









Page: 1 / 29 Rev.: 00

# FCC ID: WR974100118120 Report No.: T190813W01-F

# FCC 47 CFR PART 15 SUBPART B & ICES-003 Issue 6 TEST REPORT

For

Smart camera with voice control

**MODEL: EBSCV01** 

Issued for

**Ecobee Incorporated** 

207 Queens Quay West, Suite 600, Toronto Ontario, Canada, M5J1A7

Issued By:

Compliance Certification Services Inc.

Wugu Laboratory

No.11, Wugong 6th Rd., Wugu Dist., New Taipei City 24891, Taiwan. (R.O.C.)

Issued Date: September 26, 2019

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 Report No.:
 T190813W01-F

 Page:
 2 / 29

 Rev.:
 00

#### **Revision History**

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	September 26, 2019	Initial Issue	ALL	Vicki Huang



**Report No.:** T190813W01-F

#### Page: 3 / 29 Rev.: 00

# **TABLE OF CONTENTS**

1	TEST RESULT CERTIFICATION	4
2	EUT DESCRIPTION	5
3	TEST METHODOLOGY	6
3.1.	DECISION OF FINAL TEST MODE	6
3.2.	EUT SYSTEM OPERATION	6
4	SETUP OF EQUIPMENT UNDER TEST	7
4.1.	DESCRIPTION OF SUPPORT UNITS	7
4.2.	CONFIGURATION OF SYSTEM UNDER TEST	7
5	FACILITIES AND ACCREDITATIONS	8
5.1.	FACILITIES	8
5.2.	ACCREDITATIONS	8
5.3.	MEASUREMENT UNCERTAINTY	g
6	CONDUCTED EMISSION MEASUREMENT	10
6.1.	LIMITS OF CONDUCTED EMISSION MEASUREMENT	10
6.2.	TEST INSTRUMENTS	10
6.3.	TEST PROCEDURES	11
6.4.	TEST SETUP	12
6.5.	DATA SAMPLE:	12
6.6.	TEST RESULTS	13
7	RADIATED EMISSION MEASUREMENT	15
7.1.	LIMITS OF RADIATED EMISSION MEASUREMENT	15
7.2.	TEST INSTRUMENTS	17
7.3.	TEST PROCEDURES	19
7.4.	TEST SETUP	21
7.5.	DATA SAMPLE:	22
7.6.	TEST RESULTS	23
8	PHOTOGRAPHS OF THE TEST CONFIGURATION	27
	APPENDIX 1 - PHOTOGRAPHS OF EUT	



Page: 4 / 29 **Report No.:** T190813W01-F

Rev.: 00

# 1 TEST RESULT CERTIFICATION

Product: Smart camera with voice control

**Brand:** Ecobee

Model: EBSCV01

**Applicant: Ecobee Incorporated** 

207 Queens Quay West, Suite 600, Toronto Ontario, Canada, M5J1A7

**Manufacturer: Wistron Corporation** 

21F., No.88, Sec. 1, Xintai 5th Rd., Xizhi Dist., New Taipei City 221, Taiwan (R.O.C.)

Tested: August 16, 2019

Test Voltage: 120Vac, 60Hz

EMISSION					
Standard	ltem	Result	Remarks		
FCC 47 CFR Part 15 Subpart B, ICES-003 Issue 6-2016	Conducted (Power Port)	PASS	Meet Class B limit		
ANSI C63.4-2014	Radiated	PASS	Meet Class B limit		

Note: 1. The statements of test result on the above are decided by the request of test standard only; the measurement uncertainties are not factored into this compliance determination.

2. The information of measurement uncertainty is available upon the customer's request.

Deviation from Applicable Standard
None

#### **Statements of Conformity**

Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

The above equipment has been tested by Compliance Certification Services Inc., and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Approved by:	Tested by:	
Dex Chiang	Lowka chen	
Hex Chiang Supervisor	Lowka Chen Engineer	



 Report No.:
 T190813W01-F

 Page:
 5 / 29

 Rev.:
 00

# **2 EUT DESCRIPTION**

Product	Smart camera with voice control	
Brand	Ecobee	
Model	EBSCV01	
Applicant	Ecobee Incorporated	
Housing material	Plastic	
Identify Number	T190813W01	
Received Date	August 13, 2019	
EUT Power Rating	VDC from Power Adapter Model No.: SAW12D-120-1000U I/P:100-240Vac, 50/60Hz, 0.3A O/P:12Vdc,1000mA	
AC Power Cord Type	N/A	
DC Power Cord Type	Non-shielded 1m (Non-detachable)	

**Note:** Client consigns only one sample to test (model number: EBSCV01). Therefore, the testing Lab. just guarantees the unit, which has been tested.

