

FCC RF Test Report

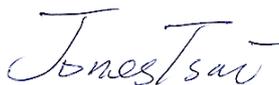
APPLICANT : Hewlett-Packard Company
EQUIPMENT : Notebook PC
BRAND NAME : Hewlett-Packard
MODEL NAME : HSTNN-W03C
FCC ID : B94HNW03CSWTH
STANDARD : 47 CFR Part 2, 22(H), 24(E), 27
CLASSIFICATION : PCS Licensed Transmitter (PCB)

The product was received on Oct. 07, 2013 and testing was completed on Oct. 28, 2013. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI / TIA / EIA-603-C-2004 and shown 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 INC., the test report shall not be reproduced except in full.



Reviewed by: Joseph Lin / Supervisor



Approved by: Jones Tsai / Manager



SPORTON INTERNATIONAL INC.

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FCC ID : B94HNW03CSWTH

Page Number : 1 of 66

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SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	§2.1046	RSS-130(4.4) RSS-132 (5.4) RSS-133 (6.4) RSS-139(6.4)	Conducted Output Power	Reporting Only	PASS	-
3.1	§22.913(a)(2)	RSS-132(5.4) SRSP-503(5.1.3)	Effective Radiated Power (Band 5)	ERP < 7 Watts	PASS	-
	§27.50(c)(10)	N/A	Effective Radiated Power (Band 13) (Band 17)	ERP < 3 Watts		
	N/A	RSS-130(4.4)	Equivalent Isotropic Radiated Power (Band 13) (Band 17)	EIRP < 5 Watt		
	§24.232(c)	RSS-133 (6.4) SRSP-510(5.1.2)	Equivalent Isotropic Radiated Power (Band 2) (Band 25)	EIRP < 2Watt		
	§27.50(d)(4)	RSS-139 (6.4) SRSP-513(5.1.2)	Equivalent Isotropic Radiated Power (Band 4)	EIRP < 1Watt		
3.2	§2.1053 §22.917(a) §24.238(a) §27.53(c) (g)(h)	RSS-130(4.6) RSS-132 (5.5) RSS-133 (6.5.1) RSS-139 (6.5)	Radiated Spurious Emission (Band 2) (Band 4) (Band 5) (Band 13) (Band 17) (Band 25)	< 43+10log ₁₀ (P[Watts])	PASS	Under limit 15.44 dB at 5728.000 MHz



1 General Description

1.1 Applicant

Hewlett-Packard Company
3000 Hanover Street, Palo Alto, California 94304, USA

1.2 Manufacturer

Wistron Corporation
21F., No.88, Sec.1, Xintai 5th Rd., Xizhi Dist., New Taipei City 22181, Taiwan (R.O.C)

1.3 Feature of Equipment Under Test

Product Feature	
Equipment	Notebook PC
Brand Name	Hewlett-Packard
Model Name	HSTNN-W03C
FCC ID	B94HNW03CSWTH
Integrated the WWAN Module	Brand Name : Sierra Model Name : EM7355 FCC ID : N7NEM7355
EUT supports Radios application	CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE/NFC

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification of Equipment Under Test

Product Specification subjective to this standard	
Tx Frequency	LTE Band 5 : 826.5 MHz ~ 846.5 MHz LTE Band 2 : 1852.5 MHz ~ 1907.5 MHz LTE Band 25 : 1852.5 MHz ~ 1912.5 MHz LTE Band 4 : 1712.5 MHz ~ 1752.5 MHz LTE Band 13 : 779.5 MHz ~ 784.5 MHz LTE Band 17 : 706.5 MHz ~ 713.5 MHz
Rx Frequency	LTE Band 5 : 871.5 MHz ~ 891.5 MHz LTE Band 2 : 1932.5 MHz ~ 1987.5 MHz LTE Band 25 : 1932.5 MHz ~ 1992.5 MHz LTE Band 4 : 2112.5 MHz ~ 2152.5 MHz LTE Band 13 : 748.5 MHz ~ 753.5 MHz LTE Band 17 : 736.5 MHz ~ 743.5 MHz
Bandwidth	5MHz / 10MHz (Band 5) 5MHz / 10MHz / 15MHz / 20MHz (Band 2) 5MHz / 10MHz / 15MHz / 20MHz (Band 25) 5MHz / 10MHz / 15MHz / 20MHz (Band 4) 5MHz / 10MHz (Band 13) 5MHz / 10MHz (Band 17)
Maximum Output Power to Antenna	LTE Band 5 : 22.44 dBm / 0.1754 W LTE Band 2 : 22.94 dBm / 0.1968 W LTE Band 25 : 22.97 dBm / 0.1982 W LTE Band 4 : 22.79 dBm / 0.1901 W LTE Band 13 : 22.61 dBm / 0.1824 W LTE Band 17 : 22.73 dBm / 0.1875 W
Antenna Type	PIFA Antenna
Antenna Gain	LTE Band 5 : -3.42 dBi LTE Band 2 : -5.92 dBi LTE Band 4 : -3.22 dBi LTE Band 13 : -2.60 dBi LTE Band 17 : -2.83 dBi LTE Band 25 : -5.92 dBi
Type of Modulation	QPSK / 16QAM / 64 QAM

1.5 Modification of EUT

No modifications are made to the EUT during all test items.



1.6 Maximum ERP/EIRP Power

FCC Rule	System	Type of Modulation	BW	Maximum ERP/EIRP
Part 22	LTE Band 5	QPSK	5 MHz	0.05 W
Part 22	LTE Band 5	16QAM	5 MHz	0.04 W
Part 22	LTE Band 5	QPSK	10 MHz	0.05 W
Part 22	LTE Band 5	16QAM	10 MHz	0.04 W
Part 24	LTE Band 2	QPSK	5 MHz	0.05 W
Part 24	LTE Band 2	16QAM	5 MHz	0.04 W
Part 24	LTE Band 2	QPSK	10 MHz	0.05 W
Part 24	LTE Band 2	16QAM	10 MHz	0.04 W
Part 24	LTE Band 2	QPSK	15 MHz	0.05 W
Part 24	LTE Band 2	16QAM	15 MHz	0.04 W
Part 24	LTE Band 2	QPSK	20 MHz	0.05 W
Part 24	LTE Band 2	16QAM	20 MHz	0.04 W



FCC Rule	System	Type of Modulation	BW	Maximum ERP/EIRP
Part 24	LTE Band 25	QPSK	5 MHz	0.05 W
Part 24	LTE Band 25	16QAM	5 MHz	0.04 W
Part 24	LTE Band 25	QPSK	10 MHz	0.05 W
Part 24	LTE Band 25	16QAM	10 MHz	0.04 W
Part 24	LTE Band 25	QPSK	15 MHz	0.05 W
Part 24	LTE Band 25	16QAM	15 MHz	0.04 W
Part 24	LTE Band 25	QPSK	20 MHz	0.05 W
Part 24	LTE Band 25	16QAM	20 MHz	0.04 W
Part 27	LTE Band 4	QPSK	5MHz	0.09 W
Part 27	LTE Band 4	16QAM	5MHz	0.07 W
Part 27	LTE Band 4	QPSK	10MHz	0.09 W
Part 27	LTE Band 4	16QAM	10MHz	0.07 W
Part 27	LTE Band 4	QPSK	15MHz	0.09 W
Part 27	LTE Band 4	16QAM	15MHz	0.07 W
Part 27	LTE Band 4	QPSK	20MHz	0.09 W
Part 27	LTE Band 4	16QAM	20MHz	0.08 W
Part 27	LTE Band 13	QPSK	5MHz	0.08 W
Part 27	LTE Band 13	16QAM	5MHz	0.06 W
Part 27	LTE Band 13	QPSK	10MHz	0.08 W
Part 27	LTE Band 13	16QAM	10MHz	0.06 W
Part 27	LTE Band 17	QPSK	5MHz	0.06 W
Part 27	LTE Band 17	16QAM	5MHz	0.05 W
Part 27	LTE Band 17	QPSK	10MHz	0.06 W
Part 27	LTE Band 17	16QAM	10MHz	0.05 W

1.7 Testing Site

Test Site	SPORTON INTERNATIONAL INC.		
Test Site Location	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978		
Test Site No.	Sporton Site No.		FCC/IC Registration No.
	TH02-HY	03CH07-HY	722060/4086B-1

1.8 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR Part 2, 22(H), 24(E), 27
- ♦ ANSI / TIA / EIA-603-C-2004
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v02r01
- ♦ FCC KDB 412172 D01 Determining ERP and ERIP v01

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

2 Test Configuration of Equipment Under Test

2.1 Test Mode

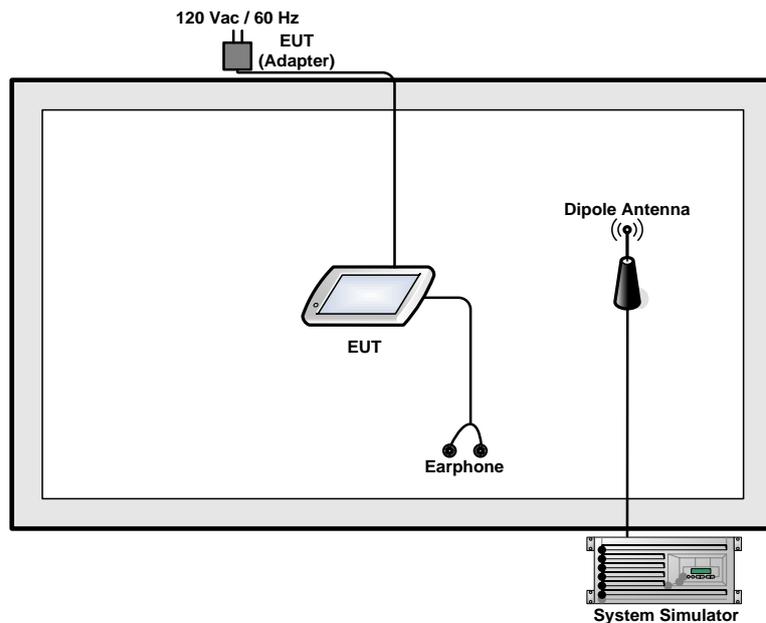
During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes in Tablet PC configurations and one test plane in Laptop PC configuration to find out the worst emission.

Frequency range investigated for radiated emission: 30MHz to 10th harmonic.

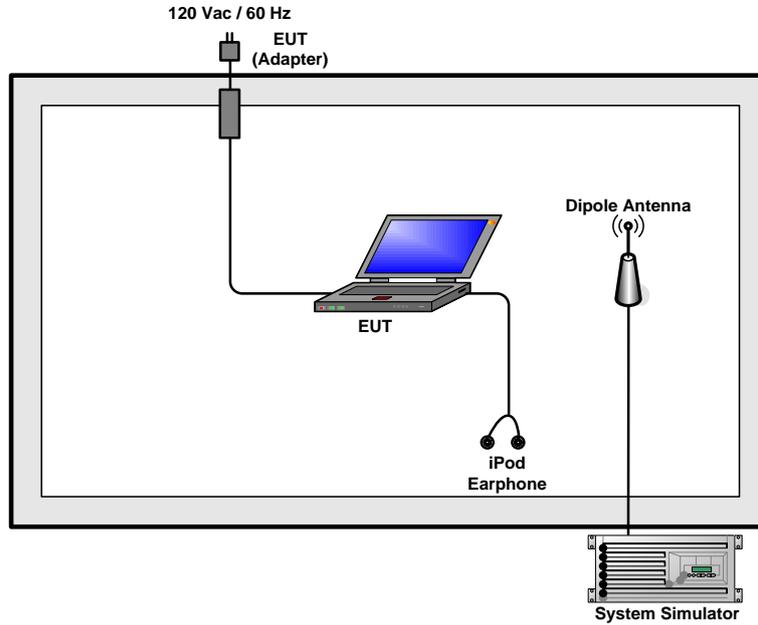
Test Modes		
Band		Radiated TCs
LTE Band 5	BW 10MHz	■ LTE (RB Size 1) Link
LTE Band 2	BW 20MHz	■ LTE (RB Size 1) Link
LTE Band 25	BW 20MHz	■ LTE (RB Size 1) Link
LTE Band 4	BW 20MHz	■ LTE (RB Size 1) Link
LTE Band 13	BW 10MHz	■ LTE (RB Size 1) Link
LTE Band 17	BW 10MHz	■ LTE (RB Size 1) Link

2.2 Connection Diagram of Test System

<EUT with Tablet PC Mode>



<EUT with Laptop PC Mode>



Remark: The EUT is set in Tablet PC and Laptop PC configurations during test.

2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A

3 Test Result

3.1 Conducted Output Power Measurement and ERP/EIRP Measurement

3.1.1 Description of the Conducted Output Power Measurement and ERP/EIRP Measurement

A base station simulator was used to establish communication with the EUT. Its parameters were set to transmit the maximum power on the EUT. The measured power in the radio frequency on the transmitter output terminals shall be reported.

The ERP of mobile transmitters must not exceed 7 Watts for LTE Band 5.

The ERP of mobile transmitters must not exceed 3 Watts for LTE Band 13 and Band 17. (FCC Only)

The EIRP of mobile transmitters must not exceed 5 Watts for LTE Band 13 and Band 17. (IC Only)

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2 and Band 25.

The EIRP of mobile transmitters must not exceed 1 Watts for LTE Band 4.

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$, $ERP = EIRP - 2.15$, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

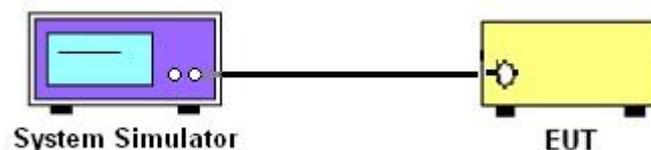
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

1. The transmitter output port was connected to base station.
2. Set EUT at maximum power through base station.
3. Select lowest, middle, and highest channels for each band and different modulation.

3.1.4 Test Setup





3.1.5 Test Result of Conducted Output Power

<LTE Band 5 Conducted Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				20450	20525	20600
Frequency (MHz)				829	836.5	844
10	QPSK	1	0	22.21	22.31	22.31
10	QPSK	1	24	22.44	22.36	22.33
10	QPSK	1	49	22.27	22.26	22.29
10	QPSK	25	0	21.31	21.34	21.24
10	QPSK	25	12	21.36	21.20	21.37
10	QPSK	25	24	21.25	21.33	21.24
10	QPSK	50	0	21.27	21.52	21.26
10	16QAM	1	0	21.08	21.35	21.04
10	16QAM	1	24	21.41	21.37	21.25
10	16QAM	1	49	21.34	21.33	21.12
10	16QAM	25	0	20.22	20.48	20.07
10	16QAM	25	12	20.25	20.28	20.26
10	16QAM	25	24	20.32	20.21	20.16
10	16QAM	50	0	20.19	20.23	20.17
Channel				20425	20525	20625
Frequency (MHz)				826.5	836.5	846.5
5	QPSK	1	0	22.19	22.31	22.13
5	QPSK	1	12	22.32	22.26	22.25
5	QPSK	1	24	22.32	22.29	22.14
5	QPSK	12	0	21.18	21.31	21.15
5	QPSK	12	6	21.39	21.27	21.37
5	QPSK	12	11	21.18	21.26	21.10
5	QPSK	25	0	21.16	21.27	21.07
5	16QAM	1	0	21.26	21.28	21.10
5	16QAM	1	12	21.41	21.47	21.28
5	16QAM	1	24	21.33	21.25	21.17
5	16QAM	12	0	20.14	20.28	20.23
5	16QAM	12	6	20.31	20.24	20.36
5	16QAM	12	11	20.16	20.25	20.28
5	16QAM	25	0	20.06	20.29	20.10



<LTE Band 2 Conducted Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				18700	18900	19100
Frequency (MHz)				1860	1880	1900
20	QPSK	1	0	22.79	22.73	22.60
20	QPSK	1	49	22.74	22.75	22.54
20	QPSK	1	99	22.66	22.68	22.94
20	QPSK	50	0	21.63	21.76	21.63
20	QPSK	50	24	21.58	21.59	21.34
20	QPSK	50	49	21.52	21.45	21.42
20	QPSK	100	0	21.62	21.54	21.45
20	16QAM	1	0	21.75	21.70	21.41
20	16QAM	1	49	21.63	21.68	21.56
20	16QAM	1	99	21.68	21.51	21.71
20	16QAM	50	0	20.50	20.56	20.60
20	16QAM	50	24	20.48	20.40	20.31
20	16QAM	50	49	20.44	20.38	20.28
20	16QAM	100	0	20.44	20.41	20.33
Channel				18675	18900	19125
Frequency (MHz)				1857.5	1880	1902.5
15	QPSK	1	0	22.63	22.82	22.45
15	QPSK	1	37	22.71	22.68	22.30
15	QPSK	1	74	22.63	22.61	22.28
15	QPSK	36	0	21.48	21.63	21.25
15	QPSK	36	18	21.57	21.54	21.39
15	QPSK	36	37	21.56	21.43	21.40
15	QPSK	75	0	21.51	21.43	21.36
15	16QAM	1	0	21.60	21.85	21.49
15	16QAM	1	37	21.71	21.64	21.56
15	16QAM	1	74	21.65	21.62	21.63
15	16QAM	36	0	20.62	20.60	20.34
15	16QAM	36	18	20.49	20.47	20.39
15	16QAM	36	37	20.45	20.40	20.41
15	16QAM	75	0	20.41	20.46	20.28



