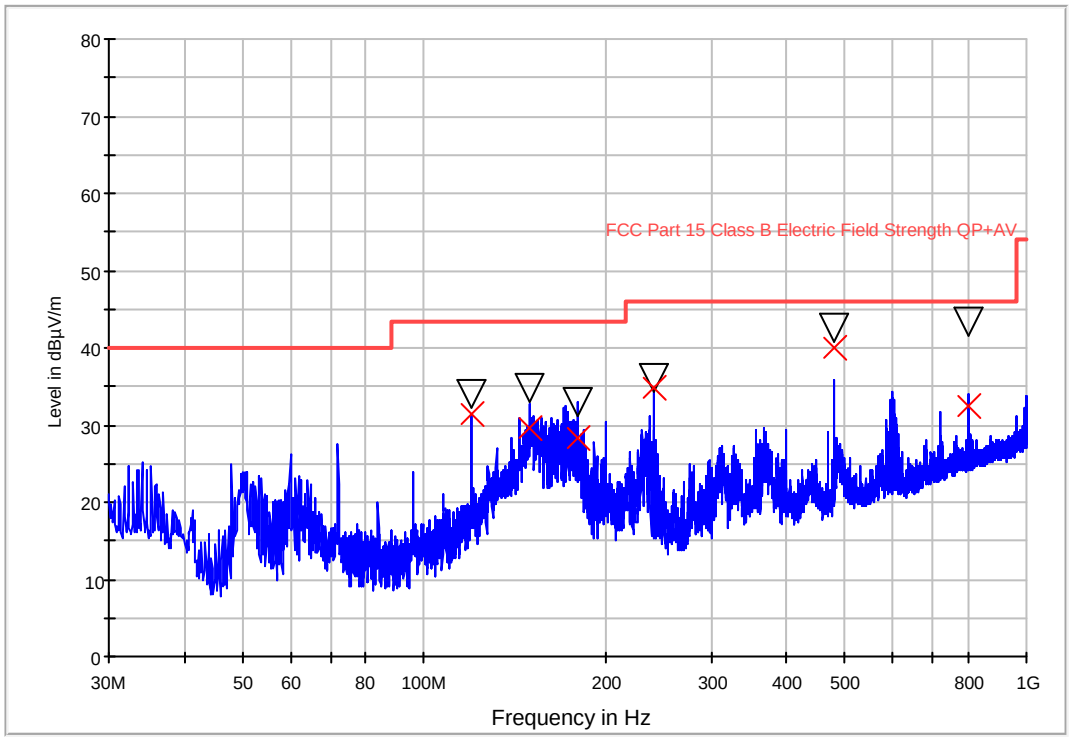
Max PK-AVG

Frequency (MHz)	MaxPeak-ClearWrite (dBµV/m)	Average-ClearWrite (dBµV/m)
18646.000000	53.8	40.1
19358.000000	53.6	40.2
19774.000000	53.9	40.4
20515.000000	53.0	39.7
21587.000000	53.6	40.2
21821.000000	53.2	39.9
22750.000000	54.4	40.6
23434.000000	53.8	39.9
24921.000000	54.3	41.0
25791.000000	55.4	41.4

Radiated Emission: CR0102 (30MHz to 1GHz)

Project:	41308REM.001
Company:	BRCK Inc.
Sample:	S/01
Operation mode:	OM#02
Description:	EUT ON. Equipment charging battery, WiFi disabled and working in IDLE 900MHz mode. Power supply: AC/DC Adapter (115Vac).

FCC class B Bilog Hybrid



FCC Part 15 Class B Electric Field Strength QP+AV — Peak Preview
MaxPeak — QuasiPeak

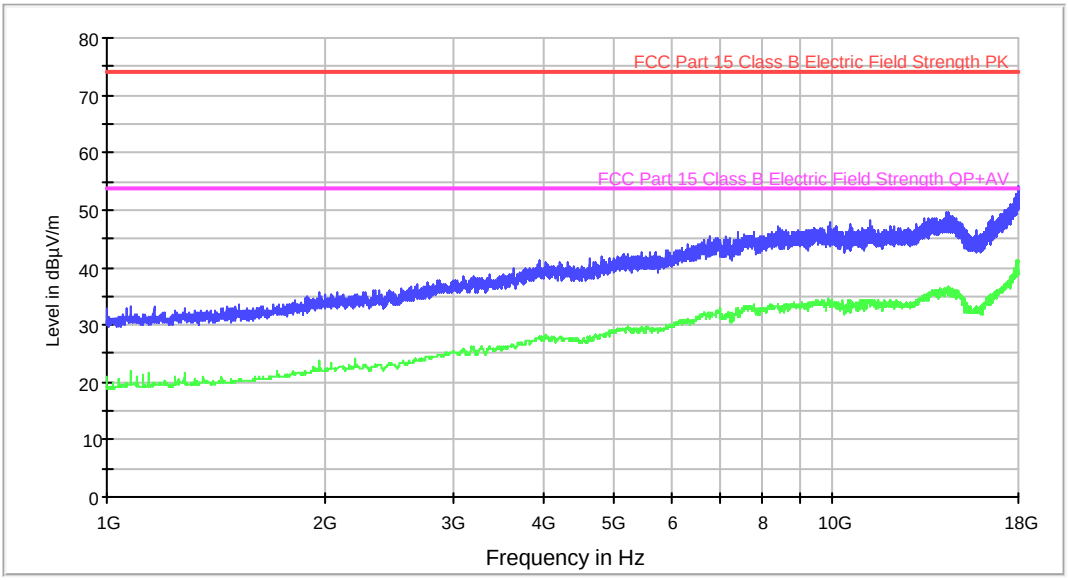
Maximizations

Frequency (MHz)	MaxPeak (dBµV/m)	QuasiPeak (dBµV/m)	Height (cm)	Polarization	Azimuth (deg)
119.974950	34.0	31.3	98.0	V	321.0
150.001002	34.8	29.7	162.0	H	96.0
179.522044	33.0	28.3	101.0	V	3.0
239.996994	36.2	34.8	135.0	H	107.0
480.021042	42.6	39.9	99.0	V	290.0
800.001002	43.4	32.5	126.0	V	7.0

