

APPENDIX 2: Data of EMI test

Conducted Emission

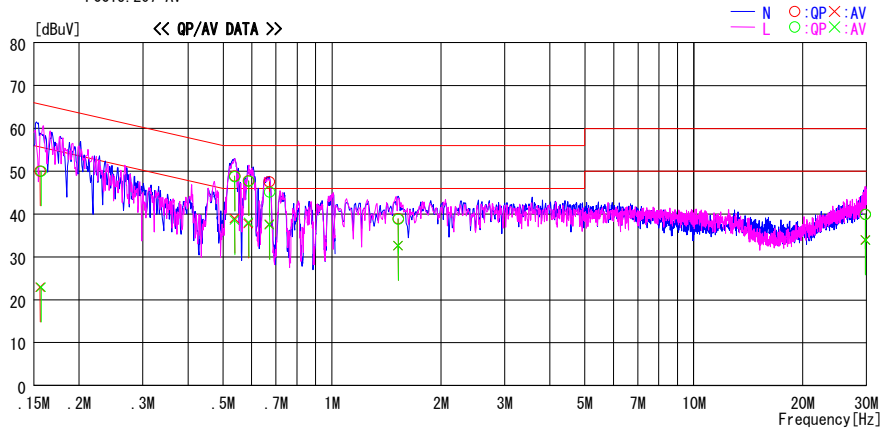
DATA OF CONDUCTED EMISSION TEST

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

Report No. : 30KE0072-H0
 Temp./Humi. : 25deg. C. / 62%
 Engineer : Tomotaka Sasagawa

Mode / Remarks : Tx 11n-20/-40 5270MHz Ant1

LIMIT : FCC15.207 QP
 FCC15.207 AV



Frequency [MHz]	Reading Level		Corr. Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15609	36.8	9.7	13.2	50.0	22.9	65.7	55.7	15.7	32.8	N	
0.53802	35.6	25.7	13.3	48.9	39.0	56.0	46.0	7.1	7.0	N	
0.58761	34.5	24.5	13.3	47.8	37.8	56.0	46.0	8.2	8.2	N	
0.67113	34.2	24.3	13.3	47.5	37.6	56.0	46.0	8.5	8.4	N	
1.52420	25.6	19.2	13.4	39.0	32.6	56.0	46.0	17.0	13.4	N	
29.77950	24.8	18.9	15.1	39.9	34.0	60.0	50.0	20.1	16.0	N	
0.15696	36.8	9.7	13.2	50.0	22.9	65.6	55.6	15.6	32.7	L	
0.53802	35.4	25.3	13.3	48.7	38.6	56.0	46.0	7.3	7.4	L	
0.58848	34.4	24.8	13.3	47.7	38.1	56.0	46.0	8.3	7.9	L	
0.67200	31.9	24.2	13.3	45.2	37.5	56.0	46.0	10.8	8.5	L	
1.52420	25.4	19.2	13.4	38.8	32.6	56.0	46.0	17.2	13.4	L	
29.79955	24.8	18.8	15.1	39.9	33.9	60.0	50.0	20.1	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.

Conducted Emission

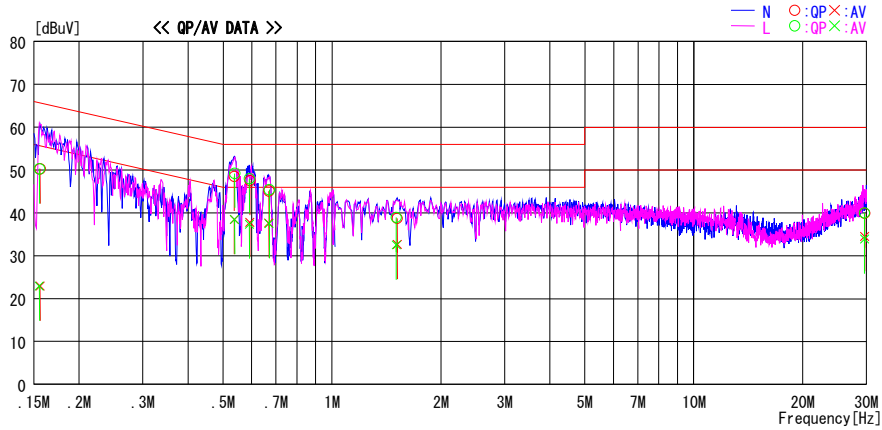
DATA OF CONDUCTED EMISSION TEST

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-20/-40 5550MHz Ant1

LIMIT : FCC15.207 QP
 FCC15.207 AV



Frequency [MHz]	Reading Level		Corr. Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15609	37.1	9.7	13.2	50.3	22.9	65.7	55.7	15.4	32.8	N	
0.53715	35.2	25.1	13.3	48.5	38.4	56.0	46.0	7.5	7.6	N	
0.59283	34.2	24.5	13.3	47.5	37.8	56.0	46.0	8.5	8.2	N	
0.66939	31.8	24.3	13.3	45.1	37.6	56.0	46.0	10.9	8.4	N	
1.51513	25.3	19.2	13.4	38.7	32.6	56.0	46.0	17.3	13.4	N	
29.63915	24.8	19.4	15.1	39.9	34.5	60.0	50.0	20.1	15.5	N	
0.15522	37.1	9.7	13.2	50.3	22.9	65.7	55.7	15.4	32.8	L	
0.53802	35.9	25.1	13.3	49.2	38.4	56.0	46.0	6.8	7.6	L	
0.59109	34.7	24.1	13.3	48.0	37.4	56.0	46.0	8.0	8.6	L	
0.67026	32.1	24.2	13.3	45.4	37.5	56.0	46.0	10.6	8.5	L	
1.50606	25.6	19.1	13.4	39.0	32.5	56.0	46.0	17.0	13.5	L	
29.61910	24.9	18.8	15.1	40.0	33.9	60.0	50.0	20.0	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.

Conducted Emission

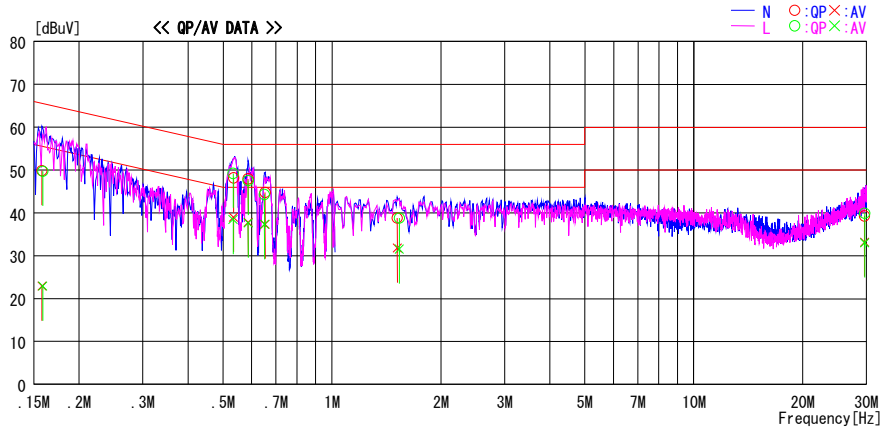
DATA OF CONDUCTED EMISSION TEST

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

Report No. : 30KE0072-H0
 Temp./Humi. : 25deg.C. / 62%
 Engineer : Tomotaka Sasagawa

Mode / Remarks : Rx 11n-20/-40 5260MHz Ant0/1

LIMIT : FCC15.207 QP
 FCC15.207 AV



Frequency [MHz]	Reading Level		Corr. Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15783	36.7	9.7	13.2	49.9	22.9	65.6	55.6	15.7	32.7	N	
0.53454	34.9	25.7	13.3	48.2	39.0	56.0	46.0	7.8	7.0	N	
0.58674	34.6	24.5	13.3	47.9	37.8	56.0	46.0	8.1	8.2	N	
0.65286	31.5	24.1	13.3	44.8	37.4	56.0	46.0	11.2	8.6	N	
1.51513	25.4	18.4	13.4	38.8	31.8	56.0	46.0	17.2	14.2	N	
29.61910	24.2	18.1	15.1	39.3	33.2	60.0	50.0	20.7	16.8	N	
0.15870	36.5	9.7	13.2	49.7	22.9	65.5	55.5	15.8	32.6	L	
0.53280	35.9	25.1	13.3	49.2	38.4	56.0	46.0	6.8	7.6	L	
0.58674	34.2	24.3	13.3	47.5	37.6	56.0	46.0	8.5	8.4	L	
0.65112	31.0	24.0	13.3	44.3	37.3	56.0	46.0	11.7	8.7	L	
1.53327	25.4	18.2	13.4	38.8	31.6	56.0	46.0	17.2	14.4	L	
29.63915	24.8	17.9	15.1	39.9	33.0	60.0	50.0	20.1	17.0	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

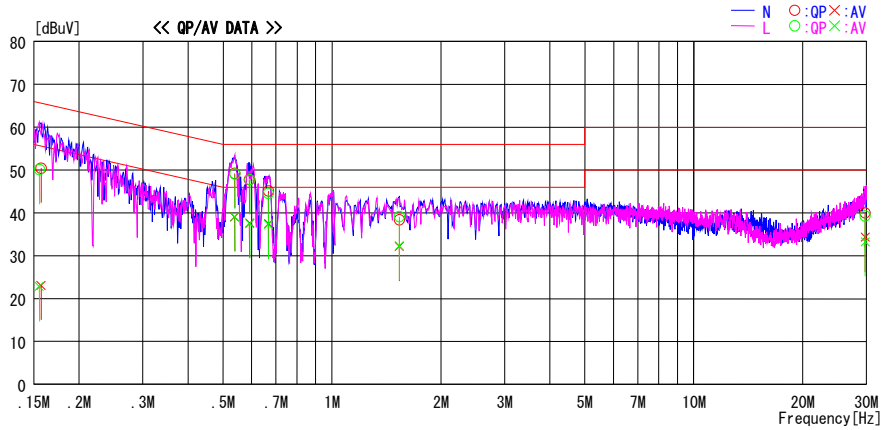
DATA OF CONDUCTED EMISSION TEST

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 11n-20/-40 5580MHz Ant0/1

LIMIT : FCC15.207 QP
 FCC15.207 AV



Frequency [MHz]	Reading Level		Corr. Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15696	37.2	9.9	13.2	50.4	23.1	65.6	55.6	15.2	32.5	N	
0.53802	35.9	25.8	13.3	49.2	39.1	56.0	46.0	6.8	6.9	N	
0.59196	34.5	24.3	13.3	47.8	37.6	56.0	46.0	8.2	8.4	N	
0.66852	31.8	24.2	13.3	45.1	37.5	56.0	46.0	10.9	8.5	N	
1.53327	25.0	18.8	13.4	38.4	32.2	56.0	46.0	17.6	13.8	N	
29.75945	24.9	19.2	15.1	40.0	34.3	60.0	50.0	20.0	15.7	N	
0.15522	36.9	9.6	13.2	50.1	22.8	65.7	55.7	15.6	32.9	L	
0.53889	35.8	25.8	13.3	49.1	39.1	56.0	46.0	6.9	6.9	L	
0.59283	34.5	24.2	13.3	47.8	37.5	56.0	46.0	8.2	8.5	L	
0.66678	31.2	24.0	13.3	44.5	37.3	56.0	46.0	11.5	8.7	L	
1.53327	25.7	18.9	13.4	39.1	32.3	56.0	46.0	16.9	13.7	L	
29.75945	24.2	18.2	15.1	39.3	33.3	60.0	50.0	20.7	16.7	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.

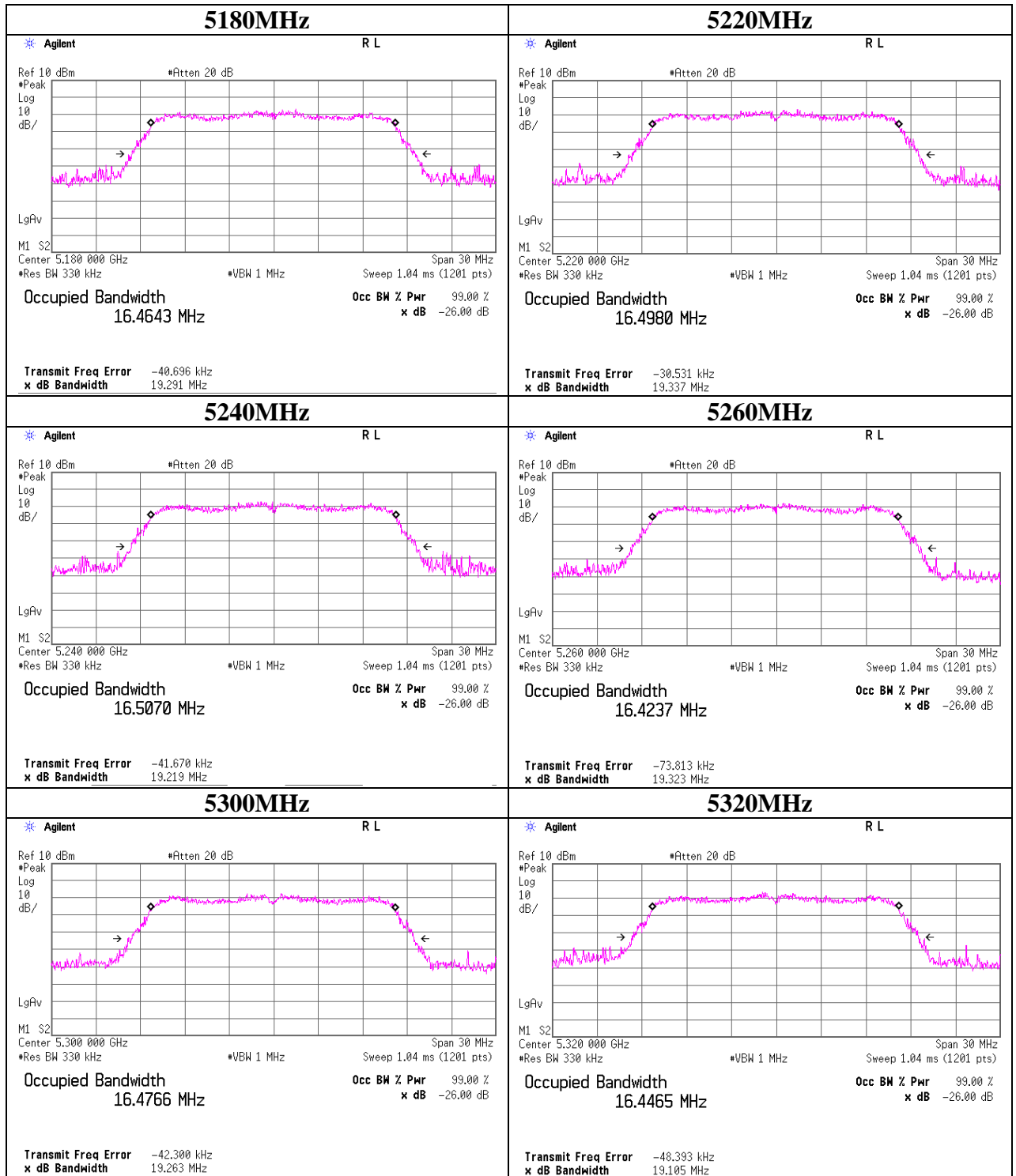
26dB Emission Bandwidth and 99% Occupied Bandwidth

Test place Head Office EMC Lab. No.11 Measurement room
Report No. 30KE0072-HO-02
Date 09/17/2010
Temperature/ Humidity 26deg.C. / 40%
Engineer Satofumi Matsuyama
Mode 11a Tx

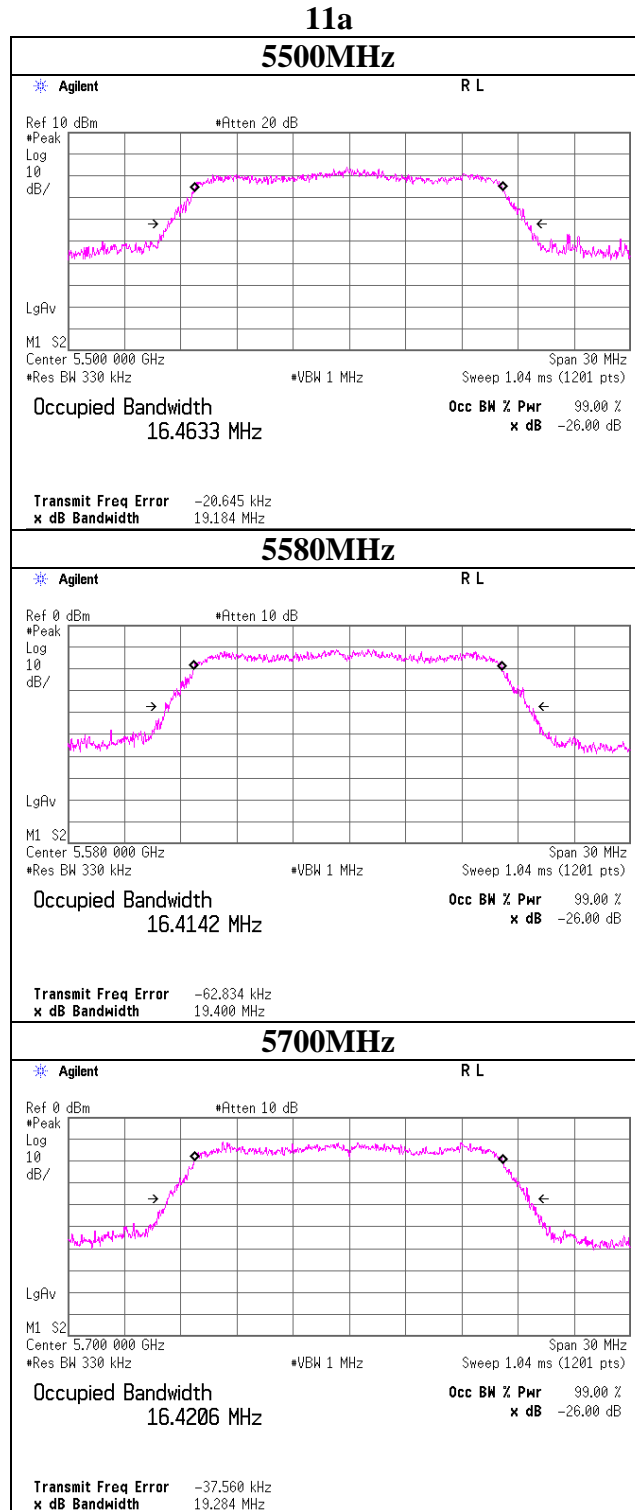
Frequency [MHz]	26dB Emission Bandwidth [MHz]	99% Occupied Bandwidth [MHz]	Limit [MHz]
5180	19.291	16.4643	-
5220	19.337	16.4980	-
5240	19.219	16.5070	-
5260	19.323	16.4237	-
5300	19.263	16.4766	-
5320	19.105	16.4465	-
5500	19.184	16.4633	-
5580	19.430	16.4142	-
5700	19.284	16.4206	-

26dB Emission Bandwidth and 99% Occupied Bandwidth

11a



26dB Emission Bandwidth and 99% Occupied Bandwidth



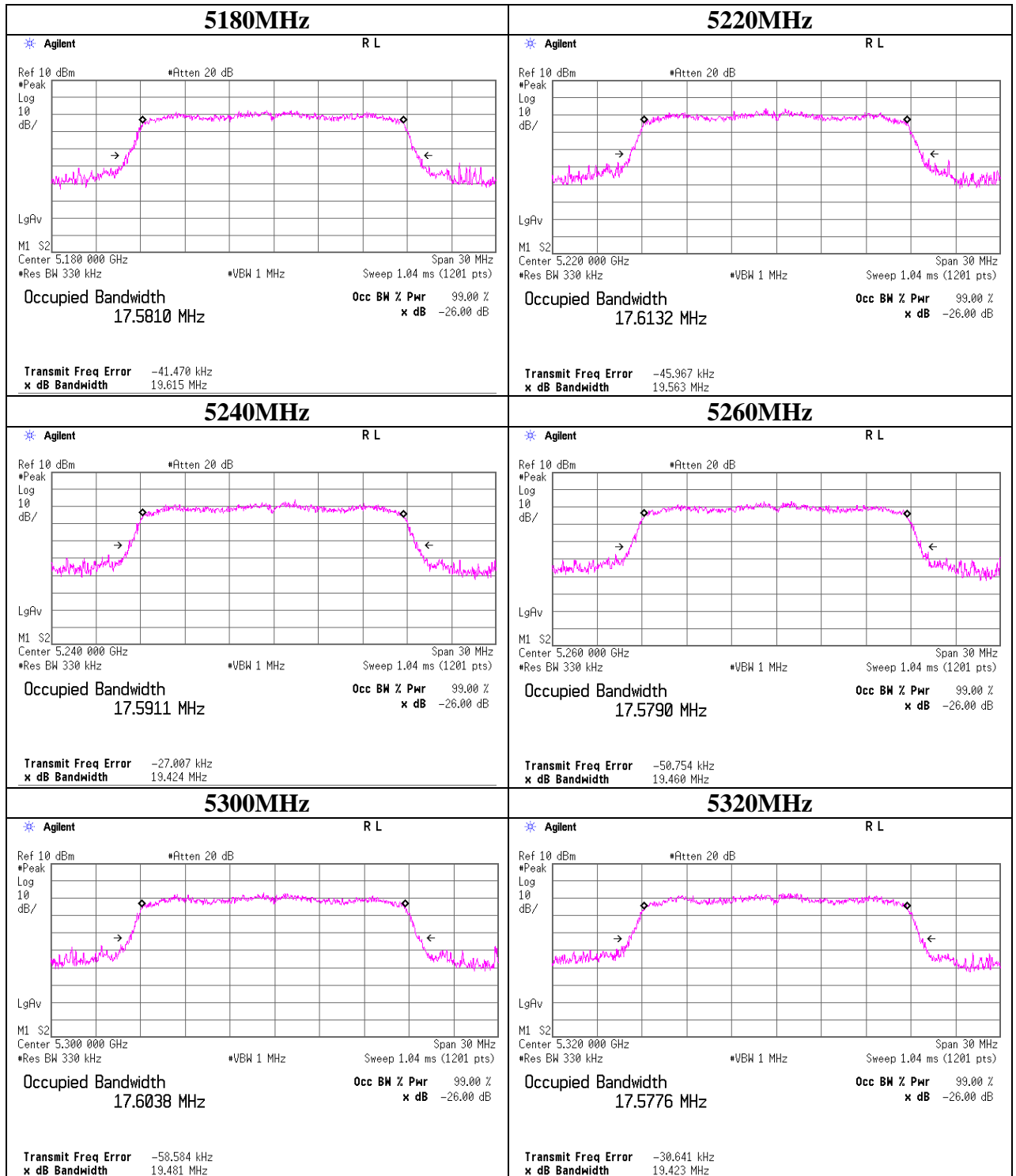
26dB Emission Bandwidth and 99% Occupied Bandwidth

Test place : Head Office EMC Lab. No.11 Measurement room
Report No. : 30KE0072-HO-02
Date : 09/17/2010
Temperature/ Humidity : 26deg.C. / 40%
Engineer : Satofumi Matsuyama
Mode : 11n-20 Tx

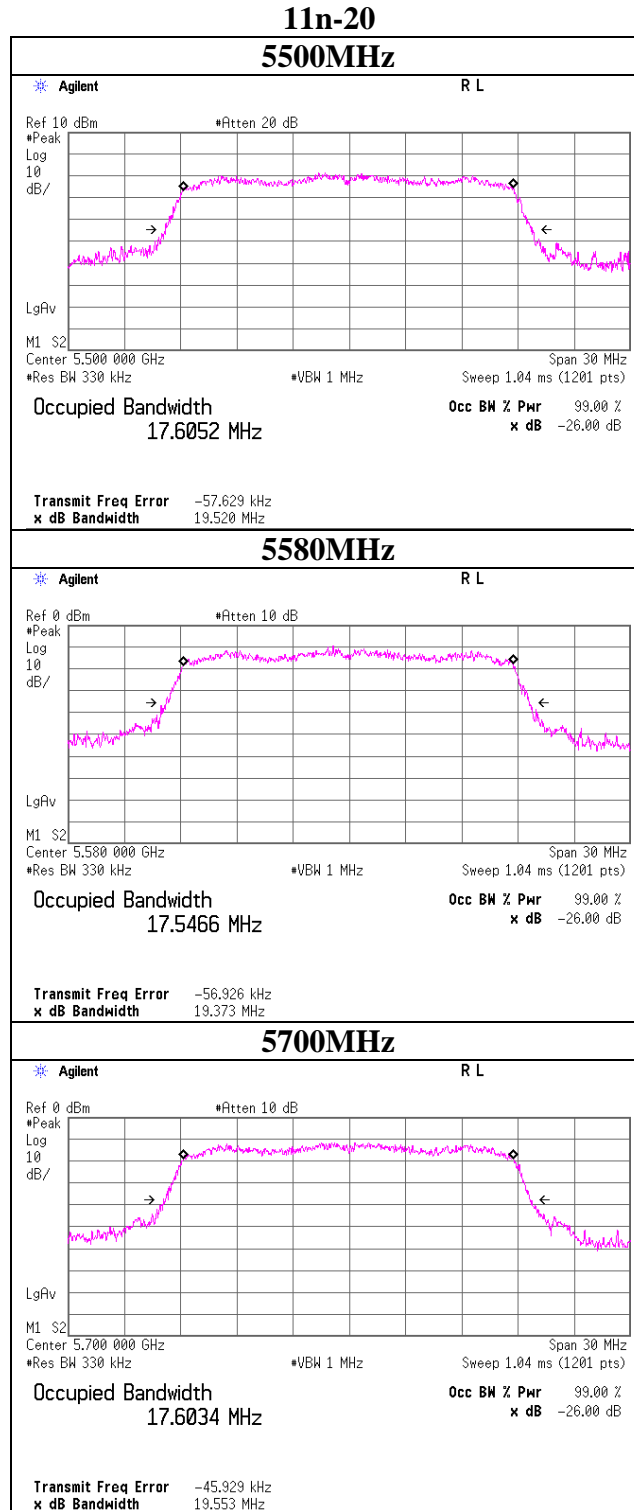
Frequency [MHz]	26dB Emission Bandwidth [MHz]	99% Occupied Bandwidth [MHz]	Limit [MHz]
5180	19.615	17.5810	-
5220	19.583	17.6132	-
5240	19.424	17.5911	-
5260	19.460	17.5790	-
5300	19.481	17.6038	-
5320	19.423	17.5776	-
5500	19.520	17.6052	-
5580	19.373	17.5466	-
5700	19.553	17.6034	-

26dB Emission Bandwidth and 99% Occupied Bandwidth

11n-20



26dB Emission Bandwidth and 99% Occupied Bandwidth



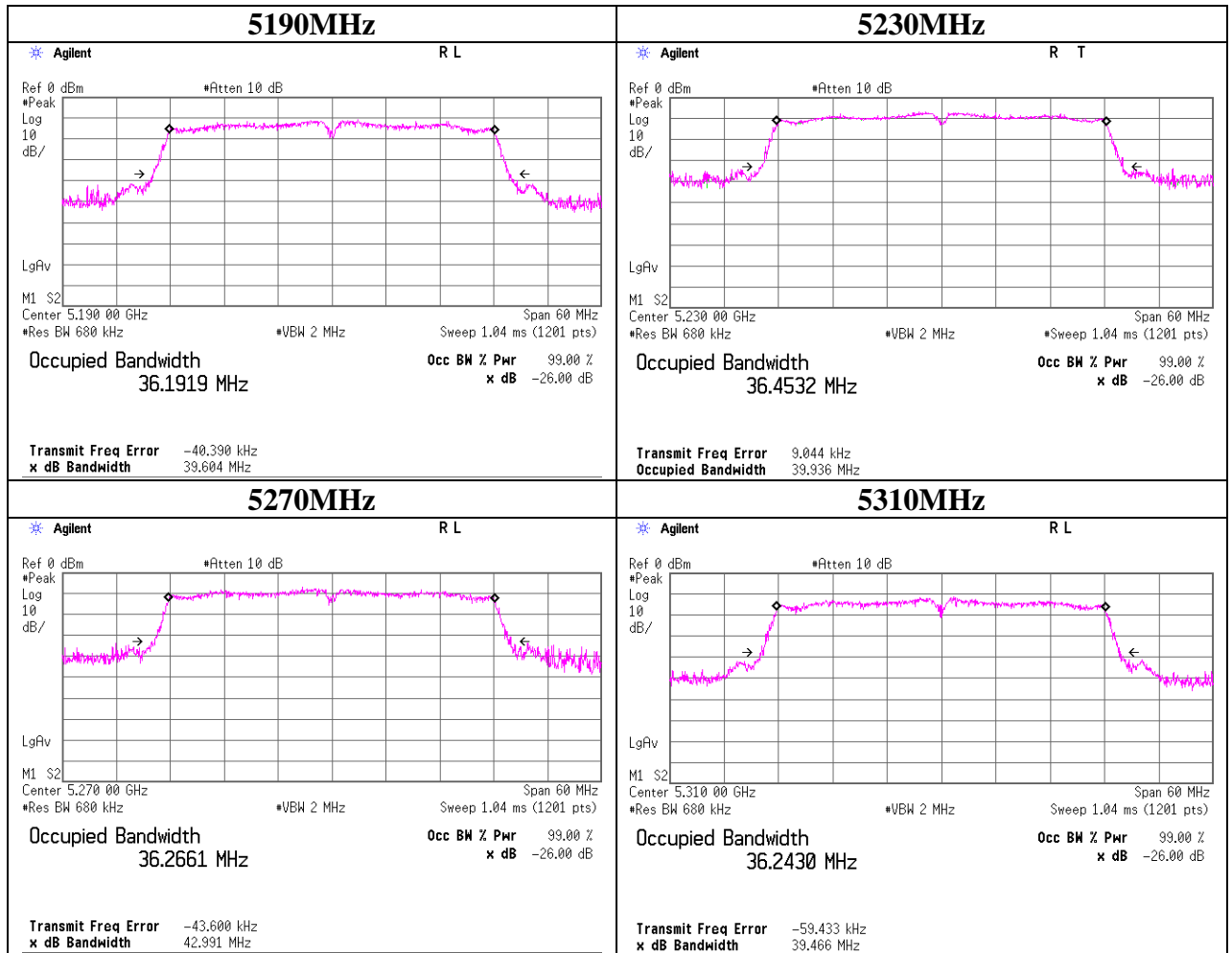
26dB Emission Bandwidth and 99% Occupied Bandwidth

Test place : Head Office EMC Lab. No.11 Measurement room
Report No. : 30KE0072-HO-02
Date : 09/17/2010
Temperature/ Humidity : 26deg.C. / 40%
Engineer : Satofumi Matsuyama
Mode : 11n-40 Tx

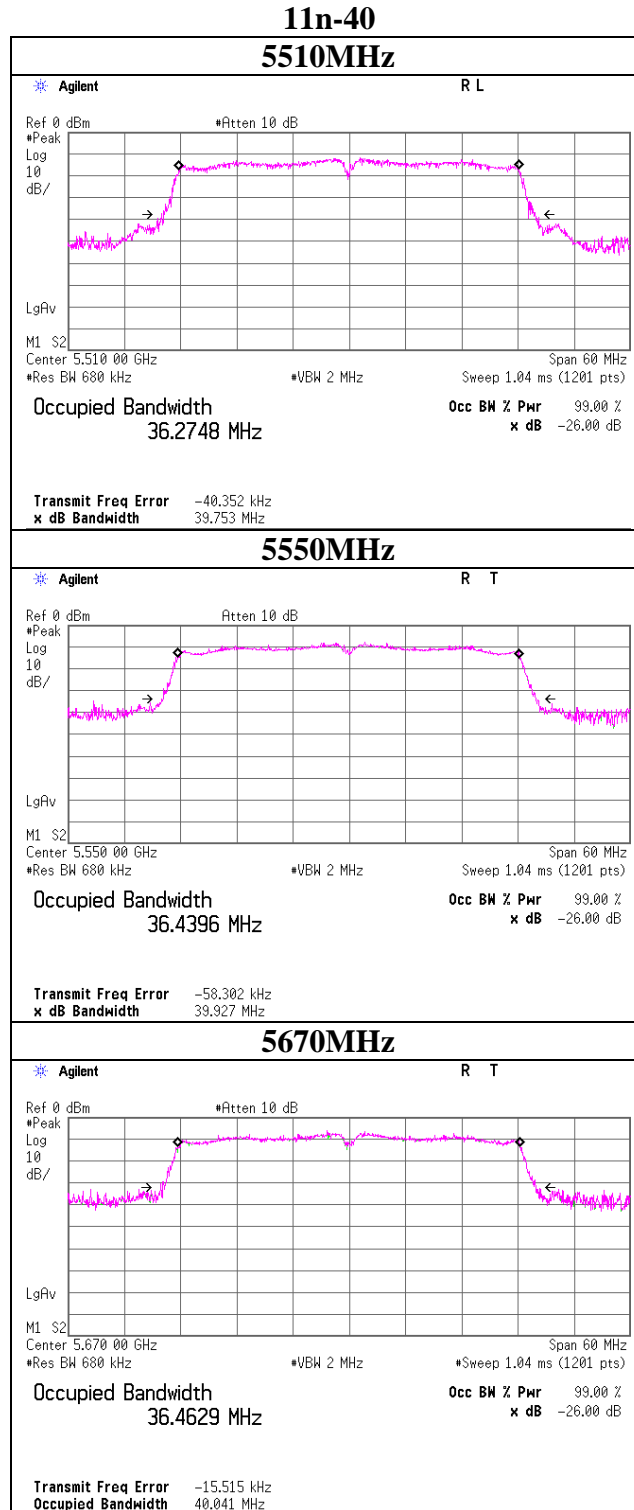
Frequency [MHz]	26dB Emission Bandwidth [MHz]	99% Occupied Bandwidth [MHz]	Limit [MHz]
5190	39.604	36.1919	-
5230	39.936	36.4532	-
5270	42.991	36.2661	-
5310	39.468	36.2430	-
5510	39.753	36.2748	-
5550	39.927	36.4396	-
5670	40.041	36.4629	-

26dB Emission Bandwidth and 99% Occupied Bandwidth

11n-40



26dB Emission Bandwidth and 99% Occupied Bandwidth



20dB Bandwidth

Test place Head Office EMC Lab. No.11 Semi Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/17/2010
Temperature/ Humidity 26deg.C. / 40%
Engineer Satofumi Matsuyama
Mode Tx

11a

Frequency [MHz]	20dB Bandwidth [MHz]	Limit [MHz]
5580	18.534	-
5660	18.694	-

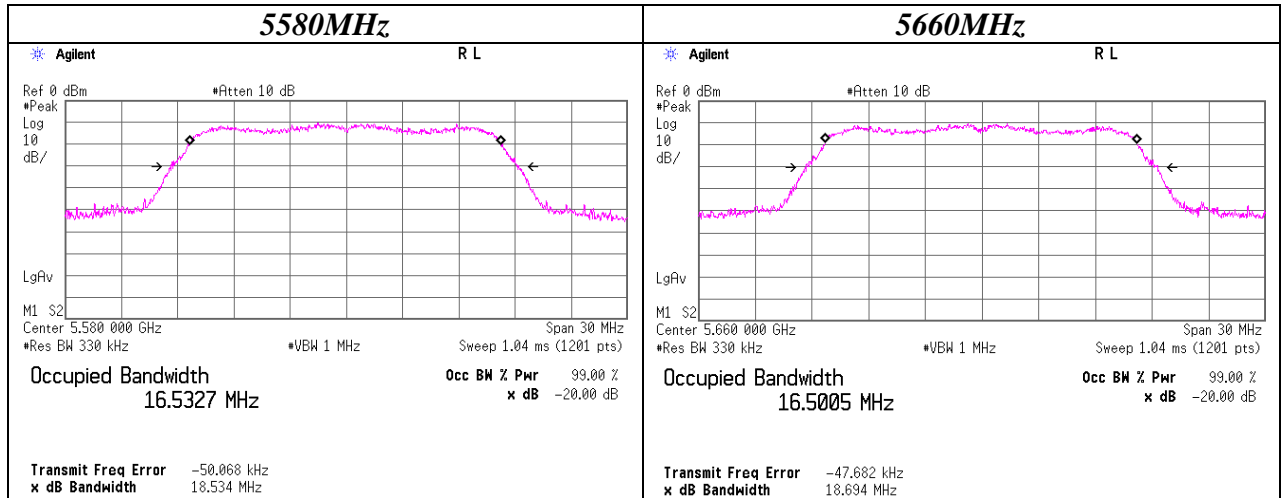
11n-20

Frequency [MHz]	20dB Bandwidth [MHz]	Limit [MHz]
5580	19.018	-
5660	19.148	-

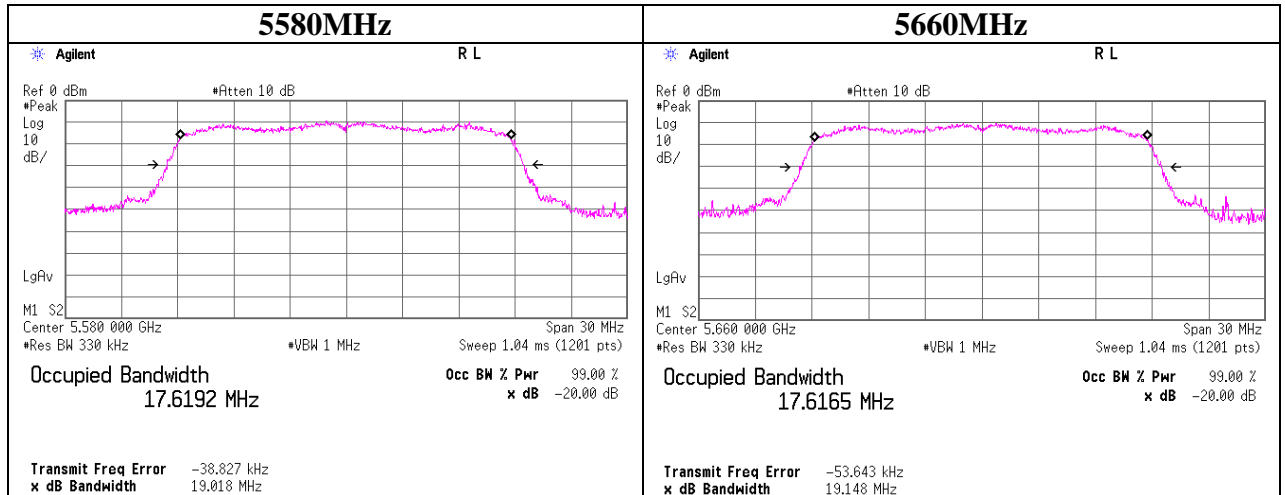
11n-40

Frequency [MHz]	20dB Bandwidth [MHz]	Limit [MHz]
5550	38.64	-
5670	38.78	-

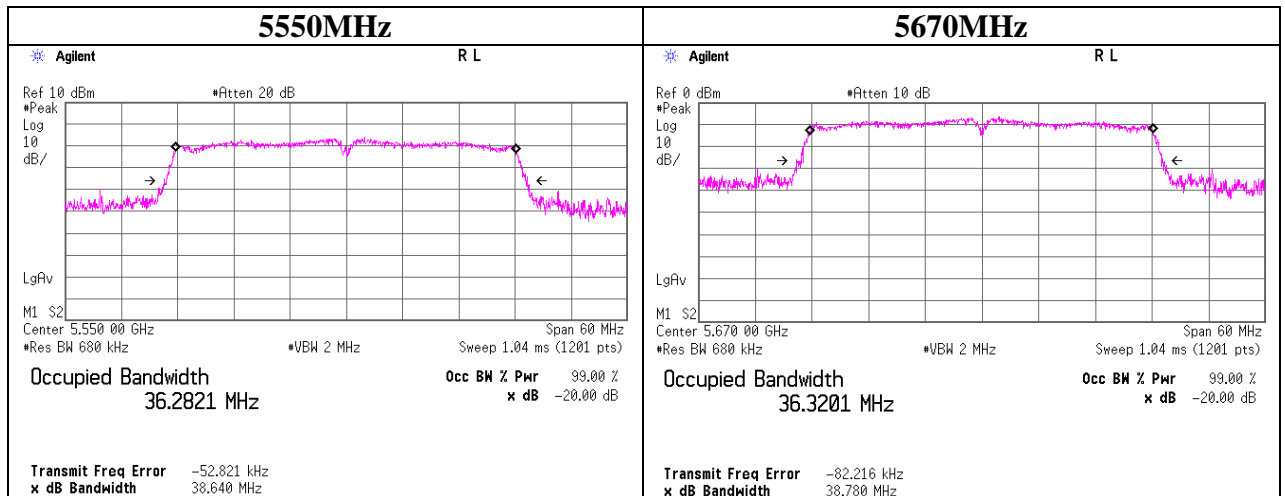
20dB Bandwidth
11a



11n-20



11n-40



Maximum Peak Output Power

Test place : Head Office EMC Lab. No. 3 Measurement Room
Report No. : 30KE0072-HO
Date : 09/13/2010
Temperature/ Humidity : 24deg.C. / 52%
Engineer : Kazuya Yoshioka
Mode : 11a Tx

Antenna 0

Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result (Cond.) [dBm]	Result (e.i.r.p.) [dBm]	Limit (Cond.) [dBm]	Limit (e.i.r.p.) [dBm]	Margin (Cond.) [dB]	Margin (e.i.r.p.) [dB]
5180.0	-0.05	2.64	10.01	-1.00	12.60	11.60	16.85	-	4.25	-
5220.0	-0.08	2.64	10.01	-1.00	12.57	11.57	16.86	-	4.29	-
5240.0	-0.06	2.63	10.01	-1.00	12.58	11.58	16.83	-	4.25	-
5260.0	-0.95	2.63	10.01	-0.80	11.69	10.89	23.86	-	12.17	-
5300.0	-0.85	2.63	10.01	-0.80	11.79	10.99	23.84	-	12.05	-
5320.0	-0.04	2.63	10.01	-0.80	12.60	11.80	23.81	-	11.21	-
5500.0	-0.08	2.61	10.01	-0.60	12.54	11.94	23.85	-	11.31	-
5580.0	-3.73	2.63	10.01	-0.60	8.91	8.31	23.88	-	14.97	-
5700.0	-3.91	2.66	10.00	-0.60	8.75	8.15	23.85	-	15.10	-

Antenna 1

Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result (Cond.) [dBm]	Result (e.i.r.p.) [dBm]	Limit (Cond.) [dBm]	Limit (e.i.r.p.) [dBm]	Margin (Cond.) [dB]	Margin (e.i.r.p.) [dB]
5180.0	0.60	2.64	10.01	1.30	13.25	14.55	16.85	-	3.60	-
5220.0	0.54	2.64	10.01	1.30	13.19	14.49	16.86	-	3.67	-
5240.0	0.53	2.63	10.01	1.30	13.17	14.47	16.83	-	3.66	-
5260.0	0.10	2.63	10.01	2.30	12.74	15.04	23.86	-	11.12	-
5300.0	-0.14	2.63	10.01	2.30	12.50	14.80	23.84	-	11.34	-
5320.0	0.61	2.63	10.01	2.30	13.25	15.55	23.81	-	10.56	-
5500.0	0.01	2.61	10.01	1.60	12.63	14.23	23.85	-	11.22	-
5580.0	-3.04	2.63	10.01	1.60	9.60	11.20	23.88	-	14.28	-
5700.0	-3.75	2.66	10.00	1.60	8.91	10.51	23.85	-	14.94	-

Result(Cond.) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss

Result(e.i.r.p.) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss + Antenna

15.407(a)(1) Limit(Cond.) = 16.98dBm(50mW) or 4 + 10log(26dB BW) dBm

15.407(a)(2) Limit(Cond.) = 23.97dBm(250mW) or 11 + 10log(26dB BW) dBm

ON time was only measured using Gate function.

UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

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Maximum Peak Output Power

Test place : Head Office EMC Lab. No. 3 Measurement Room
Report No. : 30KE0072-HO
Date : 09/13/2010
Temperature/ Humidity : 24deg.C. / 52%
Engineer : Kazuya Yoshioka
Mode : 11n-20 Tx

Antenna 0

Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result (Cond.) [dBm]	Result (e.i.r.p.) [dBm]	Limit (Cond.) [dBm]	Limit (e.i.r.p.) [dBm]	Margin (Cond.) [dB]	Margin (e.i.r.p.) [dB]
5180.0	-0.06	2.64	10.01	-1.00	12.59	11.59	16.92	-	4.33	-
5220.0	-0.07	2.64	10.01	-1.00	12.58	11.58	16.91	-	4.33	-
5240.0	-0.02	2.63	10.01	-1.00	12.62	11.62	16.88	-	4.26	-
5260.0	-0.02	2.63	10.01	-0.80	12.62	11.82	23.89	-	11.27	-
5300.0	-0.21	2.63	10.01	-0.80	12.43	11.63	23.89	-	11.46	-
5320.0	-0.21	2.63	10.01	-0.80	12.43	11.63	23.88	-	11.45	-
5500.0	-1.96	2.61	10.01	-0.60	10.66	10.06	23.90	-	13.24	-
5580.0	-3.21	2.63	10.01	-0.60	9.43	8.83	23.87	-	14.44	-
5700.0	-4.00	2.66	10.00	-0.60	8.66	8.06	23.91	-	15.25	-

Antenna 1

Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result (Cond.) [dBm]	Result (e.i.r.p.) [dBm]	Limit (Cond.) [dBm]	Limit (e.i.r.p.) [dBm]	Margin (Cond.) [dB]	Margin (e.i.r.p.) [dB]
5180.0	0.49	2.01	10.01	1.30	12.51	13.81	16.92	-	4.41	-
5220.0	0.77	2.01	10.01	1.30	12.79	14.09	16.91	-	4.12	-
5240.0	0.58	2.00	10.01	1.30	12.59	13.89	16.88	-	4.29	-
5260.0	0.56	2.00	10.01	2.30	12.57	14.87	23.89	-	11.32	-
5300.0	0.91	2.00	10.01	2.30	12.92	15.22	23.89	-	10.97	-
5320.0	0.72	2.00	10.01	2.30	12.73	15.03	23.88	-	11.15	-
5500.0	-0.48	2.61	10.01	1.60	12.14	13.74	23.90	-	11.76	-
5580.0	-3.02	2.63	10.01	1.60	9.62	11.22	23.87	-	14.25	-
5700.0	-3.47	2.66	10.00	1.60	9.19	10.79	23.91	-	14.72	-

Result(Cond.) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss

Result(e.i.r.p.) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss + Antenna

15.407(a)(1) Limit(Cond.) = 16.98dBm(50mW) or 4 + 10log(26dB BW) dBm

15.407(a)(2) Limit(Cond.) = 23.97dBm(250mW) or 11 + 10log(26dB BW) dBm

ON time was only measured using Gate function.

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Head Office EMC Lab.

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Facsimile : +81 596 24 8124

Maximum Peak Output Power

Test place : Head Office EMC Lab. No. 11 Measurement Room
Report No. : 30KE0072-HO
Date : 09/17/2010
Temperature/ Humidity : 26deg.C. / 40%
Engineer : Satofumi Matsuyama
Mode : 11n-40 Tx

Antenna 0

Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result (Cond.) [dBm]	Result (e.i.r.p.) [dBm]	Limit (Cond.) [dBm]	Limit (e.i.r.p.) [dBm]	Margin (Cond.) [dB]	Margin (e.i.r.p.) [dB]
5190.0	-3.72	2.64	10.01	-1.00	8.93	7.93	16.98	-	8.05	-
5230.0	0.04	2.63	10.01	-1.00	12.68	11.68	16.98	-	4.30	-
5270.0	0.14	2.63	10.01	-0.80	12.78	11.98	23.97	-	11.19	-
5310.0	-4.47	2.63	10.01	-0.80	8.17	7.37	23.97	-	15.80	-
5510.0	-4.40	2.61	10.01	-0.60	8.22	7.62	23.97	-	15.75	-
5550.0	1.11	2.61	10.01	-0.60	13.73	13.13	23.97	-	10.24	-
5670.0	0.71	2.65	10.00	-0.60	13.36	12.76	23.97	-	10.61	-

Antenna 1

Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result (Cond.) [dBm]	Result (e.i.r.p.) [dBm]	Limit (Cond.) [dBm]	Limit (e.i.r.p.) [dBm]	Margin (Cond.) [dB]	Margin (e.i.r.p.) [dB]
5190.0	-2.91	2.64	10.01	1.30	9.74	11.04	16.98	-	7.24	-
5230.0	0.60	2.63	10.01	1.30	13.24	14.54	16.98	-	3.74	-
5270.0	0.70	2.63	10.01	2.30	13.34	15.64	23.97	-	10.63	-
5310.0	-3.46	2.63	10.01	2.30	9.18	11.48	23.97	-	14.79	-
5510.0	-3.58	2.61	10.01	1.60	9.04	10.64	23.97	-	14.93	-
5550.0	1.67	2.61	10.01	1.60	14.29	15.89	23.97	-	9.68	-
5670.0	1.77	2.65	10.00	1.60	14.42	16.02	23.97	-	9.55	-

Result(Cond.) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss

Result(e.i.r.p.) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss + Antenna

15.407(a)(1) Limit(Cond.) = 16.98dBm(50mW) or 4 + 10log(26dB BW) dBm

15.407(a)(2) Limit(Cond.) = 23.97dBm(250mW) or 11 + 10log(26dB BW) dBm

ON time was only measured using Gate function.

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Peak Power Spectral Density

Test place Head Office EMC Lab. No.3 Measurement Room
Report No. 30KE0072-HO-02
Date 09/13/2010
Temperature/ Humidity 24deg.C. / 52%
Engineer Kazuya Yoshioka
Mode 11a Tx

Antenna 1

Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	ENBW [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5180.0	-8.77	2.64	10.01	0.20	3.68	4.00	0.32
5220.0	-10.25	2.64	10.01	0.20	2.20	4.00	1.80
5240.0	-8.86	2.63	10.01	0.20	3.58	4.00	0.42
5260.0	-10.20	2.63	10.01	0.20	2.24	11.00	8.76
5300.0	-9.99	2.63	10.01	0.20	2.45	11.00	8.55
5320.0	-9.84	2.63	10.01	0.20	2.60	11.00	8.40
5500.0	-9.36	2.61	10.01	0.20	3.06	11.00	7.94
5580.0	-13.46	2.63	10.01	0.20	-1.02	11.00	12.02
5700.0	-13.97	2.66	10.00	0.20	-1.51	11.00	12.51

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator - ENBW
*ENBW: Equivalent Noise Band Width

ON time was only measured using Gate function.

Peak Power Spectral Density

Test place : Head Office EMC Lab. No.3 Measurement Room
Report No. : 30KE0072-HO-02
Date : 09/13/2010
Temperature/ Humidity : 24deg.C. / 52%
Engineer : Kazuya Yoshioka
Mode : 11n-20 Tx

Antenna 1

Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	ENBW [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5180.0	-8.92	2.64	10.01	0.20	3.53	4.00	0.47
5220.0	-8.76	2.64	10.01	0.20	3.69	4.00	0.31
5240.0	-8.66	2.63	10.01	0.20	3.78	4.00	0.22
5260.0	-9.14	2.63	10.01	0.20	3.30	11.00	7.70
5300.0	-8.42	2.63	10.01	0.20	4.02	11.00	6.98
5320.0	-8.95	2.63	10.01	0.20	3.49	11.00	7.51
5500.0	-8.56	2.61	10.01	0.20	3.86	11.00	7.14
5580.0	-11.77	2.63	10.01	0.20	0.67	11.00	10.33
5700.0	-12.12	2.66	10.00	0.20	0.34	11.00	10.66

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator - ENBW
*ENBW: Equivalent Noise Band Width

ON time was only measured using Gate function.

