

# SDoC TEST REPORT

<b>Client:</b>	<b>Date of Receipt:</b> January 25, 2019
Information System Technology LLC	<b>Date of Issue:</b> April 01, 2019
46559 Fremont Blvd.	<b>Test Report No.:</b> EMCE-E-1902-F002
Fremont, CA 94538, U.S.A.	<b>Test Site:</b> Universal Compliance Labs dba EMCE Engineering

**MODEL:****WSDU**

Product Type : Wearable Scan and Display Unit  
Manufacturer : Information System Technology LLC  
Test Standard(s) : FCC CFR 47 Part 15 Subpart B  
ICES-003 Issue 6  
ANSI C63.4-2014  
Class Type : Class B  
Date of Test : January 25, 2019 – March 25, 2019  
Test Result : Refer to the present document

The device bearing the trade name and model specified above, has been shown to comply with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.4-2014. (See Test Report if any modifications were made for compliance) The results of testing in this report apply only to the product which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

Universal Compliance Labs dba EMCE Engineering certifies that no party to application has been denied the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C 862

**Tested By**

James Choi  
Test Engineer  
EMC Division

**Reviewed By**

Billy Kim  
Technical Manager  
EMC Division

## REVISION HISTORY

*The revision history for this document is shown in table.*

Test Report No.	Issue Date	Description
EMCE-E-1902-F002	02/11/2019	Original Issue
EMCE-E-1902-F002	03/26/2019	Added Radiated Emissions data to show Rx data for both Charging and Standalone Mode.
EMCE-E-1902-F002	04/01/2019	Changed title from EMC TEST REPORT to SDoC TEST REPORT

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## 1. General Information of EUT

### 1.1. Description of EUT

<b>Product Type</b>	Wearable Scan and Display Unit
<b>Basic Model</b>	WSDU
<b>Manufacturer</b>	Information System Technology LLC

### 1.2. Product Specification

Item	Specification	
<b>Power Supply</b>	Battery 3.7 V	
<b>USB Type</b>	USB-C Port [The USB-C port is used for battery recharge only]	
<b>Frequency Range</b>	915 MHz	
<b>Max. RF Output Power</b>	92.1 dBuV/m	
<b>Modulation Type</b>	GFSK	
<b>Number of Channels</b>	1 Channel	
<b>Dwell Time</b>	30ms, idle time (does not transmit) = 70ms	
<b>Antenna Specification</b>	Antenna Type:	Chip Antenna
	Peak Gain:	-1.0 dBi

### 1.3. System Configuration

Type	Model	Serial Number	Manufacturer	Quantity
-	-	-	-	-

### 1.4. Model Difference

N/A

## 2. Configuration and Connections with the EUT

### 2.1. Configuration of the EUT and Ancillary Equipment

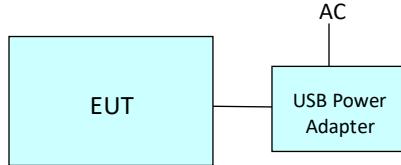
Equipment Type	Model No.	Serial Number	Manufacturer
EUT	WSDU	-	Information System Technology LLC
USB Power Adapter	A1401	-	Apple

### 2.2. Test Ports

Start Connection		End Connection		Cable	
Equipment	I/O Port	Equipment	I/O Port	Length (m)	Shielding Condition
EUT	USB-C Port	AC Charger	USB	1.0	Unshielded

## 2.3. Connection Diagram of the EUT and Peripheral Devices

### [ Charging Mode ]



### [ Standalone Mode ]



## 2.4. Operation of the EUT

### a) Operating Mode(s)

#### Charging Mode

EUT was tested while in charging mode using a USB-C cable connected to USB Power Adapter for Tx and Rx.

#### Standalone Mode

EUT was tested while in standalone mode using its internal battery for power for Tx and Rx.

### 3. Test Facilities and Accreditations

#### 3.1. Test Laboratory

<b>Company Name</b>	Universal Compliance Labs dba EMCE Engineering
<b>CEO</b>	Kisoo Kim
<b>Address</b>	1726 Ringwood Ave., San Jose, CA 95131 USA
<b>Telephone</b>	+1 510-933-8848
<b>Fax</b>	+1 510-933-8849

#### 3.2. Test Facility

<b>Address</b>	1726 Ringwood Avenue, San Jose, CA 95131 USA
<b>Telephone</b>	+1 510-933-8848
<b>Fax</b>	+1 510-933-8849

Measurement facilities are constructed in conformance with the requirements of ANSI C63.4-2014. The normalized site attenuations (30 MHz to 1 GHz) and site validation (1 GHz to 18 GHz) were performed in accordance with the standard in ANSI C63.4-2014.

Measurement Facilities	
Radiated Field Strength Measurement Facility	3 m Semi-Anechoic Chamber
Radiated Field Strength Measurement Facility	10m Open Site

#### 3.3. Instrument Calibration

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturers recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

All antenna for measurement is calibrated in accordance with the requirements of ANSI C63.5-2017.

### 3.4. Accreditation Certificate

United States Department of Commerce  
National Institute of Standards and Technology



## Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 200092-0

**Universal Compliance Labs dba EMCE Engineering**  
San Jose, CA

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:*

### Electromagnetic Compatibility & Telecommunications

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).*

2018-12-31 through 2019-12-31

*Effective Dates*



*For the National Voluntary Laboratory Accreditation Program*

A handwritten signature in blue ink, appearing to read "Diana S. Lamm", is placed over the text "For the National Voluntary Laboratory Accreditation Program".

## 4. Test Method

### 4.1. Measurement of Conducted Emission

The test procedure was in accordance with ANSI C63.4-2014

- a) The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). If the EUT is connected to the PC through USB, the AC power-line adapter of the PC is directly connected to a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 Ω / 50 μH of coupling impedance for the measuring instrument.
- b) Both conducted lines are measured in Quasi-Peak and Average mode, including the worst-case data points for each tested configuration.
- c) The frequency range from 150 kHz to 30 MHz was searched.

#### [ Conducted Emission Limit ]

Frequency (MHz)	Resolution Bandwidth (kHz)	Class A		Class B	
		Quasi-Peak (dBμV)	Average (dBμV)	Quasi-Peak (dBμV)	Average (dBμV)
0.15 to 0.5	9	79	66	66 to 56*	56 to 46*
0.5 to 5	9	73	60	56	46
5 to 30	9	73	60	60	50

\*NOTE: Decreases with the logarithm of the frequency.