Radiated Emission: CR0102_RA1_PH (1 – 18 GHz)

Project:	41308REM.001
Company:	BRCK Inc.
Sample:	S/01
Operation mode:	OM#02
Description:	EUT ON. Equipment charging battery, WiFi disabled and working in IDLE 900MHz mode. Power supply: AC/DC Adapter (115Vac). Horizontal Polarization.

FCC 1-18GHz class B ESIB Horn 0245 AMP3783



Peak Scan
FCC Part 15 Class B Electric Field Strength PK
Average Scan
FCC Part 15 Class B Electric Field Strength QP+AV

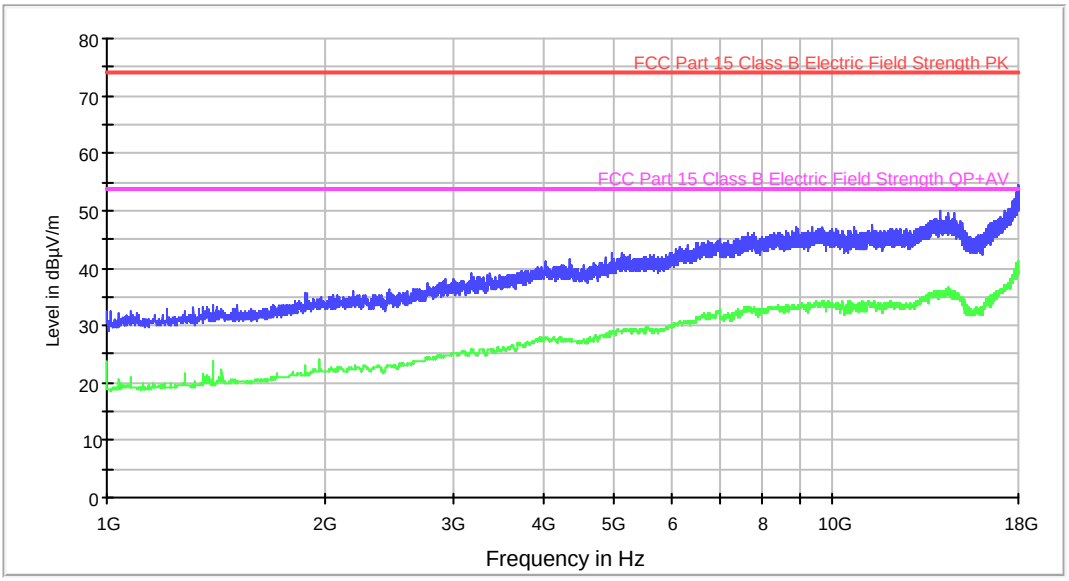
Max PK-AVG

Frequency (MHz)	MaxPeak-ClearWrite (dBµV/m)	Average-ClearWrite (dBµV/m)
1080.000000	33.1	22.1
1782.000000	33.7	21.1
2342.000000	36.1	22.9
3100.000000	38.3	25.6
3952.000000	41.1	27.8
5584.000000	42.6	29.3
7376.000000	46.1	32.9
9898.000000	47.8	33.6
13378.000000	48.6	34.9
17960.000000	54.0	41.0

Radiated Emission: CR0102_RA1_PV (1 – 18 GHz)

Project:	41308REM.001
Company:	BRCK Inc.
Sample:	S/01
Operation mode:	OM#02
Description:	EUT ON. Equipment charging battery, WiFi disabled and working in IDLE 900MHz mode. Power supply: AC/DC Adapter (115Vac). Vertical Polarization.

FCC 1-18GHz class B ESIB Horn 0245 AMP3783



Peak Scan
FCC Part 15 Class B Electric Field Strength PK
Average Scan
FCC Part 15 Class B Electric Field Strength QP+AV

