

## Maximum Power Spectral Density

Report No. 13568152S-L  
Test place Shonan EMC Lab. No.5 Shielded Room  
Date January 14, 2021  
Temperature / Humidity 21 deg. C / 51 % RH  
Engineer Shiro Kobayashi  
Mode Tx 11a

### Main

Applied limit: 15.407, mobile and portable client device

Tested Frequency [M Hz]	PSD Reading [dBm /MHz]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	RBW Correction Factor [dB]	PSD (Conducted)			PSD (e.i.r.p.)		
							Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]	Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]
5180	-15.66	2.39	10.22	0.21	-0.98	0.00	-2.84	11.00	13.84	-3.82	17.00	20.82
5220	-16.55	2.40	10.22	0.21	-0.98	0.00	-3.72	11.00	14.72	-4.70	17.00	21.70
5240	-16.79	2.40	10.22	0.21	-0.98	0.00	-3.96	11.00	14.96	-4.94	17.00	21.94
5260	-16.73	2.40	10.22	0.21	-0.98	0.00	-3.90	11.00	14.90	-4.88	17.00	21.88
5300	-17.50	2.40	10.22	0.21	-0.98	0.00	-4.67	11.00	15.67	-5.65	17.00	22.65
5320	-16.86	2.40	10.22	0.21	-0.98	0.00	-4.03	11.00	15.03	-5.01	17.00	22.01
5500	-15.98	2.41	10.22	0.21	-0.98	0.00	-3.14	11.00	14.14	-4.12	17.00	21.12
5580	-16.84	2.41	10.22	0.21	-0.98	0.00	-4.00	11.00	15.00	-4.98	17.00	21.98
5700	-15.00	2.42	10.22	0.21	-0.98	0.00	-2.15	11.00	13.15	-3.13	17.00	20.13
5745	-23.69	2.42	10.22	0.21	-0.98	6.99	-3.85	30.00	33.85	-4.83	36.00	40.83
5785	-24.43	2.42	10.22	0.21	-0.98	6.99	-4.59	30.00	34.59	-5.57	36.00	41.57
5825	-24.36	2.42	10.22	0.21	-0.98	6.99	-4.52	30.00	34.52	-5.50	36.00	41.50

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz

band. RBW Correction Factor =  $10 * \log(\text{Specified bandwidth} / \text{Measured bandwidth})$

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

### Sub

Applied limit: 15.407, mobile and portable client device

Tested Frequency [M Hz]	PSD Reading [dBm /MHz]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	RBW Correction Factor [dB]	PSD (Conducted)			PSD (e.i.r.p.)		
							Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]	Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]
5180	-13.95	2.38	9.93	0.21	-1.54	0.00	-1.43	11.00	12.43	-2.97	17.00	19.97
5220	-15.61	2.38	9.93	0.21	-1.54	0.00	-3.09	11.00	14.09	-4.63	17.00	21.63
5240	-16.05	2.38	9.93	0.21	-1.54	0.00	-3.53	11.00	14.53	-5.07	17.00	22.07
5260	-15.97	2.38	9.93	0.21	-1.54	0.00	-3.45	11.00	14.45	-4.99	17.00	21.99
5300	-16.39	2.38	9.93	0.21	-1.54	0.00	-3.87	11.00	14.87	-5.41	17.00	22.41
5320	-16.63	2.38	9.93	0.21	-1.54	0.00	-4.11	11.00	15.11	-5.65	17.00	22.65
5500	-14.68	2.39	9.94	0.21	-1.54	0.00	-2.14	11.00	13.14	-3.68	17.00	20.68
5580	-14.65	2.39	9.94	0.21	-1.54	0.00	-2.11	11.00	13.11	-3.65	17.00	20.65
5700	-15.17	2.40	9.94	0.21	-1.54	0.00	-2.62	11.00	13.62	-4.16	17.00	21.16
5745	-23.82	2.40	9.94	0.21	-1.54	6.99	-4.28	30.00	34.28	-5.82	36.00	41.82
5785	-24.04	2.40	9.94	0.21	-1.54	6.99	-4.50	30.00	34.50	-6.04	36.00	42.04
5825	-23.82	2.40	9.94	0.21	-1.54	6.99	-4.28	30.00	34.28	-5.82	36.00	41.82

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz

band. RBW Correction Factor =  $10 * \log(\text{Specified bandwidth} / \text{Measured bandwidth})$

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

**UL Japan, Inc.**

**Shonan EMC Lab.**

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

## Maximum Power Spectral Density

Report No. 13568152S-L  
Test place Shonan EMC Lab. No.5 Shielded Room  
Date January 14, 2021  
Temperature / Humidity 21 deg. C / 51 % RH  
Engineer Shiro Kobayashi  
Mode Tx 11n-20 (SISO)

### Main

Applied limit: 15.407, mobile and portable client device

Tested Frequency [M Hz]	PSD Reading [dBm /MHz]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	RBW Correction Factor [dB]	PSD (Conducted)			PSD (e.i.r.p.)		
							Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]	Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]
5180	-14.32	2.39	10.22	0.22	-0.98	0.00	-1.49	11.00	12.49	-2.47	17.00	19.47
5220	-16.42	2.40	10.22	0.22	-0.98	0.00	-3.58	11.00	14.58	-4.56	17.00	21.56
5240	-16.92	2.40	10.22	0.22	-0.98	0.00	-4.08	11.00	15.08	-5.06	17.00	22.06
5260	-16.66	2.40	10.22	0.22	-0.98	0.00	-3.82	11.00	14.82	-4.80	17.00	21.80
5300	-17.56	2.40	10.22	0.22	-0.98	0.00	-4.72	11.00	15.72	-5.70	17.00	22.70
5320	-17.61	2.40	10.22	0.22	-0.98	0.00	-4.77	11.00	15.77	-5.75	17.00	22.75
5500	-16.14	2.41	10.22	0.22	-0.98	0.00	-3.29	11.00	14.29	-4.27	17.00	21.27
5580	-16.93	2.41	10.22	0.22	-0.98	0.00	-4.08	11.00	15.08	-5.06	17.00	22.06
5700	-15.41	2.42	10.22	0.22	-0.98	0.00	-2.55	11.00	13.55	-3.53	17.00	20.53
5745	-23.58	2.42	10.22	0.22	-0.98	6.99	-3.73	30.00	33.73	-4.71	36.00	40.71
5785	-24.12	2.42	10.22	0.22	-0.98	6.99	-4.27	30.00	34.27	-5.25	36.00	41.25
5825	-24.38	2.42	10.22	0.22	-0.98	6.99	-4.53	30.00	34.53	-5.51	36.00	41.51

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band. RBW Correction Factor =  $10 * \log(\text{Specified bandwidth} / \text{Measured bandwidth})$

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

### Sub

Applied limit: 15.407, mobile and portable client device

Tested Frequency [M Hz]	PSD Reading [dBm /MHz]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	RBW Correction Factor [dB]	PSD (Conducted)			PSD (e.i.r.p.)		
							Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]	Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]
5180	-14.12	2.38	9.93	0.22	-1.54	0.00	-1.59	11.00	12.59	-3.13	17.00	20.13
5220	-16.09	2.38	9.93	0.22	-1.54	0.00	-3.56	11.00	14.56	-5.10	17.00	22.10
5240	-16.37	2.38	9.93	0.22	-1.54	0.00	-3.84	11.00	14.84	-5.38	17.00	22.38
5260	-16.02	2.38	9.93	0.22	-1.54	0.00	-3.49	11.00	14.49	-5.03	17.00	22.03
5300	-16.90	2.38	9.93	0.22	-1.54	0.00	-4.37	11.00	15.37	-5.91	17.00	22.91
5320	-17.05	2.38	9.93	0.22	-1.54	0.00	-4.52	11.00	15.52	-6.06	17.00	23.06
5500	-14.90	2.39	9.94	0.22	-1.54	0.00	-2.35	11.00	13.35	-3.89	17.00	20.89
5580	-14.93	2.39	9.94	0.22	-1.54	0.00	-2.38	11.00	13.38	-3.92	17.00	20.92
5700	-15.02	2.40	9.94	0.22	-1.54	0.00	-2.46	11.00	13.46	-4.00	17.00	21.00
5745	-23.89	2.40	9.94	0.22	-1.54	6.99	-4.34	30.00	34.34	-5.88	36.00	41.88
5785	-24.11	2.40	9.94	0.22	-1.54	6.99	-4.56	30.00	34.56	-6.10	36.00	42.10
5825	-24.11	2.40	9.94	0.22	-1.54	6.99	-4.56	30.00	34.56	-6.10	36.00	42.10

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band. RBW Correction Factor =  $10 * \log(\text{Specified bandwidth} / \text{Measured bandwidth})$

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

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Test place Shonan EMC Lab. No.5 Shielded Room  
Date January 14, 2021  
Temperature / Humidity 21 deg. C / 51 % RH  
Engineer Shiro Kobayashi  
Mode Tx 11n-20 (MIMO)