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				18650	18900	19150
Frequency (MHz)				1855	1880	1905
10	QPSK	1	0	22.87	22.93	22.68
10	QPSK	1	24	22.87	22.90	22.80
10	QPSK	1	49	22.93	22.91	22.88
10	QPSK	25	0	21.89	22.02	21.73
10	QPSK	25	12	21.90	21.85	21.85
10	QPSK	25	24	21.95	21.81	21.66
10	QPSK	50	0	21.67	21.67	21.49
10	16QAM	1	0	21.84	22.05	21.70
10	16QAM	1	24	21.81	22.07	21.78
10	16QAM	1	49	21.89	21.88	21.92
10	16QAM	25	0	20.84	20.96	20.69
10	16QAM	25	12	20.69	20.73	20.62
10	16QAM	25	24	20.86	20.81	20.65
10	16QAM	50	0	20.55	20.67	20.56
Channel				18625	18900	19175
Frequency (MHz)				1852.5	1880	1907.5
5	QPSK	1	0	22.83	22.92	22.79
5	QPSK	1	12	22.80	22.79	22.78
5	QPSK	1	24	22.91	22.72	22.90
5	QPSK	12	0	21.74	21.91	21.79
5	QPSK	12	6	21.84	21.86	21.71
5	QPSK	12	11	22.00	21.89	21.79
5	QPSK	25	0	21.72	21.75	21.70
5	16QAM	1	0	21.81	22.01	21.76
5	16QAM	1	12	21.85	21.85	21.80
5	16QAM	1	24	21.90	21.79	21.91
5	16QAM	12	0	20.95	20.82	20.86
5	16QAM	12	6	20.83	20.93	20.87
5	16QAM	12	11	20.97	20.79	20.87
5	16QAM	25	0	20.85	20.63	20.66



<LTE Band 25 Conducted Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				26140	26365	26590
Frequency (MHz)				1860	1882.5	1905
20	QPSK	1	0	22.97	22.91	22.71
20	QPSK	1	49	22.93	22.89	22.86
20	QPSK	1	99	22.86	22.78	22.90
20	QPSK	50	0	21.83	21.65	21.65
20	QPSK	50	24	21.60	21.57	21.82
20	QPSK	50	49	21.82	21.54	21.99
20	QPSK	100	0	21.81	21.68	21.79
20	16QAM	1	0	21.99	21.92	21.87
20	16QAM	1	49	21.74	21.86	22.07
20	16QAM	1	99	21.91	21.77	22.24
20	16QAM	50	0	20.65	20.59	20.50
20	16QAM	50	24	20.53	20.54	20.78
20	16QAM	50	49	20.76	20.47	20.94
20	16QAM	100	0	20.77	20.74	20.82
Channel				26115	26365	26615
Frequency (MHz)				1857.5	1882.5	1907.5
15	QPSK	1	0	22.89	22.82	22.57
15	QPSK	1	37	22.51	22.59	22.81
15	QPSK	1	74	22.83	22.51	22.96
15	QPSK	36	0	21.66	21.55	21.29
15	QPSK	36	18	21.34	21.50	21.68
15	QPSK	36	37	21.63	21.46	21.94
15	QPSK	75	0	21.53	21.28	21.64
15	16QAM	1	0	21.91	21.77	21.52
15	16QAM	1	37	21.47	21.60	21.76
15	16QAM	1	74	21.75	21.53	21.99
15	16QAM	36	0	20.51	20.44	20.46
15	16QAM	36	18	20.30	20.37	20.61
15	16QAM	36	37	20.70	20.45	20.91
15	16QAM	75	0	20.47	20.39	20.45



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				26090	26365	26640
Frequency (MHz)				1855	1882.5	1910
10	QPSK	1	0	22.83	22.76	22.51
10	QPSK	1	24	22.56	22.60	22.83
10	QPSK	1	49	22.76	22.51	22.96
10	QPSK	25	0	21.73	21.63	21.59
10	QPSK	25	12	21.37	21.55	21.81
10	QPSK	25	24	21.52	21.48	21.89
10	QPSK	50	0	21.59	21.30	21.63
10	16QAM	1	0	21.80	21.79	21.52
10	16QAM	1	24	21.60	21.66	21.90
10	16QAM	1	49	21.79	21.54	22.00
10	16QAM	25	0	20.73	20.54	20.62
10	16QAM	25	12	20.40	20.51	20.82
10	16QAM	25	24	20.49	20.34	20.82
10	16QAM	50	0	20.42	20.29	20.58
Channel				26065	26365	26665
Frequency (MHz)				1852.5	1882.5	1912.5
5	QPSK	1	0	22.78	22.60	22.61
5	QPSK	1	12	22.52	22.57	22.86
5	QPSK	1	24	22.71	22.52	22.94
5	QPSK	12	0	21.74	21.64	21.71
5	QPSK	12	6	21.54	21.66	21.96
5	QPSK	12	11	21.62	21.53	22.02
5	QPSK	25	0	21.65	21.44	21.80
5	16QAM	1	0	21.78	21.58	21.60
5	16QAM	1	12	21.50	21.59	21.96
5	16QAM	1	24	21.61	21.60	22.03
5	16QAM	12	0	20.63	20.72	20.60
5	16QAM	12	6	20.48	20.52	20.86
5	16QAM	12	11	20.73	20.59	20.91
5	16QAM	25	0	20.62	20.40	20.86



<LTE Band 4 Conducted Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				20050	20175	20300
Frequency (MHz)				1720	1732.5	1745
20	QPSK	1	0	22.76	22.77	22.79
20	QPSK	1	49	22.74	22.66	22.78
20	QPSK	1	99	22.72	22.72	22.61
20	QPSK	50	0	21.51	21.62	21.39
20	QPSK	50	24	21.70	21.40	21.53
20	QPSK	50	49	21.49	21.45	21.46
20	QPSK	100	0	21.70	21.54	21.55
20	16QAM	1	0	21.79	21.79	21.87
20	16QAM	1	49	21.87	21.63	21.98
20	16QAM	1	99	21.78	21.73	21.75
20	16QAM	50	0	20.41	20.46	20.48
20	16QAM	50	24	20.53	20.30	20.55
20	16QAM	50	49	20.45	20.43	20.61
20	16QAM	100	0	20.57	20.49	20.56
Channel				20025	20175	20325
Frequency (MHz)				1717.5	1732.5	1747.5
15	QPSK	1	0	22.74	22.71	22.60
15	QPSK	1	37	22.71	22.55	22.75
15	QPSK	1	74	22.68	22.55	22.53
15	QPSK	36	0	21.54	21.50	21.43
15	QPSK	36	18	21.65	21.40	21.58
15	QPSK	36	37	21.57	21.60	21.54
15	QPSK	75	0	21.65	21.48	21.52
15	16QAM	1	0	21.82	21.67	21.57
15	16QAM	1	37	21.90	21.76	21.77
15	16QAM	1	74	21.79	21.71	21.60
15	16QAM	36	0	20.54	20.53	20.40
15	16QAM	36	18	20.55	20.35	20.61
15	16QAM	36	37	20.47	20.44	20.52
15	16QAM	75	0	20.48	20.44	20.56



BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				20000	20175	20350
Frequency (MHz)				1715	1732.5	1750
10	QPSK	1	0	22.63	22.75	22.58
10	QPSK	1	24	22.74	22.46	22.76
10	QPSK	1	49	22.64	22.69	22.62
10	QPSK	25	0	21.68	21.68	21.62
10	QPSK	25	12	21.73	21.47	21.69
10	QPSK	25	24	21.60	21.73	21.70
10	QPSK	50	0	21.46	21.54	21.48
10	16QAM	1	0	21.65	21.72	21.63
10	16QAM	1	24	21.69	21.60	21.94
10	16QAM	1	49	21.76	21.65	21.63
10	16QAM	25	0	20.52	20.52	20.59
10	16QAM	25	12	20.55	20.39	20.64
10	16QAM	25	24	20.64	20.73	20.59
10	16QAM	50	0	20.44	20.44	20.52
Channel				19975	20175	20375
Frequency (MHz)				1712.5	1732.5	1752.5
5	QPSK	1	0	22.71	22.69	22.68
5	QPSK	1	12	22.75	22.57	22.74
5	QPSK	1	24	22.72	22.73	22.62
5	QPSK	12	0	21.70	21.79	21.58
5	QPSK	12	6	21.71	21.61	21.85
5	QPSK	12	11	21.72	21.80	21.74
5	QPSK	25	0	21.75	21.70	21.71
5	16QAM	1	0	21.65	21.69	21.63
5	16QAM	1	12	21.84	21.68	21.82
5	16QAM	1	24	21.80	21.82	21.66
5	16QAM	12	0	20.64	20.87	20.70
5	16QAM	12	6	20.80	20.60	20.83
5	16QAM	12	11	20.83	20.79	20.71
5	16QAM	25	0	20.69	20.57	20.72



<LTE Band 13 Conducted Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel					23230	
Frequency (MHz)					782	
10	QPSK	1	0		22.39	
10	QPSK	1	24		22.61	
10	QPSK	1	49		22.46	
10	QPSK	25	0		21.18	
10	QPSK	25	12		21.48	
10	QPSK	25	24		21.27	
10	QPSK	50	0		21.36	
10	16QAM	1	0		21.37	
10	16QAM	1	24		21.59	
10	16QAM	1	49		21.31	
10	16QAM	25	0		20.13	
10	16QAM	25	12		20.36	
10	16QAM	25	24		20.21	
10	16QAM	50	0		20.29	
Channel				23205	23230	23255
Frequency (MHz)				779.5	782	784.5
5	QPSK	1	0	22.10	22.09	22.18
5	QPSK	1	12	22.59	22.49	22.38
5	QPSK	1	24	22.53	22.27	22.19
5	QPSK	12	0	21.29	21.15	21.25
5	QPSK	12	6	21.50	21.48	21.41
5	QPSK	12	11	21.47	21.41	21.29
5	QPSK	25	0	21.27	21.32	21.28
5	16QAM	1	0	21.11	21.17	21.19
5	16QAM	1	12	21.50	21.65	21.33
5	16QAM	1	24	21.34	21.32	21.30
5	16QAM	12	0	20.11	20.17	20.16
5	16QAM	12	6	20.37	20.47	20.55
5	16QAM	12	11	20.38	20.37	20.18
5	16QAM	25	0	20.23	20.27	20.19



<LTE Band 17 Conducted Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power (dBm) Low Ch. / Freq.	Power (dBm) Middle Ch. / Freq.	Power (dBm) High Ch. / Freq.
Channel				23780	23790	23800
Frequency (MHz)				709	710	711
10	QPSK	1	0	22.37	22.42	22.53
10	QPSK	1	24	22.73	22.55	22.57
10	QPSK	1	49	22.40	22.35	22.25
10	QPSK	25	0	21.69	21.34	21.41
10	QPSK	25	12	21.58	21.51	21.51
10	QPSK	25	24	21.73	21.31	21.25
10	QPSK	50	0	21.46	21.26	21.26
10	16QAM	1	0	21.33	21.31	21.43
10	16QAM	1	24	21.68	21.62	21.65
10	16QAM	1	49	21.42	21.21	21.32
10	16QAM	25	0	20.62	20.32	20.32
10	16QAM	25	12	20.54	20.30	20.35
10	16QAM	25	24	20.51	20.42	20.24
10	16QAM	50	0	20.41	20.47	20.31
Channel				23755	23790	23825
Frequency (MHz)				706.5	710	713.5
5	QPSK	1	0	22.66	22.37	22.32
5	QPSK	1	12	22.62	22.57	22.18
5	QPSK	1	24	22.64	22.39	22.23
5	QPSK	12	0	21.68	21.48	21.22
5	QPSK	12	6	21.87	21.71	21.39
5	QPSK	12	11	21.65	21.63	21.24
5	QPSK	25	0	21.59	21.48	21.23
5	16QAM	1	0	21.53	21.33	21.30
5	16QAM	1	12	21.79	21.59	21.29
5	16QAM	1	24	21.72	21.45	21.26
5	16QAM	12	0	20.75	20.43	20.49
5	16QAM	12	6	20.73	20.69	20.26
5	16QAM	12	11	20.66	20.60	20.33
5	16QAM	25	0	20.60	20.45	20.15

Note: maximum average power for LTE.

3.1.6 Test Result of Conducted Output Power and ERP/EIRP

Cellular Band ($G_T - L_C = -3.42$ dB)						
Modes	LTE Band 5 (QPSK, BW=5M)			LTE Band 5 (16QAM, BW=5M)		
Channel	20425 (Low)	20525 (Mid)	20625 (High)	20425 (Low)	20525 (Mid)	20625 (High)
Frequency (MHz)	826.5	836.5	846.5	826.5	836.5	846.5
Conducted Power (dBm)	22.32	22.31	22.25	21.41	21.47	21.28
Conducted Power (Watts)	0.17	0.17	0.17	0.14	0.14	0.13
ERP(dBm)	16.75	16.74	16.68	15.84	15.90	15.71
ERP(Watts)	0.05	0.05	0.05	0.04	0.04	0.04

Cellular Band ($G_T - L_C = -3.42$ dB)						
Modes	LTE Band 5 (QPSK, BW=10M)			LTE Band 5 (16QAM, BW=10M)		
Channel	20450 (Low)	20525 (Mid)	20600 (High)	20450 (Low)	20525 (Mid)	20600 (High)
Frequency (MHz)	829	836.5	844	829	836.5	844
Conducted Power (dBm)	22.44	22.36	22.33	21.41	21.37	21.25
Conducted Power (Watts)	0.18	0.17	0.17	0.14	0.14	0.13
ERP(dBm)	16.87	16.79	16.76	15.84	15.80	15.68
ERP(Watts)	0.05	0.05	0.05	0.04	0.04	0.04



PCS Band ($G_T - L_C = -5.92$ dB)						
Modes	LTE Band 2 (QPSK, BW=5M)			LTE Band 2 (16QAM, BW=5M)		
Channel	18625(Low)	18900 (Mid)	19175 (High)	18625(Low)	18900 (Mid)	19175 (High)
Frequency (MHz)	1852.5	1880	1907.5	1852.5	1880	1907.5
Conducted Power (dBm)	22.91	22.92	22.90	21.90	22.01	21.91
Conducted Power (Watts)	0.20	0.20	0.19	0.15	0.16	0.16
EIRP(dBm)	16.99	17.00	16.98	15.98	16.09	15.99
EIRP(Watts)	0.05	0.05	0.05	0.04	0.04	0.04

PCS Band ($G_T - L_C = -5.92$ dB)						
Modes	LTE Band 2 (QPSK, BW=10M)			LTE Band 2 (16QAM, BW=10M)		
Channel	18650(Low)	18900 (Mid)	19150 (High)	18650(Low)	18900 (Mid)	19150 (High)
Frequency (MHz)	1855	1880	1905	1855	1880	1905
Conducted Power (dBm)	22.93	22.93	22.88	21.89	22.07	21.92
Conducted Power (Watts)	0.20	0.20	0.19	0.15	0.16	0.16
EIRP(dBm)	17.01	17.01	16.96	15.97	16.15	16.00
EIRP(Watts)	0.05	0.05	0.05	0.04	0.04	0.04



PCS Band ($G_T - L_C = -5.92$ dB)						
Modes	LTE Band 2 (QPSK, BW=15M)			LTE Band 2 (16QAM, BW=15M)		
Channel	18675(Low)	18900 (Mid)	19125 (High)	18675(Low)	18900 (Mid)	19125 (High)
Frequency (MHz)	1857.5	1880	1902.5	1857.5	1880	1902.5
Conducted Power (dBm)	22.71	22.82	22.45	21.71	21.85	21.63
Conducted Power (Watts)	0.19	0.19	0.18	0.15	0.15	0.15
EIRP(dBm)	16.79	16.90	16.53	15.79	15.93	15.71
EIRP(Watts)	0.05	0.05	0.04	0.04	0.04	0.04