### 4.2. Measurement of Radiated Emission

The test procedure was in accordance with ANSI C63.4-2014

- a) The EUT was placed on the top of a turn table 0.8 meters above the ground at a shield room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b) The EUT was set 3 m or 10 m away, according to the specified measurement distance, from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c) The antenna height is varied from 1 m to 4 m above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 m to 4 m and the turn table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e) The test-receiver system was set to Quasi-Peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f) The test-receiver system was set to Peak and Average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.

g) Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. (1 GHz to 40 GHz)

**[ Radiated Emission Limits ]**

Frequency (MHz)	Class A			Class B		
	Antenna Distance (m)	Field Strength ( $\mu$ V/m)	Quasi-Peak (dB $\mu$ V/m)	Antenna Distance (m)	Field Strength ( $\mu$ V/m)	Quasi-Peak (dB $\mu$ V/m)
30 to 88	10	90	39.0	3	100	40.0
88 to 216	10	150	43.5	3	150	43.5
216 to 960	10	210	46.4	3	200	46.0
Above 960	10	300	49.5	3	500	54.0
Frequency (MHz)	Antenna Distance (m)		Class A		Class B	
			Peak (dB $\mu$ V/m)	Average (dB $\mu$ V/m)	Peak (dB $\mu$ V/m)	Average (dB $\mu$ V/m)
Above 1,000	3		79.5	59.5	74	54

**4.2.1. Frequency Range of Radiated Measurements**

For an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a Radiated Emission limit is specified, up to the frequency shown in the following table

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705 to 108	1,000
108 to 500	2,000
500 to 1,000	5,000
Above 1,000	5 <sup>th</sup> harmonic of the highest frequency or 40 GHz, whichever is lower

#### 4.3. Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.4-2014.

All measurement uncertainty values are shown with a coverage factor of  $k = 2$  to indicate a 95 % level of confidence. The measurement data shown herein meets or exceeds the  $U_{\text{CISPR}}$  measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Parameter	Expanded Uncertainty (dB)
Conducted Emission (0.15 MHz to 30 MHz)	2.55 dB ( $k = 2$ )
Radiated Emissions (30 MHz to 1 GHz)	4.73 dB ( $k = 2$ )
Radiated Emissions (1 GHz to 18 GHz)	5.21 dB ( $k = 2$ )
Radiated Emissions (18 GHz to 40 GHz)	5.18 dB ( $k = 2$ )

## 5. Test Summary

The results in this report apply only to sample tested:

Test Date	Phenomena	Limit Value / Performance Criteria	Test Result	Test Method	Class Type
01/25/2019	Conducted Emission	See test data	Pass	ANSI C63.4-2014	Class A
03/25/2019	Radiated Emission (30 MHz to 1 GHz)	See test data	Pass	ANSI C63.4-2014	Class A
03/25/2019	Radiated Emission (1 GHz to 18 GHz)	See test data	Pass	ANSI C63.4-2014	Class A

## 6. Test Equipment

Type	Manufacturer	Model Name	Serial Number	Calibration Cycle	Cal Due Date
<b><u>Radiated Emission (30 MHz – 1 GHz)</u></b>					
<input checked="" type="checkbox"/> EMI Test Receiver	Rohde & Schwarz	ESU40	100529	1 year	12/20/2019
<input checked="" type="checkbox"/> LNA	COM-Power	PAM-103A	18020005	1 year	01/19/2020
<input checked="" type="checkbox"/> Hybrid Antenna	Sunol	JB6	A060916	2 years	06/27/2019
<input checked="" type="checkbox"/> Antenna Master	ETS Lindgren	2170/2180	-	N/A	-
<input checked="" type="checkbox"/> Turn Table	ETS Lindgren	-	-	N/A	-
<input checked="" type="checkbox"/> Antenna Master & Turn Table Controller	ETS Lindgren	7006-001	00162360	N/A	-
<input checked="" type="checkbox"/> Software	TOYO	EP7RE	-	-	-
<b><u>Radiated Emission (1 GHz – 6 GHz)</u></b>					
<input checked="" type="checkbox"/> EMI Test Receiver	Rohde & Schwarz	ESU40	100529	1 year	12/20/2019
<input checked="" type="checkbox"/> LNA	Cernex	CBLU1183540B-01	27974	1 year	01/18/2020
<input checked="" type="checkbox"/> Horn Antenna	Sunol	DRH-118	A070516	2 years	08/28/2020
<input checked="" type="checkbox"/> Antenna Master	ETS Lindgren	2170/2180	-	N/A	-
<input checked="" type="checkbox"/> Turn Table	ETS Lindgren	-	-	N/A	-
<input checked="" type="checkbox"/> Antenna Master & Turn Table Controller	ETS Lindgren	7006-001	00162360	N/A	-
<input checked="" type="checkbox"/> Software	Toyo Corporation	EP7RE	-	-	-
<b><u>Conducted Emission</u></b>					
<input checked="" type="checkbox"/> EMI Test Receiver	Rohde & Schwarz	ESR3	102363	1 year	12/20/2019
<input type="checkbox"/> LISN	EMCO	3816/2SH	00205729	1 year	01/19/2020
<input checked="" type="checkbox"/> LISN	Rohde & Schwarz	ENV216	101349	1 year	01/19/2020
<input type="checkbox"/> ISN	Teseq	ISN ST08	49771	1 year	01/28/2020
<input type="checkbox"/> ISN	Teseq	ISN T800	420805	1 year	01/18/2020
<input checked="" type="checkbox"/> Software	Toyo Corporation	EP9CE	-	-	-

## 7. EMC Test Results

### 7.1. Conducted Emission Test

#### 7.1.1. Operating Environment

<b>Temperature</b>	18.1 °C
<b>Relative Humidity</b>	40 % R.H.
<b>Pressure</b>	101.3 kPa

#### 7.1.2. Test Method and Levels

The test method shall be in accordance with ANSI C63.4-2014.

The equipment shall meet the Class A limits given in FCC CFR 47 Part 15 Subpart B and ICES-003 Issue 6.

#### 7.1.3. Test Condition

##### a) Operating Mode(s)

Charging Mode

##### b) Testing

The following requirements and evaluation of test results shall apply.