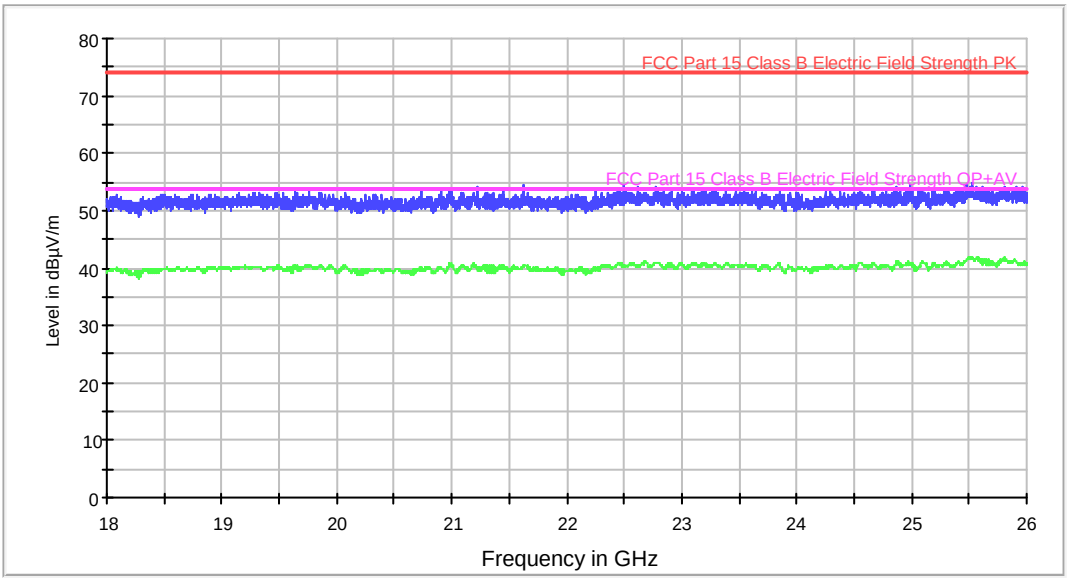
Max PK-AVG

Frequency (MHz)	MaxPeak-ClearWrite (dBµV/m)	Average-ClearWrite (dBµV/m)
1040.000000	36.1	29.7
1400.000000	33.5	23.6
1882.000000	38.7	21.7
2442.000000	36.2	23.1
3182.000000	39.3	25.7
4007.000000	41.3	27.8
4944.000000	42.6	28.8
6745.000000	44.6	31.9
8625.000000	46.6	33.6
9377.000000	47.2	33.5
14084.000000	49.8	35.2
17950.000000	54.5	41.1

Radiated Emission: CR0102_RA2_PH (18 – 26 GHz)

Project:	41308REM.001
Company:	BRCK Inc.
Sample:	S/01
Operation mode:	OM#02
Description:	EUT ON. Equipment charging battery, WiFi disabled and working in IDLE 900MHz mode. Power supply: AC/DC Adapter (115Vac). Horizontal Polarization.

FCC 18-26GHz class B ESIB Horn 1920 AMP1975



Peak Scan
FCC Part 15 Class B Electric Field Strength PK
Average Scan
FCC Part 15 Class B Electric Field Strength QP+AV

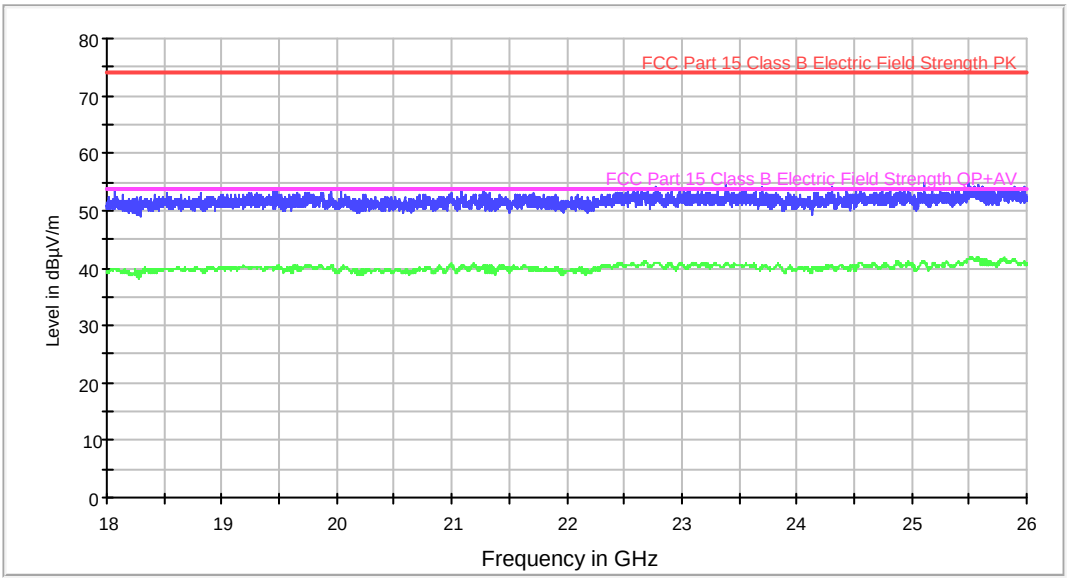
Max PK-AVG

Frequency (MHz)	MaxPeak-ClearWrite (dBµV/m)	Average-ClearWrite (dBµV/m)
18463.000000	52.8	39.6
18913.000000	52.9	40.0
19647.000000	53.4	40.5
19758.000000	53.3	40.4
20743.000000	53.3	39.8
21630.000000	54.7	40.3
22255.000000	53.3	40.3
22504.000000	54.6	40.3
23103.000000	53.8	40.8
24289.000000	53.4	40.4
24992.000000	54.4	40.9
25525.000000	54.9	41.7

Radiated Emission: CR0102_RA2_PV (18 -26 GHz)

Project:	41308REM.001
Company:	BRCK Inc.
Sample:	S/01
Operation mode:	OM#02
Description:	EUT ON. Equipment charging battery, WiFi disabled and working in IDLE 900MHz mode. Power supply: AC/DC Adapter (115Vac). Vertical Polarization.