**Main + Sub**

Applied limit: 15.407, mobile and portable client device

Tested Frequency [M Hz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna		Sum	Result	Limit	Margin	Antenna		Sum	Result	Limit	Margin
	Main	Sub					Main	Sub				
[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	
5180	0.74	0.62	1.36	1.34	11.00	9.66	0.59	0.43	1.03	0.12	17.00	16.88
5220	0.65	0.52	1.17	0.69	11.00	10.31	0.52	0.37	0.88	-0.53	17.00	17.53
5240	0.58	0.47	1.06	0.23	11.00	10.77	0.47	0.33	0.80	-0.99	17.00	17.99
5260	0.59	0.46	1.05	0.21	11.00	10.79	0.47	0.33	0.79	-1.01	17.00	18.01
5300	0.44	0.53	0.97	-0.14	11.00	11.14	0.35	0.37	0.72	-1.42	17.00	18.42
5320	0.45	0.66	1.11	0.46	11.00	10.54	0.36	0.46	0.82	-0.84	17.00	17.84
5500	0.55	0.60	1.15	0.59	11.00	10.41	0.44	0.42	0.86	-0.67	17.00	17.67
5580	0.47	0.57	1.04	0.18	11.00	10.82	0.37	0.40	0.78	-1.10	17.00	18.10
5700	0.63	0.59	1.22	0.87	11.00	10.13	0.50	0.41	0.92	-0.37	17.00	17.37
5745	0.48	0.45	0.93	-0.31	30.00	30.31	0.38	0.32	0.70	-1.55	36.00	37.55
5785	0.47	0.45	0.92	-0.36	30.00	30.36	0.37	0.32	0.69	-1.61	36.00	37.61
5825	0.49	0.60	1.09	0.37	30.00	29.63	0.39	0.42	0.81	-0.91	36.00	36.91

Tested Frequency [M Hz]	Main							Sub							
	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result		
							Cond.	e.i.r.p.					Cond.	e.i.r.p.	
[dB]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	
5180	0.49	0.00	-14.38	2.39	10.22	-0.98	-1.28	-2.26	-14.90	2.38	9.93	-1.54	-2.10	-3.64	
5220	0.49	0.00	-14.99	2.40	10.22	-0.98	-1.88	-2.86	-15.61	2.38	9.93	-1.54	-2.81	-4.35	
5240	0.49	0.00	-15.45	2.40	10.22	-0.98	-2.34	-3.32	-16.06	2.38	9.93	-1.54	-3.26	-4.80	
5260	0.49	0.00	-15.44	2.40	10.22	-0.98	-2.33	-3.31	-16.13	2.38	9.93	-1.54	-3.33	-4.87	
5300	0.49	0.00	-16.68	2.40	10.22	-0.98	-3.57	-4.55	-15.57	2.38	9.93	-1.54	-2.77	-4.31	
5320	0.49	0.00	-16.56	2.40	10.22	-0.98	-3.45	-4.43	-14.60	2.38	9.93	-1.54	-1.80	-3.34	
5500	0.49	0.00	-15.75	2.41	10.22	-0.98	-2.63	-3.61	-15.03	2.39	9.94	-1.54	-2.21	-3.75	
5580	0.49	0.00	-16.42	2.41	10.22	-0.98	-3.30	-4.28	-15.23	2.39	9.94	-1.54	-2.41	-3.95	
5700	0.49	0.00	-15.12	2.42	10.22	-0.98	-1.99	-2.97	-15.12	2.40	9.94	-1.54	-2.29	-3.83	
5745	0.49	6.99	-23.32	2.42	10.22	-0.98	-3.20	-4.18	-23.25	2.40	9.94	-1.54	-3.43	-4.97	
5785	0.49	6.99	-23.41	2.42	10.22	-0.98	-3.29	-4.27	-23.28	2.40	9.94	-1.54	-3.46	-5.00	
5825	0.49	6.99	-23.25	2.42	10.22	-0.98	-3.13	-4.11	-22.02	2.40	9.94	-1.54	-2.20	-3.74	

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz

band. RBW Correction Factor =  $10 * \log(\text{Specified bandwidth} /$

Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor + RBW

Correction Factor PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

## Maximum Power Spectral Density

Report No. 13568152S-L  
Test place Shonan EMC Lab. No.5 Shielded Room  
Date January 14, 2021  
Temperature / Humidity 21 deg. C / 51 % RH  
Engineer Shiro Kobayashi  
Mode Tx 11n-40 (SISO)

### Main

Applied limit: 15.407, mobile and portable client device

Tested Frequency [M Hz]	PSD Reading [dBm /MHz]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	RBW Correction Factor [dB]	PSD (Conducted)			PSD (e.i.r.p.)		
							Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]	Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]
5190	-19.39	2.39	10.22	0.41	-0.98	0.00	-6.37	11.00	17.37	-7.35	17.00	24.35
5230	-19.24	2.40	10.22	0.41	-0.98	0.00	-6.21	11.00	17.21	-7.19	17.00	24.19
5270	-19.47	2.40	10.22	0.41	-0.98	0.00	-6.44	11.00	17.44	-7.42	17.00	24.42
5310	-20.41	2.40	10.22	0.41	-0.98	0.00	-7.38	11.00	18.38	-8.36	17.00	25.36
5510	-19.15	2.41	10.22	0.41	-0.98	0.00	-6.11	11.00	17.11	-7.09	17.00	24.09
5550	-18.65	2.41	10.22	0.41	-0.98	0.00	-5.61	11.00	16.61	-6.59	17.00	23.59
5670	-18.30	2.41	10.22	0.41	-0.98	0.00	-5.26	11.00	16.26	-6.24	17.00	23.24
5755	-26.76	2.42	10.22	0.41	-0.98	0.27	-13.44	30.00	43.44	-14.42	36.00	50.42
5795	-26.75	2.42	10.22	0.41	-0.98	0.27	-13.43	30.00	43.43	-14.41	36.00	50.41

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band. RBW Correction Factor =  $10 * \log(\text{Specified bandwidth} / \text{Measured bandwidth})$

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

### Sub

Applied limit: 15.407, mobile and portable client device

Tested Frequency [M Hz]	PSD Reading [dBm /MHz]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	RBW Correction Factor [dB]	PSD (Conducted)			PSD (e.i.r.p.)		
							Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]	Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]
5190	-18.22	2.38	9.93	0.41	-1.54	0.00	-5.50	11.00	16.50	-7.04	17.00	24.04
5230	-18.55	2.38	9.93	0.41	-1.54	0.00	-5.83	11.00	16.83	-7.37	17.00	24.37
5270	-19.00	2.38	9.93	0.41	-1.54	0.00	-6.28	11.00	17.28	-7.82	17.00	24.82
5310	-19.35	2.38	9.93	0.41	-1.54	0.00	-6.63	11.00	17.63	-8.17	17.00	25.17
5510	-18.15	2.39	9.94	0.41	-1.54	0.00	-5.41	11.00	16.41	-6.95	17.00	23.95
5550	-17.75	2.39	9.94	0.41	-1.54	0.00	-5.01	11.00	16.01	-6.55	17.00	23.55
5670	-17.76	2.39	9.94	0.41	-1.54	0.00	-5.02	11.00	16.02	-6.56	17.00	23.56
5755	-26.10	2.40	9.94	0.41	-1.54	6.99	-6.36	30.00	36.36	-7.90	36.00	43.90
5795	-26.27	2.40	9.94	0.41	-1.54	6.99	-6.53	30.00	36.53	-8.07	36.00	44.07

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band. RBW Correction Factor =  $10 * \log(\text{Specified bandwidth} / \text{Measured bandwidth})$

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

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## Maximum Power Spectral Density

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Date January 14, 2021  
Temperature / Humidity 21 deg. C / 51 % RH  
Engineer Shiro Kobayashi  
Mode Tx 11n-40 (MIMO)

**Main + Sub**

Applied limit: 15.407, mobile and portable client device

Tested Frequency [M Hz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna		Sum	Result	Limit	Margin	Antenna		Sum	Result	Limit	Margin
	Main	Sub					Main	Sub				
[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	
5190	0.22	0.25	0.46	-3.33	11.00	14.33	0.17	0.17	0.35	-4.60	17.00	21.60
5230	0.26	0.20	0.47	-3.31	11.00	14.31	0.21	0.14	0.35	-4.52	17.00	21.52
5270	0.23	0.17	0.40	-3.96	11.00	14.96	0.18	0.12	0.30	-5.17	17.00	22.17
5310	0.17	0.18	0.35	-4.55	11.00	15.55	0.13	0.13	0.26	-5.81	17.00	22.81
5510	0.25	0.31	0.57	-2.47	11.00	13.47	0.20	0.22	0.42	-3.75	17.00	20.75
5550	0.32	0.35	0.66	-1.80	11.00	12.80	0.25	0.24	0.49	-3.06	17.00	20.06
5670	0.34	0.31	0.65	-1.85	11.00	12.85	0.27	0.22	0.49	-3.09	17.00	20.09
5755	0.25	0.27	0.52	-2.84	30.00	32.84	0.20	0.19	0.39	-4.10	36.00	40.10
5795	0.23	0.28	0.51	-2.89	30.00	32.89	0.18	0.20	0.38	-4.17	36.00	40.17

