

APPENDIX 2: Data of EMI test

Conducted Emission

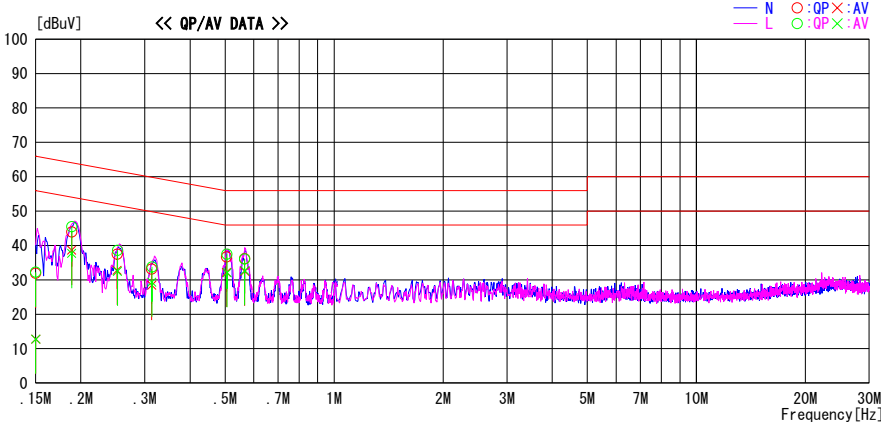
DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.4 Semi Anechoic Chamber
Date : 2010/03/04

Report No. : 30GE0005-HO-01
Temp./Humi. : 23deg. C / 46%
Engineer : Hiroyuki Furutaka

Mode / Remarks : BT Tx 2402MHz DH5

LIMIT : FCC15.207 QP
FCC15.207 AV

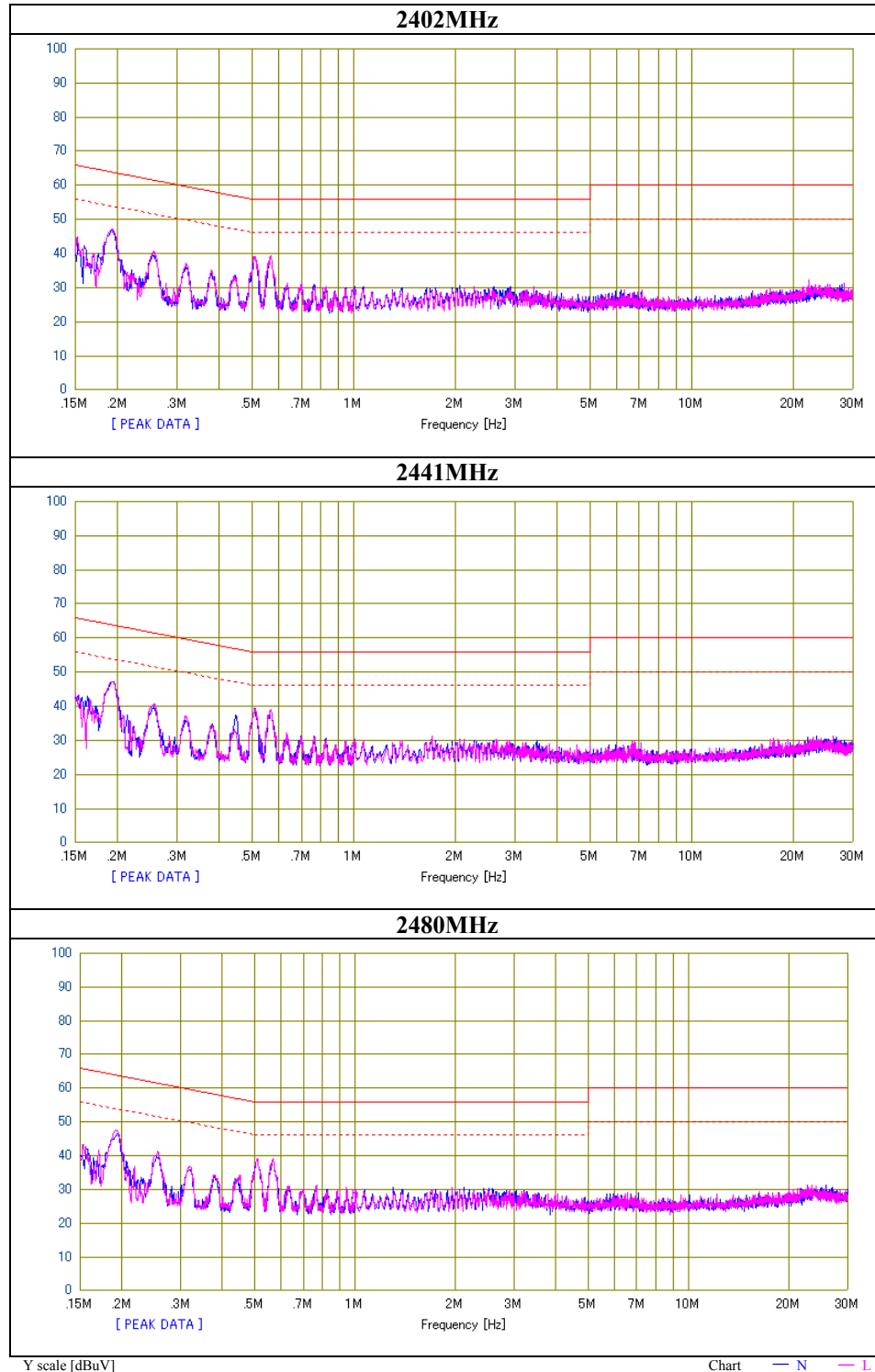


Frequency	Reading Level		Corr. Factor	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0.15000	18.6	-0.5	13.3	31.9	12.8	66.0	56.0	34.1	43.2	N	
0.18855	30.7	25.3	13.3	44.0	38.6	64.1	54.1	20.1	15.5	N	
0.25171	24.2	19.5	13.3	37.5	32.8	61.7	51.7	24.2	18.9	N	
0.31358	19.8	15.1	13.3	33.1	28.4	59.9	49.9	26.8	21.5	N	
0.50451	23.4	18.9	13.3	36.7	32.2	56.0	46.0	19.3	13.8	N	
0.56613	22.9	19.2	13.3	36.2	32.5	56.0	46.0	19.8	13.5	N	
0.15000	18.9	-0.5	13.3	32.2	12.8	66.0	56.0	33.8	43.2	L	
0.18863	32.2	24.4	13.3	45.5	37.7	64.1	54.1	18.6	16.4	L	
0.25217	25.3	19.2	13.3	38.6	32.5	61.7	51.7	23.1	19.2	L	
0.31379	20.5	16.1	13.3	33.8	29.4	59.9	49.9	26.1	20.5	L	
0.50624	24.2	18.8	13.3	37.5	32.1	56.0	46.0	18.5	13.9	L	
0.56653	22.8	19.4	13.3	36.1	32.7	56.0	46.0	19.9	13.3	L	

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

Conducted Emission

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. 30GE0005-HO-01
Date March 04, 2010
Temperature/ Humidity 23 deg.C./ 46%
Engineer Hiroyuki Furutaka
Mode Tx DH5



Conducted Emission

DATA OF CONDUCTED EMISSION TEST

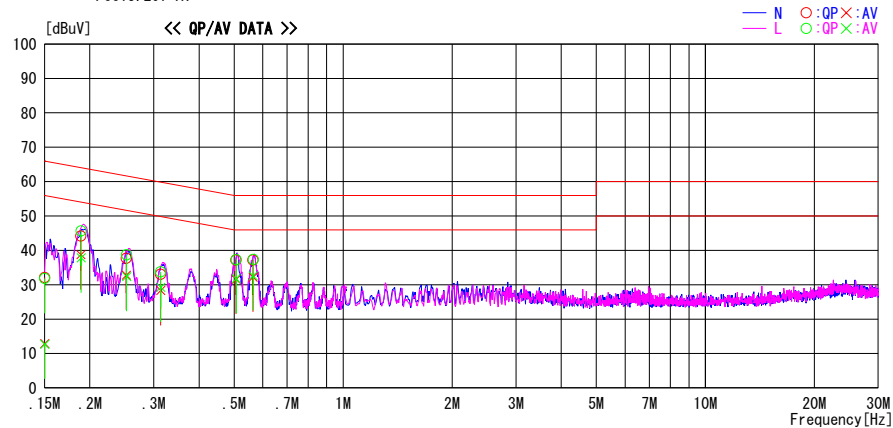
UL Japan, Inc. Head Office EMC Lab. No.4 Semi Anechoic Chamber
Date : 2010/03/04

Report No. : 30GE0005-HO-01

Temp./Humi. : 23deg.C / 46%
Engineer : Hiroyuki Furutaka

Mode / Remarks : BT Tx 2402MHz 3DH5

LIMIT : FCC15.207 QP
FCC15.207 AV

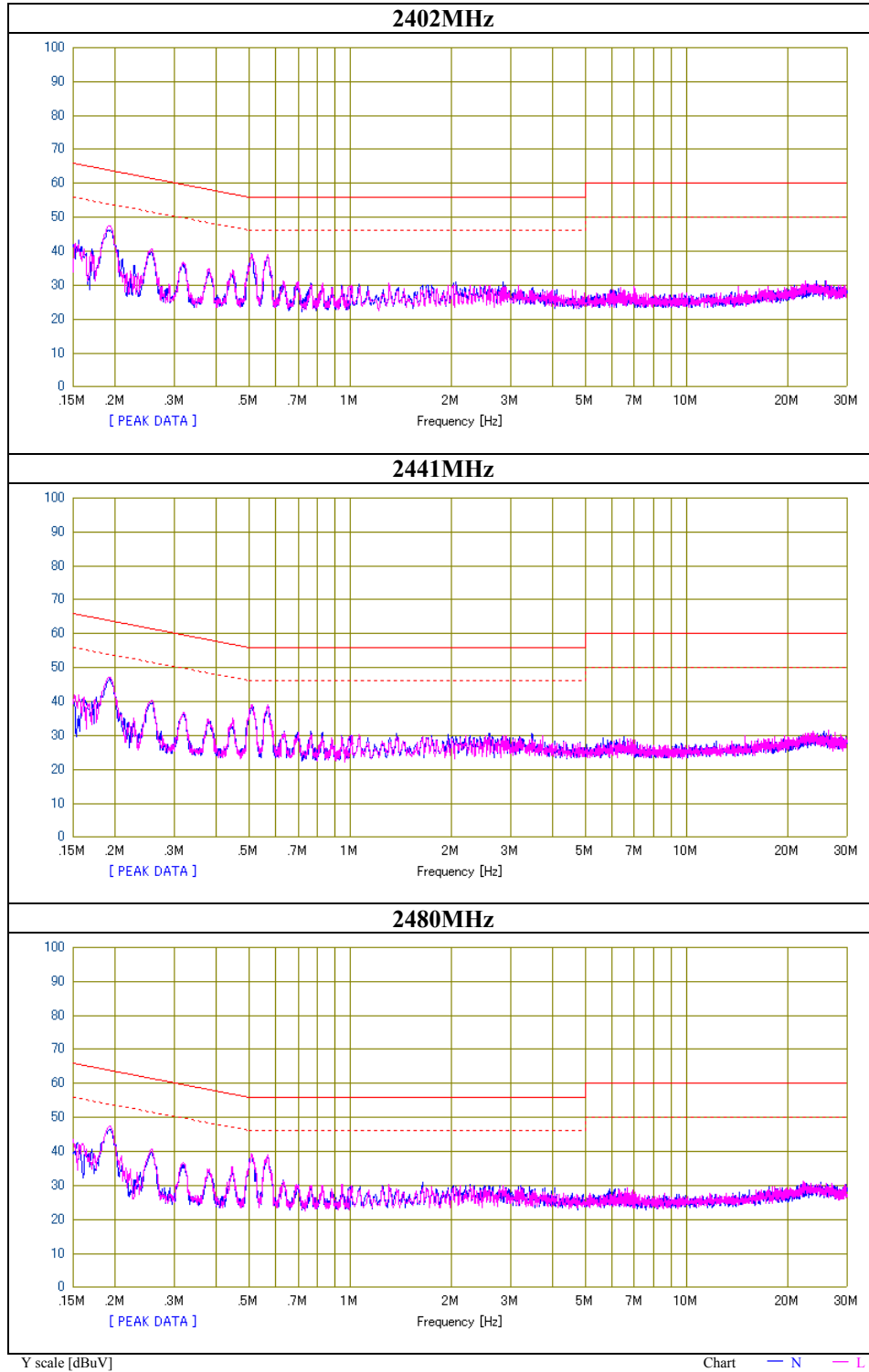


Frequency [MHz]	Reading Level		Corr. Factor	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15000	18.8	-0.4	13.3	32.1	12.9	66.0	56.0	33.9	43.1	N	
0.18873	30.9	25.4	13.3	44.2	38.7	64.1	54.1	19.9	15.4	N	
0.25199	24.4	19.5	13.3	37.7	32.8	61.7	51.7	24.0	18.9	N	
0.31346	19.7	15.0	13.3	33.0	28.3	59.9	49.9	26.9	21.6	N	
0.50627	23.9	18.3	13.3	37.2	31.6	56.0	46.0	18.8	14.4	N	
0.56424	23.9	18.9	13.3	37.2	32.2	56.0	46.0	18.8	13.8	N	
0.15000	18.5	-0.6	13.3	31.8	12.7	66.0	56.0	34.2	43.3	L	
0.18916	32.4	24.5	13.3	45.7	37.8	64.1	54.1	18.4	16.3	L	
0.25255	25.4	19.1	13.3	38.7	32.4	61.7	51.7	23.0	19.3	L	
0.31371	20.5	16.0	13.3	33.8	29.3	59.9	49.9	26.1	20.6	L	
0.50658	24.0	18.5	13.3	37.3	31.8	56.0	46.0	18.7	14.2	L	
0.56454	24.1	19.3	13.3	37.4	32.6	56.0	46.0	18.6	13.4	L	

