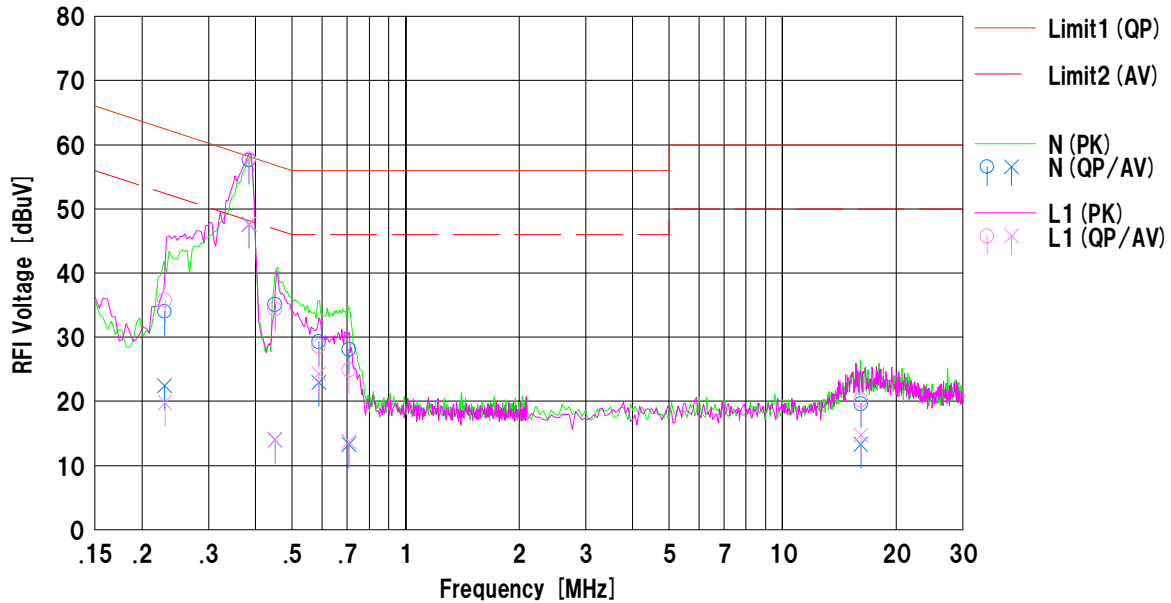


APPENDIX 2: Data of EMI test

Conducted Emission

Test place : UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2009/12/29
Temperature / Humidity : 24 deg.C, 30%
Engineer : Kenichi Adachi
Mode : Tx, 2427MHz
(M/N: RAS26 S/N: EP2-13)

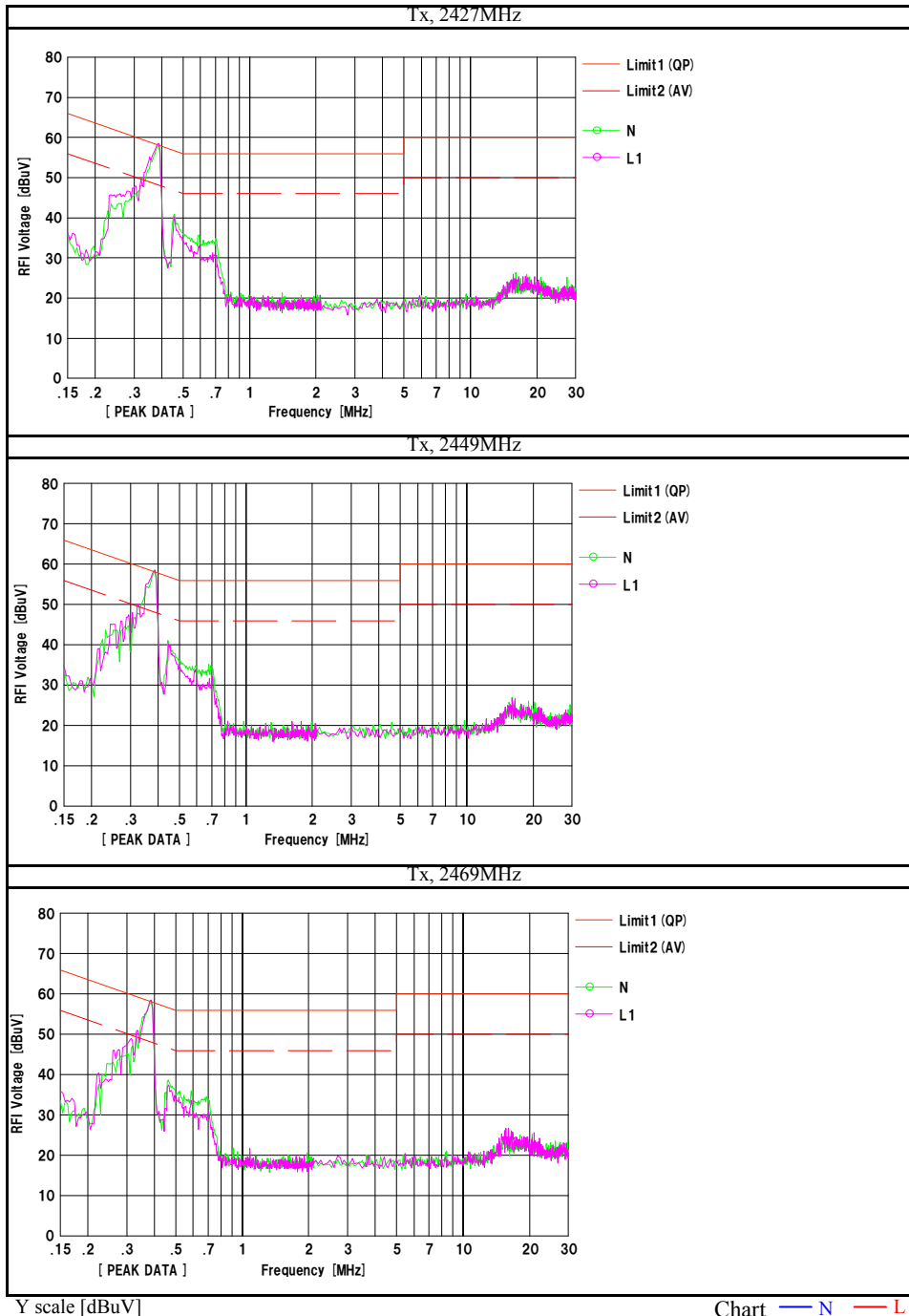


No.	Freq. [MHz]	Reading		C.Fac [dB]	Results		Limit		Margin		Phase	Comment
		<QP> [dBuV]	<AV> [dBuV]		<QP> [dBuV]	<AV> [dBuV]	<QP> [dBuV]	<AV> [dBuV]	<QP> [dB]	<AV> [dB]		
1	0.22954	24.3	12.7	9.7	34.0	22.4	62.5	52.5	28.5	30.1	N	
2	0.38413	47.9	37.9	9.7	57.6	47.6	58.2	48.2	0.6	0.6	N	
3	0.45017	25.4	4.3	9.7	35.1	14.0	56.9	46.9	21.8	32.9	N	
4	0.58795	19.6	13.2	9.7	29.3	22.9	56.0	46.0	26.7	23.1	N	
5	0.70828	18.4	3.6	9.7	28.1	13.3	56.0	46.0	27.9	32.7	N	
6	16.11389	9.2	2.9	10.4	19.6	13.3	60.0	50.0	40.4	36.7	N	
7	0.22989	26.1	10.1	9.7	35.8	19.8	62.5	52.5	26.7	32.7	L1	
8	0.38470	48.1	38.0	9.7	57.8	47.7	58.2	48.2	0.4	0.5	L1	
9	0.45017	24.7	4.3	9.7	34.4	14.0	56.9	46.9	22.5	32.9	L1	
10	0.58795	18.9	14.6	9.7	28.6	24.3	56.0	46.0	27.4	21.7	L1	
11	0.70828	15.2	4.0	9.7	24.9	13.7	56.0	46.0	31.1	32.3	L1	
12	16.12783	9.8	4.3	10.4	20.2	14.7	60.0	50.0	39.8	35.3	L1	

Calculation:Result [dBuV] =Reading [dBuV] +C.Fac (LISN+Cable) [dB]

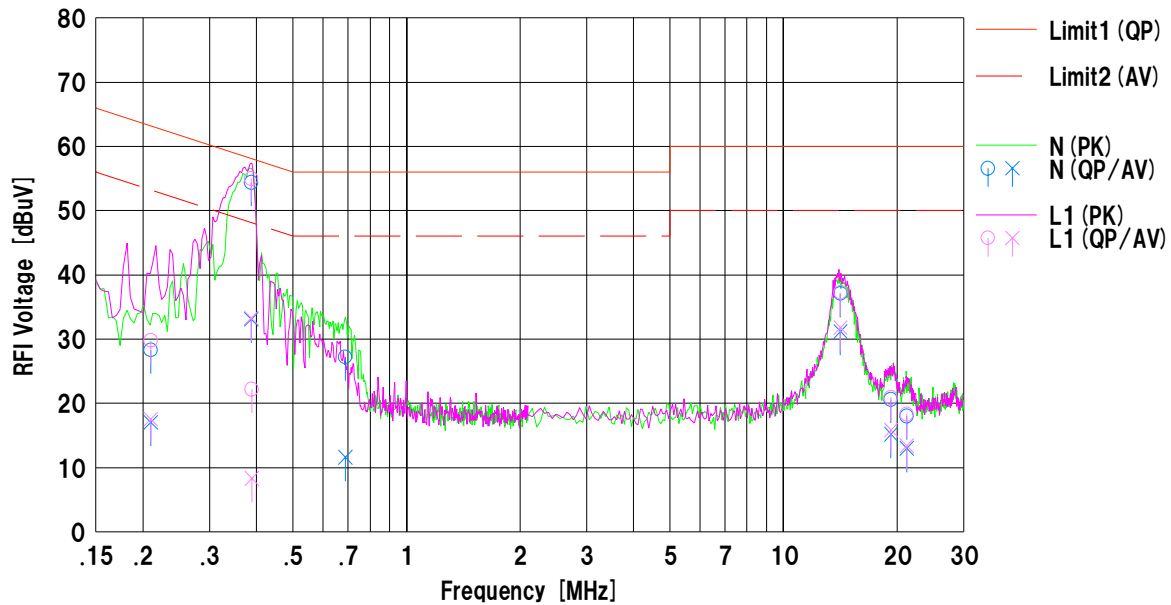
Conducted Emission

Test place : UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
 Date : 2009/12/29
 Temperature / Humidity : 24 deg.C, 30%
 Engineer : Kenichi Adachi
 Mode : Tx,
 (M/N: RAS26 S/N: EP2-13)



Conducted Emission

Test place : UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2009/12/29
Temperature / Humidity : 24 deg.C, 30%
Engineer : Kenichi Adachi
Mode : Tx, 2427MHz
(M/N: RAS26E S/N: EP2-43)

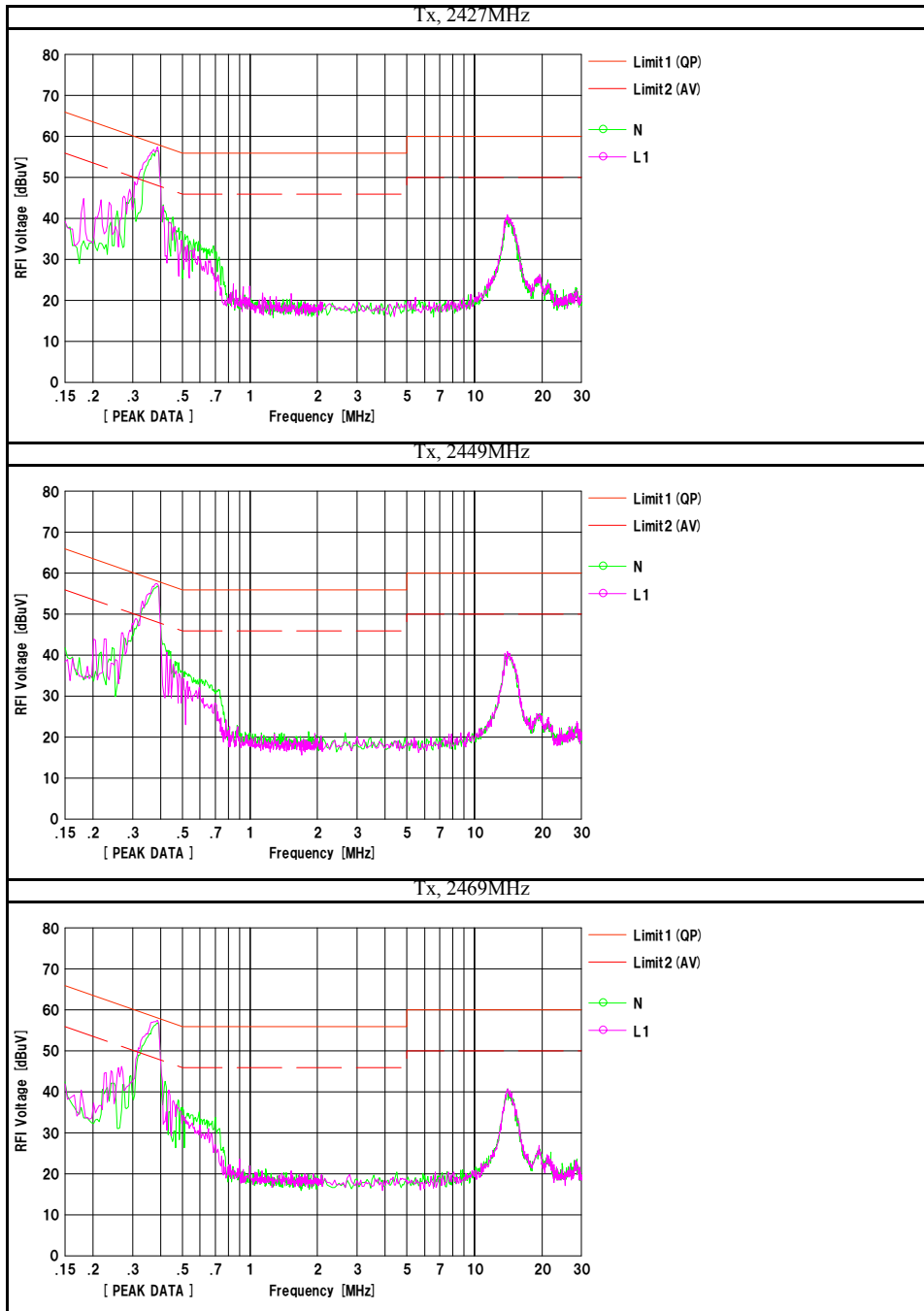


No.	Freq. [MHz]	Reading		C.Fac [dB]	Results		Limit		Margin		Phase	Comment
		<QP> [dBuV]	<AV> [dBuV]		<QP> [dBuV]	<AV> [dBuV]	<QP> [dB]	<AV> [dB]	<QP> [dB]	<AV> [dB]		
1	0.20983	18.6	7.3	9.7	28.3	17.0	63.2	53.2	34.9	36.2	N	
2	0.38799	44.7	23.4	9.7	54.4	33.1	58.1	48.1	3.7	15.0	N	
3	0.68736	17.5	1.9	9.7	27.2	11.6	56.0	46.0	28.8	34.4	N	
4	14.16489	26.8	20.9	10.3	37.1	31.2	60.0	50.0	22.9	18.8	N	
5	19.28644	10.1	4.7	10.5	20.6	15.2	60.0	50.0	39.4	34.8	N	
6	21.22893	7.3	2.3	10.7	18.0	13.0	60.0	50.0	42.0	37.0	N	
7	0.20983	20.1	7.8	9.7	29.8	17.5	63.2	53.2	33.4	35.7	L1	
8	0.38799	45.3	23.6	9.7	55.0	33.3	58.1	48.1	3.1	14.8	L1	
9	0.38838	12.5	-1.4	9.7	22.2	8.3	58.1	48.1	35.9	39.8	L1	
10	14.16489	27.0	21.5	10.3	37.3	31.8	60.0	50.0	22.7	18.2	L1	
11	19.28644	10.4	5.3	10.5	20.9	15.8	60.0	50.0	39.1	34.2	L1	
12	21.22893	7.6	2.7	10.7	18.3	13.4	60.0	50.0	41.7	36.6	L1	

