APPENDIX 2: Data of EMI test

Conducted Emission

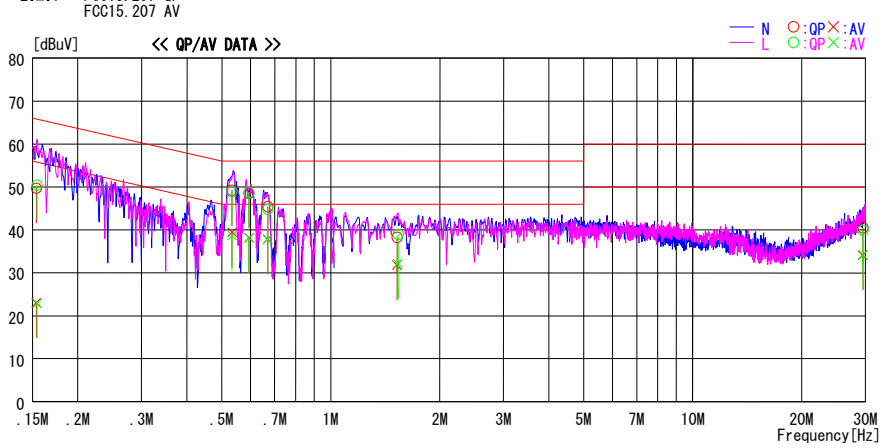
DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2010/09/18

Report No. : 30KE0072-HO
Temp./Humi. : 25deg.C. / 62%
Engineer : Tomotaka Sasagawa

Mode / Remarks : Tx 11n-40 2437MHz Ant1

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase	Comment
	QP	AV	Factor	QP	AV	QP	AV	QP	AV		
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0.15348	36.5	9.9	13.2	49.7	23.1	65.8	55.8	16.1	32.7	N	
0.53367	35.9	26.1	13.3	49.2	39.4	56.0	46.0	6.8	6.6	N	
0.59457	35.2	24.9	13.3	48.5	38.2	56.0	46.0	7.5	7.8	N	
0.66939	32.1	24.5	13.3	45.4	37.8	56.0	46.0	10.6	8.2	N	
1.52420	24.8	18.4	13.4	38.2	31.8	56.0	46.0	17.8	14.2	N	
29.51885	25.4	19.0	15.1	40.5	34.1	60.0	50.0	19.5	15.9	N	
0.15435	37.2	9.7	13.2	50.4	22.9	65.8	55.8	15.4	32.9	L	
0.53367	35.6	25.4	13.3	48.9	38.7	56.0	46.0	7.1	7.3	L	
0.59457	35.4	24.8	13.3	48.7	38.1	56.0	46.0	7.3	7.9	L	
0.66939	31.5	24.6	13.3	44.8	37.9	56.0	46.0	11.2	8.1	L	
1.53327	25.6	18.7	13.4	39.0	32.1	56.0	46.0	17.0	13.9	L	
29.55895	24.8	19.1	15.1	39.9	34.2	60.0	50.0	20.1	15.8	L	

CHART:WITH FACTOR,Peak hold data. CALCULATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

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DATA OF CONDUCTED EMISSION TEST

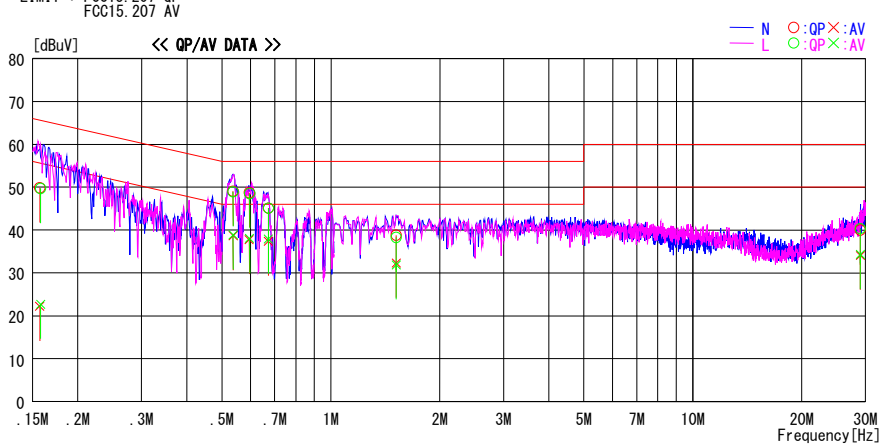
UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2010/09/18

Report No. : 30KE0072-HO

Temp./Humi. : 25deg.C. / 62%
Engineer : Tomotaka Sasagawa

Mode / Remarks : Rx 11n 2437MHz Ant0/1

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase	Comment
	QP	AV	Factor	QP	AV	QP	AV	QP	AV		
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0.15696	36.7	9.0	13.2	49.9	22.2	65.6	55.6	15.7	33.4	N	
0.53715	35.8	25.4	13.3	49.1	38.7	56.0	46.0	6.9	7.3	N	
0.59544	35.4	24.5	13.3	48.7	37.8	56.0	46.0	7.3	8.2	N	
0.67200	31.8	24.1	13.3	45.1	37.4	56.0	46.0	10.9	8.6	N	
1.51513	25.4	18.9	13.4	38.8	32.3	56.0	46.0	17.2	13.7	N	
29.03765	24.9	19.0	15.1	40.0	34.1	60.0	50.0	20.0	15.9	N	
0.15783	36.5	9.5	13.2	49.7	22.7	65.6	55.6	15.9	32.9	L	
0.53715	35.6	25.6	13.3	48.9	38.9	56.0	46.0	7.1	7.1	L	
0.59631	35.2	24.7	13.3	48.5	38.0	56.0	46.0	7.5	8.0	L	
0.67200	31.8	24.6	13.3	45.1	37.9	56.0	46.0	10.9	8.1	L	
1.51513	24.9	18.5	13.4	38.3	31.9	56.0	46.0	17.7	14.1	L	
29.03765	25.2	19.2	15.1	40.3	34.3	60.0	50.0	19.7	15.7	L	

CHART:WITH FACTOR,Peak hold data. CALCULATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

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DATA OF CONDUCTED EMISSION TEST

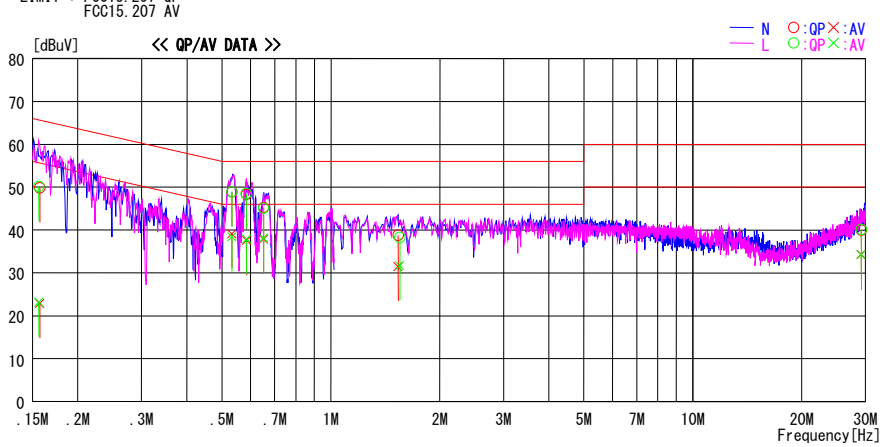
UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2010/09/18

Report No. : 30KE0072-HO

Temp./Humi. : 25deg.C. / 62%
Engineer : Tomotaka Sasagawa

Mode / Remarks : Tx 11a 5785MHz Ant0

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase	Comment
	QP	AV	Factor	QP	AV	QP	AV	QP	AV		
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0.15696	36.7	9.7	13.2	49.9	22.9	65.6	55.6	15.7	32.7	N	
0.53280	35.6	25.8	13.3	48.9	39.1	56.0	46.0	7.1	6.9	N	
0.58500	35.0	24.3	13.3	48.3	37.6	56.0	46.0	7.7	8.4	N	
0.65199	32.0	24.6	13.3	45.3	37.9	56.0	46.0	10.7	8.1	N	
1.53327	25.4	18.1	13.4	38.8	31.5	56.0	46.0	17.2	14.5	N	
29.17800	24.9	19.2	15.1	40.0	34.3	60.0	50.0	20.0	15.7	N	
0.15609	37.0	10.0	13.2	50.2	23.2	65.7	55.7	15.5	32.5	L	
0.53280	35.6	25.1	13.3	48.9	38.4	56.0	46.0	7.1	7.6	L	
0.58413	35.2	24.6	13.3	48.5	37.9	56.0	46.0	7.5	8.1	L	
0.65199	31.8	24.8	13.3	45.1	38.1	56.0	46.0	10.9	7.9	L	
1.55141	24.9	18.3	13.4	38.3	31.7	56.0	46.0	17.7	14.3	L	
29.17800	25.1	19.1	15.1	40.2	34.2	60.0	50.0	19.8	15.8	L	

CHART:WITH FACTOR,Peak hold data. CALCULATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

-

DATA OF CONDUCTED EMISSION TEST

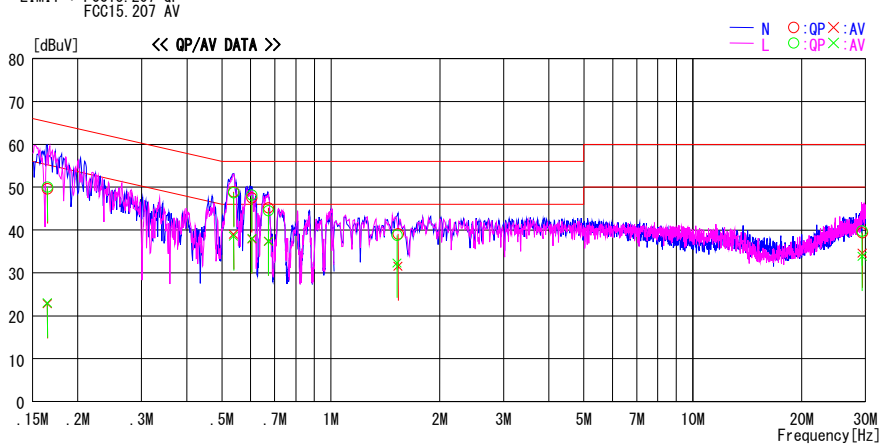
UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2010/09/18

Report No. : 30KE0072-HO

Temp./Humi. : 25deg.C. / 62%
Engineer : Tomotaka Sasagawa

Mode / Remarks : Rx 11a 5785MHz Ant0

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase	Comment
	QP	AV	Factor	QP	AV	QP	AV	QP	AV		
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0.16479	36.4	9.6	13.2	49.6	22.8	65.2	55.2	15.6	32.4	N	
0.53889	35.6	25.7	13.3	48.9	39.0	56.0	46.0	7.1	7.0	N	
0.60501	34.2	24.6	13.3	47.5	37.9	56.0	46.0	8.5	8.1	N	
0.67200	31.9	24.1	13.3	45.2	37.4	56.0	46.0	10.8	8.6	N	
1.53327	25.7	18.2	13.4	39.1	31.6	56.0	46.0	16.9	14.4	N	
29.37850	24.3	19.5	15.1	39.4	34.6	60.0	50.0	20.6	15.4	N	
0.16479	36.8	9.8	13.2	50.0	23.0	65.2	55.2	15.2	32.2	L	
0.53889	35.4	25.3	13.3	48.7	38.6	56.0	46.0	7.3	7.4	L	
0.60501	34.9	24.7	13.3	48.2	38.0	56.0	46.0	7.8	8.0	L	
0.67287	31.2	24.1	13.3	44.5	37.4	56.0	46.0	11.5	8.6	L	
1.52420	25.4	18.9	13.4	38.8	32.3	56.0	46.0	17.2	13.7	L	
29.35845	24.7	18.8	15.1	39.8	33.9	60.0	50.0	20.2	16.1	L	

CHART:WITH FACTOR,Peak hold data. CALCULATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

6dB Bandwidth

Test place	Head Office EMC Lab. No.11 Measurement Room		
Report No.	30KE0072-HO-02		
Date	09/07/2010	09/08/2010	09/14/2010
Temperature/ Humidity	24 deg.C./ 60%	26 deg.C./ 67%	24 deg.C./ 65%
Engineer	Satofumi Matsuyama	Satofumi Matsuyama	Katsunori Okai
Mode	Tx		

11b

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
2412	8.097	>500
2437	8.113	>500
2462	8.074	>500

11g

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
2412	15.102	>500
2437	15.106	>500
2462	15.103	>500

11n-20 (2.4GHz)

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
2412	15.055	>500
2437	15.041	>500
2462	15.091	>500

11n-40 (2.4GHz)

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
2422	35.727	>500
2437	35.720	>500
2452	35.555	>500

11a

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
5745	15.128	>500
5785	15.112	>500
5825	15.151	>500

11n-20 (5GHz)

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
5745	15.723	>500
5785	15.061	>500
5825	15.046	>500

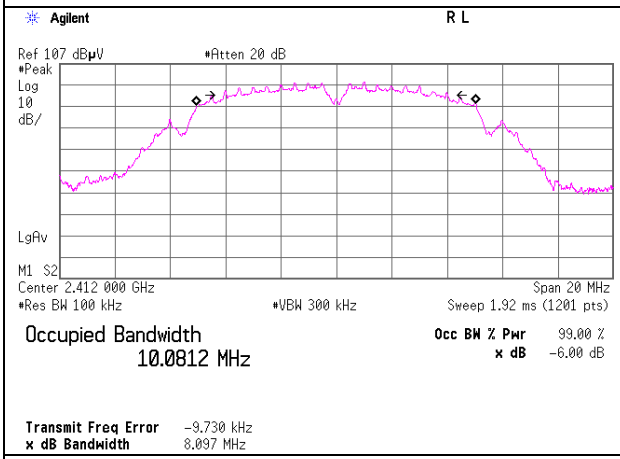
11n-40 (5GHz)

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
5755	35.474	>500
5795	35.359	>500

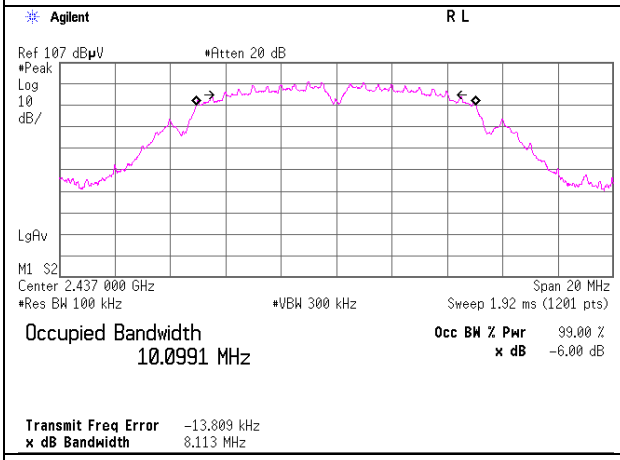
6dB Bandwidth

11b

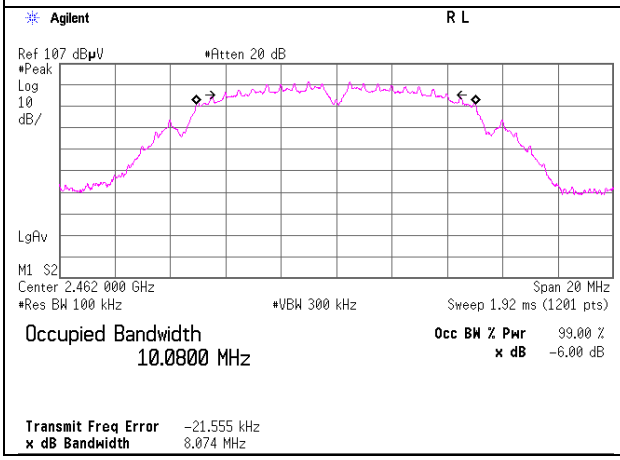
2412MHz



2437MHz

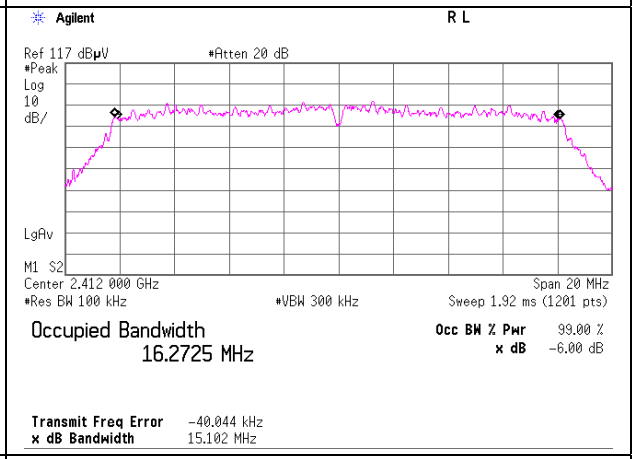


2462MHz

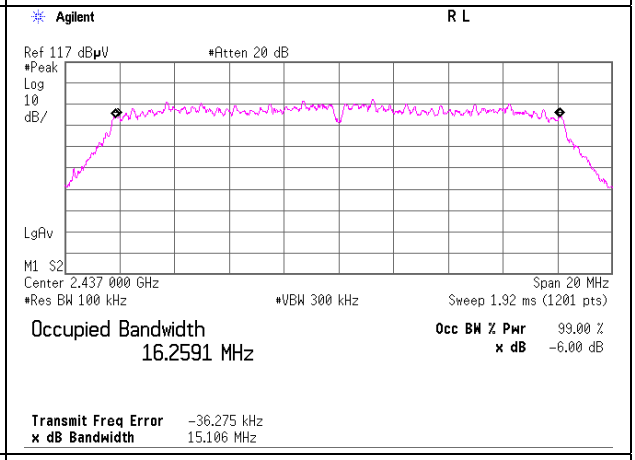


11g

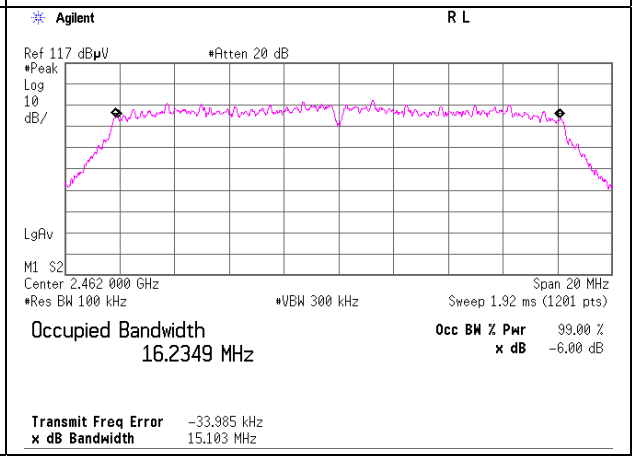
2412MHz



2437MHz



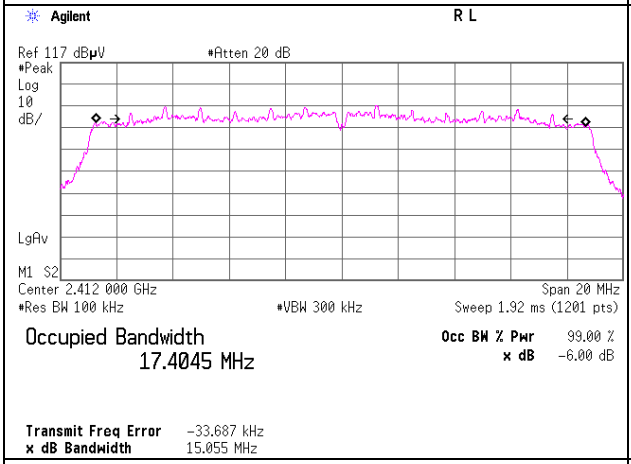
2462MHz



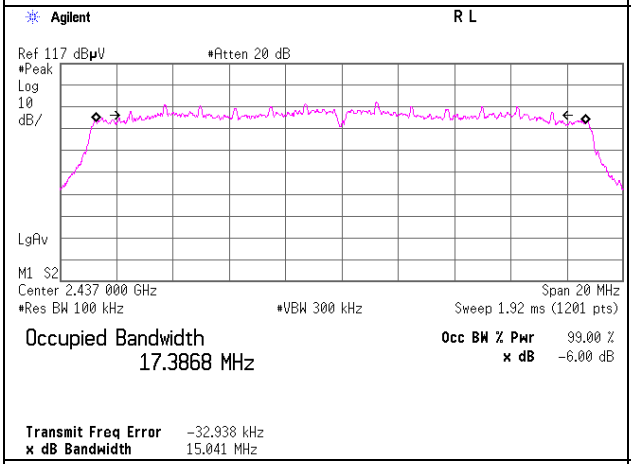
6dB Bandwidth

11n-20 (2.4GHz)

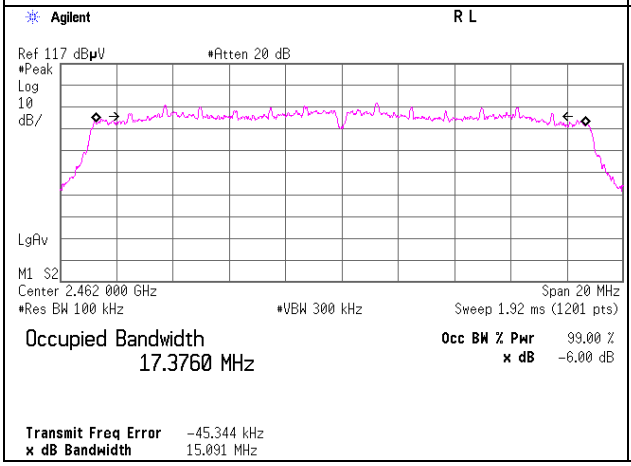
2412MHz



2437MHz

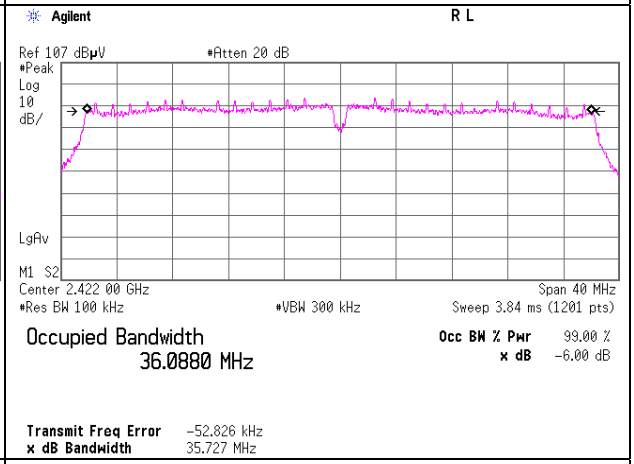


2462MHz

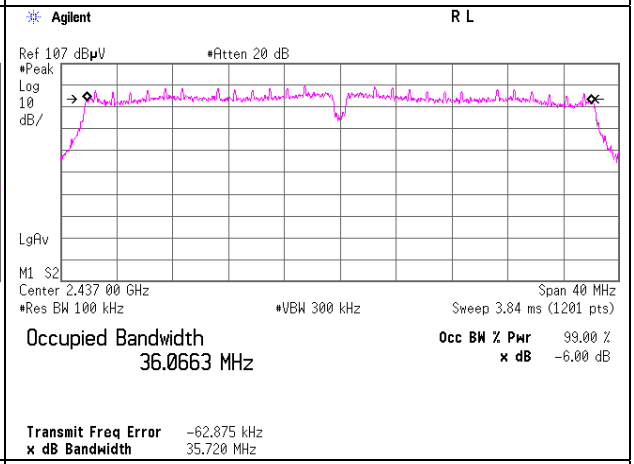


11n-40 (2.4GHz)

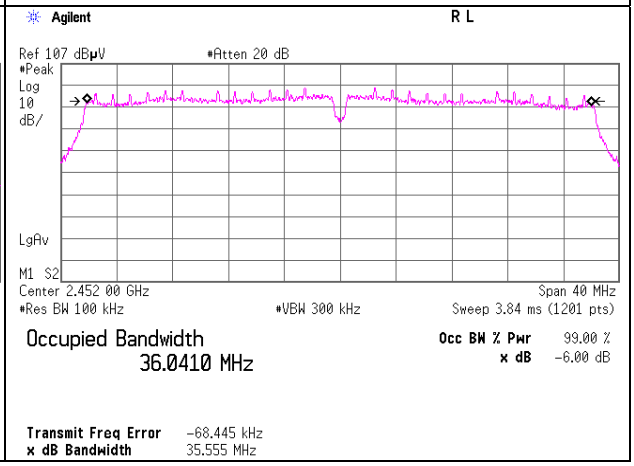
2422MHz



2437MHz



2452MHz



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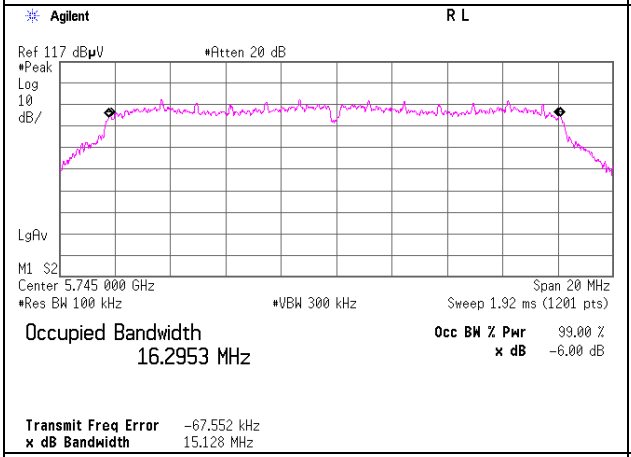
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8116
Facsimile : +81 596 24 8124

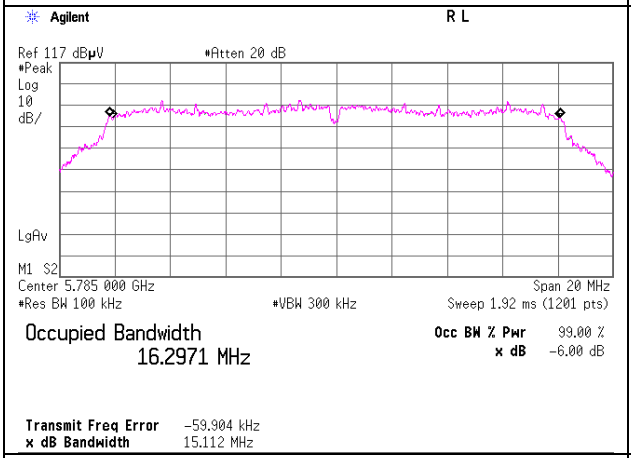
6dB Bandwidth

11a

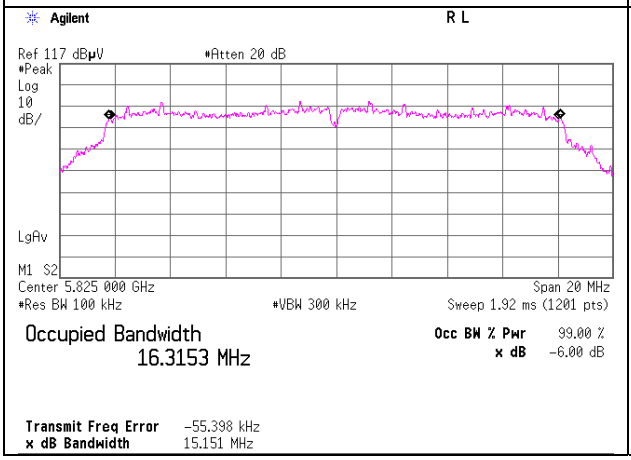
5745MHz



5785MHz

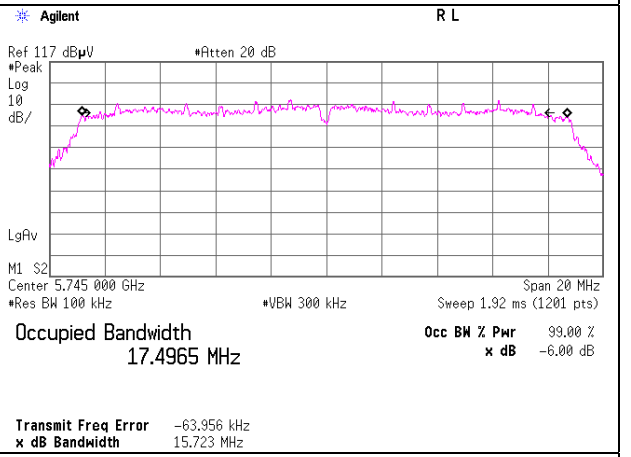


5825MHz

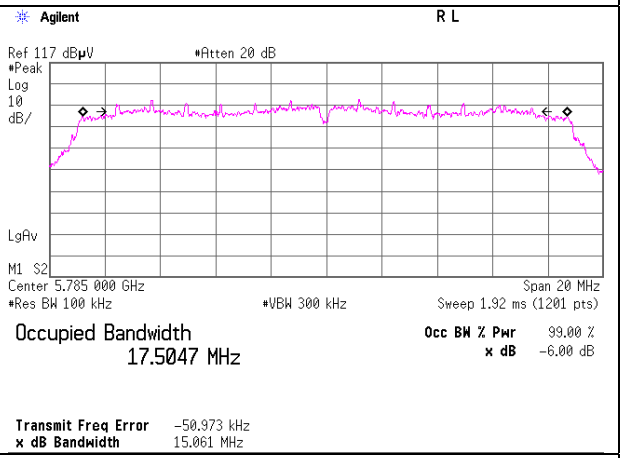


11n-20

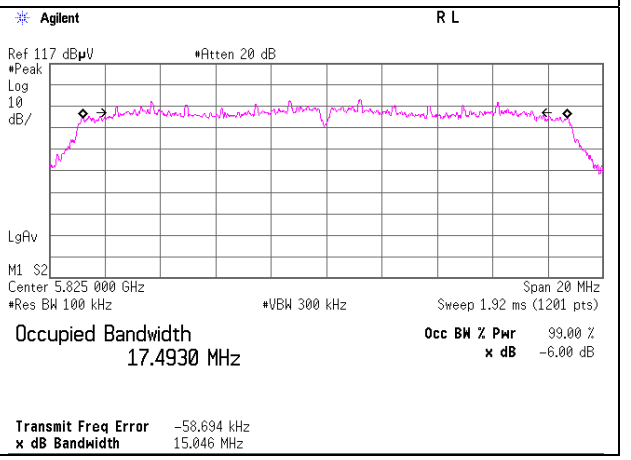
5745MHz



5785MHz



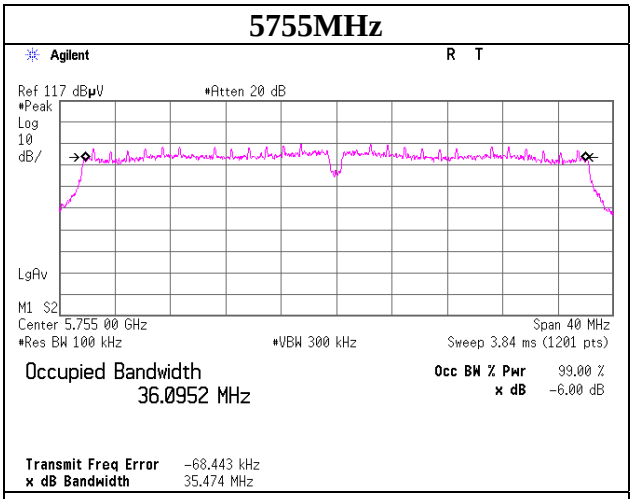
5825MHz



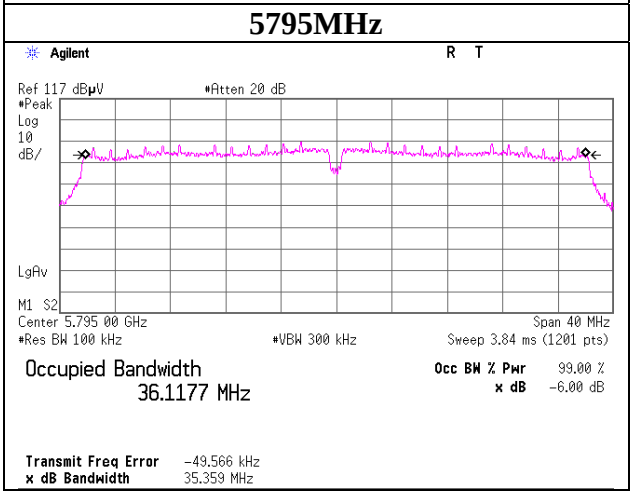
6dB Bandwidth

11n-40

5755MHz



5795MHz



Maximum Peak Output Power

Test place	Head Office EMC Lab. No.6 Measurement Room
Report No.	30KE0072-HO-02
Date	09/14/2010
Temperature/ Humidity	24 deg.C./ 65%
Engineer	Katsunori Okai
Mode	11b Tx

Antenna 0

Freq.	Reading	Cable Loss	Atten.	Result		Limit		Margin
[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
2412	3.85	1.86	9.97	15.68	36.98	30.00	1000	14.32
2437	3.93	1.87	9.97	15.77	37.76	30.00	1000	14.23
2462	3.74	1.87	9.97	15.58	36.14	30.00	1000	14.42

Antenna 1

Freq.	Reading	Cable Loss	Atten.	Result		Limit		Margin
[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
2412	4.82	1.86	9.97	16.65	46.24	30.00	1000	13.35
2437	4.53	1.87	9.97	16.37	43.35	30.00	1000	13.63
2462	4.62	1.87	9.97	16.46	44.26	30.00	1000	13.54

Sample Calculation:
Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator

Antenna 0, 2437MHz

Rate	Reading	Remark
[Mbps]	[dBm]	
1	3.93	*
2	3.52	
5.5	3.61	
11	3.58	

*: Worst Rate
All comparizon were carried out on same frequency and measurement factors.

Maximum Peak Output Power

Test place	Head Office EMC Lab. No.6 Measurement Room	
Report No.	30KE0072-HO-02	
Date	09/14/2010	09/20/2010
Temperature/ Humidity	24 deg.C./ 65%	25 deg.C./ 59%
Engineer	Katsunori Okai	Takeshi Choda
Mode	11g Tx	

Antenna 0

Freq.	Reading	Cable Loss	Atten.	Result		Limit		Margin
[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
2412	10.97	1.86	9.97	22.80	190.55	30.00	1000	7.20
2417	11.12	1.86	9.97	22.95	197.24	30.00	1000	7.05
2437	10.69	1.87	9.97	22.53	179.06	30.00	1000	7.47
2462	10.80	1.87	9.97	22.64	183.65	30.00	1000	7.36

Antenna 1

Freq.	Reading	Cable Loss	Atten.	Result		Limit		Margin
[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
2412	11.43	1.86	9.97	23.26	211.84	30.00	1000	6.74
2417	11.61	1.86	9.97	23.44	220.80	30.00	1000	6.56
2437	11.06	1.87	9.97	22.90	194.98	30.00	1000	7.10
2462	11.27	1.87	9.97	23.11	204.64	30.00	1000	6.89

Sample Calculation:
Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator

Antenna 0, 2437MHz

Rate	Reading	Remark
[Mbps]	[dBm]	
6	10.66	
9	10.64	
12	10.65	
18	10.63	
24	10.60	
36	10.69	*
48	10.68	
54	10.57	

*: Worst Rate
All comparison were carried out on same frequency and measurement factors.

Maximum Peak Output Power

Test place	Head Office EMC Lab. No.6 Measurement Room	
Report No.	30KE0072-HO-02	
Date	09/14/2010	09/20/2010
Temperature/ Humidity	24 deg.C./ 65%	25 deg.C./ 59%
Engineer	Katsunori Okai	Takeshi Choda
Mode	11n-20(2.4GHz) Tx	

Antenna 0

Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Result [mW]	Limit [dBm]	Limit [mW]	Margin [dB]
2412	10.48	1.86	9.97	22.31	170.22	30.00	1000	7.69
2417	11.22	1.86	9.97	23.05	201.84	30.00	1000	6.95
2437	10.64	1.87	9.97	22.48	177.01	30.00	1000	7.52
2457	10.69	1.87	9.97	22.53	179.06	30.00	1000	7.47
2462	10.63	1.87	9.97	22.47	176.60	30.00	1000	7.53

Antenna 1

Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Result [mW]	Limit [dBm]	Limit [mW]	Margin [dB]
2412	10.88	1.86	9.97	22.71	186.64	30.00	1000	7.29
2417	11.56	1.86	9.97	23.39	218.27	30.00	1000	6.61
2437	11.27	1.87	9.97	23.11	204.64	30.00	1000	6.89
2457	11.38	1.87	9.97	23.22	209.89	30.00	1000	6.78
2462	11.31	1.87	9.97	23.15	206.54	30.00	1000	6.85

Sample Calculation:
Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator

Antenna 0, 2437MHz

MCS Number	Reading [dBm]	Remark
0	10.64	*
1	10.62	
2	10.63	
3	10.63	
4	10.59	
5	10.61	
6	10.57	
7	10.58	

*: Worst Rate
All comparison were carried out on same frequency and measurement factors.

Maximum Peak Output Power

Test place	Head Office EMC Lab. No.6 Measurement Room	
Report No.	30KE0072-HO-02	
Date	09/14/2010	09/20/2010
Temperature/ Humidity	24 deg.C./ 65%	25 deg.C./ 59%
Engineer	Katsunori Okai	Takeshi Choda
Mode	11n-40(2.4GHz) Tx	

Antenna 0

Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Result [mW]	Limit [dBm]	Limit [mW]	Margin [dB]
2422	7.57	1.87	9.97	19.41	87.30	30.00	1000	10.59
2427	10.74	1.87	9.97	22.58	181.13	30.00	1000	7.42
2437	10.47	1.87	9.97	22.31	170.22	30.00	1000	7.69
2447	10.31	1.87	9.97	22.15	164.06	30.00	1000	7.85
2452	10.38	1.87	9.97	22.22	166.72	30.00	1000	7.78

Antenna 1

Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Result [mW]	Limit [dBm]	Limit [mW]	Margin [dB]
2422	7.72	1.87	9.97	19.56	90.36	30.00	1000	10.44
2427	11.62	1.87	9.97	23.46	221.82	30.00	1000	6.54
2437	11.54	1.87	9.97	23.38	217.77	30.00	1000	6.62
2447	11.38	1.87	9.97	23.22	209.89	30.00	1000	6.78
2452	11.17	1.87	9.97	23.01	199.99	30.00	1000	6.99

Sample Calculation:
Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator

Antenna 0, 2437MHz

MCS Number	Reading [dBm]	Remark
0	10.47	*
1	10.45	
2	10.42	
3	10.46	
4	10.41	
5	10.45	
6	10.44	
7	10.37	

*: Worst Rate
All comparison were carried out on same frequency and measurement factors.

Maximum Peak Output Power

Test place	Head Office EMC Lab. No.11 Measurement Room
Report No.	30KE0072-HO-02
Date	09/07/2010
Temperature/ Humidity	24 deg.C./ 60%
Engineer	Satofumi Matsuyama
Mode	11a Tx

Antenna 0

Freq.	Reading	Cable Loss	Atten.	Result		Limit		Margin
[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
5745	10.23	2.67	10.00	22.90	194.98	30.00	1000	7.10
5785	10.34	2.68	10.00	23.02	200.45	30.00	1000	6.98
5825	10.18	2.68	10.00	22.86	193.20	30.00	1000	7.14

Antenna 1

Freq.	Reading	Cable Loss	Atten.	Result		Limit		Margin
[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
5745	10.19	2.67	10.00	22.86	193.20	30.00	1000	7.14
5785	10.18	2.68	10.00	22.86	193.20	30.00	1000	7.14
5825	10.02	2.68	10.00	22.70	186.21	30.00	1000	7.30

Sample Calculation:
Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator

Antenna 0, 5785MHz

Rate	Reading	Remark
[Mbps]	[dBm]	
6	10.34	*
9	10.29	
12	10.27	
18	10.18	
24	10.17	
36	10.22	
48	10.16	
54	10.21	

*: Worst Rate
All comparison were carried out on same frequency and measurement factors.

Maximum Peak Output Power

Test place	Head Office EMC Lab. No.11 Measurement Room
Report No.	30KE0072-HO-02
Date	09/07/2010
Temperature/ Humidity	24 deg.C./ 60%
Engineer	Satofumi Matsuyama
Mode	11n-20(5GHz) Tx

Antenna 0

Freq.	Reading	Cable Loss	Atten.	Result		Limit		Margin
[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
5745	10.16	2.67	10.00	22.83	191.87	30.00	1000	7.17
5785	10.14	2.68	10.00	22.82	191.43	30.00	1000	7.18
5825	10.12	2.68	10.00	22.80	190.55	30.00	1000	7.20

Antenna 1

Freq.	Reading	Cable Loss	Atten.	Result		Limit		Margin
[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
5745	9.89	2.67	10.00	22.56	180.30	30.00	1000	7.44
5785	9.80	2.68	10.00	22.48	177.01	30.00	1000	7.52
5825	9.45	2.68	10.00	22.13	163.31	30.00	1000	7.87

Sample Calculation:
Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator

Antenna 0, 5785MHz

MCS Number	Reading [dBm]	Remark
MCS0	10.14	*
MCS1	10.06	
MCS2	10.04	
MCS3	10.10	
MCS4	10.06	
MCS5	10.09	
MCS6	10.06	
MCS7	10.12	

*: Worst Rate
All comparison were carried out on same frequency and measurement factors.

Maximum Peak Output Power

Test place	Head Office EMC Lab. No.11 Measurement Room
Report No.	30KE0072-HO-02
Date	09/07/2010
Temperature/ Humidity	24 deg.C./ 60%
Engineer	Satofumi Matsuyama
Mode	11n-40(5GHz) Tx

Antenna 0

Freq.	Reading	Cable Loss	Atten.	Result		Limit		Margin
[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
5755	10.24	2.67	10.00	22.91	195.43	30.00	1000	7.09
5795	10.19	2.68	10.00	22.87	193.64	30.00	1000	7.13

Antenna 1

Freq.	Reading	Cable Loss	Atten.	Result		Limit		Margin
[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
5755	9.96	2.67	10.00	22.63	183.23	30.00	1000	7.37
5795	9.87	2.68	10.00	22.55	179.89	30.00	1000	7.45

Sample Calculation:
Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator

Antenna 0, 5755MHz

MCS Number	Reading [dBm]	Remark
MCS0	10.24	*
MCS1	10.22	
MCS2	10.22	
MCS3	10.20	
MCS4	10.21	
MCS5	10.19	
MCS6	10.22	
MCS7	10.21	

*: Worst Rate
All comparison were carried out on same frequency and measurement factors.

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber	
Report No.	30KE0072-HO-02	
Date	09/13/2010	09/16/2010
Temperature/ Humidity	21 deg.C./ 56%	23 deg.C./ 67%
Engineer	Keisuke Kawamura (1-10GHz)	Takumi Shimada (10-26.5GHz)
Mode	11b Tx 2412MHz Ant1	

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2390.000	PK	53.8	27.7	2.6	32.5	51.6	73.9	22.4	
Hori	2400.000	PK	66.2	27.7	2.6	32.5	64.0	-	-	See 20dBc Data Sheet
Hori	3216.005	PK	50.7	29.5	3.1	32.1	51.2	73.9	22.7	
Hori	4824.000	PK	47.1	31.7	5.2	31.8	52.2	73.9	21.7	
Hori	7236.000	PK	48.4	36.2	6.2	32.4	58.4	73.9	15.5	
Hori	9648.000	PK	44.1	38.0	6.8	32.9	56.0	73.9	17.9	
Hori	24120.000	PK	48.0	37.9	-1.3	31.0	53.6	73.9	20.3	
Hori	2390.000	AV	41.4	27.7	2.6	32.5	39.2	53.9	14.7	
Hori	2400.000	AV	57.2	27.7	2.6	32.5	55.0	-	-	See 20dBc Data Sheet
Hori	3216.005	AV	47.1	29.5	3.1	32.1	47.6	53.9	6.4	
Hori	4824.000	AV	42.4	31.7	5.2	31.8	47.5	53.9	6.4	
Hori	7236.000	AV	42.9	36.2	6.2	32.4	52.9	53.9	1.0	
Hori	9648.000	AV	34.9	38.0	6.8	32.9	46.8	53.9	7.2	
Hori	24120.000	AV	31.3	37.9	-1.3	31.0	36.9	53.9	17.0	
Vert	2390.000	PK	55.3	27.7	2.6	32.5	53.1	73.9	20.8	
Vert	2400.000	PK	67.7	27.7	2.6	32.5	65.5	-	-	See 20dBc Data Sheet
Vert	3216.005	PK	49.8	29.5	3.1	32.1	50.3	73.9	23.7	
Vert	4824.000	PK	45.9	31.7	5.2	31.8	51.0	73.9	22.9	
Vert	7236.000	PK	46.3	36.2	6.2	32.4	56.3	73.9	17.6	
Vert	9648.000	PK	44.8	38.0	6.8	32.9	56.7	73.9	17.2	
Vert	24120.000	PK	49.0	37.9	-1.3	31.0	54.6	73.9	19.4	
Vert	2390.000	AV	43.2	27.7	2.6	32.5	41.0	53.9	12.9	
Vert	2400.000	AV	58.7	27.7	2.6	32.5	56.5	-	-	See 20dBc Data Sheet
Vert	3216.005	AV	45.7	29.5	3.1	32.1	46.2	53.9	7.7	
Vert	4824.000	AV	40.8	31.7	5.2	31.8	45.9	53.9	8.0	
Vert	7236.000	AV	39.5	36.2	6.2	32.4	49.5	53.9	4.5	
Vert	9648.000	AV	35.9	38.0	6.8	32.9	47.8	53.9	6.1	
Vert	24120.000	AV	31.3	37.9	-1.3	31.0	36.9	53.9	17.0	

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 had enough margin (more than 20dB).

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2412.000	PK	101.8	27.7	2.6	32.5	99.6	-	-	Carrier
Hori	2400.000	PK	60.9	27.7	2.6	32.5	58.7	79.6	20.9	
Vert	2412.000	PK	103.7	27.7	2.6	32.5	101.5	-	-	Carrier
Vert	2400.000	PK	62.7	27.7	2.6	32.5	60.5	81.5	21.0	

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

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber	
Report No.	30KE0072-HO-02	
Date	09/14/2010	09/16/2010
Temperature/ Humidity	23 deg.C./ 65%	23 deg.C./ 67%
Engineer	Takumi Shimada	Takumi Shimada
	(1-10GHz)	(10-26.5GHz)
Mode	11b Tx 2437MHz Ant1	

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3249.317	PK	49.6	29.5	3.1	32.1	50.1	73.9	23.8	
Hori	4874.000	PK	49.3	31.9	5.3	31.8	54.7	73.9	19.2	
Hori	7311.000	PK	48.8	36.2	6.2	32.4	58.8	73.9	15.2	
Hori	9748.000	PK	44.5	38.1	6.9	32.9	56.6	73.9	17.3	
Hori	24370.000	PK	48.5	37.9	-1.2	30.8	54.4	73.9	19.5	
Hori	3249.317	AV	44.9	29.5	3.1	32.1	45.4	53.9	8.5	
Hori	4874.000	AV	44.8	31.9	5.3	31.8	50.2	53.9	3.7	
Hori	7311.000	AV	41.4	36.2	6.2	32.4	51.4	53.9	2.5	
Hori	9748.000	AV	35.0	38.1	6.9	32.9	47.1	53.9	6.8	
Hori	24370.000	AV	31.1	37.9	-1.2	30.8	37.0	53.9	16.9	
Vert	3249.267	PK	48.6	29.5	3.1	32.1	49.1	73.9	24.8	
Vert	4874.000	PK	47.7	31.9	5.3	31.8	53.1	73.9	20.8	
Vert	7311.000	PK	46.6	36.2	6.2	32.4	56.6	73.9	17.3	
Vert	9748.000	PK	43.7	38.1	6.9	32.9	55.8	73.9	18.1	
Vert	24370.000	PK	48.4	37.9	-1.2	30.8	54.3	73.9	19.6	
Vert	3249.267	AV	43.6	29.5	3.1	32.1	44.1	53.9	9.8	
Vert	4874.000	AV	42.7	31.9	5.3	31.8	48.1	53.9	5.8	
Vert	7311.000	AV	39.0	36.2	6.2	32.4	49.0	53.9	5.0	
Vert	9748.000	AV	33.7	38.1	6.9	32.9	45.8	53.9	8.1	
Vert	24370.000	AV	31.1	37.9	-1.2	30.8	37.0	53.9	16.9	

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

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

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

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Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber	
Report No.	30KE0072-HO-02	
Date	09/14/2010	09/16/2010
Temperature/ Humidity	23 deg.C./ 65%	23 deg.C./ 67%
Engineer	Takumi Shimada	Takumi Shimada
	(1-10GHz)	(10-26.5GHz)
Mode	11b Tx 2462MHz Ant1	

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2483.500	PK	53.1	27.6	2.7	32.4	51.0	73.9	22.9	
Hori	3282.634	PK	46.4	29.6	3.1	32.0	47.1	73.9	26.8	
Hori	4924.000	PK	48.5	32.0	5.3	31.8	54.0	73.9	19.9	
Hori	7386.000	PK	47.3	36.2	6.2	32.4	57.3	73.9	16.6	
Hori	9848.000	PK	43.9	38.2	7.0	32.9	56.2	73.9	17.7	
Hori	24620.000	PK	48.3	38.0	-1.2	30.6	54.5	73.9	19.4	
Hori	2483.500	AV	40.8	27.6	2.7	32.4	38.7	53.9	15.2	
Hori	3282.634	AV	40.6	29.6	3.1	32.0	41.3	53.9	12.6	
Hori	4924.000	AV	44.0	32.0	5.3	31.8	49.5	53.9	4.4	
Hori	7386.000	AV	39.8	36.2	6.2	32.4	49.8	53.9	4.1	
Hori	9848.000	AV	34.4	38.2	7.0	32.9	46.7	53.9	7.3	
Hori	24620.000	AV	31.2	38.0	-1.2	30.6	37.4	53.9	16.6	
Vert	2483.500	PK	52.9	27.6	2.7	32.4	50.8	73.9	23.1	
Vert	3282.599	PK	50.6	29.6	3.1	32.0	51.3	73.9	22.6	
Vert	4924.000	PK	47.7	32.0	5.3	31.8	53.2	73.9	20.8	
Vert	7386.000	PK	46.9	36.2	6.2	32.4	56.9	73.9	17.0	
Vert	9848.000	PK	44.1	38.2	7.0	32.9	56.4	73.9	17.5	
Vert	24620.000	PK	49.1	38.0	-1.2	30.6	55.3	73.9	18.6	
Vert	2483.500	AV	40.9	27.6	2.7	32.4	38.8	53.9	15.1	
Vert	3282.599	AV	45.7	29.6	3.1	32.0	46.4	53.9	7.5	
Vert	4924.000	AV	43.3	32.0	5.3	31.8	48.8	53.9	5.1	
Vert	7386.000	AV	38.1	36.2	6.2	32.4	48.1	53.9	5.8	
Vert	9848.000	AV	33.7	38.2	7.0	32.9	46.0	53.9	7.9	
Vert	24620.000	AV	31.1	38.0	-1.2	30.6	37.3	53.9	16.6	

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 had enough margin (more than 20dB).

