FCC RF TEST REPORT

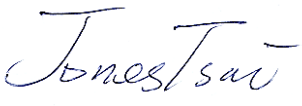
47 CFR FCC Part 15 Subpart C § 15.249

APPLICANT	**: Samsung Electronics Co., Ltd.**
EQUIPMENT	**: Tablet PC**
BRAND NAME	**: SAMSUNG**
MODEL NAME	**: SM-P555C**
FCC ID	**: A3LSMP555C**

The product was received on Mar. 10, 2015 and testing was completed on Apr. 05, 2015. We, SPORTON INTERNATIONAL (SHENZHEN) INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL (SHENZHEN) INC., the test report shall not be reproduced except in full.

Reviewed by: Joseph Lin / Supervisor



Approved by: Jones Tsai / Manager

SPORTON INTERNATIONAL (SHENZHEN) INC.
1F & 2F,Building A, Morning Business Center, No. 4003 ShiGu Rd., Xili Town, Nanshan District, Shenzhen, Guangdong, P. R. China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR531006D	Rev. 01	Initial issue of report	Apr. 16, 2015

1. SUMMARY OF THE TEST RESULT

Applied Standard:				
Part	**FCC Rule**	**Description of Test**	**Result**	**Under Limit**
3.1	15.207	AC Power Line Conducted Emissions	Complies	16.06 dB at 0.440MHz
3.2	2.1049	20dB & 99% Occupied Bandwidth	Complies	-
3.3	15.249(a)	Field Strength of Fundamental Emissions	Complies	14.1 dB at 2441.000MHz
3.3	15.249(a)(d)	Radiated Spurious Emissions	Complies	6.47 dB at 39.700MHz
3.4	15.203	Antenna Requirements	Complies	-

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.3 dB**

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.9 dB**

2. GENERAL INFORMATION

2.1 Applicant

Samsung Electronics Co., Ltd.

No.9 WeiWu Rd, Micro Electronic Industrial Park, Jingang Highway, Xiqing District, Tianjin, China

2.2 Manufacturer

Samsung Electronics Co., Ltd.

No.9 WeiWu Rd, Micro Electronic Industrial Park, Jingang Highway, Xiqing District, Tianjin, China

2.3 Product Details

For more detailed features description, please refer to the manufacturer's specifications or user's manual.

Product Feature	
Equipment	Tablet PC
Brand Name	SAMSUNG
Model Name	SM-P555C
FCC ID	A3LSMP555C
GSM Operating Band(s)	GSM 900/1800/1900/850MHz
GPRS/EGPRS Multislot Class	GPRS Class 33, EGPRS Class 33
WCDMA Operating Band(s)	FDD Band I/II/V/VIII
LTE Operating Band(s)	FDD Band 1/3/8/28, TDD Band 41
Wi-Fi Specification	2.4GHz 802.11b/g/n HT20 5GHz 802.11a/n HT20/ HT40
Bluetooth Version	Bluetooth v3.0 + EDR/Bluetooth v4.0 LE
ANT+ Specification	2.4GHz
IMEI Code	Conducted: 354171050000373 Radiated: 354171050000349 Conduction: 354171050000315
HW Version	REV1.0
SW Version	P555C.001
EUT Stage	Identical Prototype

Items	Description
Modulation	GFSK
Channel Bandwidth (99%)	0.882MHz
Max. Field Strength (Peak)	99.9dBμV/m
Max. Field Strength (Average)	52.36dBμV/m
ANT+ Channel Number	79
ANT+ Frequency Range	2402-2480MHz

2.4 Table for Test Modes

Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode
AC Power Line Conducted Emissions	CTX
Field Strength of Fundamental Emissions	CTX
Bandwidth	CTX
Radiated Emissions	CTX

Note:

1. CTX=continuously transmitting.
2. The programmed RF utility, the engineering test program was provided and enabled to make EUT continuous transmit/receive.

2.5 Table for Testing Locations

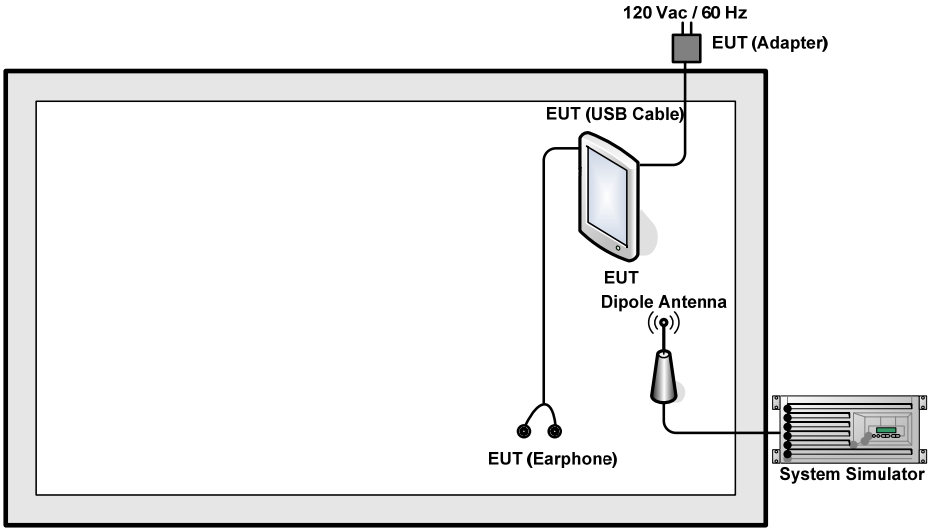
Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.	
Test Site Location	1F & 2F,Building A, Morning Business Center, No. 4003 ShiGu Rd., Xili Town, Nanshan District, Shenzhen, Guangdong, P. R. China TEL: +86-755-8637-9589 FAX: +86-755-8637-9595	
Test Site No.	**Sporton Site No.**	
	TH01-SZ	CO01-SZ

Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.	
Test Site Location	No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan warehouse, Nanshan District, Shenzhen, Guangdong, P. R. China TEL: +86-755- 3320-2398	
Test Site No.	**Sporton Site No.**	**FCC Registration No.**
	03CH01-SZ	831040

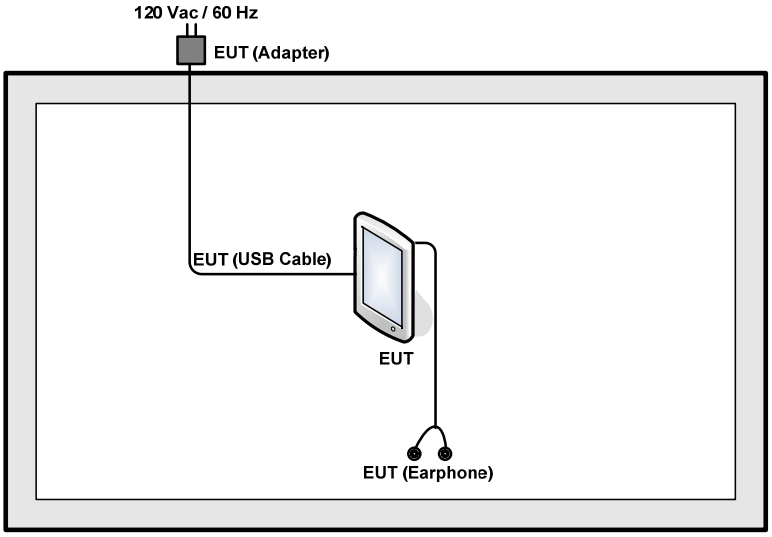
Note: The test site complies with ANSI C63.4 2009 requirement.

2.6 Test Configurations

<AC Conducted Emissions>



<Radiated Spurious Emissions>



3. TEST RESULT

3.1 AC Power Line Conducted Emissions Measurement

3.1.1 Limit

For a Low-power Radio-frequency device which is designed to be connected to the 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 below limits table.

Frequency (MHz)	QP Limit (dBμV)	AV Limit (dBμV)
0.15~0.5	66~56	56~46
0.5~5	56	46
5~30	60	50

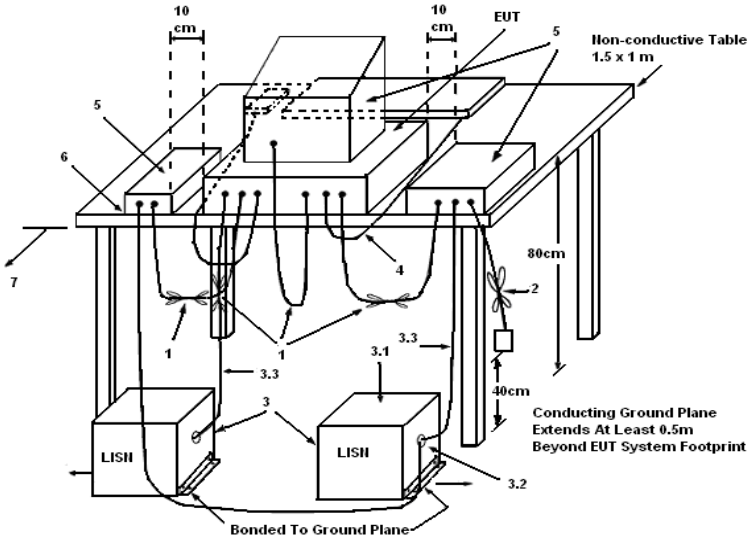
3.1.2 Measuring Instruments

Please refer to section 4 of equipment list in this report.

3.1.3 Test Procedures

1. Configure the EUT according to ANSI C63.10. The EUT or host of EUT has to be placed 0.4 meter far from the conducting wall of the shielding room and at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT or host of EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connected to the other LISNs. The LISN should provide 50uH/50ohms coupling impedance.
4. The frequency range from 150 kHz to 30 MHz was searched.
5. Set the test-receiver system to Peak Detect Function and Specified Bandwidth (IF bandwidth = 9kHz) with Maximum Hold Mode.
6. The measurement has to be done between each power line and ground at the power terminal.

3.1.4 Test Setup Layout



LEGEND:

(1) Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

(2) I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

(3) EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω. LISN can be placed on top of, or immediately beneath, reference ground plane.

(3.1) All other equipment powered from additional LISN(s).

(3.2) Multiple outlet strip can be used for multiple power cords of non-EUT equipment.

(3.3) LISN at least 80 cm from nearest part of EUT chassis.

(4) Cables of hand-operated devices, such as keyboards, mice, etc., shall be placed as for normal use.

(5) Non-EUT components of EUT system being tested.

(6) Rear of EUT, including peripherals, shall all be aligned and flush with rear of tabletop.

(7) Rear of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.

3.1.5 Test Deviation

There is no deviation with the original standard.

