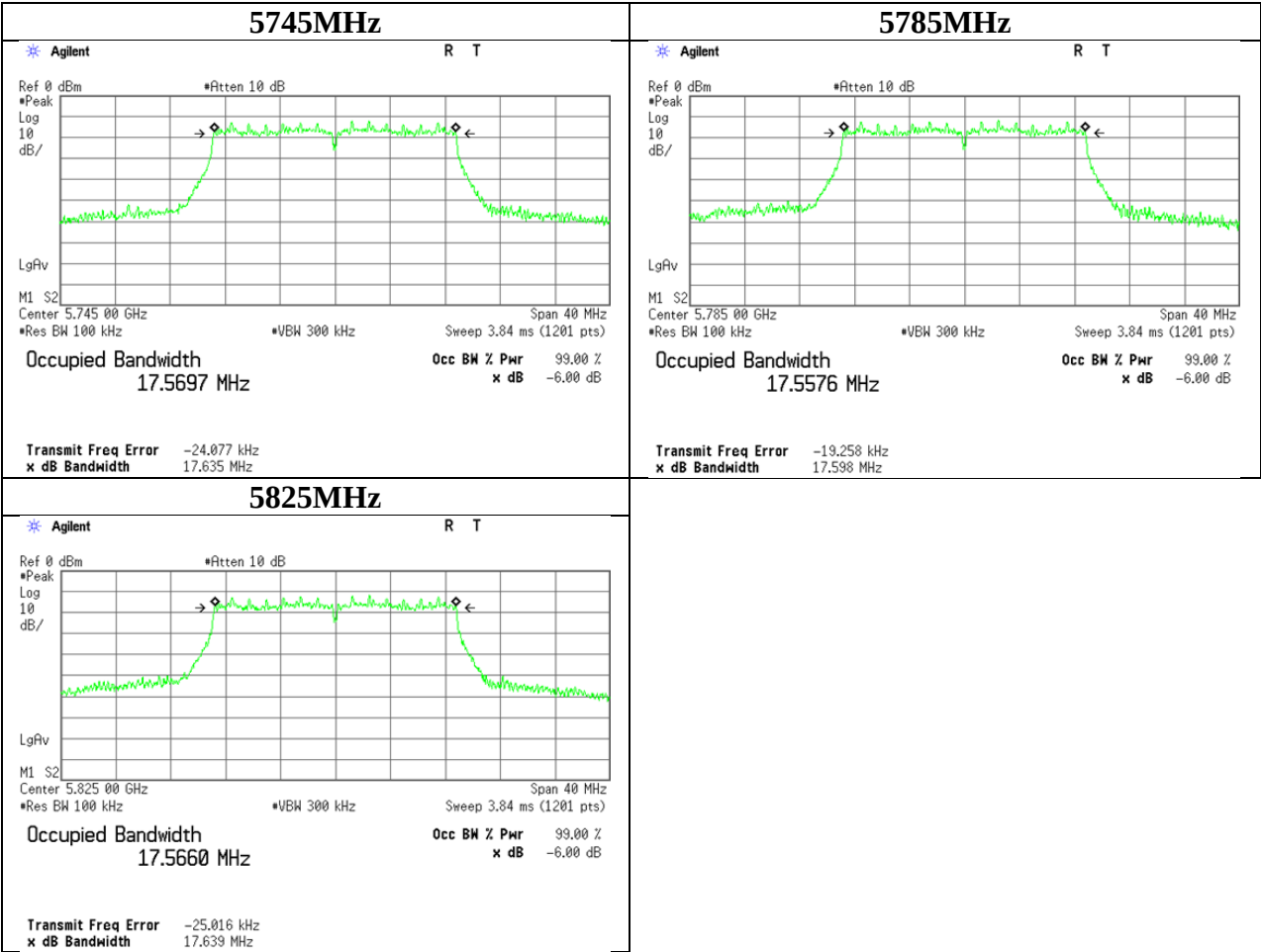


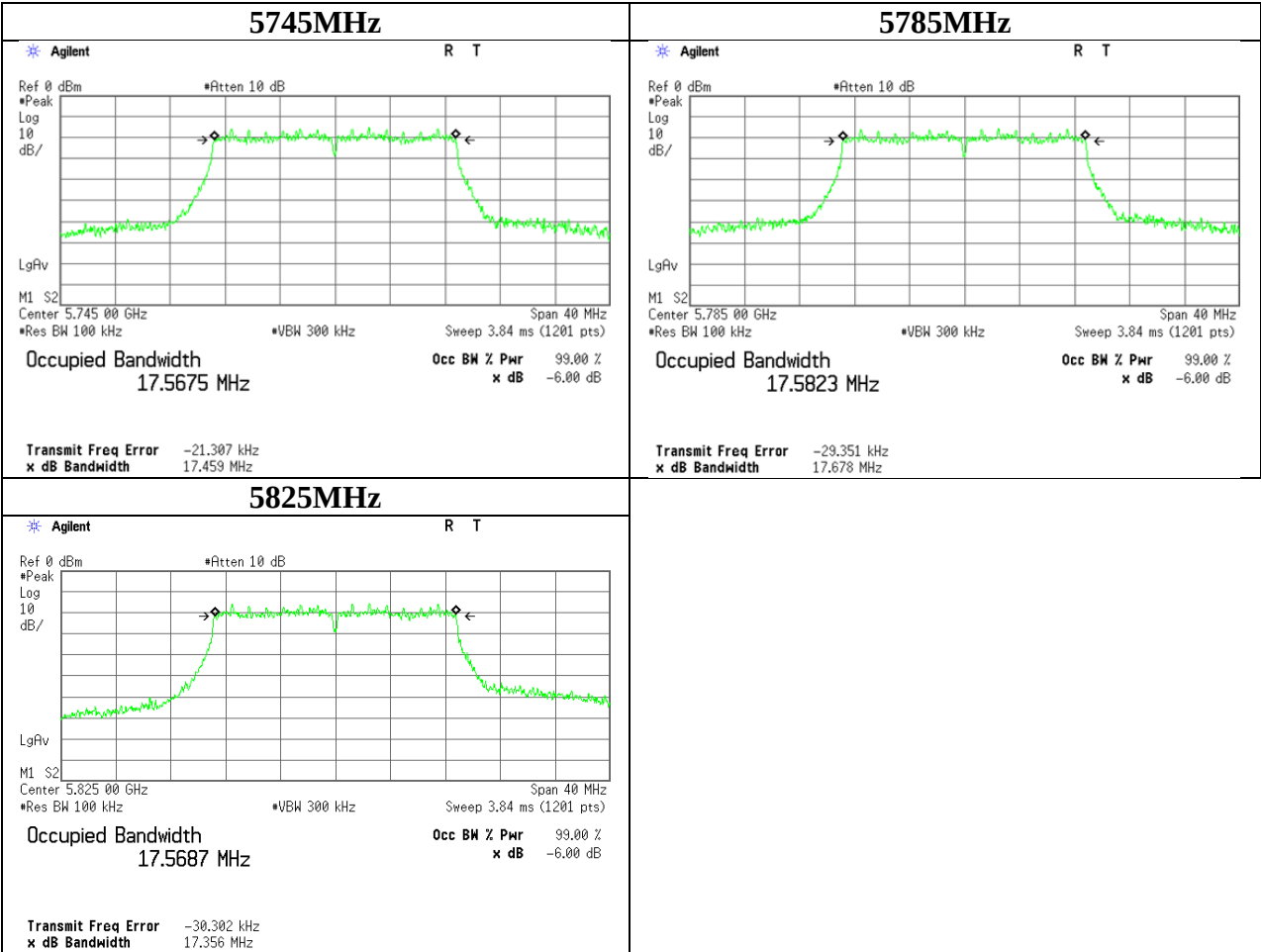
6dB Bandwidth

11n-20 Antenna 1



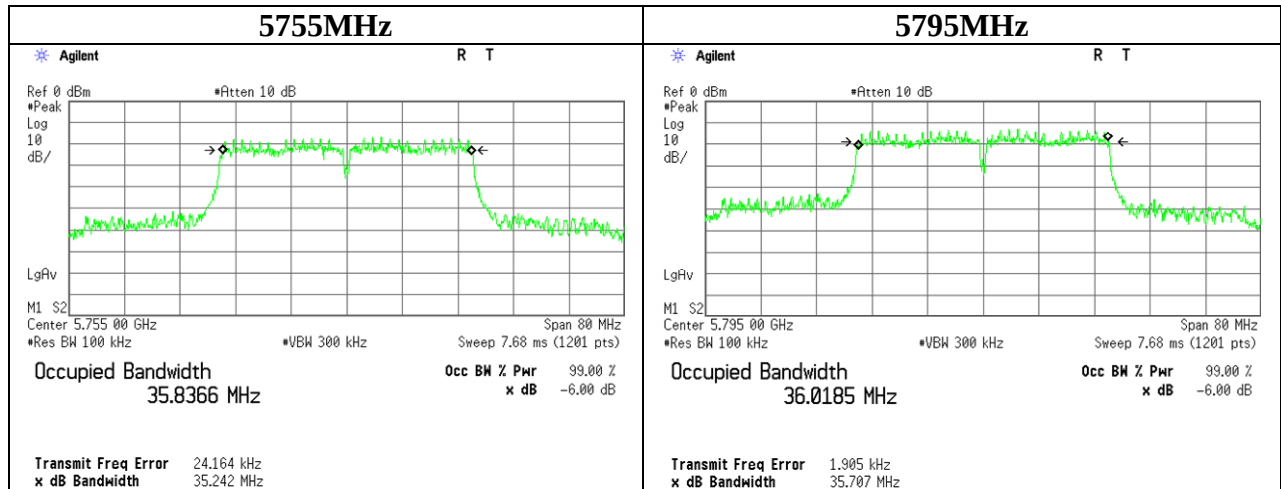
6dB Bandwidth

11ac-20 Antenna 1

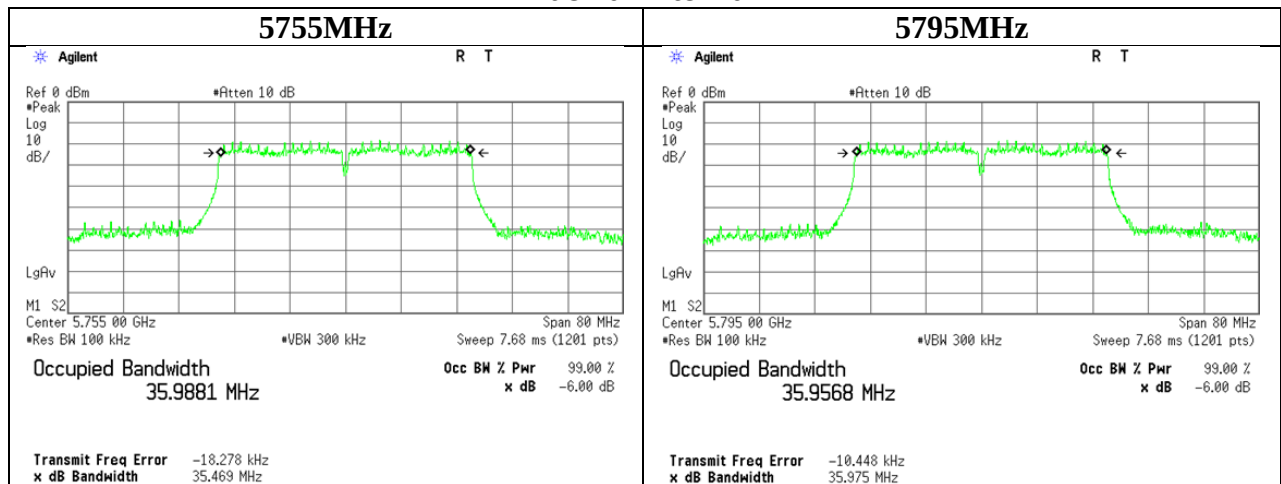


6dB Bandwidth

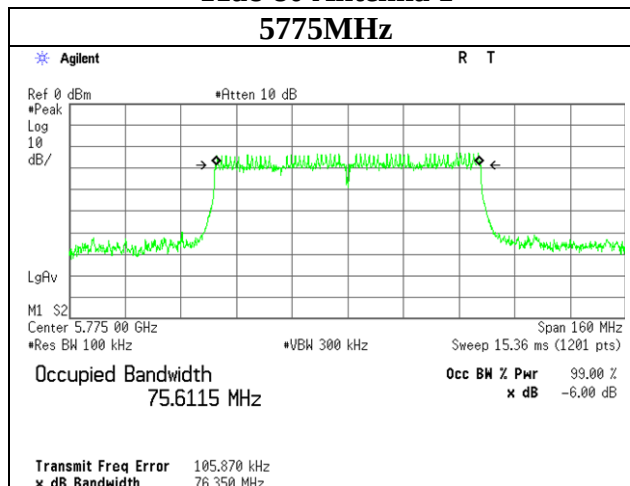
11n-40 Antenna 1



11ac-40 Antenna 1



11ac-80 Antenna 1



UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Conducted Output Power

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 10689818H
Date : 04/10/2015 06/02/2015
Temperature/ Humidity : 23deg. C / 33% RH 23deg. C / 68% RH
Engineer : Tomoki Matsui Takafumi Noguchi
Mode : 11a Tx

Antenna 1

Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	Result (Cond.)		Result (e.i.r.p.)		Limit (Cond.)		Limit (e.i.r.p.)		Margin (Cond.) [dB]	Margin (e.i.r.p.) [dB]
						[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]		
5180.0	0.23	2.71	10.01	0.88	5.00	13.83	24.17	18.83	76.43	23.97	250.00	-	-	10.14	-
5220.0	0.29	2.74	10.01	0.88	5.00	13.92	24.66	18.92	77.98	23.97	250.00	-	-	10.05	-
5240.0	0.19	2.75	10.01	0.88	5.00	13.83	24.17	18.83	76.44	23.97	250.00	-	-	10.14	-
5260.0	0.02	2.77	10.01	0.88	5.00	13.68	23.32	18.68	73.74	23.89	244.91	-	-	10.21	-
5300.0	0.39	2.79	10.01	0.88	5.00	14.07	25.55	19.07	80.79	23.85	242.66	-	-	9.78	-
5320.0	0.41	2.80	10.01	0.88	5.00	14.11	25.75	19.11	81.41	23.85	242.66	-	-	9.74	-
5500.0	0.17	2.92	10.02	0.88	5.00	13.99	25.03	18.99	79.16	23.87	243.78	-	-	9.89	-
5580.0	-0.05	2.96	10.02	0.88	5.00	13.81	24.04	18.81	76.02	23.94	247.74	-	-	10.13	-
5700.0	-1.06	3.03	10.02	0.88	5.00	12.86	19.34	17.86	61.15	23.85	242.66	-	-	10.99	-
5745.0	-0.79	3.05	10.02	0.88	5.00	13.16	20.69	18.16	65.44	30.00	1000.00	-	-	16.84	-
5785.0	0.15	3.07	10.02	0.88	5.00	14.12	25.82	19.12	81.65	30.00	1000.00	-	-	15.88	-
5825.0	0.12	3.09	10.02	0.88	5.00	14.11	25.77	19.11	81.48	30.00	1000.00	-	-	15.89	-

Result(Cond.) = Reading + Cable Loss + Atten.Loss + Duty Factor

Result(e.i.r.p.) = Reading + Cable Loss + Atten.Loss + Duty Factor + Antenna Gain

15.407(a)(1)(iv) Limit(Cond.) = 23.97dBm(250mW)

Although the EUT operates on Master mode, more stringent limit for Client device was applied.

