FCC 47 CFR PART 15 SUBPART C AND ANSI C63.4:2003 TEST REPORT

For

SF500

Model: SF500

Trade Name: MOTOROLA

Issued for

Motorola Mobility Inc.

8000W.Sunrise Blvd, Suite A. Plantation, FL 33322 U.S.A.

Issued by

Compliance Certification Services Inc. Hsinchu Lab.

NO. 989-1 Wen Shan Rd., Shang Shan Village, Qionglin Shiang Hsinchu County 30741, Taiwan, R.O.C

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Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	10/07/2011	Initial Issue	All Page 27	Winnie Chen

DP6MC1 Report No. : T110916301-RP1

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1. TEST REPORT CERTIFICATION

Applicant : Motorola Mobility Inc.

Address: 8000W.Sunrise Blvd,Suite A. Plantation,FL 33322 U.S.A.

Equipment Under Test: SF500 **Model** : SF500

Trade Name : MOTOROLA

Tested Date : September 16 ~ October 07, 2011

APPLICABLE STANDARD		
Standard	Test Result	
FCC Part 15 Subpart C AND ANSI C63.4:2003	PASS	

WE HEREBY CERTIFY THAT: 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:

Rex Liao

Deputy Section Manager

Reviewed by:

Jacky Chen

Deputy Section Manager

2. EUT DESCRIPTION

Product Name	SF500	
Model Number	SF500	
Identify Number	T110916301	
Received Date	September 16, 2011	
Frequency Range	2402MHz~2480MHz	
Transmit Power	93.33 dBµV/m	
Channel Spacing	2MHz	
Channel Number	40 Channels	
Transmit Data Rate	GFSK (1Mbps)	
Type of Modulation	Frequency Hopping Spread Spectrum	
Frequency Selection	by software / firmware	
Transmitter Classification	portable device	
Antenna Type	IFA Antenna, Antenna Gain -0.54 dBi	
Power Source	3.7Vdc (Battery Powered)	
Fower Source	5.0Vdc (From Notebook PC, Powered From Host Device)	
Signal Cable	Shielded Micro USB Cable 0.15m × 1	
I/O Port	Micro USB port × 1	

Remark:

- 1. The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.
- 2. For more details, please refer to the User's manual of the EUT.
- 3. This submittal(s) (test report) is intended for FCC ID: IHDP6MC1 filing to comply with Section 15.207, 15.209 and 15.249 of the FCC Part 15, Subpart C Rules.

3. DESCRIPTION OF TEST MODES

The EUT (SF500) had been tested under operating condition.

Radiated Emission (Below 1 GHz) and Conducted Emission Test:

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

No.	. Pre-Test Mode	·
1	TX Mode	

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

Final Test Mode			
Emission	Radiated Emission	TX Mode	
LIIIISSIOII	Conducted Emission	N/A	

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

Radiated Emission Test (Above 1 GHz):

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

Following channel(s) was (were) selected for the final test as listed below.

Channel	Frequency (MHz)
Low	2402
Middle	2440
High	2480

Bandedge Measurement:

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

Following channel(s) was (were) selected for the final test as listed below.

Channel	Frequency (MHz)
Low	2402
High	2480

Remark: The field strength of spurious emission was measured in the following position: EUT stand-up position(Z axis), lie-down position(X, Y axis). The worst emission was found in lie-down position(X axis) and the worst case was recorded.

4. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4: 2003 and FCC CFR 47, 15.207, 15.209 and 15.249.

5. FACILITIES AND ACCREDITATION

5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

NO. 989-1 Wen Shan Rd., Shang Shan Village, Qionglin Shiang Hsinchu County 30741, Taiwan, R.O.C

The sites are constructed in conformance with the requirements of ANSI C63.4:2003 and CISPR 22. All receiving equipment conforms to CISPR 16-1-1, CISPR 16-1-2, CISPR 16-1-3, CISPR 16-1-5.