PCS Band ($G_T - L_C = -5.92$ dB)						
Modes	LTE Band 2 (QPSK, BW=20M)			LTE Band 2 (16QAM, BW=20M)		
Channel	18700(Low)	18900 (Mid)	19100 (High)	18700(Low)	18900 (Mid)	19100 (High)
Frequency (MHz)	1860	1880	1900	1860	1880	1900
Conducted Power (dBm)	22.79	22.75	22.94	21.75	21.70	21.71
Conducted Power (Watts)	0.19	0.19	0.20	0.15	0.15	0.15
EIRP(dBm)	16.87	16.83	17.02	15.83	15.78	15.79
EIRP(Watts)	0.05	0.05	0.05	0.04	0.04	0.04



PCS Band ($G_T - L_C = -5.92$ dB)						
Modes	LTE Band 25 (QPSK, BW=5M)			LTE Band 25 (16QAM, BW=5M)		
Channel	26065 (Low)	26365 (Mid)	26665 (High)	26065 (Low)	26365 (Mid)	26665 (High)
Frequency (MHz)	1852.5	1882.5	1912.5	1852.5	1882.5	1912.5
Conducted Power (dBm)	22.78	22.6	22.94	21.78	21.6	22.03
Conducted Power (Watts)	0.19	0.18	0.20	0.15	0.14	0.16
EIRP(dBm)	16.86	16.68	17.02	15.86	15.68	16.11
EIRP(Watts)	0.05	0.05	0.05	0.04	0.04	0.04

PCS Band ($G_T - L_C = -5.92$ dB)						
Modes	LTE Band 25 (QPSK, BW=10M)			LTE Band 25 (16QAM, BW=10M)		
Channel	26090 (Low)	26365 (Mid)	26640 (High)	26090 (Low)	26365 (Mid)	26640 (High)
Frequency (MHz)	1855	1882.5	1910	1855	1882.5	1910
Conducted Power (dBm)	22.83	22.76	22.96	21.8	21.79	22
Conducted Power (Watts)	0.19	0.19	0.20	0.15	0.15	0.16
EIRP(dBm)	16.91	16.84	17.04	15.88	15.87	16.08
EIRP(Watts)	0.05	0.05	0.05	0.04	0.04	0.04



PCS Band ($G_T - L_C = -5.92$ dB)						
Modes	LTE Band 25 (QPSK, BW=15M)			LTE Band 25 (16QAM, BW=15M)		
Channel	26115 (Low)	26365 (Mid)	26615 (High)	26115 (Low)	26365 (Mid)	26615 (High)
Frequency (MHz)	1857.5	1882.5	1907.5	1857.5	1882.5	1907.5
Conducted Power (dBm)	22.89	22.82	22.96	21.91	21.77	21.99
Conducted Power (Watts)	0.19	0.19	0.20	0.16	0.15	0.16
EIRP(dBm)	16.97	16.90	17.04	15.99	15.85	16.07
EIRP(Watts)	0.05	0.05	0.05	0.04	0.04	0.04

PCS Band ($G_T - L_C = -5.92$ dB)						
Modes	LTE Band 25 (QPSK, BW=20M)			LTE Band 25 (16QAM, BW=20M)		
Channel	26140 (Low)	26365 (Mid)	26590 (High)	26140 (Low)	26365 (Mid)	26590 (High)
Frequency (MHz)	1860	1882.5	1905	1860	1882.5	1905
Conducted Power (dBm)	22.97	22.91	22.90	21.99	21.92	22.24
Conducted Power (Watts)	0.20	0.20	0.19	0.16	0.16	0.17
EIRP(dBm)	17.05	16.99	16.98	16.07	16.00	16.32
EIRP(Watts)	0.05	0.05	0.05	0.04	0.04	0.04



PCS Band ($G_T - L_C = -3.22$ dB)						
Modes	LTE Band 4 (QPSK, BW=5M)			LTE Band 4 (16QAM, BW=5M)		
Channel	19975(Low)	20175 (Mid)	20375 (High)	19975(Low)	20175 (Mid)	20375 (High)
Frequency (MHz)	1712.5	1732.5	1752.5	1712.5	1732.5	1752.5
Conducted Power (dBm)	22.75	22.73	22.74	21.84	21.82	21.82
Conducted Power (Watts)	0.19	0.19	0.19	0.15	0.15	0.15
EIRP(dBm)	19.53	19.51	19.52	18.62	18.60	18.60
EIRP(Watts)	0.09	0.09	0.09	0.07	0.07	0.07

PCS Band ($G_T - L_C = -3.22$ dB)						
Modes	LTE Band 4 (QPSK, BW=10M)			LTE Band 4 (16QAM, BW=10M)		
Channel	20000 (Low)	20175 (Mid)	20350 (High)	20000 (Low)	20175 (Mid)	20350 (High)
Frequency (MHz)	1715	1732.5	1750	1715	1732.5	1750
Conducted Power (dBm)	22.74	22.75	22.76	21.76	21.72	21.94
Conducted Power (Watts)	0.19	0.19	0.19	0.15	0.15	0.16
EIRP(dBm)	19.52	19.53	19.54	18.54	18.50	18.72
EIRP(Watts)	0.09	0.09	0.09	0.07	0.07	0.07



PCS Band ($G_T - L_C = -3.22$ dB)						
Modes	LTE Band 4 (QPSK, BW=15M)			LTE Band 4 (16QAM, BW=15M)		
Channel	20025 (Low)	20175 (Mid)	20325 (High)	20025 (Low)	20175 (Mid)	20325 (High)
Frequency (MHz)	1717.5	1732.5	1747.5	1717.5	1732.5	1747.5
Conducted Power (dBm)	22.74	22.71	22.75	21.9	21.76	21.77
Conducted Power (Watts)	0.19	0.19	0.19	0.15	0.15	0.15
EIRP(dBm)	19.52	19.49	19.53	18.68	18.54	18.55
EIRP(Watts)	0.09	0.09	0.09	0.07	0.07	0.07

PCS Band ($G_T - L_C = -3.22$ dB)						
Modes	LTE Band 4 (QPSK, BW=20M)			LTE Band 4 (16QAM, BW=20M)		
Channel	20050 (Low)	20175 (Mid)	20300 (High)	20050 (Low)	20175 (Mid)	20300 (High)
Frequency (MHz)	1720	1732.5	1745	1720	1732.5	1745
Conducted Power (dBm)	22.76	22.77	22.79	21.87	21.79	21.98
Conducted Power (Watts)	0.19	0.19	0.19	0.15	0.15	0.16
EIRP(dBm)	19.54	19.55	19.57	18.65	18.57	18.76
EIRP(Watts)	0.09	0.09	0.09	0.07	0.07	0.08



Cellular Band ($G_T - L_C = -2.60$ dB)						
Modes	LTE Band 13 (QPSK, BW=5M)			LTE Band 13 (16QAM, BW=5M)		
Channel	23205 (Low)	23230 (Mid)	23255 (High)	23205 (Low)	23230 (Mid)	23255 (High)
Frequency (MHz)	779.5	782	784.5	779.5	782	784.5
Conducted Power (dBm)	23.61	23.69	22.63	22.64	22.75	22.65
Conducted Power (Watts)	0.23	0.23	0.18	0.18	0.19	0.18
ERP(dBm)	18.86	18.94	17.88	17.89	18.00	17.90
ERP(Watts)	0.08	0.08	0.06	0.06	0.06	0.06
EIRP(dBm)	21.01	21.09	20.03	20.04	20.15	20.05
EIRP(Watts)	0.13	0.13	0.10	0.10	0.10	0.10

Cellular Band ($G_T - L_C = -2.60$ dB)		
Modes	LTE Band 13 (QPSK, BW=10M)	LTE Band 13 (16QAM, BW=10M)
Channel	23230 (Mid)	23230 (Mid)
Frequency (MHz)	782	782
Conducted Power (dBm)	23.74	22.75
Conducted Power (Watts)	0.24	0.19
ERP(dBm)	18.99	18.00
ERP(Watts)	0.08	0.06
EIRP(dBm)	21.14	20.15
EIRP(Watts)	0.13	0.10



Cellular Band ($G_T - L_C = -2.83$ dB)						
Modes	LTE Band 17 (QPSK, BW=5M)			LTE Band 17 (16QAM, BW=5M)		
Channel	23755(Low)	23790 (Mid)	23825 (High)	23755(Low)	23790 (Mid)	23825 (High)
Frequency (MHz)	706.5	710	713.5	706.5	710	713.5
Conducted Power (dBm)	22.66	22.57	22.32	21.79	21.59	21.3
Conducted Power (Watts)	0.18	0.18	0.17	0.15	0.14	0.13
ERP(dBm)	17.68	17.59	17.34	16.81	16.61	16.32
ERP(Watts)	0.06	0.06	0.05	0.05	0.05	0.04
EIRP(dBm)	20.06	19.97	19.72	19.19	18.99	18.7
EIRP(Watts)	0.10	0.10	0.09	0.08	0.08	0.07

Cellular Band ($G_T - L_C = -2.83$ dB)						
Modes	LTE Band 17 (QPSK, BW=10M)			LTE Band 17 (16QAM, BW=10M)		
Channel	23780(Low)	23790 (Mid)	23800 (High)	23780(Low)	23790 (Mid)	23800 (High)
Frequency (MHz)	709	710	711	709	710	711
Conducted Power (dBm)	22.73	22.55	22.57	21.68	21.62	21.65
Conducted Power (Watts)	0.19	0.18	0.18	0.15	0.15	0.15
ERP(dBm)	17.75	17.57	17.59	16.70	16.64	16.67
ERP(Watts)	0.06	0.06	0.06	0.05	0.05	0.05
EIRP(dBm)	20.13	19.95	19.97	19.08	19.02	19.05
EIRP(Watts)	0.10	0.10	0.10	0.08	0.08	0.08



3.2 Radiated Spurious Emission Measurement

3.2.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI / TIA / EIA-603-C-2004. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.2.3 Test Procedures

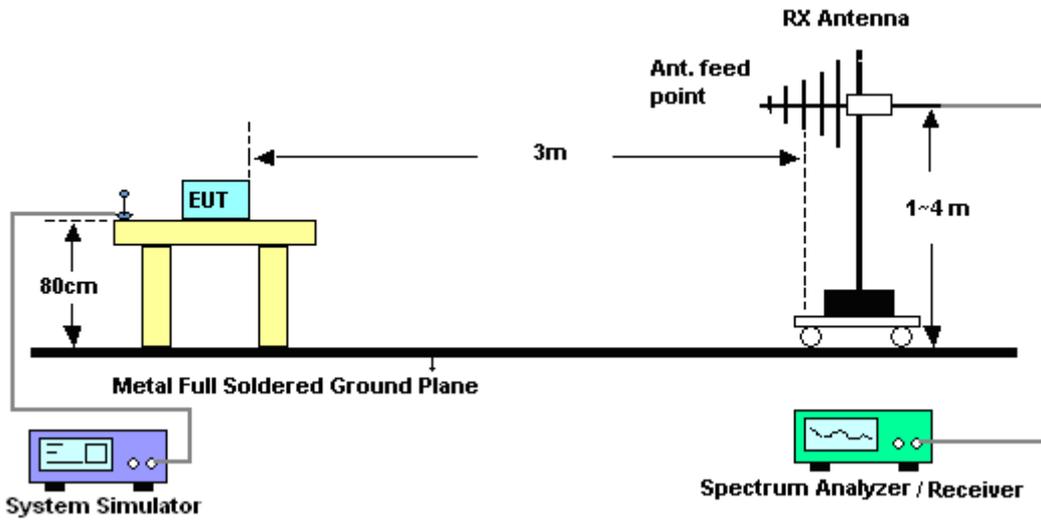
1. The EUT was placed on a rotatable wooden table with 0.8 meter above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)]$ (dB)
 $= [30 + 10\log(P)]$ (dBm) - $[43 + 10\log(P)]$ (dB)
 $= -13$ dBm.

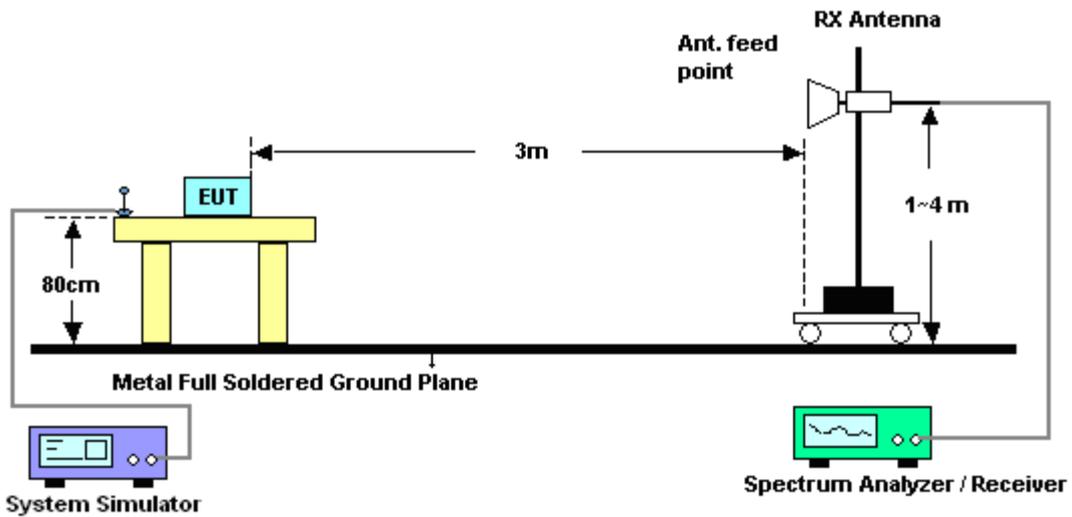
11. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
12. ERP (dBm) = EIRP - 2.15

3.2.4 Test Setup

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz

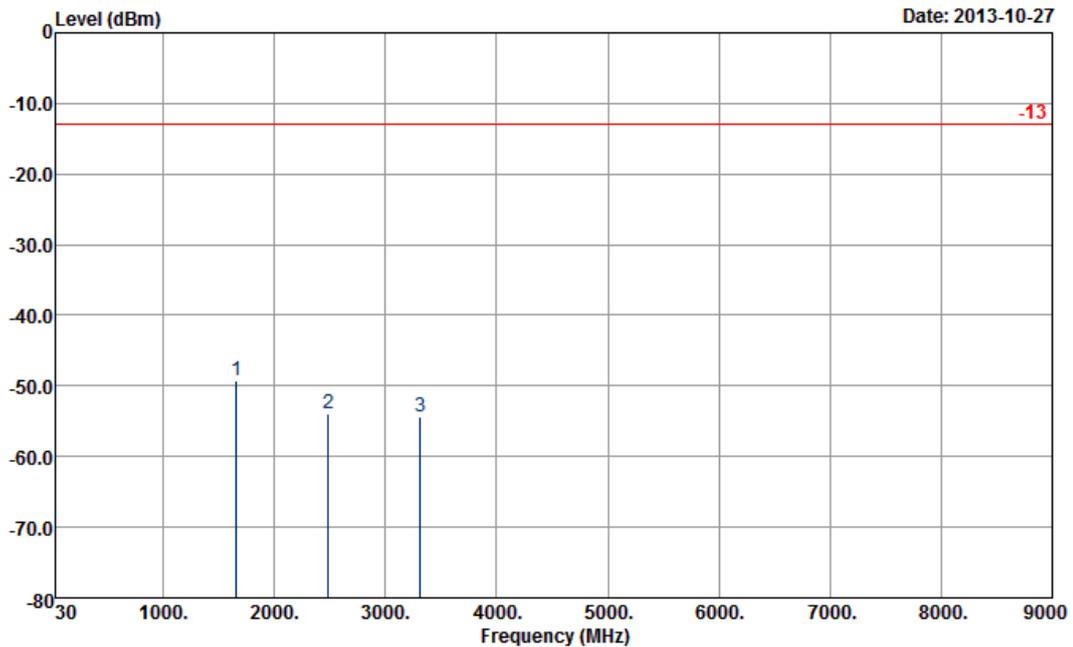




3.2.5 Test Result of Field Strength of Spurious Radiated

<Low Channel>

Band :	LTE Band 5	Temperature :	21~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 24	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

