

APPENDIX 2: Data of EMI test

Conducted Emission 11a, Tx, 5180MHz

DATA OF CONDUCTED EMISSION TEST

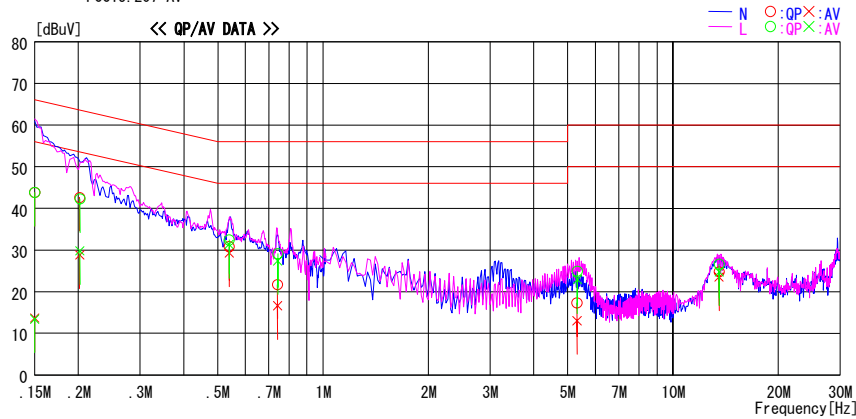
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/18

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : AC 120V / 60Hz
Temp./Humi. : 23deg. C / 47%
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Tx 5180MHz

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]		
0.15001	43.5	13.3	0.3	43.8	13.6	66.0	56.0	22.2	42.4	N	
0.20162	42.3	28.5	0.3	42.6	28.8	63.5	53.5	20.9	24.7	N	
0.53932	30.5	29.0	0.3	30.8	29.3	56.0	46.0	25.2	16.7	N	
0.74142	21.3	16.2	0.4	21.7	16.6	56.0	46.0	34.3	29.4	N	
5.32211	16.4	12.1	0.9	17.3	13.0	60.0	50.0	42.7	37.0	N	
13.53831	23.2	22.0	1.5	24.7	23.5	60.0	50.0	35.3	26.5	N	
0.15001	43.5	13.1	0.3	43.8	13.4	66.0	56.0	22.2	42.6	L	
0.20178	42.0	29.5	0.3	42.3	29.8	63.5	53.5	21.2	23.7	L	
0.53885	32.1	31.0	0.3	32.4	31.3	56.0	46.0	23.6	14.7	L	
0.74195	28.7	27.0	0.4	29.1	27.4	56.0	46.0	26.9	18.6	L	
5.32991	24.0	21.9	0.9	24.9	22.8	60.0	50.0	35.1	27.2	L	
13.55940	25.1	23.2	1.5	26.6	24.7	60.0	50.0	33.4	25.3	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.

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

Conducted Emission 11a, Tx, 5220MHz

DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/18

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : AC 120V / 60Hz
Temp./Humi. : 23deg.C / 47%
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Tx 5220MHz

LIMIT : FCC15.207 QP
FCC15.207 AV

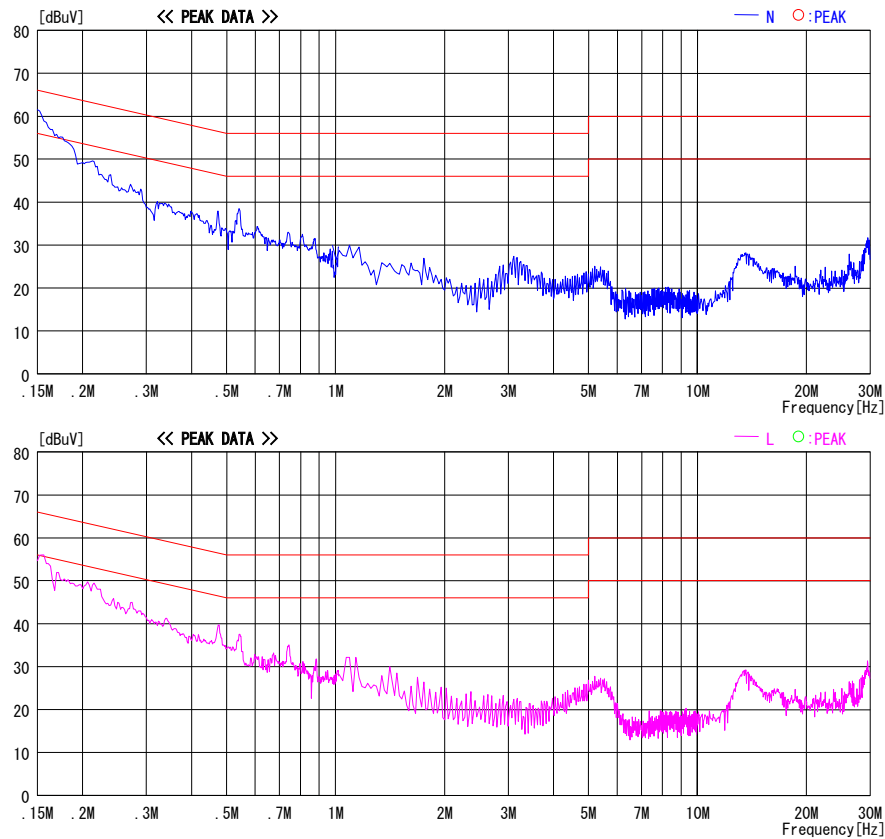


CHART: WITH FACTOR, Peak hold data. CALCULATION: RESULT[dBuV]=READING[dBuV]+C.F[dB] (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission 11a, Tx, 5240MHz

DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/18

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : AC 120V / 60Hz
Temp./Humi. : 23deg.C / 47%
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Tx 5240MHz

LIMIT : FCC15.207 QP
FCC15.207 AV

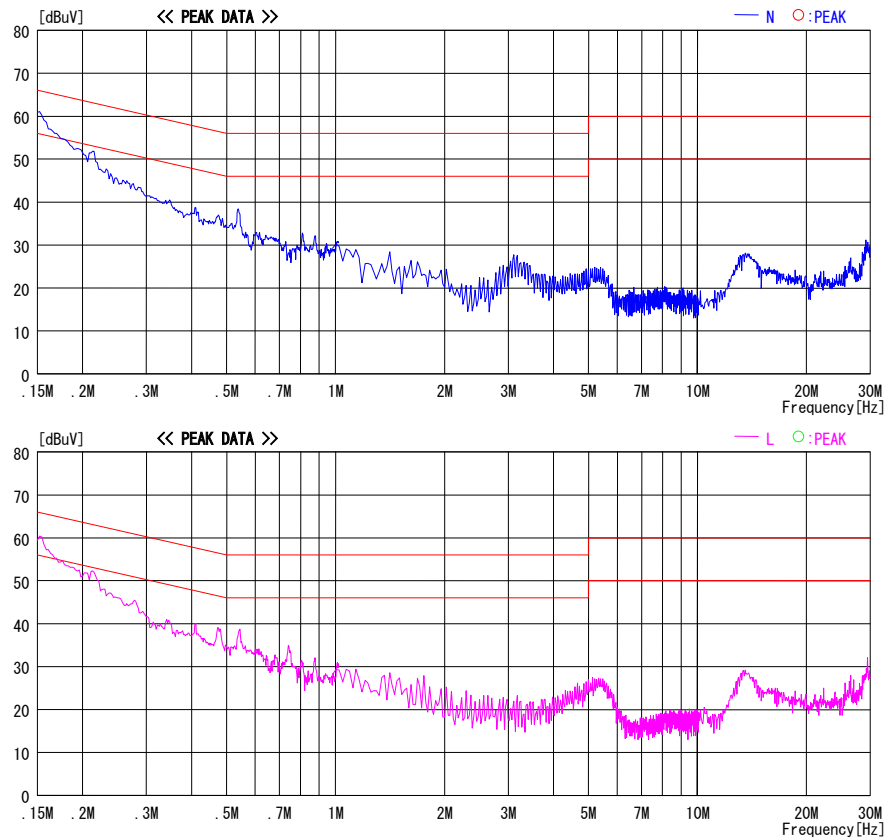


CHART: WITH FACTOR, Peak hold data. CALCURATION: RESULT[dBuV]=READING[dBuV]+C.F[dB] (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission 11a, Tx, 5260MHz

DATA OF CONDUCTED EMISSION TEST

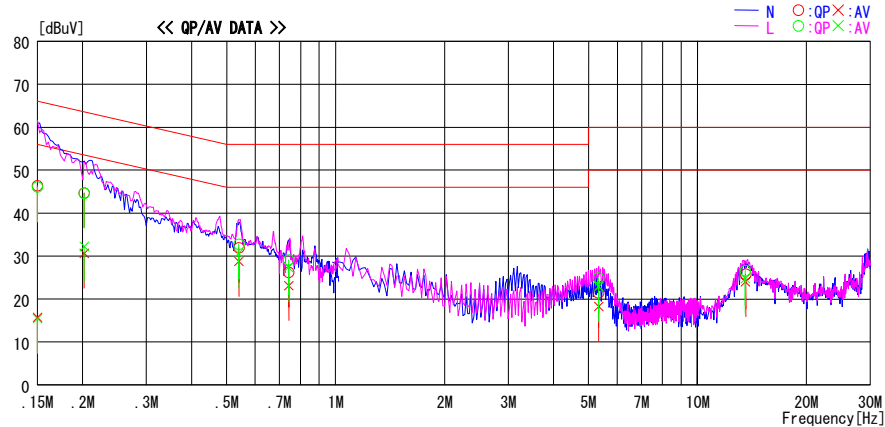
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/18

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : AC 120V / 60Hz
Temp./Humi. : 23deg.C / 47%
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Tx 5260MHz

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]		
0.15001	46.1	15.4	0.3	46.4	15.7	66.0	56.0	19.6	40.3	N	
0.20220	44.4	30.3	0.3	44.7	30.6	63.5	53.5	18.8	22.9	N	
0.54087	31.6	28.4	0.3	31.9	28.7	56.0	46.0	24.1	17.3	N	
0.74312	25.8	22.7	0.4	26.2	23.1	56.0	46.0	29.8	22.9	N	
5.33280	20.5	17.3	0.9	21.4	18.2	60.0	50.0	38.6	31.8	N	
13.56941	24.3	22.5	1.5	25.8	24.0	60.0	50.0	34.2	26.0	N	
0.15001	45.8	15.1	0.3	46.1	15.4	66.0	56.0	19.9	40.6	L	
0.20220	44.3	31.9	0.3	44.6	32.2	63.5	53.5	18.9	21.3	L	
0.54013	32.4	30.3	0.3	32.7	30.6	56.0	46.0	23.3	15.4	L	
0.74257	28.7	27.0	0.4	29.1	27.4	56.0	46.0	26.9	18.6	L	
5.33221	24.0	21.9	0.9	24.9	22.8	60.0	50.0	35.1	27.2	L	
13.56481	25.1	23.2	1.5	26.6	24.7	60.0	50.0	33.4	25.3	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.

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

Conducted Emission 11a, Tx, 5300MHz

DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/18

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : AC 120V / 60Hz
Temp./Humi. : 23deg.C / 47%
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Tx 5300MHz

LIMIT : FCC15.207 QP
FCC15.207 AV

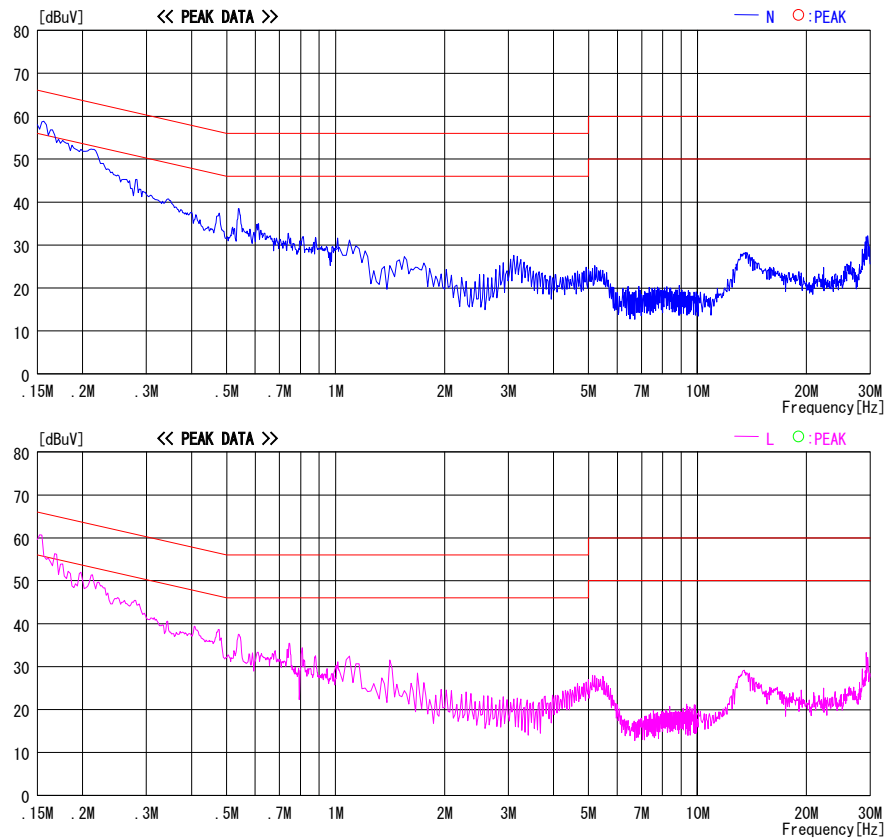


CHART: WITH FACTOR, Peak hold data. CALCULATION: RESULT[dBuV]=READING[dBuV]+C.F[dB] (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission 11a, Tx, 5320MHz

DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/18

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : AC 120V / 60Hz
Temp./Humi. : 23deg.C / 47%
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Tx 5320MHz

LIMIT : FCC15.207 QP
FCC15.207 AV

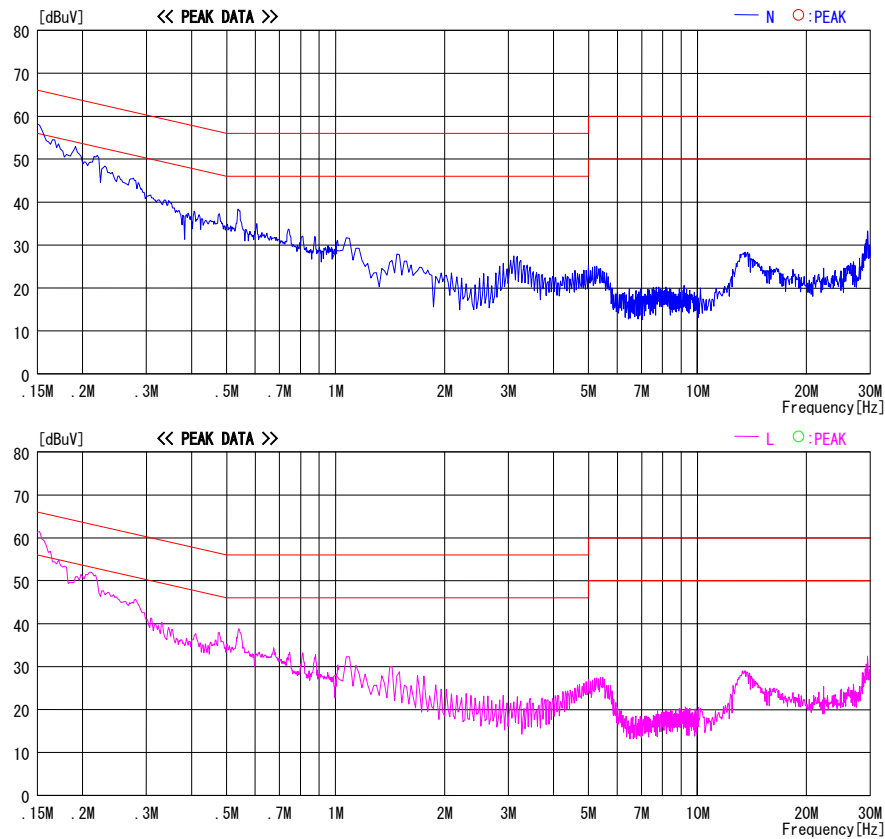


CHART: WITH FACTOR, Peak hold data. CALCULATION: RESULT[dBuV]=READING[dBuV]+C.F[dB] (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission 11a, Tx, 5500MHz

DATA OF CONDUCTED EMISSION TEST

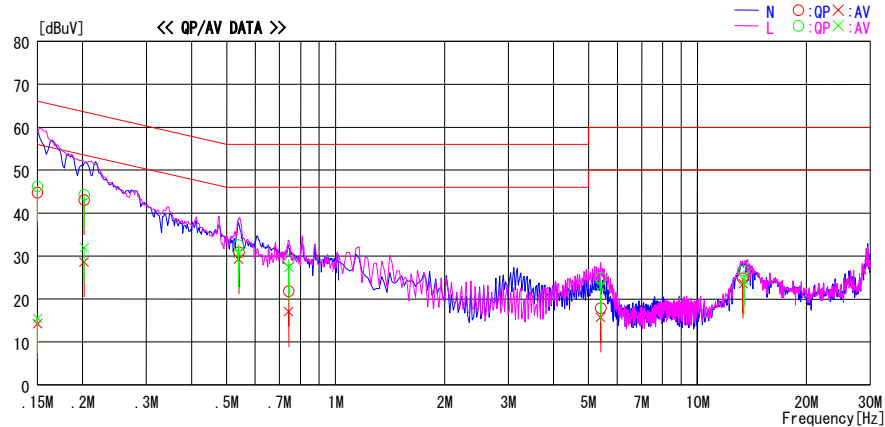
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/18

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : AC 120V / 60Hz
Temp./Humi. : 23deg.C / 47%
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Tx 5500MHz

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]		
0.15001	44.5	13.9	0.3	44.8	14.2	66.0	56.0	21.2	41.8	N	
0.20198	42.8	28.3	0.3	43.1	28.6	63.5	53.5	20.4	24.9	N	
0.53994	30.6	29.0	0.3	30.9	29.3	56.0	46.0	25.1	16.7	N	
0.74196	21.4	16.6	0.4	21.8	17.0	56.0	46.0	34.2	29.0	N	
5.39567	17.0	14.8	0.9	17.9	15.7	60.0	50.0	42.1	34.3	N	
13.35121	23.3	22.1	1.5	24.8	23.6	60.0	50.0	35.2	26.4	N	
0.15001	45.9	15.2	0.3	46.2	15.5	66.0	56.0	19.8	40.5	L	
0.20219	44.0	31.7	0.3	44.3	32.0	63.5	53.5	19.2	21.5	L	
0.53984	32.3	30.3	0.3	32.6	30.6	56.0	46.0	23.4	15.4	L	
0.74327	28.7	27.0	0.4	29.1	27.4	56.0	46.0	26.9	18.6	L	
5.40163	24.1	21.9	0.9	25.0	22.8	60.0	50.0	35.0	27.2	L	
13.43836	25.1	22.9	1.5	26.6	24.4	60.0	50.0	33.4	25.6	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.

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

Conducted Emission 11a, Tx, 5600MHz

DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/18

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : AC 120V / 60Hz
Temp./Humi. : 23deg.C / 47%
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Tx 5600MHz

LIMIT : FCC15.207 QP
FCC15.207 AV

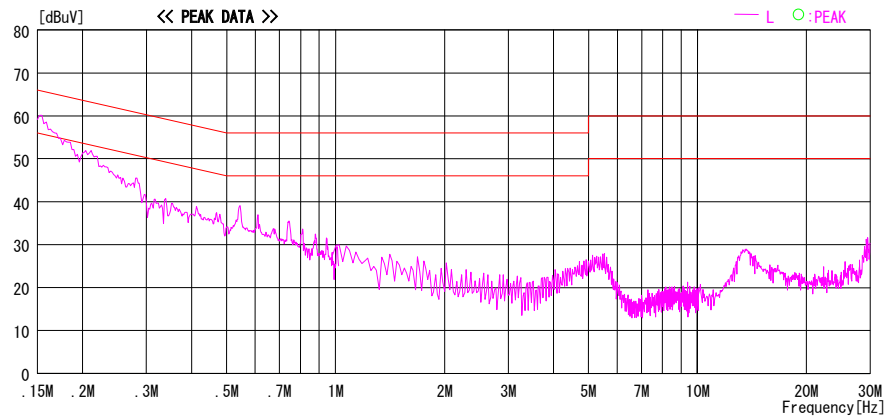
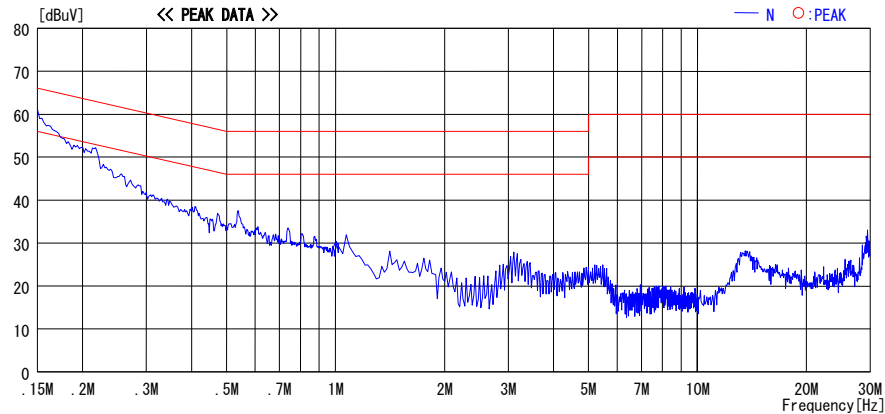


CHART: WITH FACTOR, Peak hold data. CALCULATION: RESULT[dBuV]=READING[dBuV]+C.F[dB] (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission 11a, Tx, 5700MHz

DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/18

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : AC 120V / 60Hz
Temp./Humi. : 23deg.C / 47%
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Tx 5700MHz

LIMIT : FCC15.207 QP
FCC15.207 AV

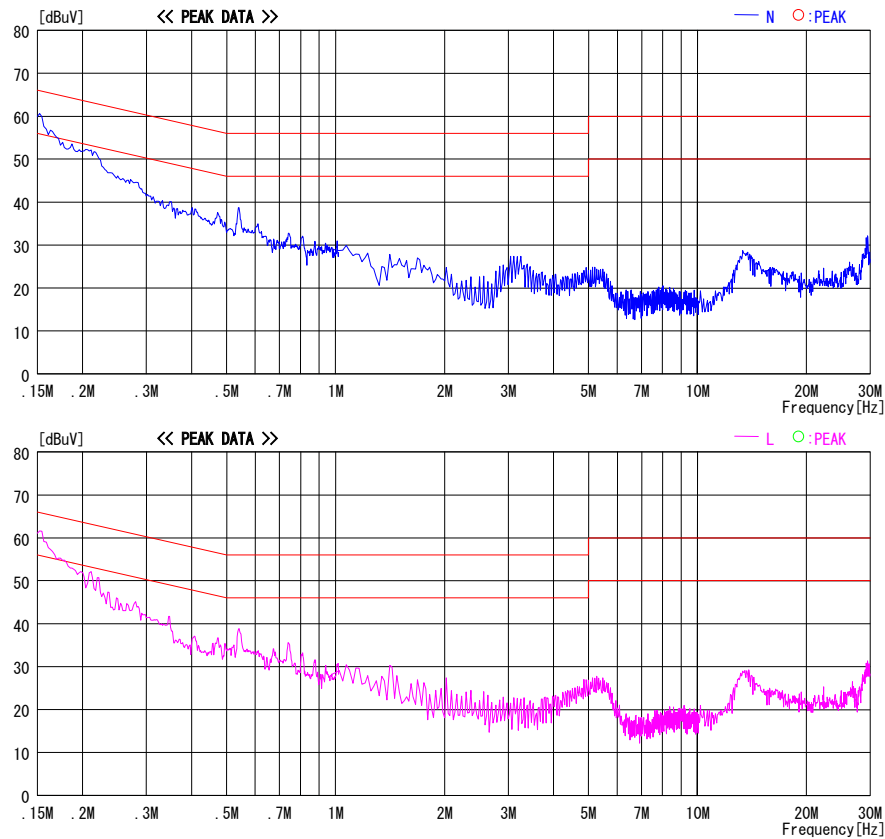


CHART: WITH FACTOR, Peak hold data. CALCULATION: RESULT[dBuV]=READING[dBuV]+C.F[dB] (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission 11a, Rx, 5220MHz

DATA OF CONDUCTED EMISSION TEST

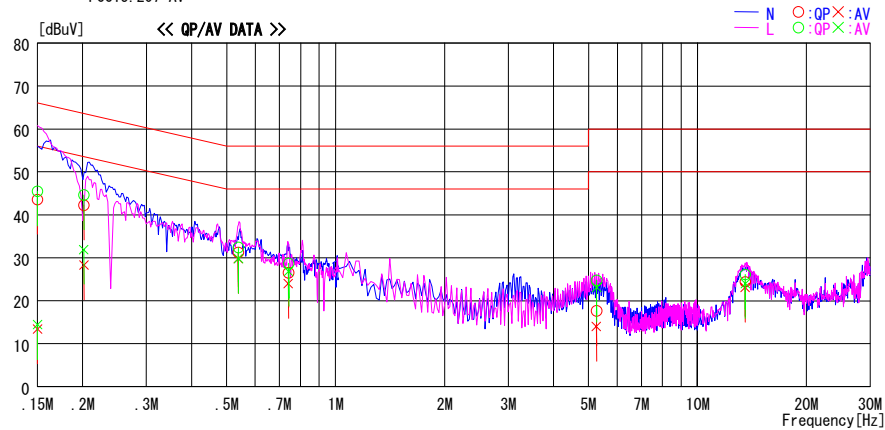
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/18

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : AC 120V / 60Hz
Temp./Humi. : 23deg. C / 47%
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Rx 5220MHz

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]		
0.15001	43.3	13.1	0.3	43.6	13.4	66.0	56.0	22.4	42.6	N	
0.20158	42.0	28.0	0.3	42.3	28.3	63.5	53.5	21.2	25.2	N	
0.53861	31.0	29.5	0.3	31.3	29.8	56.0	46.0	24.7	16.2	N	
0.74043	26.1	23.6	0.4	26.5	24.0	56.0	46.0	29.5	22.0	N	
5.25358	16.7	13.1	0.9	17.6	14.0	60.0	50.0	42.4	36.0	N	
13.53671	22.9	21.6	1.5	24.4	23.1	60.0	50.0	35.6	26.9	N	
0.15001	45.2	14.1	0.3	45.5	14.4	66.0	56.0	20.5	41.6	L	
0.20145	44.3	31.6	0.3	44.6	31.9	63.6	53.6	19.0	21.7	L	
0.53955	32.1	29.5	0.3	32.4	29.8	56.0	46.0	23.6	16.2	L	
0.74231	28.3	26.4	0.4	28.7	26.8	56.0	46.0	27.3	19.2	L	
5.26128	23.8	22.2	0.9	24.7	23.1	60.0	50.0	35.3	26.9	L	
13.55561	24.6	22.5	1.5	26.1	24.0	60.0	50.0	33.9	26.0	L	

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

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

Conducted Emission 11a, Rx, 5300MHz

DATA OF CONDUCTED EMISSION TEST

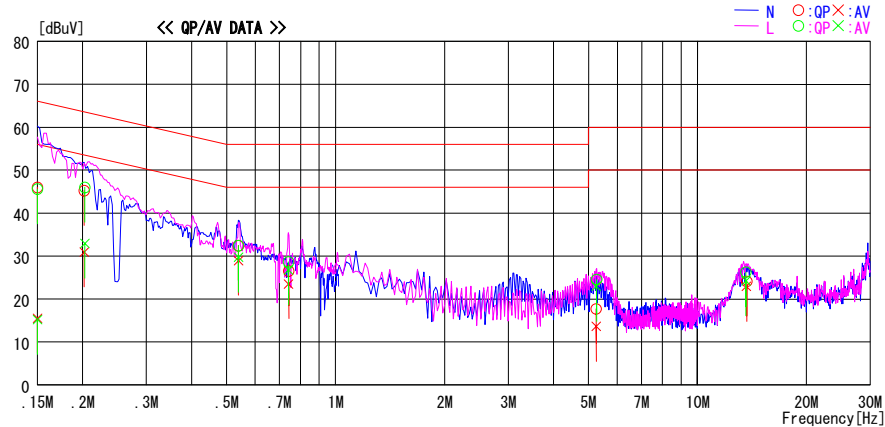
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/18

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : AC 120V / 60Hz
Temp./Humi. : 23deg.C / 47%
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Rx 5300MHz

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]		
0.15001	45.7	15.2	0.3	46.0	15.5	66.0	56.0	20.0	40.5	N	
0.20220	45.0	30.6	0.3	45.3	30.9	63.5	53.5	18.2	22.6	N	
0.53936	32.1	28.6	0.3	32.4	28.9	56.0	46.0	23.6	17.1	N	
0.74213	26.1	23.1	0.4	26.5	23.5	56.0	46.0	29.5	22.5	N	
5.25258	16.8	12.7	0.9	17.7	13.6	60.0	50.0	42.3	36.4	N	
13.66886	22.5	21.3	1.6	24.1	22.9	60.0	50.0	35.9	27.1	N	
0.15001	45.3	14.9	0.3	45.6	15.2	66.0	56.0	20.4	40.8	L	
0.20291	45.7	32.6	0.3	46.0	32.9	63.5	53.5	17.5	20.6	L	
0.53948	32.1	29.4	0.3	32.4	29.7	56.0	46.0	23.6	16.3	L	
0.74168	28.2	26.3	0.4	28.6	26.7	56.0	46.0	27.4	19.3	L	
5.25718	23.7	22.0	0.9	24.6	22.9	60.0	50.0	35.4	27.1	L	
13.61303	24.8	22.7	1.5	26.3	24.2	60.0	50.0	33.7	25.8	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.

