HCT.CO., LTD.
Calibration & Certification Division
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CERTIFICATE OF COMPLIANCE

Applicant Name:
eb Corp.
14th Fl., HIGH-END TOWER, 235-2, Guro-Dong,
Guro-Ku, Seoul, Korea

Date of Testing:
Nov. 16, 2007

Test Site/Location:
HCT.CO., LTD., San 136-1 Ami-ri, Bubal-eup, Icheon-si,
Kyungki-do, Korea

FCC ID	**:**	**VASEBP200B**
APPLICANT	**:**	**eb Corp.**

FCC Classification	:	Low Power Communication Device – Transmitter
EUT Type	:	Payment Terminal
Manufacturer	:	eb Corp.
Model name	:	EBP-200B
Frequency of Operation	:	13.56 MHz
FCC Rule Part(s)	:	FCC Part 15.225 Subpart C
Test Procedure(s)	:	ANSI C-63.4-2003
Application Type	:	Original Equipment
Data of issue	:	November, 16, 2007

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. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of FCC Part 15 Subpart C of the FCC Rules under normal use and maintenance.

Youn Seok Jung

Report prepared by
: Youn Seok Jung
Test engineer of RF Part

Sang Jun Lee

Approved by
: Sang Jun Lee
Manager of RF Part

C O N T E N T S

1. GENERAL INFORMATION

1-1. CLIENT INFORMATION

Company	**eb Corp.**
Contact Point	**14th Fl., HIGH-END TOWER, 235-2, Guro-Dong, Guro-Ku, Seoul, Korea**
Contact person	**Name: DaeHee, Han** **Tel: + 82 2 6220 3000** **Fax: + 82 2 6220 5001**

1-2. **Description of Equipment Under Test**

Equipment Under Test			
Description	Manufacturer	Model Name	Serial Number
Payment Terminal (RFID Device)	eb Corp.	EBP-200B	Not labeled

2. TEST SPECIFICATIONS

2.1 Standards

The following tests were conducted on a sample of the equipment for the purpose of demonstrating compliance With **FCC Part 15.Subpart C**

Regulation	Measurement standard	Range
Title 47 of the CFR:2005, Part 15 Subpart (c), Clause 15.225(a)	ANSI C63.4:2003	13.553MHz to 13.567MHz
Title 47 of the CFR:2005, Part 15 Subpart (c), Clause 15.225(d)	ANSI C63.4:2003	outside of the 13.110-14.010 MHz band
Title 47 of the CFR:2005, Part 15 Subpart (c), Clause 15.209	ANSI C63.4:2003	9kHz to 30MHz
Title 47 of the CFR:2005, Part 15 Subpart (c), Clause 15.209	ANSI C63.4:2003	30MHz to 1GHz
Title 47 of the CFR:2005, Part 15 Subpart (c), Clause 15.207	ANSI C63.4:2003	150kHz to 30MHz
Title 47 of the CFR:2005, Part 15 Subpart (c), Clause 15.225(e)	ANSI C63.4:2003	0.01% of nominal

3. STANDARDS ENVIRONMENTAL TEST CONDITIONS

Temperature :	**+ 15 ℃ to + 35 ℃**
Relative humidity:	**30 % to 60 %**
Air pressure	**860 mbar to 1060 mbar**