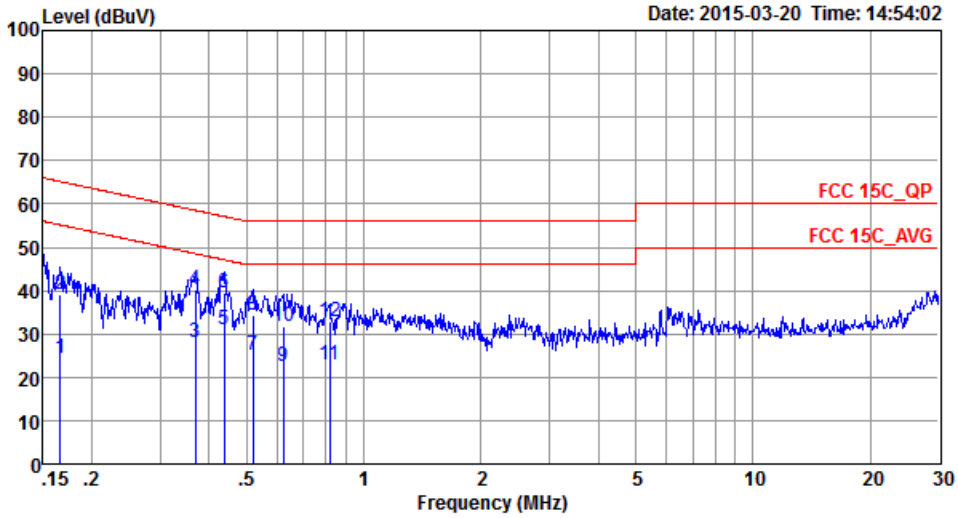
3.1.6 EUT Operation during Test

The EUT was placed on the test table and programmed in transmitting function.

3.1.7 Results of AC Power Line Conducted Emissions Measurement

Test Date	Mar. 20, 2015	Test Site No.	CO01-SZ
Temperature	21~22℃	Humidity	41~42%
Test Engineer	Jack Tian	Configuration	ANT+ Transmitting Mode
Mode	GSM850 Idle + USB Cable (Charging from Adapter) + Earphone + ANT+TX		

Line

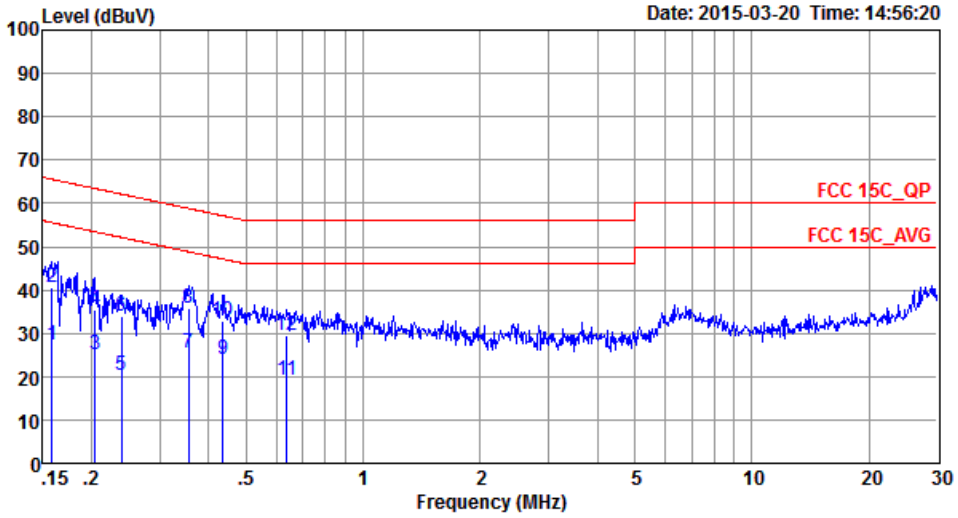


Site : CO01-SZ
Condition: FCC 15C_QP LISN_L_20140304 LINE

IMEI : 354171050000315

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.17	24.46	-30.70	55.16	13.90	0.22	10.34	Average
2		0.17	39.06	-26.10	65.16	28.50	0.22	10.34	QP
3		0.37	27.95	-20.57	48.52	17.50	0.27	10.18	Average
4		0.37	40.05	-18.47	58.52	29.60	0.27	10.18	QP
5	*	0.44	31.05	-16.06	47.11	20.60	0.29	10.16	Average
6		0.44	39.45	-17.66	57.11	29.00	0.29	10.16	QP
7		0.52	25.14	-20.86	46.00	14.69	0.29	10.16	Average
8		0.52	34.34	-21.66	56.00	23.89	0.29	10.16	QP
9		0.62	22.57	-23.43	46.00	12.20	0.22	10.15	Average
10		0.62	31.87	-24.13	56.00	21.50	0.22	10.15	QP
11		0.82	22.86	-23.14	46.00	12.50	0.21	10.15	Average
12		0.82	32.76	-23.24	56.00	22.40	0.21	10.15	QP