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Conducted Emission 11a, Rx, 5600MHz

DATA OF CONDUCTED EMISSION TEST

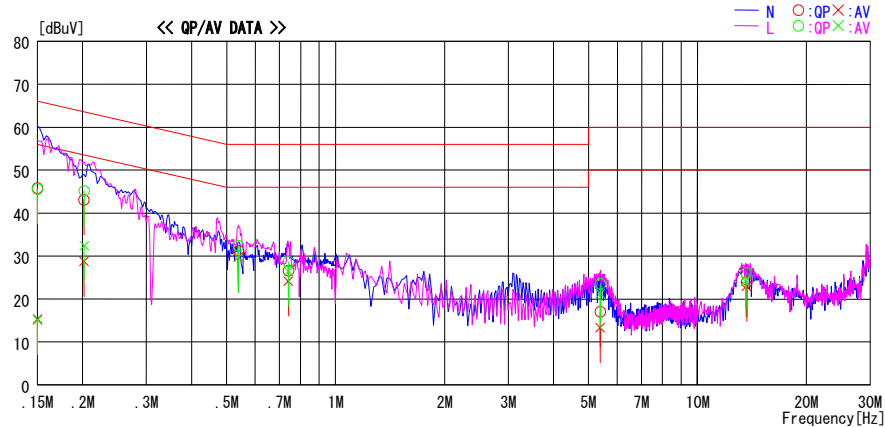
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/18

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : AC 120V / 60Hz
Temp./Humi. : 23deg.C / 47%
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Rx 5600MHz

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]		
0.15001	45.5	15.0	0.3	45.8	15.3	66.0	56.0	20.2	40.7	N	
0.20165	42.8	28.4	0.3	43.1	28.7	63.5	53.5	20.4	24.8	N	
0.53842	31.0	29.5	0.3	31.3	29.8	56.0	46.0	24.7	16.2	N	
0.74037	26.2	23.7	0.4	26.6	24.1	56.0	46.0	29.4	21.9	N	
5.38413	16.2	12.4	0.9	17.1	13.3	60.0	50.0	42.9	36.7	N	
13.66237	22.4	21.3	1.6	24.0	22.9	60.0	50.0	36.0	27.1	N	
0.15001	45.3	14.8	0.3	45.6	15.1	66.0	56.0	20.4	40.9	L	
0.20207	44.9	32.1	0.3	45.2	32.4	63.5	53.5	18.3	21.1	L	
0.53887	32.1	29.3	0.3	32.4	29.6	56.0	46.0	23.6	16.4	L	
0.74137	28.2	26.1	0.4	28.6	26.5	56.0	46.0	27.4	19.5	L	
5.38943	22.6	20.3	0.9	23.5	21.2	60.0	50.0	36.5	28.8	L	
13.60933	24.6	22.6	1.5	26.1	24.1	60.0	50.0	33.9	25.9	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.

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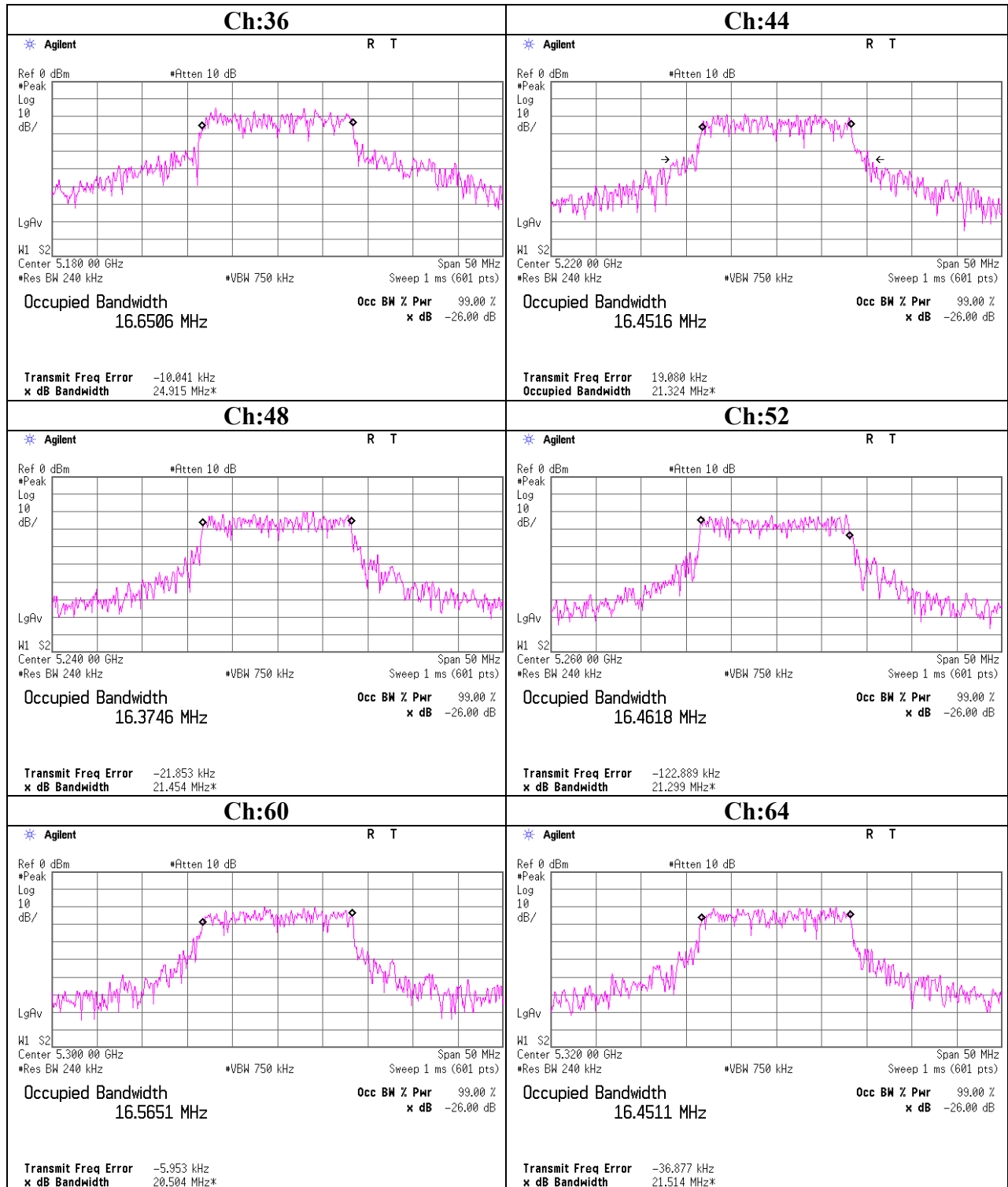
26dB Emission Bandwidth

Company	Canon Inc.	UL Japan, Inc
Equipment	WLAN Module	Head Office EMC Lab. No.6 shielded room
Model	CH9-1161	Report No. 29EE0246-HO-01
S/N	ES7005	Regulation FCC Part15 Subpart E 15.407(a)(1)(2)(3) / RSS-210 A9.2(1)(2)(3)
Power	DC 3.3V	Test Distance -
Mode	IEEE802.11a, Tx, 24Mbps	Date 04/09/2009 04/17/2009
		Temperature 25 deg.C. 24 deg.C.
		Humidity 27% 51%
		Engineer Tomohisa Nakagawa Tomohisa Nakagawa

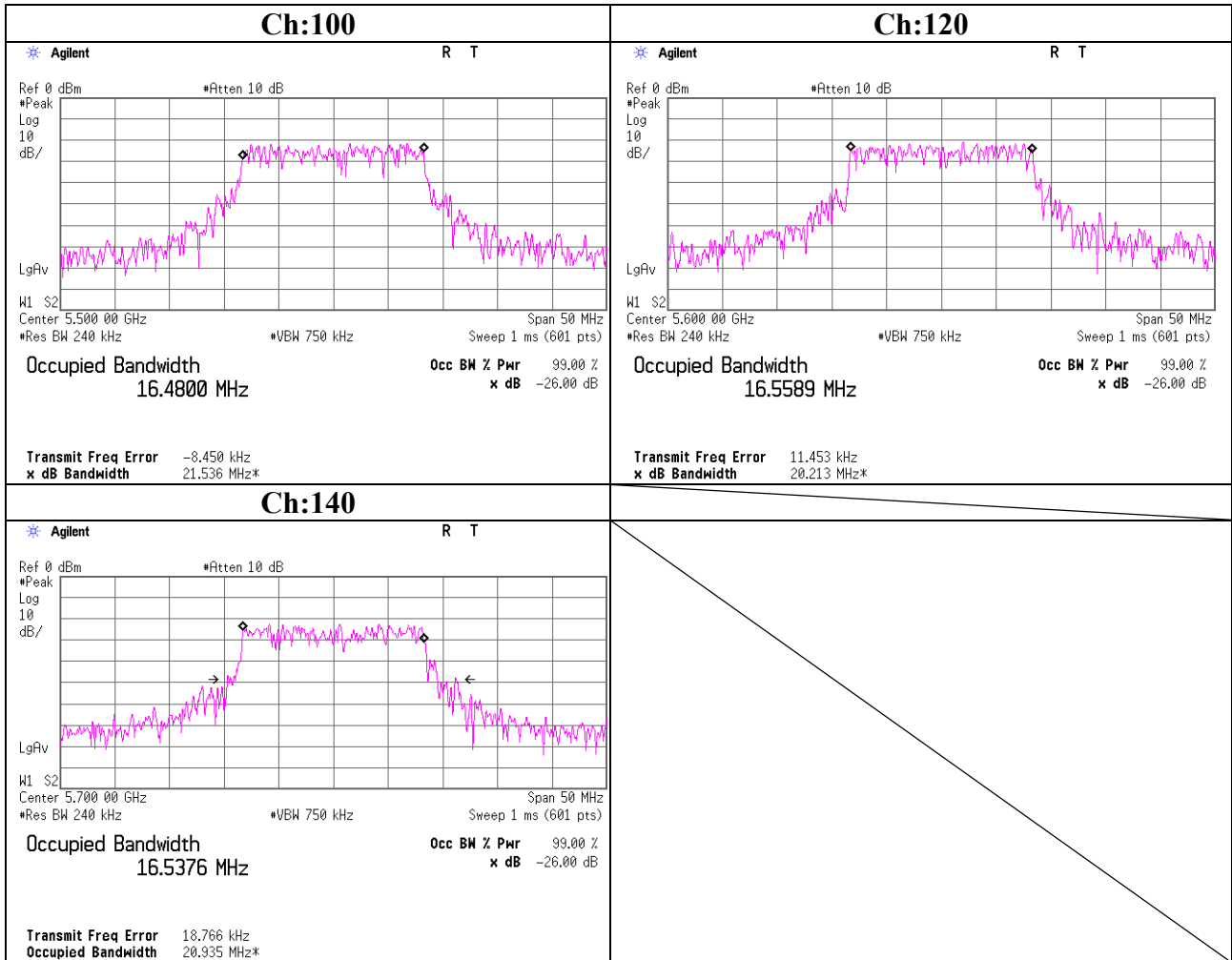
[IEEE 802.11a]

Ch	Freq. [MHz]	26dB Emission Bandwidth [MHz]
36	5180.0	24.915
44	5220.0	21.324
48	5240.0	21.454
52	5260.0	21.299
60	5300.0	20.504
64	5320.0	21.514
100	5500.0	21.536
120	5600.0	20.213
140	5700.0	20.935

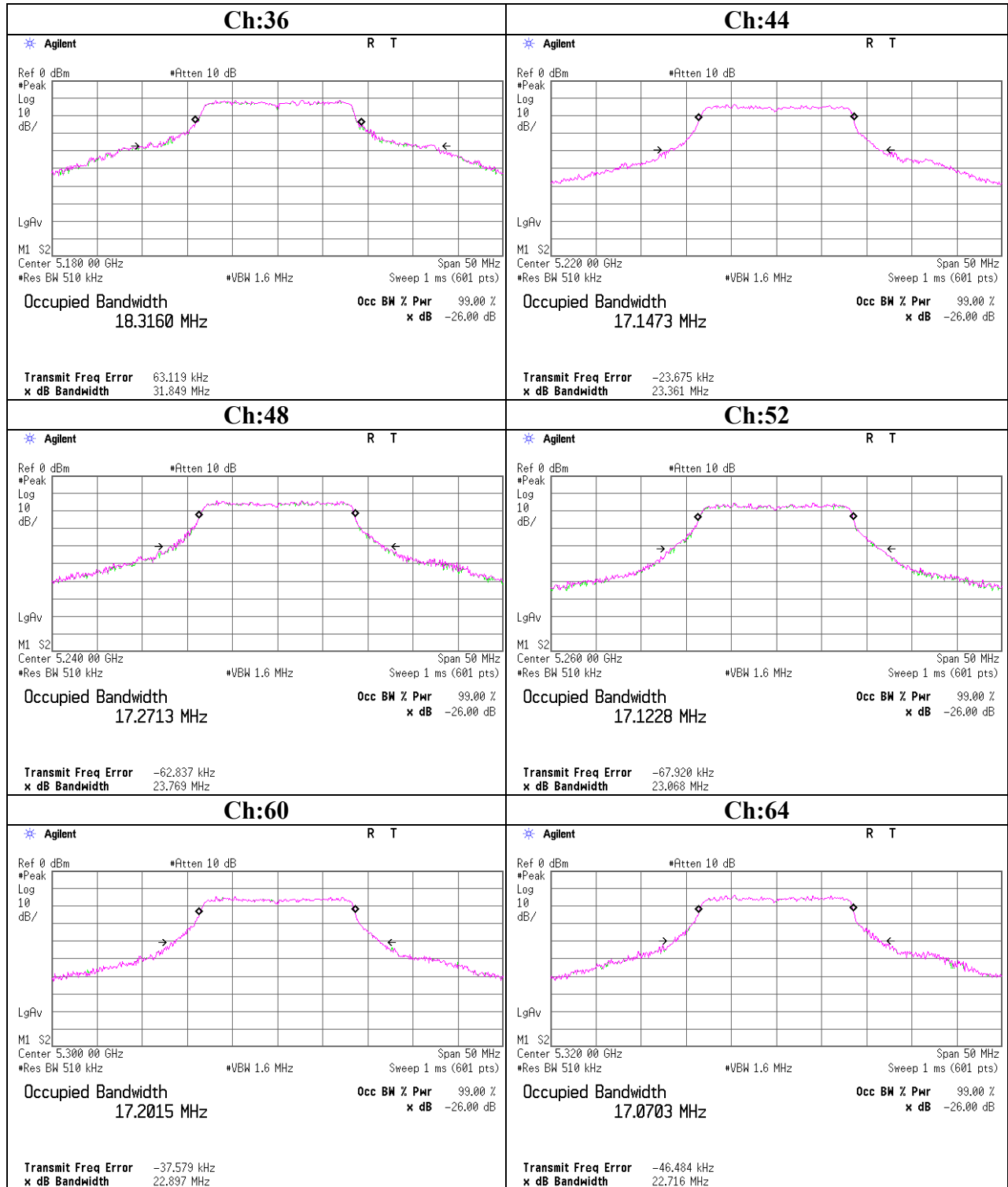
26dB Emission Bandwidth



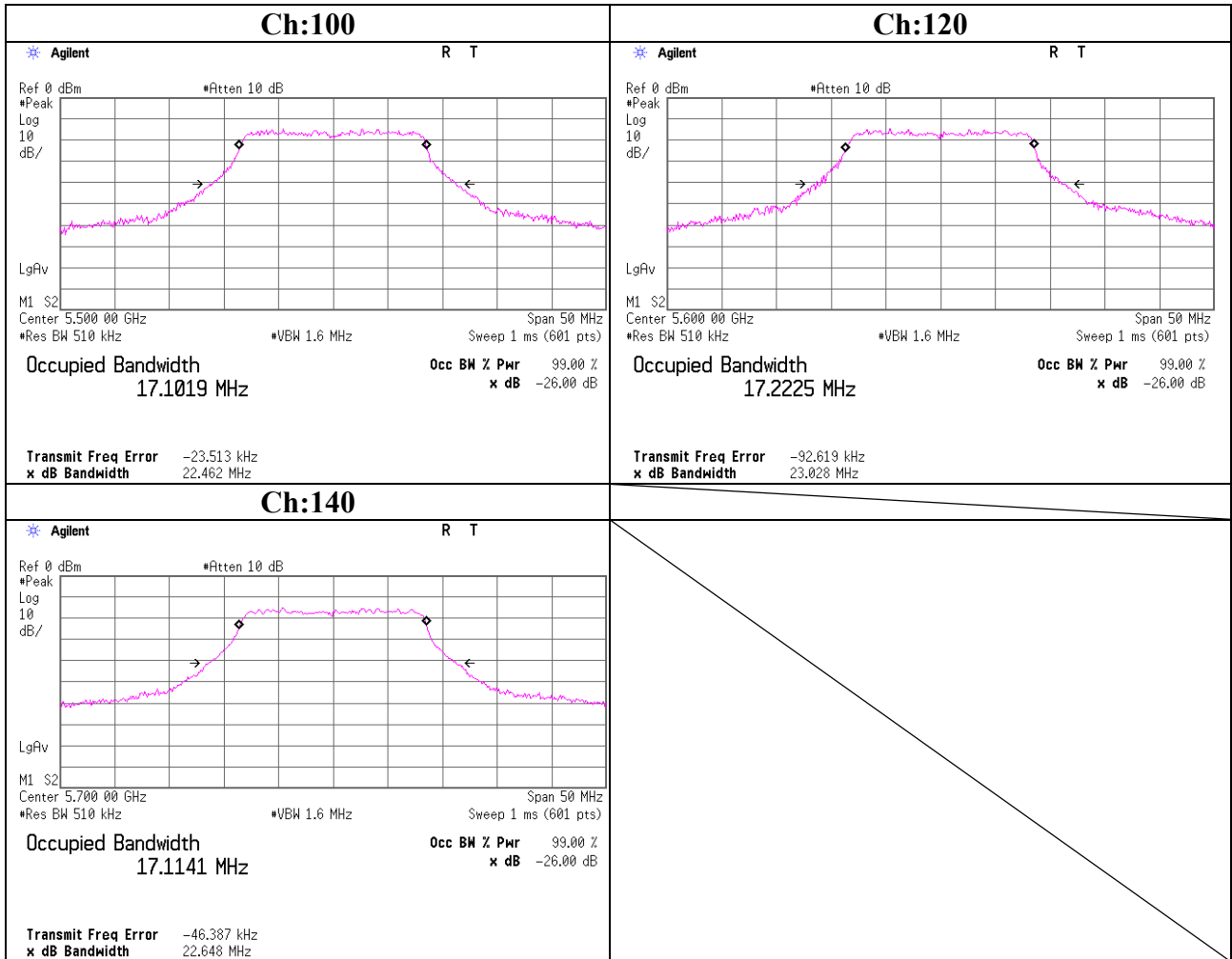
26dB Emission Bandwidth



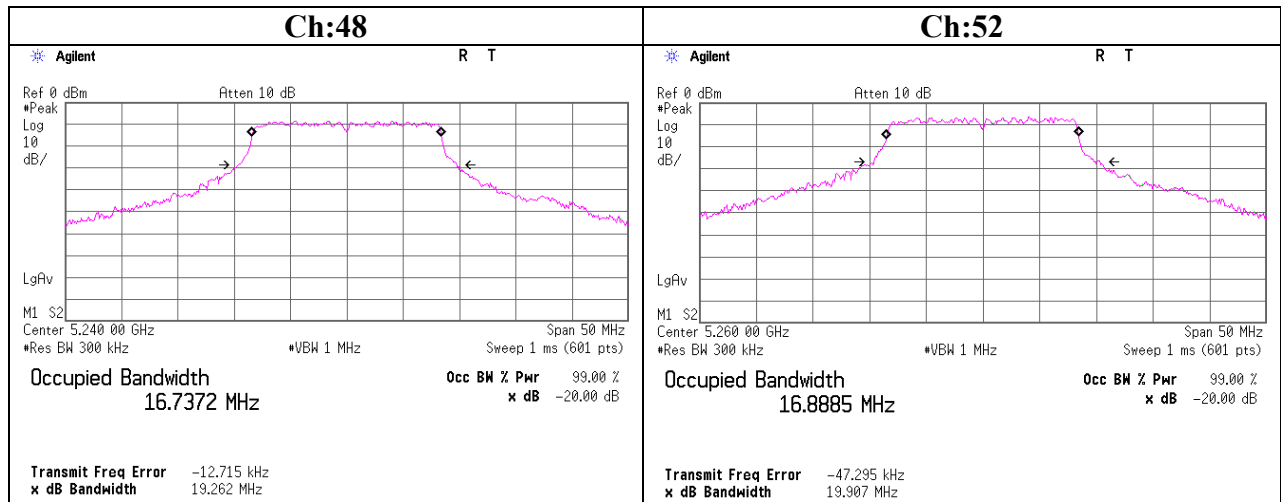
99%Occupied Bandwidth



99%Occupied Bandwidth



20dB Emission Bandwidth



Maximum Peak Output Power

Company	Canon Inc.	UL Japan, Inc
Equipment	WLAN Module	Head Office EMC Lab.
Model	CH9-1161	No.6 shielded room and No.11 Measruement Room
S/N	ES7005	Report No. 29EE0246-HO-01
Power	DC 3.3V	Regulation FCC Part15 Subpart E 15.407(a)(1)(2) / RSS-210 A9.2(1)(2)
Mode	IEEE802.11a, Tx, 24Mbps	Test Distance -
		Date 04/09/2009 04/17/2009
		Temperature 25 deg.C. 24 deg.C.
		Humidity 27% 51%
		Engineer Tomohisa Nakagawa Tomohisa Nakagawa

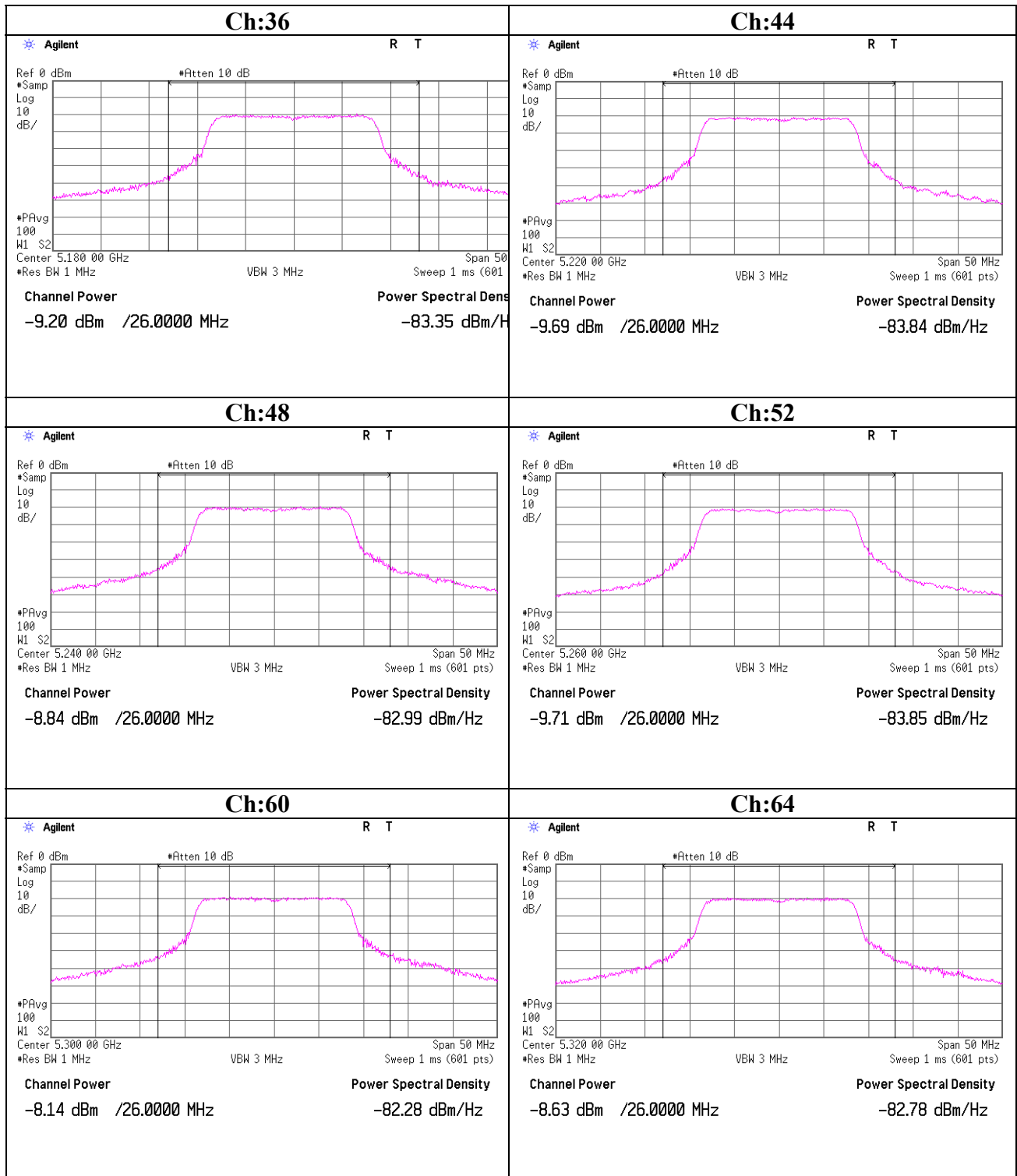
[IEEE 802.11a]

Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
36	5180.0	-9.20	2.16	19.98	12.94	17.0	4.06
44	5220.0	-9.69	2.17	19.98	12.46	17.0	4.54
48	5240.0	-8.84	2.17	19.98	13.31	17.0	3.69
52	5260.0	-9.71	2.18	19.98	12.45	24.0	11.55
60	5300.0	-8.14	2.18	19.99	14.03	24.0	9.97
64	5320.0	-8.63	2.19	19.99	13.55	24.0	10.45
100	5500.0	-8.77	2.22	19.99	13.44	24.0	10.56
120	5600.0	-9.47	2.20	20.00	12.73	24.0	11.27
140	5700.0	-9.14	2.18	20.00	13.04	24.0	10.96

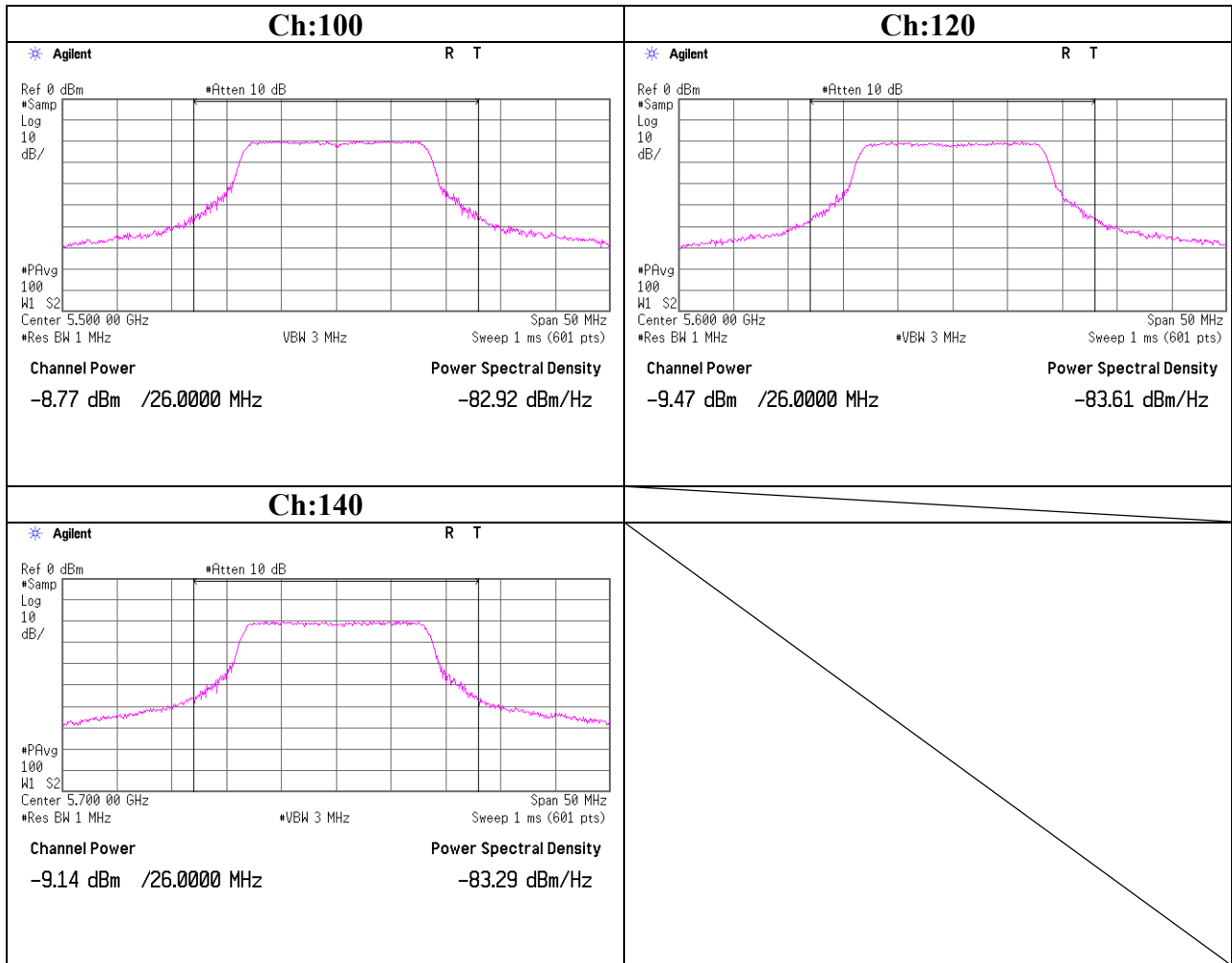
Sample Calculation:

Result = Reading + Cable Loss (Including customer's cable loss)+ Atten.Loss

Maximum Peak Output Power



Maximum Peak Output Power



Maximum Peak Output Power
(Rerference data)

Company	Canon Inc.	UL Japan, Inc
Equipment	WLAN Module	Head Office EMC Lab. No.11 Measurement room
Model	CH9-1161	Report No. 29EE0246-HO-01
S/N	ES7005	Regulation FCC Part15 Subpart E 15.407(a)(1)(2) / RSS-210 A9.2(1)(2)
Power	DC 3.3V	Test Distance -
Mode	IEEE802.11a, Tx,	Date 04/17/2006
		Temperature 24deg.C.
		Humidity 51%
		Engineer Tomohisa Nakagawa

[IEEE 802.11a]

Rate	Freq.	S/A Reading	Remarks
[Mbps]	[MHz]	[dBm]	[dB]
6	5180.0	0.45	
9	5180.0	0.67	
12	5180.0	1.20	
18	5180.0	1.43	
24	5180.0	1.57	Worst
36	5180.0	0.95	
48	5180.0	0.63	
54	5180.0	0.80	

The test was performed with the same cable and attenuator.