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

15.407(a)(3) Limit(Cond.) = 30dBm(1W)

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Conducted Output Power

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 10689818H
Date : 04/10/2015 06/02/2015
Temperature/ Humidity : 23deg. C / 33% RH 23deg. C / 68% RH
Engineer : Tomoki Matsui Takafumi Noguchi
Mode : 11n-20 Tx

Antenna 1+2

Freq. [MHz]	Antenna Port 1 Result		Antenna Port 2 Result		Result Antenna Port 1+2 (Cond.)		Result Antenna Port 1+2 (e.i.r.p.)		Limit (Cond.)		Limit (e.i.r.p.)		Margin (Cond.)	Margin (e.i.r.p.)
	(Cond.) [mW]	(e.i.r.p.) [mW]	(Cond.) [mW]	(e.i.r.p.) [mW]	[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	[dB]	[dB]
5180.0	8.38	26.50	7.17	22.67	11.92	15.55	16.92	49.17	23.97	250.00	-	-	12.05	-
5220.0	8.63	27.29	7.04	22.26	11.95	15.67	16.95	49.55	23.97	250.00	-	-	12.02	-
5240.0	8.38	26.50	7.30	23.09	11.95	15.68	16.95	49.59	23.97	250.00	-	-	12.02	-
5260.0	8.27	26.16	7.07	22.35	11.86	15.34	16.86	48.51	23.97	249.46	-	-	12.11	-
5300.0	8.92	28.21	7.56	23.89	12.17	16.48	17.17	52.10	23.94	247.74	-	-	11.77	-
5320.0	8.62	27.27	7.28	23.02	12.01	15.90	17.01	50.29	23.94	247.74	-	-	11.93	-
5500.0	8.74	27.64	7.70	24.35	12.16	16.44	17.16	51.99	23.90	245.47	-	-	11.74	-
5580.0	8.18	25.88	6.95	21.99	11.80	15.13	16.80	47.87	23.94	247.74	-	-	12.14	-
5700.0	8.76	27.70	7.47	23.62	12.10	16.23	17.10	51.32	23.95	248.31	-	-	11.85	-
5745.0	9.16	28.96	8.55	27.03	12.48	17.71	17.48	55.99	30.00	1000.00	-	-	17.52	-
5785.0	9.27	29.31	8.24	26.07	12.43	17.51	17.43	55.38	30.00	1000.00	-	-	17.57	-
5825.0	8.22	26.00	8.10	25.61	12.13	16.32	17.13	51.61	30.00	1000.00	-	-	17.87	-

Antenna 1

Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	Result (Cond.)		Result (e.i.r.p.)	
						[dBm]	[mW]	[dBm]	[mW]
5180.0	-4.65	2.71	10.01	1.16	5.00	9.23	8.38	14.23	26.50
5220.0	-4.55	2.74	10.01	1.16	5.00	9.36	8.63	14.36	27.29
5240.0	-4.69	2.75	10.01	1.16	5.00	9.23	8.38	14.23	26.50
5260.0	-4.76	2.77	10.01	1.16	5.00	9.18	8.27	14.18	26.16
5300.0	-4.46	2.79	10.01	1.16	5.00	9.50	8.92	14.50	28.21
5320.0	-4.62	2.80	10.01	1.16	5.00	9.36	8.62	14.36	27.27
5500.0	-4.68	2.92	10.02	1.16	5.00	9.42	8.74	14.42	27.64
5580.0	-5.01	2.96	10.02	1.16	5.00	9.13	8.18	14.13	25.88
5700.0	-4.78	3.03	10.02	1.16	5.00	9.42	8.76	14.42	27.70
5745.0	-4.61	3.05	10.02	1.16	5.00	9.62	9.16	14.62	28.96
5785.0	-4.58	3.07	10.02	1.16	5.00	9.67	9.27	14.67	29.31
5825.0	-5.12	3.09	10.02	1.16	5.00	9.15	8.22	14.15	26.00

Antenna 2

Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	Result (Cond.)		Result (e.i.r.p.)	
						[dBm]	[mW]	[dBm]	[mW]
5180.0	-5.26	2.64	10.01	1.16	5.00	8.56	7.17	13.56	22.67
5220.0	-5.36	2.66	10.01	1.16	5.00	8.47	7.04	13.47	22.26
5240.0	-5.21	2.67	10.01	1.16	5.00	8.63	7.30	13.63	23.09
5260.0	-5.36	2.68	10.01	1.16	5.00	8.49	7.07	13.49	22.35
5300.0	-5.09	2.70	10.01	1.16	5.00	8.78	7.56	13.78	23.89
5320.0	-5.26	2.71	10.01	1.16	5.00	8.62	7.28	13.62	23.02
5500.0	-5.10	2.79	10.02	1.16	5.00	8.87	7.70	13.87	24.35
5580.0	-5.57	2.82	10.02	1.16	5.00	8.42	6.95	13.42	21.99
5700.0	-5.30	2.86	10.02	1.16	5.00	8.73	7.47	13.73	23.62
5745.0	-4.73	2.87	10.02	1.16	5.00	9.32	8.55	14.32	27.03
5785.0	-4.90	2.88	10.02	1.16	5.00	9.16	8.24	14.16	26.07
5825.0	-4.99	2.89	10.02	1.16	5.00	9.08	8.10	14.08	25.61

Result(Cond.) = Reading + Cable Loss + Atten.Loss + Duty Factor

Result(e.i.r.p.) = Reading + Cable Loss + Atten.Loss + Duty Factor + Antenna Gain

15.407(a)(1)(iv) Limit(Cond.) = 23.97dBm(250mW)

Although the EUT operates on Master mode, more stringent limit for Client device was applied.

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

15.407(a)(3) Limit(Cond.) = 30dBm(1W)

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Conducted Output Power

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 10689818H
Date : 06/02/2015
Temperature/ Humidity : 23deg. C / 68% RH
Engineer : Takafumi Noguchi
Mode : 11ac-20 Tx

Antenna 1+2

Freq. [MHz]	Antenna Port 1 Result		Antenna Port 2 Result		Result Antenna Port 1+2 (Cond.)		Result Antenna Port 1+2 (e.i.r.p.)		Limit (Cond.)		Limit (e.i.r.p.)		Margin (Cond.)	Margin (e.i.r.p.)
	(Cond.) [mW]	(e.i.r.p.) [mW]	(Cond.) [mW]	(e.i.r.p.) [mW]	(Cond.) [dBm]	[mW]	(e.i.r.p.) [dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	[dB]	[dB]
5180.0	3.79	11.97	3.32	10.51	8.52	7.11	13.52	22.48	23.97	250.00	-	-	15.45	-
5220.0	3.84	12.13	3.34	10.55	8.56	7.18	13.56	22.68	23.97	250.00	-	-	15.41	-
5240.0	3.85	12.17	3.45	10.90	8.63	7.30	13.63	23.07	23.97	250.00	-	-	15.34	-
5260.0	3.76	11.90	3.28	10.38	8.48	7.04	13.48	22.28	23.91	246.04	-	-	15.43	-
5300.0	3.90	12.34	3.26	10.31	8.55	7.16	13.55	22.65	23.91	246.04	-	-	15.36	-
5320.0	3.94	12.47	3.41	10.77	8.66	7.35	13.66	23.24	23.93	247.17	-	-	15.27	-
5500.0	3.96	12.52	3.05	9.65	8.46	7.01	13.46	22.17	23.97	250.00	-	-	15.51	-
5580.0	3.70	11.69	2.99	9.47	8.25	6.69	13.26	21.16	23.92	246.60	-	-	15.67	-
5700.0	4.12	13.01	3.26	10.31	8.68	7.38	13.68	23.32	23.96	248.89	-	-	15.28	-
5745.0	3.89	12.30	3.51	11.11	8.69	7.40	13.69	23.41	30.00	1000.00	-	-	21.31	-
5785.0	3.99	12.62	3.45	10.92	8.72	7.44	13.72	23.54	30.00	1000.00	-	-	21.28	-
5825.0	3.89	12.30	3.14	9.94	8.47	7.03	13.47	22.24	30.00	1000.00	-	-	21.53	-

Antenna 1

Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	Result (Cond.)		Result (e.i.r.p.)	
						[dBm]	[mW]	[dBm]	[mW]
5180.0	-8.19	2.71	10.01	1.25	5.00	5.78	3.79	10.78	11.97
5220.0	-8.16	2.74	10.01	1.25	5.00	5.84	3.84	10.84	12.13
5240.0	-8.16	2.75	10.01	1.25	5.00	5.85	3.85	10.85	12.17
5260.0	-8.27	2.77	10.01	1.25	5.00	5.76	3.76	10.76	11.90
5300.0	-8.14	2.79	10.01	1.25	5.00	5.91	3.90	10.91	12.34
5320.0	-8.11	2.80	10.01	1.25	5.00	5.96	3.94	10.96	12.47
5500.0	-8.21	2.92	10.02	1.25	5.00	5.98	3.96	10.98	12.52
5580.0	-8.55	2.96	10.02	1.25	5.00	5.68	3.70	10.68	11.69
5700.0	-8.15	3.03	10.02	1.25	5.00	6.14	4.12	11.14	13.01
5745.0	-8.42	3.05	10.02	1.25	5.00	5.90	3.89	10.90	12.30
5785.0	-8.33	3.07	10.02	1.25	5.00	6.01	3.99	11.01	12.62
5825.0	-8.46	3.09	10.02	1.25	5.00	5.90	3.89	10.90	12.30

Antenna 2

Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	Result (Cond.)		Result (e.i.r.p.)	
						[dBm]	[mW]	[dBm]	[mW]
5180.0	-8.69	2.64	10.01	1.25	5.00	5.22	3.32	10.22	10.51
5220.0	-8.69	2.66	10.01	1.25	5.00	5.23	3.34	10.23	10.55
5240.0	-8.56	2.67	10.01	1.25	5.00	5.37	3.45	10.37	10.90
5260.0	-8.78	2.68	10.01	1.25	5.00	5.16	3.28	10.16	10.38
5300.0	-8.83	2.70	10.01	1.25	5.00	5.13	3.26	10.13	10.31
5320.0	-8.65	2.71	10.01	1.25	5.00	5.32	3.41	10.32	10.77
5500.0	-9.21	2.79	10.02	1.25	5.00	4.85	3.05	9.85	9.65
5580.0	-9.32	2.82	10.02	1.25	5.00	4.76	2.99	9.76	9.47
5700.0	-8.99	2.86	10.02	1.25	5.00	5.13	3.26	10.13	10.31
5745.0	-8.68	2.87	10.02	1.25	5.00	5.46	3.51	10.46	11.11
5785.0	-8.77	2.88	10.02	1.25	5.00	5.38	3.45	10.38	10.92
5825.0	-9.19	2.89	10.02	1.25	5.00	4.97	3.14	9.97	9.94

Result(Cond.) = Reading + Cable Loss + Atten.Loss + Duty Factor

Result(e.i.r.p.) = Reading + Cable Loss + Atten.Loss + Duty Factor + Antenna Gain

15.407(a)(1)(iv) Limit(Cond.) = 23.97dBm(250mW)

Although the EUT operates on Master mode, more stringent limit for Client device was applied.

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

15.407(a)(3) Limit(Cond.) = 30dBm(1W)

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Conducted Output Power

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 10689818H
Date : 04/10/2015 04/15/2015 06/02/2015
Temperature/ Humidity : 23deg. C / 33% RH 24deg. C / 39% RH 23deg. C / 68% RH
Engineer : Tomoki Matsui Yuta Moriya Takafumi Noguchi
Mode : 11n-40 Tx

Antenna 1

Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	Result (Cond.)		Result (e.i.r.p.)		Limit (Cond.)		Limit (e.i.r.p.)		Margin (Cond.)	Margin (e.i.r.p.)
						[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	[dB]	[dB]
5190.0	-5.16	2.72	10.01	1.79	5.00	9.36	8.63	14.36	27.29	23.97	250.00	-	-	14.61	-
5230.0	-2.26	2.75	10.01	1.79	5.00	12.29	16.95	17.29	53.59	23.97	250.00	-	-	11.68	-
5270.0	-1.88	2.77	10.01	1.79	5.00	12.69	18.58	17.69	58.77	23.97	250.00	-	-	11.28	-
5310.0	-3.75	2.80	10.01	1.79	5.00	10.85	12.17	15.85	38.47	23.97	250.00	-	-	13.12	-
5510.0	-3.06	2.93	10.02	1.79	5.00	11.68	14.71	16.68	46.52	23.97	250.00	-	-	12.29	-
5550.0	-2.00	2.95	10.02	1.79	5.00	12.76	18.87	17.76	59.67	23.97	250.00	-	-	11.21	-
5670.0	-2.26	3.01	10.02	1.79	5.00	12.56	18.02	17.56	57.00	23.97	250.00	-	-	11.41	-
5755.0	-2.98	3.05	10.02	1.79	5.00	11.88	15.41	16.88	48.74	30.00	1000.00	-	-	18.12	-
5795.0	-2.15	3.08	10.02	1.79	5.00	12.74	18.79	17.74	59.42	30.00	1000.00	-	-	17.26	-

Result(Cond.) = Reading + Cable Loss + Atten.Loss + Duty Factor

Result(e.i.r.p.) = Reading + Cable Loss + Atten.Loss + Duty Factor + Antenna Gain

15.407(a)(1)(iv) Limit(Cond.) = 23.97dBm(250mW)

Although the EUT operates on Master mode, more stringent limit for Client device was applied.

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

15.407(a)(3) Limit(Cond.) = 30dBm(1W)

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Conducted Output Power

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 10689818H
Date : 06/02/2015
Temperature/ Humidity : 23deg. C / 68% RH
Engineer : Takafumi Noguchi
Mode : 11ac-40 Tx

Antenna 1+2

Freq. [MHz]	Antenna Port 1 Result		Antenna Port 2 Result		Result Antenna Port 1+2 (Cond.)		Result Antenna Port 1+2 (e.i.r.p.)		Limit (Cond.)		Limit (e.i.r.p.)		Margin (Cond.)	Margin (e.i.r.p.)
	(Cond.) [mW]	(e.i.r.p.) [mW]	(Cond.) [mW]	(e.i.r.p.) [mW]	[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	[dB]	[dB]
5190.0	3.31	10.47	3.07	9.71	8.05	6.38	13.05	20.18	23.97	250.00	-	-	15.92	-
5230.0	3.25	10.27	2.90	9.18	7.89	6.15	12.89	19.45	23.97	250.00	-	-	16.08	-
5270.0	3.83	12.12	3.29	10.42	8.52	7.12	13.53	22.54	23.97	250.00	-	-	15.45	-
5310.0	3.49	11.04	2.95	9.33	8.09	6.44	13.09	20.37	23.97	250.00	-	-	15.88	-
5510.0	3.24	10.23	2.80	8.85	7.81	6.04	12.81	19.08	23.97	250.00	-	-	16.16	-
5550.0	3.27	10.33	2.76	8.71	7.80	6.03	12.80	19.04	23.97	250.00	-	-	16.17	-
5670.0	3.33	10.54	2.95	9.34	7.98	6.28	12.98	19.88	23.97	250.00	-	-	15.99	-
5755.0	3.53	11.15	3.18	10.05	8.27	6.71	13.26	21.20	30.00	1000.00	-	-	21.73	-
5795.0	3.48	11.00	3.21	10.15	8.25	6.69	13.25	21.15	30.00	1000.00	-	-	21.75	-

Antenna 1

Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	Result (Cond.)		Result (e.i.r.p.)	
						[dBm]	[mW]	[dBm]	[mW]
5190.0	-8.88	2.72	10.01	1.35	5.00	5.20	3.31	10.20	10.47
5230.0	-8.99	2.75	10.01	1.35	5.00	5.12	3.25	10.12	10.27
5270.0	-8.30	2.77	10.01	1.35	5.00	5.83	3.83	10.83	12.12
5310.0	-8.73	2.80	10.01	1.35	5.00	5.43	3.49	10.43	11.04
5510.0	-9.19	2.93	10.02	1.35	5.00	5.10	3.24	10.10	10.23
5550.0	-9.17	2.95	10.02	1.35	5.00	5.14	3.27	10.14	10.33
5670.0	-9.15	3.01	10.02	1.35	5.00	5.23	3.33	10.23	10.54
5755.0	-8.95	3.05	10.02	1.35	5.00	5.47	3.53	10.47	11.15
5795.0	-9.03	3.08	10.02	1.35	5.00	5.41	3.48	10.41	11.00

Antenna 2

Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	Result (Cond.)		Result (e.i.r.p.)	
						[dBm]	[mW]	[dBm]	[mW]
5190.0	-9.14	2.65	10.01	1.35	5.00	4.87	3.07	9.87	9.71
5230.0	-9.40	2.67	10.01	1.35	5.00	4.63	2.90	9.63	9.18
5270.0	-8.87	2.69	10.01	1.35	5.00	5.18	3.29	10.18	10.42
5310.0	-9.37	2.70	10.01	1.35	5.00	4.70	2.95	9.70	9.33
5510.0	-9.69	2.79	10.02	1.35	5.00	4.47	2.80	9.47	8.85
5550.0	-9.77	2.81	10.02	1.35	5.00	4.40	2.76	9.40	8.71
5670.0	-9.51	2.85	10.02	1.35	5.00	4.70	2.95	9.70	9.34
5755.0	-9.22	2.87	10.02	1.35	5.00	5.02	3.18	10.02	10.05
5795.0	-9.19	2.89	10.02	1.35	5.00	5.06	3.21	10.06	10.15

Result(Cond.) = Reading + Cable Loss + Atten.Loss

Result(e.i.r.p.) = Reading + Cable Loss + Atten.Loss + Antenna Gain

15.407(a)(1)(iv) Limit(Cond.) = 23.97dBm(250mW)

Although the EUT operates on Master mode, more stringent limit for Client device was applied.