Calculation:Result [dBuV] =Reading [dBuV] +C.Fac (LISN+Cable) [dB]

Conducted Emission

Test place : UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
 Date : 2009/12/29
 Temperature / Humidity : 24 deg.C, 30%
 Engineer : Kenichi Adachi
 Mode : Tx,
 (M/N: RAS26E S/N: EP2-43)

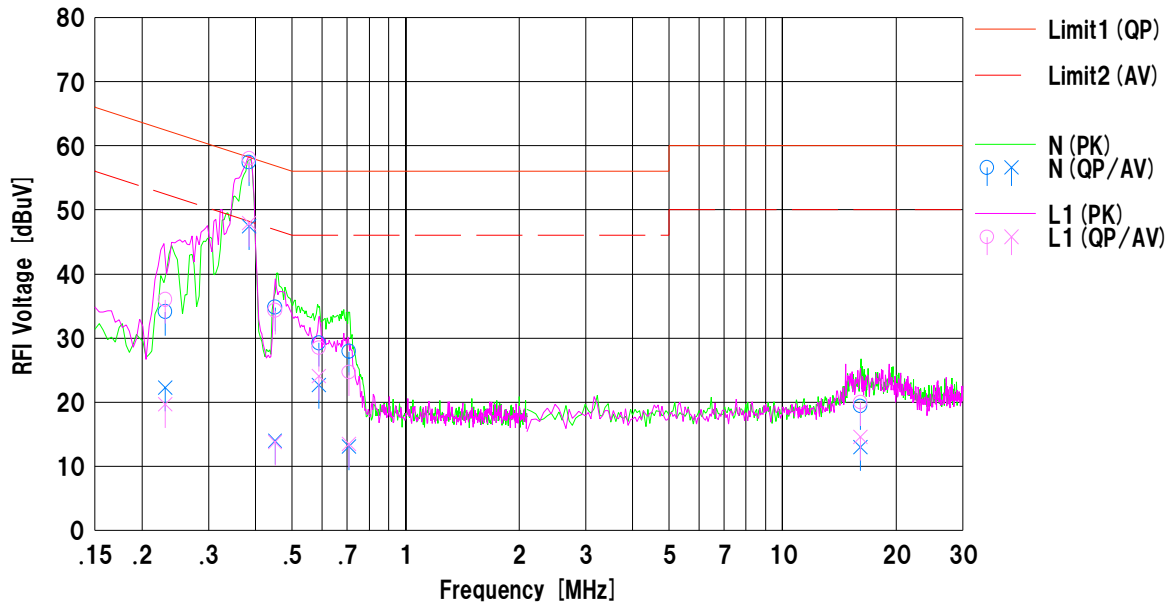


Y scale [dBuV]

Chart — N — L

Conducted Emission

Test place : UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2009/12/29
Temperature / Humidity : 24 deg.C. , 30%
Engineer : Kenichi Adachi
Mode : Standby
(M/N: RAS26 S/N: EP2-13)

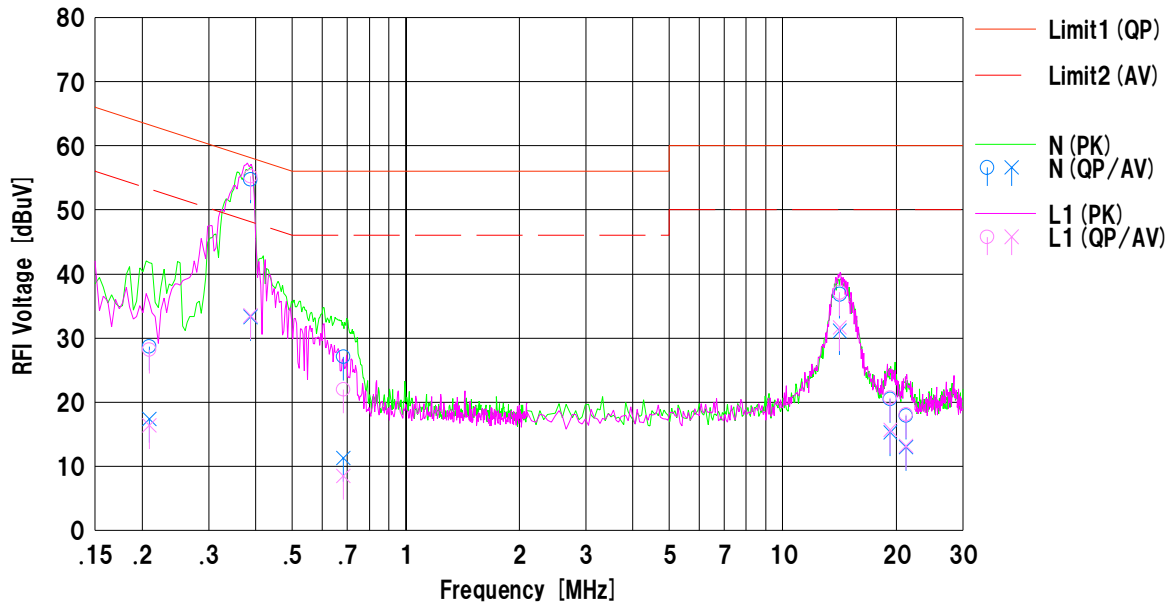


No.	Freq. [MHz]	Reading		C.Fac	Results		Limit		Margin		Phase	Comment
		<QP> [dBuV]	<AV> [dBuV]		<QP> [dBuV]	<AV> [dBuV]	<QP> [dBuV]	<AV> [dBuV]	<QP> [dB]	<AV> [dB]		
1	0.23048	24.4	12.6	9.7	34.1	22.3	62.4	52.4	28.3	30.1	N	
2	0.38389	47.7	37.7	9.7	57.4	47.4	58.2	48.2	0.8	0.8	N	
3	0.45022	25.1	4.3	9.7	34.8	14.0	56.9	46.9	22.1	32.9	N	
4	0.58877	19.5	13.0	9.7	29.2	22.7	56.0	46.0	26.8	23.3	N	
5	0.70802	18.2	3.4	9.7	27.9	13.1	56.0	46.0	28.1	32.9	N	
6	16.07857	9.0	2.6	10.4	19.4	13.0	60.0	50.0	40.6	37.0	N	
7	0.23048	26.3	10.0	9.7	36.0	19.7	62.4	52.4	26.4	32.7	L1	
8	0.38466	48.3	38.2	9.7	58.0	47.9	58.2	48.2	0.2	0.3	L1	
9	0.45022	24.6	4.1	9.7	34.3	13.8	56.9	46.9	22.6	33.1	L1	
10	0.58877	18.8	14.4	9.7	28.5	24.1	56.0	46.0	27.5	21.9	L1	
11	0.70802	15.0	3.8	9.7	24.7	13.5	56.0	46.0	31.3	32.5	L1	
12	16.10121	9.6	4.2	10.4	20.0	14.6	60.0	50.0	40.0	35.4	L1	

Calculation:Result [dBuV] =Reading [dBuV] +C.Fac (LISN+Cable) [dB]

Conducted Emission

Test place : UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2009/12/29
Temperature / Humidity : 24 deg.C, 30%
Engineer : Kenichi Adachi
Mode : Standby
(M/N: RAS26E S/N: EP2-43)



No.	Freq. [MHz]	Reading		C.Fac [dB]	Results		Limit		Margin		Phase	Comment
		<QP> [dBuV]	<AV> [dBuV]		<QP> [dBuV]	<AV> [dBuV]	<QP> [dB]	<AV> [dB]				
1	0.20871	19.0	7.7	9.7	28.7	17.4	63.3	53.3	34.6	35.9	N	
2	0.38795	45.0	23.6	9.7	54.7	33.3	58.1	48.1	3.4	14.8	N	
3	0.68358	17.4	1.6	9.7	27.1	11.3	56.0	46.0	28.9	34.7	N	
4	14.16546	26.5	20.8	10.3	36.8	31.1	60.0	50.0	23.2	18.9	N	
5	19.28707	10.0	4.8	10.5	20.5	15.3	60.0	50.0	39.5	34.7	N	
6	21.23270	7.2	2.3	10.7	17.9	13.0	60.0	50.0	42.1	37.0	N	
7	0.20871	18.5	6.7	9.7	28.2	16.4	63.3	53.3	35.1	36.9	L1	
8	0.38795	45.5	23.8	9.7	55.2	33.5	58.1	48.1	2.9	14.6	L1	
9	0.68358	12.3	-1.2	9.7	22.0	8.5	56.0	46.0	34.0	37.5	L1	
10	14.16546	26.8	21.4	10.3	37.1	31.7	60.0	50.0	22.9	18.3	L1	
11	19.28707	10.2	5.2	10.5	20.7	15.7	60.0	50.0	39.3	34.3	L1	
12	21.23270	7.4	2.5	10.7	18.1	13.2	60.0	50.0	41.9	36.8	L1	

Calculation: Result [dBuV] = Reading [dBuV] + C.Fac (LISN+Cable) [dB]

20dB Bandwidth and Carrier Frequency Separation

Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
Date 2009/11/30
Temperature / Humidity 24deg.C. , 34%
Engineer Tatsuya Arai
Mode Tx,
 (M/N: RAS26 S/N: EP2-13)

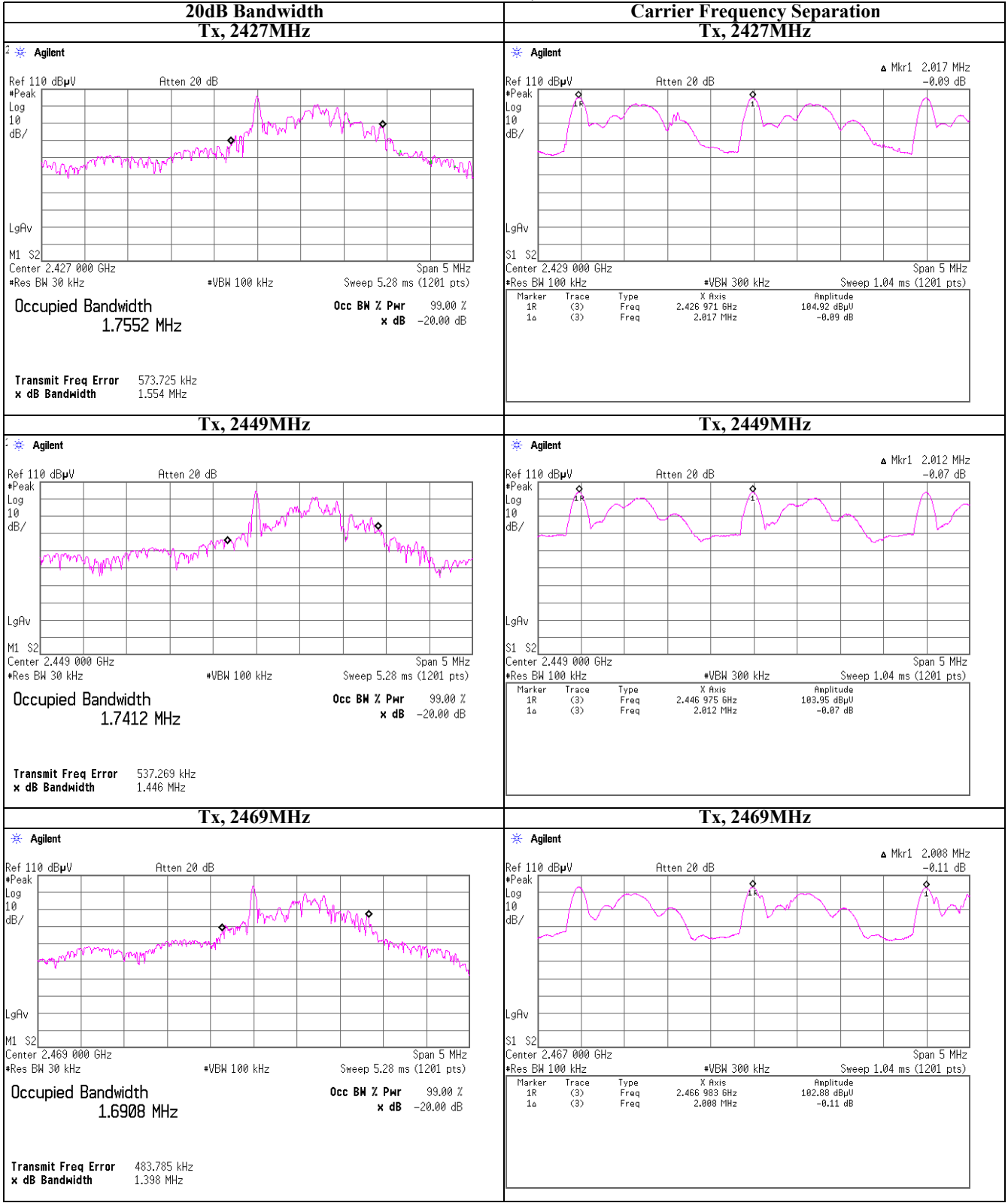
Mode	Freq. [MHz]	20dB Bandwidth [MHz]	Carrier Frequency Separation [MHz]	Limit for Carrier Frequency Separation [MHz]
Hopping off	2402.0	1.554	2.017	>= 1.554
Hopping off	2441.0	1.446	2.012	>= 1.446
Hopping off	2480.0	1.398	2.008	>= 1.398

Limit: 20dB Bandwidth or 25kHz (whichever is greater).

No limit applies to 20dB Bandwidth.