Maximum Peak Output Power
(Reference data for SAR testing)

Company	Canon Inc.	UL Japan, Inc
Equipment	WLAN Module	Head Office EMC Lab.
Model	CH9-1161	No.6 shielded room and No.11 Measruement Room
S/N	ES7005	Report No. 29EE0246-HO-01
Power	DC 3.3V	Regulation (Reference data for SAR testing)
Mode	IEEE802.11a, Tx, 24Mbps	Test Distance -
		Date 04/09/2009
		Temperature 25 deg.C.
		Humidity 27%
		Engineer Tomohisa Nakagawa

[IEEE 802.11a]

Ch	Freq. [MHz]	P/M AVG Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result	
					[dBm]	[mW]
36	5180.0	2.15	0.90	10.06	13.11	20.5
44	5220.0	2.12	0.90	10.06	13.08	20.3
48	5240.0	2.65	0.90	10.06	13.61	23.0
52	5260.0	2.19	0.90	10.06	13.15	20.7
60	5300.0	2.70	0.90	10.06	13.66	23.2
64	5320.0	2.56	0.90	10.06	13.52	22.5
100	5500.0	2.39	0.90	10.06	13.35	21.6
116	5580.0	2.52	0.90	10.06	13.48	22.3
120	5600.0	2.18	0.90	10.06	13.14	20.6
140	5700.0	2.00	0.90	10.06	12.96	19.8

Sample Calculation:

Result = Reading + Cable Loss (Including customer's cable loss)+ Atten.Loss

Radiated Spurious Emission (below 1GHz)
11a, Tx, 5180MHz

DATA OF RADIATED EMISSION TEST

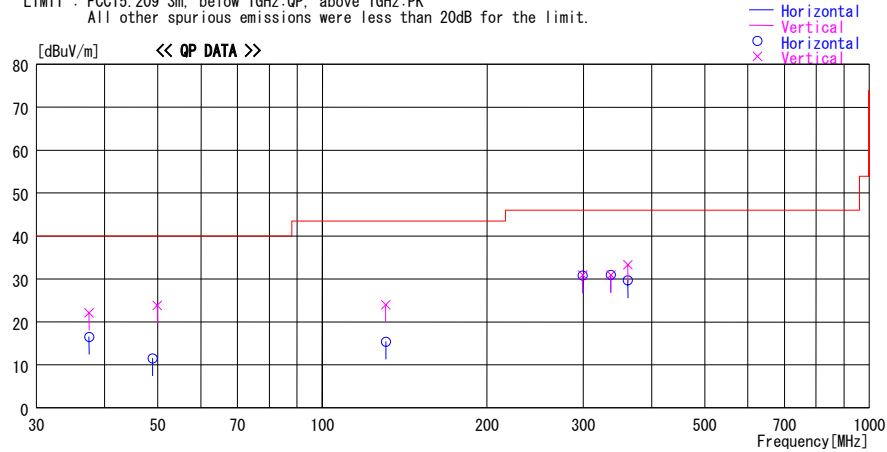
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/17

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : DC 3.3V
Temp./Humi. : 23 deg.C. / 52 %
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Tx 5180MHz, Worst-axis:Module(Hor:Y/Ver:Y), Ant(Hor:Z/Ver:Y)

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:PK
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Gain [dB]							
37.433	23.0	QP	15.3	-21.8	16.5	92	300	Hori.	40.0	23.5	
37.433	28.6	QP	15.3	-21.8	22.1	114	100	Vert.	40.0	17.9	
48.900	22.5	QP	10.7	-21.7	11.5	317	300	Hori.	40.0	28.5	
49.909	35.1	QP	10.4	-21.7	23.8	148	100	Vert.	40.0	16.2	
130.581	30.8	QP	13.8	-20.6	24.0	259	100	Vert.	43.5	19.5	
130.800	22.2	QP	13.8	-20.6	15.4	270	300	Hori.	43.5	28.1	
299.446	29.8	QP	20.0	-18.9	30.9	236	100	Vert.	46.0	15.1	
299.444	29.7	QP	20.0	-18.9	30.8	203	300	Hori.	46.0	15.2	
336.872	35.3	QP	14.7	-19.0	31.0	284	112	Hori.	46.0	15.0	
336.872	35.2	QP	14.7	-19.0	30.9	153	100	Vert.	46.0	15.1	
361.833	33.0	QP	15.8	-19.1	29.7	303	100	Hori.	46.0	16.3	
361.833	36.6	QP	15.8	-19.1	33.3	196	100	Vert.	46.0	12.7	

CHART: WITH FACTOR ANT TYPE: -30MHz: LOOP, 30-300MHz: BICONICAL, 300MHz-1000MHz: LOGPERIODIC, 1000MHz-: HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

*The limit is rounded down to one decimal place.

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

Radiated Spurious Emission (below 1GHz)
11a, Tx, 5220MHz

DATA OF RADIATED EMISSION TEST

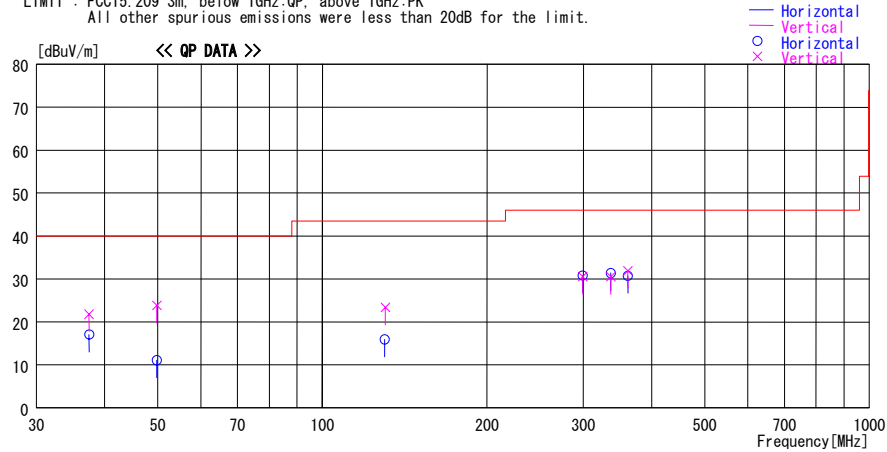
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/17

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : DC 3.3V
Temp./Humi. : 23 deg.C. / 52 %
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Tx 5220MHz, Worst-axis:Module(Hor:Y/Ver:Y),Ant(Hor:Z/Ver:Y)

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:PK
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Gain [dB]							
37.426	28.3	QP	15.3	-21.8	21.8	115	100	Vert.	40.0	18.2	
37.426	23.6	QP	15.3	-21.8	17.1	358	300	Hori.	40.0	22.9	
49.800	22.4	QP	10.4	-21.7	11.1	0	300	Hori.	40.0	28.9	
49.800	35.1	QP	10.4	-21.7	23.8	297	100	Vert.	40.0	16.2	
129.900	22.8	QP	13.7	-20.6	15.9	82	300	Hori.	43.5	27.6	
130.380	30.3	QP	13.7	-20.6	23.4	282	100	Vert.	43.5	20.1	
299.412	29.7	QP	20.0	-18.9	30.8	201	296	Hori.	46.0	15.2	
299.419	29.4	QP	20.0	-18.9	30.5	234	100	Vert.	46.0	15.5	
336.856	35.7	QP	14.7	-19.0	31.4	283	116	Hori.	46.0	14.6	
336.854	34.8	QP	14.7	-19.0	30.5	143	142	Vert.	46.0	15.5	
361.833	34.0	QP	15.8	-19.1	30.7	224	177	Hori.	46.0	15.3	
361.812	35.2	QP	15.8	-19.1	31.9	189	100	Vert.	46.0	14.1	

CHART: WITH FACTOR ANT TYPE: -30MHz: LOOP, 30-300MHz: BICONICAL, 300MHz-1000MHz: LOGPERIODIC, 1000MHz-: HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

*The limit is rounded down to one decimal place.

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

Radiated Spurious Emission (below 1GHz)
11a, Tx, 5240MHz

DATA OF RADIATED EMISSION TEST

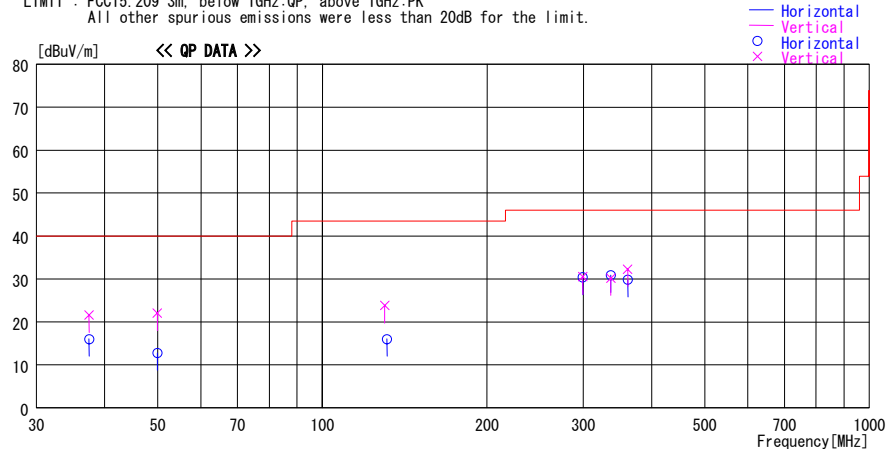
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/17

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : DC 3.3V
Temp./Humi. : 23 deg.C. / 52 %
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Tx 5240MHz, Worst-axis:Module(Hor:Y/Ver:Y),Ant(Hor:Z/Ver:Y)

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:PK
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Loss& Gain [dB]							
37.426	22.5	QP	15.3	-21.8	16.0	348	300	Hori.	40.0	24.0	
37.426	28.1	QP	15.3	-21.8	21.6	313	100	Vert.	40.0	18.4	
49.902	33.3	QP	10.4	-21.7	22.0	337	100	Vert.	40.0	18.0	
49.902	24.1	QP	10.4	-21.7	12.8	347	300	Hori.	40.0	27.2	
130.030	30.7	QP	13.7	-20.6	23.8	236	100	Vert.	43.5	19.7	
131.250	22.8	QP	13.8	-20.6	16.0	111	300	Hori.	43.5	27.5	
299.401	29.3	QP	20.0	-18.9	30.4	189	300	Hori.	46.0	15.6	
299.446	29.4	QP	20.0	-18.9	30.5	252	100	Vert.	46.0	15.5	
336.830	35.2	QP	14.7	-19.0	30.9	273	100	Hori.	46.0	15.1	
336.830	34.5	QP	14.7	-19.0	30.2	45	100	Vert.	46.0	15.8	
361.782	33.1	QP	15.8	-19.1	29.8	224	100	Hori.	46.0	16.2	
361.782	35.6	QP	15.8	-19.1	32.3	183	100	Vert.	46.0	13.7	

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-300MHz:BICONICAL, 300MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - GAIN(AMP)

*The limit is rounded down to one decimal place.

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

Radiated Spurious Emission (below 1GHz)
11a, Tx, 5260MHz

DATA OF RADIATED EMISSION TEST

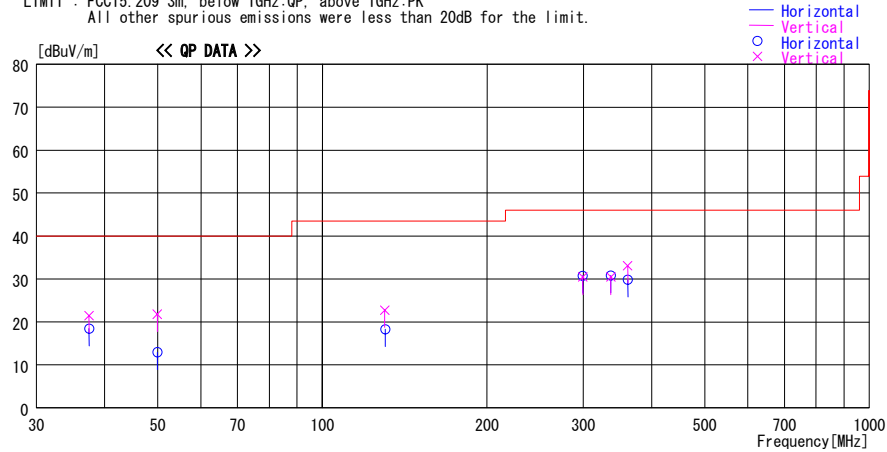
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/17

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : DC 3.3V
Temp./Humi. : 23 deg.C. / 52 %
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Tx 5260MHz, Worst-axis:Module(Hor:Y/Ver:Y),Ant(Hor:Z/Ver:Y)

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:PK
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Loss& Gain [dB]							
37.426	24.9	QP	15.3	-21.8	18.4	3	300	Hori.	40.0	21.6	
37.426	28.0	QP	15.3	-21.8	21.5	69	100	Vert.	40.0	18.5	
49.899	24.2	QP	10.4	-21.7	12.9	88	300	Hori.	40.0	27.1	
49.899	33.1	QP	10.4	-21.7	21.8	254	100	Vert.	40.0	18.2	
130.060	29.6	QP	13.7	-20.6	22.7	268	100	Vert.	43.5	20.8	
130.367	25.2	QP	13.7	-20.6	18.3	63	300	Hori.	43.5	25.2	
299.388	29.6	QP	20.0	-18.9	30.7	189	300	Hori.	46.0	15.3	
299.390	29.3	QP	20.0	-18.9	30.4	254	100	Vert.	46.0	15.6	
336.817	34.7	QP	14.7	-19.0	30.4	37	100	Vert.	46.0	15.6	
336.816	35.1	QP	14.7	-19.0	30.8	257	100	Hori.	46.0	15.2	
361.765	33.1	QP	15.8	-19.1	29.8	218	100	Hori.	46.0	16.2	
361.765	36.4	QP	15.8	-19.1	33.1	200	100	Vert.	46.0	12.9	

CHART: WITH FACTOR ANT TYPE: -30MHz: LOOP, 30-300MHz: BICONICAL, 300MHz-1000MHz: LOGPERIODIC, 1000MHz-: HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

*The limit is rounded down to one decimal place.

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

Radiated Spurious Emission (below 1GHz)
11a, Tx, 5300MHz

DATA OF RADIATED EMISSION TEST

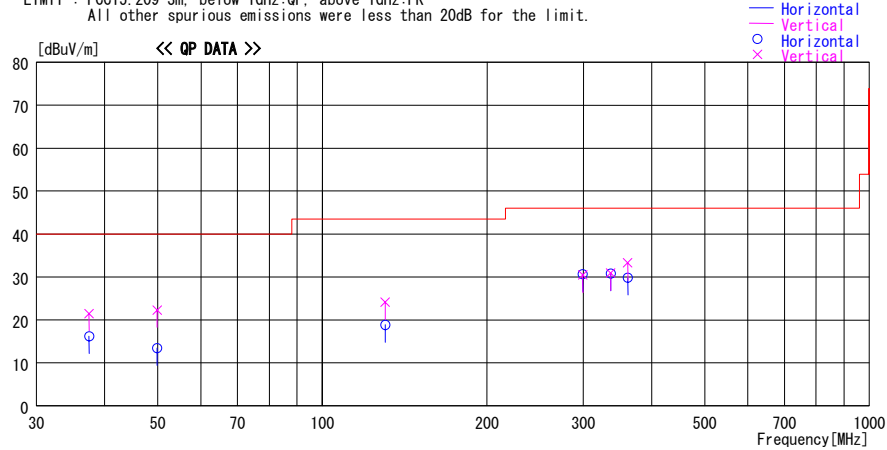
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/17

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : DC 3.3V
Temp./Humi. : 23 deg.C. / 52 %
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Tx 5300MHz, Worst-axis:Module(Hor:Y/Ver:Y), Ant(Hor:Z/Ver:Y)

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:PK
All other spurious emissions were less than 20dB for the limit.



Frequency	Reading	DET	Antenna		Level	Angle	Height	Polar.	Limit	Margin	Comment
			Factor	Gain							
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]	
37.426	28.0	QP	15.3	-21.8	21.5	116	100	Vert.	40.0	18.5	
37.426	22.7	QP	15.3	-21.8	16.2	3	300	Hori.	40.0	23.8	
49.898	24.7	QP	10.4	-21.7	13.4	301	300	Hori.	40.0	26.6	
49.898	33.6	QP	10.4	-21.7	22.3	53	100	Vert.	40.0	17.7	
130.350	25.7	QP	13.7	-20.6	18.8	73	300	Hori.	43.5	24.7	
130.350	31.0	QP	13.7	-20.6	24.1	124	100	Vert.	43.5	19.4	
299.379	29.3	QP	20.0	-18.9	30.4	231	100	Vert.	46.0	15.6	
299.384	29.5	QP	20.0	-18.9	30.6	200	300	Hori.	46.0	15.4	
336.804	35.1	QP	14.7	-19.0	30.8	257	100	Hori.	46.0	15.2	
336.802	35.2	QP	14.7	-19.0	30.9	160	100	Vert.	46.0	15.1	
361.755	36.6	QP	15.8	-19.1	33.3	199	100	Vert.	46.0	12.7	
361.755	33.1	QP	15.8	-19.1	29.8	209	100	Hori.	46.0	16.2	

CHART: WITH FACTOR ANT TYPE: -30MHz: LOOP, 30-300MHz: BICONICAL, 300MHz-1000MHz: LOGPERIODIC, 1000MHz-: HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

*The limit is rounded down to one decimal place.

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

Radiated Spurious Emission (below 1GHz)
11a, Tx, 5320MHz

DATA OF RADIATED EMISSION TEST

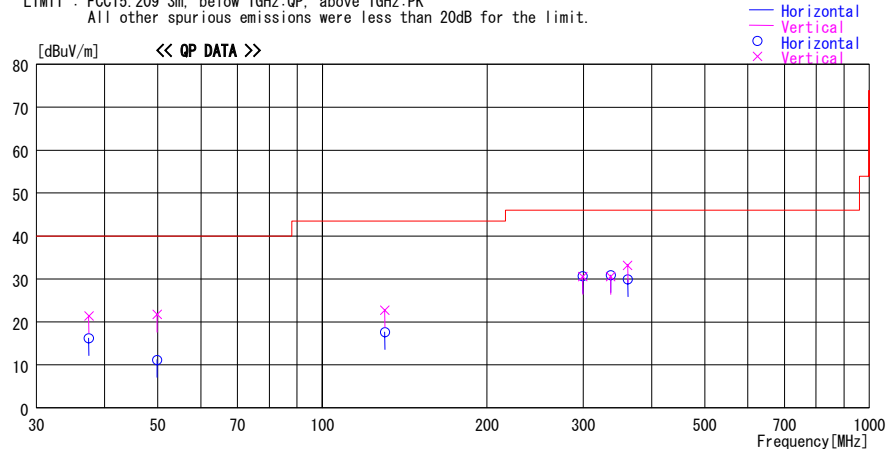
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/17

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : DC 3.3V
Temp./Humi. : 23 deg.C. / 52 %
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Tx 5320MHz, Worst-axis:Module(Hor:Y/Ver:Y),Ant(Hor:Z/Ver:Y)

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:PK
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Loss& Gain [dB]							
37.419	22.7	QP	15.3	-21.8	16.2	246	300	Hori.	40.0	23.8	
37.419	27.9	QP	15.3	-21.8	21.4	295	100	Vert.	40.0	18.6	
49.898	22.5	QP	10.4	-21.7	11.2	334	300	Hori.	40.0	28.8	
49.898	33.0	QP	10.4	-21.7	21.7	67	100	Vert.	40.0	18.3	
130.110	24.5	QP	13.7	-20.6	17.6	279	300	Hori.	43.5	25.9	
130.110	29.6	QP	13.7	-20.6	22.7	260	100	Vert.	43.5	20.8	
299.374	29.5	QP	20.0	-18.9	30.6	224	300	Hori.	46.0	15.4	
299.377	29.4	QP	20.0	-18.9	30.5	242	100	Vert.	46.0	15.5	
336.797	35.2	QP	14.7	-19.0	30.9	274	100	Hori.	46.0	15.1	
336.796	34.8	QP	14.7	-19.0	30.5	148	100	Vert.	46.0	15.5	
361.741	36.5	QP	15.8	-19.1	33.2	198	100	Vert.	46.0	12.8	
361.741	33.2	QP	15.8	-19.1	29.9	282	100	Hori.	46.0	16.1	

CHART: WITH FACTOR ANT TYPE: -30MHz: LOOP, 30-300MHz: BICONICAL, 300MHz-1000MHz: LOGPERIODIC, 1000MHz-: HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

*The limit is rounded down to one decimal place.

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

Radiated Spurious Emission (below 1GHz)
11a, Tx, 5500MHz

DATA OF RADIATED EMISSION TEST

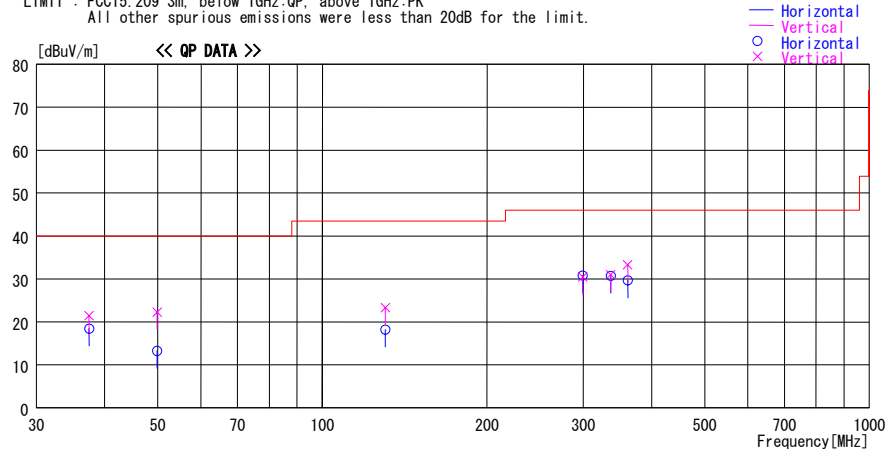
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/17

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : DC 3.3V
Temp./Humi. : 23 deg.C. / 52 %
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Tx 5500MHz, Worst-axis:Module(Hor:Y/Ver:Y),Ant(Hor:Z/Ver:Y)

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:PK
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Loss& Gain [dB]							
37.425	28.0	QP	15.3	-21.8	21.5	3	100	Vert.	40.0	18.5	
37.425	24.9	QP	15.3	-21.8	18.4	216	300	Hori.	40.0	21.6	
49.896	24.6	QP	10.4	-21.7	13.3	346	300	Hori.	40.0	26.7	
49.896	33.6	QP	10.4	-21.7	22.3	1	100	Vert.	40.0	17.7	
130.360	25.1	QP	13.7	-20.6	18.2	103	300	Hori.	43.5	25.3	
130.360	30.2	QP	13.7	-20.6	23.3	131	100	Vert.	43.5	20.2	
299.373	29.7	QP	20.0	-18.9	30.8	197	300	Hori.	46.0	15.2	
299.371	29.3	QP	20.0	-18.9	30.4	111	100	Vert.	46.0	15.6	
336.793	35.3	QP	14.7	-19.0	31.0	157	100	Vert.	46.0	15.0	
336.791	35.0	QP	14.7	-19.0	30.7	279	100	Hori.	46.0	15.3	
361.737	33.0	QP	15.8	-19.1	29.7	216	100	Hori.	46.0	16.3	
361.737	36.6	QP	15.8	-19.1	33.3	208	100	Vert.	46.0	12.7	

CHART: WITH FACTOR ANT TYPE: -30MHz: LOOP, 30-300MHz: BICONICAL, 300MHz-1000MHz: LOGPERIODIC, 1000MHz-: HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

*The limit is rounded down to one decimal place.

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

Radiated Spurious Emission (below 1GHz)
11a, Tx, 5600MHz

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/17

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : DC 3.3V
Temp./Humi. : 23 deg.C. / 52 %
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Tx 5600MHz, Worst-axis:Module(Hor:Y/Ver:Y), Ant(Hor:Z/Ver:Y)

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:PK
All other spurious emissions were less than 20dB for the limit.

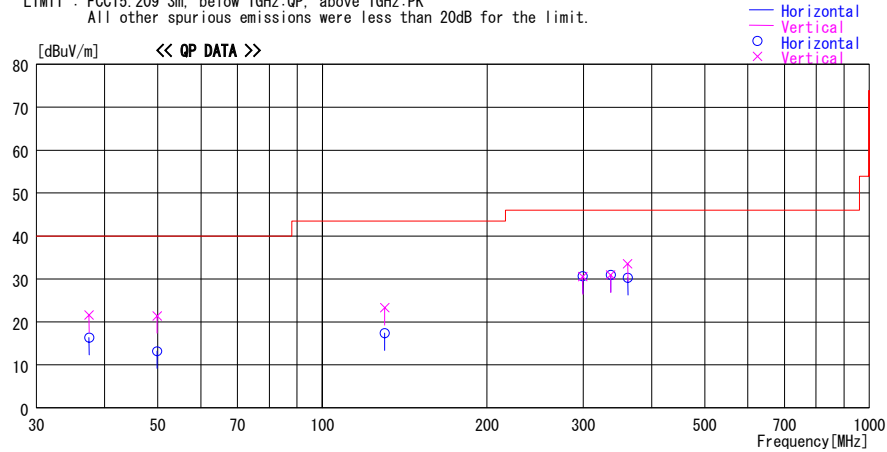


CHART: WITH FACTOR ANT TYPE: -30MHz: LOOP, 30-300MHz: BICONICAL, 300MHz-1000MHz: LOGPERIODIC, 1000MHz-: HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

*The limit is rounded down to one decimal place.

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

Radiated Spurious Emission (below 1GHz)
11a, Tx, 5700MHz

DATA OF RADIATED EMISSION TEST

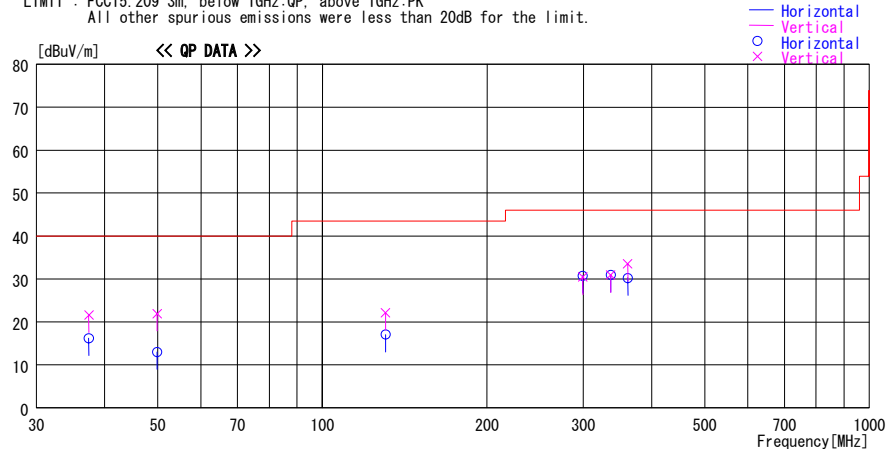
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/17

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : DC 3.3V
Temp./Humi. : 23 deg.C. / 52 %
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Tx 5700MHz, Worst-axis:Module(Hor:Y/Ver:Y),Ant(Hor:Z/Ver:Y)

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:PK
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Loss& Gain [dB]							
37.419	22.7	QP	15.3	-21.8	16.2	11	300	Hori.	40.0	23.8	
37.419	28.1	QP	15.3	-21.8	21.6	220	100	Vert.	40.0	18.4	
49.892	24.3	QP	10.4	-21.7	13.0	110	300	Hori.	40.0	27.0	
49.892	33.2	QP	10.4	-21.7	21.9	346	100	Vert.	40.0	18.1	
130.482	28.9	QP	13.8	-20.6	22.1	285	100	Vert.	43.5	21.4	
130.482	23.9	QP	13.8	-20.6	17.1	276	300	Hori.	43.5	26.4	
299.356	29.3	QP	20.0	-18.9	30.4	244	100	Vert.	46.0	15.6	
299.358	29.6	QP	20.0	-18.9	30.7	192	300	Hori.	46.0	15.3	
336.779	35.3	QP	14.7	-19.0	31.0	282	100	Hori.	46.0	15.0	
336.779	35.2	QP	14.7	-19.0	30.9	73	100	Vert.	46.0	15.1	
361.723	36.8	QP	15.8	-19.1	33.5	209	100	Vert.	46.0	12.5	
361.723	33.5	QP	15.8	-19.1	30.2	220	100	Hori.	46.0	15.8	

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-300MHz:BICONICAL, 300MHz-1000MHz:LOGPERIODIC, 1000MHz:-HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - GAIN(AMP)

*The limit is rounded down to one decimal place.

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

Radiated Spurious Emission (below 1GHz)
11a, Rx, 5220MHz

DATA OF RADIATED EMISSION TEST

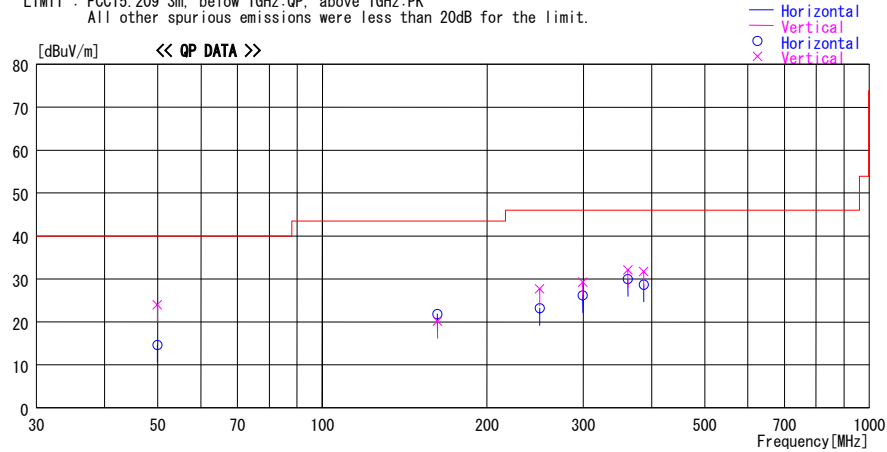
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/18

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : DC 3.3V
Temp./Humi. : 23 deg.C. / 47 %
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Rx 5220MHz, Worst-axis:Module(Hor:Y/Ver:Y), Ant(Hor:Z/Ver:Y)

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:PK
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Loss& Gain [dB]							
49.902	25.9	QP	10.4	-21.7	14.6	136	300	Hori.	40.0	25.4	
49.902	35.3	QP	10.4	-21.7	24.0	344	100	Vert.	40.0	16.0	
162.299	26.5	QP	15.6	-20.3	21.8	232	300	Hori.	43.5	21.7	
162.299	24.9	QP	15.6	-20.3	20.2	216	100	Vert.	43.5	23.3	
249.523	25.4	QP	17.2	-19.4	23.2	189	300	Hori.	46.0	22.8	
249.523	29.9	QP	17.2	-19.4	27.7	231	100	Vert.	46.0	18.3	
299.412	25.1	QP	20.0	-18.9	26.2	261	300	Hori.	46.0	19.8	
299.412	28.2	QP	20.0	-18.9	29.3	261	100	Vert.	46.0	16.7	
361.803	33.3	QP	15.8	-19.1	30.0	223	100	Hori.	46.0	16.0	
361.803	35.4	QP	15.8	-19.1	32.1	244	100	Vert.	46.0	13.9	
386.737	30.9	QP	16.9	-19.1	28.7	223	100	Hori.	46.0	17.3	
386.737	33.9	QP	16.9	-19.1	31.7	256	100	Vert.	46.0	14.3	

CHART: WITH FACTOR ANT TYPE: -30MHz: LOOP, 30-300MHz: BICONICAL, 300MHz-1000MHz: LOGPERIODIC, 1000MHz-: HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

*The limit is rounded down to one decimal place.