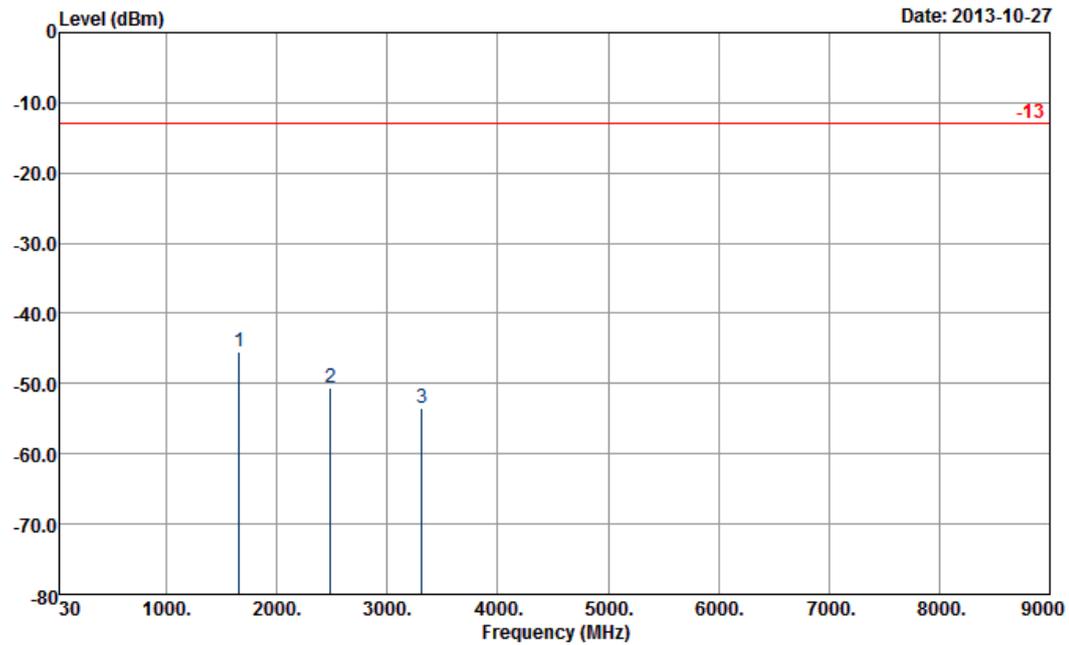


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) HORIZONTAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1657	-49.34	-13	-36.34	-58.25	-53.29	1.63	5.58	H	Pass
2488	-53.91	-13	-40.91	-67.19	-58.01	2.21	6.31	H	Pass
3313	-54.35	-13	-41.35	-68.67	-59.38	3.1	8.13	H	Pass



Band :	LTE Band 5	Temperature :	21~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 24	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

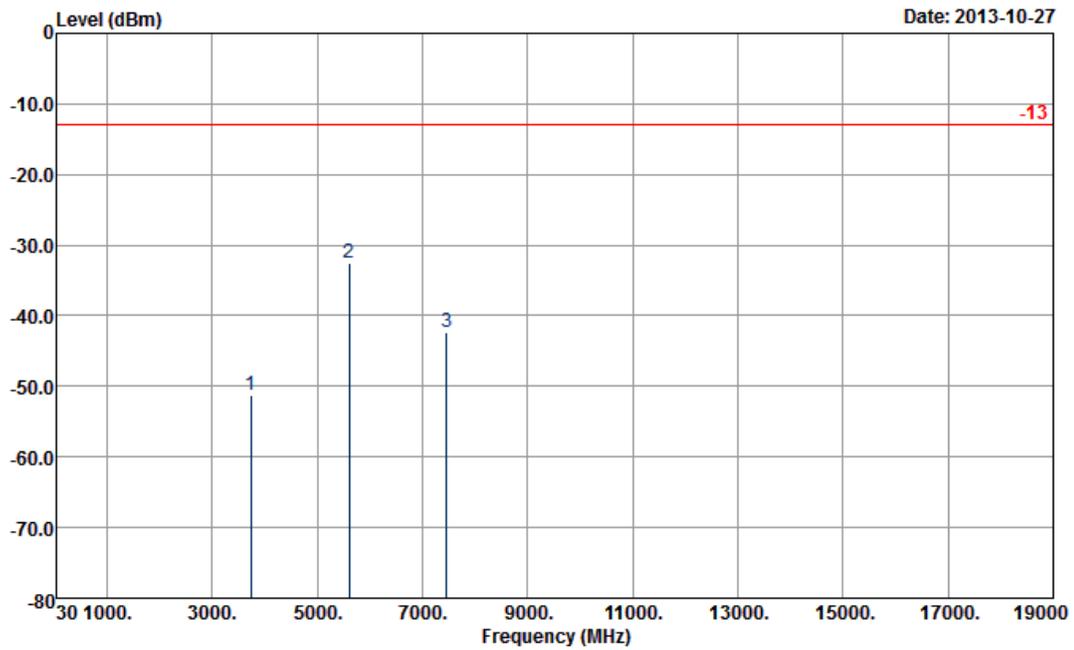


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) VERTICAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1657	-45.52	-13	-32.52	-56.55	-49.47	1.63	5.58	V	Pass
2488	-50.63	-13	-37.63	-64.32	-54.73	2.21	6.31	V	Pass
3314	-53.45	-13	-40.45	-68.98	-58.48	3.1	8.13	V	Pass



Band :	LTE Band 2	Temperature :	21~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 99	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

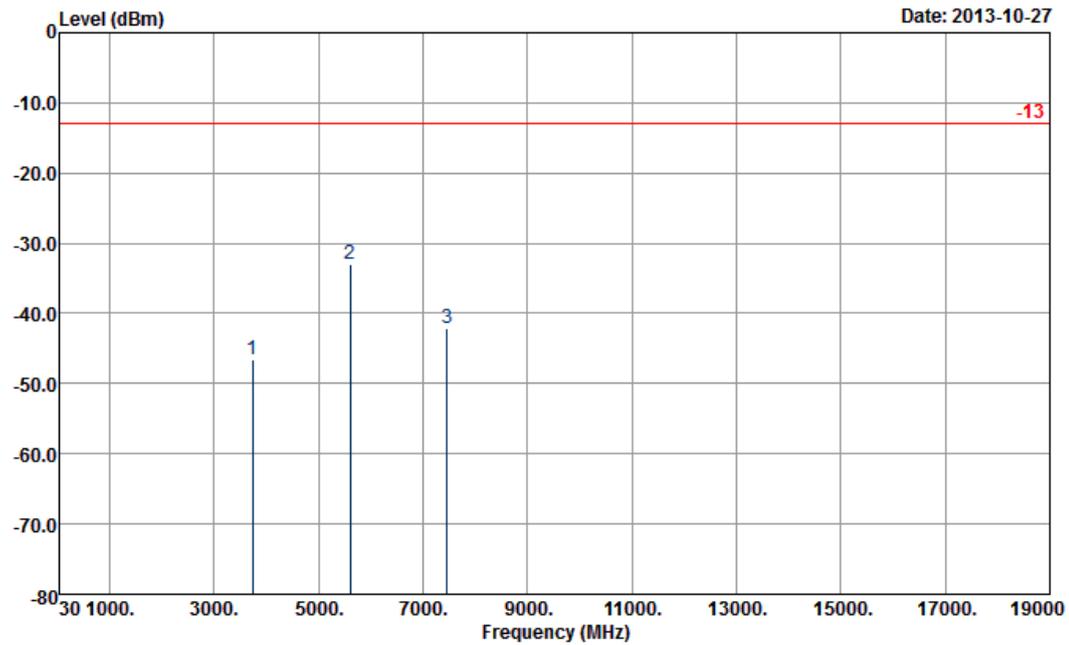


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) HORIZONTAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3736	-51.27	-13	-38.27	-66.58	-57.65	2.51	8.89	H	Pass
5608	-32.53	-13	-19.53	-53.34	-40.39	3.03	10.89	H	Pass
7464	-42.32	-13	-29.32	-70.06	-51.46	3.24	12.38	H	Pass



Band :	LTE Band 2	Temperature :	21~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 99	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

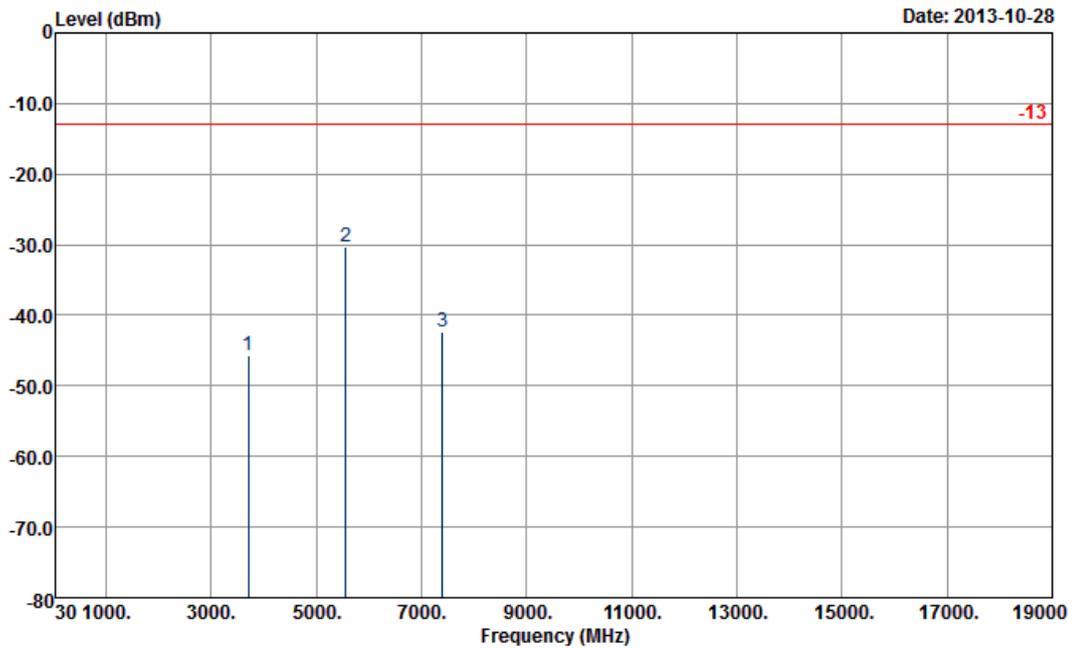


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) VERTICAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3736	-46.63	-13	-33.63	-62.9	-53.01	2.51	8.89	V	Pass
5608	-33.03	-13	-20.03	-53.59	-40.89	3.03	10.89	V	Pass
7464	-42.09	-13	-29.09	-69.19	-51.23	3.24	12.38	V	Pass



Band :	LTE Band 25	Temperature :	21~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

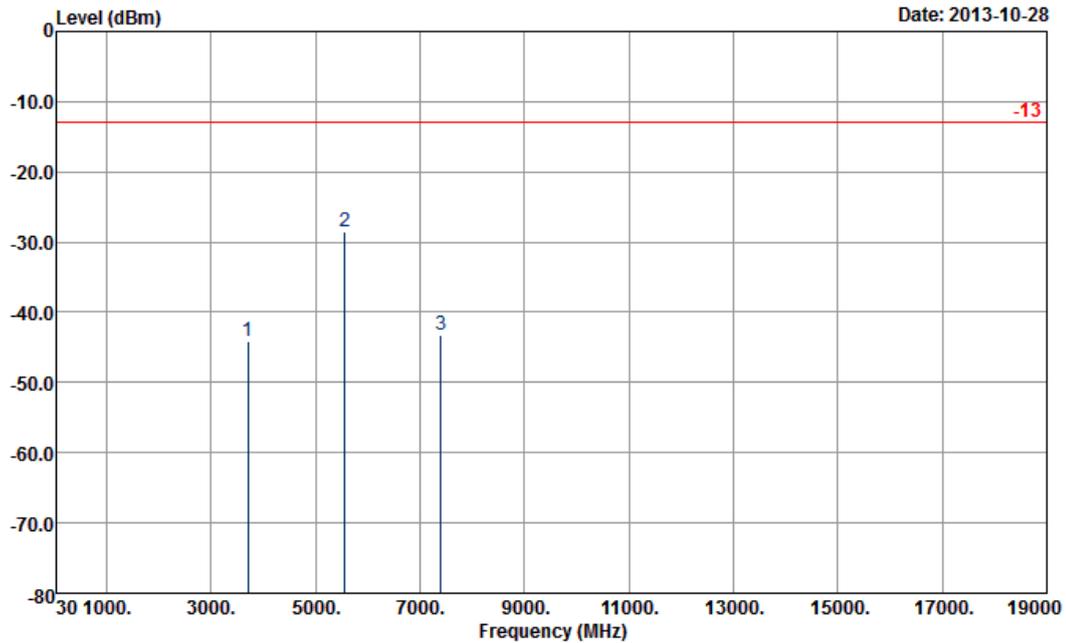


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) HORIZONTAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3700	-45.63	-13	-32.63	-60.69	-52.01	2.51	8.89	H	Pass
5556	-30.39	-13	-17.39	-50.89	-38.25	3.03	10.89	H	Pass
7400	-42.24	-13	-29.24	-69.76	-51.38	3.24	12.38	H	Pass



Band :	LTE Band 25	Temperature :	21~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

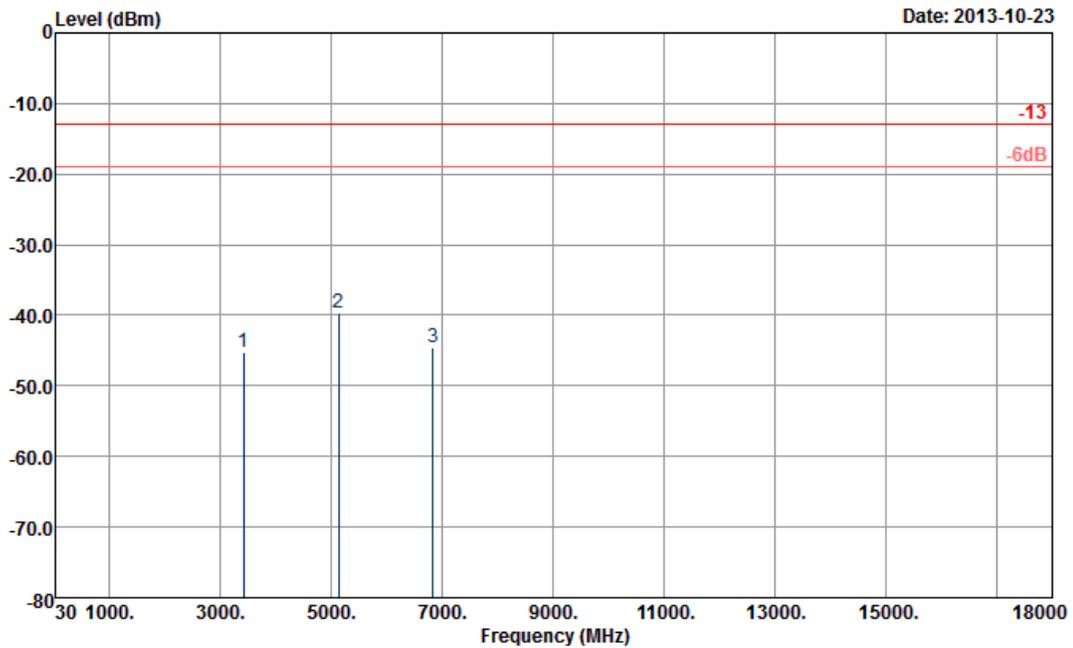


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) VERTICAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3700	-44.09	-13	-31.09	-60.38	-50.47	2.51	8.89	V	Pass
5556	-28.55	-13	-15.55	-49.09	-36.41	3.03	10.89	V	Pass
7400	-43.14	-13	-30.14	-70	-52.28	3.24	12.38	V	Pass



Band :	LTE Band 4	Temperature :	21~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

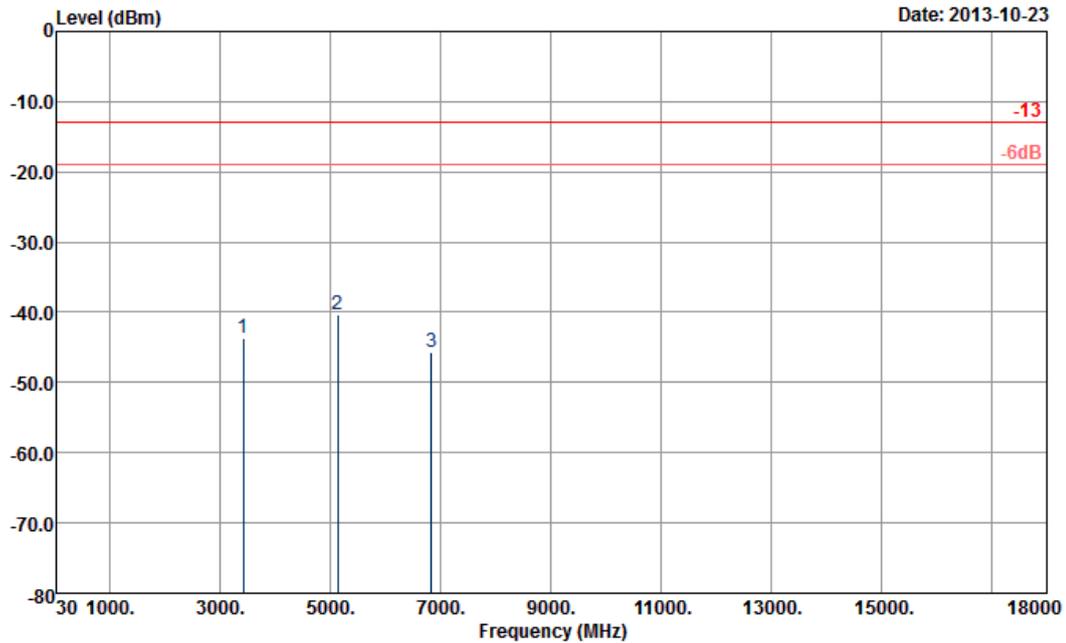


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) HORIZONTAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3420	-45.31	-13	-32.31	-59.52	-49.14	4.48	8.31	H	Pass
5132	-39.74	-13	-26.74	-58.35	-44.38	5.332	9.98	H	Pass
6840	-44.49	-13	-31.49	-70.16	-49.73	6.1	11.34	H	Pass