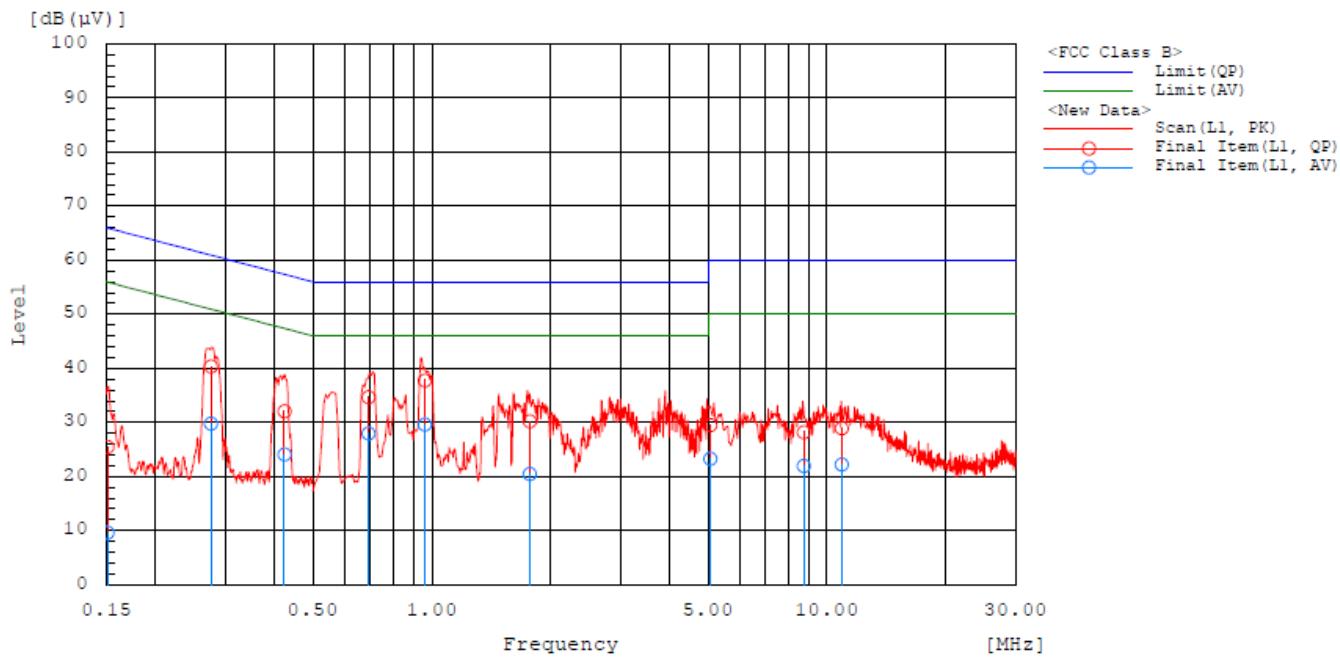
<b>Power Supply</b>	120VAC / 60Hz
<b>Applicable Port</b>	AC Mains Port
<b>Frequency Range</b>	150 kHz to 30 MHz
<b>LISN Impedance</b>	150 Ω
<b>Measurement Detector Type / Bandwidth</b>	Detector: Quasi-Peak / Average IF BW: 9 kHz

##### c) Test Site

Conducted Emission Testing was performed in a partially shielded room.

#### 7.1.4. Test Data

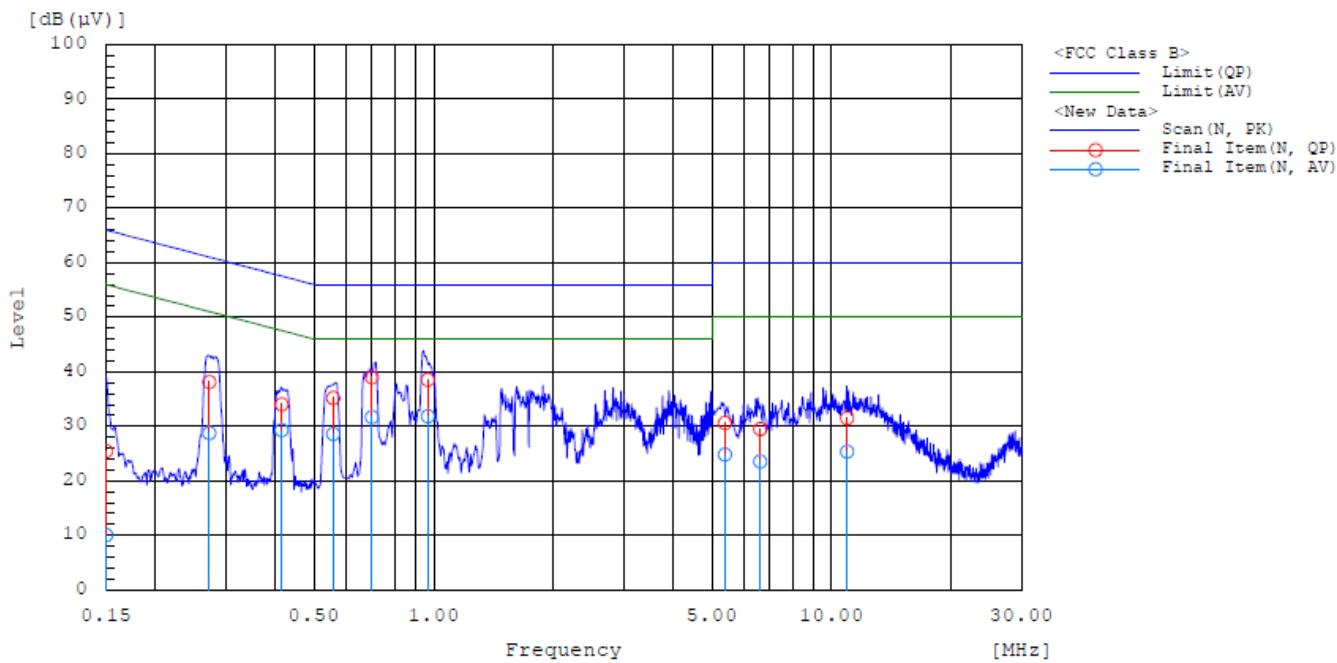
[ Normal Mode – AC Mains Power Port #1 ]  
[ L1 ]



[ Final Results ]

Frequency MHz	Line	Reading dB(μV)		Corr. dB	Level dB(μV)		Limit dB(μV)		Margin dB	
		QP	CAV		QP	CAV	QP	CAV	QP	CAV
0.151	L1	15.9	0.1	9.6	25.5	9.7	66	56	40.5	46.3
0.276	L1	30.8	20.2	9.6	40.4	29.8	60.9	50.9	20.5	21.1
0.423	L1	22.5	14.5	9.6	32.1	24.1	57.4	47.4	25.3	23.3
0.691	L1	25.1	18.4	9.6	34.7	28	56	46	21.3	18
0.959	L1	28.1	19.9	9.7	37.8	29.6	56	46	18.2	16.4
1.768	L1	20.6	10.9	9.6	30.2	20.5	56	46	25.8	25.5
5.063	L1	19.8	13.5	9.8	29.6	23.3	60	50	30.4	26.7
8.729	L1	18.2	12	10	28.2	22	60	50	31.8	28
10.901	L1	18.9	12.2	10	28.9	22.2	60	50	31.1	27.8

[ Normal Mode – AC Mains Power Port #1 ]  
[ N ]



[ Final Results ]

Frequency MHz	Line	Reading dB(μV)		Corr. dB	Level dB(μV)		Limit dB(μV)		Margin dB	
		QP	CAV		QP	CAV	QP	CAV	QP	CAV
0.15	N	15.9	0.5	9.6	25.5	10.1	66	56	40.5	45.9
0.273	N	28.6	19.2	9.6	38.2	28.8	61	51	22.8	22.2
0.414	N	24.5	19.7	9.6	34.1	29.3	57.6	47.6	23.5	18.3
0.559	N	25.6	19	9.6	35.2	28.6	56	46	20.8	17.4
0.699	N	29.4	22.1	9.6	39	31.7	56	46	17	14.3
0.966	N	28.9	22.2	9.7	38.6	31.9	56	46	17.4	14.1
5.389	N	20.8	15.1	9.8	30.6	24.9	60	50	29.4	25.1
6.617	N	19.7	13.8	9.8	29.5	23.6	60	50	30.5	26.4
10.94	N	21.6	15.4	10	31.6	25.4	60	50	28.4	24.6

## 7.2. Radiated Emission (30 MHz – 1 GHz)

### 7.2.1. Operating Environment

<b>Temperature</b>	20.2 °C
<b>Relative Humidity</b>	45 % R.H.
<b>Pressure</b>	101.8 kPa

### 7.2.2. Test Method and Levels

The test method shall be in accordance with ANSI C63.4-2014.