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

Radiated Spurious Emission (below 1GHz)
11a, Rx, 5300MHz

DATA OF RADIATED EMISSION TEST

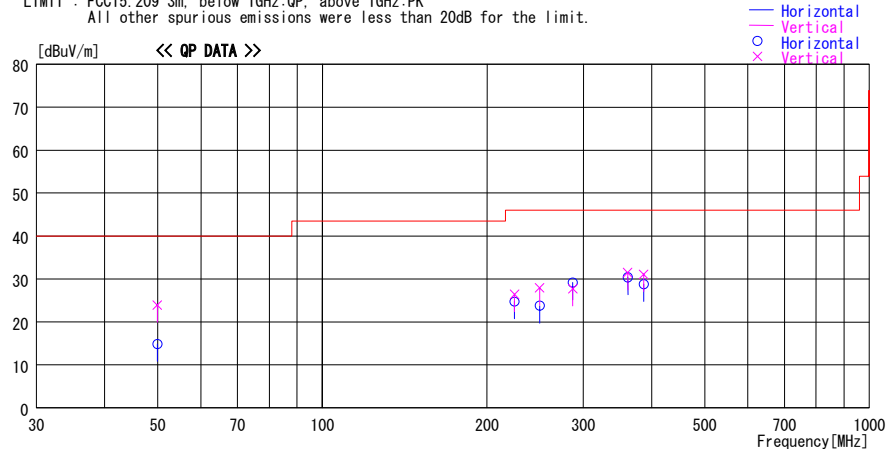
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/04/18

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : DC 3.3V
Temp./Humi. : 23 deg.C. / 47 %
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Rx 5300MHz, Worst-axis:Module(Hor:Y/Ver:Y), Ant(Hor:Z/Ver:Y)

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:PK
All other spurious emissions were less than 20dB for the limit.



Frequency	Reading	DET	Antenna		Level	Angle	Height	Polar.	Limit	Margin	Comment
			Factor	Gain							
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]	
49.900	26.2	QP	10.4	-21.7	14.9	281	300	Hori.	40.0	25.1	
49.900	35.2	QP	10.4	-21.7	23.9	274	100	Vert.	40.0	16.1	
224.563	27.4	QP	16.9	-19.6	24.7	193	300	Hori.	46.0	21.3	
224.563	29.1	QP	16.9	-19.6	26.4	141	100	Vert.	46.0	19.6	
249.523	26.0	QP	17.2	-19.4	23.8	178	300	Hori.	46.0	22.2	
249.523	30.1	QP	17.2	-19.4	27.9	221	100	Vert.	46.0	18.1	
286.938	28.9	QP	19.3	-19.0	29.2	201	300	Hori.	46.0	16.8	
286.938	27.4	QP	19.3	-19.0	27.7	155	100	Vert.	46.0	18.3	
361.793	33.7	QP	15.8	-19.1	30.4	216	100	Hori.	46.0	15.6	
361.793	34.8	QP	15.8	-19.1	31.5	257	100	Vert.	46.0	14.5	
386.733	31.0	QP	16.9	-19.1	28.8	228	100	Hori.	46.0	17.2	
386.733	33.3	QP	16.9	-19.1	31.1	259	100	Vert.	46.0	14.9	

CHART: WITH FACTOR ANT TYPE: -30MHz: LOOP, 30-300MHz: BICONICAL, 300MHz-1000MHz: LOGPERIODIC, 1000MHz-: HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

*The limit is rounded down to one decimal place.

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

Radiated Spurious Emission (below 1GHz)
11a, Rx, 5600MHz

DATA OF RADIATED EMISSION TEST

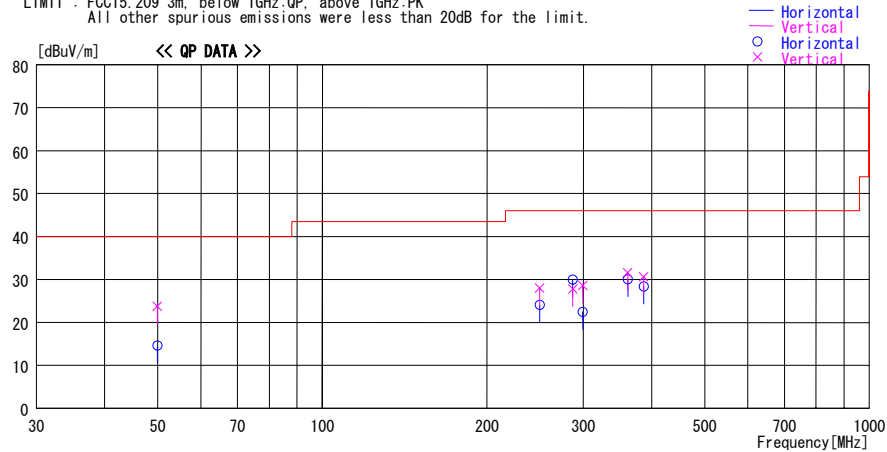
UL Japan, Inc. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2009/04/18

Company : Canon Inc.
Kind of EUT : WLAN Module
Model No. : CH9-1161
Serial No. : ES7004

Report No. : 29EE0246-HO-01
Power : DC 3.3V
Temp./Humi. : 23 deg. C. / 47 %
Engineer : Keisuke Kawamura

Mode / Remarks : IEEE802.11a, Rx 5600MHz, Worst-axis:Module(Hor:Y/Ver:Y), Ant(Hor:Z/Ver:Y)

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:PK
All other spurious emissions were less than 20dB for the limit.



Frequency	Reading	DET	Antenna	Loss&	Level	Angle	Height	Polar.	Limit	Margin	Comment
[MHz]	[dBuV]		Factor	Gain	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]	
49.904	25.9	QP	10.4	-21.7	14.6	305	300	Hori.	40.0	25.4	
49.904	35.0	QP	10.4	-21.7	23.7	337	100	Vert.	40.0	16.3	
249.491	26.3	QP	17.2	-19.4	24.1	178	300	Hori.	46.0	21.9	
249.491	30.2	QP	17.2	-19.4	28.0	221	100	Vert.	46.0	18.0	
286.932	29.7	QP	19.3	-19.0	30.0	197	300	Hori.	46.0	16.0	
286.932	27.5	QP	19.3	-19.0	27.8	137	100	Vert.	46.0	18.2	
299.398	21.4	QP	20.0	-18.9	22.5	153	300	Hori.	46.0	23.5	
299.398	27.5	QP	20.0	-18.9	28.6	213	100	Vert.	46.0	17.4	
361.781	33.4	QP	15.8	-19.1	30.1	209	100	Hori.	46.0	15.9	
361.781	34.9	QP	15.8	-19.1	31.6	246	100	Vert.	46.0	14.4	
386.729	30.6	QP	16.9	-19.1	28.4	244	100	Hori.	46.0	17.6	
386.729	32.8	QP	16.9	-19.1	30.6	248	100	Vert.	46.0	15.4	

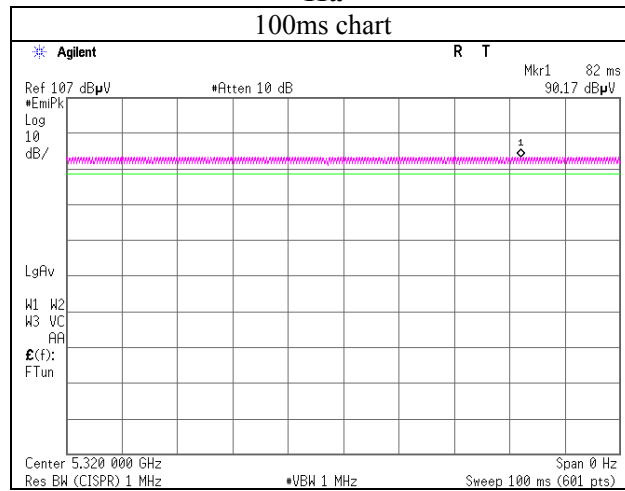
CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-300MHz:BICONICAL, 300MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - GAIN(AMP)

*The limit is rounded down to one decimal place.

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

VBW setting to use of the radiated emission
(Average detector function)

11a



--- VBW Setting ---

$$VBW = 1 / (1 \text{ cycle time}) = 1 / 100 \text{ ms} = 10 \text{ Hz}$$

Radiated Spurious Emission (above 1GHz: Inside of the restricted band)

11a, Tx 5180MHz

UL Japan, Inc.

Head Office EMC Lab. No.4 Anechoic Chamber

Report No. 29EE0146-HO-01

Regulation FCC Part15 Subpart C 15.209 / RSS-210 A9.3

Test Distance 3m (below 10GHz), 1m (above 10GHz)

Date 04/27/2009 04/28/2009

Temperature 20 deg.C. 21 deg.C.

Humidity 41 % 38 %

Engineer Takumi Shimada Takumi Shimada

Company Canon Inc.

Equipment WLAN Module

Model CH9-1161

S/N ES7006

Power DC 3.3V

Mode IEEE802.11a, Tx, 5180MHz, 24Mbps

EUT-Axis H: Y-axis, V: Y-axis

Ant-Axis H: Z-axis, V: Y-axis

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit PK [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	[dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	5150.0	48.8	48.8	32.0	31.9	4.0	0.0	52.9	52.9	73.9	21.0	21.0
2	5460.0	49.0	46.9	32.3	31.9	4.1	0.0	53.5	51.4	73.9	20.4	22.5
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)												
3	15540.0	44.7	45.3	39.0	33.2	7.1	1.1	49.2	49.8	73.9	24.7	24.1
4	20720.0	NS	NS	-	-	-	-	-	-	73.9	-	-

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit AV [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	[dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	5150.0	32.8	33.2	32.0	31.9	4.0	0.0	36.9	37.3	53.9	17.0	16.6
2	5460.0	36.3	34.7	32.3	31.9	4.1	0.0	40.8	39.2	53.9	13.1	14.7
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)												
3	15540.0	31.1	30.8	39.0	33.2	7.1	1.1	35.6	35.3	53.9	18.3	18.6
4	20720.0	NS	NS	-	-	-	-	-	-	53.9	-	-

Test Distance 1.0m : Distance Factor(Dfac(1m)) = $20\log(3.0/1.0) =$

9.5 dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

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

*The limit is rounded down to one decimal place.

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

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

Radiated Spurious Emission (above 1GHz: Inside of the restricted band)

11a, Tx 5220MHz

UL Japan, Inc.

Head Office EMC Lab. No.4 Anechoic Chamber

Report No. 29EE0146-HO-01

Regulation FCC Part15 Subpart C 15.209 / RSS-210 A9.3

Test Distance 3m (below 10GHz), 1m (above 10GHz) , 0.5m (above 26.5GHz)

Date 04/27/2009 04/28/2009

Temperature 20 deg.C. 21 deg.C.

Humidity 41 % 38 %

Engineer Takumi Shimada

Takumi Shimada

Company Canon Inc.

Equipment WLAN Module

Model CH9-1161

S/N ES7006

Power DC 3.3V

Mode IEEE802.11a, Tx, 5220MHz, 24Mbps

EUT-Axis H: Y-axis, V: Y-axis

Ant-Axis H: Z-axis, V: Y-axis

PK DETECT (RBW 1MHz, VBW 1MHz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit PK [dBuV/m]	Margin	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	5460.0	49.0	50.0	32.3	31.9	4.1	0.0	53.5	54.5	73.9	20.4	19.4
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)												
2	15660.0	46.3	45.5	38.7	33.2	7.1	1.1	50.5	49.7	73.9	23.4	24.2
3	20880.0	NS	NS	-	-	-	-	-	-	73.9	-	-
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)												
4	31320.0	NS	NS	-	-	-	-	-	-	73.9	-	-

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit AV [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	5460.0	35.8	35.9	32.3	31.9	4.1	0.0	40.3	40.4	53.9	13.6	13.5
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)												
2	15660.0	31.7	31.3	38.7	33.2	7.1	1.1	35.9	35.5	53.9	18.0	18.4
3	20880.0	NS	NS	-	-	-	-	-	-	53.9	-	-
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)												
4	31320.0	NS	NS	-	-	-	-	-	-	53.9	-	-

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) =

9.5 dB

Test Distance 0.5m : Distance Factor(Dfac(0.5m)) = 20log(3/0.5) =

15.6 dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

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

*The limit is rounded down to one decimal place.

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

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

Radiated Spurious Emission (above 1GHz: Inside of the restricted band)

11a, Tx 5240MHz

UL Japan, Inc.

Head Office EMC Lab. No.4 Anechoic Chamber

Report No. 29EE0146-HO-01

Regulation FCC Part15 Subpart C 15.209 / RSS-210 A9.3

Test Distance 3m (below 10GHz), 1m (above 10GHz), 0.5m (above 26.5GHz)

Date 04/27/2009 04/28/2009

Temperature 20 deg.C. 21 deg.C.

Humidity 41 % 38 %

Engineer Takumi Shimada

Takumi Shimada

Company Canon Inc.

Equipment WLAN Module

Model CH9-1161

S/N ES7006

Power DC 3.3V

Mode IEEE802.11a, Tx, 5240MHz, 24Mbps

EUT-Axis H: Y-axis, V: Y-axis

Ant-Axis H: Z-axis, V: Y-axis

PK DETECT (RBW 1MHz, VBW 1MHz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit PK [dBuV/m]	Margin	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	5460.0	49.7	49.5	32.3	31.9	4.1	0.0	54.2	54.0	73.9	19.7	19.9
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)												
2	15720.0	44.1	44.3	38.6	33.2	7.1	1.1	48.2	48.4	73.9	25.7	25.5
3	20960.0	NS	NS	-	-	-	-	-	-	73.9	-	-
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)												
4	31440.0	NS	NS	-	-	-	-	-	-	73.9	-	-

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit AV [dBuV/m]	Margin	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	5460.0	35.5	35.9	32.3	31.9	4.1	0.0	40.0	40.4	53.9	13.9	13.5
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)												
2	15720.0	31.3	31.0	38.6	33.2	7.1	1.1	35.4	35.1	53.9	18.5	18.8
3	20960.0	NS	NS	-	-	-	-	-	-	53.9	-	-
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)												
4	31440.0	NS	NS	-	-	-	-	-	-	53.9	-	-

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) =

9.5 dB

Test Distance 0.5m : Distance Factor(Dfac(0.5m)) = 20log(3/0.5) =

15.6 dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

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

*The limit is rounded down to one decimal place.

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

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Radiated Spurious Emission (above 1GHz: Inside of the restricted band)

11a, Tx 5260MHz

UL Japan, Inc.

Head Office EMC Lab. No.4 Anechoic Chamber

Company	Canon Inc.	Report No.	29EE0146-HO-01
Equipment	WLAN Module	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Model	CH9-1161	Test Distance	3m (below 10GHz), 1m (above 10GHz), 0.5m (above 26.5GHz)
S/N	ES7006	Date	04/27/2009 04/28/2009
Power	DC 3.3V	Temperature	20 deg.C. 21 deg.C.
Mode	IEEE802.11a, Tx, 5260MHz, 24Mbps	Humidity	41 % 38 %
EUT-Axis	H: Y-axis, V: Y-axis	Engineer	Takumi Shimada Takumi Shimada
Ant-Axis	H: Z-axis, V: Y-axis		

PK DETECT (RBW 1MHz, VBW 1MHz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit PK [dBuV/m]	Margin	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	5460.0	48.3	49.8	32.3	31.9	4.1	0.0	52.8	54.3	73.9	21.1	19.6
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)												
2	15780.0	44.9	41.0	38.5	33.2	7.1	1.1	48.9	45.0	73.9	25.0	28.9
3	21040.0	NS	NS	-	-	-	-	-	-	73.9	-	-
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)												
4	31560.0	NS	NS	-	-	-	-	-	-	73.9	-	-

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit AV [dBuV/m]	Margin	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	5460.0	35.3	37.0	32.3	31.9	4.1	0.0	39.8	41.5	53.9	14.1	12.4
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)												
2	15780.0	32.1	31.0	38.5	33.2	7.1	1.1	36.1	35.0	53.9	17.8	18.9
3	21040.0	NS	NS	-	-	-	-	-	-	53.9	-	-
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)												
4	31560.0	NS	NS	-	-	-	-	-	-	53.9	-	-

Test Distance 1.0m : Distance Factor(Dfac(1m)) = $20\log(3/1.0) = 9.5$ dB
Test Distance 0.5m : Distance Factor(Dfac(0.5m)) = $20\log(3/0.5) = 15.6$ dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

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

*The limit is rounded down to one decimal place.

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

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Radiated Spurious Emission (above 1GHz: Inside of the restricted band)

11a, Tx 5300MHz

UL Japan, Inc.

Head Office EMC Lab. No.4 Anechoic Chamber

Report No. 29EE0146-HO-01

Regulation FCC Part15 Subpart C 15.209 / RSS-210 A9.3

Test Distance 3m (below 10GHz), 1m (above 10GHz), 0.5m (above 26.5GHz)

Date 04/27/2009 04/28/2009

Temperature 20 deg.C. 21 deg.C.

Humidity 41 % 38 %

Engineer Takumi Shimada Takumi Shimada

Company Canon Inc.

Equipment WLAN Module

Model CH9-1161

S/N ES7006

Power DC 3.3V

Mode IEEE802.11a, Tx, 5300MHz, 24Mbps

EUT-Axis H: Y-axis, V: Y-axis

Ant-Axis H: Z-axis, V: Y-axis

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	Freq. [MHz]	Reading HOR VER [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result HOR VER [dBuV/m]		Limit PK [dBuV/m]	Margin HOR VER [dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	5460.0	49.7	49.1	32.3	31.9	4.1	0.0	54.2	53.6	73.9	19.7	20.3
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)												
2	10600.0	52.3	47.1	39.4	33.5	5.7	1.2	55.6	50.4	73.9	18.3	23.5
3	15900.0	42.0	44.2	38.2	33.2	7.1	1.0	45.6	47.8	73.9	28.3	26.1
4	21200.0	NS	NS	-	-	-	-	-	-	73.9	-	-
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)												
5	31800.0	NS	NS	-	-	-	-	-	-	73.9	-	-

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit AV [dBuV/m]	Margin	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	5460.0	35.1	37.7	32.3	31.9	4.1	0.0	39.6	42.2	53.9	14.3	11.7
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)												
2	10600.0	39.4	36.5	39.4	33.5	5.7	1.2	42.7	39.8	53.9	11.2	14.1
3	15900.0	31.1	30.7	38.2	33.2	7.1	1.0	34.7	34.3	53.9	19.2	19.6
4	21200.0	NS	NS	-	-	-	-	-	-	53.9	-	-
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)												
5	31800.0	NS	NS	-	-	-	-	-	-	53.9	-	-

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) =

9.5 dB

Test Distance 0.5m : Distance Factor(Dfac(0.5m)) = 20log(3/0.5) =

15.6 dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

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

*The limit is rounded down to one decimal place.

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

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Radiated Spurious Emission (above 1GHz: Inside of the restricted band)

11a, Tx 5320MHz

UL Japan, Inc.

Head Office EMC Lab. No.4 Anechoic Chamber

Company	Canon Inc.	Report No.	29EE0146-HO-01
Equipment	WLAN Module	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Model	CH9-1161	Test Distance	3m (below 10GHz), 1m (above 10GHz)
S/N	ES7006	Date	04/27/2009 04/28/2009
Power	DC 3.3V	Temperature	20 deg.C. 21 deg.C.
Mode	IEEE802.11a, Tx, 5320MHz, 24Mbps	Humidity	41 % 38 %
EUT-Axis	H: Y-axis, V: Y-axis	Engineer	Takumi Shimada Takumi Shimada
Ant-Axis	H: Z-axis, V: Y-axis		

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit PK [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	5350.0	52.4	54.4	32.2	31.9	4.0	0.0	56.7	58.7	73.9	17.2	15.2
2	5460.0	48.4	48.3	32.3	31.9	4.1	0.0	52.9	52.8	73.9	21.0	21.1
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)												
3	10640.0	50.6	46.5	39.4	33.5	5.7	1.2	53.9	49.8	73.9	20.0	24.1
4	15960.0	43.9	43.6	38.1	33.2	7.1	1.0	47.4	47.1	73.9	26.5	26.8
5	21280.0	NS	NS	-	-	-	-	-	-	73.9	-	-

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit AV [dBuV/m]	Margin		
		HOR	VER					HOR	VER		HOR	VER	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)													
1	5350.0	34.2	36.3	32.2	31.9	4.0	0.0	38.5	40.6	53.9	15.4	13.3	
2	5460.0	34.9	35.3	32.3	31.9	4.1	0.0	39.4	39.8	53.9	14.5	14.1	
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)													
3	10640.0	37.7	36.0	39.4	33.5	5.7	1.2	41.0	39.3	53.9	12.9	14.6	
4	15960.0	31.0	30.6	38.1	33.2	7.1	1.0	34.5	34.1	53.9	19.4	19.8	
5	21280.0	NS	NS	-	-	-	-	-	-	53.9	-	-	

Test Distance 1.0m : Distance Factor(Dfac(1m)) = $20\log(3/1.0) = 9.5 \text{ dB}$

- * Except for the above table : All other spurious emissions were less than 20dB for the limit.
- * In the above table, factor 0.0dB represents no use of Atten. and/or Filter.
- *The limit is rounded down to one decimal place.
- *The test result is rounded off to one or two decimal places, so some differences might be observed.

Radiated Spurious Emission (above 1GHz: Inside of the restricted band)

11a, Tx 5500MHz

UL Japan, Inc.

Head Office EMC Lab. No.4 Anechoic Chamber

Report No. 29EE0146-HO-01

Regulation FCC Part15 Subpart C 15.209 / RSS-210 A9.3

Test Distance 1m (above 10GHz)

Date 04/28/2009

Temperature 21 deg.C.

Humidity 38 %

Engineer Takumi Shimada

Company Canon Inc.
Equipment WLAN Module
Model CH9-1161
S/N ES7006
Power DC 3.3V
Mode IEEE802.11a, Tx, 5500MHz, 24Mbps
EUT-Axis H: Y-axis, V: Y-axis
Ant-Axis H: Z-axis, V: Y-axis

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit PK [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)												
1	11000.0	51.6	48.2	39.8	33.5	5.8	1.3	55.5	52.1	73.9	18.4	21.8

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit AV [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)												
1	11000.0	38.8	35.6	39.8	33.5	5.8	1.3	42.7	39.5	53.9	11.2	14.4

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) =

9.5 dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

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

*The limit is rounded down to one decimal place.

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

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Radiated Spurious Emission (above 1GHz: Inside of the restricted band)

11a, Tx 5600MHz

UL Japan, Inc.

Head Office EMC Lab. No.4 Anechoic Chamber

Report No. 29EE0146-HO-01

Regulation FCC Part15 Subpart C 15.209 / RSS-210 A9.3

Test Distance 1m (above 10GHz), 0.5m (above 26.5GHz)

Date 04/28/2009

Temperature 21 deg.C.

Humidity 38 %

Engineer Takumi Shimada

Company Canon Inc.

Equipment WLAN Module

Model CH9-1161

S/N ES7006

Power DC 3.3V

Mode IEEE802.11a, Tx, 5600MHz, 24Mbps

EUT-Axis H: Y-axis, V: Y-axis

Ant-Axis H: Z-axis, V: Y-axis

PK DETECT (RBW 1MHz, VBW 1MHz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit PK [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	[dB]
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)												
1	11200.0	50.1	46.6	39.8	33.5	5.9	1.2	54.0	50.5	73.9	19.9	23.4
2	22400.0	NS	NS	-	-	-	-	-	-	73.9	-	-
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)												
3	39200.0	NS	NS	-	-	-	-	-	-	73.9	-	-

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit AV [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
[dBuV]												
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)												
1	11200.0	37.8	34.3	39.8	33.5	5.9	1.2	41.7	38.2	53.9	12.2	15.7
2	22400.0	NS	NS	-	-	-	-	-	-	53.9	-	-
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)												
3	39200.0	NS	NS	-	-	-	-	-	-	53.9	-	-

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) =

9.5 dB

Test Distance 0.5m : Distance Factor(Dfac(0.5m)) = 20log(3/0.5) =

15.6 dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

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

*The limit is rounded down to one decimal place.

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

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Radiated Spurious Emission (above 1GHz: Inside of the restricted band)

11a, Tx 5700MHz

UL Japan, Inc.

Head Office EMC Lab. No.4 Anechoic Chamber

Report No. 29EE0146-HO-01

Regulation FCC Part15 Subpart C 15.209 / RSS-210 A9.3

Test Distance 1m (above 10GHz), 0.5m (above 26.5GHz)

Date 04/28/2009

Temperature 21 deg.C.

Humidity 38 %

Engineer Takumi Shimada

Company Canon Inc.

Equipment WLAN Module

Model CH9-1161

S/N ES7006

Power DC 3.3V

Mode IEEE802.11a, Tx, 5700MHz, 24Mbps

EUT-Axis H: Y-axis, V: Y-axis

Ant-Axis H: Z-axis, V: Y-axis

PK DETECT (RBW 1MHz, VBW 1MHz)

No.	Freq. [MHz]	Reading HOR VER [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result HOR VER [dBuV/m]		Limit PK [dBuV/m]	Margin HOR VER [dB]	
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)												
1	11400.0	47.8	45.2	39.9	33.5	6.1	1.1	51.9	49.3	73.9	22.0	24.6
2	22800.0	NS	NS	-	-	-	-	-	-	73.9	-	-
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)												
3	39900.0	NS	NS	-	-	-	-	-	-	73.9	-	-

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	Freq. [MHz]	Reading HOR VER [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result HOR VER [dBuV/m]		Limit AV [dBuV/m]	Margin HOR VER [dB]	
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)												
1	11400.0	34.1	32.6	39.9	33.5	6.1	1.1	38.2	36.7	53.9	15.7	17.2
2	22800.0	NS	NS	-	-	-	-	-	-	53.9	-	-
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)												
3	39900.0	NS	NS	-	-	-	-	-	-	53.9	-	-

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB

Test Distance 0.5m : Distance Factor(Dfac(0.5m)) = 20log(3/0.5) = 15.6 dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

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

*The limit is rounded down to one decimal place.

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

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Radiated Spurious Emission (above 1GHz: Outside of the restricted band)

*used conversion formula

11a, Tx 5180MHz

UL Japan, Inc.

Head Office EMC Lab. No.4 Anechoic Chamber

Report No. 29EE0146-HO-01

Regulation FCC Part15 Subpart E 15.407(b) / RSS-210 A9.3

Test Distance 3m (below 10GHz), 1m (above 10GHz), 0.5m (above 26.5GHz)

Date 04/27/2009 04/28/2009

Temperature 20 deg.C. 21 deg.C.

Humidity 41 % 38 %

Engineer Takumi Shimada Takumi Shimada

Company Canon Inc.

Equipment WLAN Module

Model CH9-1161

S/N ES7006

Power DC 3.3V

Mode IEEE802.11a, Tx, 5180MHz, 24Mbps

EUT-Axis H: Y-axis, V: Y-axis

Ant-Axis H: Z-axis, V: Y-axis

PK detect (RBW 1MHz, VBW 1MHz)

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Lmit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)														
1	5150.00	48.8	48.8	32.0	31.9	4.0	0.0	52.9	52.9	-42.3	-42.3	-27.0	15.3	15.3
Test distance 1meter, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)														
2	10360.00	53.2	50.9	39.1	33.5	5.7	1.2	56.2	53.9	-39.0	-41.3	-27.0	12.0	14.3
3	25900.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-
Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)														
4	31080.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-
5	36260.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-

Result(EIRP[dBm])=10*LOG((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance:3[m]) ^ 2 } / 30) *10^3)

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB
Test Distance 0.5m : Distance Factor(Dfac(0.5m)) = 20log(3/0.5) = 15.56 dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

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

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

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Radiated Spurious Emission (above 1GHz: Outside of the restricted band)

***used conversion formula**

11a, Tx 5220MHz

UL Japan, Inc.

Head Office EMC Lab. No.4 Anechoic Chamber

Report No. 29EE0146-HO-01

Regulation FCC Part15 Subpart E 15.407(b) / RSS-210 A9.3

Test Distance 1m (above 10GHz), 0.5m (above 26.5GHz)

Date 04/28/2009

Temperature 21 deg.C.

Humidity 38 %

Engineer Takumi Shimada

Company Canon Inc.

Equipment WLAN Module

Model CH9-1161

S/N ES7006

Power DC 3.3V

Mode IEEE802.11a, Tx, 5220MHz, 24Mbps

EUT-Axis H: Y-axis, V: Y-axis

Ant-Axis H: Z-axis, V: Y-axis

PK detect

(RBW 1MHz, VBW 1MHz)

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Lmit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
Test distance 1meter, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)														
1	10440.00	53.7	53.0	39.2	33.5	5.7	1.2	56.8	56.1	-38.5	-39.2	-27.0	11.5	12.2
2	26100.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-
Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)														
3	36540.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-

Result(EIRP[dBm])=10*LOG(({ 10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance:3[m]) ^ 2 } / 30) *10^3)

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.54 dB

Test Distance 0.5m : Distance Factor(Dfac(0.5m)) = 20log(3/0.5) = 15.56 dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

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

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

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Radiated Spurious Emission (above 1GHz: Outside of the restricted band)

***used conversion formula**

11a, Tx 5240MHz

UL Japan, Inc.