#### I/O Port

I/O PORT TYPES	Q'TY	TESTED WITH
1) DC Jack Port	1	1



Page: 6 / 29 **Report No.:** T190813W01-F

Rev.: 00

#### 3 TEST METHODOLOGY

#### 3.1. DECISION OF FINAL TEST MODE

1. The following test modes were scanned during the preliminary test:

Pre-Test Mode
Mode 1: EUT(EBSCV01), Microphone + Wi-Fi 5G Link Mode
Mode 2: EUT(EBSCV01), Microphone + Wi-Fi 2.4G Link Mode
Mode 3: EUT(EBSCV01), Speaker + IR LED + RGB LED

After the preliminary scan, the following test mode was found to produce the highest emission level.

Final Test N	Mode	
Emission	Conducted Emission	Mode 1
Emission	Radiated Emission	Mode 1

Then, the above highest emission mode of the configuration of the EUT and cable was chosen for all final test items.

#### 3.2. EUT SYSTEM OPERATION

- 1. Setup the EUT and simulators as shown on 4.2.
- 2. Turn on the power of all equipment.
- 3. The EUT to be tested is connected to Wireless AP.
- 4. Setup the condition for test mode, and begin the test.

Note: Test program is self-repeating throughout the test.



Page: 7 / 29 **Report No.:** T190813W01-F

Rev.: 00

# 4 SETUP OF EQUIPMENT UNDER TEST

# 4.1. DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

#### **Peripherals Devices:**

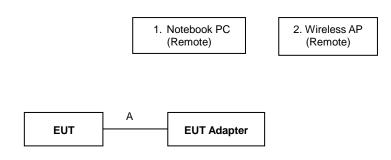
No.	Equipment	Trade Name	Model No.	Serial No.
1	Notebook PC (Remote)	DELL	INSPIRON 640m	CN-0MG532-70166-75G-03AP
2	Wireless AP (Remote)	D-Link	DIR-868L	R3X81D7000137

No.	Cable Name	Unit	Shielded	Length	With Core
(A)	DC Jack Cable	1	□Shielded, ⊠Non	3 m	☐With Corex, ⊠Non

#### Note:

- 1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- 2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

#### 4.2. CONFIGURATION OF SYSTEM UNDER TEST





Page: 8 / 29 Report No.: T190813W01-F Rev.: 00

# **FACILITIES AND ACCREDITATIONS**

#### 5.1. FACILITIES

All measurement facilities used to collect the measurement data are located at:
☐ No.11, Wugong 6th Rd., Wugu Dist., New Taipei City 24891, Taiwan (R.O.C.)
No.139, Wugong Rd., Wugu Dist., New Taipei City 24886, Taiwan (R.O.C.)
The sites are constructed in conformance with the requirements of ANSI C63.4 and CISPR 22. All receiving equipment conforms to CISPR 16-1-1, CISPR 16-1-2, CISPR

16-1-3, CISPR 16-1-4, CISPR 16-1-5.

#### 5.2. ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

> TAF (TAF 1309) Taiwan **USA** A2LA (0824.01)

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

Canada **Industry Canada** 

(10M Semi Anechoic Chamber: IC 2324G-1 / IC 2324G-2 / 2324J-1 /

2324J-2 to perform)

**VCCI** Japan

Radiated emissions: 30 MHz -1000 MHz: R-14343 / Above 1GHz: G-10945

Conducted Emission B: C-13700 / T-11839

**USA** 

(10M Semi Anechoic Chamber (FCC MRA: TW1039) to perform FCC Part

15 measurements)

Copies of granted accreditation certificates are available for downloading from our web site.