Tested Frequency [M Hz]	Main							Sub							
	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result		
							Cond.	e.i.r.p.					Cond.	e.i.r.p.	
[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	
5190	0.70	0.00	-19.95	2.39	10.22	-0.98	-6.64	-7.62	-19.08	2.38	9.93	-1.54	-6.07	-7.61	
5230	0.70	0.00	-19.11	2.40	10.22	-0.98	-5.79	-6.77	-19.93	2.38	9.93	-1.54	-6.92	-8.46	
5270	0.70	0.00	-19.73	2.40	10.22	-0.98	-6.41	-7.39	-20.63	2.38	9.93	-1.54	-7.62	-9.16	
5310	0.70	0.00	-21.07	2.40	10.22	-0.98	-7.75	-8.73	-20.40	2.38	9.93	-1.54	-7.39	-8.93	
5510	0.70	0.00	-19.29	2.41	10.22	-0.98	-5.96	-6.94	-18.09	2.39	9.94	-1.54	-5.06	-6.60	
5550	0.70	0.00	-18.35	2.41	10.22	-0.98	-5.02	-6.00	-17.64	2.39	9.94	-1.54	-4.61	-6.15	
5670	0.70	0.00	-17.97	2.41	10.22	-0.98	-4.64	-5.62	-18.13	2.39	9.94	-1.54	-5.10	-6.64	
5755	0.70	6.99	-26.31	2.42	10.22	-0.98	-5.98	-6.96	-25.76	2.40	9.94	-1.54	-5.73	-7.27	
5795	0.70	6.99	-26.72	2.42	10.22	-0.98	-6.39	-7.37	-25.50	2.40	9.94	-1.54	-5.47	-7.01	

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz

band. RBW Correction Factor =  $10 * \log(\text{Specified bandwidth} /$

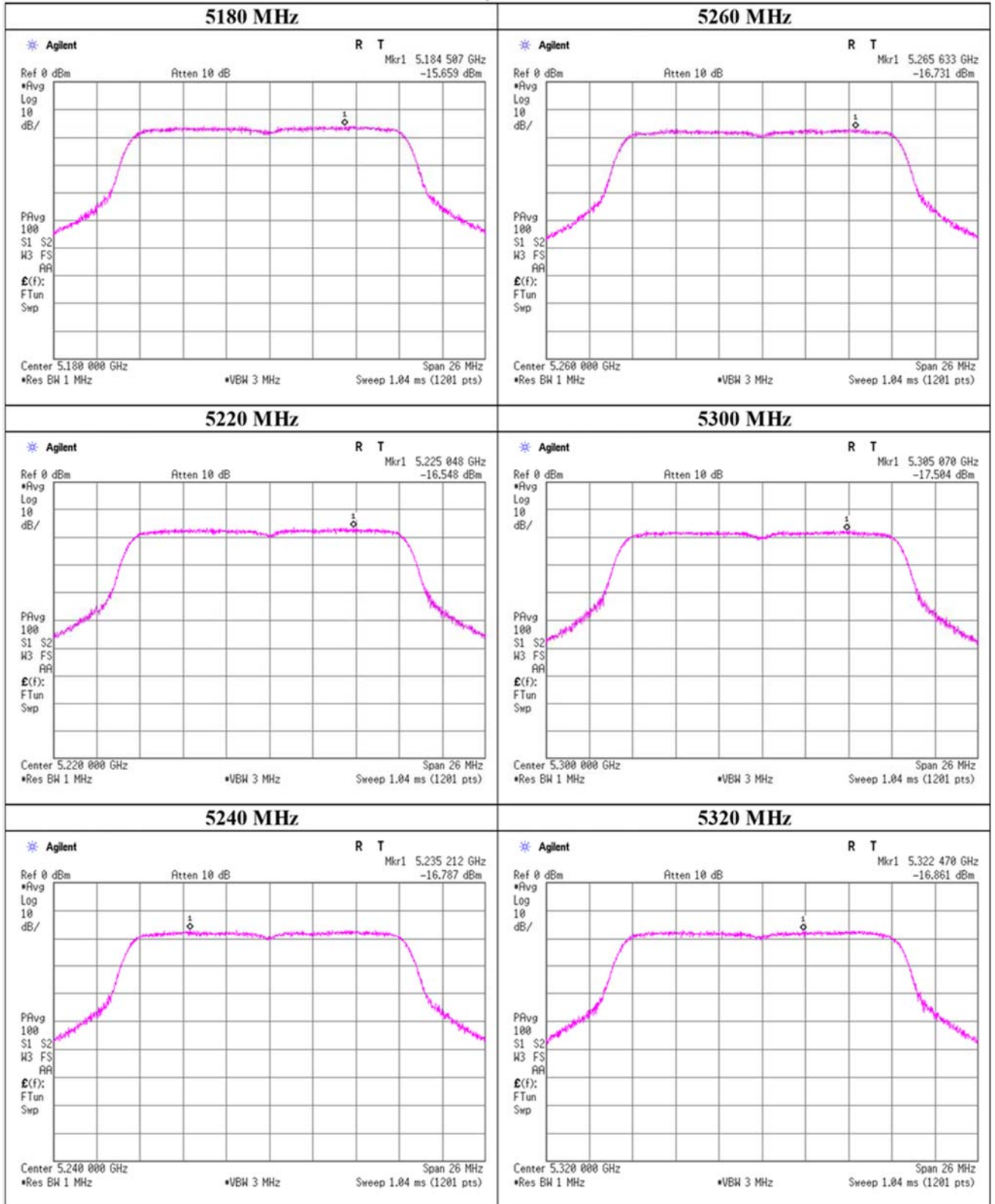
Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor + RBW