Band :	LTE Band 4	Temperature :	21~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

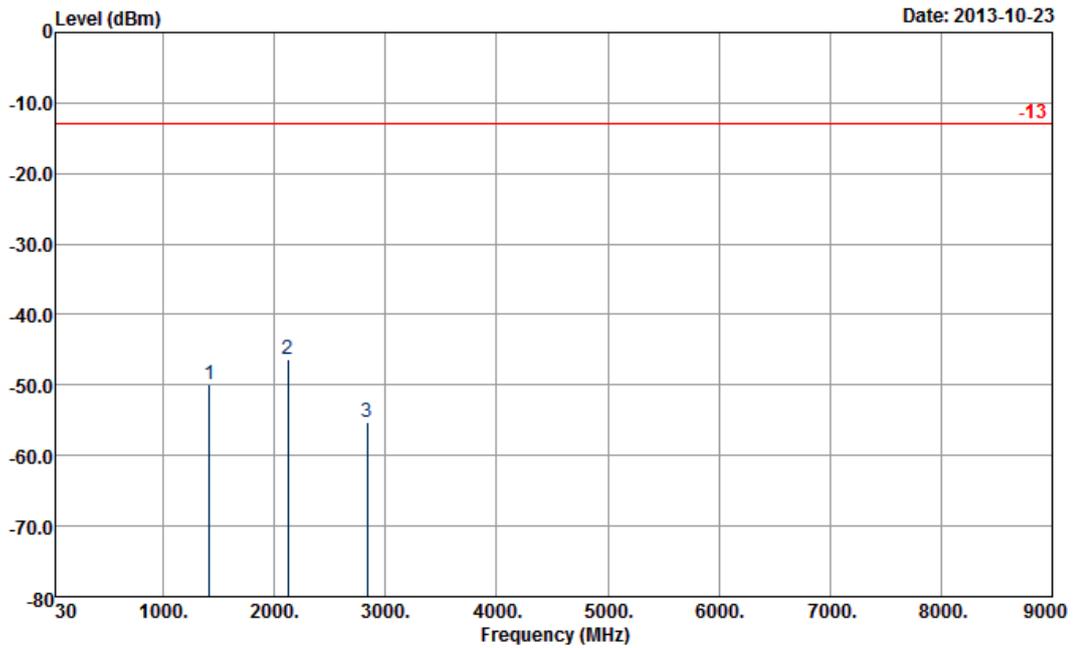


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) VERTICAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3420	-43.68	-13	-30.68	-59.37	-47.51	4.48	8.31	V	Pass
5132	-40.28	-13	-27.28	-58.72	-44.92	5.332	9.98	V	Pass
6840	-45.77	-13	-32.77	-70.87	-51.01	6.1	11.34	V	Pass



Band :	LTE Band 17	Temperature :	21~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 24	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

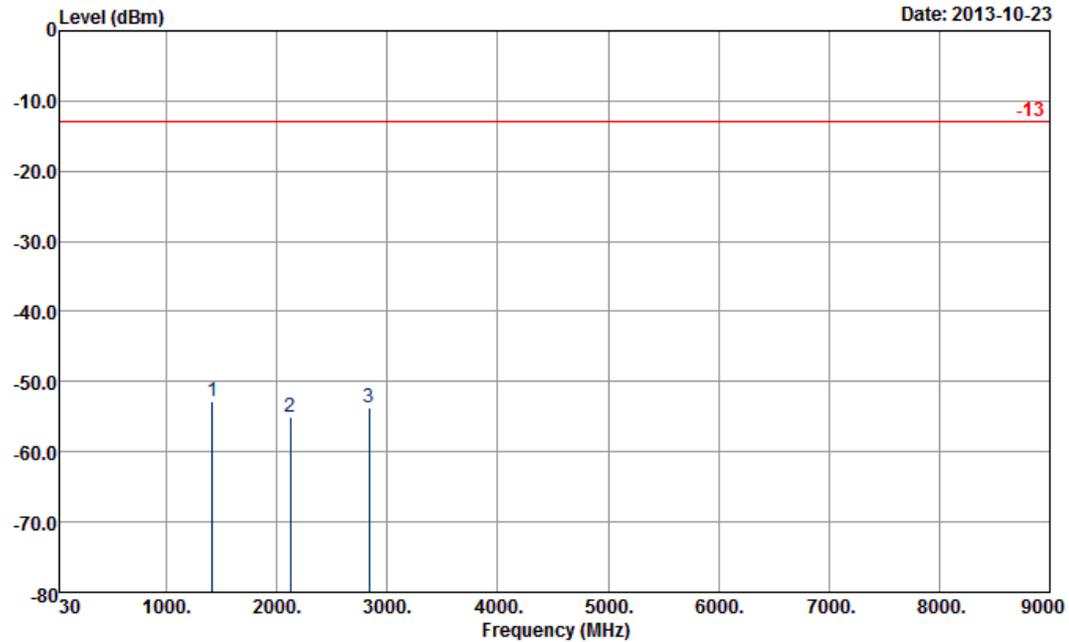


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) HORIZONTAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1417	-49.89	-13	-36.89	-57.93	-53.98	1.52	5.61	H	Pass
2125	-46.24	-13	-33.24	-57.36	-50.43	1.83	6.02	H	Pass
2834	-55.24	-13	-42.24	-68.77	-60.01	2.24	7.01	H	Pass



Band :	LTE Band 17	Temperature :	21~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 24	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



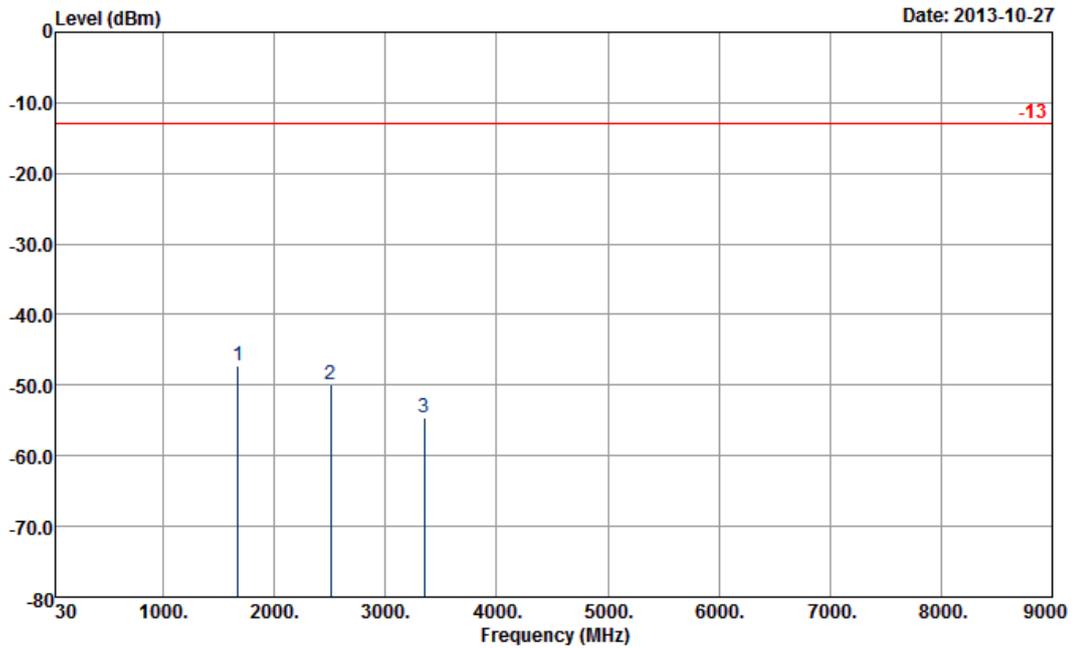
Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) VERTICAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1417	-52.74	-13	-39.74	-63.05	-56.84	1.51	5.61	V	Pass
2125	-54.94	-13	-41.94	-67.93	-59.14	1.82	6.02	V	Pass
2833	-53.81	-13	-40.81	-68.77	-58.62	2.2	7.01	V	Pass



<Middle Channel>

Band :	LTE Band 5	Temperature :	21~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 24	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

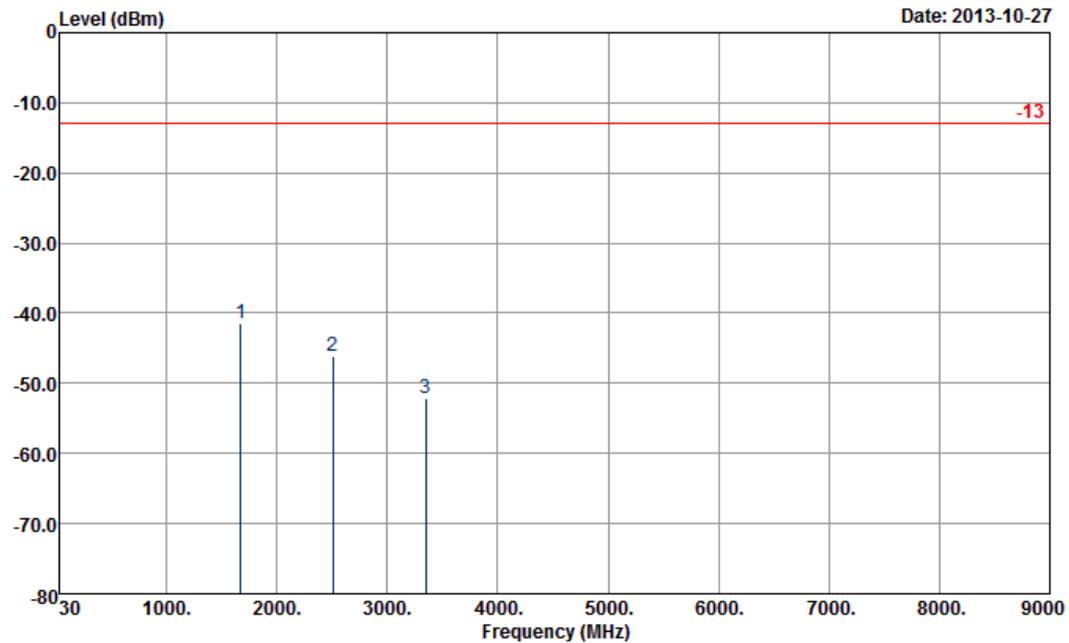


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) HORIZONTAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-47.27	-13	-34.27	-56.14	-51.14	1.62	5.49	H	Pass
2509	-49.90	-13	-36.90	-63.28	-54.02	2.1	6.22	H	Pass
3346	-54.54	-13	-41.54	-68.69	-59.58	3.03	8.07	H	Pass



Band :	LTE Band 5	Temperature :	21~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 24	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

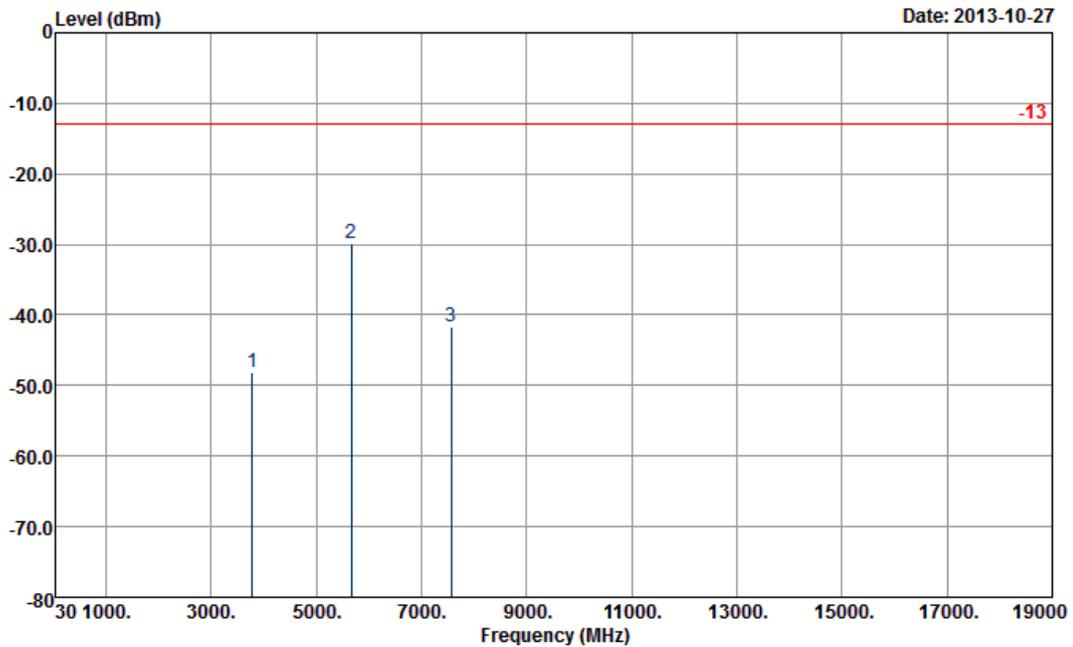


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) VERTICAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-41.39	-13	-28.39	-52.66	-45.26	1.62	5.49	V	Pass
2509	-46.06	-13	-33.06	-59.74	-50.18	2.1	6.22	V	Pass
3346	-52.13	-13	-39.13	-67.82	-57.17	3.03	8.07	V	Pass



Band :	LTE Band 2	Temperature :	21~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 99	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

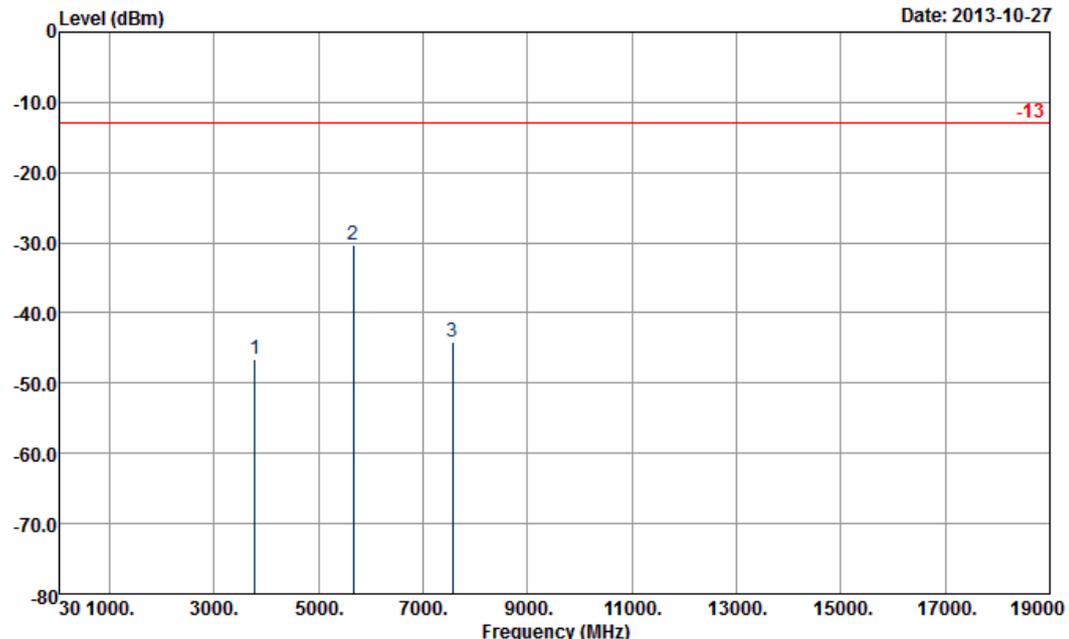


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) HORIZONTAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3776	-48.18	-13	-35.18	-63.63	-54.48	2.51	8.81	H	Pass
5668	-29.91	-13	-16.91	-50.75	-37.62	2.99	10.70	H	Pass
7556	-41.78	-13	-28.78	-68.76	-50.31	3.59	12.12	H	Pass