Peak Power Spectral Density

Test place : Head Office EMC Lab. No.11 Measurement Room
Report No. : 30KE0072-HO-02
Date : 09/17/2010
Temperature/ Humidity : 26deg.C. / 40%
Engineer : Satofumi Matsuyama
Mode : 11n-40 Tx

Antenna 1

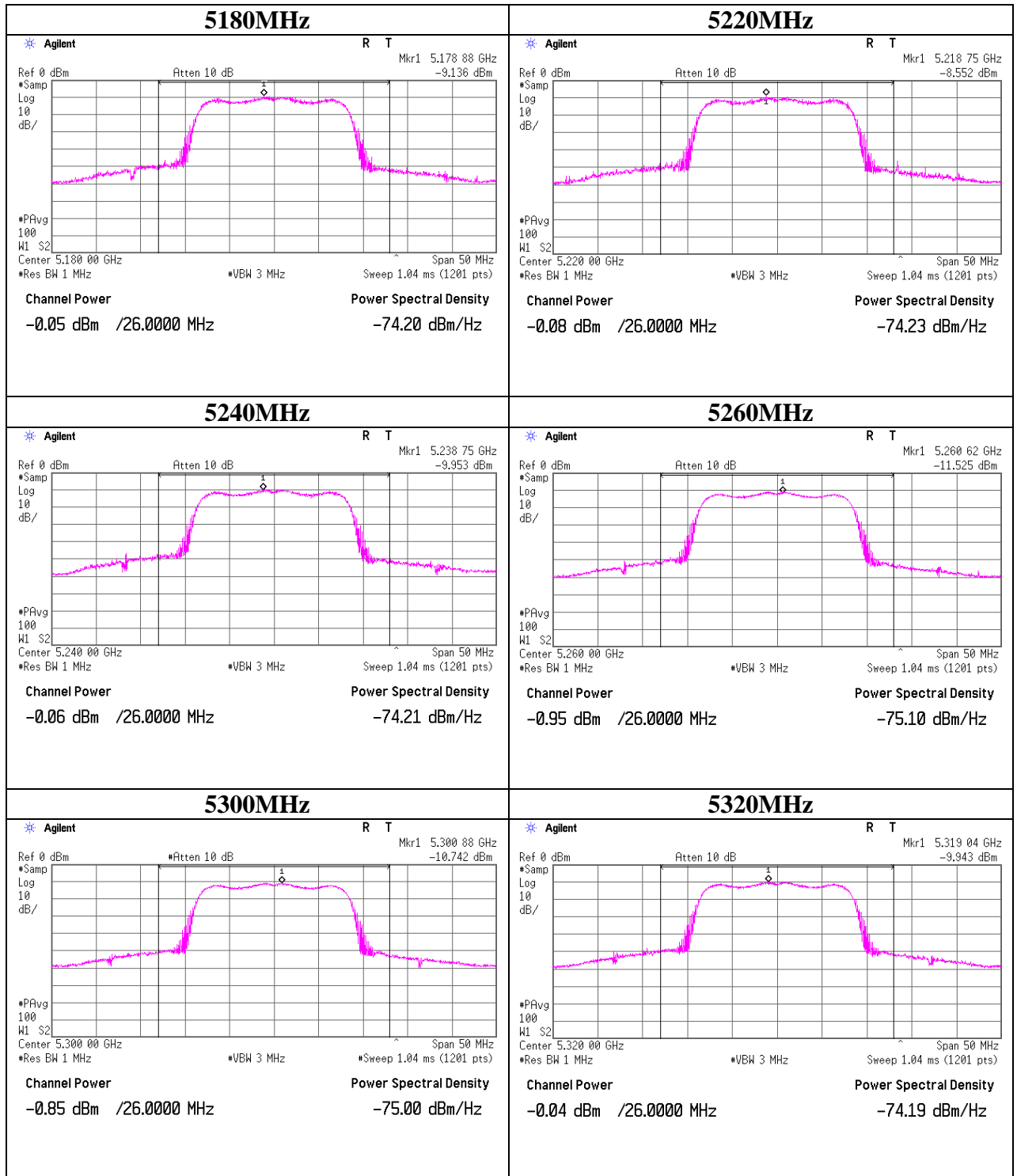
Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	ENBW [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5190.0	-15.57	2.64	10.01	0.20	-3.12	4.00	7.12
5230.0	-12.45	2.64	10.01	0.20	0.01	4.00	4.00
5270.0	-12.34	2.63	10.01	0.20	0.10	11.00	10.90
5310.0	-16.20	2.63	10.01	0.20	-3.76	11.00	14.76
5510.0	-16.27	2.63	10.01	0.20	-3.83	11.00	14.83
5550.0	-11.21	2.63	10.01	0.20	1.23	11.00	9.77
5670.0	-11.46	2.66	10.00	0.20	1.00	11.00	10.00

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator - ENBW
*ENBW: Equivalent Noise Band Width

ON time was only measured using Gate function.

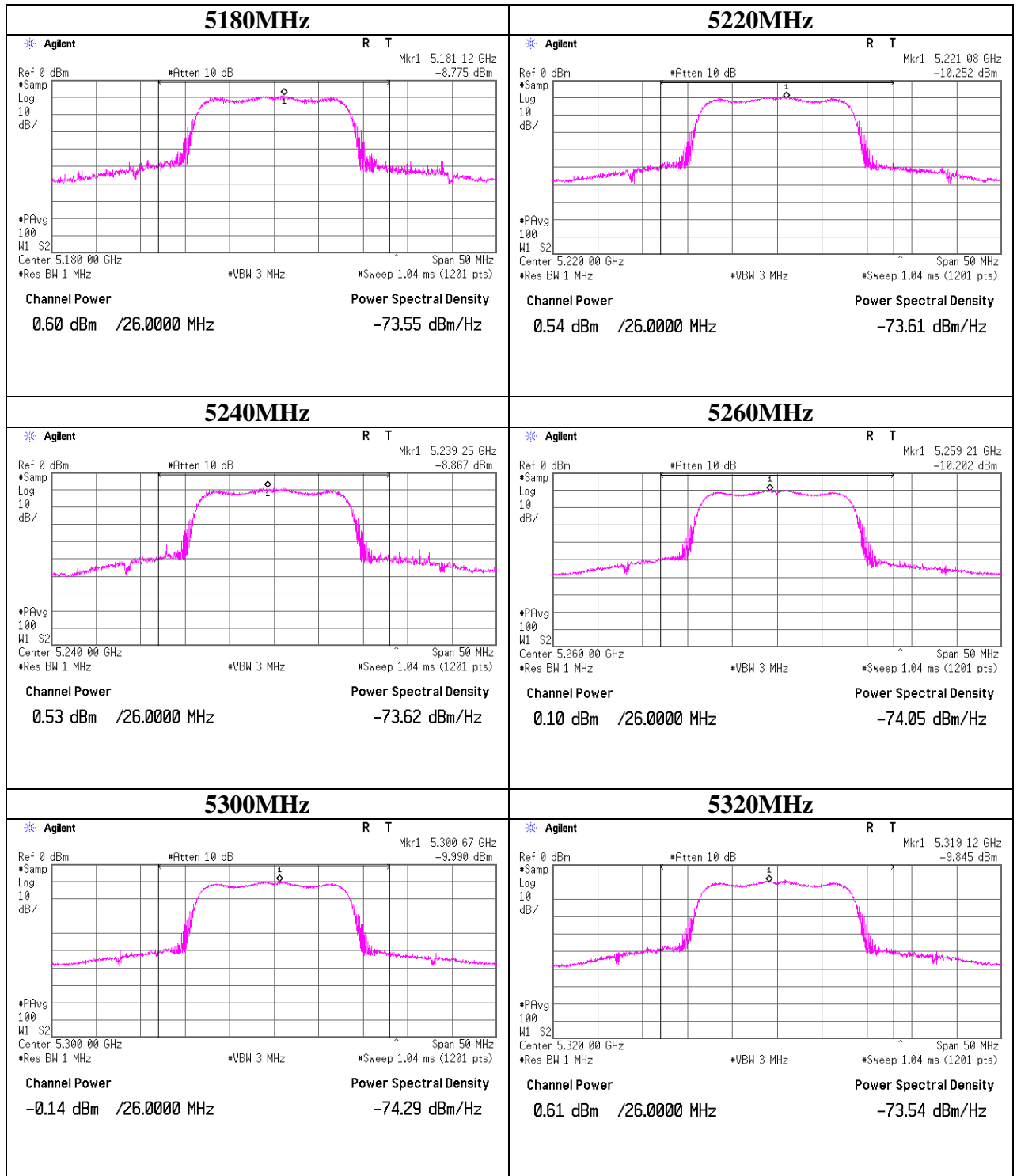
Maximum Peak Output Power & Peak Power Spectral Density

11a Antenna 0

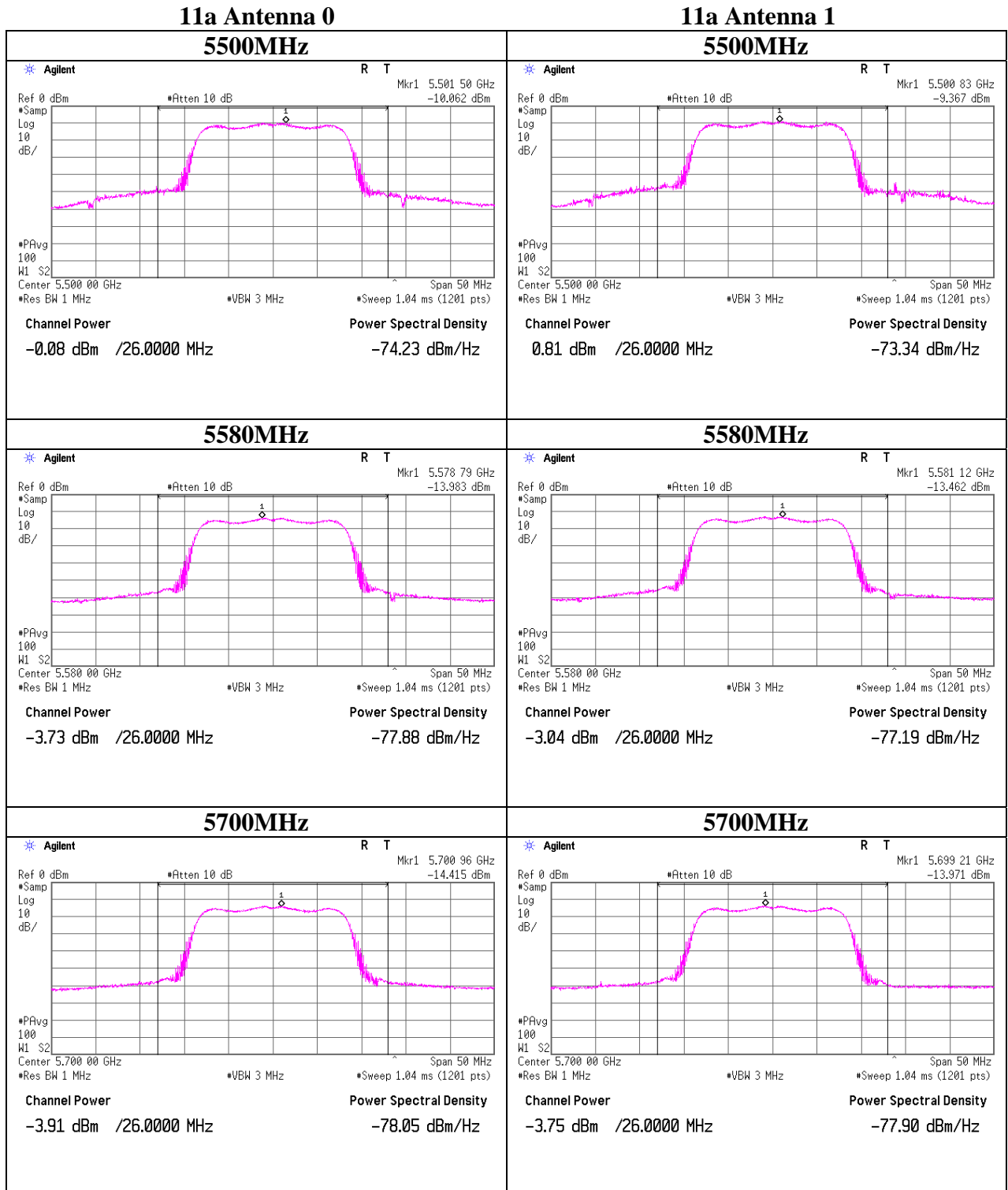


Maximum Peak Output Power & Peak Power Spectral Density

11a Antenna 1

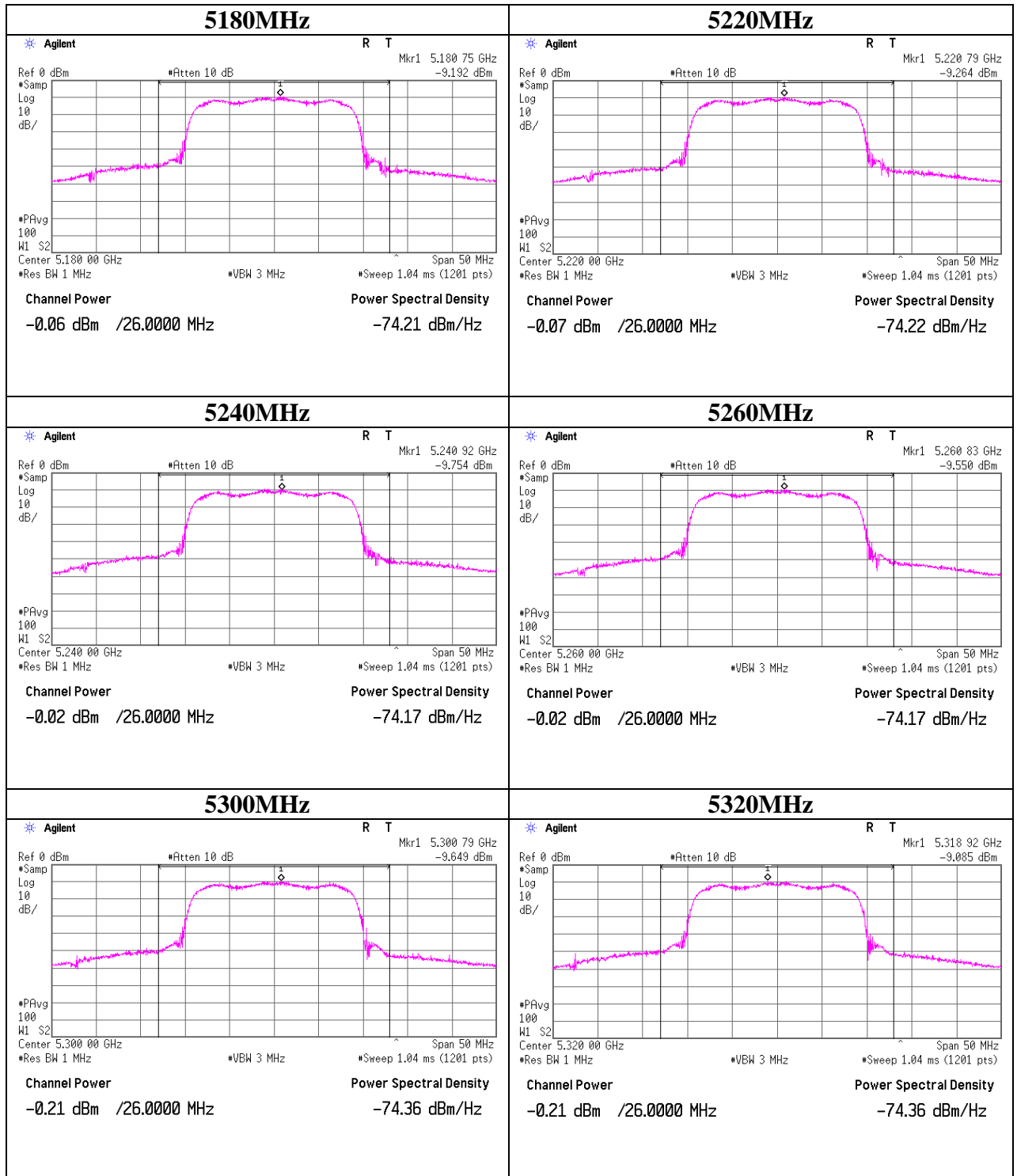


Maximum Peak Output Power & Peak Power Spectral Density



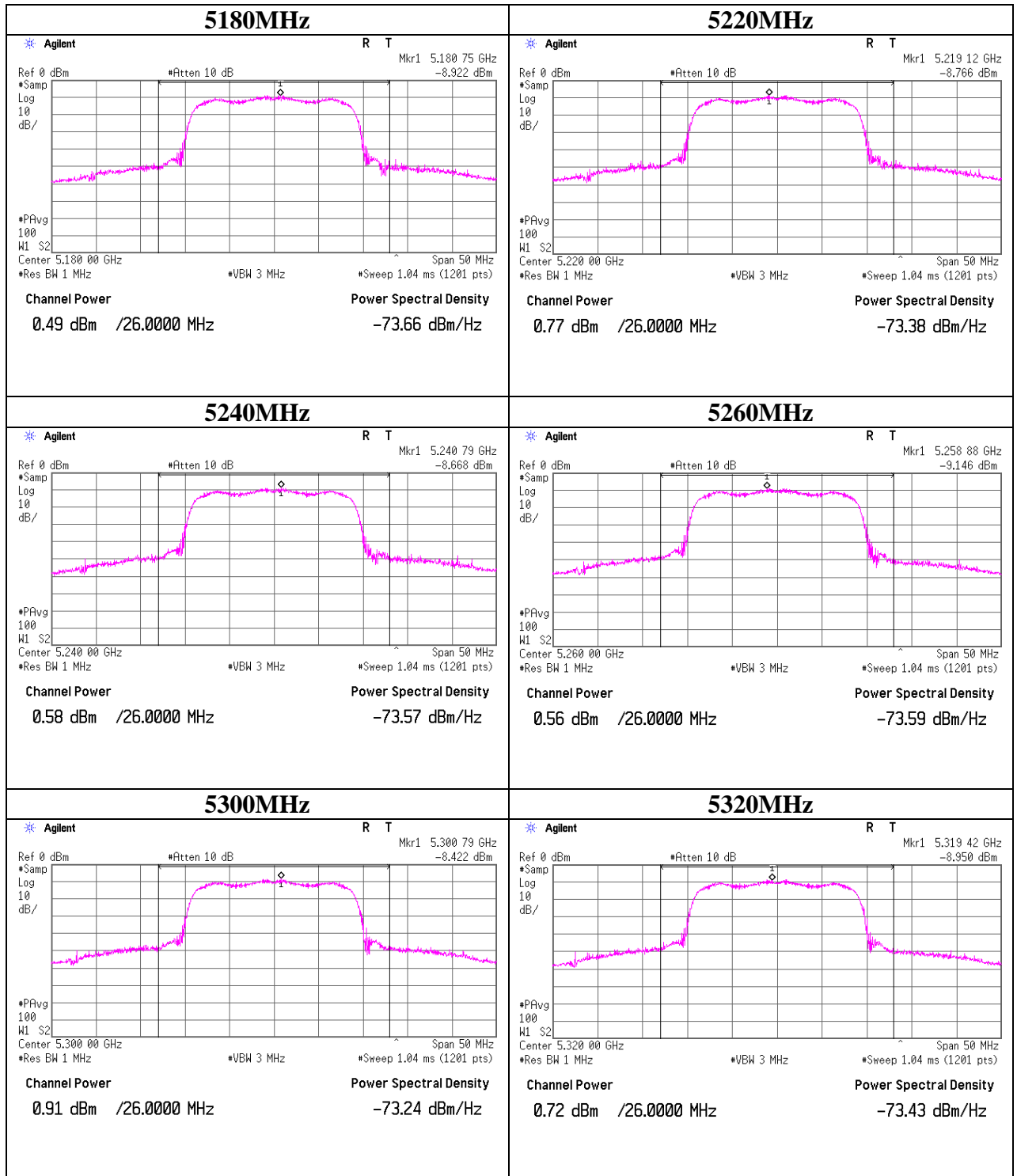
Maximum Peak Output Power & Peak Power Spectral Density

11n-20 Antenna 0



Maximum Peak Output Power & Peak Power Spectral Density

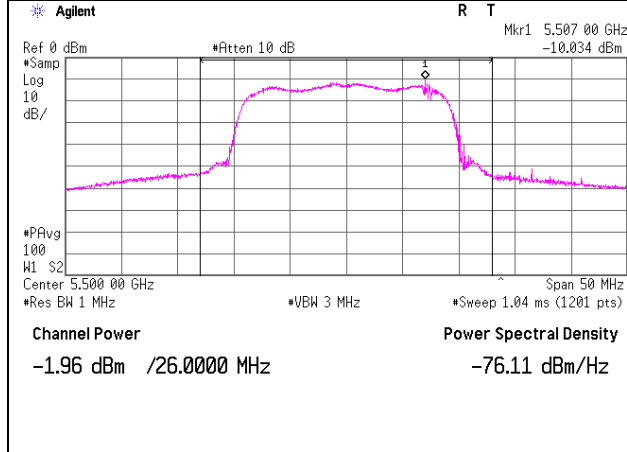
11n-20 Antenna 1



Maximum Peak Output Power & Peak Power Spectral Density

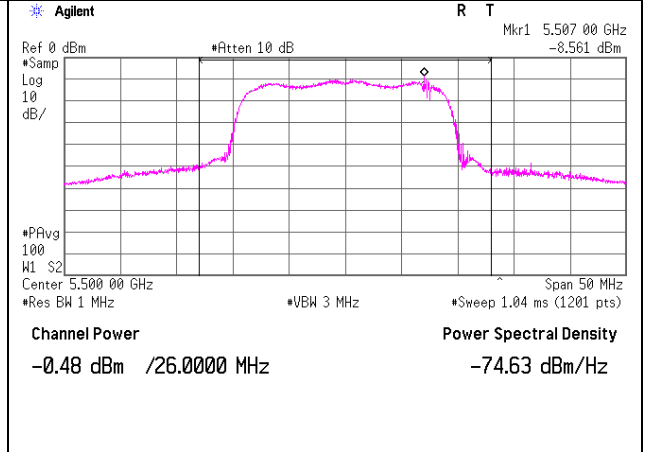
11n-20 Antenna 0

5500MHz

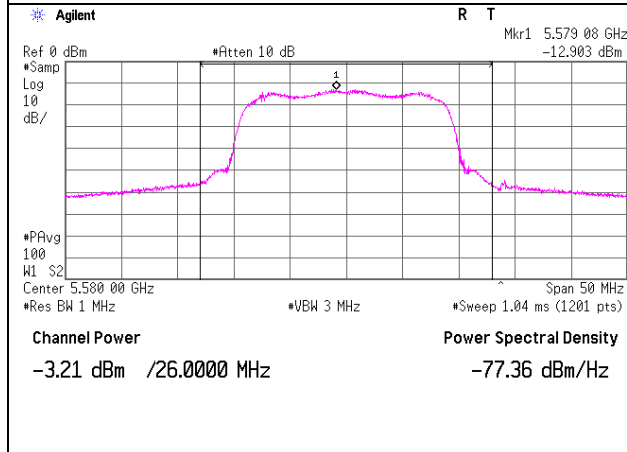


11n-20 Antenna 1

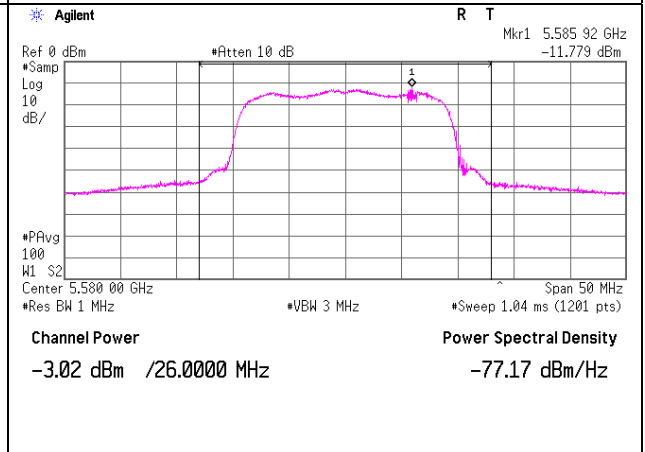
5500MHz



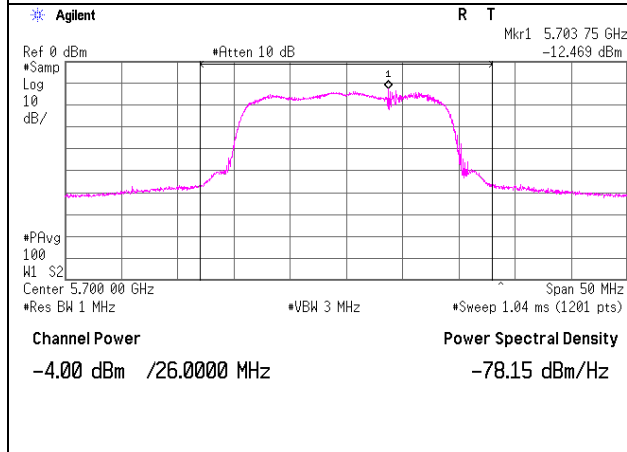
5580MHz



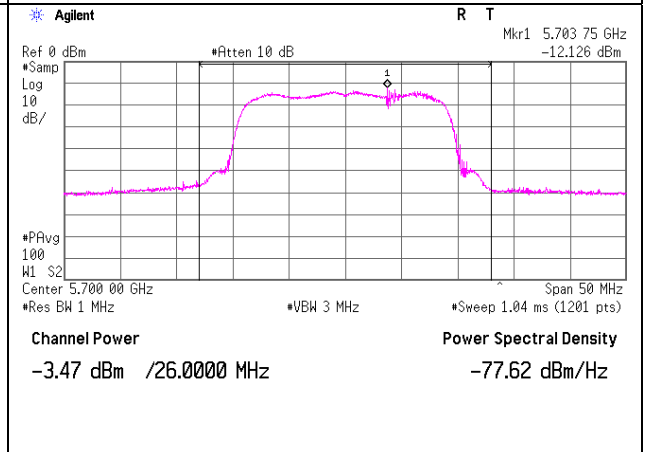
5580MHz



5700MHz

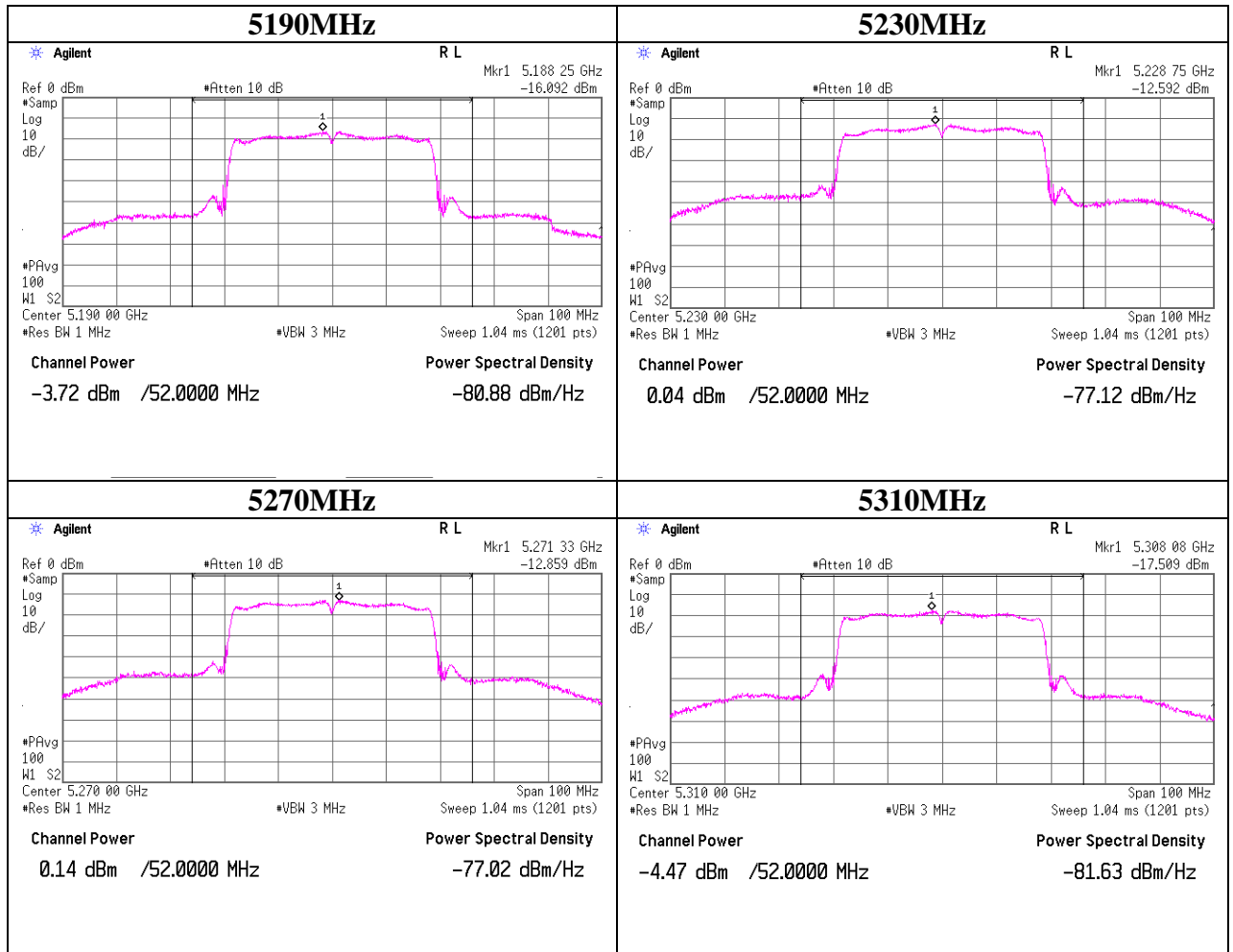


5700MHz



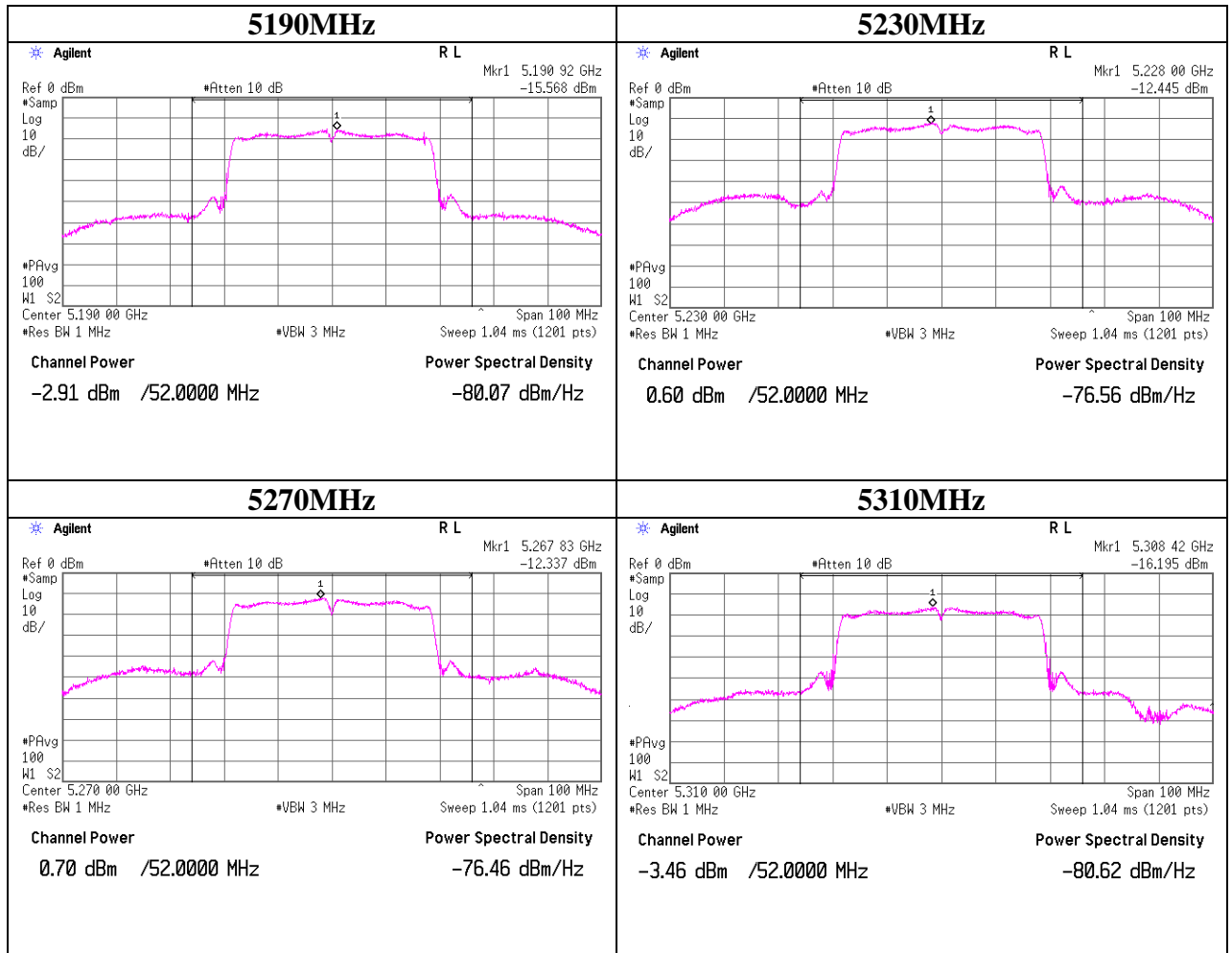
Maximum Peak Output Power & Peak Power Spectral Density

11n-40 Antenna 0



Maximum Peak Output Power & Peak Power Spectral Density

11n-40 Antenna 1



UL Japan, Inc.

Head Office EMC Lab.

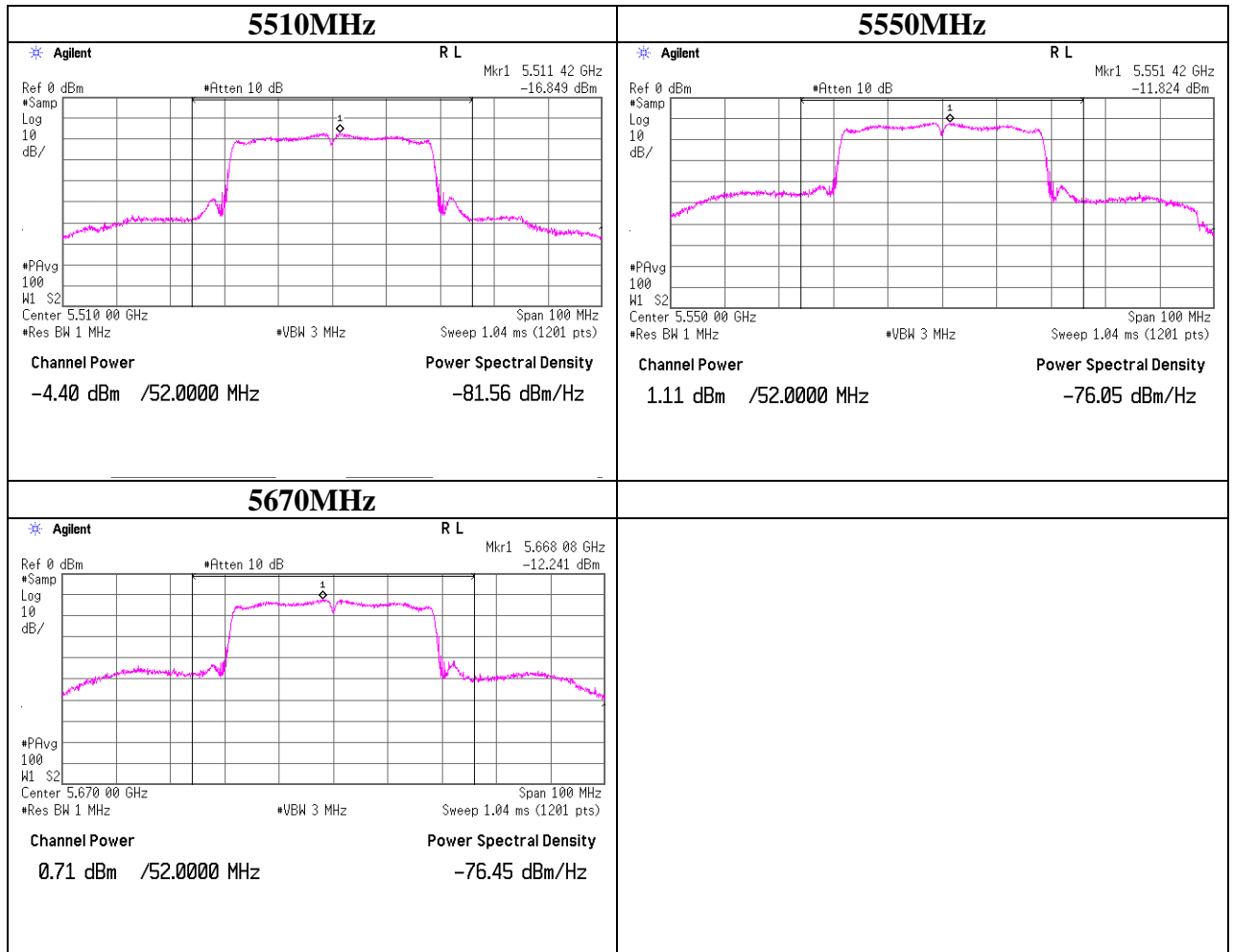
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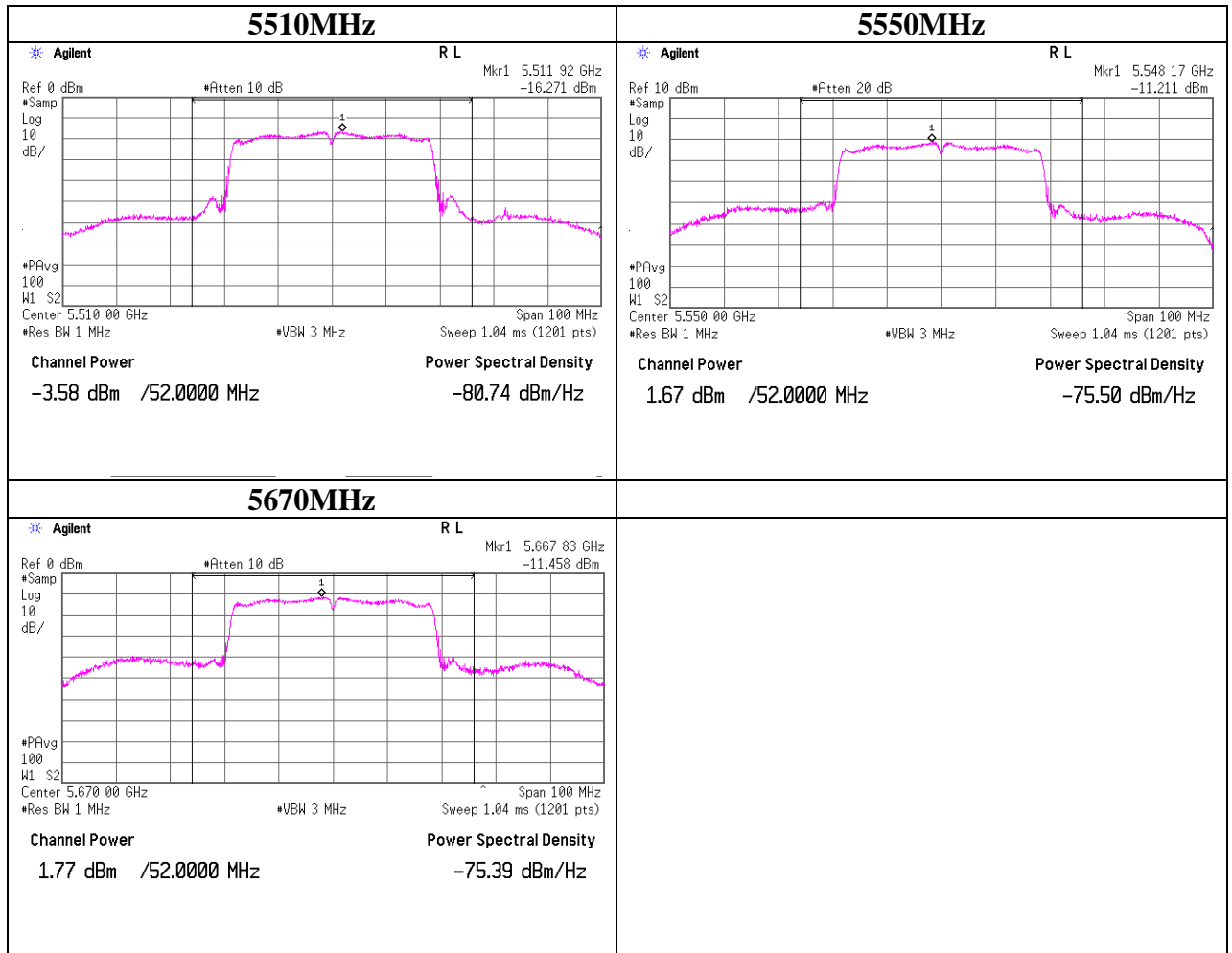
Maximum Peak Output Power & Peak Power Spectral Density

11n-40 Antenna 0



Maximum Peak Output Power & Peak Power Spectral Density

11n-40 Antenna 1



Maximum Peak Output Power
(Reference data)

Test place : Head Office EMC Lab. No.3 Measurement Room
Report No. : 30KE0072-HO
Date : 09/13/2010
Temperature/ Humidity : 24deg.C. / 52%
Engineer : Kazuya Yoshioka
Mode : 11a Tx

Antenna 0, 5220MHz

Data Rate [Mbps]	Reading [dBm]	Remark
6	-0.08	*
9	-0.24	
12	-0.18	
18	-0.19	
24	-0.17	
36	-0.30	
48	-0.28	
54	-0.31	

* Worst Rate

All comparison were carried out on same frequency and measurement factors.

ON time was only measured using Gate function.

Maximum Peak Output Power
(Reference data)

Test place : Head Office EMC Lab. No. 3 Measurement Room
Report No. : 30KE0072-HO
Date : 09/13/2010
Temperature/ Humidity : 24deg.C. / 52%
Engineer : Kazuya Yoshioka
Mode : 11n-20 Tx

Antenna 0, 5220MHz

MCS Number	Reading [dBm]	Remark
0	-0.07	*
1	-0.17	
2	-0.09	
3	-0.19	
4	-0.19	
5	-0.08	
6	-0.19	
7	-0.20	

* Worst MCS

All comparison were carried out on same frequency and measurement factors.

ON time was only measured using Gate function.

Maximum Peak Output Power
(Reference data)

Test place : Head Office EMC Lab. No. 11 Measurement Room
Report No. : 30KE0072-HO
Date : 09/17/2010
Temperature/ Humidity : 26deg.C. / 40%
Engineer : Satofumi Matsuyama
Mode : 11n-40 Tx

Antenna 0, 5190MHz

MCS Number	Reading [dBm]	Remark
0	-2.83	*
1	-3.00	
2	-2.93	
3	-2.98	
4	-2.90	
5	-2.90	
6	-3.12	
7	-3.00	

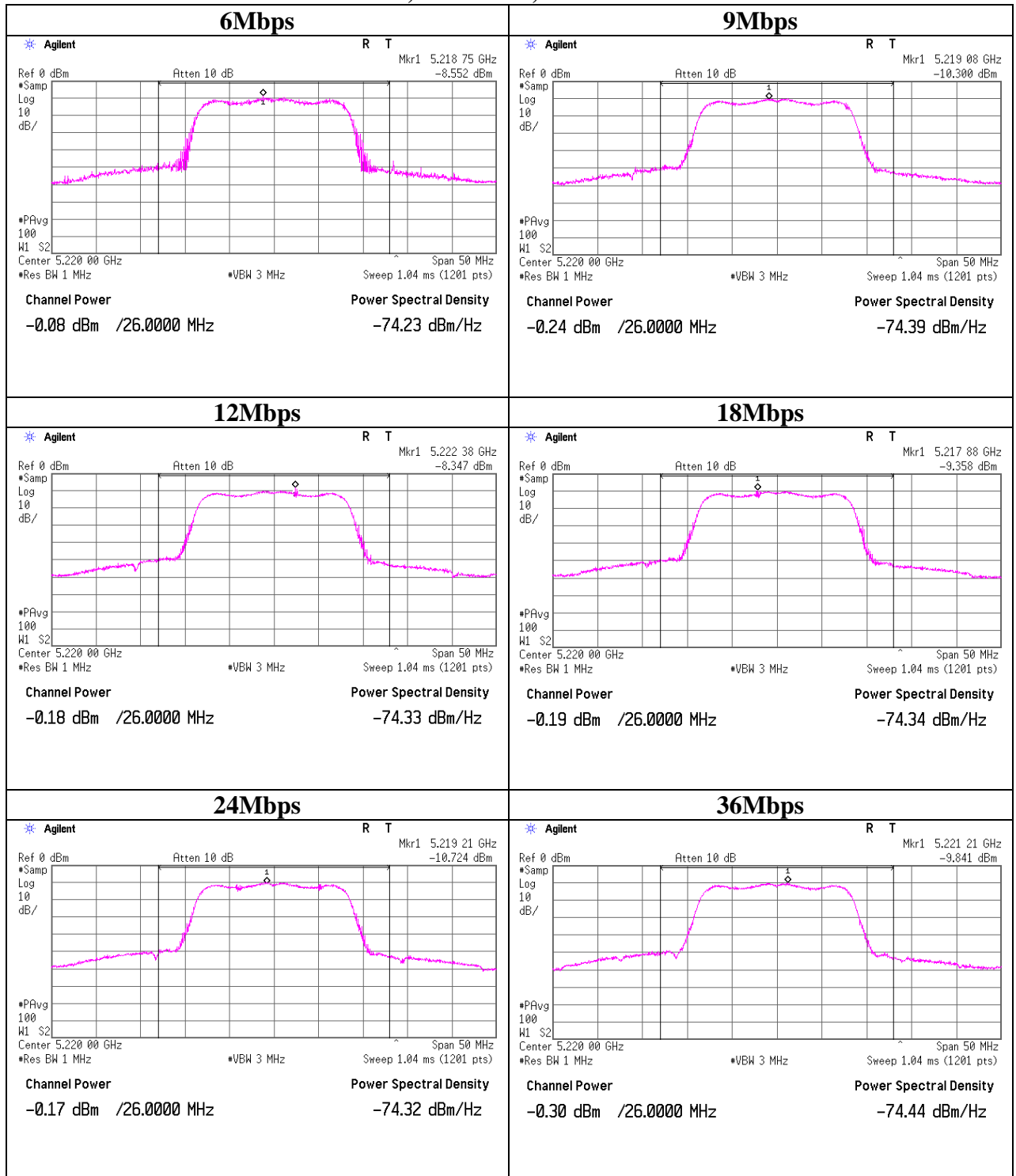
* Worst MCS

All comparison were carried out on same frequency and measurement factors.

ON time was only measured using Gate function.