Neutral



Site : CO01-SZ
Condition: FCC 15C_QP LISN_N_20140304 NEUTRAL

IMEI : 354171050000315

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.16	27.38	-28.18	55.56	16.70	0.33	10.35	Average
2		0.16	40.68	-24.88	65.56	30.00	0.33	10.35	QP
3		0.20	25.01	-28.44	53.45	14.40	0.32	10.29	Average
4		0.20	35.41	-28.04	63.45	24.80	0.32	10.29	QP
5		0.24	20.19	-31.94	52.13	9.60	0.34	10.25	Average
6		0.24	33.79	-28.34	62.13	23.20	0.34	10.25	QP
7		0.36	25.56	-23.27	48.83	15.00	0.38	10.18	Average
8	*	0.36	35.86	-22.97	58.83	25.30	0.38	10.18	QP
9		0.44	24.16	-22.99	47.15	13.60	0.40	10.16	Average
10		0.44	32.66	-24.49	57.15	22.10	0.40	10.16	QP
11		0.64	19.05	-26.95	46.00	8.60	0.30	10.15	Average
12		0.64	29.45	-26.55	56.00	19.00	0.30	10.15	QP

3.2 20dB and & 99% Occupied Bandwidth

3.2.1 Limit

Intentional radiators must be designed to ensure that the 20 dB bandwidth of the emissions in the specific band.

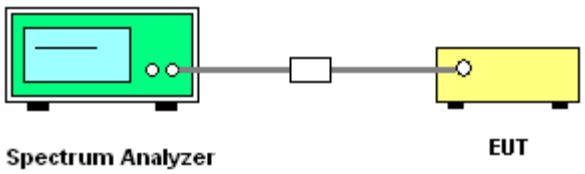
3.2.2 Measuring Instruments

Please refer to section 4 of equipment list in this report.

3.2.3 Test Procedures

1. The transmitter output port was connected to the spectrum analyzer.
2. Measured the spectrum width with highest power setting.

3.2.4 Test Setup Layout



3.2.5 Test Deviation

There is no deviation with the original standard.

3.2.6 EUT Operation during Test

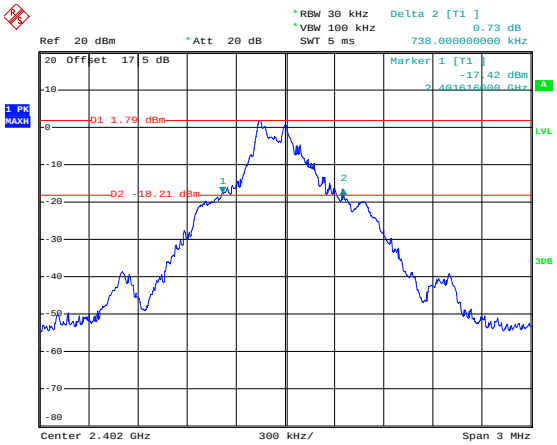
The EUT was programmed to be in continuously transmitting mode.

3.2.7 Test Result of 20dB Spectrum Bandwidth

Test Date	Mar. 15, 2015	Test Site No.	TH01-SZ
Temperature	24~26℃	Humidity	50~53%
Test Engineer	Fly Liang		

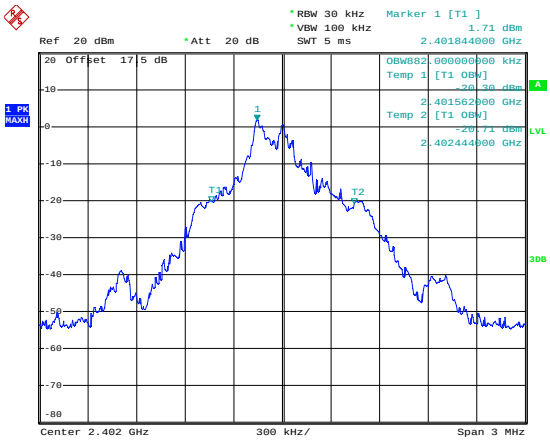
Frequency	20dB BW (MHz)	99% OBW (MHz)
2402MHz	0.738	0.882
2441MHz	0.726	0.864
2480MHz	0.756	0.864

20 dB Bandwidth Plot on 2402MHz



Date: 15.MAR.2015 09:40:03

99% Bandwidth Plot on 2402MHz



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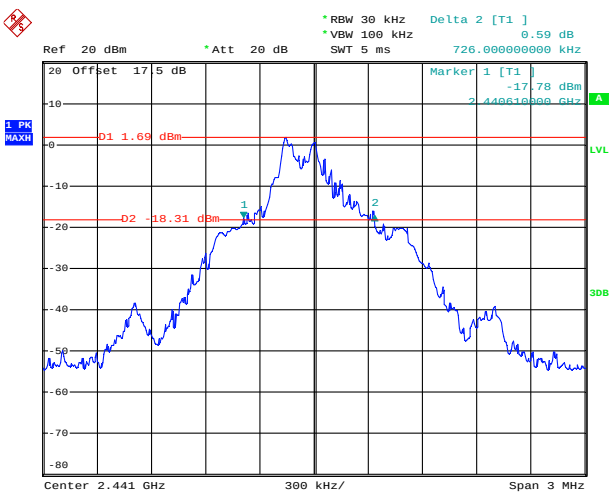
20 dB Bandwidth Plot on 2441MHz



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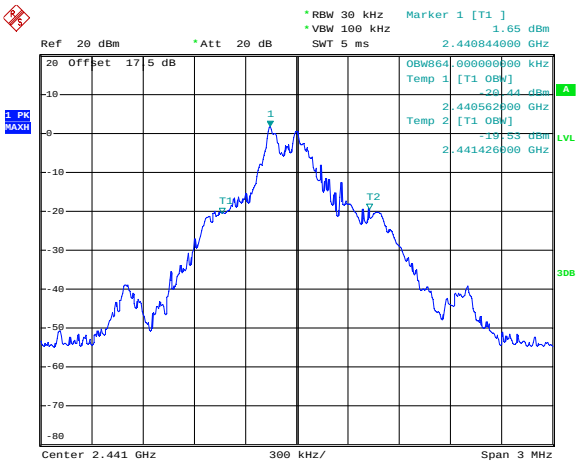
99% Bandwidth Plot on 2441MHz