The equipment shall meet the Class A limits given in FCC CFR 47 Part 15 Subpart B and ICES-003 Issue 6.

### 7.2.3. Test Condition

#### a) Operating Mode(s)

Charging Mode

Standalone Mode

#### b) Testing

Radiated Emissions pre-scans and final measurements were performed in a 3 m semi-anechoic chamber.

Obtained the max. emission point by optimizing the antenna height, antenna polarization and turntable azimuth.

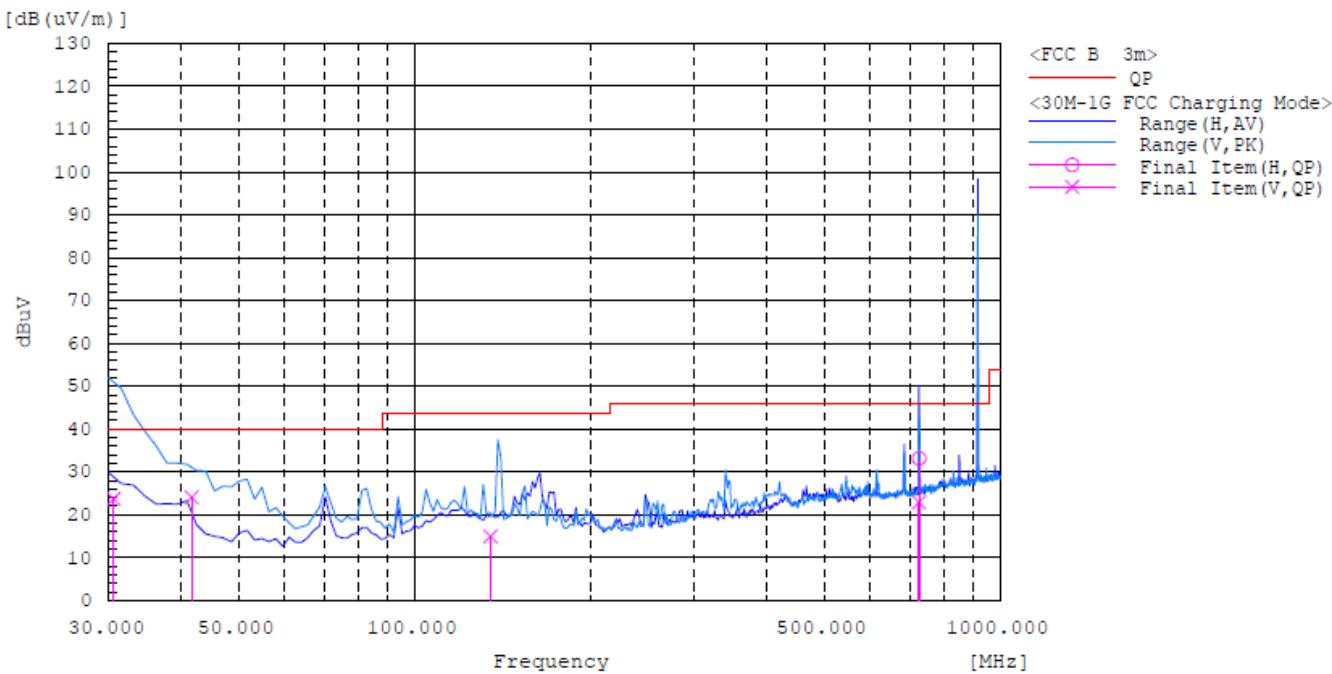
<b>Power Supply</b>	120VAC / 60Hz
<b>Applicable Port</b>	Enclosure
<b>Frequency Range</b>	30 MHz to 1 000 MHz
<b>Measurement Detector Type / Bandwidth</b>	Detector: Quasi-Peak IF BW: 120 kHz
<b>Distance</b>	3 m

#### c) Test Site

Radiated Emission Testing was performed in a 3 m semi-anechoic chamber.

#### 7.2.4. Test Data

[ 30 MHz to 1 000 MHz ]  
[ Charging Mode – Tx ]



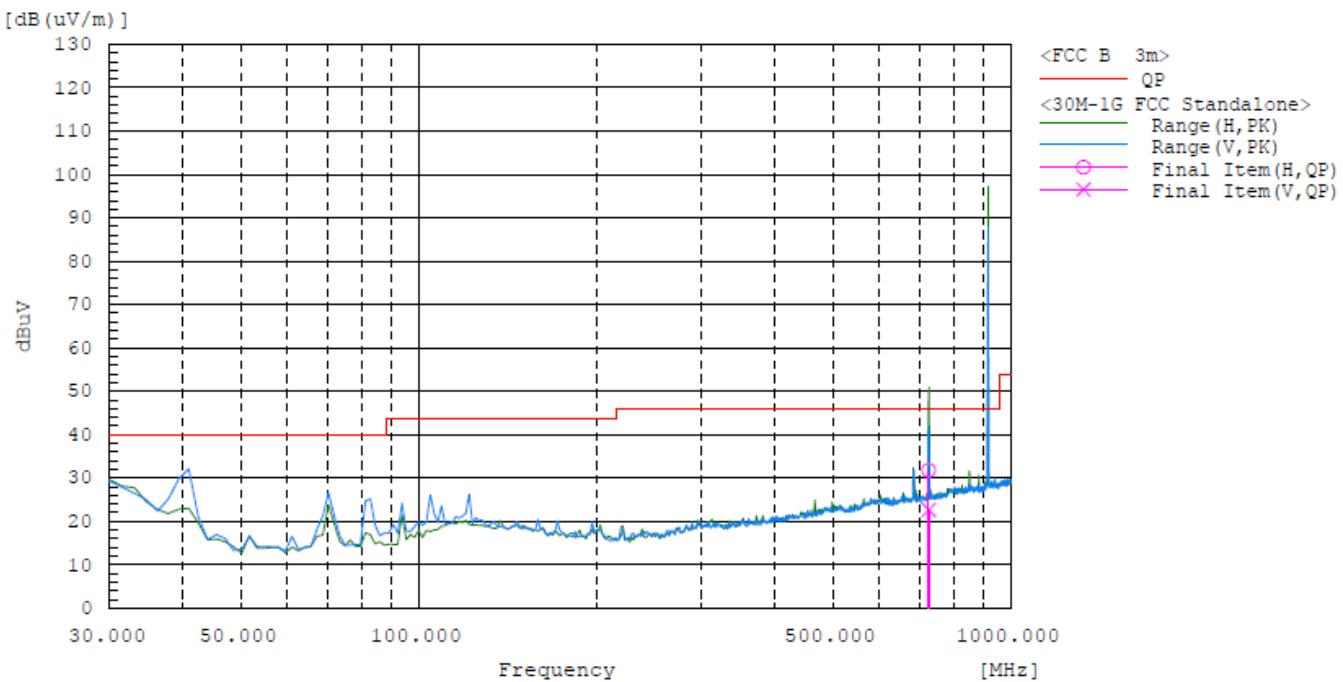
Frequency MHz	Polarization	Reading dB(uV)	Corr. dB(1/m)	Level	Limit	Margin	Height cm	Angle deg
				QP	QP	QP		
30.614	V	28.8	-5.1	23.7	40	16.3	103.1	18.3
41.628	V	39.5	-15.4	24.1	40	15.9	204.8	13.0
134.695	V	29.2	-14.2	15.0	43.5	28.5	109.6	108.3
726.846	V	28.9	-6.0	22.9	46	23.1	120.6	255.0
726.954	H	39.1	-6.0	33.1	46	12.9	117.0	22.0