Correction Factor PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

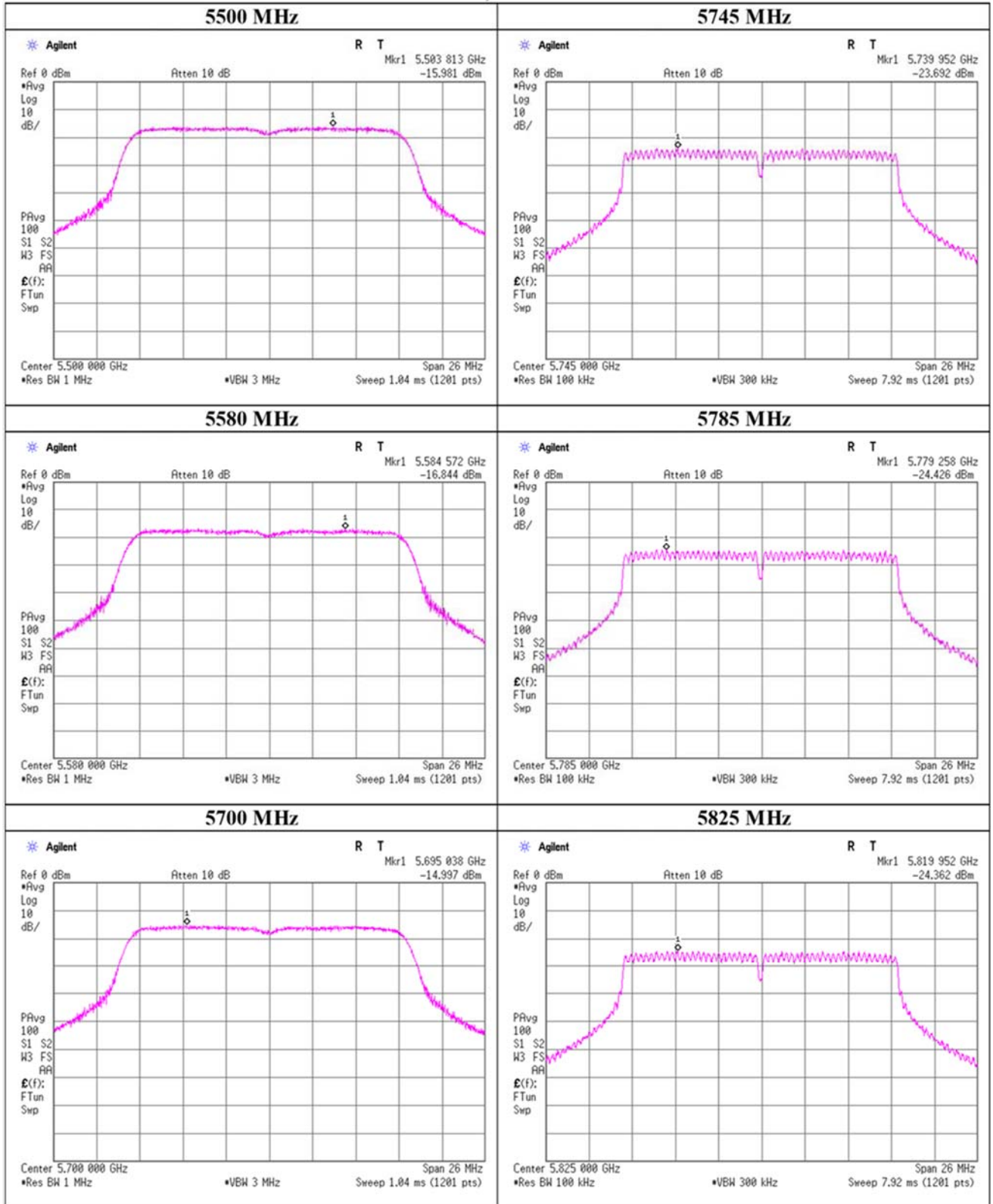
**Maximum Power Spectral Density**

**11a, Main**



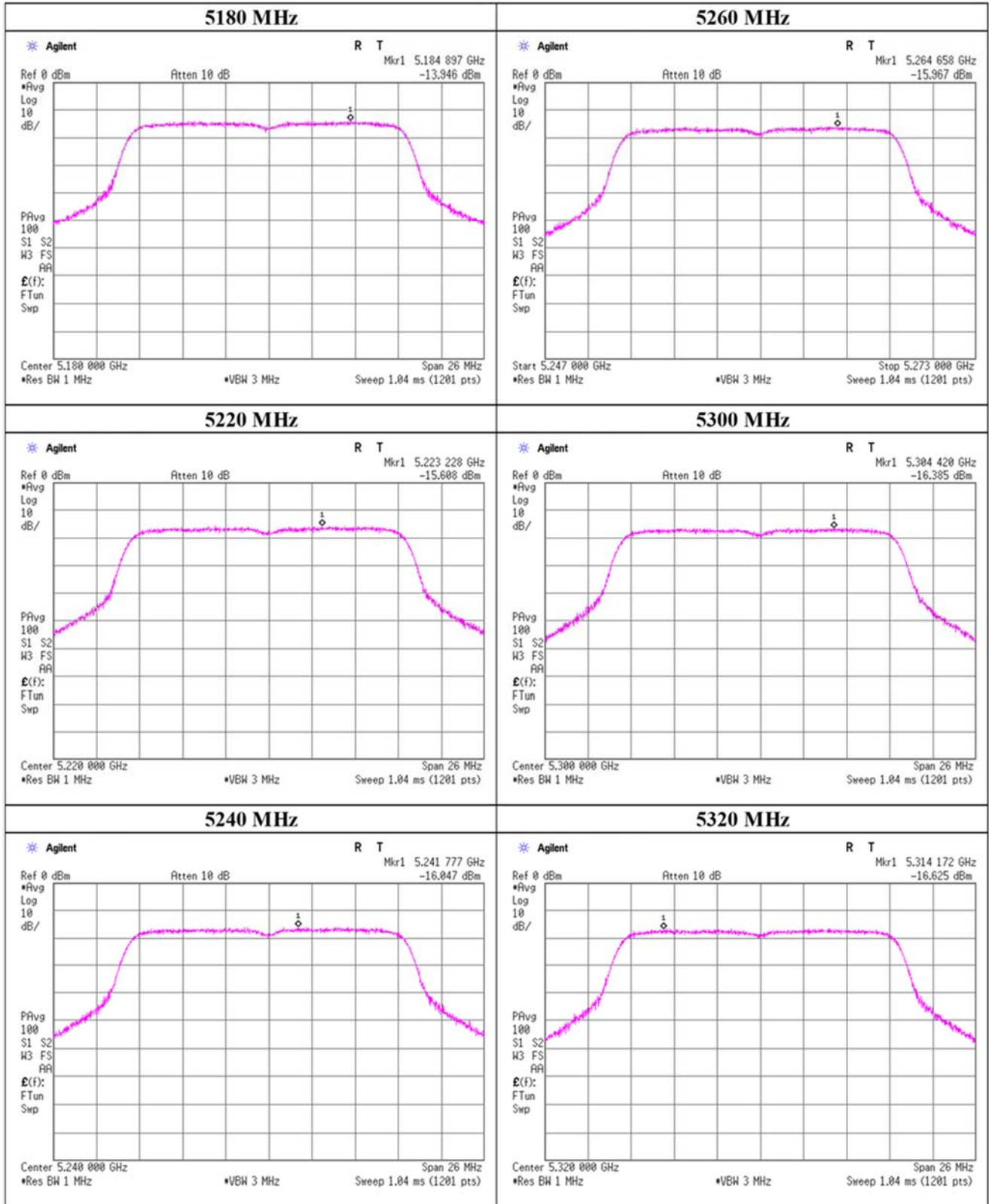
**Maximum Power Spectral Density**

**11a, Main**



**Maximum Power Spectral