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

Conducted Emission

Test place	Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No.	30GE0005-HO-01
Date	March 04, 2010
Temperature/ Humidity	23 deg.C./ 46%
Engineer	Hiroyuki Furutaka
Mode	Tx 3DH5



Conducted Emission

DATA OF CONDUCTED EMISSION TEST

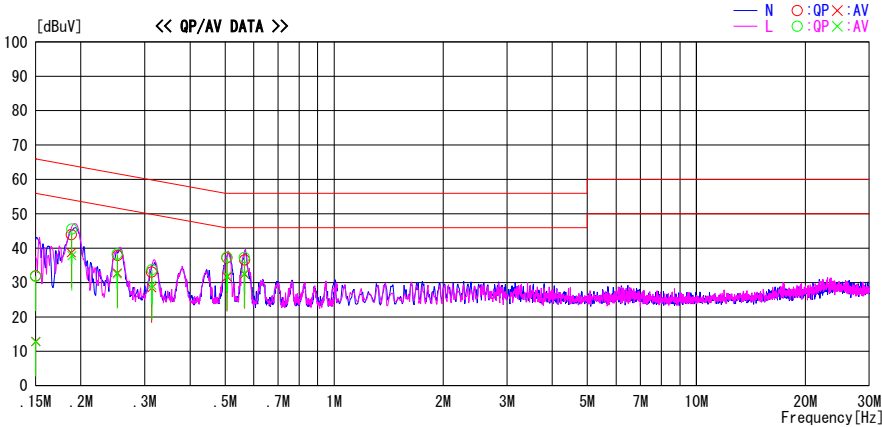
UL Japan, Inc. Head Office EMC Lab. No.4 Semi Anechoic Chamber
Date : 2010/03/04

Report No. : 30GE0005-HO-01

Temp./Humi. : 23deg. C / 46%
Engineer : Hiroyuki Furutaka

Mode / Remarks : BT Rx 2441MHz

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase	Comment
	QP	AV		QP	AV	QP	AV	QP	AV		
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0.15000	18.6	-0.4	13.3	31.9	12.9	66.0	56.0	34.1	43.1	N	
0.18817	30.7	25.3	13.3	44.0	38.6	64.1	54.1	20.1	15.5	N	
0.25226	24.6	19.5	13.3	37.9	32.8	61.7	51.7	23.8	18.9	N	
0.31358	19.7	15.1	13.3	33.0	28.4	59.9	49.9	26.9	21.5	N	
0.50631	23.9	18.4	13.3	37.2	31.7	56.0	46.0	18.8	14.3	N	
0.56573	23.3	19.2	13.3	36.6	32.5	56.0	46.0	19.4	13.5	N	
0.15000	18.5	-0.5	13.3	31.8	12.8	66.0	56.0	34.2	43.2	L	
0.18872	32.3	24.5	13.3	45.6	37.8	64.1	54.1	18.5	16.3	L	
0.25174	25.0	19.2	13.3	38.3	32.5	61.7	51.7	23.4	19.2	L	
0.31387	20.5	16.0	13.3	33.8	29.3	59.9	49.9	26.1	20.6	L	
0.50628	24.1	18.7	13.3	37.4	32.0	56.0	46.0	18.6	14.0	L	
0.56493	24.0	19.4	13.3	37.3	32.7	56.0	46.0	18.7	13.3	L	

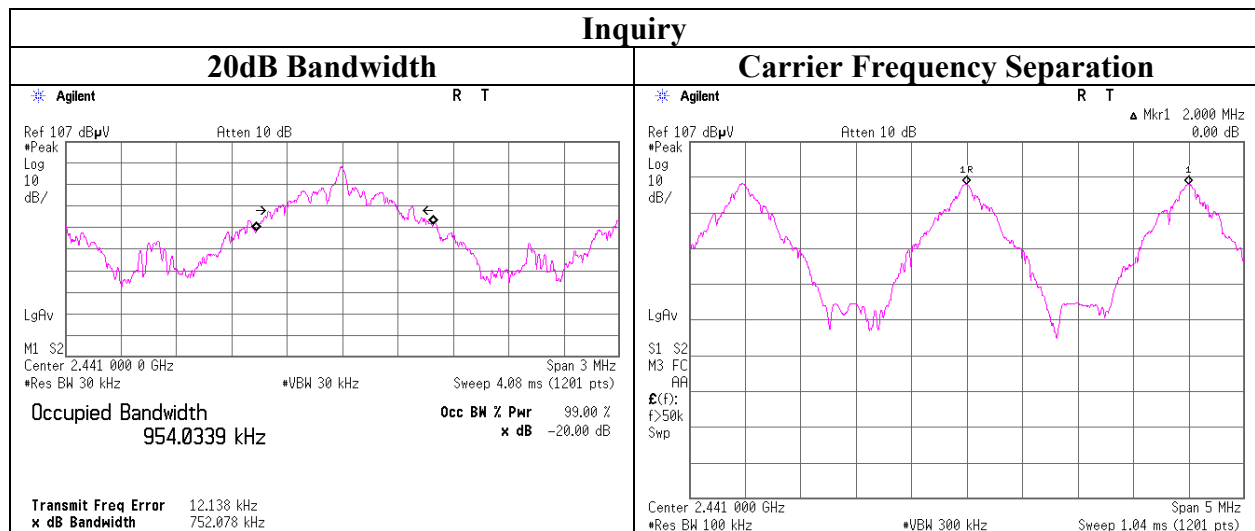
CHART:WITH FACTOR, Peak hold data. CALCULATION:RESULT[dBuV]=READING[dBuV]+C.F[dB] (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

20dB Bandwidth and Carrier Frequency Separation

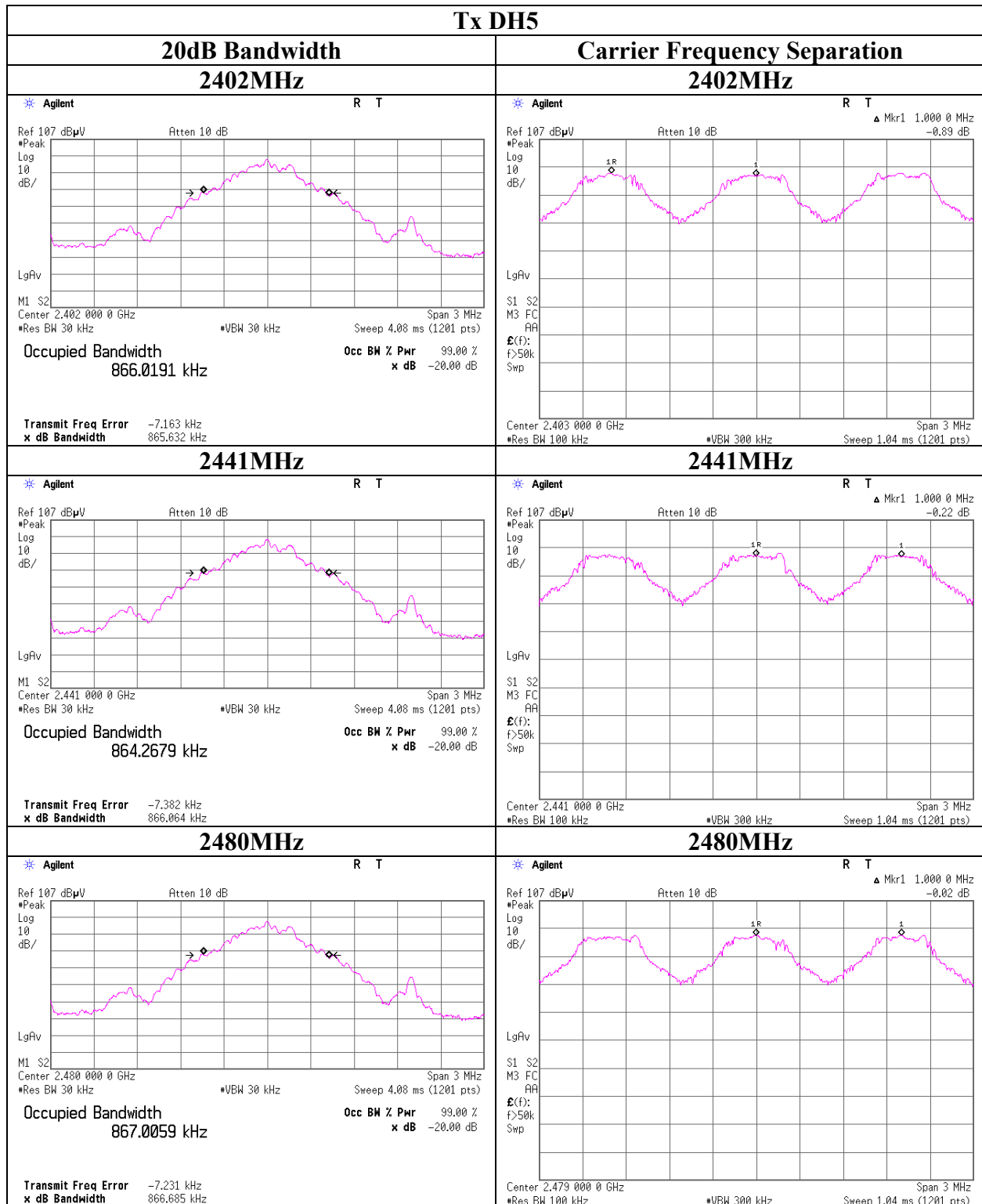
Test place	Head Office EMC Lab. No.11 Measurement Room
Report No.	30GE0005-HO-01
Date	March 05, 2010
Temperature/ Humidity	21 deg.C./ 53%
Engineer	Keisuke Kawamura
Mode	Tx (Hopping on) DH5/3DH5/Inquiry

Mode	Freq. [MHz]	20dB Bandwidth [MHz]	Carrier Frequency Separation [MHz]	Limit for Carrier Frequency separation [MHz]
DH5	2402.0	0.866	1.000	≥ 0.577
DH5	2441.0	0.866	1.000	≥ 0.577
DH5	2480.0	0.867	1.000	≥ 0.578
3DH5	2402.0	1.260	1.000	≥ 0.840
3DH5	2441.0	1.258	1.000	≥ 0.839
3DH5	2480.0	1.257	1.000	≥ 0.838
Inquiry	2441.0	0.752	2.000	≥ 0.501

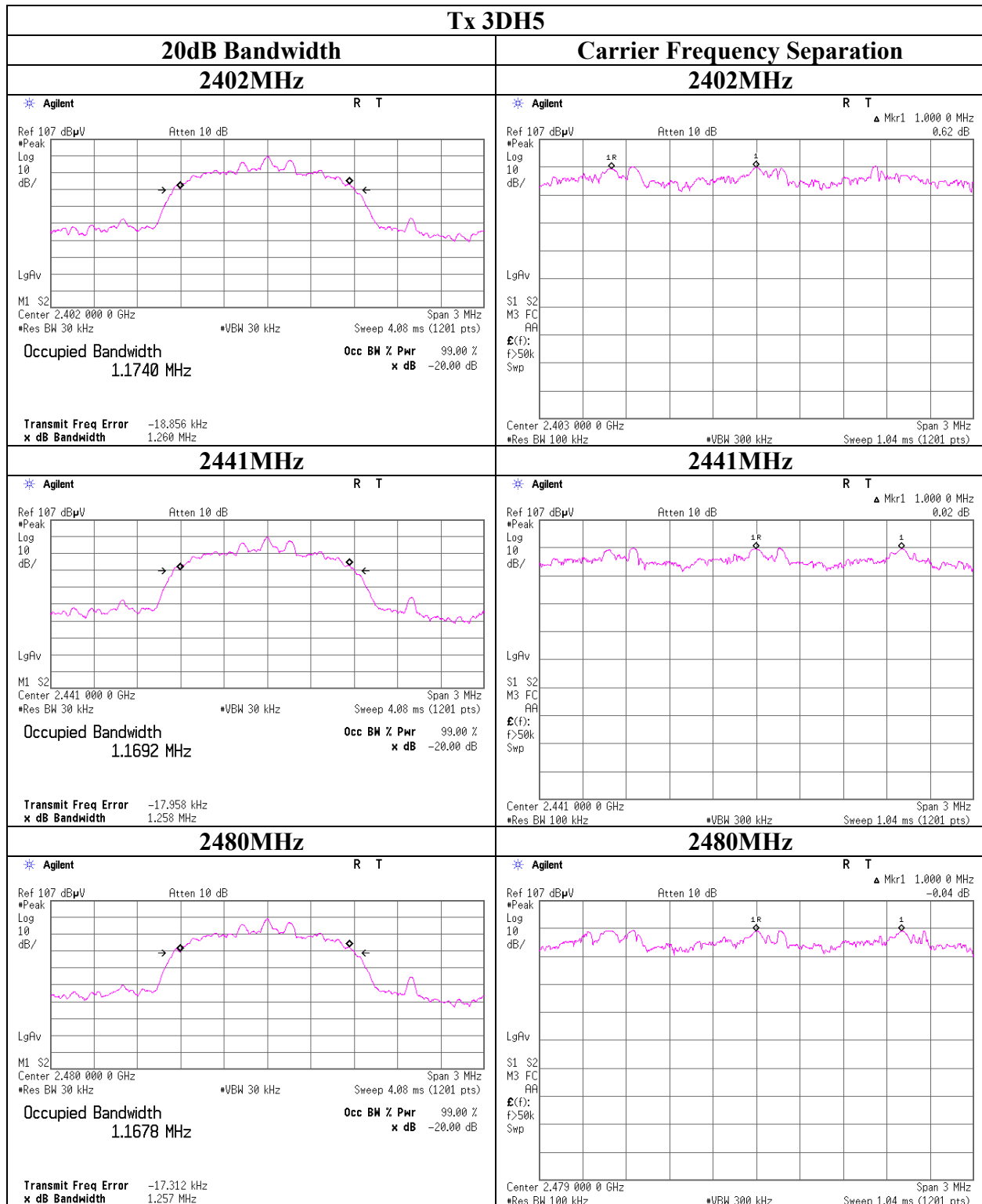
Limit: Two-thirds of 20dB Bandwidth or 25kHz (whichever is greater).
No limit applies to 20dB Bandwidth.