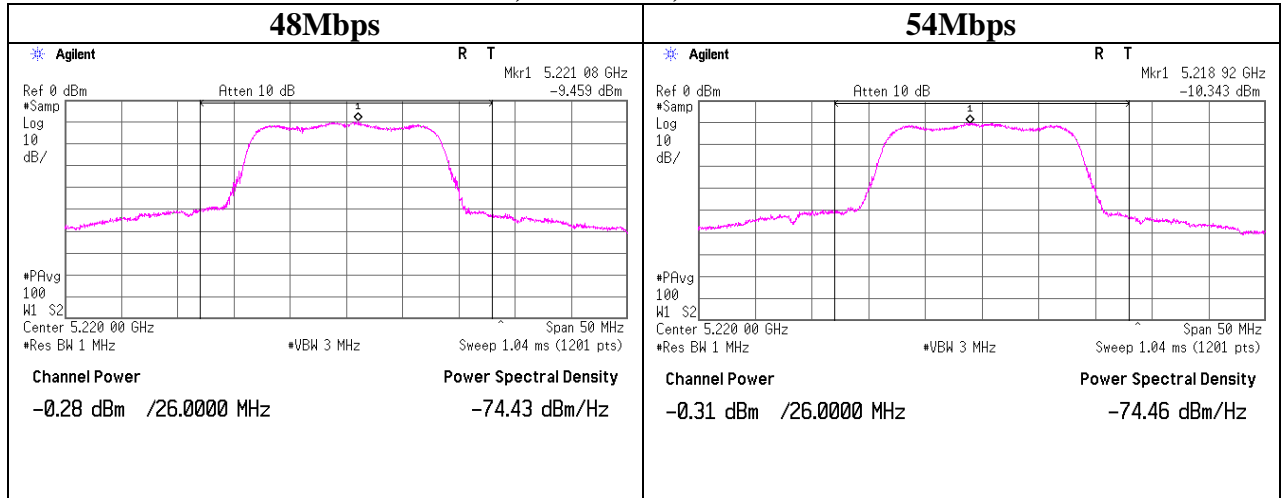
Maximum Peak Output Power
(Reference data)

11a, Antenna 0, 5220MHz



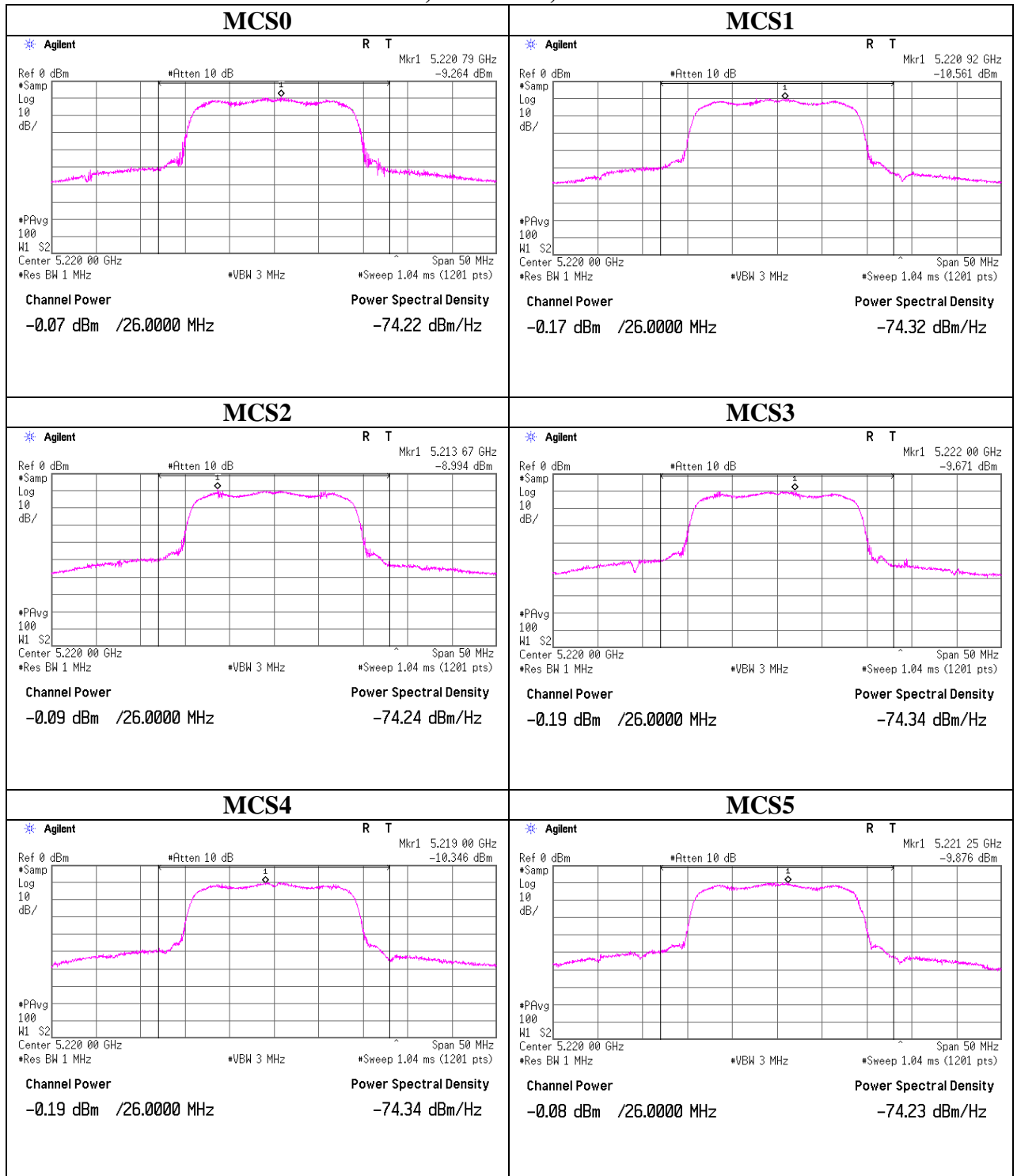
Maximum Peak Output Power
(Reference data)

11a, Antenna 0, 5220MHz



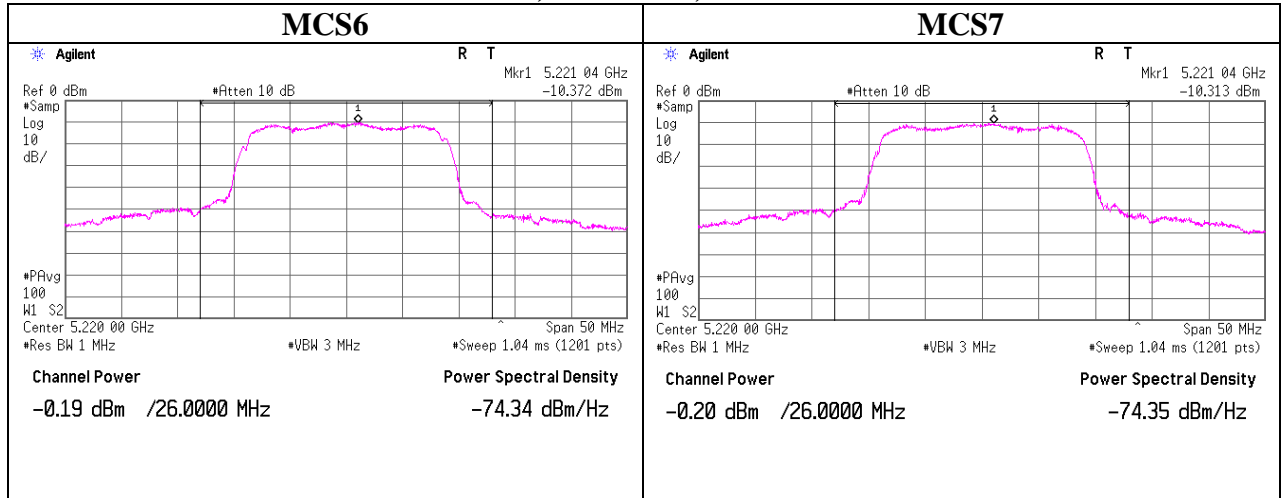
Maximum Peak Output Power
(Reference data)

11n-20, Antenna 0, 5220MHz



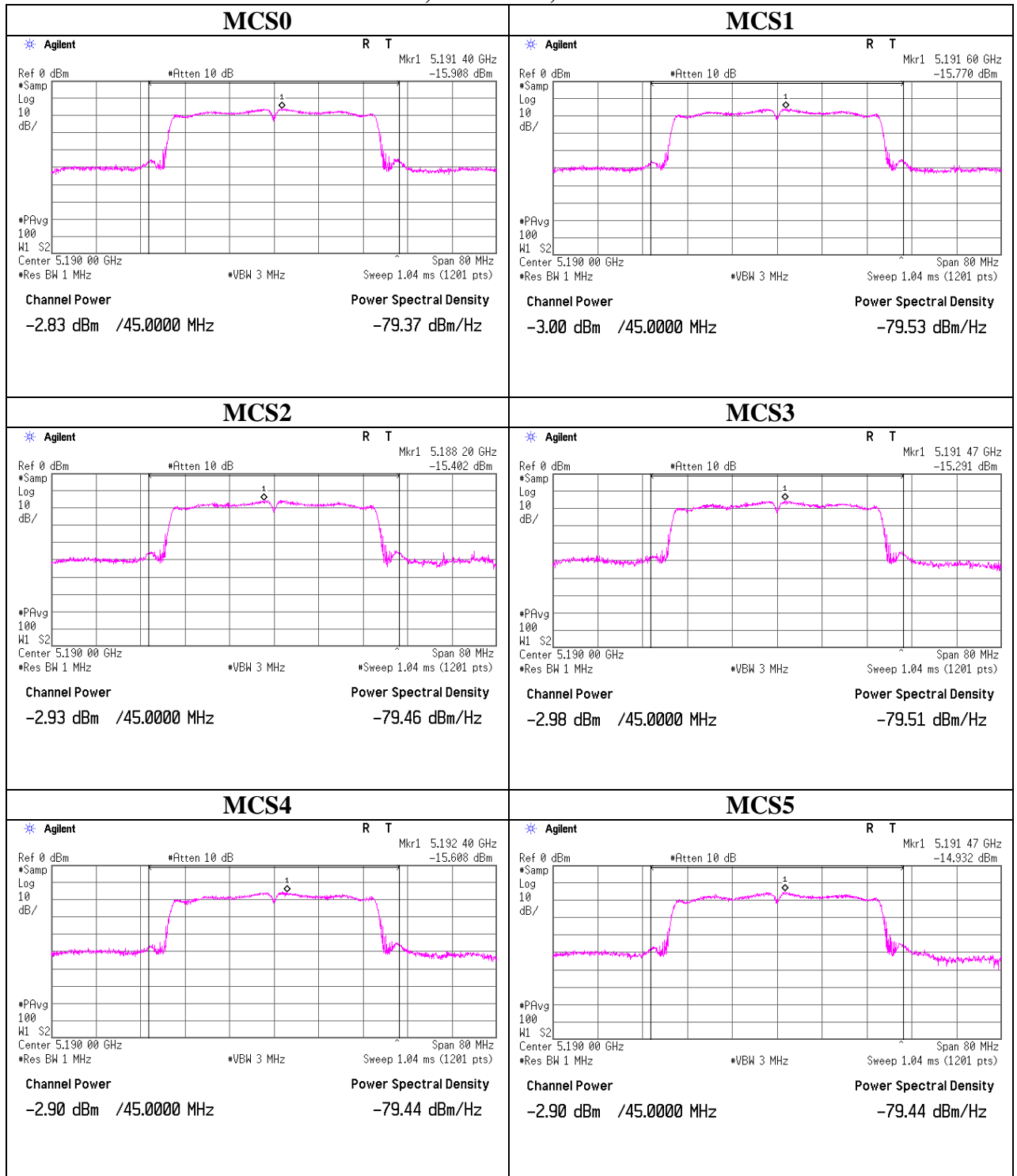
Maximum Peak Output Power
(Reference data)

11n-20, Antenna 0, 5220MHz



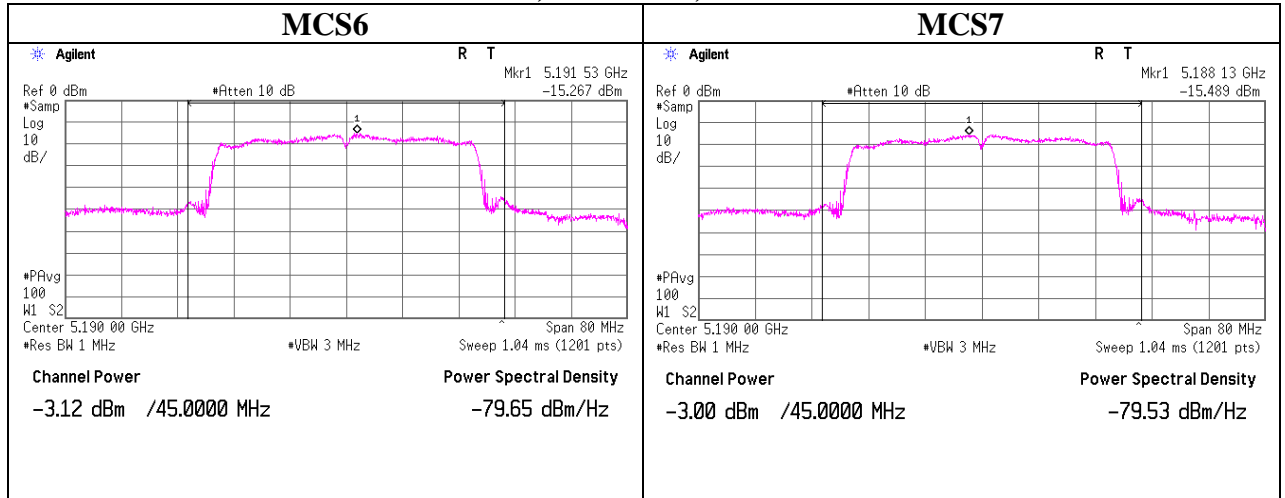
Maximum Peak Output Power
(Reference data)

11n-40, Antenna 0, 5190MHz



Maximum Peak Output Power
(Reference data)

11n-40, Antenna 0, 5190MHz



Radiated Spurious Emission

Test place Head Office EMC Lab. No.3 and 4 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/14/2010 09/15/2010 09/16/2010 09/21/2010
Temperature/ Humidity 23deg.C. / 65% 24deg.C. / 60% 23deg.C. / 67% 24deg.C. / 67%
Engineer Keisuke Takumi Keisuke Satofumi
Kawamura Shimada Kawamura Matsuyama
(1-10GHz) (10G-18GHz) (18-40GHz) (1-10GHz)
Mode 11a Tx 5180MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3453.323	PK	48.9	29.8	3.2	32.0	49.9	68.2	18.3	Outside	
Hori	5101.370	PK	55.1	31.5	4.0	31.4	59.2	73.9	14.7	Inside	
Hori	5150.000	PK	58.7	32.3	4.0	31.8	63.2	68.2	5.0	Bandedge	
Hori	6906.646	PK	46.2	35.9	4.6	32.3	54.4	68.2	13.8	Outside	
Hori	10360.000	PK	54.9	38.9	-2.2	32.9	58.7	68.2	9.5	Outside	
Hori	15540.000	PK	48.1	39.2	-0.8	32.6	53.9	73.9	20.0	Inside	
Hori	5101.370	AV	44.3	31.5	4.0	31.4	48.4	53.9	5.5	Inside	
Hori	5150.000	AV	42.4	32.3	4.0	31.8	46.9	53.9	7.0	Bandedge	
Hori	15540.000	AV	33.0	39.2	-0.8	32.6	38.8	53.9	15.1	Inside	
Vert	3453.323	PK	47.6	29.8	3.2	32.0	48.6	68.2	19.6	Outside	
Vert	5106.032	PK	51.0	31.5	4.0	31.4	55.1	73.9	18.8	Inside	
Vert	5150.000	PK	55.9	32.3	4.0	31.8	60.4	68.2	7.8	Bandedge	
Vert	6906.646	PK	46.0	35.9	4.6	32.3	54.2	68.2	14.0	Outside	
Vert	10360.000	PK	51.9	38.9	-2.2	32.9	55.7	68.2	12.5	Outside	
Vert	15540.000	PK	52.4	39.2	-0.8	32.6	58.2	73.9	15.7	Inside	
Vert	5106.032	AV	40.0	31.5	4.0	31.4	44.1	53.9	9.8	Inside	
Vert	5150.000	AV	39.6	32.3	4.0	31.8	44.1	53.9	9.8	Bandedge	
Vert	15540.000	AV	34.9	39.2	-0.8	32.6	40.7	53.9	13.2	Inside	

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

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

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

Radiated Spurious Emission

Test place Head Office EMC Lab. No.3 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/14/2010 09/15/2010 09/16/2010 09/17/2010
Temperature/ Humidity 23deg.C. / 65% 24deg.C. / 60% 23deg.C. / 67% 22deg.C. / 66%
Engineer Takumi Shimada Takumi Shimada Keisuke Kawamura Keisuke Kawamura
(1-10GHz) (10G-18GHz) (18-40GHz) (30M-1GHz)
Mode 11a Tx 5260MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3506.688	PK	46.9	29.9	3.2	32.0	48.0	68.2	20.2	Outside	
Hori	7013.300	PK	46.1	36.2	4.6	32.3	54.6	68.2	13.6	Outside	
Hori	10520.000	PK	53.0	39.2	-2.1	32.9	57.2	68.2	11.0	Outside	
Hori	15780.000	PK	48.9	38.5	-0.7	32.6	54.1	73.9	19.8	Inside	
Hori	15780.000	AV	32.8	38.5	-0.7	32.6	38.0	53.9	15.9	Inside	
Vert	3506.645	PK	46.5	29.9	3.2	32.0	47.6	68.2	20.6	Outside	
Vert	7013.290	PK	46.2	36.2	4.6	32.3	54.7	68.2	13.5	Outside	
Vert	10520.000	PK	50.8	39.2	-2.1	32.9	55.0	68.2	13.2	Outside	
Vert	15780.000	PK	53.9	38.5	-0.7	32.6	59.1	73.9	14.8	Inside	
Vert	15780.000	AV	34.7	38.5	-0.7	32.6	39.9	53.9	14.0	Inside	

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

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

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 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/14/2010 09/15/2010 09/16/2010 09/21/2010
Temperature/ Humidity 23deg.C. / 65% 24deg.C. / 60% 23deg.C. / 67% 24deg.C. / 67%
Engineer Keisuke Takumi Keisuke Satofumi
Kawamura Shimada Kawamura Matsuyama
(1-10GHz) (10G-18GHz) (18-40GHz) (1-10GHz)
Mode 11a Tx 5320MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3546.645	PK	47.1	29.9	3.2	31.9	48.3	68.2	19.9	Outside	
Hori	5350.000	PK	59.3	32.3	4.1	31.9	63.8	68.2	4.4	Bandedge	
Hori	5393.002	PK	53.4	31.8	4.1	31.5	57.8	73.9	16.1	Inside	
Hori	7093.290	PK	46.6	36.2	4.6	32.3	55.1	68.2	13.1	Outside	
Hori	10640.000	PK	53.7	39.4	-2.1	32.9	58.1	73.9	15.8	Inside	
Hori	15960.000	PK	50.9	38.1	-0.6	32.6	55.8	73.9	18.1	Inside	
Hori	5350.000	AV	40.4	32.3	4.1	31.9	44.9	53.9	9.0	Bandedge	
Hori	5393.002	AV	42.5	31.8	4.1	31.5	46.9	53.9	7.0	Inside	
Hori	10640.000	AV	37.1	39.4	-2.1	32.9	41.5	53.9	12.4	Inside	
Hori	15960.000	AV	34.7	38.1	-0.6	32.6	39.6	53.9	14.3	Inside	
Vert	3546.645	PK	47.4	29.9	3.2	31.9	48.6	68.2	19.6	Outside	
Vert	5350.000	PK	58.4	32.3	4.1	31.9	62.9	68.2	5.3	Bandedge	
Vert	5393.150	PK	50.8	31.8	4.1	31.5	55.2	73.9	18.7	Inside	
Vert	7093.290	PK	44.5	36.2	4.6	32.3	53.0	68.2	15.2	Outside	
Vert	10640.000	PK	51.8	39.4	-2.1	32.9	56.2	73.9	17.7	Inside	
Vert	15960.000	PK	55.8	38.1	-0.6	32.6	60.7	73.9	13.2	Inside	
Vert	5350.000	AV	39.6	32.3	4.1	31.9	44.1	53.9	9.8	Bandedge	
Vert	5393.150	AV	40.3	31.8	4.1	31.5	44.7	53.9	9.2	Inside	
Vert	10640.000	AV	35.6	39.4	-2.1	32.9	40.0	53.9	13.9	Inside	
Vert	15960.000	AV	36.9	38.1	-0.6	32.6	41.8	53.9	12.1	Inside	

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

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

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 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/14/2010 09/15/2010 09/16/2010 09/21/2010
Temperature/ Humidity 23deg.C. / 65% 24deg.C. / 60% 23deg.C. / 67% 24deg.C. / 67%
Engineer Keisuke Keisuke Keisuke Satofumi
Kawamura Kawamura Kawamura Matsuyama
(1-10GHz) (10-18GHz) (18-40GHz) (1-10GHz)
Mode 11a Tx 5500MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3666.661	PK	46.3	30.0	3.3	31.9	47.7	73.9	26.2	Inside	
Hori	5420.801	PK	53.6	31.9	4.1	31.5	58.1	73.9	15.8	Inside	
Hori	5460.000	PK	51.3	32.3	4.1	31.9	55.8	73.9	18.1	Inside	
Hori	5470.000	PK	59.0	32.3	4.1	31.9	63.5	68.2	4.7	Outside	
Hori	7333.322	PK	44.9	36.2	4.7	32.4	53.4	73.9	20.5	Inside	
Hori	11000.000	PK	48.6	39.8	-2.0	32.9	53.5	73.9	20.4	Inside	
Hori	16500.000	PK	45.4	39.7	-0.4	32.4	52.3	68.2	15.9	Outside	
Hori	3666.661	AV	40.8	30.0	3.3	31.9	42.2	53.9	11.7	Inside	
Hori	5420.801	AV	42.6	31.9	4.1	31.5	47.1	53.9	6.8	Inside	
Hori	5460.000	AV	37.2	32.3	4.1	31.9	41.7	53.9	12.2	Inside	
Hori	7333.322	AV	34.1	36.2	4.7	32.4	42.6	53.9	11.3	Inside	
Hori	11000.000	AV	37.0	39.8	-2.0	32.9	41.9	53.9	12.0	Inside	
Vert	3666.661	PK	46.8	30.0	3.3	31.9	48.2	73.9	25.7	Inside	
Vert	5420.830	PK	53.4	31.9	4.1	31.5	57.9	73.9	16.0	Inside	
Vert	5460.000	PK	50.6	32.3	4.1	31.9	55.1	73.9	18.8	Inside	
Vert	5470.000	PK	59.0	32.3	4.1	31.9	63.5	68.2	4.7	Outside	
Vert	7333.322	PK	44.9	36.2	4.7	32.4	53.4	73.9	20.5	Inside	
Vert	11000.000	PK	49.4	39.8	-2.0	32.9	54.3	73.9	19.6	Inside	
Vert	16500.000	PK	48.7	39.7	-0.4	32.4	55.6	68.2	12.6	Outside	
Vert	3666.661	AV	41.5	30.0	3.3	31.9	42.9	53.9	11.0	Inside	
Vert	5420.830	AV	42.6	31.9	4.1	31.5	47.1	53.9	6.8	Inside	
Vert	5460.000	AV	36.3	32.3	4.1	31.9	40.8	53.9	13.1	Inside	
Vert	7333.322	AV	32.9	36.2	4.7	32.4	41.4	53.9	12.5	Inside	
Vert	11000.000	AV	37.4	39.8	-2.0	32.9	42.3	53.9	11.6	Inside	

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

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

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 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/14/2010 09/15/2010 09/16/2010 09/21/2010
Temperature/ Humidity 23deg.C. / 65% 24deg.C. / 60% 23deg.C. / 67% 24deg.C. / 67%
Engineer Keisuke Keisuke Keisuke Satofumi
Kawamura Kawamura Kawamura Matsuyama
(1-10GHz) (10-18GHz) (18-40GHz) (1-10GHz)
Mode 11a Tx 5580MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3720.045	PK	46.0	30.1	3.3	31.9	47.5	73.9	26.4	Inside	
Hori	5420.032	PK	46.2	31.9	4.1	31.5	50.7	73.9	23.2	Inside	
Hori	7440.000	PK	43.8	36.2	4.7	32.5	52.2	73.9	21.7	Inside	
Hori	11160.000	PK	47.3	39.7	-2.0	32.9	52.1	73.9	21.8	Inside	
Hori	16740.000	PK	43.7	40.5	-0.4	32.4	51.4	68.2	16.8	Outside	
Hori	3720.045	AV	39.8	30.1	3.3	31.9	41.3	53.9	12.6	Inside	
Hori	5420.032	AV	35.4	31.9	4.1	31.5	39.9	53.9	14.0	Inside	
Hori	7440.000	AV	31.8	36.2	4.7	32.5	40.2	53.9	13.7	Inside	
Hori	11160.000	AV	35.1	39.7	-2.0	32.9	39.9	53.9	14.0	Inside	
Vert	3720.032	PK	46.6	30.1	3.3	31.9	48.1	73.9	25.8	Inside	
Vert	5419.253	PK	44.6	31.9	4.1	31.5	49.1	73.9	24.8	Inside	
Vert	7440.000	PK	43.4	36.2	4.7	32.5	51.8	73.9	22.1	Inside	
Vert	11160.000	PK	46.0	39.7	-2.0	32.9	50.8	73.9	23.1	Inside	
Vert	16740.000	PK	44.4	40.5	-0.4	32.4	52.1	68.2	16.1	Outside	
Vert	3720.032	AV	41.1	30.1	3.3	31.9	42.6	53.9	11.3	Inside	
Vert	5419.253	AV	34.4	31.9	4.1	31.5	38.9	53.9	15.0	Inside	
Vert	7440.000	AV	31.8	36.2	4.7	32.5	40.2	53.9	13.7	Inside	
Vert	11160.000	AV	34.4	39.7	-2.0	32.9	39.2	53.9	14.7	Inside	

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

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

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 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/14/2010 09/15/2010 09/16/2010 09/21/2010
Temperature/ Humidity 23deg.C. / 65% 24deg.C. / 60% 23deg.C. / 67% 24deg.C. / 67%
Engineer Keisuke Keisuke Keisuke Satofumi
Kawamura Kawamura Kawamura Matsuyama
(1-10GHz) (10-18GHz) (18-40GHz) (1-10GHz)
Mode 11a Tx 5700MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3799.980	PK	48.0	30.1	3.4	31.9	49.6	73.9	24.3	Inside	
Hori	5725.000	PK	56.5	32.7	4.2	31.9	61.5	68.2	6.7	Outside	
Hori	5773.151	PK	51.8	32.5	4.3	31.6	57.0	68.2	11.2	Outside	
Hori	7599.960	PK	43.8	36.4	4.8	32.5	52.5	73.9	21.4	Inside	
Hori	11400.000	PK	44.9	39.6	-1.8	32.9	49.8	73.9	24.1	Inside	
Hori	17100.000	PK	43.7	42.2	-0.3	32.3	53.3	68.2	14.9	Outside	
Hori	3799.980	AV	44.0	30.1	3.4	31.9	45.6	53.9	8.3	Inside	
Hori	7599.960	AV	32.6	36.4	4.8	32.5	41.3	53.9	12.6	Inside	
Hori	11400.000	AV	33.7	39.6	-1.8	32.9	38.6	53.9	15.3	Inside	
Vert	3799.980	PK	46.4	30.1	3.4	31.9	48.0	73.9	25.9	Inside	
Vert	5725.000	PK	55.2	32.7	4.2	31.9	60.2	68.2	8.0	Outside	
Vert	5777.901	PK	51.5	32.5	4.3	31.6	56.7	68.2	11.5	Outside	
Vert	7599.960	PK	45.0	36.4	4.8	32.5	53.7	73.9	20.2	Inside	
Vert	11400.000	PK	44.7	39.6	-1.8	32.9	49.6	73.9	24.3	Inside	
Vert	17100.000	PK	43.6	42.2	-0.3	32.3	53.2	68.2	15.0	Outside	
Vert	3799.980	AV	40.4	30.1	3.4	31.9	42.0	53.9	11.9	Inside	
Vert	7599.960	AV	35.0	36.4	4.8	32.5	43.7	53.9	10.2	Inside	
Vert	11400.000	AV	33.4	39.6	-1.8	32.9	38.3	53.9	15.6	Inside	

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

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

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 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/15/2010 09/15/2010 09/16/2010 09/21/2010
Temperature/ Humidity 24deg.C. / 60% 24deg.C. / 60% 23deg.C. / 67% 24deg.C. / 67%
Engineer Takumi Keisuke Keisuke Satofumi
Shimada Kawamura Kawamura Matsuyama
(1-10GHz) (10-18GHz) (18-40GHz) (1-10GHz)
Mode 1In-20 Tx 5180MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3453.304	PK	48.0	29.8	3.2	32.0	49.0	68.2	19.2	Outside	
Hori	5098.273	PK	54.0	31.5	4.0	31.4	58.1	73.9	15.8	Inside	
Hori	5150.000	PK	58.7	32.3	4.0	31.8	63.2	68.2	5.0	Bandedge	
Hori	6906.608	PK	46.2	35.9	4.6	32.3	54.4	68.2	13.8	Outside	
Hori	10360.000	PK	51.2	38.9	-2.2	32.9	55.0	68.2	13.2	Outside	
Hori	15540.000	PK	45.9	39.2	-0.8	32.6	51.7	73.9	22.2	Inside	
Hori	5098.273	AV	43.4	31.5	4.0	31.4	47.5	53.9	6.4	Inside	
Hori	5150.000	AV	42.2	32.3	4.0	31.8	46.7	53.9	7.2	Bandedge	
Hori	15540.000	AV	33.1	39.2	-0.8	32.6	38.9	53.9	15.0	Inside	
Vert	3453.304	PK	48.3	29.8	3.2	32.0	49.3	68.2	18.9	Outside	
Vert	5106.033	PK	49.5	31.5	4.0	31.4	53.6	73.9	20.3	Inside	
Vert	5150.000	PK	53.8	32.3	4.0	31.8	58.3	68.2	9.9	Bandedge	
Vert	6906.608	PK	46.8	35.9	4.6	32.3	55.0	68.2	13.2	Outside	
Vert	10360.000	PK	50.5	38.9	-2.2	32.9	54.3	68.2	13.9	Outside	
Vert	15540.000	PK	49.0	39.2	-0.8	32.6	54.8	73.9	19.1	Inside	
Vert	5106.033	AV	39.2	31.5	4.0	31.4	43.3	53.9	10.6	Inside	
Vert	5150.000	AV	38.5	32.3	4.0	31.8	43.0	53.9	10.9	Bandedge	
Vert	15540.000	AV	34.3	39.2	-0.8	32.6	40.1	53.9	13.8	Inside	

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

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

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

Radiated Spurious Emission

Test place Head Office EMC Lab. No.3 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/14/2010 09/15/2010 09/16/2010
Temperature/ Humidity 23deg.C. / 65% 24deg.C. / 60% 23deg.C. / 67%
Engineer Takumi Shimada Keisuke Kawamura Keisuke Kawamura
(1-10GHz) (10-18GHz) (18-40GHz)
Mode 11n-20 Tx 5260MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3506.685	PK	46.6	29.9	3.2	32.0	47.7	68.2	20.5	Outside	
Hori	7013.280	PK	46.9	36.2	4.6	32.3	55.4	68.2	12.8	Outside	
Hori	10520.000	PK	48.8	39.2	-2.1	32.9	53.0	68.2	15.2	Outside	
Hori	15780.000	PK	46.7	38.5	-0.7	32.6	51.9	73.9	22.0	Inside	
Hori	15780.000	AV	33.8	38.5	-0.7	32.6	39.0	53.9	14.9	Inside	
Vert	3506.682	PK	47.5	29.9	3.2	32.0	48.6	68.2	19.6	Outside	
Vert	7013.280	PK	44.7	36.2	4.6	32.3	53.2	68.2	15.0	Outside	
Vert	10520.000	PK	49.9	39.2	-2.1	32.9	54.1	68.2	14.1	Outside	
Vert	15780.000	PK	52.6	38.5	-0.7	32.6	57.8	73.9	16.1	Inside	
Vert	15780.000	AV	36.4	38.5	-0.7	32.6	41.6	53.9	12.3	Inside	

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

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

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 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/15/2010 09/15/2010 09/16/2010 09/21/2010
Temperature/ Humidity 24deg.C. / 60% 24deg.C. / 60% 23deg.C. / 67% 24deg.C. / 67%
Engineer Takumi Keisuke Keisuke Satofumi
Shimada Kawamura Kawamura Matsuyama
(1-10GHz) (10-18GHz) (18-40GHz) (1-10GHz)
Mode 11n-20 Tx 5320MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3545.987	PK	47.1	29.9	3.2	31.9	48.3	68.2	19.9	Outside	
Hori	5350.000	PK	57.3	32.3	4.1	31.9	61.8	68.2	6.4	Bandedge	
Hori	5393.230	PK	54.3	31.8	4.1	31.5	58.7	73.9	15.2	Inside	
Hori	7093.290	PK	46.7	36.2	4.6	32.3	55.2	68.2	13.0	Outside	
Hori	10640.000	PK	50.2	39.4	-2.1	32.9	54.6	73.9	19.3	Inside	
Hori	15960.000	PK	48.0	38.1	-0.6	32.6	52.9	73.9	21.0	Inside	
Hori	5393.230	AV	43.4	31.8	4.1	31.5	47.8	53.9	6.1	Inside	
Hori	10640.000	AV	38.2	39.4	-2.1	32.9	42.6	53.9	11.3	Inside	
Hori	15960.000	AV	34.5	38.1	-0.6	32.6	39.4	53.9	14.5	Inside	
Vert	3546.645	PK	46.9	29.9	3.2	31.9	48.1	68.2	20.1	Outside	
Vert	5350.000	PK	54.7	32.3	4.1	31.9	59.2	68.2	9.0	Bandedge	
Vert	5394.501	PK	51.6	31.8	4.1	31.5	56.0	73.9	17.9	Inside	
Vert	7093.290	PK	46.0	36.2	4.6	32.3	54.5	68.2	13.7	Outside	
Vert	10640.000	PK	49.5	39.4	-2.1	32.9	53.9	73.9	20.0	Inside	
Vert	15960.000	PK	52.3	38.1	-0.6	32.6	57.2	73.9	16.7	Inside	
Vert	5350.000	AV	38.2	32.3	4.1	31.9	42.7	53.9	11.2	Bandedge	
Vert	5394.501	AV	40.7	31.8	4.1	31.5	45.1	53.9	8.8	Inside	
Vert	10640.000	AV	36.8	39.4	-2.1	32.9	41.2	53.9	12.7	Inside	
Vert	15960.000	AV	36.5	38.1	-0.6	32.6	41.4	53.9	12.5	Inside	

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

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

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 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/14/2010 09/15/2010 09/16/2010 09/21/2010
Temperature/ Humidity 23deg.C. / 65% 24deg.C. / 60% 23deg.C. / 67% 24deg.C. / 67%
Engineer Keisuke Keisuke Keisuke Satofumi
Kawamura Kawamura Kawamura Matsuyama
(1-10GHz) (10-18GHz) (18-40GHz) (1-10GHz)
Mode 1In-20 Tx 5500MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3666.661	PK	46.2	30.0	3.3	31.9	47.6	73.9	26.3	Inside	
Hori	5420.678	PK	53.4	31.9	4.1	31.5	57.9	73.9	16.0	Inside	
Hori	5460.000	PK	49.5	32.3	4.1	31.9	54.0	73.9	19.9	Inside	
Hori	5470.000	PK	57.6	32.3	4.1	31.9	62.1	68.2	6.1	Outside	
Hori	7333.322	PK	45.1	36.2	4.7	32.4	53.6	73.9	20.3	Inside	
Hori	11000.000	PK	48.2	39.8	-2.0	32.9	53.1	73.9	20.8	Inside	
Hori	16500.000	PK	44.5	39.7	-0.4	32.4	51.4	68.2	16.8	Outside	
Hori	3666.661	AV	41.0	30.0	3.3	31.9	42.4	53.9	11.5	Inside	
Hori	5420.678	AV	43.3	31.9	4.1	31.5	47.8	53.9	6.1	Inside	
Hori	5460.000	AV	35.4	32.3	4.1	31.9	39.9	53.9	14.0	Inside	
Hori	7333.322	AV	34.1	36.2	4.7	32.4	42.6	53.9	11.3	Inside	
Hori	11000.000	AV	36.6	39.8	-2.0	32.9	41.5	53.9	12.4	Inside	
Vert	3666.661	PK	46.7	30.0	3.3	31.9	48.1	73.9	25.8	Inside	
Vert	5420.170	PK	51.4	31.9	4.1	31.5	55.9	73.9	18.0	Inside	
Vert	5460.000	PK	49.6	32.3	4.1	31.9	54.1	73.9	19.8	Inside	
Vert	5470.000	PK	58.1	32.3	4.1	31.9	62.6	68.2	5.6	Outside	
Vert	7333.322	PK	44.2	36.2	4.7	32.4	52.7	73.9	21.2	Inside	
Vert	11000.000	PK	48.8	39.8	-2.0	32.9	53.7	73.9	20.2	Inside	
Vert	16500.000	PK	46.8	39.7	-0.4	32.4	53.7	68.2	14.5	Outside	
Vert	3666.661	AV	41.1	30.0	3.3	31.9	42.5	53.9	11.4	Inside	
Vert	5420.170	AV	40.7	31.9	4.1	31.5	45.2	53.9	8.7	Inside	
Vert	5460.000	AV	35.1	32.3	4.1	31.9	39.6	53.9	14.3	Inside	
Vert	7333.322	AV	33.8	36.2	4.7	32.4	42.3	53.9	11.6	Inside	
Vert	11000.000	AV	36.1	39.8	-2.0	32.9	41.0	53.9	12.9	Inside	

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

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

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 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/14/2010 09/15/2010 09/16/2010 09/17/2010
Temperature/ Humidity 23deg.C. / 65% 24deg.C. / 60% 23deg.C. / 67% 22deg.C. / 66%
Engineer Takumi Shimada Keisuke Kawamura Keisuke Kawamura Keisuke Kawamura
(1-10GHz) (10-18GHz) (18-40GHz) (30M-1GHz)
Mode 1In-20 Tx 5580MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3720.018	PK	46.0	30.1	3.3	31.9	47.5	73.9	26.4	Inside	
Hori	7439.947	PK	43.5	36.2	4.7	32.5	51.9	73.9	22.0	Inside	
Hori	11160.000	PK	45.8	39.7	-2.0	32.9	50.6	73.9	23.3	Inside	
Hori	16740.000	PK	44.1	40.5	-0.4	32.4	51.8	68.2	16.4	Outside	
Hori	3720.018	AV	40.6	30.1	3.3	31.9	42.1	53.9	11.8	Inside	
Hori	7439.947	AV	32.7	36.2	4.7	32.5	41.1	53.9	12.8	Inside	
Hori	11160.000	AV	35.1	39.7	-2.0	32.9	39.9	53.9	14.0	Inside	
Vert	3719.996	PK	45.8	30.1	3.3	31.9	47.3	73.9	26.6	Inside	
Vert	7439.947	PK	44.1	36.2	4.7	32.5	52.5	73.9	21.4	Inside	
Vert	11160.000	PK	45.8	39.7	-2.0	32.9	50.6	73.9	23.3	Inside	
Vert	16740.000	PK	44.5	40.5	-0.4	32.4	52.2	68.2	16.0	Outside	
Vert	3719.996	AV	39.5	30.1	3.3	31.9	41.0	53.9	12.9	Inside	
Vert	7439.947	AV	31.9	36.2	4.7	32.5	40.3	53.9	13.6	Inside	
Vert	11160.000	AV	34.3	39.7	-2.0	32.9	39.1	53.9	14.8	Inside	

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

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

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

Radiated Spurious Emission

Test place Head Office EMC Lab. No.3 and 4 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/14/2010 09/15/2010 09/16/2010 09/21/2010
Temperature/ Humidity 23deg.C. / 65% 24deg.C. / 60% 23deg.C. / 67% 24deg.C. / 67%
Engineer Keisuke Keisuke Keisuke Satofumi
Kawamura Kawamura Kawamura Matsuyama
(1-10GHz) (10-18GHz) (18-40GHz) (1-10GHz)
Mode 11n-20 Tx 5700MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3799.980	PK	47.6	30.1	3.4	31.9	49.2	73.9	24.7	Inside	
Hori	5725.000	PK	57.7	32.7	4.2	31.9	62.7	68.2	5.5	Outside	
Hori	5773.022	PK	50.6	32.5	4.3	31.6	55.8	68.2	12.4	Outside	
Hori	7599.960	PK	44.6	36.4	4.8	32.5	53.3	73.9	20.6	Inside	
Hori	11400.000	PK	45.3	39.6	-1.8	32.9	50.2	73.9	23.7	Inside	
Hori	17100.000	PK	43.9	42.2	-0.3	32.3	53.5	68.2	14.7	Outside	
Hori	3799.980	AV	42.8	30.1	3.4	31.9	44.4	53.9	9.5	Inside	
Hori	7599.960	AV	33.0	36.4	4.8	32.5	41.7	53.9	12.2	Inside	
Hori	11400.000	AV	33.5	39.6	-1.8	32.9	38.4	53.9	15.5	Inside	
Vert	3799.980	PK	47.0	30.1	3.4	31.9	48.6	73.9	25.3	Inside	
Vert	5725.000	PK	57.9	32.7	4.2	31.9	62.9	68.2	5.3	Outside	
Vert	5777.233	PK	50.2	32.5	4.3	31.6	55.4	68.2	12.8	Outside	
Vert	7599.960	PK	45.1	36.4	4.8	32.5	53.8	73.9	20.1	Inside	
Vert	11400.000	PK	44.4	39.6	-1.8	32.9	49.3	73.9	24.6	Inside	
Vert	17100.000	PK	44.2	42.2	-0.3	32.3	53.8	68.2	14.4	Outside	
Vert	3799.980	AV	41.6	30.1	3.4	31.9	43.2	53.9	10.7	Inside	
Vert	7599.960	AV	34.5	36.4	4.8	32.5	43.2	53.9	10.7	Inside	
Vert	11400.000	AV	33.5	39.6	-1.8	32.9	38.4	53.9	15.5	Inside	

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

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

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

Radiated Spurious Emission

Test place Head Office EMC Lab. No.3 and 4 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/14/2010 09/15/2010 09/16/2010 09/21/2010
Temperature/ Humidity 23deg.C. / 65% 24deg.C. / 60% 23deg.C. / 67% 24deg.C. / 67%
Engineer Keisuke Keisuke Keisuke Satofumi
Kawamura Kawamura Kawamura Matsuyama
(1-10GHz) (10-18GHz) (18-40GHz) (1-10GHz)
Mode 11n-40 Tx 5190MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3459.989	PK	49.3	29.9	3.2	32.0	50.4	68.2	17.8	Outside	
Hori	5145.257	PK	59.0	31.6	4.0	31.4	63.2	73.9	10.7	Inside	
Hori	5150.000	PK	58.5	32.3	4.0	31.8	63.0	68.2	5.2	Bandedge	
Hori	6919.978	PK	46.7	35.9	4.6	32.3	54.9	68.2	13.3	Outside	
Hori	10380.000	PK	43.1	39.0	-2.2	32.9	47.0	68.2	21.2	Outside	
Hori	15570.000	PK	43.9	39.1	-0.8	32.6	49.6	73.9	24.3	Inside	
Hori	5145.257	AV	37.9	31.6	4.0	31.4	42.1	53.9	11.8	Inside	
Hori	5150.000	AV	39.5	32.3	4.0	31.8	44.0	53.9	9.9	Bandedge	
Hori	15570.000	AV	31.6	39.1	-0.8	32.6	37.3	53.9	16.6	Inside	
Vert	3459.989	PK	48.1	29.9	3.2	32.0	49.2	68.2	19.0	Outside	
Vert	5145.433	PK	54.8	31.6	4.0	31.4	59.0	73.9	14.9	Inside	
Vert	5150.000	PK	56.3	32.3	4.0	31.8	60.8	68.2	7.4	Bandedge	
Vert	6919.978	PK	45.5	35.9	4.6	32.3	53.7	68.2	14.5	Outside	
Vert	10380.000	PK	43.8	39.0	-2.2	32.9	47.7	68.2	20.5	Outside	
Vert	15570.000	PK	44.6	39.1	-0.8	32.6	50.3	73.9	23.6	Inside	
Vert	5145.433	AV	35.3	31.6	4.0	31.4	39.5	53.9	14.4	Inside	
Vert	5150.000	AV	37.6	32.3	4.0	31.8	42.1	53.9	11.8	Bandedge	
Vert	15570.000	AV	31.6	39.1	-0.8	32.6	37.3	53.9	16.6	Inside	

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

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

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

Radiated Spurious Emission

Test place Head Office EMC Lab. No.3 and 4 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/19/2010 09/23/2010 09/24/2010
Temperature/ Humidity 22deg.C. / 62% 22deg.C. / 72% 25deg.C. / 57%
Engineer Kazuya Takumi Tomohisa
Yoshioka Shimada Nakagawa
(1-10GHz) (10-18GHz) (18-40GHz)
Mode 11n-40 Tx 5230MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3486.667	PK	48.0	29.9	3.2	32.0	49.1	68.2	19.1	Outside	
Hori	6973.282	PK	46.0	36.1	4.6	32.3	54.4	68.2	13.8	Outside	
Hori	10460.000	PK	48.8	39.1	-2.0	33.0	52.9	68.2	15.3	Outside	
Hori	15690.000	PK	46.7	38.8	-0.6	32.3	52.6	73.9	21.3	Inside	
Hori	15690.000	AV	33.4	38.8	-0.6	32.3	39.3	53.9	14.6	Inside	
Vert	3486.657	PK	47.8	29.9	3.2	32.0	48.9	68.2	19.3	Outside	
Vert	6973.283	PK	45.6	36.1	4.6	32.3	54.0	68.2	14.2	Outside	
Vert	10460.000	PK	49.7	39.1	-2.0	33.0	53.8	68.2	14.4	Outside	
Vert	15690.000	PK	48.5	38.8	-0.6	32.3	54.4	73.9	19.5	Inside	
Vert	15690.000	AV	34.4	38.8	-0.6	32.3	40.3	53.9	13.6	Inside	

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

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

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 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/14/2010 09/15/2010 09/16/2010 09/17/2010
Temperature/ Humidity 23deg.C. / 65% 24deg.C. / 60% 23deg.C. / 67% 22deg.C. / 66%
Engineer Takumi Shimada Keisuke Kawamura Keisuke Kawamura Keisuke Kawamura
(1-10GHz) (10-18GHz) (18-40GHz) (30M-1GHz)
Mode 11n-40 Tx 5270MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	214.769	QP	46.6	17.1	9.3	32.0	41.0	43.5	2.5	Outside	
Hori	239.991	QP	45.3	17.4	9.6	32.0	40.3	46.0	5.7	Outside	
Hori	272.042	QP	42.7	18.5	9.8	31.9	39.1	46.0	6.9	Inside	
Hori	300.677	QP	45.9	14.3	10.0	31.8	38.4	46.0	7.6	Outside	
Hori	335.985	QP	45.8	15.5	10.2	31.8	39.7	46.0	6.3	Outside	
Hori	720.007	QP	43.3	20.7	12.5	31.9	44.6	46.0	1.4	Outside	
Hori	3513.320	PK	47.2	29.9	3.2	32.0	48.3	68.2	19.9	Outside	
Hori	7026.607	PK	47.4	36.2	4.6	32.3	55.9	68.2	12.3	Outside	
Hori	10540.000	PK	47.3	39.2	-2.1	32.9	51.5	68.2	16.7	Outside	
Hori	15810.000	PK	45.1	38.5	-0.6	32.6	50.4	73.9	23.5	Inside	
Hori	15810.000	AV	32.8	38.5	-0.6	32.6	38.1	53.9	15.8	Inside	
Vert	207.371	QP	35.7	16.9	9.2	32.1	29.7	43.5	13.8	Outside	
Vert	239.991	QP	35.7	17.4	9.6	32.0	30.7	46.0	15.3	Outside	
Vert	335.985	QP	39.0	15.5	10.2	31.8	32.9	46.0	13.1	Outside	
Vert	455.064	QP	36.5	17.8	11.0	31.9	33.4	46.0	12.6	Outside	
Vert	499.604	QP	37.8	18.1	11.3	31.9	35.3	46.0	10.7	Outside	
Vert	720.007	QP	41.2	20.7	12.5	31.9	42.5	46.0	3.5	Outside	
Vert	3513.319	PK	46.9	29.9	3.2	32.0	48.0	68.2	20.2	Outside	
Vert	7026.607	PK	45.1	36.2	4.6	32.3	53.6	68.2	14.6	Outside	
Vert	10540.000	PK	45.9	39.2	-2.1	32.9	50.1	68.2	18.1	Outside	
Vert	15810.000	PK	49.5	38.5	-0.6	32.6	54.8	73.9	19.1	Inside	
Vert	15810.000	AV	35.9	38.5	-0.6	32.6	41.2	53.9	12.7	Inside	

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

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

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

Radiated Spurious Emission

Test place Head Office EMC Lab. No.3 and 4 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/14/2010 09/15/2010 09/16/2010 09/21/2010
Temperature/ Humidity 23deg.C. / 65% 24deg.C. / 60% 23deg.C. / 67% 24deg.C. / 67%
Engineer Keisuke Keisuke Keisuke Satofumi
Kawamura Kawamura Kawamura Matsuyama
(1-10GHz) (10-18GHz) (18-40GHz) (1-10GHz)
Mode 11n-40 Tx 5310MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3540.011	PK	47.6	29.9	3.2	31.9	48.8	68.2	19.4	Outside	
Hori	5350.000	PK	57.3	32.3	4.1	31.9	61.8	68.2	6.4	Bandedge	
Hori	5350.850	PK	60.0	31.8	4.1	31.5	64.4	73.9	9.5	Inside	
Hori	7080.022	PK	47.4	36.2	4.6	32.3	55.9	68.2	12.3	Outside	
Hori	10620.000	PK	42.3	39.3	-2.1	32.9	46.6	73.9	27.3	Inside	
Hori	15930.000	PK	44.1	38.2	-0.6	32.6	49.1	73.9	24.8	Inside	
Hori	5350.000	AV	38.3	32.3	4.1	31.9	42.8	53.9	11.1	Bandedge	
Hori	5350.850	AV	40.0	31.8	4.1	31.5	44.4	53.9	9.5	Inside	
Hori	10620.000	AV	31.6	39.3	-2.1	32.9	35.9	53.9	18.0	Inside	
Hori	15930.000	AV	31.6	38.2	-0.6	32.6	36.6	53.9	17.3	Inside	
Vert	3540.011	PK	47.7	29.9	3.2	31.9	48.9	68.2	19.3	Outside	
Vert	5350.000	PK	54.8	32.3	4.1	31.9	59.3	68.2	8.9	Bandedge	
Vert	5350.475	PK	60.6	31.8	4.1	31.5	65.0	73.9	8.9	Inside	
Vert	7080.022	PK	44.9	36.2	4.6	32.3	53.4	68.2	14.8	Outside	
Vert	10620.000	PK	43.2	39.3	-2.1	32.9	47.5	73.9	26.4	Inside	
Vert	15930.000	PK	44.6	38.2	-0.6	32.6	49.6	73.9	24.3	Inside	
Vert	5350.000	AV	37.2	32.3	4.1	31.9	41.7	53.9	12.2	Bandedge	
Vert	5350.475	AV	40.2	31.8	4.1	31.5	44.6	53.9	9.3	Inside	
Vert	10620.000	AV	32.1	39.3	-2.1	32.9	36.4	53.9	17.5	Inside	
Vert	15930.000	AV	31.6	38.2	-0.6	32.6	36.6	53.9	17.3	Inside	

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

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

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 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/14/2010 09/15/2010 09/16/2010 09/21/2010
Temperature/ Humidity 23deg.C. / 65% 24deg.C. / 60% 23deg.C. / 67% 24deg.C. / 67%
Engineer Keisuke Keisuke Keisuke Satofumi
Kawamura Kawamura Kawamura Matsuyama
(1-10GHz) (10-18GHz) (18-40GHz) (1-10GHz)
Mode 11n-40 Tx 5510MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3673.312	PK	47.2	30.0	3.3	31.9	48.6	73.9	25.3	Inside	
Hori	5460.000	PK	52.1	32.3	4.1	31.9	56.6	73.9	17.3	Inside	
Hori	5467.250	PK	61.3	31.9	4.1	31.5	65.8	68.2	2.4	Outside	
Hori	5470.000	PK	60.4	32.3	4.1	31.9	64.9	68.2	3.3	Outside	
Hori	7346.624	PK	43.7	36.2	4.7	32.4	52.2	73.9	21.7	Inside	
Hori	11020.000	PK	44.7	39.8	-2.0	32.9	49.6	73.9	24.3	Inside	
Hori	16530.000	PK	44.6	39.8	-0.4	32.4	51.6	68.2	16.6	Outside	
Hori	3673.312	AV	42.3	30.0	3.3	31.9	43.7	53.9	10.2	Inside	
Hori	5460.000	AV	34.9	32.3	4.1	31.9	39.4	53.9	14.5	Inside	
Hori	7346.624	AV	33.4	36.2	4.7	32.4	41.9	53.9	12.0	Inside	
Hori	11020.000	AV	32.6	39.8	-2.0	32.9	37.5	53.9	16.4	Inside	
Vert	3673.312	PK	45.7	30.0	3.3	31.9	47.1	73.9	26.8	Inside	
Vert	5460.000	PK	48.5	32.3	4.1	31.9	53.0	73.9	20.9	Inside	
Vert	5467.983	PK	62.1	31.9	4.1	31.5	66.6	68.2	1.6	Outside	
Vert	5470.000	PK	57.2	32.3	4.1	31.9	61.7	68.2	6.5	Outside	
Vert	7346.624	PK	43.7	36.2	4.7	32.4	52.2	73.9	21.7	Inside	
Vert	11020.000	PK	43.3	39.8	-2.0	32.9	48.2	73.9	25.7	Inside	
Vert	16530.000	PK	43.1	39.8	-0.4	32.4	50.1	68.2	18.1	Outside	
Vert	3673.312	AV	40.1	30.0	3.3	31.9	41.5	53.9	12.4	Inside	
Vert	5460.000	AV	32.7	32.3	4.1	31.9	37.2	53.9	16.7	Inside	
Vert	7346.624	AV	32.5	36.2	4.7	32.4	41.0	53.9	12.9	Inside	
Vert	11020.000	AV	32.1	39.8	-2.0	32.9	37.0	53.9	16.9	Inside	