5.2 ACCREDITATIONS

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

Taiwan TAF

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

Canada INDUSTRY CANADA
Japan VCCI
Taiwan BSMI
USA FCC MRA

Copies of granted accreditation certificates are available for downloading from our web site, http:///www.ccsrf.com

5.3 MEASUREMENT UNCERTAINTY

The following table is for the measurement uncertainty, which is calculated as per the document CISPR 16-4-2.

PARAMETER	UNCERTAINTY
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 30 to 1000 MHz	+/- 3.5189
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 1 to 18GHz	+/- 2.5164
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 18 to 26 GHz	+/- 2.4967
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 26 to 40 GHz	+/- 2.7655
Conducted Emission (Mains Terminals), 9kHz to 30MHz	+/- 1.5923

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: 2006, 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 acceptable measurement uncertainty value without requiring revision of the compliance statement is base on conducted and radiated emissions being less than U_{CISPR} which is 3.6dB and 5.2dB respectively. CCS values (called U_{Lab} in CISPR 16-4-2) is less than U_{CISPR} as shown in the table above. Therefore, MU need not be considered for compliance.

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6. SETUP OF EQUIPMENT UNDER TEST

SUPPORT EQUIPMENT

No.	Product	Manufacturer	Model No.	Serial No.	FCC ID
1	Notebook PC	DELL	Latitude D610 PP01L	CN-0XD762-48643-63 7-1743	DoC

SETUP DIAGRAM FOR TESTS

EUT & peripherals setup diagram is shown in appendix setup photos.

EUT OPERATING CONDITION

- 1. Setup all computers like the setup diagram.
- 2. Run CSR Blue Test software.
- 3. TX mode

Freq: 2402, 2440, 2480

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7. FCC PART 15.249 REQUIREMENTS

7.1 RADIATED EMISSION

LIMITS

(1) According to § 15.205 (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 -1710	10.6 -12.7
6.26775 - 6.26825	108 -121.94	1718.8 - 1722.2	13.25 -13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 -16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3338	36.43 - 36.5
12.57675 - 12.57725	322 -335.4	3600 - 4400	(²)
13.36 - 13.41			

Remark:

(2) According to § 15.205 (b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown is Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

^{1.} 1 Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz. 2. 2 Above 38.6

(3) According to § 15.209 (a) Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table :

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 - 0.490	2400/F(KHz)	300
0.490 - 1.705	24000/F(KHz)	30
1.705 - 30.0	30	30
30 - 88	100 **	3
88 - 216	150 **	3
216 - 960	200 **	3
Above 960	500	3

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

- (4) According to § 15.209 (b) In the emission table above, the tighter limit applies at the band edges.
- (5) According to § 15.249 (a) Except as provided in paragraph (b) of this section, the field strength of emission from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental Frequency (MHz)	Field Strength of Fundamental (millivolts/meter)	Measurement Distance of Harmonics (microvolts/meter)
902 - 928	50	500
2400 - 2483.5	50	500
5725 - 5875	50	500
24000 - 24250	250	2500

TEST EQUIPMENT

966Chamber_B

Name of Equipment	Manufacture	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY43360132	06/19/2012
EMI Receiver	ROHDE & SCHWARZ	ESCI	101131	01/13/2012
Broadband Hybrid Bi-Log Antenna	Sunol Sciences	JB1	A100209-4	10/07/2011
Double-Ridged Waveguide Horn	ETS-LINDGREN	3117	00078732	07/03/2012
Horn Antenna	COM-POWER	AH-840	03077	12/12/2011
Pre-Amplifier	Agilent	8447D	2944A10052	07/19/2012
Pre-Amplifier	Agilent	8449B	3008A01916	09/18/2012
LOOP Antenna	EMCO	6502	8905-2356	06/10/2012
Notch Filters Band Reject	Micro-Tronics	BRM05702-01	026	N.C.R

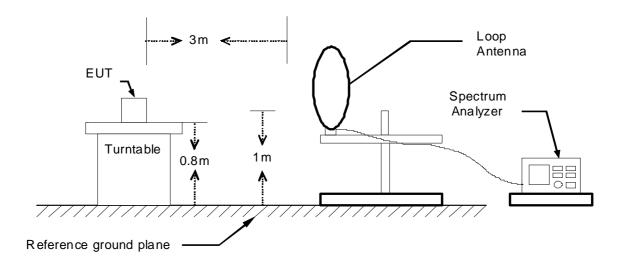
Remark: 1. Each piece of equipment is scheduled for calibration once a year.