20dB Bandwidth and Carrier Frequency Separation



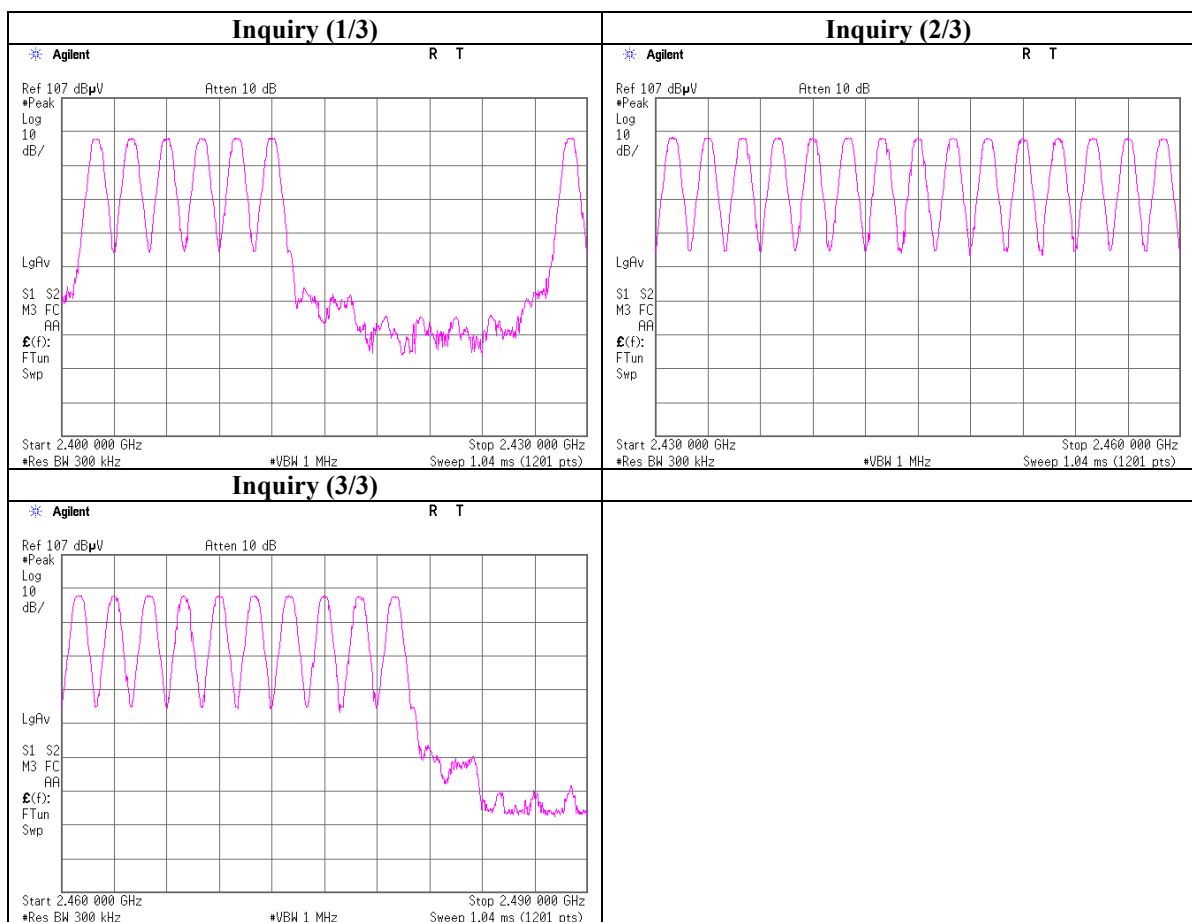
20dB Bandwidth and Carrier Frequency Separation



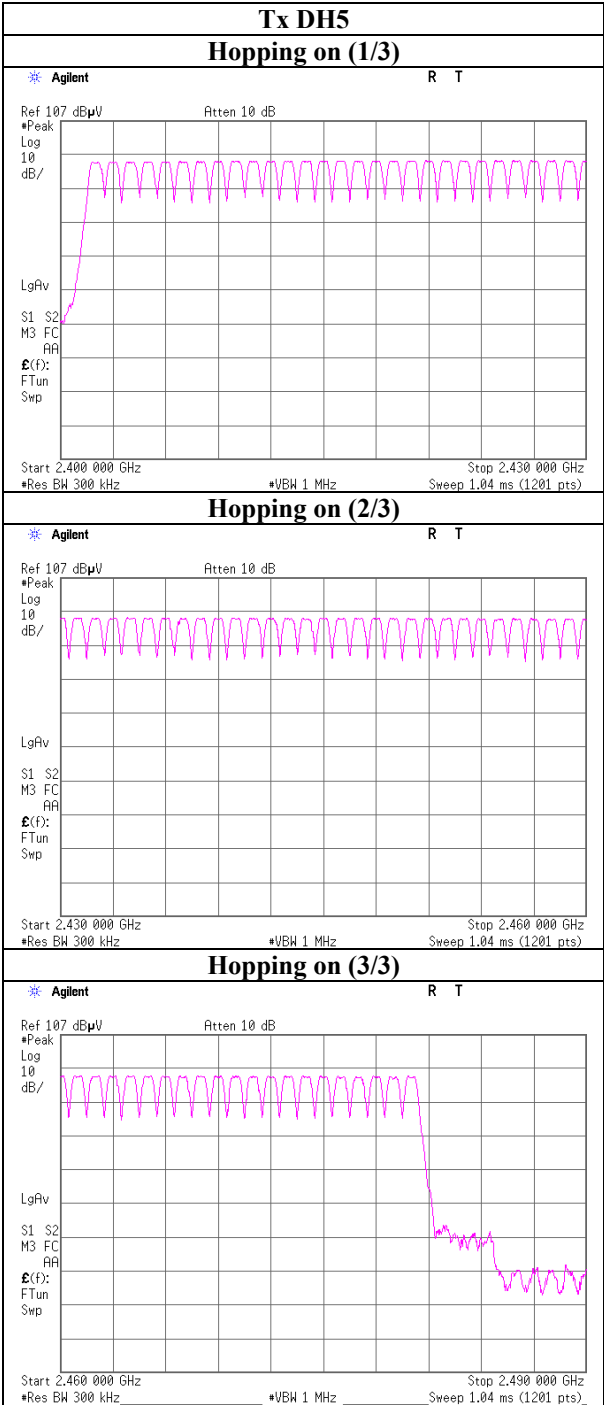
Number of Hopping Frequency

Test place	Head Office EMC Lab. No.11 Measurement Room
Report No.	30GE0005-HO-01
Date	March 05, 2010
Temperature/ Humidity	21 deg.C./ 53%
Engineer	Keisuke Kawamura
Mode	Tx (Hopping on) DH5/3DH5/Inquiry

Mode	Number of channel [times]	Limit [times]
DH5	79	>= 15
3DH5	79	>= 15
Inquiry	32	>= 15



Number of Hopping Frequency



Dwell time

Test place	Head Office EMC Lab. No.11 Measurement Room
Report No.	30GE0005-HO-02
Date	March 05, 2010
Temperature/ Humidity	21 deg.C./ 53%
Engineer	Keisuke Kawamura
Mode	Tx (Hopping on) DH5/3DH5/Inquiry

Mode	Number of transmission in a 31.6(79 Hopping x 0.4) / 12.8(32 Hopping x 0.4)second period					Length of transmission time [msec]	Result [msec]	Limit [msec]
DH1	51.2 times	/	5 sec.	x	31.6 sec. = 324 times	0.543	176	400
DH3	27.2 times	/	5 sec.	x	31.6 sec. = 172 times	1.799	309	400
DH5	17.6 times	/	5 sec.	x	31.6 sec. = 112 times	3.049	341	400
3DH1	50.8 times	/	5 sec.	x	31.6 sec. = 322 times	0.559	180	400
3DH3	26.4 times	/	5 sec.	x	31.6 sec. = 167 times	1.821	304	400
3DH5	17.4 times	/	5 sec.	x	31.6 sec. = 110 times	3.074	338	400
Inquiry	100.0 times	/	1 sec.	x	12.8 sec. = 1280 times	0.242	309	400

Sample Calculation

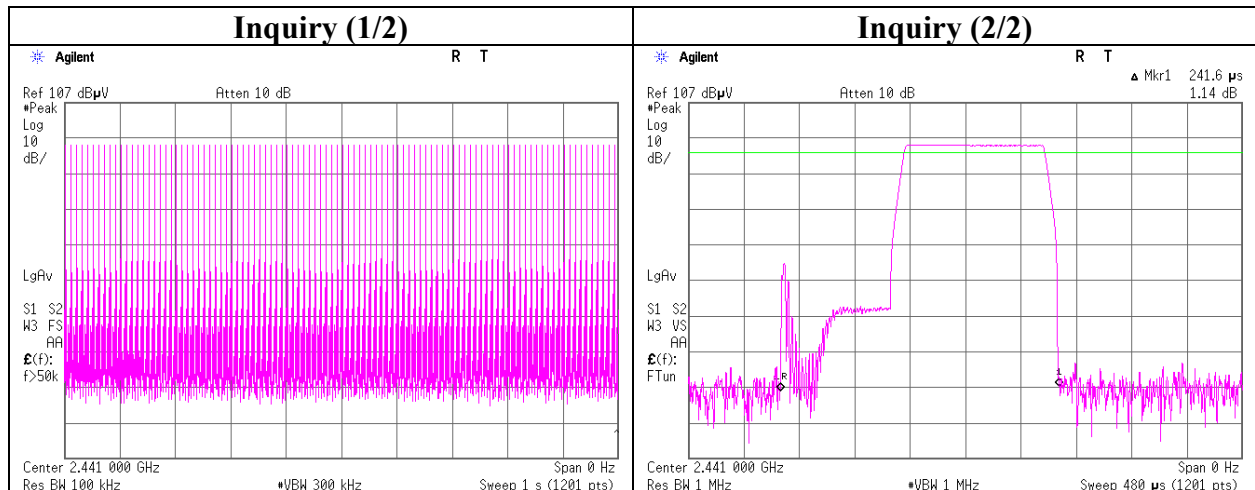
Result = Number of transmission x Length of transmission time

*Average data of 5 tests.(except Inquiry)