20dB Bandwidth and Carrier Frequency Separation

(RAS26)



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Number of Hopping Frequency (Conducted)

Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
Date 2009/11/30
Temperature / Humidity 24deg.C. , 34%
Engineer Tatsuya Arai
Mode Tx,
(M/N: RAS26 S/N: EP2-13)

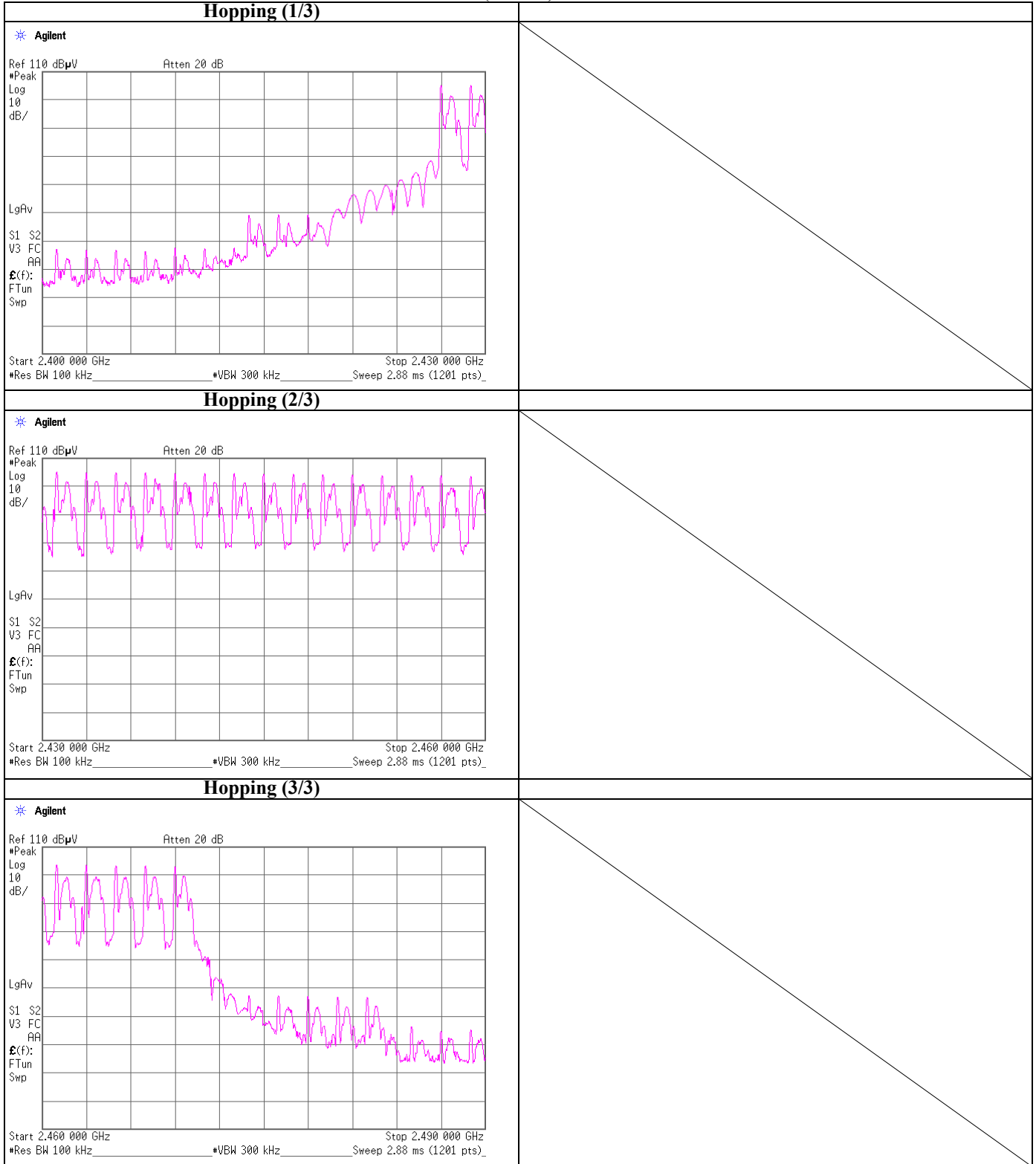
Mode	Number of Channel [times]	Limit [times]
Hopping	22	>=15

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Number of Hopping Frequency

(RAS26)



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Dwell Time (Conducted)

Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
Date 2009/11/30
Temperature / Humidity 24deg.C. , 34%
Engineer Tatsuya Arai
Mode Tx,
 (M/N: RAS26 S/N: EP2-13)

Mode	Number of transmission in a 8.8(22 Hopping x 0.4)	Length of transmission time [msec]	Result [msec]	Limit [msec]
Hopping	5.0 times / 5 sec. x 8.8 sec. = 9 times	12.570	113	400

Sample Calculation

Result = Number of transmission x Length of transmission time

*Average data of 5 tests.

Mode	Sampling [times]					Average [times]
	1	2	3	4	5	
Hopping	5	5	5	5	5	5

Sample Calculation

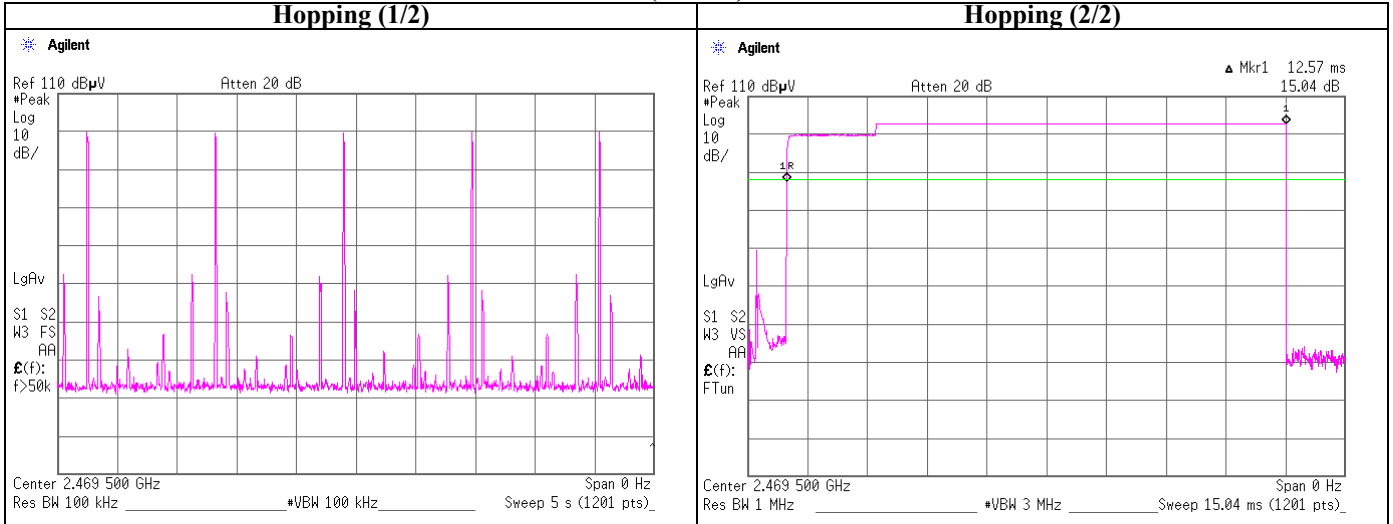
Average= Summation(Sampling 1 to 5) / 5

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Dwell time

(RAS26)



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Peak Output Power (Conducted)

Test place UL Japan, Inc. Shonan EMC Lab. No.5 Shielded Room
Date 2009/11/30
Temperature / Humidity 24deg.C. , 34%
Engineer Tatsuya Arai
Mode Tx,
(M/N: RAS26 S/N: EP2-13)

Ch	Freq. [MHz]	P/M (PK) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result		Limit		Margin [dB]
					[dBm]	[mW]	[dBm]	[mW]	
Low	2427.0	-1.76	1.31	10.00	9.55	9.02	30.00	1000	20.45
Mid	2449.0	-2.83	1.30	10.00	8.47	7.03	30.00	1000	21.53
High	2469.0	-3.95	1.30	10.00	7.35	5.43	30.00	1000	22.65

Sample Calculation:

Result = Reading + Cable Loss + Atten. Loss

* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

*The test result is rounded off to one or two decimal places, so some differences might be observed.

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Spurious Emission (Radiated)

Test place : UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2009/11/24
Temperature / Humidity : 26deg.C. , 33%
Engineer : Makoto Hosaka
Mode : Tx, 2427 MHz
(M/N: RAS26 S/N: EP2-13)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	122.164	QP	43.4	13.2	7.3	32.0	31.9	43.5	11.6	321	303	
Hori.	153.507	QP	44.4	14.7	7.5	32.0	34.6	43.5	8.9	212	302	
Hori.	337.540	QP	45.5	14.6	8.4	31.9	36.6	46.0	9.4	100	171	
Hori.	600.031	QP	43.4	19.0	9.4	31.9	39.9	46.0	6.1	120	93	
Hori.	723.306	QP	41.1	20.4	9.8	31.7	39.6	46.0	6.4	100	314	
Hori.	771.523	QP	40.6	20.6	9.9	31.7	39.4	46.0	6.6	100	299	
Hori.	1499.921	PK	53.1	24.8	12.7	39.6	51.0	73.9	22.9	100	302	
Hori.	2390.000	PK	47.1	27.6	13.4	39.8	48.3	73.9	25.6	100	297	
Hori.	2400.000	PK	47.9	27.6	13.6	39.8	49.3	73.9	24.6	100	297	
Hori.	2985.972	PK	52.0	28.5	4.9	40.1	45.3	73.9	28.6	100	237	
Hori.	4854.000	PK	65.0	30.8	5.7	39.5	62.0	73.9	11.9	100	292	
Hori.	5998.380	PK	52.0	33.2	6.3	38.2	53.3	73.9	20.6	100	316	
Hori.	7281.000	PK	58.9	36.0	6.9	38.4	63.4	73.9	10.5	100	225	
Hori.	9708.000	PK	54.2	38.4	7.8	36.9	63.5	73.9	10.4	100	68	
Hori.	12135.000	PK	47.2	39.7	8.9	37.8	58.0	73.9	15.9	100	0	
Hori.	1499.921	AV	44.1	24.8	12.7	39.6	42.0	53.9	-	100	302	VBW:10Hz, Reference data
Hori.	2390.000	AV	33.9	27.6	13.4	39.8	35.1	53.9	-	100	297	VBW:30Hz, Reference data
Hori.	2400.000	AV	34.6	27.6	13.6	39.8	36.0	53.9	-	100	297	VBW:30Hz, Reference data
Hori.	2985.972	AV	47.4	28.5	4.9	40.1	40.7	53.9	-	100	237	VBW:10Hz, Reference data
Hori.	4854.000	AV	56.3	30.8	5.7	39.5	53.3	53.9	-	100	292	VBW:30Hz, Reference data
Hori.	5998.380	AV	34.9	33.2	6.3	38.2	36.2	53.9	-	100	316	VBW:10Hz, Reference data
Hori.	7281.000	AV	50.1	36.0	6.9	38.4	54.6	53.9	-	100	225	VBW:30Hz, Reference data
Hori.	9708.000	AV	38.3	38.4	7.8	36.9	47.6	53.9	-	100	68	VBW:30Hz, Reference data
Hori.	12135.000	AV	33.5	39.7	8.9	37.8	44.3	53.9	-	100	0	VBW:30Hz, Reference data
Vert.	35.762	QP	43.4	16.3	6.6	32.1	34.2	40.0	5.8	100	179	
Vert.	122.500	QP	46.9	13.2	7.3	32.0	35.4	43.5	8.1	100	28	
Vert.	153.507	QP	44.8	14.7	7.5	32.0	35.0	43.5	8.5	100	357	
Vert.	819.753	QP	39.8	21.0	10.1	31.6	39.3	46.0	6.7	108	64	
Vert.	867.970	QP	38.9	21.5	10.2	31.2	39.4	46.0	6.6	100	76	
Vert.	1499.921	PK	56.2	24.8	12.7	39.6	54.1	73.9	19.8	122	336	
Vert.	2390.000	PK	45.7	27.6	13.4	39.8	46.9	73.9	27.0	100	0	
Vert.	2400.000	PK	47.0	27.6	13.6	39.8	48.4	73.9	25.5	100	0	
Vert.	2999.976	PK	58.1	28.5	4.8	40.1	51.3	73.9	22.6	100	297	
Vert.	4854.000	PK	62.9	30.8	5.7	39.5	59.9	73.9	14.0	100	35	
Vert.	5998.380	PK	51.5	33.2	6.3	38.2	52.8	73.9	21.1	100	349	
Vert.	7281.000	PK	63.1	36.0	6.9	38.4	67.6	73.9	6.3	183	314	
Vert.	9708.000	PK	44.2	38.4	7.8	36.9	53.5	73.9	20.4	100	0	
Vert.	12135.000	PK	46.7	39.7	8.9	37.8	57.5	73.9	16.4	100	0	
Vert.	1499.921	AV	48.3	24.8	12.7	39.6	46.2	53.9	-	122	336	VBW:10Hz, Reference data
Vert.	2390.000	AV	33.8	27.6	13.4	39.8	35.0	53.9	-	100	0	VBW:30Hz, Reference data
Vert.	2400.000	AV	33.9	27.6	13.6	39.8	35.3	53.9	-	100	0	VBW:30Hz, Reference data
Vert.	2999.976	AV	49.1	28.5	4.8	40.1	42.3	53.9	-	100	297	VBW:10Hz, Reference data
Vert.	4854.000	AV	54.5	30.8	5.7	39.5	51.5	53.9	-	100	35	VBW:30Hz, Reference data
Vert.	5998.380	AV	35.2	33.2	6.3	38.2	36.5	53.9	-	100	349	VBW:10Hz, Reference data
Vert.	7281.000	AV	53.9	36.0	6.9	38.4	58.4	53.9	-	183	314	VBW:30Hz, Reference data
Vert.	9708.000	AV	35.9	38.4	7.8	36.9	45.2	53.9	-	100	0	VBW:30Hz, Reference data
Vert.	12135.000	AV	33.6	39.7	8.9	37.8	44.4	53.9	-	100	0	VBW:30Hz, Reference data

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).
*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 18GHz-40.0GHz 20log(3.0m/1.0m)= 9.5dB

AV measurement (Dwell time factor relaxation)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Dwell Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	1499.921	AV	44.1	24.8	12.7	39.6	-18.0	24.0	53.9	29.9	
Hori.	2390.000	AV	33.9	27.6	13.4	39.8	-18.0	17.1	53.9	36.8	
Hori.	2400.000	AV	34.6	27.6	13.6	39.8	-18.0	18.0	53.9	35.9	
Hori.	2985.972	AV	47.4	28.5	4.9	40.1	-18.0	22.7	53.9	31.2	
Hori.	4854.000	AV	56.3	30.8	5.7	39.5	-18.0	35.3	53.9	18.6	
Hori.	5998.380	AV	34.9	33.2	6.3	38.2	-18.0	18.2	53.9	35.7	
Hori.	7281.000	AV	50.1	36.0	6.9	38.4	-18.0	36.6	53.9	17.3	
Hori.	9708.000	AV	38.3	38.4	7.8	36.9	-18.0	29.6	53.9	24.3	
Hori.	12135.000	AV	33.5	39.7	8.9	37.8	-18.0	26.3	53.9	27.6	
Vert.	1499.921	AV	48.3	24.8	12.7	39.6	-18.0	28.2	53.9	25.7	
Vert.	2390.000	AV	33.8	27.6	13.4	39.8	-18.0	17.0	53.9	36.9	
Vert.	2400.000	AV	33.9	27.6	13.6	39.8	-18.0	17.3	53.9	36.6	
Vert.	2999.976	AV	49.1	28.5	4.8	40.1	-18.0	24.3	53.9	29.6	
Vert.	4854.000	AV	54.5	30.8	5.7	39.5	-18.0	33.5	53.9	20.4	
Vert.	5998.380	AV	35.2	33.2	6.3	38.2	-18.0	18.5	53.9	35.4	
Vert.	7281.000	AV	53.9	36.0	6.9	38.4	-18.0	40.4	53.9	13.5	
Vert.	9708.000	AV	35.9	38.4	7.8	36.9	-18.0	27.2	53.9	26.7	
Vert.	12135.000	AV	33.6	39.7	8.9	37.8	-18.0	26.4	53.9	27.5	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier) + Dwell time factor (Refer to dwell time data sheet)
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).
*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 18GHz-40.0GHz 20log(3.0m/1.0m)= 9.5dB

Spurious Emission (Radiated)