Page: 9 / 29 **Report No.:** T190813W01-F

Rev.: 00

#### 5.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Uncertainty
Conducted emissions #B	0.15MHz ~ 30MHz	±3.14 dB
Radiated emissions	30MHz ~ 200MHz	±4.23 dB
(966C Chamber)	200MHz ~ 1000MHz	±4.13 dB
	1GHz ~ 6GHz	±4.89 dB
Radiated emissions	6GHz ~ 18GHz	±5.27 dB
(10M Chamber)	18GHz ~ 26GHz	±4.13 dB
	26GHz ~ 40GHz	±4.28 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Consistent with industry standard (e.g. CISPR 22:2008, clause 11, Measurement Uncertainty) determining compliance with the limits shall be base on the results of the compliance measurement. Consequently the measure emissions being less than the maximum allowed emission result in this be a compliant test or passing test.

The listed uncertainties of above table are the worst case values for the entire range of measurement. Please note that the uncertainty values are only provided for informational purpose and aren't used in determining the PASS/FAIL results.



Page: 10 / 29 **Report No.:** T190813W01-F

Rev.: 00

# 6 CONDUCTED EMISSION MEASUREMENT

#### 6.1. LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY	Class A	A (dBuV)	Class B (dBuV)		
(MHz)	Quasi-peak	Average	Quasi-peak	Average	
0.15 - 0.5	79	66	66 - 56	56 - 46	
0.50 - 5.0	73	60	56	46	
5.0 - 30.0	73	60	60	50	

#### NOTE:

- (1) The lower limit shall apply at the transition frequencies.
- (2) The limit decreases in line with the logarithm of the frequency in the range 0.15 to 0.50 MHz
- (3) All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

#### **6.2. TEST INSTRUMENTS**

	Conducted Test Site No.B						
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due		
Coaxial Cable	EMCI	CFD300-NL	CE2	04/30/2019	04/29/2020		
EMI Test Receiver	R&S	ESCI	101073	07/18/2019	07/17/2020		
LISN	R&S	ENV216	101054	05/02/2019	05/01/2020		
LISN	Schwarzbeck	NSLK8128	5012	04/18/2019	04/17/2020		
Software	CCS-3A1-CE						

**Note:** The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.



Page: 11 / 29 **Report No.:** T190813W01-F

Rev.: 00

#### **6.3. TEST PROCEDURES** (please refer to measurement standard or CCS SOP PA-031)

#### **Procedure of Preliminary Test**

- The EUT and support equipment, if needed, were set up as per the test configuration to simulate typical usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor standing equipment, it is placed on the ground plane, which has a 12 mm non-conductive covering to insulate the EUT from the ground plane.
- All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- The test equipment EUT installed by AC 120VAC/60Hz main power, through a Line Impedance Stabilization Network (LISN), which was supplied power source and was grounded to the ground plane.
- All support equipment power by from a second LISN.
- The test program of the EUT was started. Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.
- The Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- During the above scans, the emissions were maximized by cable manipulation.
- The test mode(s) described in Item 3.1 were scanned during the preliminary test.
- After the preliminary scan, we found the test mode described in Item 3.1 producing the highest emission level.
- The worst configuration of EUT and cable of the above highest emission level were recorded for reference of the final test.

#### **Procedure of Final Test**

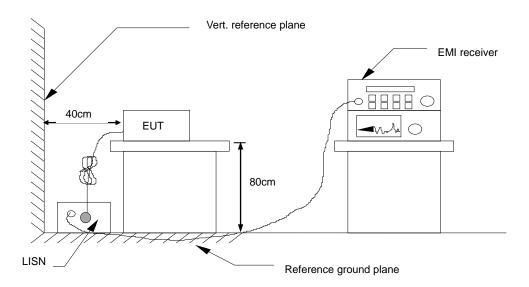
- EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.
- A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.
- The test data of the worst-case condition(s) was recorded.