FCC 18-26GHz class B ESIB Horn 1920 AMP1975



Peak Scan
FCC Part 15 Class B Electric Field Strength PK
Average Scan
FCC Part 15 Class B Electric Field Strength QP+AV

Max PK-AVG

Frequency (MHz)	MaxPeak-ClearWrite (dBµV/m)	Average-ClearWrite (dBµV/m)
18067.000000	53.3	39.8
18813.000000	53.0	39.8
19472.000000	53.5	40.3
20045.000000	54.0	40.1
20755.000000	52.7	39.7
21082.000000	53.9	40.4
21721.000000	53.1	40.0
22776.000000	54.1	40.8
23381.000000	54.5	40.6
24313.000000	54.0	40.4
25107.000000	54.7	40.9
25494.000000	54.7	41.6

CONTINUOUS CONDUCTED EMISSION ON POWER LEADS

LIMITS:	Product standard :	FCC RULES AND REGULATIONS 47 CFR PART 15, SUBPART B (10-01-12 Edition); ICESS-003 ISSUE 5 & ANSI C63.10-2009
	Test standard :	FCC RULES AND REGULATIONS 47 CFR PART 15, SUBPART B (10-01-12 Edition); ICESS-003 ISSUE 5 & ANSI C63.10-2009

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 (10-01-12 Edition); ICESS-003 ISSUE 5 & ANSI C63.10-2009, in the frequency range 0,15 to 30 MHz, for Class B equipment was:

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

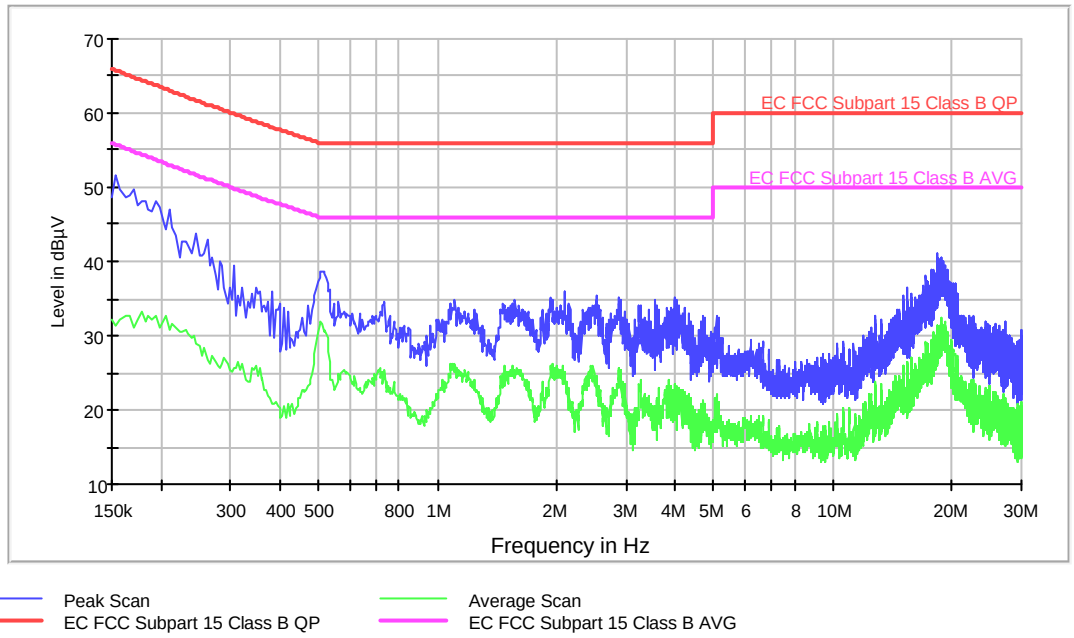
TESTED SAMPLES:	S/01
TESTED OPERATION MODES:	OM#01; 02; 03 & 04
TEST RESULTS :	CCmmnnhh: CC, Conducted Condition; mm: Sample number; nn: Operation mode; hh: wire

CCmmnnhh	**Description**	**Result**
CC01010N	Neutral wire noise	P
CC0101L1	Phase wire noise	P
CC01020N	Neutral wire noise	P
CC0102L1	Phase wire noise	P
CC01030N	Neutral wire noise	P
CC0103L1	Phase wire noise	P
CC01040N	Neutral wire noise	P
CC0104L1	Phase wire noise	P

Continuous Conducted emission : CC01010N	Detector : Peak / Average / Cuasi-peak

Project:	41308REM.001
Company:	BRCK Inc.
Sample:	S/01
Operation mode:	OM#01
Description:	EUT ON. Equipment in computer peripherical device mode working in IDLE 900MHz mode with WiFi disabled and charging battery. Power supply: 115Vac. Neutral wire noise.