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

15.407(a)(3) Limit(Cond.) = 30dBm(1W)

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Conducted Output Power

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 10689818H
Date : 05/25/2015
Temperature/ Humidity : 24 deg. C / 49% RH
Engineer : Shinichi Miyazono
Mode : 11ac-80 Tx

Antenna 1+2

Freq. [MHz]	Antenna Port 1 Result		Antenna Port 2 Result		Result Antenna Port 1+2 (Cond.)		Result Antenna Port 1+2 (e.i.r.p.)		Limit (Cond.)		Limit (e.i.r.p.)		Margin (Cond.)	Margin (e.i.r.p.)
	(Cond.) [mW]	(e.i.r.p.) [mW]	(Cond.) [mW]	(e.i.r.p.) [mW]	(Cond.) [dBm]	(e.i.r.p.) [dBm]	(Cond.) [mW]	(e.i.r.p.) [mW]	[dBm]	[mW]	[dBm]	[mW]	[dB]	[dB]
5210.0	2.48	7.83	2.33	7.36	6.82	4.81	11.82	15.19	23.97	250.00	-	-	17.15	-
5290.0	3.52	11.12	3.21	10.14	8.28	6.73	13.28	21.26	23.97	250.00	-	-	15.69	-
5530.0	2.98	9.42	2.62	8.28	7.48	5.60	12.48	17.70	23.97	250.00	-	-	16.49	-
5610.0	3.42	10.81	3.19	10.09	8.20	6.61	13.20	20.90	23.97	250.00	-	-	15.77	-
5775.0	2.42	7.66	2.26	7.16	6.70	4.68	11.71	14.82	30.00	1000.00	-	-	23.30	-

Antenna 1

Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	Result (Cond.)		Result (e.i.r.p.)	
						[dBm]	[mW]	[dBm]	[mW]
5210.0	-10.07	2.73	10.01	1.27	5.00	3.94	2.48	8.94	7.83
5290.0	-8.60	2.78	10.01	1.27	5.00	5.46	3.52	10.46	11.12
5530.0	-9.48	2.93	10.02	1.27	5.00	4.74	2.98	9.74	9.42
5610.0	-8.93	2.98	10.02	1.27	5.00	5.34	3.42	10.34	10.81
5775.0	-10.51	3.06	10.02	1.27	5.00	3.84	2.42	8.84	7.66

Antenna 2

Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	Result (Cond.)		Result (e.i.r.p.)	
						[dBm]	[mW]	[dBm]	[mW]
5210.0	-10.34	2.73	10.01	1.27	5.00	3.67	2.33	8.67	7.36
5290.0	-9.00	2.78	10.01	1.27	5.00	5.06	3.21	10.06	10.14
5530.0	-10.04	2.93	10.02	1.27	5.00	4.18	2.62	9.18	8.28
5610.0	-9.23	2.98	10.02	1.27	5.00	5.04	3.19	10.04	10.09
5775.0	-10.80	3.06	10.02	1.27	5.00	3.55	2.26	8.55	7.16

Result(Cond.) = Reading + Cable Loss + Atten.Loss + Duty Factor
Result(e.i.r.p.) = Reading + Cable Loss + Atten.Loss + Duty Factor + Antenna Gain
15.407(a)(1)(iv) Limit(Cond.) = 23.97dBm(250mW)
Although the EUT operates on Master mode, more stringent limit for Client device was applied.
15.407(a)(2) Limit(Cond.) = 23.97dBm(250mW) or 11 + 10log(26dB BW) dBm
15.407(a)(3) Limit(Cond.) = 30dBm(1W)

Maximum Conducted Output Power
(Reference data)

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 10689818H
Date : 02/02/2015
Temperature/ Humidity : 26deg. C / 40% RH
Engineer : Satofumi Matsuyama
Mode : 11a Tx

5180MHz

Rate [Mbps]	Reading Antenna1 [dBm]	Reading Antenna2 [dBm]	Remark
6	3.21	2.66	*
9	3.20	-	
12	3.18	-	
18	3.19	-	
24	3.16	-	
36	2.77	-	
48	2.89	-	
54	2.92	-	

*Difference between worst rate check data and formal test result is due to the different test condition.

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Conducted Output Power
(Reference data)

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 10689818H
Date : 02/02/2015
Temperature/ Humidity : 26deg. C / 40% RH
Engineer : Satofumi Matsuyama
Mode : 11n-20 Tx

5180MHz

MCS Index	Reading Antenna1 [dBm]	Reading Antenna2 [dBm]	Total [dBm]	Ramark
0	1.85	-	-	
1	1.37	-	-	
2	1.99	1.74	-	
3	1.67	-	-	
4	1.77	-	-	
5	1.83	-	-	
6	1.88	-	-	
7	1.84	-	-	
8	-0.65	-1.23	2.08	*
9	-0.62	-1.62	1.92	
10	-1.01	-1.36	1.83	
11	-0.96	-1.26	1.90	
12	-0.88	-1.39	1.88	
13	-1.23	-1.28	1.76	
14	-1.17	-1.63	1.62	
15	-1.09	-1.55	1.70	

*Difference between worst rate check data and formal test result is due to the different test condition.

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Conducted Output Power (Reference data)

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 10689818H
Date : 02/02/2015
Temperature/ Humidity : 26deg. C / 40% RH
Engineer : Satofumi Matsuyama
Mode : 11ac-20 Tx

5180MHz

MCS Index	Reading Antenna1 [dBm]	Reading Antenna2 [dBm]	Total [dBm]	Ramark
0	-2.12	-	-	
1	-2.61	-	-	
2	-2.07	-	-	
3	-2.06	-	-	
4	-1.99	-	-	
5	-1.95	-	-	
6	-1.97	-	-	
7	-1.89	-2.43	-	
8	-2.22	-	-	
0	-4.49	-5.08	-1.76	
1	-4.77	-5.29	-2.01	
2	-4.19	-4.79	-1.47	*
3	-4.33	-4.88	-1.59	
4	-4.23	-4.78	-1.49	
5	-4.20	-5.24	-1.68	
6	-4.43	-5.08	-1.73	
7	-4.46	-5.09	-1.75	
8	-4.42	-5.04	-1.71	

*Difference between worst rate check data and formal test result is due to the different test condition.

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Conducted Output Power
(Reference data)

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 10689818H
Date : 02/02/2015
Temperature/ Humidity : 26deg. C / 40% RH
Engineer : Satofumi Matsuyama
Mode : 11n-40 Tx

5190MHz

MCS Index	Reading Antenna1 [dBm]	Reading Antenna2 [dBm]	Total [dBm]	Ramark
0	2.16	-	-	
1	2.10	-	-	
2	1.93	-	-	
3	2.19	-	-	
4	2.22	-	-	
5	2.29	-	-	
6	2.34	1.43	-	*
7	2.09	-	-	
8	-0.73	-1.37	1.97	
9	-1.23	-1.72	1.54	
10	-0.95	-1.55	1.77	
11	-1.17	-1.63	1.62	
12	-1.02	-1.48	1.77	
13	-1.03	-1.38	1.81	
14	-1.00	-1.47	1.78	
15	-1.13	-1.63	1.64	

*Difference between worst rate check data and formal test result is due to the different test condition.

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Conducted Output Power
(Reference data)

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 10689818H
Date : 02/02/2015
Temperature/ Humidity : 26deg. C / 40% RH
Engineer : Satofumi Matsuyama
Mode : 11ac-40 Tx

5190MHz

MCS Index	Reading Antenna1 [dBm]	Reading Antenna2 [dBm]	Total [dBm]	Ramark
0	-2.05	-	-	
1	-2.20	-	-	
2	-2.19	-	-	
3	-1.89	-	-	
4	-2.12	-	-	
5	-2.02	-	-	
6	-1.95	-	-	
7	-1.99	-	-	
8	-1.86	-	-	
9	-1.83	-2.50	-	
0	-4.44	-5.19	-1.79	
1	-4.36	-4.96	-1.64	*
2	-4.36	-4.98	-1.65	
3	-4.63	-5.27	-1.93	
4	-4.70	-5.36	-2.01	
5	-4.61	-5.19	-1.88	
6	-4.52	-5.19	-1.83	
7	-4.54	-5.22	-1.86	
8	-4.56	-5.22	-1.87	
9	-4.46	-5.13	-1.77	

*Difference between worst rate check data and formal test result is due to the different test condition.

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Conducted Output Power
(Reference data)

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 10689818H
Date : 05/18/2015
Temperature/ Humidity : 25deg. C / 49% RH
Engineer : Tomoki Matsui
Mode : 11ac-80 Tx

5190MHz

MCS Index	Reading Antenna1 [dBm]	Reading Antenna2 [dBm]	Total [dBm]	Ramark
0	-3.80	-	-	
1	-3.57	-	-	
2	-3.59	-	-	
3	-3.70	-	-	
4	-3.71	-	-	
5	-3.64	-	-	
6	-3.90	-	-	
7	-3.67	-	-	
8	-3.54	-4.25	-	
9	-3.86	-	-	
0	-5.96	-6.32	-3.13	
1	-6.04	-6.27	-3.14	
2	-6.10	-6.37	-3.22	
3	-6.03	-6.32	-3.16	
4	-5.83	-6.35	-3.07	
5	-5.70	-6.39	-3.02	*
6	-5.87	-6.33	-3.08	
7	-5.93	-6.56	-3.22	
8	-5.82	-6.56	-3.16	
9	-5.74	-6.50	-3.09	

*Difference between worst rate check data and formal test result is due to the different test condition.

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

Test place Ise EMC Lab. No.11 Measurement Room
Report No. 10689818H
Date 04/11/2015 06/02/2015
Temperature/ Humidity 24deg. C / 40% RH 23deg. C / 68% RH
Engineer Shinichi Miyazono Takafumi Noguchi
Mode 11a Tx

Antenna 1

Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Correction Factor [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5180.0	-9.61	2.71	10.02	0.88	0.00	4.00	11.00	7.00
5220.0	-9.88	2.74	10.02	0.88	0.00	3.77	11.00	7.24
5240.0	-10.11	2.75	10.02	0.88	0.00	3.54	11.00	7.46
5260.0	-9.98	2.76	10.02	0.88	0.00	3.68	11.00	7.32
5300.0	-9.95	2.79	10.02	0.88	0.00	3.74	11.00	7.26
5320.0	-10.14	2.80	10.02	0.88	0.00	3.56	11.00	7.44
5500.0	-10.48	2.92	10.02	0.88	0.00	3.34	11.00	7.66
5580.0	-10.37	2.96	10.02	0.88	0.00	3.49	11.00	7.51
5700.0	-11.57	3.02	10.02	0.88	0.00	2.35	11.00	8.65
5745.0	-14.02	3.05	10.02	0.88	0.27	0.20	30.00	29.80
5785.0	-12.63	3.07	10.02	0.88	0.27	1.62	30.00	28.39
5825.0	-13.19	3.09	10.02	0.88	0.27	1.07	30.00	28.93

Result = Reading + Cable Loss + Attenuator + Duty factor + Correction factor

UL Japan, Inc.

Ise EMC Lab.

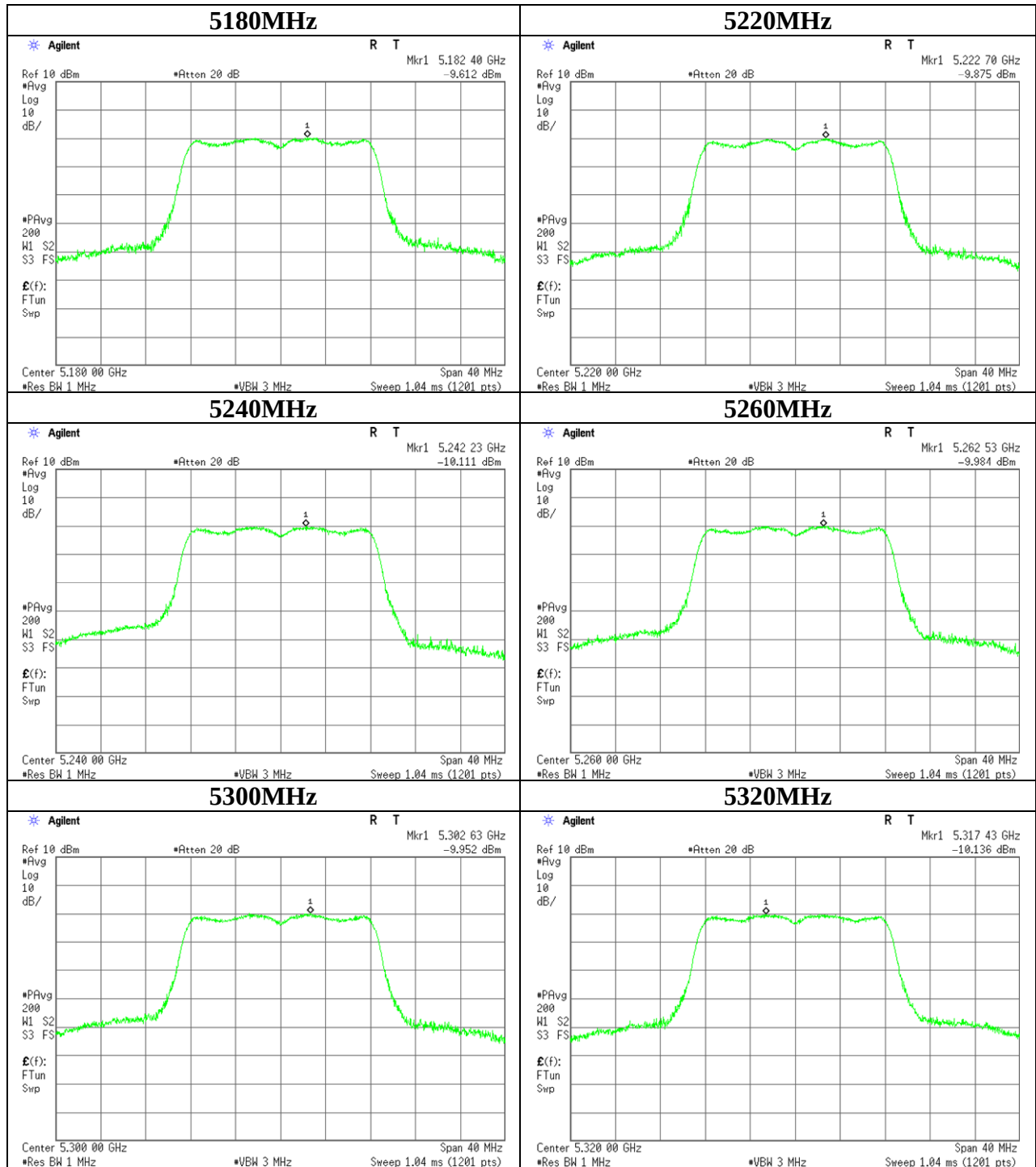
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

11a Antenna 1



UL Japan, Inc.

Ise EMC Lab.