4. TEST SUMMARY

The results in this report apply only to sample tested

Regulation	Test Type	Range	Result
Title 47 of the CFR:2005, Part 15 Subpart (c), Clause 15.225(a)	Radiated Electric Field Emissions	13.553MHz to 13.567MHz	Pass
Title 47 of the CFR:2005, Part 15 Subpart (c), Clause 15.225(b)	Radiated Electric Field Emissions	13.410MHz to 13.553MHz and 13.567MHz to 13.710MHz	N/A
Title 47 of the CFR:2005, Part 15 Subpart (c), Clause 15.225(c)	Radiated Electric Field Emissions	13.710MHz to 14.010MHz	N/A
Title 47 of the CFR:2005, Part 15 Subpart (c), Clause 15.209 (d)	Radiated Electric Field Emissions	9kHz to 30MHz	Pass
Title 47 of the CFR:2005, Part 15 Subpart (c), Clause 15.209	Radiated Electric Field Emissions	30MHz to 1GHz	Pass
Title 47 of the CFR:2005, Part 15 Subpart (c), Clause 15.207	AC power conducted emissions	150kHz to 30MHz	Pass
Title 47 of the CFR:2005, Part 15 Subpart (c), Clause 15.225(e)	Frequency Stability	0.01% of nominal	Pass

5. TEST EQUIPMENT

Manufacturer	Model / Equipment	Cal Interval	Calibration Due
Rohde & Schwarz	ESCI / EMI Test Receiver	Annual	08/24/2008
Rohde & Schwarz	ESH2-Z5 / LISN	Annual	04/20/2008
Rohde & Schwarz	ESH3-Z2 / PULSE LIMITER	Annual	03/16/2008
Schwarzbeck	VULB9168 / TRILOG Antenna	Annual	03/19/2008
HD	MA240/ Antenna Position Tower	N/A	N/A
EMCO	1050/ Turn Table	N/A	N/A
HD GmbH	HD 100/ Controller	N/A	N/A
HD GmbH	KMS 560/ SlideBar	N/A	N/A
ADVANTEST	R3671/Spectrum Analyzer	Annual	05/02/2008
Rohde & Schwarz	HFH2-Z2/Loop Antenna	Annual	01/10/2008
Agilent	E4438C /Signal Generator	Annual	01/22/2008
Korea Eng	KR-1005L/ Temperature and Humidity Chamber	Annual	12/29/2007
Agilent	E7405A /EMC Analyzer	Annual	03/30/2008

6. Conducted Emission Measurement

6-1. AC Line Conducted Emissions

Requirement(s): 47 CFR §15.107, §15.207

Test Set-up:

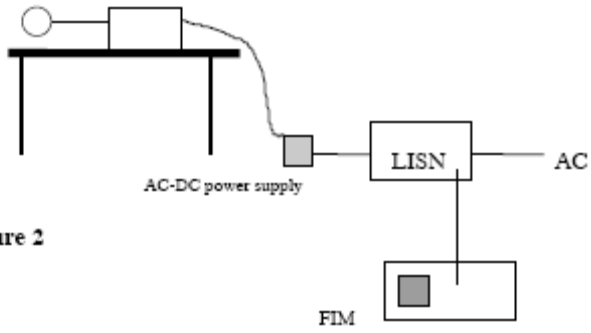

Figure 2

Test Procedures:

1. The EUT was placed on a wooden table 40 cm from a vertical ground plane and approximately 80 cm above the horizontal ground plane on the floor. The EUT was set to transmit in normally.
2. Line conducted data was recorded for both NEUTRAL and HOT lines.

Test Results:

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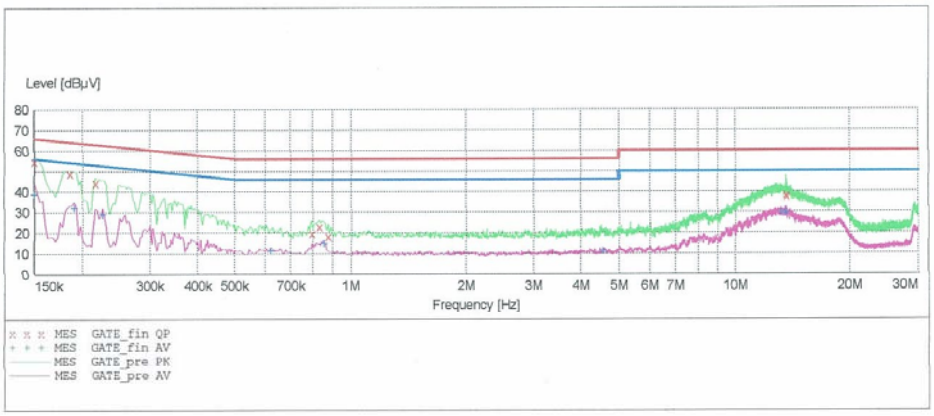
EUT:                  EBP-200B
Manufacturer:         EB
Operating Condition:  NORMAL MODE
Test Site:            SHIELD ROOM
Operator:             YS-LEE
Test Specification:   CISPR 22 CLASS B
Comment:              N
```

SCAN TABLE: "CISPR 22 Voltage"

Short Description: CISPR 22 Voltage

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.1 kHz	500.0 kHz	2.5 kHz	MaxPeak Average	10.0 ms	9 kHz	None
500.0 kHz	5.0 MHz	5.0 kHz	MaxPeak Average	10.0 ms	9 kHz	None
5.0 MHz	30.0 MHz	5.0 kHz	MaxPeak Average	10.0 ms	9 kHz	None



MEASUREMENT RESULT: "GATE_fin QP"

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Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.150100	54.70	10.0	66	11.3	---	---
0.185100	49.10	10.0	64	15.1	---	---
0.215100	44.20	10.0	63	18.8	---	---
0.795000	19.90	10.1	56	36.1	---	---
0.830000	23.20	10.1	56	32.8	---	---
0.875000	18.50	10.1	56	37.5	---	---
13.635000	38.40	11.7	60	21.6	---	---
13.655000	38.50	11.7	60	21.5	---	---
13.670000	37.60	11.7	60	22.4	---	---

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MEASUREMENT RESULT: "GATE_fin AV"

11/8/2007 2:45PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.150100	38.90	10.0	56	17.1	---	---
0.190100	32.50	10.0	54	21.5	---	---
0.225100	29.20	10.0	53	23.5	---	---
0.620000	11.70	10.1	46	34.3	---	---
0.850000	15.10	10.1	46	30.9	---	---
4.545000	11.30	10.6	46	34.7	---	---
13.215000	30.10	11.6	50	19.9	---	---
13.570000	29.80	11.7	50	20.2	---	---
13.670000	29.90	11.7	50	20.1	---	---

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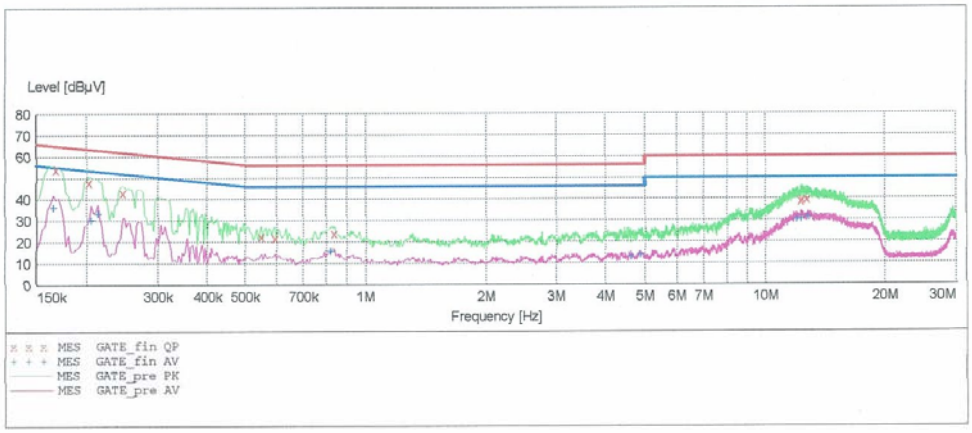
EUT: EBP-200B
Manufacturer: EB
Operating Condition: NORMAL MODE
Test Site: SHIELD ROOM
Operator: YS-LEE
Test Specification: CISPR 22 CLASS B