EMI EC FCC Subpart 15 Class B ESPI CC



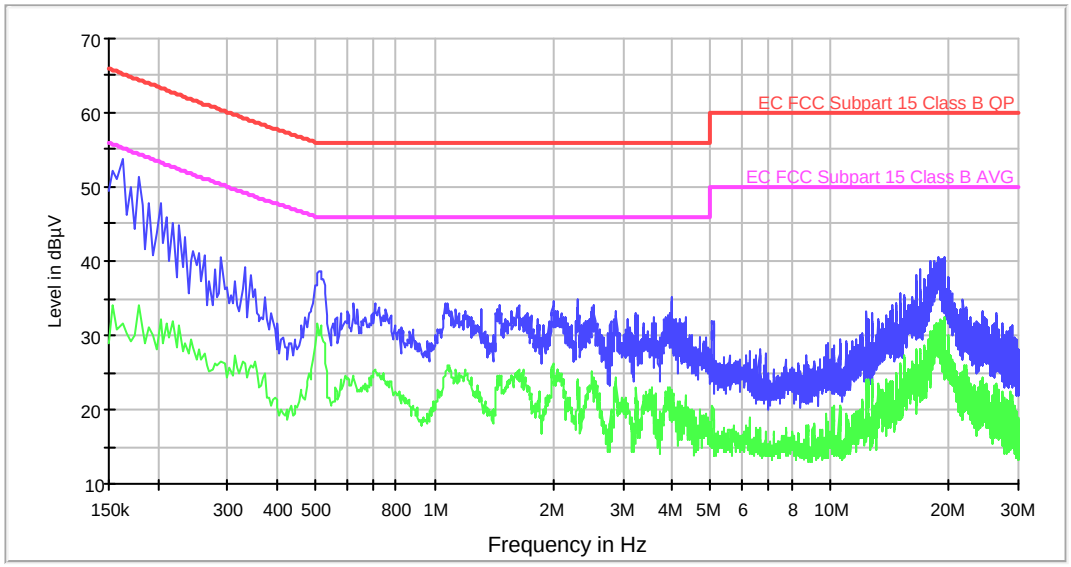
Subrange Maxima

Frequency (MHz)	MaxPeak-ClearWrite (dBµV)	Average-ClearWrite (dBµV)
0.154000	51.6	31.4
0.262000	43.0	26.9
0.510000	38.8	31.6
1.106000	34.9	26.3
2.094000	36.0	24.8
2.518000	35.5	23.4
3.974000	35.2	21.7
6.198000	29.5	17.7
17.658000	39.0	27.7
18.350000	41.2	31.4

Continuous Conducted emission : CC0101L1	**Detector : Peak / Average / Cuasi-peak**

Project:	41308REM.001
Company:	BRCK Inc.
Sample:	S/01
Operation mode:	OM#01
Description:	EUT ON. Equipment in computer peripherical device mode working in IDLE 900MHz mode with WiFi disabled and charging battery. Power supply: 115Vac. Phase wire noise.

EMI EC FCC Subpart 15 Class B ESPI CC



Peak Scan
EC FCC Subpart 15 Class B QP
Average Scan
EC FCC Subpart 15 Class B AVG

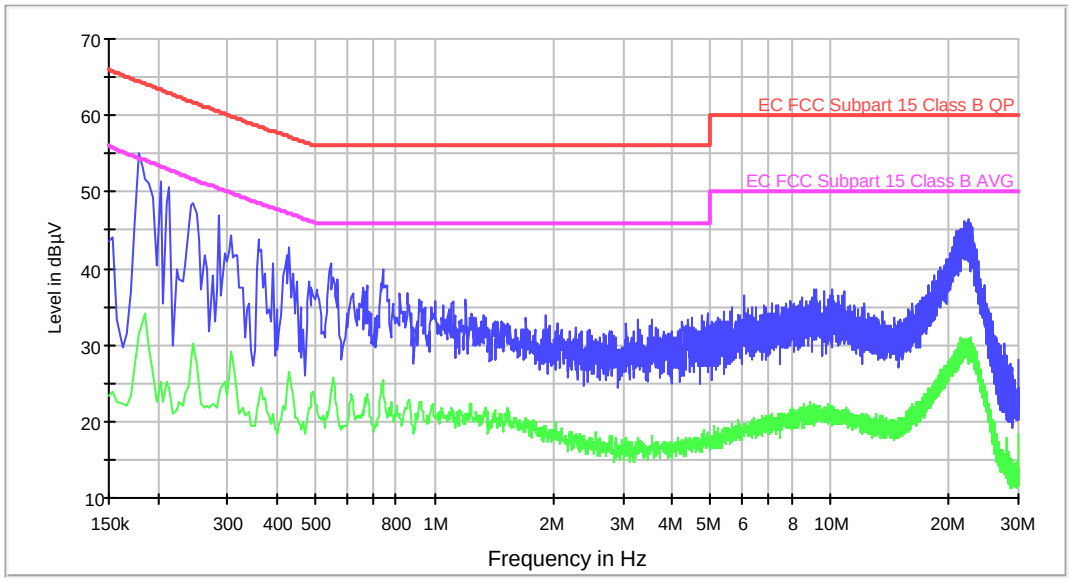
Subrange Maxima

Frequency (MHz)	MaxPeak-ClearWrite (dBµV)	Average-ClearWrite (dBµV)
0.162000	53.9	31.7
0.262000	40.7	27.5
0.514000	38.7	31.3
1.082000	34.4	26.0
1.994000	34.7	26.0
2.310000	34.8	23.9
3.966000	35.0	20.8
9.910000	29.0	17.8
16.930000	38.9	27.9
19.474000	40.6	31.4

Continuous Conducted emission : CC01020N	Detector : Peak / Average / Cuasi-peak

Project:	41308REM.001
Company:	BRCK Inc.
Sample:	S/01
Operation mode:	OM#02
Description:	EUT ON. Equipment charging battery, WiFi disabled and working in IDLE 900MHz mode. Power supply: AC/DC Adapter (115Vac). Neutral wire noise.

EMI EC FCC Subpart 15 Class B ESPI CC



Peak Scan
EC FCC Subpart 15 Class B QP
Average Scan
EC FCC Subpart 15 Class B AVG