\*Note<sup>1</sup>: Fundamentals at 915 MHz.

⌘ Calculation Formula:

1. POL. H = Horizontal, POL. V = Vertical
2. QuasiPeak Level = Reading (Receiver Reading) + Corr.
3. Corr. (Correction Factor) = Antenna Factor + Cable Loss + LNA
4. Margin = Limit - QuasiPeak Level

[ 30 MHz to 1 000 MHz ]  
[ Standalone Mode – Tx ]



Frequency MHz	Polarization	Reading dB(uV)	Corr. dB(1/m)	Level	Limit	Margin	Height cm	Angle deg
				QP	QP	QP		
727.157	V	28.6	-6.0	22.6	46	23.4	166.8	252.0
726.659	H	37.8	-6.0	31.8	46	14.2	115.0	23.3

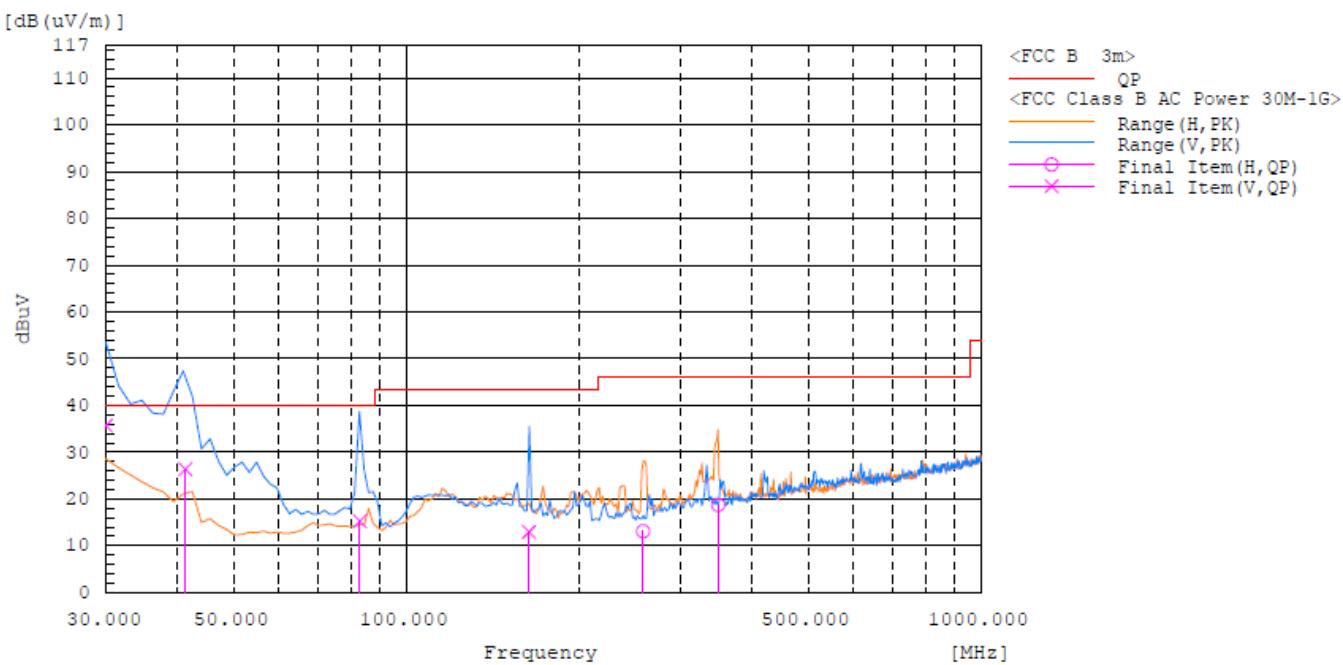
\*Note<sup>1</sup>: Fundamentals at 915 MHz.

\*Note<sup>2</sup>: Remaining peaks have a 24 dB margin or higher.

※ **Calculation Formula:**

1. POL. H = Horizontal, POL. V = Vertical
2. QuasiPeak Level = Reading (Receiver Reading) + Corr.
3. Corr. (Correction Factor) = Antenna Factor + Cable Loss + LNA
4. Margin = Limit - QuasiPeak Level

[ 30 MHz to 1 000 MHz ]  
[ Charging Mode – Rx ]