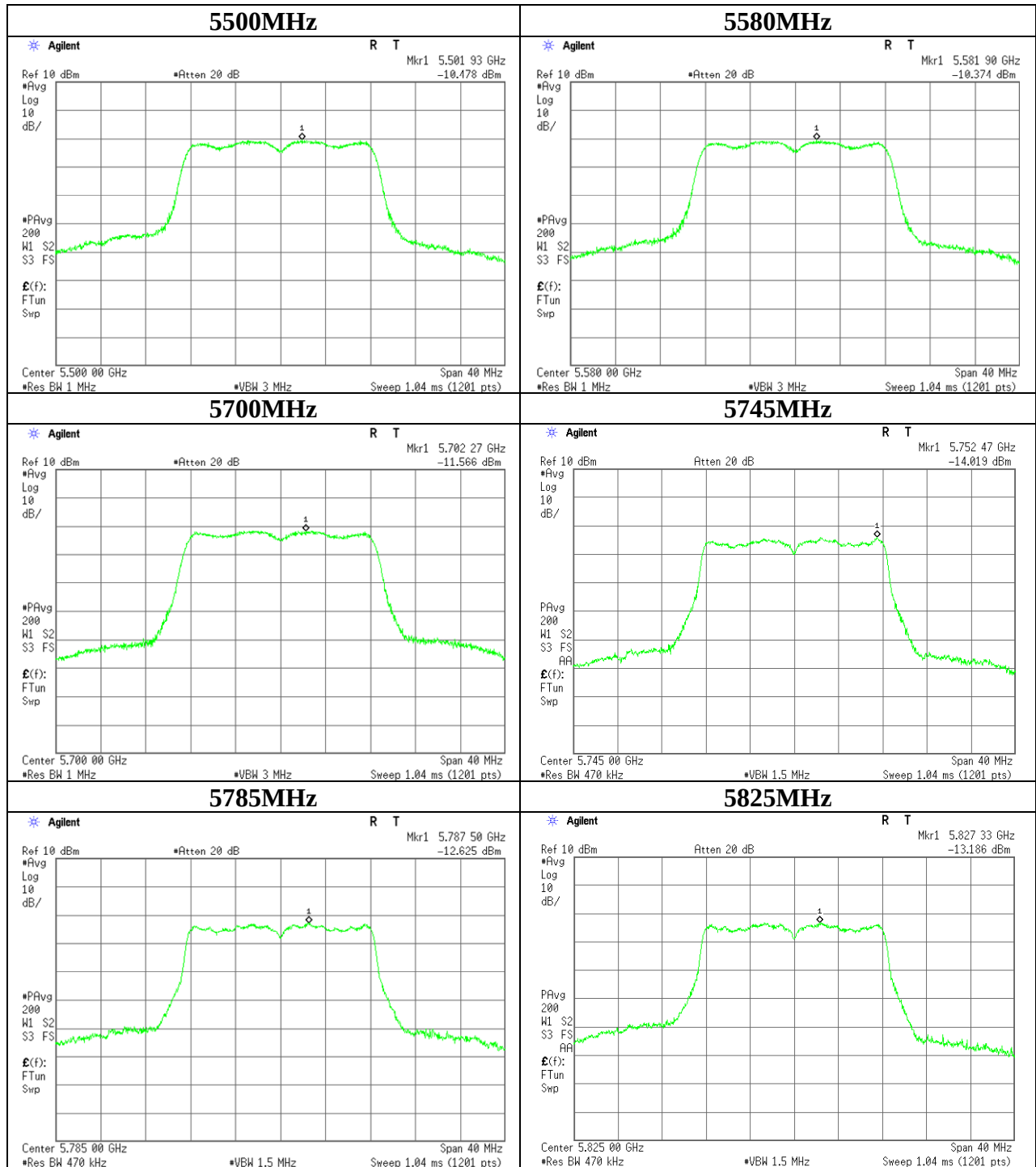
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

11a Antenna 1



UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 10689818H
Date : 04/11/2015 06/02/2015
Temperature/ Humidity : 24deg. C / 40% RH 23deg. C / 68% RH
Engineer : Shinichi Miyazono Takafumi Noguchi
Mode : 11n-20 Tx

Antenna 1+2

Freq.	Result	Limit	Margin
[MHz]	[dBm]	[dBm]	[dB]
5180.0	1.91	11.00	9.09
5220.0	1.84	11.00	9.16
5240.0	2.00	11.00	9.00
5260.0	2.00	11.00	9.00
5300.0	1.94	11.00	9.06
5320.0	1.94	11.00	9.06
5500.0	1.40	11.00	9.60
5580.0	1.50	11.00	9.50
5700.0	1.58	11.00	9.42
5745.0	0.14	30.00	29.86
5785.0	-0.20	30.00	30.20
5825.0	-0.21	30.00	30.21

Result [dBm] = 10 x log (10 ^ (Ant1 Result [dBm] / 10) + 10 ^ (Ant2 Result [dBm] / 10))

Antenna 1

Freq.	Reading	Cable Loss	Atten.	Duty Factor	Correction Factor	Result
[MHz]	[dBm]	[dB]	[dB]	[dB]	[dB]	[dBm]
5180.0	-14.73	2.71	10.02	1.16	0.00	-0.84
5220.0	-14.87	2.74	10.02	1.16	0.00	-0.95
5240.0	-14.83	2.75	10.02	1.16	0.00	-0.90
5260.0	-14.40	2.76	10.02	1.16	0.00	-0.46
5300.0	-14.74	2.79	10.02	1.16	0.00	-0.77
5320.0	-14.64	2.80	10.02	1.16	0.00	-0.66
5500.0	-15.44	2.92	10.02	1.16	0.00	-1.34
5580.0	-15.31	2.96	10.02	1.16	0.00	-1.17
5700.0	-15.37	3.02	10.02	1.16	0.00	-1.17
5745.0	-17.11	3.05	10.02	1.16	0.27	-2.61
5785.0	-17.58	3.07	10.02	1.16	0.27	-3.06
5825.0	-17.59	3.09	10.02	1.16	0.27	-3.05

Antenna 2

Freq.	Reading	Cable Loss	Atten.	Duty Factor	Correction Factor	Result
[MHz]	[dBm]	[dB]	[dB]	[dB]	[dB]	[dBm]
5180.0	-15.27	2.71	10.02	1.16	0.00	-1.38
5220.0	-15.32	2.74	10.02	1.16	0.00	-1.40
5240.0	-15.05	2.75	10.02	1.16	0.00	-1.12
5260.0	-15.59	2.76	10.02	1.16	0.00	-1.65
5300.0	-15.37	2.79	10.02	1.16	0.00	-1.40
5320.0	-15.50	2.80	10.02	1.16	0.00	-1.52
5500.0	-16.00	2.92	10.02	1.16	0.00	-1.90
5580.0	-16.02	2.96	10.02	1.16	0.00	-1.88
5700.0	-15.91	3.02	10.02	1.16	0.00	-1.71
5745.0	-17.66	3.05	10.02	1.16	0.27	-3.16
5785.0	-17.88	3.07	10.02	1.16	0.27	-3.36
5825.0	-17.94	3.09	10.02	1.16	0.27	-3.40

UL Japan, Inc.

Ise EMC Lab.

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

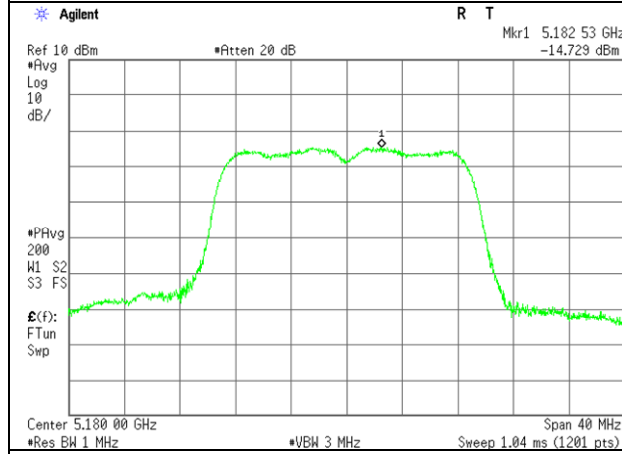
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

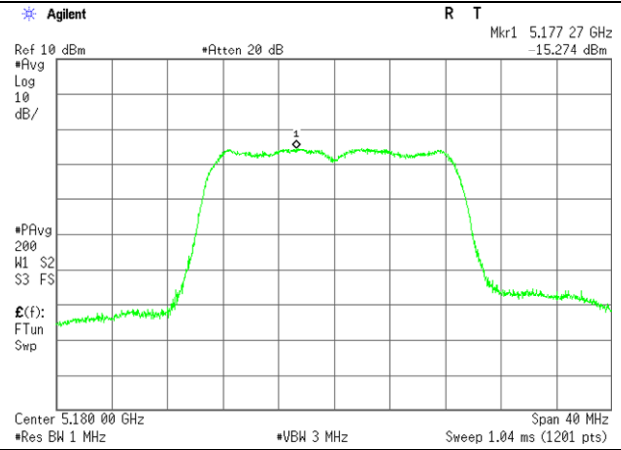
11n-20 Antenna 1

5180MHz

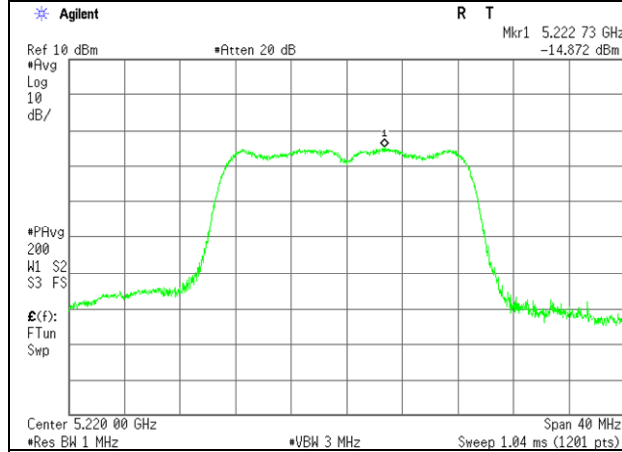


11n-20 Antenna 2

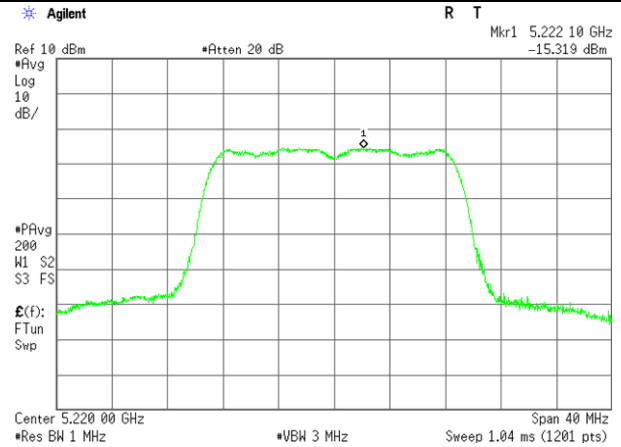
5180MHz



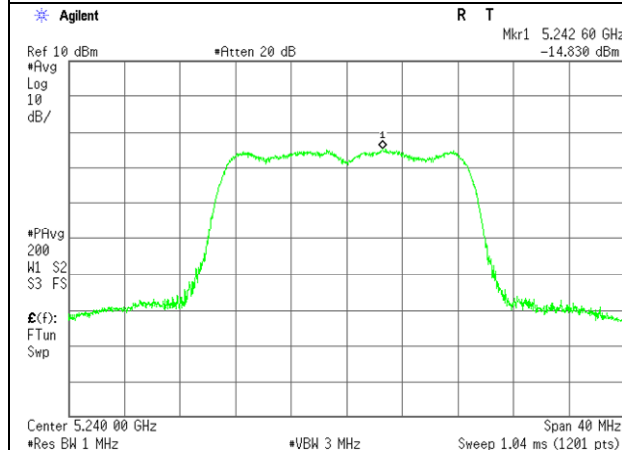
5220MHz



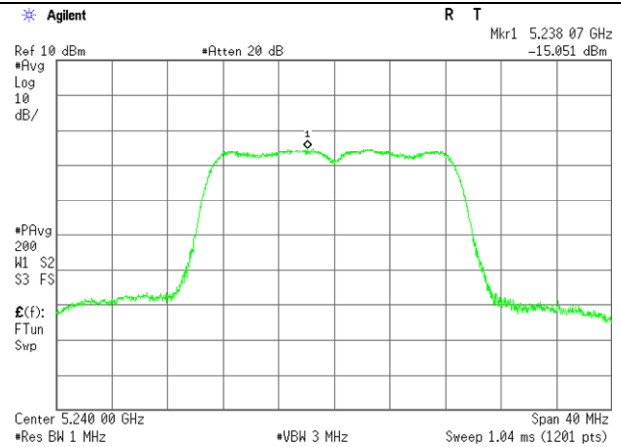
5220MHz



5240MHz



5240MHz



UL Japan, Inc.

Ise EMC Lab.

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

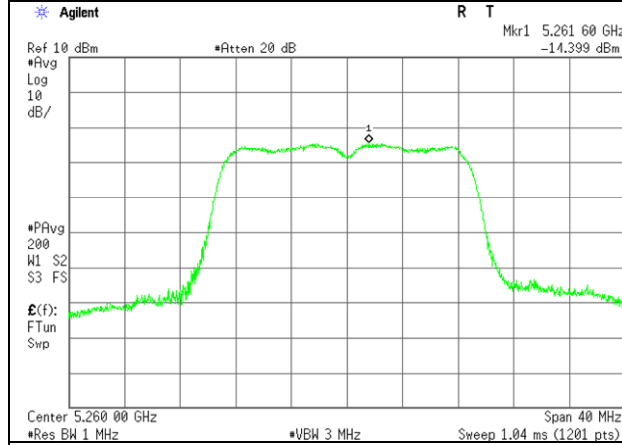
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

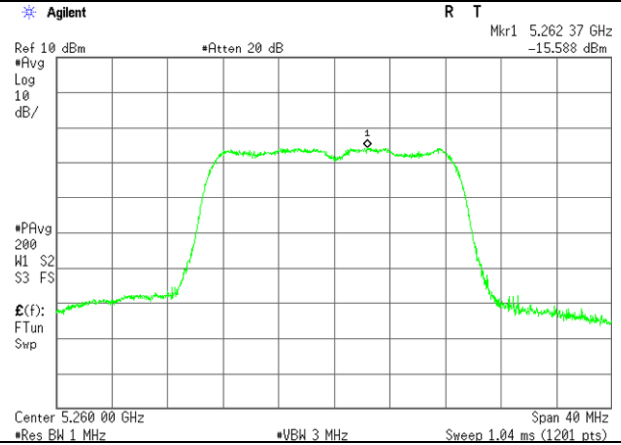
11n-20 Antenna 1

5260MHz

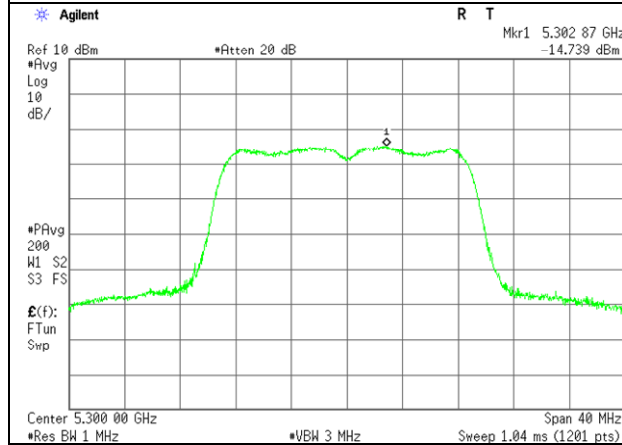


11n-20 Antenna 2

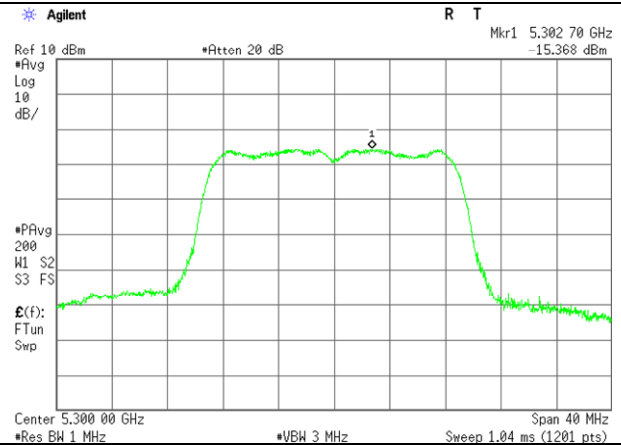
5260MHz



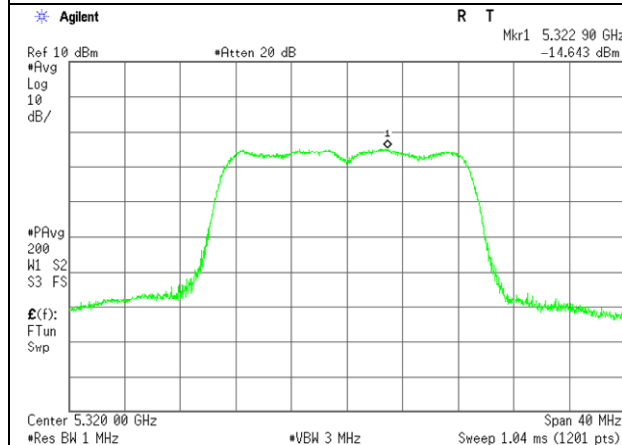
5300MHz



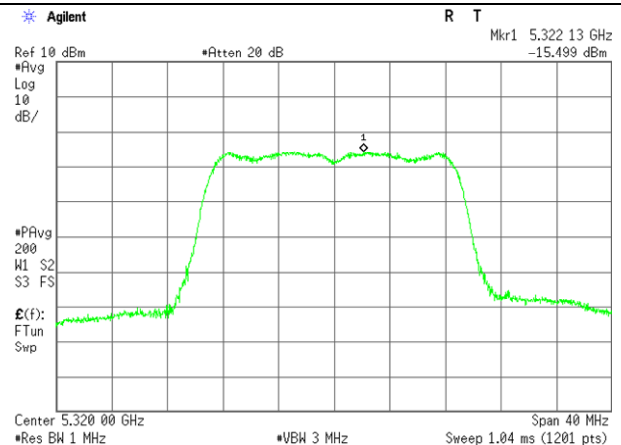
5300MHz



5320MHz



5320MHz



UL Japan, Inc.

Ise EMC Lab.