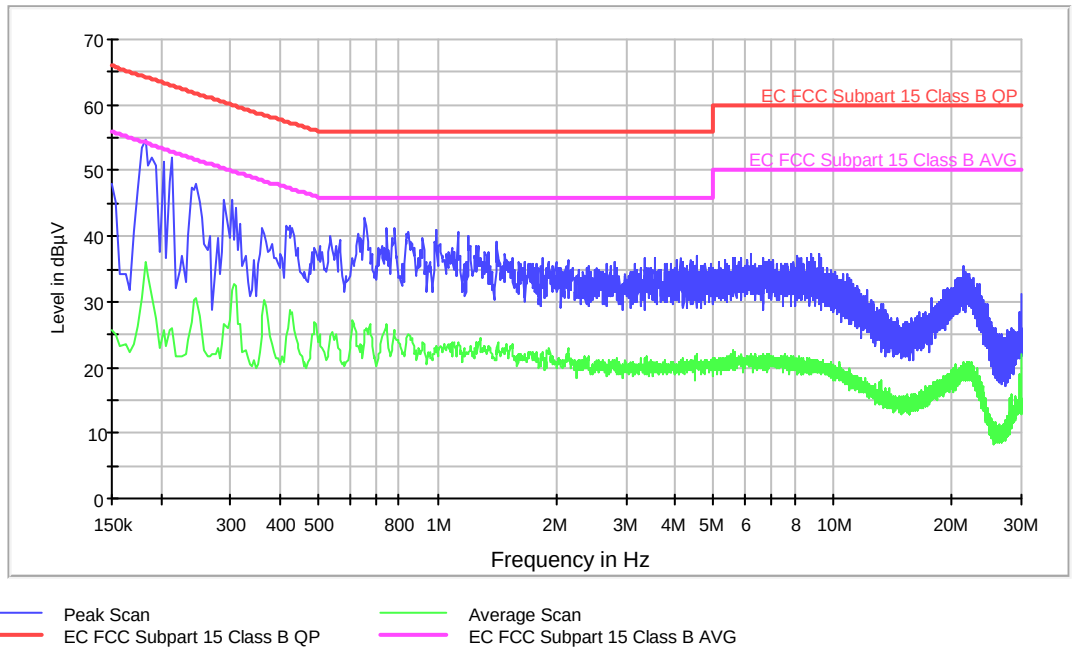
Subrange Maxima

Frequency (MHz)	MaxPeak-ClearWrite (dBµV)	Average-ClearWrite (dBµV)
0.178000	55.0	31.4
0.286000	46.9	23.4
0.546000	40.7	24.1
0.738000	39.8	25.4
1.330000	33.9	21.2
3.262000	33.4	17.8
6.058000	36.5	19.6
10.126000	37.3	21.1
10.882000	36.9	21.3
22.514000	46.3	29.6

Continuous Conducted emission : CC0102L1	**Detector : Peak / Average / Cuasi-peak**

Project: 41308REM.001
Company: BRCK Inc.
Sample: S/01
Operation mode: OM#02
Description: EUT ON. Equipment charging battery, WiFi disabled and working in IDLE 900MHz mode. Power supply: AC/DC Adapter (115Vac). Phase wire noise.

EMI EC FCC Subpart 15 Class B ESPI CC



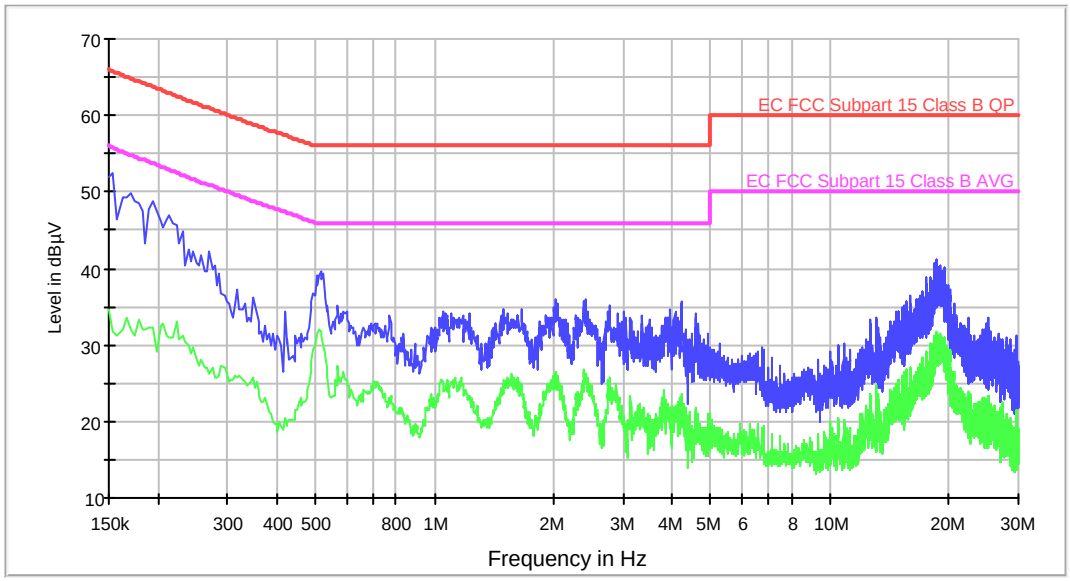
Subrange Maxima

Frequency (MHz)	MaxPeak-ClearWrite (dBµV)	Average-ClearWrite (dBµV)
0.182000	54.6	36.2
0.290000	45.7	26.5
0.654000	42.8	25.8
0.782000	41.3	24.7
1.410000	39.2	22.6
3.530000	36.6	20.0
4.526000	36.9	22.0
6.238000	37.4	22.1
10.890000	34.3	18.3
21.362000	35.6	20.1

Continuous Conducted emission : CC01030N	Detector : Peak / Average / Cuasi-peak

Project:	41308REM.001
Company:	BRCK Inc.
Sample:	S/01
Operation mode:	OM#03
Description:	EUT ON. Equipment in computer peripherical device mode working in TCH 900MHz mode with WiFi enabled and charging battery. Power supply: 115Vac. Neutral wire noise.