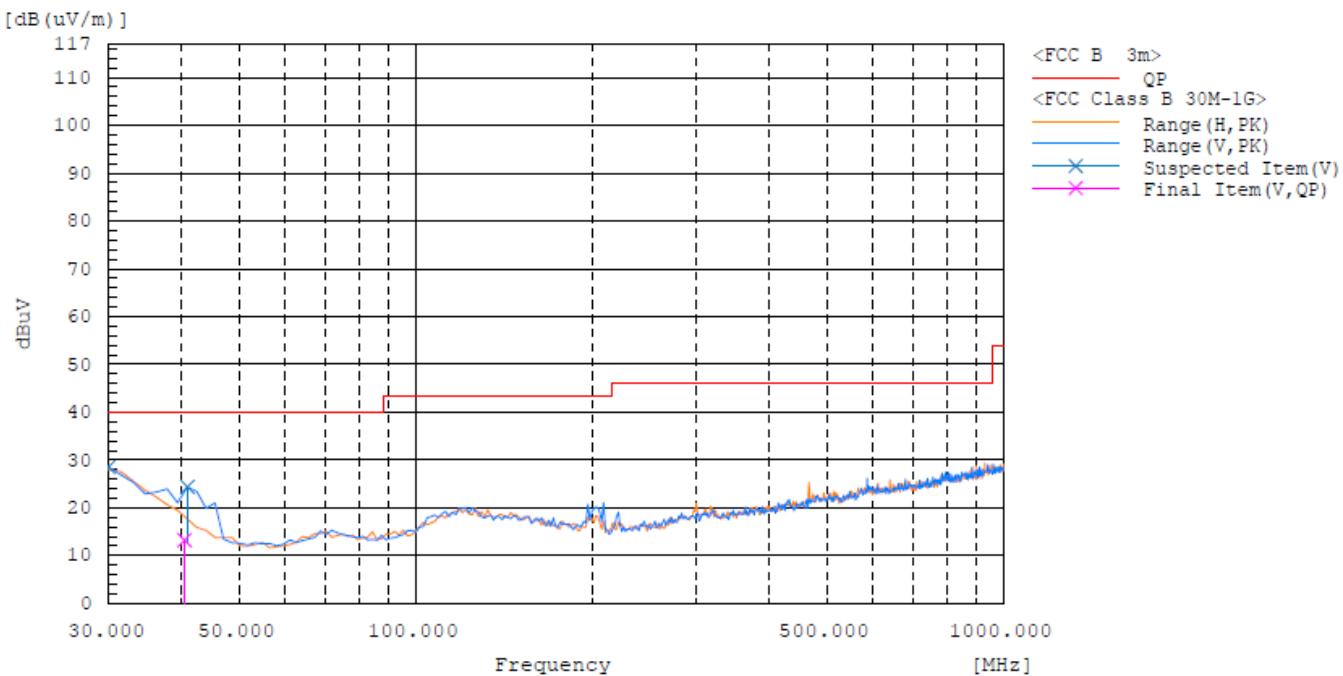


Frequency MHz	Polarization	Reading dB(uV)	Corr. dB(1/m)	Level dB(uV/m)	Limit dB(uV/m)	Margin dB	Height cm	Angle deg
		QP		QP	QP	QP		
30	V	27.1	8.6	35.7	40	4.3	111.3	351.5
41.224	V	41.5	-15.1	26.4	40	13.6	100.3	346.3
82.987	V	33.9	-18.6	15.3	40	24.7	117.5	298.0
163.447	V	28.2	-15.2	13.0	43.5	30.5	105.6	286.8
258.232	H	29.0	-15.9	13.1	46	32.9	120.0	238.0
348.803	H	31.5	-12.8	18.7	46	27.3	119.4	49.3

※ Calculation Formula:

1. POL. H = Horizontal, POL. V = Vertical
2. QuasiPeak Level = Reading (Receiver Reading) + Corr.
3. Corr. (Correction Factor) = Antenna Factor + Cable Loss + LNA
4. Margin = Limit - QuasiPeak Level

[ 30 MHz to 1 000 MHz ]  
[ Standalone Mode – Rx ]



Frequency MHz	Polarization	Reading dB(uV)	Corr. dB(1/m)	Level	Limit	Margin	Height cm	Angle deg
				QP	QP	QP		
30.00	V	14.9	-35.9	-21.0	40	61.0	115.1	133.3
40.42	V	27.6	-14.4	13.2	40	26.8	118.5	350.0

\*Note<sup>1</sup>: Remaining peaks have a 20 dB margin or higher.

⌘ Calculation Formula:

1. POL. H = Horizontal, POL. V = Vertical
2. QuasiPeak Level = Reading (Receiver Reading) + Corr.
3. Corr. (Correction Factor) = Antenna Factor + Cable Loss + LNA
4. Margin = Limit - QuasiPeak Level

## 7.3. Radiated Emission (1 GHz – 5 GHz)

### 7.3.1. Operating Environment

<b>Temperature</b>	19.3 °C
<b>Relative Humidity</b>	38 % R.H.
<b>Pressure</b>	101.9 kPa

### 7.3.2. Test Method and Levels

The test method shall be in accordance with ANSI C63.4-2014.

The equipment shall meet the Class A limits given in FCC CFR 47 Part 15 Subpart B and ICES-003 Issue 6.

### 7.3.3. Test Condition

#### a) Operating Mode(s)

Charging Mode  
Standalone Mode

#### b) Testing

Radiated Emissions testing performed in a 3 m semi-anechoic chamber.

Obtained the max. emission point by optimizing the antenna height, antenna polarization and turntable azimuth.

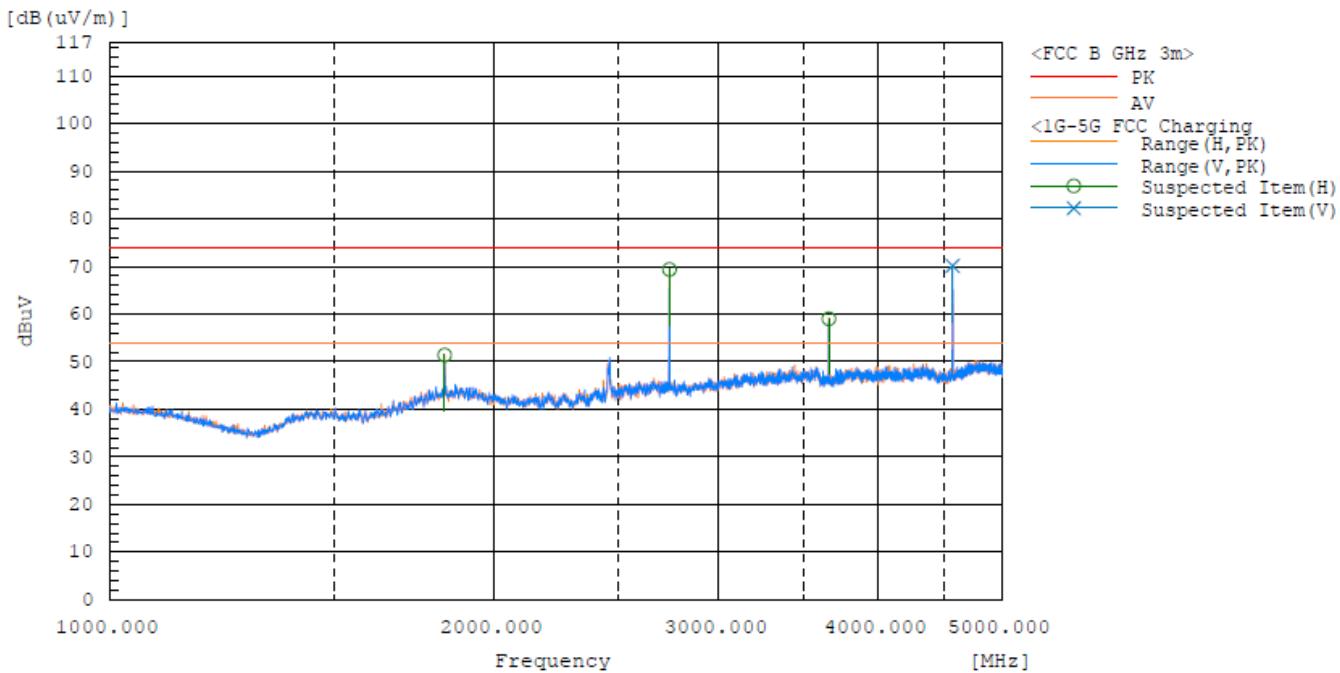
<b>Power Supply</b>	120VAC / 60Hz
<b>Applicable Port</b>	Enclosure
<b>Frequency Range</b>	1 000 MHz to 5 000 MHz
<b>Measurement Detector Type / Bandwidth</b>	Detector: Peak, Average IF BW: 1 MHz
<b>Distance</b>	3 m

#### c) Test Site

Radiated Emission Testing was performed in a 3 m semi-anechoic chamber.