Comment: H

SCAN TABLE: "CISPR 22 Voltage"

Short Description: CISPR 22 Voltage

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.1 kHz	500.0 kHz	2.5 kHz	MaxPeak Average	10.0 ms	9 kHz	None
500.0 kHz	5.0 MHz	5.0 kHz	MaxPeak Average	10.0 ms	9 kHz	None
5.0 MHz	30.0 MHz	5.0 kHz	MaxPeak Average	10.0 ms	9 kHz	None



MEASUREMENT RESULT: "GATE_fin QP"

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Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.167600	54.10	10.0	65	10.9	---	---
0.202600	48.00	10.0	64	15.5	---	---
0.245100	43.10	10.0	62	18.8	---	---
0.550000	22.60	10.1	56	33.4	---	---
0.595000	21.90	10.1	56	34.1	---	---
0.835000	24.00	10.1	56	32.0	---	---
12.300000	38.80	11.5	60	21.2	---	---
12.385000	39.70	11.5	60	20.3	---	---
12.745000	39.60	11.5	60	20.4	---	---

MEASUREMENT RESULT: "GATE_fin AV"

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Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.165100	36.40	10.0	55	18.8	---	---
0.205100	30.50	10.0	53	22.9	---	---
0.212600	33.70	10.0	53	19.4	---	---
0.820000	15.80	10.1	46	30.2	---	---
4.620000	13.00	10.6	46	33.0	---	---
4.865000	14.10	10.6	46	31.9	---	---
12.035000	30.30	11.4	50	19.7	---	---
12.305000	30.50	11.5	50	19.5	---	---
12.855000	31.40	11.5	50	18.6	---	---

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7. Radiated Emission Measurement

Requirement(s): 15.209, 15.225

Except as provided elsewhere in this paragraph the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Minimum Standard: FCC Part 15.225 / 15.209

Rule Part	Frequency (MHz)	Limit
Part 15. 209	0.009 ~ 0.490	2400/F(KHz)uV/m@300
	0.490 ~1.705	24000/F(KHz)uV/m@30
	1.705 ~ 30	30 uV/m@30
	30 ~ 88	100 ** uV/m@3m
	88 ~ 216	150 ** uV/m@3m
	216 ~ 960	200 ** uV/m@3m
	Above 960	500 uV/m@3m