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

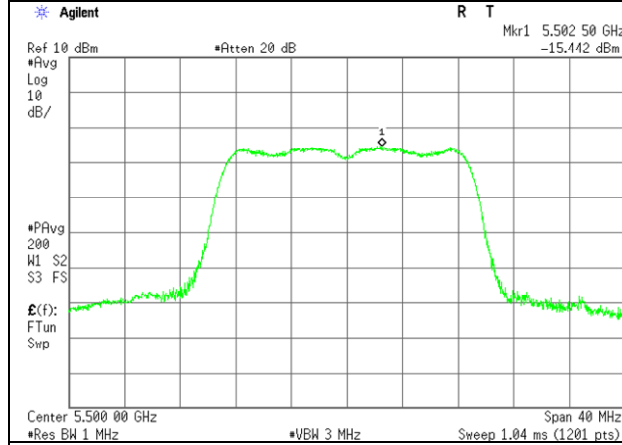
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

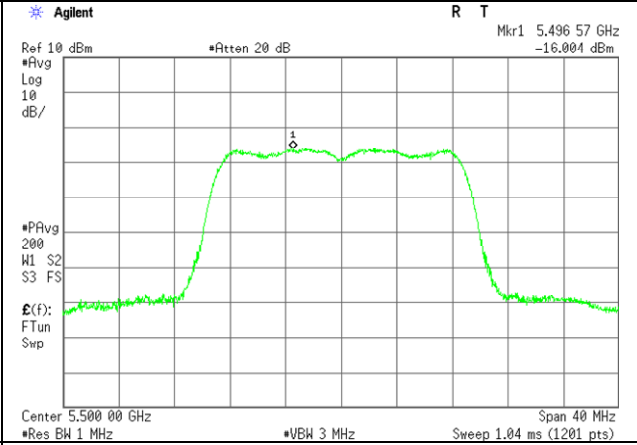
11n-20 Antenna 1

5500MHz

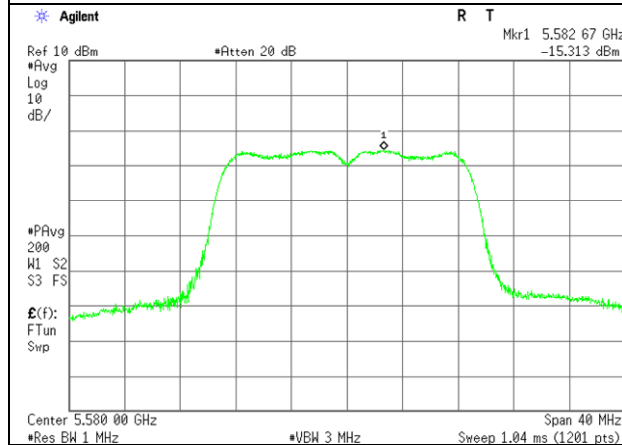


11n-20 Antenna 2

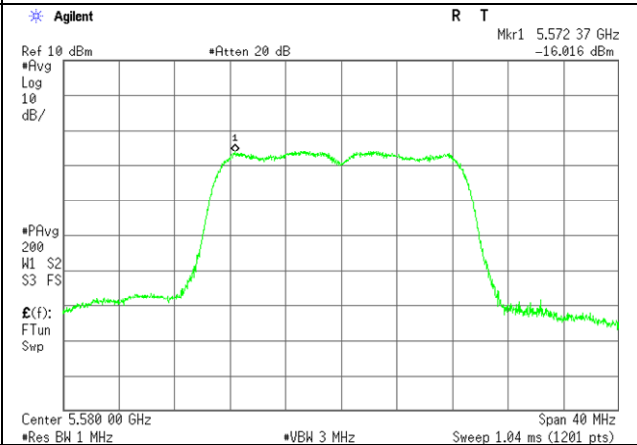
5500MHz



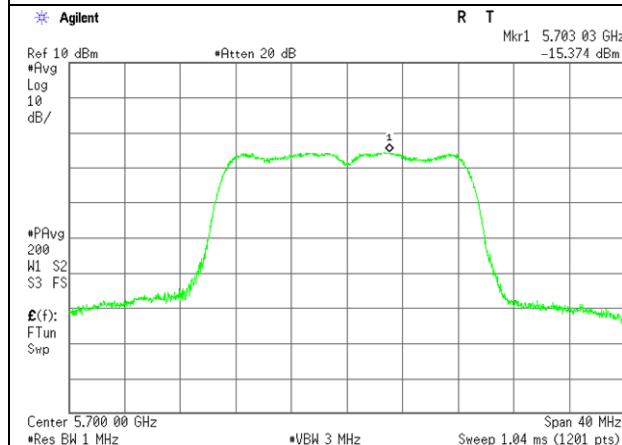
5580MHz



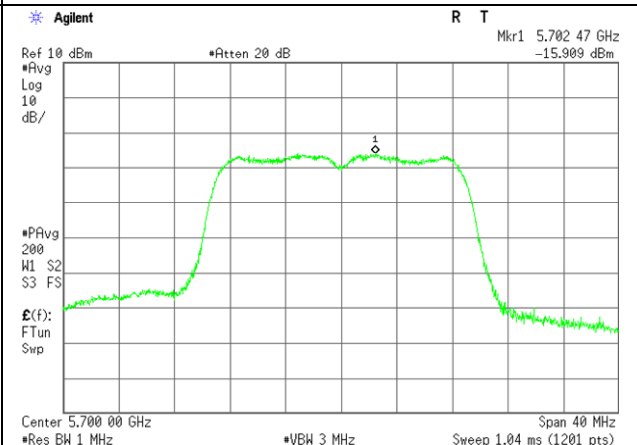
5580MHz



5700MHz



5700MHz



UL Japan, Inc.

Ise EMC Lab.

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

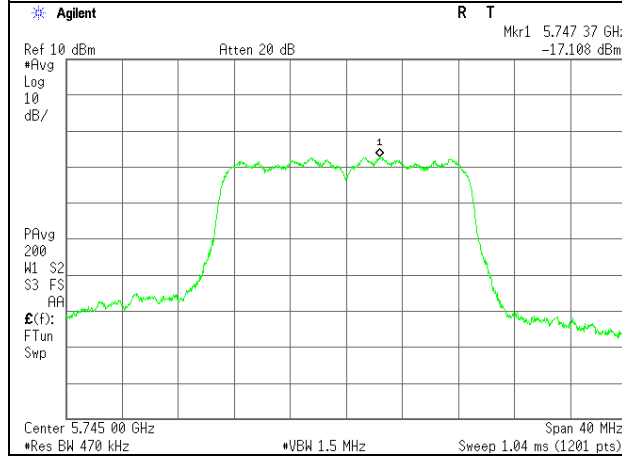
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

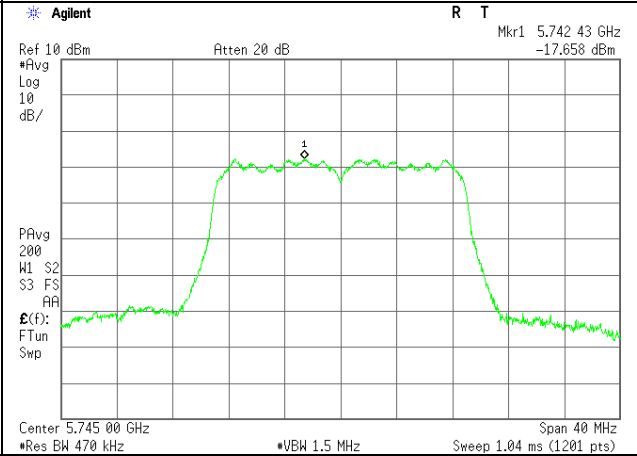
11n-20 Antenna 1

5745MHz

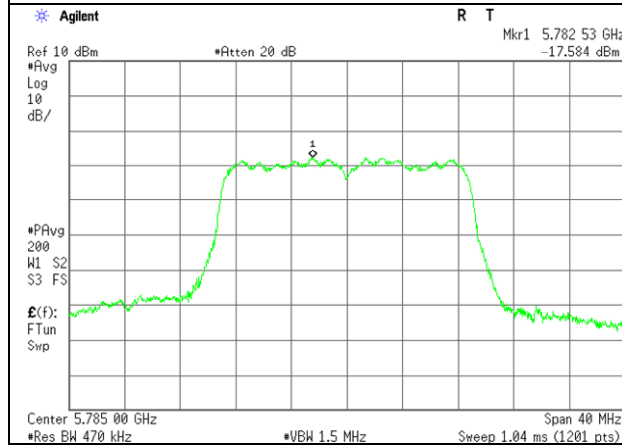


11n-20 Antenna 2

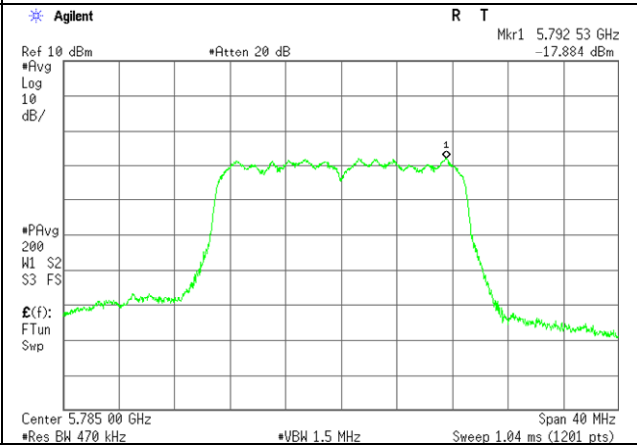
5745MHz



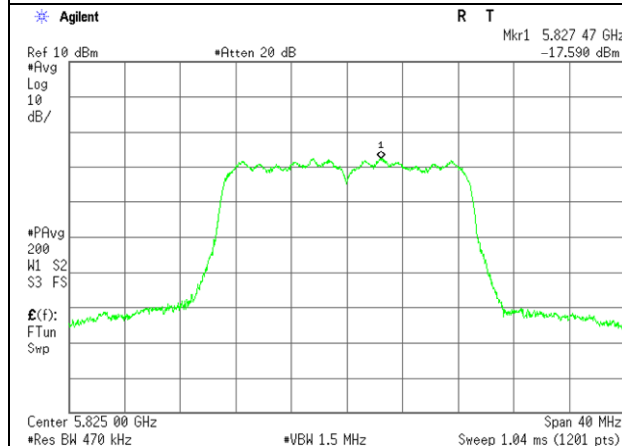
5785MHz



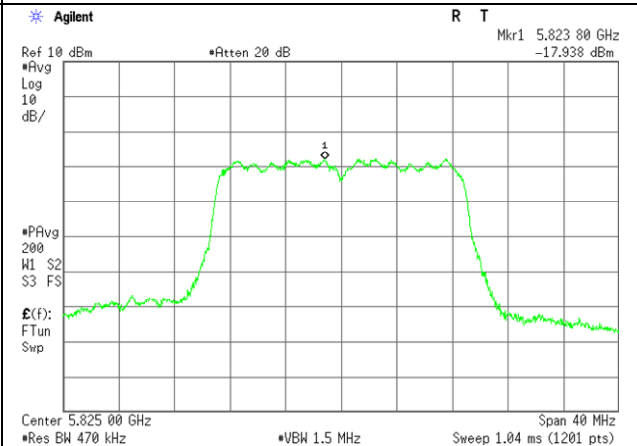
5785MHz



5825MHz



5825MHz



UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 10689818H
Date : 04/13/2015
Temperature/ Humidity : 24deg. C / 39% RH
Engineer : Shinichi Miyazono
Mode : 11ac-20 Tx

Antenna 1+2

Freq.	Result	Limit	Margin
[MHz]	[dBm]	[dBm]	[dB]
5180.0	-1.55	11.00	12.55
5220.0	-1.90	11.00	12.90
5240.0	-2.03	11.00	13.03
5260.0	-1.53	11.00	12.53
5300.0	-1.56	11.00	12.56
5320.0	-1.59	11.00	12.59
5500.0	-2.16	11.00	13.16
5580.0	-2.06	11.00	13.06
5700.0	-1.90	11.00	12.90
5745.0	-3.49	30.00	33.49
5785.0	-3.76	30.00	33.76
5825.0	-3.80	30.00	33.80

Result [dBm] = 10 x log (10 ^ (Ant1 Result [dBm] / 10) + 10 ^ (Ant2 Result [dBm] / 10))

Antenna 1

Freq.	Reading	Cable Loss	Atten.	Duty Factor	Correction Factor	Result
[MHz]	[dBm]	[dB]	[dB]	[dB]	[dB]	[dBm]
5180.0	-18.17	2.71	10.02	1.25	0.00	-4.19
5220.0	-18.67	2.74	10.02	1.25	0.00	-4.66
5240.0	-18.79	2.75	10.02	1.25	0.00	-4.77
5260.0	-17.97	2.76	10.02	1.25	0.00	-3.94
5300.0	-18.52	2.79	10.02	1.25	0.00	-4.46
5320.0	-18.28	2.80	10.02	1.25	0.00	-4.21
5500.0	-19.05	2.92	10.02	1.25	0.00	-4.86
5580.0	-18.73	2.96	10.02	1.25	0.00	-4.50
5700.0	-18.71	3.02	10.02	1.25	0.00	-4.42
5745.0	-20.97	3.05	10.02	1.25	0.27	-6.38
5785.0	-21.22	3.07	10.02	1.25	0.27	-6.61
5825.0	-21.22	3.09	10.02	1.25	0.27	-6.59

Antenna 2

Freq.	Reading	Cable Loss	Atten.	Duty Factor	Correction Factor	Result
[MHz]	[dBm]	[dB]	[dB]	[dB]	[dB]	[dBm]
5180.0	-18.94	2.71	10.02	1.25	0.00	-4.96
5220.0	-19.19	2.74	10.02	1.25	0.00	-5.18
5240.0	-19.35	2.75	10.02	1.25	0.00	-5.33
5260.0	-19.27	2.76	10.02	1.25	0.00	-5.24
5300.0	-18.76	2.79	10.02	1.25	0.00	-4.70
5320.0	-19.11	2.80	10.02	1.25	0.00	-5.04
5500.0	-19.70	2.92	10.02	1.25	0.00	-5.51
5580.0	-19.95	2.96	10.02	1.25	0.00	-5.72
5700.0	-19.75	3.02	10.02	1.25	0.00	-5.46
5745.0	-21.21	3.05	10.02	1.25	0.27	-6.62
5785.0	-21.55	3.07	10.02	1.25	0.27	-6.94
5825.0	-21.67	3.09	10.02	1.25	0.27	-7.04

Result = Reading + Cable Loss + Attenuator + Duty Factor + Correction Factor

UL Japan, Inc.

Ise EMC Lab.

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

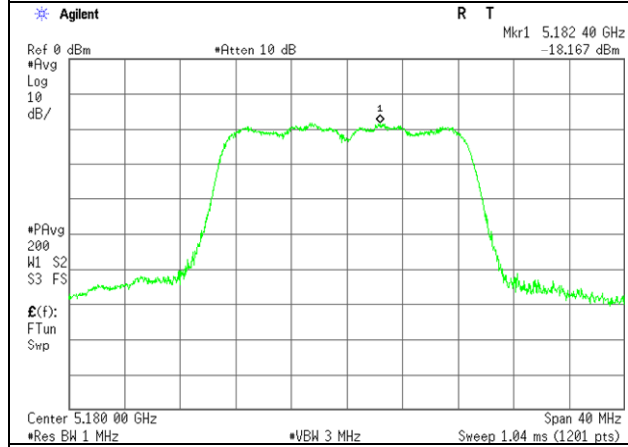
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