EMI EC FCC Subpart 15 Class B ESPI CC



Peak Scan
EC FCC Subpart 15 Class B QP
Average Scan
EC FCC Subpart 15 Class B AVG

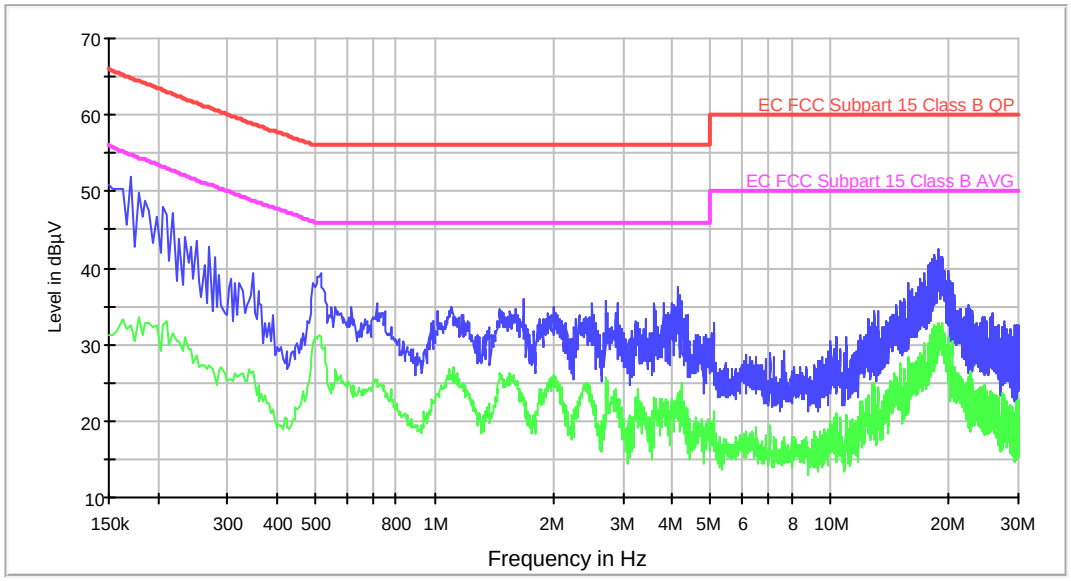
Subrange Maxima

Frequency (MHz)	MaxPeak-ClearWrite (dBµV)	Average-ClearWrite (dBµV)
0.154000	52.6	31.7
0.270000	42.3	26.1
0.514000	39.6	31.6
1.054000	34.4	24.9
2.022000	35.9	26.5
2.402000	35.9	26.3
4.202000	35.7	23.3
6.754000	29.5	18.9
17.530000	38.9	29.1
18.494000	41.3	31.4

Continuous Conducted emission : CC0103L1	**Detector : Peak / Average / Cuasi-peak**

Project:	41308REM.001
Company:	BRCK Inc.
Sample:	S/01
Operation mode:	OM#03
Description:	EUT ON. Equipment in computer peripherical device mode working in TCH 900MHz mode with WiFi enabled and charging battery. Power supply: 115Vac. Phase wire noise.

EMI EC FCC Subpart 15 Class B ESPI CC



Peak Scan
EC FCC Subpart 15 Class B QP
Average Scan
EC FCC Subpart 15 Class B AVG

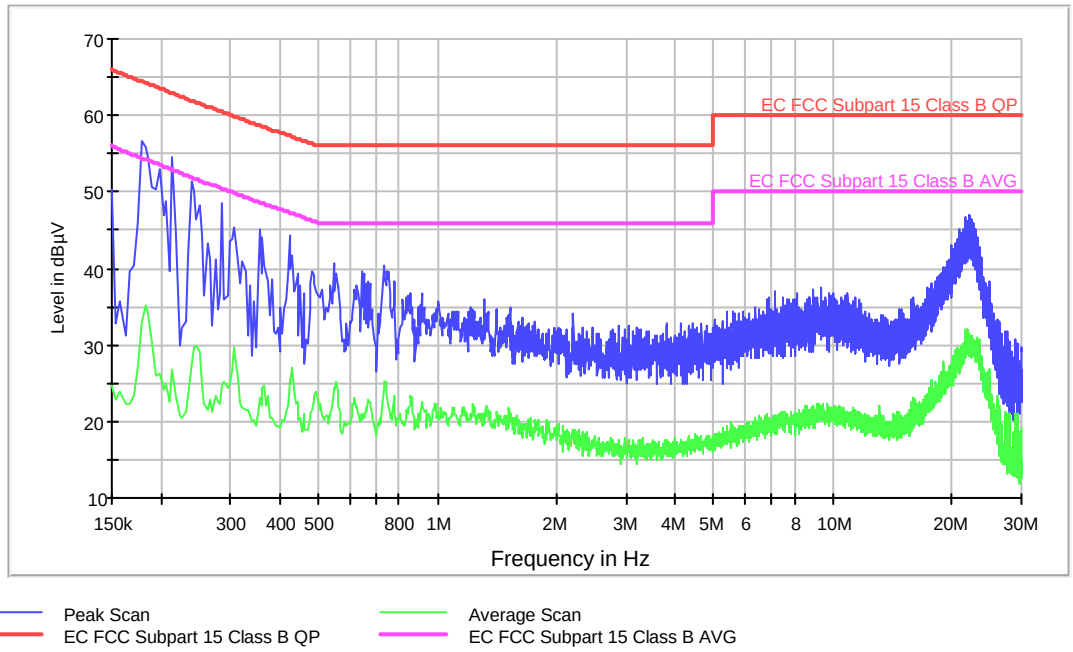
Subrange Maxima

Frequency (MHz)	MaxPeak-ClearWrite (dBµV)	Average-ClearWrite (dBµV)
0.170000	51.8	32.5
0.270000	42.7	27.2
0.514000	39.3	31.0
1.098000	34.8	26.1
1.678000	36.0	23.1
2.714000	35.8	25.0
4.138000	37.4	23.6
10.322000	30.9	20.7
17.302000	39.2	28.7
18.798000	42.6	32.0

Continuous Conducted emission : CC01040N	Detector : Peak / Average / Cuasi-peak

Project:	41308REM.001
Company:	BRCK Inc.
Sample:	S/01
Operation mode:	OM#04
Description:	EUT ON. Equipment charging battery, WiFi enabled and working in TCH 900MHz mode. Power supply: AC/DC Adapter (115Vac). Neutral wire noise.