** Except as provided in 15.209(g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88MHz, 174-216MHz or 470-806MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g. 15.231 and 15.241.

15.225 Operation within the band 13.110 – 14.010 MHz.

(a) The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter (= 84 dBuV/m) at 30 meters.

(b) Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter (=50.5dBuV/m) at 30 meters.

(c) Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter (=40.5 dBuV/m) at 30 meters.

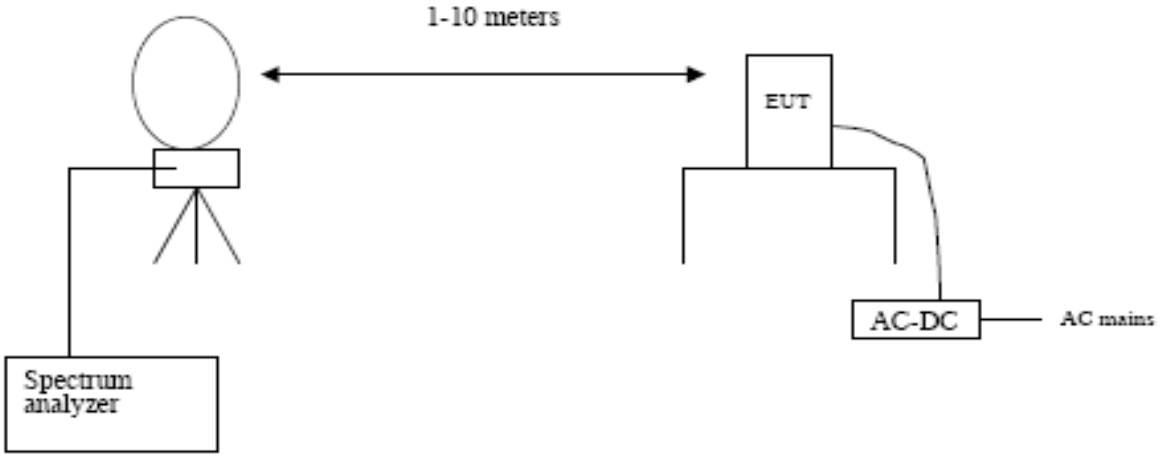
(d) The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in § 15.209.

(e) The frequency tolerance of the carrier signal shall be maintained within +/- 0.01% of the operating frequency over a temperature variation of –20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

(f) In the case of radio frequency powered tags designed to operate with a device authorized under this section, the tag may be approved with the device or be considered as a separate device subject to its own authorization. Powered tags approved with a device under a single application shall be labeled with the same identification number as the device.

7-1. Radiated Emission 9KHz – 30 MHz

Test Set-up



Test Procedure

The EUT was placed on a non-conductive table located on a large open test site.
The loop antenna was placed at a location 10m from the EUT. Radiated emissions were measured with the loop antenna both parallel and perpendicular to the plane of the EUT loop antenna.

The limit is converted from microvolts/meter to decibel microvolts/meter. Sample Calculation:

Corrected Amplitude = Raw Amplitude(dBμV/m) + ACF(dB) + Cable Loss(dB) – Distance Correction Factor

The spectrum analyzer is set to:
Frequency Range = 9 KHz ~ 1GHz
RBW = 9 KHz (9 KHz ~ 30MHz)
= 120 kHz (30 MHz ~ 1 GHz)