Head Office EMC Lab. No.4 Anechoic Chamber

Report No. 29EE0146-HO-01

Regulation FCC Part15 Subpart E 15.407(b) / RSS-210 A9.3

Test Distance 1m (above 10GHz), 0.5m (above 26.5GHz)

Date 04/28/2009

Temperature 21 deg.C.

Humidity 38 %

Engineer Takumi Shimada

Company Canon Inc.
Equipment WLAN Module
Model CH9-1161
S/N ES7006
Power DC 3.3V
Mode IEEE802.11a, Tx, 5240MHz, 24Mbps
EUT-Axis H: Y-axis, V: Y-axis
Ant-Axis H: Z-axis, V: Y-axis

PK detect (RBW 1MHz, VBW 1MHz)

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Lmit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
Test distance 1meter, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)														
1	10480.00	53.9	51.3	39.3	33.5	5.7	1.2	57.1	54.5	-38.2	-40.8	-27.0	11.2	13.8
2	26200.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-
Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)														
3	36680.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-

Result(EIRP[dBm])=10*LOG(((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance:3[m]) ^ 2 } / 30) *10^3)

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.54 dB

Test Distance 0.5m : Distance Factor(Dfac(0.5m)) = 20log(3/0.5) = 15.56 dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

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

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

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Radiated Spurious Emission (above 1GHz: Outside of the restricted band)

***used conversion formula**

11a, Tx 5260MHz

UL Japan, Inc.

Head Office EMC Lab. No.4 Anechoic Chamber

Report No. 29EE0146-HO-01

Regulation FCC Part15 Subpart E 15.407(b) / RSS-210 A9.3

Test Distance 1m (above 10GHz), 0.5m (above 26.5GHz)

Date 04/28/2009

Temperature 21 deg.C.

Humidity 38 %

Engineer Takumi Shimada

Company Canon Inc.

Equipment WLAN Module

Model CH9-1161

S/N ES7006

Power DC 3.3V

Mode IEEE802.11a, Tx, 5260MHz, 24Mbps

EUT-Axis H: Y-axis, V: Y-axis

Ant-Axis H: Z-axis, V: Y-axis

PK detect (RBW 1MHz, VBW 1MHz)

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Lmit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
Test distance 1meter, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)														
1	10520.00	53.7	50.5	39.3	33.5	5.7	1.2	56.9	53.7	-38.3	-41.6	-27.0	11.3	14.6
2	26300.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-
Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)														
3	36820.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-

Result(EIRP[dBm])=10*LOG(((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance:3[m]) ^ 2 } / 30) *10^3)

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.54 dB

Test Distance 0.5m : Distance Factor(Dfac(0.5m)) = 20log(3/0.5) = 15.56 dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

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

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

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Radiated Spurious Emission (above 1GHz: Outside of the restricted band)

***used conversion formula**

11a, Tx 5300MHz

UL Japan, Inc.

Head Office EMC Lab. No.4 Anechoic Chamber

Report No. 29EE0146-HO-01

Regulation FCC Part15 Subpart E 15.407(b) / RSS-210 A9.3

Test Distance 1m (above 10GHz), 0.5m (above 26.5GHz)

Date 04/28/2009

Temperature 21 deg.C.

Humidity 38 %

Engineer Takumi Shimada

Company Canon Inc.

Equipment WLAN Module

Model CH9-1161

S/N ES7006

Power DC 3.3V

Mode IEEE802.11a, Tx, 5300MHz, 24Mbps

EUT-Axis H: Y-axis, V: Y-axis

Ant-Axis H: Z-axis, V: Y-axis

PK detect (RBW 1MHz, VBW 1MHz)

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Lmit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
Test distance 1meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)														
1	10600.00	52.3	47.1	39.4	33.5	5.7	1.2	55.6	50.4	-39.7	-44.9	-27.0	12.7	17.9
Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)														
2	26500.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-
3	37100.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-

Result(EIRP[dBm])=10*LOG((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance:3[m]) ^ 2 / 30) *10^3)

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.54 dB

Test Distance 0.5m : Distance Factor(Dfac(0.5m)) = 20log(3/0.5) = 15.56 dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

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

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

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Radiated Spurious Emission (above 1GHz: Outside of the restricted band)

***used conversion formula**

11a, Tx 5320MHz

UL Japan, Inc.

Head Office EMC Lab. No.4 Anechoic Chamber

Report No. 29EE0146-HO-01

Regulation FCC Part15 Subpart E 15.407(b) / RSS-210 A9.3

Test Distance 3m (below 10GHz), 0.5m (above 26.5GHz)

Date 04/27/2009 04/28/2009

Temperature 20 deg.C. 21 deg.C.

Humidity 41 % 38 %

Engineer Takumi Shimada Takumi Shimada

Company Canon Inc.
Equipment WLAN Module
Model CH9-1161
S/N ES7006
Power DC 3.3V
Mode IEEE802.11a, Tx, 5320MHz, 24Mbps
EUT-Axis H: Y-axis, V: Y-axis
Ant-Axis H: Z-axis, V: Y-axis

PK detect (RBW 1MHz, VBW 1MHz)

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Lmit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)														
1	5350.00	49.0	50.0	32.3	31.9	4.0	0.0	53.4	54.4	-41.8	-40.8	-27.0	14.8	13.8
Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)														
2	26600.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-
3	31920.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-
4	37240.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-

Result(EIRP[dBm])=10*LOG(({ 10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance:3[m]) ^ 2 } / 30) *10^3)

Test Distance 0.5m : Distance Factor(Dfac(0.5m)) = 20log(3/0.5) = 15.56 dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

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

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

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Radiated Spurious Emission (above 1GHz: Outside of the restricted band)

*used conversion formula

11a, Tx 5500MHz

UL Japan, Inc.

Head Office EMC Lab. No.4 Anechoic Chamber

Report No. 29EE0146-HO-01

Regulation FCC Part15 Subpart E 15.407(b) / RSS-210 A9.3

Test Distance 3m (below 10GHz), 1m (above 10GHz), 0.5m (above 26.5GHz)

Date 04/27/2009 04/28/2009

Temperature 20 deg.C. 21 deg.C.

Humidity 41 % 38 %

Engineer Takumi Shimada Takumi Shimada

Company Canon Inc.

Equipment WLAN Module

Model CH9-1161

S/N ES7006

Power DC 3.3V

Mode IEEE802.11a, Tx, 5500MHz, 24Mbps

EUT-Axis H: Y-axis, V: Y-axis

Ant-Axis H: Z-axis, V: Y-axis

PK detect

(RBW 1MHz, VBW 1MHz)

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Lmit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)														
1	5470.00	47.6	46.9	32.3	31.9	4.1	0.0	52.1	51.4	-43.1	-43.8	-27.0	16.1	16.8
Test distance 1meter, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)														
2	16500.00	44.0	43.3	39.0	33.3	7.2	1.0	48.4	47.7	-46.9	-47.6	-27.0	19.9	20.6
3	22000.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-
Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)														
4	27500.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-
5	33000.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-
6	38500.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-

Result(EIRP[dBm])=10*LOG(({ 10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance:3[m]) ^ 2 } / 30) *10^3)

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) =

9.5 dB

Test Distance 0.5m : Distance Factor(Dfac(0.5m)) = 20log(3/0.5) =

15.6 dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

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

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

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Radiated Spurious Emission (above 1GHz: Outside of the restricted band)

***used conversion formula**

11a, Tx 5600MHz

UL Japan, Inc.

Head Office EMC Lab. No.4 Anechoic Chamber

Report No. 29EE0146-HO-01

Regulation FCC Part15 Subpart E 15.407(b) / RSS-210 A9.3

Test Distance 3m (below 10GHz), 1m (above 10GHz), 0.5m (above 26.5GHz)

Date 04/27/2009 04/28/2009

Temperature 20 deg.C. 21 deg.C.

Humidity 41 % 38 %

Engineer Takumi Shimada Takumi Shimada

Company Canon Inc.

Equipment WLAN Module

Model CH9-1161

S/N ES7006

Power DC 3.3V

Mode IEEE802.11a, Tx, 5600MHz, 24Mbps

EUT-Axis H: Y-axis, V: Y-axis

Ant-Axis H: Z-axis, V: Y-axis

PK detect (RBW 1MHz, VBW 1MHz)

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Lmit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)														
1	5470.00	45.2	47.4	32.3	31.9	4.1	0.0	49.7	51.9	-45.5	-43.3	-27.0	18.5	16.3
Test distance 1meter, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)														
2	16800.00	43.6	43.4	39.6	33.3	7.3	0.9	48.6	48.4	-46.7	-46.9	-27.0	19.7	19.9
Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)														
3	28000.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-
4	33600.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-

Result(EIRP[dBm])=10*LOG (({ 10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance:3[m]) ^ 2 } / 30) *10^3)

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB

Test Distance 0.5m : Distance Factor(Dfac(0.5m)) = 20log(3/0.5) = 15.6 dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

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

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

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Radiated Spurious Emission (above 1GHz: Outside of the restricted band)

***used conversion formula**

11a, Tx 5700MHz

UL Japan, Inc.

Head Office EMC Lab. No.4 Anechoic Chamber

Report No. 29EE0146-HO-01

Regulation FCC Part15 Subpart E 15.407(b) / RSS-210 A9.3

Test Distance 3m (below 10GHz), 1m (above 10GHz), 0.5m (above 26.5GHz)

Date 04/27/2009 04/28/2009

Temperature 20 deg.C. 21 deg.C.

Humidity 41 % 38 %

Engineer Takumi Shimada Takumi Shimada

Company Canon Inc.

Equipment WLAN Module

Model CH9-1161

S/N ES7006

Power DC 3.3V

Mode IEEE802.11a, Tx, 5700MHz, 24Mbps

EUT-Axis H: Y-axis, V: Y-axis

Ant-Axis H: Z-axis, V: Y-axis

PK detect (RBW 1MHz, VBW 1MHz)

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Lmit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)														
1	5725.00	54.4	51.3	32.6	32.0	4.2	0.0	59.2	56.1	-36.0	-39.1	-27.0	9.0	12.1
Test distance 1meter, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)														
2	17100.00	43.6	43.8	40.5	33.3	7.3	0.9	49.5	49.7	-45.8	-45.6	-27.0	18.8	18.6
Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)														
3	28500.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-
4	34200.00	NS	NS	-	-	-	-	-	-	-	-	-27.0	-	-

Result(EIRP[dBm])=10*LOG((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance:3[m]) ^ 2) / 30) *10^3)

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB

Test Distance 0.5m : Distance Factor(Dfac(0.5m)) = 20log(3/0.5) = 15.6 dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

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

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

UL Japan, Inc.

Head Office EMC Lab.

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Radiated Spurious Emission (above 1GHz, Receiver)

11a, Rx, 5220MHz

UL Japan, Inc.

Head Office EMC Lab. No.2 Anechoic Chamber

Report No. 29EE0146-HO-01

Regulation FCC Part15 Subpart B 15.109 / RSS-210 A9.3

Test Distance 3m (below 10GHz), 1m (above 10GHz), 0.5m (above 26.5GHz)

Date 03/26/2009

Temperature 23 deg.C.

Humidity 41 %

Engineer Keisuke Kawamura

Company Canon Inc.
Equipment WLAN Module
Model CH9-1161
S/N ES7004
Power DC 3.3V
Mode IEEE802.11a, Rx, 5220MHz
EUT-Axis H: Y-axis, V: Y-axis
Ant-Axis H: Z-axis, V: Y-axis

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING HOR VER [dBuV]		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	RESULT HOR VER [dBuV/m]		Limit PK [dBuV/m]	MARGIN HOR VER [dB]	
		Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss									
1	5220.00	37.1	36.7	31.6	31.2	3.8	41.3	40.9	73.9	32.6	33.0
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss - Dfac											
2	10440.00	44.7	44.7	39.3	31.7	4.9	47.7	47.7	73.9	26.2	26.2
3	15660.00	40.7	41.0	37.8	29.7	6.1	45.4	45.7	73.9	28.5	28.2

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER				HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss											
1	5220.00	25.8	25.8	31.6	31.2	3.8	30.0	30.0	53.9	23.9	23.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss - Dfac											
2	10440.00	36.0	35.7	39.3	31.7	4.9	39.0	38.7	53.9	14.9	15.2
3	15660.00	28.0	27.9	37.8	29.7	6.1	32.7	32.6	53.9	21.2	21.3

Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3.0/1.0) = 9.5$ dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*Hi-Pass Filter was not used for factor 0.0dB of the above table.

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

UL Japan, Inc.

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Radiated Spurious Emission (above 1GHz, Receiver)

11a, Rx, 5300MHz

UL Japan, Inc.

Head Office EMC Lab. No.2 Anechoic Chamber

Report No. 29EE0146-HO-01

Regulation FCC Part15 Subpart B 15.109 / RSS-210 A9.3

Test Distance 3m (below 10GHz), 1m (above 10GHz), 0.5m (above 26.5GHz)

Date 03/26/2009

Temperature 23 deg.C.

Humidity 41 %

Engineer Keisuke Kawamura

Company Canon Inc.
Equipment WLAN Module
Model CH9-1161
S/N ES7004
Power DC 3.3V
Mode IEEE802.11a, Rx, 5300MHz
EUT-Axis H: Y-axis, V: Y-axis
Ant-Axis H: Z-axis, V: Y-axis

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING HOR VER [dBuV]		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	RESULT HOR VER [dBuV/m]		Limit PK [dBuV/m]	MARGIN HOR VER [dB]	
		Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss									
1	5300.00	38.0	37.9	31.6	31.2	3.8	42.2	42.1	73.9	31.7	31.8
		Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss - Dfac									
2	10600.00	44.1	44.6	39.4	31.6	4.9	47.3	47.8	73.9	26.6	26.1
3	15900.00	40.3	41.0	37.2	29.8	6.1	44.3	45.0	73.9	29.6	28.9

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING HOR VER [dBuV]		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	RESULT HOR VER [dBuV/m]		Limit AV [dBuV/m]	MARGIN HOR VER [dB]	
		Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss									
1	5300.00	26.3	26.2	31.6	31.2	3.8	30.5	30.4	53.9	23.4	23.5
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss - Dfac											
2	10600.00	36.2	36.9	39.4	31.6	4.9	39.4	40.1	53.9	14.5	13.8
3	15900.00	28.1	28.2	37.2	29.8	6.1	32.1	32.2	53.9	21.8	21.7

Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3.0/1.0) = 9.5$ dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*Hi-Pass Filter was not used for factor 0.0dB of the above table.

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

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Radiated Spurious Emission (above 1GHz, Receiver)

11a, Rx, 5600MHz

UL Japan, Inc.

Head Office EMC Lab. No.2 Anechoic Chamber

Report No. 29EE0146-HO-01

Regulation FCC Part15 Subpart B 15.109 / RSS-210 A9.3

Test Distance 3m (below 10GHz), 1m (above 10GHz), 0.5m (above 26.5GHz)

Date 03/26/2009

Temperature 23 deg.C.

Humidity 41 %

Engineer Keisuke Kawamura

Company Canon Inc.
Equipment WLAN Module
Model CH9-1161
S/N ES7004
Power DC 3.3V(AC Adapter:AC120V/60Hz)
Mode IEEE802.11a, Rx, 5600MHz
EUT-Axis H: Y-axis, V: Y-axis
Ant-Axis H: Z-axis, V: Y-axis

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING HOR VER [dBuV]		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	RESULT HOR VER [dBuV/m]		Limit PK [dBuV/m]	MARGIN HOR VER [dB]	
		Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss									
1	5600.00	38.2	39.3	31.9	31.2	3.9	42.8	43.9	73.9	31.1	30.0
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss - Dfac											
2	11200.00	46.4	45.0	39.7	31.1	5.1	50.6	49.2	73.9	23.3	24.7
3	16800.00	40.8	41.0	39.5	29.9	6.4	47.3	47.5	73.9	26.6	26.4

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING HOR VER [dBuV]		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	RESULT HOR VER [dBuV/m]		Limit AV [dBuV/m]	MARGIN HOR VER [dB]	
		Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss									
1	5600.00	26.5	26.4	31.9	31.2	3.9	31.1	31.0	53.9	22.8	22.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss - Dfac											
2	11200.00	40.7	37.7	39.7	31.1	5.1	44.9	41.9	53.9	9.0	12.0
3	16800.00	27.5	27.6	39.5	29.9	6.4	34.0	34.1	53.9	19.9	19.8

Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3.0/1.0) = 9.5$ dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*Hi-Pass Filter was not used for factor 0.0dB of the above table.

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

UL Japan, Inc.

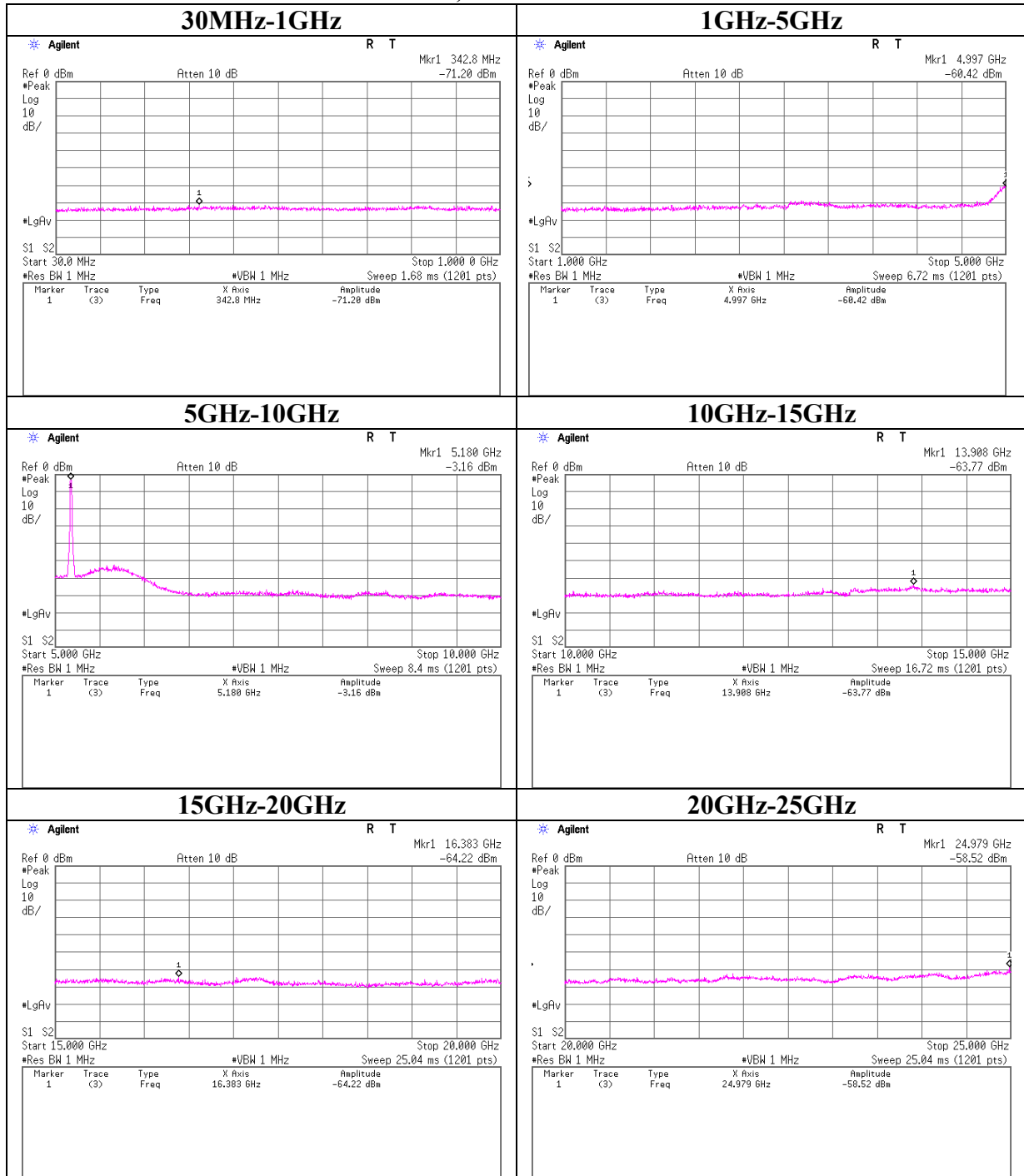
Head Office EMC Lab.

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

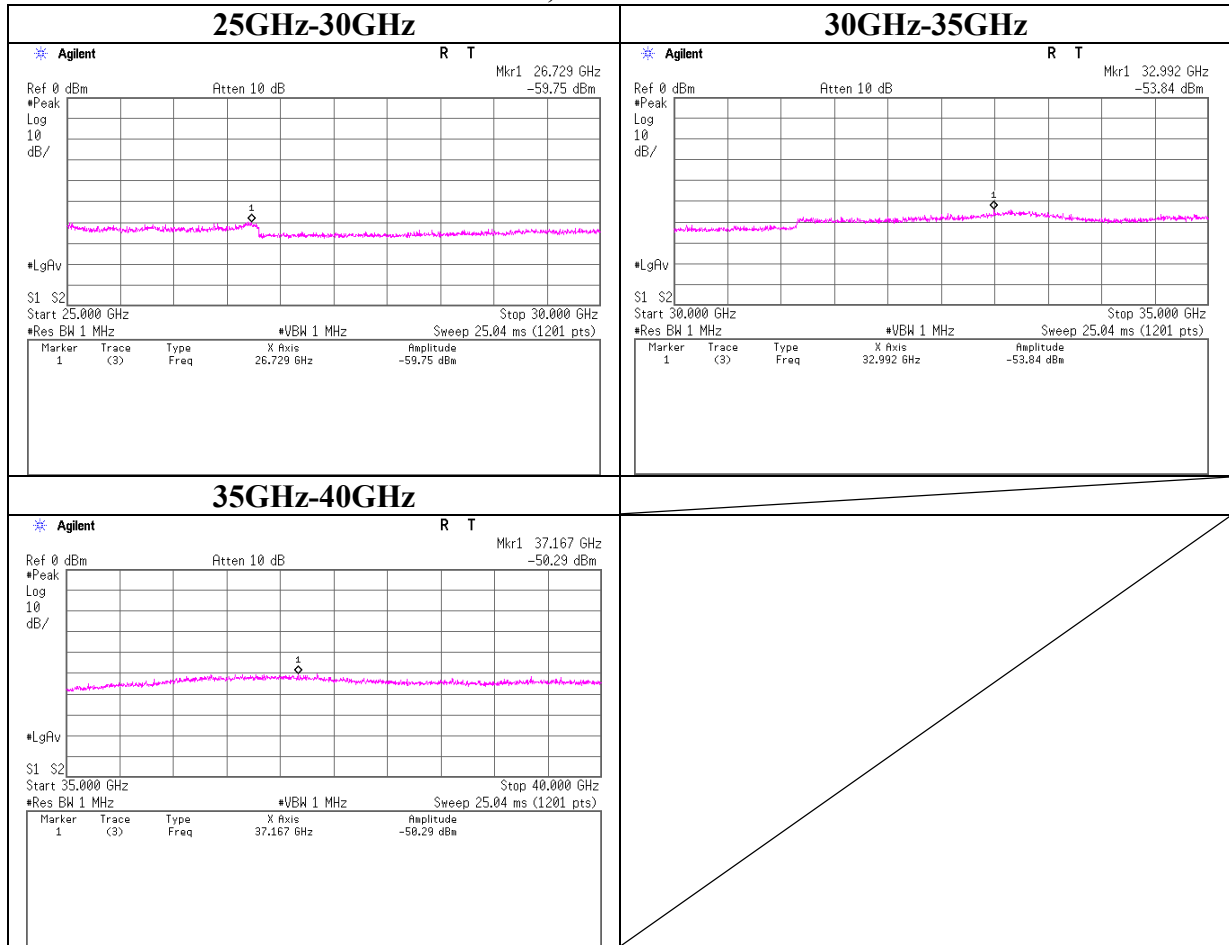
Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

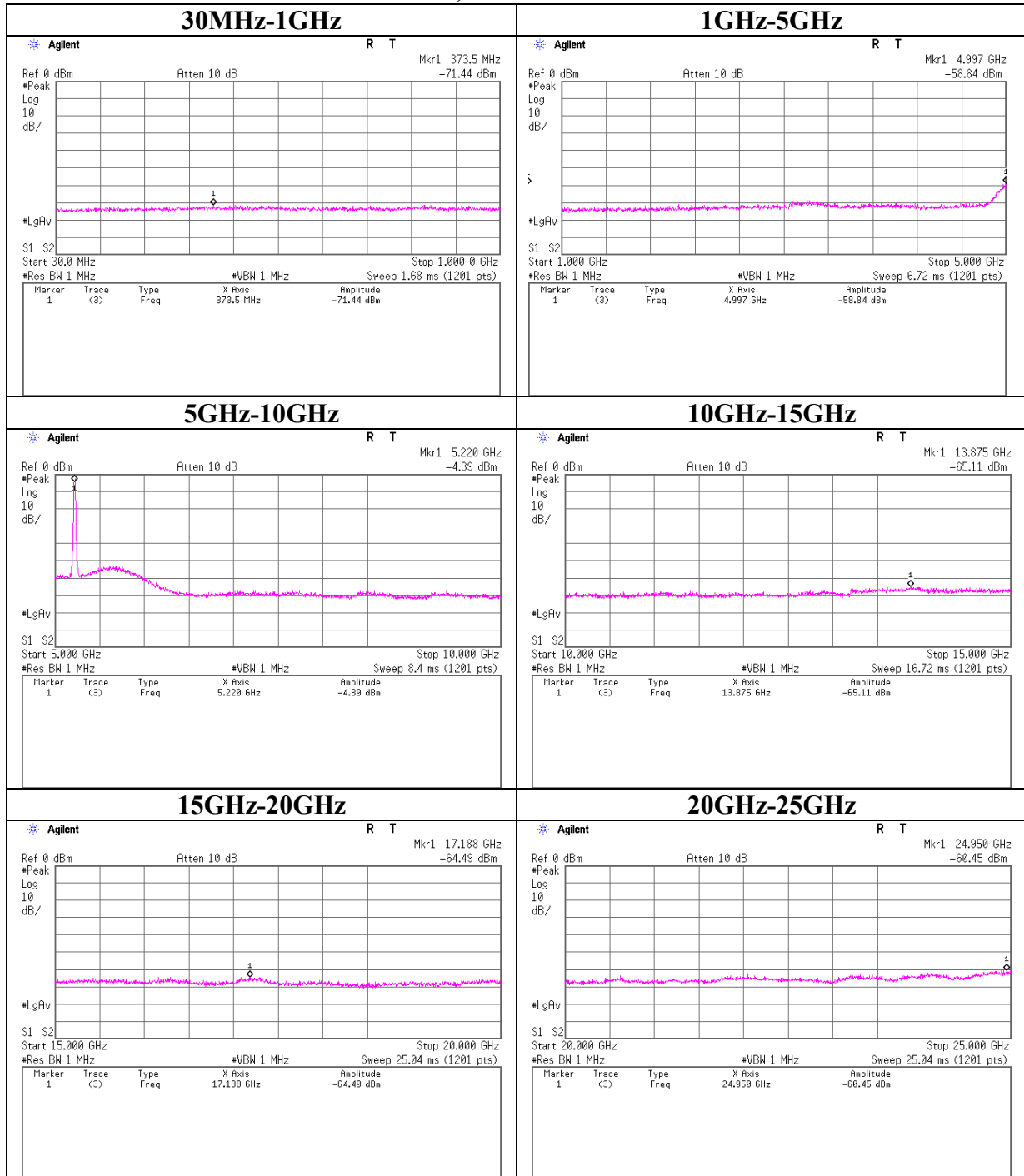
Conducted Spurious Emission
11a, Tx 5180MHz



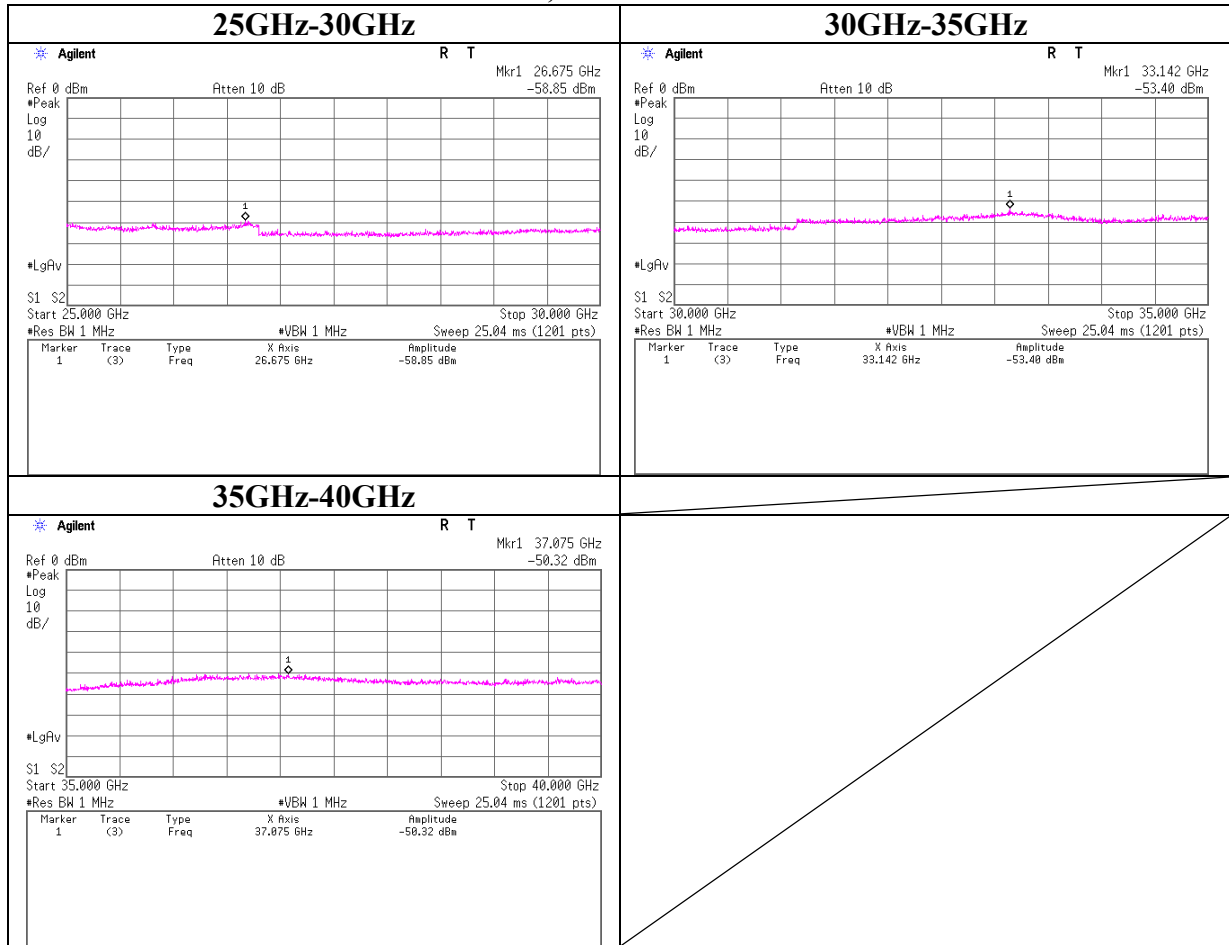
Conducted Spurious Emission
11a, Tx 5180MHz