Test place : UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2009/11/24
Temperature / Humidity : 26deg.C. , 33%
Engineer : Makoto Hosaka
Mode : Tx, 2449 MHz
(M/N: RAS26 S/N: EP2-13)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	122.080	QP	42.7	13.2	7.3	32.0	31.2	43.5	12.3	150	322	
Hori.	153.159	QP	44.8	14.7	7.5	32.0	35.0	43.5	8.5	228	120	
Hori.	337.550	QP	45.9	14.6	8.4	31.9	37.0	46.0	9.0	100	165	
Hori.	600.033	QP	43.2	19.0	9.4	31.9	39.7	46.0	6.3	122	92	
Hori.	723.327	QP	41.8	20.4	9.8	31.7	40.3	46.0	5.7	100	308	
Hori.	771.538	QP	40.1	20.6	9.9	31.7	38.9	46.0	7.1	100	301	
Hori.	1499.921	PK	53.5	24.8	12.7	39.6	51.4	73.9	22.5	100	301	
Hori.	2985.972	PK	47.7	28.5	4.9	40.1	41.0	73.9	32.9	100	281	
Hori.	4898.000	PK	66.9	30.9	5.8	39.5	64.1	73.9	9.8	102	129	
Hori.	5998.380	PK	52.1	33.2	6.3	38.2	53.4	73.9	20.5	100	316	
Hori.	7347.000	PK	60.2	36.0	7.0	38.4	64.8	73.9	9.1	100	147	
Hori.	9796.000	PK	44.4	38.3	7.9	37.0	53.6	73.9	20.3	100	68	
Hori.	12245.000	PK	44.9	39.7	9.1	37.6	56.1	73.9	17.8	100	0	
Hori.	1499.921	AV	44.2	24.8	12.7	39.6	42.1	53.9	-	100	301	VBW:10Hz, Reference data
Hori.	2985.972	AV	34.8	28.5	4.9	40.1	28.1	53.9	-	100	281	VBW:10Hz, Reference data
Hori.	4898.000	AV	58.1	30.9	5.8	39.5	55.3	53.9	-	102	129	VBW:30Hz, Reference data
Hori.	5998.380	AV	34.8	33.2	6.3	38.2	36.1	53.9	-	100	316	VBW:10Hz, Reference data
Hori.	7347.000	AV	49.7	36.0	7.0	38.4	54.3	53.9	-	100	147	VBW:30Hz, Reference data
Hori.	9796.000	AV	32.4	38.3	7.9	37.0	41.6	53.9	-	100	68	VBW:30Hz, Reference data
Hori.	12245.000	AV	33.1	39.7	9.1	37.6	44.3	53.9	-	100	0	VBW:30Hz, Reference data
Vert.	35.720	QP	43.3	16.3	6.6	32.1	34.1	40.0	5.9	100	182	
Vert.	122.184	QP	47.2	13.2	7.3	32.0	35.7	43.5	7.8	100	1	
Vert.	153.780	QP	45.7	14.7	7.5	32.0	35.9	43.5	7.6	100	1	
Vert.	819.778	QP	39.1	21.0	10.1	31.6	38.6	46.0	7.4	115	61	
Vert.	867.992	QP	38.1	21.5	10.2	31.2	38.6	46.0	7.4	100	79	
Vert.	1499.921	PK	56.2	24.8	12.7	39.6	54.1	73.9	19.8	122	329	
Vert.	2999.976	PK	56.5	28.5	4.8	40.1	49.7	73.9	24.2	100	295	
Vert.	4898.000	PK	62.1	30.9	5.8	39.5	59.3	73.9	14.6	100	206	
Vert.	5998.380	PK	53.6	33.2	6.3	38.2	54.9	73.9	19.0	100	357	
Vert.	7347.000	PK	56.7	36.0	7.0	38.4	61.3	73.9	12.6	190	283	
Vert.	9796.000	PK	45.8	38.3	7.9	37.0	55.0	73.9	18.9	100	0	
Vert.	12245.000	PK	44.8	39.7	9.1	37.6	56.0	73.9	17.9	100	0	
Vert.	1499.921	AV	48.6	24.8	12.7	39.6	46.5	53.9	-	122	329	VBW:10Hz, Reference data
Vert.	2999.976	AV	48.1	28.5	4.8	40.1	41.3	53.9	-	100	295	VBW:10Hz, Reference data
Vert.	4898.000	AV	53.2	30.9	5.8	39.5	50.4	53.9	-	100	206	VBW:30Hz, Reference data
Vert.	5998.380	AV	35.3	33.2	6.3	38.2	36.6	53.9	-	100	357	VBW:10Hz, Reference data
Vert.	7347.000	AV	51.7	36.0	7.0	38.4	56.3	53.9	-	190	283	VBW:30Hz, Reference data
Vert.	9796.000	AV	32.7	38.3	7.9	37.0	41.9	53.9	-	100	0	VBW:30Hz, Reference data
Vert.	12245.000	AV	33.1	39.7	9.1	37.6	44.3	53.9	-	100	0	VBW:30Hz, Reference data

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 18GHz-40.0GHz 20log(3.0m/1.0m)= 9.5dB

AV measurement (Dwell time factor relaxation)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Dwell Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	1499.921	AV	44.2	24.8	12.7	39.6	-18.0	24.1	53.9	29.8	
Hori.	2985.972	AV	34.8	28.5	4.9	40.1	-18.0	10.1	53.9	43.8	
Hori.	4898.000	AV	58.1	30.9	5.8	39.5	-18.0	37.3	53.9	16.6	
Hori.	5998.380	AV	34.8	33.2	6.3	38.2	-18.0	18.1	53.9	35.8	
Hori.	7347.000	AV	49.7	36.0	7.0	38.4	-18.0	36.3	53.9	17.6	
Hori.	9796.000	AV	32.4	38.3	7.9	37.0	-18.0	23.6	53.9	30.3	
Hori.	12245.000	AV	33.1	39.7	9.1	37.6	-18.0	26.3	53.9	27.6	
Vert.	1499.921	AV	48.6	24.8	12.7	39.6	-18.0	28.5	53.9	25.4	
Vert.	2999.976	AV	48.1	28.5	4.8	40.1	-18.0	23.3	53.9	30.6	
Vert.	4898.000	AV	53.2	30.9	5.8	39.5	-18.0	32.4	53.9	21.5	
Vert.	5998.380	AV	35.3	33.2	6.3	38.2	-18.0	18.6	53.9	35.3	
Vert.	7347.000	AV	51.7	36.0	7.0	38.4	-18.0	38.3	53.9	15.6	
Vert.	9796.000	AV	32.7	38.3	7.9	37.0	-18.0	23.9	53.9	30.0	
Vert.	12245.000	AV	33.1	39.7	9.1	37.6	-18.0	26.3	53.9	27.6	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz))

- Gain(Amplifier) + Dwell time factor (Refer to dwell time data sheet)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 18GHz-40.0GHz 20log(3.0m/1.0m)= 9.5dB

Spurious Emission (Radiated)

Test place : UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2009/11/24
Temperature / Humidity : 26deg.C. , 33%
Engineer : Makoto Hosaka
Mode : Tx, 2469 MHz
(M/N: RAS26 S/N: EP2-13)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	122.264	QP	43.6	13.2	7.3	32.0	32.1	43.5	11.4	297	304	
Hori.	153.507	QP	43.0	14.7	7.5	32.0	33.2	43.5	10.3	272	293	
Hori.	337.553	QP	45.3	14.6	8.4	31.9	36.4	46.0	9.6	100	172	
Hori.	600.277	QP	43.2	19.0	9.4	31.9	39.7	46.0	6.3	118	95	
Hori.	723.319	QP	41.1	20.4	9.8	31.7	39.6	46.0	6.4	100	285	
Hori.	771.535	QP	39.7	20.6	9.9	31.7	38.5	46.0	7.5	100	295	
Hori.	1499.921	PK	52.8	24.8	12.7	39.6	50.7	73.9	23.2	100	302	
Hori.	2483.500	PK	50.3	27.9	13.6	39.8	52.0	73.9	21.9	137	310	
Hori.	2999.976	PK	53.8	28.5	4.8	40.1	47.0	73.9	26.9	100	237	
Hori.	4938.000	PK	65.9	31.0	5.9	39.4	63.4	73.9	10.5	100	334	
Hori.	5998.380	PK	51.5	33.2	6.3	38.2	52.8	73.9	21.1	100	315	
Hori.	7407.000	PK	57.6	35.9	7.0	38.5	62.0	73.9	11.9	100	52	
Hori.	9876.000	PK	55.0	38.3	7.9	37.0	64.2	73.9	9.7	100	89	
Hori.	12345.000	PK	46.1	39.7	9.4	37.4	57.8	73.9	16.1	100	0	
Hori.	1499.921	AV	44.2	24.8	12.7	39.6	42.1	53.9	-	100	302	VBW:10Hz, Reference data
Hori.	2483.500	AV	37.7	27.9	13.6	39.8	39.4	53.9	-	137	310	VBW:30Hz, Reference data
Hori.	2999.976	AV	47.2	28.5	4.8	40.1	40.4	53.9	-	100	237	VBW:10Hz, Reference data
Hori.	4938.000	AV	53.9	31.0	5.9	39.4	51.4	53.9	-	100	334	VBW:30Hz, Reference data
Hori.	5998.380	AV	34.9	33.2	6.3	38.2	36.2	53.9	-	100	315	VBW:10Hz, Reference data
Hori.	7407.000	AV	49.0	35.9	7.0	38.5	53.4	53.9	-	100	52	VBW:30Hz, Reference data
Hori.	9876.000	AV	35.3	38.3	7.9	37.0	44.5	53.9	-	100	89	VBW:30Hz, Reference data
Hori.	12345.000	AV	33.7	39.7	9.4	37.4	45.4	53.9	-	100	0	VBW:30Hz, Reference data
Vert.	35.800	QP	43.3	16.3	6.6	32.1	34.1	40.0	5.9	100	167	
Vert.	122.144	QP	47.0	13.2	7.3	32.0	35.5	43.5	8.0	100	330	
Vert.	153.678	QP	44.7	14.7	7.5	32.0	34.9	43.5	8.6	100	1	
Vert.	819.748	QP	40.2	21.0	10.1	31.6	39.7	46.0	6.3	112	63	
Vert.	867.972	QP	37.0	21.5	10.2	31.2	37.5	46.0	8.5	100	87	
Vert.	1499.921	PK	56.6	24.8	12.7	39.6	54.5	73.9	19.4	124	330	
Vert.	2483.500	PK	47.9	27.9	13.6	39.8	49.6	73.9	24.3	118	304	
Vert.	2999.976	PK	57.3	28.5	4.8	40.1	50.5	73.9	23.4	119	310	
Vert.	4938.000	PK	63.4	31.0	5.9	39.4	60.9	73.9	13.0	100	267	
Vert.	5998.380	PK	53.2	33.2	6.3	38.2	54.5	73.9	19.4	100	352	
Vert.	7407.000	PK	62.6	35.9	7.0	38.5	67.0	73.9	6.9	100	95	
Vert.	9876.000	PK	50.1	38.3	7.9	37.0	59.3	73.9	14.6	100	110	
Vert.	12345.000	PK	45.0	39.7	9.4	37.4	56.7	73.9	17.2	100	0	
Vert.	1499.921	AV	48.4	24.8	12.7	39.6	46.3	53.9	-	124	330	VBW:10Hz, Reference data
Vert.	2483.500	AV	35.3	27.9	13.6	39.8	37.0	53.9	-	118	304	VBW:30Hz, Reference data
Vert.	2999.976	AV	50.9	28.5	4.8	40.1	44.1	53.9	-	119	310	VBW:10Hz, Reference data
Vert.	4938.000	AV	53.9	31.0	5.9	39.4	51.4	53.9	-	100	267	VBW:30Hz, Reference data
Vert.	5998.380	AV	35.0	33.2	6.3	38.2	36.3	53.9	-	100	352	VBW:10Hz, Reference data
Vert.	7407.000	AV	51.1	35.9	7.0	38.5	55.5	53.9	-	100	95	VBW:30Hz, Reference data
Vert.	9876.000	AV	34.6	38.3	7.9	37.0	43.8	53.9	-	100	110	VBW:30Hz, Reference data
Vert.	12345.000	AV	33.5	39.7	9.4	37.4	45.2	53.9	-	100	0	VBW:30Hz, Reference data

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 18GHz-40.0GHz 20log(3.0m/1.0m)= 9.5dB

AV measurement (Dwell time factor relaxation)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Dwell Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	1499.921	AV	44.2	24.8	12.7	39.6	-18.0	24.1	53.9	29.8	
Hori.	2483.500	AV	37.7	27.9	13.6	39.8	-18.0	21.4	53.9	32.5	
Hori.	2999.976	AV	47.2	28.5	4.8	40.1	-18.0	22.4	53.9	31.5	
Hori.	4938.000	AV	53.9	31.0	5.9	39.4	-18.0	33.4	53.9	20.5	
Hori.	5998.380	AV	34.9	33.2	6.3	38.2	-18.0	18.2	53.9	35.7	
Hori.	7407.000	AV	49.0	35.9	7.0	38.5	-18.0	35.4	53.9	18.5	
Hori.	9876.000	AV	35.3	38.3	7.9	37.0	-18.0	26.5	53.9	27.4	
Hori.	12345.000	AV	33.7	39.7	9.4	37.4	-18.0	27.4	53.9	26.5	
Vert.	1499.921	AV	48.4	24.8	12.7	39.6	-18.0	28.3	53.9	25.6	
Vert.	2483.500	AV	35.3	27.9	13.6	39.8	-18.0	19.0	53.9	34.9	
Vert.	2999.976	AV	50.9	28.5	4.8	40.1	-18.0	26.1	53.9	27.8	
Vert.	4938.000	AV	53.9	31.0	5.9	39.4	-18.0	33.4	53.9	20.5	
Vert.	5998.380	AV	35.0	33.2	6.3	38.2	-18.0	18.3	53.9	35.6	
Vert.	7407.000	AV	51.1	35.9	7.0	38.5	-18.0	37.5	53.9	16.4	
Vert.	9876.000	AV	34.6	38.3	7.9	37.0	-18.0	25.8	54.9	29.1	
Vert.	12345.000	AV	33.5	39.7	9.4	37.4	-18.0	27.2	55.9	28.7	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz))

- Gain(Amplifier) + Dwell time factor (Refer to dwell time data sheet)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 18GHz-40.0GHz 20log(3.0m/1.0m)= 9.5dB

Spurious Emission (Radiated)

Test place : UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2009/11/24
Temperature / Humidity : 26deg.C , 33%
Engineer : Makoto Hosaka
Mode : Standby
(M/N: RAS26 S/N: EP2-13)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	121.999	QP	42.7	13.2	7.3	32	31.2	43.5	12.3	233	309	
Hori.	153.427	QP	44.1	14.7	7.5	32	34.3	43.5	9.2	209	100	
Hori.	337.543	QP	45.8	14.6	8.4	31.9	36.9	46.0	9.1	100	167	
Hori.	600.025	QP	43.6	19	9.4	31.9	40.1	46.0	5.9	121	97	
Hori.	723.318	QP	41.9	20.4	9.8	31.7	40.4	46.0	5.6	104	312	
Hori.	1241.717	PK	59.2	24.3	2.5	39.7	46.3	73.9	27.6	112	30	
Hori.	1869.339	PK	56.0	26.0	3.0	39.8	45.2	73.9	28.7	114	109	
Hori.	1241.717	AV	53.9	24.3	2.5	39.7	41.0	53.9	12.9	112	30	
Hori.	1869.339	AV	53.3	26.0	3.0	39.8	42.5	53.9	11.4	114	109	
Vert.	35.812	QP	42.7	16.3	6.6	32.1	33.5	40.0	6.5	100	169	
Vert.	122.168	QP	47.1	13.2	7.3	32.0	35.6	43.5	7.9	100	33	
Vert.	153.607	QP	44.8	14.7	7.5	32.0	35.0	43.5	8.5	100	359	
Vert.	820.441	QP	39.4	21.0	10.1	31.6	38.9	46.0	7.1	100	27	
Vert.	867.991	QP	38.7	21.5	10.2	31.2	39.2	46.0	6.8	100	75	
Vert.	1046.894	PK	50.5	24.0	2.3	39.7	37.1	73.9	36.8	100	358	
Vert.	1869.339	PK	54.7	26.0	3.0	39.8	43.9	73.9	30.0	100	67	
Vert.	1046.894	AV	44.8	24.0	2.3	39.7	31.4	53.9	22.5	100	358	
Vert.	1869.339	AV	51.3	26.0	3.0	39.8	40.5	53.9	13.4	100	67	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 18GHz-40.0GHz 20log(3.0m/1.0m)= 9.5dB