Trace Mode = max hold
Detector Mode = peak / Quasi-peak
Sweep time = auto

Test Results

13.553-13.567 MHz						
Frequency (MHz)	Read Level (dBuV)@3m	Factor (dB)	Distance Correction (dB)	Result Level (dBuV)@3m	Limit (dBuV)@3m	Margin (dB)
13.5555	32.75	20.23	-40	12.98	124	111.02

9KHz - 14.010 MHz						
Frequency (MHz)	Read Level (dBuV)@3m	Factor (dB)	Distance Correction (dB)	Result Level (dBuV)@3m	Limit (dBuV)@3m	Margin (dB)
5.87	14.30	19.36	-40	-6.34	69.5	35.84

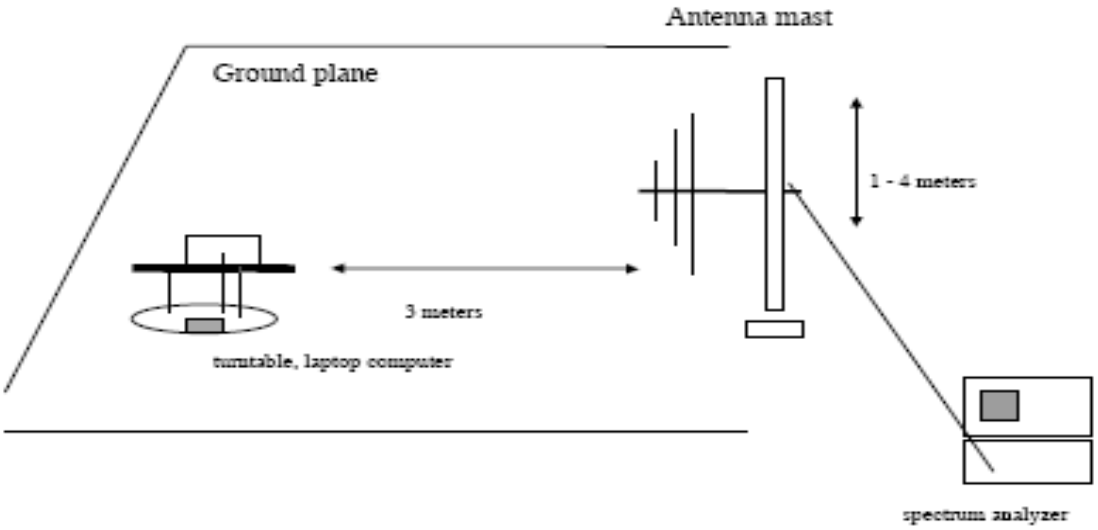
14.010 - 30 MHz						
Frequency (MHz)	Read Level (dBuV)@3m	Factor (dB)	Distance Correction (dB)	Result Level (dBuV)@3m	Limit (dBuV)@3m	Margin (dB)
27.12	18.31	22.92	-40	1.23	69.5	28.27

Remark :

1. Distance Correction Below 30MHz = 40log(3m/30m) = - 40 dB
   Measurement Distance : 3 m (Below 30MHz)
2. Factor = Antenna Factor + Cable Loss
3. Result Level = Read Level + Factor + Distance Correction
4. Margin = Limit – Result Level

7-2. Radiated Emission 30 MHz – 1000 MHz

Test Set-up



Test Procedures: Radiated emissions were measured according to ANSI C63.4.
The EUT was set to transmit at the highest output power.
The EUT was set 3 meter away from the measuring antenna.

Frequency	Read Level	Ant. Factor	Cable Loss	Factor	ANT POL	Result Level	Limit	Margin
MHz	dBuV	dB/m	dB	dB	(H/V)	dBuV/m	dBuV/m	dB
54.0	20.7	12.1	1.7	13.8	V	34.5	40	-5.5
64.0	24.3	10.9	1.8	12.7	V	37.0	40	-3.0
95.0	14.4	8.7	2.3	11.0	H	25.4	43.5	-18.1
112.0	22.8	10.3	2.5	12.8	V	35.6	43.5	-7.9
139.0	17.0	12.3	2.8	15.1	V	32.1	43.5	-11.4
178.0	13.9	10.9	3.2	14.1	H	28.0	43.5	-15.6
241.0	16.0	10.9	3.7	14.6	V	30.6	46	-15.5
251.0	14.5	11.1	3.8	14.9	V	29.4	46	-16.6
336.0	17.3	13.6	4.4	18.0	H	35.3	46	-10.7
384.0	14.2	14.6	4.6	19.2	H	33.4	46	-12.6
433.0	16.4	15.8	4.9	20.7	V	37.1	46	-8.9