Band :	LTE Band 2	Temperature :	21~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 99	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

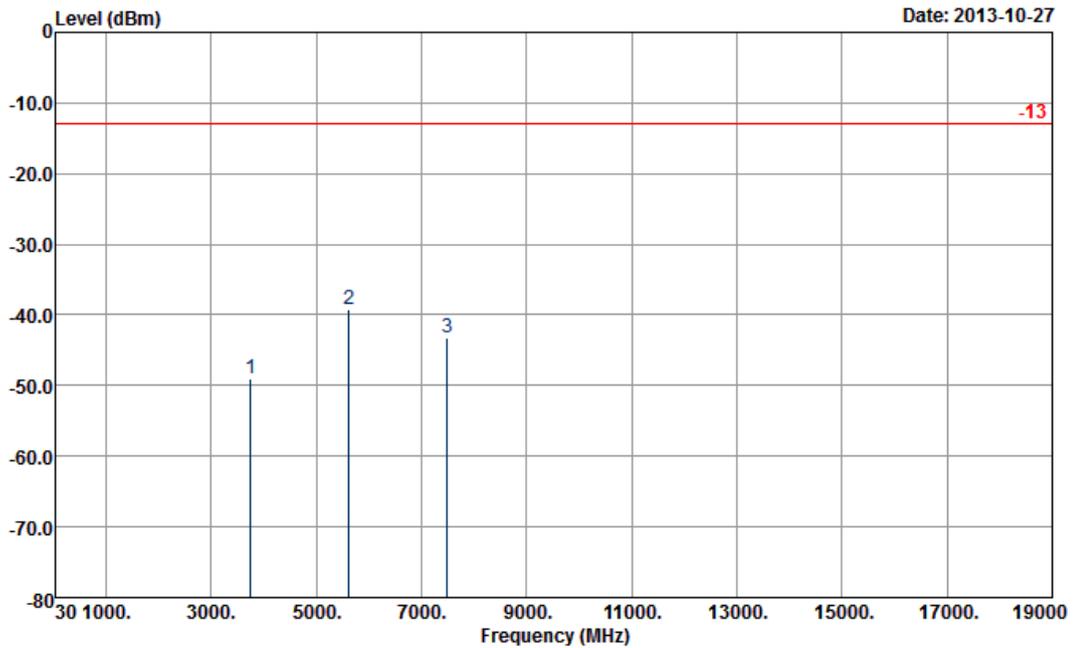


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) VERTICAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3776	-46.54	-13	-33.54	-62.9	-52.84	2.51	8.81	V	Pass
5668	-30.30	-13	-17.30	-50.91	-38.01	2.99	10.70	V	Pass
7556	-44.22	-13	-31.22	-71.05	-52.75	3.59	12.12	V	Pass



Band :	LTE Band 25	Temperature :	21~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

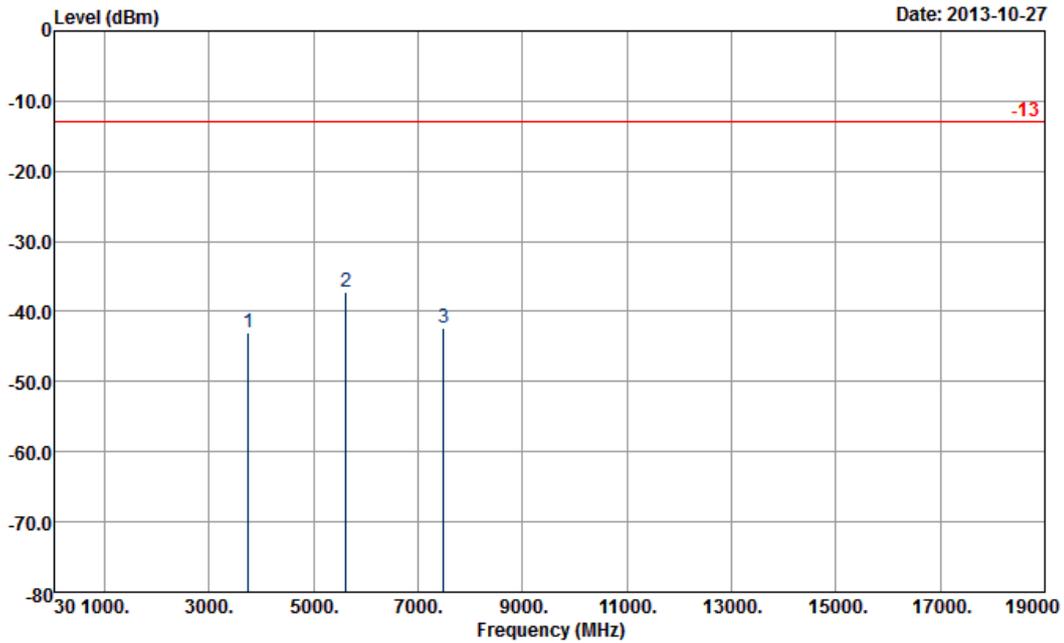


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) HORIZONTAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3744	-49.09	-13	-36.09	-64.39	-55.39	2.51	8.81	H	Pass
5620	-39.30	-13	-26.30	-59.9	-47.01	2.99	10.70	H	Pass
7484	-43.12	-13	-30.12	-70.62	-51.65	3.59	12.12	H	Pass



Band :	LTE Band 25	Temperature :	21~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

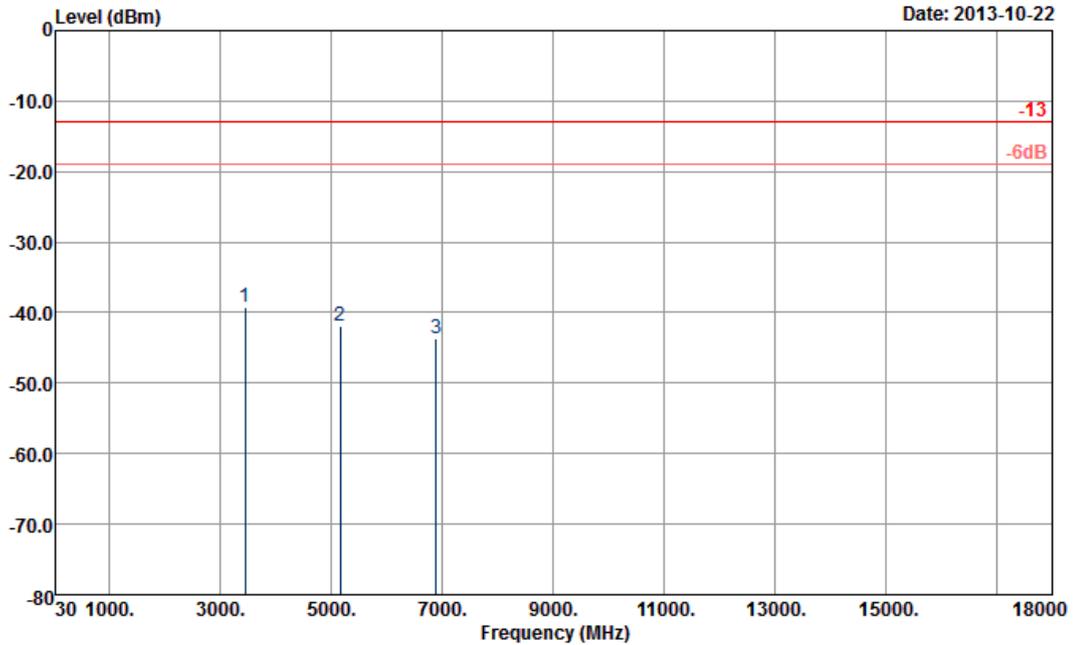


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) VERTICAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3744	-42.97	-13	-29.97	-59.28	-49.27	2.51	8.81	V	Pass
5620	-37.12	-13	-24.12	-57.54	-44.83	2.99	10.70	V	Pass
7484	-42.39	-13	-29.39	-69.62	-50.92	3.59	12.12	V	Pass



Band :	LTE Band 4	Temperature :	21~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

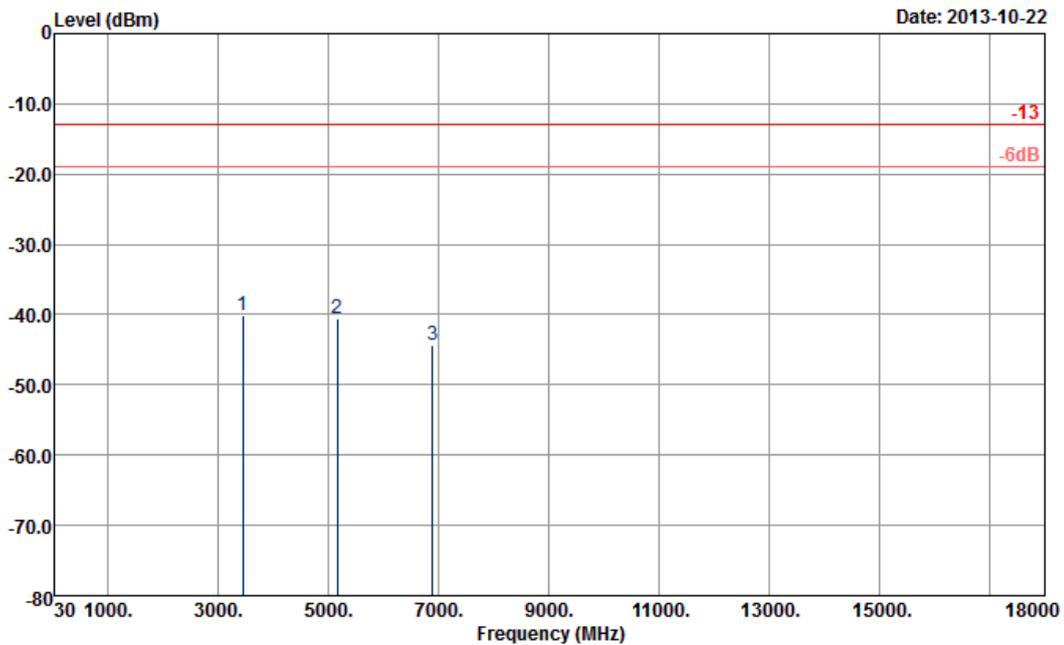


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) HORIZONTAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dB)	Polarization (H/V)	Result
3448	-39.18	-13	-26.18	-53.49	-43.01	4.48	8.31	H	Pass
5172	-41.90	-13	-28.90	-60.53	-46.54	5.332	9.98	H	Pass
6896	-43.69	-13	-30.69	-69.64	-48.93	6.1	11.34	H	Pass



Band :	LTE Band 4	Temperature :	21~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

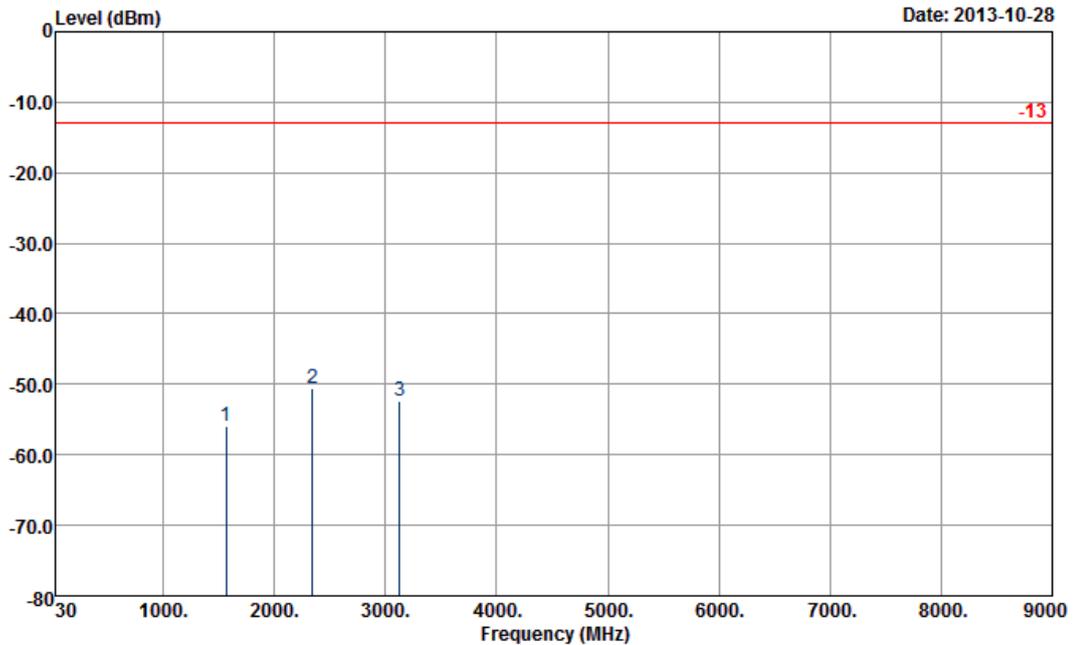


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) VERTICAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3448	-40.20	-13	-27.20	-55.8	-44.03	4.48	8.31	V	Pass
5172	-40.47	-13	-27.47	-59.14	-45.11	5.332	9.98	V	Pass
6896	-44.44	-13	-31.44	-69.69	-49.68	6.1	11.34	V	Pass



Band :	LTE Band 13	Temperature :	21~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 24	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

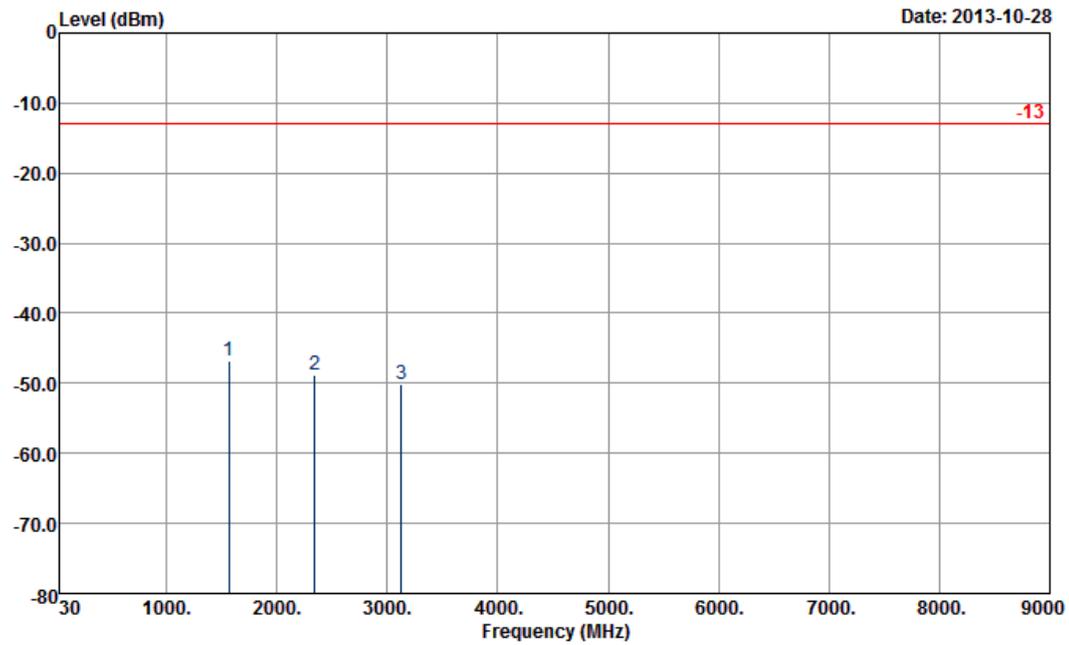


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) HORIZONTAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1564	-55.84	-13	-42.84	-64.18	-57.67	1.51	5.49	H	Pass
2347	-50.50	-13	-37.50	-63.08	-52.42	1.98	6.05	H	Pass
3127	-52.34	-13	-39.34	-66.09	-55.36	2.39	7.56	H	Pass



Band :	LTE Band 13	Temperature :	21~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 24	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