Spurious Emission (Radiated)

Test place : UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2009/11/25
Temperature / Humidity : 24deg.C , 41%
Engineer : Makoto Hosaka
Mode : Tx, 2427 MHz
(M/N: RAS26E S/N: EP2-43)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	48.011	QP	38.6	12.3	6.7	32.1	25.5	40.0	14.5	400	230	
Hori.	440.041	QP	43.5	16.6	8.8	31.9	37.0	46.0	9.0	100	231	
Hori.	864.189	QP	43.4	21.4	10.2	31.2	43.8	46.0	2.2	100	94	
Hori.	950.047	QP	34.2	22.4	10.4	30.6	36.4	46.0	9.6	116	121	
Hori.	2390.000	PK	47.5	27.6	13.4	39.8	48.7	73.9	25.2	100	0	
Hori.	2400.000	PK	49.3	27.6	13.6	39.8	50.7	73.9	23.2	100	0	
Hori.	4854.000	PK	61.7	30.8	5.7	39.5	58.7	73.9	15.2	100	198	
Hori.	7281.000	PK	62.0	36.0	6.9	38.4	66.5	73.9	7.4	105	28	
Hori.	9708.000	PK	53.5	38.4	7.8	36.9	62.8	73.9	11.1	100	55	
Hori.	12135.000	PK	46.0	39.7	8.9	37.8	56.8	73.9	17.1	100	0	
Hori.	2390.000	AV	34.4	27.6	13.4	39.8	35.6	53.9	-	100	0	VBW:30Hz, Reference data
Hori.	2400.000	AV	35.0	27.6	13.6	39.8	36.4	53.9	-	100	0	VBW:30Hz, Reference data
Hori.	4854.000	AV	51.1	30.8	5.7	39.5	48.1	53.9	-	100	198	VBW:30Hz, Reference data
Hori.	7281.000	AV	49.1	36.0	6.9	38.4	53.6	53.9	-	105	28	VBW:30Hz, Reference data
Hori.	9708.000	AV	37.8	38.4	7.8	36.9	47.1	53.9	-	100	55	VBW:30Hz, Reference data
Hori.	12135.000	AV	33.5	39.7	8.9	37.8	44.3	53.9	-	100	0	VBW:30Hz, Reference data
Vert.	48.011	QP	41.4	12.3	6.7	32.1	28.3	40.0	11.7	100	100	
Vert.	240.048	QP	39.9	17.1	8.0	31.9	33.1	46.0	12.9	110	298	
Vert.	320.019	QP	38.8	14.2	8.4	31.9	29.5	46.0	16.5	165	265	
Vert.	360.026	QP	33.8	15.1	8.5	31.9	25.5	46.0	20.5	143	254	
Vert.	2390.000	PK	46.4	27.6	13.4	39.8	47.6	73.9	26.3	100	0	
Vert.	2400.000	PK	48.9	27.6	13.6	39.8	50.3	73.9	23.6	108	238	
Vert.	4854.000	PK	62.3	30.8	5.7	39.5	59.3	73.9	14.6	102	82	
Vert.	7281.000	PK	60.7	36.0	6.9	38.4	65.2	73.9	8.7	100	304	
Vert.	9708.000	PK	50.0	38.4	7.8	36.9	59.3	73.9	14.6	109	74	
Vert.	12135.000	PK	46.5	39.7	8.9	37.8	57.3	73.9	16.6	100	0	
Vert.	2390.000	AV	35.0	27.6	13.4	39.8	36.2	53.9	-	100	0	VBW:30Hz, Reference data
Vert.	2400.000	AV	39.3	27.6	13.6	39.8	40.7	53.9	-	108	238	VBW:30Hz, Reference data
Vert.	4854.000	AV	52.9	30.8	5.7	39.5	49.9	53.9	-	102	82	VBW:30Hz, Reference data
Vert.	7281.000	AV	51.2	36.0	6.9	38.4	55.7	53.9	-	100	304	VBW:30Hz, Reference data
Vert.	9708.000	AV	35.2	38.4	7.8	36.9	44.5	53.9	-	109	74	VBW:30Hz, Reference data
Vert.	12135.000	AV	33.5	39.7	8.9	37.8	44.3	53.9	-	100	0	VBW:30Hz, Reference data

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 18GHz-40.0GHz 20log(3.0m/1.0m)= 9.5dB

AV measurement (Dwell time factor relaxatio

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Dwell Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2390.000	AV	34.4	27.6	13.4	39.8	-18.0	17.6	53.9	36.3	
Hori.	2400.000	AV	35.0	27.6	13.6	39.8	-18.0	18.4	53.9	35.5	
Hori.	4854.000	AV	51.1	30.8	5.7	39.5	-18.0	30.1	53.9	23.8	
Hori.	7281.000	AV	49.1	36.0	6.9	38.4	-18.0	35.6	53.9	18.3	
Hori.	9708.000	AV	37.8	38.4	7.8	36.9	-18.0	29.1	53.9	24.8	
Hori.	12135.000	AV	33.5	39.7	8.9	37.8	-18.0	26.3	53.9	27.6	
Vert.	2390.000	AV	35.0	27.6	13.4	39.8	-18.0	18.2	53.9	35.7	
Vert.	2400.000	AV	39.3	27.6	13.6	39.8	-18.0	22.7	53.9	31.2	
Vert.	4854.000	AV	52.9	30.8	5.7	39.5	-18.0	31.9	53.9	22.0	
Vert.	7281.000	AV	51.2	36.0	6.9	38.4	-18.0	37.7	53.9	16.2	
Vert.	9708.000	AV	35.2	38.4	7.8	36.9	-18.0	26.5	53.9	27.4	
Vert.	12135.000	AV	33.5	39.7	8.9	37.8	-18.0	26.3	53.9	27.6	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz))

- Gain(Amplifier) + Dwell time factor (Refer to dwell time data sheet)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level

Distance factor: 18GHz-40.0GHz 20log(3.0m/1.0m)= 9.5dB

Spurious Emission (Radiated)

Test place : UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
 Date : 2009/11/25
 Temperature / Humidity : 24deg.C , 41%
 Engineer : Makoto Hosaka
 Mode : Tx, 2449 MHz
 (M/N: RAS26E S/N: EP2-43)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	48.011	QP	38.0	12.3	6.7	32.1	24.9	40.0	15.1	400	229	
Hori.	440.041	QP	44.0	16.6	8.8	31.9	37.5	46.0	8.5	100	225	
Hori.	864.189	QP	43.0	21.4	10.2	31.2	43.4	46.0	2.6	100	97	
Hori.	950.047	QP	34.7	22.4	10.4	30.6	36.9	46.0	9.1	115	123	
Hori.	4898.000	PK	61.3	30.9	5.8	39.5	58.5	73.9	15.4	100	208	
Hori.	7347.000	PK	59.8	36.0	7.0	38.4	64.4	73.9	9.5	100	50	
Hori.	9796.000	PK	53.4	38.3	7.9	37.0	62.6	73.9	11.3	100	55	
Hori.	12245.000	PK	46.2	39.7	9.1	37.6	57.4	73.9	16.5	100	0	
Hori.	4898.000	AV	54.0	30.9	5.8	39.5	51.2	53.9	-	100	208	VBW:30Hz, Reference data
Hori.	7347.000	AV	51.1	36.0	7.0	38.4	55.7	53.9	-	100	50	VBW:30Hz, Reference data
Hori.	9796.000	AV	36.8	38.3	7.9	37.0	46.0	53.9	-	100	55	VBW:30Hz, Reference data
Hori.	12245.000	AV	34.0	39.7	9.1	37.6	45.2	53.9	-	100	0	VBW:30Hz, Reference data
Vert.	48.011	QP	42.0	12.3	6.7	32.1	28.9	40.0	11.1	100	99	
Vert.	240.048	QP	40.2	17.1	8.0	31.9	33.4	46.0	12.6	110	300	
Vert.	320.019	QP	38.2	14.2	8.4	31.9	28.9	46.0	17.1	165	260	
Vert.	360.026	QP	33.1	15.1	8.5	31.9	24.8	46.0	21.2	140	256	
Vert.	4898.000	PK	60.7	30.9	5.8	39.5	57.9	73.9	16.0	100	49	
Vert.	7347.000	PK	60.9	36.0	7.0	38.4	65.5	73.9	8.4	161	313	
Vert.	9796.000	PK	47.9	38.3	7.9	37.0	57.1	73.9	16.8	113	258	
Vert.	12245.000	PK	46.8	39.7	9.1	37.6	58.0	73.9	15.9	100	0	
Vert.	4898.000	AV	51.0	30.9	5.8	39.5	48.2	53.9	-	100	49	VBW:30Hz, Reference data
Vert.	7347.000	AV	51.1	36.0	7.0	38.4	55.7	53.9	-	161	313	VBW:30Hz, Reference data
Vert.	9796.000	AV	35.2	38.3	7.9	37.0	44.4	53.9	-	113	258	VBW:30Hz, Reference data
Vert.	12245.000	AV	34.0	39.7	9.1	37.6	45.2	53.9	-	100	0	VBW:30Hz, Reference data

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 18GHz-40.0GHz 20log(3.0m/1.0m)= 9.5dB

AV measurement (Dwell time factor relaxatio

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Dwell Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	4898.000	AV	54.0	30.9	5.8	39.5	-18.0	33.2	53.9	20.7	
Hori.	7347.000	AV	51.1	36.0	7.0	38.4	-18.0	37.7	53.9	16.2	
Hori.	9796.000	AV	36.8	38.3	7.9	37.0	-18.0	28.0	53.9	25.9	
Hori.	12245.000	AV	34.0	39.7	9.1	37.6	-18.0	27.2	53.9	26.7	
Vert.	4898.000	AV	51.0	30.9	5.8	39.5	-18.0	30.2	53.9	23.7	
Vert.	7347.000	AV	51.1	36.0	7.0	38.4	-18.0	37.7	53.9	16.2	
Vert.	9796.000	AV	35.2	38.3	7.9	37.0	-18.0	26.4	53.9	27.5	
Vert.	12245.000	AV	34.0	39.7	9.1	37.6	-18.0	27.2	53.9	26.7	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)

- Gain(Amplifier) + Dwell time factor (Refer to dwell time data sheet)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level

Distance factor: 18GHz-40.0GHz 20log(3.0m/1.0m)= 9.5dB

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Shonan EMC Lab.

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Spurious Emission (Radiated)

Test place : UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2009/11/25
Temperature / Humidity : 24deg.C. , 41%
Engineer : Makoto Hosaka
Mode : Tx, 2469 MHz
(M/N: RAS26E S/N: EP2-43)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	48.011	QP	39.1	12.3	6.7	32.1	26.0	40.0	14.0	400	238	
Hori.	440.041	QP	43.7	16.6	8.8	31.9	37.2	46.0	8.8	100	222	
Hori.	864.189	QP	42.7	21.4	10.2	31.2	43.1	46.0	2.9	100	101	
Hori.	950.047	QP	35.1	22.4	10.4	30.6	37.3	46.0	8.7	113	125	
Hori.	2483.500	PK	58.2	27.9	13.6	39.8	59.9	73.9	14.0	100	254	
Hori.	4938.000	PK	65.3	31.0	5.9	39.4	62.8	73.9	11.1	100	123	
Hori.	7407.000	PK	59.6	35.9	7.0	38.5	64.0	73.9	9.9	100	76	
Hori.	9876.000	PK	48.4	38.3	7.9	37.0	57.6	73.9	16.3	110	246	
Hori.	12345.000	PK	46.9	39.7	9.4	37.4	58.6	73.9	15.3	100	0	
Hori.	2483.500	AV	49.1	27.9	13.6	39.8	50.8	53.9	-	100	254	VBW:30Hz, Reference data
Hori.	4938.000	AV	56.9	31.0	5.9	39.4	54.4	53.9	-	100	123	VBW:30Hz, Reference data
Hori.	7407.000	AV	52.3	35.9	7.0	38.5	56.7	53.9	-	100	76	VBW:30Hz, Reference data
Hori.	9876.000	AV	35.0	38.3	7.9	37.0	44.2	53.9	-	110	246	VBW:30Hz, Reference data
Hori.	12345.000	AV	33.9	39.7	9.4	37.4	45.6	53.9	-	100	0	VBW:30Hz, Reference data
Vert.	48.011	QP	42.0	12.3	6.7	32.1	28.9	40.0	11.1	100	98	
Vert.	240.048	QP	40.4	17.1	8.0	31.9	33.6	46.0	12.4	110	301	
Vert.	320.019	QP	37.8	14.2	8.4	31.9	28.5	46.0	17.5	167	257	
Vert.	360.026	QP	33.9	15.1	8.5	31.9	25.6	46.0	20.4	142	251	
Vert.	2483.500	PK	54.9	27.9	13.6	39.8	56.6	73.9	17.3	100	258	
Vert.	4938.000	PK	61.7	31.0	5.9	39.4	59.2	73.9	14.7	100	48	
Vert.	7407.000	PK	57.5	35.9	7.0	38.5	61.9	73.9	12.0	100	71	
Vert.	9876.000	PK	46.0	38.3	7.9	37.0	55.2	73.9	18.7	100	0	
Vert.	12345.000	PK	46.3	39.7	9.4	37.4	58.0	73.9	15.9	100	0	
Vert.	2483.500	AV	45.6	27.9	13.6	39.8	47.3	53.9	-	100	258	VBW:30Hz, Reference data
Vert.	4938.000	AV	53.2	31.0	5.9	39.4	50.7	53.9	-	100	48	VBW:30Hz, Reference data
Vert.	7407.000	AV	48.9	35.9	7.0	38.5	53.3	53.9	-	100	71	VBW:30Hz, Reference data
Vert.	9876.000	AV	33.5	38.3	7.9	37.0	42.7	53.9	-	100	0	VBW:30Hz, Reference data
Vert.	12345.000	AV	34.0	39.7	9.4	37.4	45.7	53.9	-	100	0	VBW:30Hz, Reference data

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 18GHz-40.0GHz 20log(3.0m/1.0m)= 9.5dB

AV measurement (Dwell time factor relaxatio

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Dwell Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2483.500	AV	49.1	27.9	13.6	39.8	-18.0	32.8	53.9	21.1	
Hori.	4938.000	AV	56.9	31.0	5.9	39.4	-18.0	36.4	53.9	17.5	
Hori.	7407.000	AV	52.3	35.9	7.0	38.5	-18.0	38.7	53.9	15.2	
Hori.	9876.000	AV	35.0	38.3	7.9	37.0	-18.0	26.2	53.9	27.7	
Hori.	12345.000	AV	33.9	39.7	9.4	37.4	-18.0	27.6	53.9	26.3	
Vert.	2483.500	AV	45.6	27.9	13.6	39.8	-18.0	29.3	53.9	24.6	
Vert.	4938.000	AV	53.2	31.0	5.9	39.4	-18.0	32.7	53.9	21.2	
Vert.	7407.000	AV	48.9	35.9	7.0	38.5	-18.0	35.3	53.9	18.6	
Vert.	9876.000	AV	33.5	38.3	7.9	37.0	-18.0	24.7	53.9	29.2	
Vert.	12345.000	AV	34.0	39.7	9.4	37.4	-18.0	27.7	53.9	26.2	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)