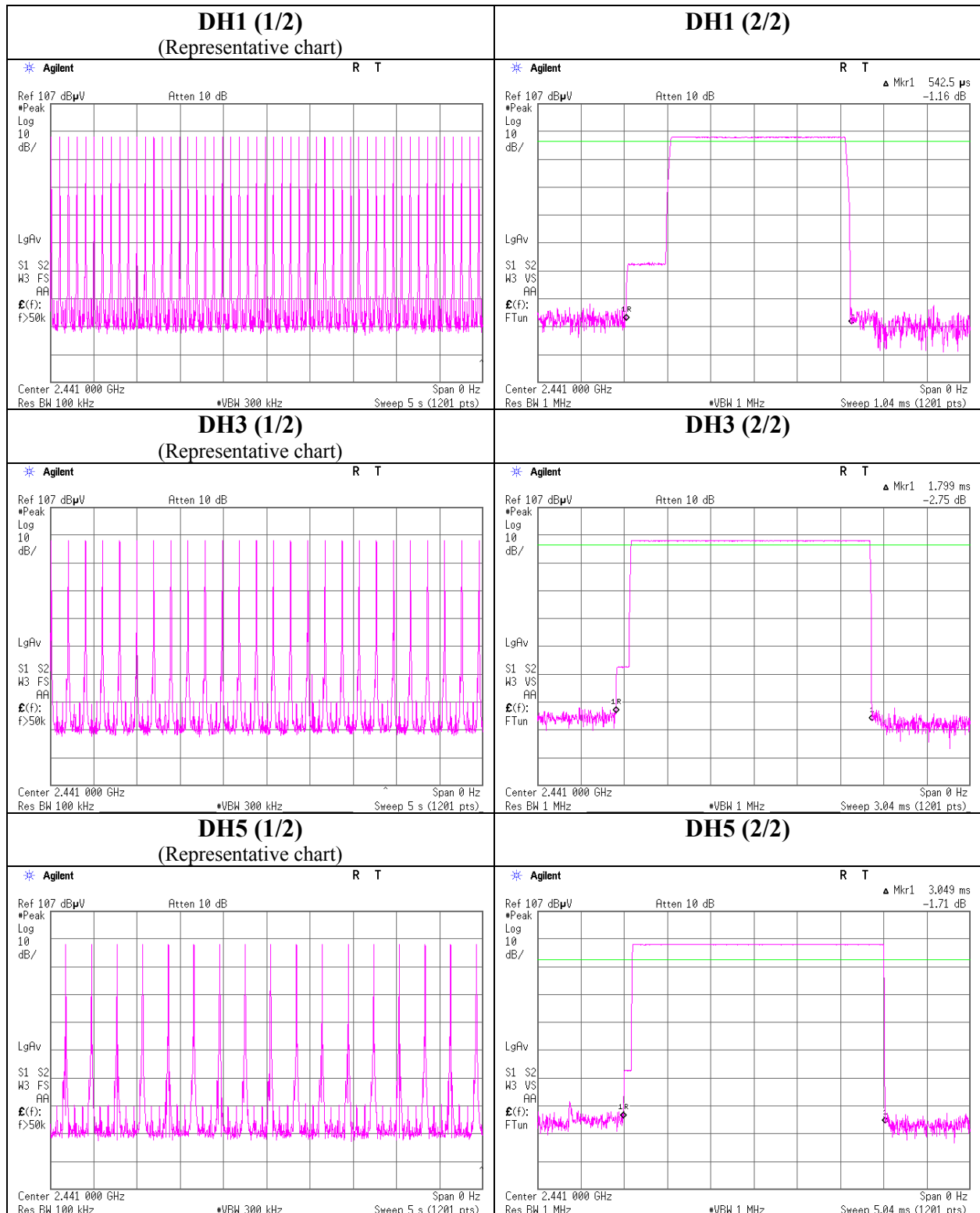
Mode	Sampling [times]					Average [times]
	1	2	3	4	5	
DH1	51	51	51	52	51	51.2
DH3	26	28	27	27	28	27.2
DH5	17	18	18	18	17	17.6
3DH1	50	51	50	52	51	50.8
3DH3	26	27	27	26	26	26.4
3DH5	17	17	18	17	18	17.4

Sample Calculation

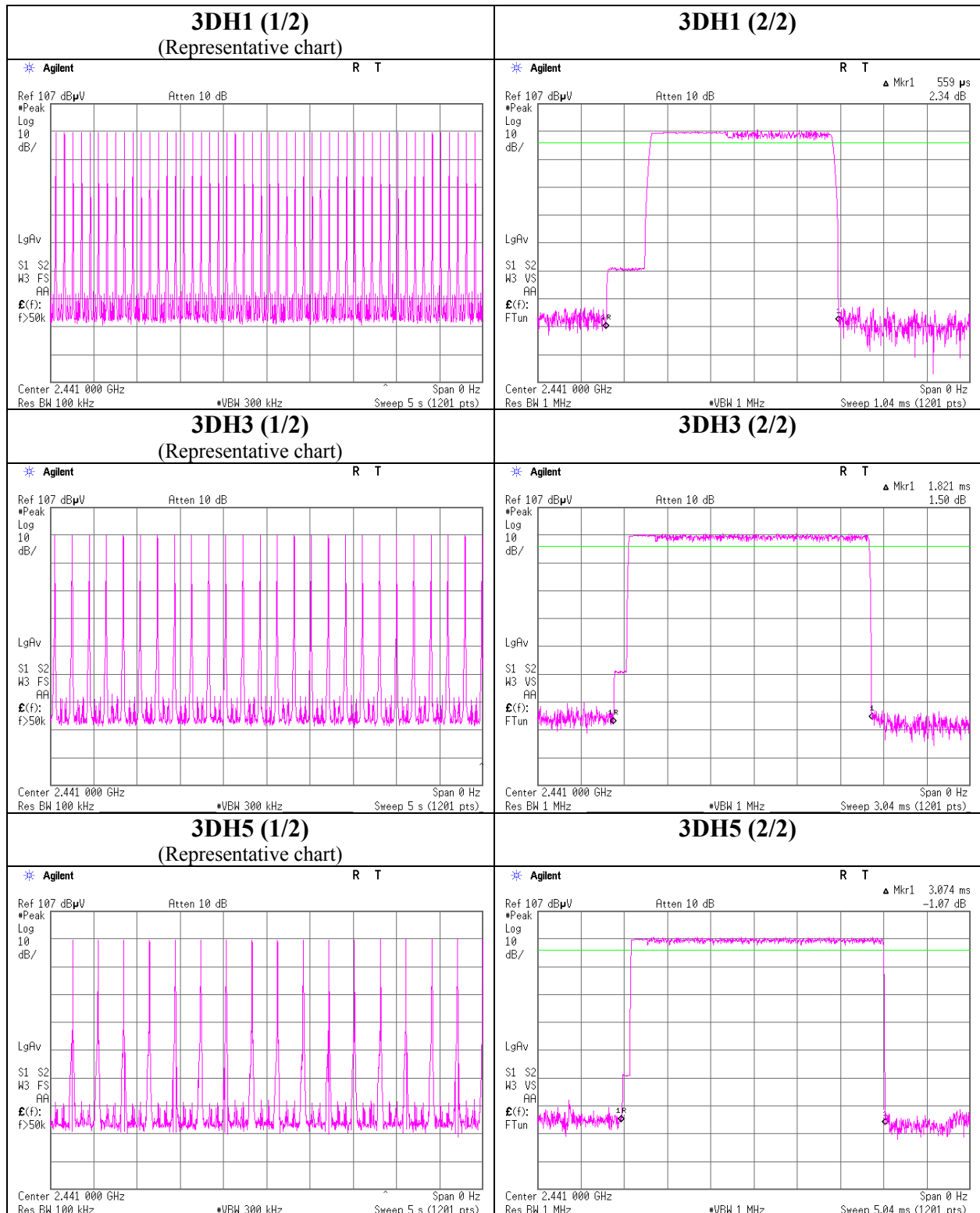
Average= Summation(Sampling 1 to 5) / 5



Dwell time



Dwell time



Maximum Peak Output Power

Test place Head Office EMC Lab. No.11 Measurement Room
Report No. 30GE0005-HO-01
Date March 05, 2010
Temperature/ Humidity 21 deg.C./ 53%
Engineer Keisuke Kawamura
Mode Tx (Hopping off) DH5/3DH5/Inquiry

Mode	Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result		Limit		Margin [dB]
					[dBm]	[mW]	[dBm]	[mW]	
DH5	2402.0	-12.88	1.39	9.98	-1.51	0.71	20.97	125	22.48
DH5	2441.0	-12.63	1.40	9.98	-1.25	0.75	20.97	125	22.22
DH5	2480.0	-12.52	1.41	9.98	-1.13	0.77	20.97	125	22.10
2DH5	2402.0	-8.79	1.39	9.98	2.58	1.81	20.97	125	18.39
2DH5	2441.0	-9.06	1.40	9.98	2.32	1.71	20.97	125	18.65
2DH5	2480.0	-9.73	1.41	9.98	1.66	1.47	20.97	125	19.31
3DH5	2402.0	-8.73	1.39	9.98	2.64	1.84	20.97	125	18.33
3DH5	2441.0	-9.02	1.40	9.98	2.36	1.72	20.97	125	18.61
3DH5	2480.0	-9.54	1.41	9.98	1.85	1.53	20.97	125	19.12
Inquiry	2441.0	-12.09	1.40	9.98	-0.71	0.85	20.97	125	21.68

Sample Calculation:

Result = Reading + Cable Loss (supplied by customer)+ Attenuator

Radiated Spurious Emission

Test place	Head Office EMC Lab. No.4 Semi Anechoic Chamber	
Report No.	30GE0005-HO-01	
Date	March 02, 2010	March 05, 2010
Temperature/ Humidity	22deg.C./ 43%	24deg.C./ 49%
Engineer	Takayuki Shimada (Above 1GHz)	Takayuki Shimada (Below 1GHz)
Mode	Tx, DH5 2402MHz	

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	52.000	QP	22.0	10.1	7.4	32.0	7.5	40.0	32.5	NS
Hori	78.000	QP	22.2	6.4	7.7	32.0	4.3	40.0	35.7	NS
Hori	104.000	QP	22.2	10.8	8.0	32.1	8.9	43.5	34.6	NS
Hori	130.000	QP	21.9	13.7	8.3	32.1	11.8	43.5	31.7	NS
Hori	156.000	QP	21.9	15.1	8.6	32.0	13.6	43.5	29.9	NS
Hori	312.000	QP	21.6	16.2	9.8	31.9	15.7	46.0	30.3	NS
Hori	2390.000	PK	45.9	26.7	2.9	32.7	42.8	73.9	31.1	
Hori	2400.000	PK	57.8	26.7	2.9	32.7	54.7	73.9	19.2	
Hori	3204.000	PK	48.6	28.6	3.3	32.4	48.1	73.9	25.8	
Hori	4804.000	PK	42.0	30.8	5.3	31.9	46.2	73.9	27.7	
Hori	7206.000	PK	41.6	35.9	5.7	32.6	50.6	73.9	23.3	NS
Hori	9608.000	PK	41.7	37.9	6.8	33.4	53.0	73.9	20.9	NS
Hori	24020.000	PK	47.6	38.1	-1.2	32.5	52.0	73.9	21.9	NS
Hori	2390.000	AV	37.3	26.7	2.9	32.7	34.2	53.9	19.7	
Hori	2400.000	AV	50.5	26.7	2.9	32.7	47.4	53.9	6.5	
Hori	3204.000	AV	43.7	28.6	3.3	32.4	43.2	53.9	10.7	
Hori	4804.000	AV	32.4	30.8	5.3	31.9	36.6	53.9	17.3	
Hori	7206.000	AV	30.6	35.9	5.7	32.6	39.6	53.9	14.3	NS
Hori	9608.000	AV	30.6	37.9	6.8	33.4	41.9	53.9	12.0	NS
Hori	24020.000	AV	35.4	38.1	-1.2	32.5	39.8	53.9	14.1	NS
Vert	52.000	QP	22.0	10.1	7.4	32.0	7.5	40.0	32.5	NS
Vert	78.000	QP	22.1	6.4	7.7	32.0	4.2	40.0	35.8	NS
Vert	104.000	QP	22.2	10.8	8.0	32.1	8.9	43.5	34.6	NS
Vert	130.000	QP	21.9	13.7	8.3	32.1	11.8	43.5	31.7	NS
Vert	156.000	QP	21.9	15.1	8.6	32.0	13.6	43.5	29.9	NS
Vert	312.000	QP	21.6	16.2	9.8	31.9	15.7	46.0	30.3	NS
Vert	2390.000	PK	43.1	26.7	2.9	32.7	40.0	73.9	33.9	
Vert	2400.000	PK	53.3	26.7	2.9	32.7	50.2	73.9	23.7	
Vert	3204.000	PK	49.4	28.6	3.3	32.4	48.9	73.9	25.0	
Vert	4804.000	PK	43.7	30.8	5.3	31.9	47.9	73.9	26.0	
Vert	7206.000	PK	41.4	35.9	5.7	32.6	50.4	73.9	23.5	NS
Vert	9608.000	PK	41.3	37.9	6.8	33.4	52.6	73.9	21.3	NS
Vert	24020.000	PK	47.6	38.1	-1.2	32.5	52.0	73.9	21.9	NS
Vert	2390.000	AV	34.1	26.7	2.9	32.7	31.0	53.9	22.9	
Vert	2400.000	AV	45.6	26.7	2.9	32.7	42.5	53.9	11.4	
Vert	3204.000	AV	44.6	28.6	3.3	32.4	44.1	53.9	9.8	
Vert	4804.000	AV	35.9	30.8	5.3	31.9	40.1	53.9	13.8	
Vert	7206.000	AV	30.6	35.9	5.7	32.6	39.6	53.9	14.3	NS
Vert	9608.000	AV	30.6	37.9	6.8	33.4	41.9	53.9	12.0	NS
Vert	24020.000	AV	35.4	38.1	-1.2	32.5	39.8	53.9	14.1	NS