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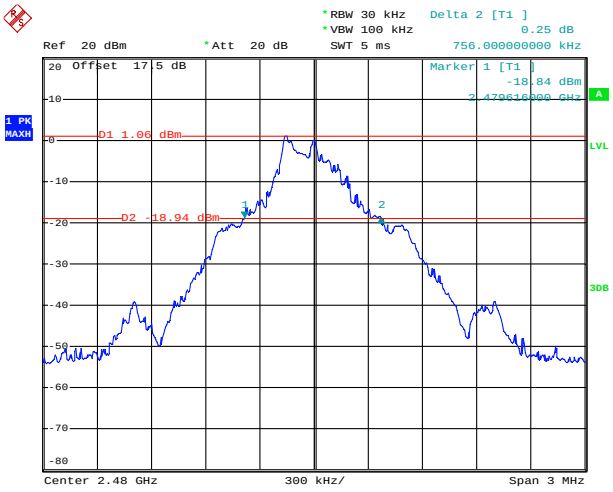
20 dB Bandwidth Plot on 2480MHz



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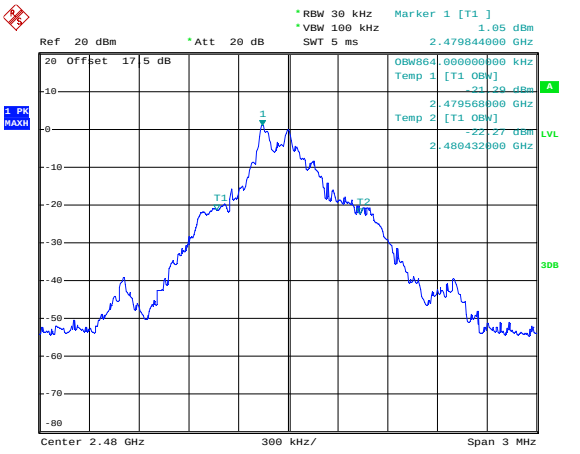
99% Bandwidth Plot on 2480MHz



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3.3 Field Strength of Fundamental Emissions and Radiated Spurious Emissions

3.3.1 Limit

The field strength measured at 3 meters shall not exceed the limits in the following table:

Fundamental Frequencies(MHz)	Field Strength(millivolts/m)	
	Fundamental	Harmonics
902~928	50	0.5
2400~2483.5	50	0.5
5725~5875	50	0.5

Note: The limits shown in the above table are based on measurements using an average detector, except for the fundamental emission in the frequency band 902-928 MHz, which is based on measurements using a CISPR quasi-peak detector.

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general field strength limits listed in 15.209 as below, whichever is less stringent.

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

3.3.2 Measuring Instruments

Please refer to section 4 of equipment list in this report.

3.3.3 Test Procedures

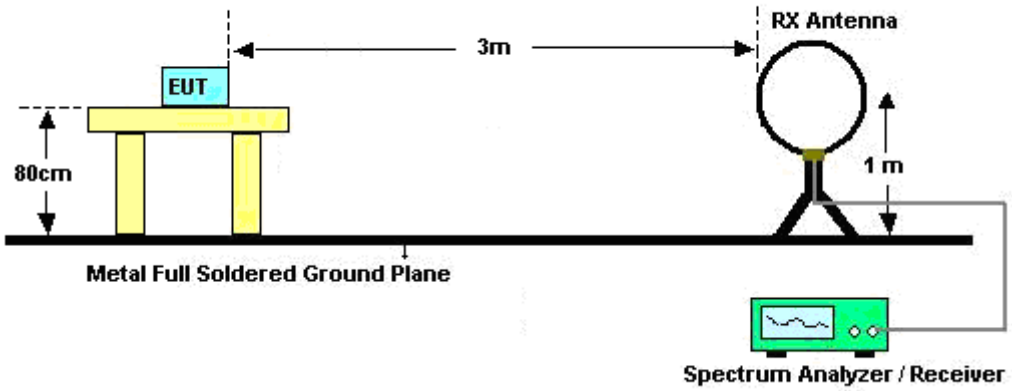
1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
4. Set to the maximum power setting and enable the EUT transmit continuously.

Remark:

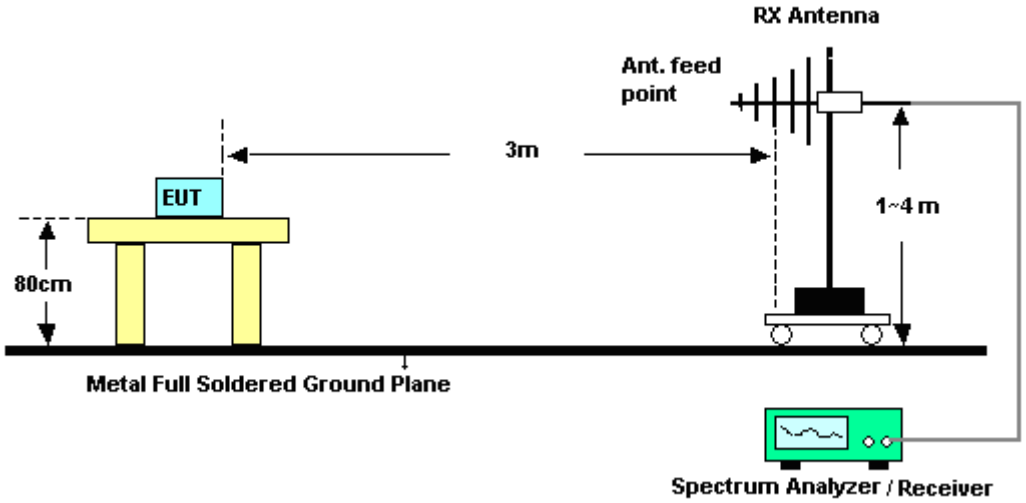
1. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
2. For average measurement: use duty cycle correction factor method per 15.35(c).
   Duty cycle = On time/100 milliseconds
   On time = N1*L1+N2*L2+...+Nn-1*LNn-1+Nn*Ln
   Where N1 is number of type 1 pulses, L1 is length of type 1 pulses, etc.
   Average Emission Level = Peak Emission Level + 20*log(Duty cycle)

3.3.4 Test Setup Layout

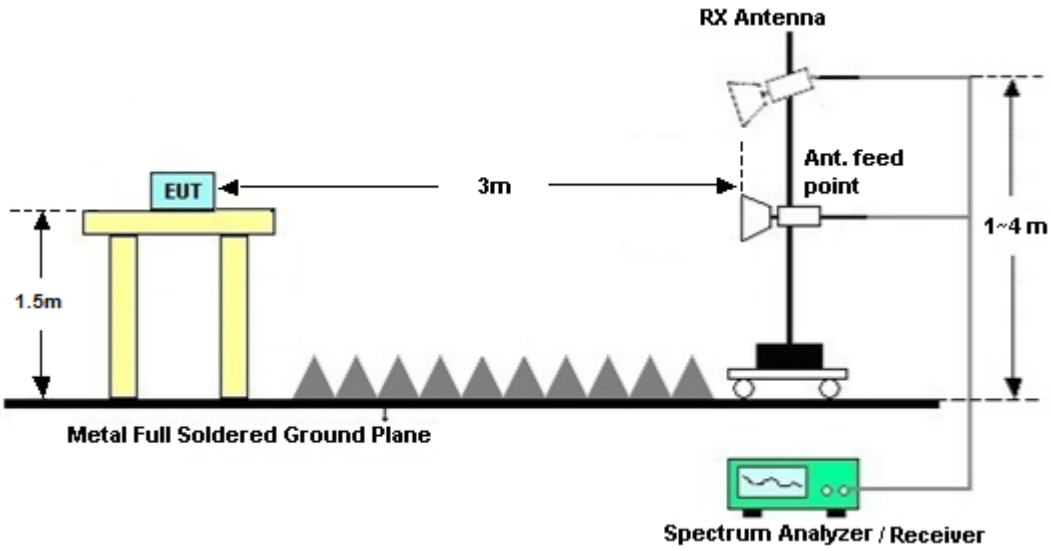
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.3.5 Test Deviation

There is no deviation with the original standard.

3.3.6 EUT Operation during Test

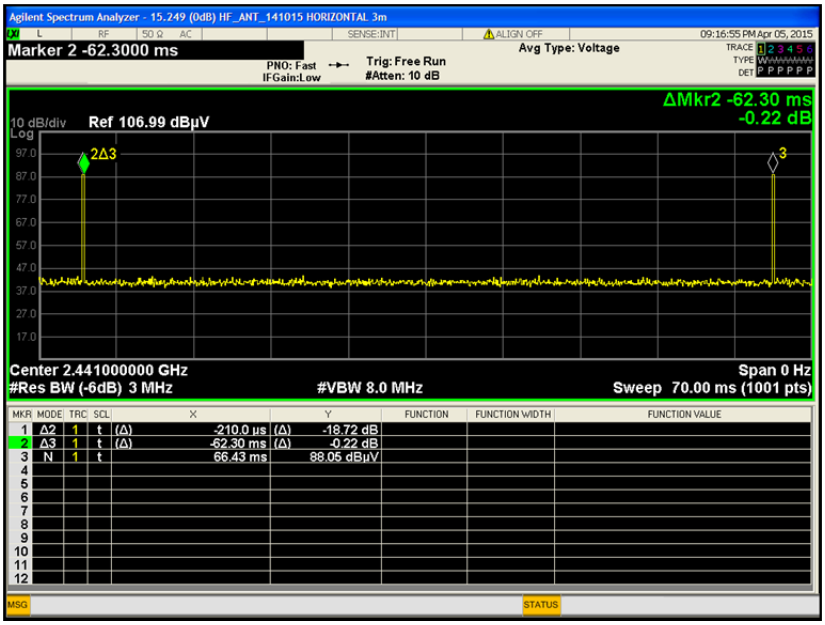
The EUT was programmed to be in continuously transmitting mode.