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

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

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 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/19/2010 09/23/2010 09/24/2010
Temperature/ Humidity 22deg.C. / 62% 22deg.C. / 72% 25deg.C. / 57%
Engineer Kazuya Takumi Tomohisa
Yoshioka Shimada Nakagawa
(1-10GHz) (10-18GHz) (18-40GHz)
Mode 11n-40 Tx 5550MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	214.766	QP	45.7	17.1	9.3	32.0	40.1	43.5	3.4	Outside	
Hori	239.993	QP	45.3	17.4	9.6	32.0	40.3	46.0	5.7	Outside	
Hori	272.044	QP	43.0	18.5	9.8	31.9	39.4	46.0	6.6	Inside	
Hori	300.681	QP	45.8	14.3	10.0	31.8	38.3	46.0	7.7	Outside	
Hori	335.984	QP	45.9	15.5	10.2	31.8	39.8	46.0	6.2	Outside	
Hori	720.107	QP	41.3	20.7	12.5	31.9	42.6	46.0	3.4	Outside	
Hori	3699.985	PK	46.8	30.1	3.3	31.9	48.3	73.9	25.6	Inside	
Hori	7399.928	PK	42.6	36.2	4.7	32.4	51.1	73.9	22.8	Inside	
Hori	11100.000	PK	46.0	39.8	-1.7	32.9	51.2	73.9	22.7	Inside	
Hori	16650.000	PK	44.9	38.8	-0.5	32.2	51.0	68.2	17.2	Outside	
Hori	3699.985	AV	41.9	30.1	3.3	31.9	43.4	53.9	10.5	Inside	
Hori	7399.928	AV	32.8	36.2	4.7	32.4	41.3	53.9	12.6	Inside	
Hori	11100.000	AV	33.0	39.8	-1.7	32.9	38.2	53.9	15.7	Inside	
Vert	208.201	QP	35.5	17.0	9.3	32.1	29.7	43.5	13.8	Outside	
Vert	239.993	QP	35.9	17.4	9.6	32.0	30.9	46.0	15.1	Outside	
Vert	335.984	QP	38.7	15.5	10.2	31.8	32.6	46.0	13.4	Outside	
Vert	455.063	QP	36.4	17.8	11.0	31.9	33.3	46.0	12.7	Outside	
Vert	499.544	QP	37.8	18.1	11.3	31.9	35.3	46.0	10.7	Outside	
Vert	720.107	QP	39.5	20.7	12.5	31.9	40.8	46.0	5.2	Outside	
Vert	3699.990	PK	45.5	30.1	3.3	31.9	47.0	73.9	26.9	Inside	
Vert	7399.953	PK	42.8	36.2	4.7	32.4	51.3	73.9	22.6	Inside	
Vert	11100.000	PK	47.3	39.8	-1.7	32.9	52.5	73.9	21.4	Inside	
Vert	16650.000	PK	46.2	38.8	-0.5	32.2	52.3	68.2	15.9	Outside	
Vert	3699.990	AV	39.8	30.1	3.3	31.9	41.3	53.9	12.6	Inside	
Vert	7399.953	AV	32.1	36.2	4.7	32.4	40.6	53.9	13.3	Inside	
Vert	11100.000	AV	34.6	39.8	-1.7	32.9	39.8	53.9	14.1	Inside	

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

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

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

Radiated Spurious Emission

Test place Head Office EMC Lab. No.3 and 4 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/14/2010 09/15/2010 09/16/2010 09/21/2010
Temperature/ Humidity 23deg.C. / 65% 24deg.C. / 60% 23deg.C. / 67% 24deg.C. / 67%
Engineer Keisuke Keisuke Keisuke Satofumi
Kawamura Kawamura Kawamura Matsuyama
(1-10GHz) (10-18GHz) (18-40GHz) (1-10GHz)
Mode 11n-40 Tx 5670MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3779.980	PK	47.4	30.1	3.3	31.9	48.9	73.9	25.0	Inside	
Hori	5725.000	PK	61.5	32.7	4.2	31.9	66.5	68.2	1.7	Outside	
Hori	5729.775	PK	60.7	32.4	4.2	31.6	65.7	68.2	2.5	Outside	
Hori	7559.960	PK	43.8	36.4	4.8	32.5	52.5	73.9	21.4	Inside	
Hori	11340.000	PK	45.7	39.6	-1.9	32.9	50.5	73.9	23.4	Inside	
Hori	17010.000	PK	43.7	41.4	-0.3	32.3	52.5	68.2	15.7	Outside	
Hori	3779.980	AV	42.3	30.1	3.3	31.9	43.8	53.9	10.1	Inside	
Hori	7559.960	AV	32.5	36.4	4.8	32.5	41.2	53.9	12.7	Inside	
Hori	11340.000	AV	34.4	39.6	-1.9	32.9	39.2	53.9	14.7	Inside	
Vert	3779.980	PK	45.4	30.1	3.3	31.9	46.9	73.9	27.0	Inside	
Vert	5725.000	PK	62.4	32.7	4.2	31.9	67.4	68.2	0.8	Outside	
Vert	5729.607	PK	61.9	32.4	4.2	31.6	66.9	68.2	1.3	Outside	
Vert	7559.960	PK	45.5	36.4	4.8	32.5	54.2	73.9	19.7	Inside	
Vert	11340.000	PK	47.8	39.6	-1.9	32.9	52.6	73.9	21.3	Inside	
Vert	17010.000	PK	43.7	41.4	-0.3	32.3	52.5	68.2	15.7	Outside	
Vert	3779.980	AV	39.5	30.1	3.3	31.9	41.0	53.9	12.9	Inside	
Vert	7559.960	AV	33.9	36.4	4.8	32.5	42.6	53.9	11.3	Inside	
Vert	11340.000	AV	36.0	39.6	-1.9	32.9	40.8	53.9	13.1	Inside	

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

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

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 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/15/2010 09/16/2010
Temperature/ Humidity 24deg.C. / 60% 23deg.C. / 67%
Engineer Takumi Shimada Takumi Shimada
(1-10GHz) (10-18GHz)
Mode 11a Rx 5260MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3506.600	PK	46.9	29.9	3.2	32.0	48.0	68.2	20.2	Outside	
Hori	5260.000	PK	43.0	32.3	4.0	31.8	47.5	68.2	20.7	Outside	
Hori	7013.200	PK	47.8	36.2	4.6	32.3	56.3	68.2	11.9	Outside	
Hori	10520.000	PK	45.0	39.2	-4.0	32.9	47.3	68.2	20.9	Outside	
Hori	15780.000	PK	45.7	38.5	-2.7	32.6	48.9	73.9	25.0	Inside	
Hori	15780.000	AV	31.4	38.5	-2.7	32.6	34.6	53.9	19.3	Inside	
Vert	3506.600	PK	48.3	29.9	3.2	32.0	49.4	68.2	18.8	Outside	
Vert	5260.000	PK	43.0	32.3	4.0	31.8	47.5	68.2	20.7	Outside	
Vert	7013.272	PK	47.1	36.2	4.6	32.3	55.6	68.2	12.6	Outside	
Vert	10520.000	PK	46.8	39.2	-4.0	32.9	49.1	68.2	19.1	Outside	
Vert	15780.000	PK	46.6	38.5	-2.7	32.6	49.8	73.9	24.1	Inside	
Vert	15780.000	AV	31.5	38.5	-2.7	32.6	34.7	53.9	19.2	Inside	

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

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

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 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/15/2010 09/16/2010
Temperature/ Humidity 24deg.C. / 60% 23deg.C. / 67%
Engineer Takumi Shimada Takumi Shimada
(1-10GHz) (10-18GHz)
Mode 11a Rx 5580MHz Ant1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3719.940	PK	44.6	30.1	3.3	31.9	46.1	73.9	27.8	Inside	
Hori	5580.000	PK	41.8	32.4	4.1	31.9	46.4	68.2	21.8	Outside	
Hori	7439.880	PK	44.0	36.2	4.7	32.5	52.4	73.9	21.5	Inside	
Hori	11160.000	PK	45.9	39.7	-3.9	32.9	48.8	73.9	25.1	Inside	
Hori	16740.000	PK	45.8	40.5	-2.5	32.4	51.4	68.2	16.8	Outside	
Hori	3719.940	AV	38.2	30.1	3.3	31.9	39.7	53.9	14.2	Inside	
Hori	7439.880	AV	32.9	36.2	4.7	32.5	41.3	53.9	12.6	Inside	
Hori	11160.000	AV	29.1	39.7	-3.9	32.9	32.0	53.9	21.9	Inside	
Vert	3719.940	PK	43.6	30.1	3.3	31.9	45.1	73.9	28.8	Inside	
Vert	5580.000	PK	41.9	32.4	4.1	31.9	46.5	68.2	21.7	Outside	
Vert	7439.880	PK	43.6	36.2	4.7	32.5	52.0	73.9	21.9	Inside	
Vert	11160.000	PK	45.8	39.7	-3.9	32.9	48.7	73.9	25.2	Inside	
Vert	16740.000	PK	46.0	40.5	-2.5	32.4	51.6	68.2	16.6	Outside	
Vert	3719.940	AV	38.1	30.1	3.3	31.9	39.6	53.9	14.3	Inside	
Vert	7439.880	AV	31.7	36.2	4.7	32.5	40.1	53.9	13.8	Inside	
Vert	11160.000	AV	33.3	39.7	-3.9	32.9	36.2	53.9	17.7	Inside	

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

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

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 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/15/2010 09/16/2010 09/17/2010
Temperature/ Humidity 24deg.C. / 60% 23deg.C. / 67% 22deg.C. / 66%
Engineer Takumi Shimada Takumi Shimada Keisuke Kawamura
(1-10GHz) (10-18GHz) (30M-1GHz)
Mode 11n-20 Rx 5260MHz Ant0/1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	194.412	QP	43.1	16.7	9.1	32.1	36.8	43.5	6.7	Outside	
Hori	214.761	QP	47.8	17.1	9.3	32.0	42.2	43.5	1.3	Outside	
Hori	239.991	QP	45.1	17.4	9.6	32.0	40.1	46.0	5.9	Outside	
Hori	272.044	QP	42.6	18.5	9.8	31.9	39.0	46.0	7.0	Inside	
Hori	300.683	QP	45.4	14.3	10.0	31.8	37.9	46.0	8.1	Outside	
Hori	335.986	QP	46.0	15.5	10.2	31.8	39.9	46.0	6.1	Outside	
Hori	3506.641	PK	43.7	29.9	3.2	32.0	44.8	68.2	23.4	Outside	
Hori	5260.000	PK	42.7	32.3	4.0	31.8	47.2	68.2	21.0	Outside	
Hori	7013.282	PK	46.7	36.2	4.6	32.3	55.2	68.2	13.0	Outside	
Hori	10520.000	PK	45.5	39.2	-4.0	32.9	47.8	68.2	20.4	Outside	
Hori	15780.000	PK	45.3	38.5	-2.7	32.6	48.5	73.9	25.4	Inside	
Hori	15780.000	AV	31.2	38.5	-2.7	32.6	34.4	53.9	19.5	Inside	
Vert	206.863	QP	35.8	16.9	9.2	32.1	29.8	43.5	13.7	Outside	
Vert	214.763	QP	37.8	17.1	9.3	32.0	32.2	43.5	11.3	Outside	
Vert	238.641	QP	36.0	17.4	9.5	32.0	30.9	46.0	15.1	Outside	
Vert	272.041	QP	31.9	18.5	9.8	31.9	28.3	46.0	17.7	Inside	
Vert	300.682	QP	35.5	14.3	10.0	31.8	28.0	46.0	18.0	Outside	
Vert	335.986	QP	39.4	15.5	10.2	31.8	33.3	46.0	12.7	Outside	
Vert	3506.641	PK	49.0	29.9	3.2	32.0	50.1	68.2	18.1	Outside	
Vert	5260.000	PK	42.6	32.3	4.0	31.8	47.1	68.2	21.1	Outside	
Vert	7013.282	PK	46.0	36.2	4.6	32.3	54.5	68.2	13.7	Outside	
Vert	10520.000	PK	44.7	39.2	-4.0	32.9	47.0	68.2	21.2	Outside	
Vert	15780.000	PK	45.8	38.5	-2.7	32.6	49.0	73.9	24.9	Inside	
Vert	15780.000	AV	31.0	38.5	-2.7	32.6	34.2	53.9	19.7	Inside	

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

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

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 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/15/2010 09/16/2010
Temperature/ Humidity 24deg.C. / 60% 23deg.C. / 67%
Engineer Takumi Shimada Takumi Shimada
(1-10GHz) (10-18GHz)
Mode 11n-20 Rx 5580MHz Ant0/1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	214.769	QP	46.6	17.1	9.3	32.0	41.0	43.5	2.5	Outside	
Hori	239.991	QP	45.3	17.4	9.6	32.0	40.3	46.0	5.7	Outside	
Hori	272.042	QP	42.7	18.5	9.8	31.9	39.1	46.0	6.9	Inside	
Hori	300.677	QP	45.9	14.3	10.0	31.8	38.4	46.0	7.6	Outside	
Hori	335.985	QP	45.8	15.5	10.2	31.8	39.7	46.0	6.3	Outside	
Hori	720.007	QP	43.3	20.7	12.5	31.9	44.6	46.0	1.4	Outside	
Hori	3719.981	PK	49.1	30.1	3.3	31.9	50.6	73.9	23.3	Inside	
Hori	5580.000	PK	42.1	32.4	4.1	31.9	46.7	68.2	21.5	Outside	
Hori	7439.962	PK	44.5	36.2	4.7	32.5	52.9	73.9	21.0	Inside	
Hori	11160.000	PK	45.7	39.7	-3.9	32.9	48.6	73.9	25.3	Inside	
Hori	16740.000	PK	45.6	40.5	-2.5	32.4	51.2	68.2	17.0	Outside	
Hori	3719.981	AV	41.5	30.1	3.3	31.9	43.0	53.9	10.9	Inside	
Hori	7439.962	AV	31.2	36.2	4.7	32.5	39.6	53.9	14.3	Inside	
Hori	11160.000	AV	31.1	39.7	-3.9	32.9	34.0	53.9	19.9	Inside	
Vert	207.371	QP	35.7	16.9	9.2	32.1	29.7	43.5	13.8	Outside	
Vert	239.991	QP	35.7	17.4	9.6	32.0	30.7	46.0	15.3	Outside	
Vert	335.985	QP	39.0	15.5	10.2	31.8	32.9	46.0	13.1	Outside	
Vert	455.064	QP	36.5	17.8	11.0	31.9	33.4	46.0	12.6	Outside	
Vert	499.604	QP	37.8	18.1	11.3	31.9	35.3	46.0	10.7	Outside	
Vert	720.007	QP	41.2	20.7	12.5	31.9	42.5	46.0	3.5	Outside	
Vert	3719.981	PK	44.4	30.1	3.3	31.9	45.9	73.9	28.0	Inside	
Vert	5580.000	PK	42.6	32.4	4.1	31.9	47.2	68.2	21.0	Outside	
Vert	7439.962	PK	43.8	36.2	4.7	32.5	52.2	73.9	21.7	Inside	
Vert	11160.000	PK	45.8	39.7	-3.9	32.9	48.7	73.9	25.2	Inside	
Vert	16740.000	PK	46.2	40.5	-2.5	32.4	51.8	68.2	16.4	Outside	
Vert	3719.981	AV	35.8	30.1	3.3	31.9	37.3	53.9	16.6	Inside	
Vert	7439.962	AV	30.1	36.2	4.7	32.5	38.5	53.9	15.4	Inside	
Vert	11160.000	AV	32.8	39.7	-3.9	32.9	35.7	53.9	18.2	Inside	

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

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

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 Anechoic Chamber
Report No. : 30KE0072-HO-02
Date : 09/22/2010
Temperature/ Humidity : 25deg.C. / 69%
Engineer : Satofumi Matsuyama
(1-10GHz)
Mode : 11a Tx 5180MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5106.927	PK	49.3	31.5	4.0	31.4	53.4	73.9	20.5	Inside	
Hori	5150.000	PK	56.0	31.6	4.0	31.4	60.2	68.2	8.0	Bandedge	
Hori	5106.927	AV	37.8	31.5	4.0	31.4	41.9	53.9	12.0	Inside	
Hori	5150.000	AV	39.8	31.6	4.0	31.4	44.0	53.9	9.9	Bandedge	
Vert	5107.178	PK	47.6	31.5	4.0	31.4	51.7	73.9	22.2	Inside	
Vert	5150.000	PK	56.0	31.6	4.0	31.4	60.2	68.2	8.0	Bandedge	
Vert	5107.178	AV	34.7	31.5	4.0	31.4	38.8	53.9	15.1	Inside	
Vert	5150.000	AV	36.4	31.6	4.0	31.4	40.6	53.9	13.3	Bandedge	

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

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

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 Anechoic Chamber
 Report No. : 30KE0072-HO-02
 Date : 09/22/2010
 Temperature/ Humidity : 25deg.C. / 69%
 Engineer : Satofumi Matsuyama
 (1-10GHz)
 Mode : 11a Tx 5320MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5350.000	PK	58.8	31.8	4.1	31.5	63.2	68.2	5.0	Bandedge	
Hori	5393.325	PK	52.6	31.8	4.1	31.5	57.0	73.9	16.9	Inside	
Hori	5350.000	AV	43.0	31.8	4.1	31.5	47.4	53.9	6.5	Bandedge	
Hori	5393.325	AV	40.0	31.8	4.1	31.5	44.4	53.9	9.5	Inside	
Vert	5350.000	PK	56.3	31.8	4.1	31.5	60.7	68.2	7.5	Bandedge	
Vert	5393.145	PK	50.1	31.8	4.1	31.5	54.5	73.9	19.4	Inside	
Vert	5350.000	AV	40.1	31.8	4.1	31.5	44.5	53.9	9.4	Bandedge	
Vert	5393.145	AV	37.8	31.8	4.1	31.5	42.2	53.9	11.7	Inside	

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

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

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 Anechoic Chamber
Report No. : 30KE0072-HO-02
Date : 09/22/2010
Temperature/ Humidity : 25deg.C. / 69%
Engineer : Satofumi Matsuyama
(1-10GHz)
Mode : 11a Tx 5500MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5426.876	PK	51.9	31.9	4.1	31.5	56.4	73.9	17.5	Inside	
Hori	5460.000	PK	50.6	31.9	4.1	31.5	55.1	73.9	18.8	Inside	
Hori	5470.000	PK	58.7	31.9	4.1	31.5	63.2	68.2	5.0	Outside	
Hori	5426.876	AV	40.1	31.9	4.1	31.5	44.6	53.9	9.3	Inside	
Hori	5460.000	AV	36.4	31.9	4.1	31.5	40.9	53.9	13.0	Inside	
Vert	5426.595	PK	56.0	31.9	4.1	31.5	60.5	73.9	13.4	Inside	
Vert	5460.000	PK	55.6	31.9	4.1	31.5	60.1	73.9	13.8	Inside	
Vert	5470.000	PK	60.5	31.9	4.1	31.5	65.0	68.2	3.2	Outside	
Vert	5426.595	AV	44.7	31.9	4.1	31.5	49.2	53.9	4.7	Inside	
Vert	5460.000	AV	38.9	31.9	4.1	31.5	43.4	53.9	10.5	Inside	

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

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

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 Anechoic Chamber
 Report No. : 30KE0072-HO-02
 Date : 09/22/2010
 Temperature/ Humidity : 25deg.C. / 69%
 Engineer : Satofumi Matsuyama
 (1-10GHz)
 Mode : 11a Tx 5700MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5725.000	PK	55.7	32.4	4.2	31.6	60.7	68.2	7.5	Outside	
Hori	5772.883	PK	50.2	32.5	4.3	31.6	55.4	68.2	12.8	Outside	
Vert	5725.000	PK	54.3	32.4	4.2	31.6	59.3	68.2	8.9	Outside	
Vert	5773.133	PK	49.6	32.5	4.3	31.6	54.8	68.2	13.4	Outside	

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

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

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 Anechoic Chamber
Report No. : 30KE0072-HO-02
Date : 09/22/2010
Temperature/ Humidity : 25deg.C. / 69%
Engineer : Satofumi Matsuyama
(1-10GHz)
Mode : 11n-20 Tx 5180MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5105.808	PK	51.1	31.5	4.0	31.4	55.2	73.9	18.7	Inside	
Hori	5150.000	PK	57.8	31.6	4.0	31.4	62.0	68.2	6.2	Bandedge	
Hori	5105.808	AV	39.6	31.5	4.0	31.4	43.7	53.9	10.2	Inside	
Hori	5150.000	AV	41.6	31.6	4.0	31.4	45.8	53.9	8.1	Bandedge	
Vert	5107.258	PK	47.4	31.5	4.0	31.4	51.5	73.9	22.4	Inside	
Vert	5150.000	PK	55.2	31.6	4.0	31.4	59.4	68.2	8.8	Bandedge	
Vert	5107.258	AV	36.1	31.5	4.0	31.4	40.2	53.9	13.7	Inside	
Vert	5150.000	AV	38.4	31.6	4.0	31.4	42.6	53.9	11.3	Bandedge	

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

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

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 Anechoic Chamber
 Report No. : 30KE0072-HO-02
 Date : 09/22/2010
 Temperature/ Humidity : 25deg.C. / 69%
 Engineer : Satofumi Matsuyama
 (1-10GHz)
 Mode : 11n-20 Tx 5320MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5350.000	PK	56.1	31.8	4.1	31.5	60.5	68.2	7.7	Bandedge	
Hori	5393.325	PK	51.2	31.8	4.1	31.5	55.6	73.9	18.3	Inside	
Hori	5350.000	AV	42.0	31.8	4.1	31.5	46.4	53.9	7.5	Bandedge	
Hori	5393.325	AV	38.7	31.8	4.1	31.5	43.1	53.9	10.8	Inside	
Vert	5350.000	PK	57.8	31.8	4.1	31.5	62.2	68.2	6.0	Bandedge	
Vert	5393.825	PK	51.1	31.8	4.1	31.5	55.5	73.9	18.4	Inside	
Vert	5350.000	AV	41.8	31.8	4.1	31.5	46.2	53.9	7.7	Bandedge	
Vert	5393.825	AV	39.3	31.8	4.1	31.5	43.7	53.9	10.2	Inside	

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

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

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 Anechoic Chamber
Report No. : 30KE0072-HO-02
Date : 09/22/2010
Temperature/ Humidity : 25deg.C. / 69%
Engineer : Satofumi Matsuyama
(1-10GHz)
Mode : 11n-20 Tx 5500MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5426.467	PK	51.8	31.9	4.1	31.5	56.3	73.9	17.6	Inside	
Hori	5460.000	PK	48.6	31.9	4.1	31.5	53.1	73.9	20.8	Inside	
Hori	5470.000	PK	56.7	31.9	4.1	31.5	61.2	68.2	7.0	Outside	
Hori	5426.467	AV	39.7	31.9	4.1	31.5	44.2	53.9	9.7	Inside	
Hori	5460.000	AV	35.0	31.9	4.1	31.5	39.5	53.9	14.4	Inside	
Vert	5427.000	PK	52.5	31.9	4.1	31.5	57.0	73.9	16.9	Inside	
Vert	5460.000	PK	49.3	31.9	4.1	31.5	53.8	73.9	20.1	Inside	
Vert	5470.000	PK	55.9	31.9	4.1	31.5	60.4	68.2	7.8	Outside	
Vert	5427.000	AV	40.8	31.9	4.1	31.5	45.3	53.9	8.6	Inside	
Vert	5460.000	AV	36.0	31.9	4.1	31.5	40.5	53.9	13.4	Inside	

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

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

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

Radiated Spurious Emission

Test place : Head Office EMC Lab. No.4 Anechoic Chamber
 Report No. : 30KE0072-HO-02
 Date : 09/22/2010
 Temperature/ Humidity : 25deg.C. / 69%
 Engineer : Satofumi Matsuyama
 (1-10GHz)
 Mode : 11n-20 Tx 5700MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	5725.000	PK	58.2	32.4	4.2	31.6	63.2	68.2	5.0	Outside	
Hori	5772.983	PK	50.7	32.5	4.3	31.6	55.9	68.2	12.3	Outside	
Vert	5725.000	PK	56.8	32.4	4.2	31.6	61.8	68.2	6.4	Outside	
Vert	5773.225	PK	49.8	32.5	4.3	31.6	55.0	68.2	13.2	Outside	

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

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

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

Radiated Spurious Emission

Test place Head Office EMC Lab. No.4 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/22/2010 09/23/2010 09/24/2010
Temperature/ Humidity 25deg.C. / 69% 22deg.C. / 72% 25deg.C. / 57%
Engineer Takumi Takumi Tomohisa
Shimada Shimada Nakagawa
(1-10GHz) (10-18GHz) (18-40GHz)
Mode 11n-40 Tx 5190MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3459.975	PK	51.2	29.3	3.4	31.7	52.2	68.2	16.0	Outside	
Hori	5144.250	PK	52.3	31.6	4.0	31.4	56.5	73.9	17.4	Inside	
Hori	5150.000	PK	52.6	31.6	4.0	31.4	56.8	68.2	11.4	Bandedge	
Hori	6919.943	PK	44.8	35.2	4.2	32.2	52.0	68.2	16.2	Outside	
Hori	10380.000	PK	41.8	38.9	-2.0	33.0	45.7	68.2	22.5	Outside	
Hori	5144.250	AV	34.5	31.6	4.0	31.4	38.7	53.9	15.2	Inside	
Hori	5150.000	AV	36.8	31.6	4.0	31.4	41.0	53.9	12.9	Bandedge	
Vert	3459.975	PK	49.5	29.3	3.4	31.7	50.5	68.2	17.7	Outside	
Vert	5144.250	PK	51.9	31.6	4.0	31.4	56.1	73.9	17.8	Inside	
Vert	5150.000	PK	52.5	31.6	4.0	31.4	56.7	68.2	11.5	Bandedge	
Vert	6919.943	PK	46.2	35.2	4.2	32.2	53.4	68.2	14.8	Outside	
Vert	10380.000	PK	44.4	38.9	-2.0	33.0	48.3	68.2	19.9	Outside	
Vert	5144.250	AV	32.5	31.6	4.0	31.4	36.7	53.9	17.2	Inside	
Vert	5150.000	AV	34.8	31.6	4.0	31.4	39.0	53.9	14.9	Bandedge	

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

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

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

Radiated Spurious Emission

Test place Head Office EMC Lab. No.4 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/22/2010 09/23/2010 09/24/2010
Temperature/ Humidity 25deg.C. / 69% 22deg.C. / 72% 25deg.C. / 57%
Engineer Takumi Takumi Tomohisa
Shimada Shimada Nakagawa
(1-10GHz) (10-18GHz) (18-40GHz)
Mode 11n-40 Tx 5230MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3486.636	PK	53.3	29.4	3.4	31.7	54.4	68.2	13.8	Outside	
Hori	6973.261	PK	45.9	35.3	4.2	32.2	53.2	68.2	15.0	Outside	
Hori	10460.000	PK	48.3	39.1	-2.0	33.0	52.4	68.2	15.8	Outside	
Hori	15690.000	PK	44.3	38.8	-0.6	32.3	50.2	73.9	23.7	Inside	
Hori	15690.000	AV	32.7	38.8	-0.6	32.3	38.6	53.9	15.3	Inside	
Vert	3486.636	PK	49.9	29.4	3.4	31.7	51.0	68.2	17.2	Outside	
Vert	6973.261	PK	46.4	35.3	4.2	32.2	53.7	68.2	14.5	Outside	
Vert	10460.000	PK	50.7	39.1	-2.0	33.0	54.8	68.2	13.4	Outside	
Vert	15690.000	PK	45.7	38.8	-0.6	32.3	51.6	73.9	22.3	Inside	
Vert	15690.000	AV	33.7	38.8	-0.6	32.3	39.6	53.9	14.3	Inside	

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

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

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 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/22/2010 09/23/2010 09/24/2010
Temperature/ Humidity 25deg.C. / 69% 22deg.C. / 72% 25deg.C. / 57%
Engineer Takumi Takumi Tomohisa
Shimada Shimada Nakagawa
(1-10GHz) (10-18GHz) (18-40GHz)
Mode 11n-40 Tx 5270MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3513.320	PK	52.4	29.4	3.5	31.7	53.6	68.2	14.6	Outside	
Hori	7026.607	PK	47.2	35.4	4.2	32.3	54.5	68.2	13.7	Outside	
Hori	10540.000	PK	46.8	39.2	-1.9	33.0	51.1	68.2	17.1	Outside	
Hori	15810.000	PK	44.0	38.3	-0.7	32.3	49.3	73.9	24.6	Inside	
Hori	15810.000	AV	32.6	38.3	-0.7	32.3	37.9	53.9	16.0	Inside	
Vert	3513.320	PK	50.0	29.4	3.5	31.7	51.2	68.2	17.0	Outside	
Vert	7026.607	PK	44.9	35.4	4.2	32.3	52.2	68.2	16.0	Outside	
Vert	10540.000	PK	47.3	39.2	-1.9	33.0	51.6	68.2	16.6	Outside	
Vert	15810.000	PK	45.3	38.3	-0.7	32.3	50.6	73.9	23.3	Inside	
Vert	15810.000	AV	33.3	38.3	-0.7	32.3	38.6	53.9	15.3	Inside	

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

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

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 Anechoic Chamber
Report No. : 30KE0072-HO-02
Date : 09/22/2010 09/23/2010 09/24/2010
Temperature/ Humidity : 25deg.C. / 69% 22deg.C. / 72% 25deg.C. / 57%
Engineer : Takumi Takumi Tomohisa
 Shimada Shimada Nakagawa
 (1-10GHz) (10-18GHz) (18-40GHz)
Mode : 11n-40 Tx 5310MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3540.011	PK	52.8	29.4	3.5	31.7	54.0	68.2	14.2	Outside	
Hori	5350.000	PK	52.8	31.8	4.1	31.5	57.2	68.2	11.0	Bandedge	
Hori	5350.500	PK	52.9	31.8	4.1	31.5	57.3	73.9	16.6	Inside	
Hori	7080.022	PK	45.5	35.5	4.2	32.3	52.9	68.2	15.3	Outside	
Hori	10620.000	PK	43.9	39.3	-1.9	33.0	48.3	73.9	25.6	Inside	
Hori	15930.000	PK	43.8	37.9	-0.7	32.3	48.7	73.9	25.2	Inside	
Hori	5350.000	AV	35.5	31.8	4.1	31.5	39.9	53.9	14.0	Bandedge	
Hori	5350.500	AV	35.3	31.8	4.1	31.5	39.7	53.9	14.2	Inside	
Hori	10620.000	AV	32.3	39.3	-1.9	33.0	36.7	53.9	17.2	Inside	
Hori	15930.000	AV	31.6	37.9	-0.7	32.3	36.5	53.9	17.4	Inside	
Vert	3540.011	PK	51.0	29.4	3.5	31.7	52.2	68.2	16.0	Outside	
Vert	5350.000	PK	56.8	31.8	4.1	31.5	61.2	68.2	7.0	Bandedge	
Vert	5350.500	PK	56.2	31.8	4.1	31.5	60.6	73.9	13.3	Inside	
Vert	7080.022	PK	45.6	35.5	4.2	32.3	53.0	68.2	15.2	Outside	
Vert	10620.000	PK	45.5	39.3	-1.9	33.0	49.9	73.9	24.0	Inside	
Vert	15930.000	PK	44.4	37.9	-0.7	32.3	49.3	73.9	24.6	Inside	
Vert	5350.000	AV	38.0	31.8	4.1	31.5	42.4	53.9	11.5	Bandedge	
Vert	5350.500	AV	39.7	31.8	4.1	31.5	44.1	53.9	9.8	Inside	
Vert	10620.000	AV	33.6	39.3	-1.9	33.0	38.0	53.9	15.9	Inside	
Vert	15930.000	AV	31.6	37.9	-0.7	32.3	36.5	53.9	17.4	Inside	

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

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

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

Radiated Spurious Emission

Test place Head Office EMC Lab. No.4 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/22/2010 09/23/2010 09/24/2010
Temperature/ Humidity 25deg.C. / 69% 22deg.C. / 72% 25deg.C. / 57%
Engineer Takumi Takumi Tomohisa
Shimada Shimada Nakagawa
(1-10GHz) (10-18GHz) (18-40GHz)
Mode 11n-40 Tx 5510MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3673.292	PK	50.6	29.5	3.5	31.6	52.0	73.9	21.9	Inside	
Hori	5460.000	PK	48.2	31.9	4.1	31.5	52.7	73.9	21.2	Inside	
Hori	5468.250	PK	55.2	31.9	4.1	31.5	59.7	68.2	8.5	Outside	
Hori	5470.000	PK	56.6	31.9	4.1	31.5	61.1	68.2	7.1	Outside	
Hori	7346.619	PK	43.7	36.0	4.3	32.4	51.6	73.9	22.3	Inside	
Hori	11020.000	PK	42.8	39.8	-1.6	33.0	48.0	73.9	25.9	Inside	
Hori	3673.292	AV	46.6	29.5	3.5	31.6	48.0	53.9	5.9	Inside	
Hori	5460.000	AV	31.9	31.9	4.1	31.5	36.4	53.9	17.5	Inside	
Hori	7346.619	AV	34.0	36.0	4.3	32.4	41.9	53.9	12.0	Inside	
Hori	11020.000	AV	31.4	39.8	-1.6	33.0	36.6	53.9	17.3	Inside	
Vert	3673.292	PK	48.9	29.5	3.5	31.6	50.3	73.9	23.6	Inside	
Vert	5460.000	PK	47.4	31.9	4.1	31.5	51.9	73.9	22.0	Inside	
Vert	5468.250	PK	55.7	31.9	4.1	31.5	60.2	68.2	8.0	Outside	
Vert	5470.000	PK	55.0	31.9	4.1	31.5	59.5	68.2	8.7	Outside	
Vert	7346.619	PK	43.5	36.0	4.3	32.4	51.4	73.9	22.5	Inside	
Vert	11020.000	PK	43.0	39.8	-1.6	33.0	48.2	73.9	25.7	Inside	
Vert	3673.292	AV	44.4	29.5	3.5	31.6	45.8	53.9	8.1	Inside	
Vert	5460.000	AV	32.1	31.9	4.1	31.5	36.6	53.9	17.3	Inside	
Vert	7346.619	AV	32.9	36.0	4.3	32.4	40.8	53.9	13.1	Inside	
Vert	11020.000	AV	31.4	39.8	-1.6	33.0	36.6	53.9	17.3	Inside	

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

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

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 Anechoic Chamber
Report No. : 30KE0072-HO-02
Date : 09/22/2010 09/23/2010 09/24/2010
Temperature/ Humidity : 25deg.C. / 69% 22deg.C. / 72% 25deg.C. / 57%
Engineer : Takumi Takumi Tomohisa
 Shimada Shimada Nakagawa
 (1-10GHz) (10-18GHz) (18-40GHz)
Mode : 11n-40 Tx 5550MHz Ant0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3699.985	PK	50.5	29.5	3.5	31.6	51.9	73.9	22.0	Inside	
Hori	7399.953	PK	44.3	36.0	4.3	32.4	52.2	73.9	21.7	Inside	
Hori	11100.000	PK	44.4	39.8	-1.7	32.9	49.6	73.9	24.3	Inside	
Hori	16650.000	PK	44.2	38.8	-0.5	32.2	50.3	68.2	17.9	Outside	
Hori	3699.985	AV	46.8	29.5	3.5	31.6	48.2	53.9	5.7	Inside	
Hori	7399.953	AV	33.2	36.0	4.3	32.4	41.1	53.9	12.8	Inside	
Hori	11100.000	AV	33.0	39.8	-1.7	32.9	38.2	53.9	15.7	Inside	
Vert	3699.985	PK	50.0	29.5	3.5	31.6	51.4	73.9	22.5	Inside	
Vert	7399.953	PK	43.9	36.0	4.3	32.4	51.8	73.9	22.1	Inside	
Vert	11100.000	PK	44.2	39.8	-1.7	32.9	49.4	73.9	24.5	Inside	
Vert	16650.000	PK	44.3	38.8	-0.5	32.2	50.4	68.2	17.8	Outside	
Vert	3699.985	AV	45.9	29.5	3.5	31.6	47.3	53.9	6.6	Inside	
Vert	7399.953	AV	33.2	36.0	4.3	32.4	41.1	53.9	12.8	Inside	
Vert	11100.000	AV	33.4	39.8	-1.7	32.9	38.6	53.9	15.3	Inside	

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

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

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 Anechoic Chamber
Report No. 30KE0072-HO-02
Date 09/22/2010 09/23/2010 09/24/2010
Temperature/ Humidity 25deg.C. / 69% 22deg.C. / 72% 25deg.C. / 57%
Engineer Takumi Takumi Tomohisa
Shimada Shimada Nakagawa
(1-10GHz) (10-18GHz) (18-40GHz)
Mode 11n-40 Tx 5670MHz Ant0

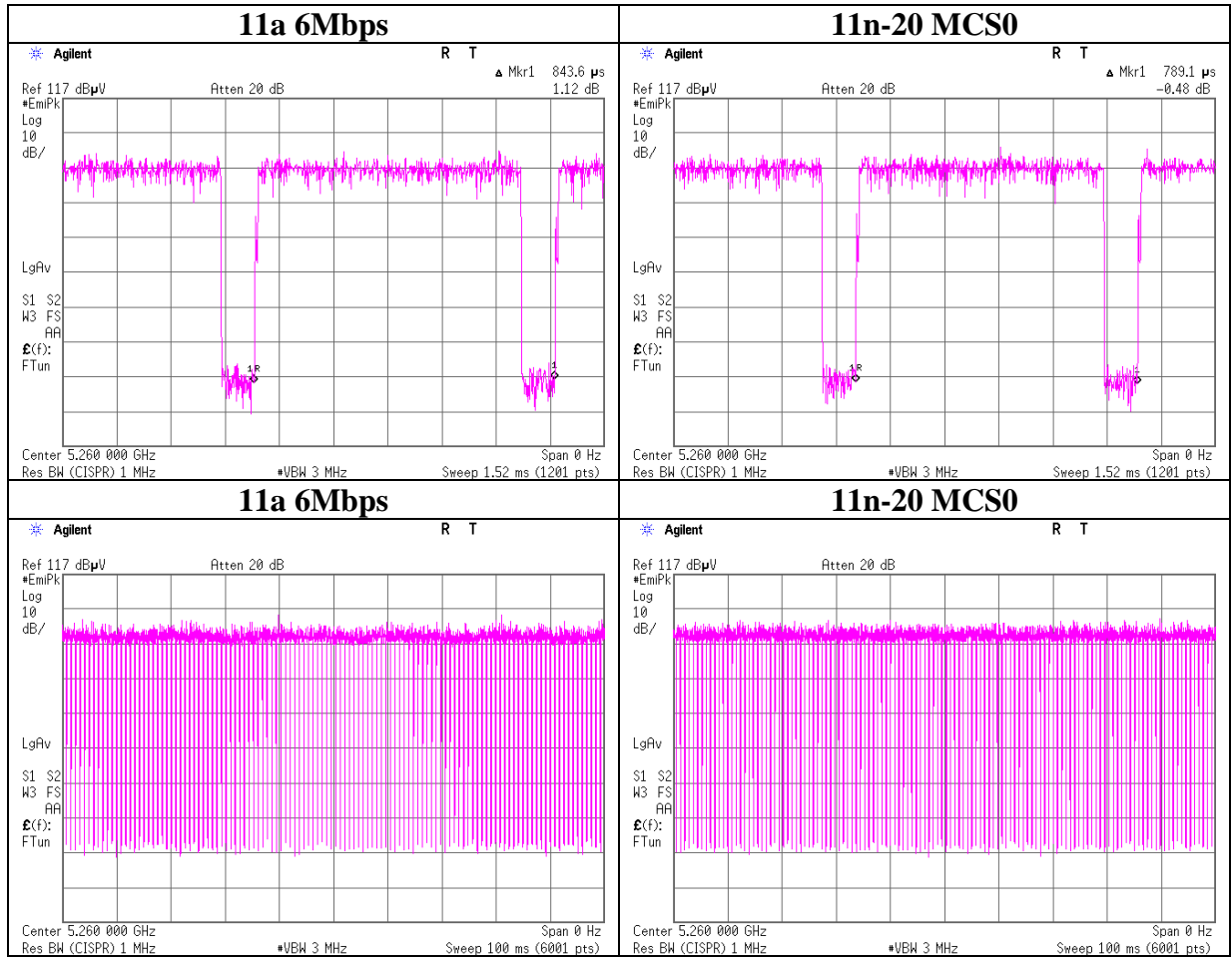
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Inside or Outside of Restricted Bands	Remark
Hori	3779.980	PK	48.5	29.5	3.5	31.6	49.9	73.9	24.0	Inside	
Hori	5725.000	PK	56.9	32.4	4.2	31.6	61.9	68.2	6.3	Outside	
Hori	5729.500	PK	57.9	32.4	4.2	31.6	62.9	68.2	5.3	Outside	
Hori	7559.960	PK	42.9	36.3	4.4	32.5	51.1	73.9	22.8	Inside	
Hori	11340.000	PK	46.9	39.7	-1.7	32.9	52.0	73.9	21.9	Inside	
Hori	17010.000	PK	43.2	39.4	-0.5	32.2	49.9	68.2	18.3	Outside	
Hori	3779.980	AV	43.7	29.5	3.5	31.6	45.1	53.9	8.8	Inside	
Hori	7559.960	AV	32.3	36.3	4.4	32.5	40.5	53.9	13.4	Inside	
Hori	11340.000	AV	34.3	39.7	-1.7	32.9	39.4	53.9	14.5	Inside	
Vert	3779.980	PK	48.7	29.5	3.5	31.6	50.1	73.9	23.8	Inside	
Vert	5725.000	PK	54.7	32.4	4.2	31.6	59.7	68.2	8.5	Outside	
Vert	5729.500	PK	56.4	32.4	4.2	31.6	61.4	68.2	6.8	Outside	
Vert	7559.960	PK	43.6	36.3	4.4	32.5	51.8	73.9	22.1	Inside	
Vert	11340.000	PK	45.6	39.7	-1.7	32.9	50.7	73.9	23.2	Inside	
Vert	17010.000	PK	44.2	39.4	-0.5	32.2	50.9	68.2	17.3	Outside	
Vert	3779.980	AV	43.6	29.5	3.5	31.6	45.0	53.9	8.9	Inside	
Vert	7559.960	AV	33.2	36.3	4.4	32.5	41.4	53.9	12.5	Inside	
Vert	11340.000	AV	33.8	39.7	-1.7	32.9	38.9	53.9	15.0	Inside	

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

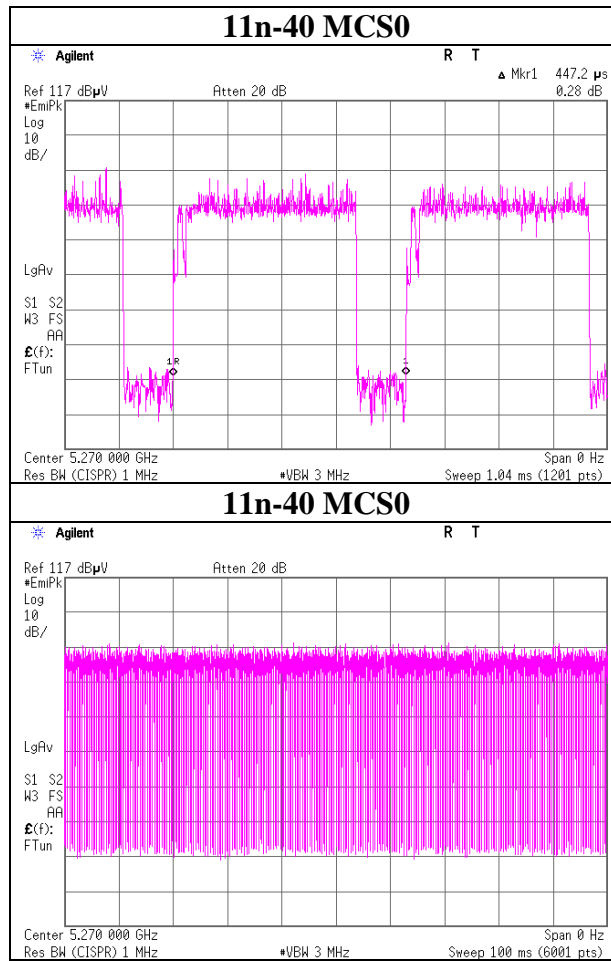
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20dB).