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

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

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

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

26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

NS:Non Signal

Radiated Spurious Emission

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. 30GE0005-HO-01
Date March 02, 2010 March 05, 2010
Temperature/ Humidity 22deg.C./ 43% 24deg.C./ 49%
Engineer Takayuki Shimada Takayuki Shimada
(Above 1GHz) (Below 1GHz)
Mode Tx, 3DH5 2402MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	52.000	QP	22.0	10.1	7.4	32.0	7.5	40.0	32.5	NS
Hori	78.000	QP	22.1	6.4	7.7	32.0	4.2	40.0	35.8	NS
Hori	104.000	QP	22.2	10.8	8.0	32.1	8.9	43.5	34.6	NS
Hori	130.000	QP	21.9	13.7	8.3	32.1	11.8	43.5	31.7	NS
Hori	156.000	QP	21.9	15.1	8.6	32.0	13.6	43.5	29.9	NS
Hori	312.000	QP	21.6	16.2	9.8	31.9	15.7	46.0	30.3	NS
Hori	2390.000	PK	47.7	26.7	2.9	32.7	44.6	73.9	29.3	See 20dBc Data Sheet
Hori	2400.000	PK	66.4	26.7	2.9	32.7	63.3	-	-	
Hori	3204.000	PK	46.5	28.6	3.3	32.4	46.0	73.9	27.9	
Hori	4804.000	PK	40.8	30.8	5.3	31.9	45.0	73.9	28.9	
Hori	7206.000	PK	41.3	35.9	5.7	32.6	50.3	73.9	23.6	
Hori	9608.000	PK	40.9	37.9	6.8	33.4	52.2	73.9	21.7	
Hori	24020.000	PK	47.6	38.1	-1.2	32.5	52.0	73.9	21.9	
Hori	2390.000	AV	38.0	26.7	2.9	32.7	34.9	53.9	19.0	See 20dBc Data Sheet
Hori	2400.000	AV	53.5	26.7	2.9	32.7	50.4	-	-	
Hori	3204.000	AV	39.7	28.6	3.3	32.4	39.2	53.9	14.7	
Hori	4804.000	AV	29.4	30.8	5.3	31.9	33.6	53.9	20.3	
Hori	7206.000	AV	30.6	35.9	5.7	32.6	39.6	53.9	14.3	
Hori	9608.000	AV	30.5	37.9	6.8	33.4	41.8	53.9	12.1	
Hori	24020.000	AV	35.4	38.1	-1.2	32.5	39.8	53.9	14.1	
Vert	52.000	QP	22.1	10.1	7.4	32.0	7.6	40.0	32.4	NS
Vert	78.000	QP	22.2	6.4	7.7	32.0	4.3	40.0	35.7	NS
Vert	104.000	QP	22.2	10.8	8.0	32.1	8.9	43.5	34.6	NS
Vert	130.000	QP	21.9	13.7	8.3	32.1	11.8	43.5	31.7	NS
Vert	156.000	QP	21.9	15.1	8.6	32.0	13.6	43.5	29.9	NS
Vert	312.000	QP	21.7	16.2	9.8	31.9	15.8	46.0	30.2	NS
Vert	2390.000	PK	45.3	26.7	2.9	32.7	42.2	73.9	31.7	See 20dBc Data Sheet
Vert	2400.000	PK	62.2	26.7	2.9	32.7	59.1	-	-	
Vert	3204.000	PK	47.0	28.6	3.3	32.4	46.5	73.9	27.4	
Vert	4804.000	PK	41.0	30.8	5.3	31.9	45.2	73.9	28.7	
Vert	7206.000	PK	41.2	35.9	5.7	32.6	50.2	73.9	23.7	
Vert	9608.000	PK	41.2	37.9	6.8	33.4	52.5	73.9	21.4	
Vert	24020.000	PK	47.5	38.1	-1.2	32.5	51.9	73.9	22.0	
Vert	2390.000	AV	34.8	26.7	2.9	32.7	31.7	53.9	22.2	See 20dBc Data Sheet
Vert	2400.000	AV	49.2	26.7	2.9	32.7	46.1	-	-	
Vert	3204.000	AV	40.5	28.6	3.3	32.4	40.0	53.9	13.9	
Vert	4804.000	AV	29.4	30.8	5.3	31.9	33.6	53.9	20.3	
Vert	7206.000	AV	30.6	35.9	5.7	32.6	39.6	53.9	14.3	
Vert	9608.000	AV	30.5	37.9	6.8	33.4	41.8	53.9	12.1	
Vert	24020.000	AV	35.4	38.1	-1.2	32.5	39.8	53.9	14.1	

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

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

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

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

26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

NS:Non Signal

Radiated Spurious Emission 20dBc Data Sheet

Test place : Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. : 30GE0005-HO-01
Date : March 02, 2010
Temperature/ Humidity : 22deg.C./ 43%
Engineer : Takayuki Shimada
(Above 1GHz)
Mode : Tx, 3DH5 2402MHz

20dBc Data Sheet

Polarity	Frequency	Detector	Reading	Ant Factor	Loss	Gain	Result	Limit	Margin	Remark
	[MHz]		[dBuV]	[dB/m]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
Hori	2402.000	PK	101.9	26.7	2.9	32.7	98.8	-	-	Carrier
Hori	2400.000	PK	51.1	26.7	2.9	32.7	48.0	78.8	30.8	
Vert	2402.000	PK	97.3	26.7	2.9	32.7	94.2	-	-	Carrier
Vert	2400.000	PK	49.7	26.7	2.9	32.7	46.6	74.2	27.6	

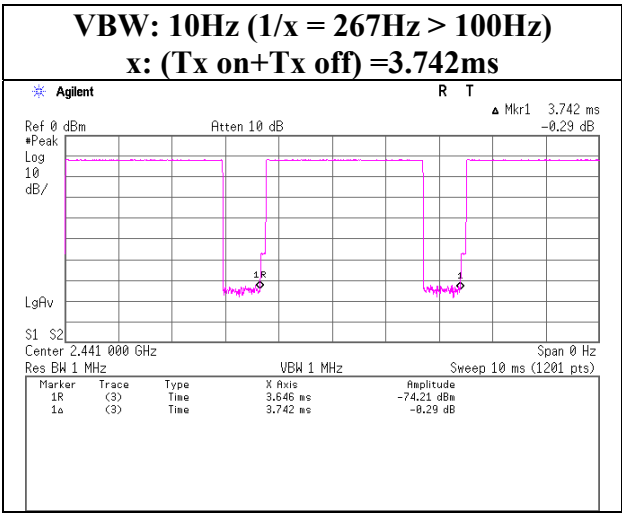
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

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

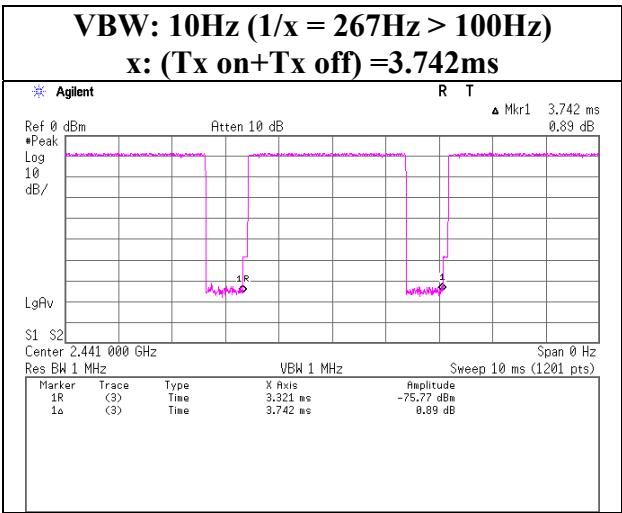
Distance factor: 10GHz-26.5GHz $20\log(3.0\text{m}/1.0\text{m})= 9.5\text{dB}$
 26.5GHz-40GHz $20\log(3.0\text{m}/0.5\text{m})=15.6\text{dB}$