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

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Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 and 4 Semi Anechoic Chamber		
Report No.	30KE0072-HO-02		
Date	09/13/2010	09/21/2010	09/16/2010
Temperature/ Humidity	21 deg.C./ 56%	24 deg.C./ 67%	23 deg.C./ 67%
Engineer	Keisuke Kawamura (1-10GHz)	Satofumi Matsuyama (1-10GHz)	Takumi Shimada (10-26.5GHz)
Mode	11g Tx 2412MHz Ant1		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2390.000	PK	73.1	27.7	2.6	32.5	70.9	73.9	3.0	
Hori	2398.920	PK	86.5	27.2	2.9	32.1	84.5	-	-	See 20dBc Data Sheet
Hori	2400.000	PK	82.6	27.7	2.6	32.5	80.4	-	-	See 20dBc Data Sheet
Hori	3216.005	PK	49.9	29.5	3.1	32.1	50.4	73.9	23.5	
Hori	4824.000	PK	43.3	31.7	5.2	31.8	48.4	73.9	25.5	
Hori	7236.000	PK	55.9	36.2	6.2	32.4	65.9	73.9	8.0	
Hori	9648.000	PK	43.4	38.0	6.8	32.9	55.3	73.9	18.7	
Hori	24120.000	PK	48.5	37.9	-1.3	31.0	54.1	73.9	19.8	
Hori	2390.000	AV	51.3	27.7	2.6	32.5	49.1	53.9	4.8	
Hori	2398.920	AV	58.9	27.2	2.9	32.1	56.9	-	-	See 20dBc Data Sheet
Hori	2400.000	AV	57.0	27.7	2.6	32.5	54.8	-	-	See 20dBc Data Sheet
Hori	3216.005	AV	43.6	29.5	3.1	32.1	44.1	53.9	9.9	
Hori	4824.000	AV	31.6	31.7	5.2	31.8	36.7	53.9	17.2	
Hori	7236.000	AV	38.6	36.2	6.2	32.4	48.6	53.9	5.3	
Hori	9648.000	AV	32.7	38.0	6.8	32.9	44.6	53.9	9.3	
Hori	24120.000	AV	31.2	37.9	-1.3	31.0	36.8	53.9	17.1	
Vert	2390.000	PK	74.1	27.7	2.6	32.5	71.9	73.9	2.0	
Vert	2398.920	PK	86.2	27.2	2.9	32.1	84.2	-	-	See 20dBc Data Sheet
Vert	2400.000	PK	83.9	27.7	2.6	32.5	81.7	-	-	See 20dBc Data Sheet
Vert	3216.005	PK	50.3	29.5	3.1	32.1	50.8	73.9	23.1	
Vert	4824.000	PK	41.9	31.7	5.2	31.8	47.0	73.9	26.9	
Vert	7236.000	PK	51.3	36.2	6.2	32.4	61.3	73.9	12.6	
Vert	9648.000	PK	43.7	38.0	6.8	32.9	55.6	73.9	18.3	
Vert	24120.000	PK	49.1	37.9	-1.3	31.0	54.7	73.9	19.2	
Vert	2390.000	AV	54.1	27.7	2.6	32.5	51.9	53.9	2.0	
Vert	2398.920	AV	59.9	27.2	2.9	32.1	57.9	-	-	See 20dBc Data Sheet
Vert	2400.000	AV	61.0	27.7	2.6	32.5	58.8	-	-	See 20dBc Data Sheet
Vert	3216.005	AV	43.8	29.5	3.1	32.1	44.3	53.9	9.6	
Vert	4824.000	AV	31.3	31.7	5.2	31.8	36.4	53.9	17.5	
Vert	7236.000	AV	36.8	36.2	6.2	32.4	46.8	53.9	7.1	
Vert	9648.000	AV	33.9	38.0	6.8	32.9	45.8	53.9	8.1	
Vert	24120.000	AV	31.2	37.9	-1.3	31.0	36.8	53.9	17.1	

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

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

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2412.000	PK	101.2	27.7	2.6	32.5	99.0	-	-	Carrier
Hori	2398.920	PK	69.7	27.2	2.9	32.1	67.7	79.0	11.3	
Hori	2400.000	PK	62.5	27.7	2.6	32.5	60.3	79.0	18.7	
Vert	2412.000	PK	103.2	27.7	2.6	32.5	101.0	-	-	Carrier
Vert	2398.920	PK	68.8	27.2	2.9	32.1	66.8	81.0	14.2	
Vert	2400.000	PK	68.7	27.7	2.6	32.5	66.5	81.0	14.5	

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

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 and 4 Semi Anechoic Chamber	
Report No.	30KE0072-HO-02	
Date	09/19/2010	09/23/2010
Temperature/ Humidity	22 deg.C./ 62%	22 deg.C./ 72%
Engineer	Kazuya Yoshioka	Takumi Shimada
	(1-10GHz)	(10-26.5GHz)
Mode	11g Tx 2417MHz Ant1	

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3222.655	PK	49.4	29.5	3.1	32.1	49.9	73.9	24.0	
Hori	4834.000	PK	43.6	31.7	5.1	31.8	48.6	73.9	25.3	
Hori	7251.000	PK	56.0	36.2	6.1	32.4	65.9	73.9	8.0	
Hori	9668.000	PK	43.8	38.0	6.8	32.9	55.7	73.9	18.2	
Hori	24170.000	PK	46.3	37.9	-1.2	31.6	51.4	73.9	22.5	
Hori	3222.655	AV	43.5	29.5	3.1	32.1	44.0	53.9	9.9	
Hori	4834.000	AV	31.6	31.7	5.1	31.8	36.6	53.9	17.3	
Hori	7251.000	AV	39.7	36.2	6.1	32.4	49.6	53.9	4.3	
Hori	9668.000	AV	33.7	38.0	6.8	32.9	45.6	53.9	8.3	
Hori	24170.000	AV	33.5	37.9	-1.2	31.6	38.6	53.9	15.3	
Vert	3222.657	PK	48.5	29.5	3.1	32.1	49.0	73.9	24.9	
Vert	4834.000	PK	42.6	31.7	5.1	31.8	47.6	73.9	26.3	
Vert	7251.000	PK	52.7	36.2	6.1	32.4	62.6	73.9	11.3	
Vert	9668.000	PK	44.6	38.0	6.8	32.9	56.5	73.9	17.4	
Vert	24170.000	PK	46.7	37.9	-1.2	31.6	51.8	73.9	22.1	
Vert	3222.657	AV	42.8	29.5	3.1	32.1	43.3	53.9	10.6	
Vert	4834.000	AV	31.2	31.7	5.1	31.8	36.2	53.9	17.7	
Vert	7251.000	AV	38.0	36.2	6.1	32.4	47.9	53.9	6.0	
Vert	9668.000	AV	33.9	38.0	6.8	32.9	45.8	53.9	8.1	
Vert	24170.000	AV	33.5	37.9	-1.2	31.6	38.6	53.9	15.3	

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

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

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber	
Report No.	30KE0072-HO-02	
Date	09/13/2010	09/16/2010
Temperature/ Humidity	21 deg.C./ 56%	23 deg.C./ 67%
Engineer	Keisuke Kawamura (1-10GHz)	Takumi Shimada (10-26.5GHz)
Mode	11g Tx 2437MHz Ant1	

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3249.338	PK	49.4	29.5	3.1	32.1	49.9	73.9	24.0	
Hori	4874.000	PK	45.5	31.9	5.3	31.8	50.9	73.9	23.0	
Hori	7311.000	PK	52.4	36.2	6.2	32.4	62.4	73.9	11.5	
Hori	9748.000	PK	43.4	38.1	6.9	32.9	55.5	73.9	18.4	
Hori	24370.000	PK	49.0	37.9	-1.2	30.8	54.9	73.9	19.0	
Hori	3249.338	AV	43.1	29.5	3.1	32.1	43.6	53.9	10.3	
Hori	4874.000	AV	33.2	31.9	5.3	31.8	38.6	53.9	15.3	
Hori	7311.000	AV	37.7	36.2	6.2	32.4	47.7	53.9	6.2	
Hori	9748.000	AV	33.2	38.1	6.9	32.9	45.3	53.9	8.6	
Hori	24370.000	AV	31.1	37.9	-1.2	30.8	37.0	53.9	16.9	
Vert	3249.338	PK	49.7	29.5	3.1	32.1	50.2	73.9	23.7	
Vert	4874.000	PK	43.0	31.9	5.3	31.8	48.4	73.9	25.5	
Vert	7311.000	PK	51.9	36.2	6.2	32.4	61.9	73.9	12.0	
Vert	9748.000	PK	42.9	38.1	6.9	32.9	55.0	73.9	18.9	
Vert	24370.000	PK	48.8	37.9	-1.2	30.8	54.7	73.9	19.2	
Vert	3249.338	AV	44.4	29.5	3.1	32.1	44.9	53.9	9.0	
Vert	4874.000	AV	31.4	31.9	5.3	31.8	36.8	53.9	17.1	
Vert	7311.000	AV	37.0	36.2	6.2	32.4	47.0	53.9	6.9	
Vert	9748.000	AV	33.3	38.1	6.9	32.9	45.4	53.9	8.5	
Vert	24370.000	AV	31.1	37.9	-1.2	30.8	37.0	53.9	16.9	

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

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

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber	
Report No.	30KE0072-HO-02	
Date	09/13/2010	09/16/2010
Temperature/ Humidity	21 deg.C./ 56%	23 deg.C./ 67%
Engineer	Keisuke Kawamura (1-10GHz)	Takumi Shimada (10-26.5GHz)
Mode	11g Tx 2462MHz Ant1	

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2483.500	PK	70.7	27.6	2.7	32.4	68.6	73.9	5.3	
Hori	3282.674	PK	48.7	29.6	3.1	32.0	49.4	73.9	24.5	
Hori	4924.000	PK	44.3	32.0	5.3	31.8	49.8	73.9	24.1	
Hori	7386.000	PK	53.8	36.2	6.2	32.4	63.8	73.9	10.1	
Hori	9848.000	PK	43.2	38.2	7.0	32.9	55.5	73.9	18.4	
Hori	24620.000	PK	48.6	38.0	-1.2	30.6	54.8	73.9	19.1	
Hori	2483.500	AV	48.9	27.6	2.7	32.4	46.8	53.9	7.1	
Hori	3282.674	AV	42.0	29.6	3.1	32.0	42.7	53.9	11.2	
Hori	4924.000	AV	32.1	32.0	5.3	31.8	37.6	53.9	16.3	
Hori	7386.000	AV	38.2	36.2	6.2	32.4	48.2	53.9	5.8	
Hori	9848.000	AV	33.1	38.2	7.0	32.9	45.4	53.9	8.5	
Hori	24620.000	AV	31.1	38.0	-1.2	30.6	37.3	53.9	16.6	
Vert	2483.500	PK	71.1	27.6	2.7	32.4	69.0	73.9	4.9	
Vert	3282.674	PK	50.7	29.6	3.1	32.0	51.4	73.9	22.5	
Vert	4924.000	PK	44.0	32.0	5.3	31.8	49.5	73.9	24.4	
Vert	7386.000	PK	51.4	36.2	6.2	32.4	61.4	73.9	12.5	
Vert	9848.000	PK	42.7	38.2	7.0	32.9	55.0	73.9	18.9	
Vert	24620.000	PK	49.1	38.0	-1.2	30.6	55.3	73.9	18.6	
Vert	2483.500	AV	50.7	27.6	2.7	32.4	48.6	53.9	5.4	
Vert	3282.674	AV	45.6	29.6	3.1	32.0	46.3	53.9	7.6	
Vert	4924.000	AV	32.1	32.0	5.3	31.8	37.6	53.9	16.3	
Vert	7386.000	AV	36.0	36.2	6.2	32.4	46.0	53.9	7.9	
Vert	9848.000	AV	32.4	38.2	7.0	32.9	44.7	53.9	9.2	
Vert	24620.000	AV	31.2	38.0	-1.2	30.6	37.4	53.9	16.5	

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 had enough margin (more than 20dB).

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

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Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber	
Report No.	30KE0072-HO-02	
Date	09/13/2010	09/16/2010
Temperature/ Humidity	21 deg.C./ 56%	23 deg.C./ 67%
Engineer	Keisuke Kawamura	Takumi Shimada
	(1-10GHz)	(10-26.5GHz)
Mode	11n-20 Tx 2412MHz Ant1	

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2390.000	PK	68.4	27.7	2.6	32.5	66.2	73.9	7.7	
Hori	2400.000	PK	74.6	27.7	2.6	32.5	72.4	-	-	See 20dBc Data Sheet
Hori	3216.005	PK	50.0	29.5	3.1	32.1	50.5	73.9	23.4	
Hori	4824.000	PK	43.0	31.7	5.2	31.8	48.1	73.9	25.8	
Hori	7236.000	PK	50.9	36.2	6.2	32.4	60.9	73.9	13.0	
Hori	9648.000	PK	44.3	38.0	6.8	32.9	56.2	73.9	17.7	
Hori	24120.000	PK	48.6	37.9	-1.3	31.0	54.2	73.9	19.7	
Hori	2390.000	AV	52.9	27.7	2.6	32.5	50.7	53.9	3.2	
Hori	2400.000	AV	59.2	27.7	2.6	32.5	57.0	-	-	See 20dBc Data Sheet
Hori	3216.005	AV	45.8	29.5	3.1	32.1	46.3	53.9	7.6	
Hori	4824.000	AV	31.9	31.7	5.2	31.8	37.0	53.9	16.9	
Hori	7236.000	AV	36.6	36.2	6.2	32.4	46.6	53.9	7.3	
Hori	9648.000	AV	35.0	38.0	6.8	32.9	46.9	53.9	7.0	
Hori	24120.000	AV	31.1	37.9	-1.3	31.0	36.7	53.9	17.2	
Vert	2390.000	PK	71.4	27.7	2.6	32.5	69.2	73.9	4.7	
Vert	2400.000	PK	77.3	27.7	2.6	32.5	75.1	-	-	See 20dBc Data Sheet
Vert	3216.005	PK	49.0	29.5	3.1	32.1	49.5	73.9	24.4	
Vert	4824.000	PK	42.5	31.7	5.2	31.8	47.6	73.9	26.3	
Vert	7236.000	PK	47.1	36.2	6.2	32.4	57.1	73.9	16.8	
Vert	9648.000	PK	44.6	38.0	6.8	32.9	56.5	73.9	17.4	
Vert	24120.000	PK	48.8	37.9	-1.3	31.0	54.4	73.9	19.5	
Vert	2390.000	AV	54.9	27.7	2.6	32.5	52.7	53.9	1.2	
Vert	2400.000	AV	61.6	27.7	2.6	32.5	59.4	-	-	See 20dBc Data Sheet
Vert	3216.005	AV	44.3	29.5	3.1	32.1	44.8	53.9	9.2	
Vert	4824.000	AV	31.5	31.7	5.2	31.8	36.6	53.9	17.3	
Vert	7236.000	AV	34.0	36.2	6.2	32.4	44.0	53.9	9.9	
Vert	9648.000	AV	35.4	38.0	6.8	32.9	47.3	53.9	6.6	
Vert	24120.000	AV	31.2	37.9	-1.3	31.0	36.8	53.9	17.1	

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 had enough margin (more than 20dB).

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2412.000	PK	100.5	27.7	2.6	32.5	98.3	-	-	Carrier
Hori	2400.000	PK	62.4	27.7	2.6	32.5	60.2	78.3	18.1	
Vert	2412.000	PK	102.1	27.7	2.6	32.5	99.9	-	-	Carrier
Vert	2400.000	PK	65.2	27.7	2.6	32.5	63.0	79.9	16.9	

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

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 and 4 Semi Anechoic Chamber	
Report No.	30KE0072-HO-02	
Date	09/19/2010	09/23/2010
Temperature/ Humidity	22 deg.C./ 62%	22 deg.C./ 72%
Engineer	Kazuya Yoshioka	Takumi Shimada
	(1-10GHz)	(10-26.5GHz)
Mode	11n-20 Tx 2417MHz Ant1	

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3222.654	PK	49.8	29.5	3.1	32.1	50.3	73.9	23.6	
Hori	4834.000	PK	44.7	31.7	5.1	31.8	49.7	73.9	24.2	
Hori	7251.000	PK	56.5	36.2	6.1	32.4	66.4	73.9	7.5	
Hori	9668.000	PK	43.6	38.0	6.8	32.9	55.5	73.9	18.4	
Hori	24170.000	PK	46.2	37.9	-1.2	31.6	51.3	73.9	22.6	
Hori	3222.654	AV	45.5	29.5	3.1	32.1	46.0	53.9	7.9	
Hori	4834.000	AV	34.1	31.7	5.1	31.8	39.1	53.9	14.8	
Hori	7251.000	AV	41.2	36.2	6.1	32.4	51.1	53.9	2.8	
Hori	9668.000	AV	35.0	38.0	6.8	32.9	46.9	53.9	7.0	
Hori	24170.000	AV	33.5	37.9	-1.2	31.6	38.6	53.9	15.3	
Vert	3222.634	PK	49.7	29.5	3.1	32.1	50.2	73.9	23.7	
Vert	4834.000	PK	41.8	31.7	5.1	31.8	46.8	73.9	27.1	
Vert	7251.000	PK	52.8	36.2	6.1	32.4	62.7	73.9	11.2	
Vert	9668.000	PK	44.5	38.0	6.8	32.9	56.4	73.9	17.5	
Vert	24170.000	PK	46.3	37.9	-1.2	31.6	51.4	73.9	22.5	
Vert	3222.634	AV	45.1	29.5	3.1	32.1	45.6	53.9	8.3	
Vert	4834.000	AV	31.7	31.7	5.1	31.8	36.7	53.9	17.2	
Vert	7251.000	AV	36.9	36.2	6.1	32.4	46.8	53.9	7.1	
Vert	9668.000	AV	35.3	38.0	6.8	32.9	47.2	53.9	6.7	
Vert	24170.000	AV	33.5	37.9	-1.2	31.6	38.6	53.9	15.3	

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

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

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber	
Report No.	30KE0072-HO-02	
Date	09/13/2010	09/16/2010
Temperature/ Humidity	21 deg.C./ 56%	23 deg.C./ 67%
Engineer	Keisuke Kawamura (1-10GHz)	Takumi Shimada (10-26.5GHz)
Mode	11n-20 Tx 2437MHz Ant1	

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3249.338	PK	50.6	29.5	3.1	32.1	51.1	73.9	22.8	
Hori	4874.000	PK	45.6	31.9	5.3	31.8	51.0	73.9	22.9	
Hori	7311.000	PK	54.2	36.2	6.2	32.4	64.2	73.9	9.7	
Hori	9748.000	PK	42.8	38.1	6.9	32.9	54.9	73.9	19.0	
Hori	24370.000	PK	48.8	37.9	-1.2	30.8	54.7	73.9	19.2	
Hori	3249.338	AV	45.3	29.5	3.1	32.1	45.8	53.9	8.1	
Hori	4874.000	AV	34.3	31.9	5.3	31.8	39.7	53.9	14.2	
Hori	7311.000	AV	40.9	36.2	6.2	32.4	50.9	53.9	3.0	
Hori	9748.000	AV	34.7	38.1	6.9	32.9	46.8	53.9	7.1	
Hori	24370.000	AV	31.3	37.9	-1.2	30.8	37.2	53.9	16.7	
Vert	3249.338	PK	50.4	29.5	3.1	32.1	50.9	73.9	23.0	
Vert	4874.000	PK	43.5	31.9	5.3	31.8	48.9	73.9	25.0	
Vert	7311.000	PK	53.1	36.2	6.2	32.4	63.1	73.9	10.8	
Vert	9748.000	PK	43.6	38.1	6.9	32.9	55.7	73.9	18.2	
Vert	24370.000	PK	48.6	37.9	-1.2	30.8	54.5	73.9	19.4	
Vert	3249.338	AV	46.5	29.5	3.1	32.1	47.0	53.9	6.9	
Vert	4874.000	AV	32.7	31.9	5.3	31.8	38.1	53.9	15.8	
Vert	7311.000	AV	39.2	36.2	6.2	32.4	49.2	53.9	4.7	
Vert	9748.000	AV	33.9	38.1	6.9	32.9	46.0	53.9	7.9	
Vert	24370.000	AV	31.3	37.9	-1.2	30.8	37.2	53.9	16.7	

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

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

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 and 4 Semi Anechoic Chamber	
Report No.	30KE0072-HO-02	
Date	09/19/2010	09/23/2010
Temperature/ Humidity	22 deg.C./ 62%	22 deg.C./ 72%
Engineer	Kazuya Yoshioka	Takumi Shimada
	(1-10GHz)	(10-26.5GHz)
Mode	11n-20 Tx 2457MHz Ant1	

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3276.002	PK	48.8	29.6	3.1	32.0	49.5	73.9	24.4	
Hori	4914.000	PK	46.7	32.0	5.2	31.8	52.1	73.9	21.8	
Hori	7371.000	PK	54.2	36.2	6.1	32.4	64.1	73.9	9.8	
Hori	9828.000	PK	44.4	38.1	6.9	32.9	56.5	73.9	17.4	
Hori	24570.000	PK	47.3	37.9	-1.1	31.5	52.6	73.9	21.3	
Hori	3276.002	AV	44.4	29.6	3.1	32.0	45.1	53.9	8.8	
Hori	4914.000	AV	35.3	32.0	5.2	31.8	40.7	53.9	13.2	
Hori	7371.000	AV	39.0	36.2	6.1	32.4	48.9	53.9	5.0	
Hori	9828.000	AV	33.8	38.1	6.9	32.9	45.9	53.9	8.0	
Hori	24570.000	AV	34.0	37.9	-1.1	31.5	39.3	53.9	14.6	
Vert	3276.022	PK	50.1	29.6	3.1	32.0	50.8	73.9	23.1	
Vert	4914.000	PK	45.3	32.0	5.2	31.8	50.7	73.9	23.2	
Vert	7371.000	PK	53.6	36.2	6.1	32.4	63.5	73.9	10.4	
Vert	9828.000	PK	43.3	38.1	6.9	32.9	55.4	73.9	18.5	
Vert	24570.000	PK	46.6	37.9	-1.1	31.5	51.9	73.9	22.0	
Vert	3276.022	AV	46.3	29.6	3.1	32.0	47.0	53.9	6.9	
Vert	4914.000	AV	33.3	32.0	5.2	31.8	38.7	53.9	15.2	
Vert	7371.000	AV	38.8	36.2	6.1	32.4	48.7	53.9	5.2	
Vert	9828.000	AV	33.1	38.1	6.9	32.9	45.2	53.9	8.7	
Vert	24570.000	AV	34.0	37.9	-1.1	31.5	39.3	53.9	14.6	

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

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

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber	
Report No.	30KE0072-HO-02	
Date	09/13/2010	09/16/2010
Temperature/ Humidity	21 deg.C./ 56%	23 deg.C./ 67%
Engineer	Keisuke Kawamura	Takumi Shimada
	(1-10GHz)	(10-26.5GHz)
Mode	11n-20 Tx 2462MHz Ant1	

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2483.500	PK	70.1	27.6	2.7	32.4	68.0	73.9	5.9	
Hori	3282.674	PK	49.5	29.6	3.1	32.0	50.2	73.9	23.7	
Hori	4924.000	PK	43.9	32.0	5.3	31.8	49.4	73.9	24.5	
Hori	7386.000	PK	52.3	36.2	6.2	32.4	62.3	73.9	11.6	
Hori	9848.000	PK	42.8	38.2	7.0	32.9	55.1	73.9	18.8	
Hori	24620.000	PK	48.8	38.0	-1.2	30.6	55.0	73.9	18.9	
Hori	2483.500	AV	52.1	27.6	2.7	32.4	50.0	53.9	3.9	
Hori	3282.674	AV	44.7	29.6	3.1	32.0	45.4	53.9	8.5	
Hori	4924.000	AV	32.4	32.0	5.3	31.8	37.9	53.9	16.0	
Hori	7386.000	AV	39.1	36.2	6.2	32.4	49.1	53.9	4.8	
Hori	9848.000	AV	34.3	38.2	7.0	32.9	46.6	53.9	7.3	
Hori	24620.000	AV	31.1	38.0	-1.2	30.6	37.3	53.9	16.6	
Vert	2483.500	PK	74.3	27.6	2.7	32.4	72.2	73.9	1.7	
Vert	3282.674	PK	49.7	29.6	3.1	32.0	50.4	73.9	23.5	
Vert	4924.000	PK	43.2	32.0	5.3	31.8	48.7	73.9	25.2	
Vert	7386.000	PK	48.1	36.2	6.2	32.4	58.1	73.9	15.8	
Vert	9848.000	PK	42.7	38.2	7.0	32.9	55.0	73.9	18.9	
Vert	24620.000	PK	49.3	38.0	-1.2	30.6	55.5	73.9	18.4	
Vert	2483.500	AV	54.5	27.6	2.7	32.4	52.4	53.9	1.6	
Vert	3282.674	AV	45.9	29.6	3.1	32.0	46.6	53.9	7.3	
Vert	4924.000	AV	32.3	32.0	5.3	31.8	37.8	53.9	16.1	
Vert	7386.000	AV	35.8	36.2	6.2	32.4	45.8	53.9	8.1	
Vert	9848.000	AV	32.9	38.2	7.0	32.9	45.2	53.9	8.7	
Vert	24620.000	AV	31.1	38.0	-1.2	30.6	37.3	53.9	16.6	

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 had enough margin (more than 20dB).

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber	
Report No.	30KE0072-HO-02	
Date	09/13/2010	09/16/2010
Temperature/ Humidity	21 deg.C./ 56%	23 deg.C./ 67%
Engineer	Keisuke Kawamura	Takumi Shimada
	(1-10GHz)	(10-26.5GHz)
Mode	11n-40 Tx 2422MHz Ant1	

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2390.000	PK	69.7	27.7	2.6	32.5	67.5	73.9	6.4	
Hori	2400.000	PK	72.7	27.7	2.6	32.5	70.5	-	-	See 20dBc Data Sheet
Hori	3229.325	PK	48.2	29.5	3.1	32.1	48.7	73.9	25.2	
Hori	4844.000	PK	42.9	31.8	5.3	31.8	48.2	73.9	25.7	
Hori	7266.000	PK	45.2	36.2	6.2	32.4	55.2	73.9	18.7	
Hori	9688.000	PK	43.6	38.1	6.9	32.9	55.7	73.9	18.2	
Hori	24220.000	PK	48.6	37.9	-1.3	30.9	54.3	73.9	19.6	
Hori	2390.000	AV	53.2	27.7	2.6	32.5	51.0	53.9	2.9	
Hori	2400.000	AV	60.1	27.7	2.6	32.5	57.9	-	-	See 20dBc Data Sheet
Hori	3229.325	AV	43.2	29.5	3.1	32.1	43.7	53.9	10.2	
Hori	4844.000	AV	31.0	31.8	5.3	31.8	36.3	53.9	17.6	
Hori	7266.000	AV	32.2	36.2	6.2	32.4	42.2	53.9	11.7	
Hori	9688.000	AV	34.1	38.1	6.9	32.9	46.2	53.9	7.7	
Hori	24220.000	AV	31.8	37.9	-1.3	30.9	37.5	53.9	16.4	
Vert	2390.000	PK	72.5	27.7	2.6	32.5	70.3	73.9	3.6	
Vert	2400.000	PK	75.6	27.7	2.6	32.5	73.4	-	-	See 20dBc Data Sheet
Vert	3229.325	PK	47.7	29.5	3.1	32.1	48.2	73.9	25.7	
Vert	4844.000	PK	42.2	31.8	5.3	31.8	47.5	73.9	26.4	
Vert	7266.000	PK	43.1	36.2	6.2	32.4	53.1	73.9	20.8	
Vert	9688.000	PK	42.6	38.1	6.9	32.9	54.6	73.9	19.3	
Vert	24220.000	PK	48.9	37.9	-1.3	30.9	54.6	73.9	19.3	
Vert	2390.000	AV	54.8	27.7	2.6	32.5	52.6	53.9	1.3	
Vert	2400.000	AV	62.1	27.7	2.6	32.5	59.9	-	-	See 20dBc Data Sheet
Vert	3229.325	AV	42.2	29.5	3.1	32.1	42.7	53.9	11.2	
Vert	4844.000	AV	30.9	31.8	5.3	31.8	36.2	53.9	17.7	
Vert	7266.000	AV	31.1	36.2	6.2	32.4	41.1	53.9	12.8	
Vert	9688.000	AV	34.3	38.1	6.9	32.9	46.4	53.9	7.5	
Vert	24220.000	AV	31.8	37.9	-1.3	30.9	37.5	53.9	16.4	

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 had enough margin (more than 20dB).

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2422.000	PK	93.7	27.7	2.6	32.5	91.5	-	-	Carrier
Hori	2400.000	PK	62.2	27.7	2.6	32.5	60.0	71.5	11.5	
Vert	2422.000	PK	94.5	27.7	2.6	32.5	92.3	-	-	Carrier
Vert	2400.000	PK	64.1	27.7	2.6	32.5	61.9	72.3	10.4	

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

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Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 and 4 Semi Anechoic Chamber	
Report No.	30KE0072-HO-02	
Date	09/19/2010	09/23/2010
Temperature/ Humidity	22 deg.C./ 62%	22 deg.C./ 72%
Engineer	Kazuya Yoshioka	Takumi Shimada
	(1-10GHz)	(10-26.5GHz)
Mode	11n-40 Tx 2427MHz Ant1	

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3235.988	PK	49.0	29.5	3.1	32.1	49.5	73.9	24.4	
Hori	4854.000	PK	45.3	31.8	5.2	31.8	50.5	73.9	23.4	
Hori	7281.000	PK	51.8	36.2	6.1	32.4	61.7	73.9	12.2	
Hori	9708.000	PK	44.5	38.1	6.8	32.9	56.5	73.9	17.4	
Hori	24270.000	PK	46.3	37.9	-1.1	31.6	51.5	73.9	22.4	
Hori	3235.988	AV	44.4	29.5	3.1	32.1	44.9	53.9	9.0	
Hori	4854.000	AV	33.6	31.8	5.2	31.8	38.8	53.9	15.1	
Hori	7281.000	AV	39.3	36.2	6.1	32.4	49.2	53.9	4.7	
Hori	9708.000	AV	34.2	38.1	6.8	32.9	46.2	53.9	7.7	
Hori	24270.000	AV	33.3	37.9	-1.1	31.6	38.5	53.9	15.4	
Vert	3235.967	PK	49.0	29.5	3.1	32.1	49.5	73.9	24.4	
Vert	4854.000	PK	41.8	31.8	5.2	31.8	47.0	73.9	26.9	
Vert	7281.000	PK	48.4	36.2	6.1	32.4	58.3	73.9	15.6	
Vert	9708.000	PK	43.8	38.1	6.8	32.9	55.8	73.9	18.1	
Vert	24270.000	PK	45.7	37.9	-1.1	31.6	50.9	73.9	23.0	
Vert	3235.967	AV	44.6	29.5	3.1	32.1	45.1	53.9	8.8	
Vert	4854.000	AV	31.5	31.8	5.2	31.8	36.7	53.9	17.2	
Vert	7281.000	AV	36.2	36.2	6.1	32.4	46.1	53.9	7.8	
Vert	9708.000	AV	34.6	38.1	6.8	32.9	46.6	53.9	7.4	
Vert	24270.000	AV	33.3	37.9	-1.1	31.6	38.5	53.9	15.4	

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

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

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

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Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber		
Report No.	30KE0072-HO-02		
Date	09/13/2010	09/16/2010	09/17/2010
Temperature/ Humidity	21 deg.C./ 56%	23 deg.C./ 67%	22 deg.C./ 66%
Engineer	Keisuke Kawamura (1-10GHz)	Takumi Shimada (10-26.5GHz)	Takumi Shimada (10-26.5GHz)
Mode	11n-40 Tx 2437MHz Ant1		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	195.971	QP	44.0	16.7	9.1	32.1	37.7	43.5	5.8	
Hori	214.764	QP	48.7	17.1	9.3	32.0	43.1	43.5	0.4	
Hori	239.985	QP	46.9	17.4	9.6	32.0	41.9	46.0	4.1	
Hori	272.048	QP	42.5	18.5	9.8	31.9	38.9	46.0	7.1	
Hori	300.673	QP	45.5	14.3	10.0	31.8	38.0	46.0	8.0	
Hori	335.992	QP	45.5	15.5	10.2	31.8	39.4	46.0	6.6	
Hori	700.620	QP	32.2	20.4	12.4	32.0	33.0	46.0	13.0	
Hori	3249.325	PK	47.4	29.5	3.1	32.1	47.9	73.9	26.0	
Hori	4874.000	PK	44.0	31.9	5.3	31.8	49.4	73.9	24.6	
Hori	7311.000	PK	51.6	36.2	6.2	32.4	61.6	73.9	12.3	
Hori	9748.000	PK	43.9	38.1	6.9	32.9	56.0	73.9	17.9	
Hori	24370.000	PK	48.9	37.9	-1.2	30.8	54.8	73.9	19.1	
Hori	3249.325	AV	41.8	29.5	3.1	32.1	42.3	53.9	11.7	
Hori	4874.000	AV	32.2	31.9	5.3	31.8	37.6	53.9	16.3	
Hori	7311.000	AV	38.8	36.2	6.2	32.4	48.8	53.9	5.1	
Hori	9748.000	AV	35.2	38.1	6.9	32.9	47.3	53.9	6.6	
Hori	24370.000	AV	31.2	37.9	-1.2	30.8	37.1	53.9	16.8	
Vert	196.621	QP	36.3	16.7	9.1	32.1	30.0	43.5	13.5	
Vert	214.796	QP	36.4	17.1	9.3	32.0	30.8	43.5	12.7	
Vert	239.989	QP	37.0	17.4	9.6	32.0	32.0	46.0	14.0	
Vert	272.052	QP	32.4	18.5	9.8	31.9	28.8	46.0	17.2	
Vert	300.680	QP	35.6	14.3	10.0	31.8	28.1	46.0	17.9	
Vert	335.984	QP	37.2	15.5	10.2	31.8	31.1	46.0	14.9	
Vert	700.678	QP	33.0	20.4	12.4	32.0	33.8	46.0	12.2	
Vert	3249.325	PK	50.2	29.5	3.1	32.1	50.7	73.9	23.2	
Vert	4874.000	PK	42.7	31.9	5.3	31.8	48.1	73.9	25.8	
Vert	7311.000	PK	50.5	36.2	6.2	32.4	60.5	73.9	13.4	
Vert	9748.000	PK	43.6	38.1	6.9	32.9	55.7	73.9	18.2	
Vert	24370.000	PK	48.7	37.9	-1.2	30.8	54.6	73.9	19.3	
Vert	3249.325	AV	46.0	29.5	3.1	32.1	46.5	53.9	7.5	
Vert	4874.000	AV	31.3	31.9	5.3	31.8	36.7	53.9	17.2	
Vert	7311.000	AV	38.1	36.2	6.2	32.4	48.1	53.9	5.8	
Vert	9748.000	AV	33.0	38.1	6.9	32.9	45.1	53.9	8.8	
Vert	24370.000	AV	31.2	37.9	-1.2	30.8	37.1	53.9	16.8	

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

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

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Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 and 4 Semi Anechoic Chamber	
Report No.	30KE0072-HO-02	
Date	09/19/2010	09/23/2010
Temperature/ Humidity	22 deg.C./ 62%	22 deg.C./ 72%
Engineer	Kazuya Yoshioka	Takumi Shimada
	(1-10GHz)	(10-26.5GHz)
Mode	11n-40 Tx 2447MHz Ant1	

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3262.650	PK	48.5	29.6	3.1	32.0	49.2	73.9	24.7	
Hori	4894.000	PK	45.1	31.9	5.2	31.8	50.4	73.9	23.5	
Hori	7341.000	PK	50.0	36.2	6.1	32.4	59.9	73.9	14.0	
Hori	9788.000	PK	43.6	38.1	6.8	32.9	55.6	73.9	18.3	
Hori	24470.000	PK	46.1	37.9	-1.1	31.6	51.3	73.9	22.6	
Hori	3262.650	AV	43.8	29.6	3.1	32.0	44.5	53.9	9.4	
Hori	4894.000	AV	33.5	31.9	5.2	31.8	38.8	53.9	15.1	
Hori	7341.000	AV	37.7	36.2	6.1	32.4	47.6	53.9	6.3	
Hori	9788.000	AV	34.2	38.1	6.8	32.9	46.2	53.9	7.7	
Hori	24470.000	AV	33.2	37.9	-1.1	31.6	38.4	53.9	15.5	
Vert	3262.677	PK	50.0	29.6	3.1	32.0	50.7	73.9	23.2	
Vert	4894.000	PK	43.9	31.9	5.2	31.8	49.2	73.9	24.7	
Vert	7341.000	PK	50.2	36.2	6.1	32.4	60.1	73.9	13.8	
Vert	9788.000	PK	43.1	38.1	6.8	32.9	55.1	73.9	18.8	
Vert	24470.000	PK	45.7	37.9	-1.1	31.6	50.9	73.9	23.0	
Vert	3262.677	AV	45.2	29.6	3.1	32.0	45.9	53.9	8.0	
Vert	4894.000	AV	31.8	31.9	5.2	31.8	37.1	53.9	16.8	
Vert	7341.000	AV	37.2	36.2	6.1	32.4	47.1	53.9	6.8	
Vert	9788.000	AV	33.4	38.1	6.8	32.9	45.4	53.9	8.5	
Vert	24470.000	AV	33.2	37.9	-1.1	31.6	38.4	53.9	15.5	

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

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

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

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Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 and 4 Semi Anechoic Chamber		
Report No.	30KE0072-HO-02		
Date	09/13/2010	09/21/2010	09/16/2010
Temperature/ Humidity	21 deg.C./ 56%	24 deg.C./ 67%	23 deg.C./ 67%
Engineer	Takumi Shimada (1-10GHz)	Satofumi Matsuyama (1-10GHz)	Takumi Shimada (10-26.5GHz)
Mode	11n-40 Tx 2452MHz Ant1		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2483.500	PK	74.2	27.6	2.7	32.4	72.1	73.9	1.8	
Hori	3269.270	PK	48.5	28.8	3.4	31.8	48.9	73.9	25.0	
Hori	4904.000	PK	43.2	32.0	5.3	31.8	48.7	73.9	25.2	
Hori	7356.000	PK	49.8	36.2	6.2	32.4	59.8	73.9	14.1	
Hori	9808.000	PK	44.0	38.1	6.9	32.9	56.1	73.9	17.8	
Hori	24520.000	PK	49.2	38.0	-1.2	30.7	55.3	73.9	18.6	
Hori	2483.500	AV	54.6	27.6	2.7	32.4	52.5	53.9	1.4	
Hori	3269.270	AV	42.4	28.8	3.4	31.8	42.8	53.9	11.1	
Hori	4904.000	AV	31.0	32.0	5.3	31.8	36.5	53.9	17.4	
Hori	7356.000	AV	37.4	36.2	6.2	32.4	47.4	53.9	6.5	
Hori	9808.000	AV	34.9	38.1	6.9	32.9	47.0	53.9	6.9	
Hori	24520.000	AV	31.5	38.0	-1.2	30.7	37.6	53.9	16.3	
Vert	2483.500	PK	71.9	27.6	2.7	32.4	69.8	73.9	4.1	
Vert	3269.239	PK	50.3	28.8	3.4	31.8	50.7	73.9	23.2	
Vert	4904.000	PK	43.7	32.0	5.3	31.8	49.2	73.9	24.7	
Vert	7356.000	PK	49.5	36.2	6.2	32.4	59.5	73.9	14.4	
Vert	9808.000	PK	43.8	38.1	6.9	32.9	55.9	73.9	18.0	
Vert	24520.000	PK	49.6	38.0	-1.2	30.7	55.7	73.9	18.2	
Vert	2483.500	AV	50.8	27.6	2.7	32.4	48.7	53.9	5.3	
Vert	3269.239	AV	45.1	28.8	3.4	31.8	45.5	53.9	8.4	
Vert	4904.000	AV	31.5	32.0	5.3	31.8	37.0	53.9	16.9	
Vert	7356.000	AV	36.8	36.2	6.2	32.4	46.8	53.9	7.1	
Vert	9808.000	AV	33.1	38.1	6.9	32.9	45.2	53.9	8.7	
Vert	24520.000	AV	31.5	38.0	-1.2	30.7	37.6	53.9	16.3	

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 had enough margin (more than 20dB).