 Report No.:
 T190813W01-F
 Page:
 12 / 29

 Rev.:
 00

#### 6.4. TEST SETUP



 For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

#### 6.5. DATA SAMPLE:

Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correctrion factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak. limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark
x.xx	43.95	33.00	10.00	53.95	43.00	56.00	46.00	-2.05	-3.00	Pass

Frequency (MHz) = Emission frequency in MHz

Reading (dBuV) = Uncorrected Analyzer/Receiver reading + Insertion loss of LISN, if it > 0.5 dB

Correction Factor (dB) = LISN Factor + Cable Loss

Result (dBuV) = Raw reading converted to dBuV and CF added

Limit (dBuV) = Limit stated in standard Margin (dB) = Result (dBuV) – Limit (dBuV)



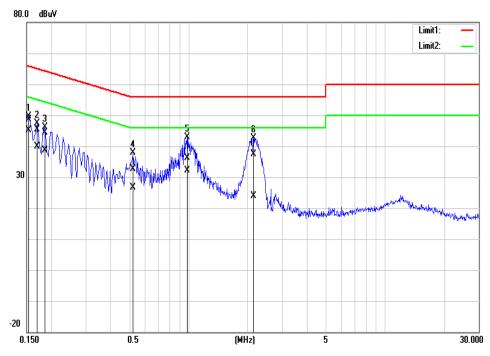
 Report No.:
 T190813W01-F

 Page:
 13 / 29

 Rev.:
 00

# **6.6. TEST RESULTS**

Model no.	EBSCV01	Line:	L1
Environmental Conditions	23°C, 49% RH	Test Date	2019/8/16
Test Mode	Mode 1	Tested by	Jemmy Wang
6dB Bandwidth	9 kHz		



NO.	Frequency	Quasi Peak reading	Average reading	Correction factor	Quasi Peak result	Average result	Quasi Peak Iimit	Average limit	Quasi Peak margin	Average margin	Remark
	(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	(dB)	(Pass/Fail)
1*	0.1539	38.88	35.40	9.76	48.64	45.16	65.78	55.79	-17.14	-10.63	Pass
2	0.1700	35.52	30.09	9.76	45.28	39.85	64.96	54.96	-19.68	-15.11	Pass
3	0.1860	34.62	28.98	9.76	44.38	38.74	64.21	54.21	-19.83	-15.47	Pass
4	0.5220	22.94	16.97	9.76	32.70	26.73	56.00	46.00	-23.30	-19.27	Pass
5	0.9860	26.32	22.30	9.78	36.10	32.08	56.00	46.00	-19.90	-13.92	Pass
6	2.1500	27.69	13.99	9.80	37.49	23.79	56.00	46.00	-18.51	-22.21	Pass

Note: L1 = Line One (Live Line)

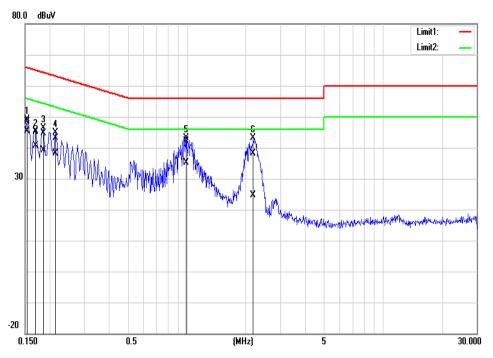


 Report No.:
 T190813W01-F

 Page:
 14 / 29

 Rev.:
 00

Model no.	EBSCV01	Line:	L2
Environmental Conditions	23°C, 49% RH	Test Date	2019/8/16
Test Mode	Mode 1	Tested by	Jemmy Wang
6dB Bandwidth	9 kHz		



NO.	Frequency	Quasi Peak reading	Average reading	Correction factor	Quasi Peak result	Average result	Quasi Peak Iimit	Average limit	Quasi Peak margin	Average margin	Remark
	(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	(dB)	(Pass/Fail)
1*	0.1539	38.70	35.55	9.80	48.50	45.35	65.78	55.79	-17.28	-10.44	Pass
2	0.1700	35.69	30.82	9.79	45.48	40.61	64.96	54.96	-19.48	-14.35	Pass
3	0.1860	34.79	29.27	9.80	44.59	39.07	64.21	54.21	-19.62	-15.14	Pass
4	0.2140	33.27	28.26	9.79	43.06	38.05	63.04	53.05	-19.98	-15.00	Pass
5	0.9980	32.34	25.30	9.82	42.16	35.12	56.00	46.00	-13.84	-10.88	Pass
6	2.1820	28.39	14.69	9.84	38.23	24.53	56.00	46.00	-17.77	-21.47	Pass