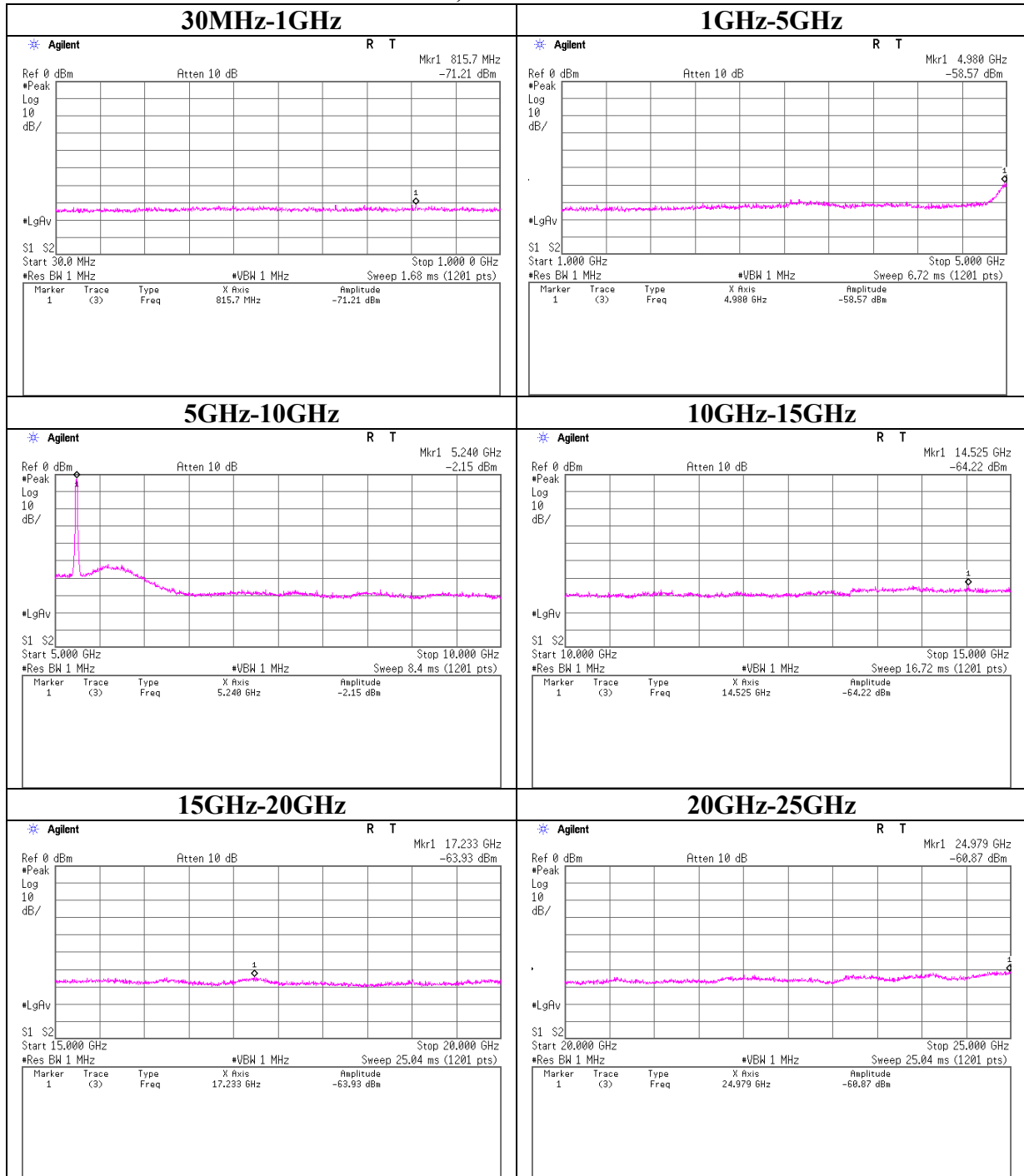
Conducted Spurious Emission
11a, Tx 5220MHz



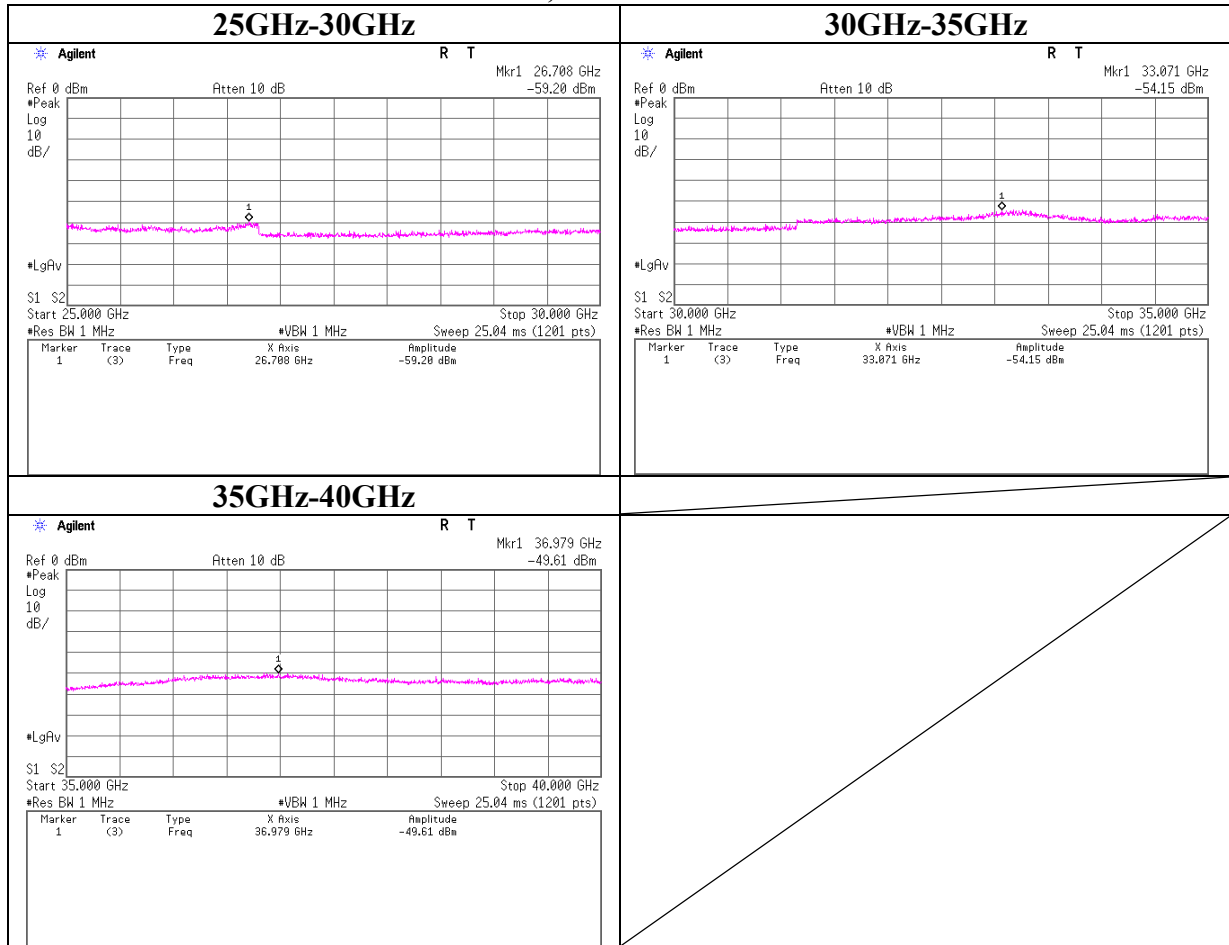
Conducted Spurious Emission
11a, Tx 5220MHz



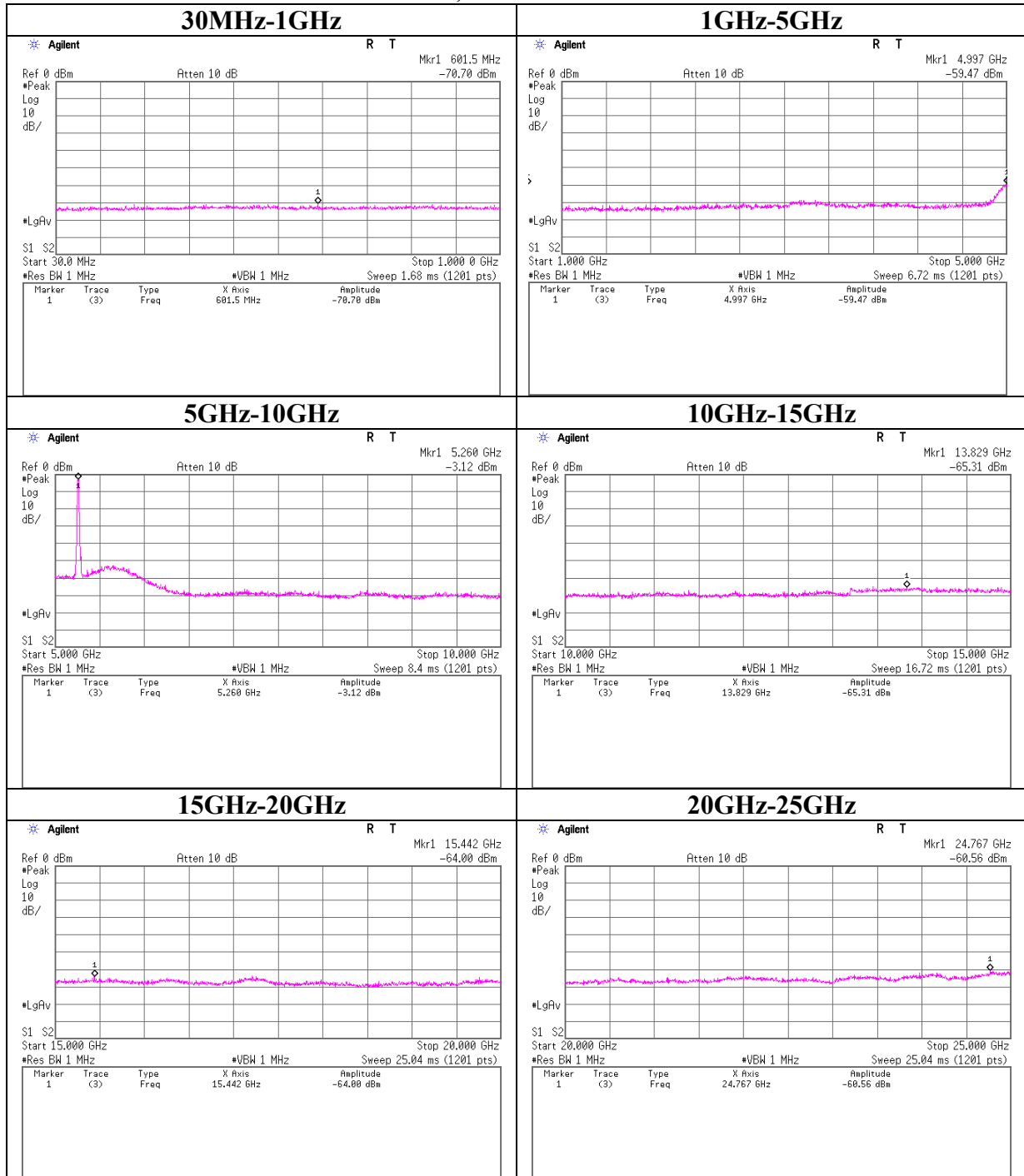
Conducted Spurious Emission
11a, Tx 5240MHz



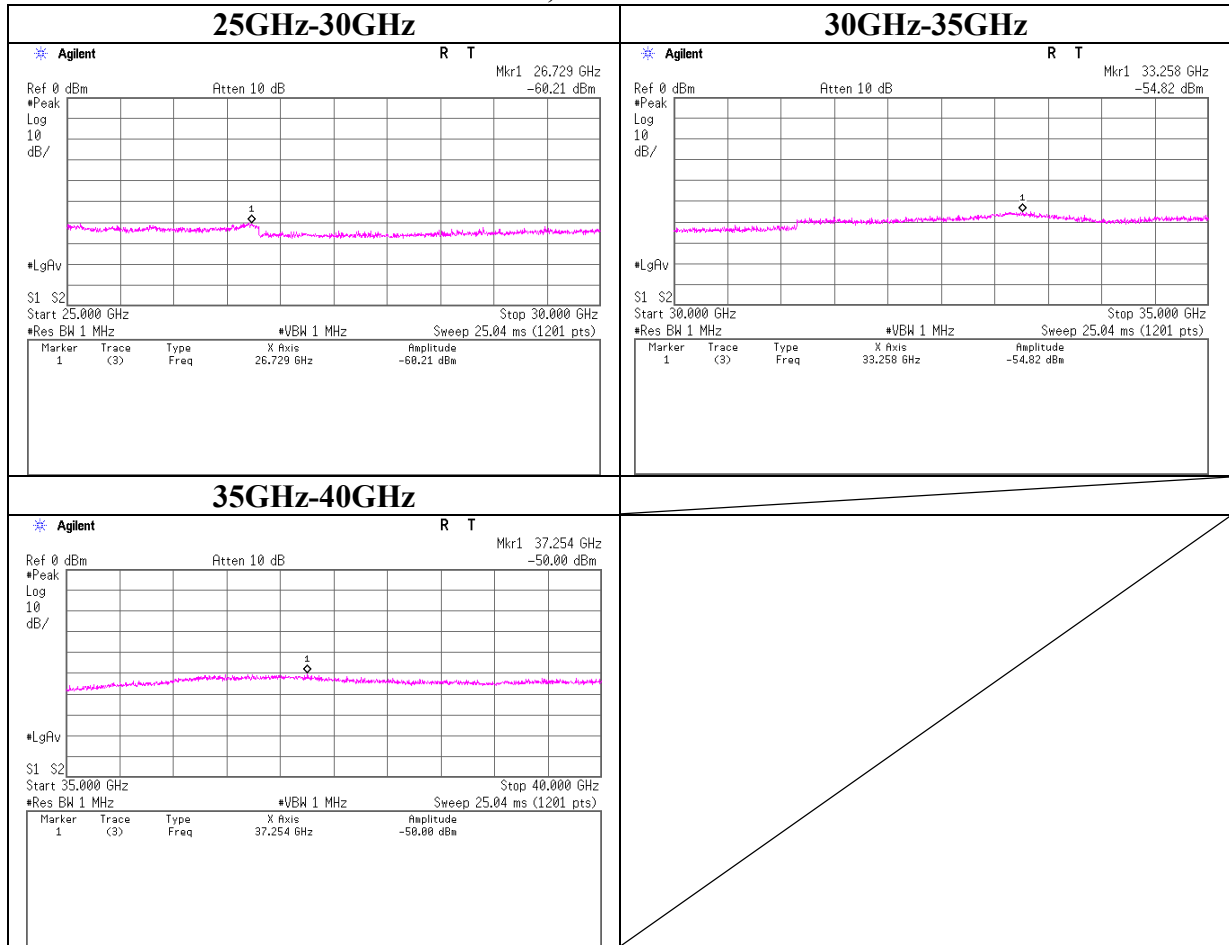
Conducted Spurious Emission
11a, Tx 5240MHz



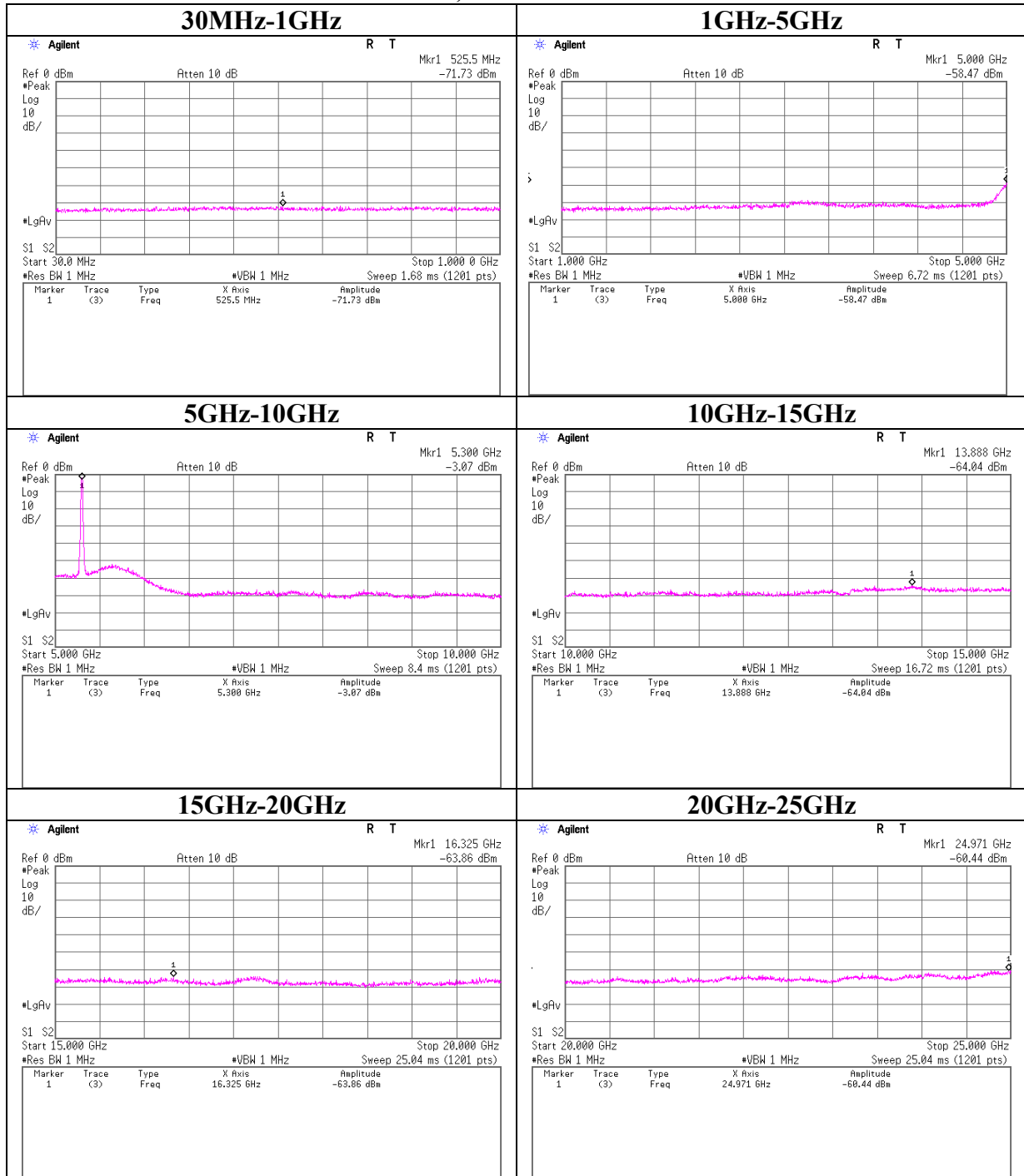
Conducted Spurious Emission
11a, Tx 5260MHz



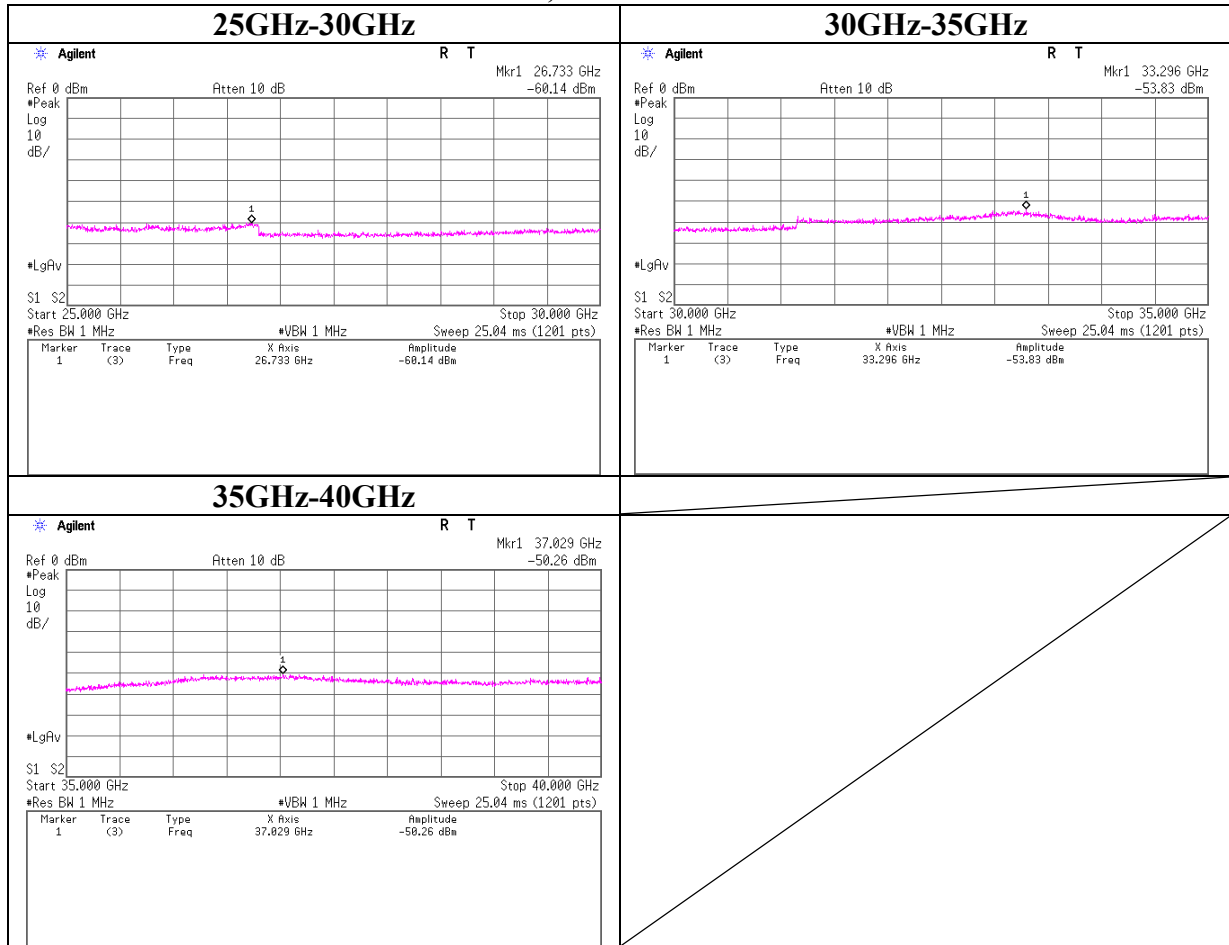
Conducted Spurious Emission
11a, Tx 5260MHz



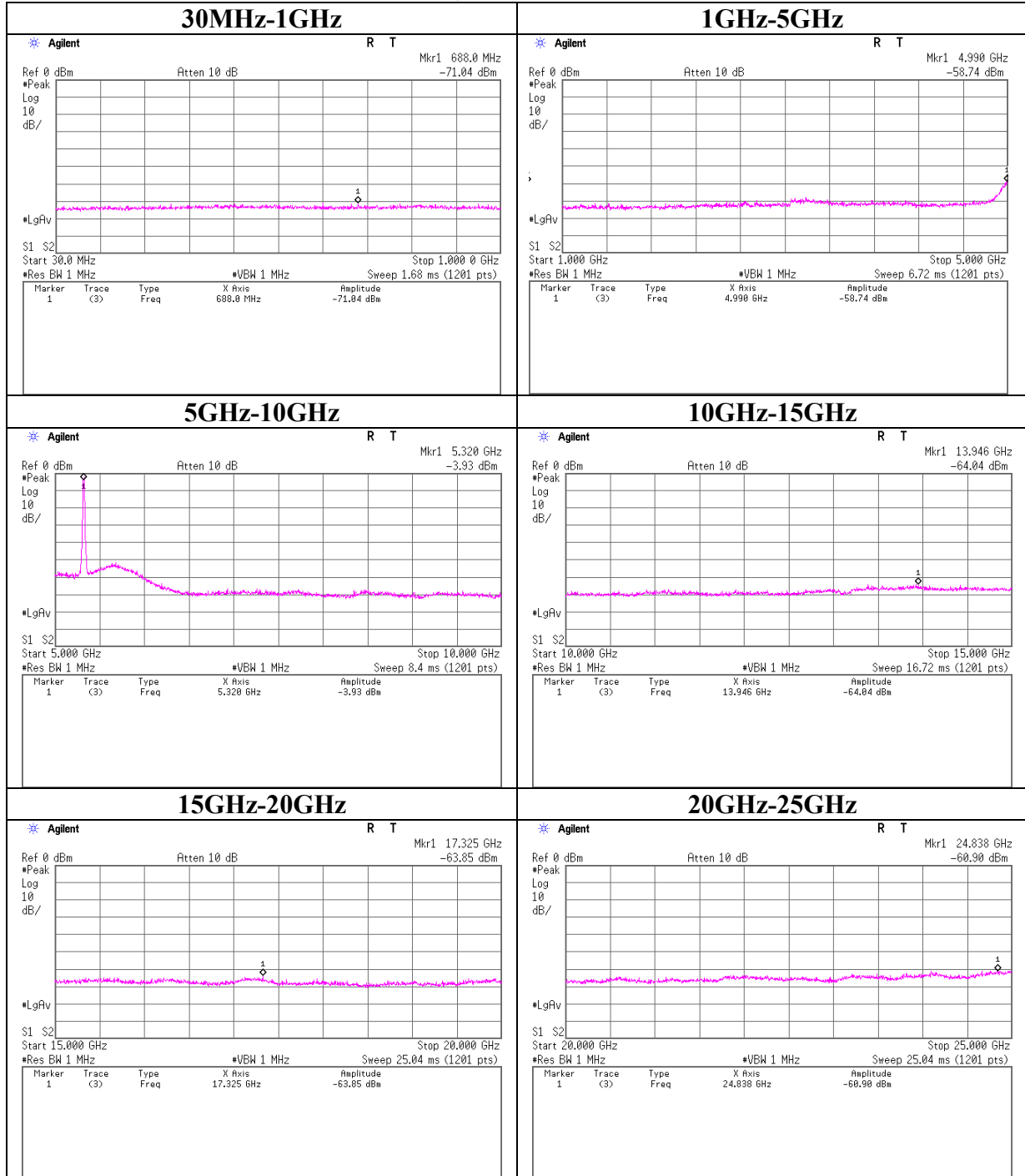
Conducted Spurious Emission
11a, Tx 5300MHz



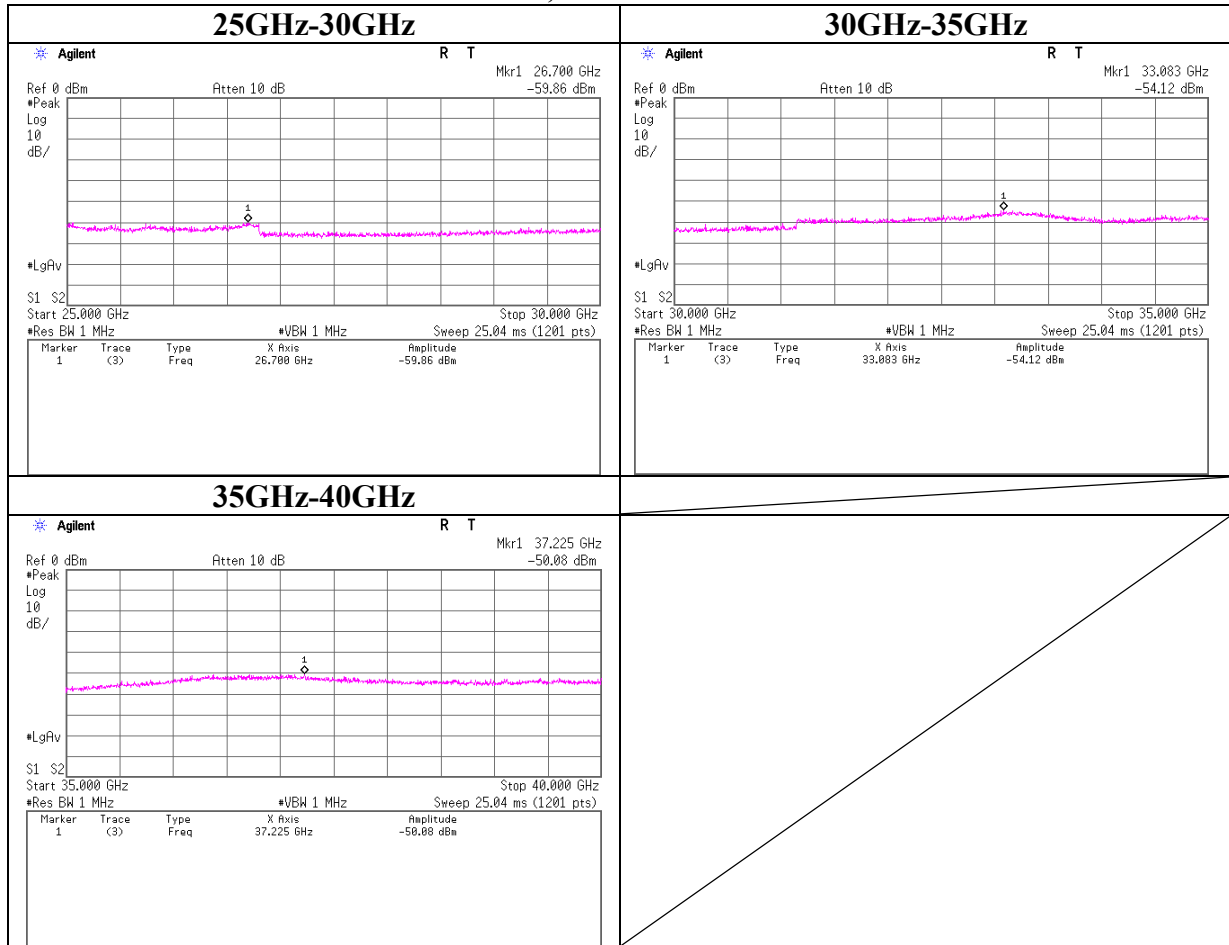
Conducted Spurious Emission
11a, Tx 5300MHz