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/14/2010
Temperature/ Humidity 23 deg.C./ 65%
Engineer Takumi Shimada
(1-10GHz)
Mode 11b/g Rx 2437MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2437.000	PK	52.3	27.7	2.7	32.4	50.3	73.9	23.6	
Hori	3249.315	PK	46.0	29.5	3.1	32.1	46.5	73.9	27.4	
Hori	4874.000	PK	43.1	31.9	3.9	31.8	47.1	73.9	26.9	
Hori	7311.000	PK	45.4	36.2	4.7	32.4	53.9	73.9	20.0	
Hori	2437.000	AV	48.0	27.7	2.7	32.4	46.0	53.9	7.9	
Hori	3249.315	AV	38.6	29.5	3.1	32.1	39.1	53.9	14.9	
Hori	4874.000	AV	30.3	31.9	3.9	31.8	34.3	53.9	19.6	
Hori	7311.000	AV	33.4	36.2	4.7	32.4	41.9	53.9	12.0	
Vert	2437.000	PK	50.9	27.7	2.7	32.4	48.9	73.9	25.0	
Vert	3250.000	PK	48.7	29.5	3.1	32.0	49.3	73.9	24.6	
Vert	4874.000	PK	43.4	31.9	3.9	31.8	47.4	73.9	26.5	
Vert	7311.000	PK	44.6	36.2	4.7	32.4	53.1	73.9	20.8	
Vert	2437.000	AV	47.3	27.7	2.7	32.4	45.3	53.9	8.7	
Vert	3250.000	AV	41.9	29.5	3.1	32.0	42.5	53.9	11.4	
Vert	4874.000	AV	30.6	31.9	3.9	31.8	34.6	53.9	19.3	
Vert	7311.000	AV	32.7	36.2	4.7	32.4	41.2	53.9	12.7	

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 had enough margin (more than 20dB).
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber	
Report No.	30KE0072-HO-02	
Date	09/14/2010	09/17/2010
Temperature/ Humidity	23 deg.C./ 65%	22 deg.C./ 66%
Engineer	Takumi Shimada	Keisuke Kawamura
	(1-10GHz)	(30-1000MHz)
Mode	11n Rx 2437MHz Ant0/1	

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	194.894	QP	44.2	16.7	9.1	32.1	37.9	43.5	5.6	
Hori	214.774	QP	48.4	17.1	9.3	32.0	42.8	43.5	0.7	
Hori	237.889	QP	46.0	17.4	9.5	32.0	40.9	46.0	5.1	
Hori	272.041	QP	42.3	18.5	9.8	31.9	38.7	46.0	7.3	
Hori	300.679	QP	45.6	14.3	10.0	31.8	38.1	46.0	7.9	
Hori	335.001	QP	46.0	15.5	10.2	31.8	39.9	46.0	6.1	
Hori	2437.000	PK	51.2	27.7	2.7	32.4	49.2	73.9	24.7	
Hori	3249.315	PK	46.0	29.5	3.1	32.1	46.5	73.9	27.4	
Hori	4874.000	PK	41.9	31.9	3.9	31.8	45.9	73.9	28.0	
Hori	7311.000	PK	44.2	36.2	4.7	32.4	52.7	73.9	21.2	
Hori	2437.000	AV	47.8	27.7	2.7	32.4	45.8	53.9	8.1	
Hori	3249.315	AV	39.5	29.5	3.1	32.1	40.0	53.9	13.9	
Hori	4874.000	AV	30.0	31.9	3.9	31.8	34.0	53.9	19.9	
Hori	7311.000	AV	33.2	36.2	4.7	32.4	41.7	53.9	12.2	
Vert	207.360	QP	35.2	16.9	9.2	32.1	29.2	43.5	14.3	
Vert	214.771	QP	37.9	17.1	9.3	32.0	32.3	43.5	11.2	
Vert	239.991	QP	36.2	17.4	9.6	32.0	31.2	46.0	14.8	
Vert	272.042	QP	32.1	18.5	9.8	31.9	28.5	46.0	17.5	
Vert	300.682	QP	35.6	14.3	10.0	31.8	28.1	46.0	17.9	
Vert	335.986	QP	39.1	15.5	10.2	31.8	33.0	46.0	13.0	
Vert	2437.000	PK	51.2	27.7	2.7	32.4	49.2	73.9	24.7	
Vert	3250.000	PK	48.1	29.5	3.1	32.0	48.7	73.9	25.2	
Vert	4874.000	PK	42.0	31.9	3.9	31.8	46.0	73.9	27.9	
Vert	7311.000	PK	43.8	36.2	4.7	32.4	52.3	73.9	21.6	
Vert	2437.000	AV	48.4	27.7	2.7	32.4	46.4	53.9	7.5	
Vert	3250.000	AV	42.2	29.5	3.1	32.0	42.8	53.9	11.2	
Vert	4874.000	AV	29.6	31.9	3.9	31.8	33.6	53.9	20.3	
Vert	7311.000	AV	31.9	36.2	4.7	32.4	40.4	53.9	13.5	

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 had enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 and 4 Semi Anechoic Chamber		
Report No.	30KE0072-HO-02		
Date	09/06/2010	09/06/2010	09/07/2010
Temperature/ Humidity	23 deg.C./ 66%	23 deg.C./ 66%	24 deg.C./ 64%
Engineer	Takumi Shimada (1-10GHz)	Katsunori Okai (10-40GHz)	Katsunori Okai (10-18GHz)
Mode	11a Tx 5745MHz Ant0		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3830.000	PK	46.6	30.2	3.4	31.8	48.4	73.9	25.5	
Hori	5725.000	PK	81.5	32.7	4.2	31.9	86.5	-	-	See 20dBc Data Sheet
Hori	11490.000	PK	52.9	39.5	-1.8	32.9	57.7	73.9	16.2	
Hori	17235.000	PK	51.9	43.4	-0.4	32.3	62.6	-	-	See 20dBc Data Sheet
Hori	3830.000	AV	43.2	30.2	3.4	31.8	45.0	53.9	8.9	
Hori	5725.000	AV	59.4	32.7	4.2	31.9	64.4	-	-	See 20dBc Data Sheet
Hori	11490.000	AV	38.0	39.5	-1.8	32.9	42.8	53.9	11.1	
Hori	17235.000	AV	37.3	43.4	-0.4	32.3	48.0	-	-	See 20dBc Data Sheet
Vert	3830.000	PK	50.2	30.2	3.4	31.8	52.0	73.9	21.9	
Vert	5725.000	PK	82.7	32.7	4.2	31.9	87.7	-	-	See 20dBc Data Sheet
Vert	11490.000	PK	49.1	39.5	-1.8	32.9	53.9	73.9	20.0	
Vert	17235.000	PK	49.8	43.4	-0.4	32.3	60.5	-	-	See 20dBc Data Sheet
Vert	3830.000	AV	41.9	30.2	3.4	31.8	43.7	53.9	10.2	
Vert	5725.000	AV	57.3	32.7	4.2	31.9	62.3	-	-	See 20dBc Data Sheet
Vert	11490.000	AV	37.1	39.5	-1.8	32.9	41.9	53.9	12.0	
Vert	17235.000	AV	36.3	43.4	-0.4	32.3	47.0	-	-	See 20dBc Data Sheet

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 had enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5745.000	PK	99.2	32.7	4.2	31.9	104.2	-	-	Carrier
Hori	5725.000	PK	65.9	32.7	4.2	31.9	70.9	84.2	13.3	
Hori	17235.000	PK	42.8	40.9	-0.5	32.2	51.0	84.2	33.2	
Vert	5745.000	PK	99.1	32.7	4.2	31.9	104.1	-	-	Carrier
Vert	5725.000	PK	65.5	32.7	4.2	31.9	70.5	84.1	13.6	
Vert	17235.000	PK	41.1	40.9	-0.5	32.2	49.3	84.1	34.8	

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

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 and 4 Semi Anechoic Chamber		
Report No.	30KE0072-HO-02		
Date	09/06/2010	09/06/2010	09/07/2010
Temperature/ Humidity	23 deg.C./ 66%	23 deg.C./ 66%	24 deg.C./ 64%
Engineer	Katsunori Okai (10-40GHz)	Takumi Shimada (1-10GHz)	Katsunori Okai (30-1000MHz) (10-18GHz)
Mode	11a Tx 5785MHz Ant0		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	200.458	QP	48.4	16.8	8.9	31.9	42.2	43.5	1.3	
Hori	229.089	QP	50.5	17.1	9.1	31.9	44.8	46.0	1.2	
Hori	240.038	QP	50.3	17.3	9.2	31.9	44.9	46.0	1.1	
Hori	258.151	QP	47.0	17.7	9.4	31.9	42.2	46.0	3.8	
Hori	300.686	QP	44.7	16.0	9.7	31.9	38.5	46.0	7.5	
Hori	335.992	QP	46.6	16.6	9.9	31.9	41.2	46.0	4.8	
Hori	716.650	QP	33.6	22.3	12.0	32.1	35.8	46.0	10.2	
Hori	3856.652	PK	51.3	30.2	3.4	31.8	53.1	73.9	20.8	
Hori	11570.000	PK	52.2	39.5	-1.8	32.9	57.0	73.9	16.9	
Hori	17355.000	PK	50.4	44.4	-0.5	32.3	62.0	-	-	See 20dBc Data Sheet
Hori	3856.652	AV	42.4	30.2	3.4	31.8	44.2	53.9	9.7	
Hori	11570.000	AV	41.2	39.5	-1.8	32.9	46.0	53.9	7.9	
Hori	17355.000	AV	39.1	44.4	-0.5	32.3	50.7	-	-	See 20dBc Data Sheet
Vert	200.461	QP	36.0	16.8	8.9	31.9	29.8	43.5	13.7	
Vert	229.092	QP	38.6	17.1	9.1	31.9	32.9	46.0	13.1	
Vert	240.037	QP	38.9	17.3	9.2	31.9	33.5	46.0	12.5	
Vert	257.731	QP	35.0	17.7	9.4	31.9	30.2	46.0	15.8	
Vert	300.676	QP	33.8	16.0	9.7	31.9	27.6	46.0	18.4	
Vert	335.988	QP	36.7	16.6	9.9	31.9	31.3	46.0	14.7	
Vert	717.720	QP	36.0	22.3	12.1	32.1	38.3	46.0	7.7	
Vert	3856.652	PK	49.2	30.2	3.4	31.8	51.0	73.9	22.9	
Vert	11570.000	PK	50.3	39.5	-1.8	32.9	55.1	73.9	18.8	
Vert	17355.000	PK	48.3	44.4	-0.5	32.3	59.9	-	-	See 20dBc Data Sheet
Vert	3856.652	AV	39.7	30.2	3.4	31.8	41.5	53.9	12.4	
Vert	11570.000	AV	40.4	39.5	-1.8	32.9	45.2	53.9	8.7	
Vert	17355.000	AV	36.8	44.4	-0.5	32.3	48.4	-	-	See 20dBc Data Sheet

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 had enough margin (more than 20dB).
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5785.000	PK	99.9	32.8	4.2	31.9	105.0	-	-	Carrier
Hori	17355.000	PK	43.1	41.7	-0.4	32.2	52.2	85.0	32.8	
Vert	5785.000	PK	98.5	32.8	4.2	31.9	103.6	-	-	Carrier
Vert	17355.000	PK	41.2	41.7	-0.4	32.2	50.3	83.6	33.3	

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

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Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 and 4 Semi Anechoic Chamber		
Report No.	30KE0072-HO-02		
Date	09/06/2010	09/06/2010	09/07/2010
Temperature/ Humidity	23 deg.C./ 66%	23 deg.C./ 66%	24 deg.C./ 64%
Engineer	Katsunori Okai (10-40GHz)	Takumi Shimada (1-10GHz)	Katsunori Okai (10-18GHz)
Mode	11a Tx 5825MHz Ant0		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3883.300	PK	50.9	30.2	3.4	31.8	52.7	73.9	21.2	
Hori	5850.000	PK	70.3	32.9	4.2	31.9	75.5	-	-	See 20dBc Data Sheet
Hori	11650.000	PK	52.4	39.4	-1.8	32.9	57.1	73.9	16.8	
Hori	17475.000	PK	52.8	45.4	-0.4	32.2	65.6	-	-	See 20dBc Data Sheet
Hori	3883.300	AV	42.1	30.2	3.4	31.8	43.9	53.9	10.0	
Hori	5850.000	AV	51.3	32.9	4.2	31.9	56.5	-	-	See 20dBc Data Sheet
Hori	11650.000	AV	42.1	39.4	-1.8	32.9	46.8	53.9	7.1	
Hori	17475.000	AV	39.3	45.4	-0.4	32.2	52.1	-	-	See 20dBc Data Sheet
Vert	3883.300	PK	50.1	30.2	3.4	31.8	51.9	73.9	22.0	
Vert	5850.000	PK	69.8	32.9	4.2	31.9	75.0	-	-	See 20dBc Data Sheet
Vert	11650.000	PK	54.7	39.4	-1.8	32.9	59.4	73.9	14.5	
Vert	17475.000	PK	46.3	45.4	-0.4	32.2	59.1	-	-	See 20dBc Data Sheet
Vert	3883.300	AV	40.4	30.2	3.4	31.8	42.2	53.9	11.7	
Vert	5850.000	AV	47.1	32.9	4.2	31.9	52.3	-	-	See 20dBc Data Sheet
Vert	11650.000	AV	43.3	39.4	-1.8	32.9	48.0	53.9	5.9	
Vert	17475.000	AV	37.9	45.4	-0.4	32.2	50.7	-	-	See 20dBc Data Sheet

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 had enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5825.000	PK	101.1	32.8	4.2	31.9	106.2	-	-	Carrier
Hori	5850.000	PK	58.3	32.9	4.2	31.9	63.5	86.2	22.7	
Hori	17475.000	PK	46.1	42.5	-0.5	32.2	55.9	86.2	30.3	
Vert	5825.000	PK	99.5	32.8	4.2	31.9	104.6	-	-	Carrier
Vert	5850.000	PK	53.9	32.9	4.2	31.9	59.1	84.6	25.5	
Vert	17475.000	PK	42.6	42.5	-0.5	32.2	52.4	84.6	32.2	

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

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 and 4 Semi Anechoic Chamber		
Report No.	30KE0072-HO-02		
Date	09/06/2010	09/06/2010	09/07/2010
Temperature/ Humidity	23 deg.C./ 66%	23 deg.C./ 66%	24 deg.C./ 64%
Engineer	Katsunori Okai	Takumi Shimada	Katsunori Okai
	(10-40GHz)	(1-10GHz)	(10-18GHz)
Mode	11n-20 Tx 5745MHz Ant0		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3830.000	PK	47.8	30.2	3.4	31.8	49.6	73.9	24.3	
Hori	5725.000	PK	82.3	32.7	4.2	31.9	87.3	-	-	See 20dBc Data Sheet
Hori	11490.000	PK	54.1	39.5	-1.8	32.9	58.9	73.9	15.0	
Hori	17235.000	PK	46.6	43.4	-0.4	32.3	57.3	-	-	See 20dBc Data Sheet
Hori	3830.000	AV	42.7	30.2	3.4	31.8	44.5	53.9	9.4	
Hori	5725.000	AV	59.4	32.7	4.2	31.9	64.4	-	-	See 20dBc Data Sheet
Hori	11490.000	AV	41.7	39.5	-1.8	32.9	46.5	53.9	7.4	
Hori	17235.000	AV	37.3	43.4	-0.4	32.3	48.0	-	-	See 20dBc Data Sheet
Vert	3830.000	PK	48.4	30.2	3.4	31.8	50.2	73.9	23.7	
Vert	5725.000	PK	81.0	32.7	4.2	31.9	86.0	-	-	See 20dBc Data Sheet
Vert	11490.000	PK	52.8	39.5	-1.8	32.9	57.6	73.9	16.3	
Vert	17235.000	PK	48.8	43.4	-0.4	32.3	59.5	-	-	See 20dBc Data Sheet
Vert	3830.000	AV	43.1	30.2	3.4	31.8	44.9	53.9	9.0	
Vert	5725.000	AV	58.2	32.7	4.2	31.9	63.2	-	-	See 20dBc Data Sheet
Vert	11490.000	AV	39.5	39.5	-1.8	32.9	44.3	53.9	9.6	
Vert	17235.000	AV	36.6	43.4	-0.4	32.3	47.3	-	-	See 20dBc Data Sheet

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 had enough margin (more than 20dB).
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5745.000	PK	99.3	32.7	4.2	31.9	104.3	-	-	Carrier
Hori	5725.000	PK	65.9	32.7	4.2	31.9	70.9	84.3	13.4	
Hori	17235.000	PK	42.2	40.9	-0.5	32.2	50.4	84.3	33.9	
Vert	5745.000	PK	97.7	32.7	4.2	31.9	102.7	-	-	Carrier
Vert	5725.000	PK	63.9	32.7	4.2	31.9	68.9	82.7	13.8	
Vert	17235.000	PK	40.8	40.9	-0.5	32.2	49.0	82.7	33.7	

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

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 and 4 Semi Anechoic Chamber		
Report No.	30KE0072-HO-02		
Date	09/06/2010	09/06/2010	09/07/2010
Temperature/ Humidity	23 deg.C./ 66%	23 deg.C./ 66%	24 deg.C./ 64%
Engineer	Katsunori Okai (10-40GHz)	Takumi Shimada (1-10GHz)	Katsunori Okai (10-18GHz)
Mode	11n-20 Tx 5785MHz Ant0		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3856.650	PK	50.1	30.2	3.4	31.8	51.9	73.9	22.0	
Hori	11570.000	PK	53.8	39.5	-1.8	32.9	58.6	73.9	15.3	
Hori	17355.000	PK	48.8	44.4	-0.5	32.3	60.4	-	-	See 20dBc Data Sheet
Hori	3856.650	AV	44.8	30.2	3.4	31.8	46.6	53.9	7.3	
Hori	11570.000	AV	42.1	39.5	-1.8	32.9	46.9	53.9	7.0	
Hori	17355.000	AV	38.8	44.4	-0.5	32.3	50.4	-	-	See 20dBc Data Sheet
Vert	3856.650	PK	49.0	30.2	3.4	31.8	50.8	73.9	23.1	
Vert	11570.000	PK	52.2	39.5	-1.8	32.9	57.0	73.9	16.9	
Vert	17355.000	PK	49.1	44.4	-0.5	32.3	60.7	-	-	See 20dBc Data Sheet
Vert	3856.650	AV	43.0	30.2	3.4	31.8	44.8	53.9	9.1	
Vert	11570.000	AV	41.1	39.5	-1.8	32.9	45.9	53.9	8.0	
Vert	17355.000	AV	38.0	44.4	-0.5	32.3	49.6	-	-	See 20dBc Data Sheet

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 had enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5785.000	PK	98.8	32.8	4.2	31.9	103.9	-	-	Carrier
Hori	17355.000	PK	44.8	41.7	-0.4	32.2	53.9	83.9	30.0	
Vert	5785.000	PK	98.5	32.8	4.2	31.9	103.6	-	-	Carrier
Vert	17355.000	PK	43.2	41.7	-0.4	32.2	52.3	83.6	31.3	

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

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Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 and 4 Semi Anechoic Chamber		
Report No.	30KE0072-HO-02		
Date	09/06/2010	09/06/2010	09/07/2010
Temperature/ Humidity	23 deg.C./ 66%	23 deg.C./ 66%	24 deg.C./ 64%
Engineer	Katsunori Okai (10-40GHz)	Takumi Shimada (1-10GHz)	Katsunori Okai (10-18GHz)
Mode	11n-20 Tx 5825MhzAnt0		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3883.300	PK	49.5	30.2	3.4	31.8	51.3	73.9	22.6	
Hori	5850.000	PK	71.6	32.9	4.2	31.9	76.8	-	-	See 20dBc Data Sheet
Hori	11650.000	PK	52.9	39.4	-1.8	32.9	57.6	73.9	16.3	
Hori	17475.000	PK	49.3	45.4	-0.4	32.2	62.1	-	-	See 20dBc Data Sheet
Hori	3883.300	AV	43.5	30.2	3.4	31.8	45.3	53.9	8.6	
Hori	5850.000	AV	52.0	32.9	4.2	31.9	57.2	-	-	See 20dBc Data Sheet
Hori	11650.000	AV	41.3	39.4	-1.8	32.9	46.0	53.9	7.9	
Hori	17475.000	AV	39.9	45.4	-0.4	32.2	52.7	-	-	See 20dBc Data Sheet
Vert	3883.300	PK	49.8	30.2	3.4	31.8	51.6	73.9	22.3	
Vert	5850.000	PK	70.6	32.9	4.2	31.9	75.8	-	-	See 20dBc Data Sheet
Vert	11650.000	PK	52.6	39.4	-1.8	32.9	57.3	73.9	16.6	
Vert	17475.000	PK	48.1	45.4	-0.4	32.2	60.9	-	-	See 20dBc Data Sheet
Vert	3883.300	AV	44.0	30.2	3.4	31.8	45.8	53.9	8.1	
Vert	5850.000	AV	49.6	32.9	4.2	31.9	54.8	-	-	See 20dBc Data Sheet
Vert	11650.000	AV	40.1	39.4	-1.8	32.9	44.8	53.9	9.1	
Vert	17475.000	AV	38.5	45.4	-0.4	32.2	51.3	-	-	See 20dBc Data Sheet

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 had enough margin (more than 20dB).
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5825.000	PK	100.7	32.8	4.2	31.9	105.8	-	-	Carrier
Hori	5850.000	PK	59.4	32.9	4.2	31.9	64.6	85.8	21.2	
Hori	17475.000	PK	46.8	42.5	-0.5	32.2	56.6	85.8	29.2	
Vert	5825.000	PK	97.3	32.8	4.2	31.9	102.4	-	-	Carrier
Vert	5850.000	PK	54.8	32.9	4.2	31.9	60.0	82.4	22.4	
Vert	17475.000	PK	43.2	42.5	-0.5	32.2	53.0	82.4	29.4	

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

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 and 4 Semi Anechoic Chamber		
Report No.	30KE0072-HO-02		
Date	09/06/2010	09/06/2010	09/07/2010
Temperature/ Humidity	23 deg.C./ 66%	23 deg.C./ 66%	24 deg.C./ 64%
Engineer	Katsunori Okai (10-40GHz)	Takumi Shimada (1-10GHz)	Katsunori Okai (10-18GHz)
Mode	11n-40 Tx 5755MHz Ant0		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3836.667	PK	49.0	30.2	3.4	31.8	50.8	73.9	23.1	
Hori	5717.471	PK	82.8	32.7	4.2	31.9	87.8	-	-	See 20dBc Data Sheet
Hori	5725.000	PK	82.3	32.7	4.2	31.9	87.3	-	-	See 20dBc Data Sheet
Hori	11510.000	PK	50.4	39.5	-1.8	32.9	55.2	73.9	18.7	
Hori	17265.000	PK	45.6	43.6	-0.4	32.3	56.5	-	-	See 20dBc Data Sheet
Hori	3836.667	AV	45.4	30.2	3.4	31.8	47.2	53.9	6.7	
Hori	5717.471	AV	66.1	32.7	4.2	31.9	71.1	-	-	See 20dBc Data Sheet
Hori	5725.000	AV	63.5	32.7	4.2	31.9	68.5	-	-	See 20dBc Data Sheet
Hori	11510.000	AV	38.9	39.5	-1.8	32.9	43.7	53.9	10.2	
Hori	17265.000	AV	36.3	43.6	-0.4	32.3	47.2	-	-	See 20dBc Data Sheet
Vert	3836.667	PK	47.2	30.2	3.4	31.8	49.0	73.9	24.9	
Vert	5717.471	PK	78.6	32.7	4.2	31.9	83.6	-	-	See 20dBc Data Sheet
Vert	5725.000	PK	77.5	32.7	4.2	31.9	82.5	-	-	See 20dBc Data Sheet
Vert	11510.000	PK	49.2	39.5	-1.8	32.9	54.0	73.9	19.9	
Vert	17265.000	PK	45.8	43.6	-0.4	32.3	56.7	-	-	See 20dBc Data Sheet
Vert	3836.667	AV	42.5	30.2	3.4	31.8	44.3	53.9	9.6	
Vert	5717.471	AV	61.4	32.7	4.2	31.9	66.4	-	-	See 20dBc Data Sheet
Vert	5725.000	AV	60.5	32.7	4.2	31.9	65.5	-	-	See 20dBc Data Sheet
Vert	11510.000	AV	37.5	39.5	-1.8	32.9	42.3	53.9	11.6	
Vert	17265.000	AV	35.2	43.6	-0.4	32.3	46.1	-	-	See 20dBc Data Sheet

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 had enough margin (more than 20dB).
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5755.000	PK	98.3	32.7	4.2	31.9	103.3	-	-	Carrier
Hori	5717.471	PK	73.8	32.7	4.2	31.9	78.8	83.3	4.5	
Hori	5725.000	PK	70.5	32.7	4.2	31.9	75.5	83.3	7.8	
Hori	17265.000	PK	41.7	41.1	-0.5	32.2	50.1	83.3	33.2	
Vert	5755.000	PK	94.4	32.7	4.2	31.9	99.4	-	-	Carrier
Vert	5717.471	PK	65.5	32.7	4.2	31.9	70.5	79.4	8.9	
Vert	5725.000	PK	65.8	32.7	4.2	31.9	70.8	79.4	8.6	
Vert	17265.000	PK	40.4	41.1	-0.5	32.2	48.8	79.4	30.6	

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

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.3 and 4 Semi Anechoic Chamber		
Report No.	30KE0072-HO-02		
Date	09/06/2010	09/06/2010	09/07/2010
Temperature/ Humidity	23 deg.C./ 66%	23 deg.C./ 66%	24 deg.C./ 64%
Engineer	Katsunori Okai (10-40GHz)	Takumi Shimada (1-10GHz)	Katsunori Okai (10-18GHz)
Mode	11n-40 Tx 5795MHz Ant0		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3863.317	PK	48.4	30.2	3.4	31.8	50.2	73.9	23.7	
Hori	5850.000	PK	70.1	32.9	4.2	31.9	75.3	-	-	See 20dBc Data Sheet
Hori	11590.000	PK	50.7	39.5	-1.8	32.9	55.5	73.9	18.4	
Hori	17385.000	PK	45.2	44.6	-0.5	32.2	57.1	-	-	See 20dBc Data Sheet
Hori	3863.317	AV	44.2	30.2	3.4	31.8	46.0	53.9	7.9	
Hori	5850.000	AV	51.1	32.9	4.2	31.9	56.3	-	-	See 20dBc Data Sheet
Hori	11590.000	AV	38.7	39.5	-1.8	32.9	43.5	53.9	10.4	
Hori	17385.000	AV	35.1	44.6	-0.5	32.2	47.0	-	-	See 20dBc Data Sheet
Vert	3863.317	PK	47.5	30.2	3.4	31.8	49.3	73.9	24.6	
Vert	5850.000	PK	61.5	32.9	4.2	31.9	66.7	-	-	See 20dBc Data Sheet
Vert	11590.000	PK	49.1	39.5	-1.8	32.9	53.9	73.9	20.0	
Vert	17385.000	PK	46.4	44.6	-0.5	32.2	58.3	-	-	See 20dBc Data Sheet
Vert	3863.317	AV	42.0	30.2	3.4	31.8	43.8	53.9	10.1	
Vert	5850.000	AV	42.6	32.9	4.2	31.9	47.8	-	-	See 20dBc Data Sheet
Vert	11590.000	AV	37.2	39.5	-1.8	32.9	42.0	53.9	11.9	
Vert	17385.000	AV	34.7	44.6	-0.5	32.2	46.6	-	-	See 20dBc Data Sheet

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 had enough margin (more than 20dB).
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5795.000	PK	98.5	32.8	4.2	31.9	103.6	-	-	Carrier
Hori	5850.000	PK	59.3	32.9	4.2	31.9	64.5	83.6	19.1	
Hori	17385.000	PK	40.2	41.9	-0.5	32.2	49.4	83.6	34.2	
Vert	5795.000	PK	94.7	32.8	4.2	31.9	99.8	-	-	Carrier
Vert	5850.000	PK	50.5	32.9	4.2	31.9	55.7	79.8	24.1	
Vert	17385.000	PK	38.8	41.9	-0.5	32.2	48.0	79.8	31.8	

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

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Radiated Spurious Emission

Test place	Head Office EMC Lab. No.4 Semi Anechoic Chamber	
Report No.	30KE0072-HO-02	
Date	09/07/2010	09/07/2010
Temperature/ Humidity	24 deg.C./ 64%	24 deg.C./ 64%
Engineer	Katsunori Okai	Takumi Shimada
	(30-1000MHz)	(1-18GHz)
Mode	11a Rx 5785MHz Ant0	

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	200.446	QP	48.3	16.8	8.9	31.9	42.1	43.5	1.4	
Hori	229.086	QP	49.9	17.1	9.1	31.9	44.2	46.0	1.8	
Hori	240.039	QP	50.9	17.3	9.2	31.9	45.5	46.0	0.5	
Hori	257.724	QP	47.1	17.7	9.4	31.9	42.3	46.0	3.7	
Hori	300.678	QP	45.0	16.0	9.7	31.9	38.8	46.0	7.2	
Hori	335.978	QP	46.3	16.6	9.9	31.9	40.9	46.0	5.1	
Hori	723.107	QP	40.4	22.4	12.1	32.1	42.8	46.0	3.2	
Hori	3856.653	PK	44.9	29.5	3.6	31.6	46.4	73.9	27.5	
Hori	5785.000	PK	41.3	32.5	4.3	31.6	46.5	73.9	27.4	
Hori	11570.000	PK	42.6	39.6	-3.6	32.9	45.7	73.9	28.2	
Hori	17355.000	PK	44.7	41.7	-2.4	32.2	51.8	73.9	22.1	
Hori	3856.653	AV	37.7	29.5	3.6	31.6	39.2	53.9	14.8	
Hori	5785.000	AV	29.0	32.5	4.3	31.6	34.2	53.9	19.7	
Hori	11570.000	AV	30.7	39.6	-3.6	32.9	33.8	53.9	20.2	
Hori	17355.000	AV	31.7	41.7	-2.4	32.2	38.8	53.9	15.1	
Vert	200.451	QP	36.1	16.8	8.9	31.9	29.9	43.5	13.6	
Vert	229.089	QP	38.3	17.1	9.1	31.9	32.6	46.0	13.4	
Vert	240.038	QP	39.9	17.3	9.2	31.9	34.5	46.0	11.5	
Vert	257.726	QP	35.2	17.7	9.4	31.9	30.4	46.0	15.6	
Vert	300.673	QP	32.2	16.0	9.7	31.9	26.0	46.0	20.0	
Vert	335.987	QP	35.4	16.6	9.9	31.9	30.0	46.0	16.0	
Vert	720.032	QP	37.3	22.4	12.1	32.1	39.7	46.0	6.3	
Vert	3856.690	PK	45.7	29.5	3.6	31.6	47.2	73.9	26.7	
Vert	5785.000	PK	41.1	32.5	4.3	31.6	46.3	73.9	27.6	
Vert	11570.000	PK	42.6	39.6	-3.6	32.9	45.7	73.9	28.2	
Vert	17355.000	PK	43.6	41.7	-2.4	32.2	50.7	73.9	23.2	
Vert	3856.690	AV	38.9	29.5	3.6	31.6	40.4	53.9	13.5	
Vert	5785.000	AV	29.7	32.5	4.3	31.6	34.9	53.9	19.0	
Vert	11570.000	AV	29.7	39.6	-3.6	32.9	32.8	53.9	21.1	
Vert	17355.000	AV	31.0	41.7	-2.4	32.2	38.1	53.9	15.8	

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 had enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No.	30KE0072-HO-02
Date	09/07/2010
Temperature/ Humidity	24 deg.C./ 64%
Engineer	Takumi Shimada
	(1-18GHz)
Mode	11n Rx 5785MHz Ant0/1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3856.653	PK	47.0	29.5	3.6	31.6	48.5	73.9	25.5	
Hori	5785.000	PK	41.0	32.5	4.3	31.6	46.2	73.9	27.7	
Hori	11570.000	PK	42.5	39.6	-3.6	32.9	45.6	73.9	28.3	
Hori	17355.000	PK	42.6	41.7	-2.4	32.2	49.7	73.9	24.2	
Hori	3856.653	AV	42.3	29.5	3.6	31.6	43.8	53.9	10.1	
Hori	5785.000	AV	30.2	32.5	4.3	31.6	35.4	53.9	18.5	
Hori	11570.000	AV	31.1	39.6	-3.6	32.9	34.2	53.9	19.7	
Hori	17355.000	AV	31.8	41.7	-2.4	32.2	38.9	53.9	15.0	
Vert	3856.674	PK	46.2	29.5	3.6	31.6	47.7	73.9	26.2	
Vert	5785.000	PK	40.5	32.5	4.3	31.6	45.7	73.9	28.2	
Vert	11570.000	PK	42.0	39.6	-3.6	32.9	45.1	73.9	28.8	
Vert	17355.000	PK	43.6	41.7	-2.4	32.2	50.7	73.9	23.2	
Vert	3856.674	AV	40.6	29.5	3.6	31.6	42.1	53.9	11.8	
Vert	5785.000	AV	29.0	32.5	4.3	31.6	34.2	53.9	19.7	
Vert	11570.000	AV	31.1	39.6	-3.6	32.9	34.2	53.9	19.7	
Vert	17355.000	AV	31.8	41.7	-2.4	32.2	38.9	53.9	15.0	

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 had enough margin (more than 20dB).
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No.	30KE0072-HO-02
Date	09/21/2010
Temperature/ Humidity	24 deg.C./ 67%
Engineer	Takumi Shimada
	(1-10GHz)
Mode	11b Tx 2412MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2390.000	PK	52.6	27.2	2.9	32.1	50.6	73.9	23.3	
Hori	2400.000	PK	63.9	27.2	2.9	32.1	61.9	-	-	See 20dBc Data Sheet
Hori	2390.000	AV	40.5	27.2	2.9	32.1	38.5	53.9	15.4	
Hori	2400.000	AV	52.9	27.2	2.9	32.1	50.9	-	-	See 20dBc Data Sheet
Vert	2390.000	PK	49.8	27.2	2.9	32.1	47.8	73.9	26.1	
Vert	2400.000	PK	60.7	27.2	2.9	32.1	58.7	-	-	See 20dBc Data Sheet
Vert	2390.000	AV	37.6	27.2	2.9	32.1	35.6	53.9	18.3	
Vert	2400.000	AV	50.1	27.2	2.9	32.1	48.1	-	-	See 20dBc Data Sheet

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

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2412.000	PK	101.9	27.2	2.9	32.1	99.9	-	-	Carrier
Hori	2400.000	PK	57.8	27.2	2.9	32.1	55.8	79.9	24.1	
Vert	2412.000	PK	100.3	27.2	2.9	32.1	98.3	-	-	Carrier
Vert	2400.000	PK	55.5	27.2	2.9	32.1	53.5	78.3	24.8	

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

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No.	30KE0072-HO-02
Date	09/21/2010
Temperature/ Humidity	24 deg.C./ 67%
Engineer	Takumi Shimada
	(1-10GHz)
Mode	11b Tx 2462MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2483.500	PK	52.1	27.2	2.9	32.1	50.1	73.9	23.8	
Hori	2483.500	AV	40.0	27.2	2.9	32.1	38.0	53.9	15.9	
Vert	2483.500	PK	51.1	27.2	2.9	32.1	49.1	73.9	24.8	
Vert	2483.500	AV	38.4	27.2	2.9	32.1	36.4	53.9	17.5	

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

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No.	30KE0072-HO-02
Date	09/21/2010
Temperature/ Humidity	24 deg.C./ 67%
Engineer	Takumi Shimada
	(1-10GHz)
Mode	11g Tx 2412MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2390.000	PK	73.6	27.2	2.9	32.1	71.6	73.9	2.3	
Hori	2398.920	PK	79.4	27.2	2.9	32.1	77.4	-	-	See 20dBc Data Sheet
Hori	2400.000	PK	82.0	27.2	2.9	32.1	80.0	-	-	See 20dBc Data Sheet
Hori	2390.000	AV	49.5	27.2	2.9	32.1	47.5	53.9	6.4	
Hori	2398.920	AV	50.3	27.2	2.9	32.1	48.3	-	-	See 20dBc Data Sheet
Hori	2400.000	AV	52.8	27.2	2.9	32.1	50.8	-	-	See 20dBc Data Sheet
Vert	2390.000	PK	73.8	27.2	2.9	32.1	71.8	73.9	2.1	
Vert	2398.920	PK	77.0	27.2	2.9	32.1	75.0	-	-	See 20dBc Data Sheet
Vert	2400.000	PK	77.3	27.2	2.9	32.1	75.3	-	-	See 20dBc Data Sheet
Vert	2390.000	AV	48.0	27.2	2.9	32.1	46.0	53.9	7.9	
Vert	2398.920	AV	50.4	27.2	2.9	32.1	48.4	-	-	See 20dBc Data Sheet
Vert	2400.000	AV	52.5	27.2	2.9	32.1	50.5	-	-	See 20dBc Data Sheet

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amprifier)
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).
*The 10th harmonic was not seen so the result was its base noise level.
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2412.000	PK	99.3	27.2	2.9	32.1	97.3	-	-	Carrier
Hori	2398.920	PK	67.0	27.2	2.9	32.1	65.0	77.3	12.3	
Hori	2400.000	PK	61.0	27.2	2.9	32.1	59.0	77.3	18.3	
Vert	2412.000	PK	99.6	27.2	2.9	32.1	97.6	-	-	Carrier
Vert	2398.920	PK	65.0	27.2	2.9	32.1	63.0	77.6	14.6	
Vert	2400.000	PK	61.9	27.2	2.9	32.1	59.9	77.6	17.7	

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

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No.	30KE0072-HO-02
Date	09/21/2010
Temperature/ Humidity	24 deg.C./ 67%
Engineer	Takumi Shimada
	(1-10GHz)
Mode	11g Tx 2462MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2483.500	PK	69.6	27.2	2.9	32.1	67.6	73.9	6.3	
Hori	2483.500	AV	47.8	27.2	2.9	32.1	45.8	53.9	8.1	
Vert	2483.500	PK	70.4	27.2	2.9	32.1	68.4	73.9	5.5	
Vert	2483.500	AV	48.4	27.2	2.9	32.1	46.4	53.9	7.5	

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

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No.	30KE0072-HO-02
Date	09/21/2010
Temperature/ Humidity	24 deg.C./ 67%
Engineer	Takumi Shimada
	(1-10GHz)
Mode	11n-20 Tx 2412MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2390.000	PK	71.0	27.2	2.9	32.1	69.0	73.9	4.9	
Hori	2400.000	PK	73.3	27.2	2.9	32.1	71.3	-	-	See 20dBc Data Sheet
Hori	2390.000	AV	52.2	27.2	2.9	32.1	50.2	53.9	3.7	
Hori	2400.000	AV	56.6	27.2	2.9	32.1	54.6	-	-	See 20dBc Data Sheet
Vert	2390.000	PK	71.0	27.2	2.9	32.1	69.0	73.9	4.9	
Vert	2400.000	PK	75.2	27.2	2.9	32.1	73.2	-	-	See 20dBc Data Sheet
Vert	2390.000	AV	51.7	27.2	2.9	32.1	49.7	53.9	4.2	
Vert	2400.000	AV	56.2	27.2	2.9	32.1	54.2	-	-	See 20dBc Data Sheet

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

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2412.000	PK	99.7	27.2	2.9	32.1	97.7	-	-	Carrier
Hori	2400.000	PK	62.0	27.2	2.9	32.1	60.0	77.7	17.7	
Vert	2412.000	PK	100.0	27.2	2.9	32.1	98.0	-	-	Carrier
Vert	2400.000	PK	60.5	27.2	2.9	32.1	58.5	78.0	19.5	

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

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No.	30KE0072-HO-02
Date	09/21/2010
Temperature/ Humidity	24 deg.C./ 67%
Engineer	Takumi Shimada
	(1-10GHz)
Mode	11n-20 Tx 2462MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2483.500	PK	68.6	27.2	2.9	32.1	66.6	73.9	7.3	
Hori	2483.500	AV	50.5	27.2	2.9	32.1	48.5	53.9	5.4	
Vert	2483.500	PK	73.9	27.2	2.9	32.1	71.9	73.9	2.0	
Vert	2483.500	AV	52.1	27.2	2.9	32.1	50.1	53.9	3.8	

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

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.4 Semi Anechoic Chamber		
Report No.	30KE0072-HO-02		
Date	09/21/2010	09/23/2010	09/24/2010
Temperature/ Humidity	24 deg.C./ 67%	22 deg.C./ 72%	25 deg.C./ 57%
Engineer	Takumi Shimada	Keisuke Kawamura	Tomohisa Nakagawa
	(1-10GHz)	(10-18GHz)	(18-40GHz)
Mode	11n-40 Tx 2422MHz Ant0		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2390.000	PK	64.8	27.2	2.9	32.1	62.8	73.9	11.1	
Hori	2400.000	PK	71.5	27.2	2.9	32.1	69.5	-	-	See 20dBc Data Sheet
Hori	3229.325	PK	47.2	28.7	3.3	31.8	47.4	73.9	26.5	
Hori	4844.000	PK	41.4	30.9	5.3	31.4	46.2	73.9	27.7	
Hori	7266.000	PK	42.8	35.8	5.7	32.3	52.0	73.9	21.9	
Hori	9688.000	PK	42.1	37.9	6.9	33.0	53.9	73.9	20.0	
Hori	24220.000	PK	47.0	37.9	-1.1	31.6	52.2	73.9	21.7	
Hori	2390.000	AV	49.3	27.2	2.9	32.1	47.3	53.9	6.6	
Hori	2400.000	AV	59.7	27.2	2.9	32.1	57.7	-	-	See 20dBc Data Sheet
Hori	3229.325	AV	42.7	28.7	3.3	31.8	42.9	53.9	11.0	
Hori	4844.000	AV	30.2	30.9	5.3	31.4	35.0	53.9	18.9	
Hori	7266.000	AV	31.6	35.8	5.7	32.3	40.8	53.9	13.2	
Hori	9688.000	AV	31.9	37.9	6.9	33.0	43.7	53.9	10.2	
Hori	24220.000	AV	33.8	37.9	-1.1	31.6	39.0	53.9	14.9	
Vert	2390.000	PK	64.3	27.2	2.9	32.1	62.3	73.9	11.6	
Vert	2400.000	PK	72.3	27.2	2.9	32.1	70.3	-	-	See 20dBc Data Sheet
Vert	3229.325	PK	47.0	28.7	3.3	31.8	47.2	73.9	26.7	
Vert	4844.000	PK	40.5	30.9	5.3	31.4	45.3	73.9	28.6	
Vert	7266.000	PK	42.7	35.8	5.7	32.3	51.9	73.9	22.0	
Vert	9688.000	PK	42.5	37.9	6.9	33.0	54.3	73.9	19.6	
Vert	24220.000	PK	45.1	37.9	-1.1	31.6	50.3	73.9	23.6	
Vert	2390.000	AV	49.7	27.2	2.9	32.1	47.7	53.9	6.2	
Vert	2400.000	AV	60.6	27.2	2.9	32.1	58.6	-	-	See 20dBc Data Sheet
Vert	3229.325	AV	42.0	28.7	3.3	31.8	42.2	53.9	11.7	
Vert	4844.000	AV	29.6	30.9	5.3	31.4	34.4	53.9	19.5	
Vert	7266.000	AV	30.9	35.8	5.7	32.3	40.1	53.9	13.8	
Vert	9688.000	AV	34.4	37.9	6.9	33.0	46.2	53.9	7.7	
Vert	24220.000	AV	33.8	37.9	-1.1	31.6	39.0	53.9	14.9	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amprifier)
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).
*The 10th harmonic was not seen so the result was its base noise level.
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2422.000	PK	93.1	27.2	2.9	32.1	91.1	-	-	Carrier
Hori	2400.000	PK	61.3	27.2	2.9	32.1	59.3	71.1	11.8	
Vert	2422.000	PK	94.1	27.2	2.9	32.1	92.1	-	-	Carrier
Vert	2400.000	PK	62.7	27.2	2.9	32.1	60.7	72.1	11.4	

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

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Radiated Spurious Emission

Test place	Head Office EMC Lab. No.4 Semi Anechoic Chamber		
Report No.	30KE0072-HO-02		
Date	09/21/2010	09/23/2010	09/24/2010
Temperature/ Humidity	24 deg.C./ 67%	22 deg.C./ 72%	25 deg.C./ 57%
Engineer	Takumi Shimada (1-10GHz)	Keisuke Kawamura (10-18GHz)	Tomohisa Nakagawa (18-40GHz)
Mode	11n-40 Tx 2427MHz Ant0		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3235.967	PK	48.9	28.7	3.3	31.8	49.1	73.9	24.8	
Hori	4854.000	PK	44.2	31.0	5.3	31.4	49.1	73.9	24.8	
Hori	7281.000	PK	44.3	35.8	5.7	32.4	53.4	73.9	20.5	
Hori	9708.000	PK	43.5	37.9	6.9	33.0	55.3	73.9	18.6	
Hori	24270.000	PK	47.6	37.9	-1.1	31.6	52.8	73.9	21.1	
Hori	3235.967	AV	43.2	28.7	3.3	31.8	43.4	53.9	10.5	
Hori	4854.000	AV	32.7	31.0	5.3	31.4	37.6	53.9	16.3	
Hori	7281.000	AV	31.4	35.8	5.7	32.4	40.5	53.9	13.4	
Hori	9708.000	AV	31.6	37.9	6.9	33.0	43.4	53.9	10.5	
Hori	24270.000	AV	35.2	37.9	-1.1	31.6	40.4	53.9	13.5	
Vert	3235.967	PK	48.6	28.7	3.3	31.8	48.8	73.9	25.1	
Vert	4854.000	PK	42.9	31.0	5.3	31.4	47.8	73.9	26.1	
Vert	7281.000	PK	43.4	35.8	5.7	32.4	52.5	73.9	21.4	
Vert	9708.000	PK	43.3	37.9	6.9	33.0	55.1	73.9	18.8	
Vert	24270.000	PK	46.8	37.9	-1.1	31.6	52.0	73.9	21.9	
Vert	3235.967	AV	43.1	28.7	3.3	31.8	43.3	53.9	10.6	
Vert	4854.000	AV	30.7	31.0	5.3	31.4	35.6	53.9	18.3	
Vert	7281.000	AV	31.1	35.8	5.7	32.4	40.2	53.9	13.7	
Vert	9708.000	AV	32.7	37.9	6.9	33.0	44.5	53.9	9.4	
Vert	24270.000	AV	35.2	37.9	-1.1	31.6	40.4	53.9	13.5	

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

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

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.4 Semi Anechoic Chamber		
Report No.	30KE0072-HO-02		
Date	09/21/2010	09/23/2010	09/24/2010
Temperature/ Humidity	24 deg.C./ 67%	22 deg.C./ 72%	25 deg.C./ 57%
Engineer	Takumi Shimada (1-10GHz)	Keisuke Kawamura (10-18GHz)	Tomohisa Nakagawa (18-40GHz)
Mode	11n-40 Tx 2437MHz Ant0		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3235.967	PK	48.9	28.7	3.3	31.8	49.1	73.9	24.8	
Hori	4854.000	PK	44.2	31.0	5.3	31.4	49.1	73.9	24.8	
Hori	7281.000	PK	44.3	35.8	5.7	32.4	53.4	73.9	20.5	
Hori	9708.000	PK	43.5	37.9	6.9	33.0	55.3	73.9	18.6	
Hori	24270.000	PK	47.6	37.9	-1.1	31.6	52.8	73.9	21.1	
Hori	3235.967	AV	43.2	28.7	3.3	31.8	43.4	53.9	10.5	
Hori	4854.000	AV	32.7	31.0	5.3	31.4	37.6	53.9	16.3	
Hori	7281.000	AV	31.4	35.8	5.7	32.4	40.5	53.9	13.4	
Hori	9708.000	AV	31.6	37.9	6.9	33.0	43.4	53.9	10.5	
Hori	24270.000	AV	35.2	37.9	-1.1	31.6	40.4	53.9	13.5	
Vert	3235.967	PK	48.6	28.7	3.3	31.8	48.8	73.9	25.1	
Vert	4854.000	PK	42.9	31.0	5.3	31.4	47.8	73.9	26.1	
Vert	7281.000	PK	43.4	35.8	5.7	32.4	52.5	73.9	21.4	
Vert	9708.000	PK	43.3	37.9	6.9	33.0	55.1	73.9	18.8	
Vert	24270.000	PK	46.8	37.9	-1.1	31.6	52.0	73.9	21.9	
Vert	3235.967	AV	43.1	28.7	3.3	31.8	43.3	53.9	10.6	
Vert	4854.000	AV	30.7	31.0	5.3	31.4	35.6	53.9	18.3	
Vert	7281.000	AV	31.1	35.8	5.7	32.4	40.2	53.9	13.7	
Vert	9708.000	AV	32.7	37.9	6.9	33.0	44.5	53.9	9.4	
Vert	24270.000	AV	35.2	37.9	-1.1	31.6	40.4	53.9	13.5	

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

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

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.4 Semi Anechoic Chamber		
Report No.	30KE0072-HO-02		
Date	09/21/2010	09/23/2010	09/24/2010
Temperature/ Humidity	24 deg.C./ 67%	22 deg.C./ 72%	25 deg.C./ 57%
Engineer	Takumi Shimada (1-10GHz)	Keisuke Kawamura (10-18GHz)	Tomohisa Nakagawa (18-40GHz)
Mode	11n-40 Tx 2447MHz Ant0		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3262.635	PK	46.4	28.8	3.4	31.8	46.8	73.9	27.1	
Hori	4894.000	PK	43.8	31.1	5.3	31.4	48.8	73.9	25.1	
Hori	7341.000	PK	44.1	35.9	5.7	32.4	53.3	73.9	20.6	
Hori	9788.000	PK	42.6	38.1	6.9	33.0	54.6	73.9	19.3	
Hori	24470.000	PK	46.5	37.9	-1.1	31.6	51.7	73.9	22.2	
Hori	3262.635	AV	39.9	28.8	3.4	31.8	40.3	53.9	13.6	
Hori	4894.000	AV	31.4	31.1	5.3	31.4	36.4	53.9	17.5	
Hori	7341.000	AV	31.7	35.9	5.7	32.4	40.9	53.9	13.0	
Hori	9788.000	AV	30.5	38.1	6.9	33.0	42.5	53.9	11.4	
Hori	24470.000	AV	35.0	37.9	-1.1	31.6	40.2	53.9	13.7	
Vert	3262.635	PK	49.1	28.8	3.4	31.8	49.5	73.9	24.4	
Vert	4894.000	PK	42.4	31.1	5.3	31.4	47.4	73.9	26.5	
Vert	7341.000	PK	42.5	35.9	5.7	32.4	51.7	73.9	22.2	
Vert	9788.000	PK	43.1	38.1	6.9	33.0	55.1	73.9	18.8	
Vert	24470.000	PK	47.7	37.9	-1.1	31.6	52.9	73.9	21.0	
Vert	3262.635	AV	43.7	28.8	3.4	31.8	44.1	53.9	9.8	
Vert	4894.000	AV	30.3	31.1	5.3	31.4	35.3	53.9	18.6	
Vert	7341.000	AV	31.2	35.9	5.7	32.4	40.4	53.9	13.5	
Vert	9788.000	AV	32.5	38.1	6.9	33.0	44.5	53.9	9.4	
Vert	24470.000	AV	35.0	37.9	-1.1	31.6	40.2	53.9	13.7	

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

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

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.4 Semi Anechoic Chamber		
Report No.	30KE0072-HO-02		
Date	09/21/2010	09/23/2010	09/24/2010
Temperature/ Humidity	24 deg.C./ 67%	22 deg.C./ 72%	25 deg.C./ 57%
Engineer	Takumi Shimada (1-10GHz)	Keisuke Kawamura (10-18GHz)	Tomohisa Nakagawa (18-40GHz)
Mode	11n-40 Tx 2452MHz Ant0		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2483.500	PK	72.5	27.2	2.9	32.1	70.5	73.9	3.4	
Hori	3269.260	PK	48.1	28.8	3.4	31.8	48.5	73.9	25.4	
Hori	4904.000	PK	42.3	31.1	5.3	31.4	47.3	73.9	26.6	
Hori	7356.000	PK	43.5	36.0	5.7	32.4	52.8	73.9	21.1	
Hori	9808.000	PK	43.2	38.1	6.9	33.0	55.2	73.9	18.7	
Hori	24520.000	PK	46.9	37.9	-1.1	31.5	52.2	73.9	21.7	
Hori	2483.500	AV	50.2	27.2	2.9	32.1	48.2	53.9	5.7	
Hori	3269.260	AV	42.0	28.8	3.4	31.8	42.4	53.9	11.5	
Hori	4904.000	AV	30.8	31.1	5.3	31.4	35.8	53.9	18.1	
Hori	7356.000	AV	31.3	36.0	5.7	32.4	40.6	53.9	13.3	
Hori	9808.000	AV	31.1	38.1	6.9	33.0	43.1	53.9	10.8	
Hori	24520.000	AV	35.4	37.9	-1.1	31.5	40.7	53.9	13.2	
Vert	2483.500	PK	70.4	27.2	2.9	32.1	68.4	73.9	5.5	
Vert	3269.260	PK	49.2	28.8	3.4	31.8	49.6	73.9	24.3	
Vert	4904.000	PK	42.9	31.1	5.3	31.4	47.9	73.9	26.0	
Vert	7356.000	PK	44.5	36.0	5.7	32.4	53.8	73.9	20.1	
Vert	9808.000	PK	42.9	38.1	6.9	33.0	54.9	73.9	19.0	
Vert	24520.000	PK	46.5	37.9	-1.1	31.5	51.8	73.9	22.1	
Vert	2483.500	AV	50.1	27.2	2.9	32.1	48.1	53.9	5.8	
Vert	3269.260	AV	43.7	28.8	3.4	31.8	44.1	53.9	9.8	
Vert	4904.000	AV	30.2	31.1	5.3	31.4	35.2	53.9	18.7	
Vert	7356.000	AV	31.0	36.0	5.7	32.4	40.3	53.9	13.6	
Vert	9808.000	AV	31.0	38.1	6.9	33.0	43.0	53.9	10.9	
Vert	24520.000	AV	35.4	37.9	-1.1	31.5	40.7	53.9	13.2	