**Note:** L2 = Line Two (Neutral Line).



Page: 15 / 29 **Report No.:** T190813W01-F

Rev.: 00

# 7 RADIATED EMISSION MEASUREMENT

#### 7.1. LIMITS OF RADIATED EMISSION MEASUREMENT

According to FCC Part 15.33 (b), 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 1.75	30
1.75-108	1000
108-500	2000
500-1000	5000
Above 1000	5 <sup>th</sup> harmonic of the highest frequency or 40GHz, whichever is lower

# **Below 1GHz (for digital device)**

EDECLIENCY (MH-)	dBuV/m (At 10m)				
FREQUENCY (MHz)	Class A	Class B			
30 ~ 230	40	30			
230 ~ 1000	47	37			

# Limit tables for digital device:

# Class A Radiated Emission limit at 10m (for others)

	•	•
Frequency (MHz)	Field Strength Limit (uV/m)Q.P.	Field Strength Limit (dBuV/m)Q.P.
30 - 88	90	39
88 - 216	150	43.5
216 – 960	210	46.4
Above 960	300	49.5

#### Class B Radiated Emission limit at 3m (for others)

Frequency (MHz)	Field Strength Limit (uV/m)Q.P.	Field Strength Limit (dBuV/m)Q.P.
30 - 88	100	40
88 - 216	150	43.5
216 – 960	200	46
Above 960	500	54



Page: 16 / 29 **Report No.:** T190813W01-F

Rev.: 00

# Above 1GHz (for all device)

Frequency	Class A (dBu	V/m) (At 10m)	Class B (dBuV/m) (At 3m)		
(MHz)	Average	Peak	Average	Peak	
Above 1000	49.5	69.5	54	74	

NOTE: (1) The lower limit shall apply at the transition frequencies.

- (2) Emission level (dBuV/m) = 20 log Emission level (uV/m).
- (3) The measurement above 1GHz is at close-in distances 3m,and determine the limit L2 corresponding to the close-in distance d2 by applying the following relation: L2 = L1 (d1/d2), where L1 is the specified limit in microvolts per metre (uV/m) at the distance d1 (10m), L2 is the new limit for distance d2 (3m).

So the new Class A limit above 1GHz at 3m is as following table:

Frequency	Class A (dBu	ıV/m) (At 3m)	
(MHz)	Average	Peak	
Above 1000	60	80	



Page: 17 / 29 **Report No.:** T190813W01-F

Rev.: 00

# 7.2. TEST INSTRUMENTS

#### **Below 1GHz**

		966C Chambe	er		
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Bilog Antenna	Sunol Sciences	JB1	A100209-1	10/22/2018	10/21/2019
Coaxial Cable	Huber+Suhner	104PEA	34376/4PEA	04/30/2019	04/29/2020
Coaxial Cable	Huber+Suhner	104PEA	33954/4PEA	04/30/2019	04/29/2020
Coaxial Cable	Huber+Suhner	104PEA	34418/4PEA	04/30/2019	04/29/2020
EMI Test Receiver	R&S	ESCI	100312	04/26/2019	04/25/2020
Pre-Amplifier	MITEQ	1625-3000	1490938	04/30/2019	04/29/2020
Spectrum Analyzer	Agilent	E4407B	MY44212686	03/29/2019	03/28/2020
Thermo-Hygro Meter	ROTRONIC	M800	0GYM	04/12/2019	04/11/2020
AC POWER SOURE	APE	AFC-130	991265	N.C.R	N.C.R
Antenna Tower	ccs	CC-A-1F	N/A	N.C.R	N.C.R
Controller	ccs	CC-C-1F	N/A	N.C.R	N.C.R
Turn Table	ccs	CC-T-1F	N/A	N.C.R	N.C.R
Software		EZ-EMC	(CCS-3A1RE)		

#### Note:

- 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
- 2. N.C.R. = No Calibration Required.