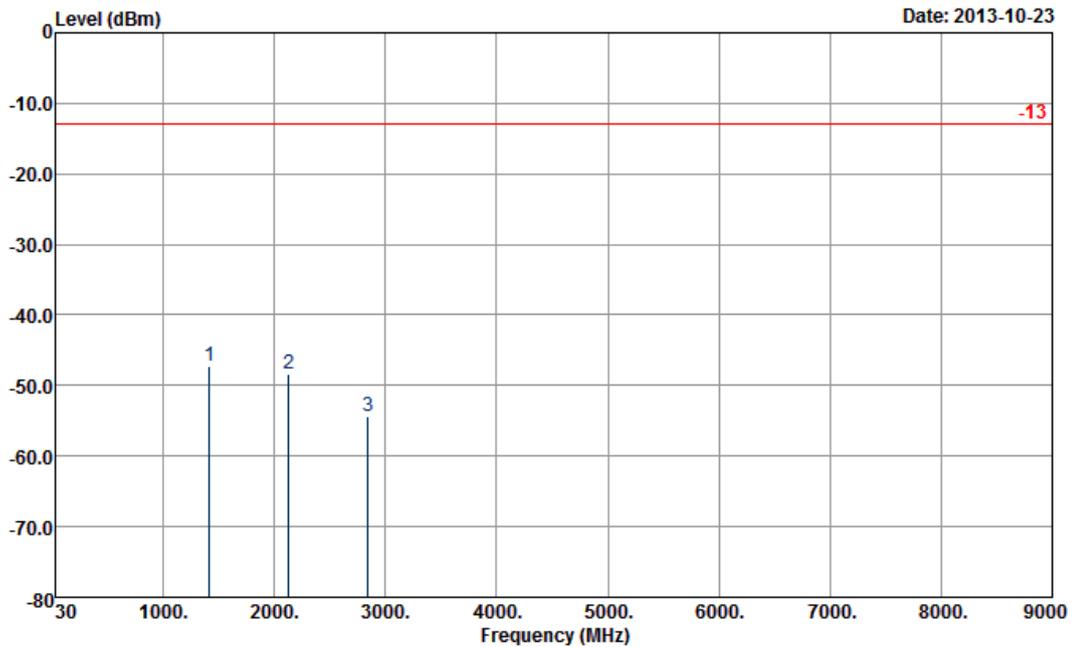


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) VERTICAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1564	-46.71	-13	-33.71	-57.5	-48.54	1.51	5.49	V	Pass
2347	-48.79	-13	-35.79	-62.42	-50.71	1.98	6.05	V	Pass
3127	-50.21	-13	-37.21	-65.69	-53.23	2.39	7.56	V	Pass



Band :	LTE Band 17	Temperature :	21~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 24	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

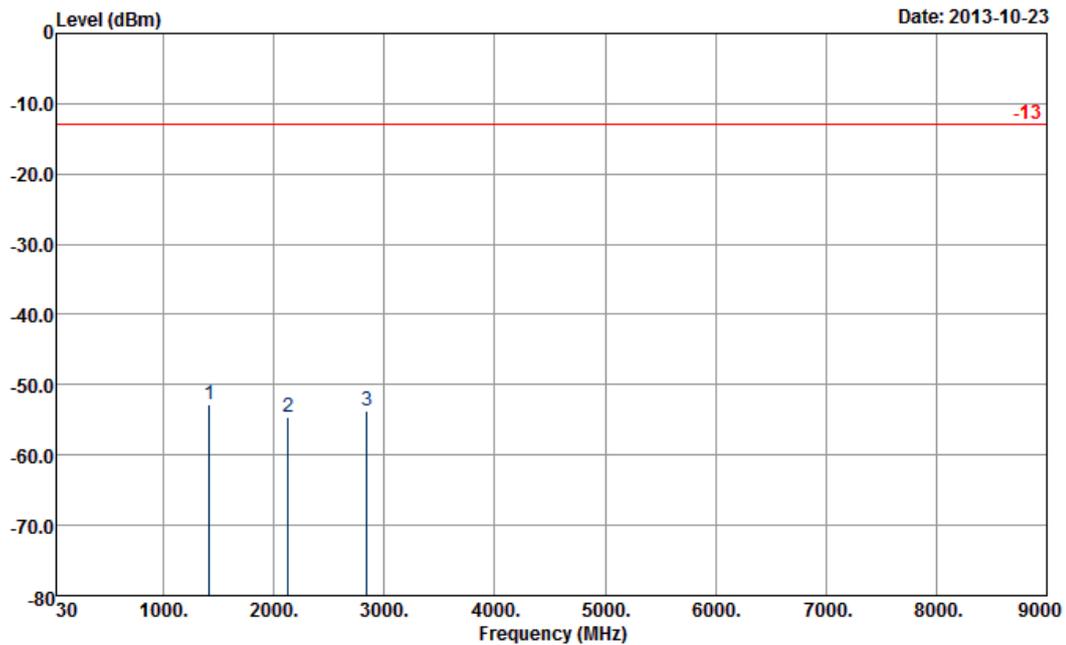


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) HORIZONTAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1420	-47.21	-13	-34.21	-55.23	-51.29	1.53	5.61	H	Pass
2128	-48.30	-13	-35.30	-59.53	-52.47	1.85	6.02	H	Pass
2842	-54.42	-13	-41.42	-67.92	-59.18	2.24	7.00	H	Pass



Band :	LTE Band 17	Temperature :	21~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 24	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



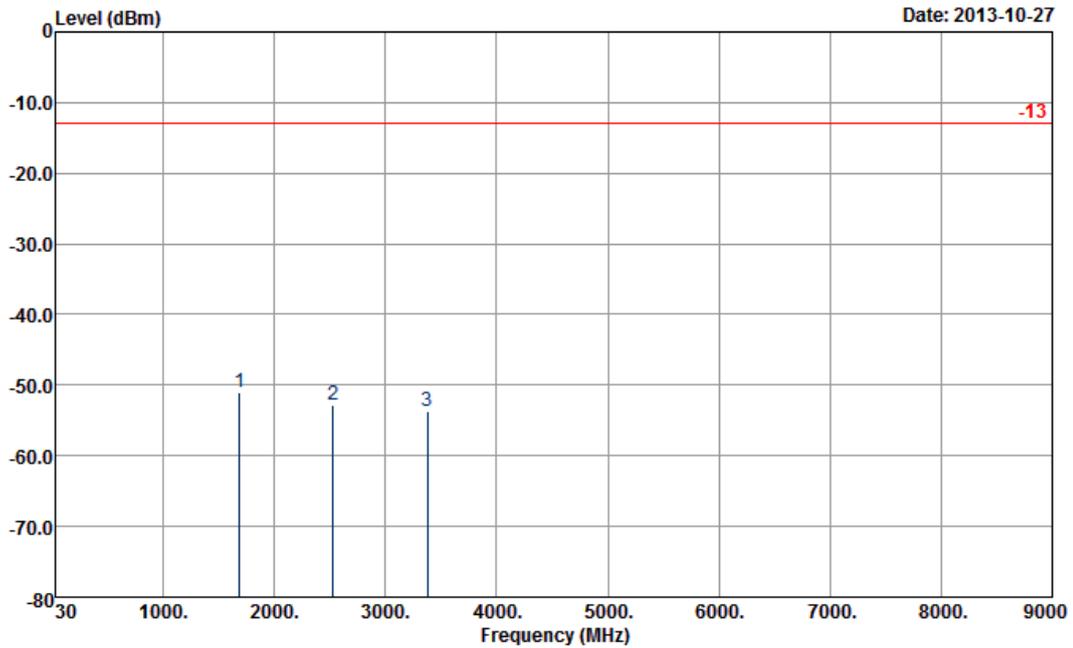
Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) VERTICAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1420	-52.90	-13	-39.90	-63.16	-56.98	1.53	5.61	V	Pass
2128	-54.66	-13	-41.66	-67.85	-58.83	1.85	6.02	V	Pass
2842	-53.61	-13	-40.61	-68.94	-58.37	2.24	7.00	V	Pass



<High Channel>

Band :	LTE Band 5	Temperature :	21~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 24	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

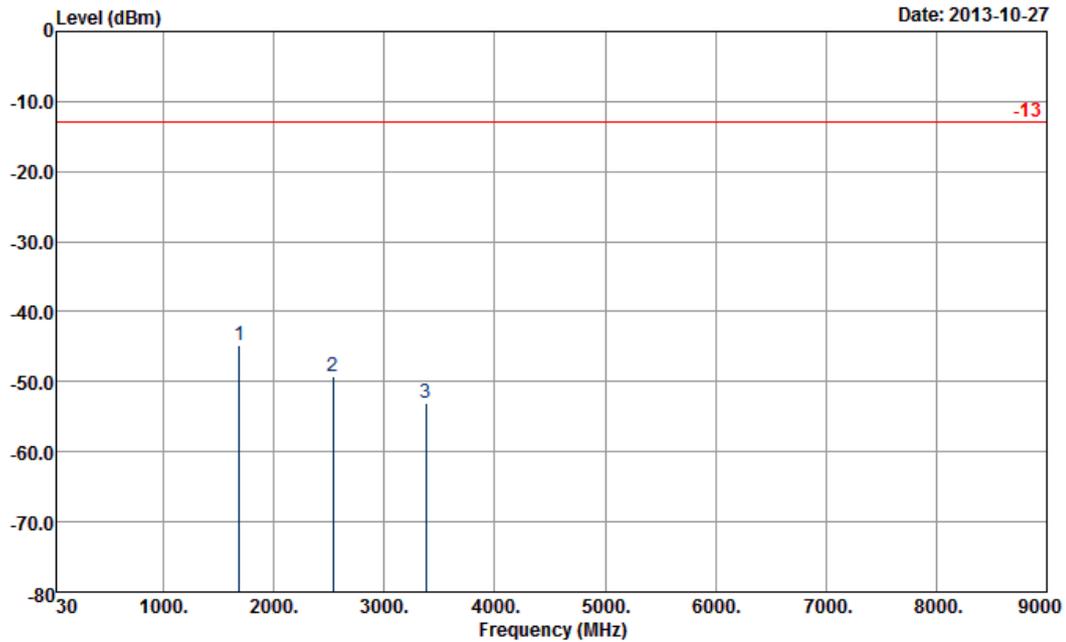


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) HORIZONTAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1687	-51.11	-13	-38.11	-59.92	-55.01	1.52	5.42	H	Pass
2530	-52.86	-13	-39.86	-66.08	-57.12	1.99	6.25	H	Pass
3376	-53.69	-13	-40.69	-68.07	-59.69	2.14	8.14	H	Pass



Band :	LTE Band 5	Temperature :	21~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 24	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

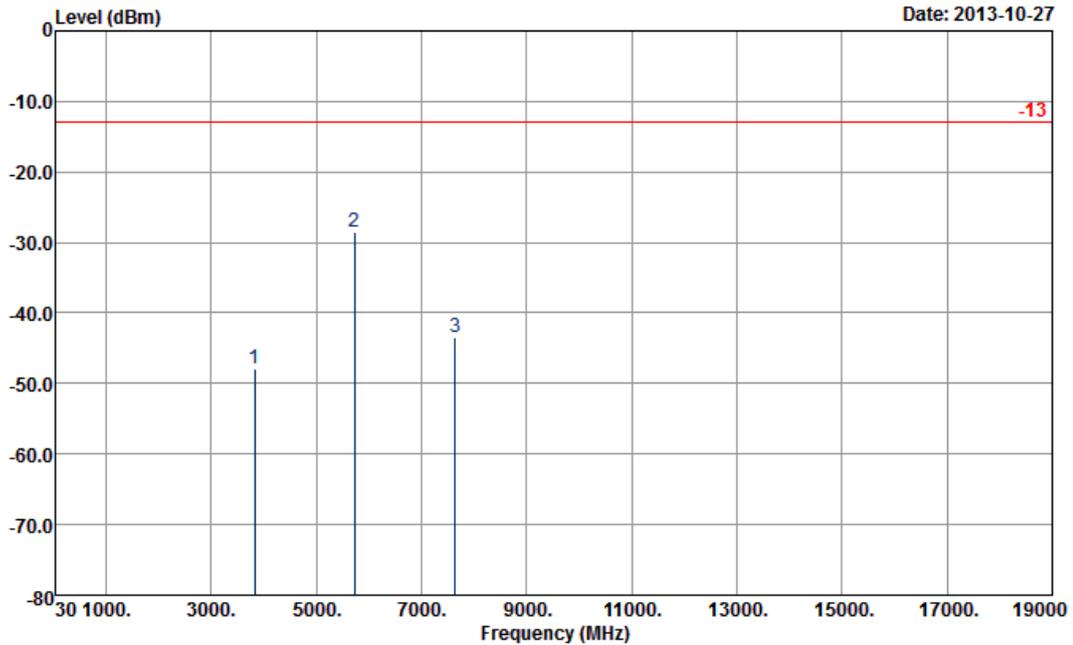


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) VERTICAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1687	-44.85	-13	-31.85	-55.93	-48.75	1.52	5.42	V	Pass
2533	-49.15	-13	-36.15	-62.94	-53.41	1.99	6.25	V	Pass
3376	-53.02	-13	-40.02	-68.61	-59.02	2.14	8.14	V	Pass



Band :	LTE Band 2	Temperature :	21~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 99	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

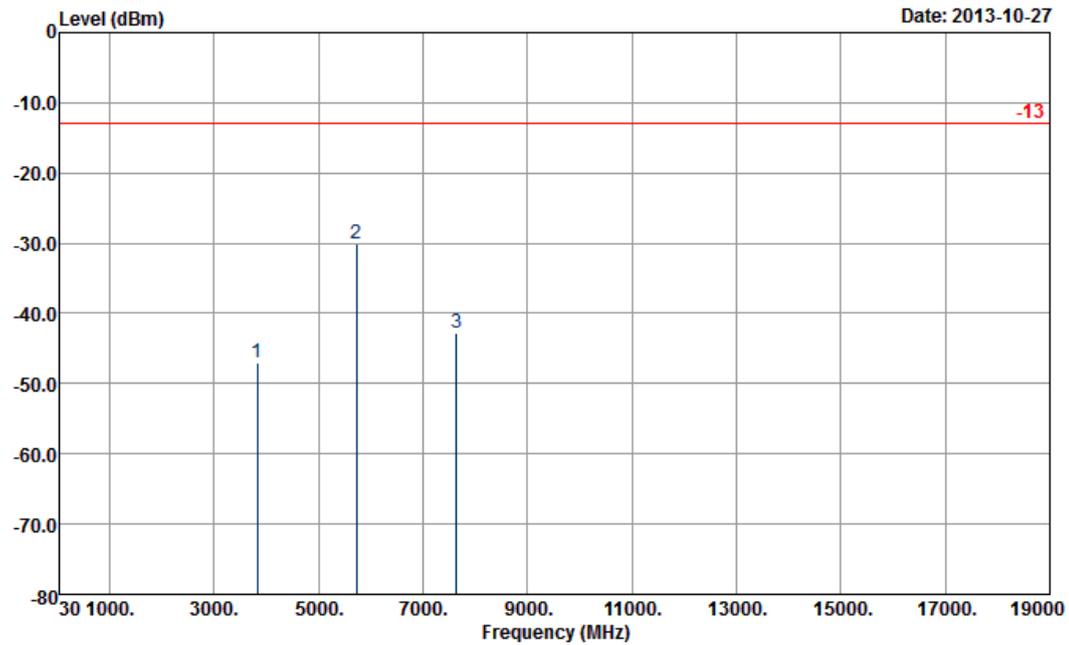


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) HORIZONTAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3816	-47.83	-13	-34.83	-63.6	-54.21	2.52	8.90	H	Pass
5728	-28.44	-13	-15.44	-49.65	-36.19	3.01	10.76	H	Pass
7636	-43.48	-13	-30.48	-69.92	-52.01	3.62	12.15	H	Pass



Band :	LTE Band 2	Temperature :	21~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 99	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