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

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

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

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

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Radiated Spurious Emission

Test place	Head Office EMC Lab. No. 4 Semi Anechoic Chamber		
Report No.	30KE0072-HO-02		
Date	09/22/2010	09/23/2010	09/24/2010
Temperature/ Humidity	25 deg.C./ 69%	22 deg.C./ 72%	25 deg.C./ 57%
Engineer	Satofumi Matsuyama (1-10GHz)	Keisuke Kawamura (10-18GHz)	Tomohisa Nakagawa (18-40GHz)
Mode	11a Tx 5745MHz Ant1		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3829.910	PK	48.3	29.5	3.6	31.6	49.8	73.9	24.1	
Hori	5725.000	PK	81.5	32.4	4.2	31.6	86.5	-	-	See 20dBc Data Sheet
Hori	11490.000	PK	47.7	39.7	-1.8	32.9	52.7	73.9	21.2	
Hori	17235.000	PK	48.2	40.9	-0.5	32.2	56.4	73.9	17.5	
Hori	3829.910	AV	42.5	29.5	3.6	31.6	44.0	53.9	9.9	
Hori	5725.000	AV	55.3	32.4	4.2	31.6	60.3	-	-	See 20dBc Data Sheet
Hori	11490.000	AV	35.8	39.7	-1.8	32.9	40.8	53.9	13.1	
Hori	17235.000	AV	35.7	40.9	-0.5	32.2	43.9	53.9	10.0	
Vert	3829.956	PK	47.1	29.5	3.6	31.6	48.6	73.9	25.3	
Vert	5725.000	PK	80.5	32.4	4.2	31.6	85.5	-	-	See 20dBc Data Sheet
Vert	11490.000	PK	48.7	39.7	-1.8	32.9	53.7	73.9	20.2	
Vert	17235.000	PK	46.0	40.9	-0.5	32.2	54.2	73.9	19.7	
Vert	3829.956	AV	40.7	29.5	3.6	31.6	42.2	53.9	11.7	
Vert	5725.000	AV	54.7	32.4	4.2	31.6	59.7	-	-	See 20dBc Data Sheet
Vert	11490.000	AV	37.3	39.7	-1.8	32.9	42.3	53.9	11.6	
Vert	17235.000	AV	33.8	40.9	-0.5	32.2	42.0	53.9	11.9	

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 had enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m	Margin [dB]	Remark
Hori	5745.000	PK	96.0	32.4	4.2	31.6	101.0	-	-	Carrier
Hori	5725.000	PK	62.1	32.4	4.2	31.6	67.1	81.0	13.9	
Vert	5745.000	PK	95.5	32.4	4.2	31.6	100.5	-	-	Carrier
Vert	5725.000	PK	61.1	32.4	4.2	31.6	66.1	80.5	14.4	

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

Radiated Spurious Emission

Test place	Head Office EMC Lab. No. 4 Semi Anechoic Chamber		
Report No.	30KE0072-HO-02		
Date	09/22/2010	09/23/2010	09/24/2010
Temperature/ Humidity	25 deg.C./ 69%	22 deg.C./ 72%	25 deg.C./ 57%
Engineer	Satofumi Matsuyama (1-10GHz)	Keisuke Kawamura (10-18GHz)	Tomohisa Nakagawa (18-40GHz)
Mode	11a Tx 5785MHz Ant1		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3856.717	PK	47.9	29.5	3.6	31.6	49.4	73.9	24.5	
Hori	11570.000	PK	48.2	39.6	-1.7	32.9	53.2	73.9	20.7	
Hori	17355.000	PK	48.6	41.7	-0.4	32.2	57.7	73.9	16.2	
Hori	3856.717	AV	41.9	29.5	3.6	31.6	43.4	53.9	10.5	
Hori	11570.000	AV	35.7	39.6	-1.7	32.9	40.7	53.9	13.3	
Hori	17355.000	AV	36.2	41.7	-0.4	32.2	45.3	53.9	8.6	
Vert	3856.551	PK	47.7	29.5	3.6	31.6	49.2	73.9	24.7	
Vert	11570.000	PK	48.6	39.6	-1.7	32.9	53.6	73.9	20.3	
Vert	17355.000	PK	45.3	41.7	-0.4	32.2	54.4	73.9	19.5	
Vert	3856.551	AV	40.6	29.5	3.6	31.6	42.1	53.9	11.8	
Vert	11570.000	AV	36.6	39.6	-1.7	32.9	41.6	53.9	12.3	
Vert	17355.000	AV	33.7	41.7	-0.4	32.2	42.8	53.9	11.1	

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 had enough margin (more than 20dB).
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Head Office EMC Lab. No. 4 Semi Anechoic Chamber		
Report No.	30KE0072-HO-02		
Date	09/22/2010	09/23/2010	09/24/2010
Temperature/ Humidity	25 deg.C./ 69%	22 deg.C./ 72%	25 deg.C./ 57%
Engineer	Satofumi Matsuyama (1-10GHz)	Keisuke Kawamura (10-18GHz)	Tomohisa Nakagawa (18-40GHz)
Mode	11a Tx 5825MHz Ant1		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	3883.251	PK	48.4	29.5	3.6	31.6	49.9	73.9	24.0	
Hori	5850.000	PK	69.1	32.6	4.3	31.6	74.4	-	-	See 20dBc Data Sheet
Hori	11650.000	PK	48.4	39.6	-1.7	32.9	53.4	73.9	20.5	
Hori	17475.000	PK	47.3	42.5	-0.5	32.2	57.1	73.9	16.8	
Hori	3883.251	AV	42.1	29.5	3.6	31.6	43.6	53.9	10.3	
Hori	5850.000	AV	48.4	32.6	4.3	31.6	53.7	-	-	See 20dBc Data Sheet
Hori	11650.000	AV	34.9	39.6	-1.7	32.9	39.9	53.9	14.0	
Hori	17475.000	AV	35.5	42.5	-0.5	32.2	45.3	53.9	8.6	
Vert	3883.254	PK	47.6	29.5	3.6	31.6	49.1	73.9	24.8	
Vert	5850.000	PK	67.0	32.6	4.3	31.6	72.3	-	-	See 20dBc Data Sheet
Vert	11650.000	PK	48.3	39.6	-1.7	32.9	53.3	73.9	20.6	
Vert	17475.000	PK	45.7	42.5	-0.5	32.2	55.5	73.9	18.4	
Vert	3883.254	AV	40.3	29.5	3.6	31.6	41.8	53.9	12.1	
Vert	5850.000	AV	47.2	32.6	4.3	31.6	52.5	-	-	See 20dBc Data Sheet
Vert	11650.000	AV	36.6	39.6	-1.7	32.9	41.6	53.9	12.3	
Vert	17475.000	AV	34.1	42.5	-0.5	32.2	43.9	53.9	10.0	

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 had enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5825.000	PK	96.4	32.6	4.3	31.6	101.7	-	-	Carrier
Hori	5850.000	PK	53.5	32.6	4.3	31.6	58.8	81.7	22.9	
Vert	5825.000	PK	96.4	32.6	4.3	31.6	101.7	-	-	Carrier
Vert	5850.000	PK	52.1	32.6	4.3	31.6	57.4	81.7	24.3	

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

Radiated Spurious Emission

Test place	Head Office EMC Lab. No. 4 Semi Anechoic Chamber
Report No.	30KE0072-HO-02
Date	09/22/2010
Temperature/ Humidity	25 deg.C./ 69%
Engineer	Satofumi Matsuyama
	(1-10GHz)
Mode	11n-20 Tx 5745MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5725.000	PK	81.5	32.4	4.2	31.6	86.5	-	-	See 20dBc Data Sheet
Hori	5725.000	AV	54.5	32.4	4.2	31.6	59.5	-	-	See 20dBc Data Sheet
Vert	5725.000	PK	81.0	32.4	4.2	31.6	86.0	-	-	See 20dBc Data Sheet
Vert	5725.000	AV	54.5	32.4	4.2	31.6	59.5	-	-	See 20dBc Data Sheet

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 had enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5745.000	PK	94.9	32.4	4.2	31.6	99.9	-	-	Carrier
Hori	5725.000	PK	61.7	32.4	4.2	31.6	66.7	79.9	13.2	
Vert	5745.000	PK	95.3	32.4	4.2	31.6	100.3	-	-	Carrier
Vert	5725.000	PK	61.1	32.4	4.2	31.6	66.1	80.3	14.2	

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

Radiated Spurious Emission

Test place	Head Office EMC Lab. No. 4 Semi Anechoic Chamber
Report No.	30KE0072-HO-02
Date	09/22/2010
Temperature/ Humidity	25 deg.C./ 69%
Engineer	Satofumi Matsuyama
	(1-10GHz)
Mode	11n-20 Tx 5825MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5850.000	PK	68.6	32.6	4.3	31.6	73.9	-	-	See 20dBc Data Sheet
Hori	5850.000	AV	47.9	32.6	4.3	31.6	53.2	-	-	See 20dBc Data Sheet
Vert	5850.000	PK	69.2	32.6	4.3	31.6	74.5	-	-	See 20dBc Data Sheet
Vert	5850.000	AV	48.8	32.6	4.3	31.6	54.1	-	-	See 20dBc Data Sheet

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 had enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5825.000	PK	94.6	32.6	4.3	31.6	99.9	-	-	Carrier
Hori	5850.000	PK	52.0	32.6	4.3	31.6	66.7	79.9	13.2	
Vert	5825.000	PK	96.8	32.6	4.3	31.6	102.1	-	-	Carrier
Vert	5850.000	PK	53.0	32.6	4.3	31.6	58.3	82.1	23.8	

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

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Radiated Spurious Emission

Test place	Head Office EMC Lab. No. 4 Semi Anechoic Chamber
Report No.	30KE0072-HO-02
Date	09/22/2010
Temperature/ Humidity	25 deg.C./ 69%
Engineer	Satofumi Matsuyama
	(1-10GHz)
Mode	11n-40 Tx 5755MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5717.453	PK	79.2	32.4	4.2	31.6	84.2	-	-	See 20dBc Data Sheet
Hori	5725.000	PK	78.7	32.4	4.2	31.6	83.7	-	-	See 20dBc Data Sheet
Hori	5717.453	AV	60.8	32.4	4.2	31.6	65.8	-	-	See 20dBc Data Sheet
Hori	5725.000	AV	58.8	32.4	4.2	31.6	63.8	-	-	See 20dBc Data Sheet
Vert	5717.467	PK	79.3	32.4	4.2	31.6	84.3	-	-	See 20dBc Data Sheet
Vert	5725.000	PK	78.9	32.4	4.2	31.6	83.9	-	-	See 20dBc Data Sheet
Vert	5717.467	AV	61.1	32.4	4.2	31.6	66.1	-	-	See 20dBc Data Sheet
Vert	5725.000	AV	59.5	32.4	4.2	31.6	64.5	-	-	See 20dBc Data Sheet

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 had enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5755.000	PK	92.6	32.4	4.2	31.6	99.9	-	-	Carrier
Hori	5717.453	PK	67.8	32.4	4.2	31.6	72.8	79.9	7.1	
Hori	5725.000	PK	63.7	32.4	4.2	31.6	66.7	79.9	13.2	
Vert	5755.000	PK	92.7	32.4	4.2	31.6	97.7	-	-	Carrier
Vert	5717.467	PK	68.3	32.4	4.2	31.6	73.3	77.7	4.4	
Vert	5725.000	PK	64.1	32.4	4.2	31.6	69.1	77.7	8.6	

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

Radiated Spurious Emission

Test place	Head Office EMC Lab. No. 4 Semi Anechoic Chamber
Report No.	30KE0072-HO-02
Date	09/22/2010
Temperature/ Humidity	25 deg.C./ 69%
Engineer	Satofumi Matsuyama
	(1-10GHz)
Mode	11n-40 Tx 5795MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5850.000	PK	65.6	32.6	4.3	31.6	70.9	-	-	See 20dBc Data Sheet
Hori	5850.000	AV	46.2	32.6	4.3	31.6	51.5	-	-	See 20dBc Data Sheet
Vert	5850.000	PK	67.6	32.6	4.3	31.6	72.9	-	-	See 20dBc Data Sheet
Vert	5850.000	AV	46.0	32.6	4.3	31.6	51.3	-	-	See 20dBc Data Sheet

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 had enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5795.000	PK	92.2	32.5	4.3	31.6	99.9	-	-	Carrier
Hori	5850.000	PK	52.8	32.6	4.3	31.6	66.7	79.9	13.2	
Vert	5795.000	PK	92.9	32.5	4.3	31.6	98.1	-	-	Carrier
Vert	5850.000	PK	52.4	32.6	4.3	31.6	57.7	78.1	20.4	

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

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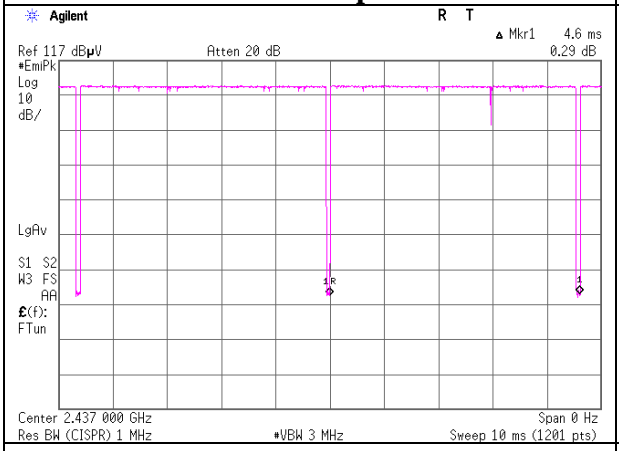
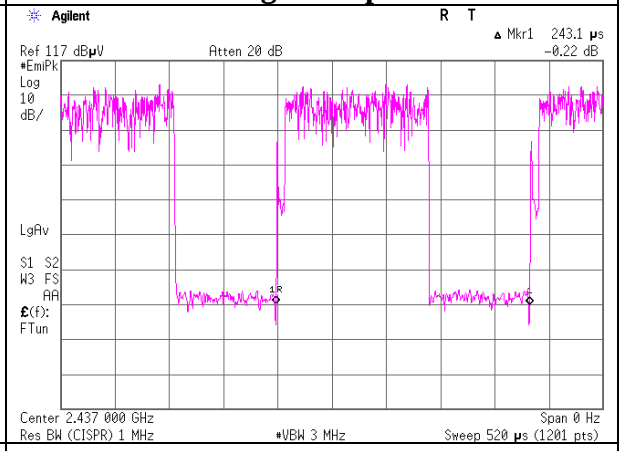
The tested burst timing

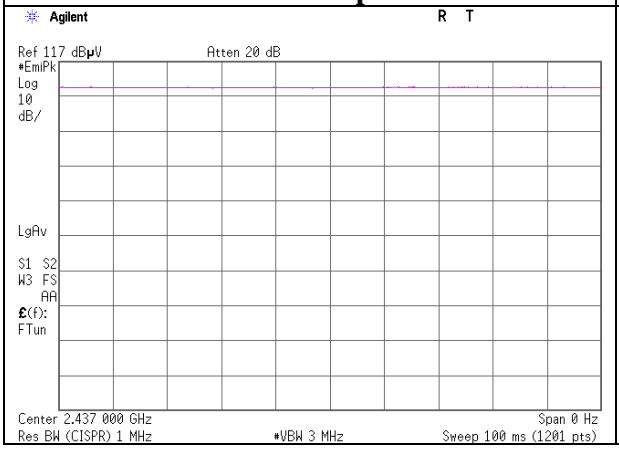
11b 1Mbps



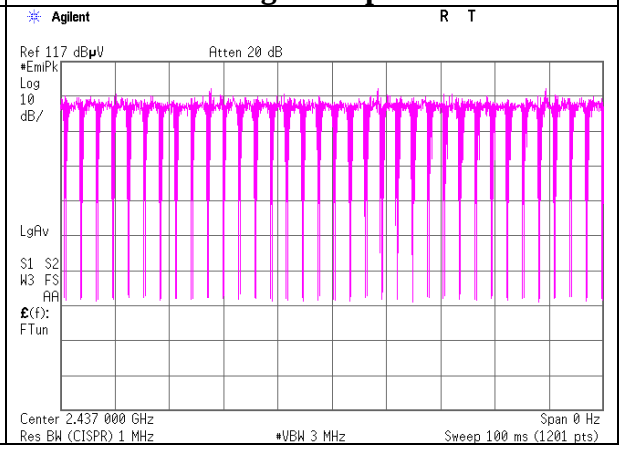
11g 36Mbps



11b 1Mbps

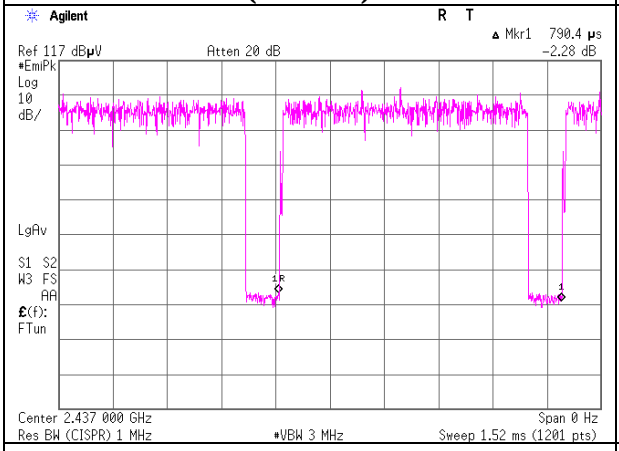


11g 36Mbps



The tested burst timing

11n-20(2.4GHz) MCS0



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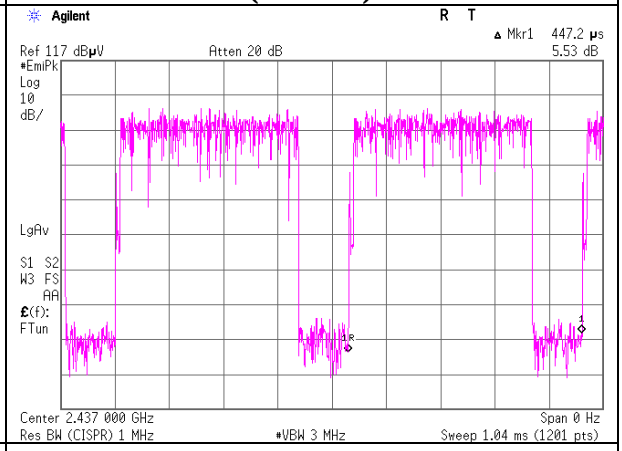

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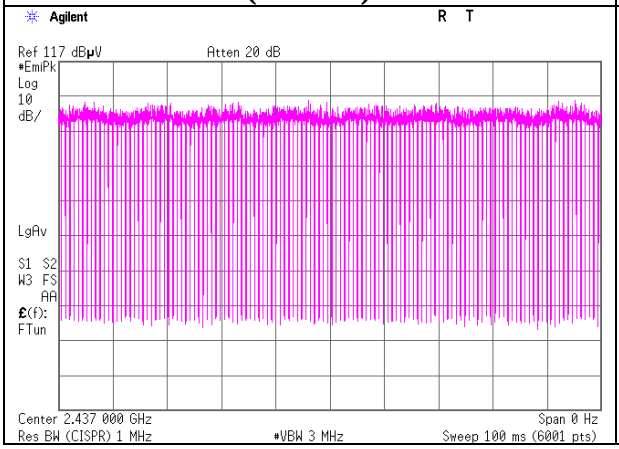
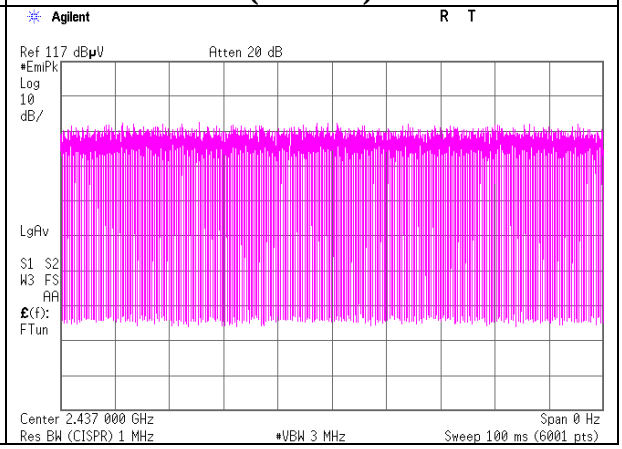


11n-40(2.4GHz) MCS0



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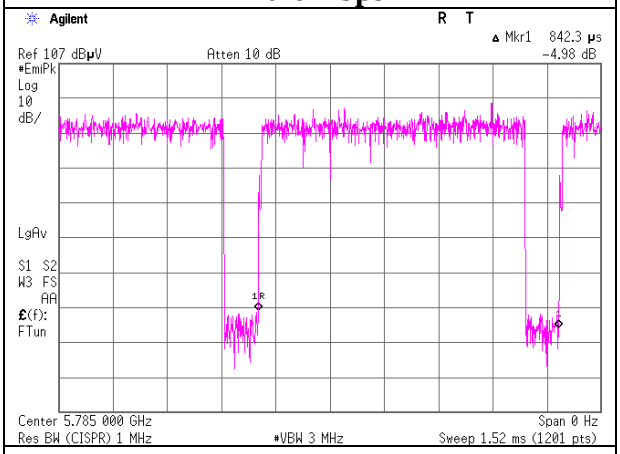
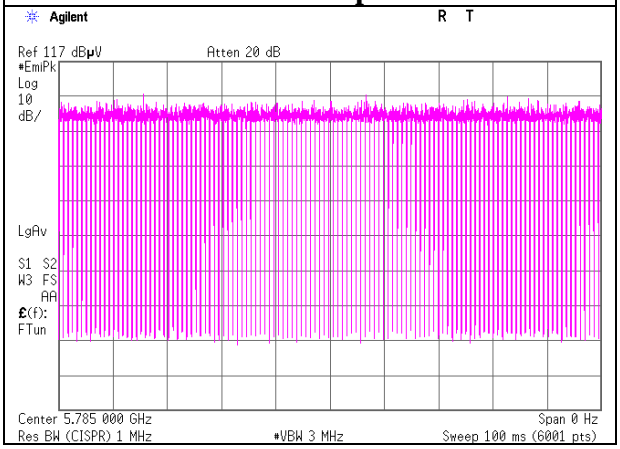
The tested burst timing

11a 6Mbps

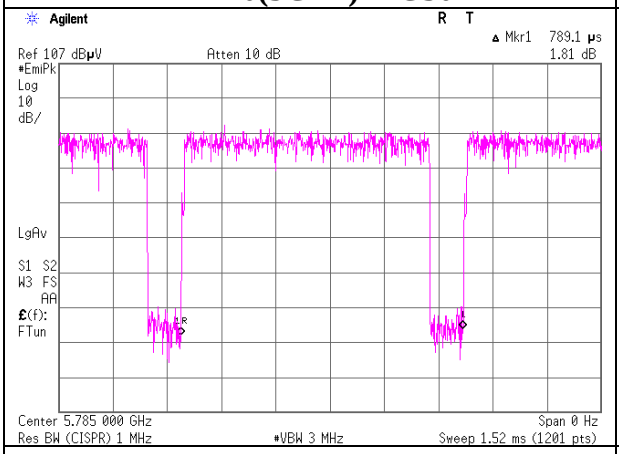


11a 6Mbps

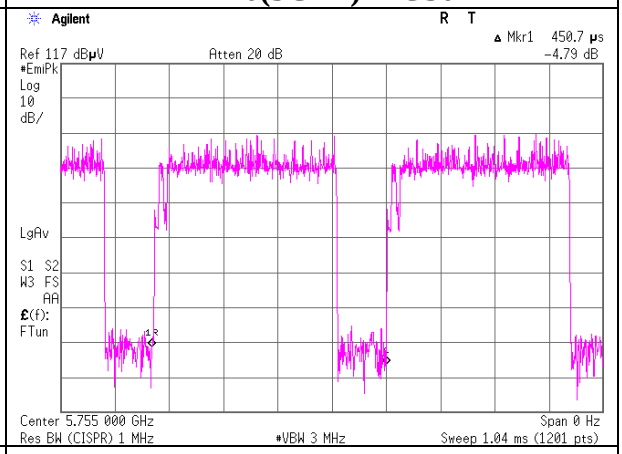


The tested burst timing

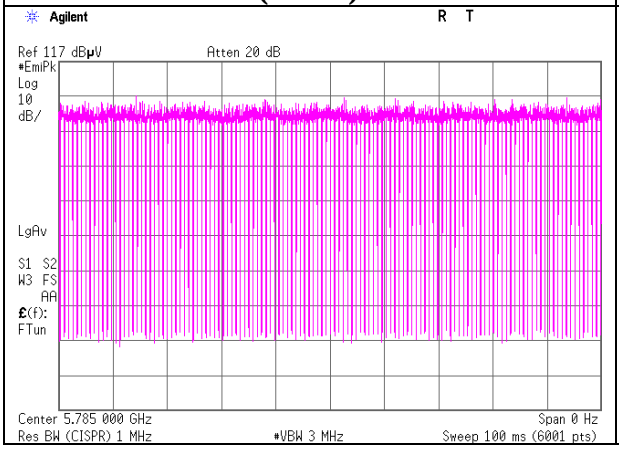
11n-20(5GHz) MCS0



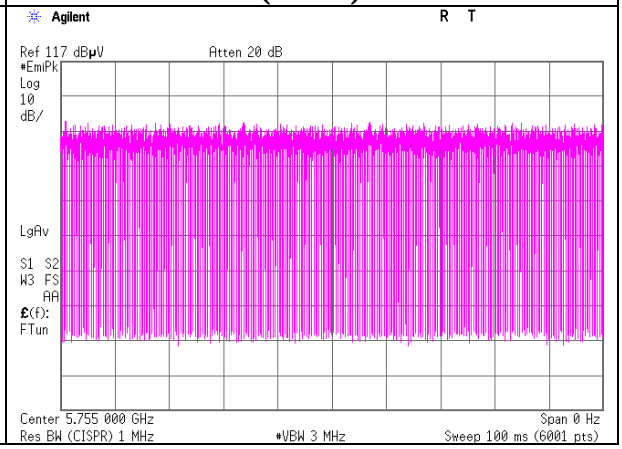
11n-40(5GHz) MCS0



11n-20(5GHz) MCS0



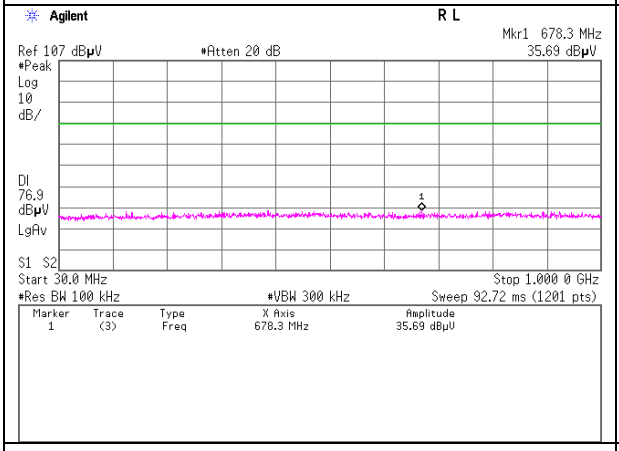
11n-40(5GHz) MCS0



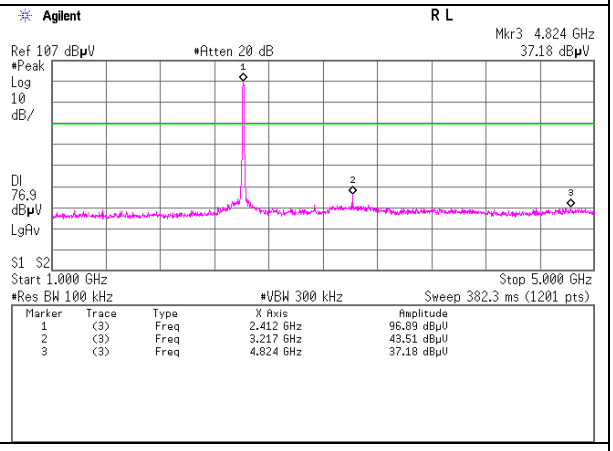
Conducted Spurious Emission

11b Tx 2412MHz

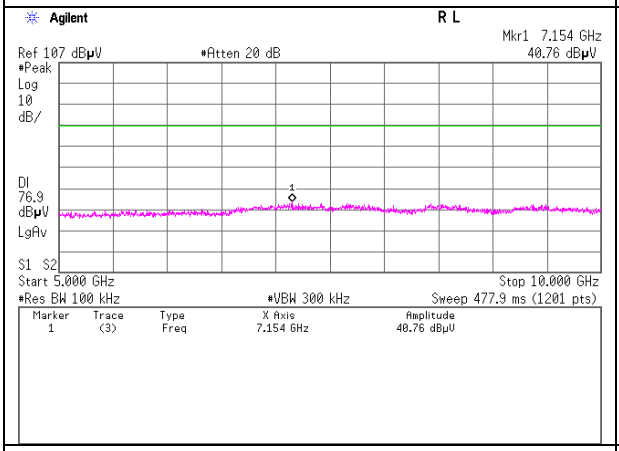
30MHz-1GHz



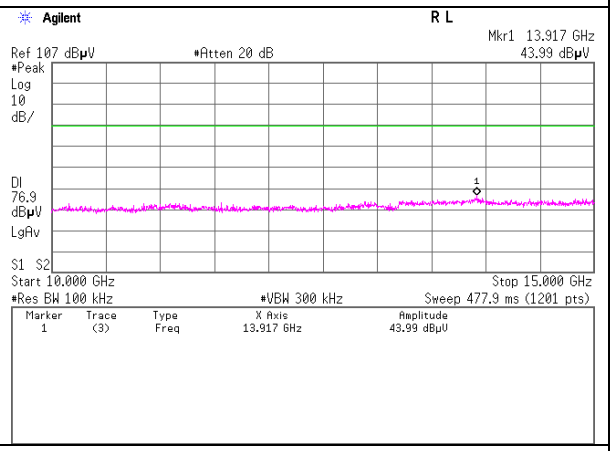
1GHz-5GHz



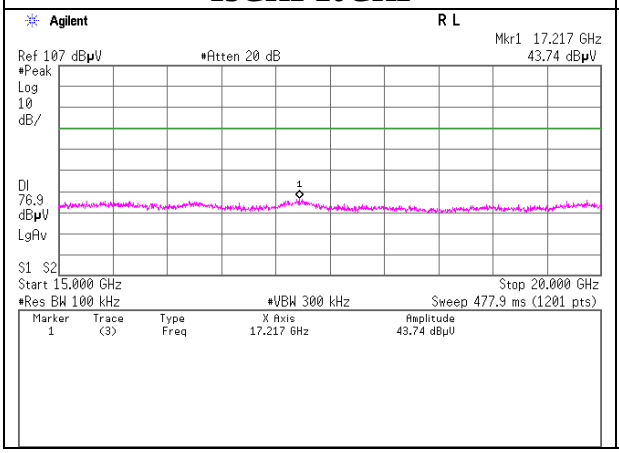
5GHz-10GHz



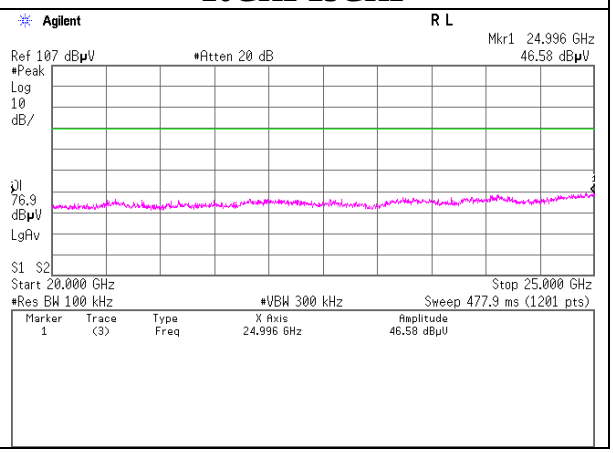
10GHz-15GHz



15GHz-20GHz



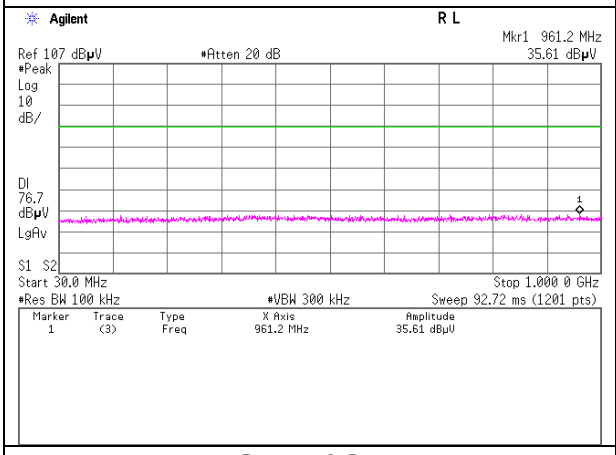
20GHz-25GHz



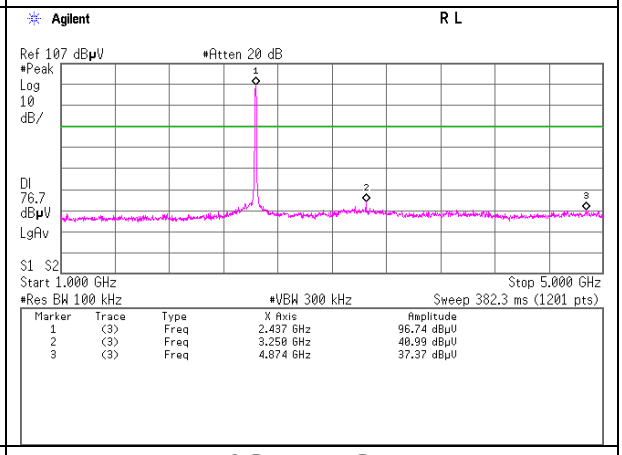
Conducted Spurious Emission

11b Tx 2437MHz

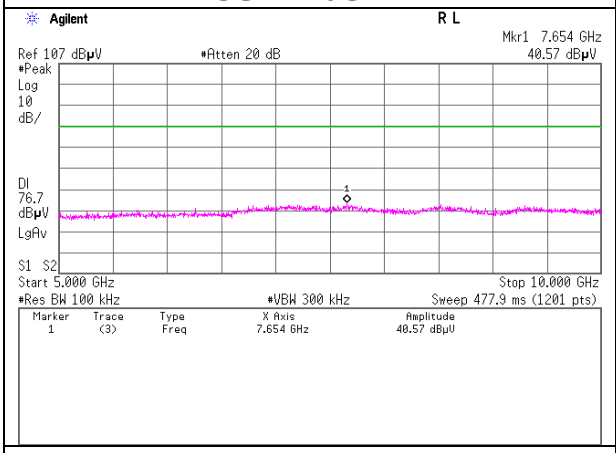
30MHz-1GHz



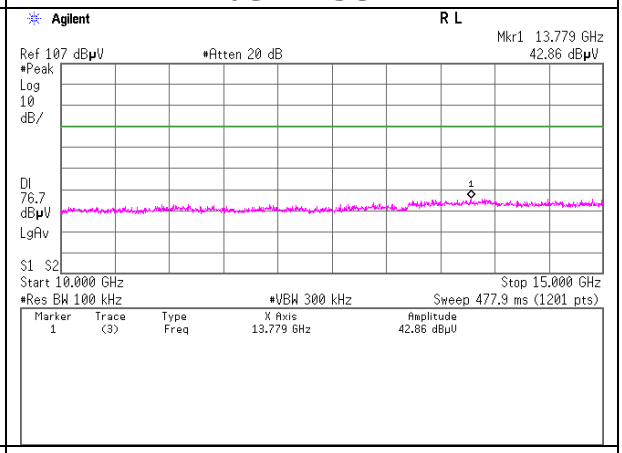
1GHz-5GHz



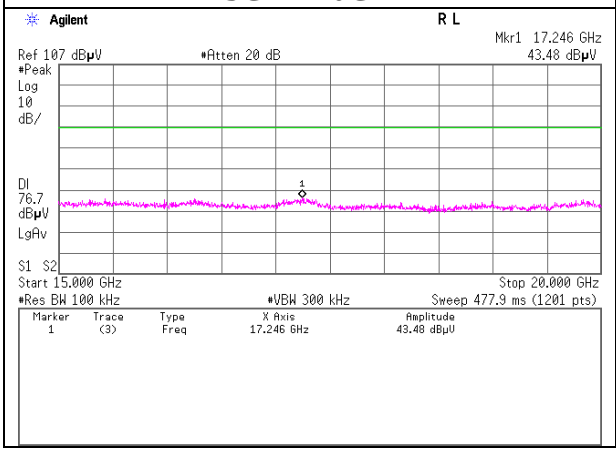
5GHz-10GHz



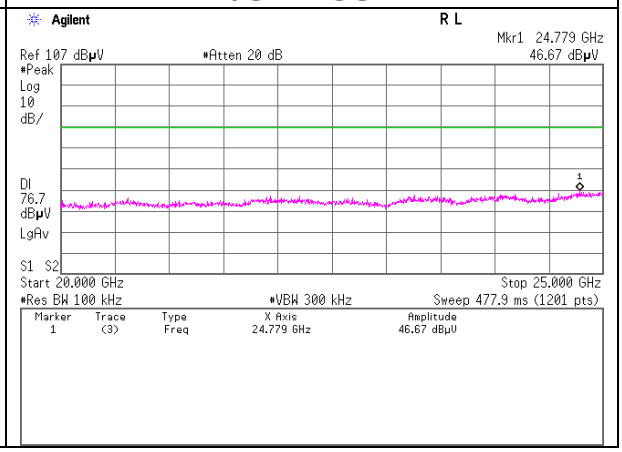
10GHz-15GHz



15GHz-20GHz



20GHz-25GHz



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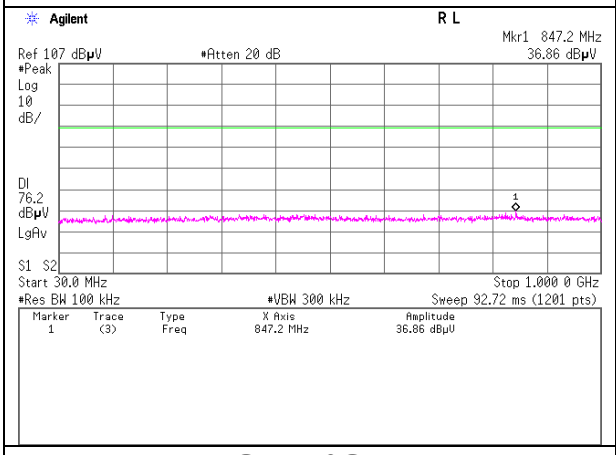
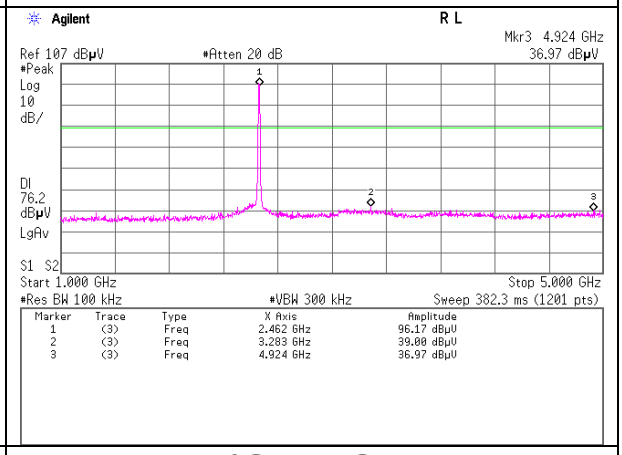
Conducted Spurious Emission