450.0	13.3	16.3	5.0	21.3	V	34.6	46	-11.5
493.0	13.0	16.8	5.3	22.1	V	35.1	46	-10.9
624.0	14.0	19.4	5.8	25.2	H	39.2	46	-6.8
648.0	16.4	19.7	6.0	25.7	H	42.1	46	-3.9
719.0	14.9	20.6	6.4	27.0	H	41.9	46	-4.1

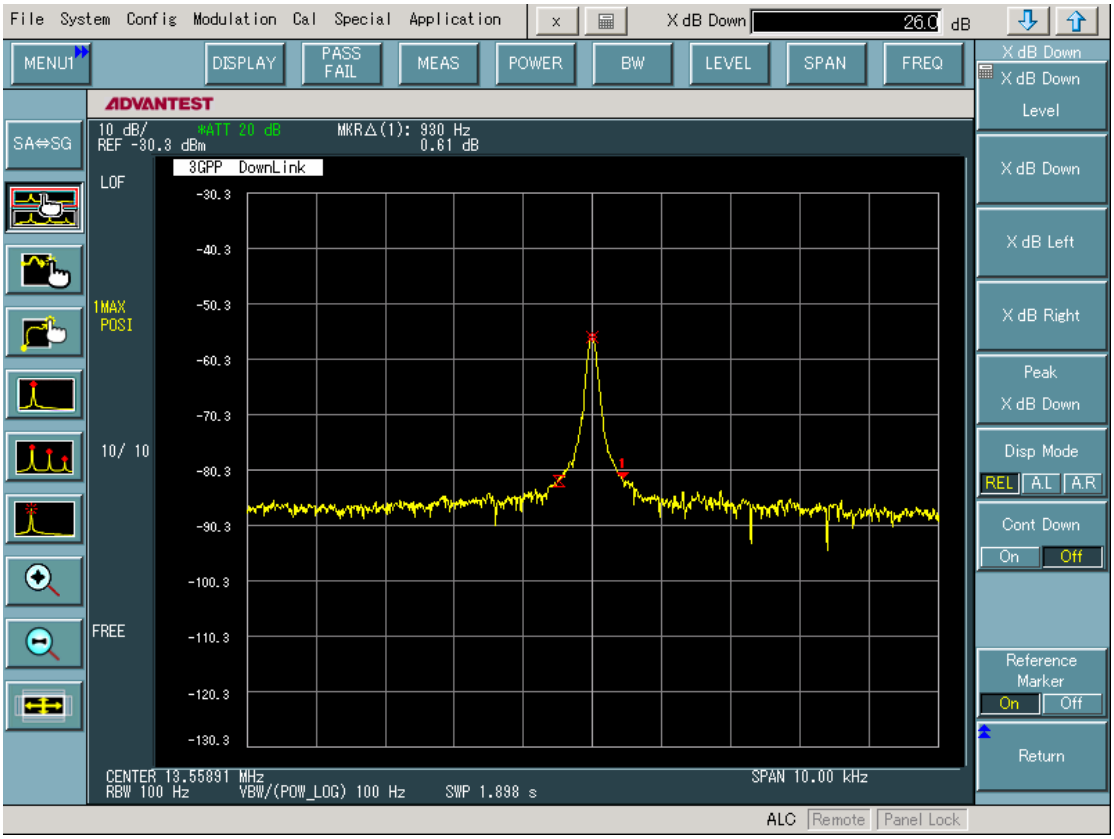
Remark :
1. Factor = Antenna Factor + Cable Loss
2. Result Level = Read Level + Factor
3. Margin = Limit – Result Level

8. Emission Bandwidth Plot.

Requirement(s):

Test Set-up: The EUT **was connected to a spectrum analyzer.**

Test Procedure: The 26dB bandwidth was measured by using a spectrum analyzer.



9. Frequency Tolerance

Procedure: Part 15.225, ANSI 63.4

If required, the operating or transmitting frequency of an intentional radiator should be measured in accordance with the following procedure to ensure that the device operates outside certain precluded frequency bands and within the frequency range. No modulation needs to be supplied to the intentional radiator during these tests, unless modulation is required to produce an output, e.g., single-sideband suppressed carrier transmitters.

The frequency stability of the transmitter is measured by:

a) Temperature: The temperature is varied from -20°C to + 50°C using an environmental chamber.

b) Primary Supply Voltage: The primary supply voltage is varied from 85% to 115% of the voltage normally at a temperature of 20 degrees C.

The frequency tolerance of the carrier signal shall be maintained within +/- 0.01% of the operating frequency.

Measurement Result:

VOLTAGE (%)	POWER (VAC)	TEMP (°C)	FREQ (Hz)	Deviation (%)
100%	110	-20	13.558987	0.0088
100%		-10	13.558948	0.0049
100%		0	13.558919	0.0020
100%		10	13.558887	-0.0012
100%		20	13.558899	0.0000
100%		30	13.558903	0.0004
100%		40	13.558907	0.0008
100%		50	13.558887	-0.0012
85%	93.5	25	13.558917	0.0018
115%	126.5	25	13.558977	0.0078