3.3.7 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

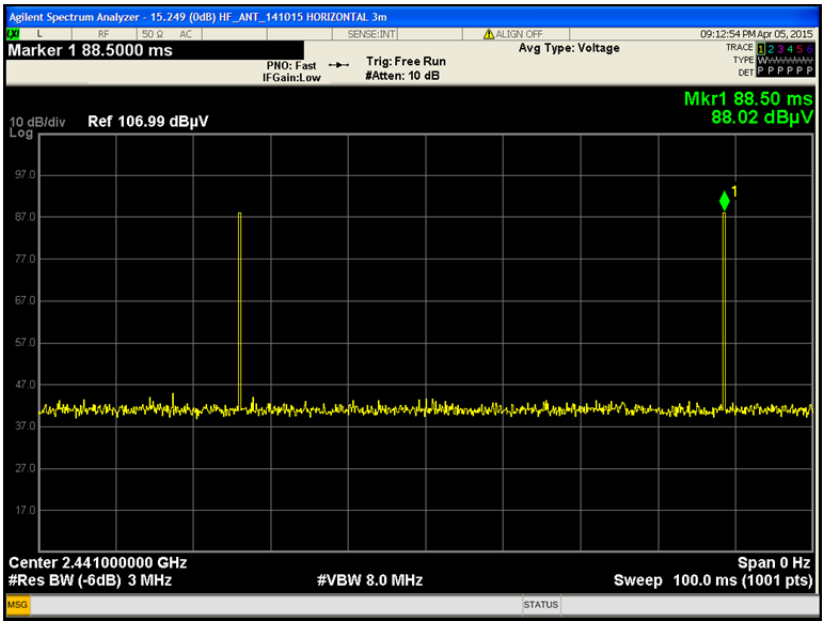
The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

3.3.8 Duty cycle correction factor for average measurement

On time (One Pulse) Plot on 2441MHz



On time (Count Pulses) Plot on 2441MHz



Note:

1. Worst case Duty cycle = on time/100 milliseconds = 2 * 0.21 / 100 = 0.42 %
2. Worst case Duty cycle correction factor = 20*log(Duty cycle) = -47.54 dB

3.3.9 Test Result of Field Strength of Fundamental Emissions and Spurious Emissions

Please refer to Appendix A.

3.4 Antenna Requirements

3.4.1 Limit

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited.

3.4.2 Antenna Connector Construction

Enbedded in Antenna.

4. LIST OF MEASURING EQUIPMENT

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSP30	101400	9kHz~30GHz	Jan. 28, 2015	Mar. 15, 2015	Jan. 27, 2016	Conducted (TH01-SZ)
Power meter	Anritsu	ML2495A	1218010	10Hz~40GHz	Jan. 28, 2015	Mar. 15, 2015	Jan. 27, 2016	Conducted (TH01-SZ)
Power Sensor	Anritsu	MA2411B	1207253	0.3GHz~40GHz	Jan. 28, 2015	Mar. 15, 2015	Jan. 27, 2016	Conducted (TH01-SZ)
EMI TEST Receiver	R&S	ESCI7	100768	9kHz~3GHz	May 04, 2014	Apr. 05, 2015	May 03, 2015	Radiation (03CH01-SZ)
Spectrum Analyzer	Agilent Technologies	N9038A	MY52260185	20Hz~26.5GHz	May 26, 2014	Apr. 05, 2015	May 25, 2015	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	May 09, 2014	Apr. 05, 2015	May 08, 2015	Radiation (03CH01-SZ)
Bilog Antenna	TESEQ	CBL 6112D	37877	30MHz~2GHz	Oct. 15, 2014	Apr. 05, 2015	Oct. 14, 2015	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS Lindgren	3117	00119436	1GHz~18GHz	Oct. 15, 2014	Apr. 05, 2015	Oct. 14, 2015	Radiation (03CH01-SZ)
Double Ridged Horn Antenna	COM-POWER	AH-840	101073	18GHz~40GHz	Jun. 09, 2014	Apr. 05, 2015	Jun. 08, 2015	Radiation (03CH01-SZ)
Amplifier	ADVANTEST	BB525C	E9007003	9kHz~3000MHz GAIN 30db	Jan. 28, 2015	Apr. 05, 2015	Jan. 27, 2016	Radiation (03CH01-SZ)
Amplifier	Chengyi	AMF-7D-00101800-30-10P-R	1707137	1GHz~18GHz	May 08, 2014	Apr. 05, 2015	May 07, 2015	Radiation (03CH01-SZ)
Amplifier	Yiai	AV3860B	04030	2GHz~26.5GHz	May 08, 2014	Apr. 05, 2015	May 07, 2015	Radiation (03CH01-SZ)
AC Source	Chroma	61601ACSOURCE	616010002470	100Vac~240Vac	NCR	Apr. 05, 2015	NCR	Radiation (03CH01-SZ)
Turn Table	EM Electronics	EM 1000	N/A	0~360 degree	NCR	Apr. 05, 2015	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM Electronics	EM 1000	N/A	1 m~4 m	NCR	Apr. 05, 2015	NCR	Radiation (03CH01-SZ)
EMI TEST Receiver	R&S	ESCI7	100768	9kHz~3GHz	May 04, 2014	Mar. 20, 2015	May 03, 2015	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Feb. 02, 2015	Mar. 20, 2015	Feb. 01, 2016	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Feb. 02, 2015	Mar. 20, 2015	Feb. 01, 2016	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	616020000891	100Vac~250Vac	Sep. 29, 2014	Mar. 20, 2015	Sep. 28, 2015	Conduction (CO01-SZ)
System Simulator	R&S	CMU 200	116456	Full-Band	Aug. 11, 2014	Mar. 20, 2015	Aug. 10, 2015	Conduction (CO01-SZ)

Note: Test equipment calibration is traceable to the procedure of ISO17025.