11b Tx 2462MHz

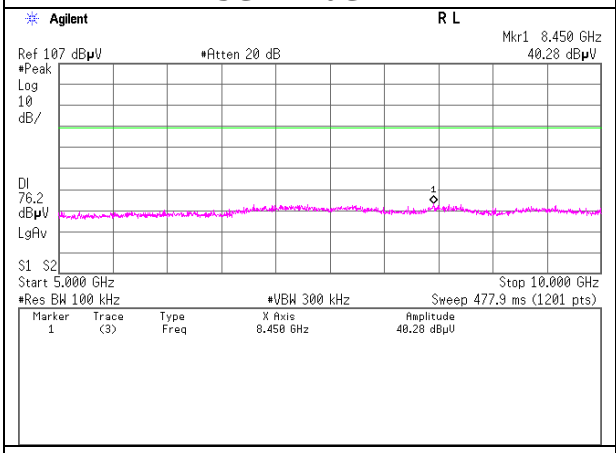
30MHz-1GHz



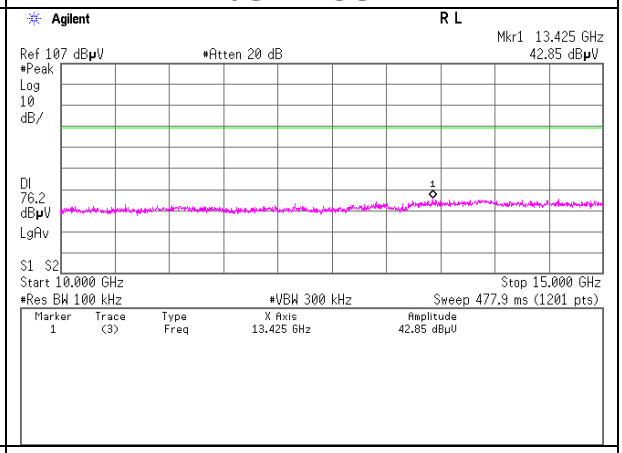
1GHz-5GHz



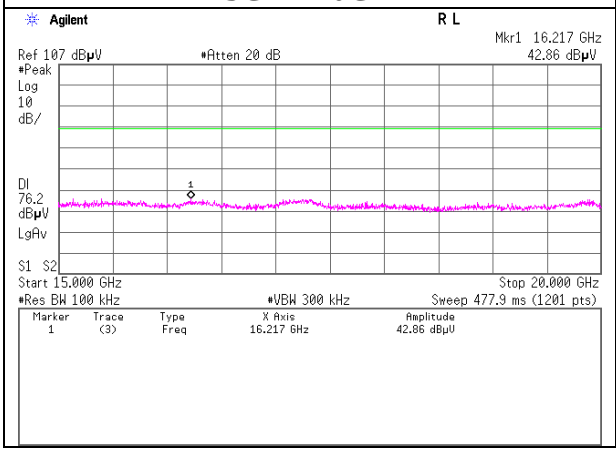
5GHz-10GHz



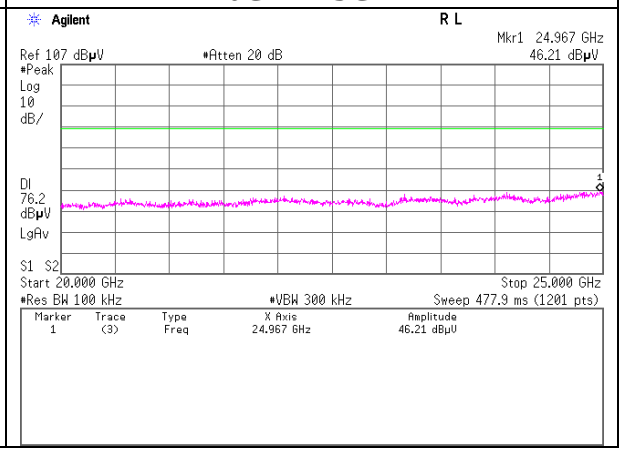
10GHz-15GHz



15GHz-20GHz



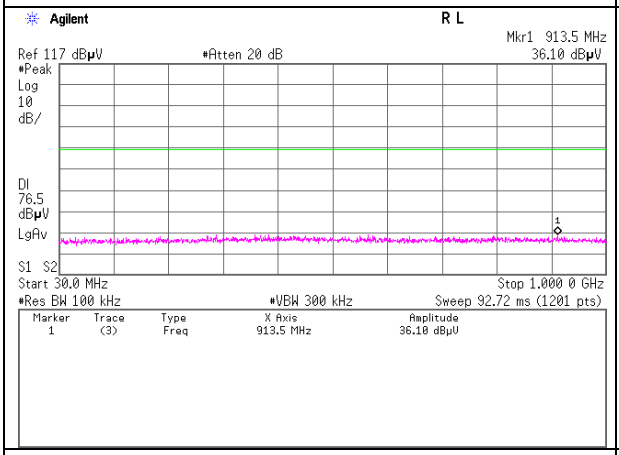
20GHz-25GHz



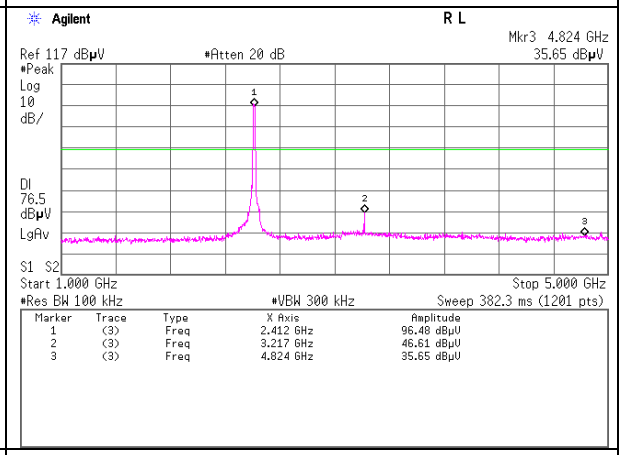
Conducted Spurious Emission

11g Tx 2412MHz

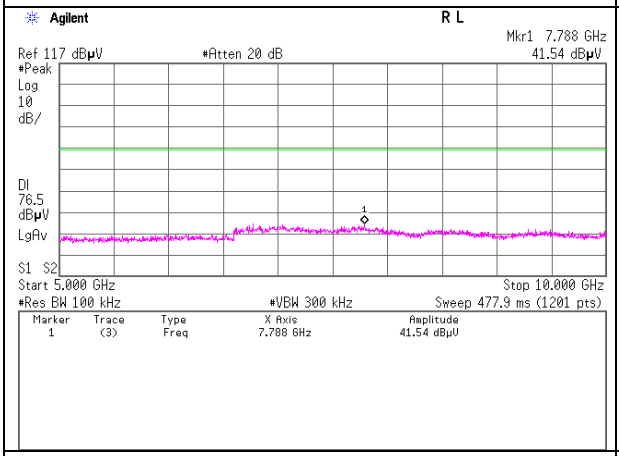
30MHz-1GHz



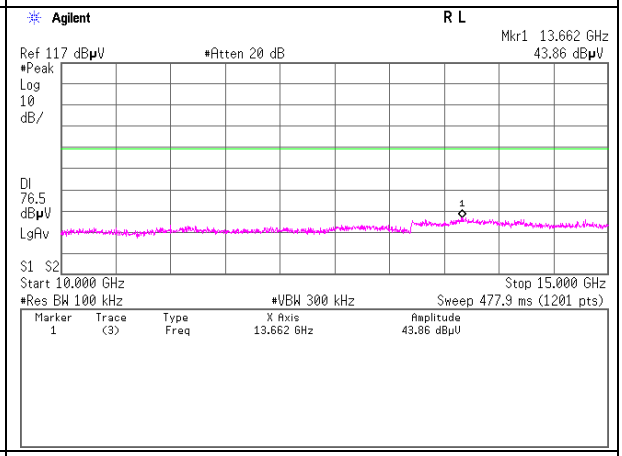
1GHz-5GHz



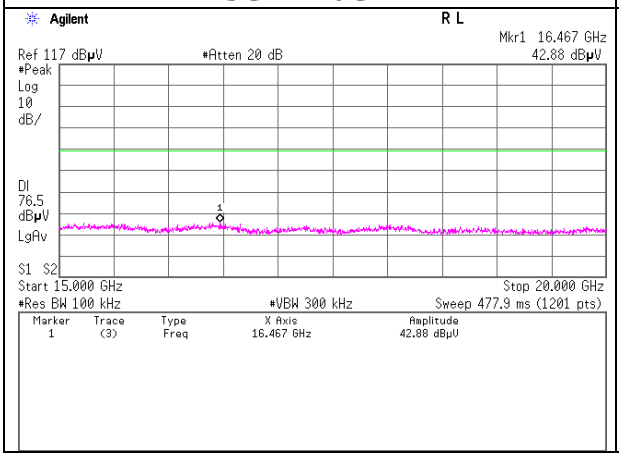
5GHz-10GHz



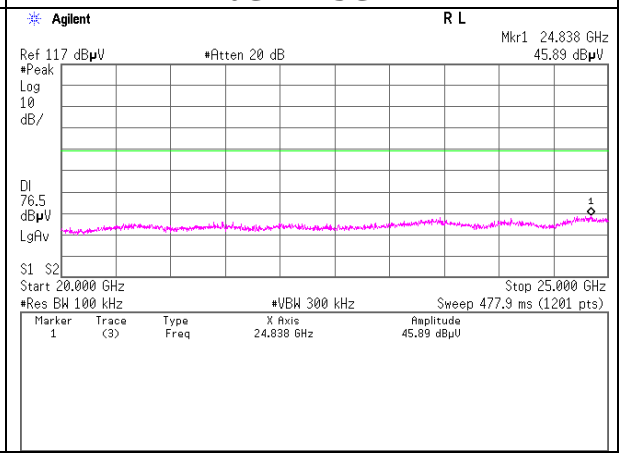
10GHz-15GHz



15GHz-20GHz



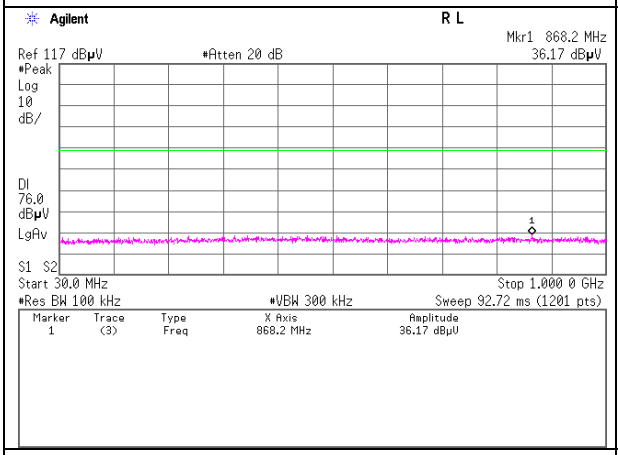
20GHz-25GHz



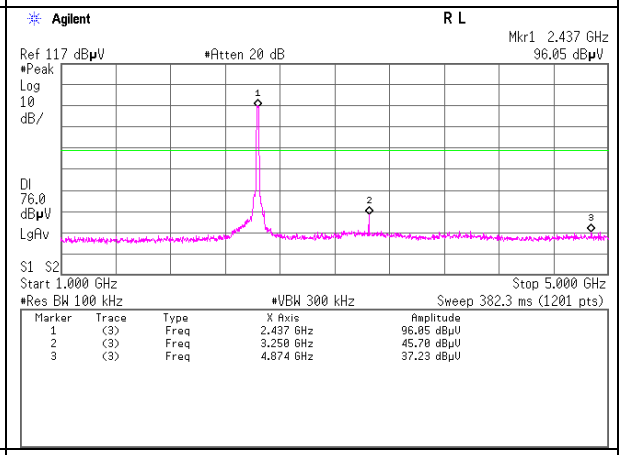
Conducted Spurious Emission

11g Tx 2437MHz

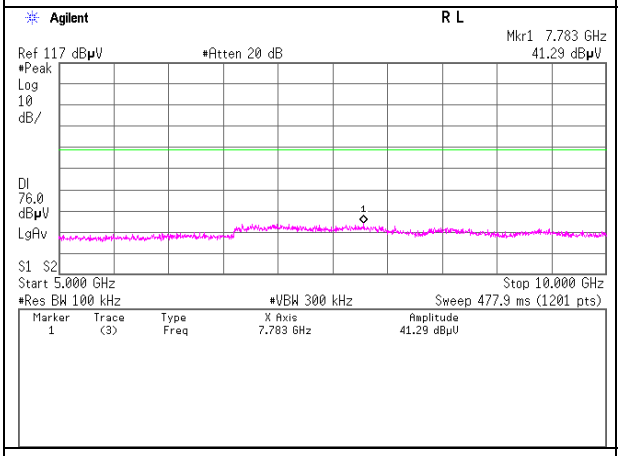
30MHz-1GHz



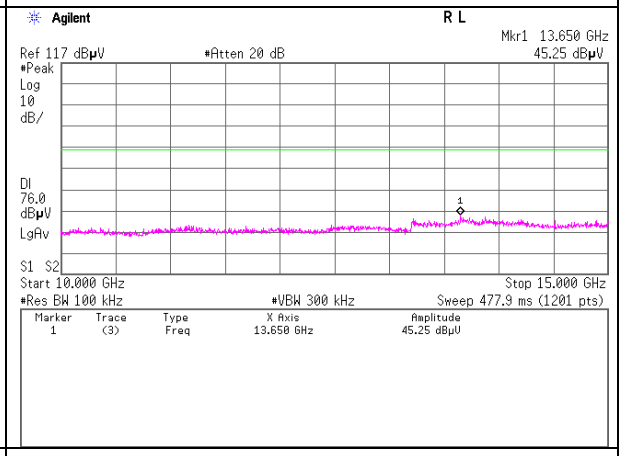
1GHz-5GHz



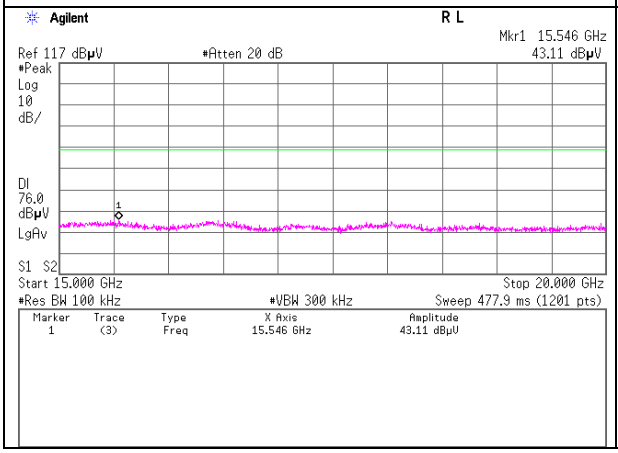
5GHz-10GHz



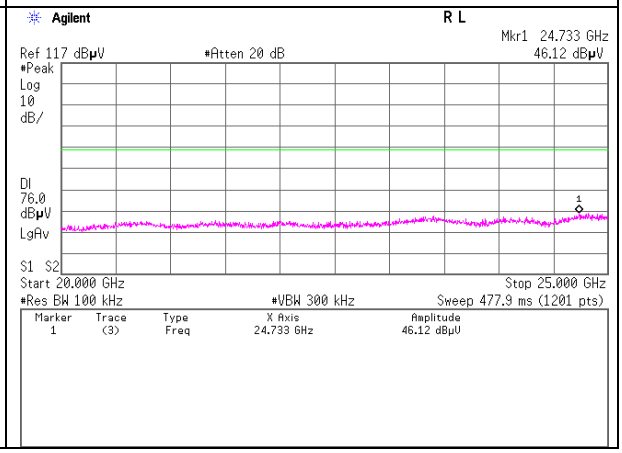
10GHz-15GHz



15GHz-20GHz



20GHz-25GHz



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Head Office EMC Lab.
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Telephone : +81 596 24 8116
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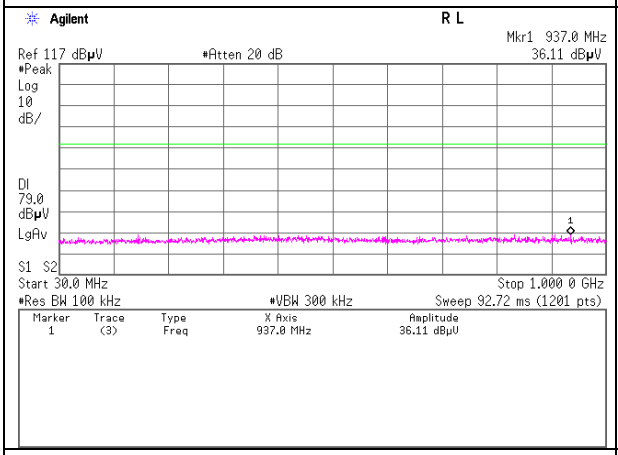
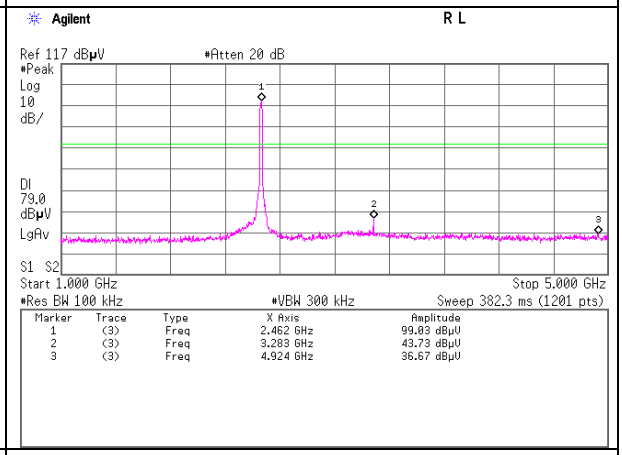
Conducted Spurious Emission