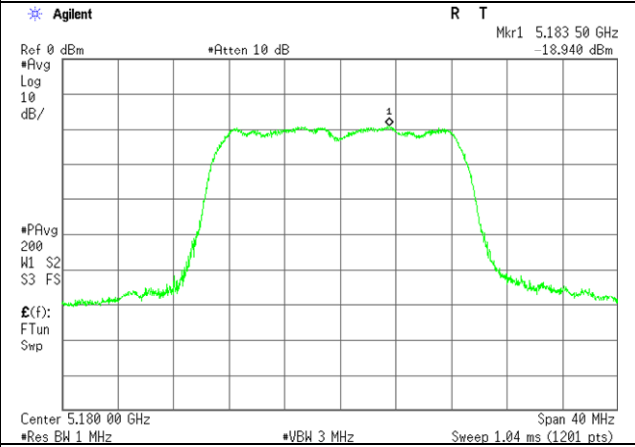
11ac-20 Antenna 1

5180MHz

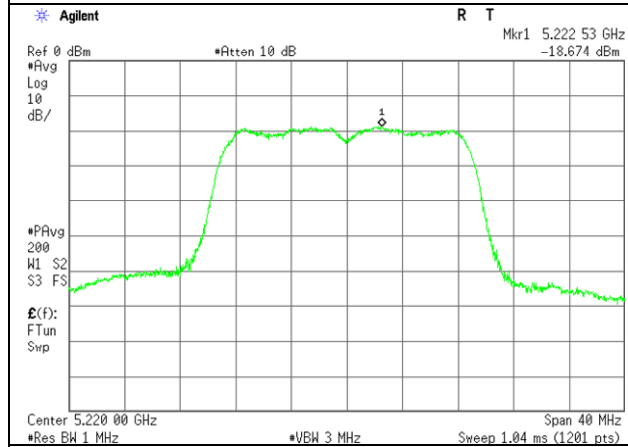


11ac-20 Antenna 2

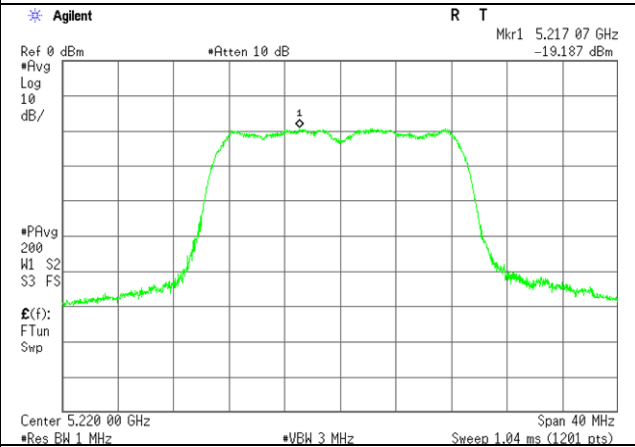
5180MHz



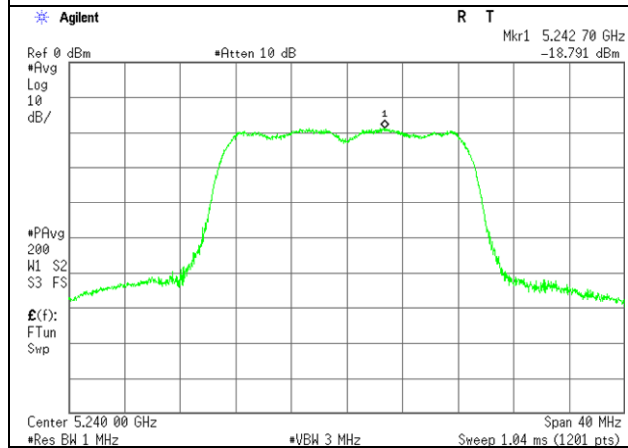
5220MHz



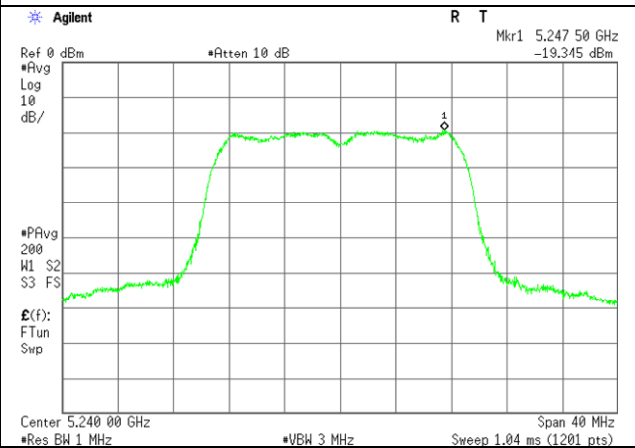
5220MHz



5240MHz



5240MHz



UL Japan, Inc.

Ise EMC Lab.

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

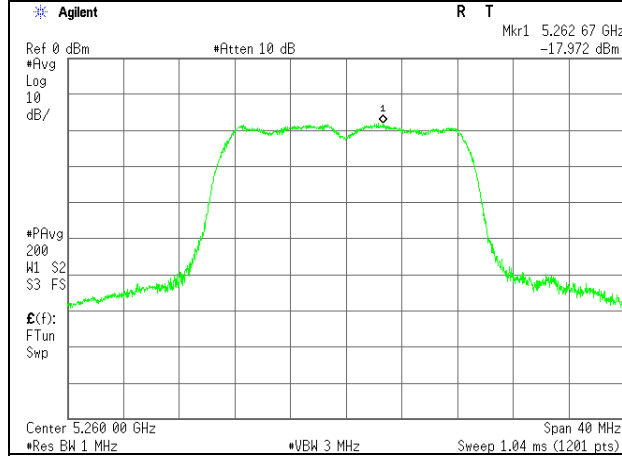
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

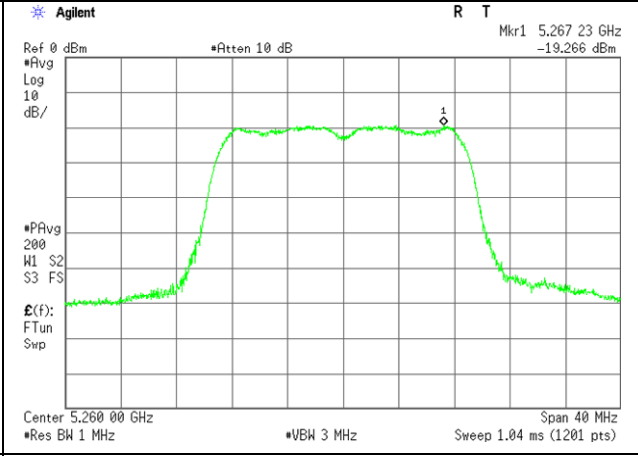
11ac-20 Antenna 1

5260MHz

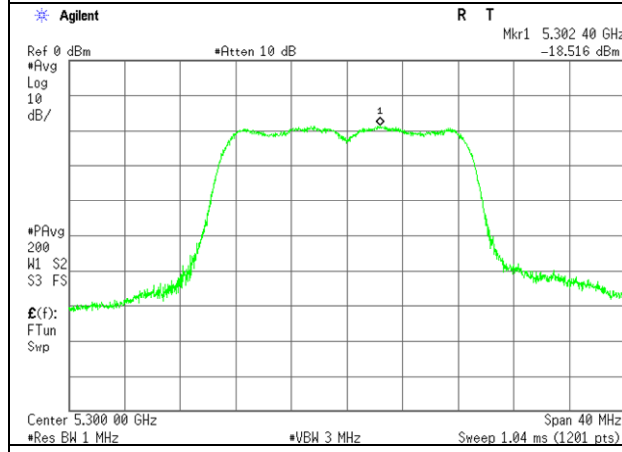


11ac-20 Antenna 2

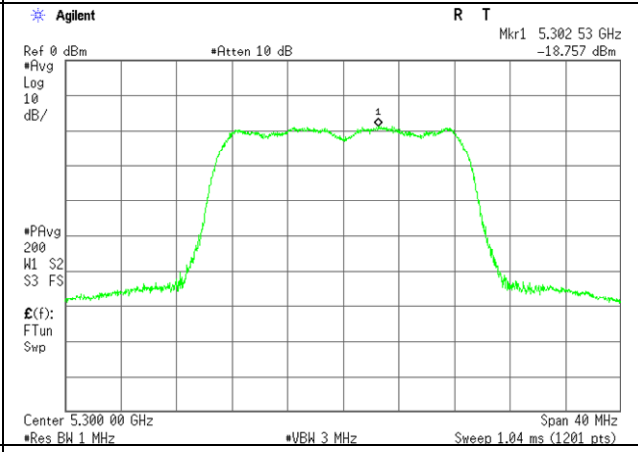
5260MHz



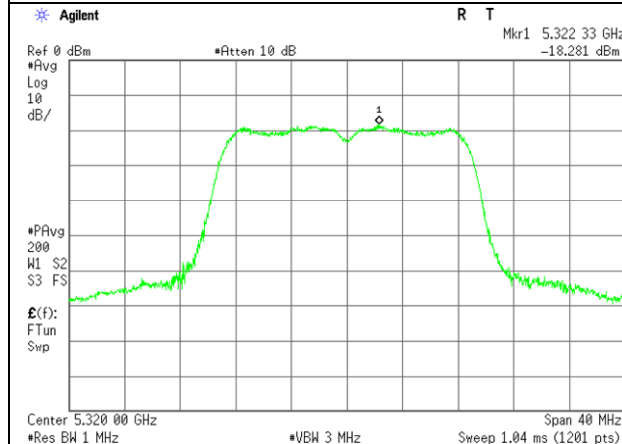
5300MHz



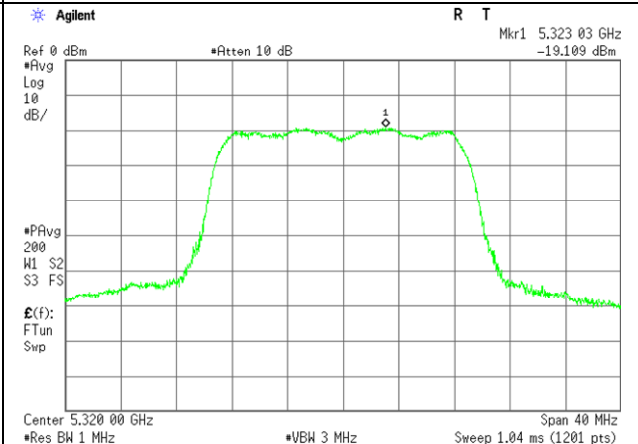
5300MHz



5320MHz



5320MHz



UL Japan, Inc.

Ise EMC Lab.

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

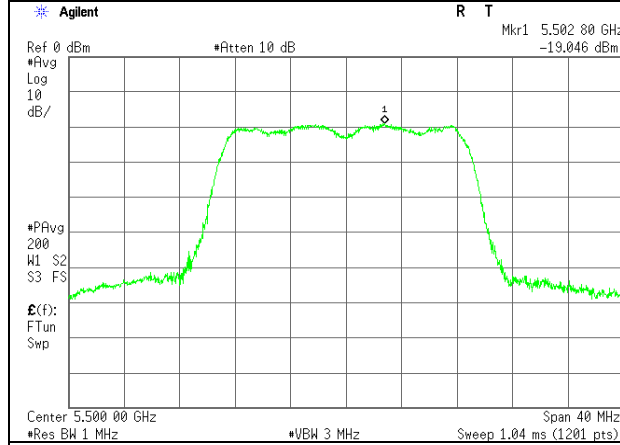
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

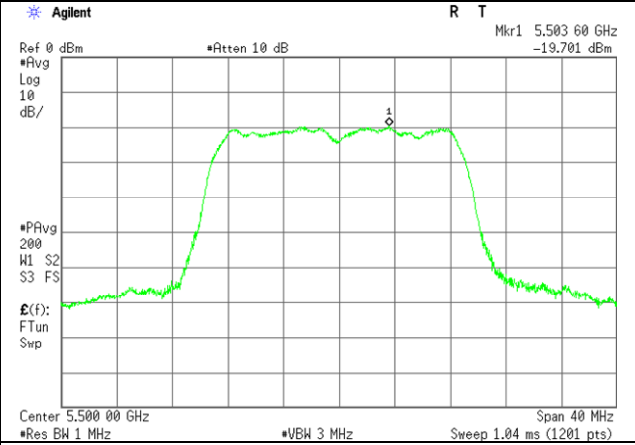
11ac-20 Antenna 1

5500MHz

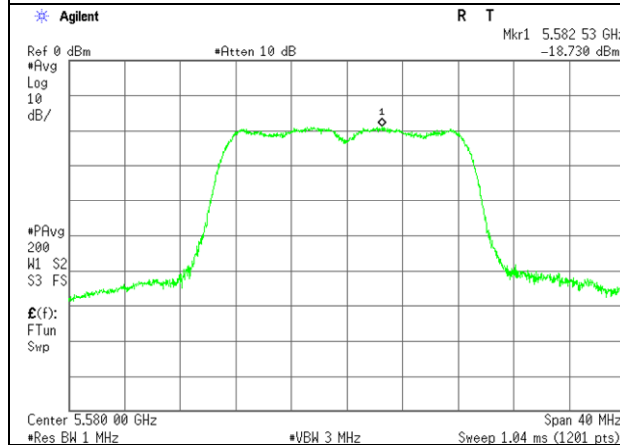


11ac-20 Antenna 2

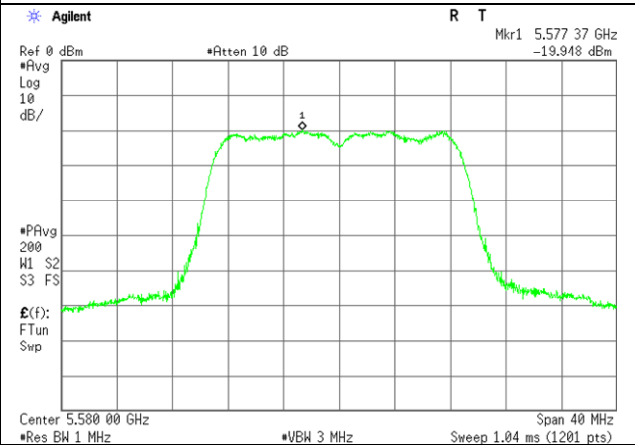
5500MHz



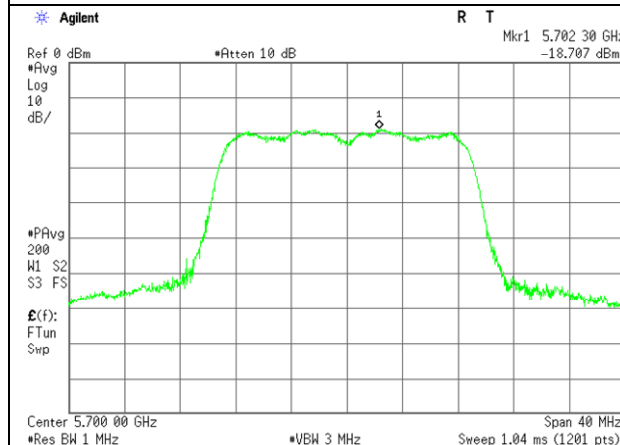
5580MHz



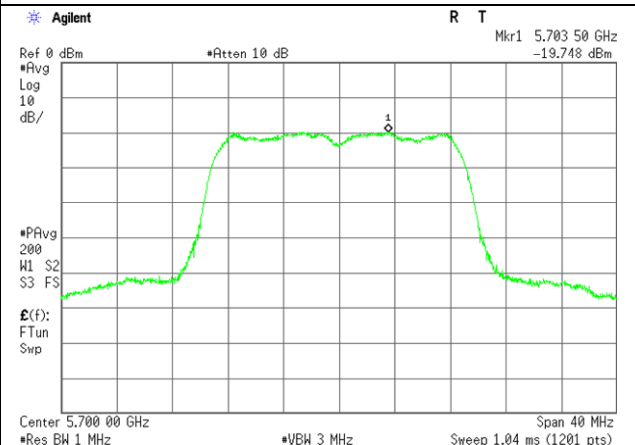
5580MHz



5700MHz



5700MHz



UL Japan, Inc.

Ise EMC Lab.

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

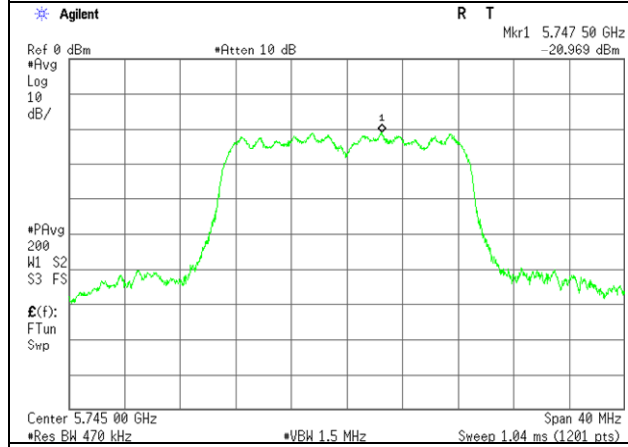
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