### 7.3.4. Test Data

[ 1 000 MHz to 5 000 MHz ]  
[ Charging Mode – Tx ]



Frequency MHz	Polarization	Reading dB(uV)		Corr. dB(1/m)	Level dB(uV/m)		Limit dB(uV/m)		Margin dB		Height cm	Angle deg
		AV	PK		AV	PK	AV	PK	AV	PK		

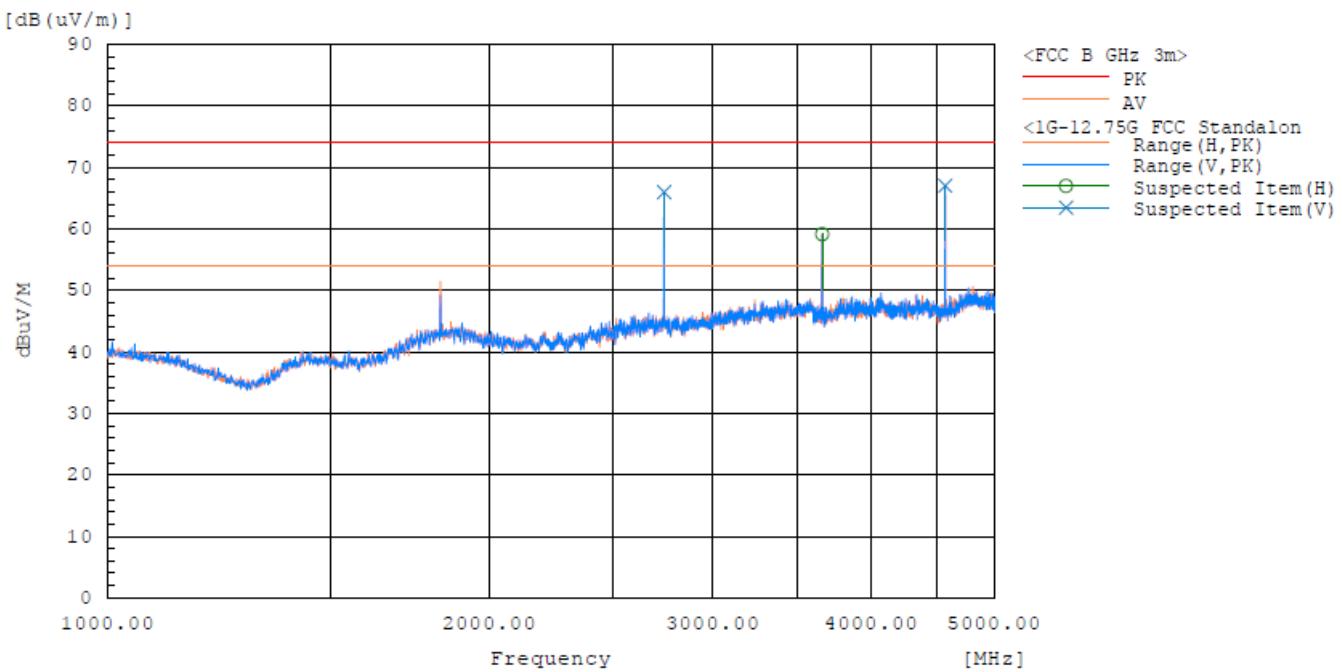
\*Note<sup>1</sup>: Peaks are the Harmonics of the Fundamentals at 915 MHz.

\*Note<sup>2</sup>: Remaining peaks have a 10 dB margin or higher.

**※ Calculation Formula:**

1. POL. H = Horizontal, POL. V = Vertical
2. CAverage or Peak Level = Reading (Receiver Reading) + Corr.
3. Corr. (Correction Factor) = Antenna Factor + Cable Loss + LNA
4. Margin = Limit – CAverage or Peak Level

[ 1 000 MHz to 5 000 MHz ]  
[ Standalone Mode – Tx ]



Frequency MHz	Polarization	Reading dB(uV)		Corr. dB(1/m)	Level dB(uV/m)		Limit dB(uV/m)		Margin dB		Height cm	Angle deg
		AV	PK		AV	PK	AV	PK	AV	PK		

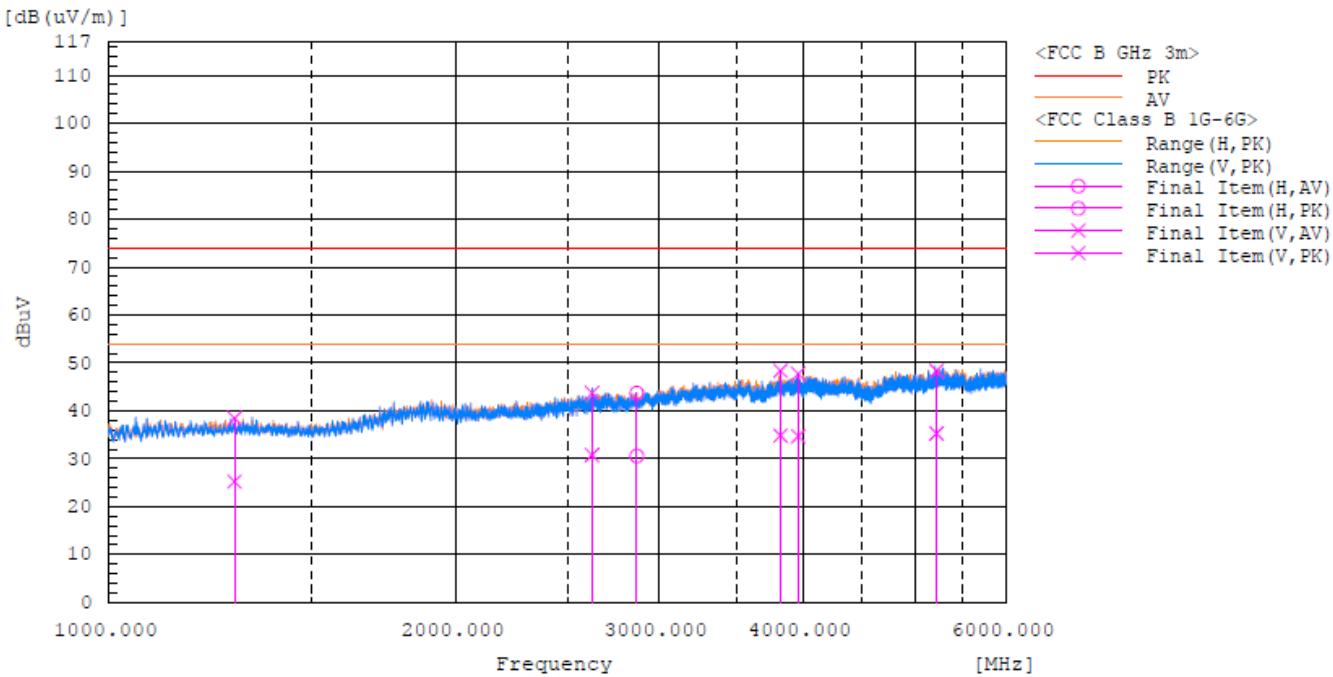
\*Note<sup>1</sup>: Peaks are the Harmonics of the Fundamentals at 915 MHz.