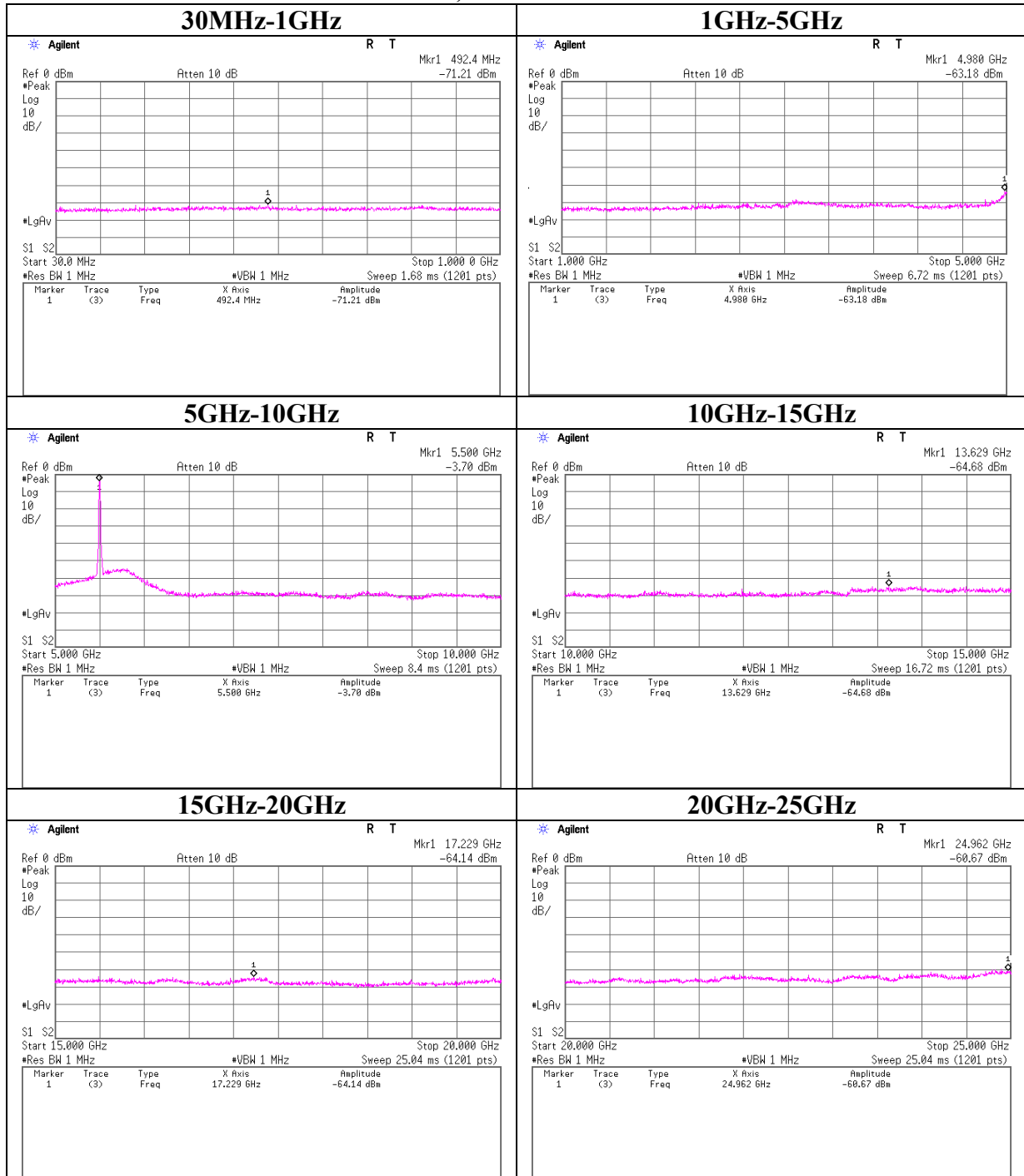
Conducted Spurious Emission
11a, Tx 5320MHz



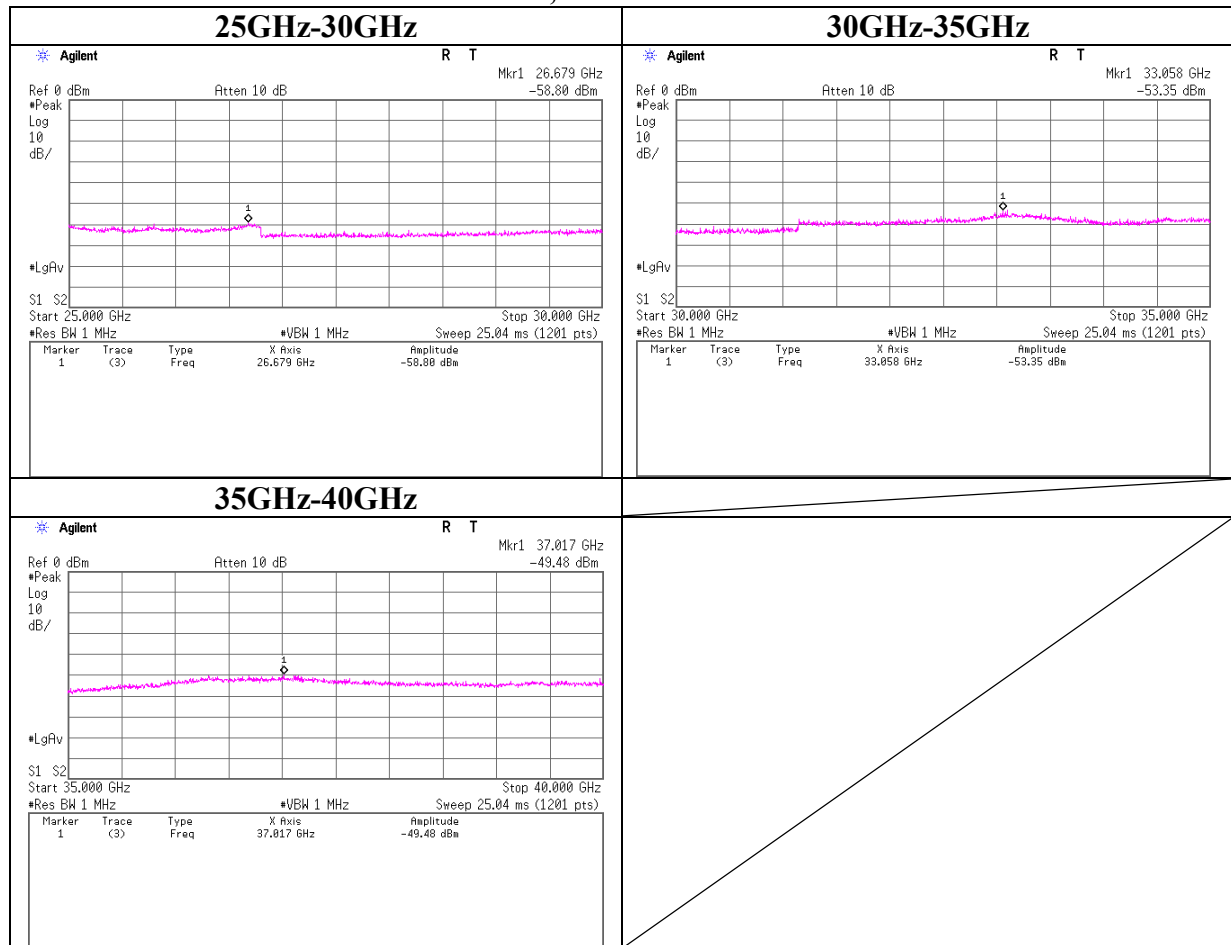
Conducted Spurious Emission
11a, Tx 5320MHz



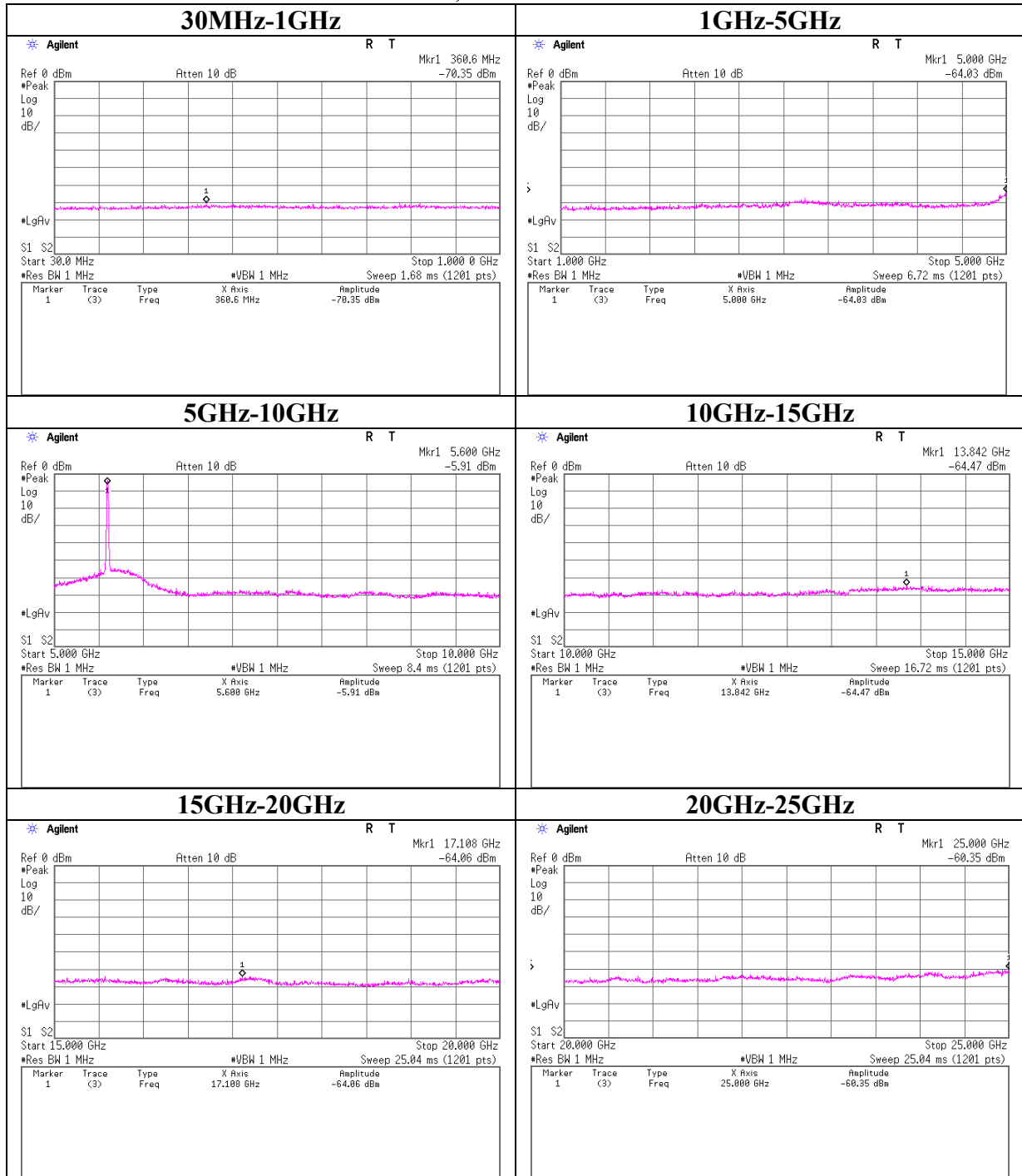
Conducted Spurious Emission
11a, Tx 5500MHz



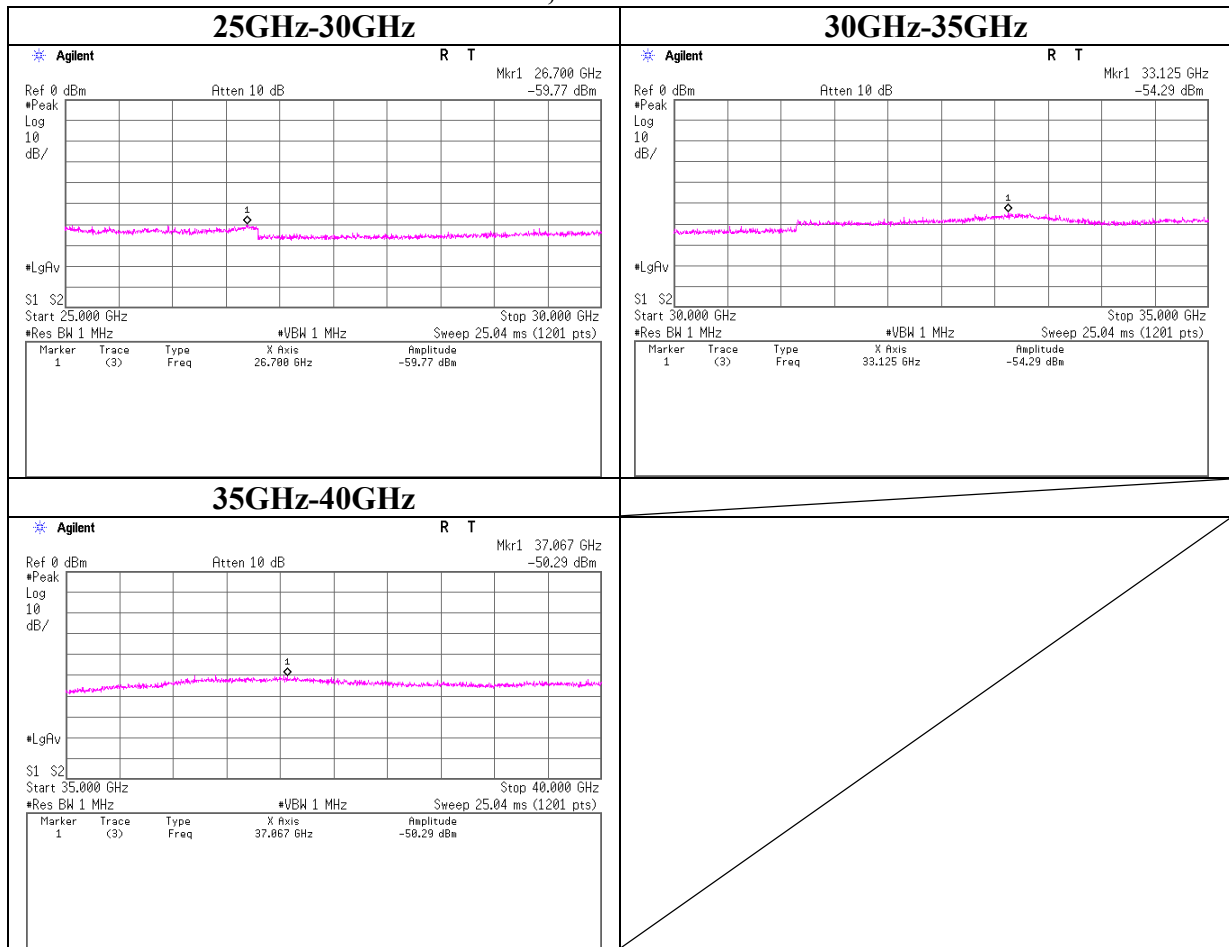
Conducted Spurious Emission
11a, Tx 5500MHz



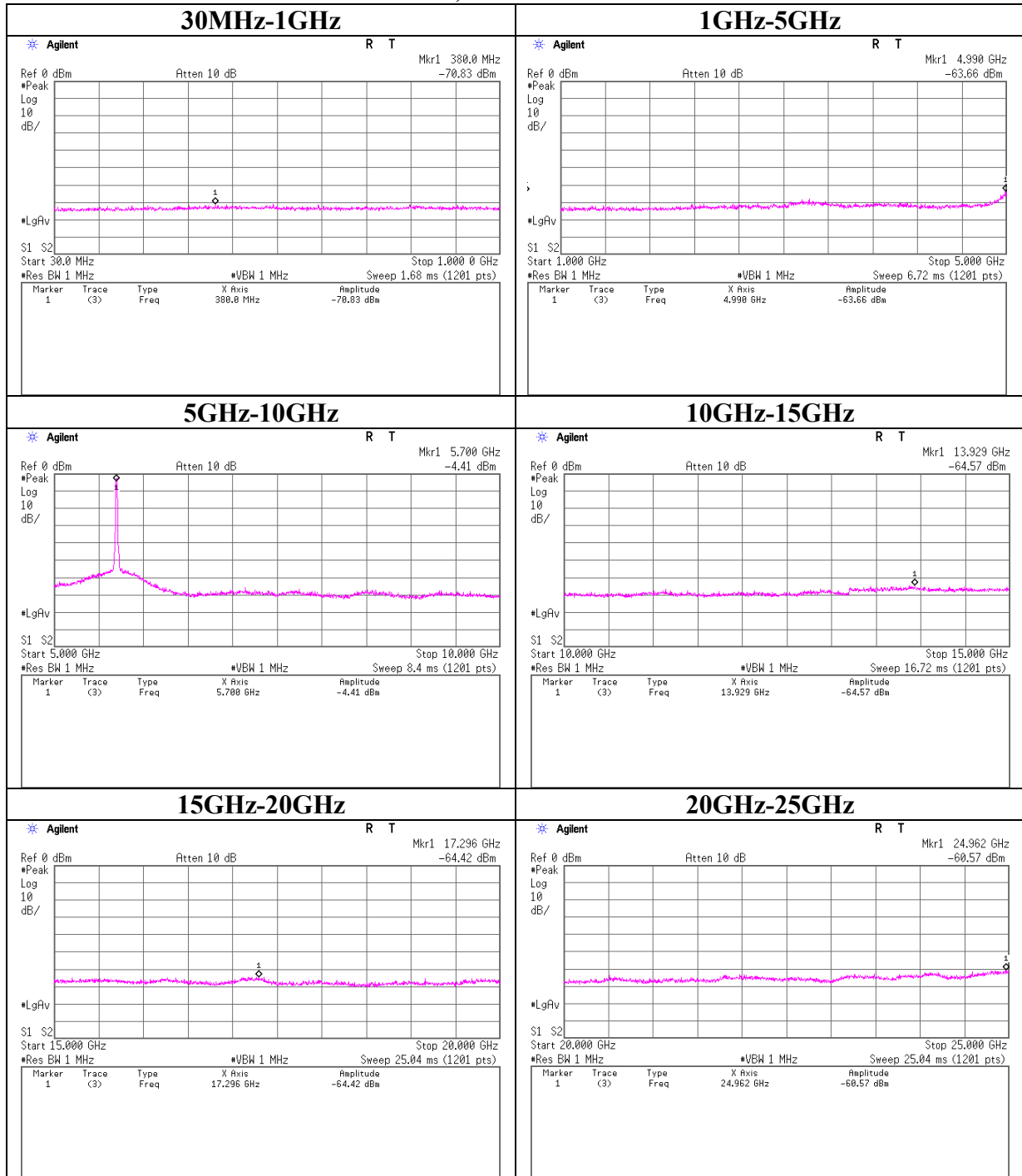
Conducted Spurious Emission
11a, Tx 5600MHz



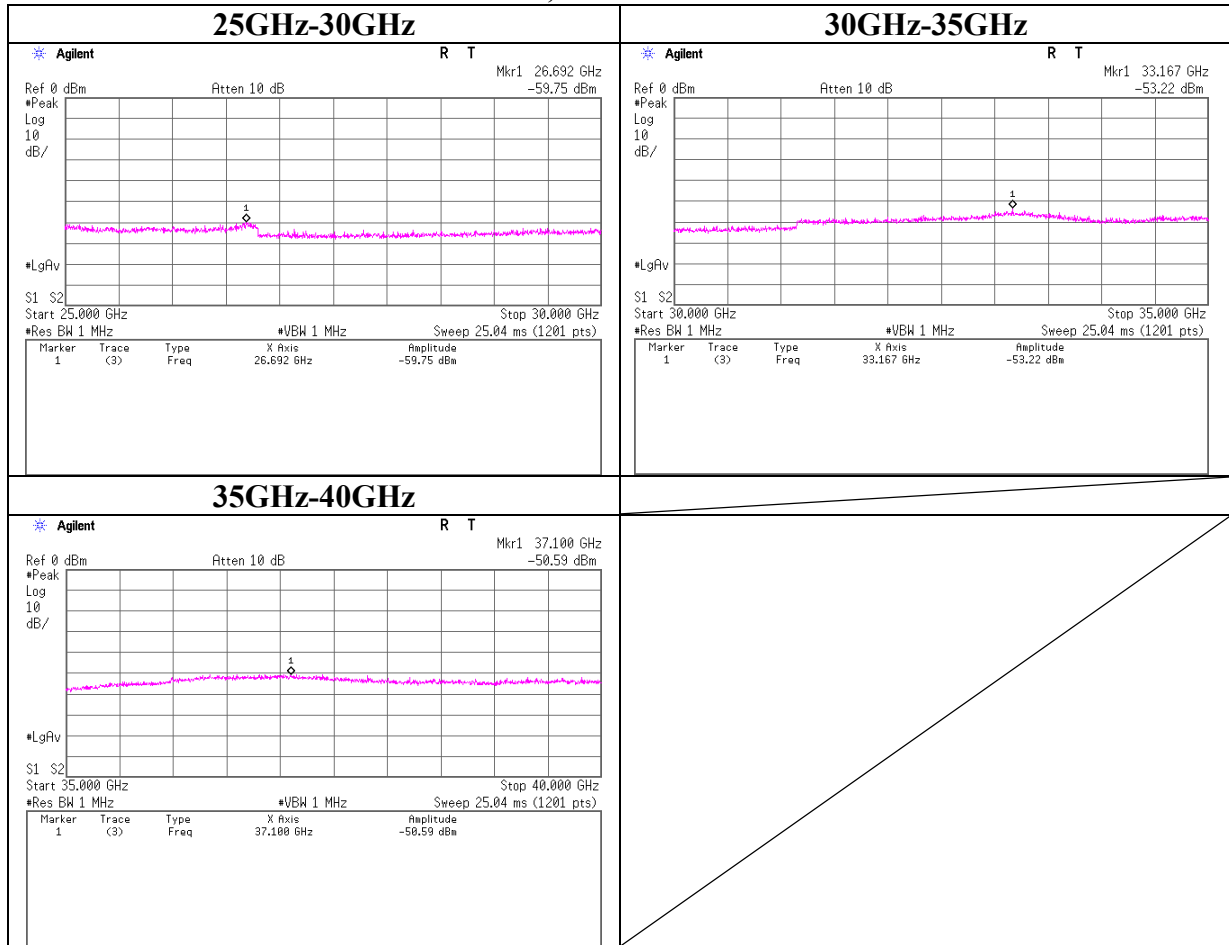
Conducted Spurious Emission
11a, Tx 5600MHz



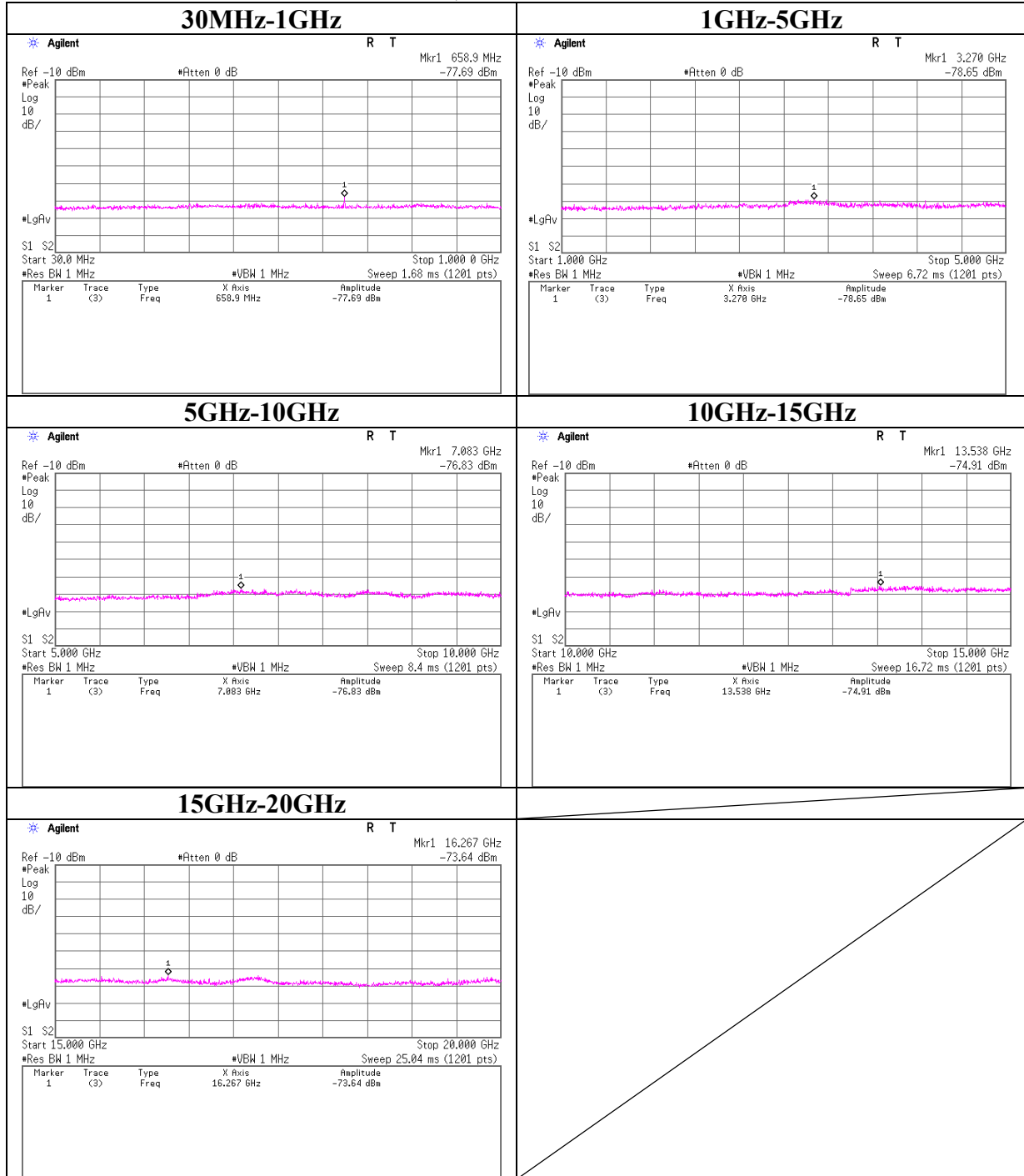
Conducted Spurious Emission
11a, Tx 5700MHz



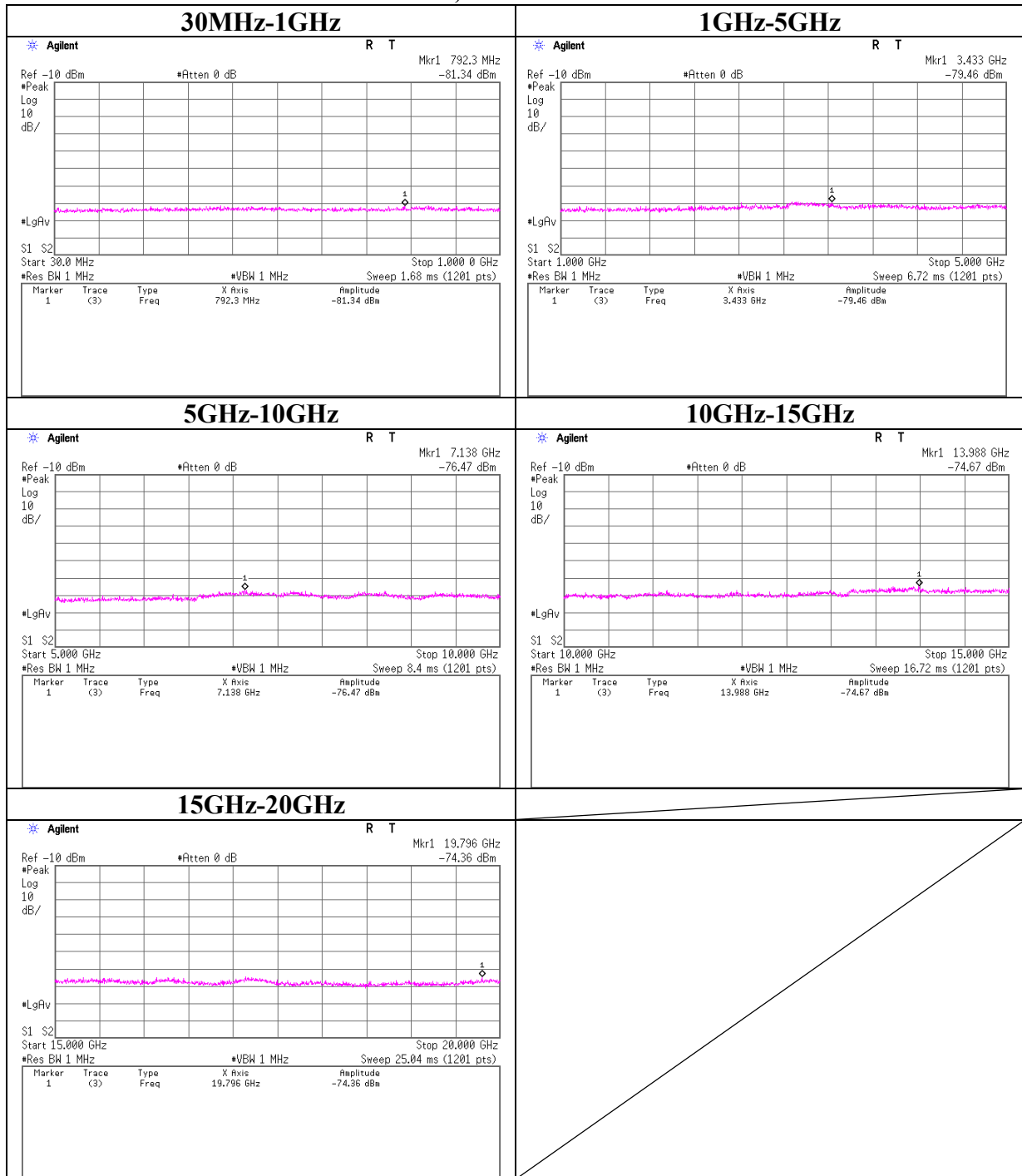
Conducted Spurious Emission
11a, Tx 5700MHz