11g Tx 2462MHz

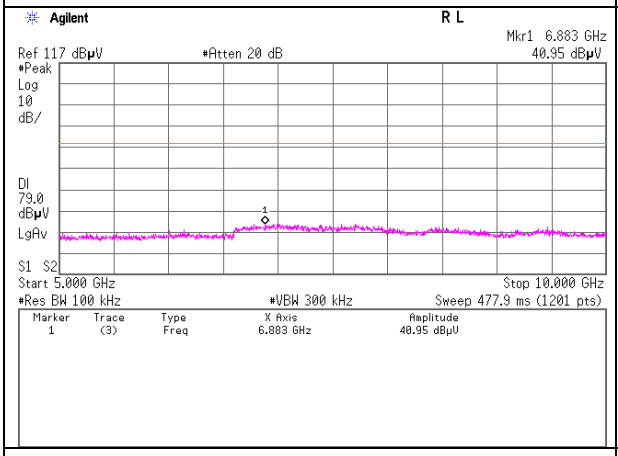
30MHz-1GHz



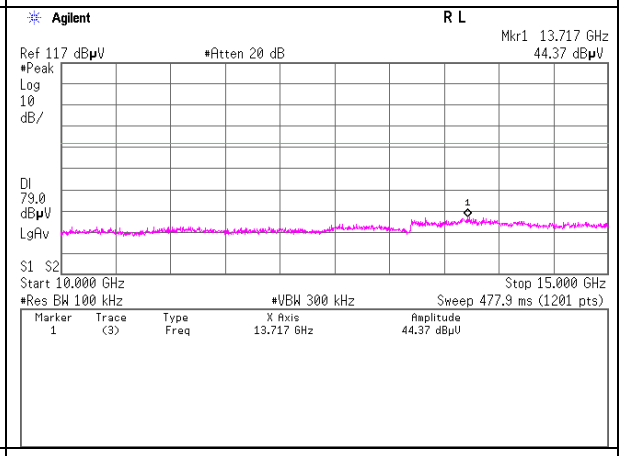
1GHz-5GHz



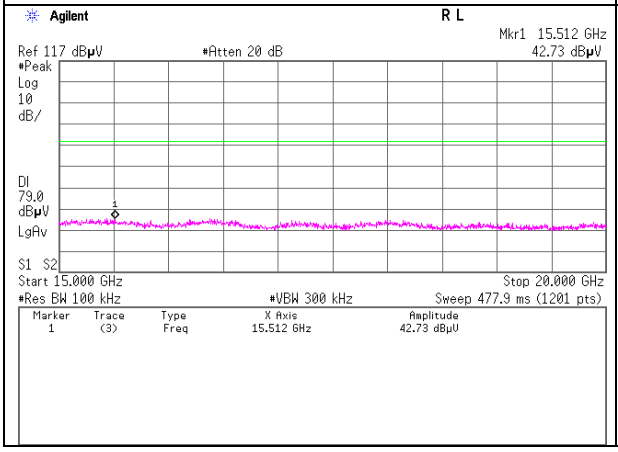
5GHz-10GHz



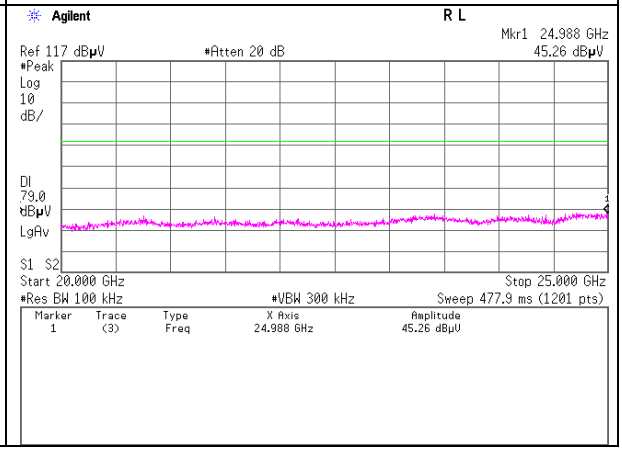
10GHz-15GHz



15GHz-20GHz



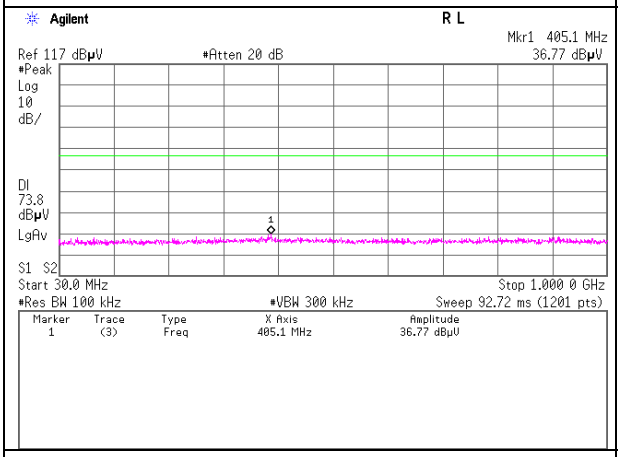
20GHz-25GHz



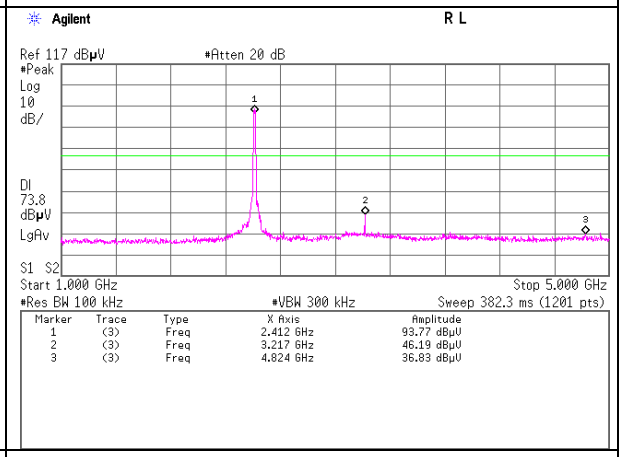
Conducted Spurious Emission

11n-20 (2.4GHz) Tx 2412MHz

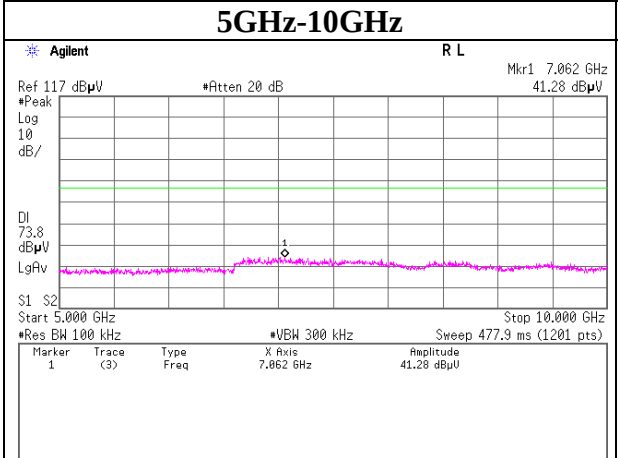
30MHz-1GHz



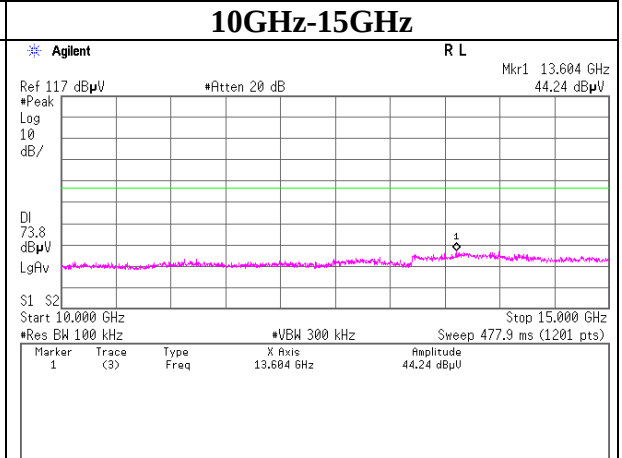
1GHz-5GHz



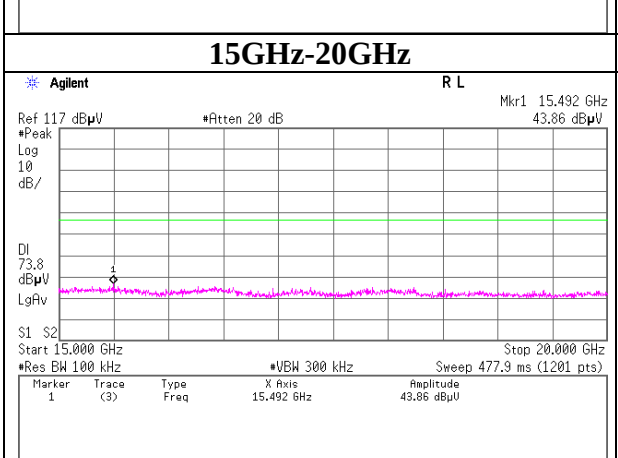
5GHz-10GHz



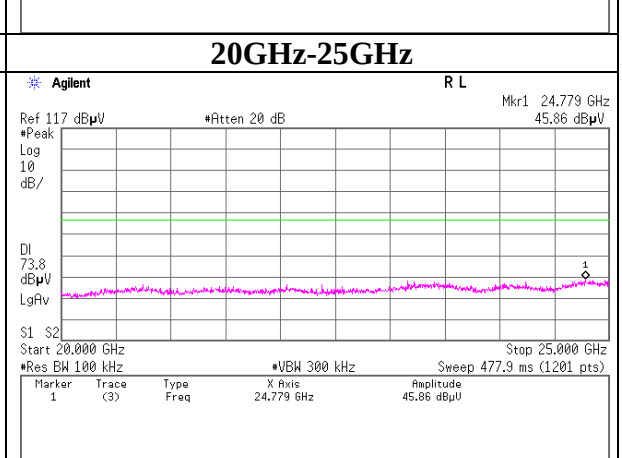
10GHz-15GHz



15GHz-20GHz



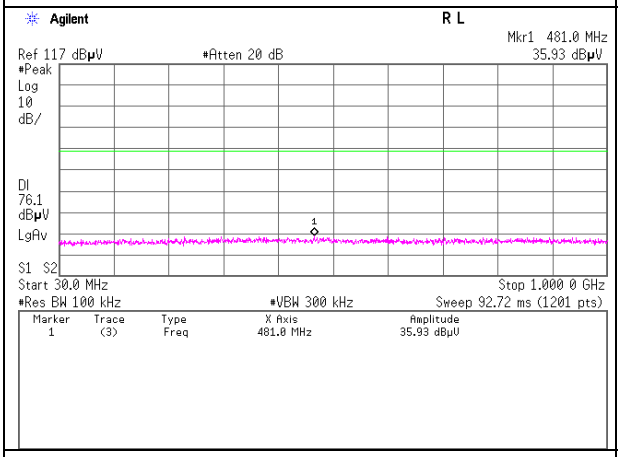
20GHz-25GHz



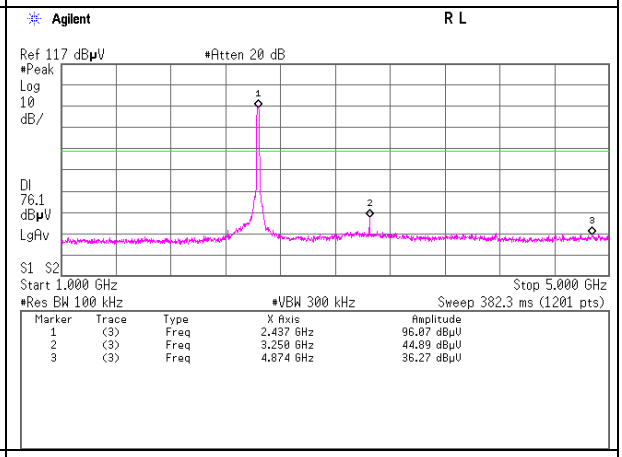
Conducted Spurious Emission

11n-20 (2.4GHz) Tx 2437MHz

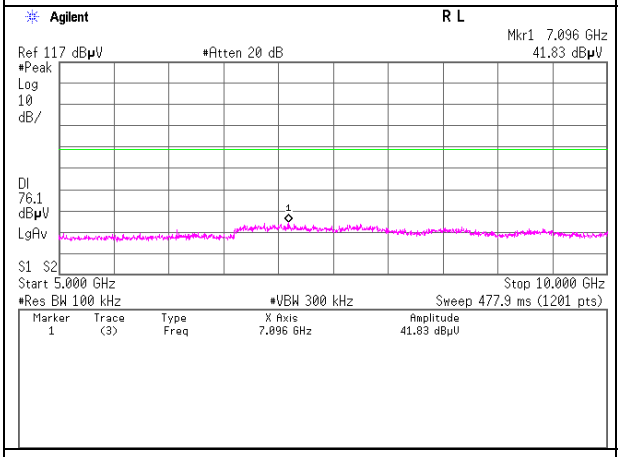
30MHz-1GHz



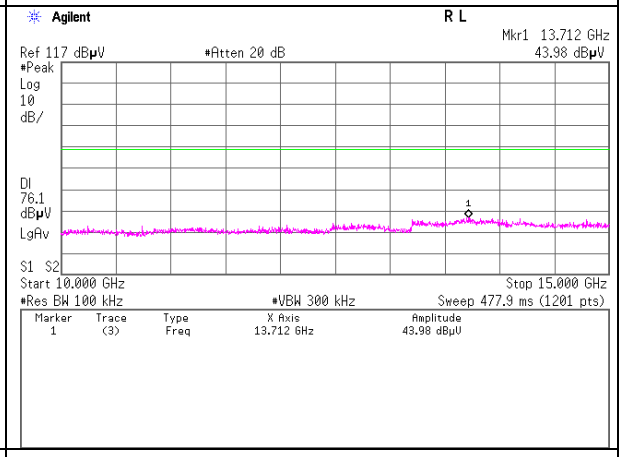
1GHz-5GHz



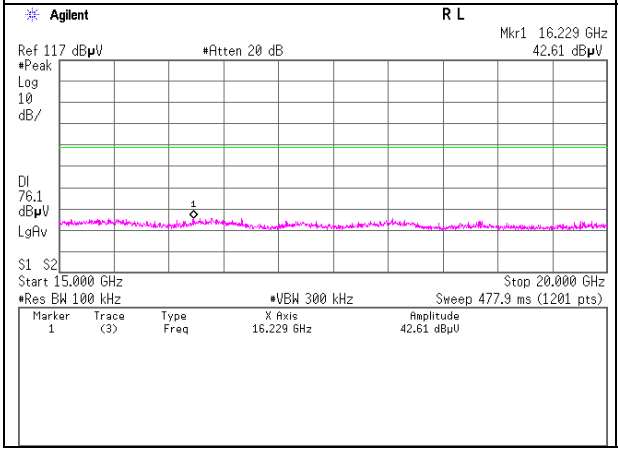
5GHz-10GHz



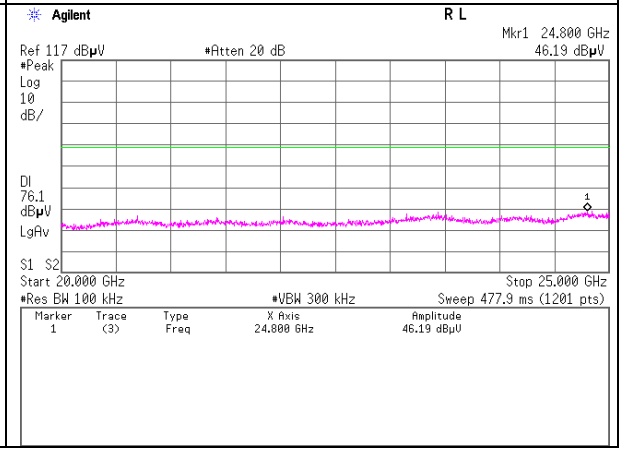
10GHz-15GHz



15GHz-20GHz



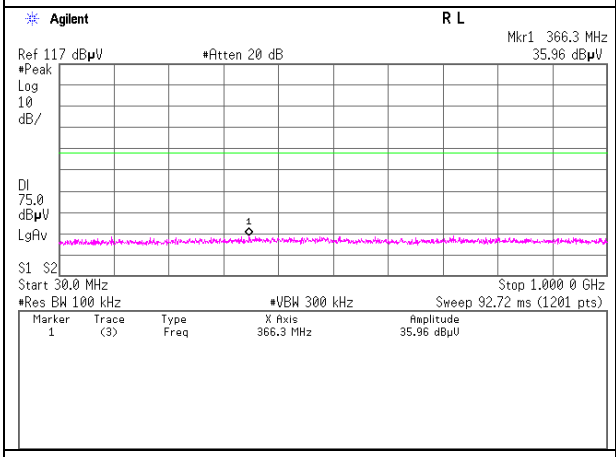
20GHz-25GHz



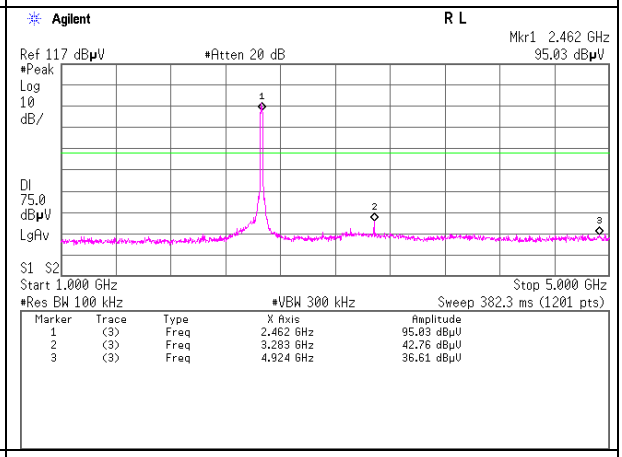
Conducted Spurious Emission

11n-20 (2.4GHz) Tx 2462MHz

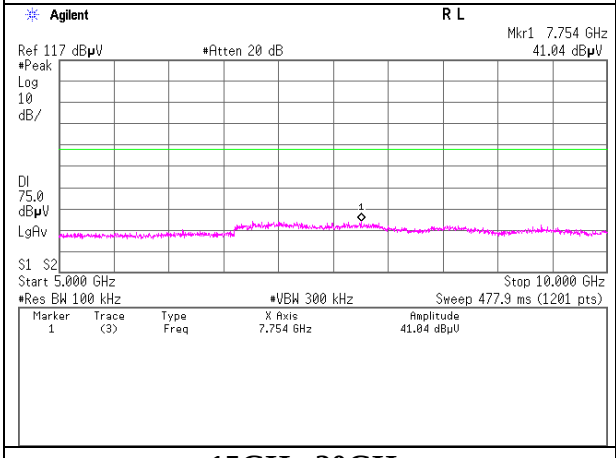
30MHz-1GHz



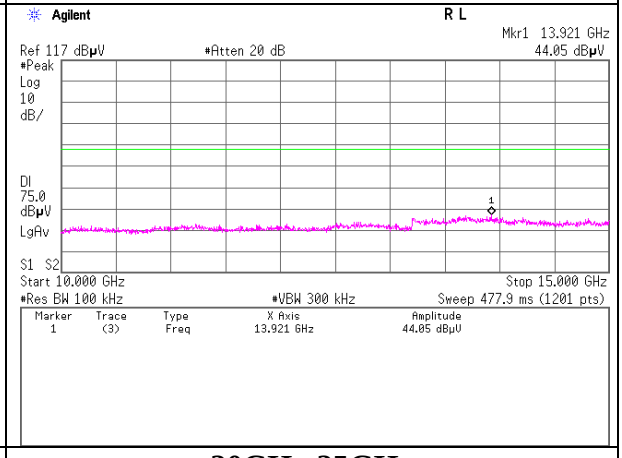
1GHz-5GHz



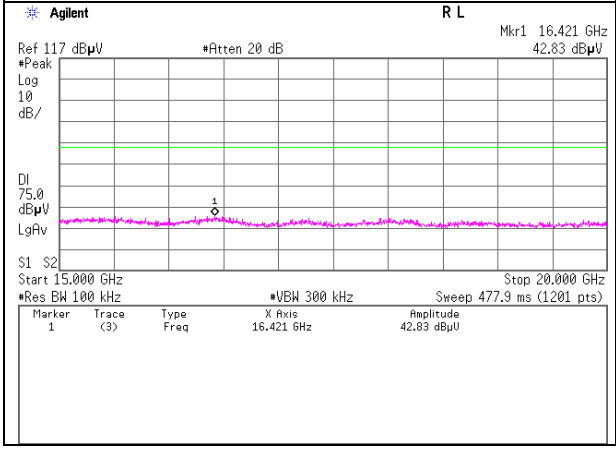
5GHz-10GHz



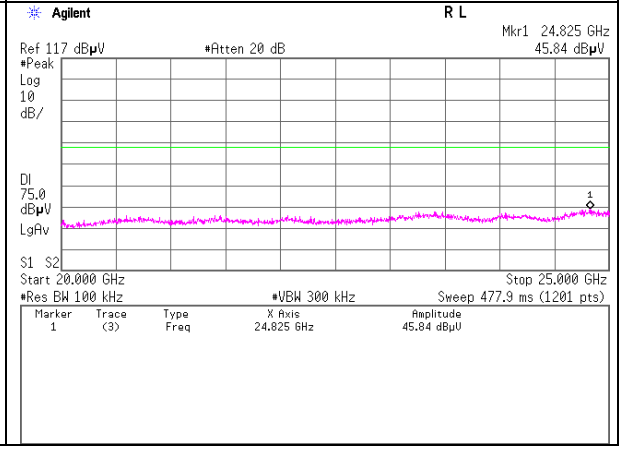
10GHz-15GHz



15GHz-20GHz



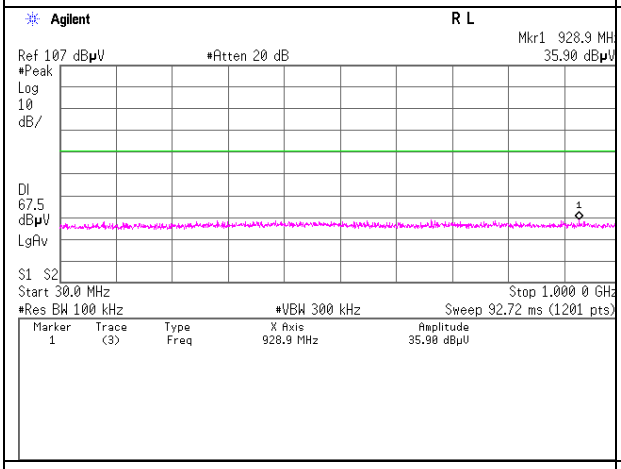
20GHz-25GHz



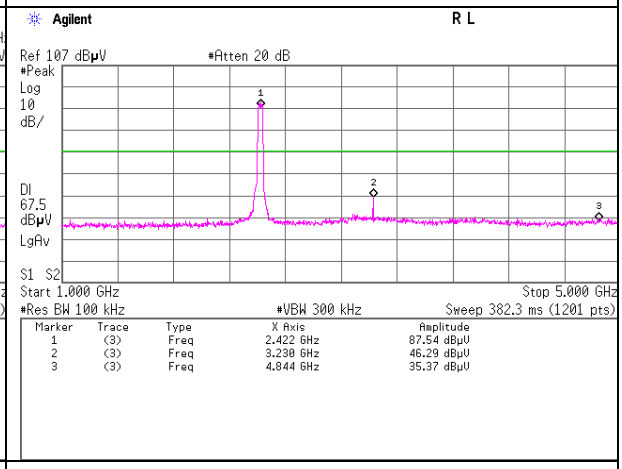
Conducted Spurious Emission

11n-40 (2.4GHz) Tx 2422MHz

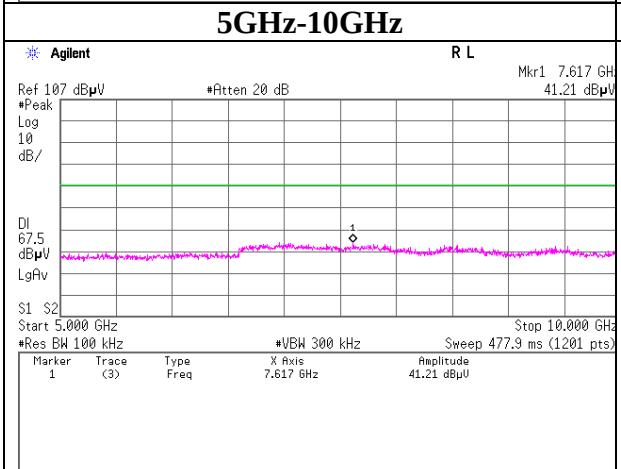
30MHz-1GHz



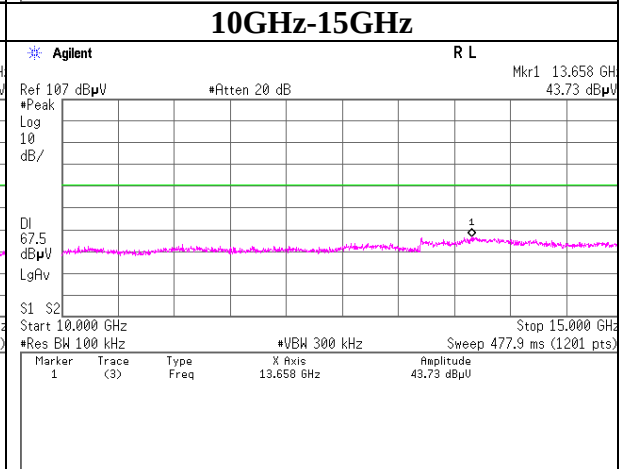
1GHz-5GHz



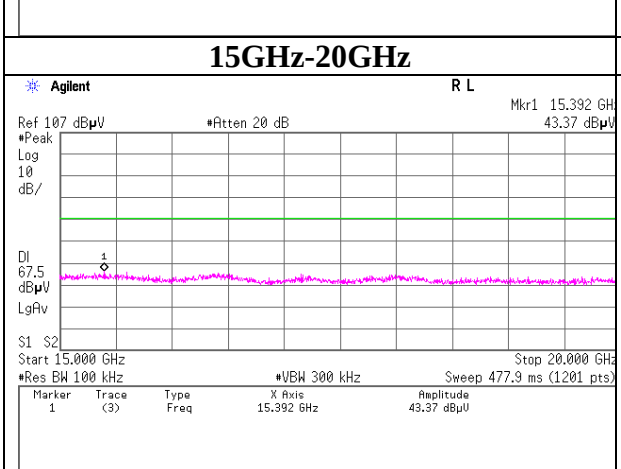
5GHz-10GHz



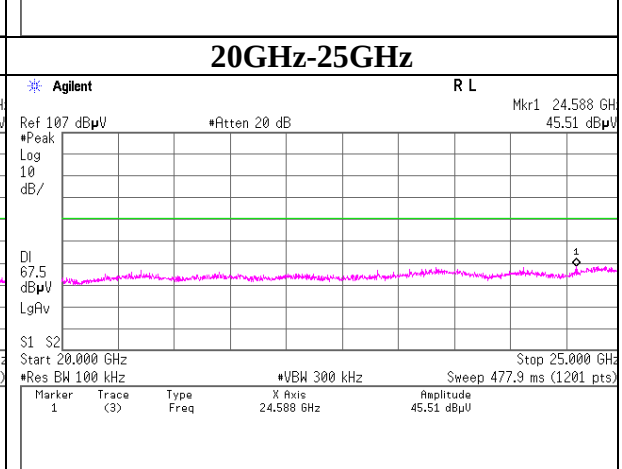
10GHz-15GHz



15GHz-20GHz



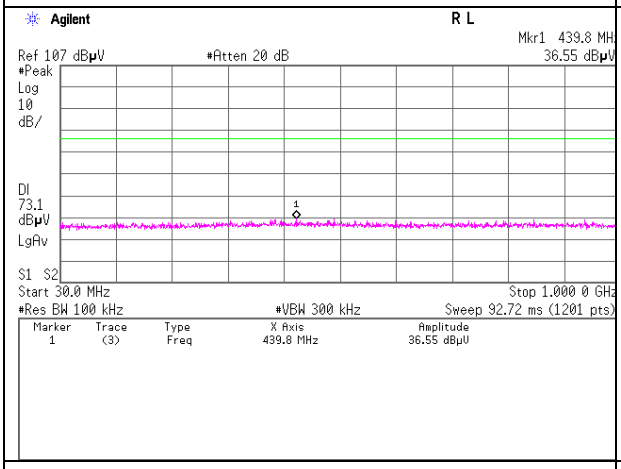
20GHz-25GHz



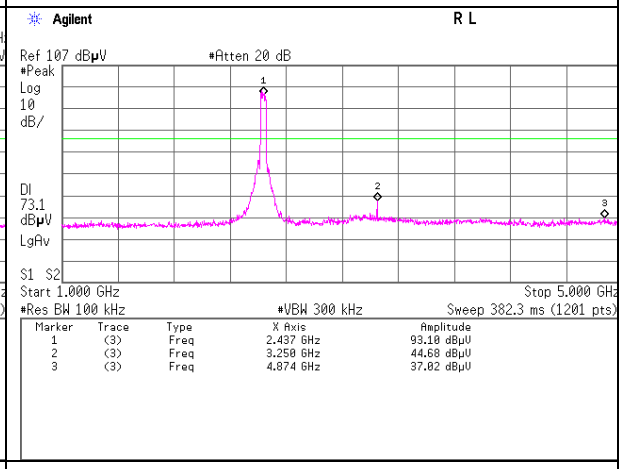
Conducted Spurious Emission

11n-40 (2.4GHz) Tx 2437MHz

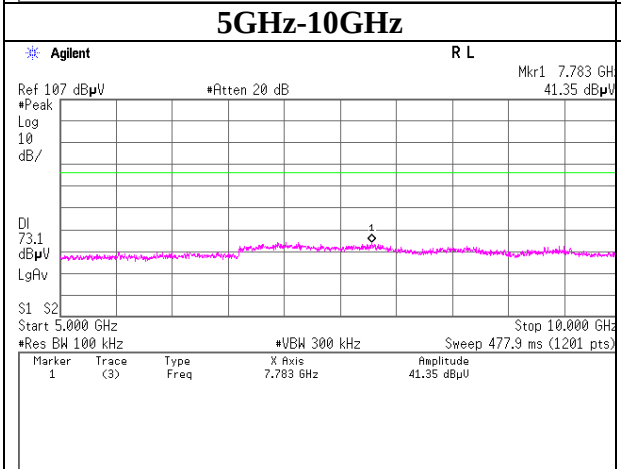
30MHz-1GHz



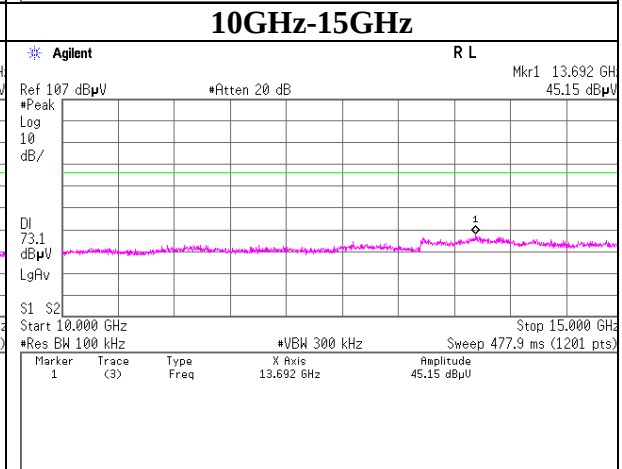
1GHz-5GHz



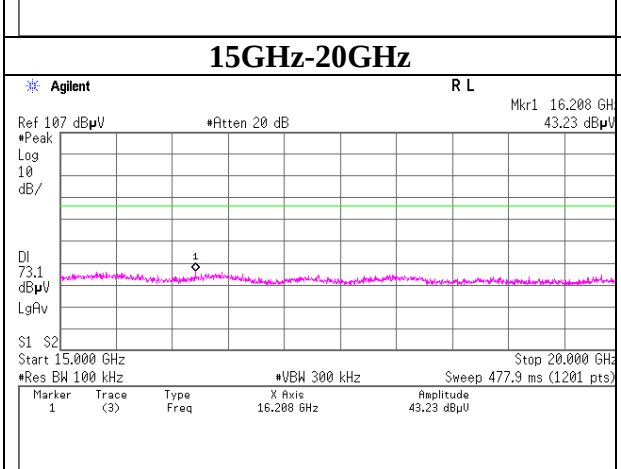
5GHz-10GHz



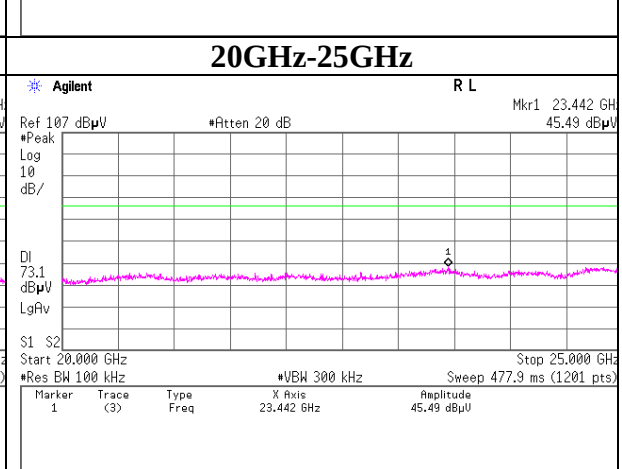
10GHz-15GHz



15GHz-20GHz



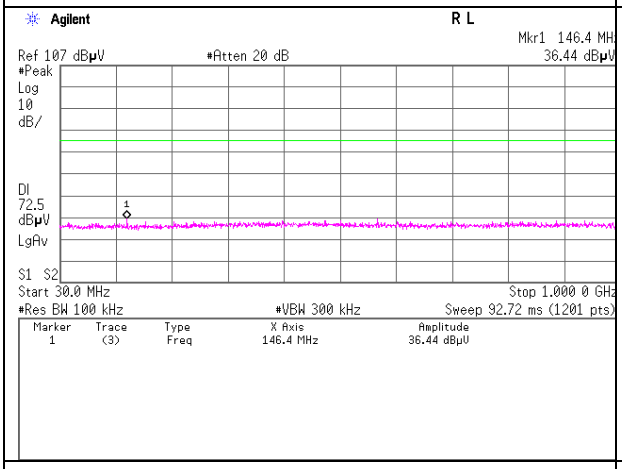
20GHz-25GHz



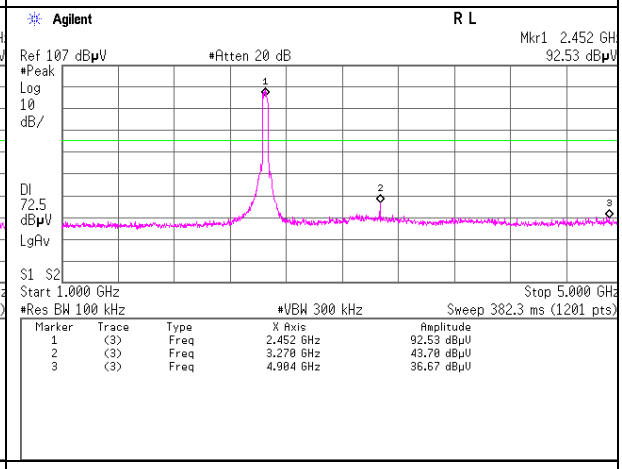
Conducted Spurious Emission

11n-40 (2.4GHz) Tx 2452MHz

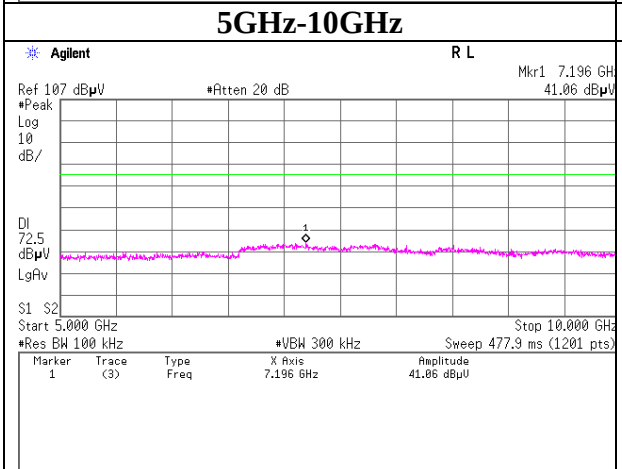
30MHz-1GHz



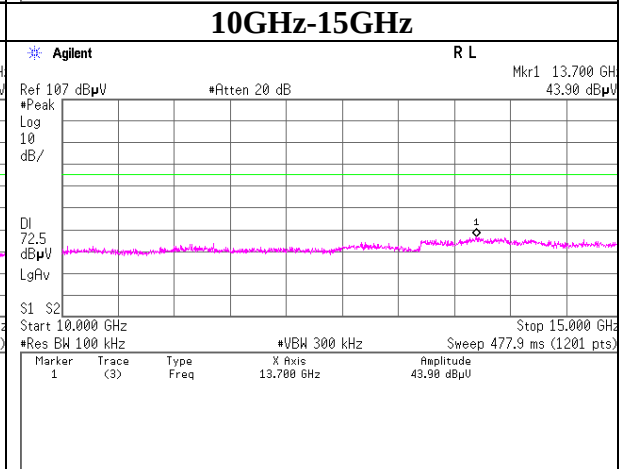
1GHz-5GHz



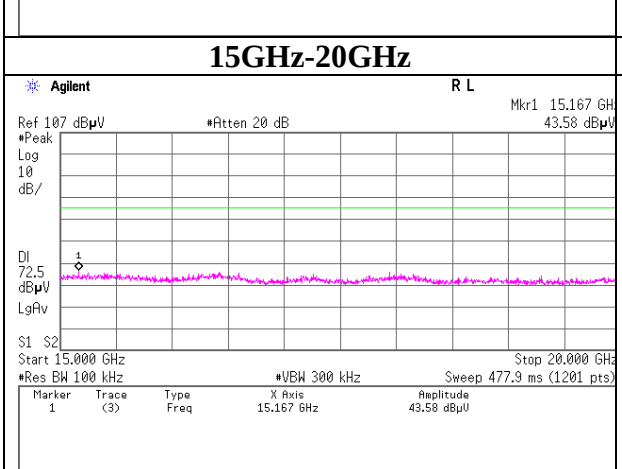
5GHz-10GHz



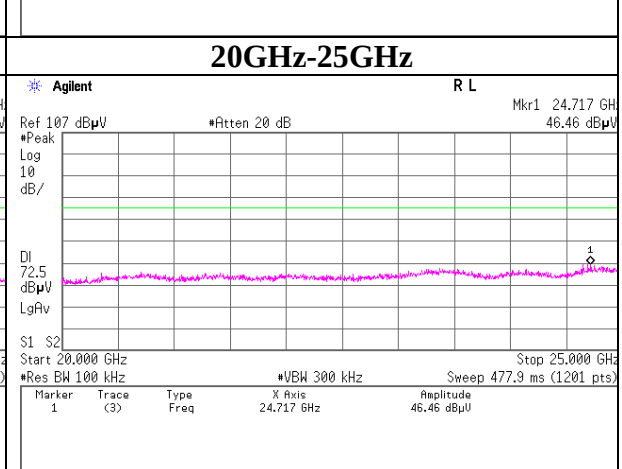
10GHz-15GHz



15GHz-20GHz



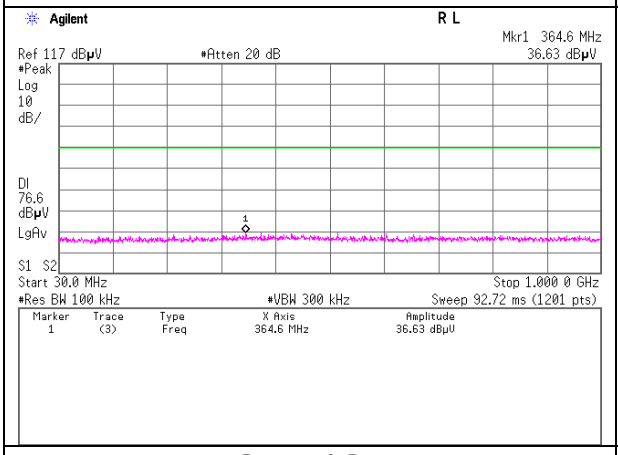
20GHz-25GHz



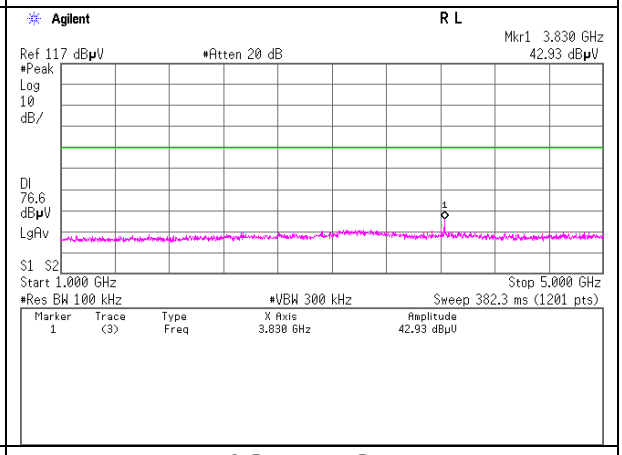
Conducted Spurious Emission

11a Tx 5745MHz

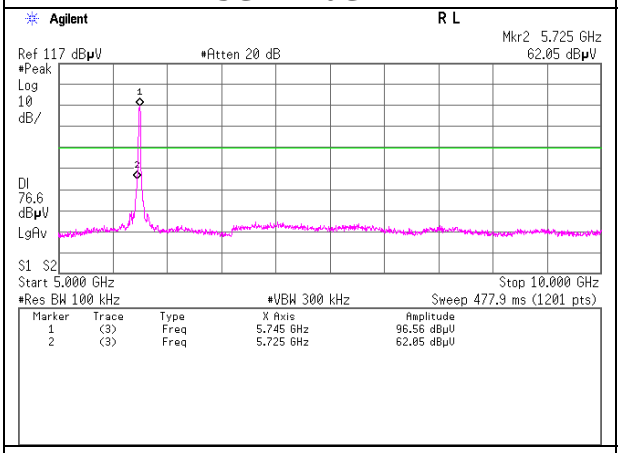
30MHz-1GHz



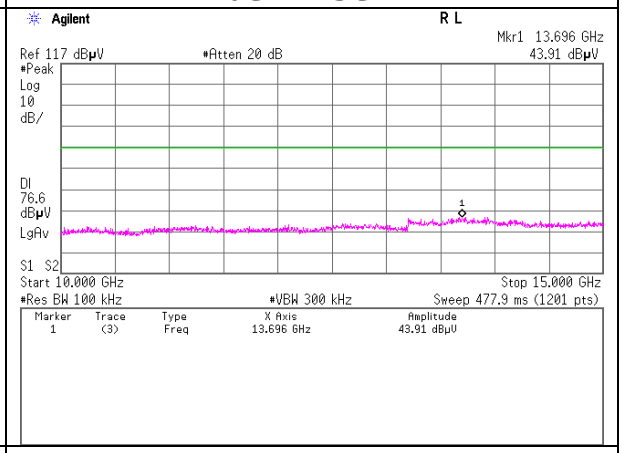
1GHz-5GHz



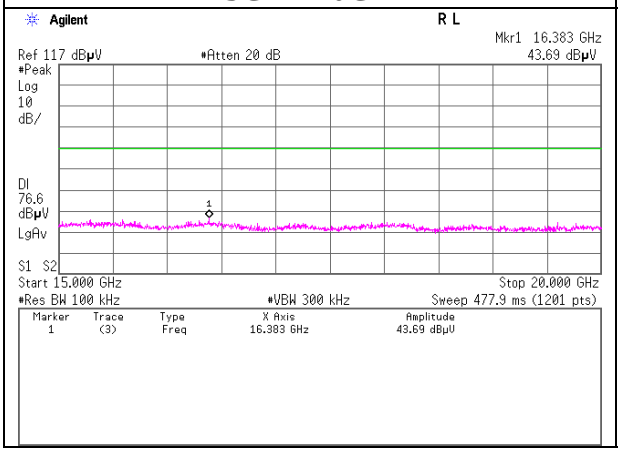
5GHz-10GHz



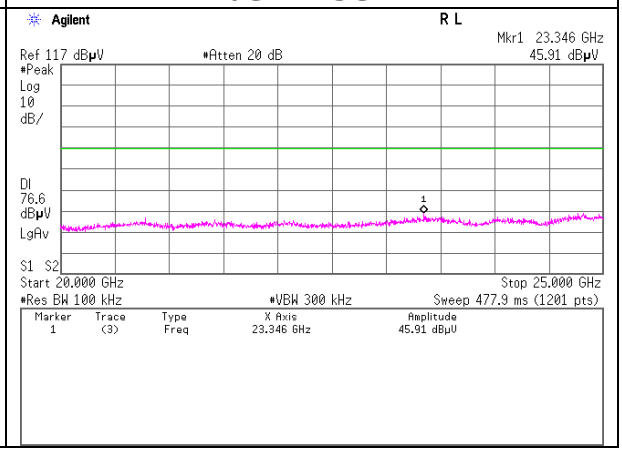
10GHz-15GHz



15GHz-20GHz



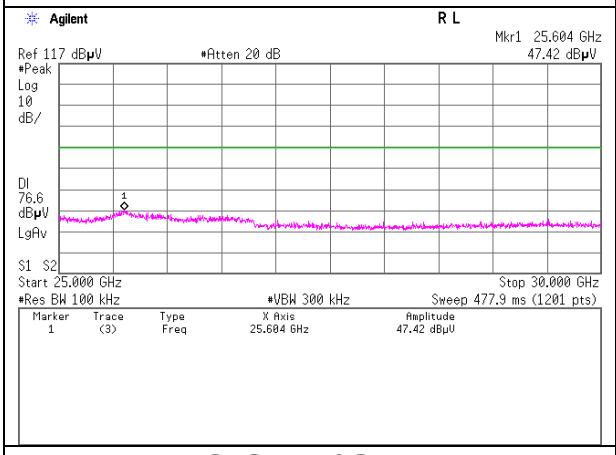
20GHz-25GHz



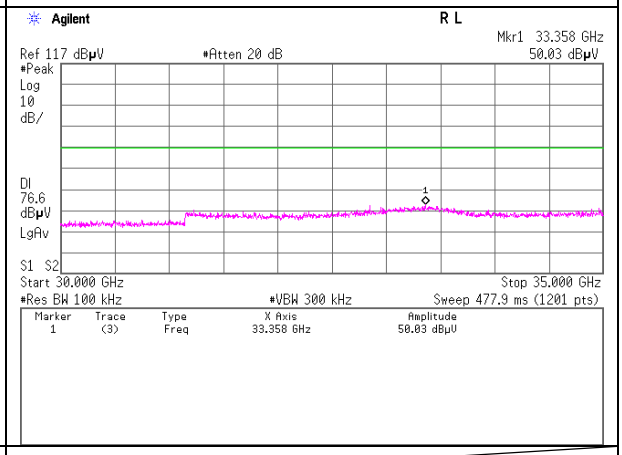
Conducted Spurious Emission

11a Tx 5745MHz

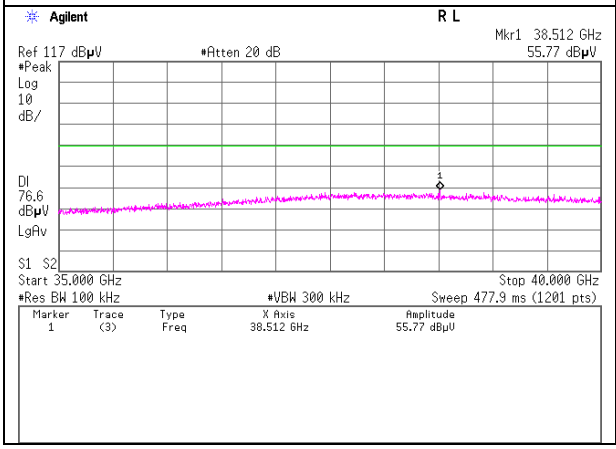
25GHz-30GHz



30GHz-35GHz



35GHz-40GHz



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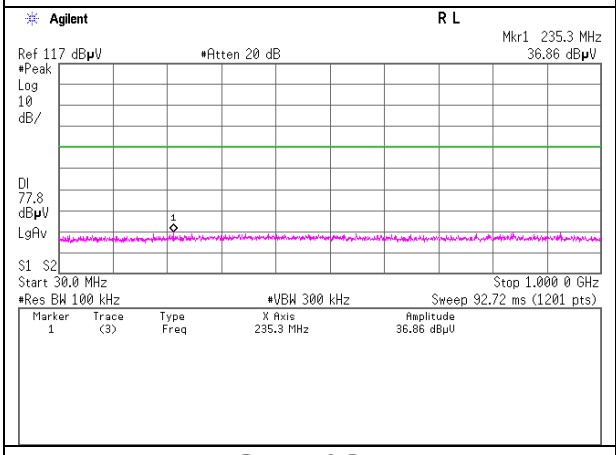
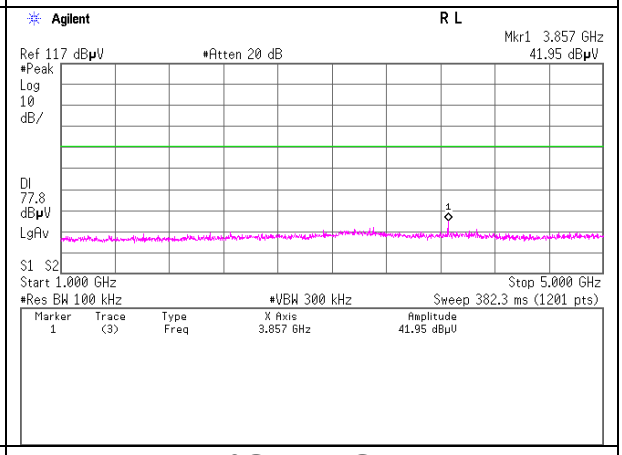
Conducted Spurious Emission

11a Tx 5785MHz

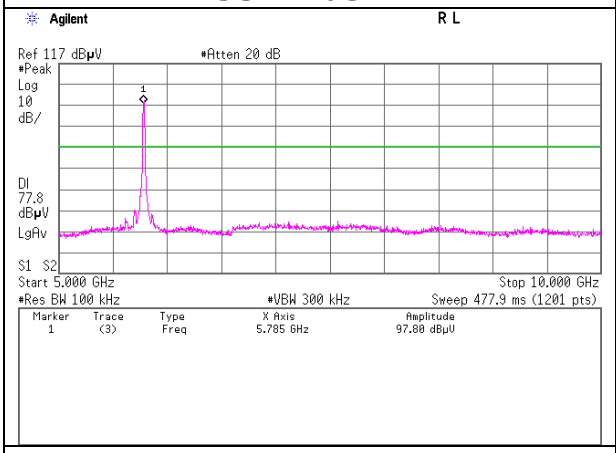
30MHz-1GHz



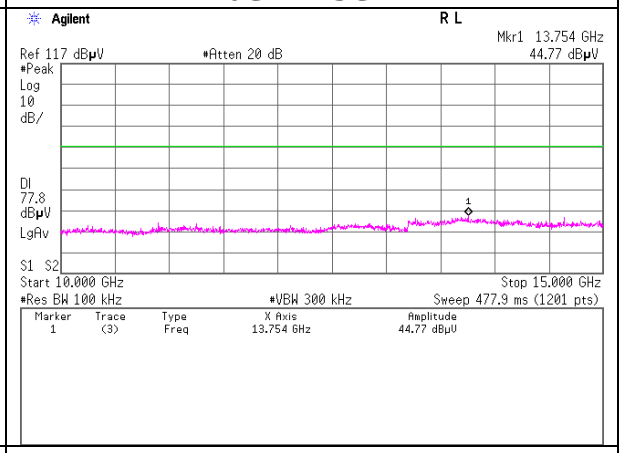
1GHz-5GHz



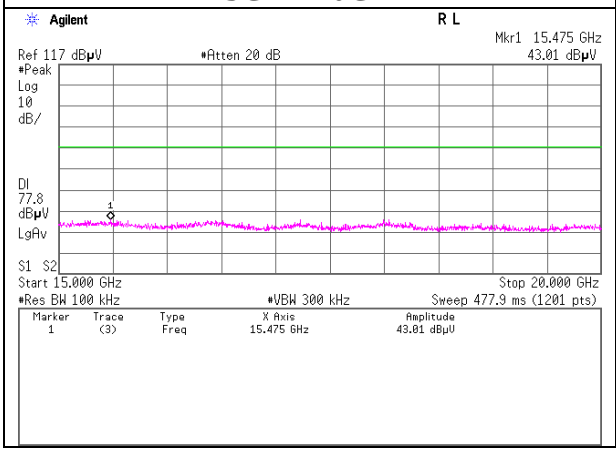
5GHz-10GHz



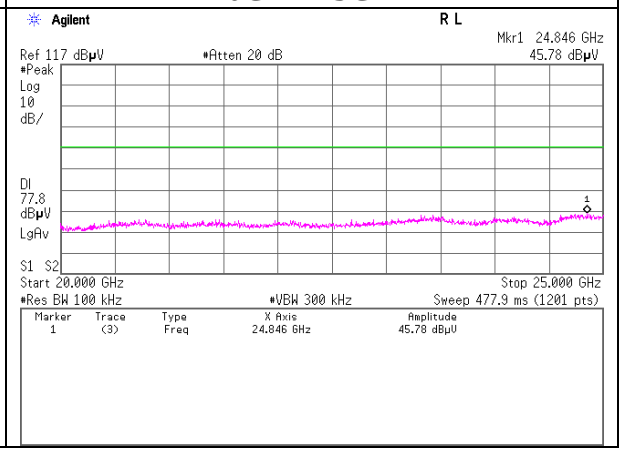
10GHz-15GHz



15GHz-20GHz



20GHz-25GHz



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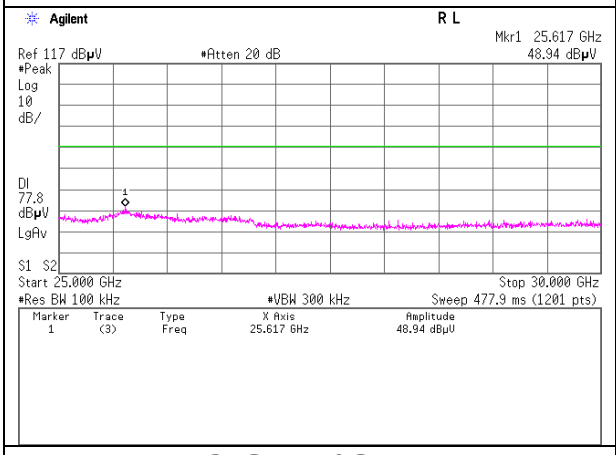
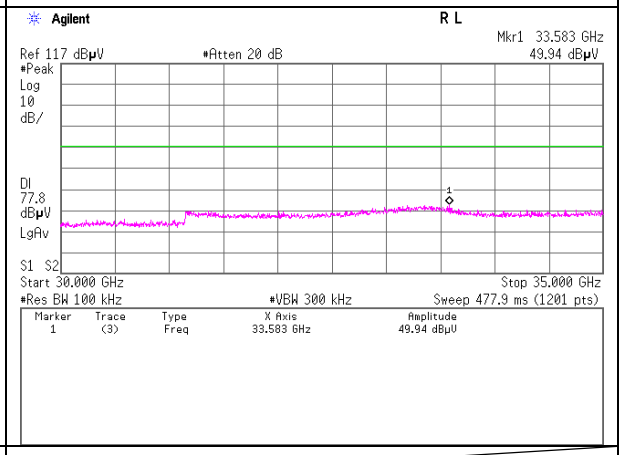
Conducted Spurious Emission

11a Tx 5785MHz

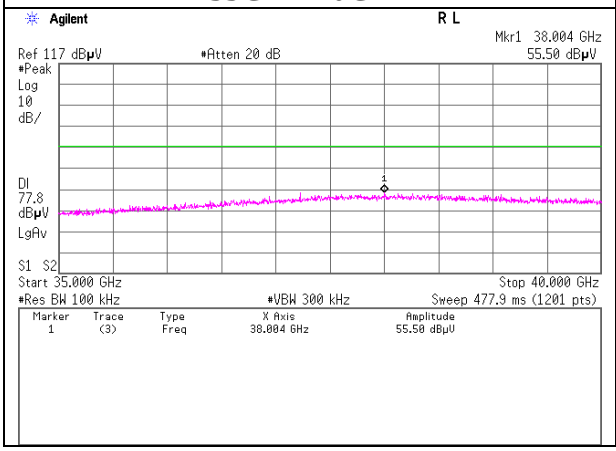
25GHz-30GHz



30GHz-35GHz



35GHz-40GHz



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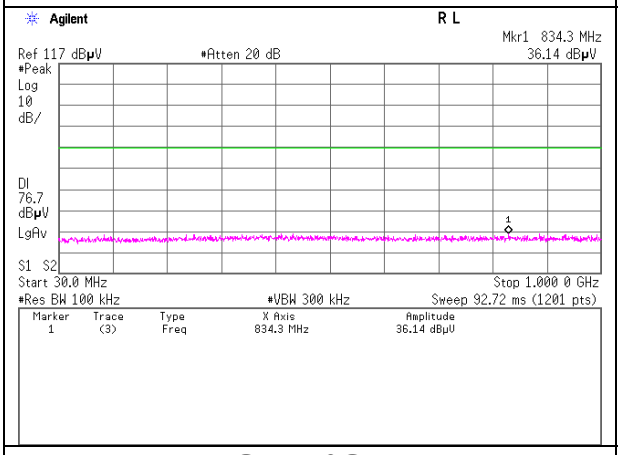
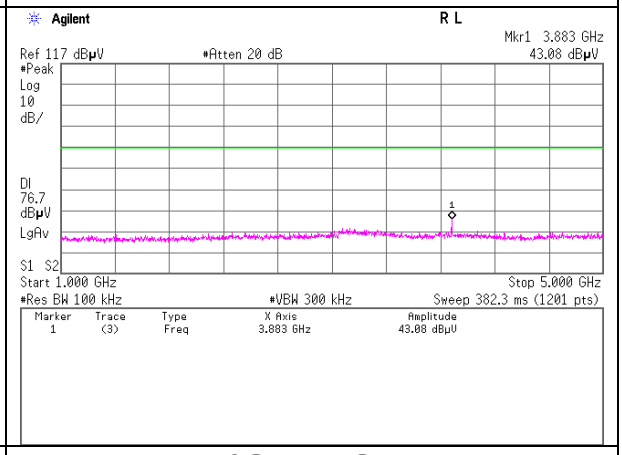
Conducted Spurious Emission

11a Tx 5825MHz

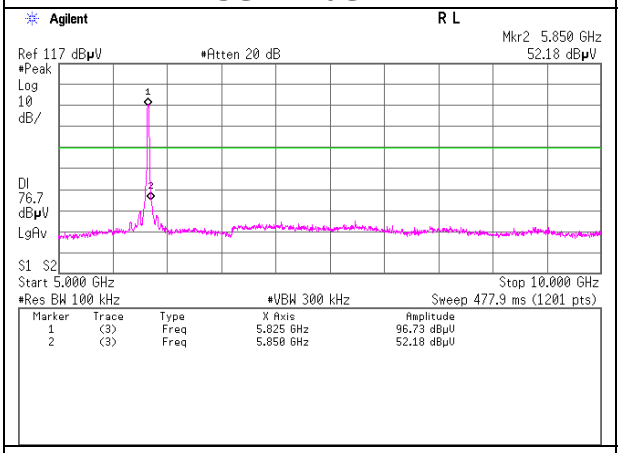
30MHz-1GHz



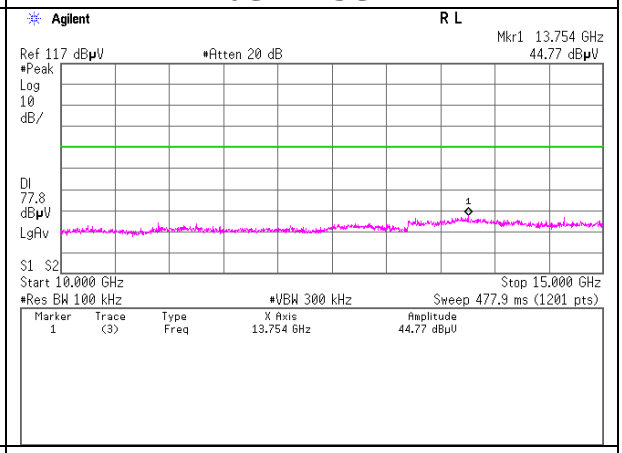
1GHz-5GHz



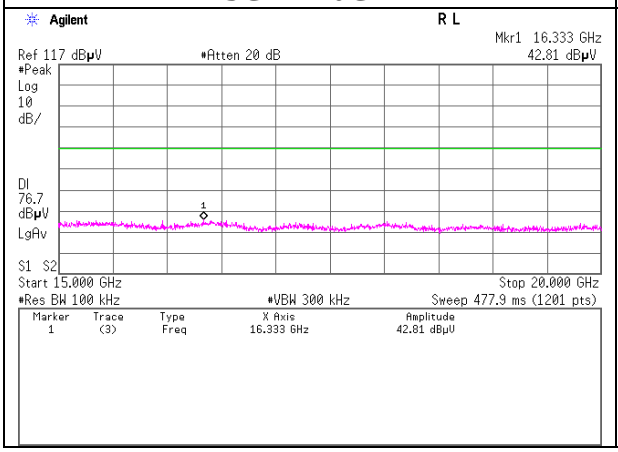
5GHz-10GHz



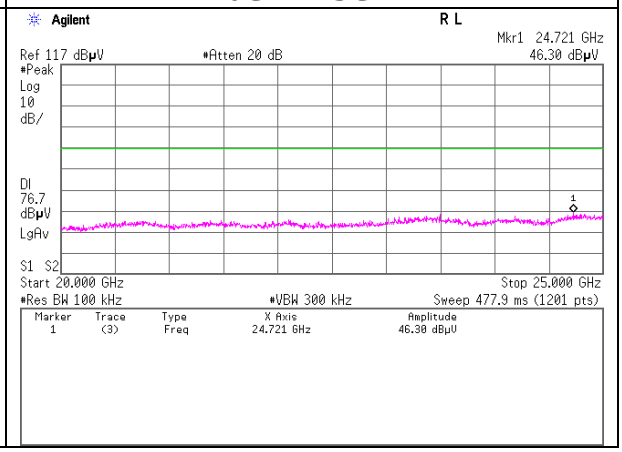
10GHz-15GHz



15GHz-20GHz



20GHz-25GHz



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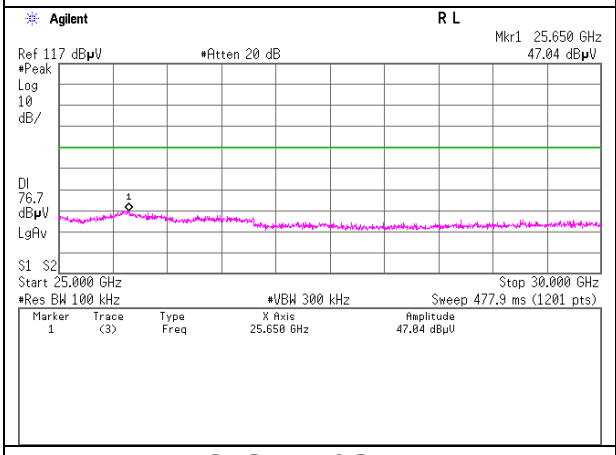
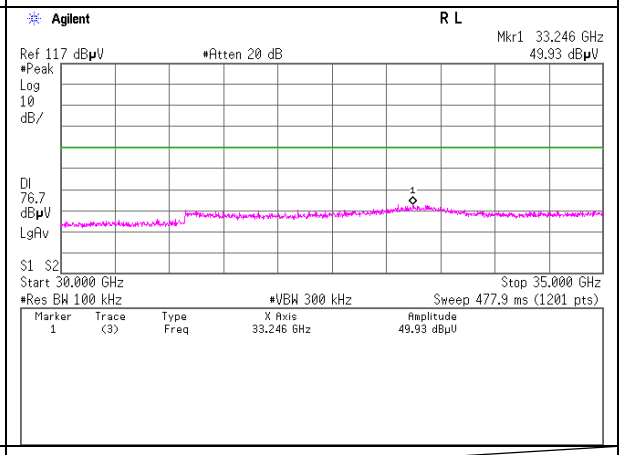
Conducted Spurious Emission

11a Tx 5825MHz

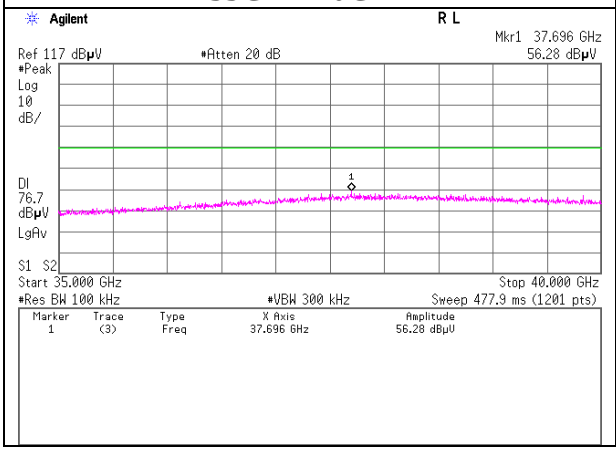
25GHz-30GHz



30GHz-35GHz



35GHz-40GHz



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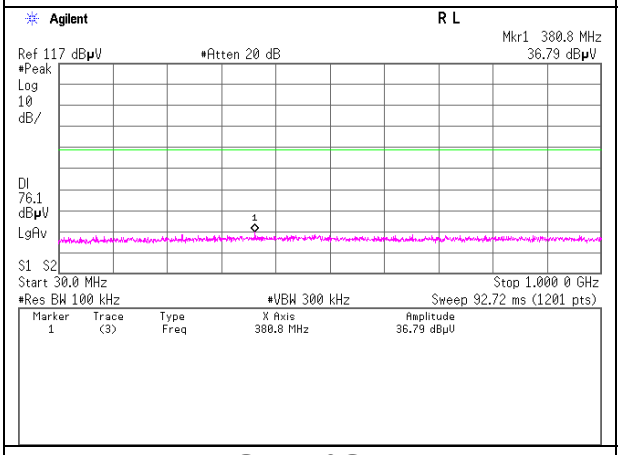
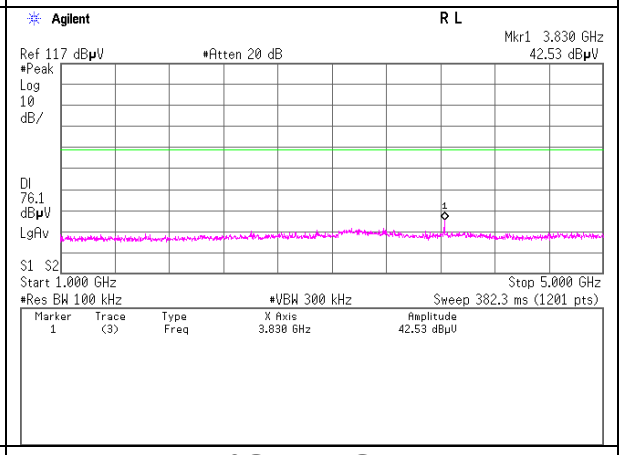
Conducted Spurious Emission

11n-20(5GHz) Tx 5745MHz

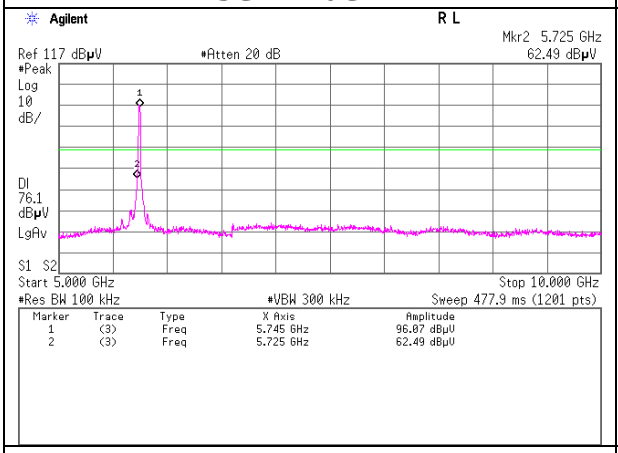
30MHz-1GHz



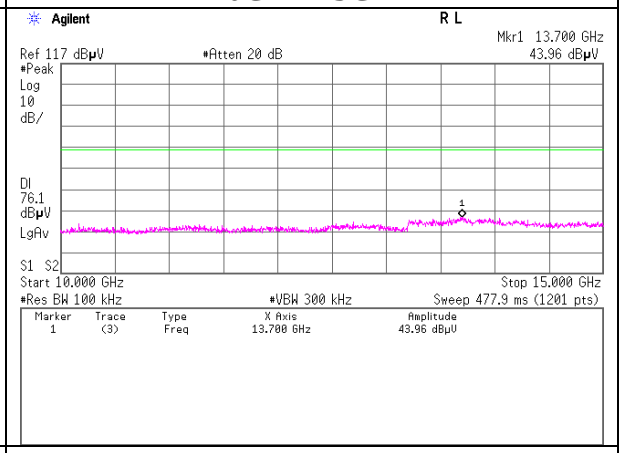
1GHz-5GHz



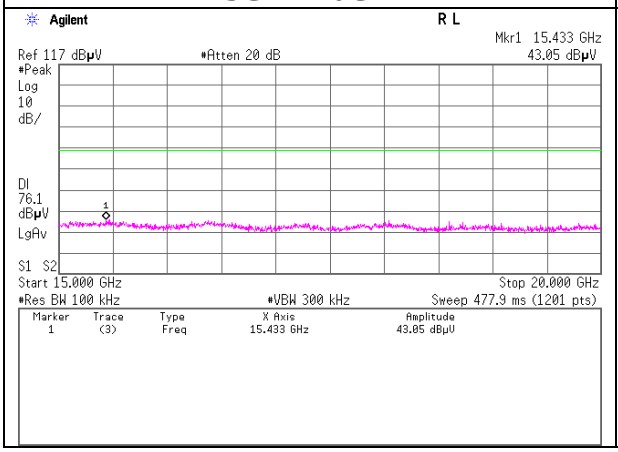
5GHz-10GHz



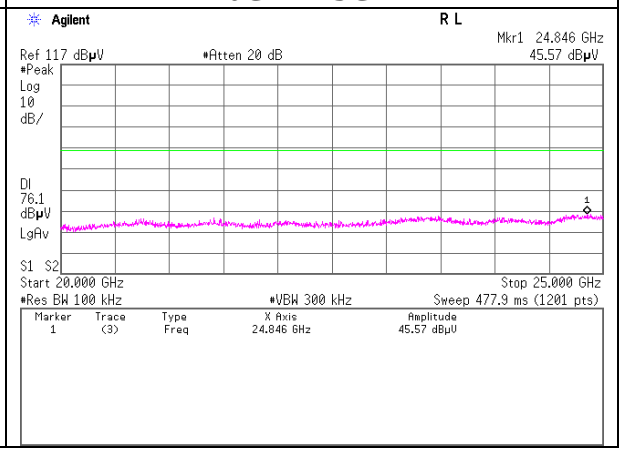
10GHz-15GHz



15GHz-20GHz



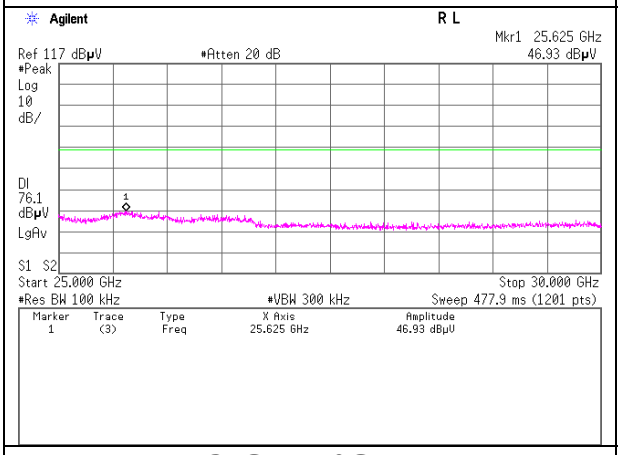
20GHz-25GHz



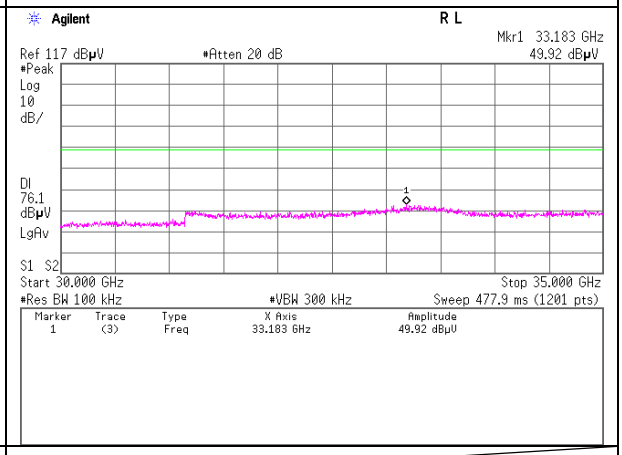
Conducted Spurious Emission

11n-20(5GHz) Tx 5745MHz

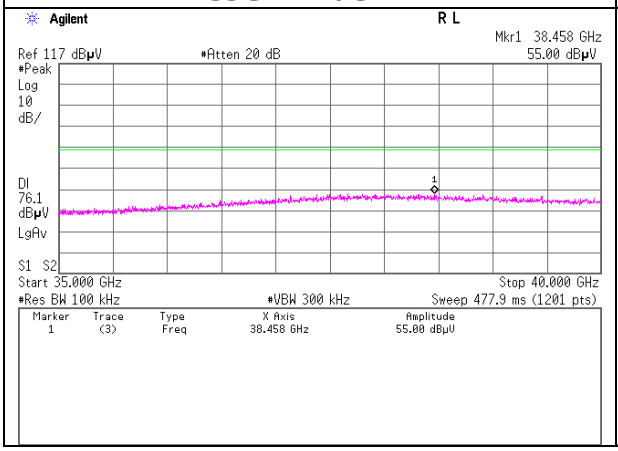
25GHz-30GHz



30GHz-35GHz



35GHz-40GHz



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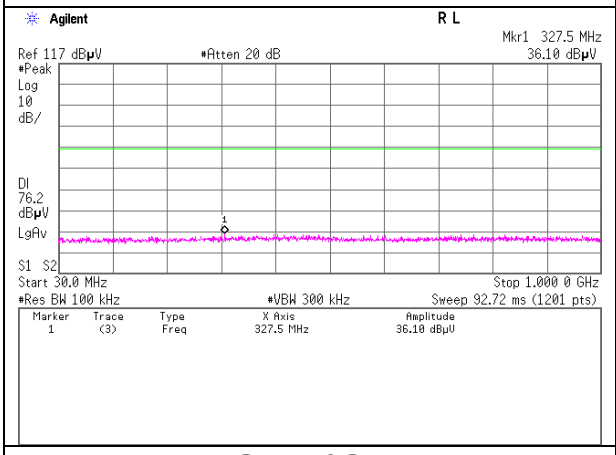
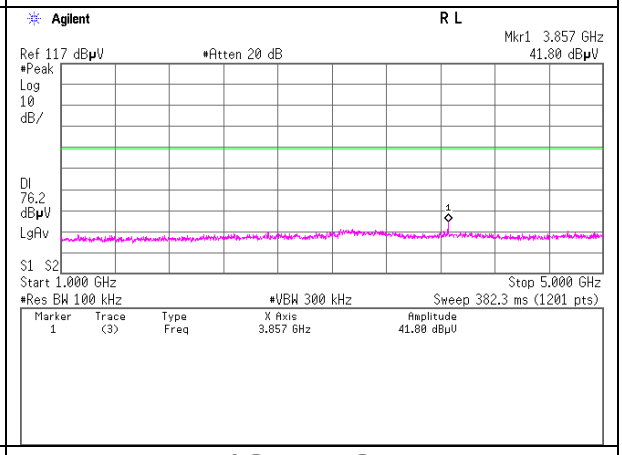
Conducted Spurious Emission

11n-20 (5GHz) Tx 5785MHz

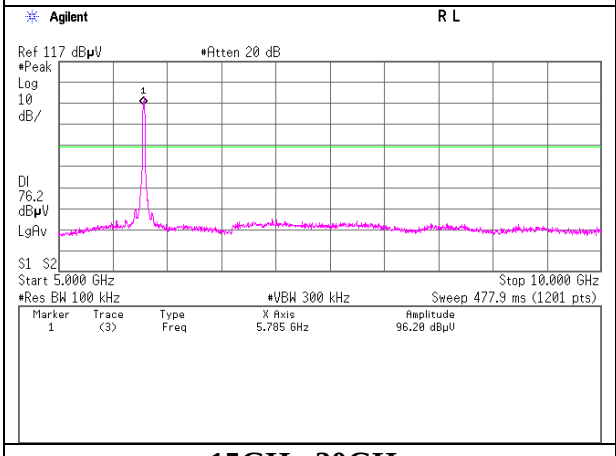
30MHz-1GHz



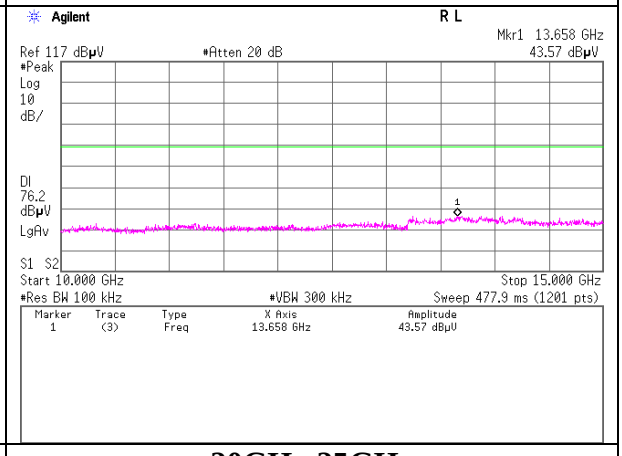
1GHz-5GHz



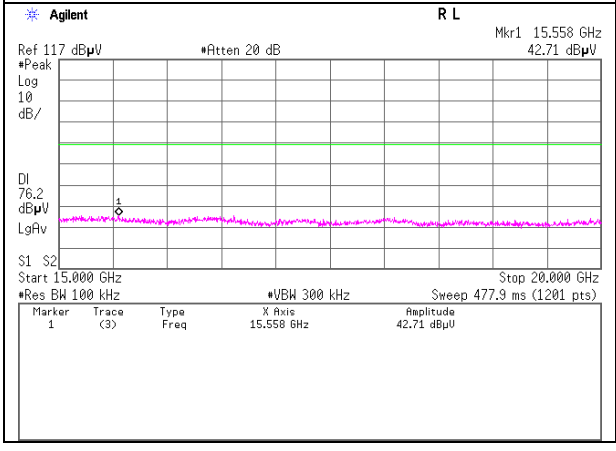
5GHz-10GHz



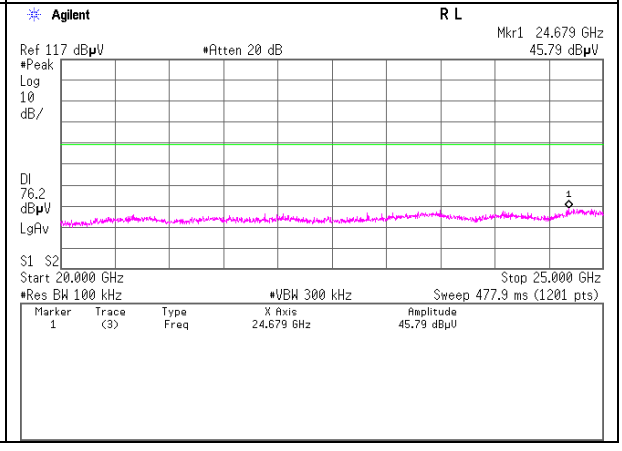
10GHz-15GHz



15GHz-20GHz



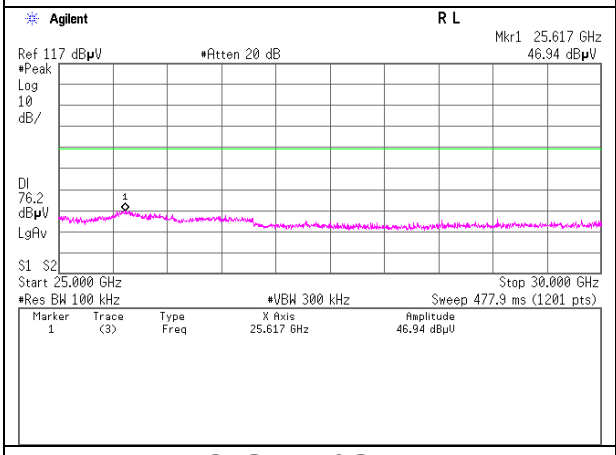
20GHz-25GHz



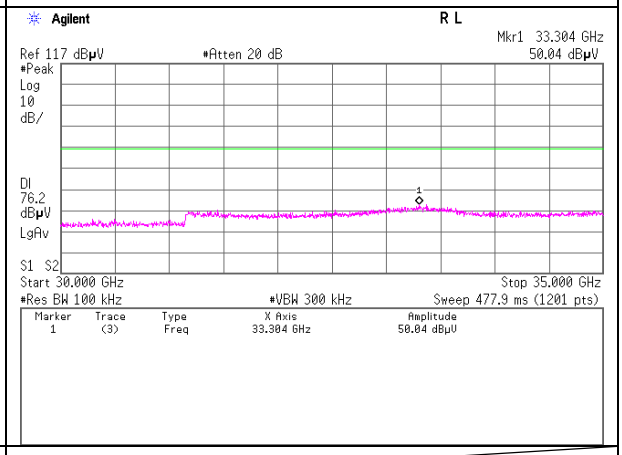
Conducted Spurious Emission

11n-20(5GHz) Tx 5785MHz

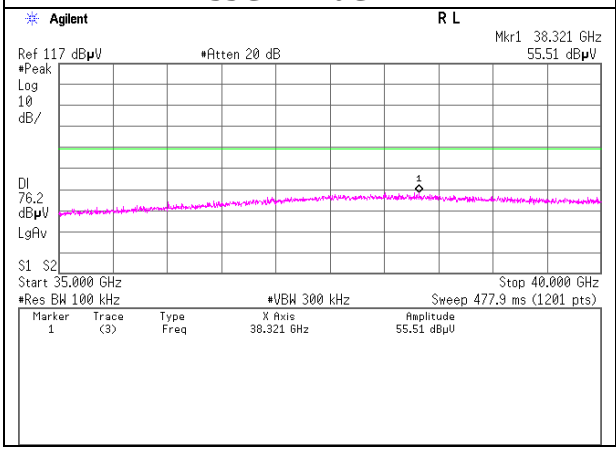
25GHz-30GHz



30GHz-35GHz



35GHz-40GHz



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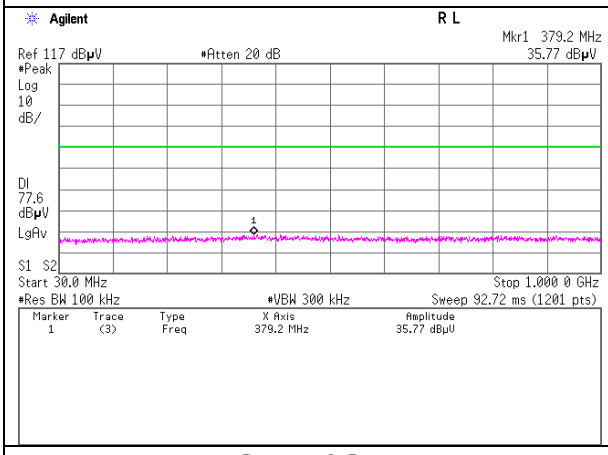
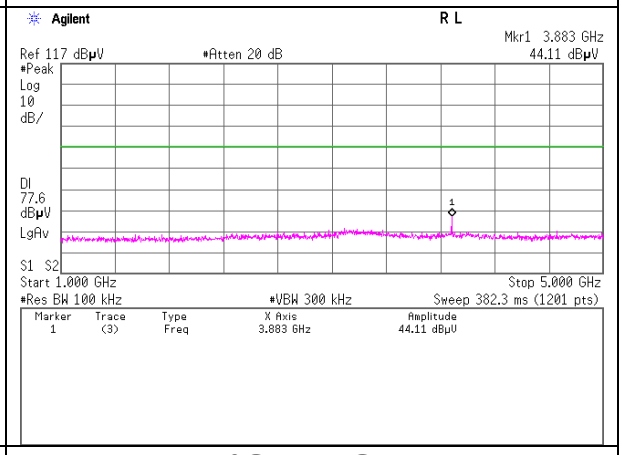
Conducted Spurious Emission