Density**

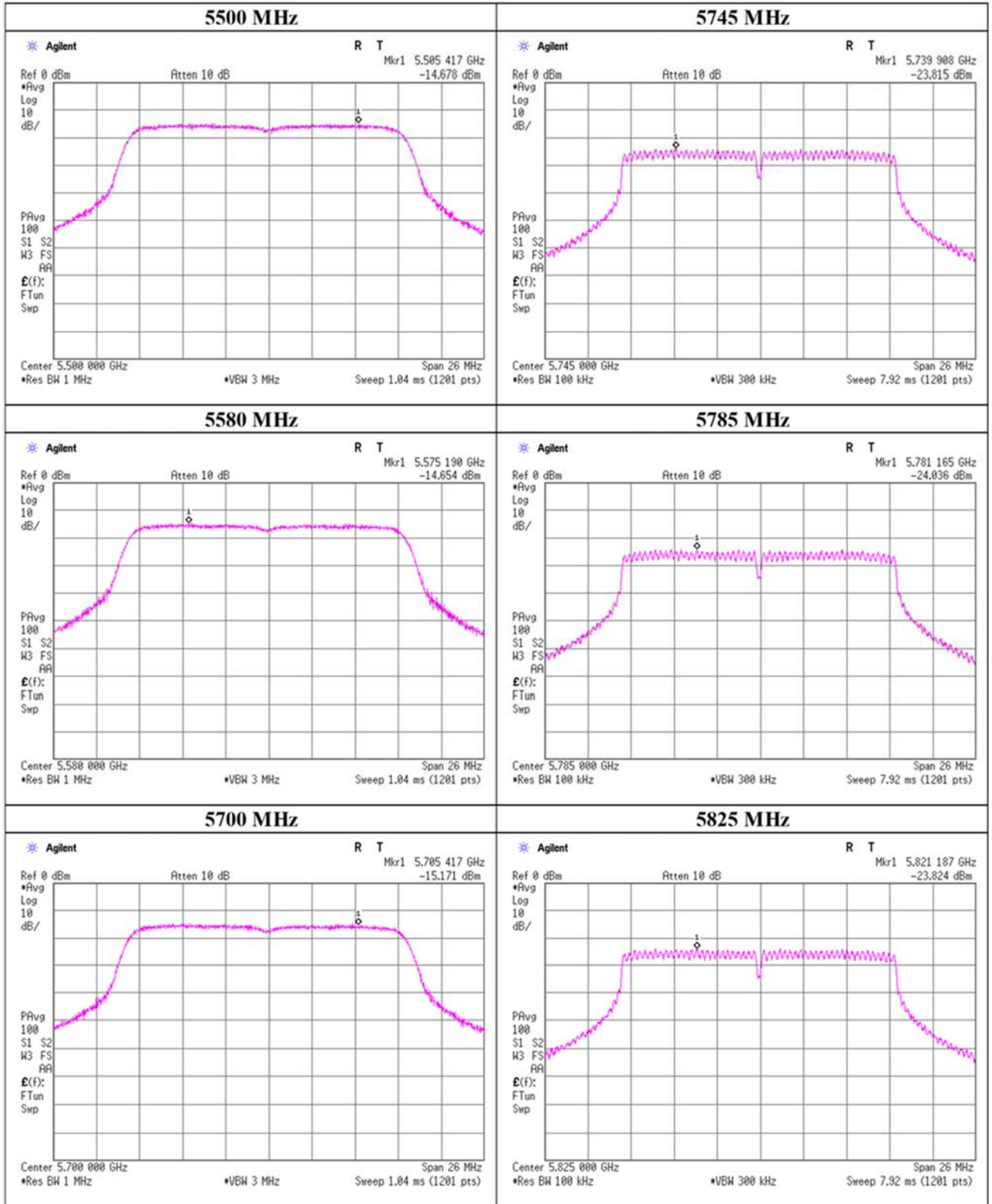
**11a, Sub**





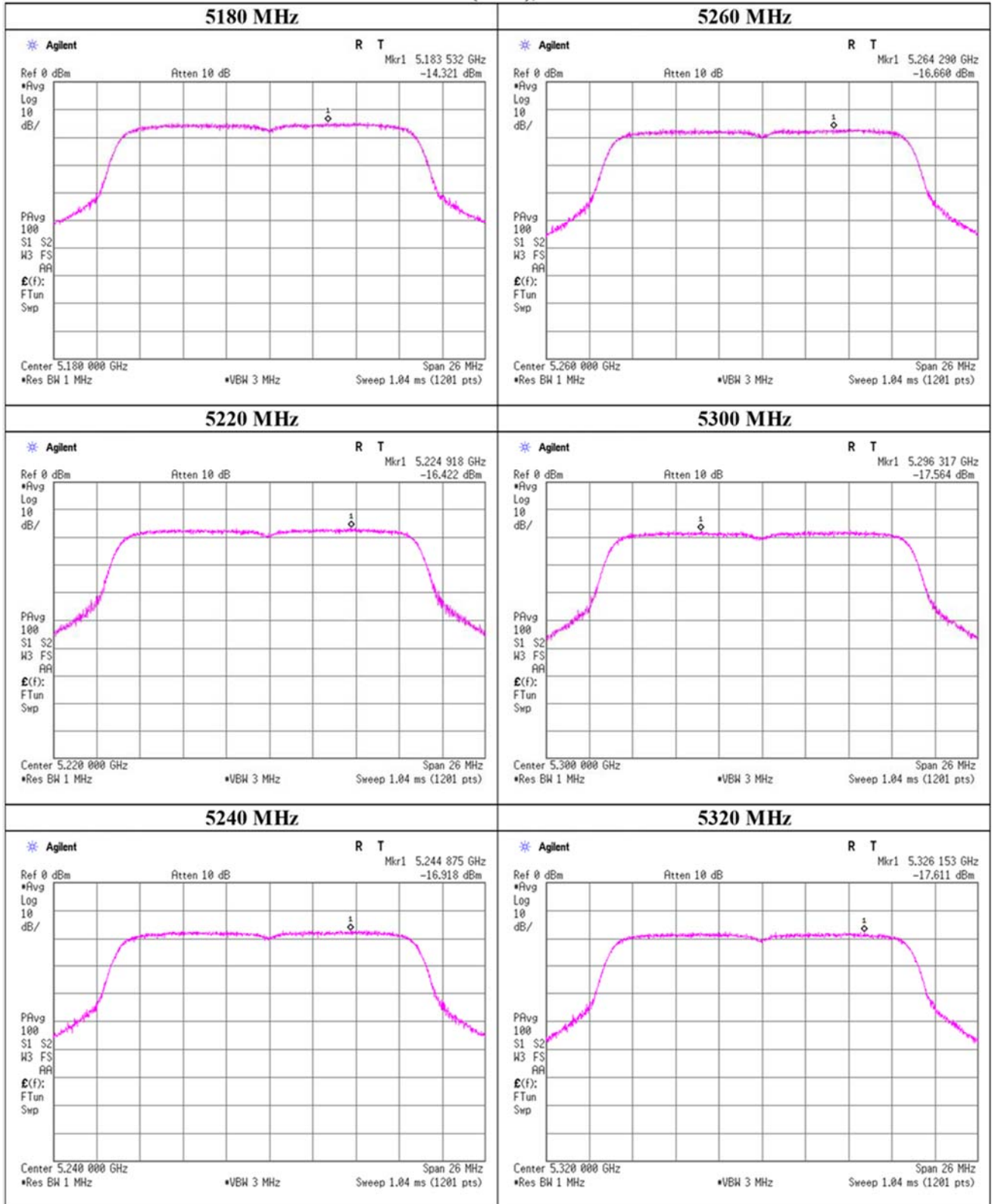
**Maximum Power Spectral Density**

**11a, Sub**



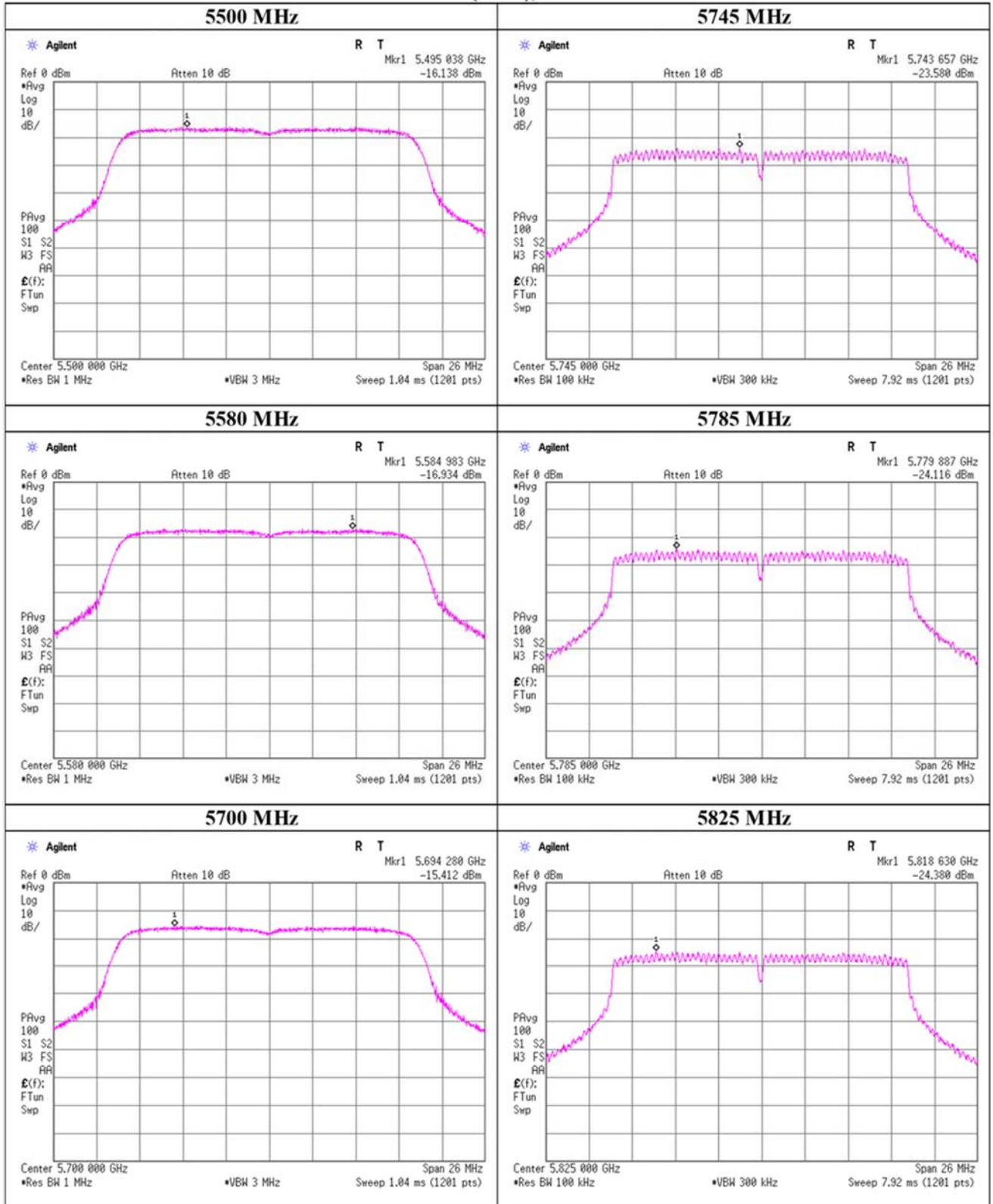
**Maximum Power Spectral Density**

**11n-20 (SISO), Main**



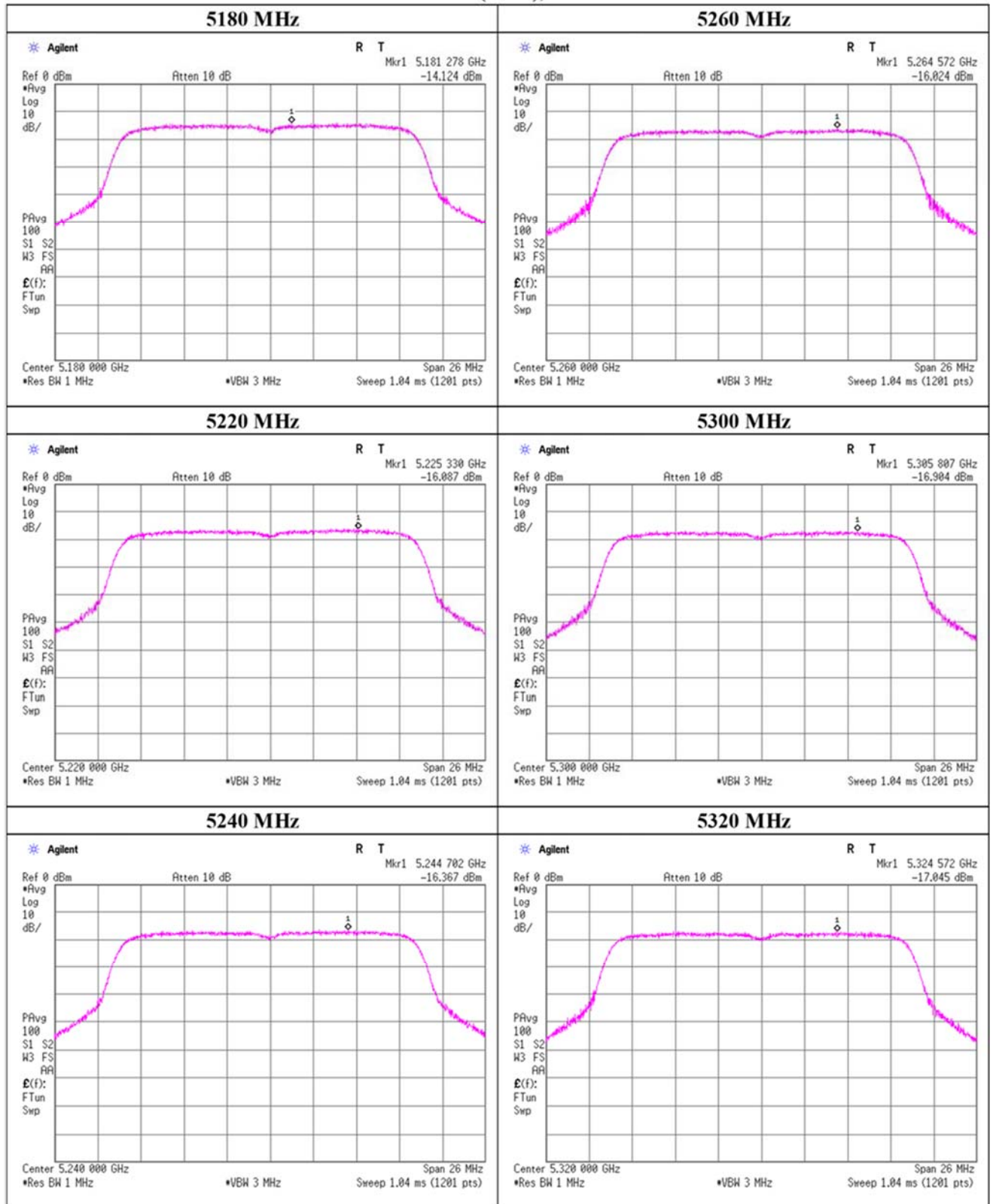