2. N.C.R = No Calibration Request.

TEST SETUP

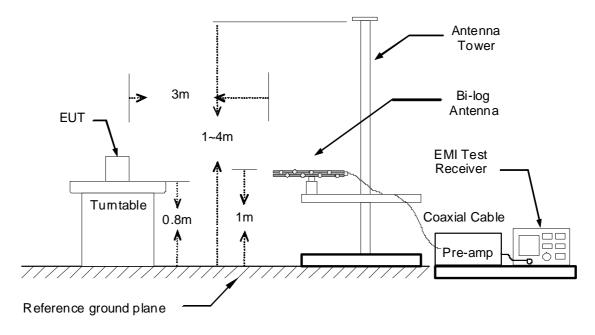
The diagram below shows the test setup that is utilized to make the measurements for emission from below 1GHz.

9kHz ~ 30MHz

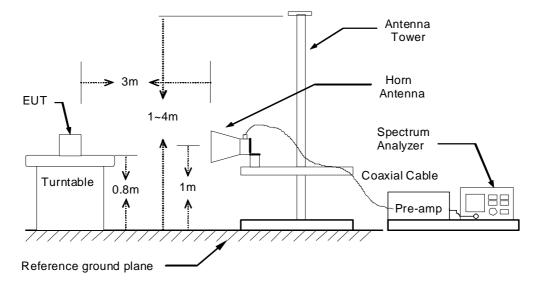


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30MHz ~ 1GHz



The diagram below shows the test setup that is utilized to make the measurements for emission above 1GHz.



TEST PROCEDURE

- 1. The EUT was placed on the top of a rotating table 0.8 meters above the ground. The table was rotated 360 degrees to determine the position of the highest radiation.
- 2. While measuring the radiated emission below 1GHz, the EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. While measuring the radiated emission above 1GHz, the EUT was set 3 meters away from the interference-receiving antenna.
- 3. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarization 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 tuned to heights from 1 meter to 4 meters and the table was turned from 0 degrees to 360 degrees to find the maximum reading.
- 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- 6. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Remark:

- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 KHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
- 2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection and frequency above 1GHz.
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.

TEST RESULTS

Below 1 GHz (9kHz ~ 30MHz)

No emission found between lowest internal used/generated frequency to 30MHz.

Below 1 GHz (30MHz ~ 1GHz)

Product Name	SF500	Test By	Waternil Guan
Test Model	SF500	Test Date	2011/09/22
Test Mode	TX Mode	TEMP & Humidity	24°C, 53%

966 Chamber B at 3Meter / Horizontal

	•	oo Chambe	_b at swetc	1 / 11011201118		
Frequency (MHz)	Reading (dBµV)	Correction Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark
57.16	56.31	-19.93	36.38	40.00	-3.62	Peak
75.59	56.31	-19.78	36.52	40.00	-3.48	Peak
102.75	49.39	-16.54	32.85	43.50	-10.65	Peak
171.62	50.39	-15.09	35.30	43.50	-8.20	Peak
250.19	50.60	-13.77	36.84	46.00	-9.16	Peak
399.57	41.26	-9.89	31.37	46.00	-14.63	Peak
797.27	46.20	-3.61	42.59	46.00	-3.41	Peak
886.51	37.87	-2.38	35.49	46.00	-10.51	Peak
		966 Chamb	er_B at 3Met	er / Vertical		
Frequency (MHz)	Reading (dBµV)	Correction Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark
54.25	53.83	-19.84	33.99	40.00	-6.01	Peak
75.59	54.17	-19.78	34.39	40.00	-5.61	Peak
188.11	46.87	-14.53	32.34	43.50	-11.16	Peak
399.57	41.18	-9.89	31.29	46.00	-14.71	Peak
475.23	41.15	-8.85	32.29	46.00	-13.71	Peak