11n-20 (5GHz) Tx 5825MHz

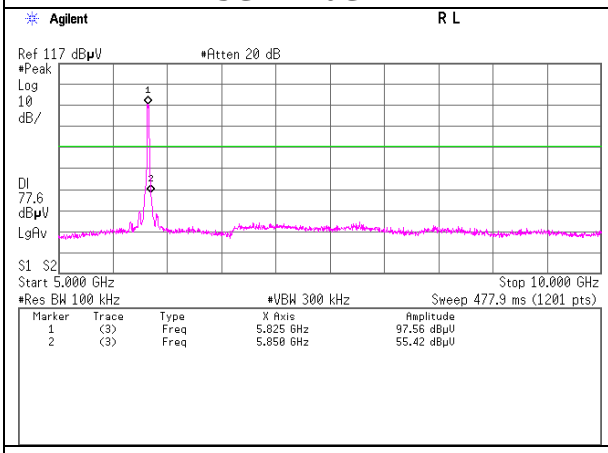
30MHz-1GHz



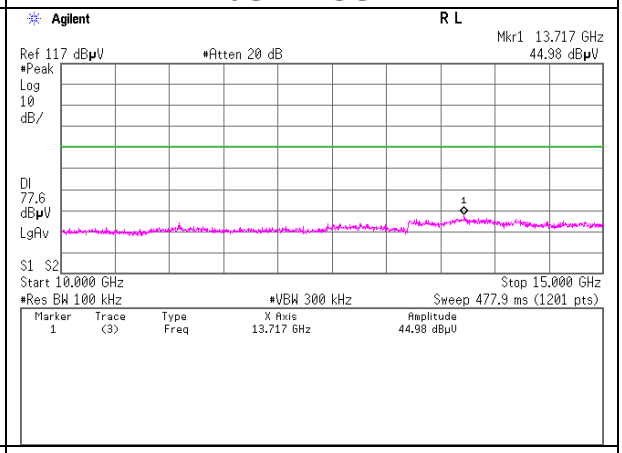
1GHz-5GHz



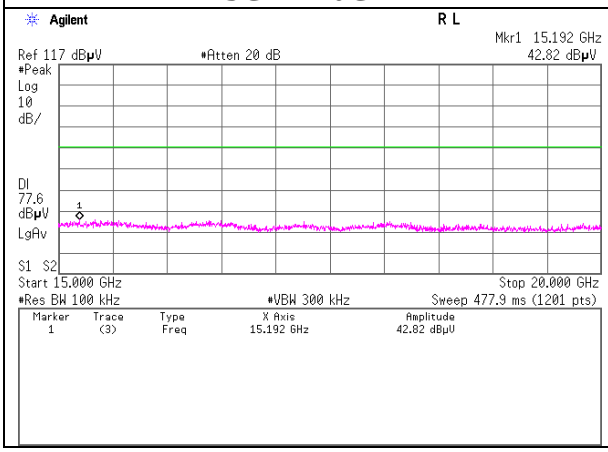
5GHz-10GHz



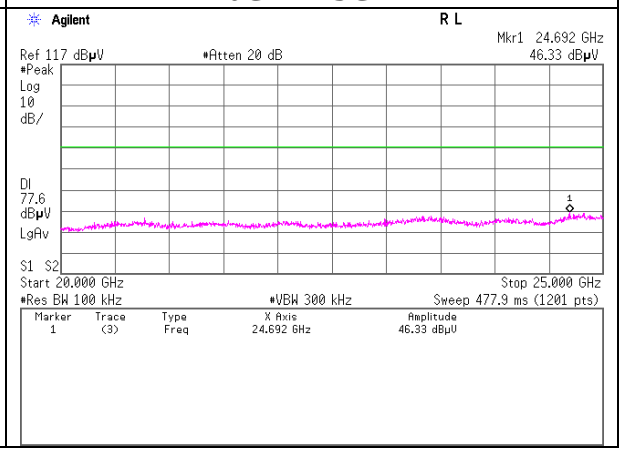
10GHz-15GHz



15GHz-20GHz



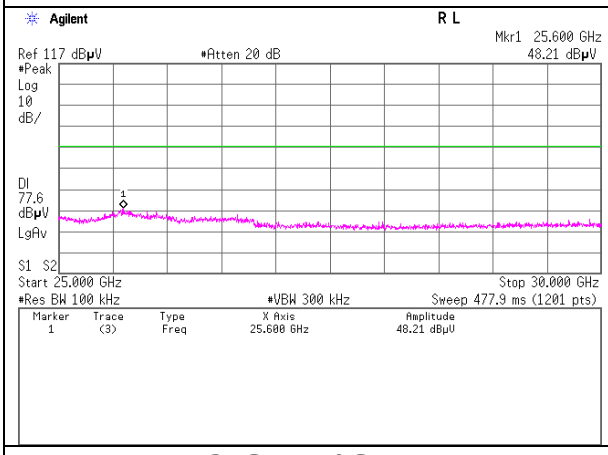
20GHz-25GHz



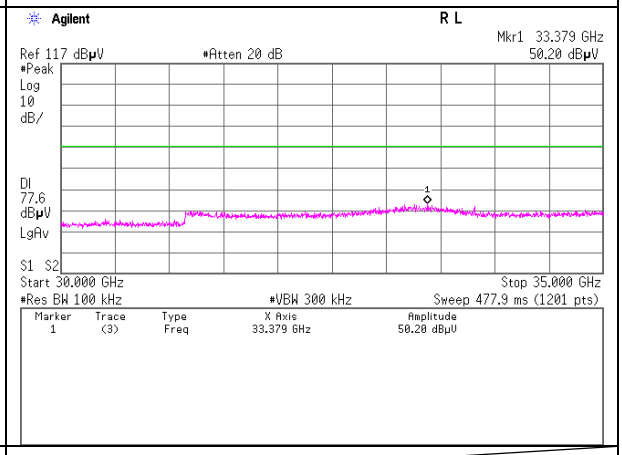
Conducted Spurious Emission

11n-20(5GHz) Tx 5825MHz

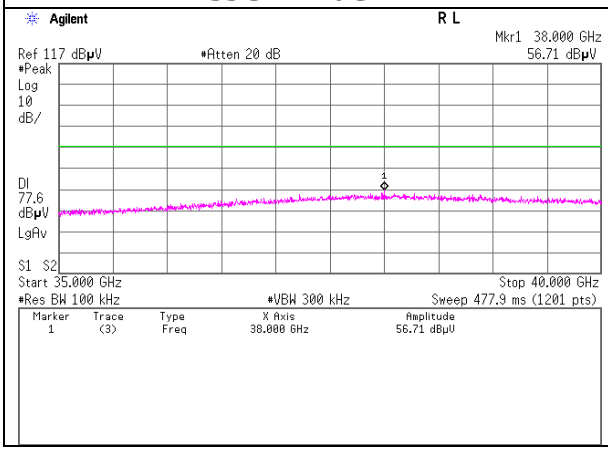
25GHz-30GHz



30GHz-35GHz



35GHz-40GHz



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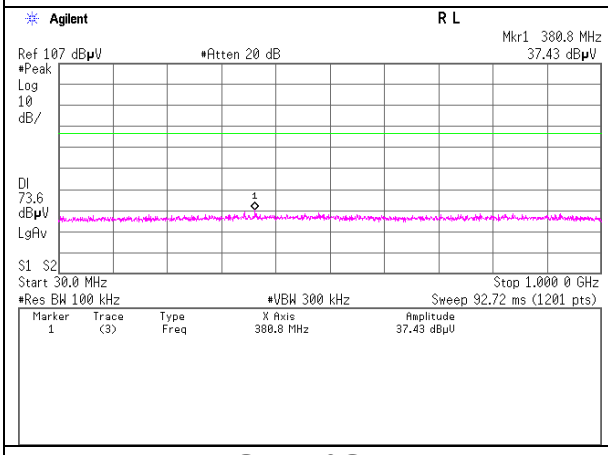
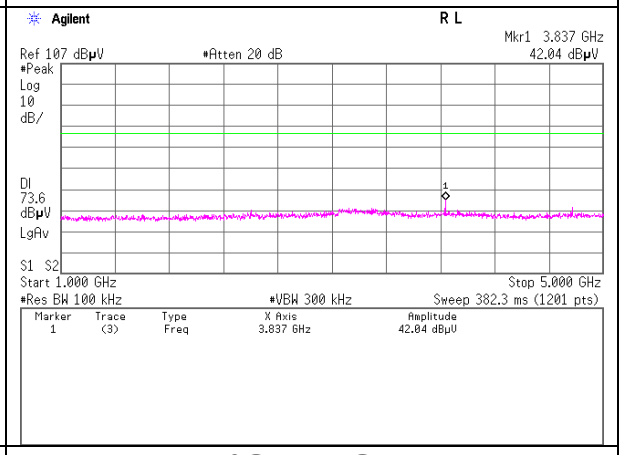
Conducted Spurious Emission

11n-40 (5GHz) Tx 5755MHz

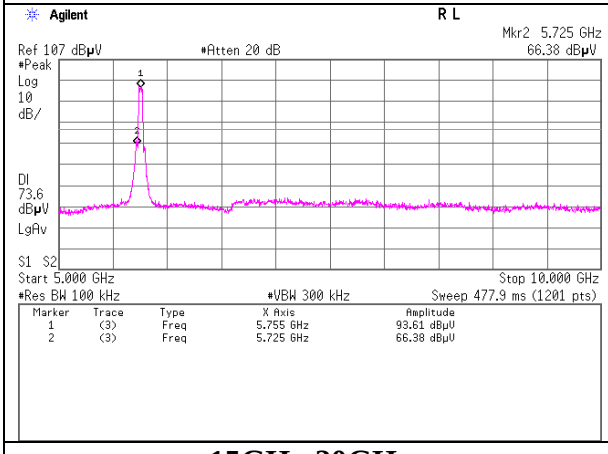
30MHz-1GHz



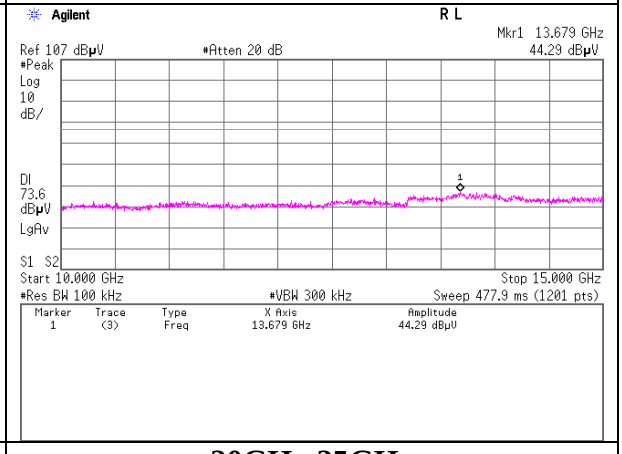
1GHz-5GHz



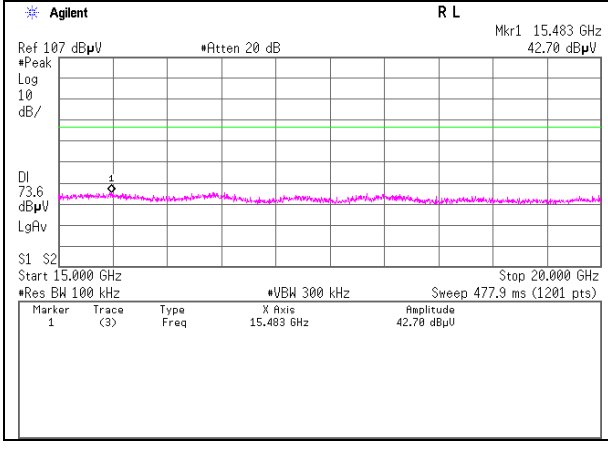
5GHz-10GHz



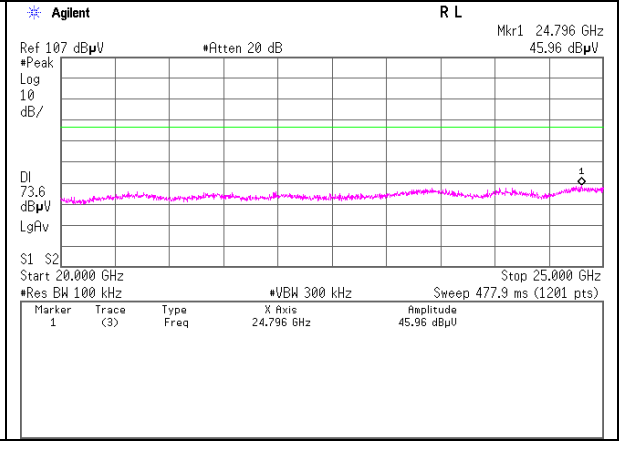
10GHz-15GHz



15GHz-20GHz



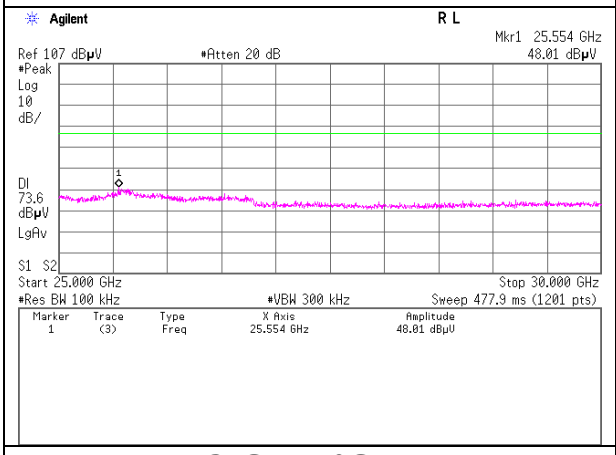
20GHz-25GHz



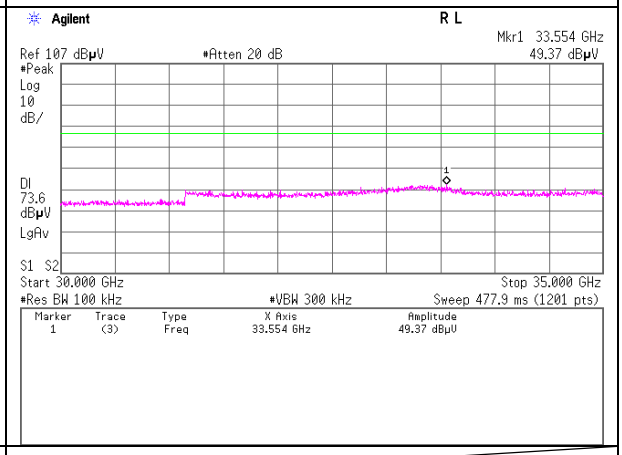
Conducted Spurious Emission

11n-40(5GHz) Tx 5755MHz

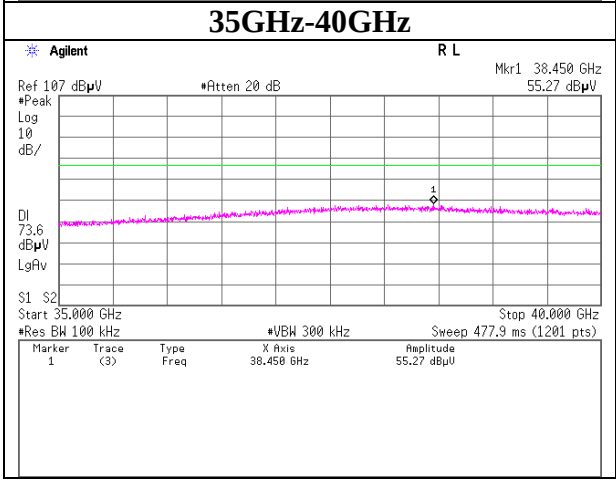
25GHz-30GHz



30GHz-35GHz



35GHz-40GHz



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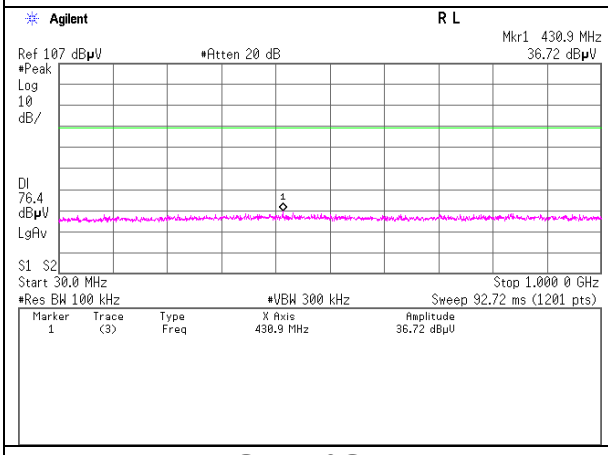
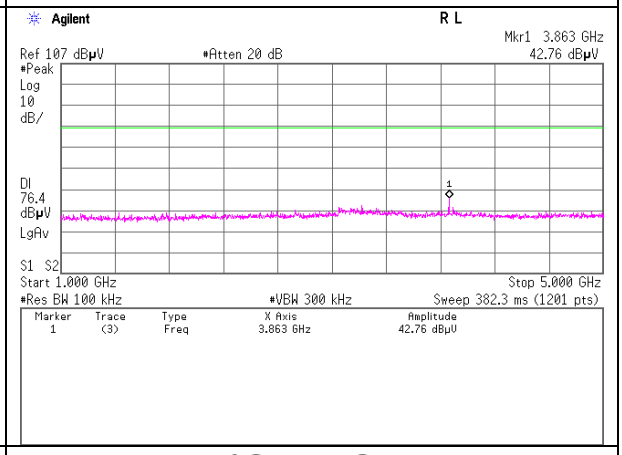
Conducted Spurious Emission

11n-40 (5GHz) Tx 5795MHz

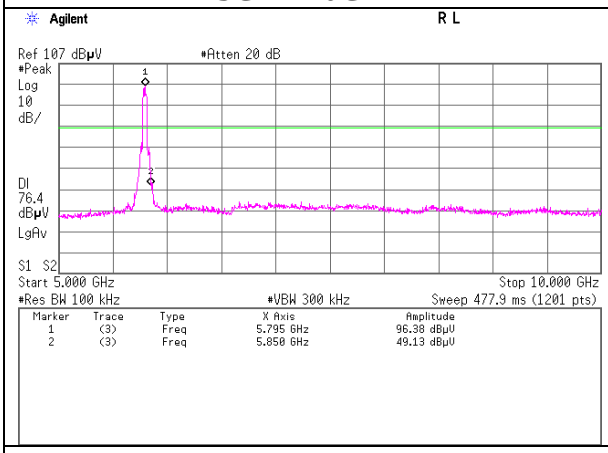
30MHz-1GHz



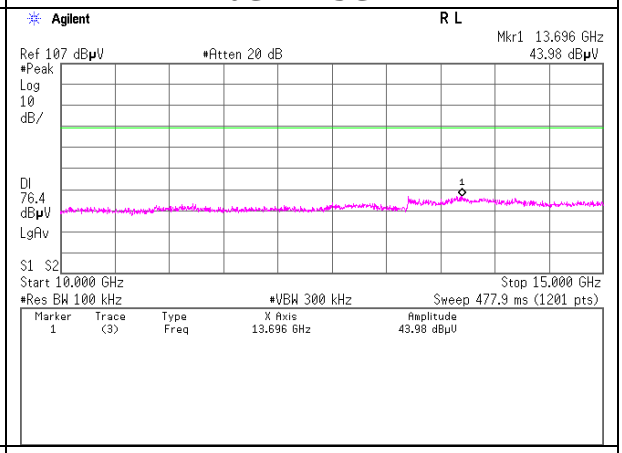
1GHz-5GHz



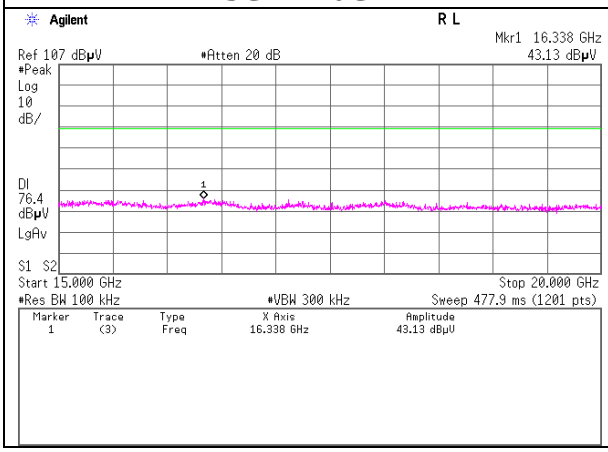
5GHz-10GHz



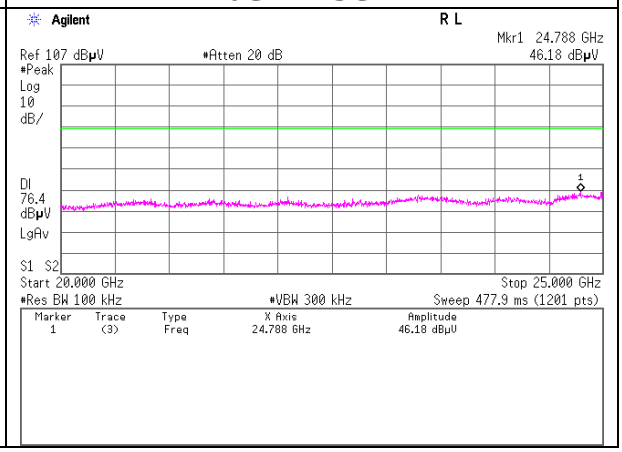
10GHz-15GHz



15GHz-20GHz



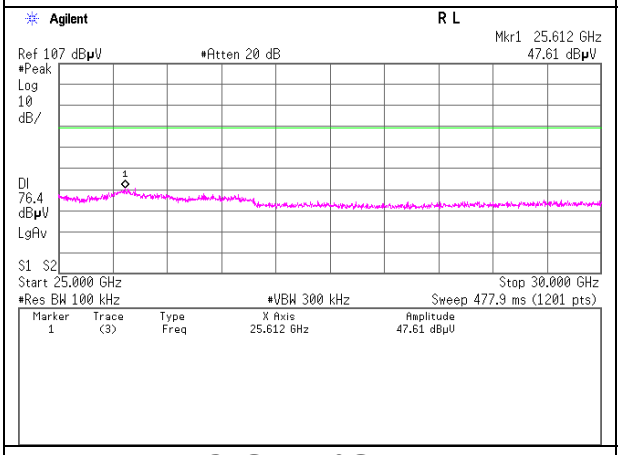
20GHz-25GHz



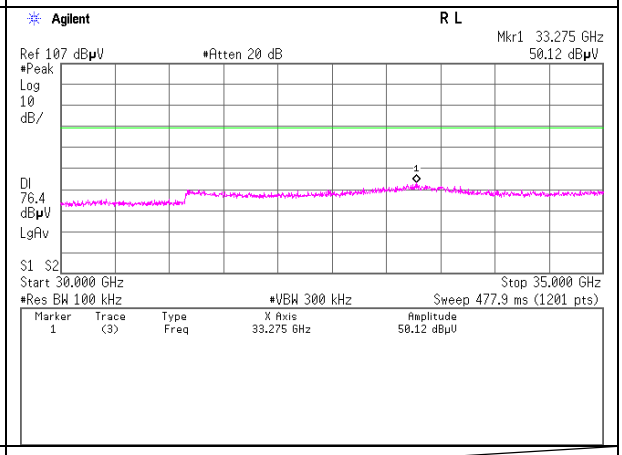
Conducted Spurious Emission

11n-40(5GHz) Tx 5795MHz

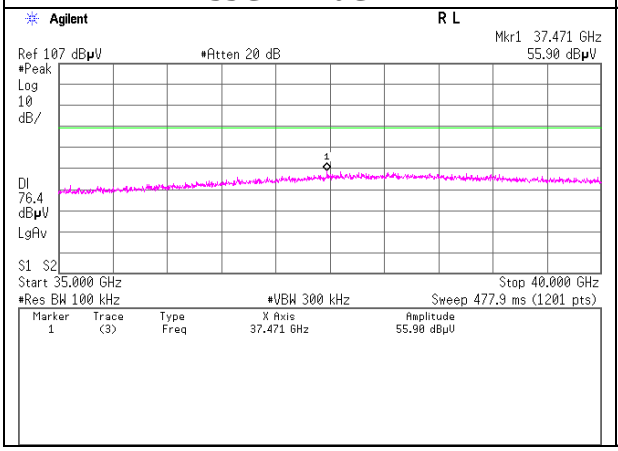
25GHz-30GHz



30GHz-35GHz



35GHz-40GHz



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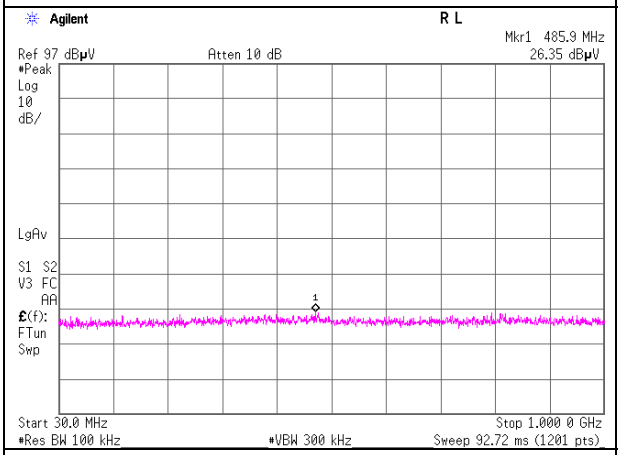
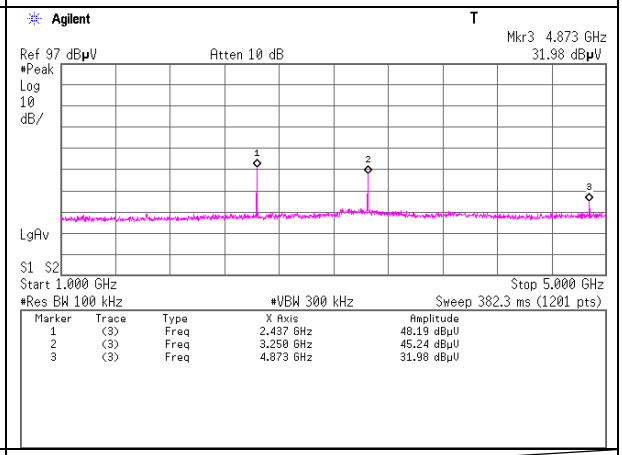
Conducted Spurious Emission

11b/g Rx 2437MHz

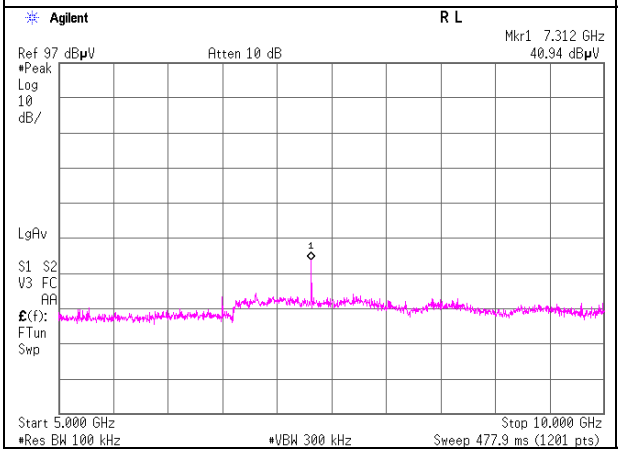
30MHz-1GHz



1GHz-5GHz



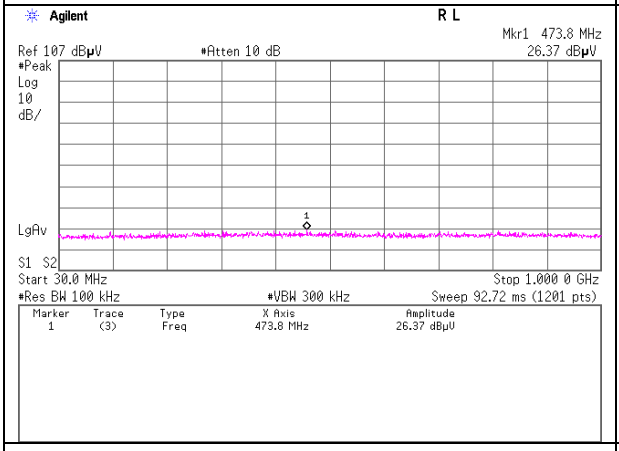
5GHz-10GHz



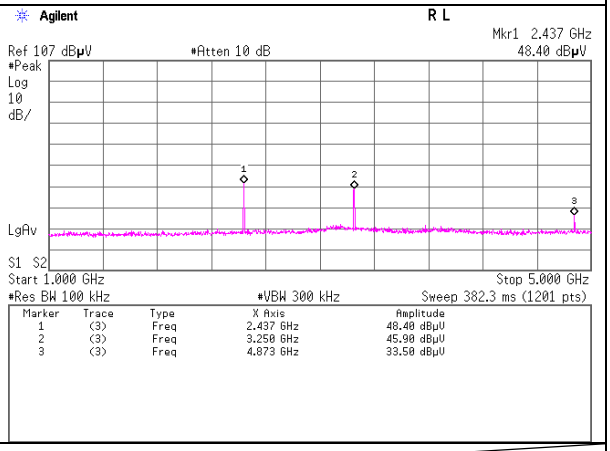
Conducted Spurious Emission

11n-20/40 Rx 2437MHz

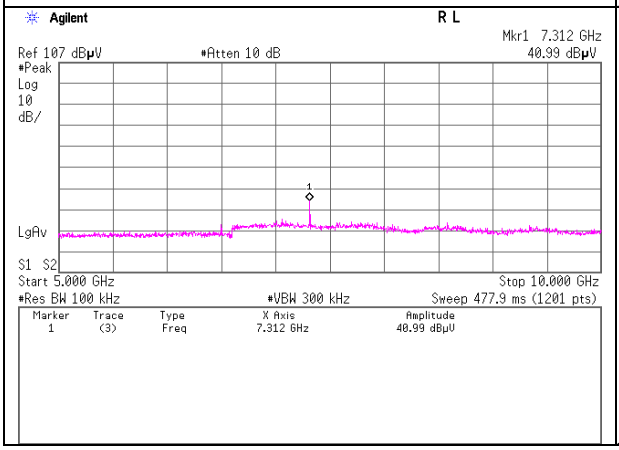
30MHz-1GHz



1GHz-5GHz



5GHz-10GHz



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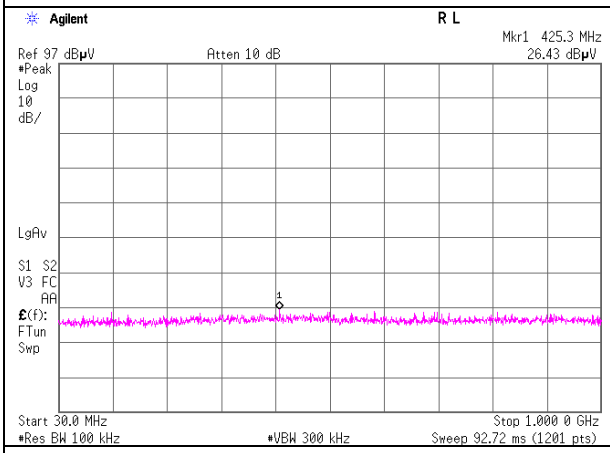
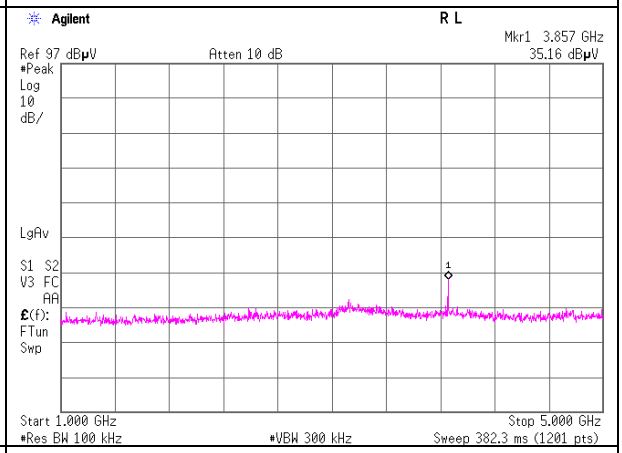
Conducted Spurious Emission

11a Rx 5785MHz

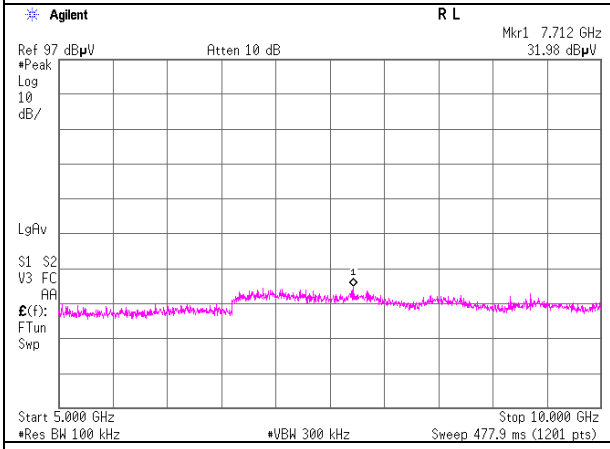
30MHz-1GHz



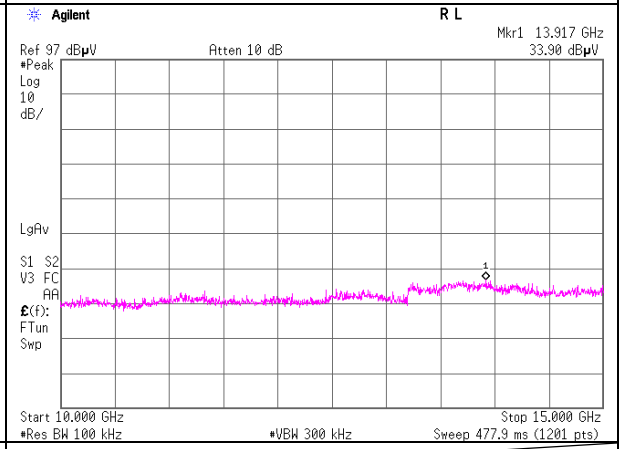
1GHz-5GHz



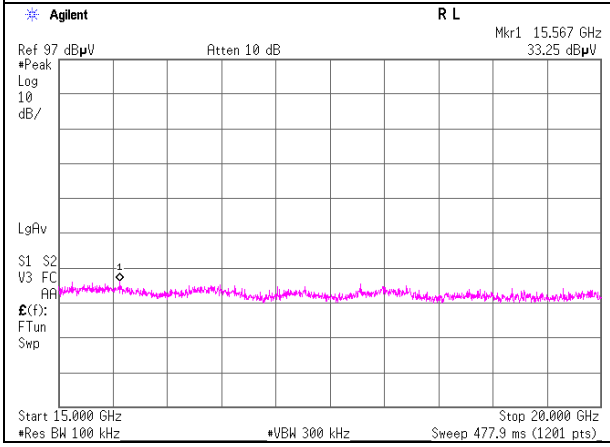
5GHz-10GHz



10GHz-15GHz



15GHz-20GHz



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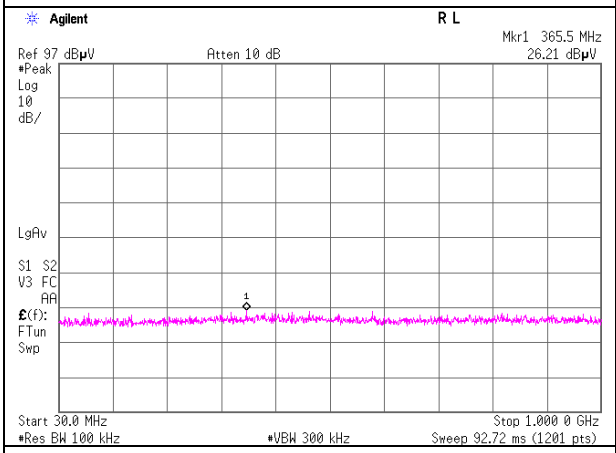
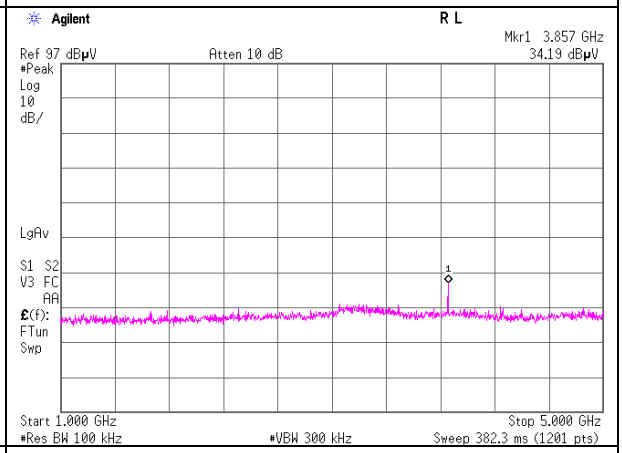
Conducted Spurious Emission

11n-20/40 Rx 5785MHz

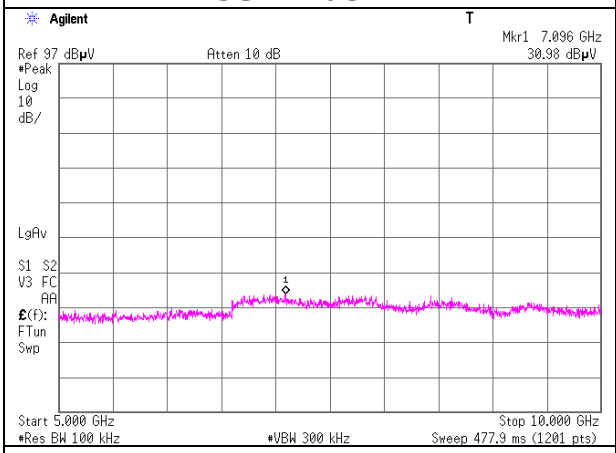
30MHz-1GHz



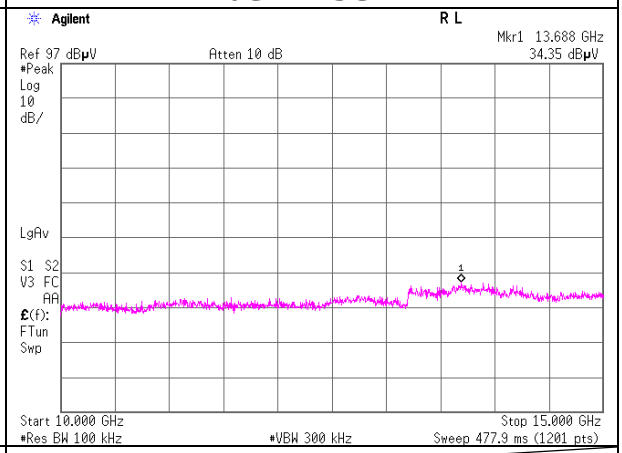
1GHz-5GHz



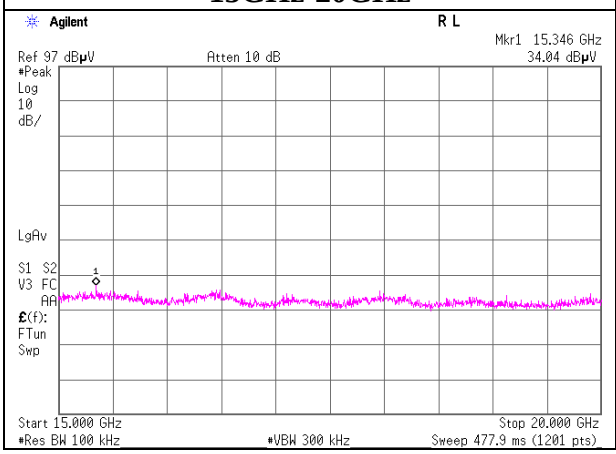
5GHz-10GHz



10GHz-15GHz



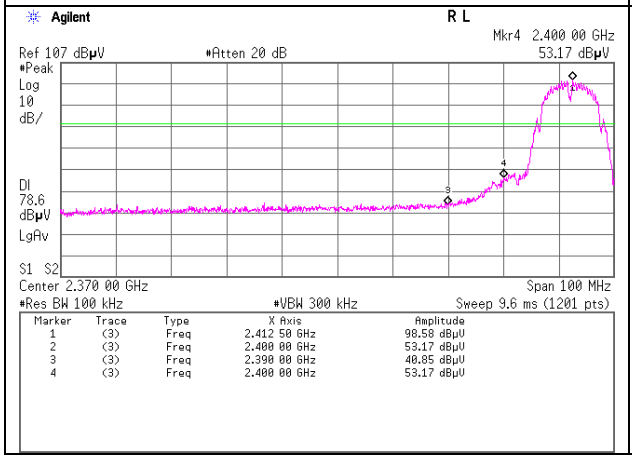
15GHz-20GHz



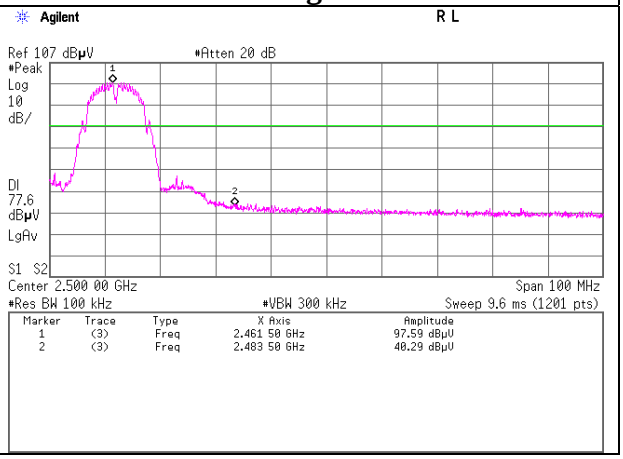
Conducted Emission Band Edge compliance

11b Tx

Low

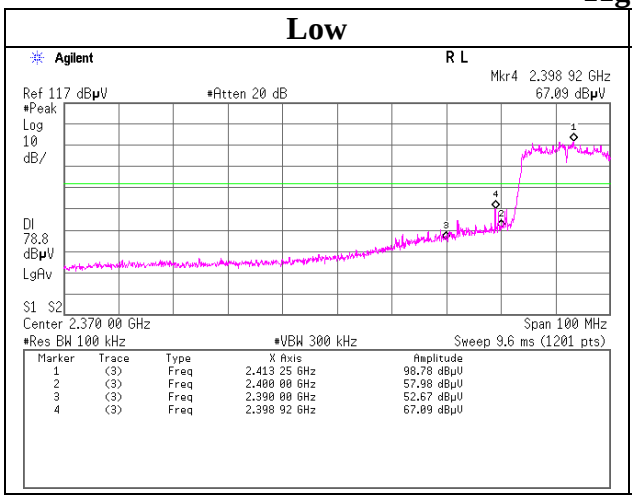


High

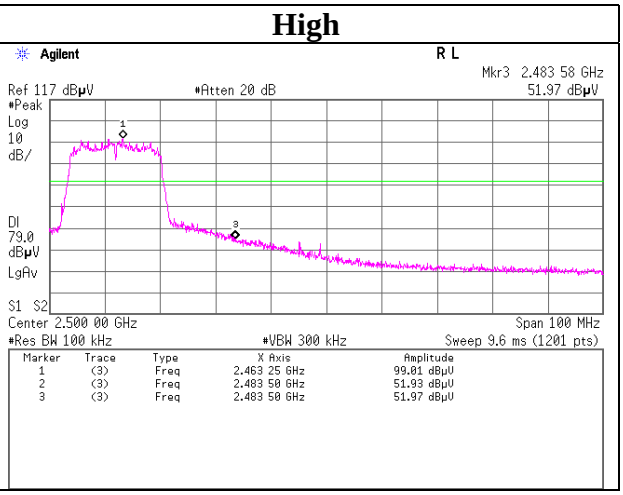


11g Tx

Low



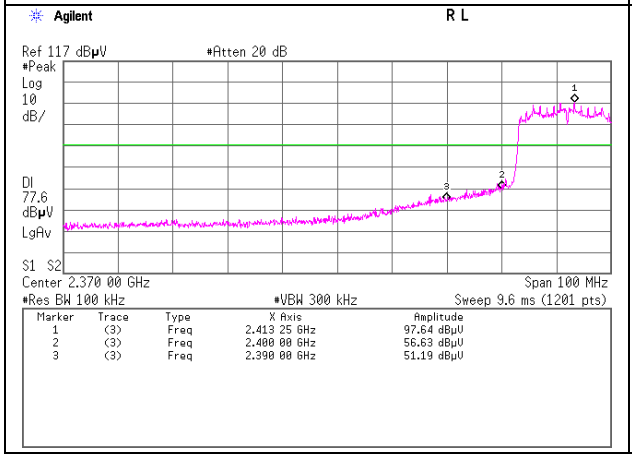
High



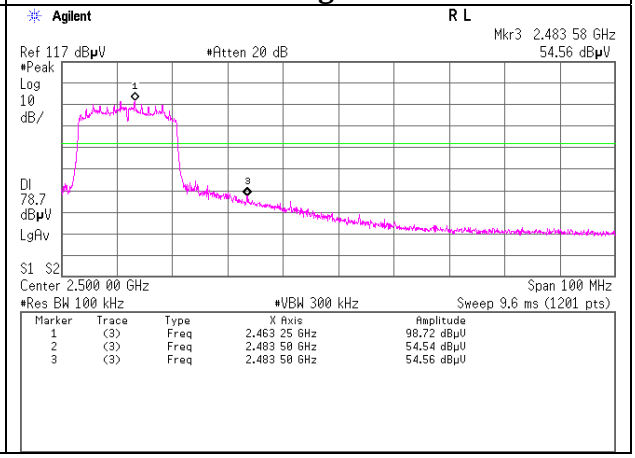
Conducted Emission Band Edge compliance

11n-20 (2.4GHz) Tx

Low

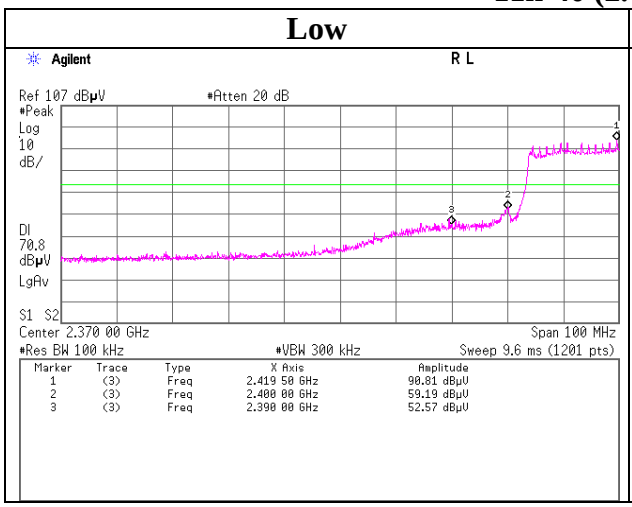


High



11n-40 (2.4GHz) Tx

Low



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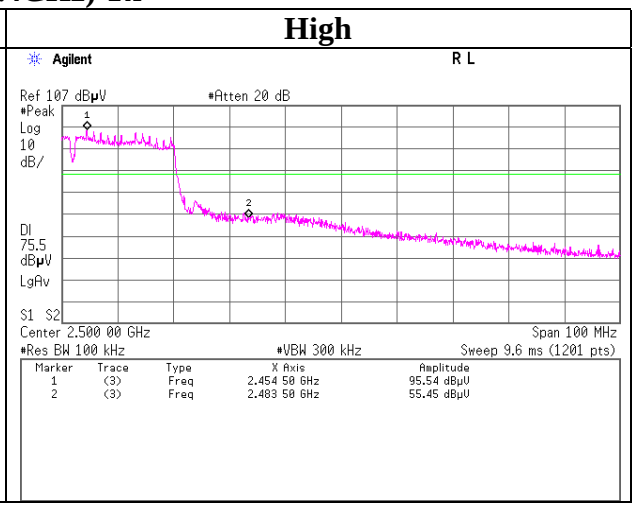
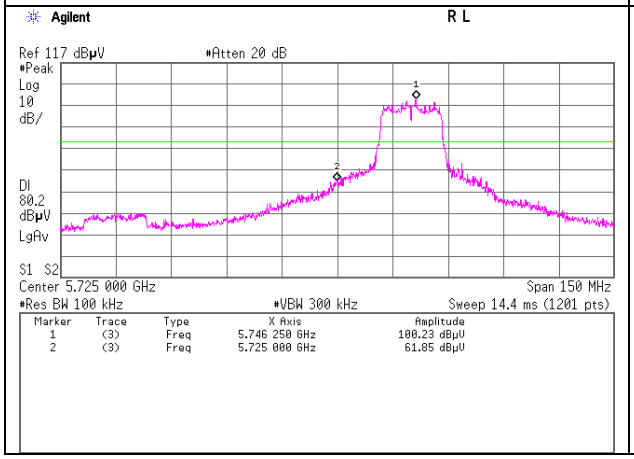


Conducted Emission Band Edge compliance

11a Tx

Low



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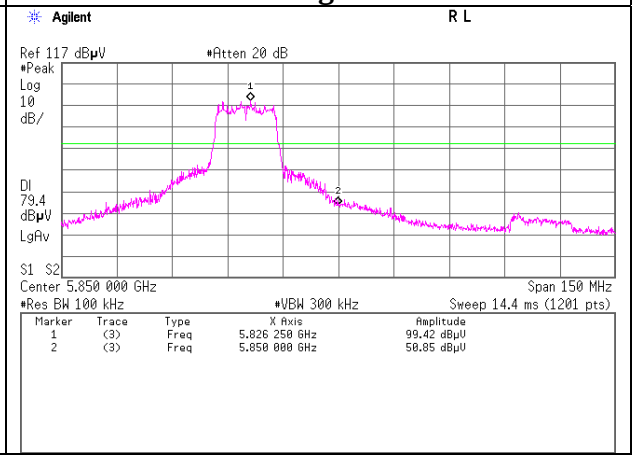
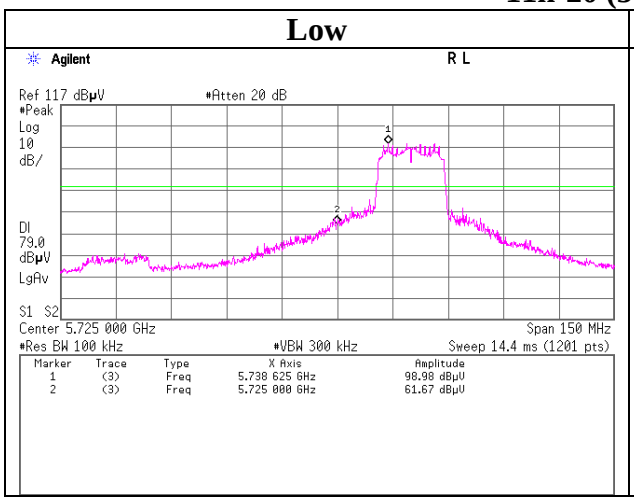


11n-20 (5GHz) Tx

Low



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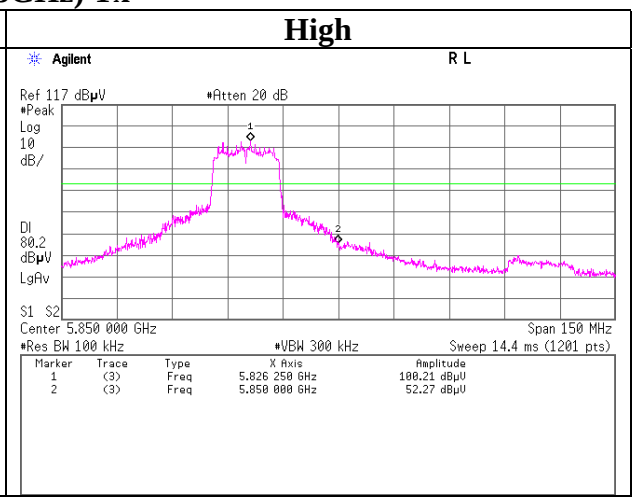
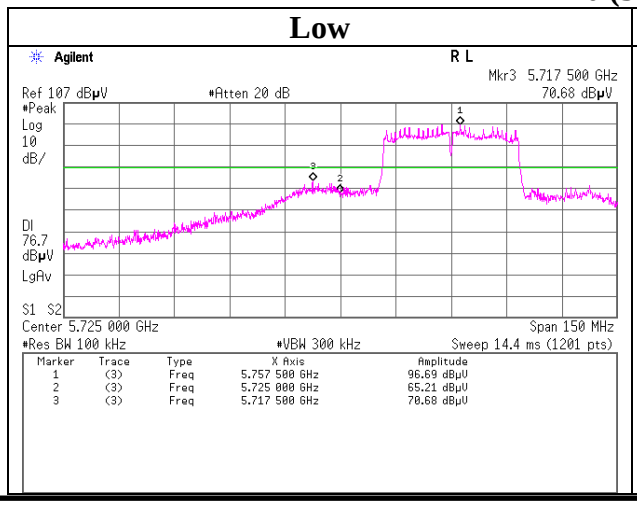