- Gain(Amplifier) + Dwell time factor (Refer to dwell time data sheet)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level

Distance factor: 18GHz-40.0GHz 20log(3.0m/1.0m)= 9.5dB

Spurious Emission (Radiated)

Test place : UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2009/11/25
Temperature / Humidity : 24deg.C , 41%
Engineer : Makoto Hosaka
Mode : Standby
(M/N: RAS26E S/N: EP2-43)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	48.011	QP	39.8	12.3	6.7	32.1	26.7	40.0	13.3	400	228	
Hori.	440.041	QP	44.3	16.6	8.8	31.9	37.8	46.0	8.2	100	237	
Hori.	864.199	QP	39.3	21.4	10.2	31.2	39.7	46.0	6.3	100	81	
Hori.	950.047	QP	33.5	22.4	10.4	30.6	35.7	46.0	10.3	143	41	
Hori.	1112.224	PK	57.7	24.1	2.4	39.7	44.5	73.9	29.4	100	176	
Hori.	1155.977	PK	55.9	24.2	2.4	39.7	42.8	73.9	31.1	100	279	
Hori.	3975.100	PK	53.0	29.0	4.7	40.4	46.3	73.9	27.6	154	285	
Hori.	1112.224	AV	51.7	24.1	2.4	39.7	38.5	53.9	15.4	100	176	
Hori.	1155.977	AV	41.6	24.2	2.4	39.7	28.5	53.9	25.4	100	279	
Hori.	3975.100	AV	43.4	29.0	4.7	40.4	36.7	53.9	17.2	154	285	
Vert.	48.011	QP	41.1	12.3	6.7	32.1	28.0	40.0	12.0	100	108	
Vert.	240.048	QP	39.4	17.1	8.0	31.9	32.6	46.0	13.4	110	297	
Vert.	320.019	QP	43.5	14.2	8.4	31.9	34.2	46.0	11.8	174	276	
Vert.	360.026	QP	34.7	15.1	8.5	31.9	26.4	46.0	19.6	165	271	
Vert.	1110.990	PK	60.7	24.1	2.4	39.7	47.5	73.9	26.4	100	177	
Vert.	1110.990	AV	43.1	24.1	2.4	39.7	29.9	53.9	24.0	100	177	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 13GHz)) - Gain(Amprifier)

*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

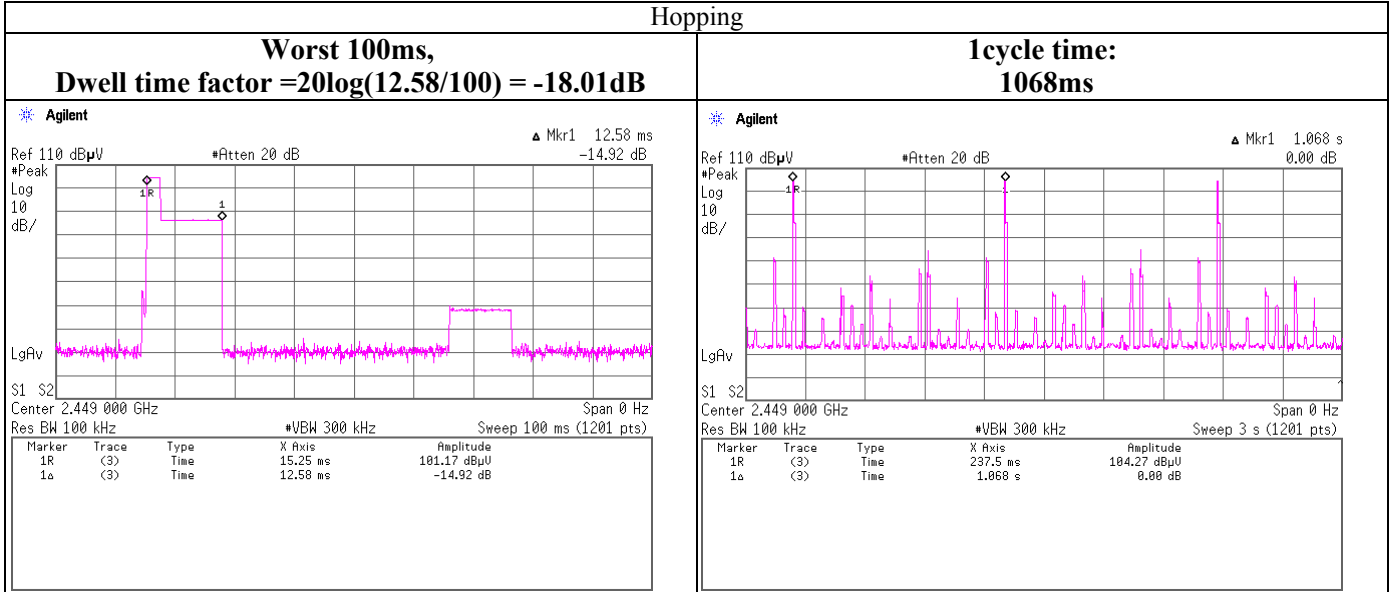
*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 18GHz-40.0GHz 20log(3.0m/1.0m)= 9.5dB

Spurious emission (Radiated) (Reference chart(Duty))

(RAS26)

Hopping



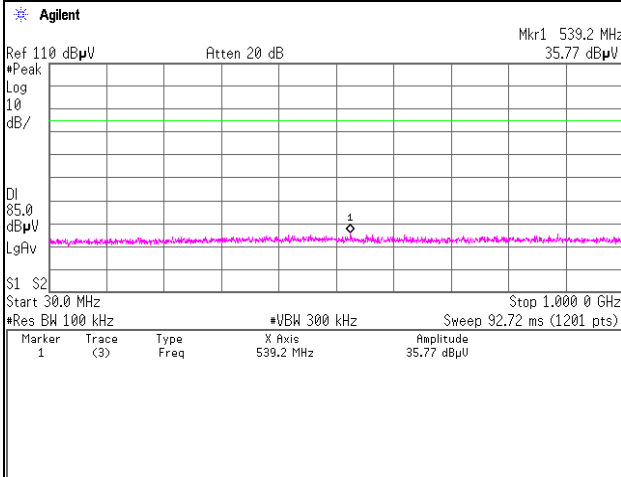
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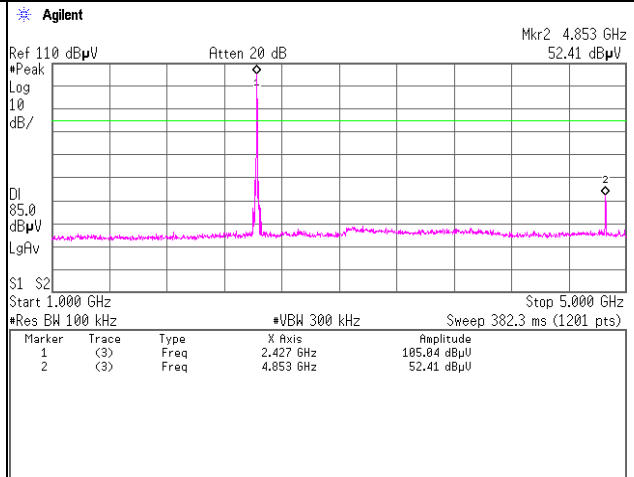
Spurious emission (Antenna port Conducted)
(RAS26)

Tx, 2427MHz

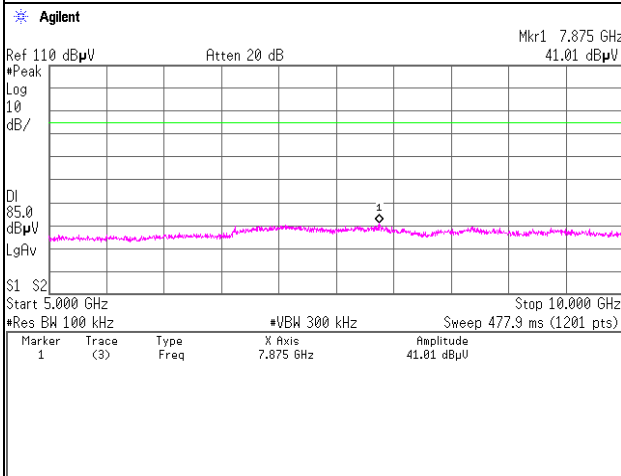
30MHz - 1GHz



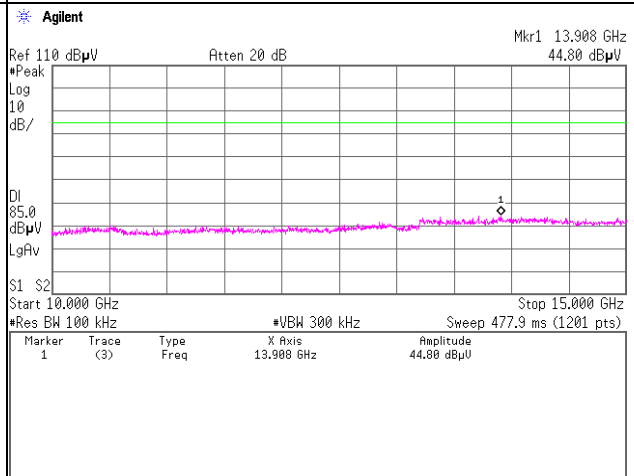
1GHz - 5GHz



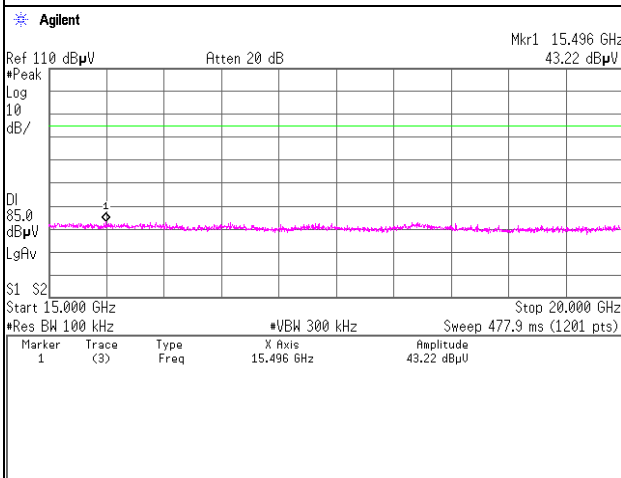
5GHz - 10GHz



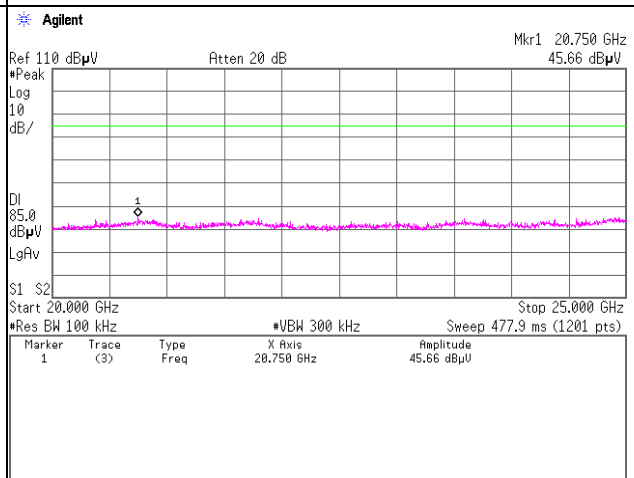
10GHz - 15GHz



15GHz - 20GHz



20GHz - 25GHz



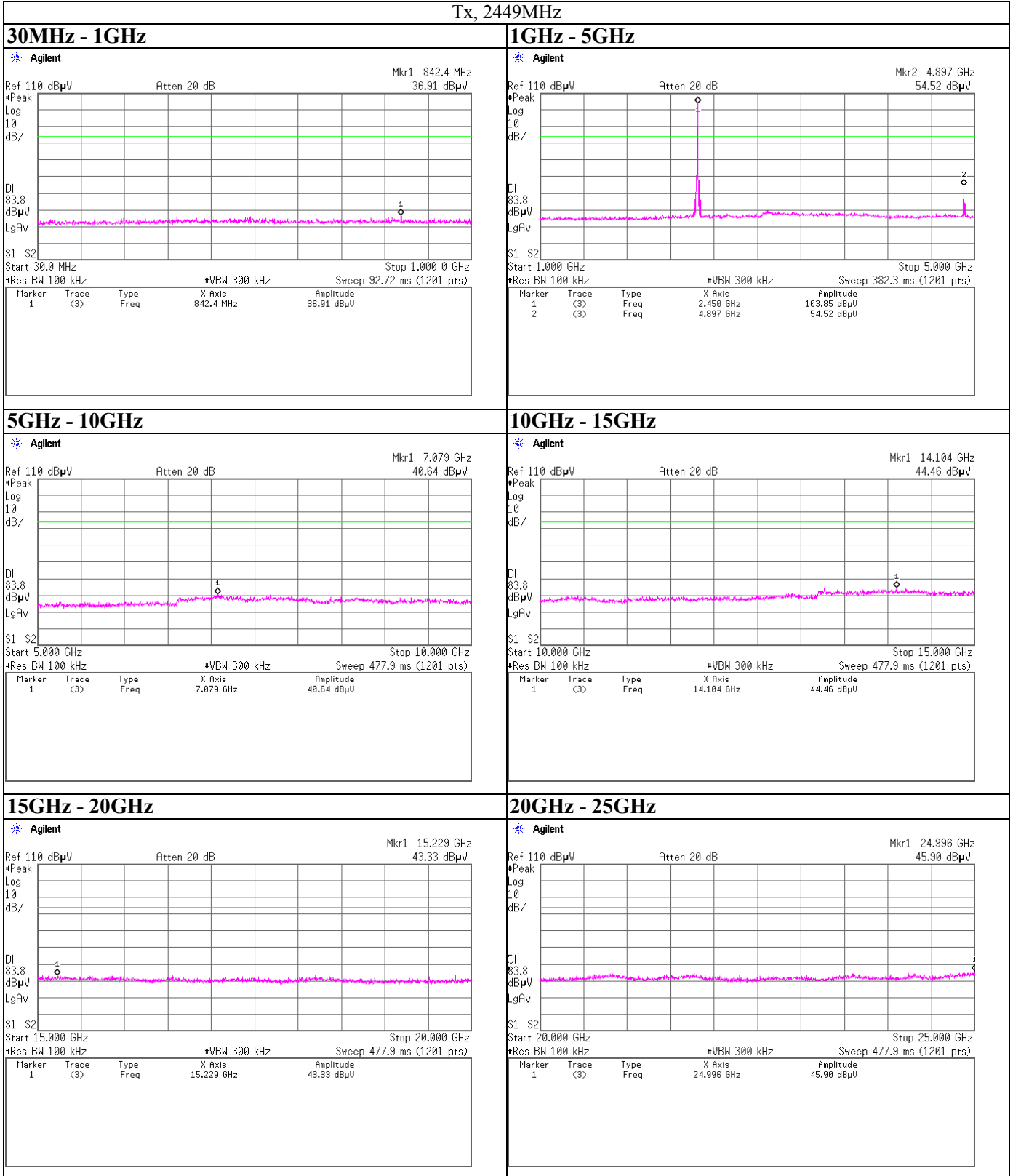
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Spurious emission (Antenna port Conducted)