Remark

752.65

797.27

840.92

997.09

39.76

40.53

41.70

39.78

- 1. Quasi-peak test would be performed if the peak result were greater than the quasi-peak limit.
- 2. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

35.08

36.92

38.59

39.09

46.00

46.00

46.00

54.00

-10.92

-9.08

-7.41

-14.91

Peak

Peak

Peak

Peak

- 3. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) PreAmp.Gain (dB)
- 4. Result (dBuV/m) = Reading (dBuV) + Correction Factor (dB/m)
- 5. Margin (dB) = Remark result (dBuV/m) Quasi-peak limit (dBuV/m).

-4.68

-3.61

-3.11

-0.70

Above 1 GHz

Product Name	SF500	Test By	Rueyyan Lin
Test Model	SF500	Test Date	2011/09/24
Test Mode	TX / CH Low	TEMP & Humidity	25°C, 53%

	966 Chamber_B at 3Meter / Horizontal										
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark		
1332.00	48.50		-3.04	45.46		74.00	54.00	-28.54	Peak		
1598.00	48.98		-1.62	47.36		74.00	54.00	-26.64	Peak		
1864.00	47.39		0.92	48.31		74.00	54.00	-25.69	Peak		
* 2402.00	89.71	70.05	3.26	92.97	73.31	114.00	94.00	-20.69	AVG		
2496.00	47.08		3.51	50.59		74.00	54.00	-23.41	Peak		
4830.00	38.25		9.05	47.30		74.00	54.00	-26.70	Peak		
	966 Chamber_B at 3Meter / Vertical										
Frequency (MHz)	Reading-	Reading-	Correction Factor	Result-PK	Result-AV	Limit-PK	Limit-AV (dBuV/m)	Margin (dB)	Remark		

	Frequency PK AV Factor Result-PK Result-AV Limit-PK Limit-AV Margin Remark											
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark			
1332.00	53.46		-3.04	50.42		74.00	54.00	-23.58	Peak			
1862.00	51.46		0.90	52.36		74.00	54.00	-21.64	Peak			
* 2402.00	89.08	69.64	3.26	92.34	72.90	114.00	94.00	-21.10	AVG			
2500.00	51.00	35.10	3.52	54.52	38.62	74.00	54.00	-15.38	AVG			
2930.00	44.51		4.90	49.41		74.00	54.00	-24.59	Peak			
4830.00	38.56		9.05	47.61		74.00	54.00	-26.39	Peak			

Remark

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor Margin = Result – Limit

Remark Peak = Result(PK) - Limit(PK)

Remark AVG = Result(AV) - Limit(AV)

6. " * " Fundamental

Product Name	SF500	Test By	Rueyyan Lin
Test Model	SF500	Test Date	2011/09/24
Test Mode	TX / CH Middle	TEMP & Humidity	25°C, 53%

		90	66 Chamb	per Bat:	3Meter / I	Horizonta	al		
Frequency (MHz)	Reading- PK (dBuV)			Result-PK		Limit-PK	Limit-AV	Margin (dB)	Remark
1330.00	49.39		-3.05	46.34		74.00	54.00	-27.66	Peak
1598.00	48.86		-1.62	47.24		74.00	54.00	-26.76	Peak
1862.00	47.11		0.90	48.01		74.00	54.00	-25.99	Peak
* 2440.00	89.19	69.76	3.36	92.55	73.12	114.00	94.00	-20.88	AVG
2492.00	47.16		3.50	50.66		74.00	54.00	-23.34	Peak
2664.00	47.10		4.04	51.14		74.00	54.00	-22.86	Peak
4800.00	39.63		9.04	48.67		74.00	54.00	-25.33	Peak
				•					
		,	966 Chan	nber_B a	t 3Meter	/ Vertical			
Frequency	Reading-	Reading-	Correction	Result-PK	Result-AV	Limit-PK	Limit-AV	Margin	Remark