11n-40 (5GHz) Tx

Low



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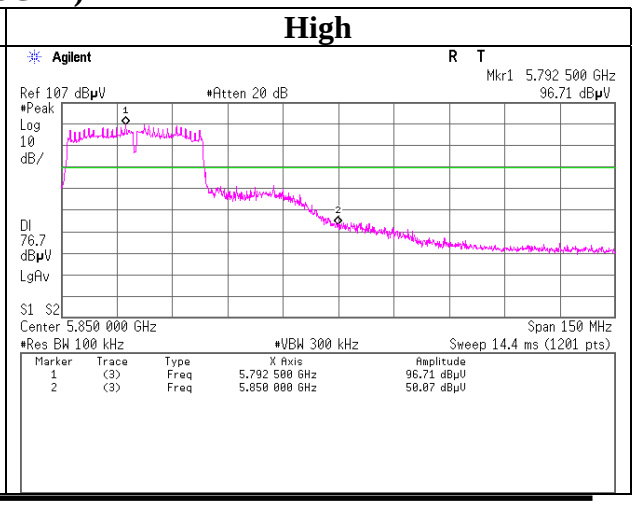


Power Density

Test place	Head Office EMC Lab. No.6 Measurement Room	
Report No.	30KE0072-HO-02	
Date	09/14/2010	09/15/2010
Temperature/ Humidity	24 deg.C./ 65%	24 deg.C./ 64%
Engineer	Katsunori Okai	Tomohisa Nakgawa
Mode	Tx	

11b

Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
2412.00	-10.32	1.86	9.97	1.51	8.00	6.49
2437.00	-10.78	1.87	9.97	1.06	8.00	6.94
2462.00	-10.67	1.87	9.97	1.17	8.00	6.83

11g

Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
2412.00	-11.33	1.86	9.97	0.50	8.00	7.50
2437.00	-11.15	1.87	9.97	0.69	8.00	7.31
2462.00	-11.21	1.87	9.97	0.63	8.00	7.37

11n-20 (2.4GHz)

Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
2412.00	-14.13	1.86	9.97	-2.30	8.00	10.30
2437.00	-12.54	1.87	9.97	-0.70	8.00	8.70
2462.00	-12.87	1.87	9.97	-1.03	8.00	9.03

11n-40 (2.4GHz)

Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
2422.00	-21.00	1.87	9.97	-9.16	8.00	17.16
2437.00	-15.32	1.87	9.97	-3.48	8.00	11.48
2452.00	-15.90	1.87	9.97	-4.06	8.00	12.06

Sample Calculation:
Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator

Power Density

Test place	Head Office EMC Lab. No.11 Measurement Room	
Report No.	30KE0072-HO-02	
Date	09/07/2010	09/08/2010
Temperature/ Humidity	24 deg.C./ 60%	26 deg.C./ 67%
Engineer	Satofumi Matsuyama	Satofumi Matsuyama
Mode	Tx	

11a

Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5745.00	-11.08	2.67	10.00	1.59	8.00	6.41
5785.00	-11.00	2.68	10.00	1.68	8.00	6.32
5825.00	-11.32	2.68	10.00	1.36	8.00	6.64

11n-20 (5GHz)

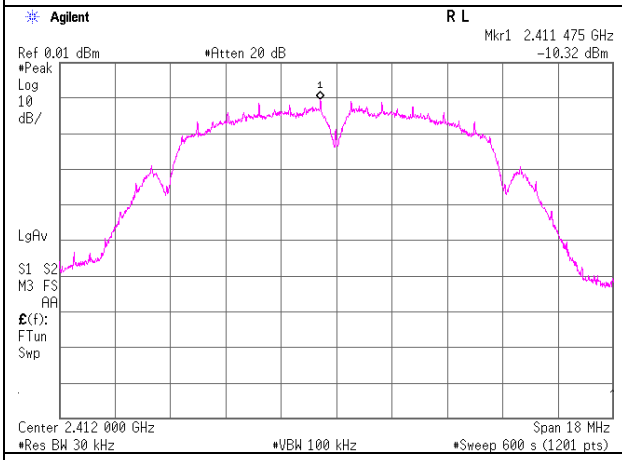
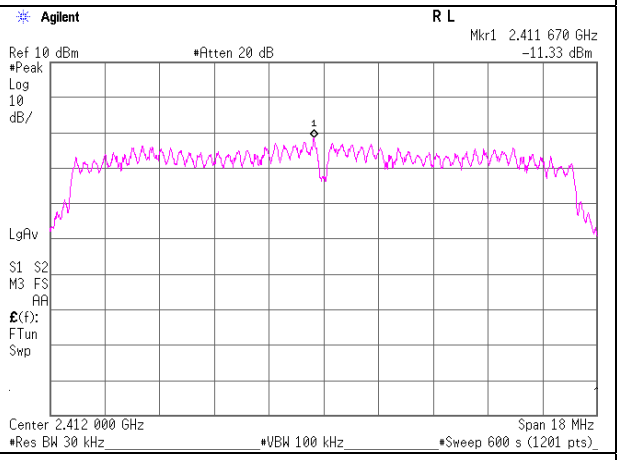
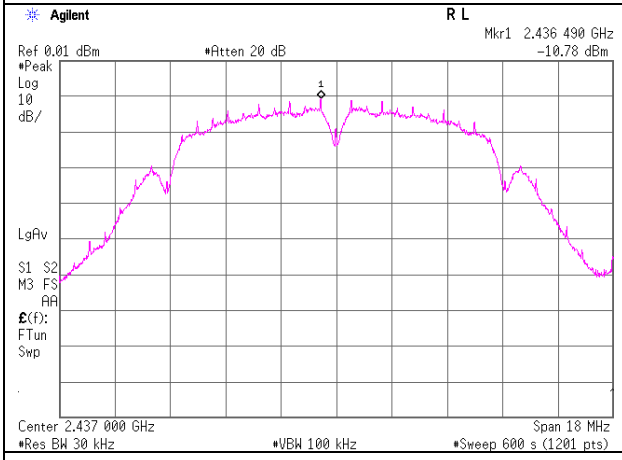
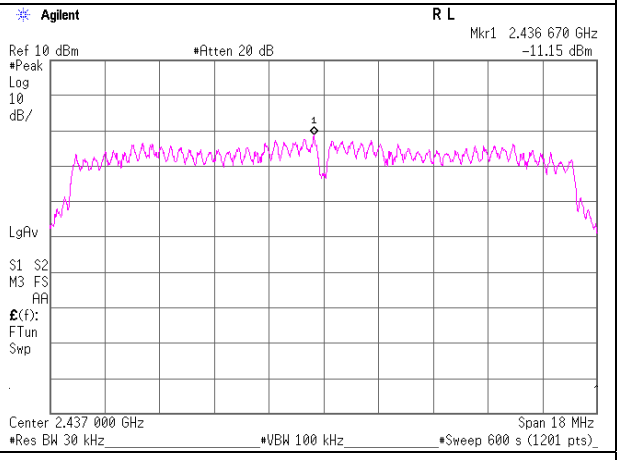
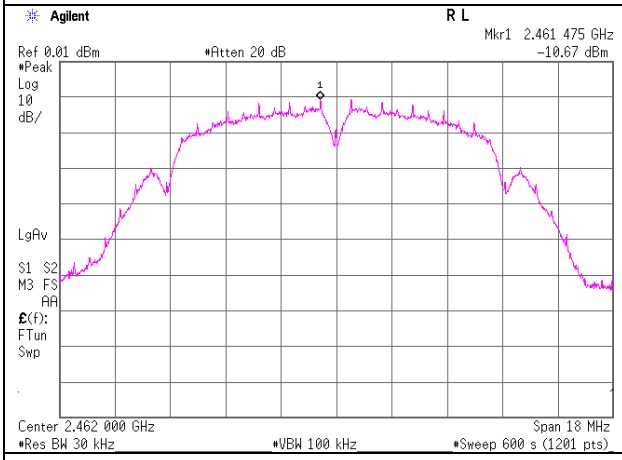
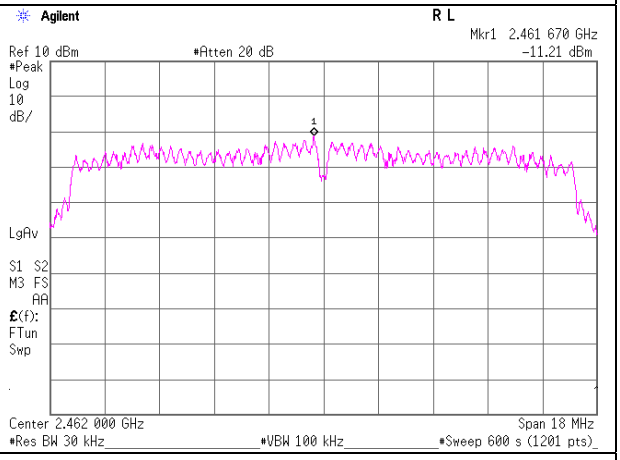
Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5745.00	-11.44	2.67	10.00	1.23	8.00	6.77
5785.00	-11.24	2.68	10.00	1.44	8.00	6.56
5825.00	-11.40	2.68	10.00	1.28	8.00	6.72

11n-40 (5GHz)

Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5755.00	-15.02	2.67	10.00	-2.35	8.00	10.35
5795.00	-15.00	2.68	10.00	-2.32	8.00	10.32

Sample Calculation:
Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator

Power Density

11b	11g
2412MHz	**2412MHz**
	
2437MHz	**2437MHz**
	
2462MHz	**2462MHz**
	

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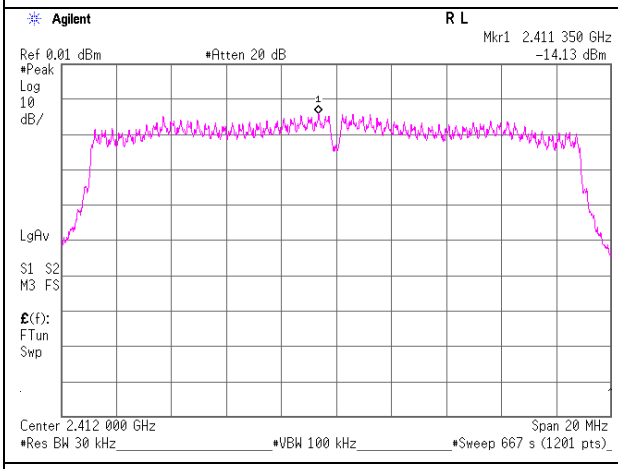
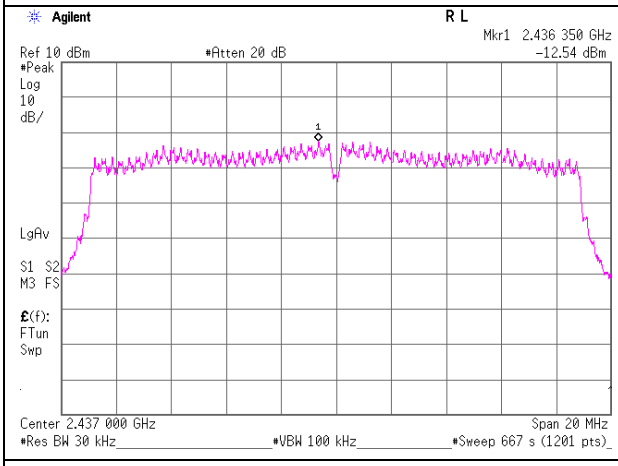
Power Density

11n-20 (2.4GHz)

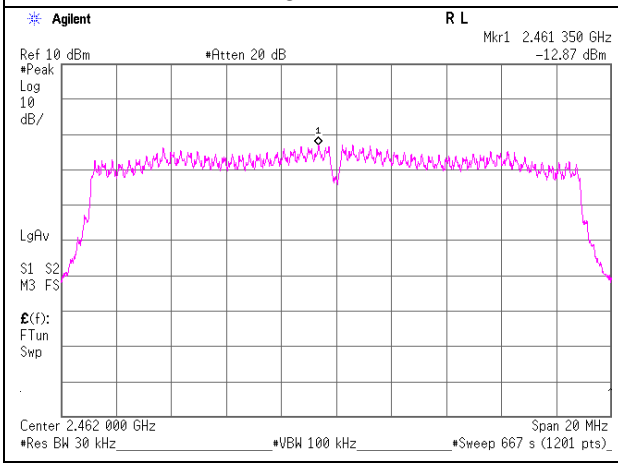
2412MHz



2437MHz

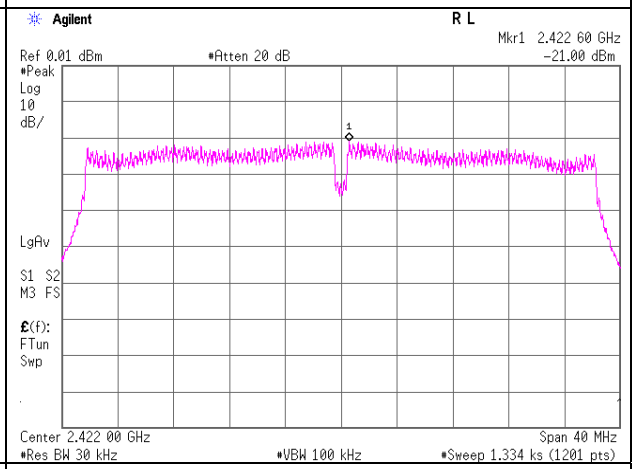


2462MHz

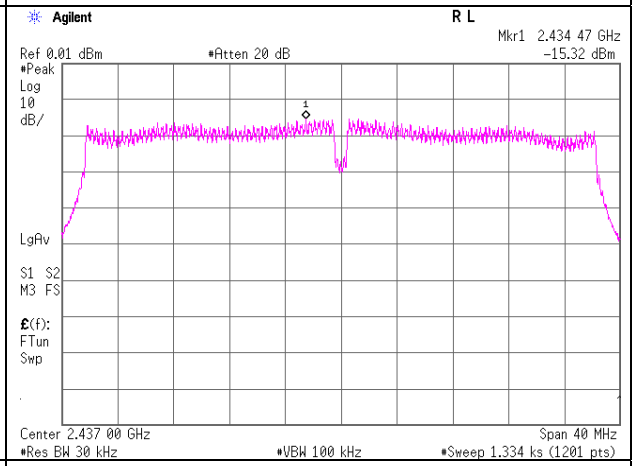


11n-40 (2.4GHz)

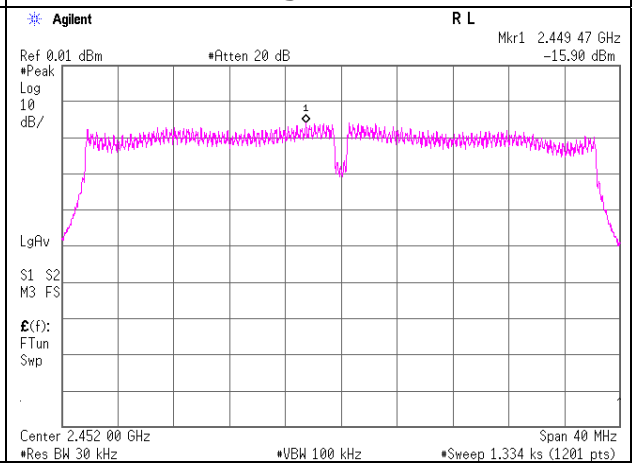
2422MHz



2437MHz



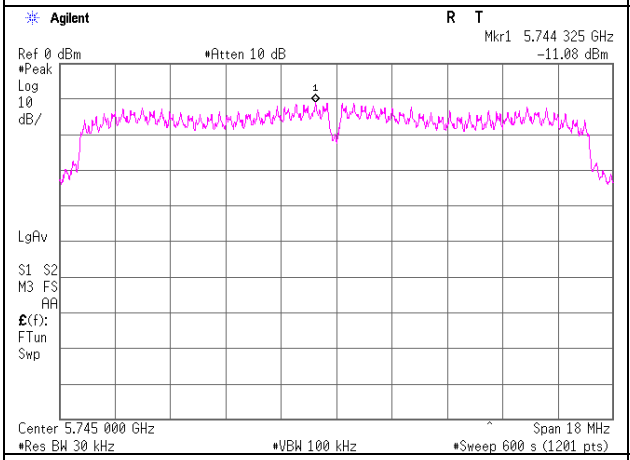
2452MHz



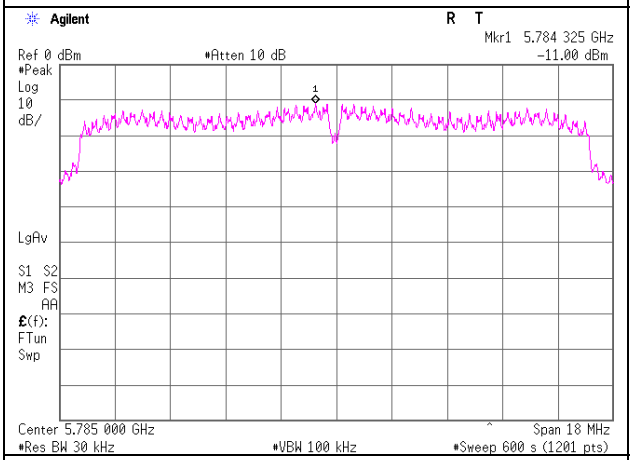
Power Density

11a

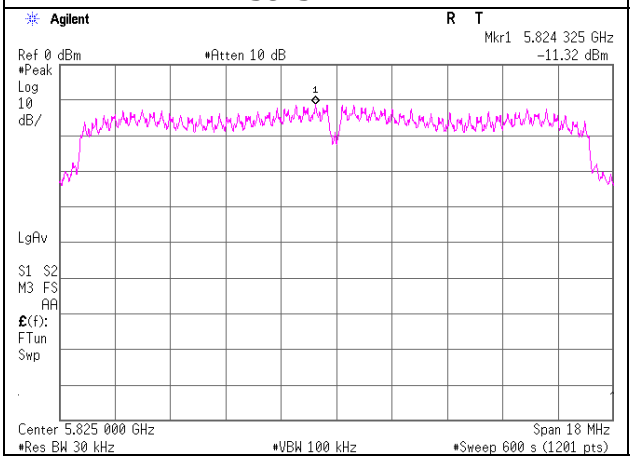
5745MHz



5785MHz

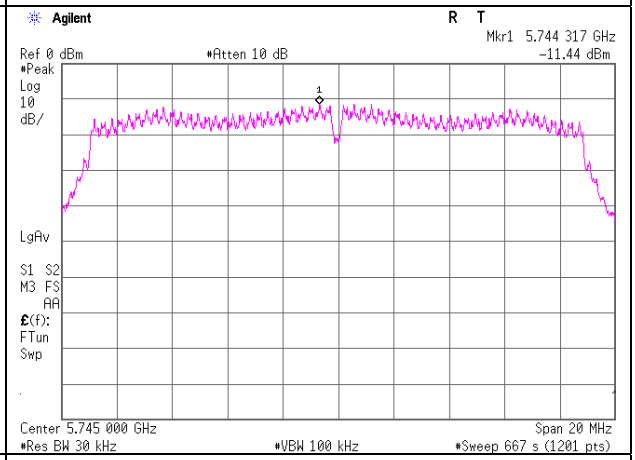


5825MHz

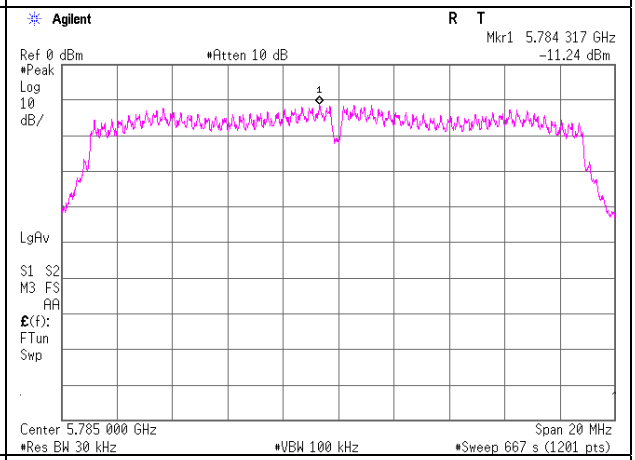


11n-20 (5GHz)

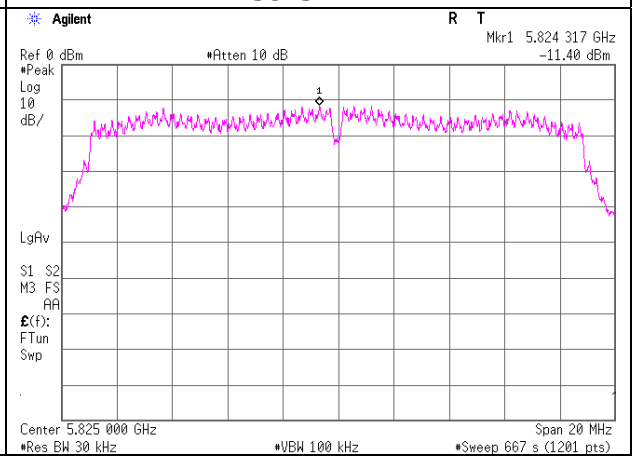
5745MHz



5785MHz



5825MHz



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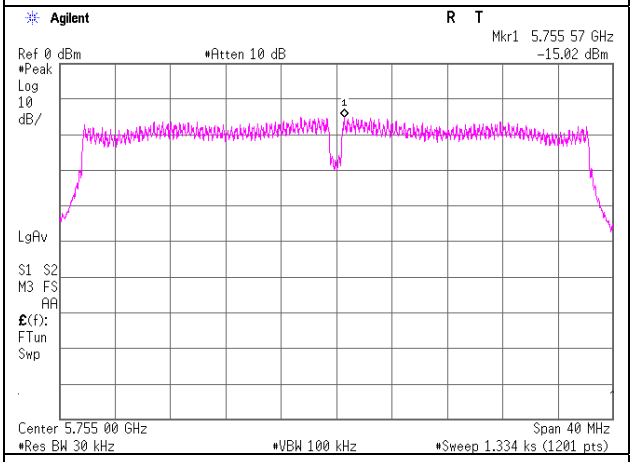
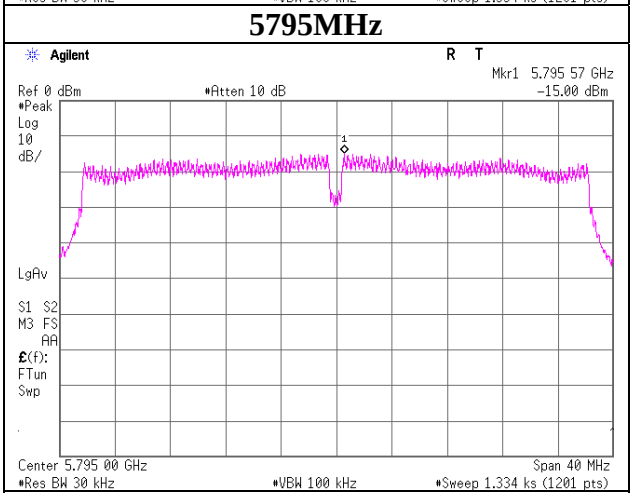
Power Density

11n-40 (5GHz)

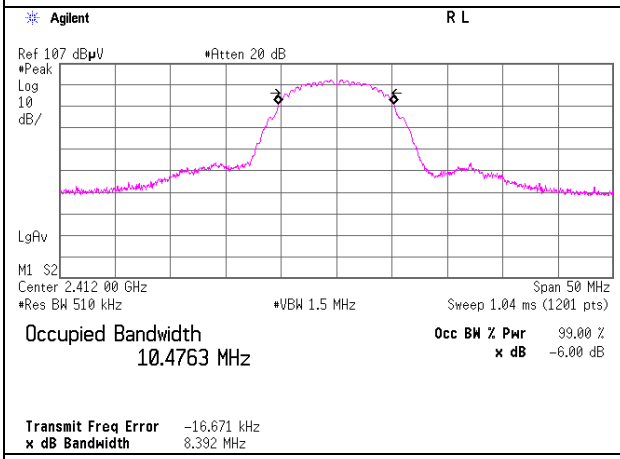
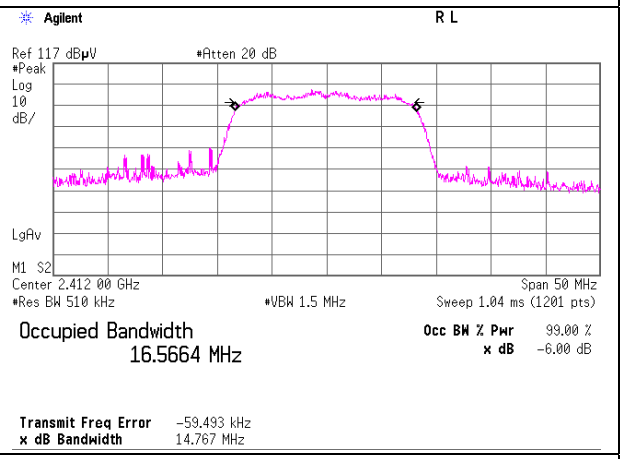
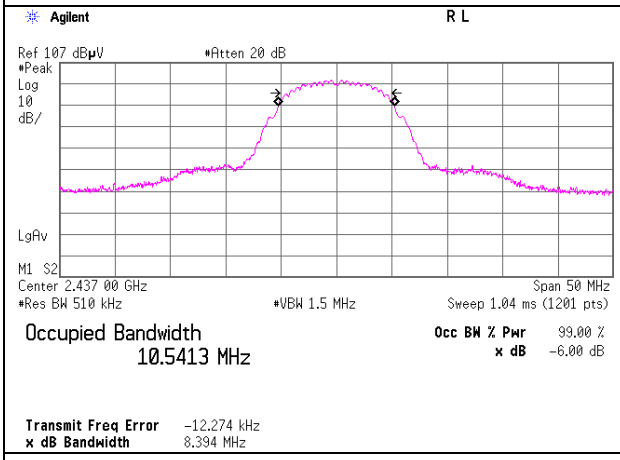
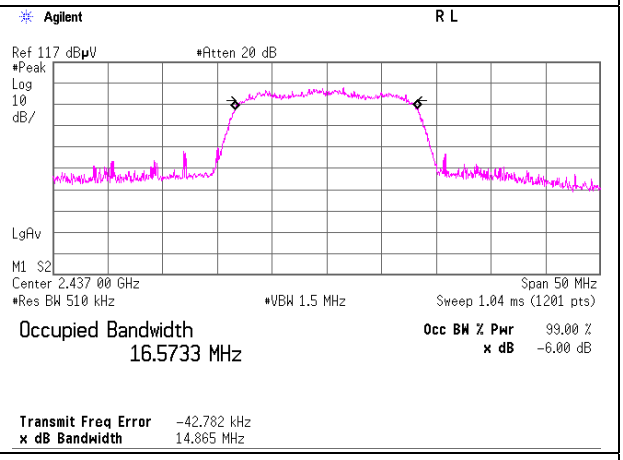
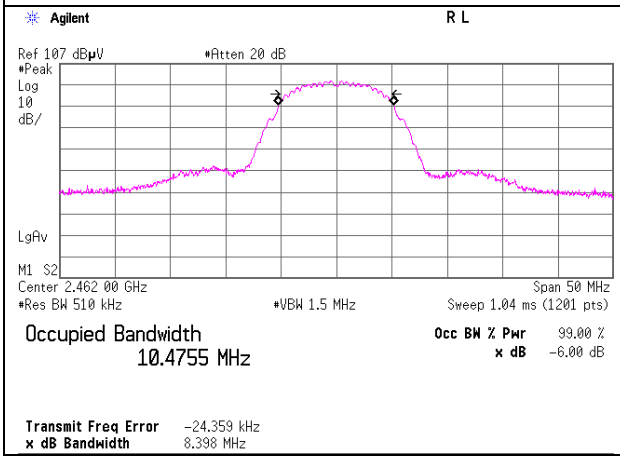
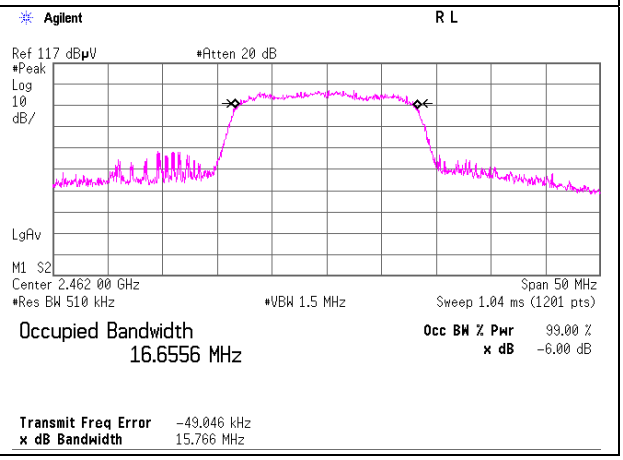
5755MHz



5795MHz



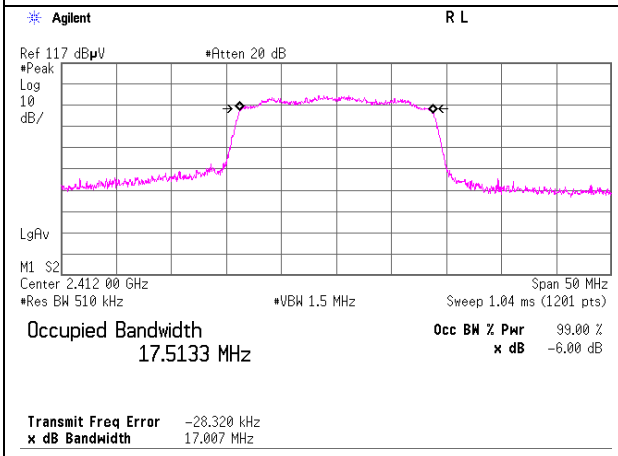
99%Occupied Bandwidth

11b	11g
2412MHz	**2412MHz**
	
2437MHz	**2437MHz**
	
2462MHz	**2462MHz**
	

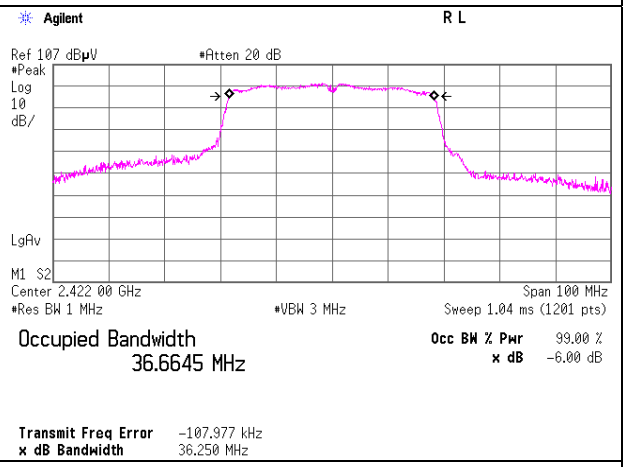
99% Occupied Bandwidth

11n-20 (2.4GHz)

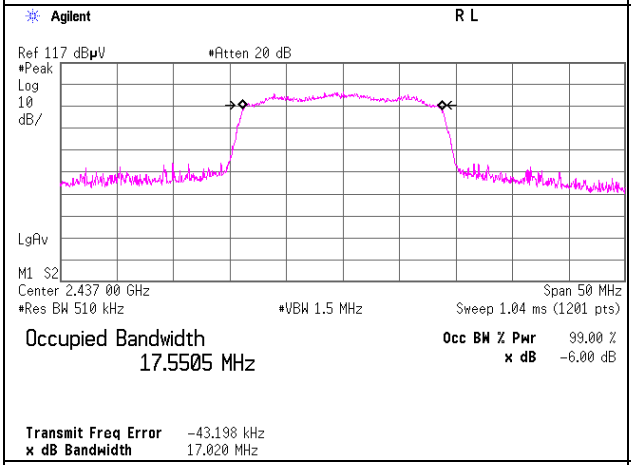
2412MHz



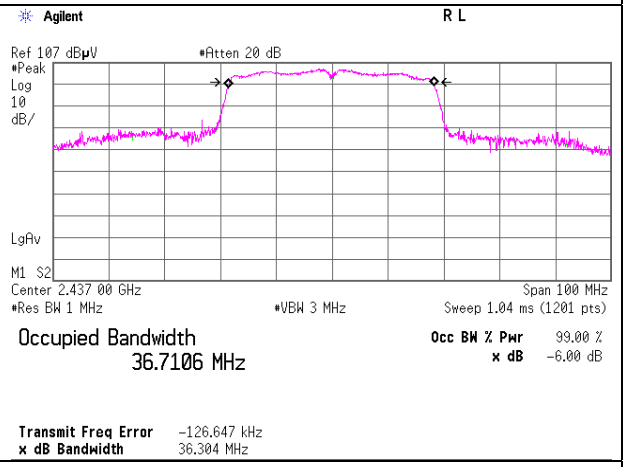
2422MHz



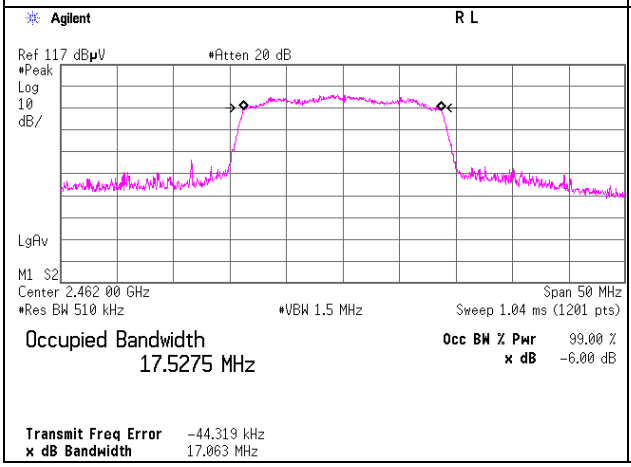
2437MHz



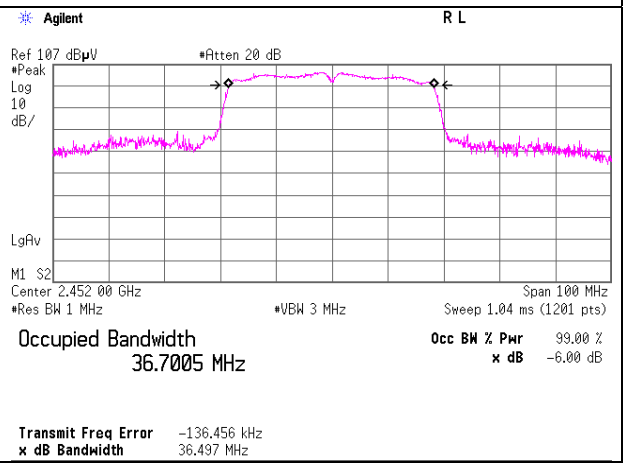
2437MHz



2462MHz



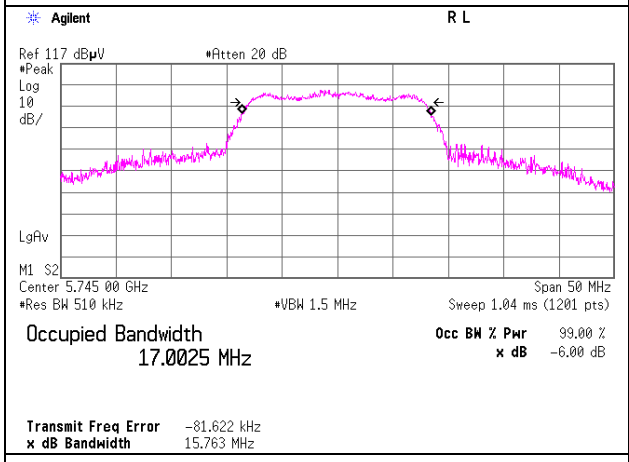
2452MHz



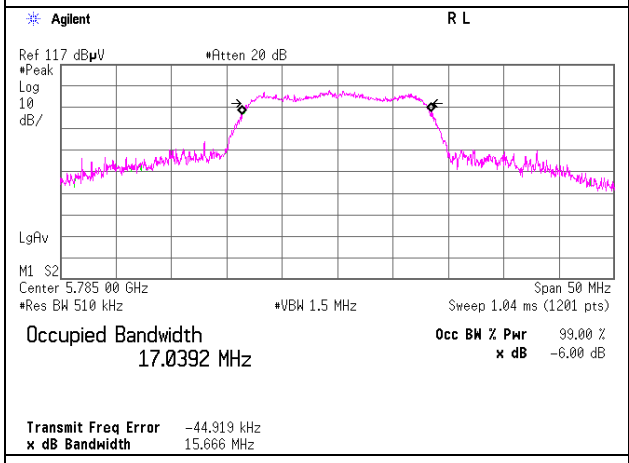
99% Occupied Bandwidth

11a

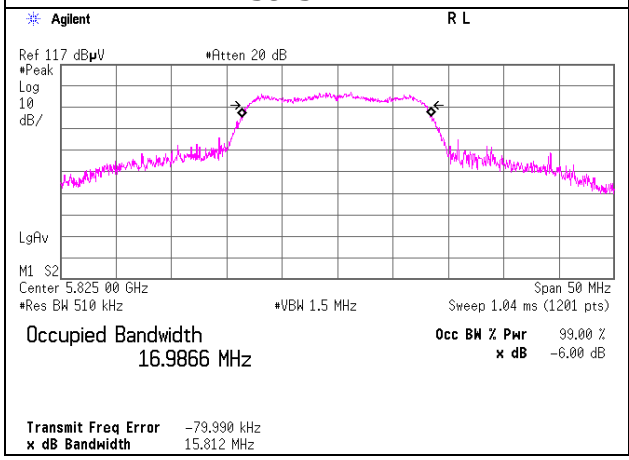
5745MHz



5785MHz

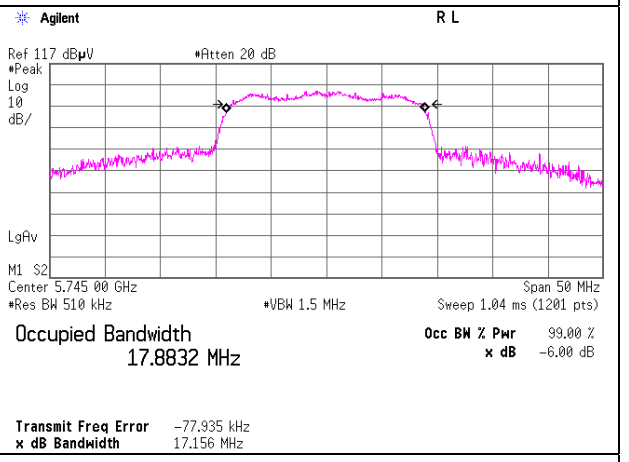


5825MHz

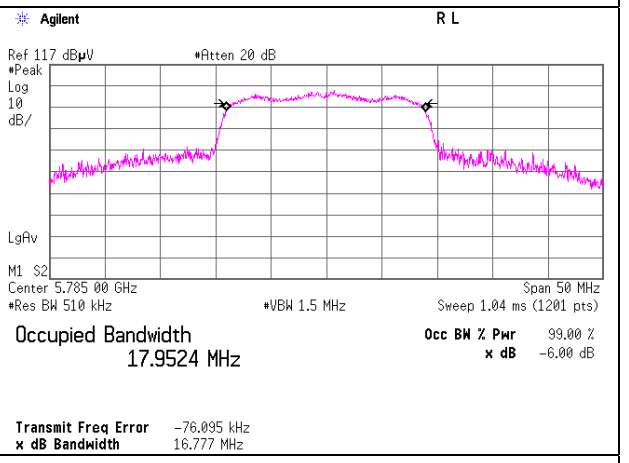


11n-20 (5GHz)

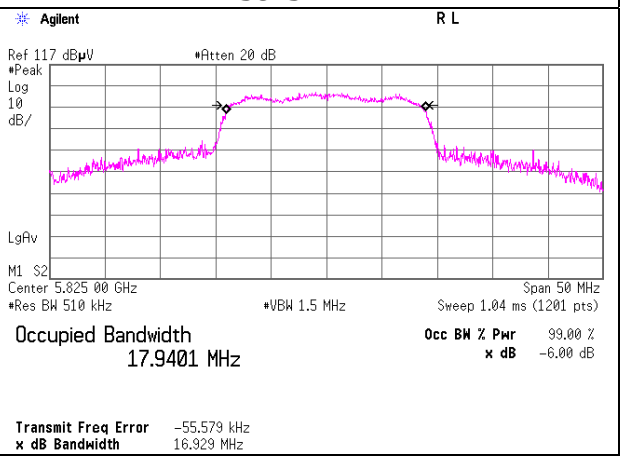
5745MHz



5785MHz



5825MHz



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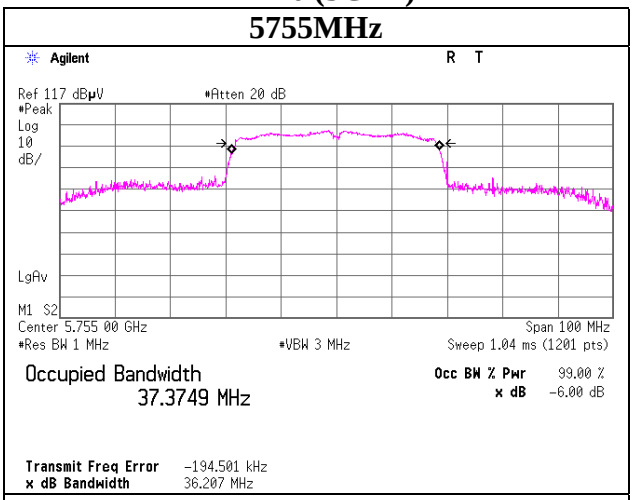
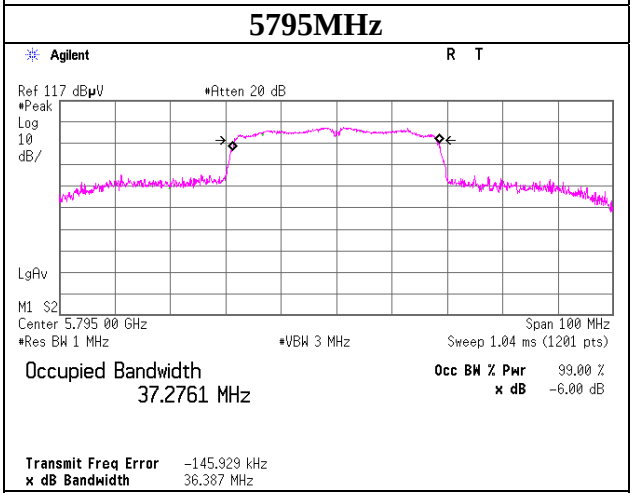
99% Occupied Bandwidth

11n-40 (5GHz)

5755MHz



5795MHz



APPENDIX 3: Test instruments

EMI test equipment (1/2)

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
MPM-08	Power Meter	Anritsu	ML2495A	6K00003338	AT	2010/09/10 * 12
MPSE-11	Power sensor	Anritsu	MA2411B	011737	AT	2010/09/10 * 12
MPM-13	Power Meter	Anritsu	ML2495A	0824014	AT	2009/11/25 * 12
MPSE-18	Power sensor	Anritsu	MA2411B	0738174	AT	2009/11/25 * 12
MCC-66	Microwave Cable 1G-40GHz	Schner	SUCOFLEX102	28636/2	AT	2010/04/27 * 12
MAT-24	Attenuator(10dB)(above 1GHz)	Agilent	8493C	71389	AT	2010/06/14 * 12
MOS-19	Thermo-Hygrometer	Custom	CTH-201	0001	AT	2009/12/22 * 12
MSA-10	Spectrum Analyzer	Agilent	E4448A	MY46180655	AT/RE	2010/02/03 * 12
MCC-45	Microwave Cable	Murata	MXGS83RK3000	-	AT	2010/07/26 * 12
MTA-36	Terminator	-	50Ω SMA	-	AT	Pre Check
MOTS-MATM	Antenna Terminal Measurement Software	UL Japan	-	-	AT	
MAEC-03	Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-10005	RE/CE	2010/02/01 * 12
MOS-13	Thermo-Hygrometer	Custom	CTH-180	-	RE/CE	2010/02/09 * 12
MJM-06	Measure	PROMART	SEN1955	-	RE/CE	-
COTS-MEMI	EMI measurement program	TSJ	TEPTO-DV	-	RE/CE	
MSA-03	Spectrum Analyzer	Agilent	E4448A	MY44020357	AT/RE	2009/11/20 * 12
MHA-20	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	258	RE	2010/05/07 * 12
MCC-56	Microwave Cable	Suhner	SUCOFLEX104	174410(1m) / 284655(5m)	RE	2010/01/25 * 12
MPA-11	MicroWave System Amplifier	Agilent	83017A	MY39500779	RE	2010/03/03 * 12
MHF-19	High Pass Filter 3.5-18.0GHz	TOKIMEC	TF323DCA	602	RE	2009/12/19 * 12
MCC-77	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	278942/4	RE	2009/12/19 * 12
MHF-22	High Pass Filter 7-20GHz	TOKIMEC	TF37NCCB	602	RE	2010/01/26 * 12
MHA-16	Horn Antenna 15-40GHz	Schwarzbeck	BBHA9170	BBHA9170306	RE	2010/05/07 * 12
MCC-54	Microwave Cable	Suhner	SUCOFLEX101	2873(1m) / 2876(5m)	RE	2010/03/02 * 12
MPA-03	Microwave System Power Amplifier	Agilent	83050A	3950M00205	RE	2010/06/11 * 12
MPM-09	Power Meter	Anritsu	ML2495A	6K00003348	AT	2010/09/10 * 12
MPSE-12	Power sensor	Anritsu	MA2411B	011598	AT	2010/09/10 * 12

EMI test equipment (2/2)

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
MAEC-04	Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-10005	RE	2010/02/02 * 12
MOS-15	Thermo-Hygrometer	Custom	CTH-180	-	RE	2010/02/09 * 12
MJM-07	Measure	PROMART	SEN1955	-	RE	-
MSA-05	Spectrum Analyzer	Advantest	R3273	160400285	RE	2009/12/15 * 12
MTR-07	Test Receiver	Rohde & Schwarz	ESCI	100635	RE	2009/10/23 * 12
MBA-05	Biconical Antenna	Schwarzbeck	BBA9106	1302	RE	2010/03/22 * 12
MLA-08	Logperiodic Antenna	Schwarzbeck	UKLP9140-A	N/A	RE	2010/01/23 * 12
MCC-50	Coaxial cable	UL Japan	-	-	RE	2010/03/18 * 12
MAT-51	Attenuator(6dB)	Weinschel	2	AS3557	RE	2010/01/20 * 12
MPA-14	Pre Amplifier	SONOMA INSTRUMENT	310	260833	RE	2010/03/05 * 12
MHA-21	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	9120D-557	RE	2010/08/08 * 12
MCC-57	Microwave Cable	Suhner	SUCOFLEX104	246769(1m) / 292411(5m)	RE	2009/11/17 * 12
MPA-12	MicroWave System Amplifier	Agilent	83017A	MY39500780	RE	2010/03/16 * 12
MCC-79	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	278923/4	RE	2009/12/19 * 12
MHF-23	High Pass Filter 7-20GHz	TOKIMEC	TF37NCCC	603	RE	2010/01/27 * 12
MHF-20	High Pass Filter 3.5-18.0GHz	TOKIMEC	TF323DCC	607	RE	2009/12/19 * 12
MSA-09	Spectrum Analyzer	Advantest	R3273	95090115	RE	2009/12/11 * 12
MTR-08	Test Receiver	Rohde & Schwarz	ESCI	100767	RE	2010/08/23 * 12
MBA-03	Biconical Antenna	Schwarzbeck	BBA9106	1915	RE	2010/01/23 * 12
MLA-03	Logperiodic Antenna	Schwarzbeck	USLP9143	174	RE	2010/01/23 * 12
MCC-51	Coaxial cable	UL Japan	-	-	RE	2010/07/06 * 12
MAT-09	Attenuator(6dB)	Weinschel Corp	2	BK7973	RE	2009/11/12 * 12
MPA-13	Pre Amplifier	SONOMA INSTRUMENT	310	260834	RE	2010/03/23 * 12
MOS-14	Thermo-Hygrometer	Custom	CTH-201	-	AT	2010/05/19 * 12
MLS-06	LISN(AMN)	Schwarzbeck	NSLK8127	8127363	CE(EUT)	2010/02/04 * 12
MCC-112	Coaxial cable	Fujikura/Suhner/TSJ	5D-2W(10m)/SFM141(3m)/sucoform141-PE(1m)/421-010(1.5m)/RFM-E321(Switcher)	-/00640	CE	2010/07/23 * 12
MHA-17	Horn Antenna 15-40GHz	Schwarzbeck	BBHA9170	BBHA9170307	RE	2010/06/29 * 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