(RAS26)

Tx, 2449MHz



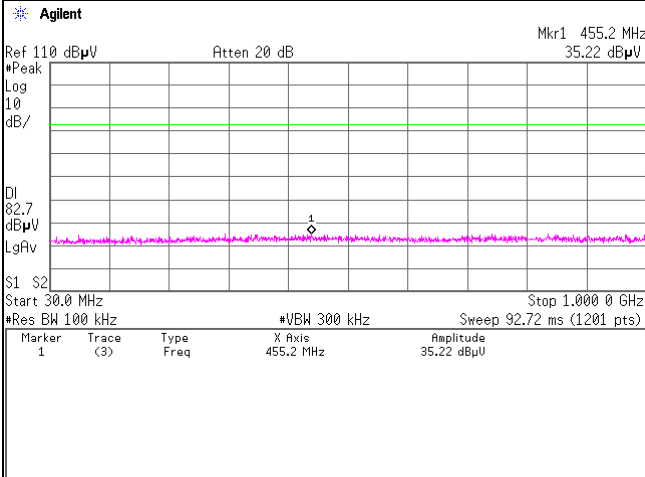
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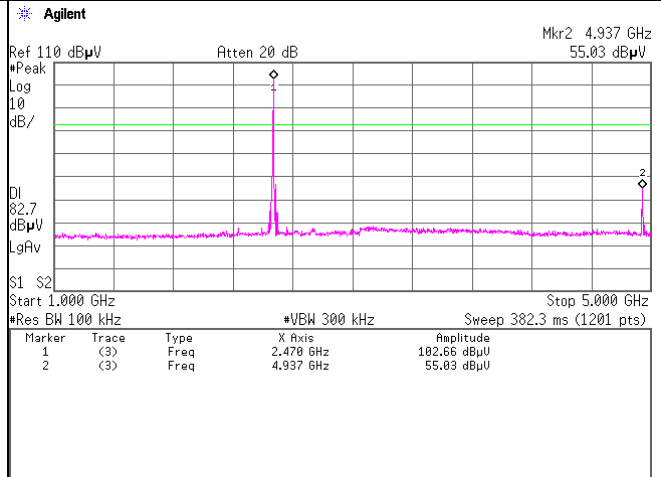
Spurious emission (Antenna port Conducted)
 (RAS26)

Tx, 2469MHz

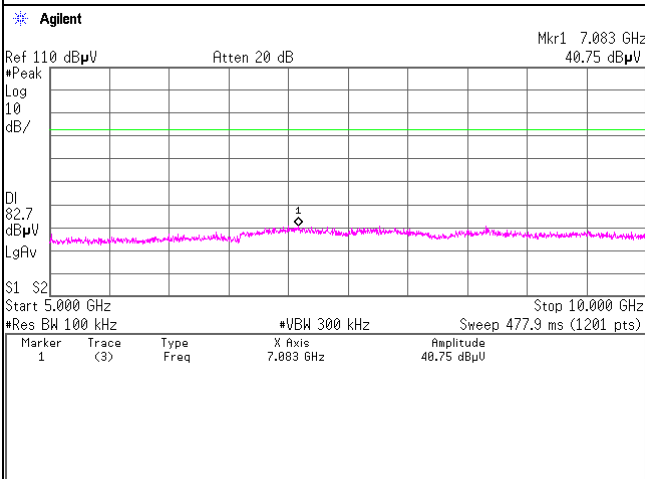
30MHz - 1GHz



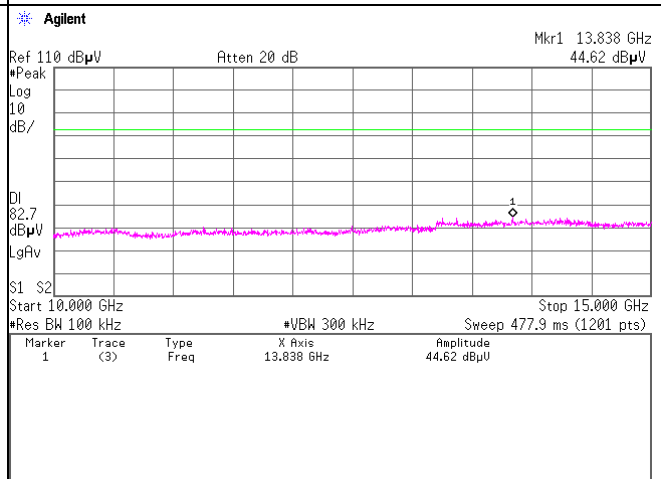
1GHz - 5GHz



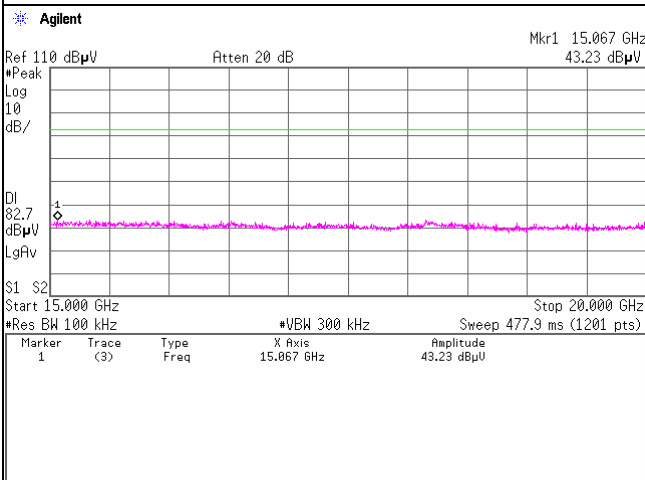
5GHz - 10GHz



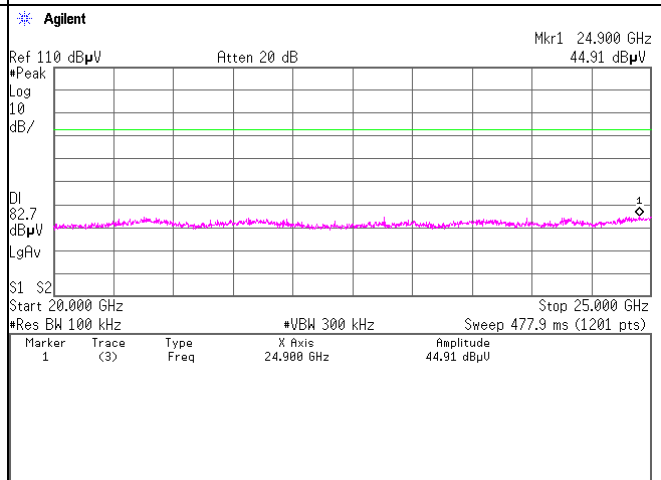
10GHz - 15GHz



15GHz - 20GHz



20GHz - 25GHz



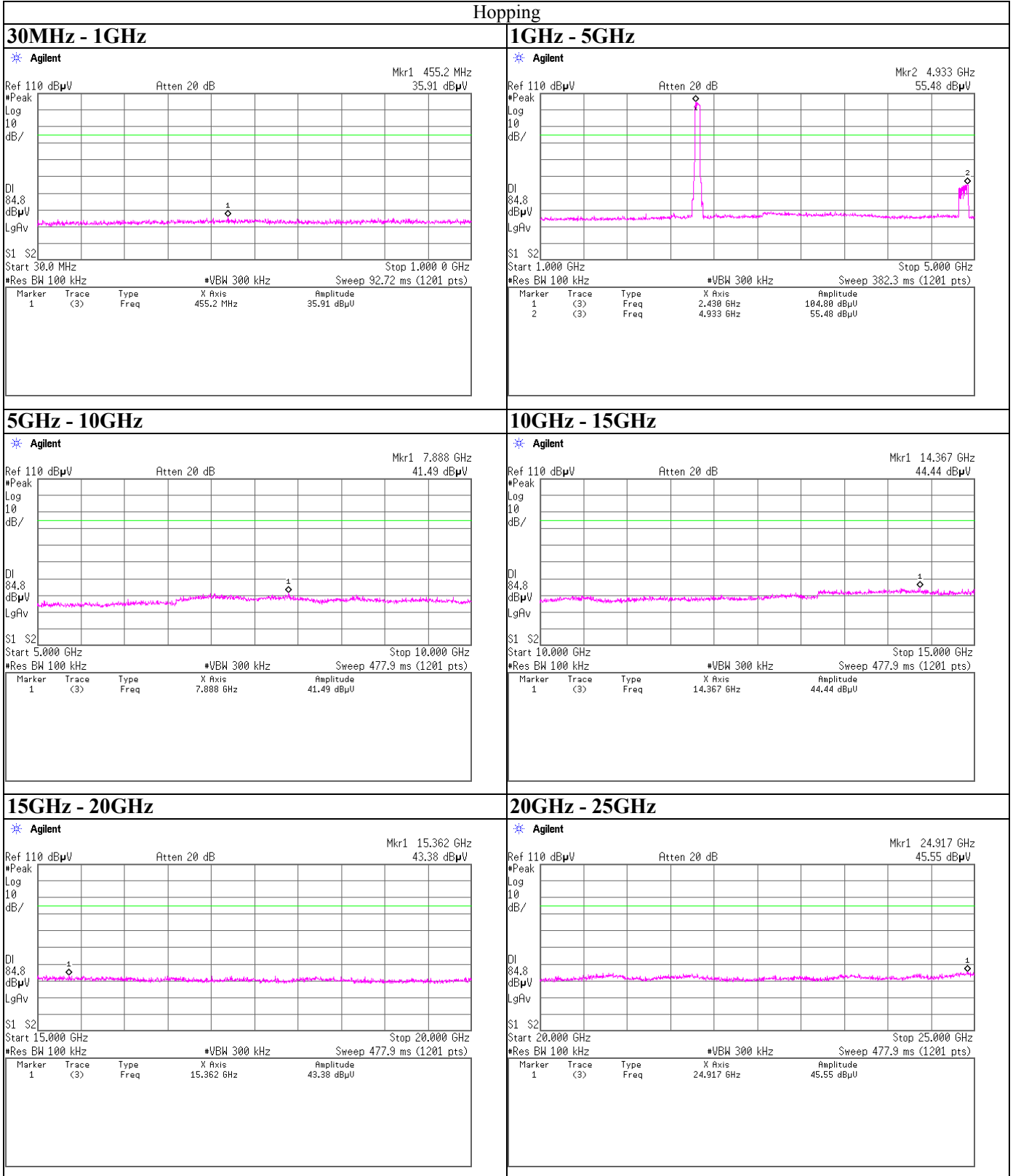
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Spurious emission (Antenna port Conducted)

(RAS26)

Hopping



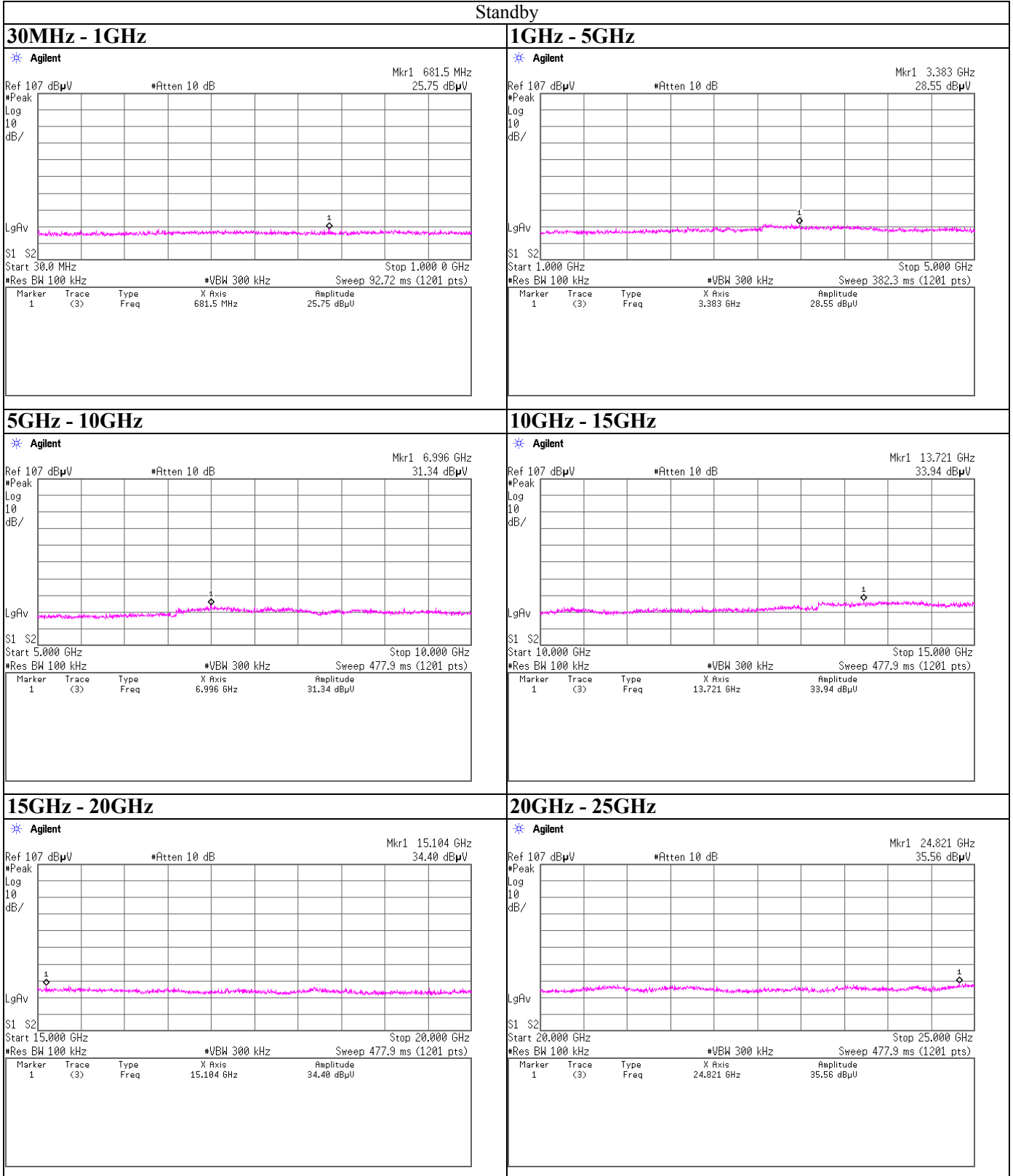
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Spurious emission (Antenna port Conducted)

(RAS26)