**Maximum Power Spectral Density**

**11n-20 (SISO), Main**



## Maximum Power Spectral Density

### 11n-20 (SISO), Sub



**UL Japan, Inc.**

**Shonan EMC Lab.**

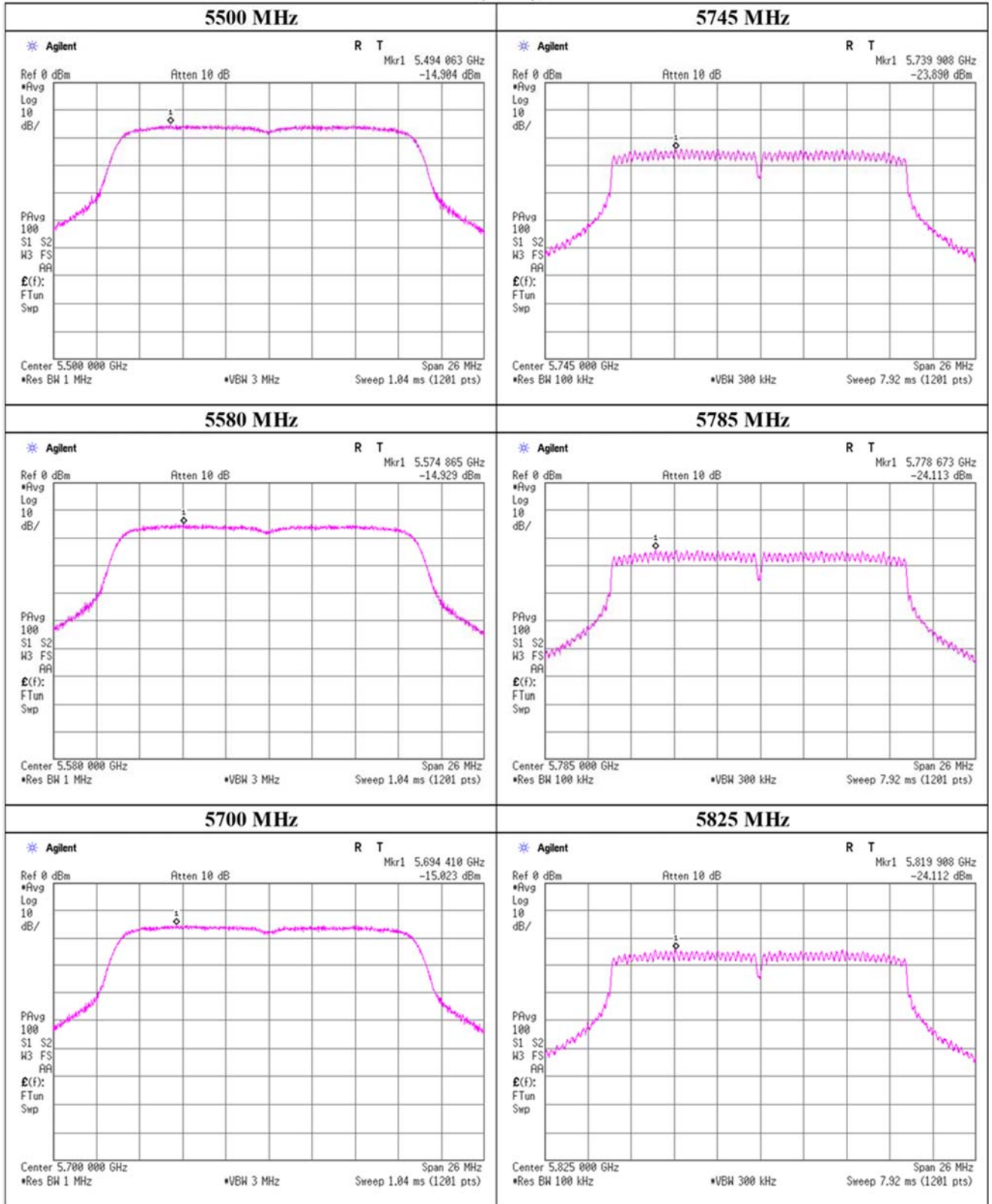
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