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

The tested burst timing

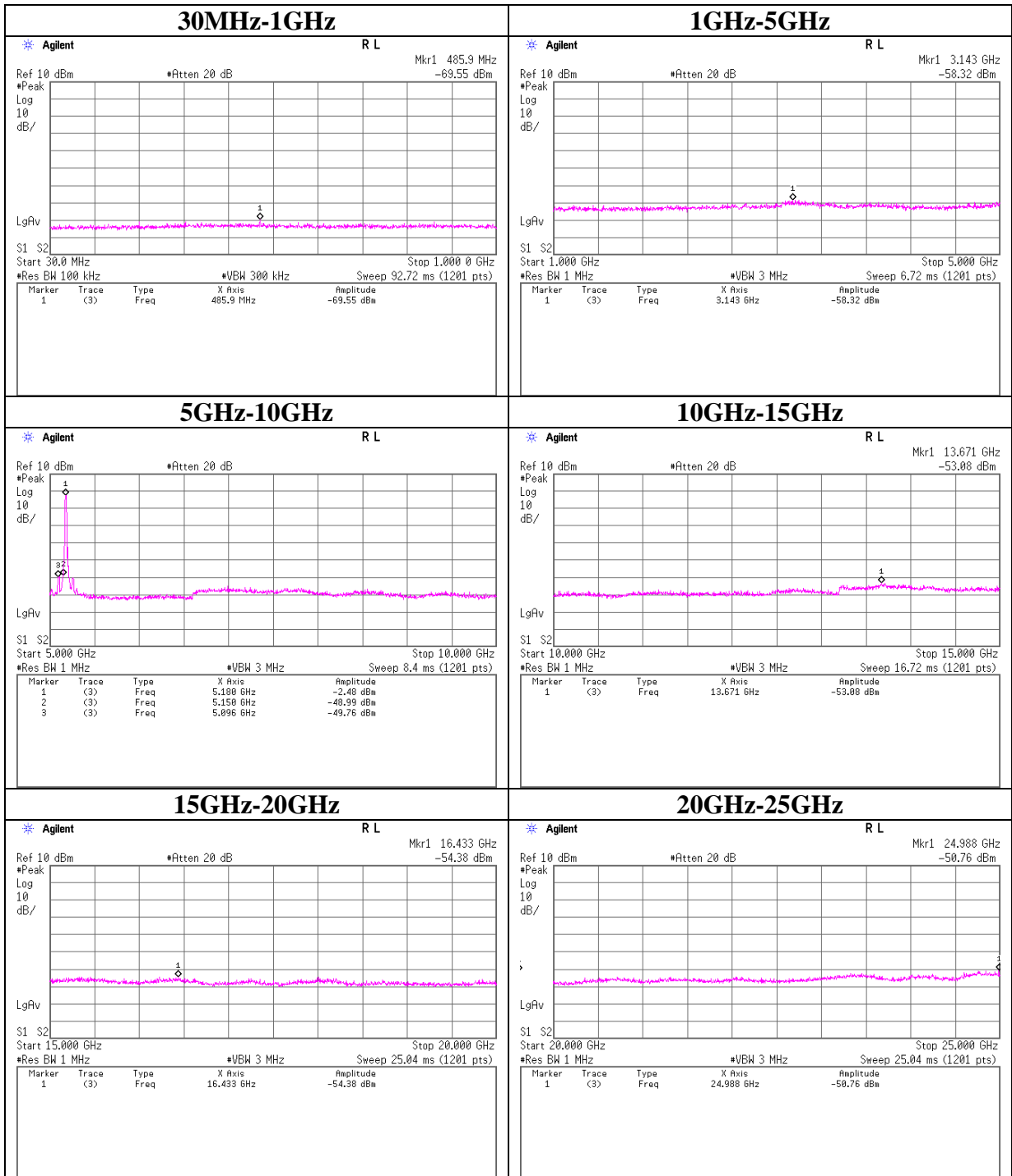


The tested burst timing



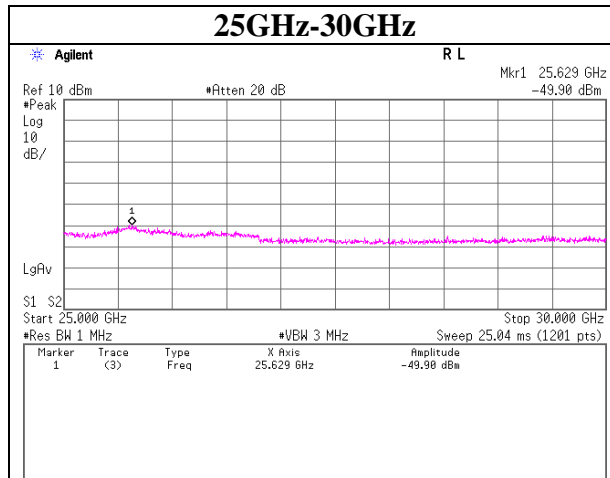
Conducted Spurious Emission

11a Tx 5180MHz

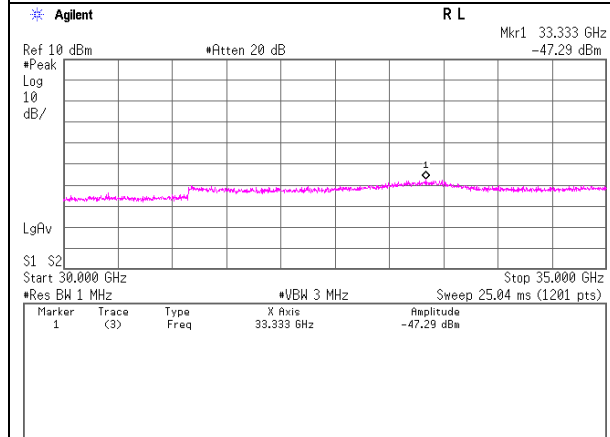


Conducted Spurious Emission

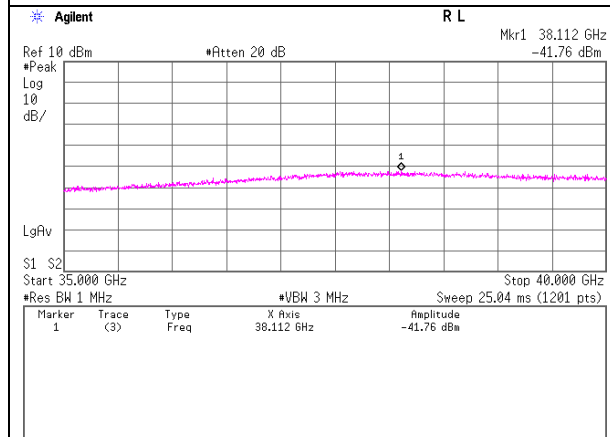
11a Tx 5180MHz 25GHz-30GHz



30GHz-35GHz

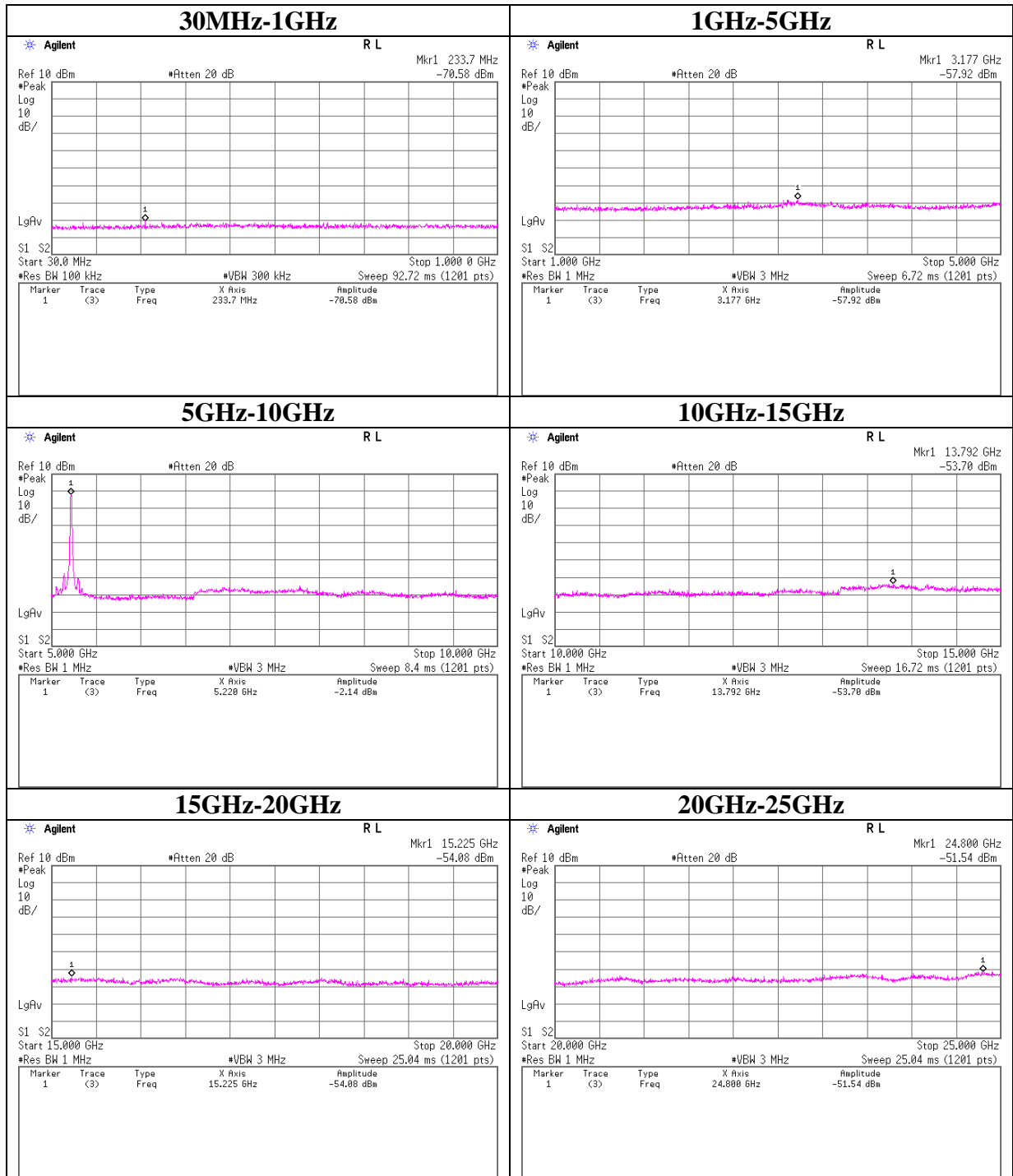


35GHz-40GHz



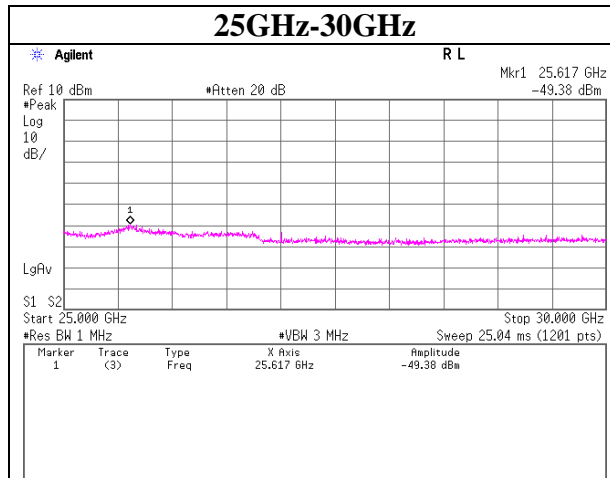
Conducted Spurious Emission

11a Tx 5220MHz

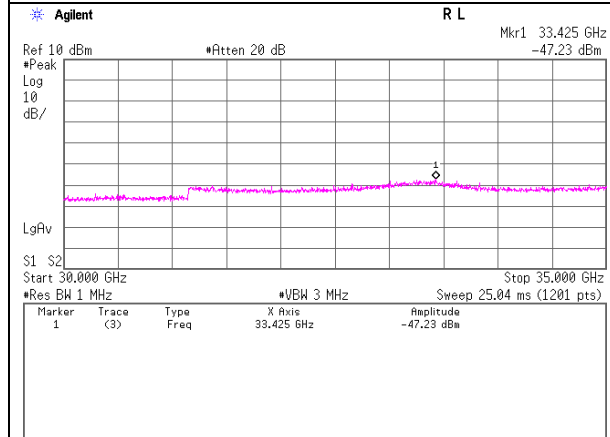


Conducted Spurious Emission

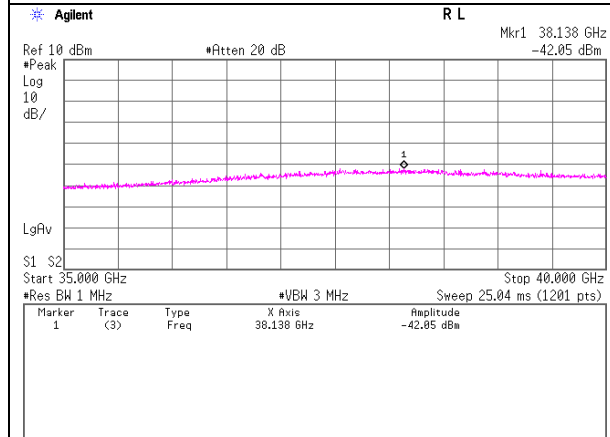
11a Tx 5220MHz 25GHz-30GHz



30GHz-35GHz

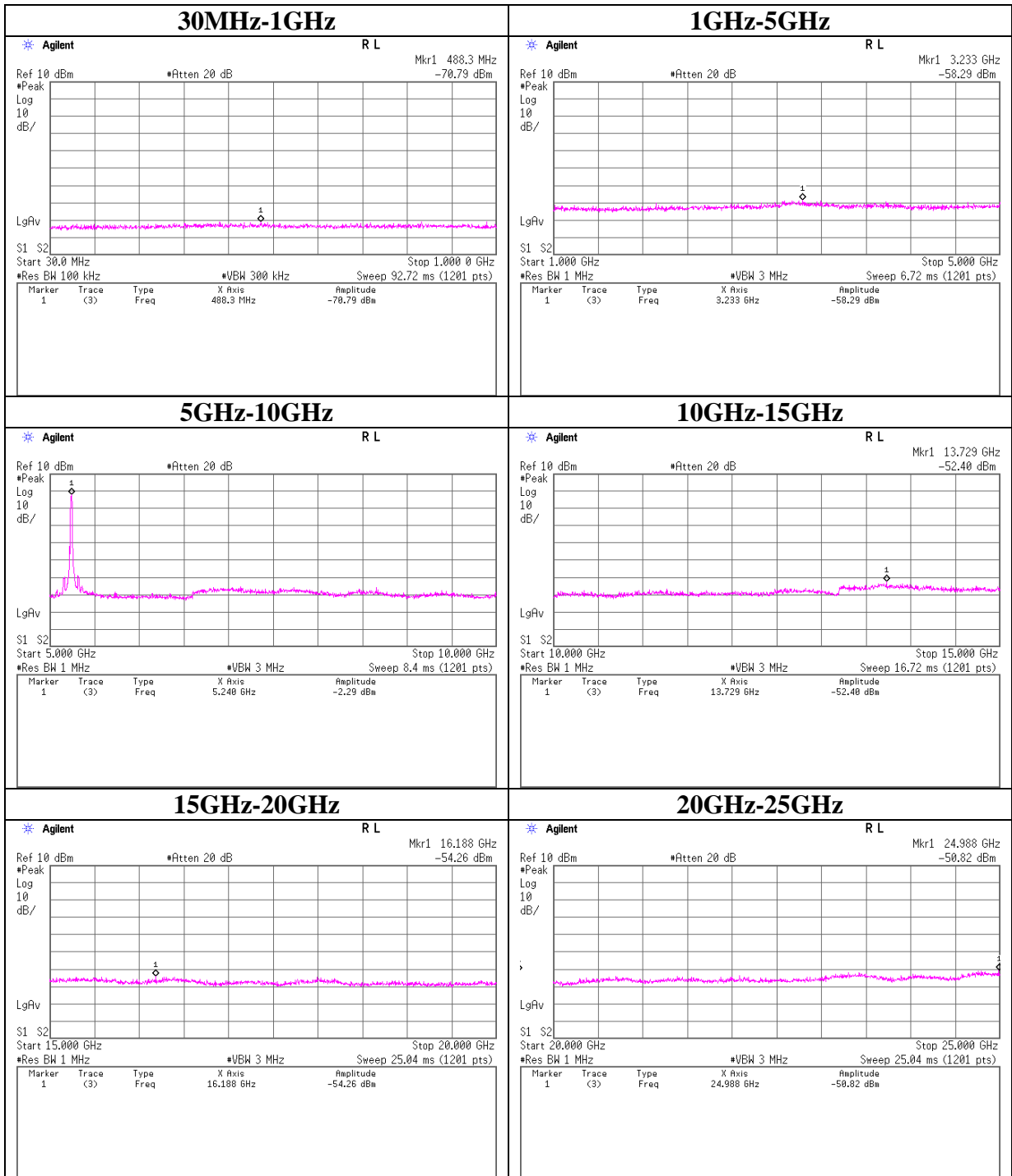


35GHz-40GHz



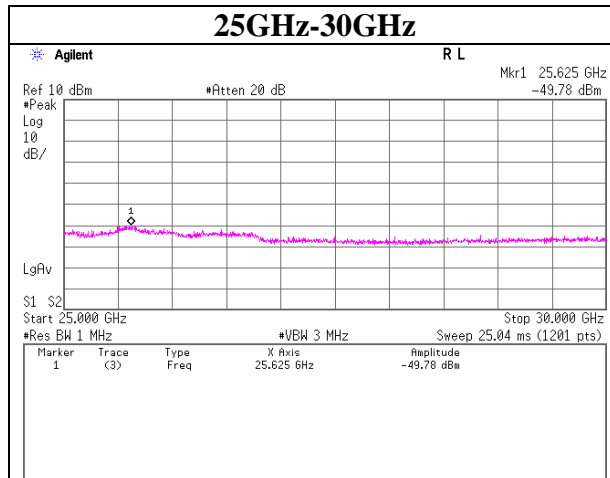
Conducted Spurious Emission

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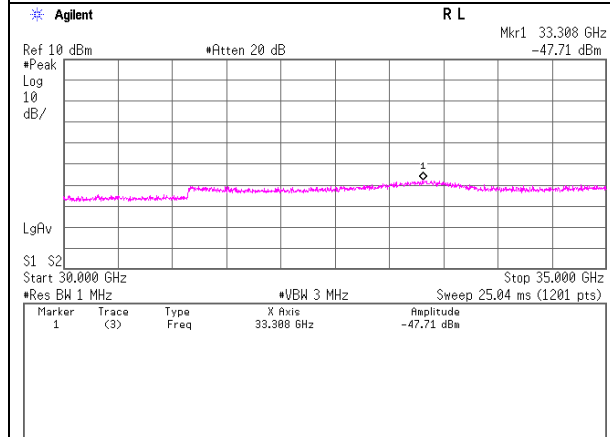