Standby

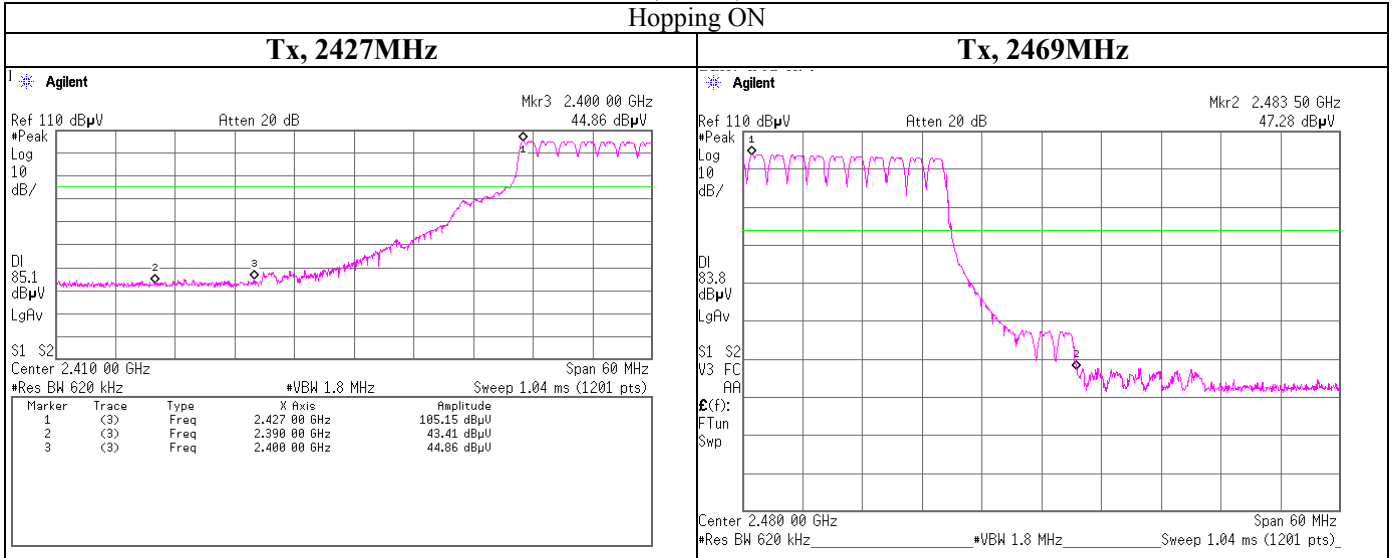


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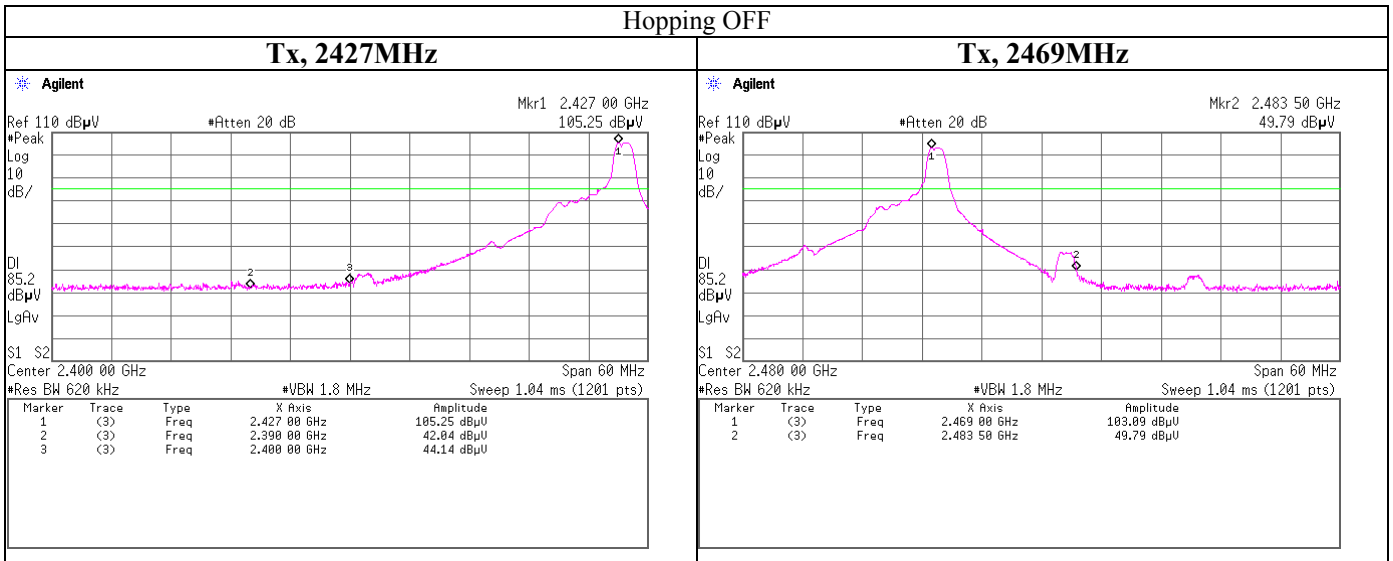
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Spurious emission (Antenna port Conducted)
 Band Edge compliance
 (RAS26)

Hopping ON

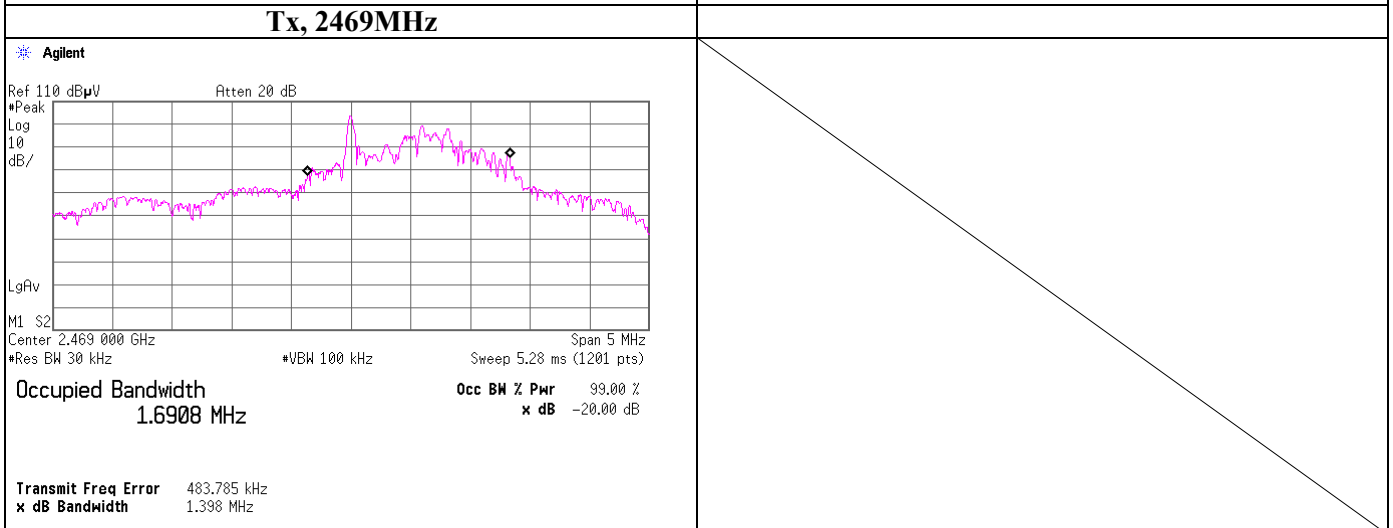
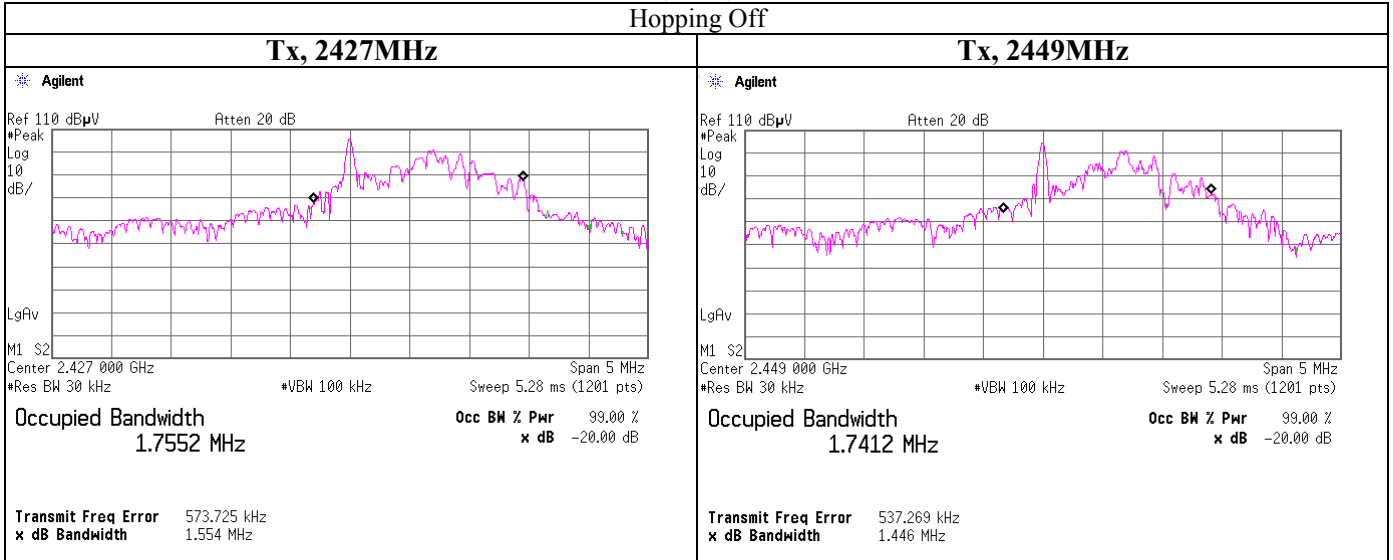


Hopping OFF

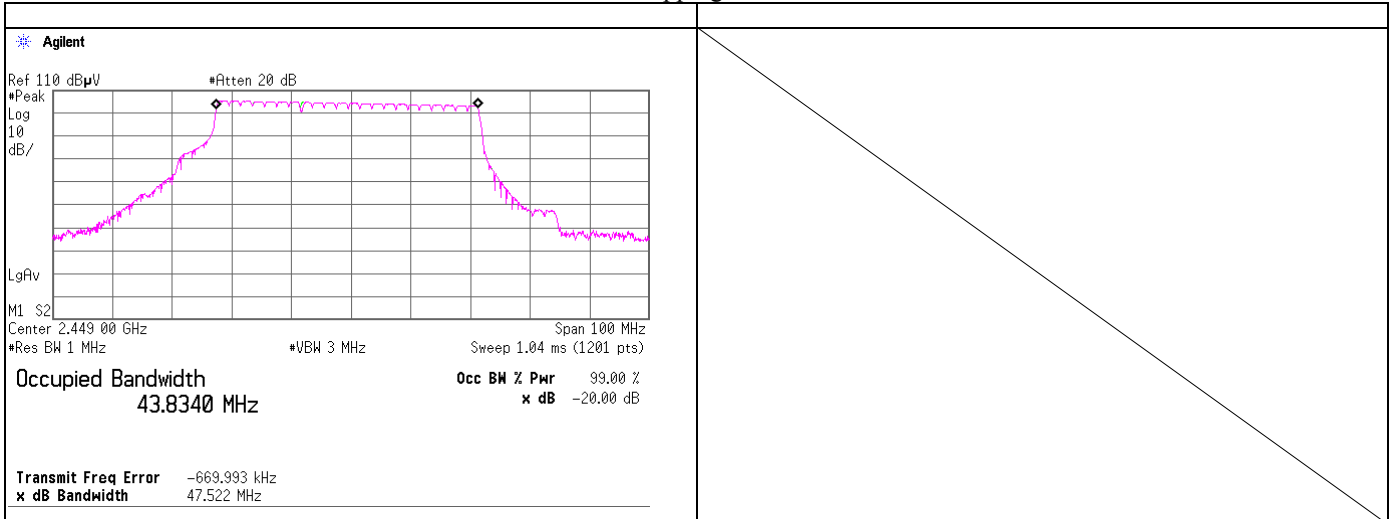


99% Occupied Bandwidth
 (RAS26)

Hopping Off



Hopping On



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APPENDIX 3: Test instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No.	Serial No.	Test Item	Calibration Date * Interval(month)
SAF-03	Pre Amplifier	SONOMA	310N	290213	RE	2009/02/13 * 12
SAT6-05	Attenuator	JFW	50HF-006N	-	RE	2009/02/13 * 12
SBA-03	Biconical Antenna	Schwarzbeck	BBA9106	91032666	RE	2009/03/20 * 12
SCC- C1/C2/C3/C4/C5/C10 /SRSE-03	Coaxial Cable&RF Selector	Fujikura/Fujikura/Suhner/Suhner/ Suhner/Suhner/TOYO	8D2W/12DSFA/141PE/141P E/141PE/141PE/NS4906	-/0901-271(RF Selector)	RE	2009/04/06 * 12
SLA-03	Logperiodic Antenna	Schwarzbeck	UHALP9108A	UHALP 9108-A 0901	RE	2009/03/20 * 12
SOS-05	Humidity Indicator	A&D	AD-5681	4062518	RE / CE	2009/02/04 * 12
STR-03	Test Receiver	Rohde & Schwarz	ESI40	100054/040	RE / CE	2009/04/08 * 12
SJM-03	Measure	KOMELON	KMC-36	-	RE / CE	-
SAEC-03(NSA)	Semi-Anechoic Chamber	TDK	SAEC-03(NSA)	3	RE	2009/03/19 * 12
COTS-SEMI-1	EMI Software	TSJ	TEPTO-DV	1	RE / CE	-
SAF-06	Pre Amplifier	TOYO Corporation	TPA0118-36	1440491	RE	2009/03/26 * 12
SCC-G03	Coaxial Cable	Suhner	SUCOFLEX 104A	46499/4A	RE	2009/04/10 * 12
SCC-G23	Coaxial Cable	Suhner	SUCOFLEX 104	297342/4	RE	2009/05/27 * 12
SHA-03	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-739	RE	2009/08/23 * 12
SAT10-04	Attenuator(above1GHz)	Agilent	8493C-010	74863	RE	2009/03/24 * 12
SFL-02	Highpass Filter	MICRO-TRONICS	HPM50111	51	RE	2009/03/25 * 12
SAF-08	Pre Amplifier	TOYO Corporation	HAP18-26W	19	RE	2009/03/27 * 12
SHA-04	Horn Antenna	ETS LINDGREN	Sep-60	LM3640	RE	2009/04/09 * 12
SCC-G17	Coaxial Cable	Suhner	SUCOFLEX 104A	46291/4A	RE	2009/03/24 * 12
SSA-02	Spectrum Analyzer	Agilent	E4448A	MY48250106	AT1,2,3,4,	2009/02/12 * 12
SCC-G12	Coaxial Cable	Suhner	SUCOFLEX 102	30790/2	AT all	2009/03/11 * 12
SAT10-05	Attenuator(above1GHz)	Agilent	8493C-010	74864	AT all	2009/03/24 * 12
SPM-06	Power Meter	Anritsu	ML2495A	850009	AT5	2009/03/16 * 12
SPSS-01	Power Sensor	Anritsu	MA2444D	738366	AT5	2009/03/16 * 12
SOS-09	Humidity Indicator	A&D	AD-5681	4061484	AT all	2009/02/04 * 12
SCC- C6/C7/C8/C10/SRSE	Coaxial Cable&RF Selector	Suhner/Fujikura/Suhner/Suhner/T OYO	141PE/12DSFA/141PE/141P E/NS4906	-/0901-271(RF Selector)	CE	2009/04/06 * 12
SLS-05	LISN	Rohde & Schwarz	ENV216	100516	CE (EUT)	2009/02/25 * 12
STM-02	Terminator	TME	CT-01 BP	-	CE	2009/02/12 * 12
SLS-03	LISN	Rohde & Schwarz	ENV216	100513	CE (AE)	2009/02/25 * 12

The expiration date of the calibration is the end of the expired month.

All equipment is calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.

Test Item:

- CE: Conducted Emission
- RE: Radiated Emission
- AT: Antenna Terminal Conducted test
 - 1: Carrier Frequency Separation
 - 2: 20dB Bandwidth
 - 3: Number of Hopping Frequency
 - 4: Dwell time
 - 5: Maximum Peak Output Power
 - 6: Out of Band Emission (Conducted)