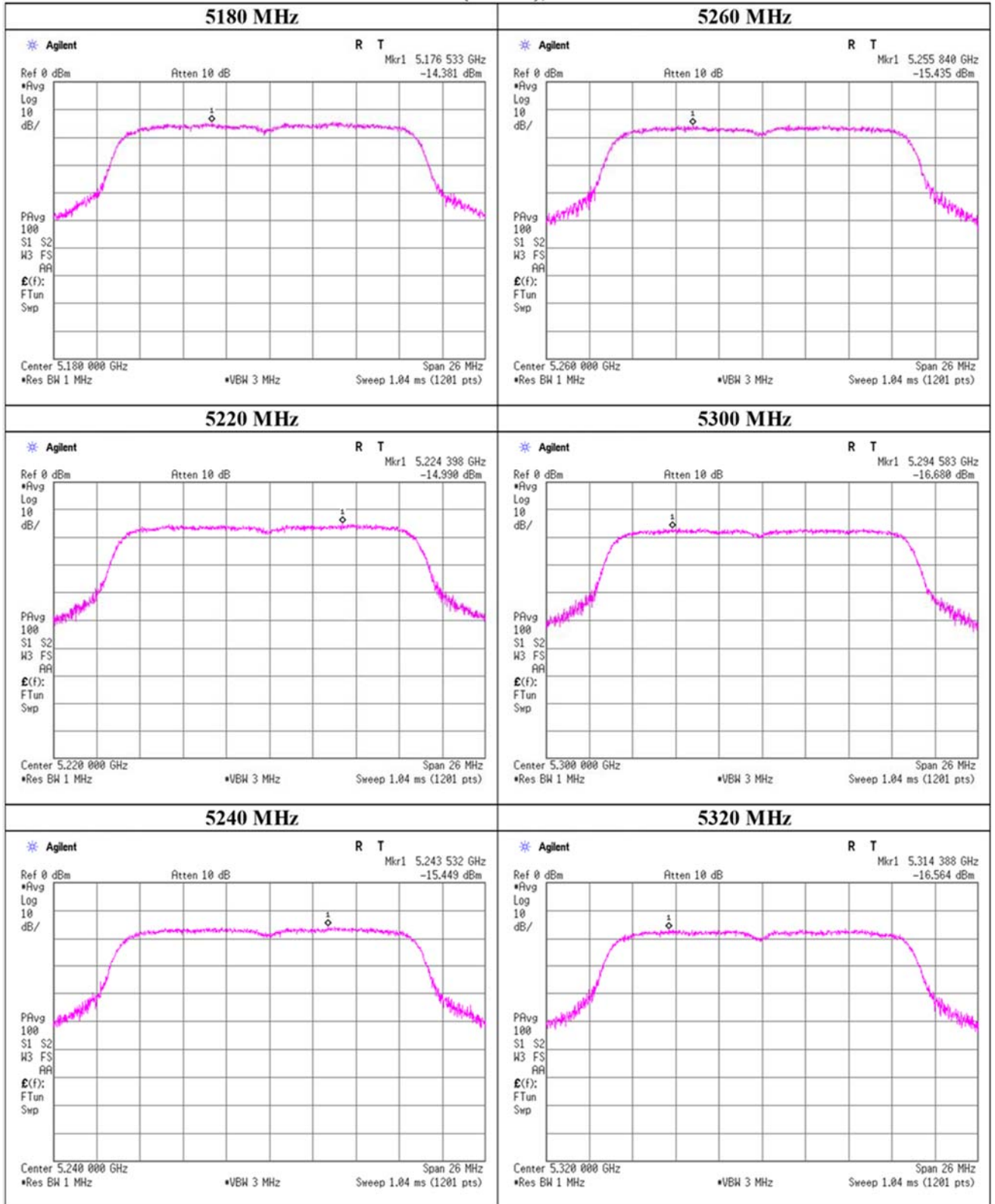
**Maximum Power Spectral Density**

**11n-20 (SISO), Sub**



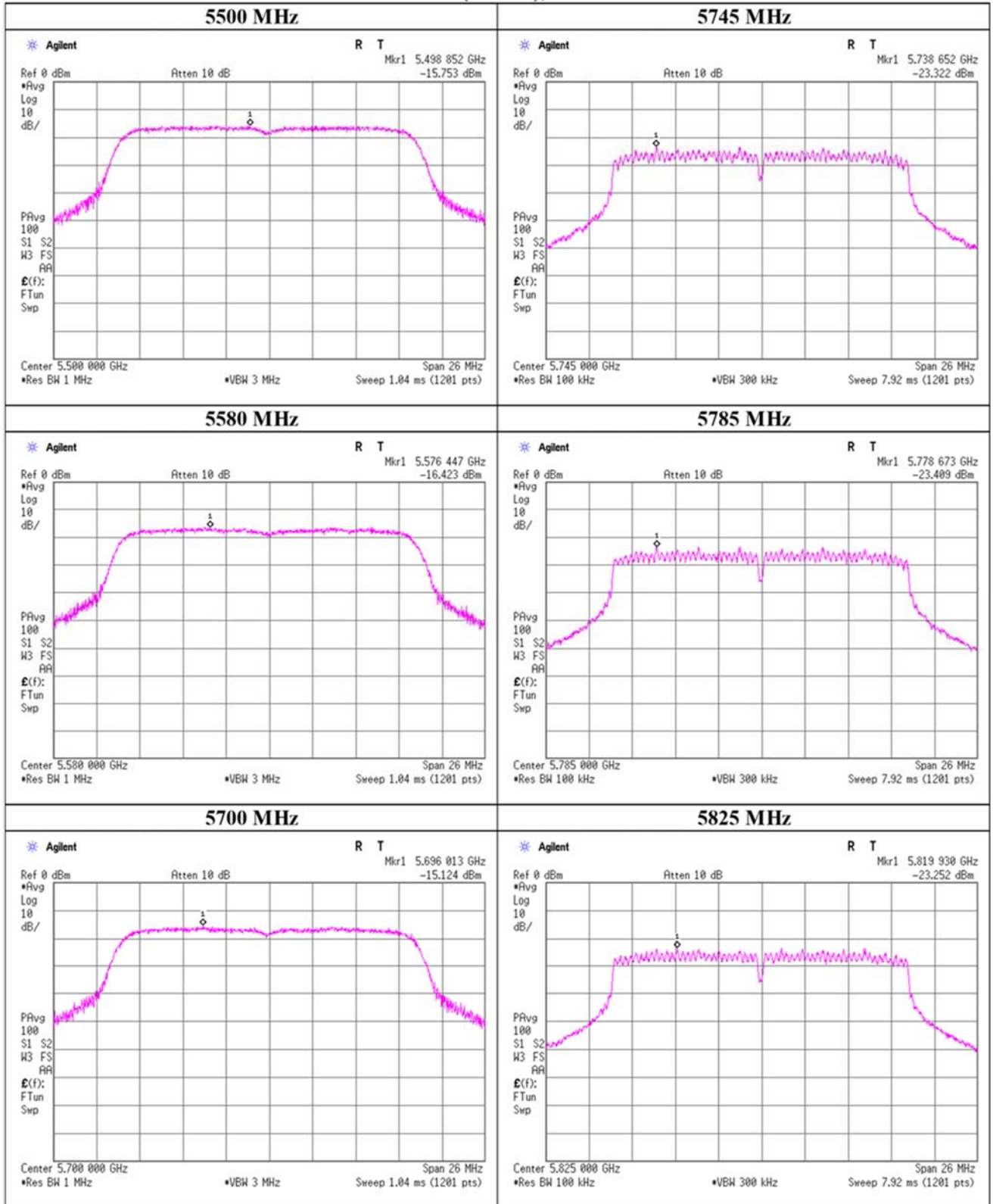
**Maximum Power Spectral Density**

**11n-20 (MIMO), Main**



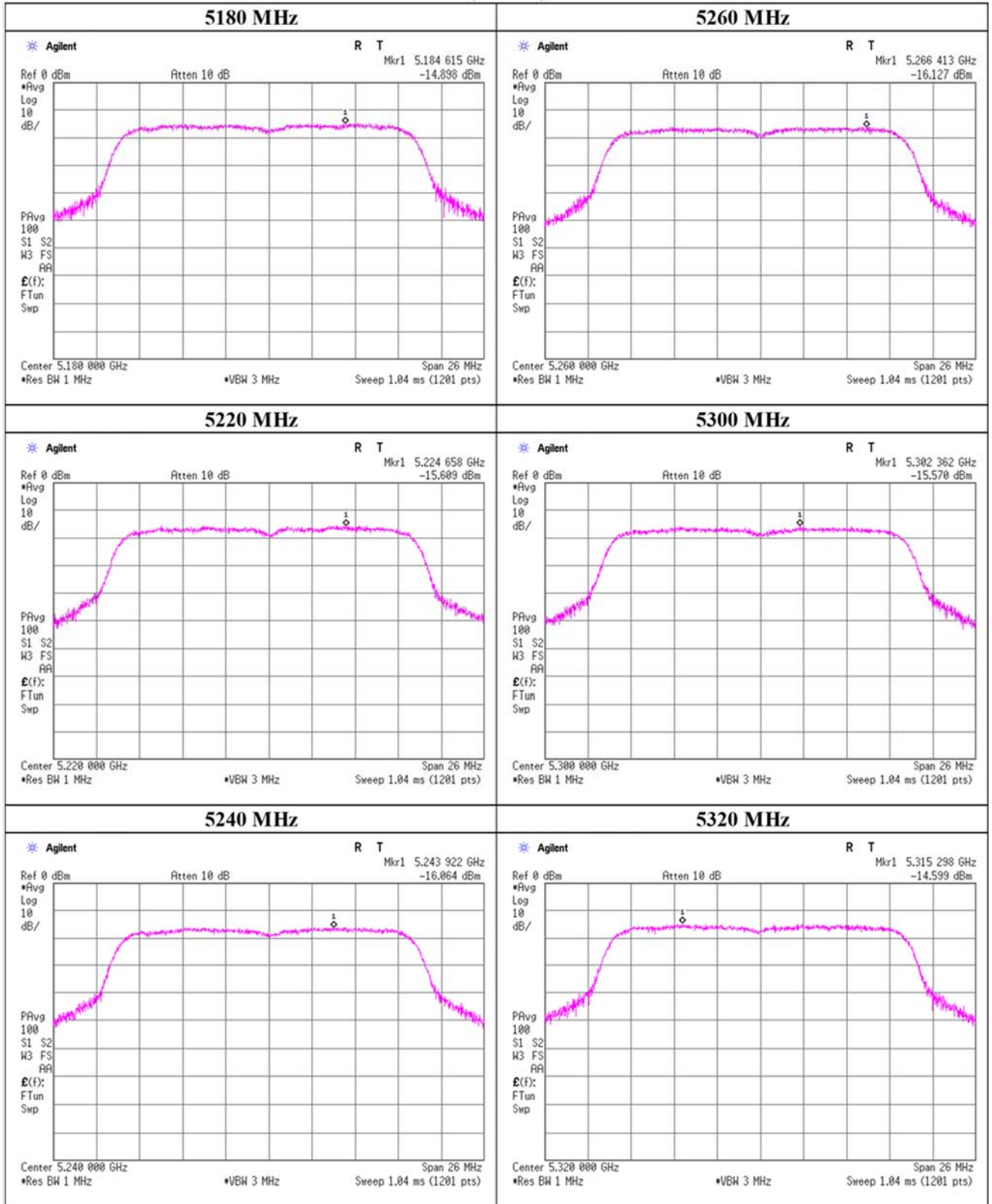
**Maximum Power Spectral Density**

**11n-20 (MIMO), Main**



**Maximum Power Spectral Density**

**11n-20 (MIMO), Sub**



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**Shonan EMC Lab.**

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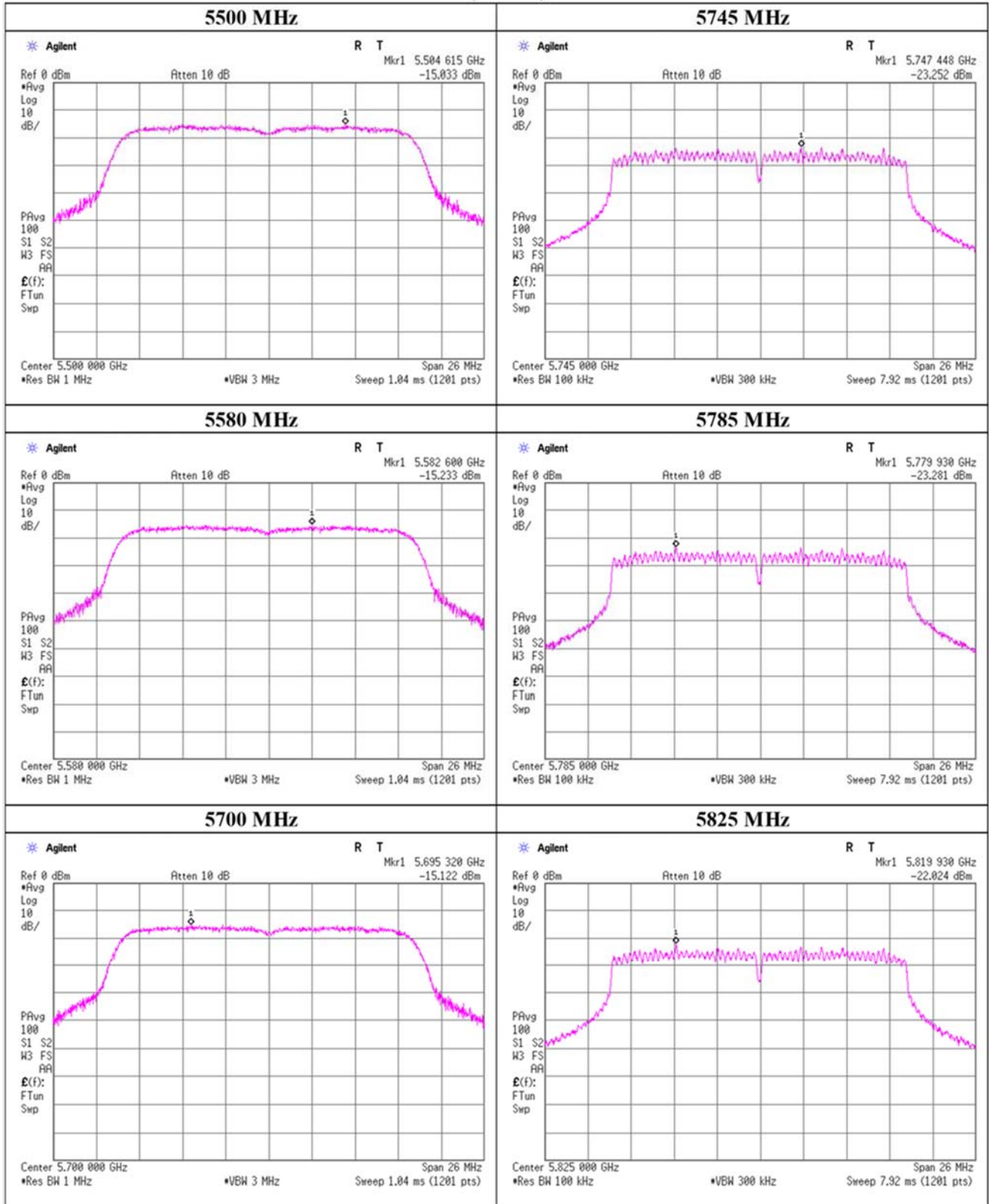
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401