 Report No.:
 T190813W01-F

 Page:
 18 / 29

 Rev.:
 00

#### **Above 1GHz**

		Wugu 10M Chamb	per				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due		
Coaxial Cable	Huber+Suhner	SUCOFLEX 104PEA	329383	04/30/2019	04/29/2020		
Coaxial Cable	Huber+Suhner	SUCOFLEX 104PEA	33945	04/30/2019	04/29/2020		
Horn Antenna	ETS LINDGREN	3116	00026370	12/26/2018	12/25/2019		
Horn Antenna	Antenna EMCO 3117		00055167	12/24/2018	12/23/2019		
Pre-Amplifier	Pre-Amplifier EMCI		980040	04/30/2019	04/29/2020		
Pre-Amplifier	MITEQ	AMF-6F-18004000-37-8P	985646	06/18/2019	06/17/2020		
Spectrum Analyzer	Agilent	E4446A	MY48250297	08/30/2018	08/29/2019		
AC POWER SOURE	APE	AFC-130	991259	N.C.R	N.C.R		
Antenna Tower	Sunol Sciences	TLT2	031010-5	N.C.R	N.C.R		
Controller Sunol Sciences Sciences		SC104V	031010-1	N.C.R	N.C.R		
Turn Table	ccs	CCS CC-T-1F		N.C.R	N.C.R		
Software		EZ-EMC (CCS-3A1RE)					

#### Note:

<sup>1.</sup> The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

<sup>2.</sup> N.C.R. = No Calibration Required.



Page: 19 / 29 **Report No.:** T190813W01-F

Rev.: 00

#### **7.3. TEST PROCEDURES** (please refer to measurement standard or CCS SOP PA-031)

The basic test procedure was in accordance with ANSI C63.4-2014 and ICES-003-2016.

#### Frequency range 30MHz ~ 1GHz

- 1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter semi-anechoic chamber room. The table was rotated 360 degrees to determine the position.
- 2. The EUT was set 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- 3. The height of antenna is varied form one meter to four meter 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.
- 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was turned to heights for 1 meter to 4 meters and the turn table was turned from 0 degrees to 360 degrees to find the maximum reading.
- 5. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1GHz. NOTE: The resolution bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1GHz.



Page: 20 / 29 **Report No.:** T190813W01-F

Rev.: 00

#### Frequency range above 1GHz

 The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber room. The table was rotated 360 degrees to determine the position.

- 2. The EUT was set 3 meters away from the directional antenna, which was pointed towards the source of the emission within the EUT. This could be done by either pointing the antenna at an angle towards the source of the emission, or by rotating the EUT, in both height and polarization, to maximize the measured emission.
- 3. The height of antenna can be varied form one meter to four meters, the height of adjustment depends on the EUT height and the antenna 3 dB beam width both, to detect the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was turned to heights and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- 5. 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 1GHz.

#### NOTE:

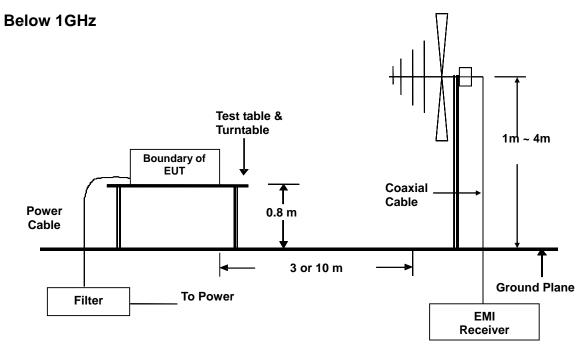
- The resolution bandwidth is 1MHz and video bandwidth of test spectrum analyzer is 1 MHz for peak detection at above 1GHz. The resolution bandwidth is 1MHz and video bandwidth of test spectrum analyzer is 100Hz for average detection at frequency above 1 GHz.
- For measurement of frequency above 1GHz, the EUT was set 3 meters away from the directional antenna.