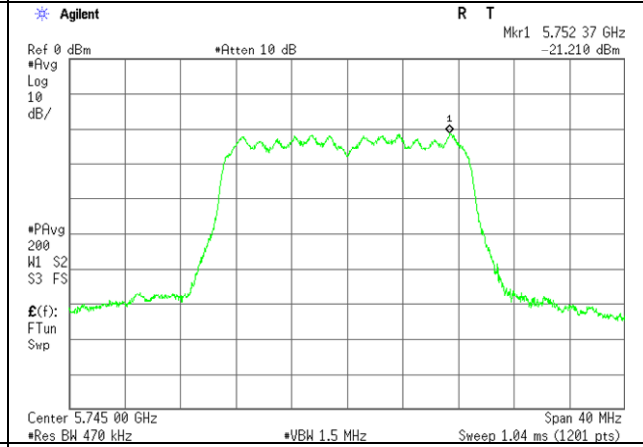
11ac-20 Antenna 1

5745MHz

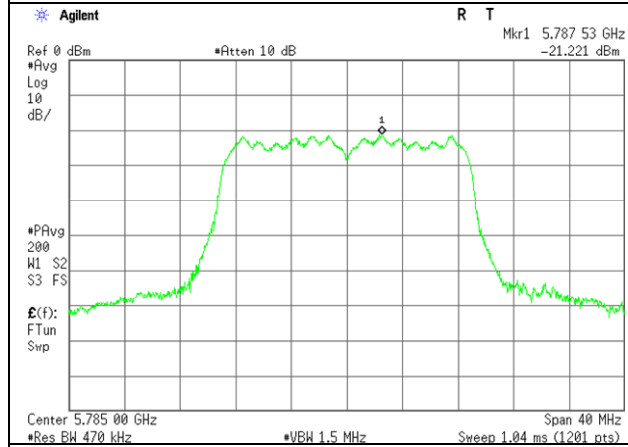


11ac-20 Antenna 2

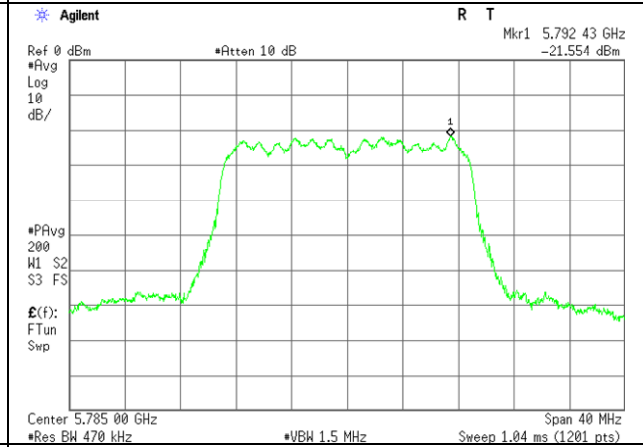
5745MHz



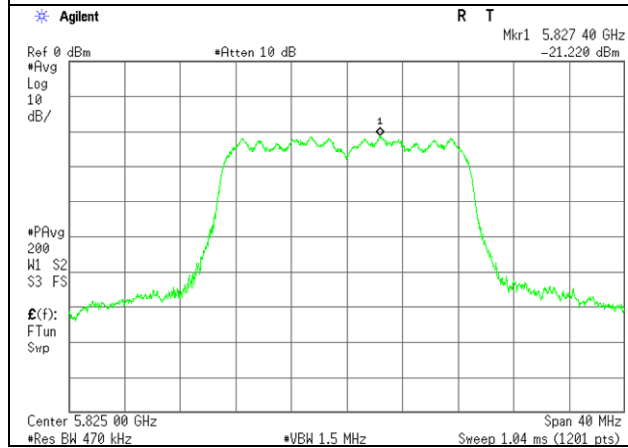
5785MHz



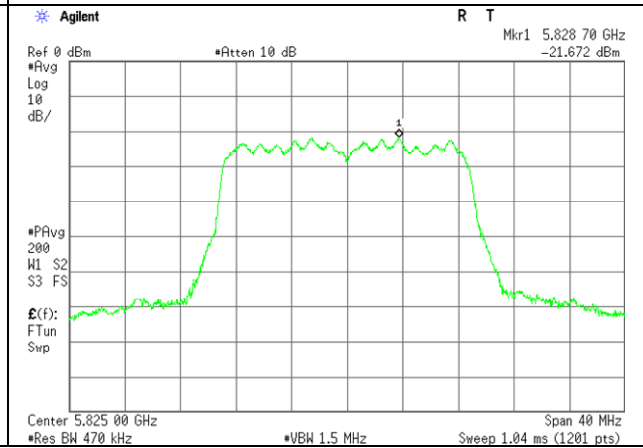
5785MHz



5825MHz



5825MHz



UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

Test place Ise EMC Lab. No.11 Measurement Room
Report No. 10689818H
Date 04/13/2015 06/02/2015
Temperature/ Humidity 24deg. C / 39% RH 23deg. C / 68% RH
Engineer Shinichi Miyazono Takafumi Noguchi
Mode 11n-40 Tx

Antenna 1

Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Correction Factor [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5190.0	-18.02	2.72	10.01	1.79	0.00	-3.50	11.00	14.50
5230.0	-14.71	2.74	10.01	1.79	0.00	-0.17	11.00	11.17
5270.0	-14.24	2.77	10.01	1.79	0.00	0.33	11.00	10.67
5310.0	-16.75	2.80	10.01	1.79	0.00	-2.15	11.00	13.15
5510.0	-16.07	2.92	10.02	1.79	0.00	-1.34	11.00	12.34
5550.0	-15.29	2.95	10.02	1.79	0.00	-0.53	11.00	11.53
5670.0	-15.16	3.01	10.02	1.79	0.00	-0.34	11.00	11.34
5755.0	-17.64	3.05	10.02	1.79	0.27	-2.51	30.00	32.51
5795.0	-16.85	3.08	10.02	1.79	0.27	-1.69	30.00	31.69

Result = Reading + Cable Loss + Attenuator + Duty factor + Correction factor

UL Japan, Inc.

Ise EMC Lab.

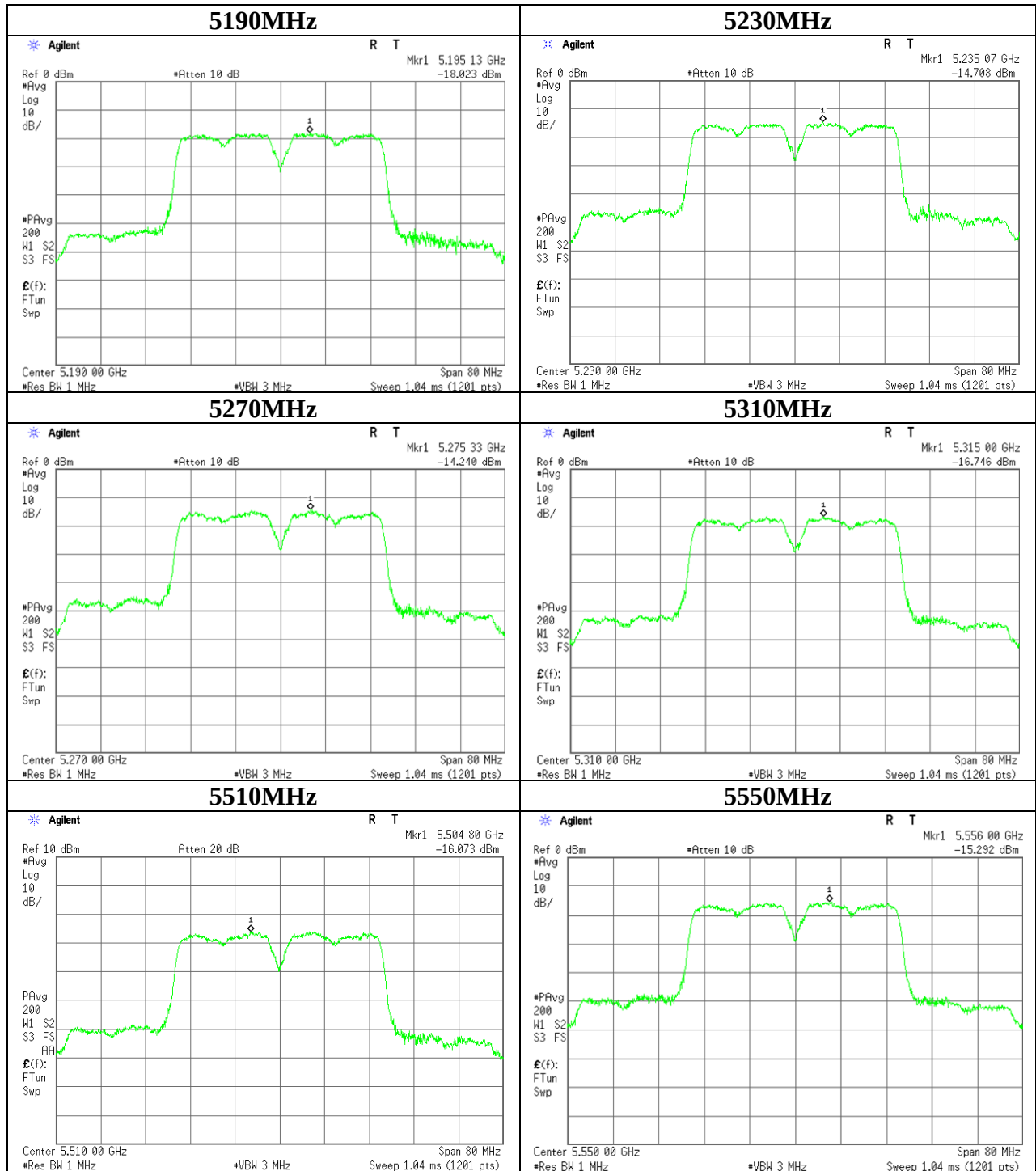
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

11n-40 Antenna 1



UL Japan, Inc.

Ise EMC Lab.

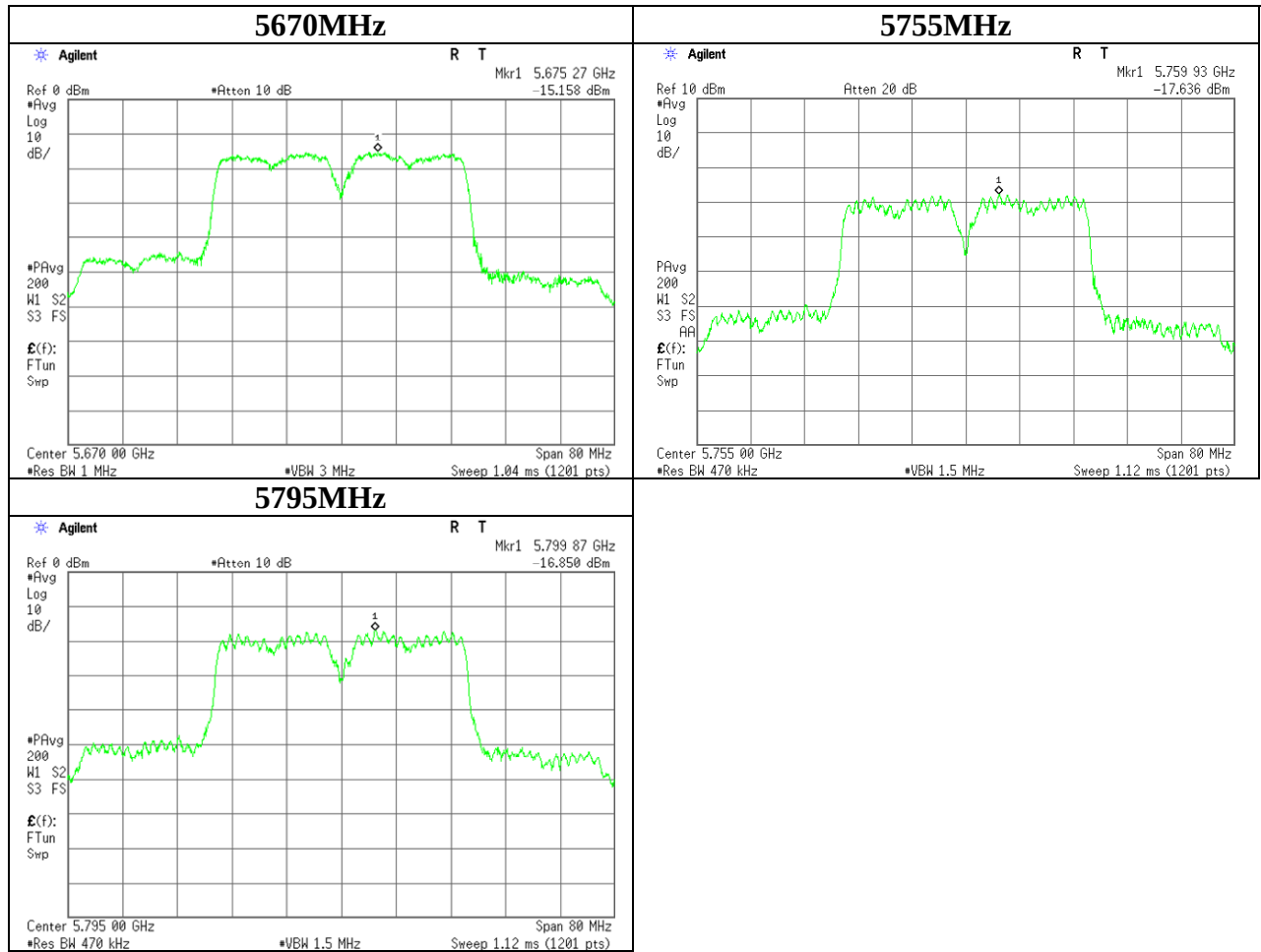
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

11n-40 Antenna 1



UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 10689818H
Date : 04/13/2015 06/02/2015
Temperature/ Humidity : 24deg. C / 39% RH 23deg. C / 68% RH
Engineer : Shinichi Miyazono Takafumi Noguchi
Mode : 11ac-40 Tx

Antenna 1+2

Freq.	Result	Limit	Margin
[MHz]	[dBm]	[dBm]	[dB]
5190.0	-5.17	11.00	16.17
5230.0	-4.92	11.00	15.92
5270.0	-4.66	11.00	15.66
5310.0	-4.39	11.00	15.39
5510.0	-5.16	11.00	16.16
5550.0	-5.20	11.00	16.20
5670.0	-4.92	11.00	15.92
5755.0	-6.56	30.00	36.56
5795.0	-6.47	30.00	36.47

Result [dBm] = $10 \times \log (10^{\wedge} (\text{Ant1 Result [dBm]} / 10) + 10^{\wedge} (\text{Ant2 Result [dBm]} / 10))$

Antenna 1

Freq.	Reading	Cable Loss	Atten.	Duty Factor	Correction Factor	Result
[MHz]	[dBm]	[dB]	[dB]	[dB]	[dB]	[dBm]
5190.0	-21.94	2.72	10.01	1.35	0.00	-7.86
5230.0	-22.00	2.74	10.01	1.35	0.00	-7.90
5270.0	-21.54	2.77	10.01	1.35	0.00	-7.41
5310.0	-21.19	2.80	10.01	1.35	0.00	-7.03
5510.0	-22.15	2.92	10.02	1.35	0.00	-7.86
5550.0	-22.18	2.95	10.02	1.35	0.00	-7.86
5670.0	-22.16	3.01	10.02	1.35	0.00	-7.78
5755.0	-24.01	3.05	10.02	1.35	0.27	-9.32
5795.0	-23.90	3.08	10.02	1.35	0.27	-9.18

Antenna 2

Freq.	Reading	Cable Loss	Atten.	Duty Factor	Correction Factor	Result
[MHz]	[dBm]	[dB]	[dB]	[dB]	[dB]	[dBm]
5180.0	-22.62	2.72	10.01	1.35	0.00	-8.54
5220.0	-22.06	2.74	10.01	1.35	0.00	-7.96
5270.0	-22.08	2.77	10.01	1.35	0.00	-7.95
5310.0	-21.96	2.80	10.01	1.35	0.00	-7.80
5510.0	-22.79	2.92	10.02	1.35	0.00	-8.50
5550.0	-22.91	2.95	10.02	1.35	0.00	-8.59
5670.0	-22.46	3.01	10.02	1.35	0.00	-8.08
5755.0	-24.53	3.05	10.02	1.35	0.27	-9.84
5795.0	-24.53	3.08	10.02	1.35	0.27	-9.81

Result = Reading + Cable Loss + Attenuator + Duty Factor + Correction Factor

UL Japan, Inc.

Ise EMC Lab.