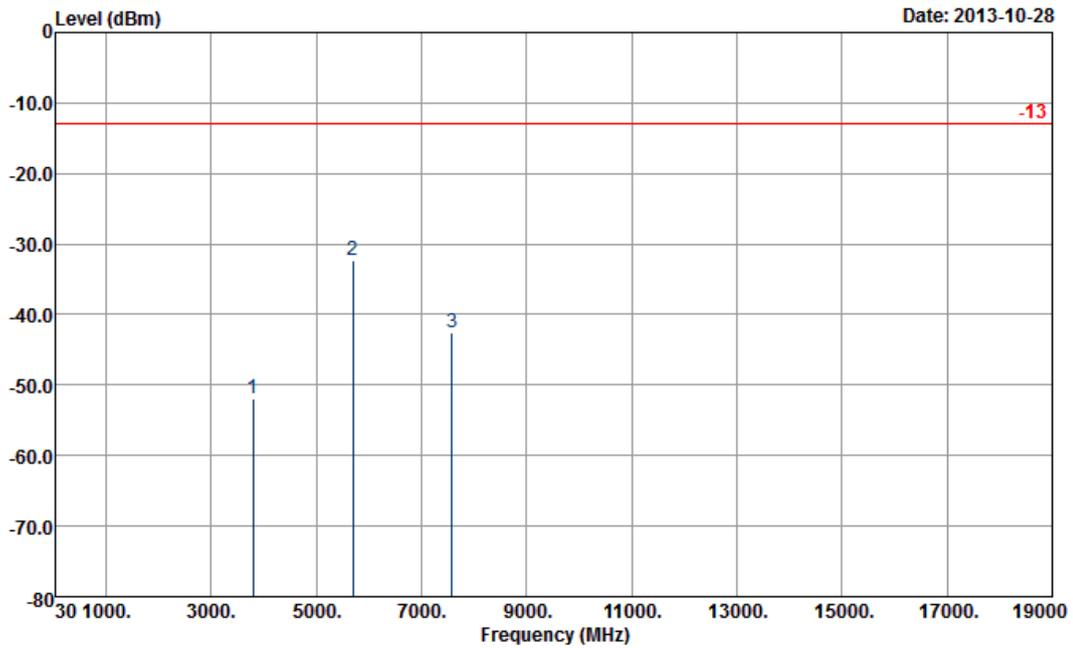


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) VERTICAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3816	-47.04	-13	-34.04	-63.54	-53.42	2.52	8.90	V	Pass
5728	-30.11	-13	-17.11	-50.87	-37.86	3.01	10.76	V	Pass
7636	-42.82	-13	-29.82	-69.27	-51.35	3.62	12.15	V	Pass



Band :	LTE Band 25	Temperature :	21~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

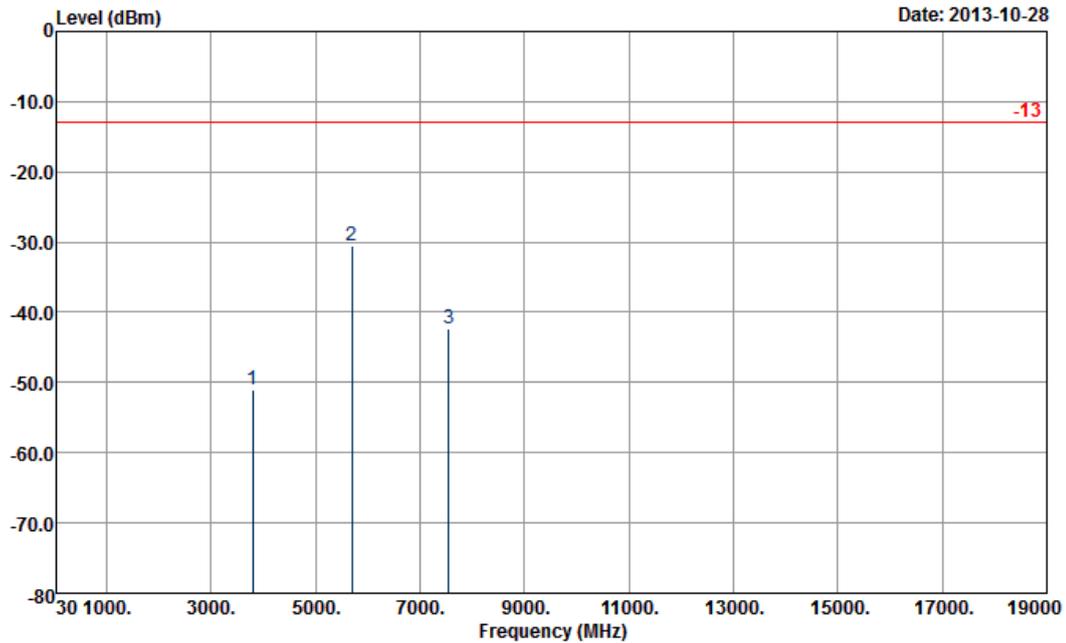


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) HORIZONTAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3792	-52.01	-13	-39.01	-67.61	-58.39	2.52	8.90	H	Pass
5688	-32.26	-13	-19.26	-53.05	-40.01	3.01	10.76	H	Pass
7584	-42.60	-13	-29.60	-69.44	-51.13	3.62	12.15	H	Pass



Band :	LTE Band 25	Temperature :	21~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

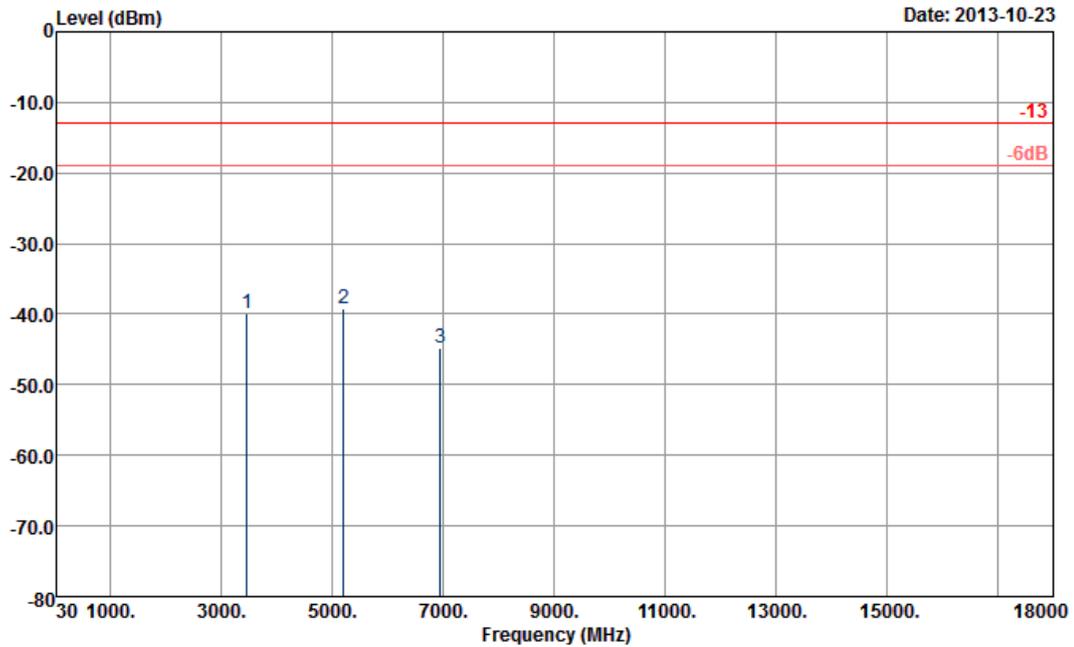


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) VERTICAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3792	-50.97	-13	-37.97	-67.48	-57.35	2.52	8.90	V	Pass
5688	-30.54	-13	-17.54	-51.61	-38.29	3.01	10.76	V	Pass
7548	-42.25	-13	-29.25	-69.09	-50.78	3.62	12.15	V	Pass



Band :	LTE Band 4	Temperature :	21~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

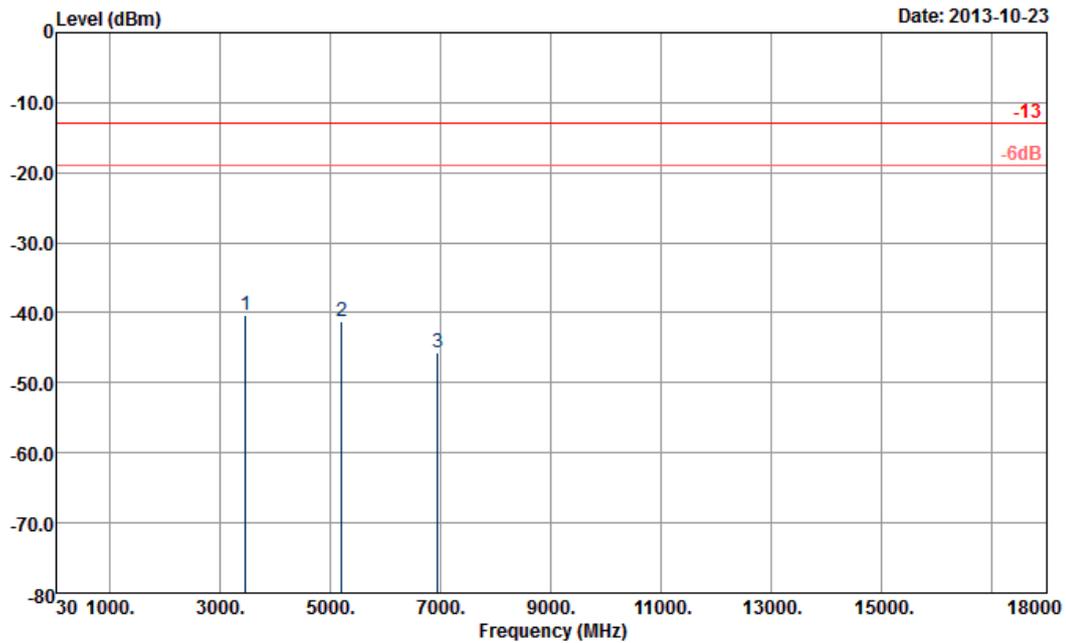


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) HORIZONTAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3472	-39.81	-13	-26.81	-54.13	-43.64	4.48	8.31	H	Pass
5208	-39.28	-13	-26.28	-58.08	-43.92	5.332	9.98	H	Pass
6944	-44.77	-13	-31.77	-70.98	-50.01	6.1	11.34	H	Pass



Band :	LTE Band 4	Temperature :	21~23°C
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

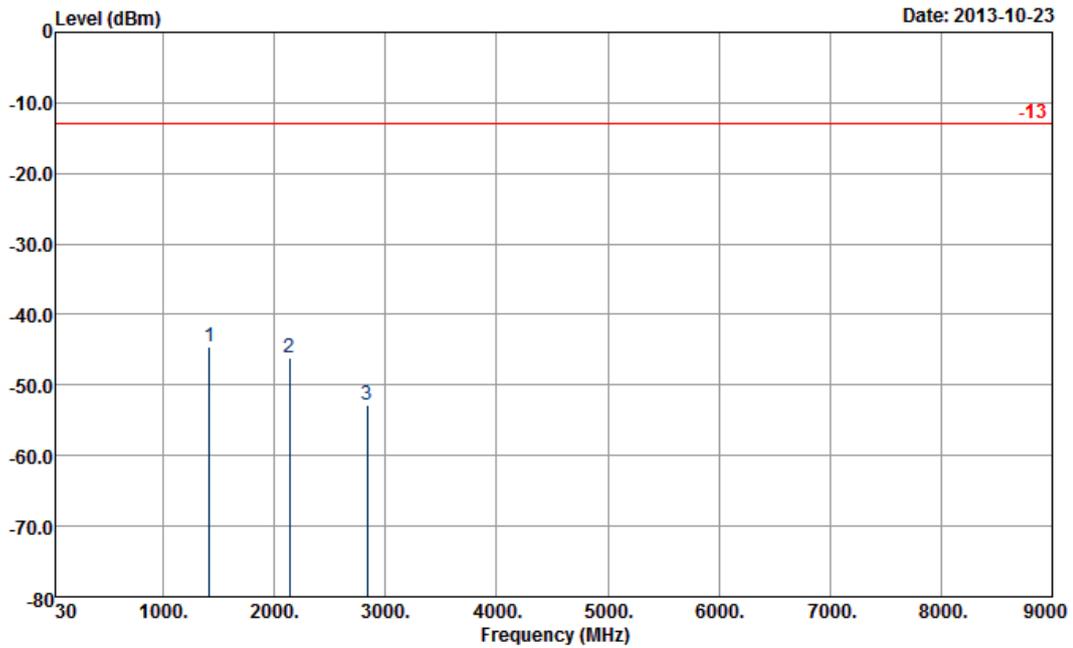


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) VERTICAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3472	-40.29	-13	-27.29	-55.75	-44.12	4.48	8.31	V	Pass
5208	-41.33	-13	-28.33	-60.17	-45.97	5.332	9.98	V	Pass
6944	-45.58	-13	-32.58	-71.06	-50.82	6.1	11.34	V	Pass



Band :	LTE Band 17	Temperature :	21~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 24	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		

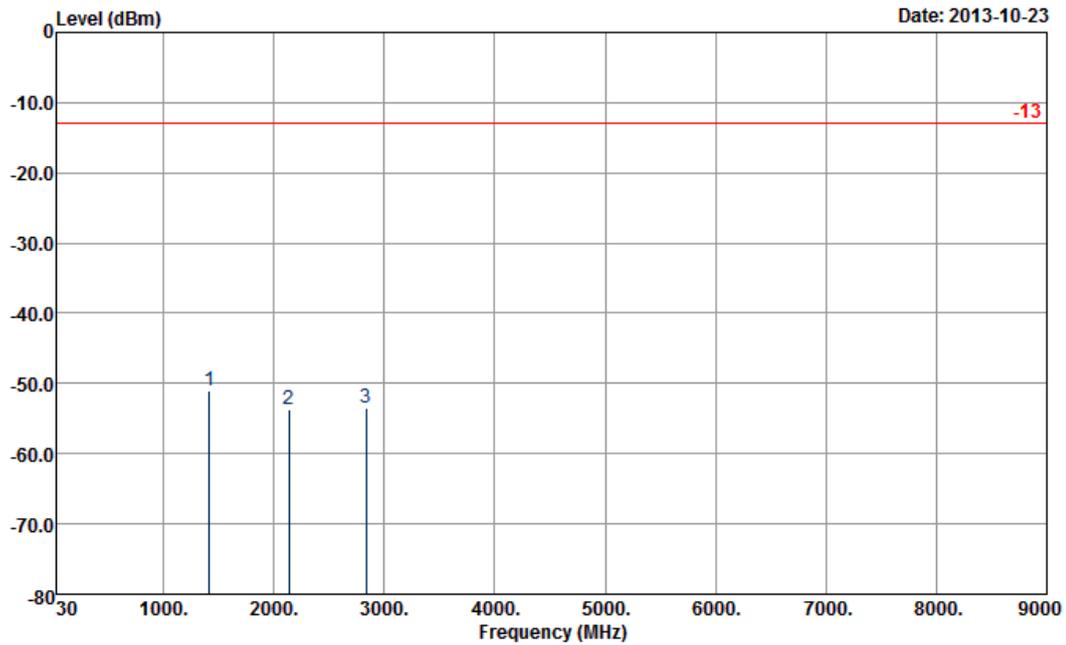


Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) HORIZONTAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1420	-44.65	-13	-31.65	-52.87	-48.75	1.53	5.63	H	Pass
2134	-46.07	-13	-33.07	-57.35	-50.27	1.88	6.08	H	Pass
2839	-52.87	-13	-39.87	-66.24	-57.71	2.27	7.11	H	Pass



Band :	LTE Band 17	Temperature :	21~23°C
Test Mode :	10MHz QPSK RB Size 1 Offset 24	Relative Humidity :	49~51%
Test Engineer :	Stan Hsieh	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH07-HY
 Condition : -13 HF-EIRP(080306) VERTICAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1420	-51.04	-13	-38.04	-61.48	-55.14	1.53	5.63	V	Pass
2134	-53.81	-13	-40.81	-66.93	-58.01	1.88	6.08	V	Pass
2839	-53.42	-13	-40.42	-68.63	-58.26	2.27	7.11	V	Pass



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
LTE Base Station	Anritsu	MT8820C	6201026480	30MHz~2.7GHz SISO (FDD Band 1~26)	Jan. 04, 2013	Oct. 07, 2013	Jan. 03, 2014	Conducted (TH02-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP30	101067	9KHz~30GHz	Nov. 30, 2012	Oct. 22, 2013 ~ Oct. 28, 2013	Nov. 29, 2013	Radiation (03CH07-HY)
Bilog Antenna	Schaffner	CBL6111C	2726	30MHz ~ 1GHz	Oct. 10, 2013	Oct. 22, 2013 ~ Oct. 28, 2013	Oct. 09, 2014	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	75962	1GHz~18GHz	Aug. 22, 2013	Oct. 22, 2013 ~ Oct. 28, 2013	Aug. 21, 2014	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	30MHz~1GHz	Feb. 26, 2013	Oct. 22, 2013 ~ Oct. 28, 2013	Feb. 25, 2014	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Dec. 01, 2012	Oct. 22, 2013 ~ Oct. 28, 2013	Nov. 30, 2013	Radiation (03CH07-HY)
Turn Table	ChainTek	ChainTek 3000	N/A	0 ~ 360 degree	N/A	Oct. 22, 2013 ~ Oct. 28, 2013	N/A	Radiation (03CH07-HY)
Antenna Mast	ChainTek	ChainTek 3000	N/A	N/A	N/A	Oct. 22, 2013 ~ Oct. 28, 2013	N/A	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA917025 1	15GHz- 40GHz	Oct. 03, 2013	Oct. 22, 2013 ~ Oct. 28, 2013	Oct. 02, 2014	Radiation (03CH07-HY)



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.50
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