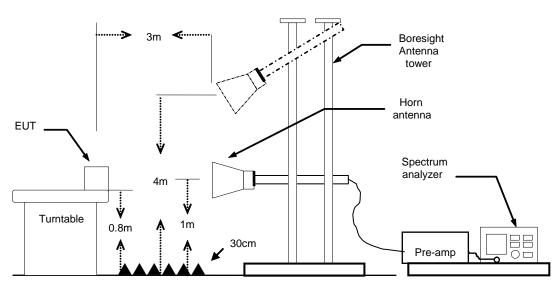
Page: 21 / 29 **Report No.:** T190813W01-F

Rev.: 00

# 7.4. TEST SETUP



#### **Above 1GHz**



 For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.



Page: 22 / 29 **Report No.:** T190813W01-F

Rev.: 00

#### 7.5. DATA SAMPLE:

#### **Below 1GHz**

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( · )	Remark
XX.XX	16.49	9.86	26.35	30.00	-3.65	116.00	101.00	QP

#### **Above 1GHz**

Frequen (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( · )	Remark
XX.XX	60.80	-14.59	46.21	74.00	-27.79	200	351	peak
XX.XX	52.05	-13.17	38.88	54.00	-15.12	200	135	AVG

Frequency (MHz) = Emission frequency in MHz

Reading (dBuV) = Uncorrected Analyzer / Receiver reading
Correction Factor (dB/m) = Antenna factor + Cable loss – Amplifier gain
Result (dBuV/m) = Reading (dBuV) + Corr. Factor (dB/m)

Limit (dBuV/m) = Limit stated in standard

Margin (dB) = Result (dBuV/m) – Limit (dBuV/m)

Q.P. = Quasi-Peak



 Page:
 23 / 29

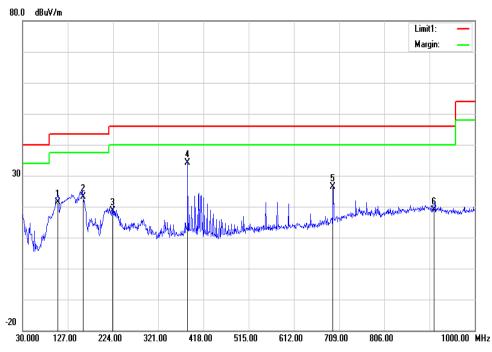
 Report No.:
 T190813W01-F

 Rev.:
 00

# 7.6. TEST RESULTS

#### **Below 1GHz**

Model no.	EBSCV01	Test Mode	Mode 1
Environmental Conditions	21°C, 59% RH	Test Date	2019/8/16
Antenna Pole	Vertical	Antenna Distance	3m
Detector Function	Quasi-peak.	Tested by	Tony Lu
6dB Bandwidth	120 kHz		



No.	Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	106.0000	51.24	-29.74	21.50	43.50	-22.00	100	124	QP
2	160.0000	52.80	-29.63	23.17	43.50	-20.33	200	46	QP
3	222.8500	47.65	-29.13	18.52	46.00	-27.48	200	253	QP
4	383.9900	61.00	-26.80	34.20	46.00	-11.80	100	29	QP
5	696.0000	48.61	-22.11	26.50	46.00	-19.50	200	334	QP
6	912.7400	37.08	-18.26	18.82	46.00	-27.18	300	180	QP

- 1. The other emission levels were very low against the limit.
- 2. 30MHz to 1000MHz test is Applicable CISPR 22 standard.

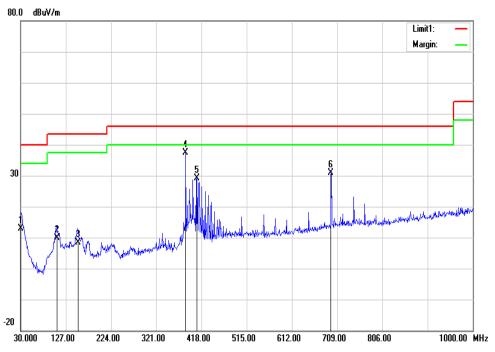


 Report No.:
 T190813W01-F

 Page:
 24 / 29

 Rev.:
 00

Model no.	EBSCV01	Test Mode	Mode 1
Environmental Conditions	21°C, 59% RH	Test Date	2019/8/16
Antenna Pole	Horizontal	Antenna Distance	3m
<b>Detector Function</b>	Quasi-peak.	Tested by	Tony Lu
6dB Bandwidth	120 kHz		