Appendix A. Radiated Spurious Emission

15C 2.4GHz 2400~2483.5MHz

ANT+ (Band Edge @ 3m)

ANT+	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
ANT+ CH00 2402MHz		2400	59.05	-14.95	74	47.11	32.6	8.6	29.26	186	215	P	H
		2400	11.51	-42.49	54	-	-	-	-	186	215	A	H
		2402	99.06	-14.94	114	87.12	32.6	8.6	29.26	186	215	P	H
		2402	51.52	-42.48	94	-	-	-	-	186	215	A	H
		2400	53.4	-20.6	74	41.46	32.6	8.6	29.26	192	160	P	V
		2400	5.86	-48.14	54	-	-	-	-	192	160	A	V
		2402	95.14	-18.86	114	83.2	32.6	8.6	29.26	192	160	P	V
		2402	47.6	-46.4	94	-	-	-	-	192	160	A	V
ANT+ CH 39 2441MHz		2400	50.66	-23.34	74	38.72	32.6	8.6	29.26	190	208	P	H
		2400	3.12	-50.88	54	-	-	-	-	190	208	A	H
		2441	99.9	-14.1	114	87.76	32.65	8.69	29.2	190	208	P	H
		2441	52.36	-41.64	94	-	-	-	-	190	208	A	H
		2483.5	50.36	-23.64	74	38.06	32.68	8.78	29.16	190	208	P	H
		2483.5	2.82	-51.18	54	-	-	-	-	190	208	A	H
		2400	50.19	-23.81	74	38.25	32.6	8.6	29.26	192	160	P	V
		2400	2.65	-51.35	54	-	-	-	-	192	160	A	V
		2441	95.61	-18.39	114	83.47	32.65	8.69	29.2	192	160	P	V
		2441	48.07	-45.93	94	-	-	-	-	192	160	A	V
		2483.5	50.53	-23.47	74	38.23	32.68	8.78	29.16	192	160	P	V
		2483.5	2.99	-51.01	54	-	-	-	-	192	160	A	V

ANT+ CH 78 2480MHz		2480	99.71	-14.29	114	87.41	32.68	8.78	29.16	181	223	P	H
		2480	52.17	-41.83	94	-	-	-	-	181	223	A	H
		2483.5	51.01	-22.99	74	38.71	32.68	8.78	29.16	181	223	P	H
		2483.5	3.47	-50.53	54	-	-	-	-	181	223	A	H
		2480	95.78	-18.22	114	83.48	32.68	8.78	29.16	189	154	P	V
		2480	48.24	-45.76	94	-	-	-	-	189	154	A	V
		2483.5	51.25	-22.75	74	38.95	32.68	8.78	29.16	189	154	P	V
		2483.5	3.71	-50.29	54	-	-	-	-	189	154	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

15C 2.4GHz 2400~2483.5MHz

ANT+ (*Harmonic* @ 3m)

ANT+	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
ANT+ CH 00 2402MHz		4804	38.43	-35.57	74	41.98	34.39	12.86	50.8	151	219	P	H
		4804	38.31	-35.69	74	41.86	34.39	12.86	50.8	151	219	P	V
ANT+ CH 39 2441MHz		4882	40.37	-33.63	74	43.54	34.43	12.98	50.58	115	258	P	H
		7323	42.15	-31.85	74	42.09	36.23	14.71	50.88	152	309	P	H
		4882	38.44	-35.56	74	41.61	34.43	12.98	50.58	115	258	P	V
		7323	41.12	-32.88	74	41.06	36.23	14.71	50.88	152	309	P	V
ANT+ CH 78 2480MHz		4960	39.77	-34.23	74	42.5	34.48	13.1	50.31	118	289	P	H
		7440	40.37	-33.63	74	40.2	36.28	14.77	50.88	158	273	P	H
		4960	38.04	-35.96	74	40.77	34.48	13.1	50.31	118	289	P	V
		7440	40	-34	74	39.83	36.28	14.77	50.88	158	273	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

15C 2.4GHz 2400~2483.5MHz

ANT+ (LF)

ANT+	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz ANT+ LF		33.88	18.18	-21.82	40	30.48	17.56	0.89	30.75			P	H
		99.84	23	-20.5	43.5	40.51	11.7	1.55	30.76			P	H
		168.71	23.35	-20.15	43.5	40.14	11.9	2.02	30.71			P	H
		328.76	22.85	-23.15	46	35.9	14.48	2.86	30.39			P	H
		612.97	24.21	-21.79	46	30.01	19.78	4.04	29.62			P	H
		911.73	27.38	-18.62	46	29.89	21.55	4.92	28.98	100	360	P	H
		39.7	33.53	-6.47	40	48.82	14.5	0.96	30.75	100	360	P	V
		99.84	19.7	-23.8	43.5	37.21	11.7	1.55	30.76			P	V
		176.47	19.53	-23.97	43.5	36.53	11.63	2.07	30.7			P	V
		328.76	19.04	-26.96	46	32.09	14.48	2.86	30.39			P	V
		596.48	24.35	-21.65	46	30.43	19.69	3.95	29.72			P	V
		803.09	27.3	-18.7	46	29.59	22.47	4.61	29.37			P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Note symbol

*	**Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency per 15.249(c).
!	Test result is **over limit** line.
P/A	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

A calculation example for radiated spurious emission is shown as below:

ANT+	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Level(dBμV/m) =

Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is "PASS".