VBW (AV) Calculation

Tx DH5

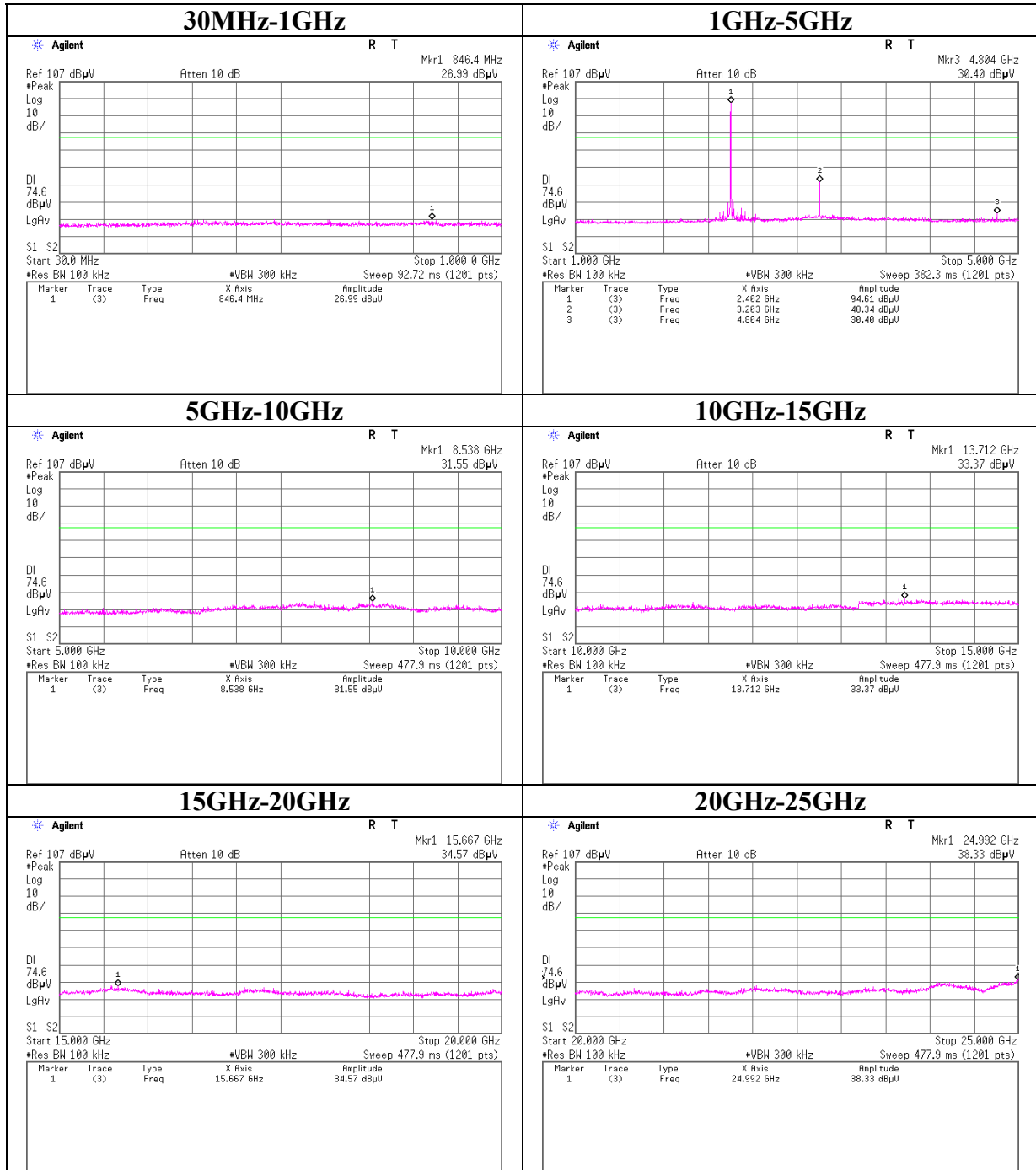


Tx 3DH5



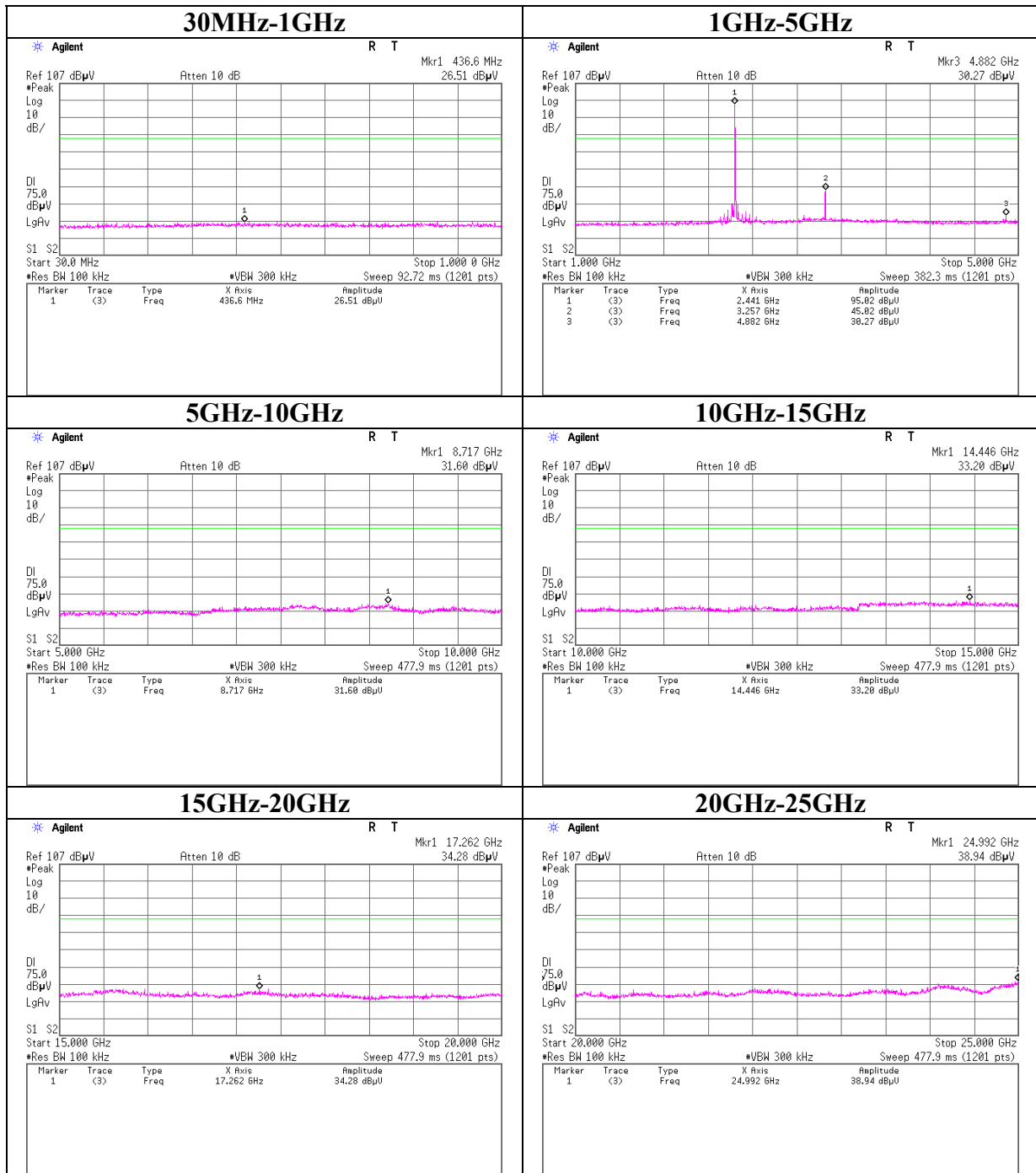
Conducted Spurious Emission

Tx DH5 2402MHz



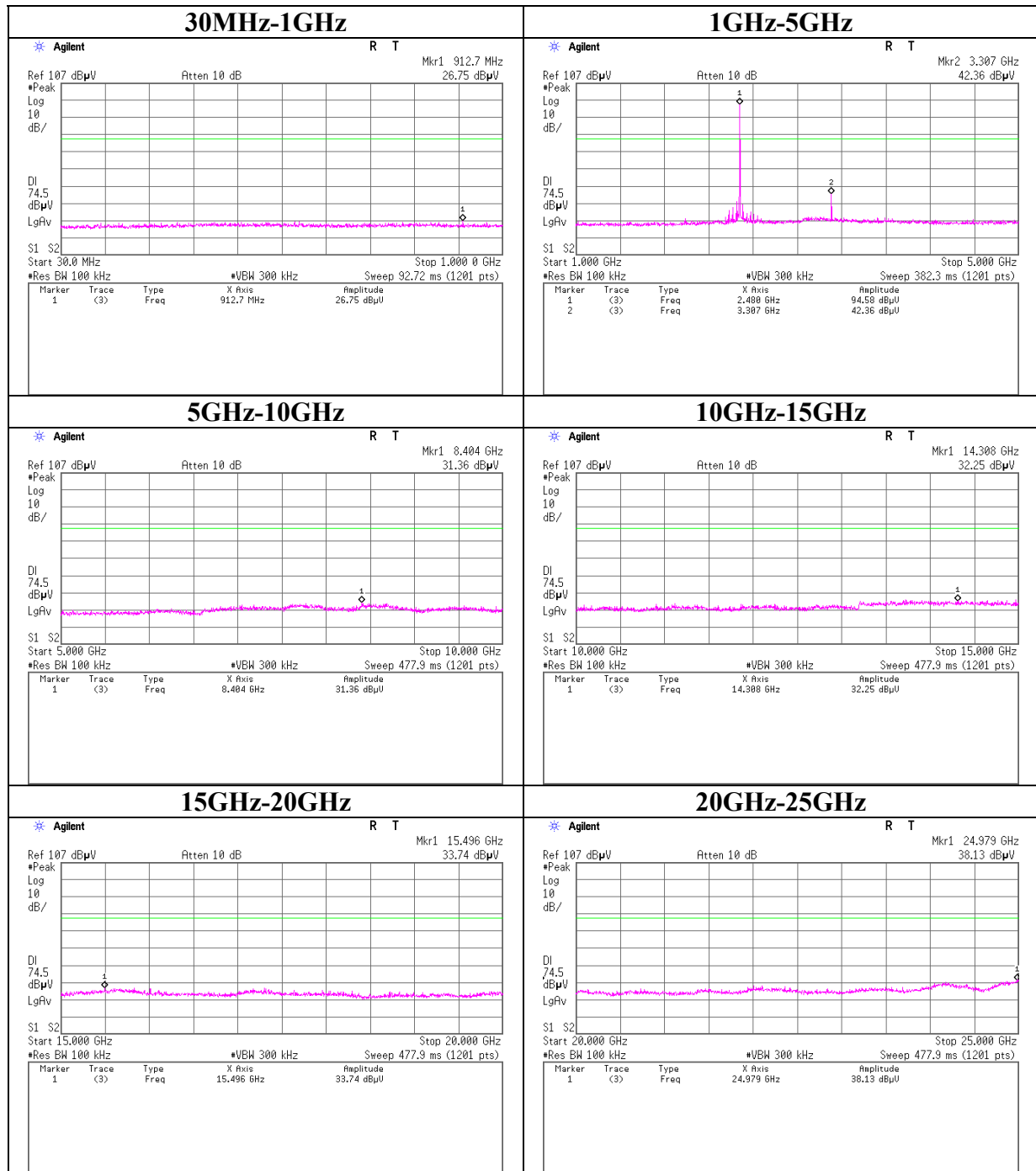
Conducted Spurious Emission

Tx DH5 2441MHz



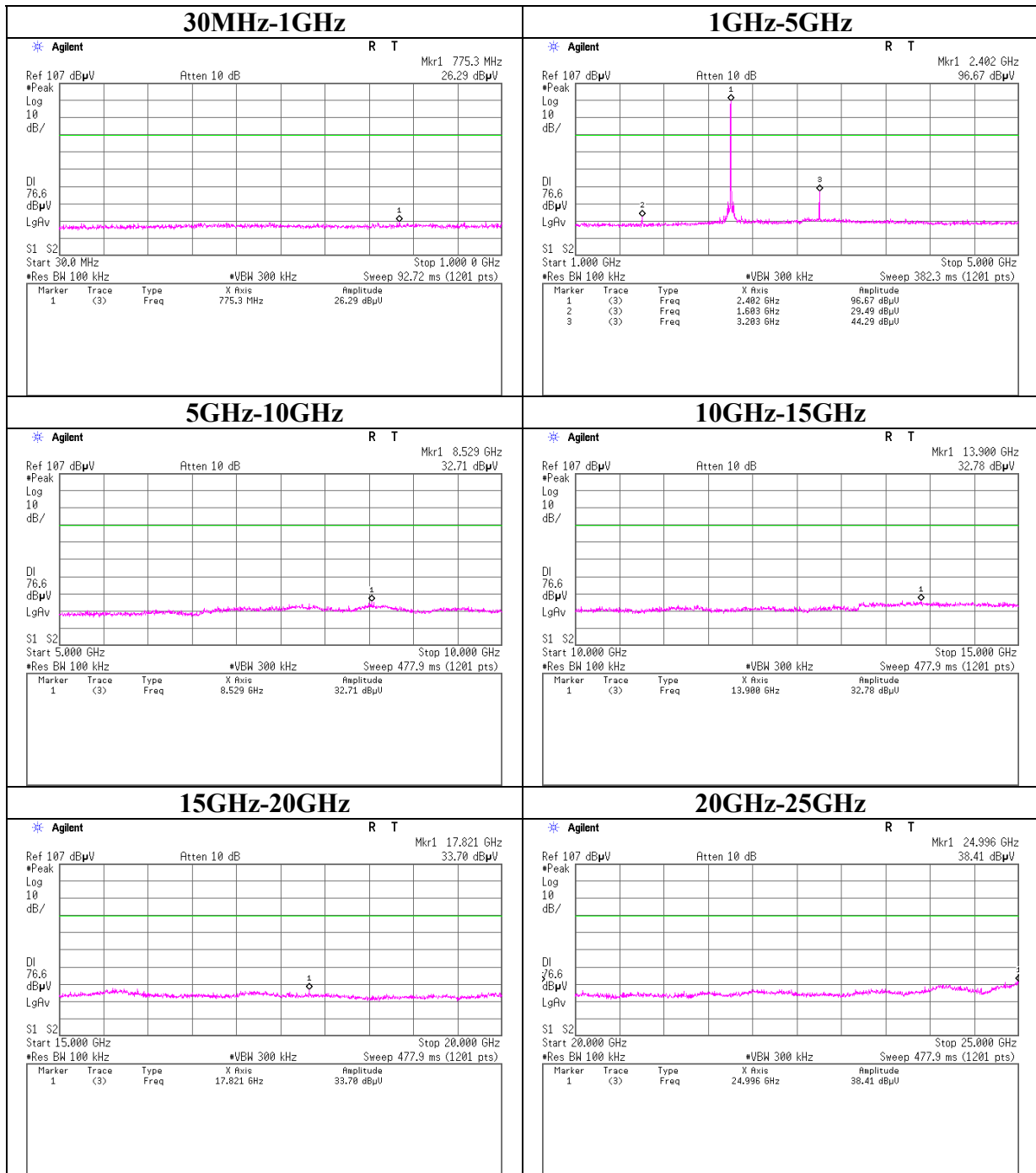
Conducted Spurious Emission

Tx DH5 2480MHz



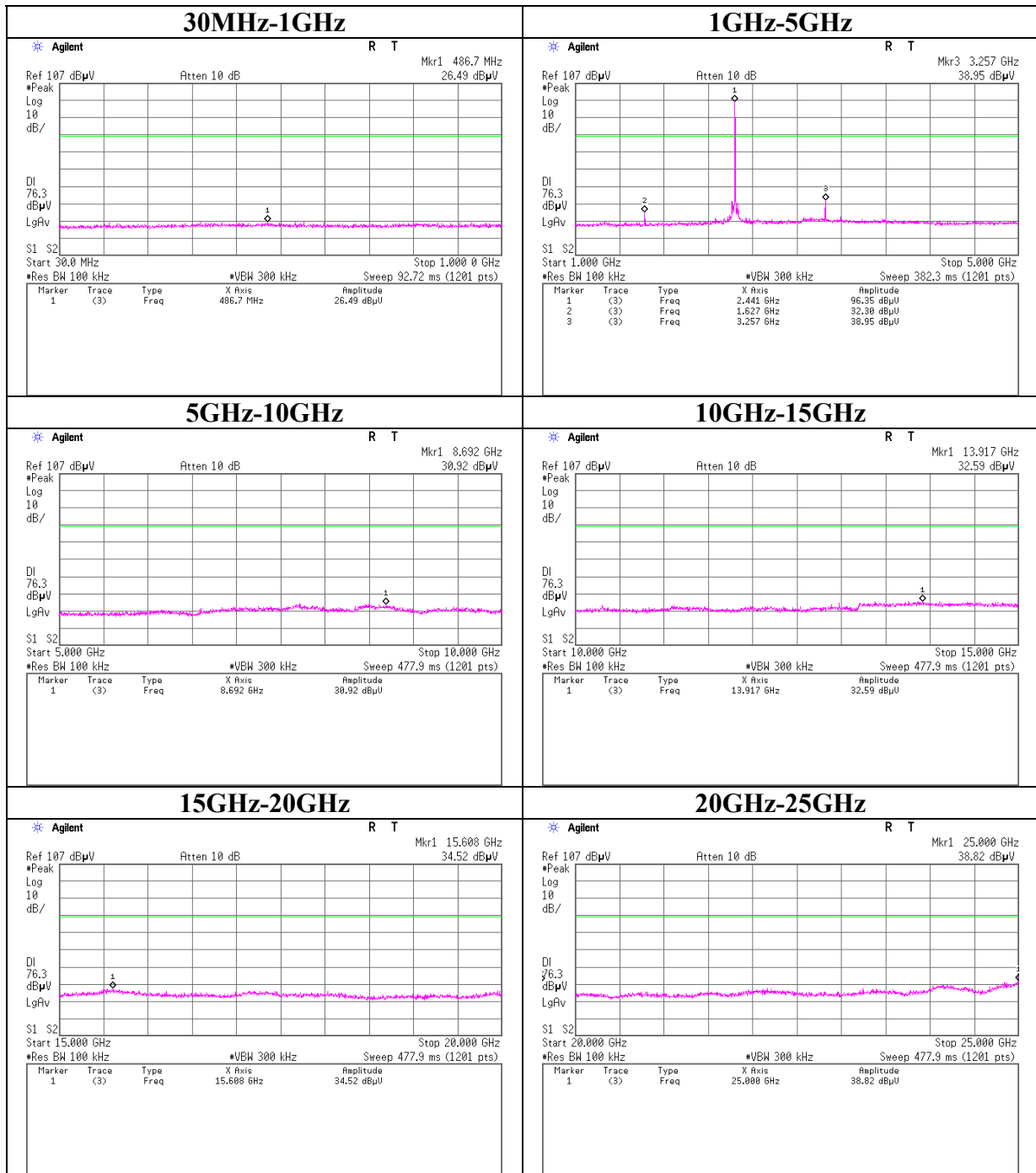
Conducted Spurious Emission

Tx 3DH5 2402MHz



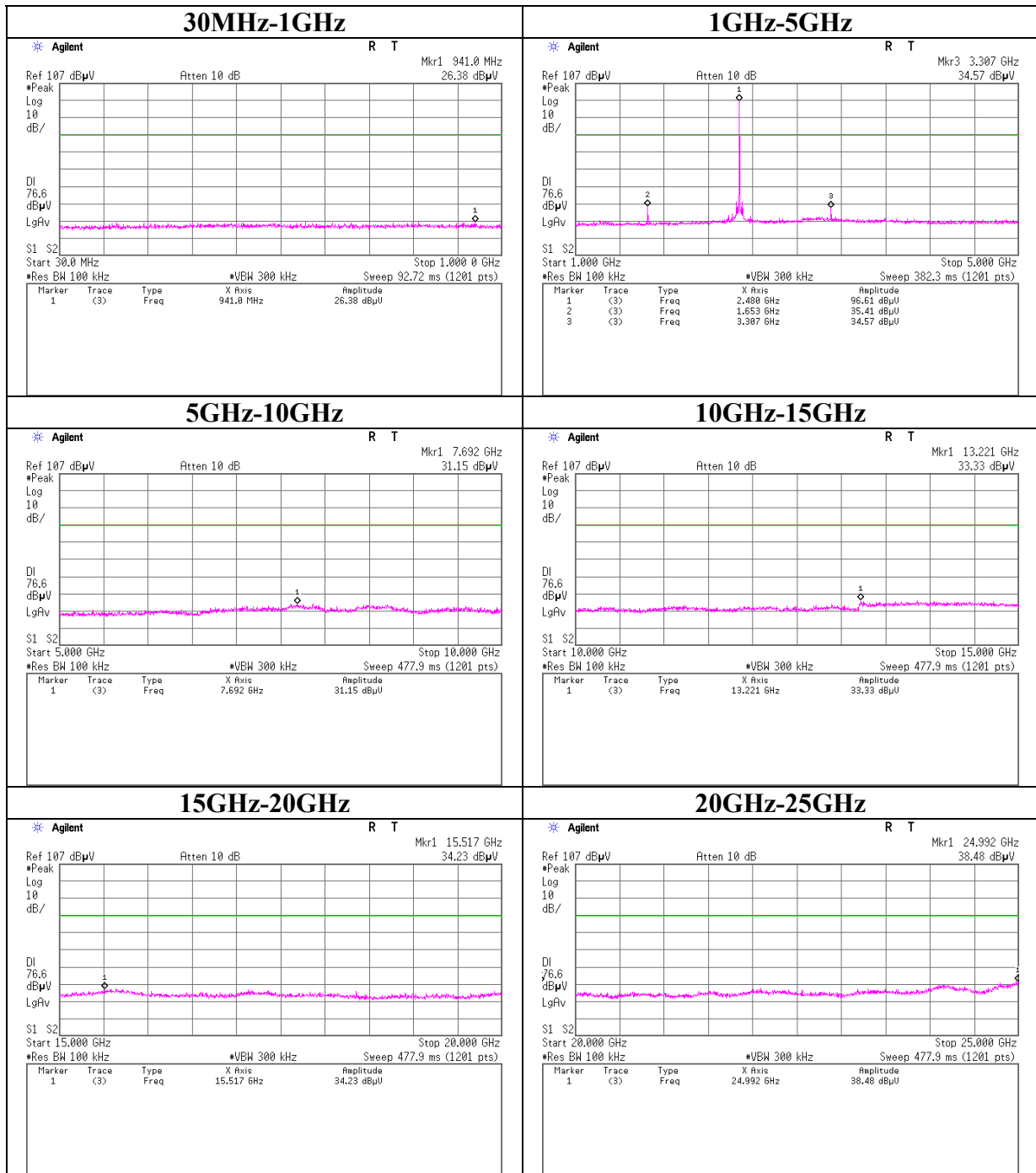
Conducted Spurious Emission

Tx 3DH5 2441MHz



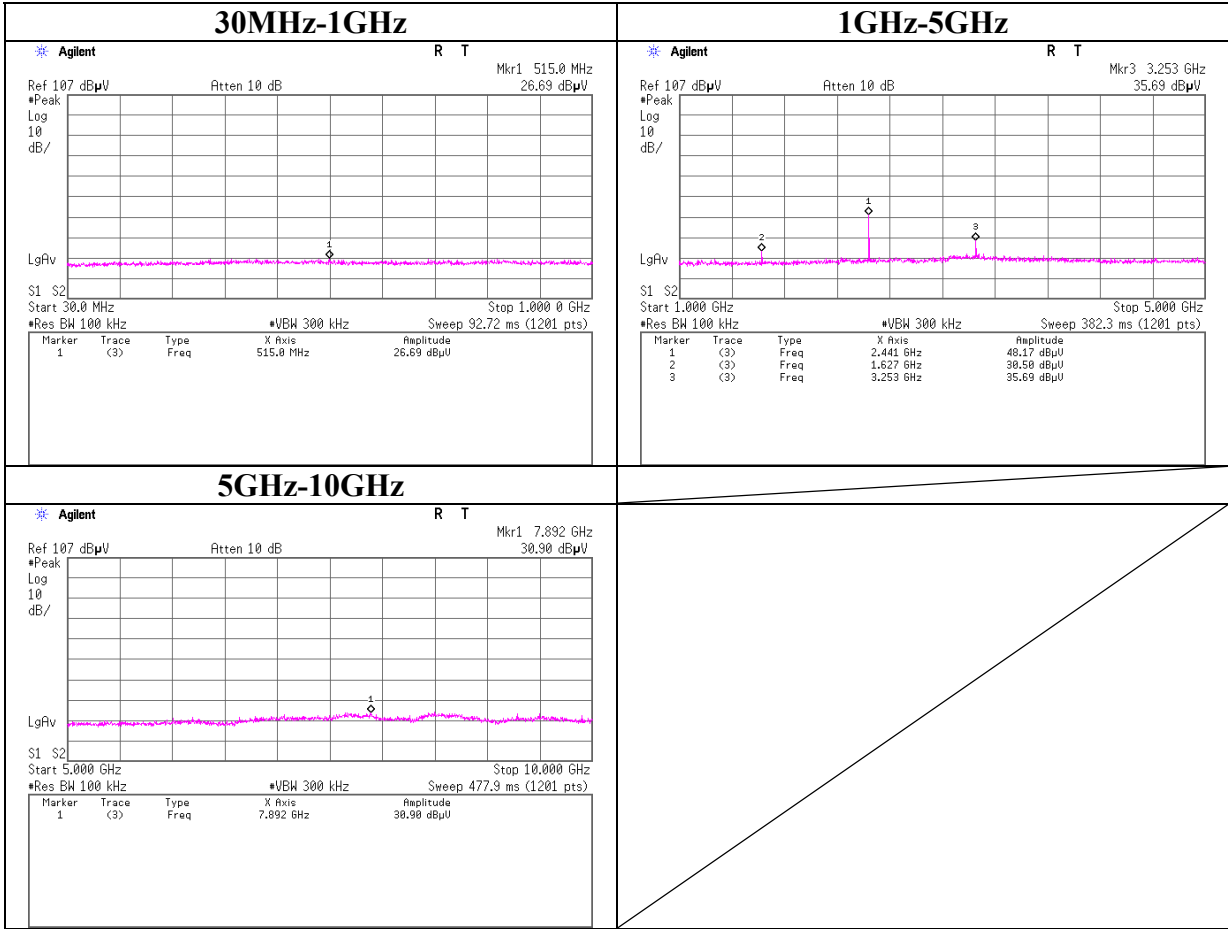
Conducted Spurious Emission

Tx 3DH5 2480MHz



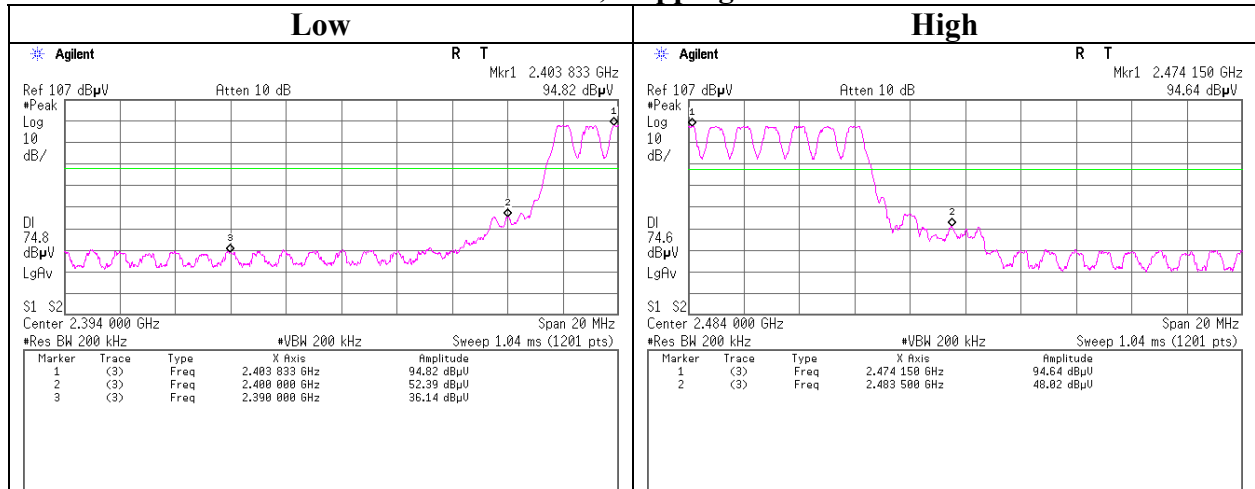
Conducted Spurious Emission

Rx 2441MHz

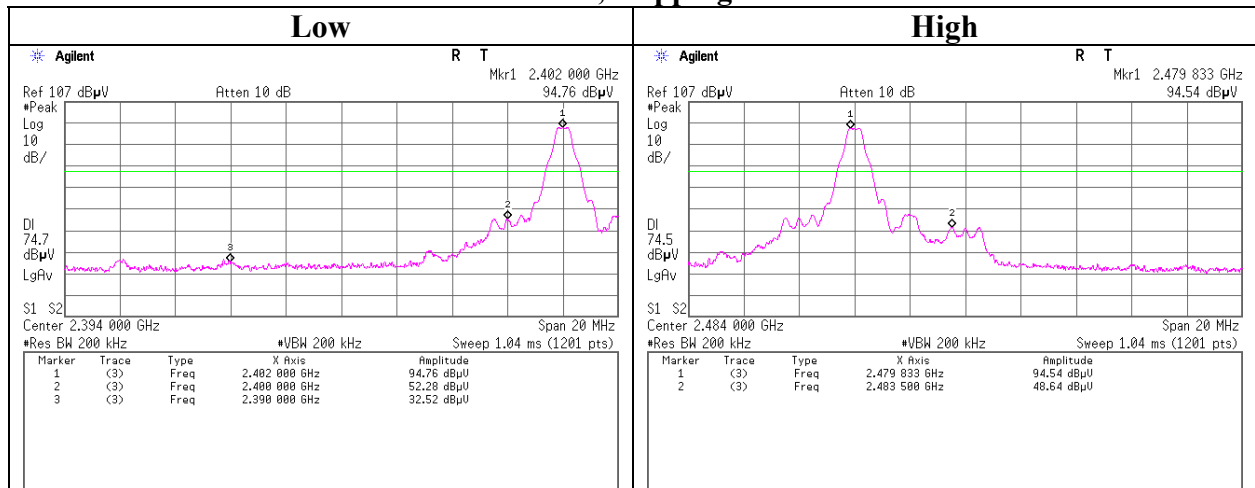


Conducted Emission Band Edge compliance

Tx DH5, Hopping on

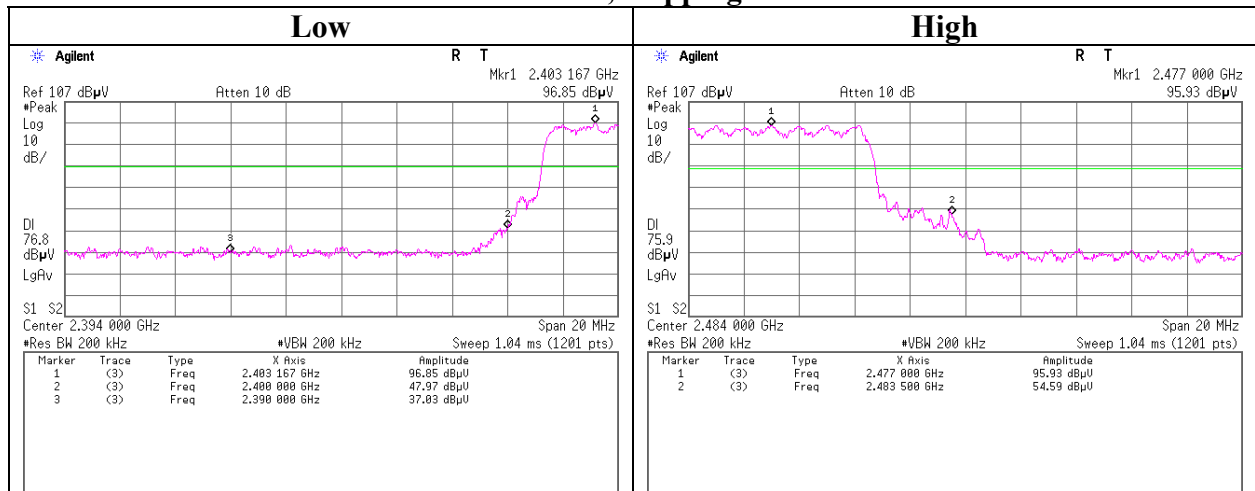


Tx DH5, Hopping off

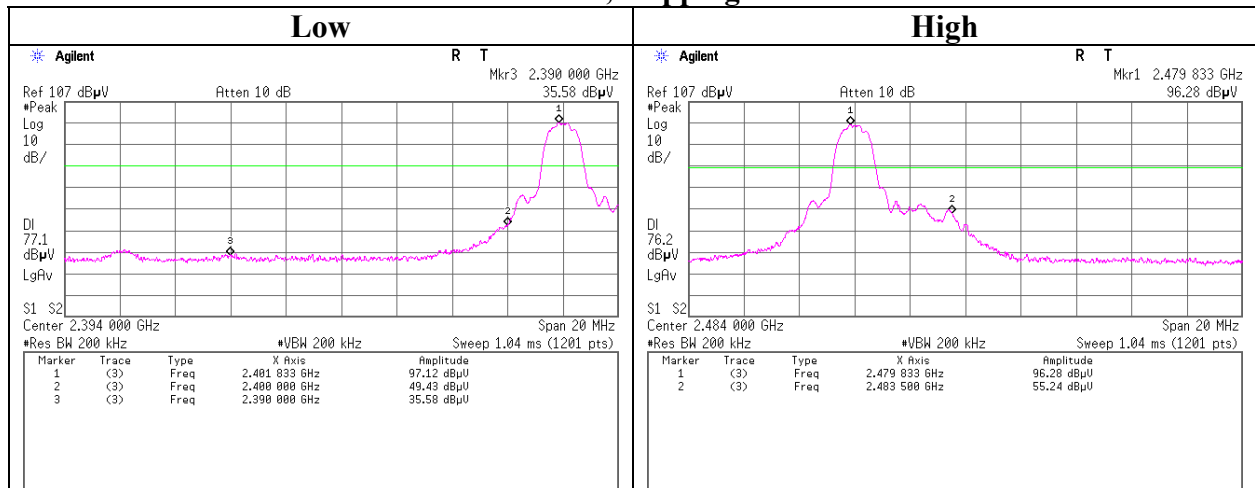


Conducted Emission Band Edge compliance

Tx 3DH5, Hopping on



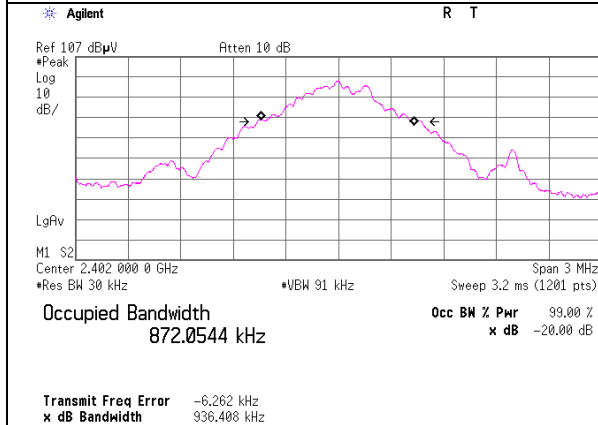
Tx 3DH5, Hopping off



99%Occupied Bandwidth

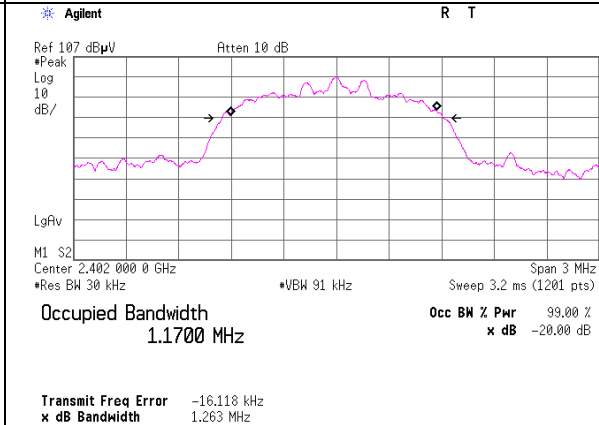
Tx DH5, Hopping off

2402MHz