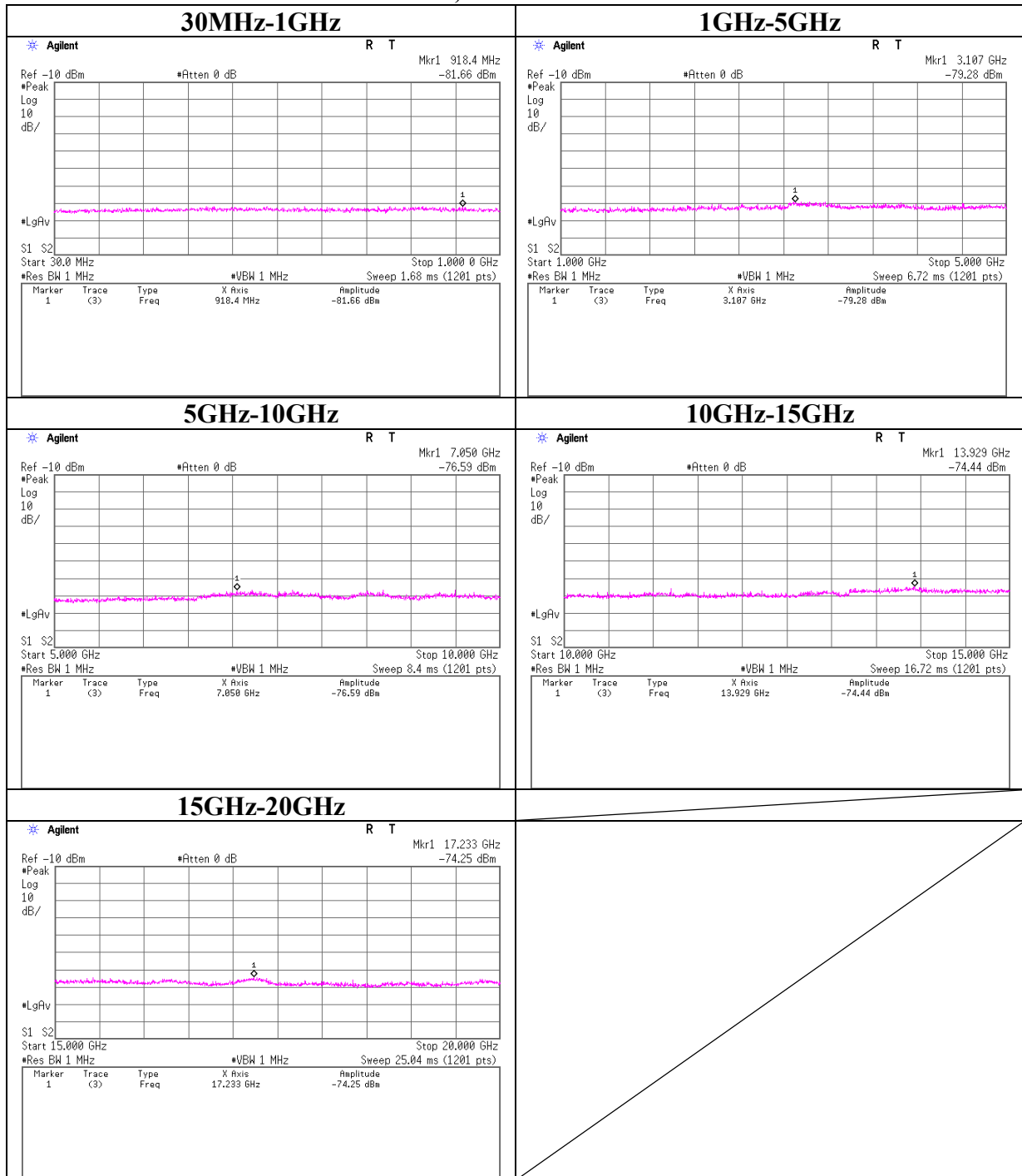
Conducted Spurious Emission
11a, Rx 5220MHz



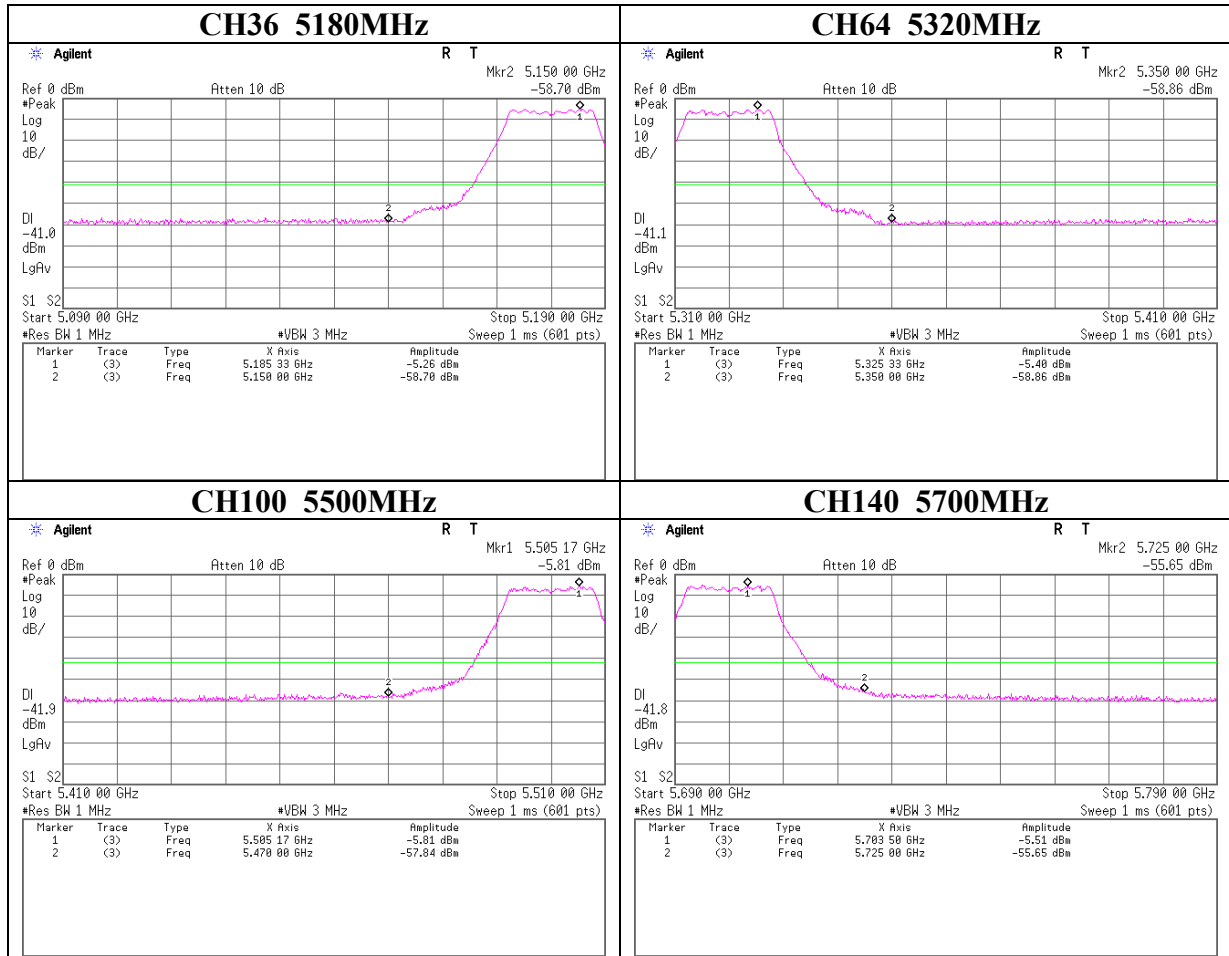
Conducted Spurious Emission
11a, Rx 5300MHz



Conducted Spurious Emission
11a, Rx 5600MHz



Conducted emission Band Edge compliance



Display Line = -27dBm – Cable Loss – ATT.Loss – Ant.Gain

Peak Power Spectral Density

Company	Canon Inc.	UL Japan, Inc.	
Equipment	WLAN Module	Head Office EMC Lab. No. 6 Shielded Room and No11 Measurement Room	
Model	CH9-1161	Report No.	29EE0246-HO-01
S/N	ES7005	Regulation	FCC Section 15.407(a)(1)(2) / RSS-210 A9.2
Power	DC 3.3V	Test Distance	-
Mode	IEEE802.11a, Tx, 24Mbps	Date	04/08/2009 04/17/2009
		Temperature	23 deg.C. 24 deg.C.
		Humidity	34 % 51 %
		Engineer	Hironobu Ohnishi Tomohisa Nakagawa

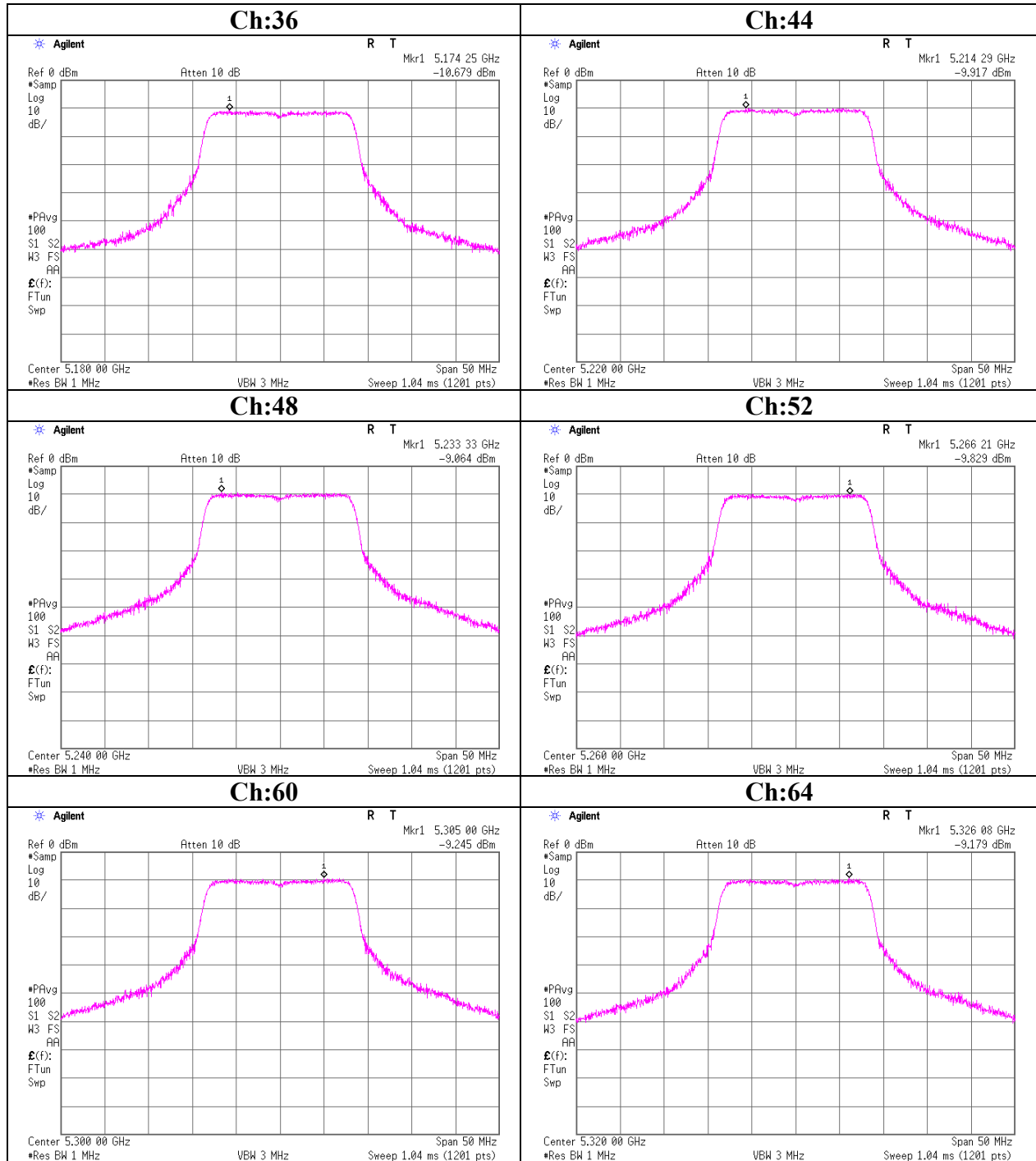
Freq.	Reading	Cable Loss	Atten.	ENBW	Result	Limit	Margin
[MHz]	[dBm]	[dB]	[dB]	[dB]	[dBm]	[dBm]	[dB]
5180.0	-10.68	2.16	10.06	0.20	1.34	4.00	2.66
5220.0	-9.92	2.17	10.06	0.20	2.11	4.00	1.89
5240.0	-9.06	2.17	10.06	0.20	2.97	4.00	1.03
5260.0	-9.83	2.18	10.06	0.20	2.21	11.00	8.79
5300.0	-9.25	2.18	10.06	0.20	2.80	11.00	8.20
5320.0	-9.18	2.19	10.06	0.20	2.87	11.00	8.13
5500.0	-9.44	2.22	10.06	0.20	2.64	11.00	8.36
5600.0	-10.00	2.20	10.05	0.20	2.05	11.00	8.95
5700.0	-9.55	2.18	10.05	0.20	2.48	11.00	8.53

Sample Calculation:

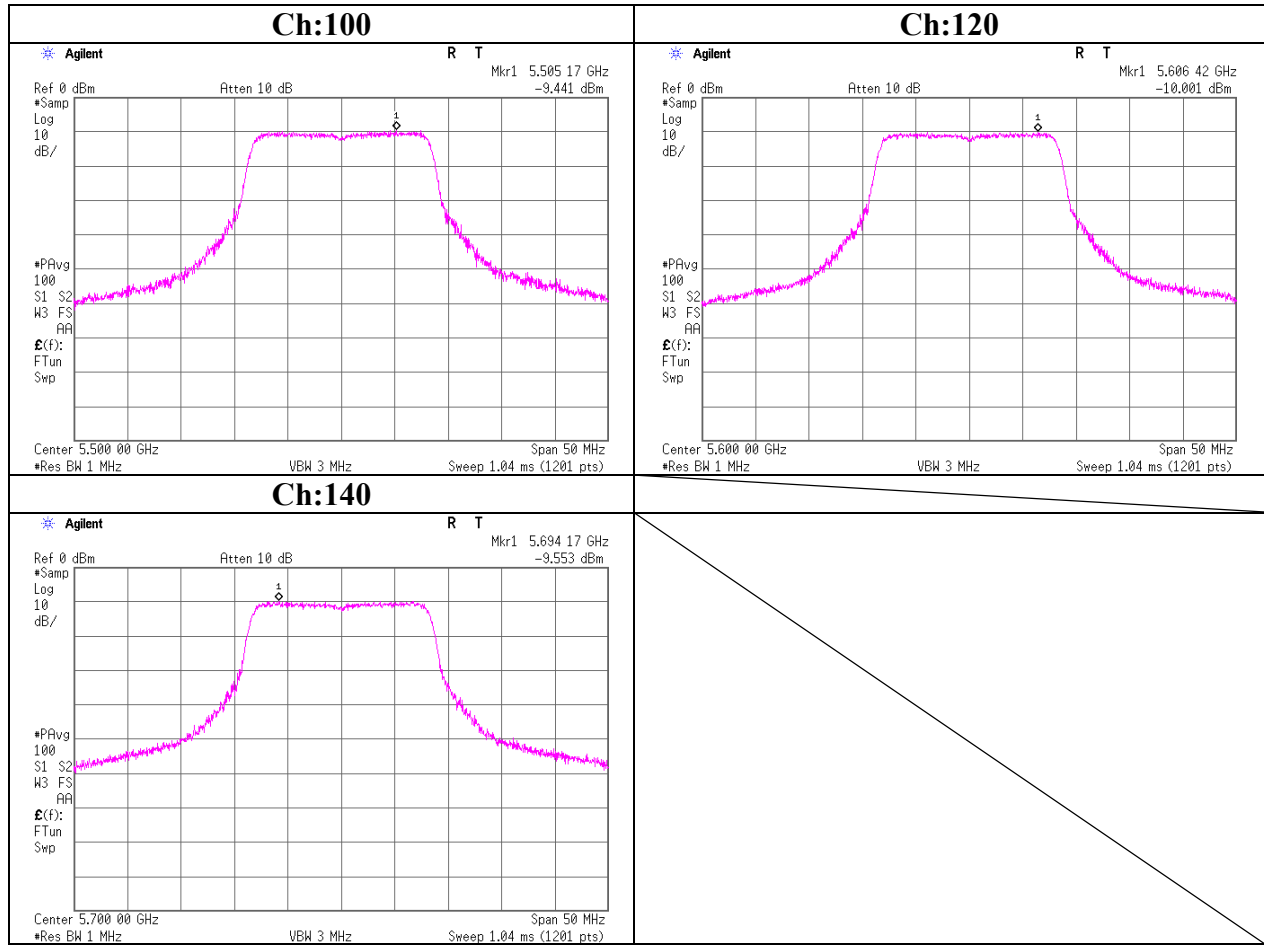
Result = Reading + Cable Loss (Including customer's cable loss) + Attenuator - ENBW

* Atten. was not used for factor 0.0dB of the above table.

Peak Power Spectral Density



Peak Power Spectral Density

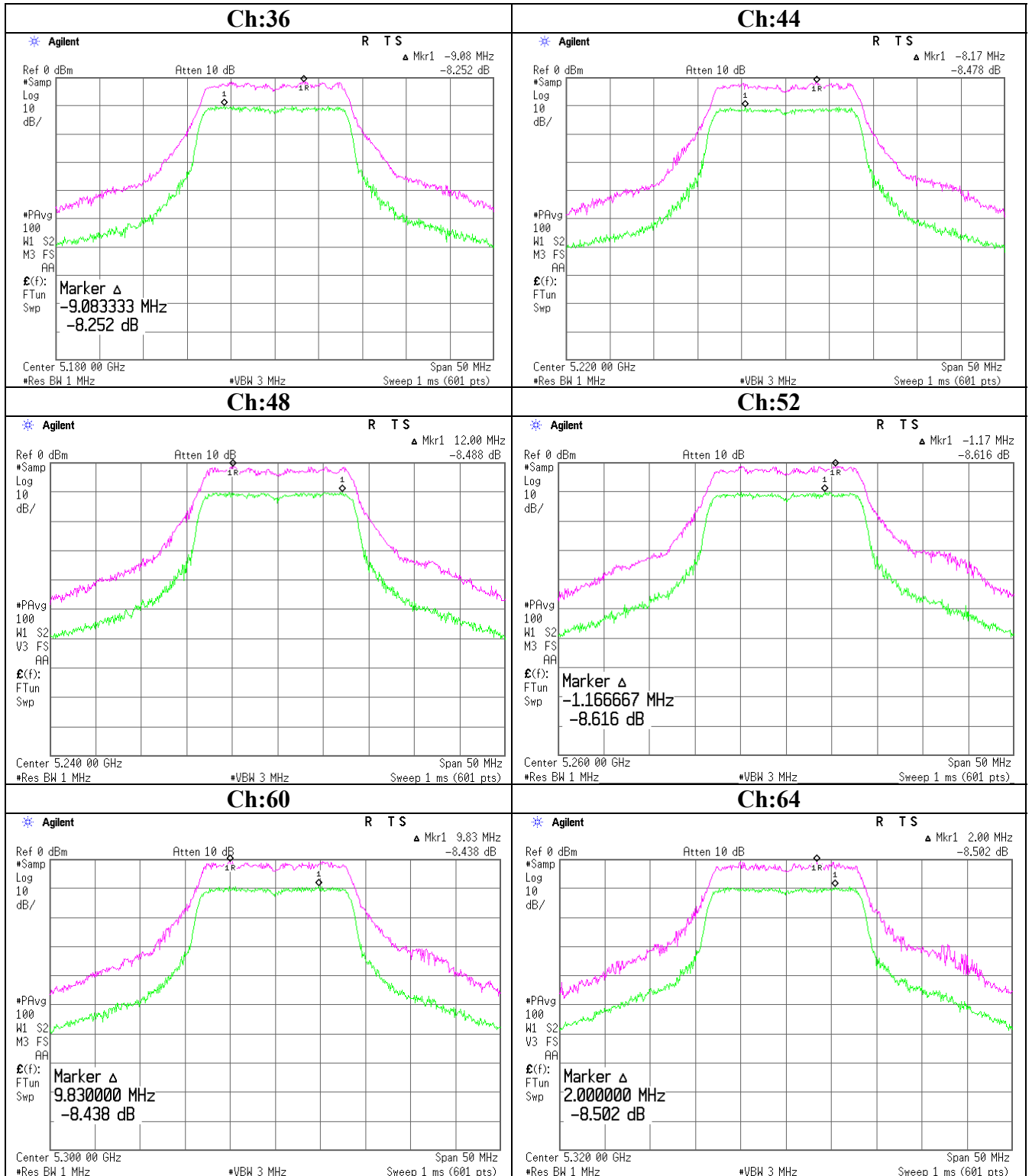


Peak Excursion Ratio

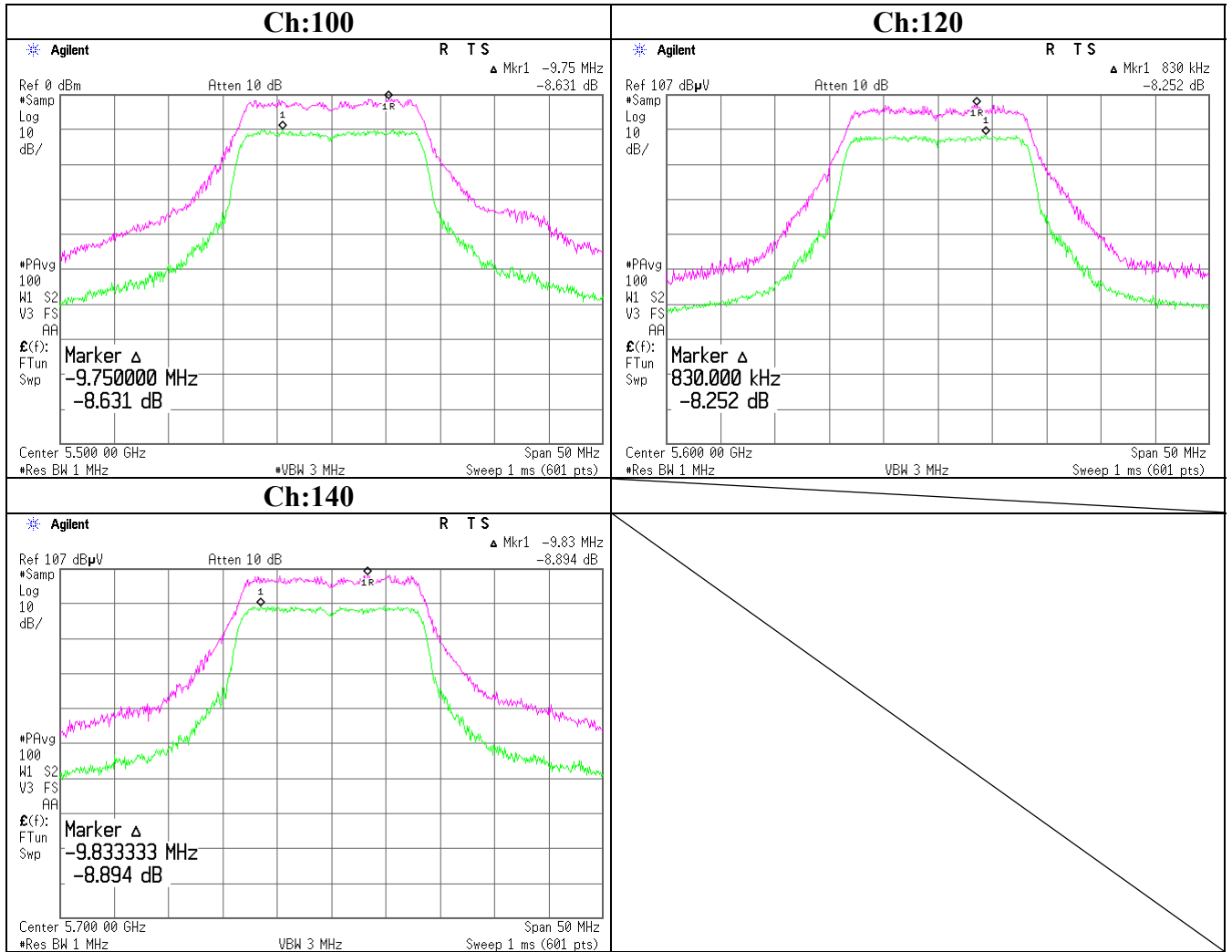
Company	Canon Inc.	UL Japan, Inc.
Equipment	WLAN Module	Head Office EMC Lab.
Model	CH9-1161	No.6 Shielded room and No11 Measurmet Room
S/N	ES7005	Report No. 29EE0246-HO-01
Power	DC 3.3V	Regulation FCC Section 15.407(a)(6)
Mode	IEEE802.11a, Tx, 24Mbps	Test Distance -
		Date 04/09/2009 04/17/2009
		Temperature 25 deg.C. 24 deg.C.
		Humidity 47% 51%
		Engineer Tomohisa Nakagawa Tomohisa Nakagawa

Freq. [MHz]	Peak Power Excursion [dB]	Limit [dB]
5180.0	8.525	13.0
5220.0	8.478	13.0
5240.0	8.488	13.0
5260.0	8.616	13.0
5300.0	8.438	13.0
5320.0	8.502	13.0
5500.0	8.631	13.0
5600.0	8.252	13.0
5700.0	8.894	13.0

Peak Excursion Ratio



Peak Excursion Ratio



APPENDIX 3:Test instruments

EMI test equipment [1/2]

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
MAEC-04	Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-10005	RE	2009/02/03 * 12
MOS-15	Thermo-Hygrometer	Custom	CTH-180	-	RE	2009/02/06 * 12
MJM-07	Measure	PROMART	SEN1955	-	RE	-
CUST-MSTW-14	EMI measurement program	TSJ	TEPTO-DV	-	RE/CE	-
MSA-05	Spectrum Analyzer	Advantest	R3273	160400285	RE	2008/06/25 * 12
MHA-21	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	9120D-557	RE	2008/08/11 * 12
MCC-57	Microwave Cable 1G-26.5GHz 6m	Suhner	SUCOFLEX104	246769(1m) / 292411(5m)	RE	2008/11/05 * 12
MPA-12	MicroWave System Amplifier	Agilent	83017A	MY39500780	RE	2009/03/19 * 12
MCC-79	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	278923/4	RE	2008/12/17 * 12
MHF-23	High Pass Filter 7-20GHz	TOKIMEC	TF37NCCC	603	RE	2009/01/23 * 12
MHA-17	Horn Antenna 15-40GHz	Schwarzbeck	BBHA9170	BBHA9170307	RE	2009/04/30 * 12
MPA-03	Microwave System Power Amplifier	Agilent	83050A	3950M00205	RE	2008/06/26 * 12
MCC-54	Microwave Cable 1G-40GHz	Suhner	SUCOFLEX101	2873(1m) / 2876(5m)	RE	2009/03/02 * 12
MSA-04	Spectrum Analyzer	Agilent	E4448A	US44300523	RE/AT	2008/08/18 * 12
MAEC-02	Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-10005	RE/CE	2009/02/02 * 12
MOS-22	Thermo-Hygrometer	Custom	CTH-180	-	RE/CE	2009/02/06 * 12
MJM-05	Measure	PROMART	SEN1955	-	RE/CE	-
MRENT-62	Spectrum Analyzer	Advantest	R3273	95090115	RE/CE	2008/12/24 * 12
MTR-03	Test Receiver	Rohde & Schwarz	ESCI	100767	RE/CE	2008/06/12 * 12
MLS-07	Terminator	MCL	BTRM-50	1 9944	CE(EUT)	2009/02/17 * 12
MCC-112	Coaxial cable	Fujikura/Suhner/TSJ	-	-	CE	2008/07/03 * 12
MCC-13					CE	

UL Japan, Inc.

Head Office EMC Lab.

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EMI test equipment [2/2]

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	VHA91032008	RE	2008/10/18 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	201	RE	2008/10/18 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	-	RE	2009/02/16 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	BK7970	RE	2008/11/14 * 12
MPA-09	Pre Amplifier	Agilent	8447D	2944A10845	RE	2008/09/04 * 12
MAT-21	Attenuator(20dB)(above 1GHz)	HIROSE ELECTRIC CO.,LTD.	AT-120	901247	AT	2009/01/16 * 12
MCC-116	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	290221/4	AT	2008/08/04 * 12
MOS-19	Thermo-Hygrometer	Custom	CTH-201	0001	AT	2008/12/08 * 12
MSA-03	Spectrum Analyzer	Agilent	E4448A	MY44020357	AT	2008/11/07 * 12
MAT-20	Attenuator(10dB)(above 1GHz)	HIROSE ELECTRIC CO.,LTD.	AT-110	-	AT	2009/01/16 * 12
MOS-14	Thermo-Hygrometer	Custom	CTH-180	-	AT	2009/02/04 * 12
MSA-03	Spectrum Analyzer	Agilent	E4448A	MY44020357	AT	2008/11/07 * 12
MCC-114	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	290212/4	AT	2008/08/01 * 12
MAT-22	Attenuator(10dB) DC-18GHz	Orient Microwave	BX10-0476-00	-	AT	2009/03/24 * 12
MPM-12	Power Meter	Anritsu	ML2495A	0825002	AT	2008/08/13 * 12
MPSE-17	Power sensor	Anritsu	MA2411B	0738285	AT	2008/08/13 * 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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