EMI EC FCC Subpart 15 Class B ESPI CC



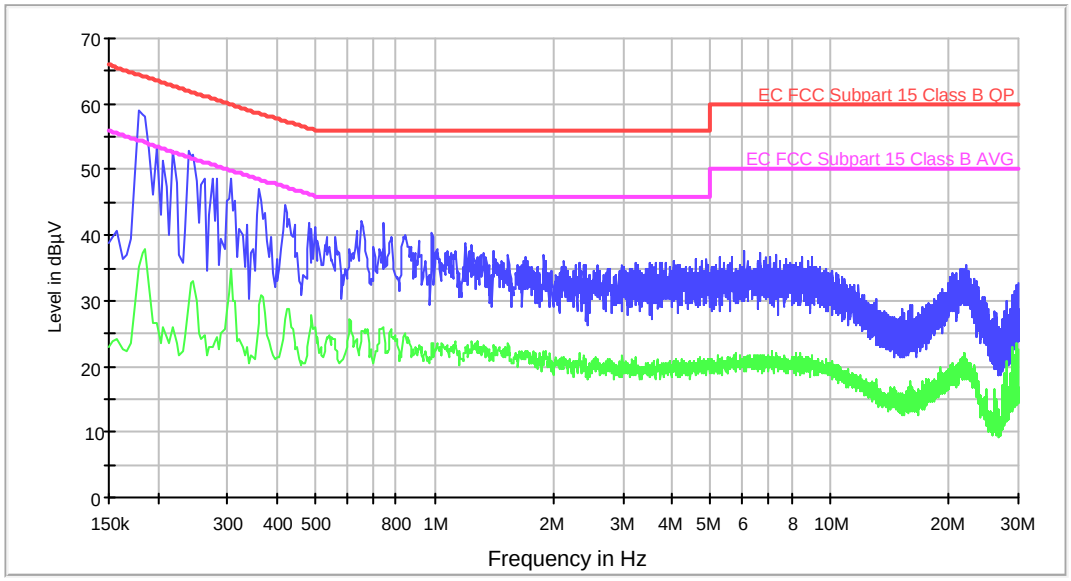
Subrange Maxima

Frequency (MHz)	MaxPeak-ClearWrite (dBµV)	Average-ClearWrite (dBµV)
0.178000	56.6	33.0
0.286000	48.5	24.7
0.546000	40.6	24.3
0.754000	39.7	22.0
1.318000	35.9	20.4
2.206000	34.1	18.9
5.946000	34.4	19.3
9.354000	37.5	21.9
17.294000	37.5	23.2
22.202000	46.9	30.6

Continuous Conducted emission : CC0104L1	**Detector : Peak / Average / Cuasi-peak**

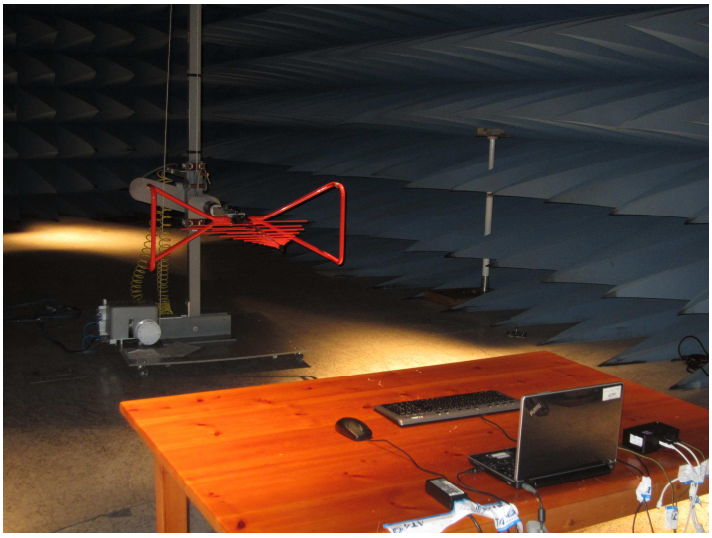
Project:	41308REM.001
Company:	BRCK Inc.
Sample:	S/01
Operation mode:	OM#04
Description:	EUT ON. Equipment charging battery, WiFi enabled and working in TCH 900MHz mode. Power supply: AC/DC Adapter (115Vac). Phase wire noise.

EMI EC FCC Subpart 15 Class B ESPI CC



Peak Scan
EC FCC Subpart 15 Class B QP
Average Scan
EC FCC Subpart 15 Class B AVG

Subrange Maxima

Frequency (MHz)	MaxPeak-ClearWrite (dBµV)	Average-ClearWrite (dBµV)
0.178000	59.0	35.1
0.282000	48.7	24.5
0.654000	42.3	25.3
0.746000	41.8	25.8
1.414000	37.6	23.1
2.130000	36.1	21.4
6.054000	37.5	21.4
6.638000	37.2	20.9
10.538000	33.8	20.3
22.198000	35.3	21.2

Appendix B - Photographs