Conducted Spurious Emission

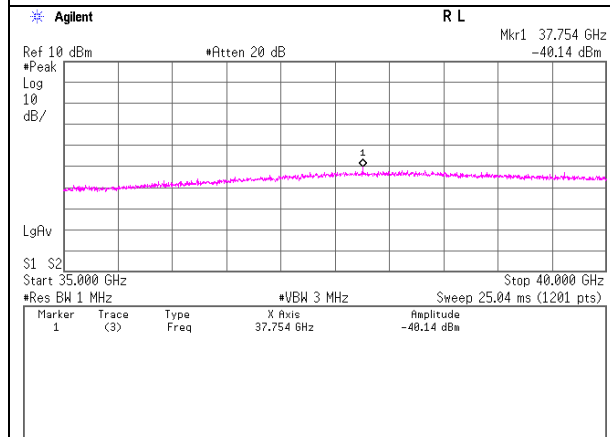
11a Tx 5240MHz 25GHz-30GHz



30GHz-35GHz

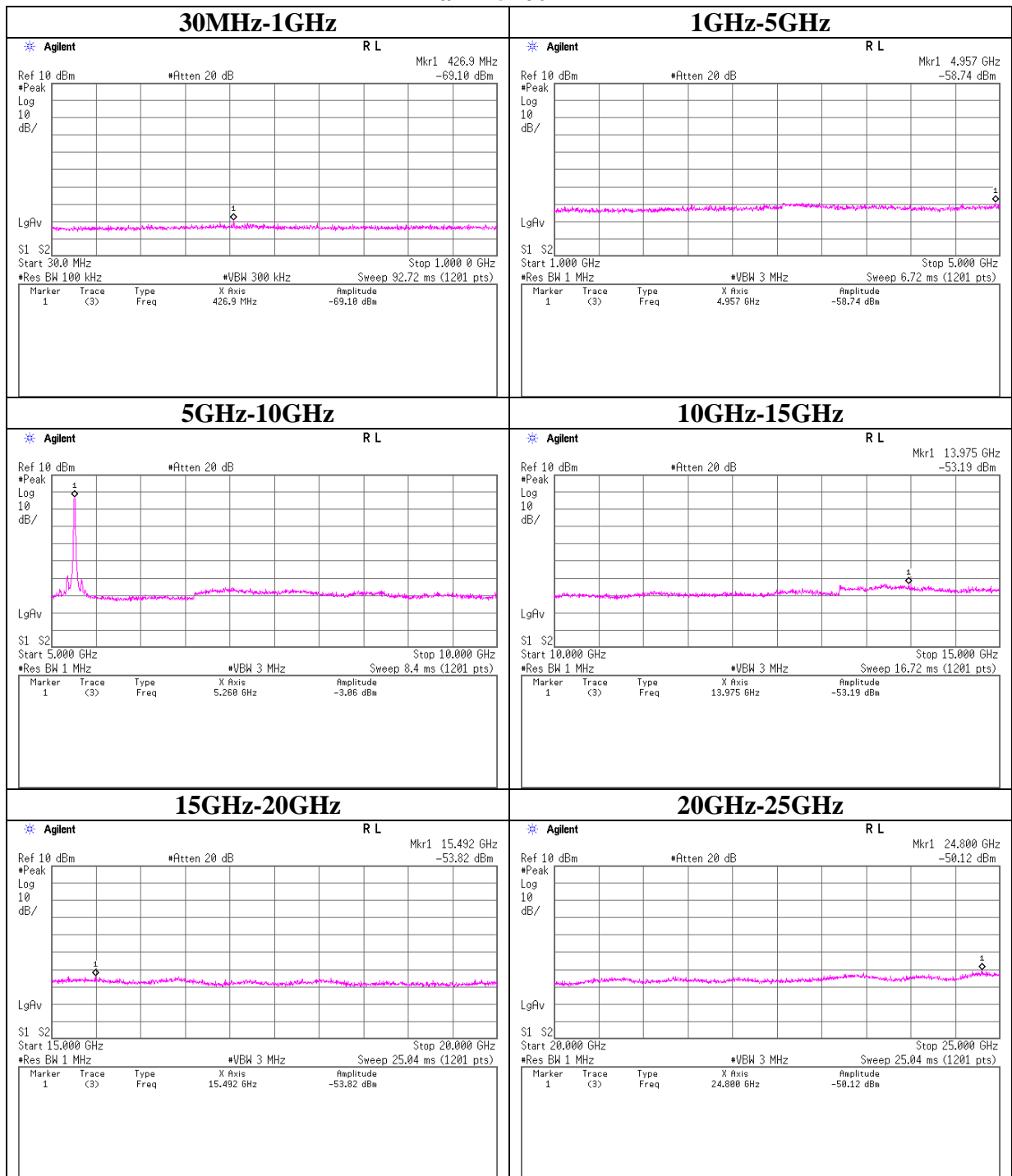


35GHz-40GHz



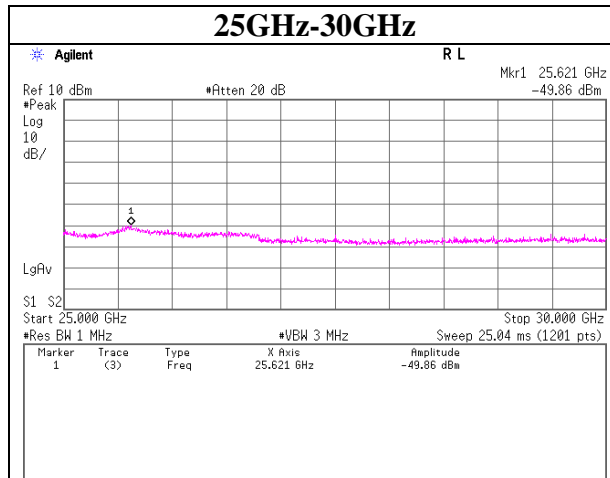
Conducted Spurious Emission

11a Tx 5260MHz

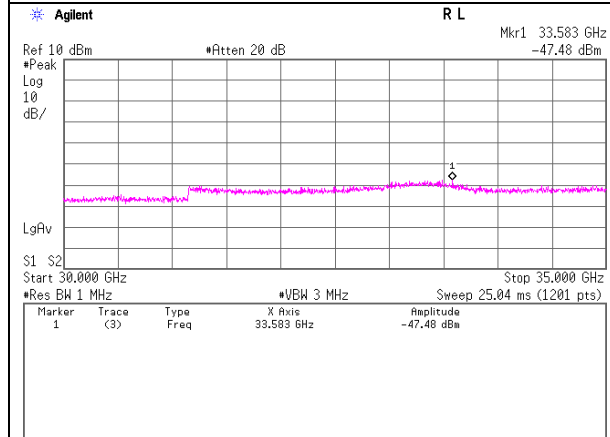


Conducted Spurious Emission

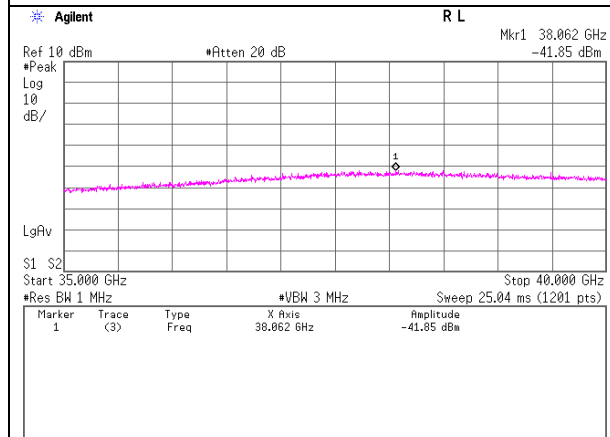
11a Tx 5260MHz 25GHz-30GHz



30GHz-35GHz

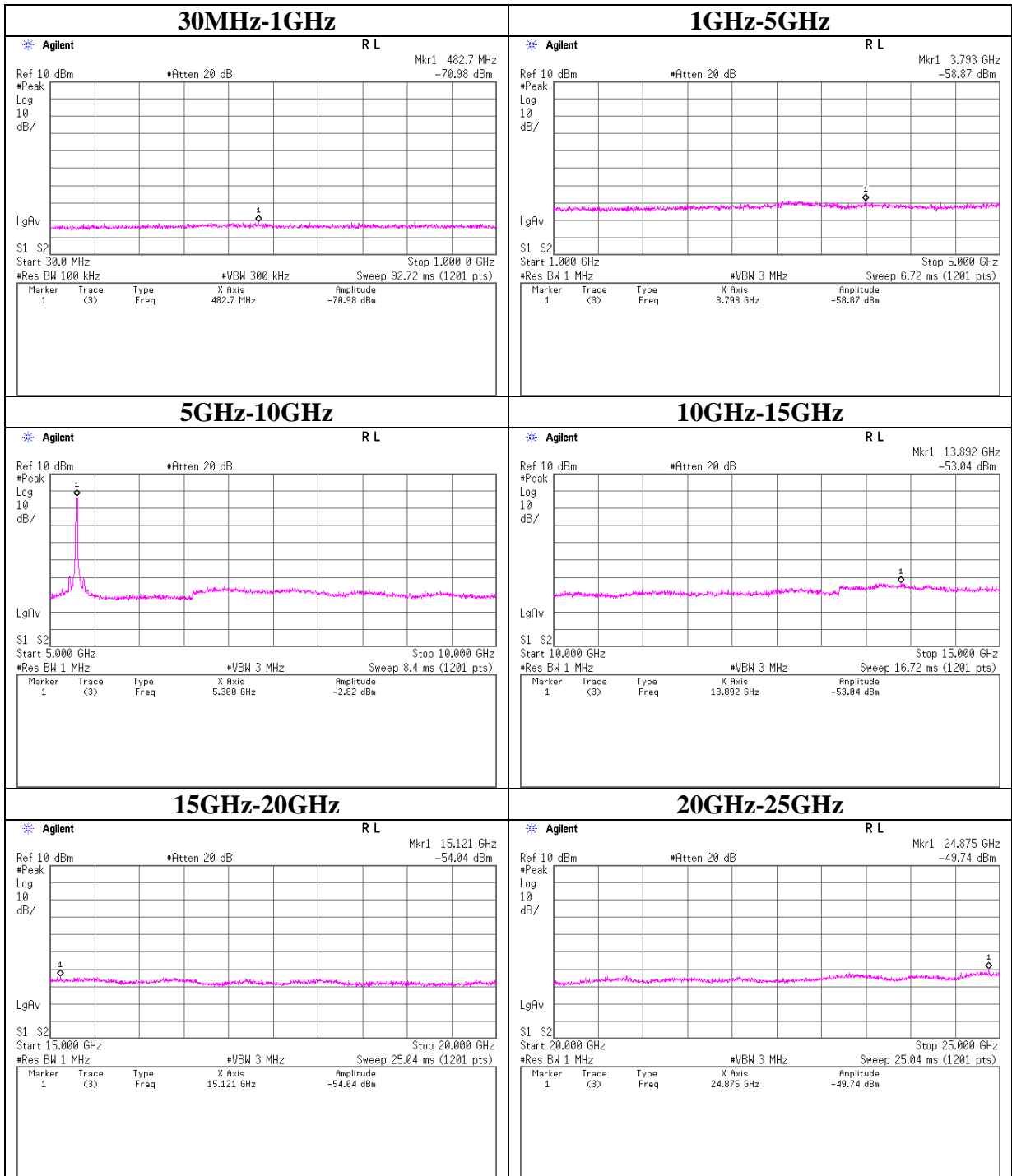


35GHz-40GHz



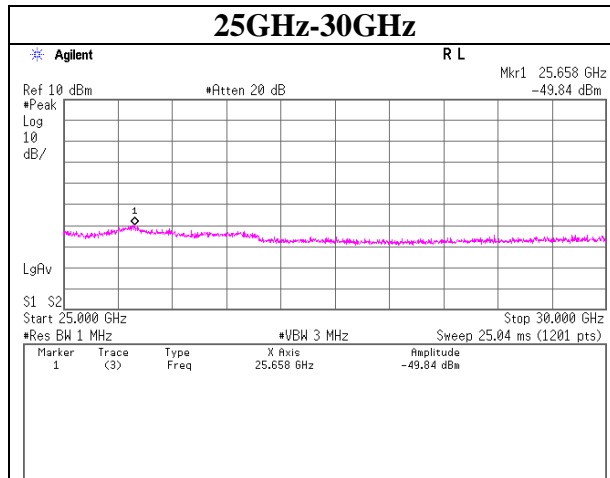
Conducted Spurious Emission

11a Tx 5300MHz

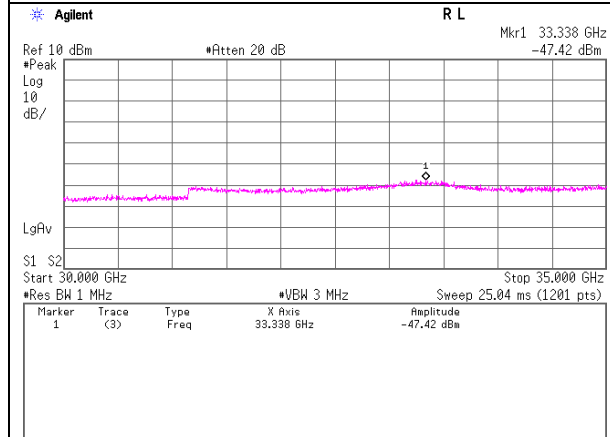


Conducted Spurious Emission

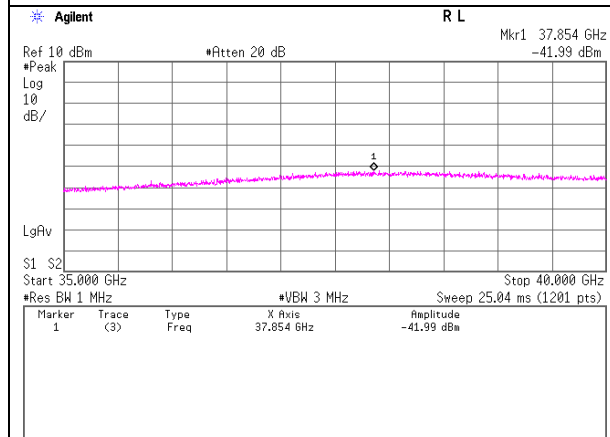
11a Tx 5300MHz 25GHz-30GHz



30GHz-35GHz

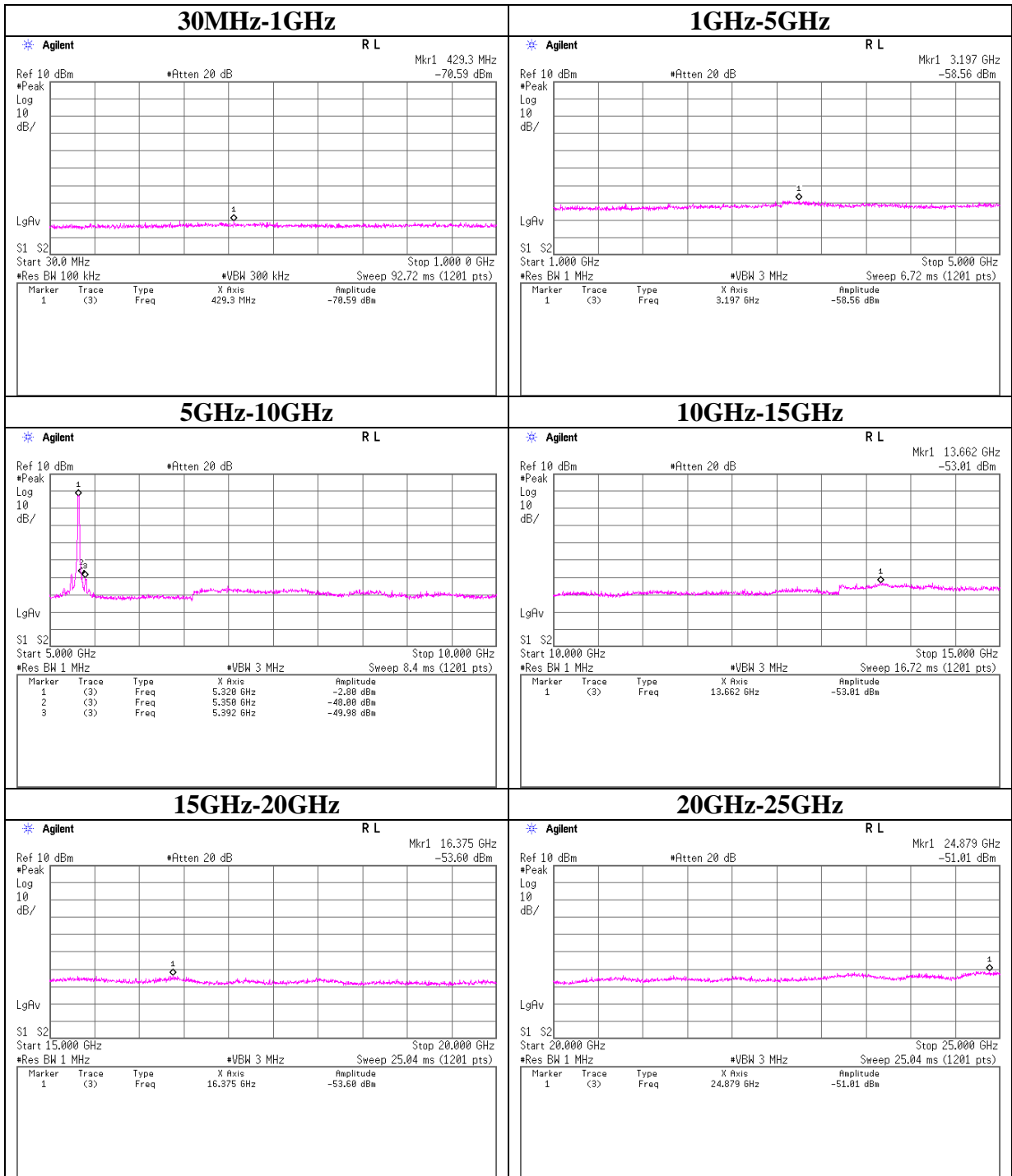


35GHz-40GHz



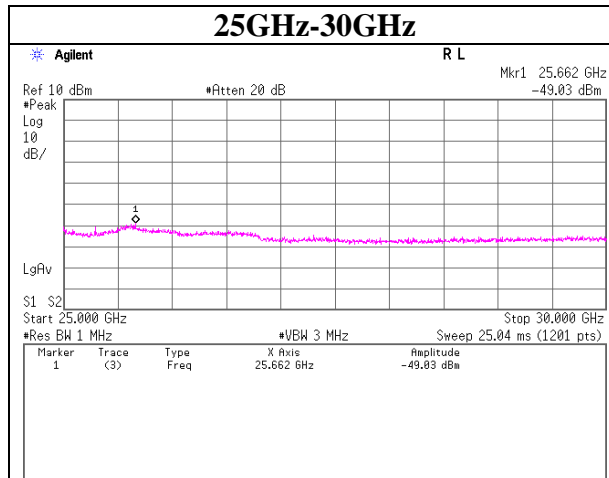
Conducted Spurious Emission

11a Tx 5320MHz

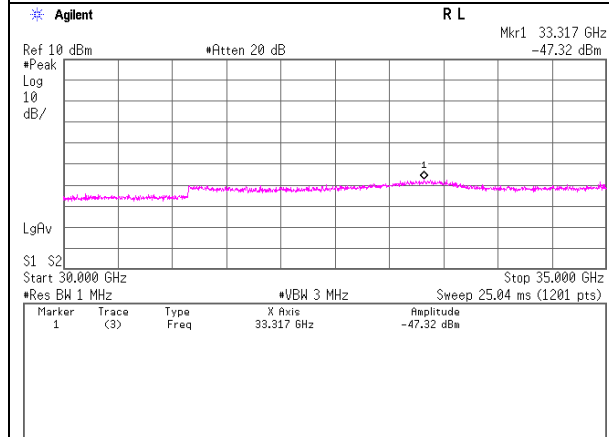


Conducted Spurious Emission

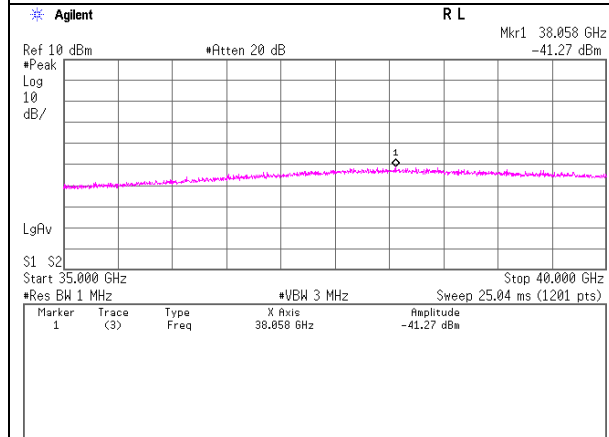
11a Tx 5320MHz 25GHz-30GHz



30GHz-35GHz

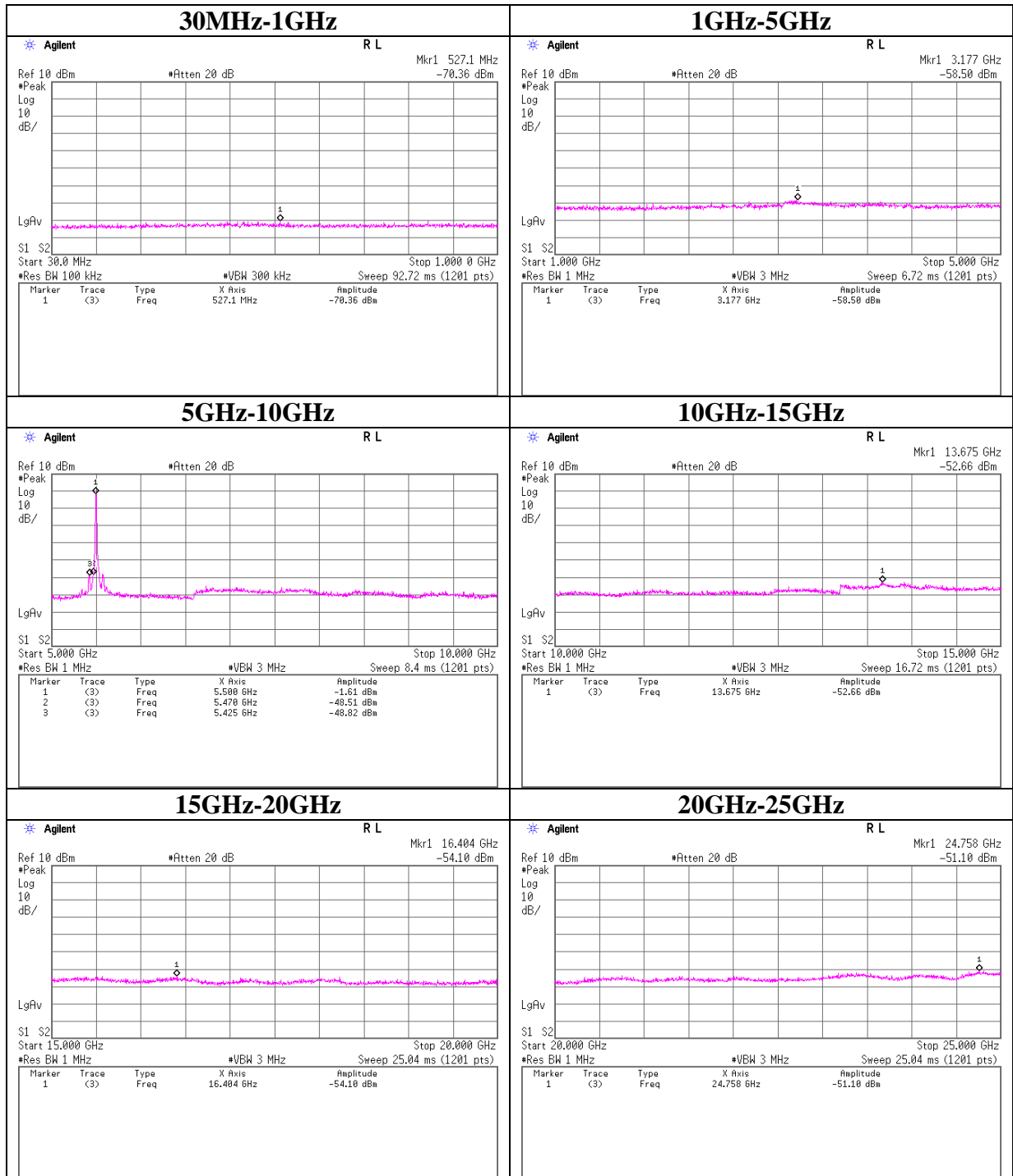


35GHz-40GHz



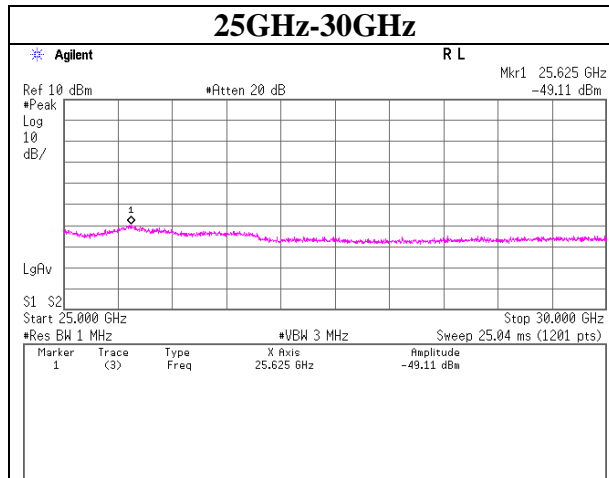
Conducted Spurious Emission

11a Tx 5500MHz

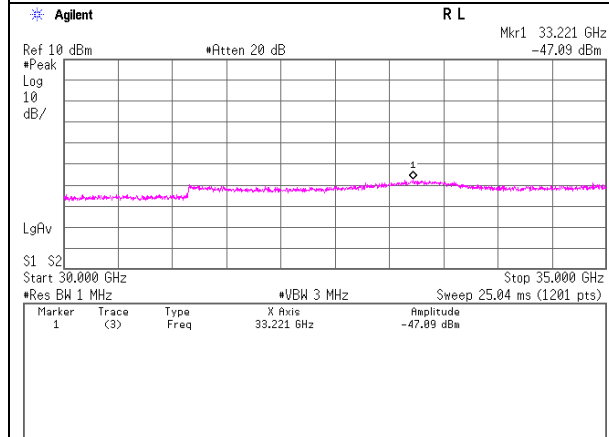


Conducted Spurious Emission

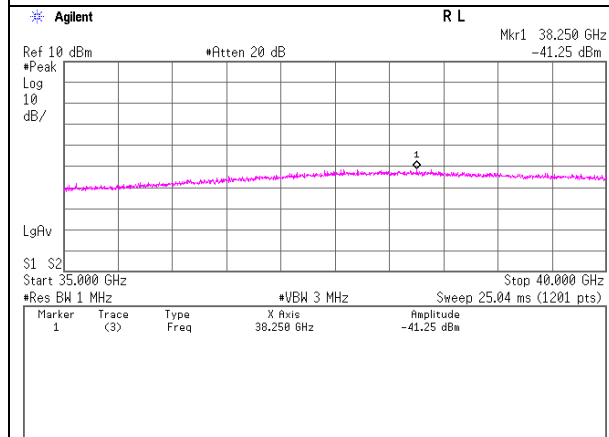
11a Tx 5500MHz 25GHz-30GHz



30GHz-35GHz

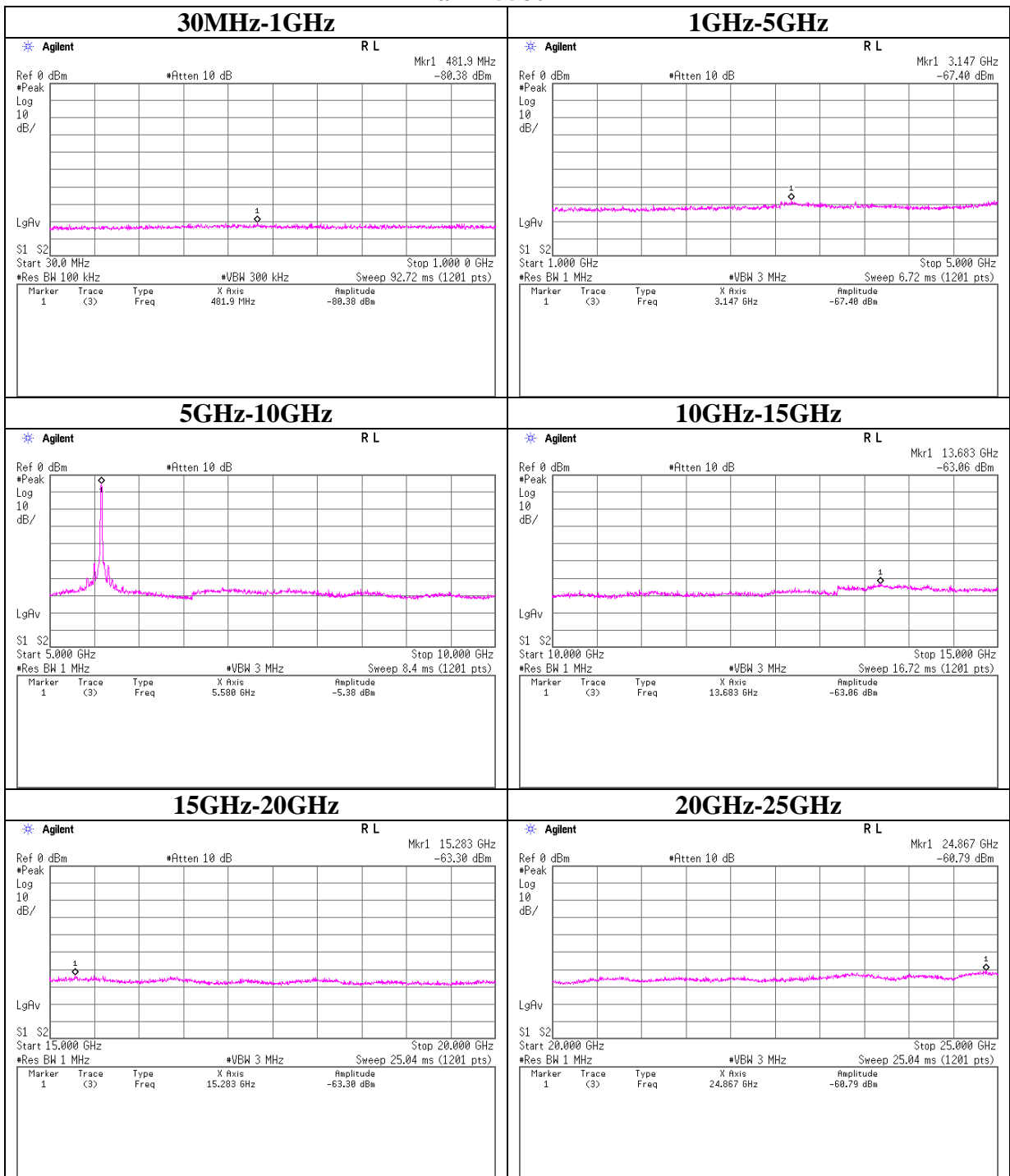


35GHz-40GHz



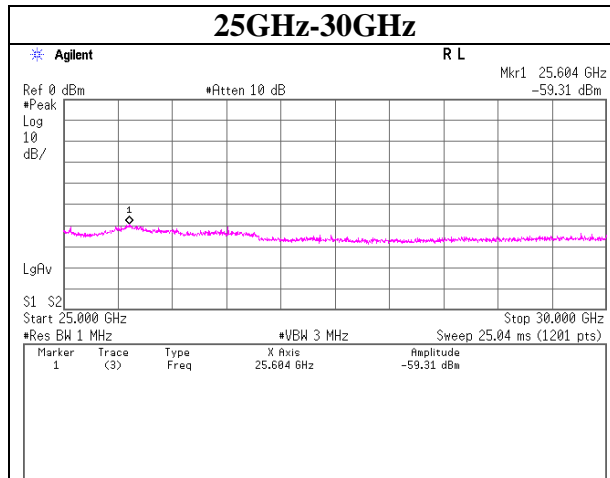
Conducted Spurious Emission

11a Tx 5580MHz

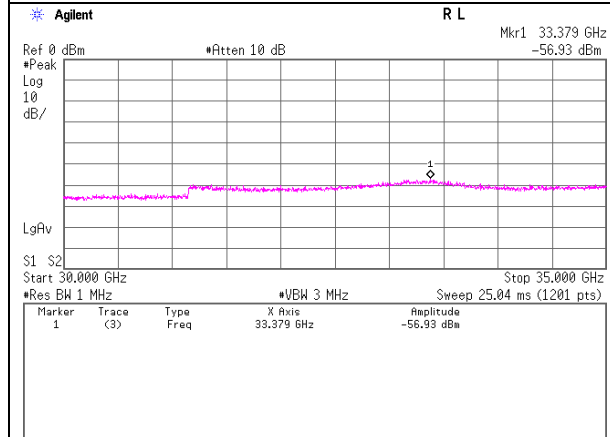


Conducted Spurious Emission

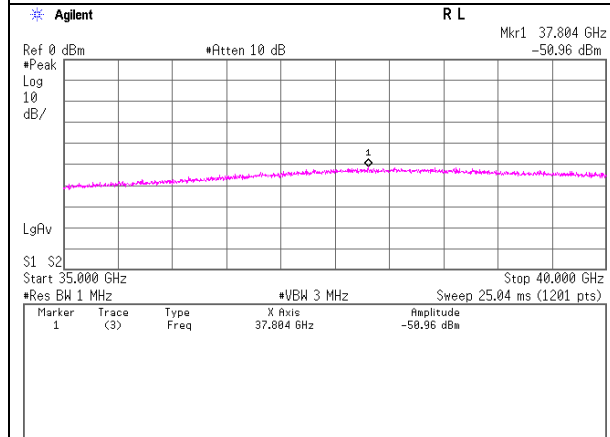
11a Tx 5580MHz 25GHz-30GHz



30GHz-35GHz

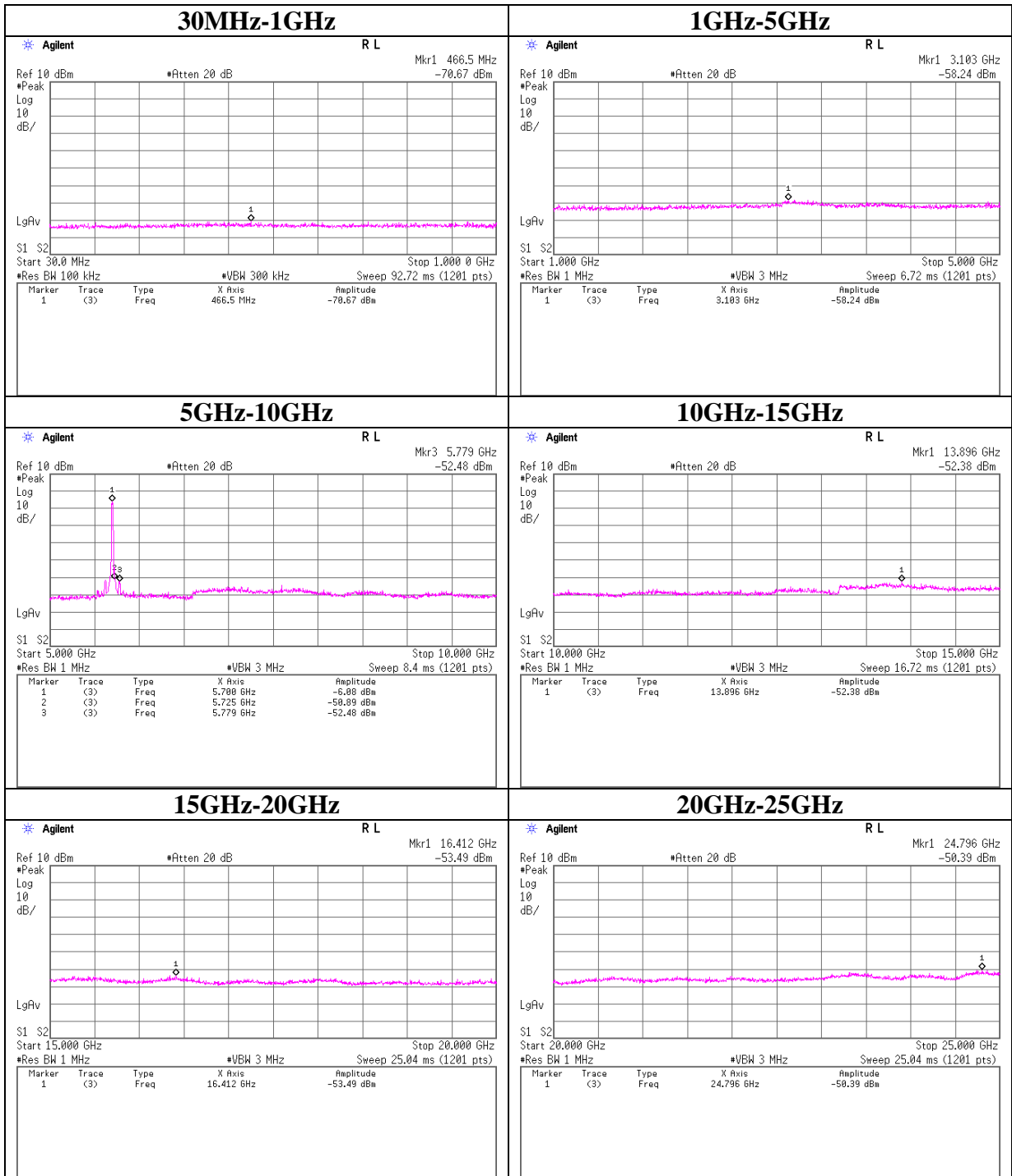


35GHz-40GHz



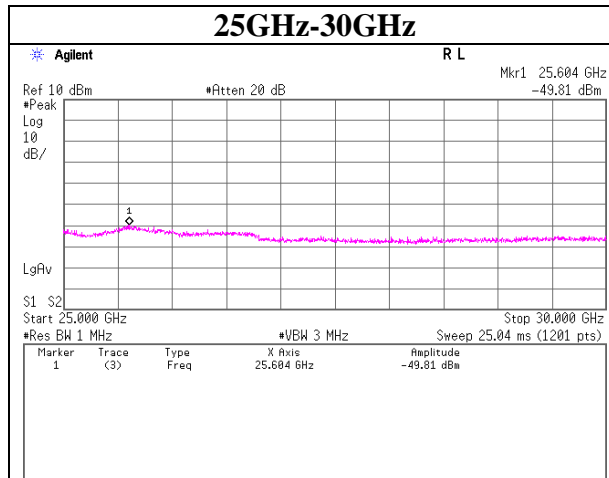
Conducted Spurious Emission

11a Tx 5700MHz

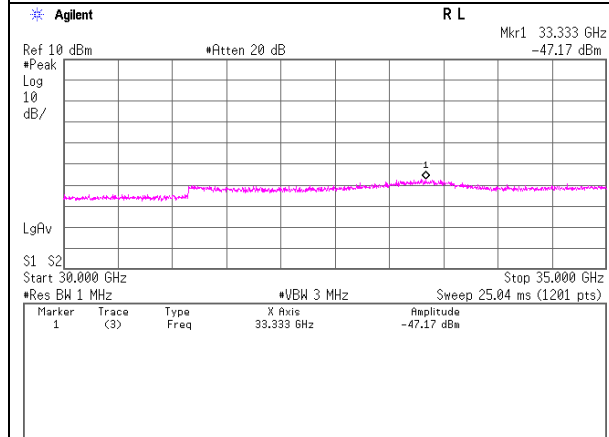


Conducted Spurious Emission

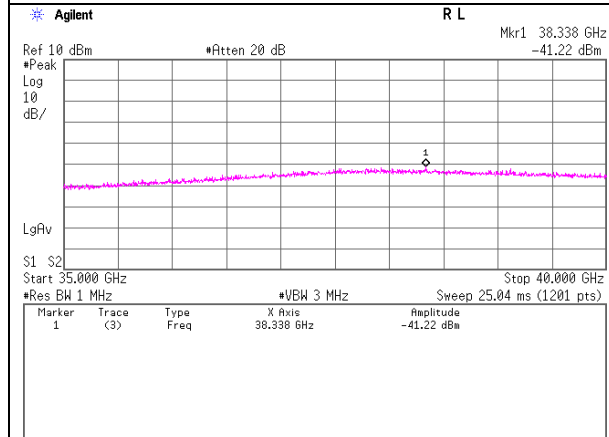
11a Tx 5700MHz 25GHz-30GHz



30GHz-35GHz

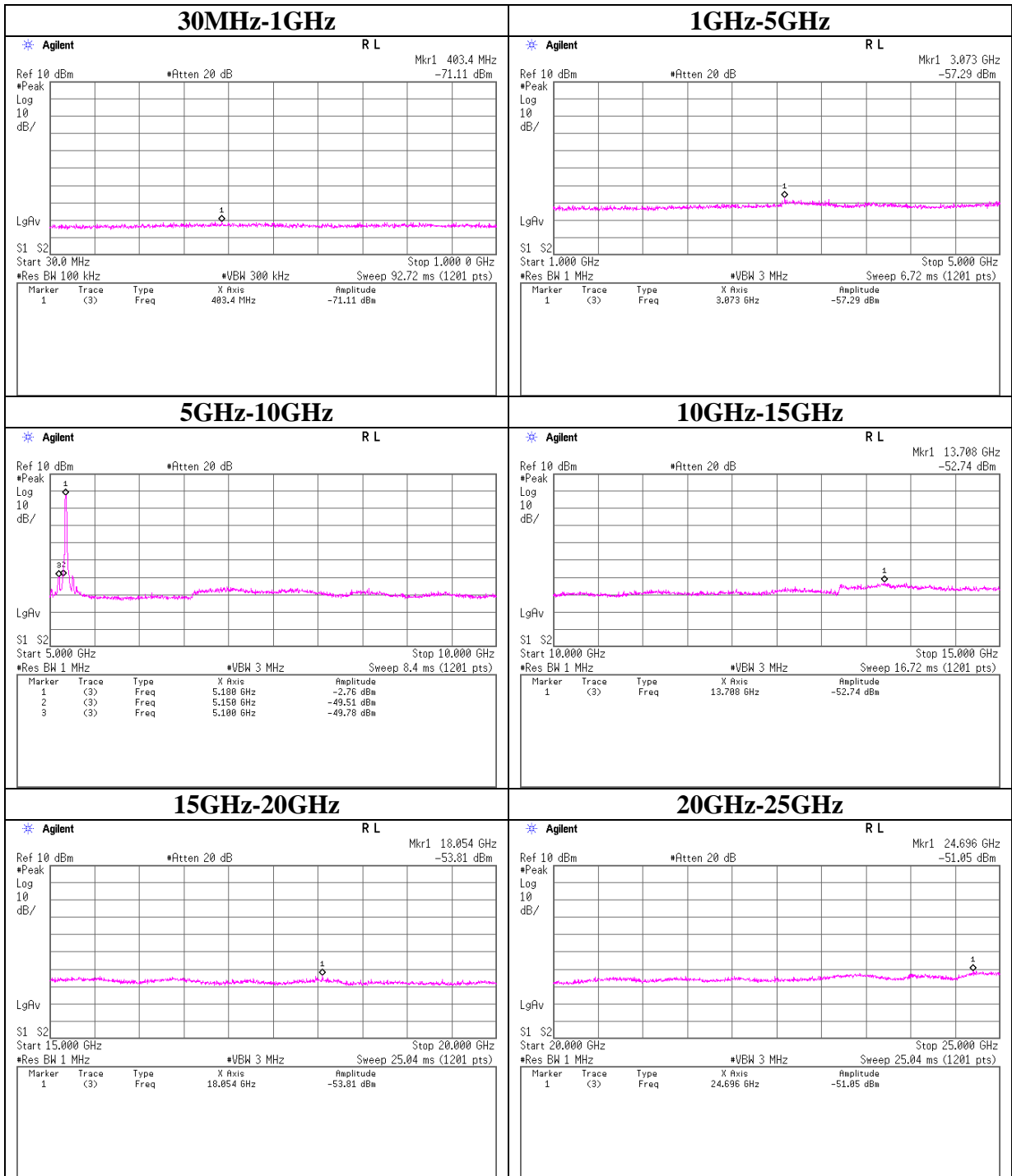


35GHz-40GHz



Conducted Spurious Emission

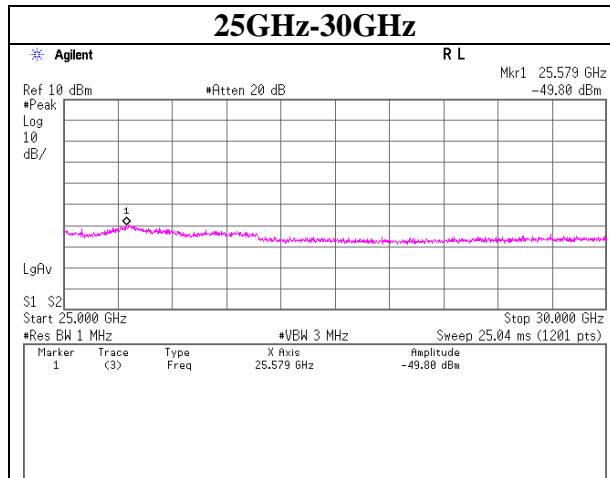
11n-20 Tx 5180MHz



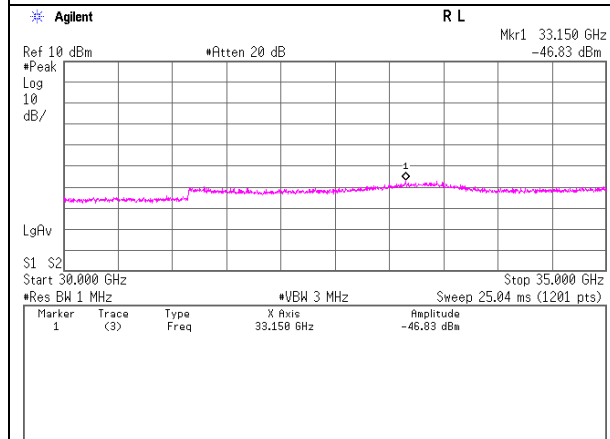
Conducted Spurious Emission

11n-20 Tx 5180MHz

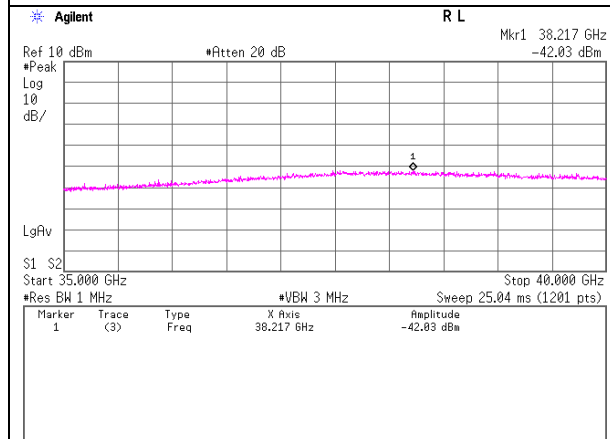
25GHz-30GHz



30GHz-35GHz

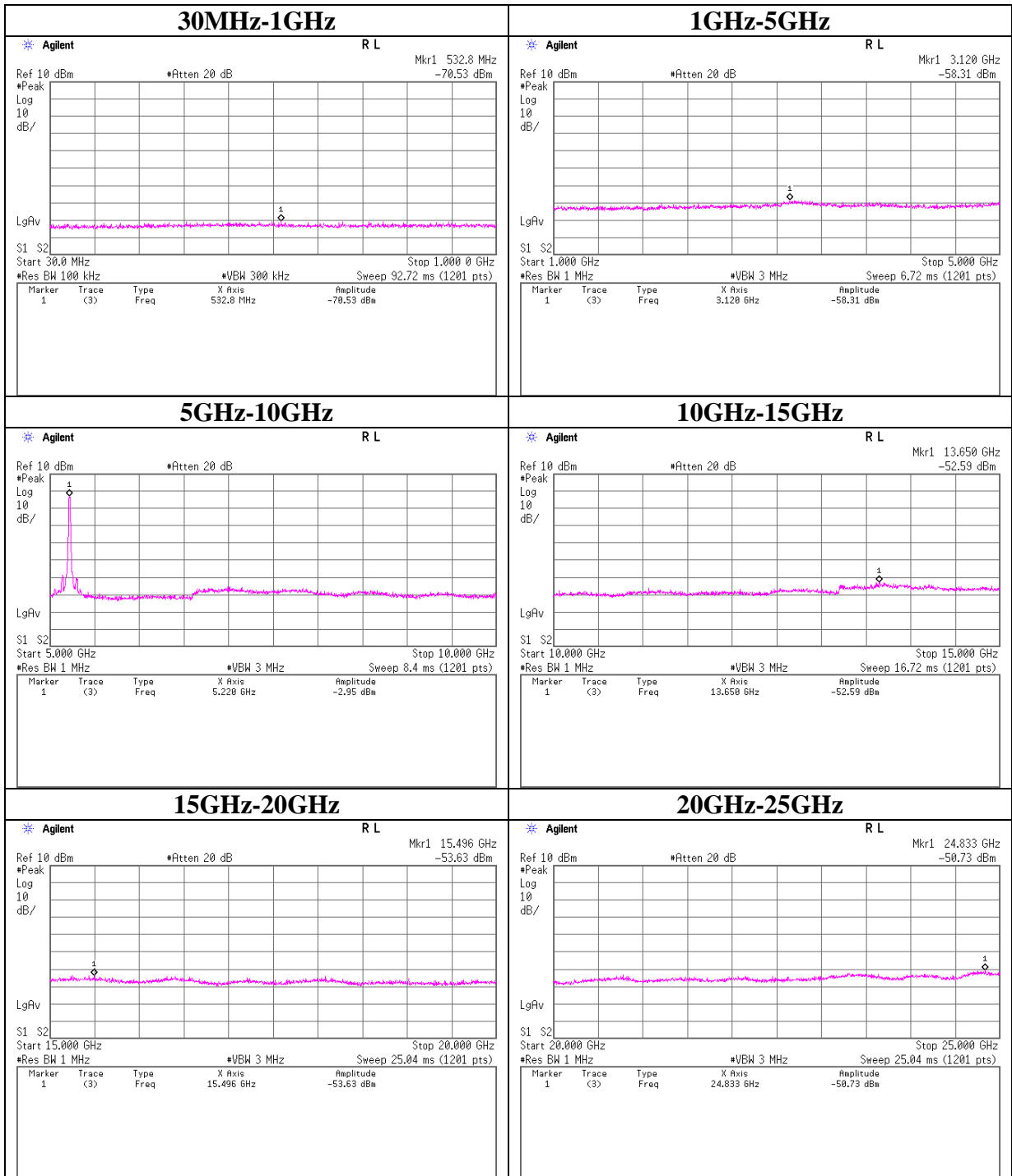


35GHz-40GHz



Conducted Spurious Emission

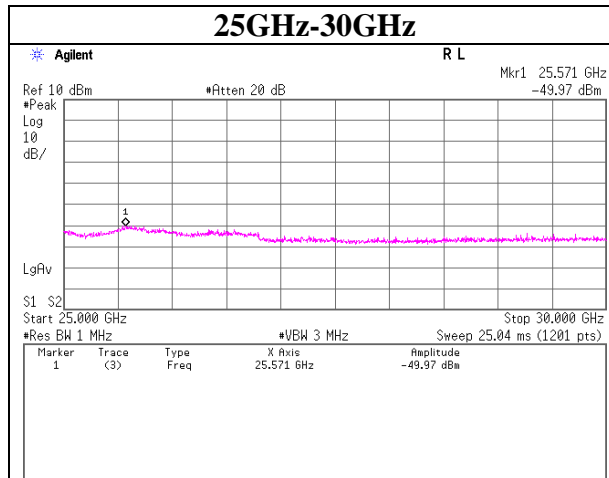
11n-20 Tx 5220MHz



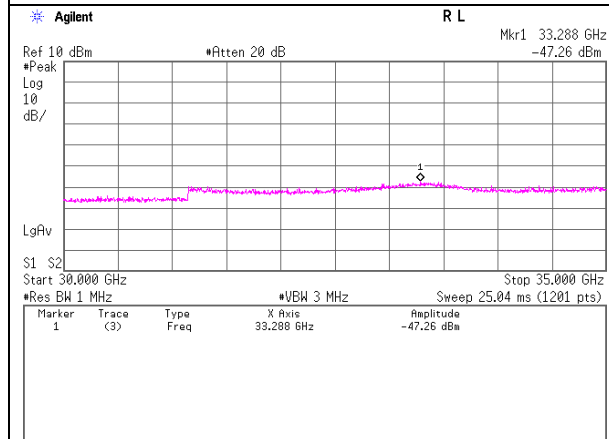
Conducted Spurious Emission

11n-20 Tx 5220MHz

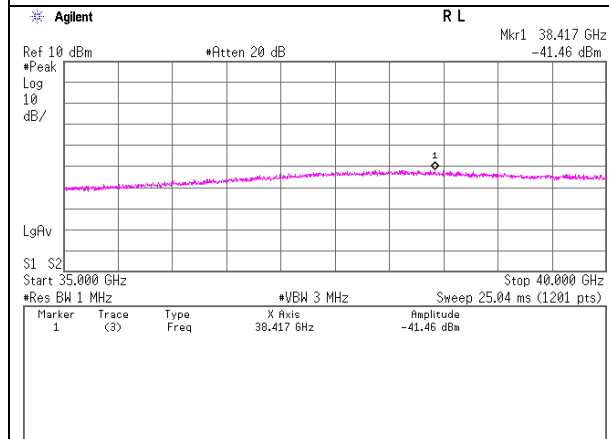
25GHz-30GHz



30GHz-35GHz

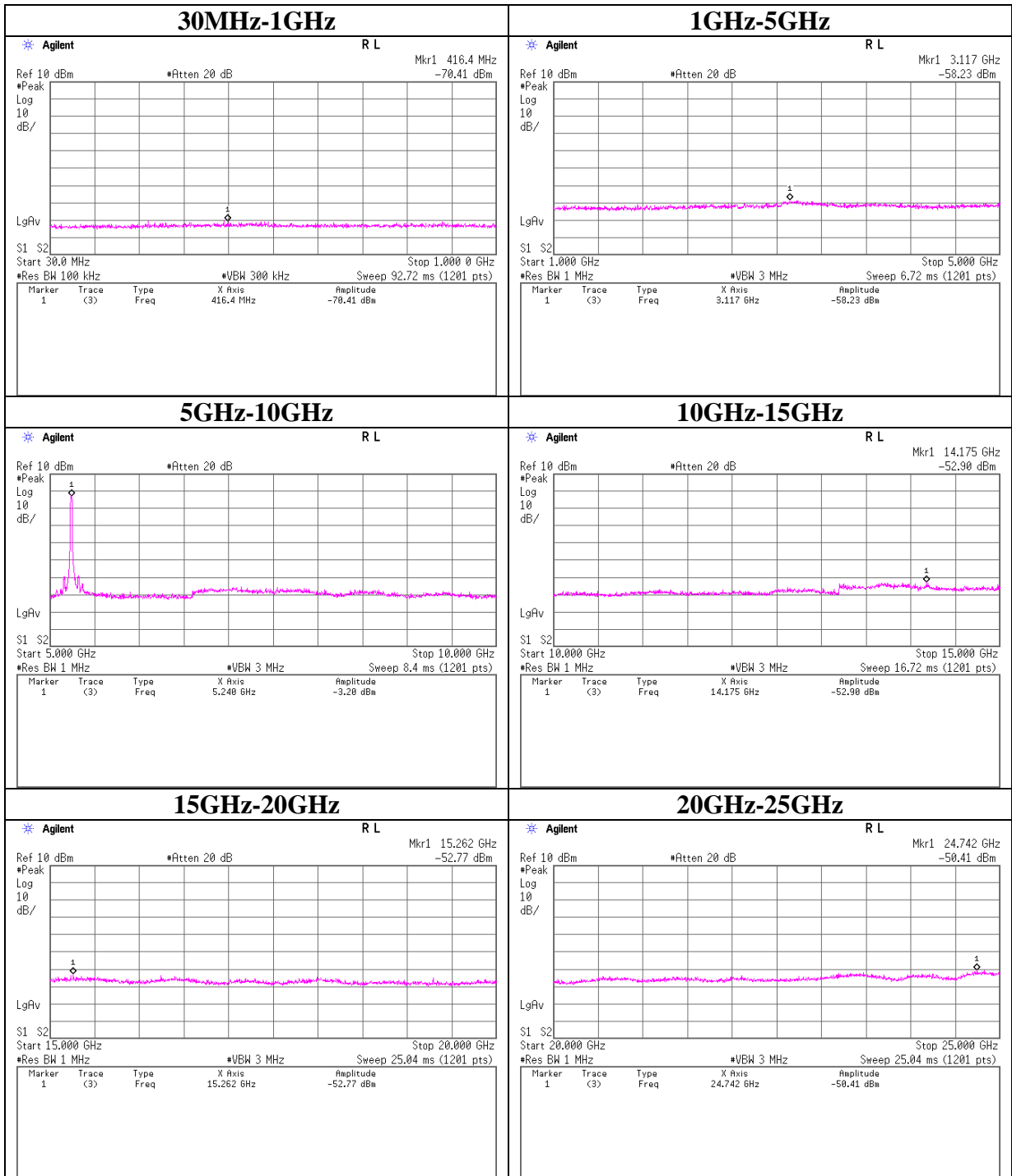


35GHz-40GHz



Conducted Spurious Emission

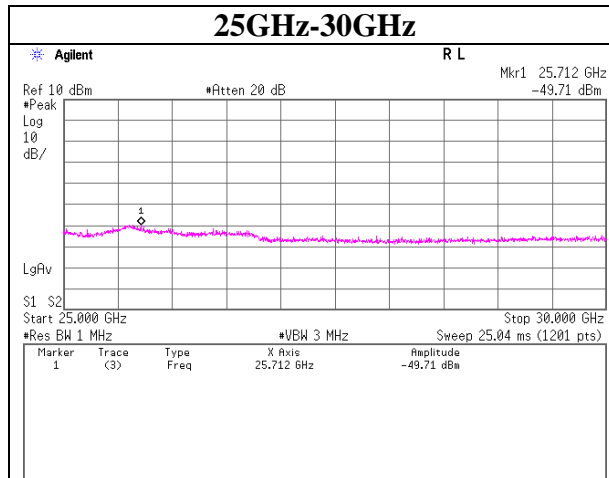
11n-20 Tx 5240MHz



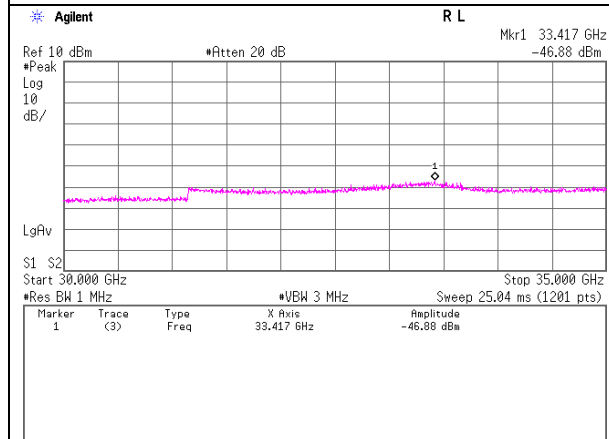
Conducted Spurious Emission

11n-20 Tx 5240MHz

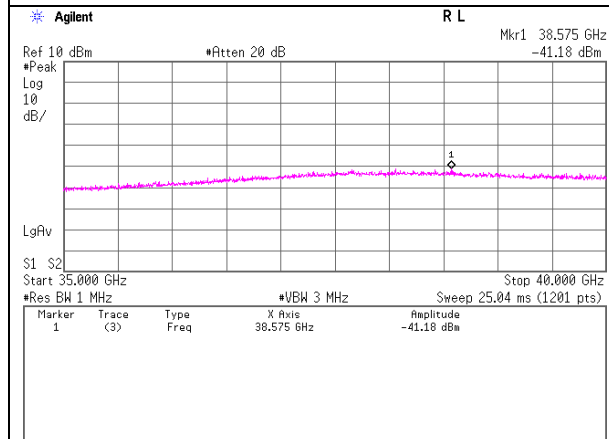
25GHz-30GHz



30GHz-35GHz

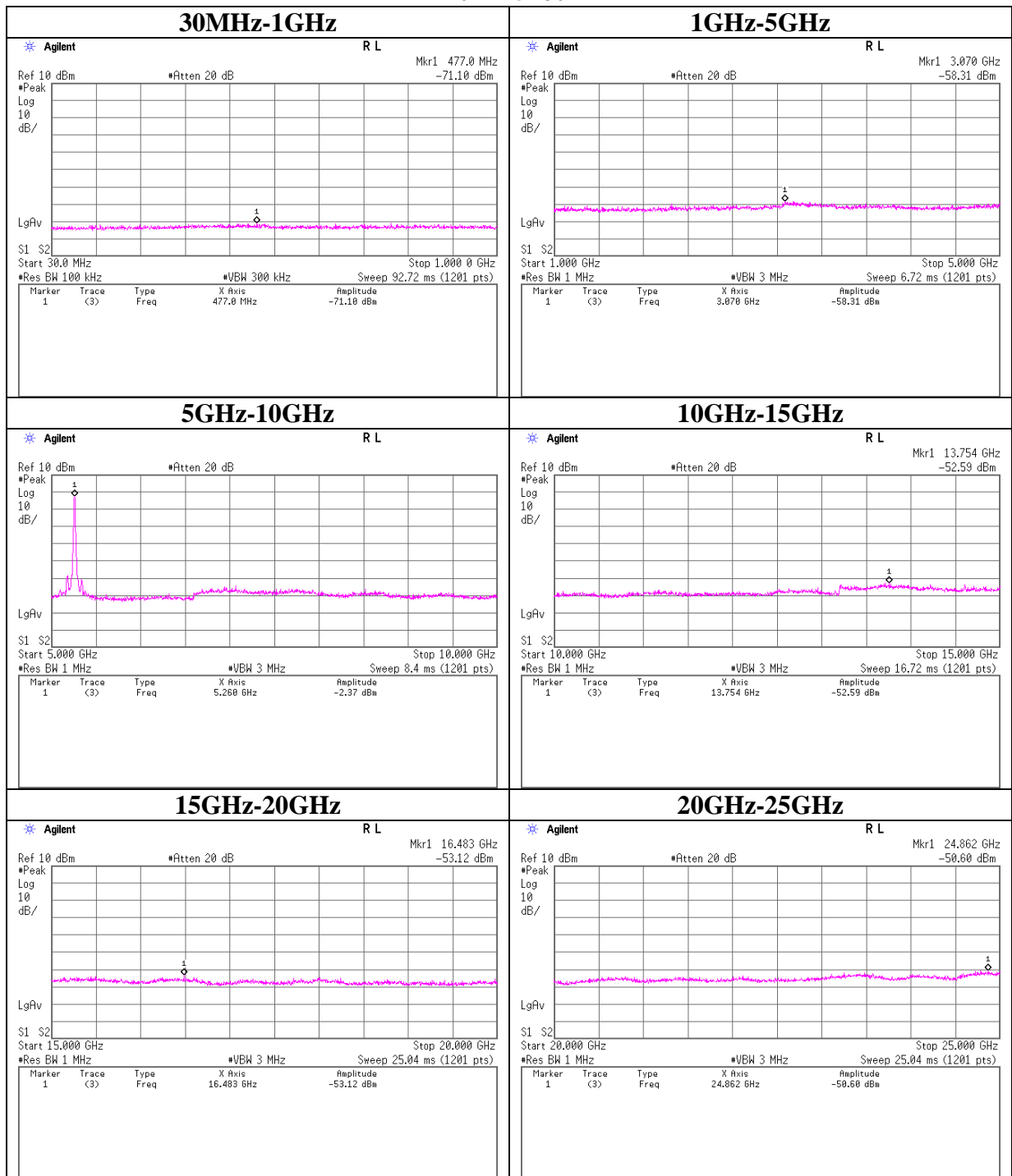


35GHz-40GHz



Conducted Spurious Emission

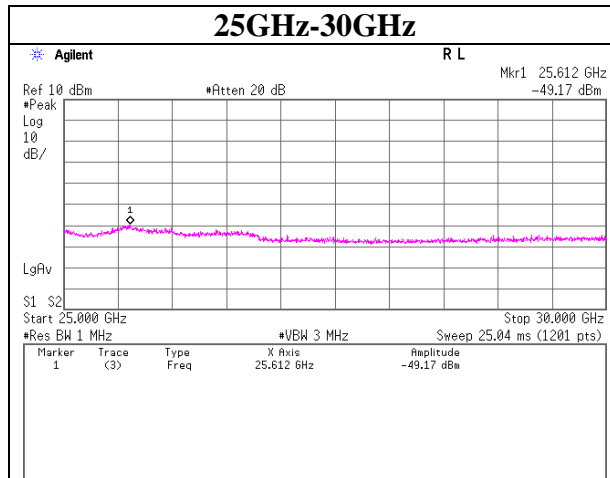
11n-20 Tx 5260MHz



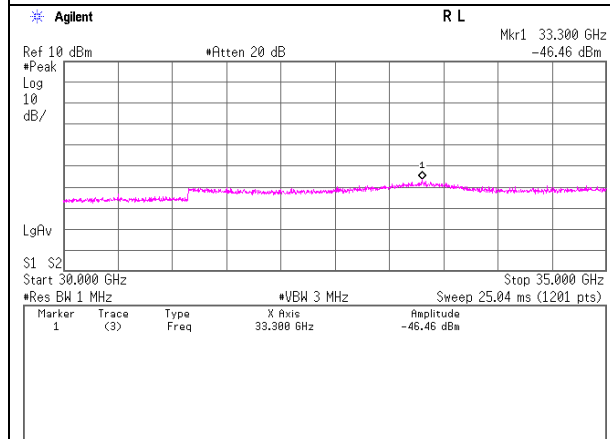
Conducted Spurious Emission

11n-20 Tx 5260MHz

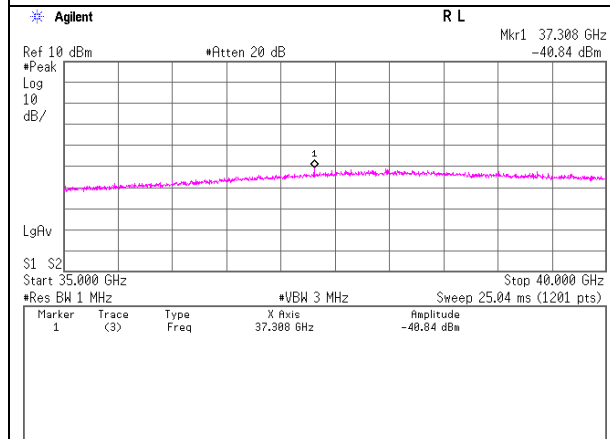
25GHz-30GHz



30GHz-35GHz

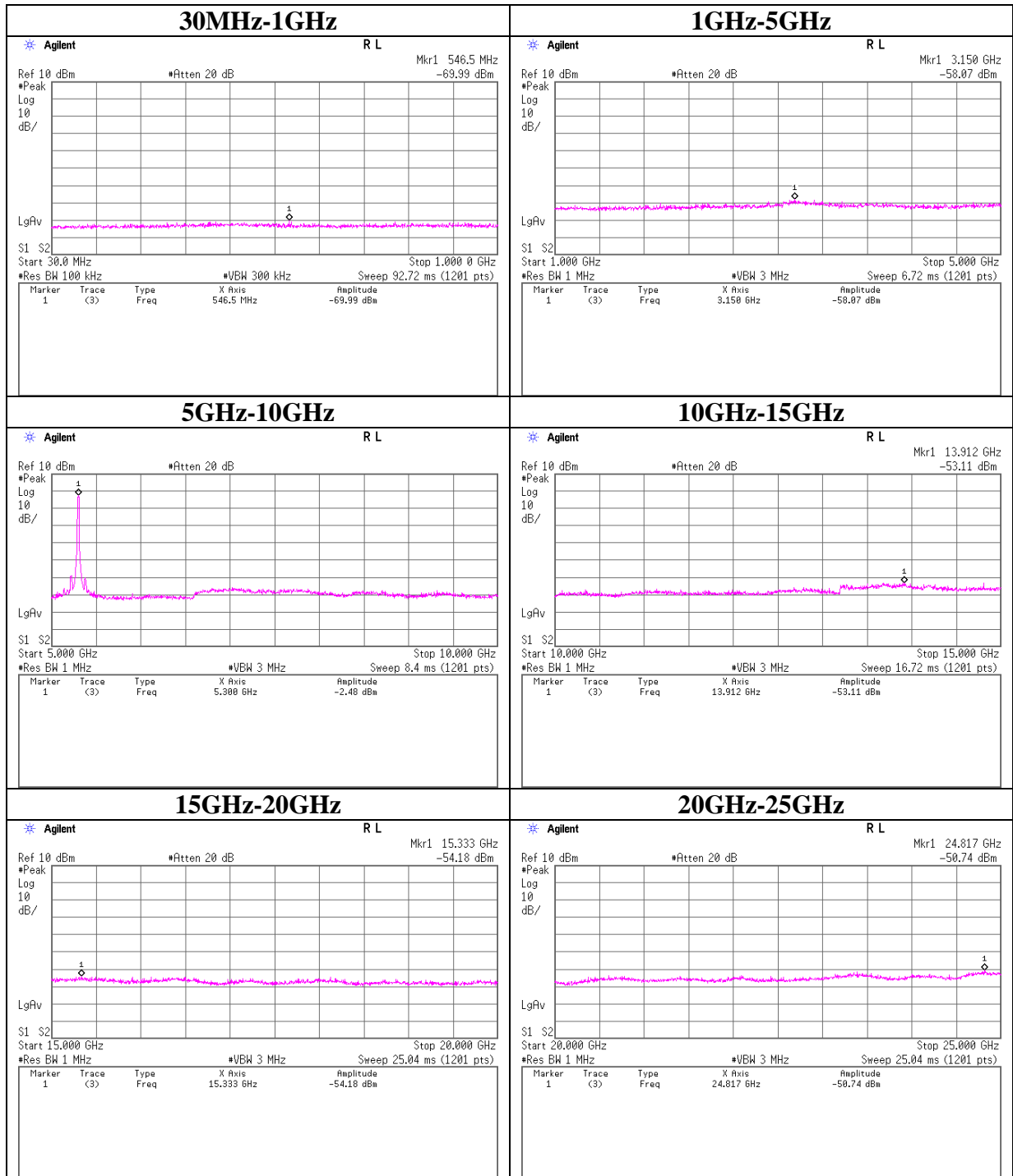


35GHz-40GHz



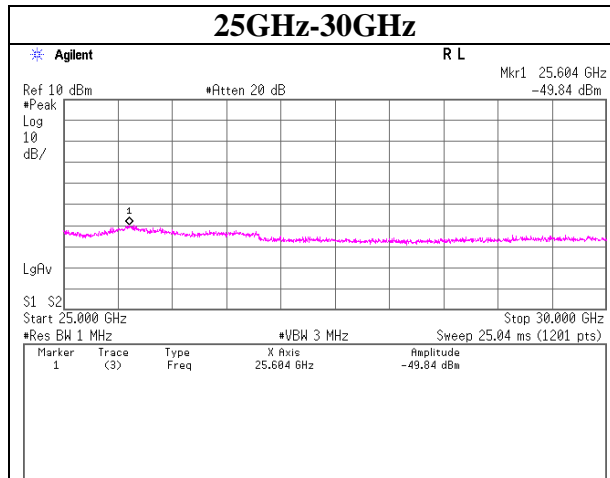
Conducted Spurious Emission

11n-20 Tx 5300MHz

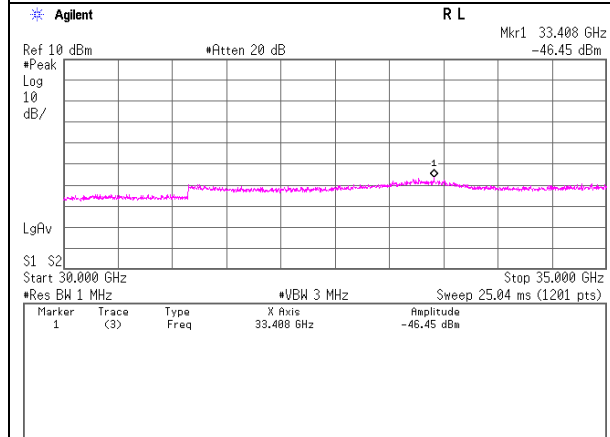


Conducted Spurious Emission

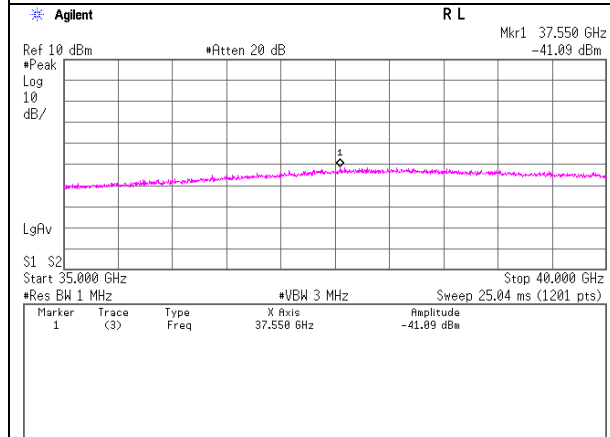
11n-20 Tx 5300MHz 25GHz-30GHz



30GHz-35GHz

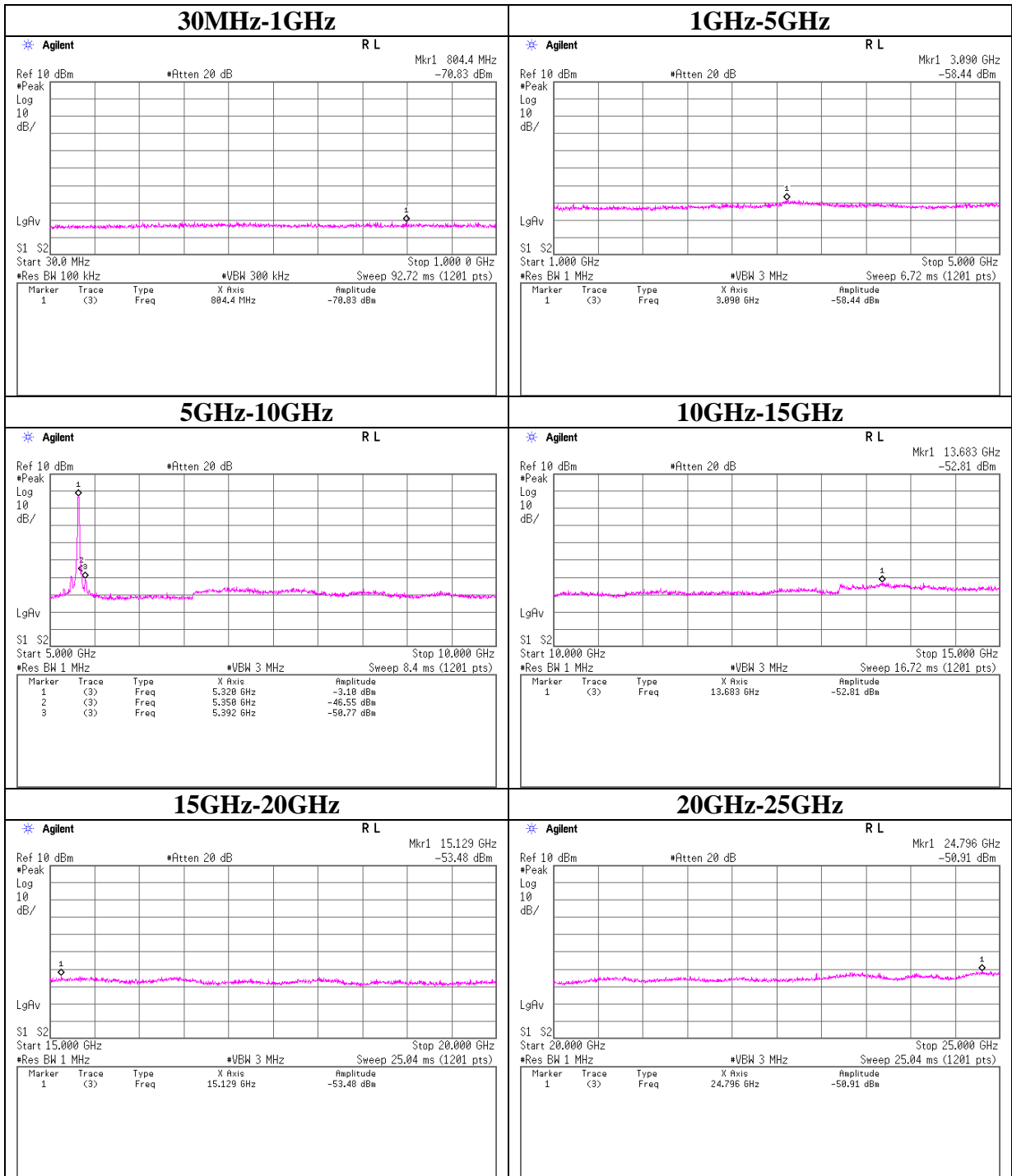


35GHz-40GHz



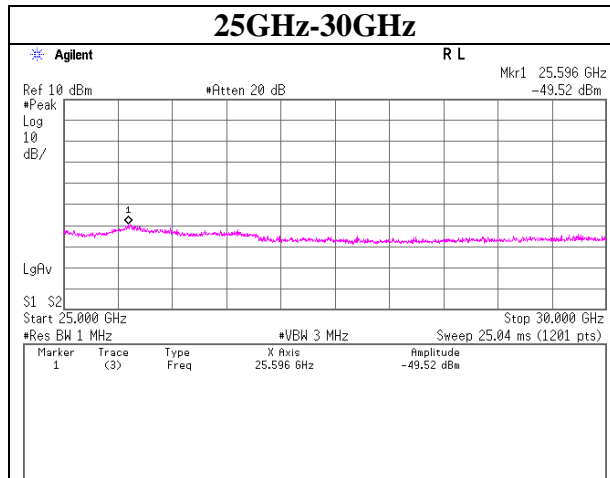
Conducted Spurious Emission

11n-20 Tx 5320MHz