	966 Chamber_B at 3Meter / Vertical											
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark			
1066.00	52.72		-3.83	48.89		74.00	54.00	-25.11	Peak			
1864.00	50.75		0.92	51.67		74.00	54.00	-22.33	Peak			
* 2440.00	88.53	69.27	3.36	91.89	72.63	114.00	94.00	-21.37	AVG			
2496.00	51.16	35.45	3.51	54.67	38.96	74.00	54.00	-15.04	AVG			
2924.00	45.19		4.88	50.07		74.00	54.00	-23.93	Peak			
4875.00	38.59		9.08	47.67		74.00	54.00	-26.33	Peak			

Remark

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor Margin = Result - Limit Remark Peak = Result(PK) - Limit(PK) Remark AVG = Result(AV) - Limit(AV)

6. " * " Fundamental

Product Name	SF500	Test By	Rueyyan Lin
Test Model	SF500	Test Date	2011/09/24
Test Mode	TX / CH High	TEMP & Humidity	25°C, 53%

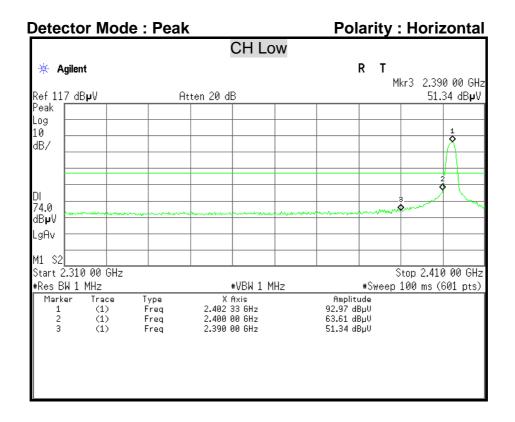
	Frequency Reading-Reading-Correction Result-PK Result-AV Limit-PK Limit-AV Margin Remark										
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark		
1330.00	48.82		-3.05	45.77		74.00	54.00	-28.23	Peak		
1594.00	49.53		-1.66	47.87		74.00	54.00	-26.13	Peak		
1864.00	47.05		0.92	47.97		74.00	54.00	-26.03	Peak		
*2480.00	89.48	69.46	3.47	92.95	72.93	114.00	94.00	-21.07	AVG		
4965.00	38.55		9.13	47.68		74.00	54.00	-26.32	Peak		

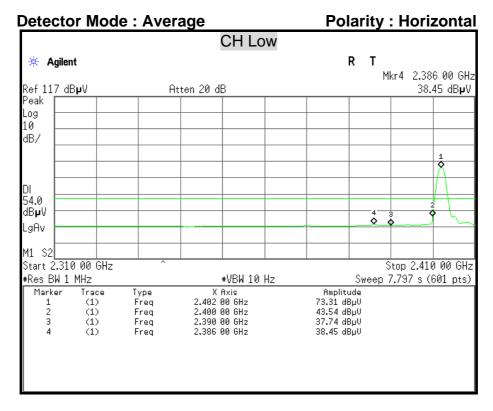
966 Chamber_B at 3Meter / Vertical										
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark	
1064.00	51.72		-3.83	47.89		74.00	54.00	-26.11	Peak	
1332.00	51.84		-3.04	48.80		74.00	54.00	-25.20	Peak	
1866.00	50.20		0.93	51.13		74.00	54.00	-22.87	Peak	
* 2480.00	89.86	70.05	3.47	93.33	73.52	114.00	94.00	-20.48	AVG	
2924.00	45.27		4.88	50.15		74.00	54.00	-23.85	Peak	
4965.00	39.51		9.13	48.64		74.00	54.00	-25.36	Peak	