\*Note<sup>2</sup>: Remaining peaks have a 10 dB margin or higher.

**※ Calculation Formula:**

1. POL. H = Horizontal, POL. V = Vertical
2. CAverage or Peak Level = Reading (Receiver Reading) + Corr.
3. Corr. (Correction Factor) = Antenna Factor + Cable Loss + LNA
4. Margin = Limit – CAverage or Peak Level

[ 1 000 MHz to 6 000 MHz ]  
[ Charging Mode – Rx ]

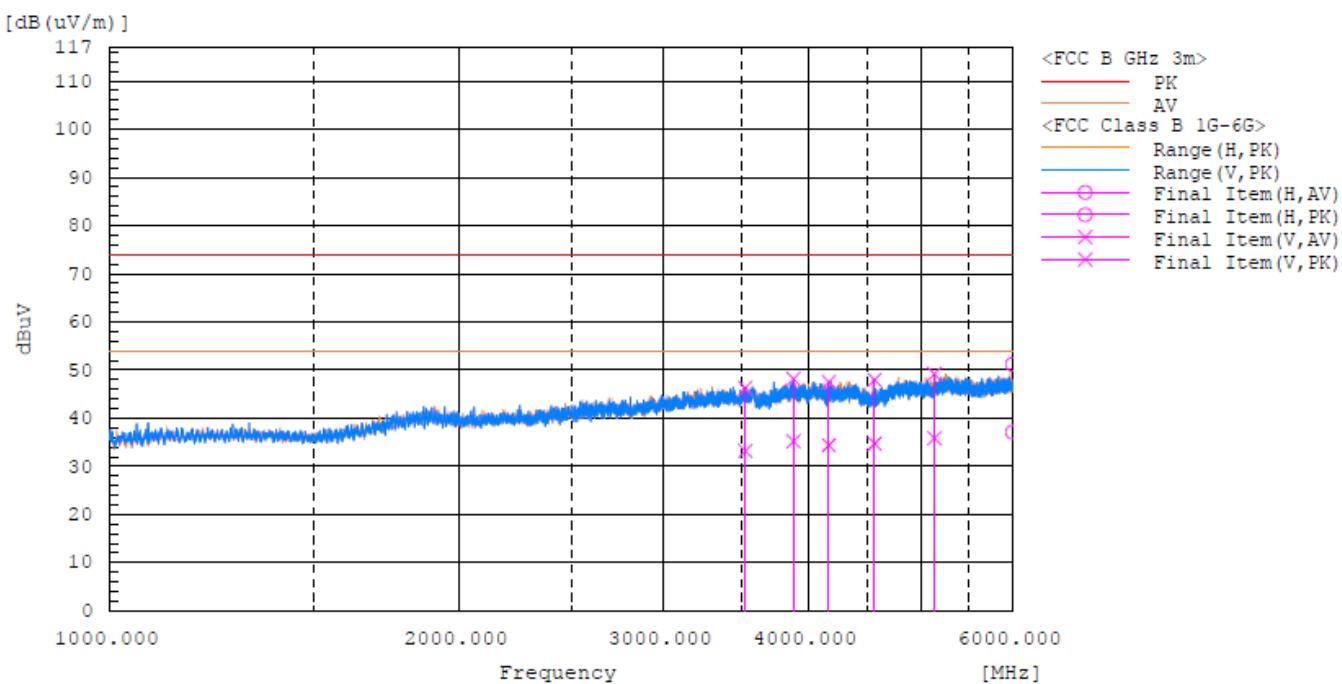


Frequency MHz	Polarization	Reading dB(uV)		Corr. dB(1/m)	Level dB(uV/m)		Limit dB(uV/m)		Margin dB		Height cm	Angle deg
		AV	PK		AV	PK	AV	PK	AV	PK		
1285.744	V	44.8	58.1	-19.6	25.2	38.5	54	74	28.8	35.5	279.7	215.5
2625.419	V	43.4	56.3	-12.6	30.8	43.7	54	74	23.2	30.3	250.5	196.3
3825.578	V	41.2	54.8	-6.4	34.8	48.4	54	74	19.2	25.6	227.0	92.0
3962.848	V	40.8	53.9	-6.1	34.7	47.8	54	74	19.3	26.2	246.4	151.5
5224.669	V	38.7	51.8	-3.4	35.3	48.4	54	74	18.7	25.6	227.1	124.8
2871.439	H	42.4	55.5	-11.8	30.6	43.7	54	74	23.4	30.3	118.8	53.0

※ Calculation Formula:

1. POL. H = Horizontal, POL. V = Vertical
2. CAverage or Peak Level = Reading (Receiver Reading) + Corr.
3. Corr. (Correction Factor) = Antenna Factor + Cable Loss + LNA
4. Margin = Limit – CAverage or Peak Level

[ 1 000 MHz to 6 000 MHz ]  
[ Standalone Mode – Rx ]



Frequency MHz	Polarization	Reading dB(uV)		Corr. dB(1/m)	Level dB(uV/m)		Limit dB(uV/m)		Margin dB		Height cm	Angle deg
		AV	PK		AV	PK	AV	PK	AV	PK		
3531.256	V	41.8	54.9	-8.6	33.2	46.3	54	74	20.8	27.7	165.4	26.0
3884.692	V	41.3	54.3	-6.1	35.2	48.2	54	74	18.8	25.8	332.5	246.0
4167.572	V	40.2	53.3	-5.8	34.4	47.5	54	74	19.6	26.5	262.3	133.3
4563.899	V	41.0	54.3	-6.3	34.7	48.0	54	74	19.3	26.0	163.7	348.5
5139.725	V	39.7	53.1	-3.9	35.8	49.2	54	74	18.2	24.8	337.4	130.0
6000	H	39.4	53.5	-2.3	37.1	51.2	54	74	16.9	22.8	100.0	261.3

**\* Calculation Formula:**

1. POL. H = Horizontal, POL. V = Vertical
2. CAverage or Peak Level = Reading (Receiver Reading) + Corr.
3. Corr. (Correction Factor) = Antenna Factor + Cable Loss + LNA
4. Margin = Limit – CAverage or Peak Level