No.	Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	30.0000	34.04	-21.24	12.80	40.00	-27.20	100	42	QP
2	108.3600	42.70	-32.90	9.80	43.50	-33.70	200	144	QP
3	153.0700	43.17	-34.77	8.40	43.50	-35.10	100	54	QP
4	383.9900	67.53	-30.13	37.40	46.00	-8.60	300	280	QP
5	407.9900	57.99	-28.98	29.01	46.00	-16.99	200	43	QP
6	696.0000	54.90	-23.90	31.00	46.00	-15.00	200	166	QP

- 1. The other emission levels were very low against the limit.
- 2. 30MHz to 1000MHz test is Applicable CISPR 22 standard.



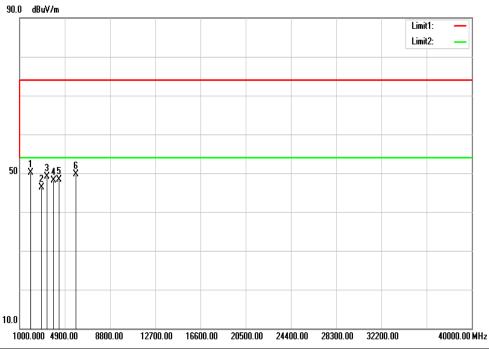
 Report No.:
 T190813W01-F

 Page:
 25 / 29

 Rev.:
 00

#### **Above 1GHz**

Model no.	EBSCV01	Test Mode	Mode 1
Environmental Conditions	26°C, 60% RH	Test Date	2019/8/16
Antenna Pole	Vertical	Antenna Distance	3m
Highest frequency generated or used	5GHz	Upper frequency	25GHz
Detector Function	Peak	Tested by	Lowka Chen
6dB Bandwidth	1 MHz		



No.	Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	1936.281	65.75	-15.62	50.13	74.00	-23.87	100	353	peak
2	2872.154	59.23	-12.91	46.32	74.00	-27.68	100	182	peak
3	3381.160	61.47	-12.36	49.11	74.00	-24.89	200	96	peak
4	3934.570	59.31	-11.15	48.16	74.00	-25.84	200	230	peak
5	4400.252	57.45	-9.12	48.33	74.00	-25.67	200	359	peak
6	5850.000	55.81	-6.19	49.62	74.00	-24.38	100	353	peak

- 1. The other emission levels were very low against the limit.
- 2. Margin (dB) = Result (dBuV/m) Limit (dBuV/m)

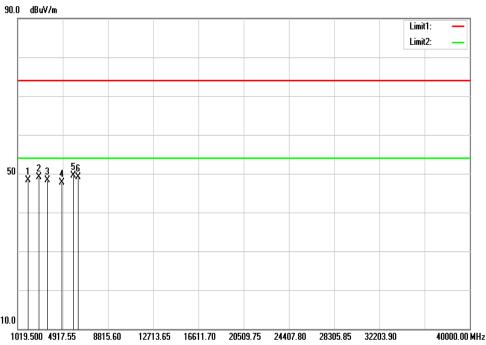


 Report No.:
 T190813W01-F

 Page:
 26 / 29

 Rev.:
 00

Model no.	EBSCV01	Test Mode	Mode 1	
Environmental Conditions	26°C, 60% RH Test Da		2019/8/16	
Antenna Pole	Horizontal	Antenna Distance	3m	
Highest frequency generated or used	5GHz	Upper frequency	25GHz	
Detector Function	Peak	Tested by	Lowka Chen	
6dB Bandwidth	1 MHz			



No.	Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	1937.181	63.84	-15.61	48.23	74.00	-25.77	400	153	peak
2	2875.232	62.04	-12.90	49.14	74.00	-24.86	400	226	peak
3	3600.000	59.49	-11.26	48.23	74.00	-25.77	300	0	peak
4	4824.131	56.69	-9.08	47.61	74.00	-26.39	300	194	peak
5	5850.000	55.72	-6.19	49.53	74.00	-24.47	200	218	peak
6	6229.121	53.73	-4.59	49.14	74.00	-24.86	400	37	peak

- 1. The other emission levels were very low against the limit.
- 2. Margin (dB) = Result (dBuV/m) Limit (dBuV/m)