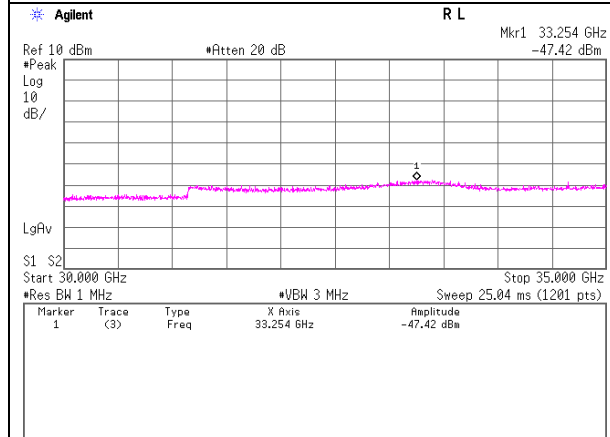


Conducted Spurious Emission

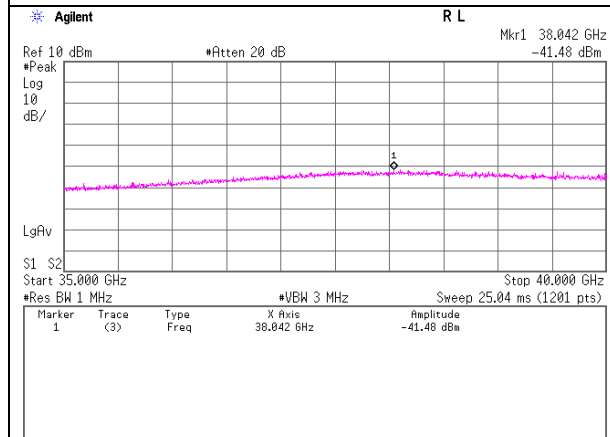
11n-20 Tx 5320MHz 25GHz-30GHz



30GHz-35GHz

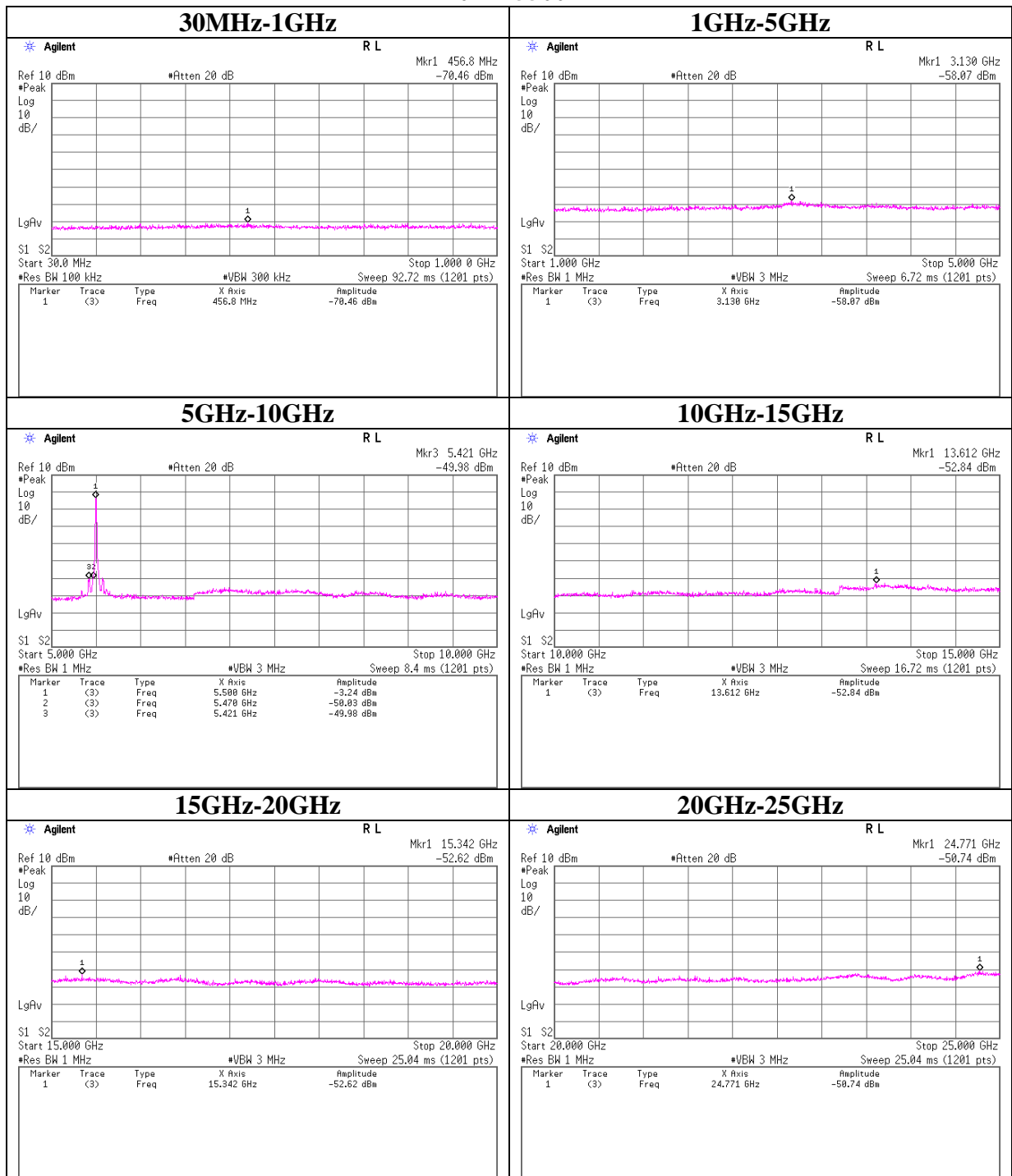


35GHz-40GHz



Conducted Spurious Emission

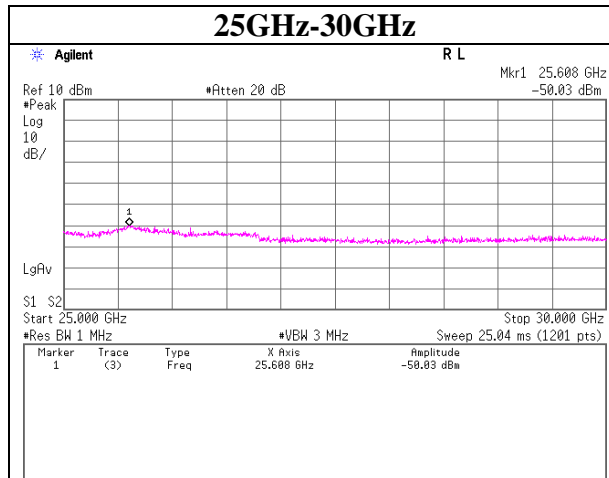
11n-20 Tx 5500MHz



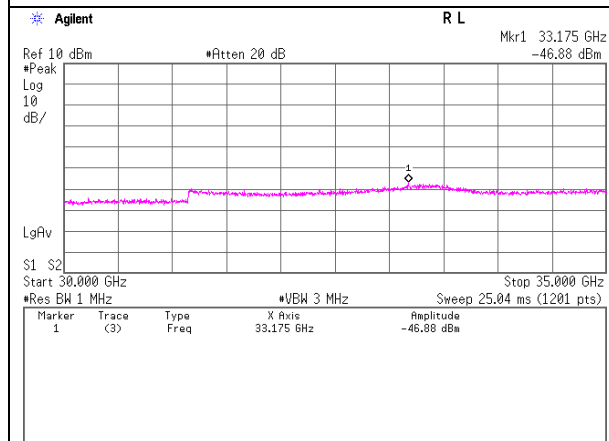
Conducted Spurious Emission

11n-20 Tx 5500MHz

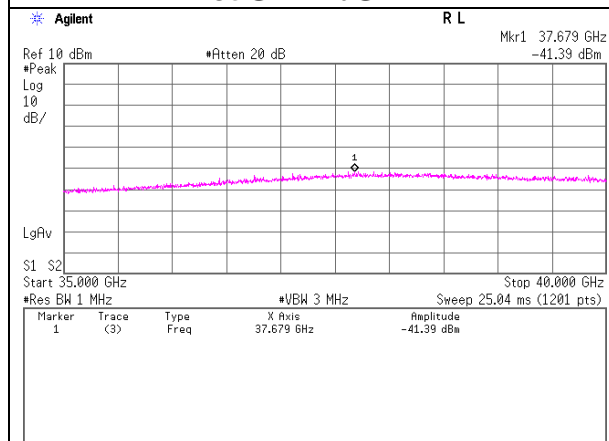
25GHz-30GHz



30GHz-35GHz

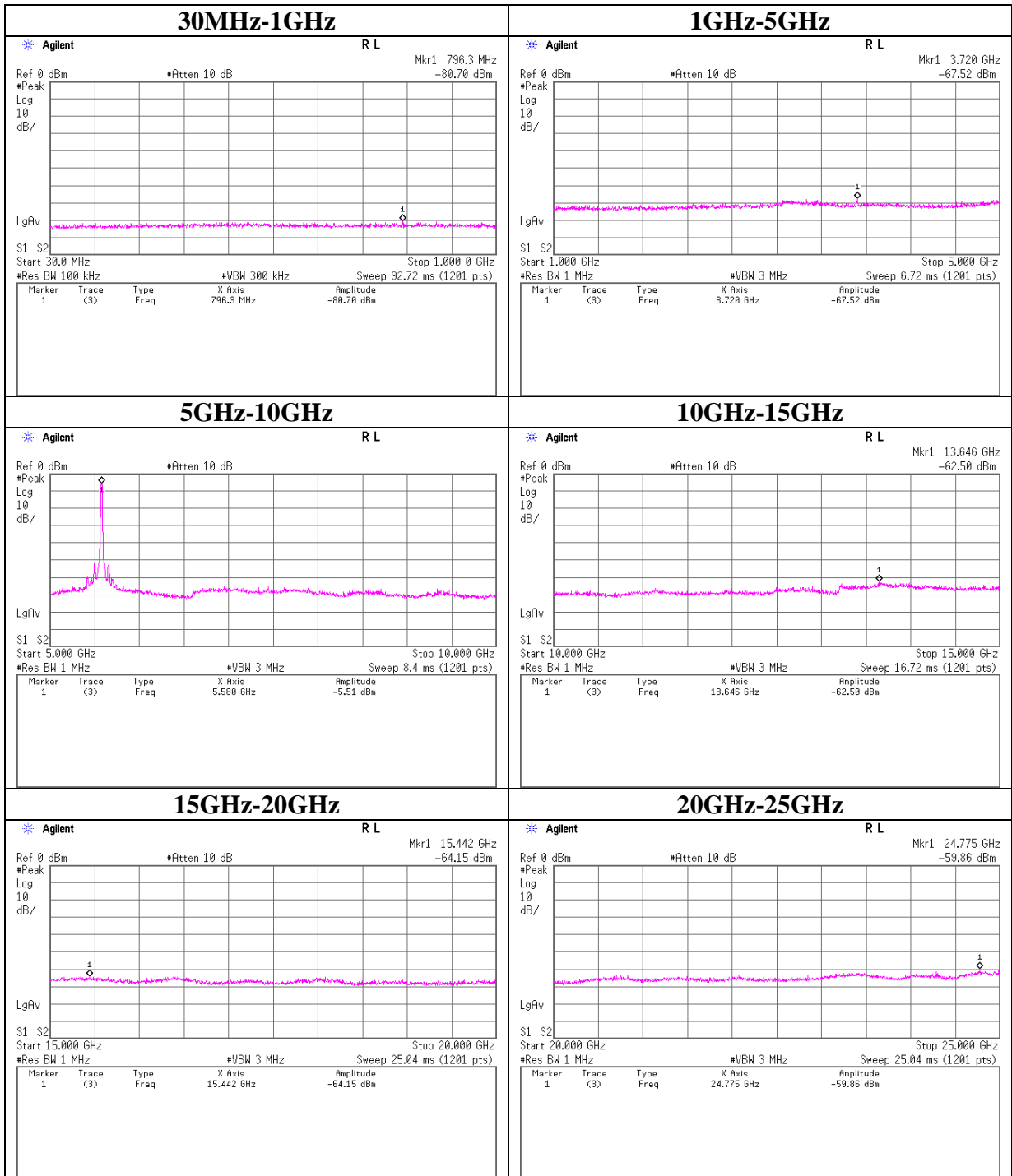


35GHz-40GHz



Conducted Spurious Emission

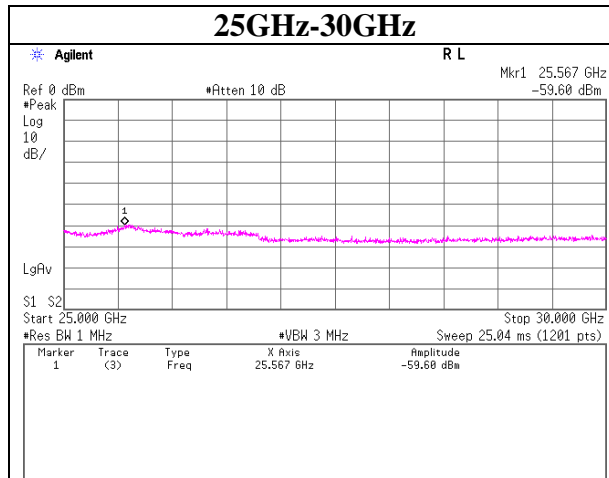
11n-20 Tx 5580MHz



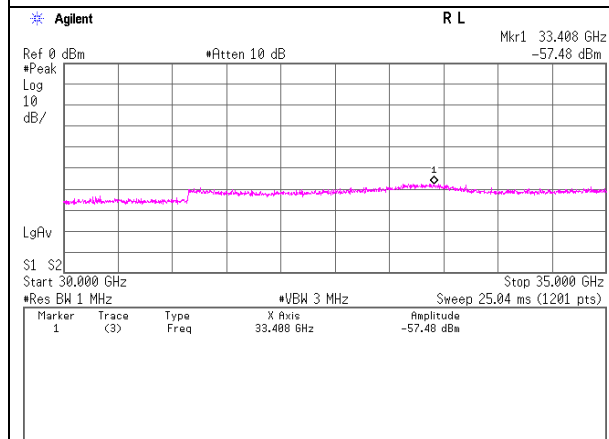
Conducted Spurious Emission

11n-20 Tx 5580MHz

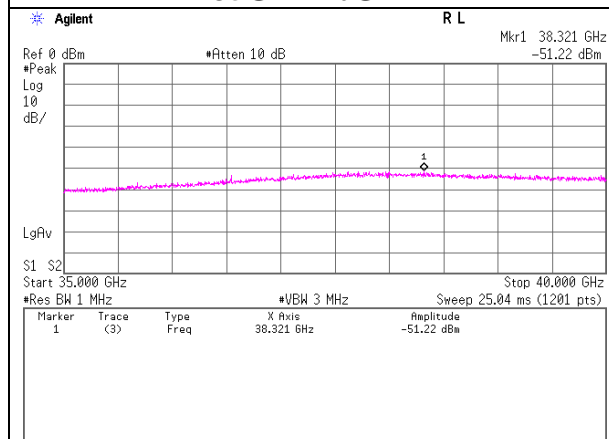
25GHz-30GHz



30GHz-35GHz

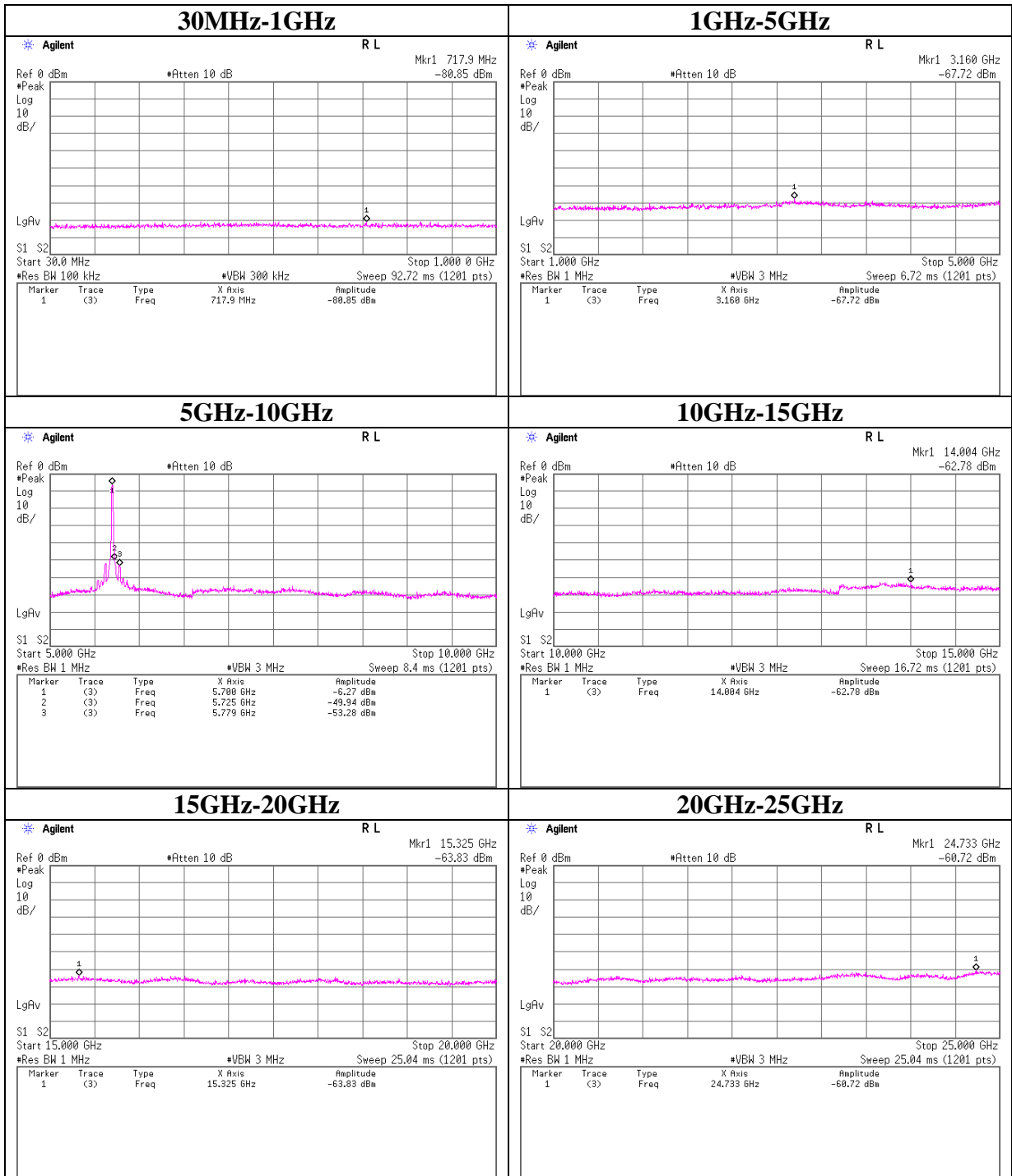


35GHz-40GHz



Conducted Spurious Emission

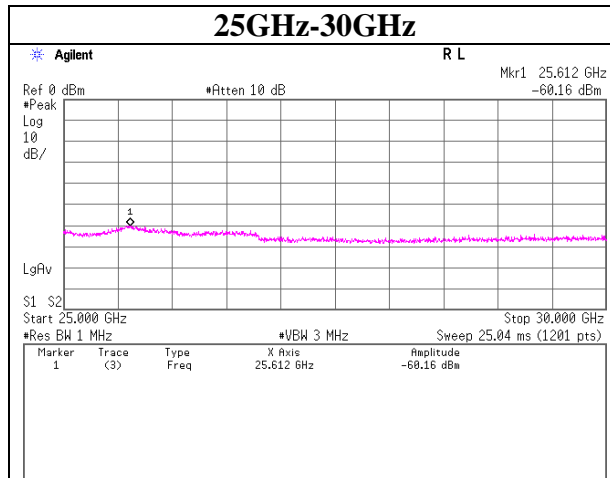
11n-20 Tx 5700MHz



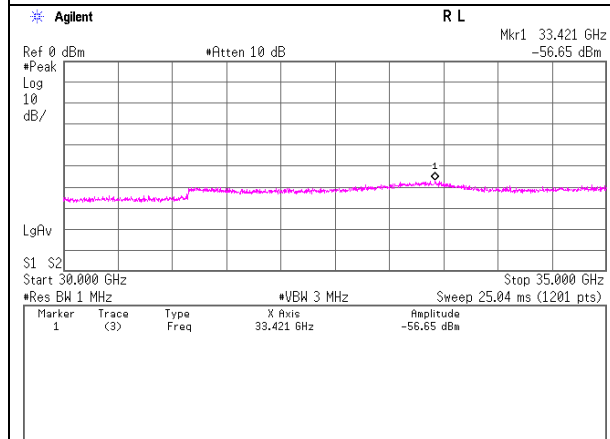
Conducted Spurious Emission

11n-20 Tx 5700MHz

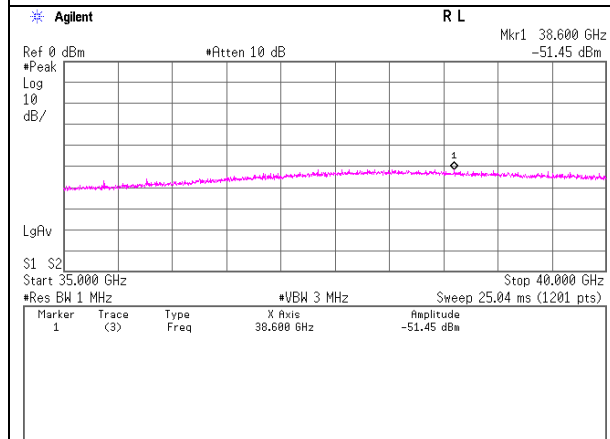
25GHz-30GHz



30GHz-35GHz

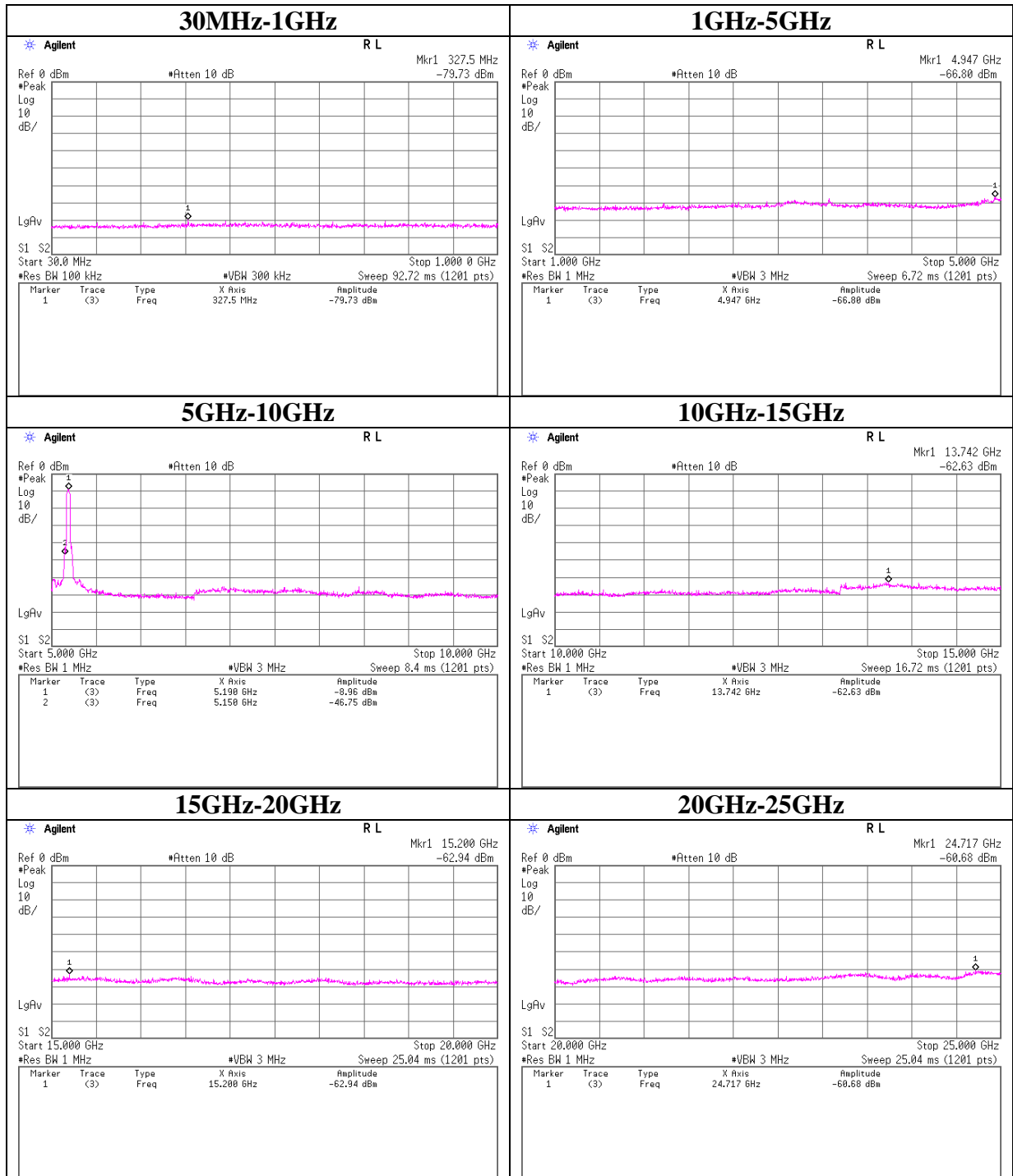


35GHz-40GHz



Conducted Spurious Emission

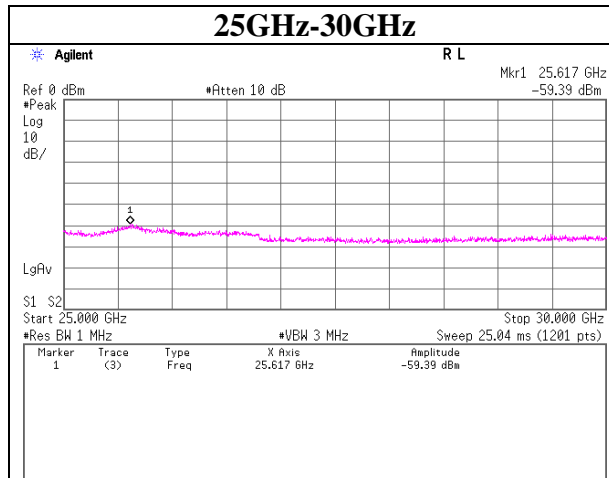
11n-40 Tx 5190MHz



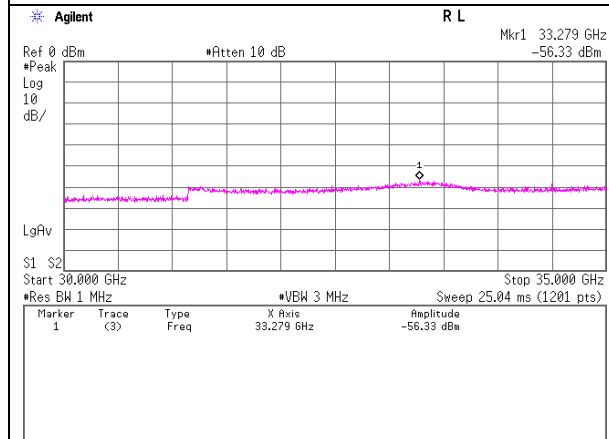
Conducted Spurious Emission

11n-40 Tx 5190MHz

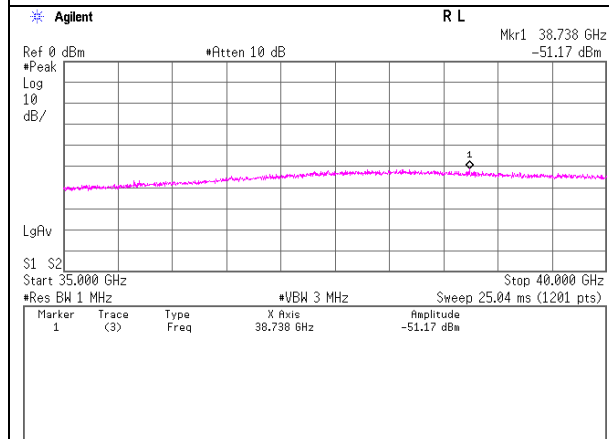
25GHz-30GHz



30GHz-35GHz

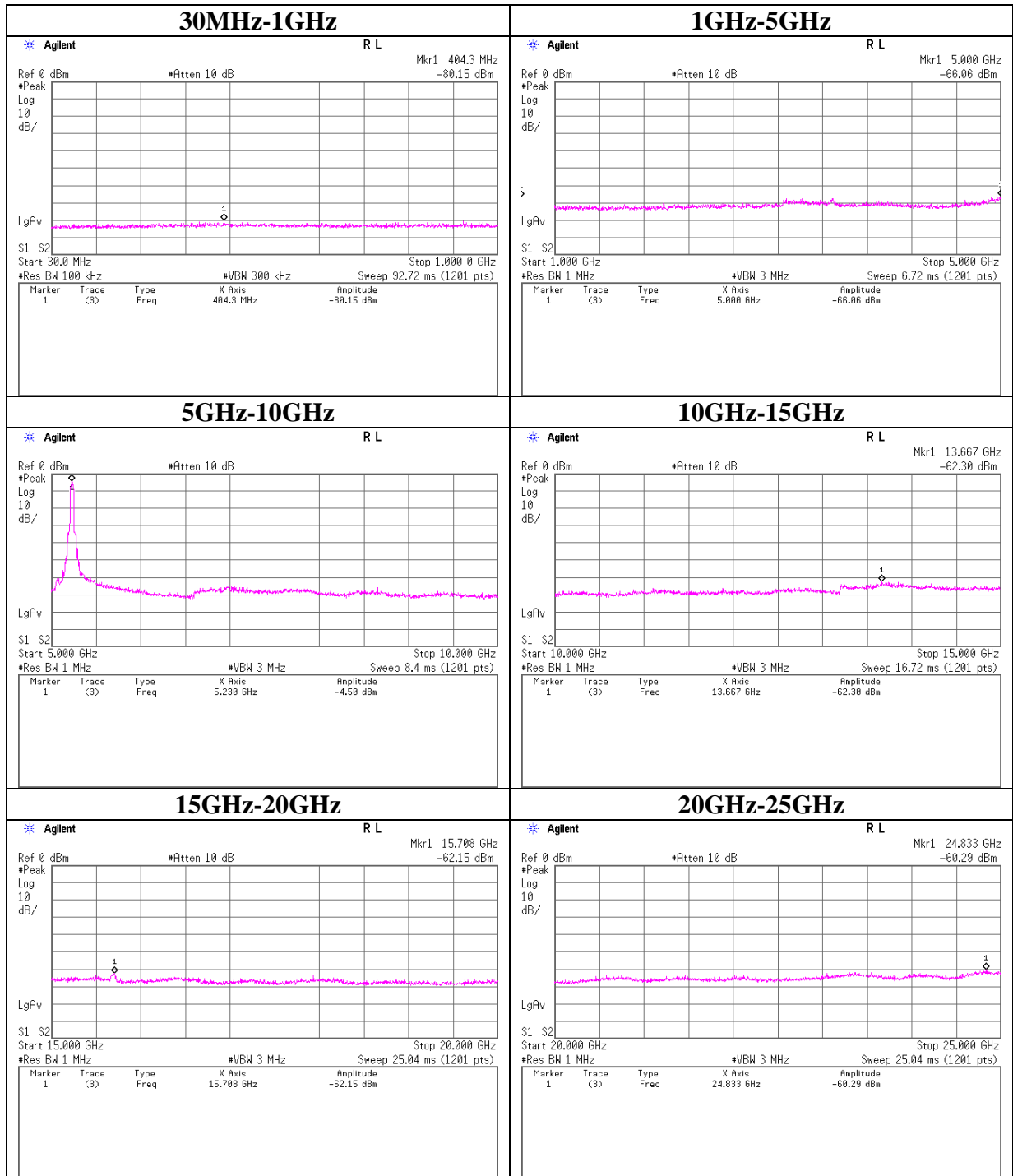


35GHz-40GHz



Conducted Spurious Emission

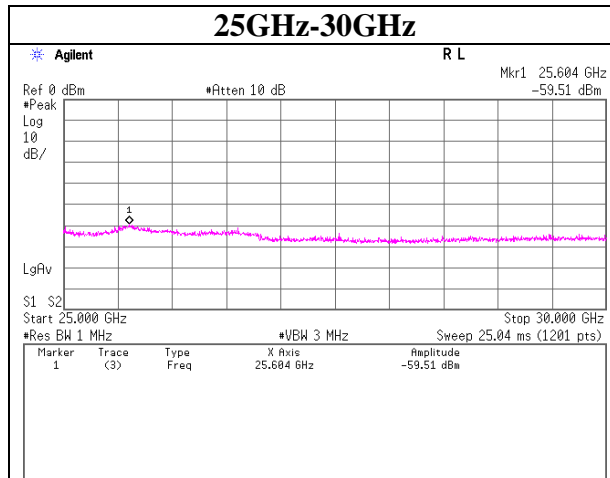
11n-40 Tx 5230MHz



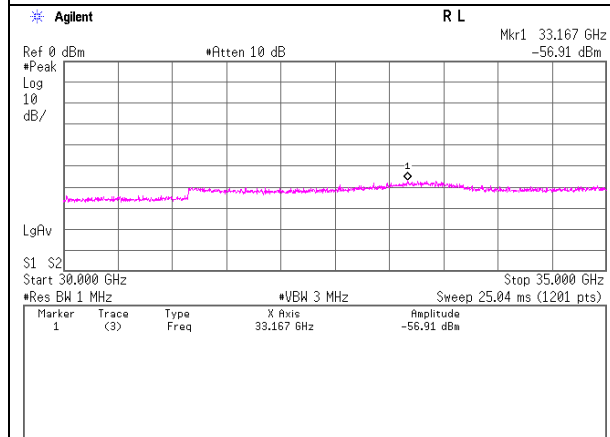
Conducted Spurious Emission

11n-40 Tx 5230MHz

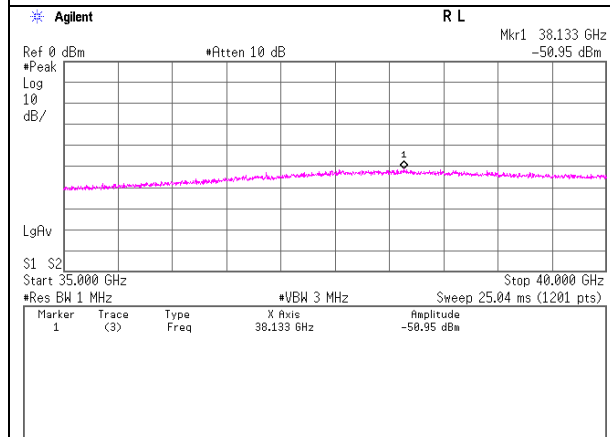
25GHz-30GHz



30GHz-35GHz

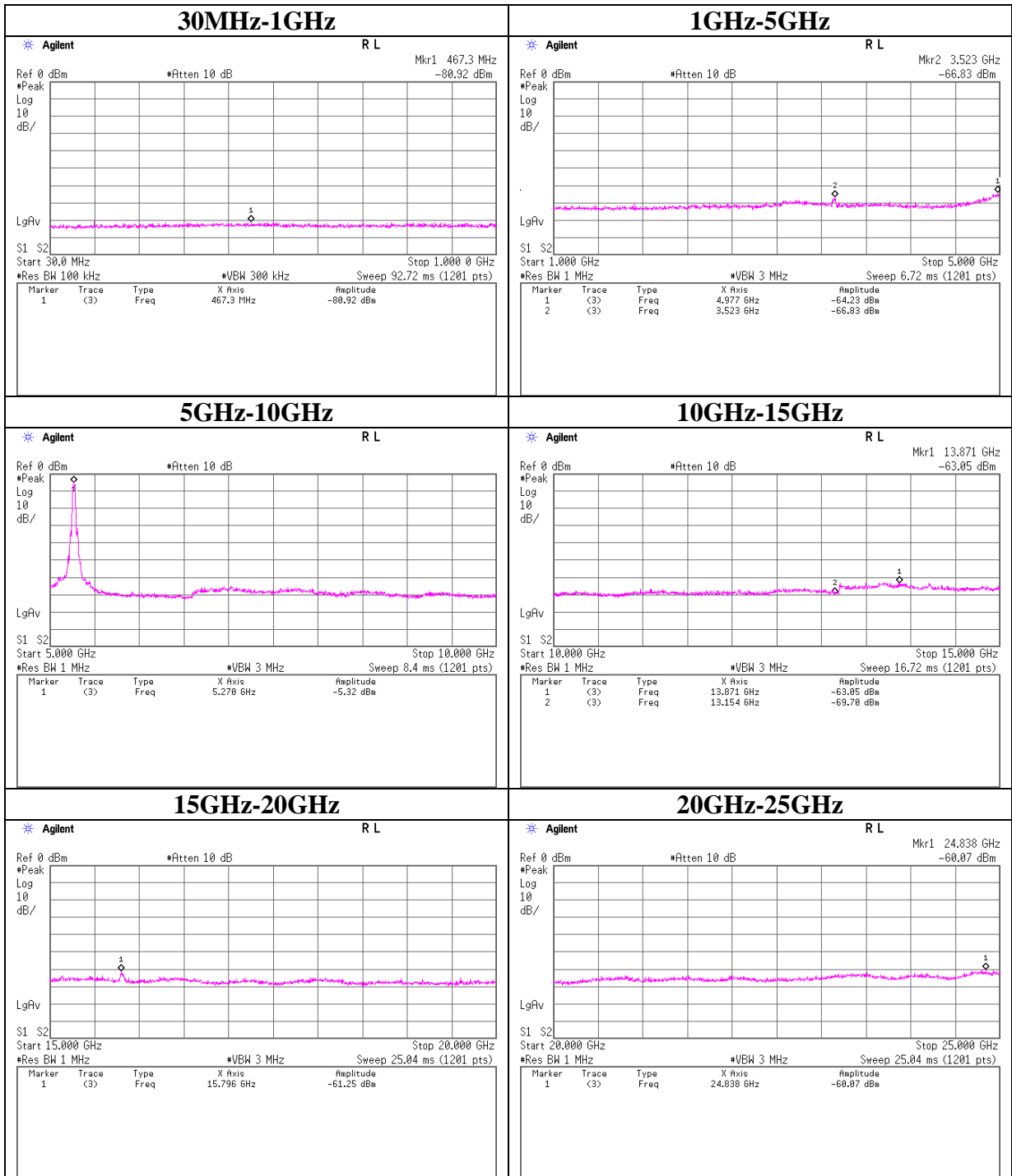


35GHz-40GHz



Conducted Spurious Emission

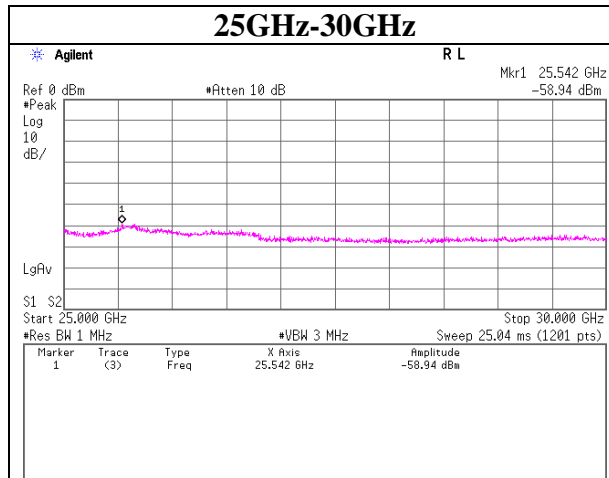
11n-40 Tx 5270MHz



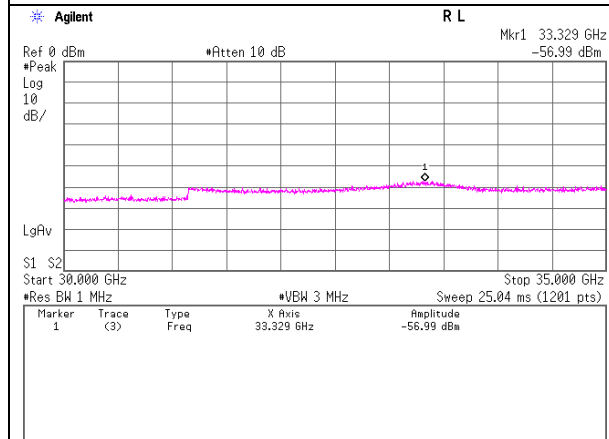
Conducted Spurious Emission

11n-40 Tx 5270MHz

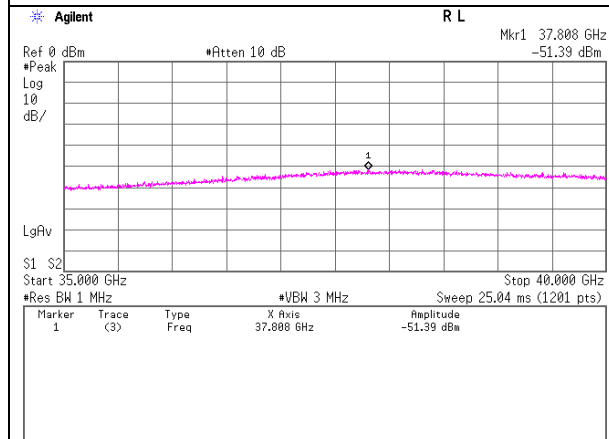
25GHz-30GHz



30GHz-35GHz

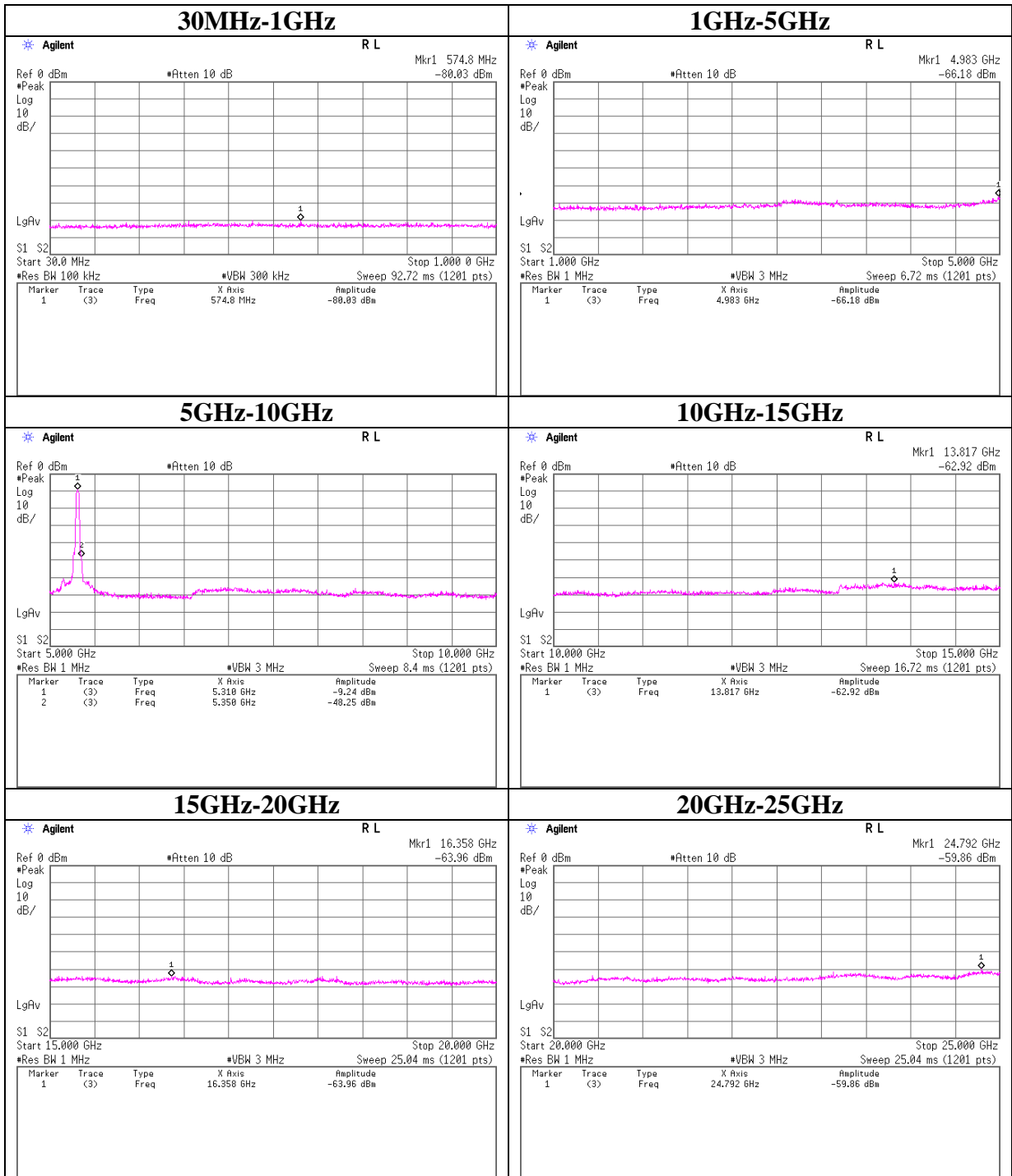


35GHz-40GHz



Conducted Spurious Emission

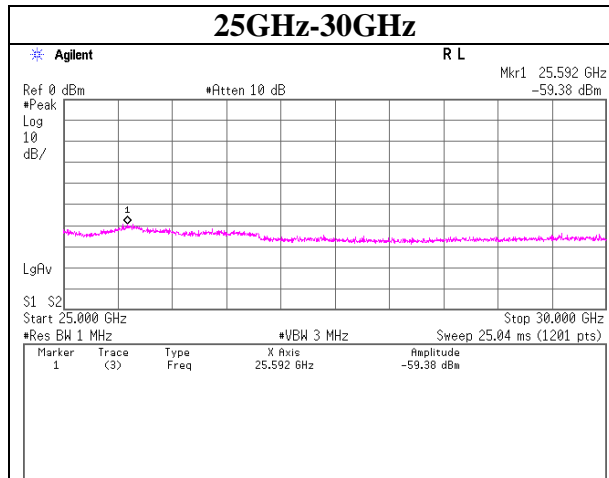
11n-40 Tx 5310MHz



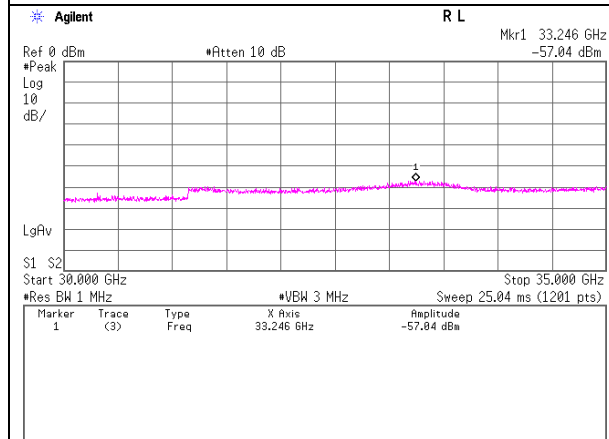
Conducted Spurious Emission

11n-40 Tx 5310MHz

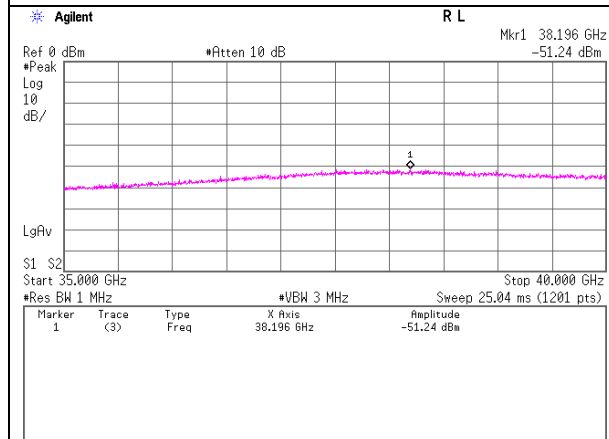
25GHz-30GHz



30GHz-35GHz

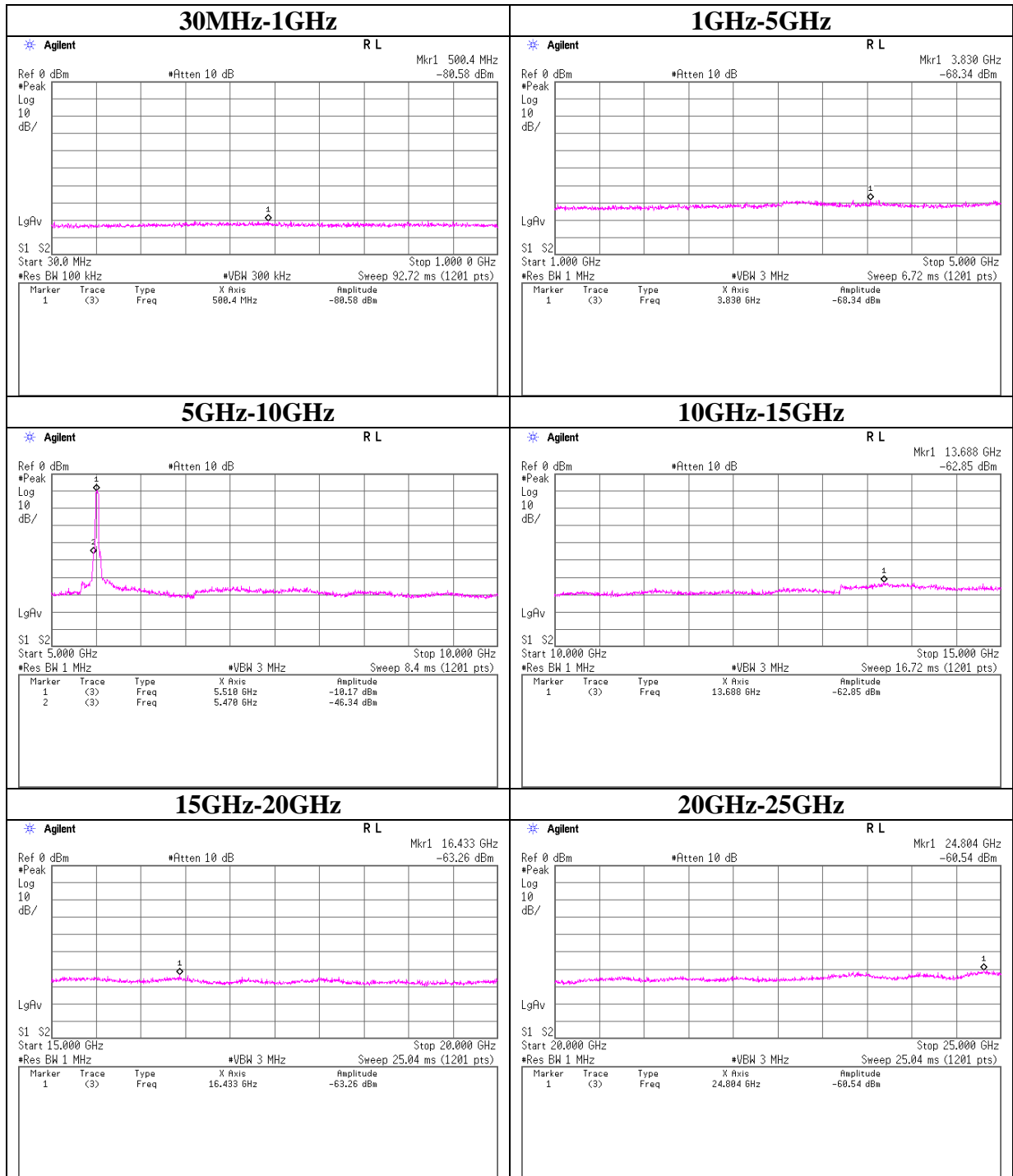


35GHz-40GHz



Conducted Spurious Emission

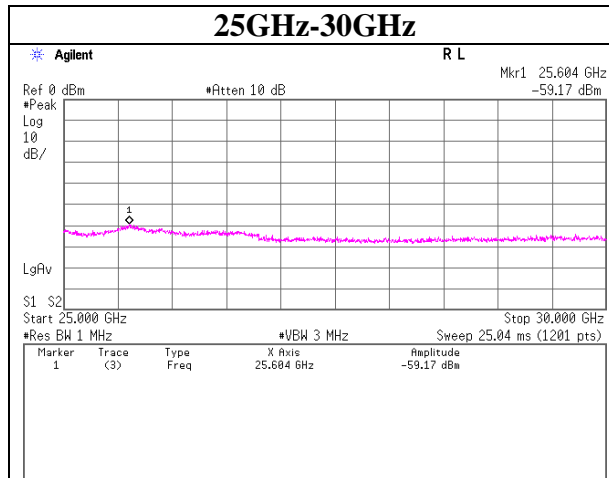
11n-40 Tx 5510MHz



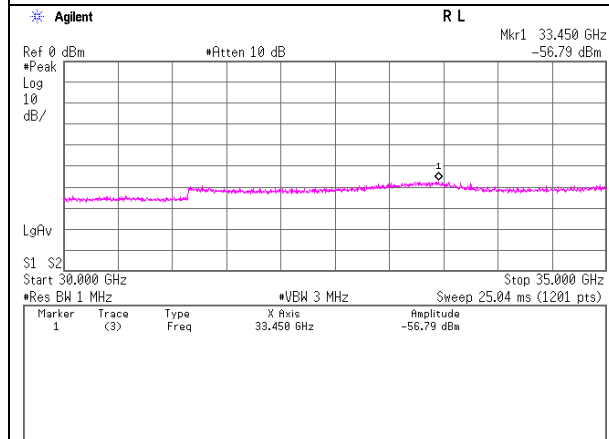
Conducted Spurious Emission

11n-40 Tx 5510MHz

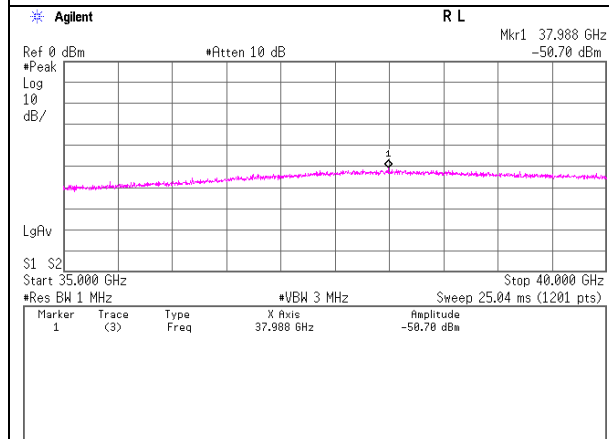
25GHz-30GHz



30GHz-35GHz

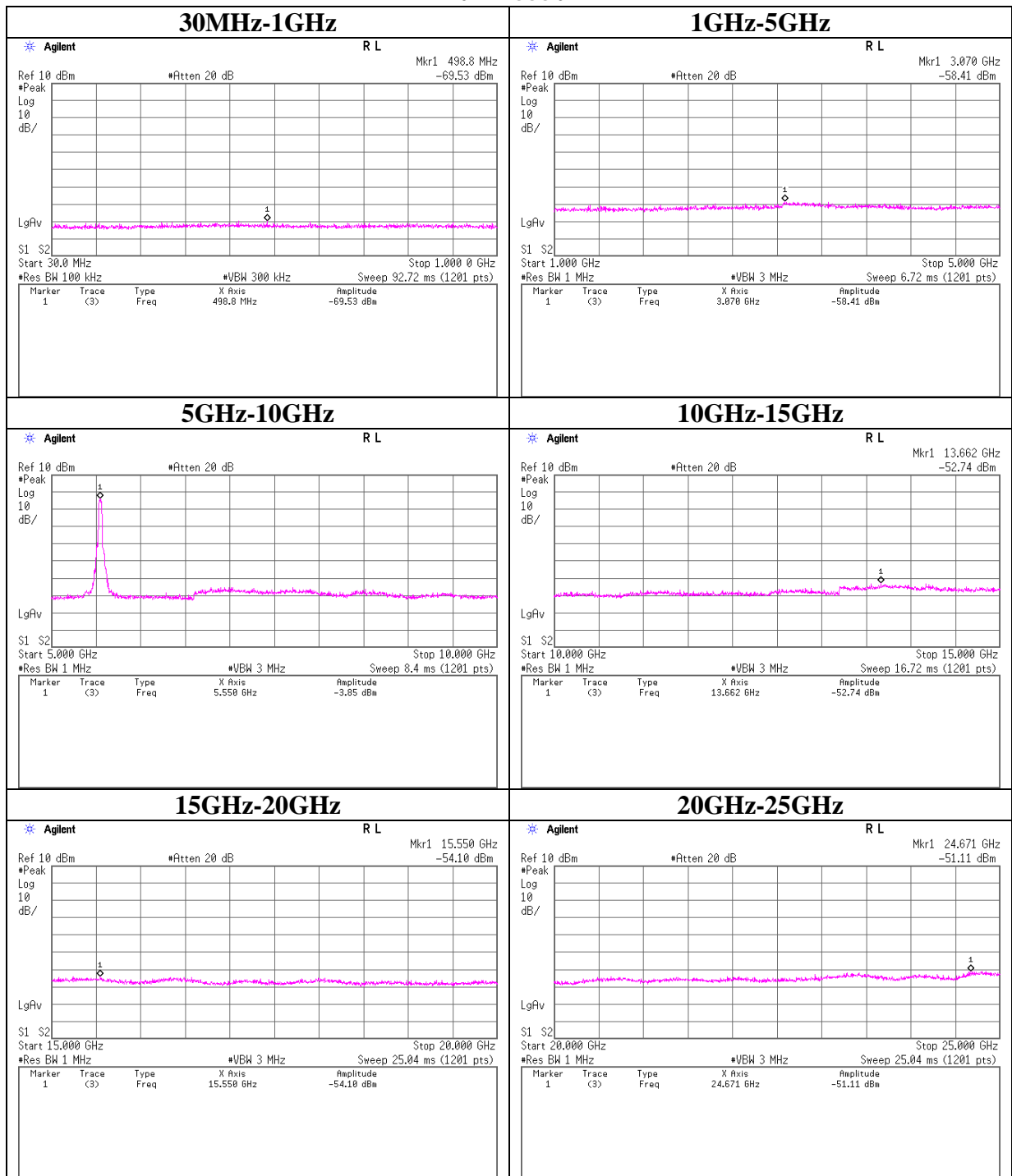


35GHz-40GHz



Conducted Spurious Emission

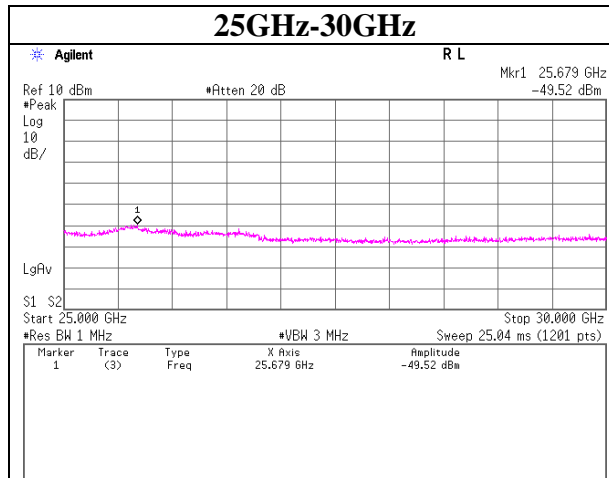
11n-40 Tx 5550MHz



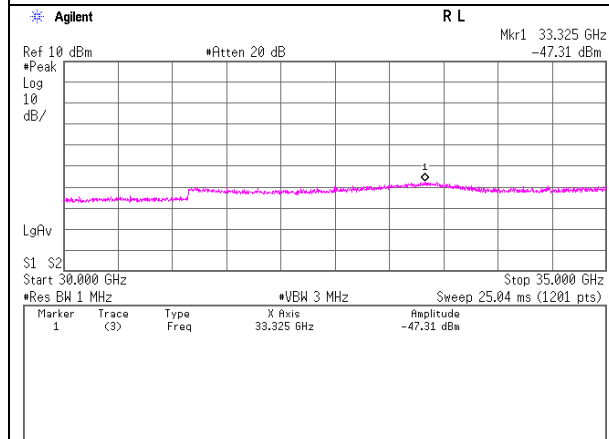
Conducted Spurious Emission

11n-40 Tx 5550MHz

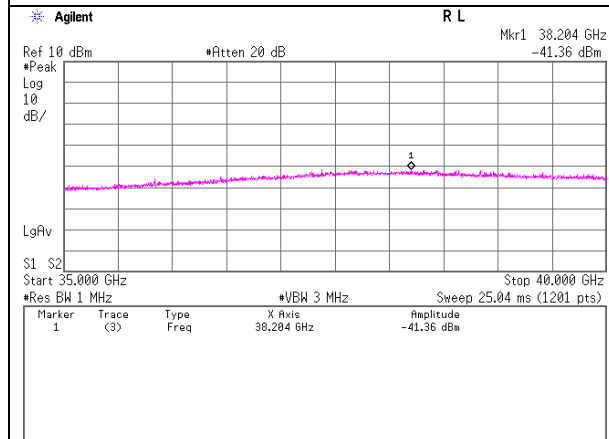
25GHz-30GHz



30GHz-35GHz

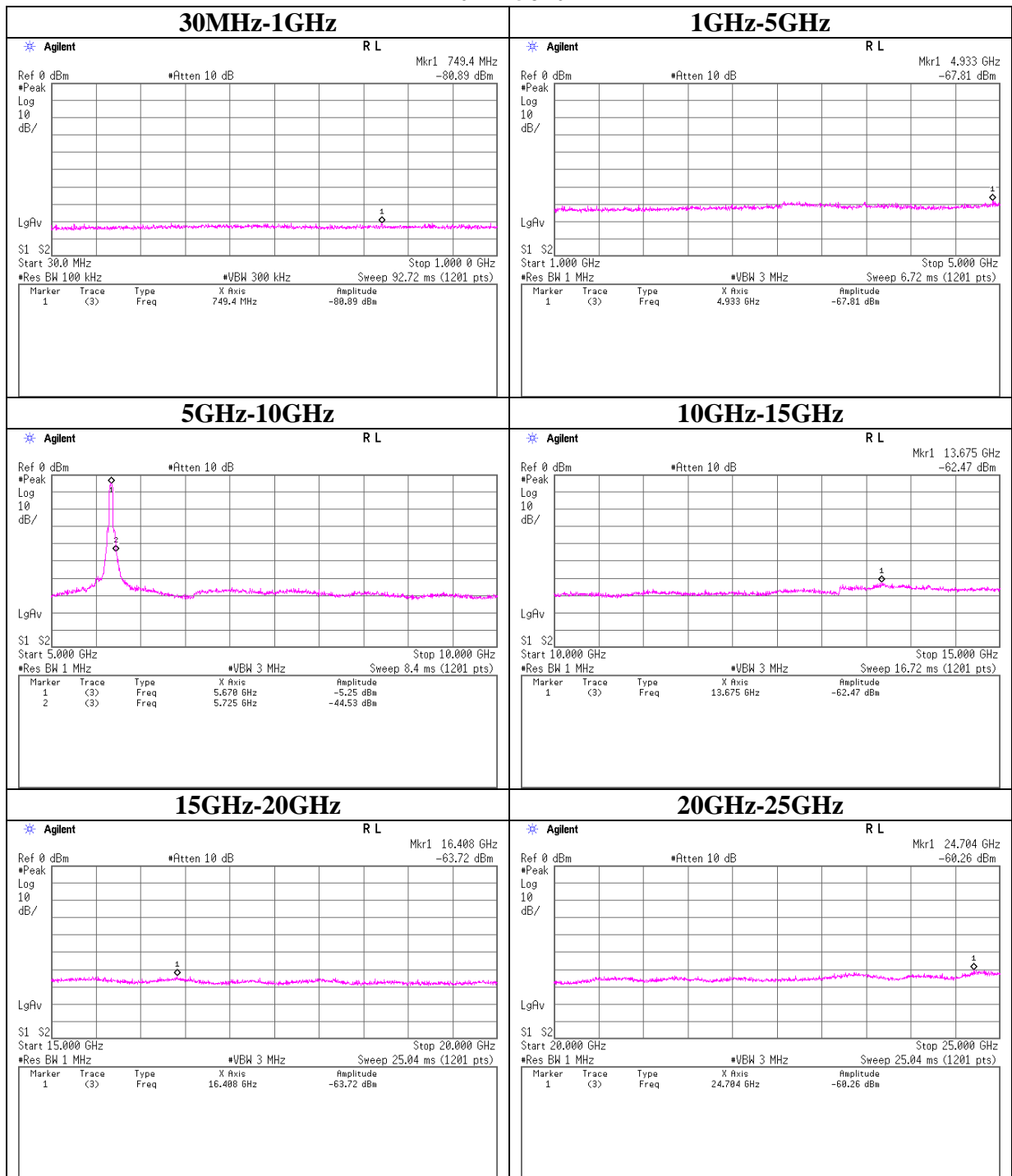


35GHz-40GHz



Conducted Spurious Emission

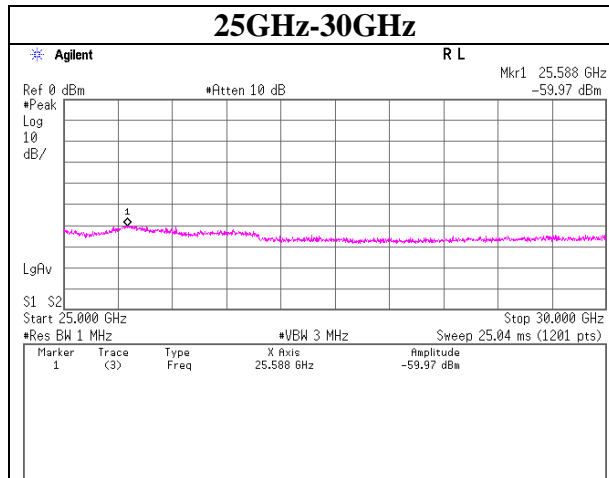
11n-40 Tx 5670MHz



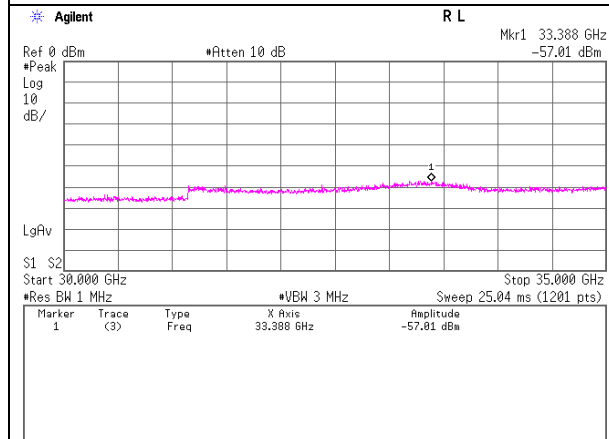
Conducted Spurious Emission

11n-40 Tx 5670MHz

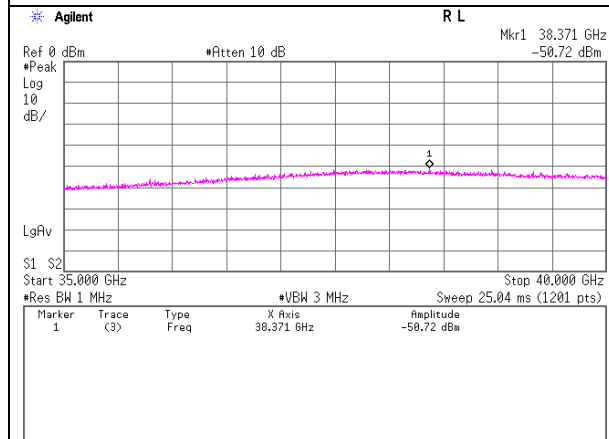
25GHz-30GHz



30GHz-35GHz

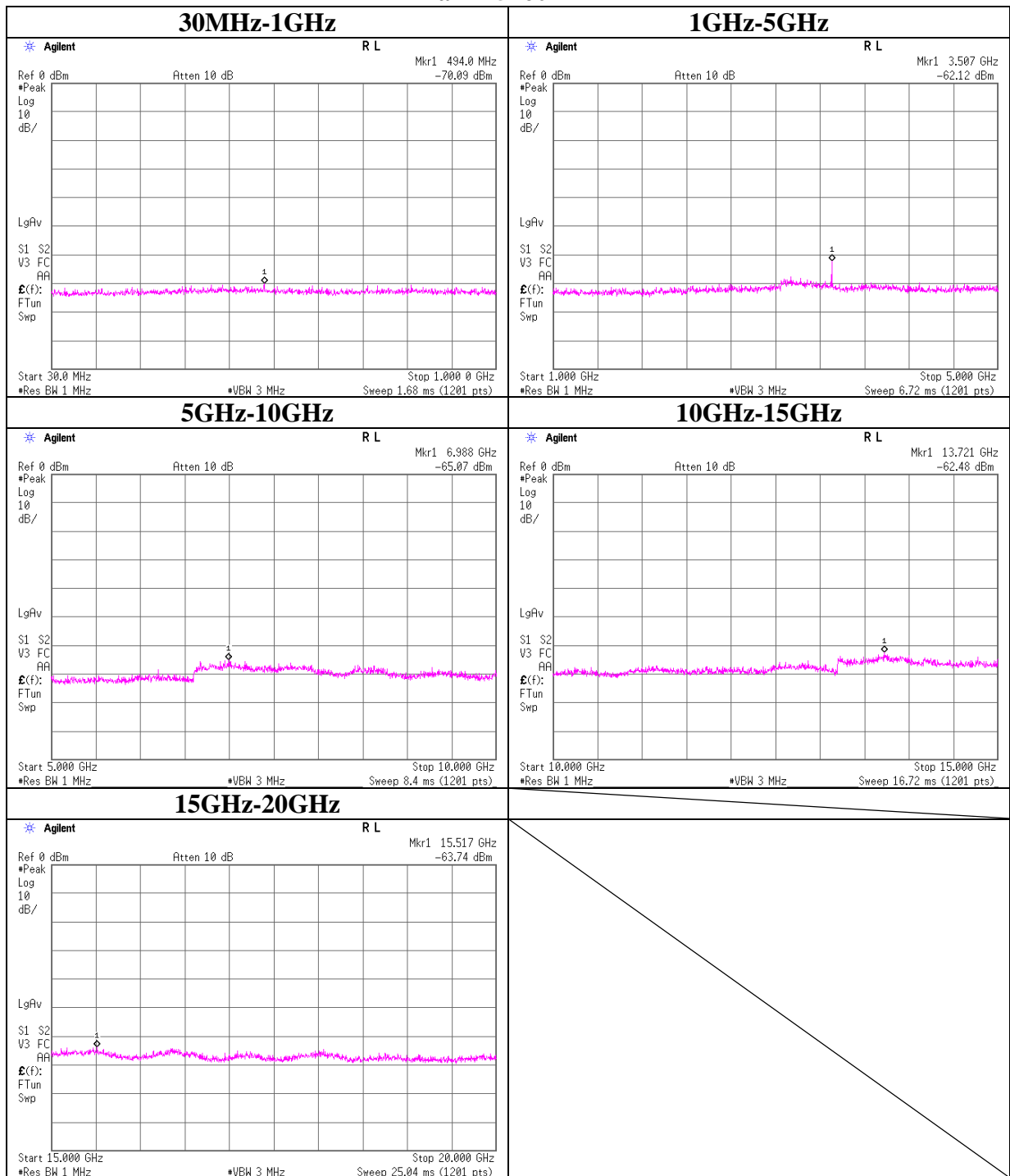


35GHz-40GHz



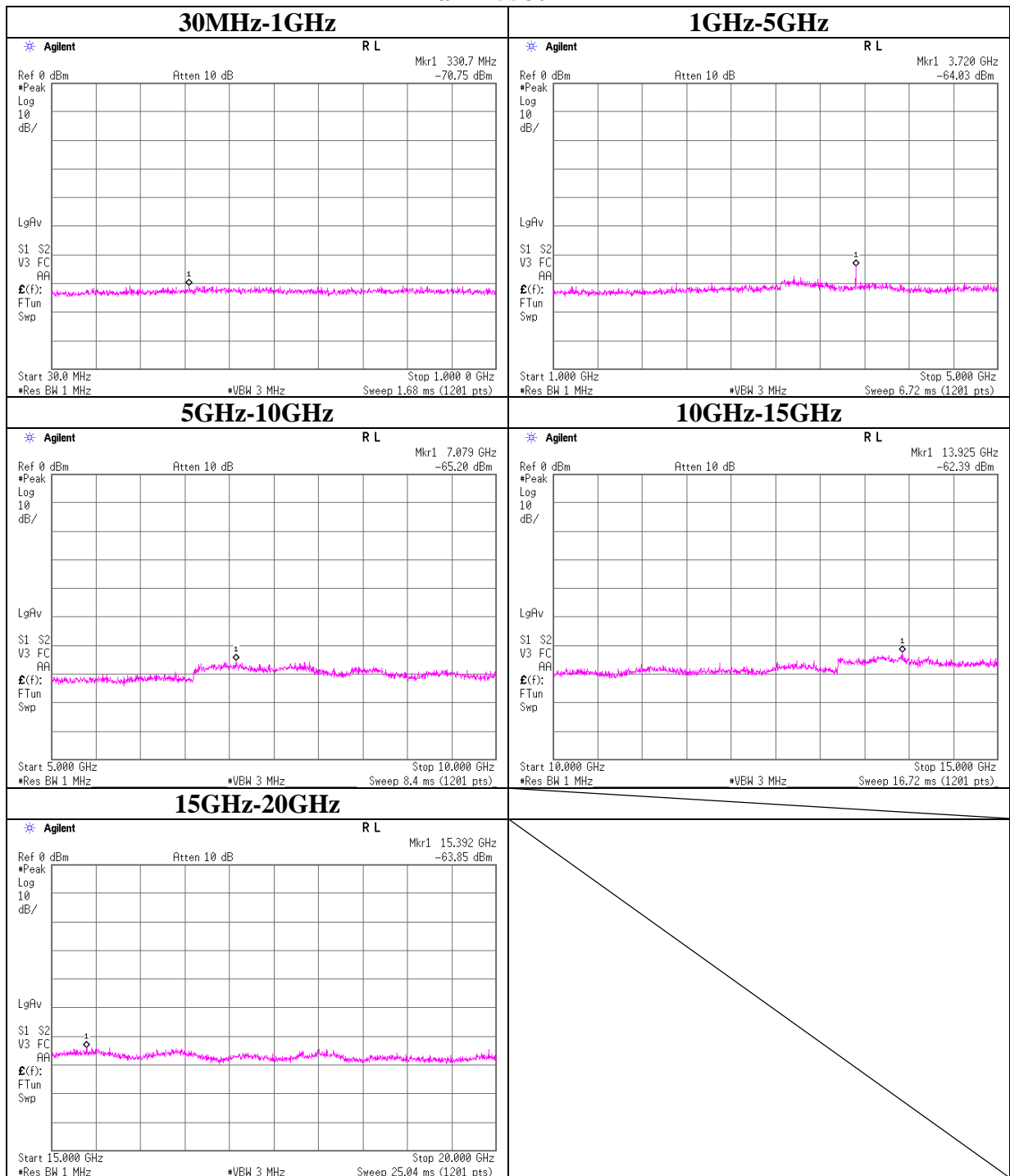
Conducted Spurious Emission

11a Rx 5260MHz



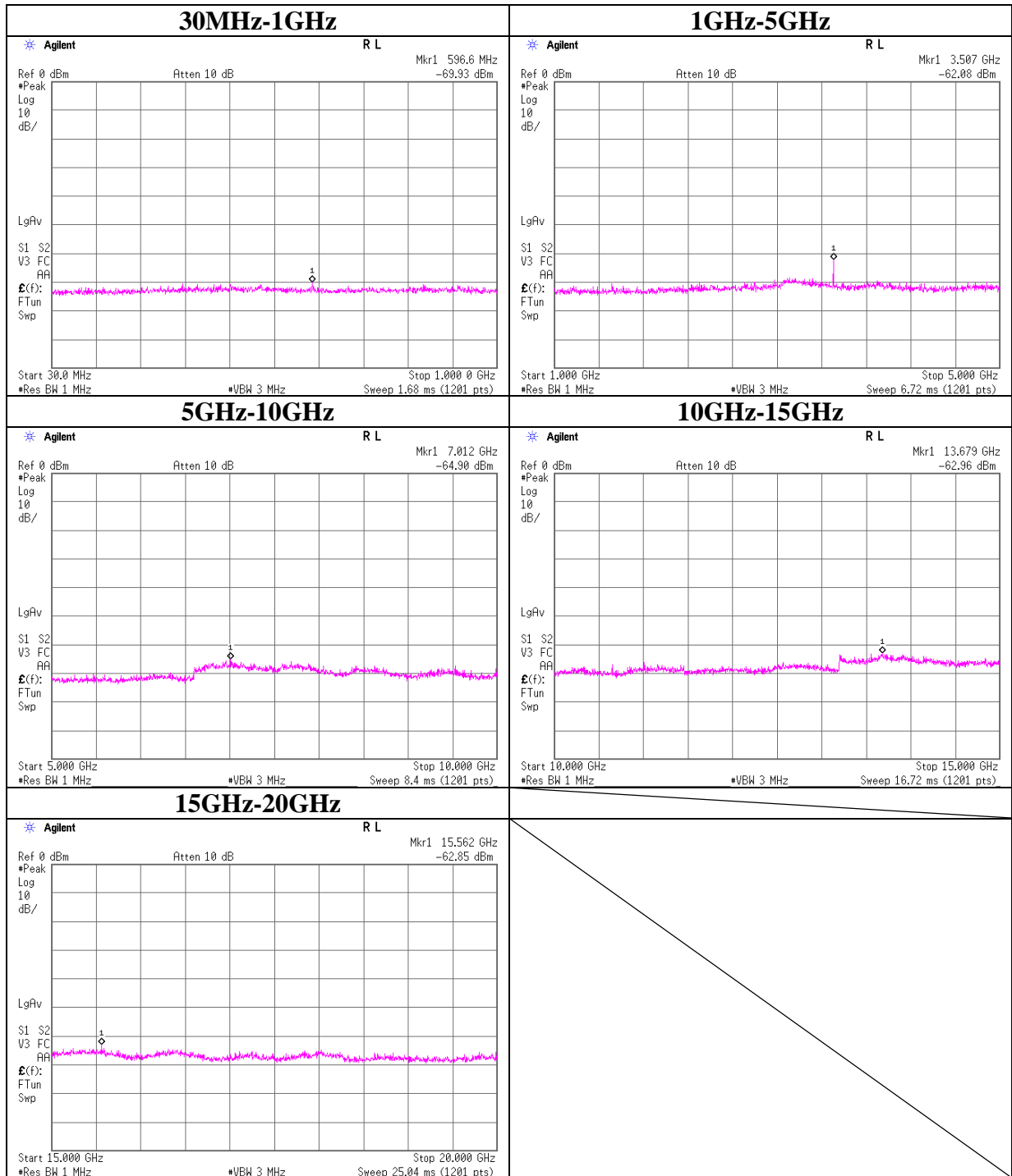
Conducted Spurious Emission

11a Rx 5580MHz



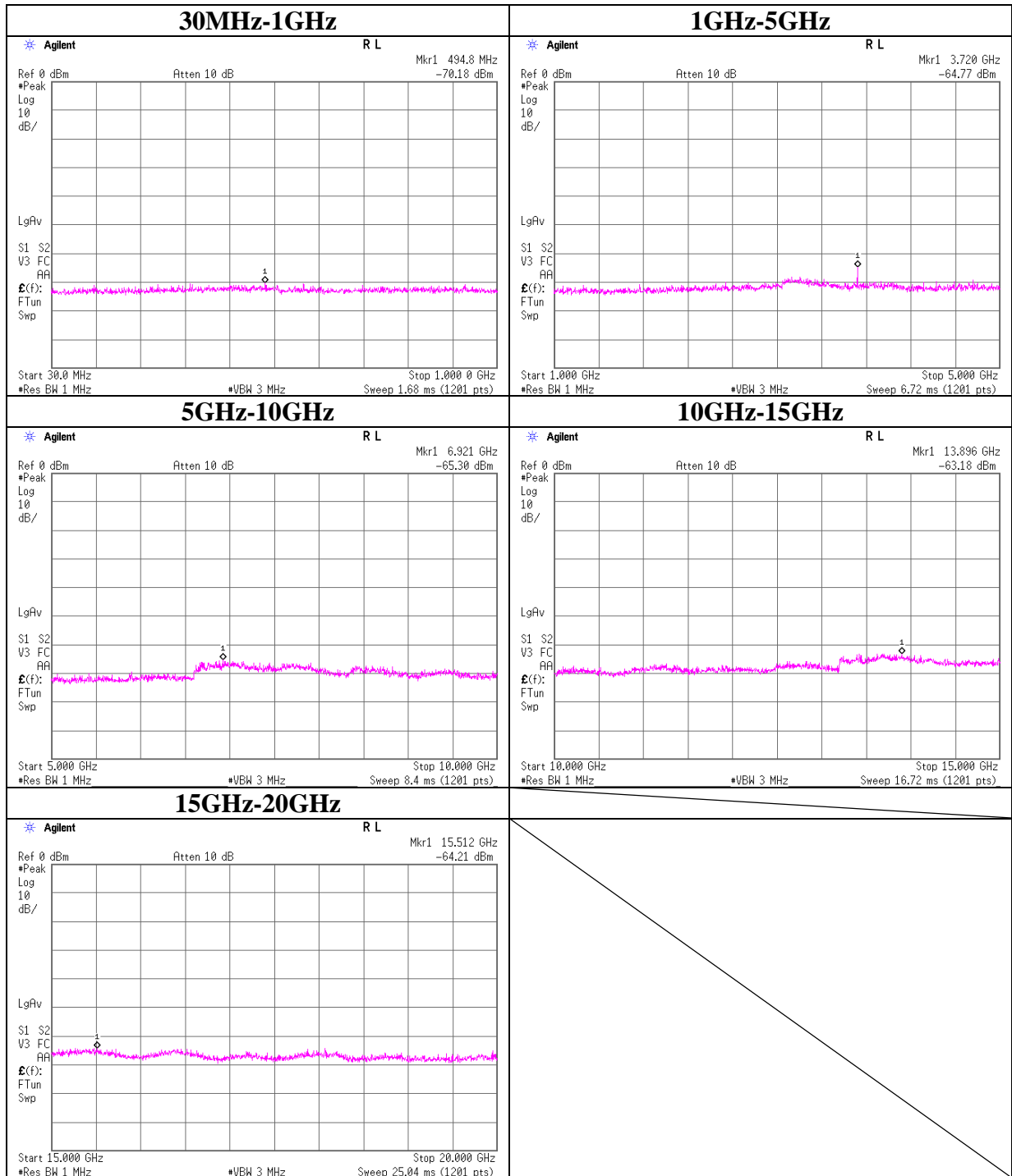
Conducted Spurious Emission

11n-20 Rx 5260MHz



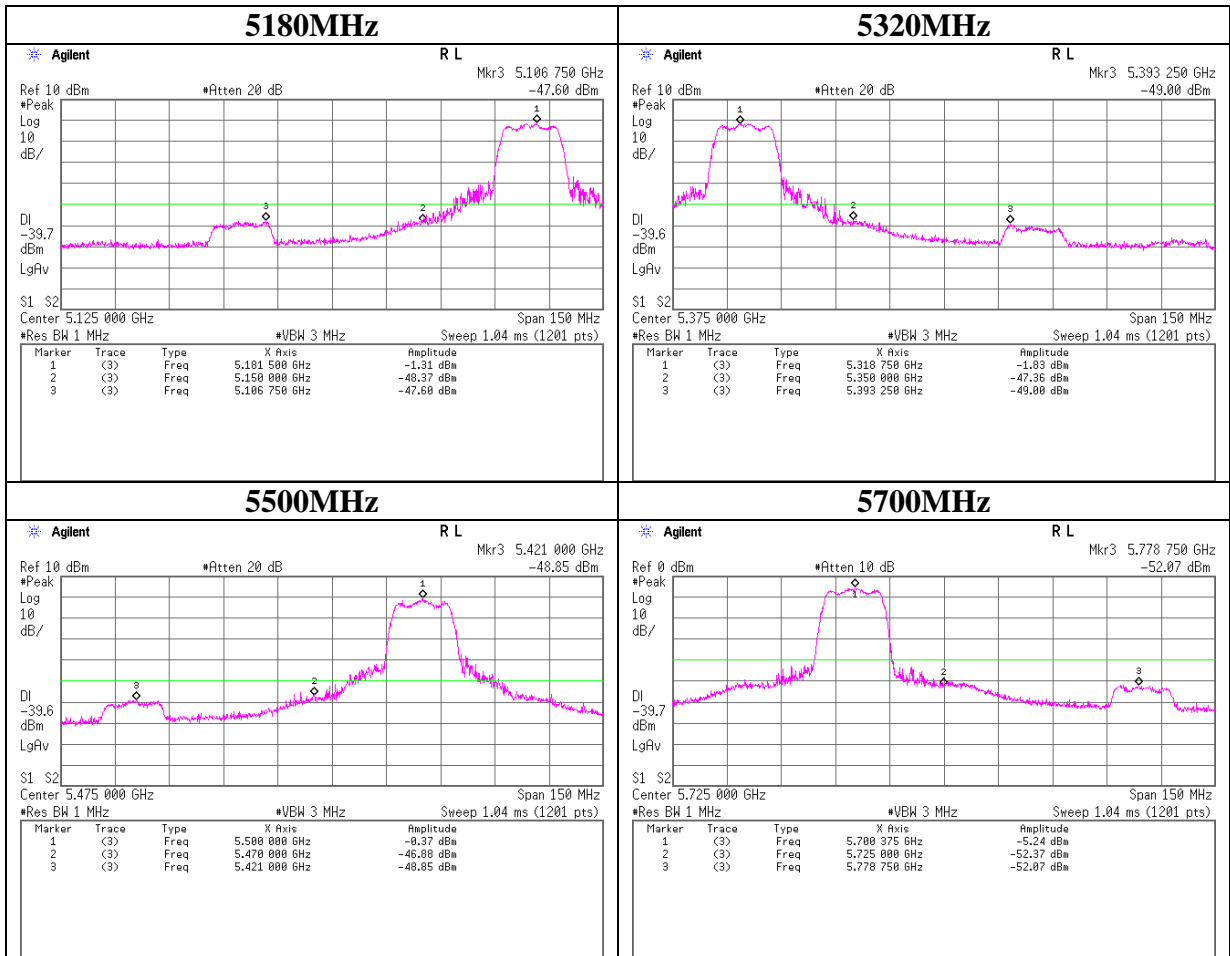