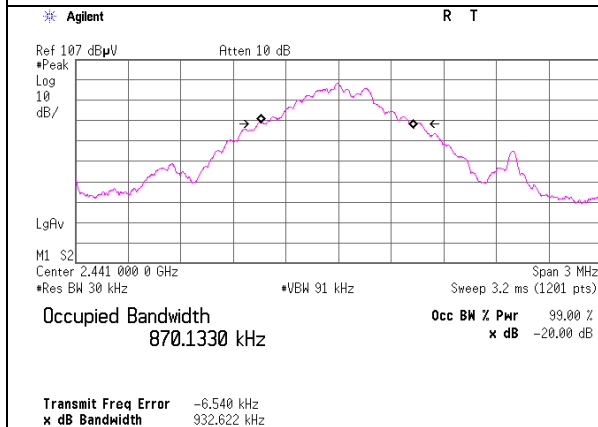


Tx 3DH5, Hopping off

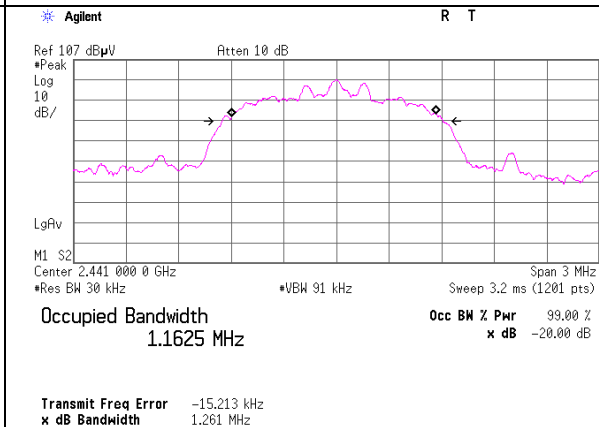
2402MHz



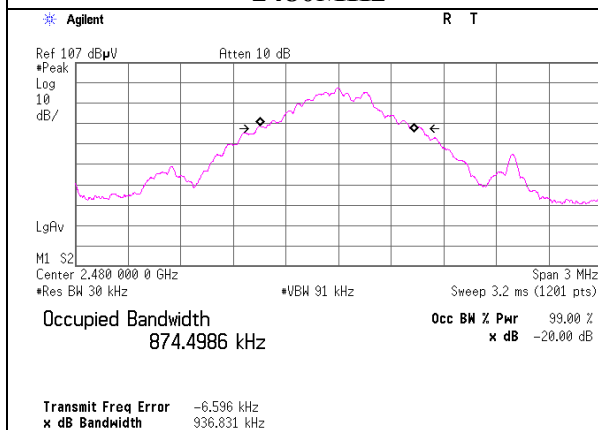
2441MHz



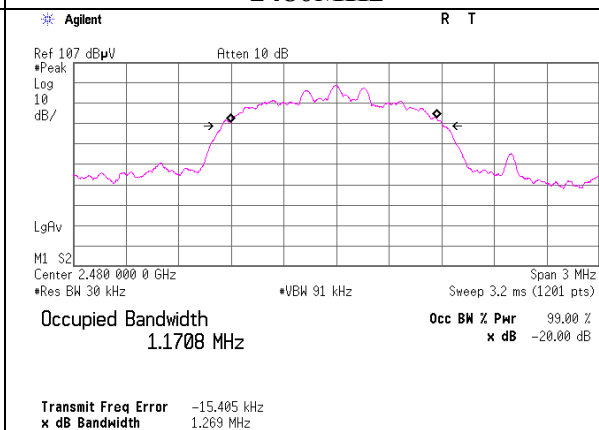
2441MHz



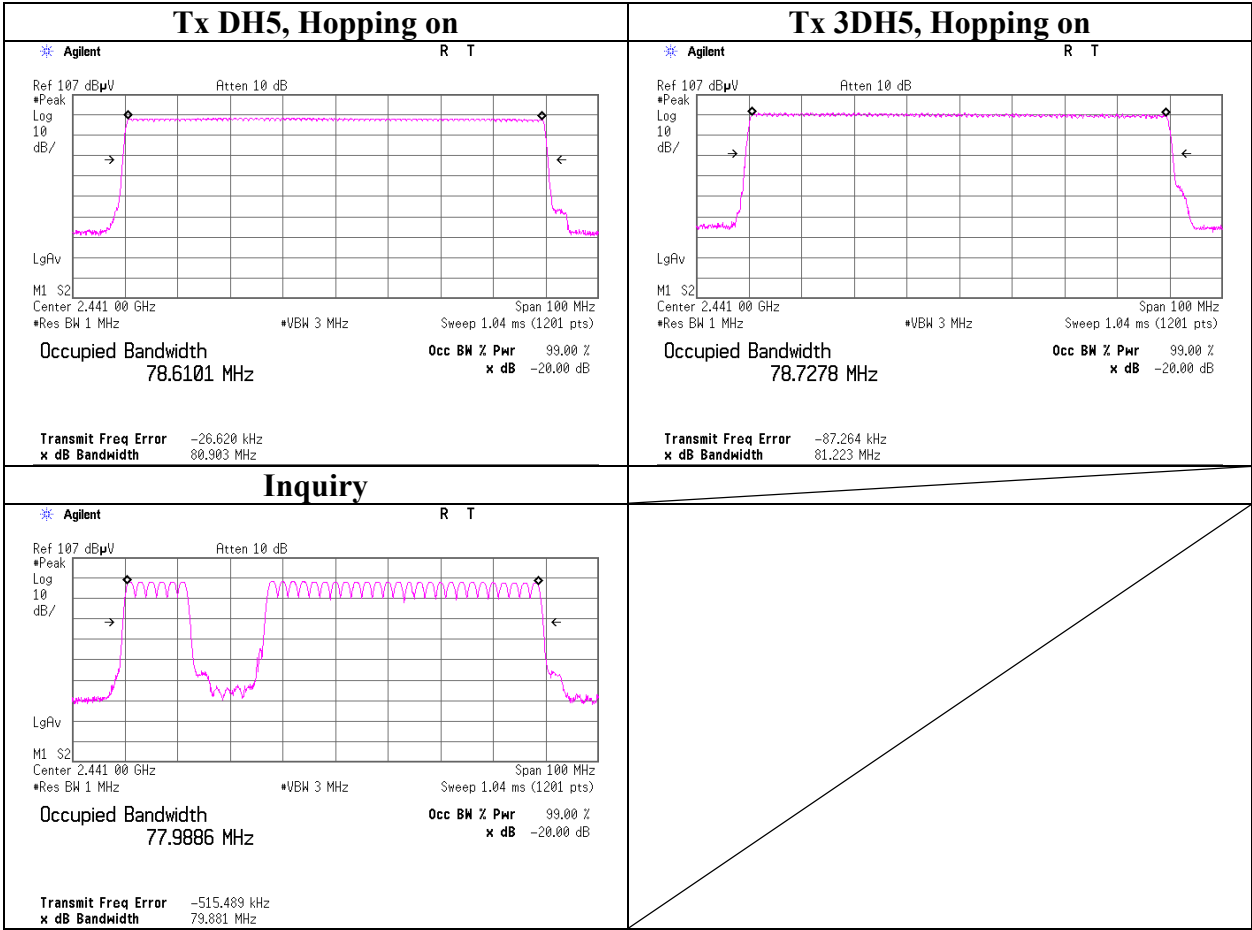
2480MHz



2480MHz



99% Occupied Bandwidth



APPENDIX 3: Test instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
MAEC-04	Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-10005	RE/CE	2010/02/02 * 12
MOS-15	Thermo-Hygrometer	Custom	CTH-180	-	RE/CE	2010/02/09 * 12
MJM-07	Measure	PROMART	SEN1955	-	RE/CE	-
COTS-MEMI	EMI measurement program	TSJ	TEPTO-DV	-	RE/CE	-
MSA-04	Spectrum Analyzer	Agilent	E4448A	US44300523	RE/AT	2009/08/25 * 12
MHA-21	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	9120D-557	RE	2009/08/10 * 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	2009/03/19 * 12
MHA-17	Horn Antenna 15-40GHz	Schwarzbeck	BBHA9170	BBHA9170307	RE	2009/06/18 * 12
MHF-20	High Pass Filter 3.5-18.0GHz	TOKIMEC	TF323DCC	607	RE	2009/12/19 * 12
MCC-79	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	278923/4	RE	2009/12/19 * 12