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

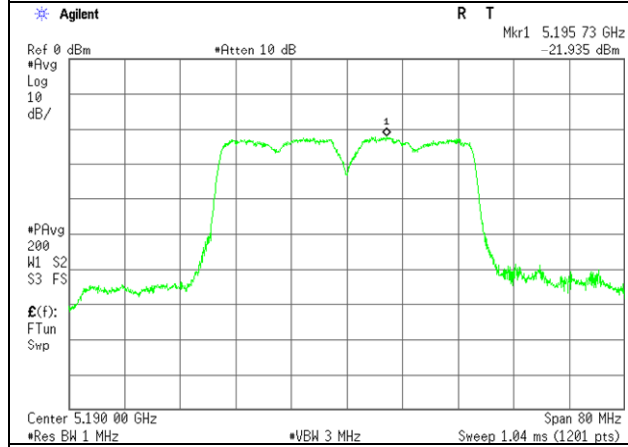
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

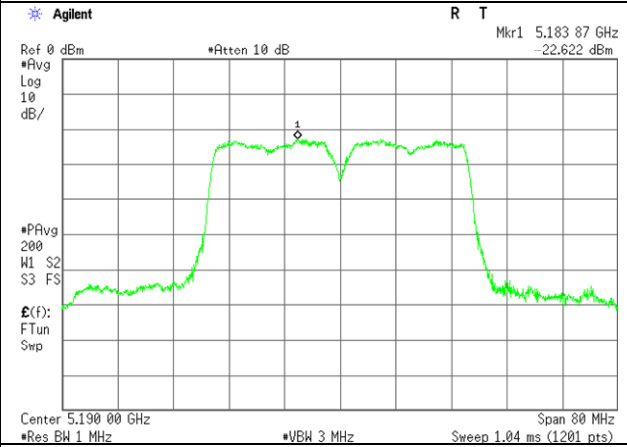
11ac-40 Antenna 1

5190MHz

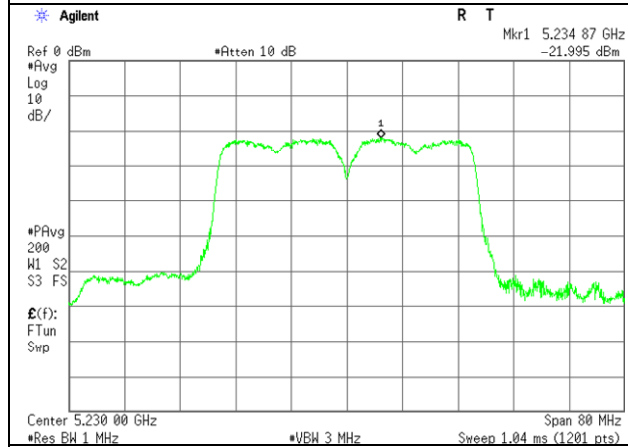


11ac-40 Antenna 2

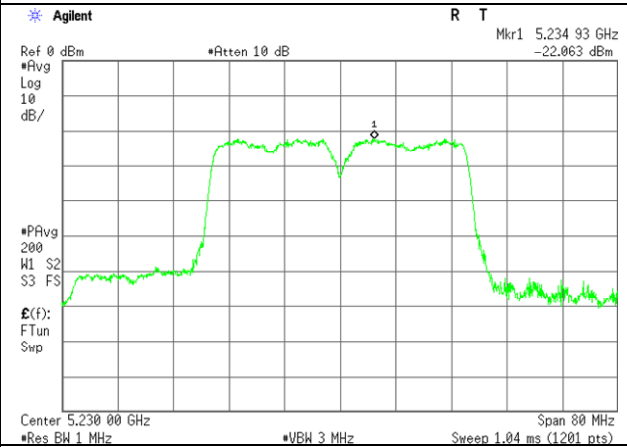
5190MHz



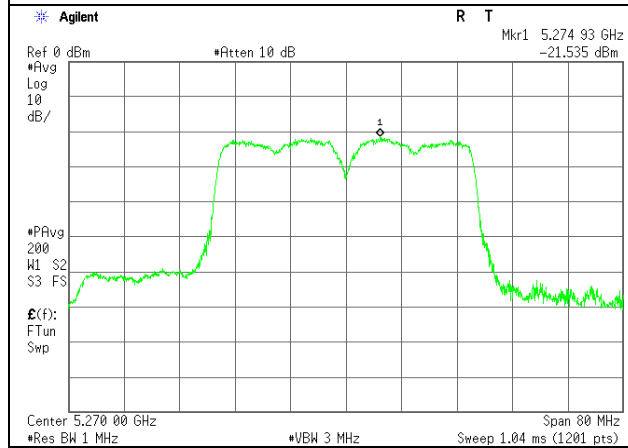
5230MHz



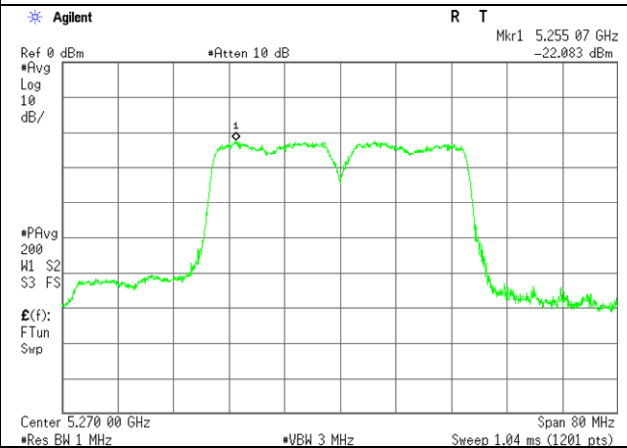
5230MHz



5270MHz



5270MHz



UL Japan, Inc.

Ise EMC Lab.

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

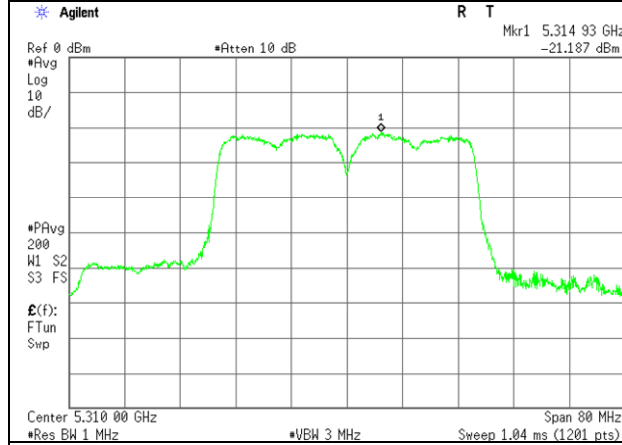
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

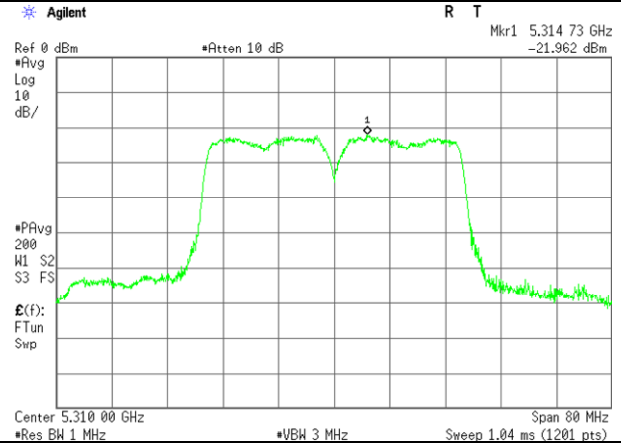
11ac-40 Antenna 1

5310MHz

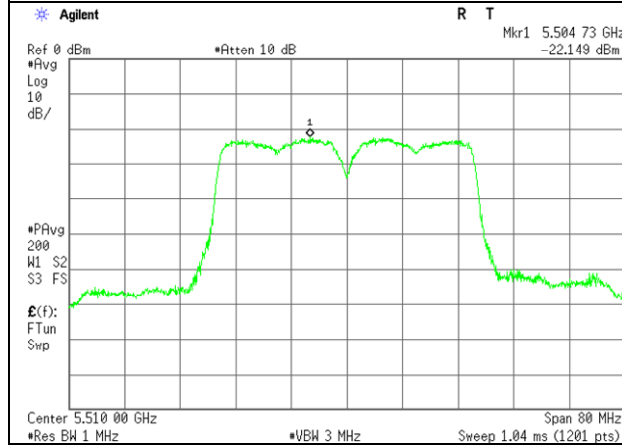


11ac-40 Antenna 2

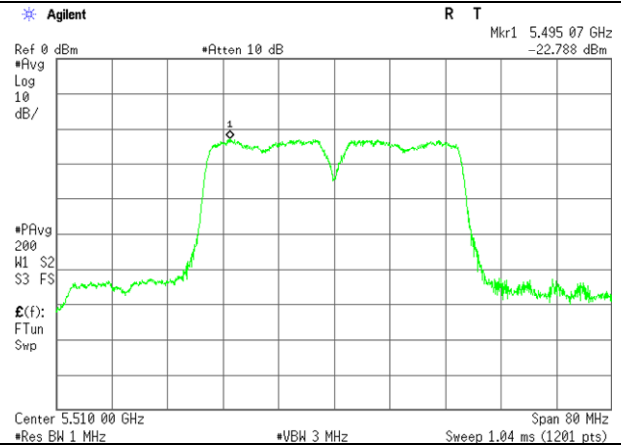
5310MHz



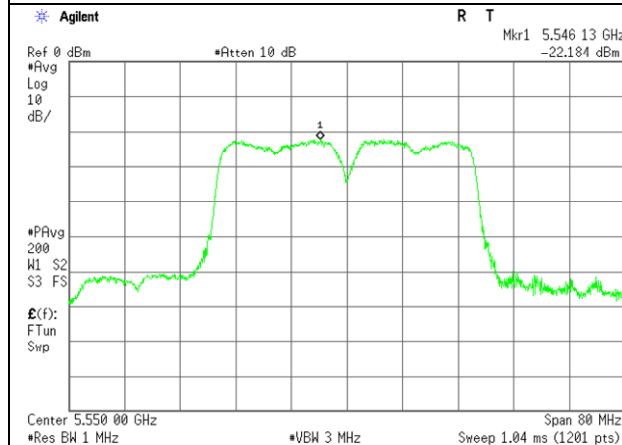
5510MHz



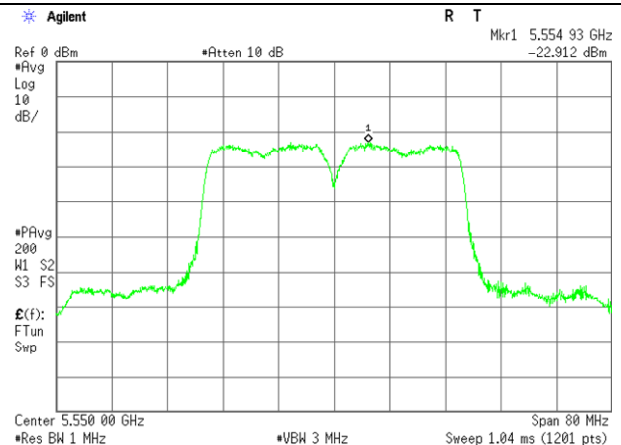
5510MHz



5550MHz



5550MHz



UL Japan, Inc.

Ise EMC Lab.

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

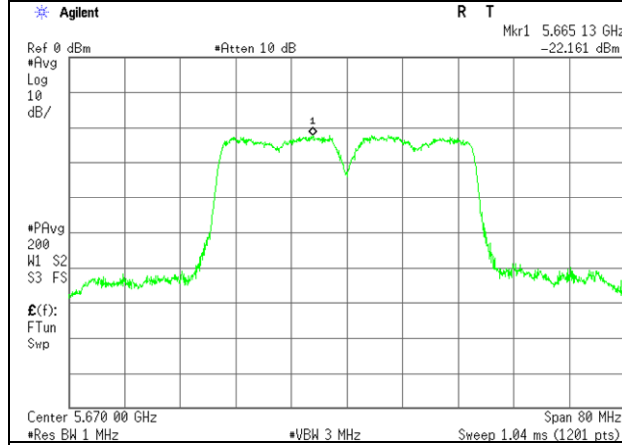
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

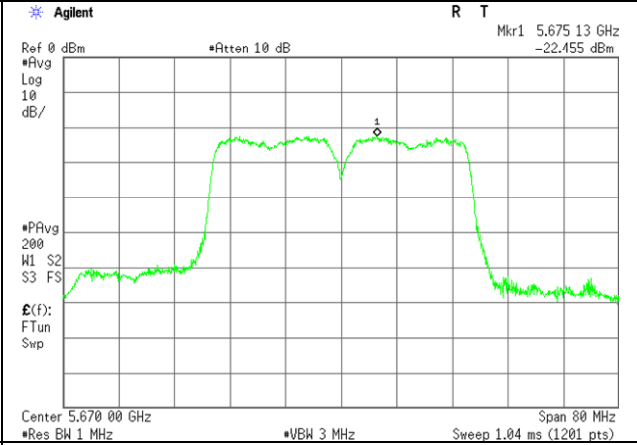
11ac-40 Antenna 1

5670MHz

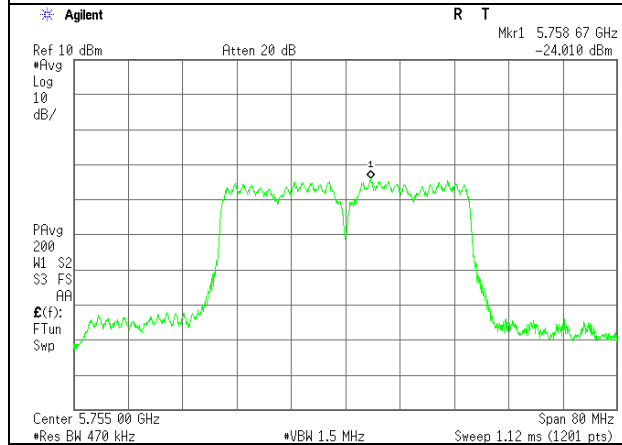


11ac-40 Antenna 2

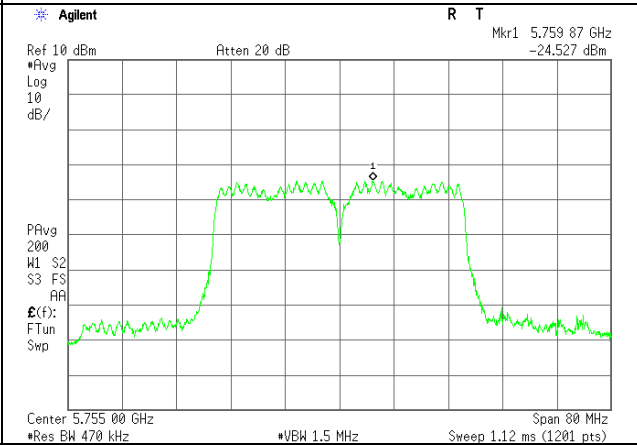
5670MHz



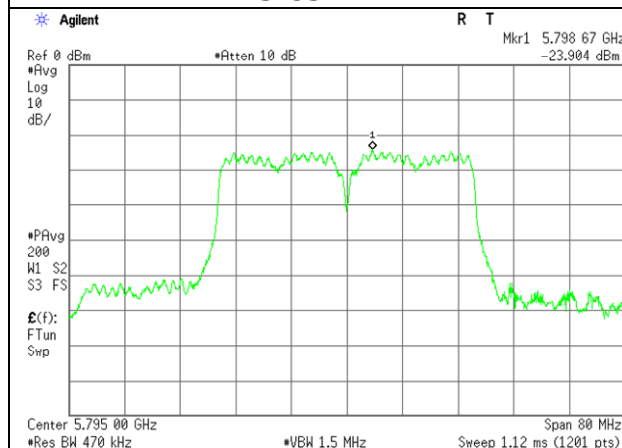
5755MHz



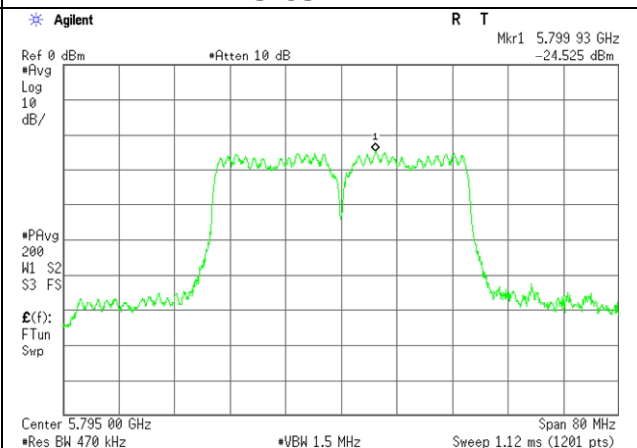
5755MHz



5795MHz



5795MHz



UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 10689818H
Date : 05/16/2015
Temperature/ Humidity : 25deg. C / 41% RH
Engineer : Shinichi Miyazono
Mode : 11ac-80 Tx

Antenna 1+2

Freq.	Result	Limit	Margin
[MHz]	[dBm]	[dBm]	[dB]
5210.0	-10.10	11.00	21.10
5290.0	-8.72	11.00	19.72
5530.0	-9.20	11.00	20.20
5610.0	-8.78	11.00	19.78
5775.0	-11.65	30.00	41.65

Result [dBm] = $10 \times \log (10^{\wedge} (\text{Ant1 Result [dBm]} / 10) + 10^{\wedge} (\text{Ant2 Result [dBm]} / 10))$

Antenna 1

Freq.	Reading	Cable Loss	Atten.	Duty Factor	Correction Factor	Result
[MHz]	[dBm]	[dB]	[dB]	[dB]	[dB]	[dBm]
5210.0	-26.69	2.73	10.01	1.27	0.00	-12.68
5290.0	-25.69	2.78	10.01	1.27	0.00	-11.63
5530.0	-26.11	2.93	10.02	1.27	0.00	-11.89
5610.0	-25.52	2.98	10.02	1.27	0.00	-11.25
5775.0	-29.08	3.06	10.02	1.27	0.27	-14.46

Antenna 2

Freq.	Reading	Cable Loss	Atten.	Duty Factor	Correction Factor	Result
[MHz]	[dBm]	[dB]	[dB]	[dB]	[dB]	[dBm]
5210.0	-27.59	2.73	10.01	1.27	0.00	-13.58
5290.0	-25.90	2.78	10.01	1.27	0.00	-11.84
5530.0	-26.77	2.93	10.02	1.27	0.00	-12.55
5610.0	-26.67	2.98	10.02	1.27	0.00	-12.40
5775.0	-29.50	3.06	10.02	1.27	0.27	-14.88

Result = Reading + Cable Loss + Attenuator + Duty Factor + Correction Factor

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124