Conducted Spurious Emission

11n-20 Rx 5580MHz



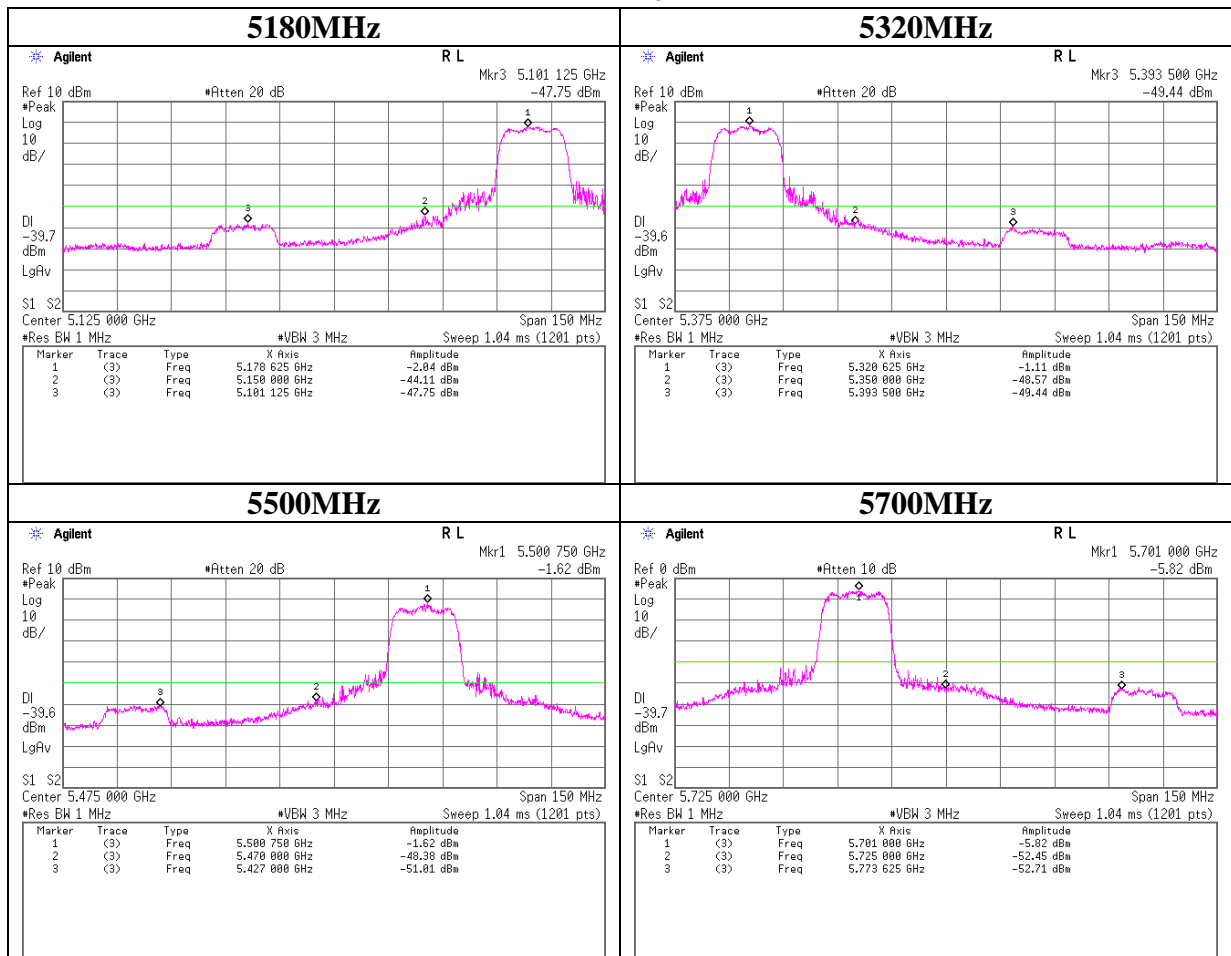
Conducted emission Band Edge compliance

11a



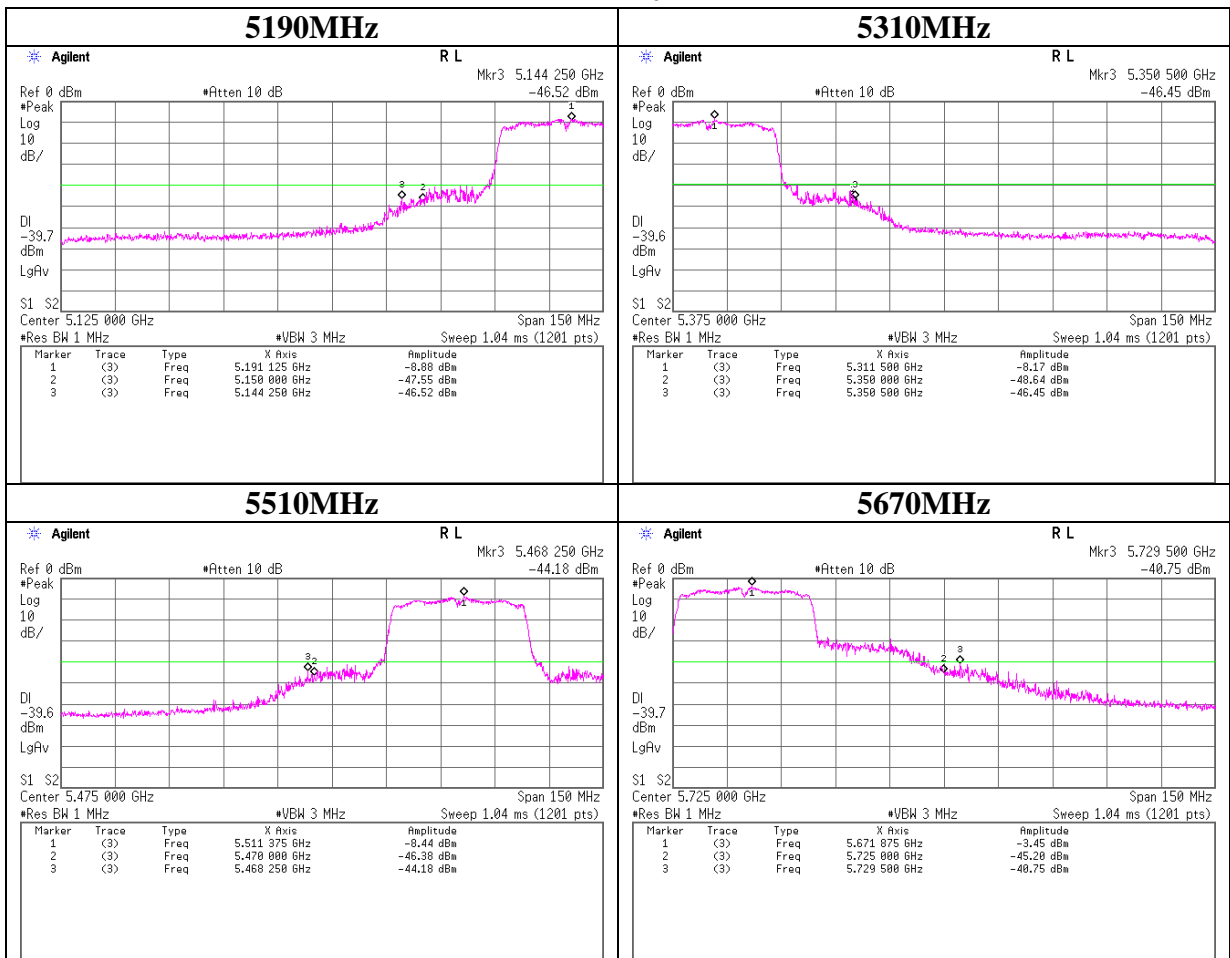
Conducted emission Band Edge compliance

11n-20



Conducted emission Band Edge compliance

11n-40



Peak Excursion Ratio

Test place Head Office EMC Lab. No.11 Measurement room
Report No. 30KE0072-HO-02
Date 09/17/2010
Temperature/ Humidity 26deg.C. / 40%
Engineer Satofumi Matsuyama
Mode 11a Tx / 11n-20 Tx / 11n-40 Tx

11a

Frequency [MHz]	Peak Power Excursion [dB]	Limit [dB]
5180	6.08	13.00
5220	7.65	13.00
5240	6.95	13.00
5260	7.63	13.00
5300	8.13	13.00
5320	8.99	13.00
5500	7.79	13.00
5800	8.73	13.00
5700	10.07	13.00

11n-20

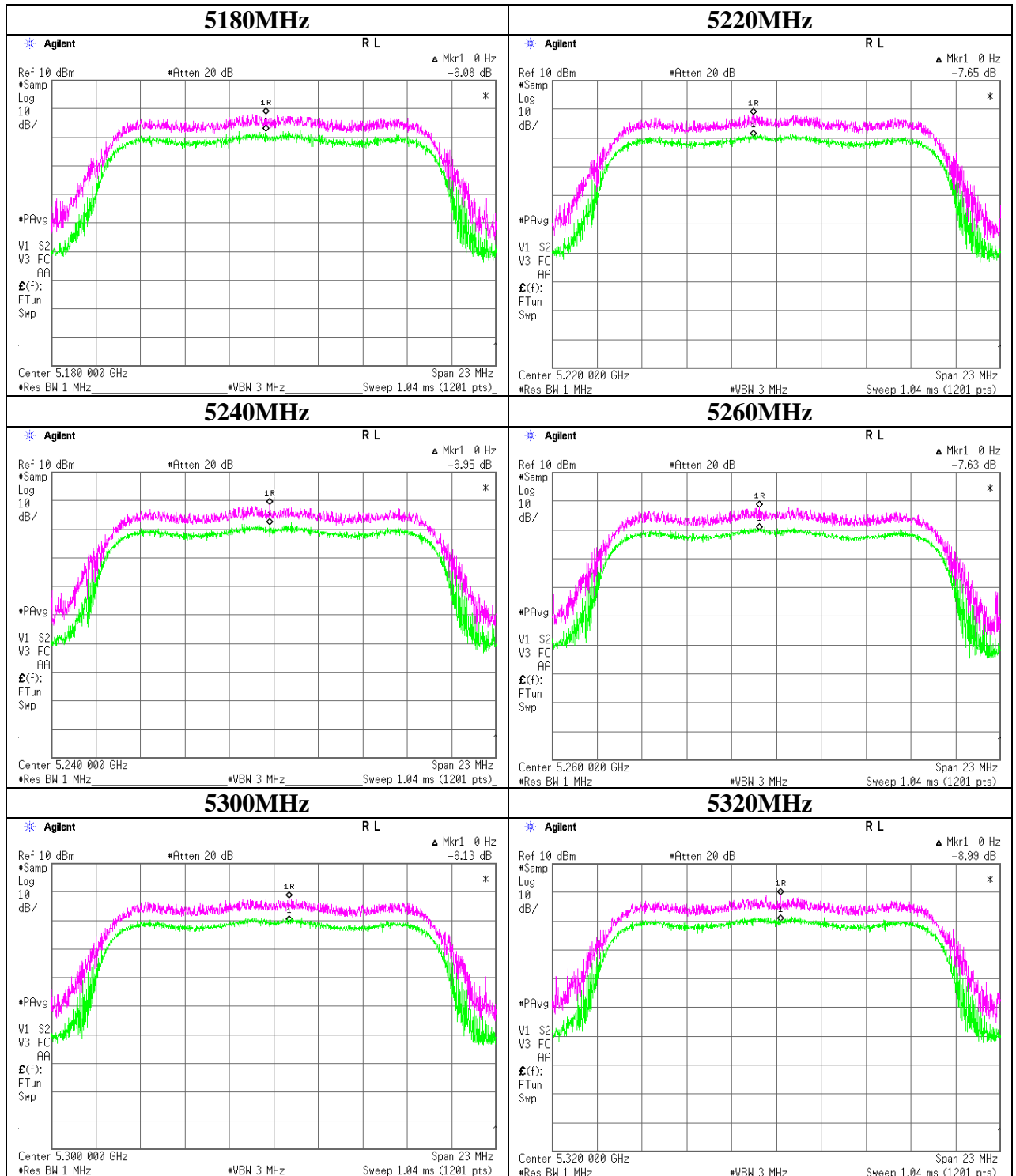
Frequency [MHz]	Peak Power Excursion [dB]	Limit [dB]
5180	8.27	13.00
5220	8.63	13.00
5240	10.75	13.00
5260	10.47	13.00
5300	7.79	13.00
5320	8.36	13.00
5500	7.62	13.00
5580	7.08	13.00
5700	6.21	13.00

11n-40

Frequency [MHz]	Peak Power Excursion [dB]	Limit [dB]
5190	6.93	13.00
5230	7.49	13.00
5270	9.94	13.00
5310	9.10	13.00
5510	8.22	13.00
5550	7.18	13.00
5670	7.94	13.00

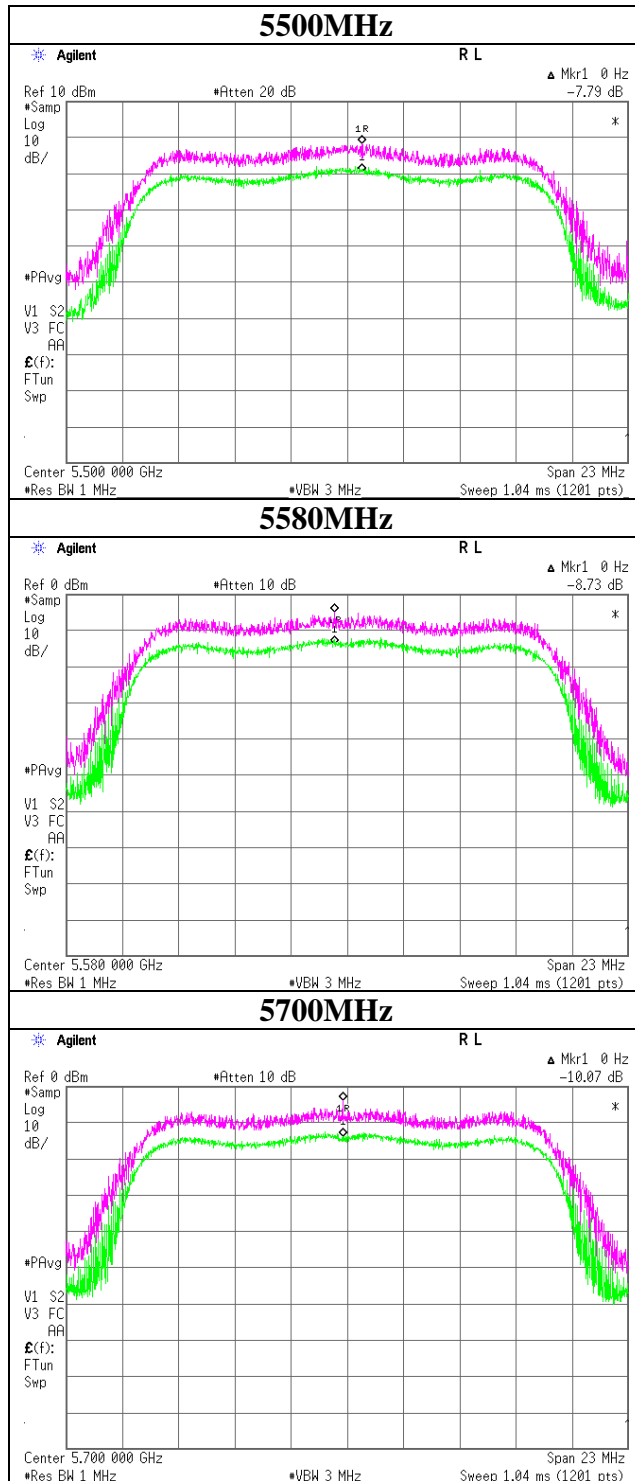
Peak Excursion Ratio

11a



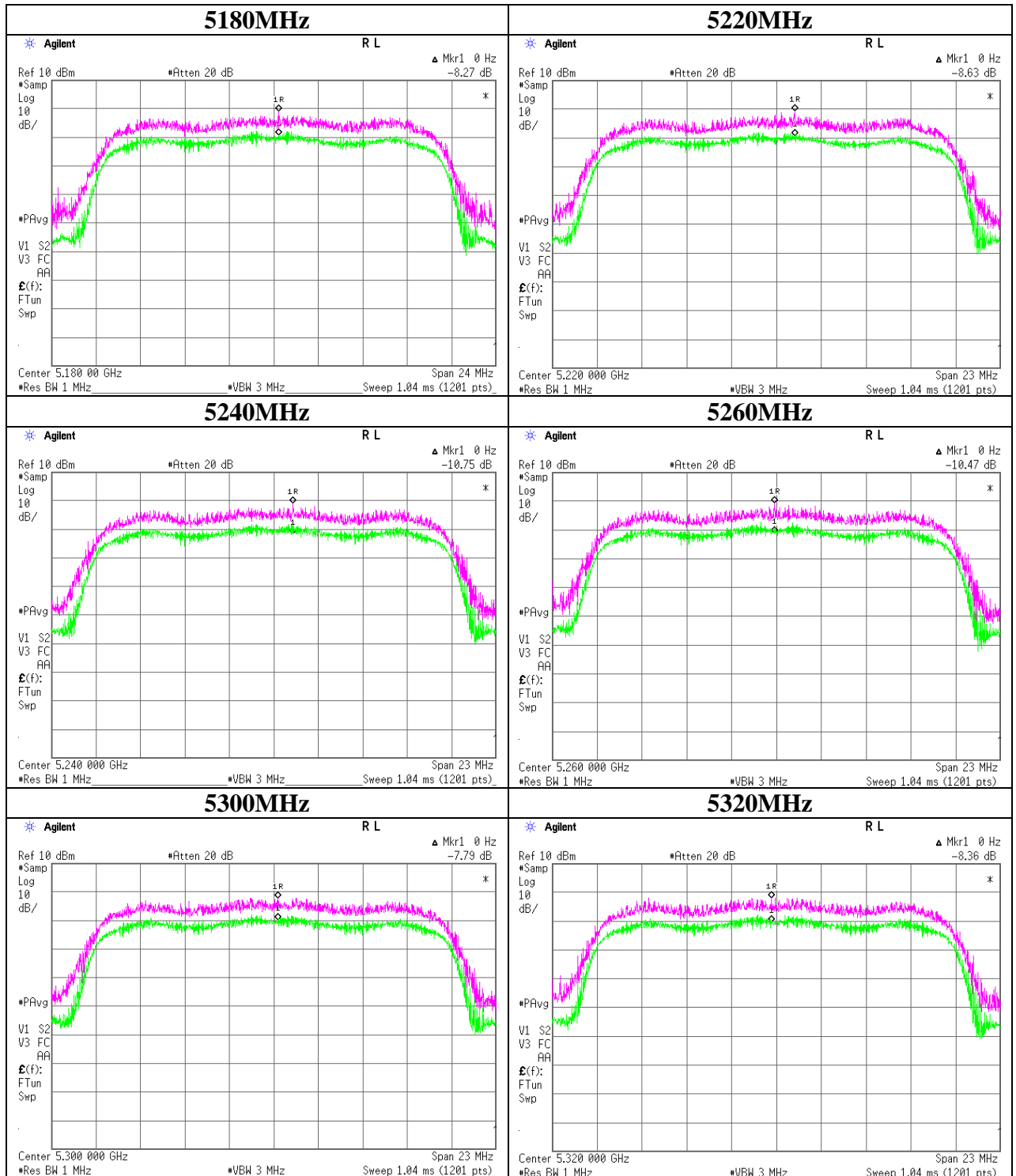
Peak Excursion Ratio

11a



Peak Excursion Ratio

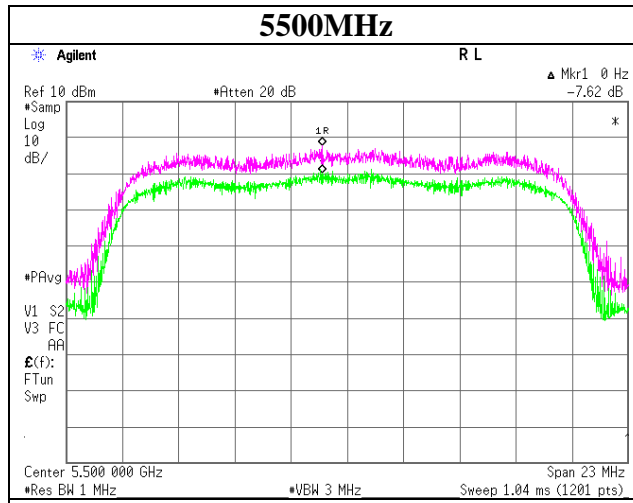
11n-20



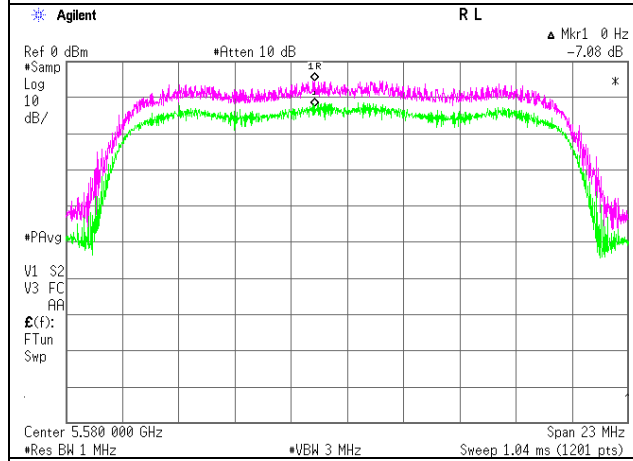
Peak Excursion Ratio

11n-20

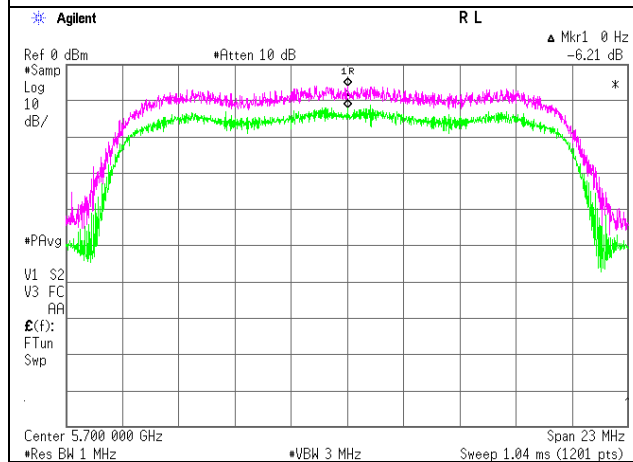
5500MHz



5580MHz

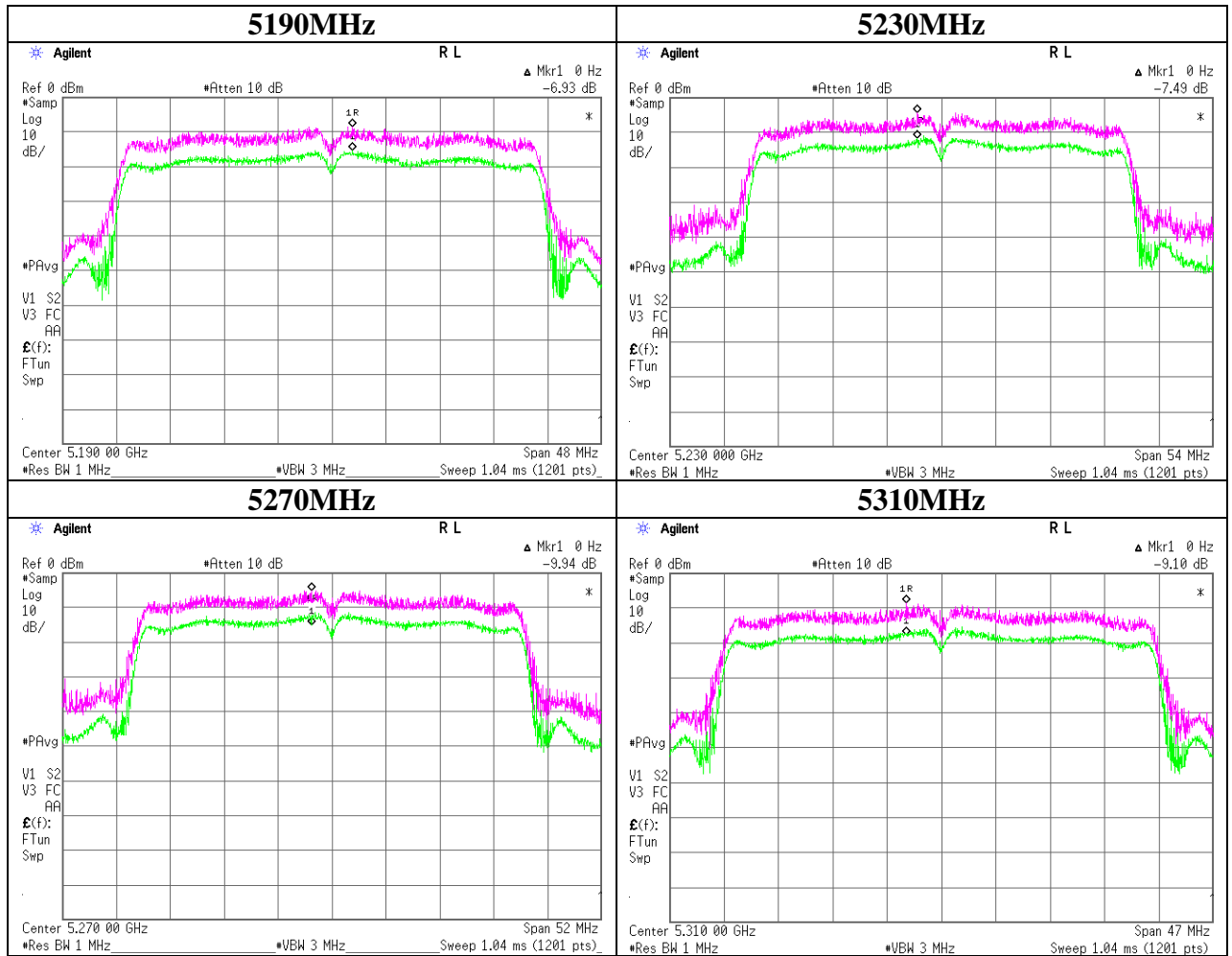


5700MHz



Peak Excursion Ratio

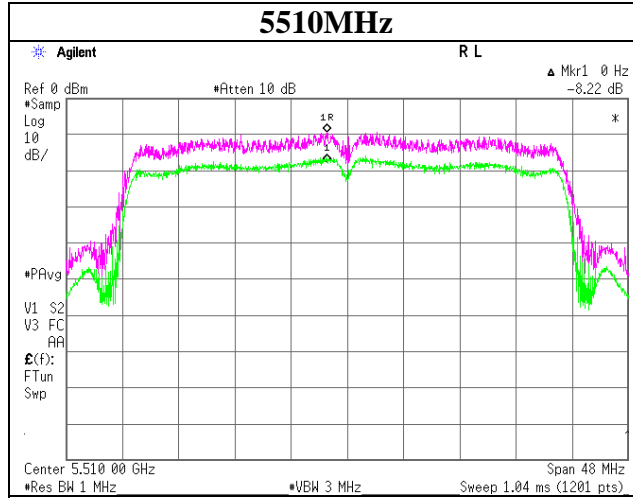
11n-40



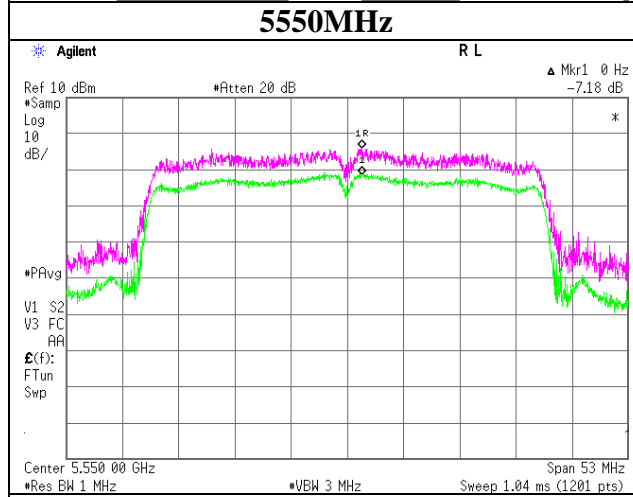
Peak Excursion Ratio

11n-40

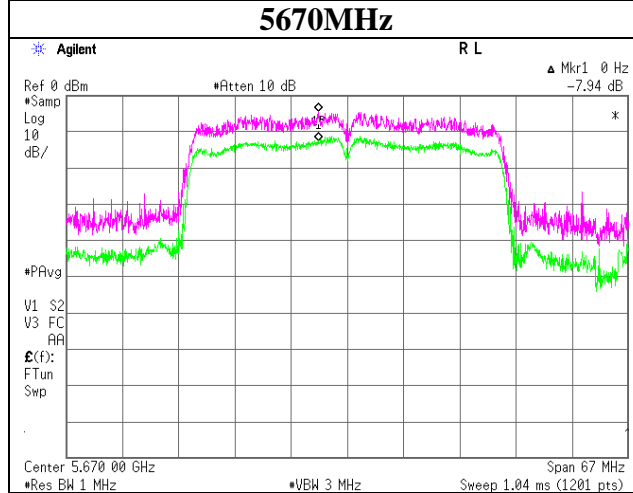
5510MHz



5550MHz



5670MHz



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
MCC-66	Microwave Cable 1G-40GHz	Schner	SUCOFLEX102	28636/2	AT	2010/04/27 * 12
MAT-24	Attenuator(10dB)(above1GHz)	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
MSA-03	Spectrum Analyzer	Agilent	E4448A	MY44020357	AT/RE	2009/11/20 * 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	
MOS-12	Thermo-Hygrometer	Custom	CTH-180	-	AT	2010/01/28 * 12
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	-
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
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	-
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
MHF-22	High Pass Filter 7-20GHz	TOKIMEC	TF37NCCB	602	RE	2010/01/26 * 12
MCC-79	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	278923/4	RE	2009/12/19 * 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
MSA-09	Spectrum Analyzer	Advantest	R3273	95090115	RE/CE	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

UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

EMI test equipment [2/2]

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
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
MHF-20	High Pass Filter 3.5- 18.0GHz	TOKIMEC	TF323DCC	607	RE	2009/12/19 * 12
MHF-23	High Pass Filter 7-20GHz	TOKIMEC	TF37NCCC	603	RE	2010/01/27 * 12
MHA-17	Horn Antenna 15-40GHz	Schwarzbeck	BBHA9170	BBHA9170307	RE	2010/06/29 * 12
COTS-MEMI	EMI measurement program	TSJ	TEPTO-DV	-	CE/RE	-
MTR-08	Test Receiver	Rohde & Schwarz	ESCI	100767	CE	2010/08/23 * 12
MLS-06	LISN(AMN)	Schwarzbeck	NSLK8127	8127363	CE(EUT)	2010/02/04 * 12
MCC-112	Coaxial cable	Fujikura/Suhner/T SJ	5D- 2W(10m)/SFM141(3 m)/sucoform141- PE(1m)/421- 010(1.5m)/RFM- E321(Switcher)	-/00640	CE	2010/07/23 * 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

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