MLS-06	LISN(AMN)	Schwarzbeck	NSLK8127	8127363	CE (EUT)	2010/02/04 * 12
MAT-67	Attenuator(13dB)	JFW Industries, Inc.	50FP-013H2 N	-	CE	2010/02/04 * 12
MCC-113	Coaxial cable	Fujikura/Suhner/TSJ	5D-2W(10m)/SFM141(5m)/421-010(1m)/sucoform141-PE(1m)/RFM-E121(Switcher)	-/04178	CE	2009/07/01 * 12
MSA-05	Spectrum Analyzer	Advantest	R3273	160400285	CE/RE	2009/12/15 * 12
MTR-07	Test Receiver	Rohde & Schwarz	ESCI	100635	CE/RE	2009/10/23 * 12
MOS-19	Thermo-Hygrometer	Custom	CTH-201	0001	AT	2009/12/22 * 12
MPM-08	Power Meter	Anritsu	ML2495A	6K00003338	AT	2009/09/09 * 12
MPSE-11	Power sensor	Anritsu	MA2411B	011737	AT	2009/09/09 * 12
MCC-115	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	290211/4	AT	2009/08/27 * 12
MAT-24	Attenuator(10dB)(above 1GHz)	Agilent	8493C	71389	AT	2009/06/11 * 12
MBA-03	Biconical Antenna	Schwarzbeck	BBA9106	1915	RE	2010/01/23 * 12
MLA-08	Logperiodic Antenna	Schwarzbeck	UKLP9140-A	N/A	RE	2010/01/23 * 12
MCC-50	Coaxial cable	UL Japan	-	-	RE	2009/03/18 * 12
MAT-51	Attenuator(6dB)	Weinschel	2	AS3557	RE	2010/01/20 * 12
MPA-14	Pre Amplifier	SONOMA INSTRUMENT	310	260833	RE	2010/03/05 * 12

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