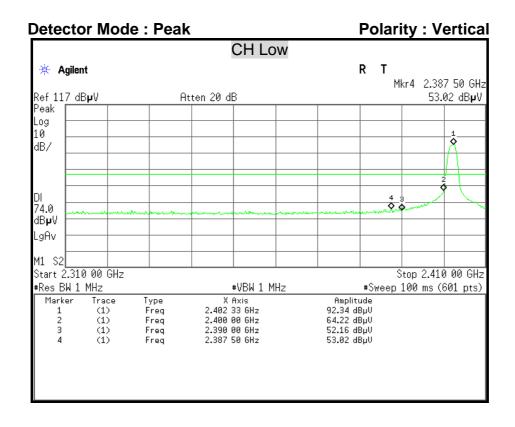
Remark

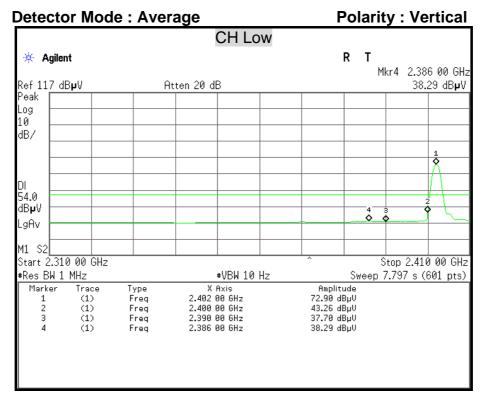
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor Margin = Result – Limit Remark Peak = Result(PK) – Limit(PK) Remark AVG = Result(AV) – Limit(AV)
- 6. " * " Fundamental

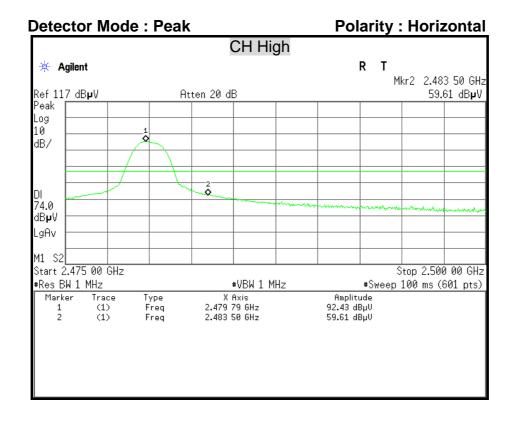
Restricted Band Edges

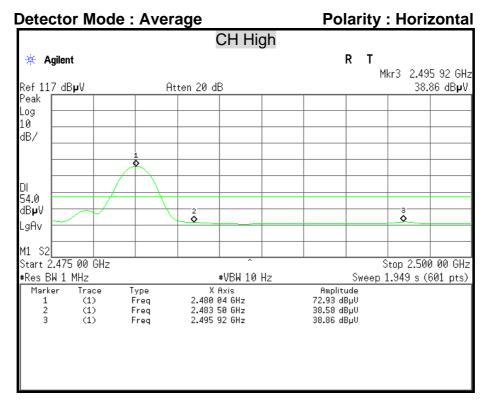


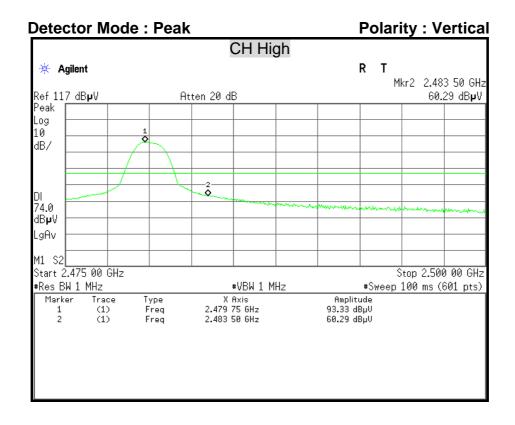


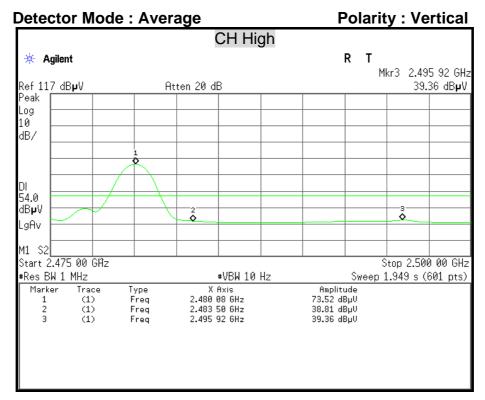












7.2 CONDUCTED EMISSION

LIMITS

§ 15.207 (a) Except as shown in paragraph (b) and (c) this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency Range	Conducted Limit (dBµv)				
(MHz)	Quasi-peak	Average			
0.15 - 0.50	66 to 56	56 to 46			
0.50 - 5.00	56	46			
5.00 - 30.0	60	50			

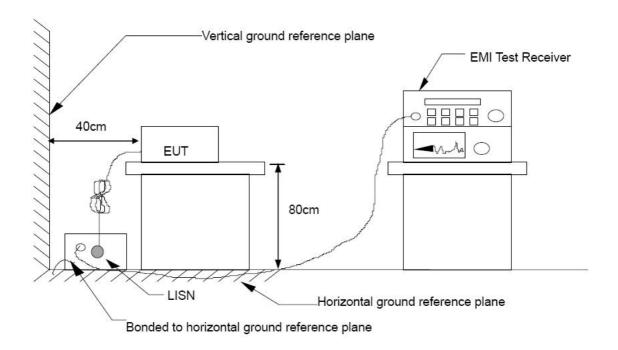
TEST EQUIPMENT

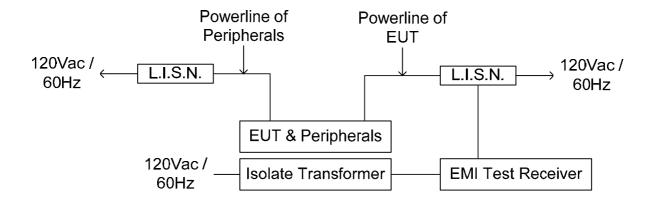
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
L.I.S.N	SCHWARZBECK	NSLK 8127	8127-465	08/09/2012
L.I.S.N	SCHWARZBECK	NSLK 8127	8127-473	03/14/2012
EMI Receiver	ROHDE & SCHWARZ	ESCS 30	835418/008	10/24/2011
Pulse Limit	ROHDE & SCHWARZ	ESH3-Z2	100117	09/14/2012

Remark: Each piece of equipment is scheduled for calibration once a year.

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TEST SETUP





TEST PROCEDURE

The basic test procedure was in accordance with ANSI C63.4:2003.

The test procedure is performed in a $4m \times 3m \times 2.4m$ (L×W×H) shielded room.

The EUT along with its peripherals were placed on a 1.0m (W) \times 1.5m (L) and 0.8m in height wooden table and the EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane.

The EUT was connected to power mains through a line impedance stabilization network (LISN) which provides 50 ohm coupling impedance for measuring instrument and the chassis ground was bounded to the horizontal ground plane of shielded room. All peripherals were connected to the second LISN and the chassis ground also bounded to the horizontal ground plane of shielded room.

The EUT was located so that the distance between the boundary of the EUT and the closest surface of the LISN is 0.8 m. Where a mains flexible cord was provided by the manufacturer shall be 1 m long, or if in excess of 1 m, the excess cable was folded back and forth as far as possible so as to form a bundle not exceeding 0.4 m in length.

TEST RESULTS

Since the BT won't work at charge mode, this is test item is not applicable.