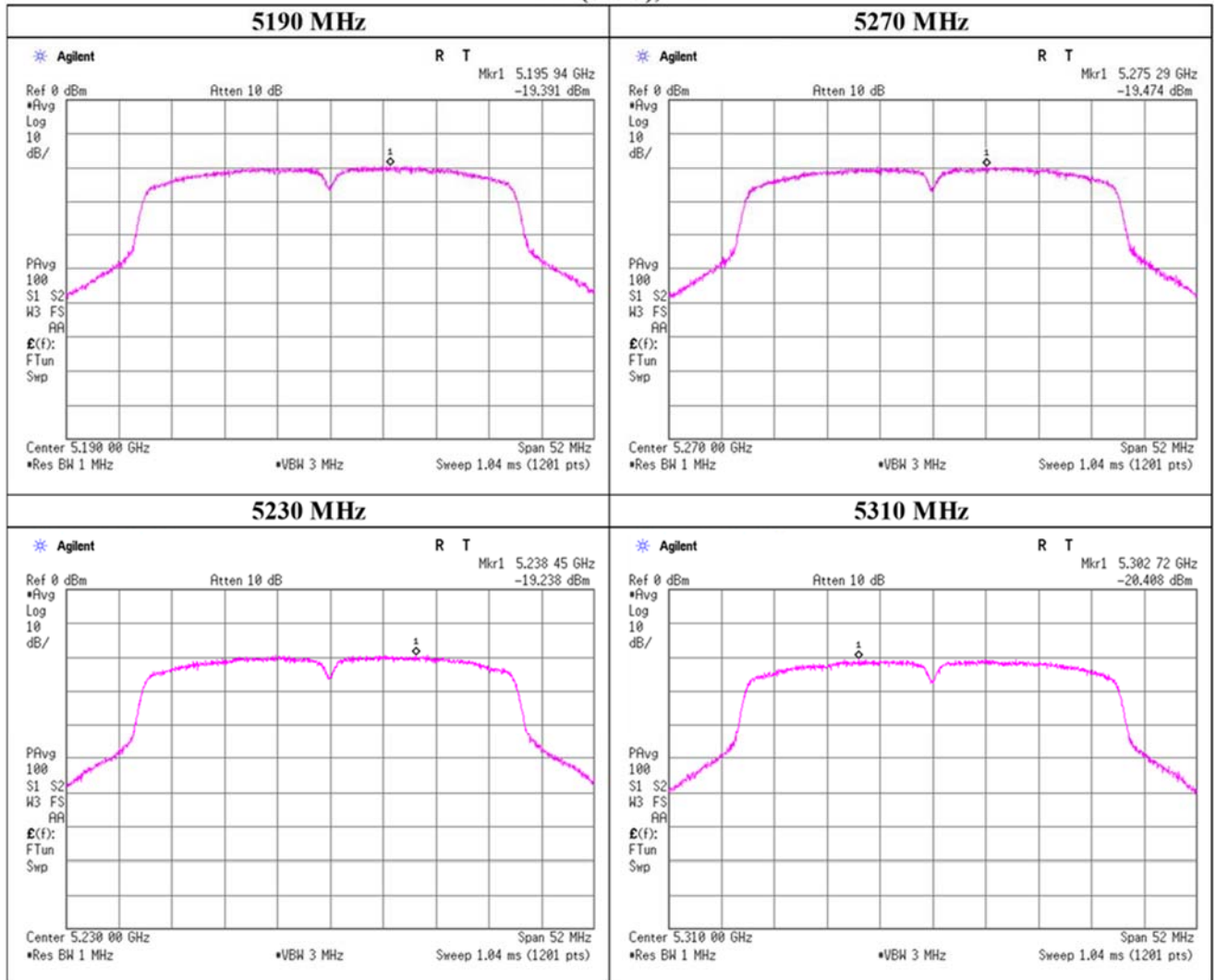
## Maximum Power Spectral Density

### 11n-20 (MIMO), Sub



**Maximum Power Spectral Density**

**11n-40 (SISO), Main**



**UL Japan, Inc.**

**Shonan EMC Lab.**

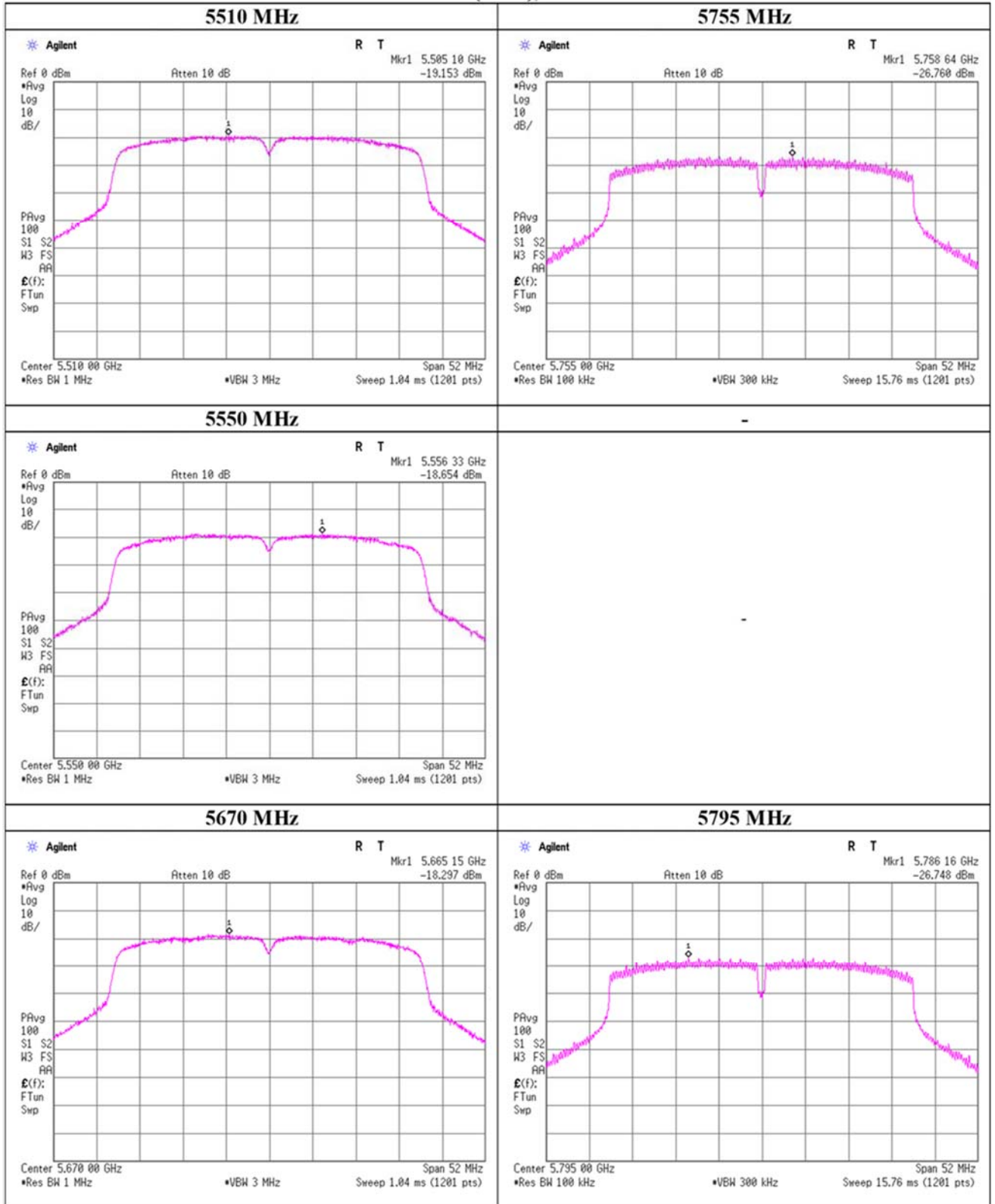
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

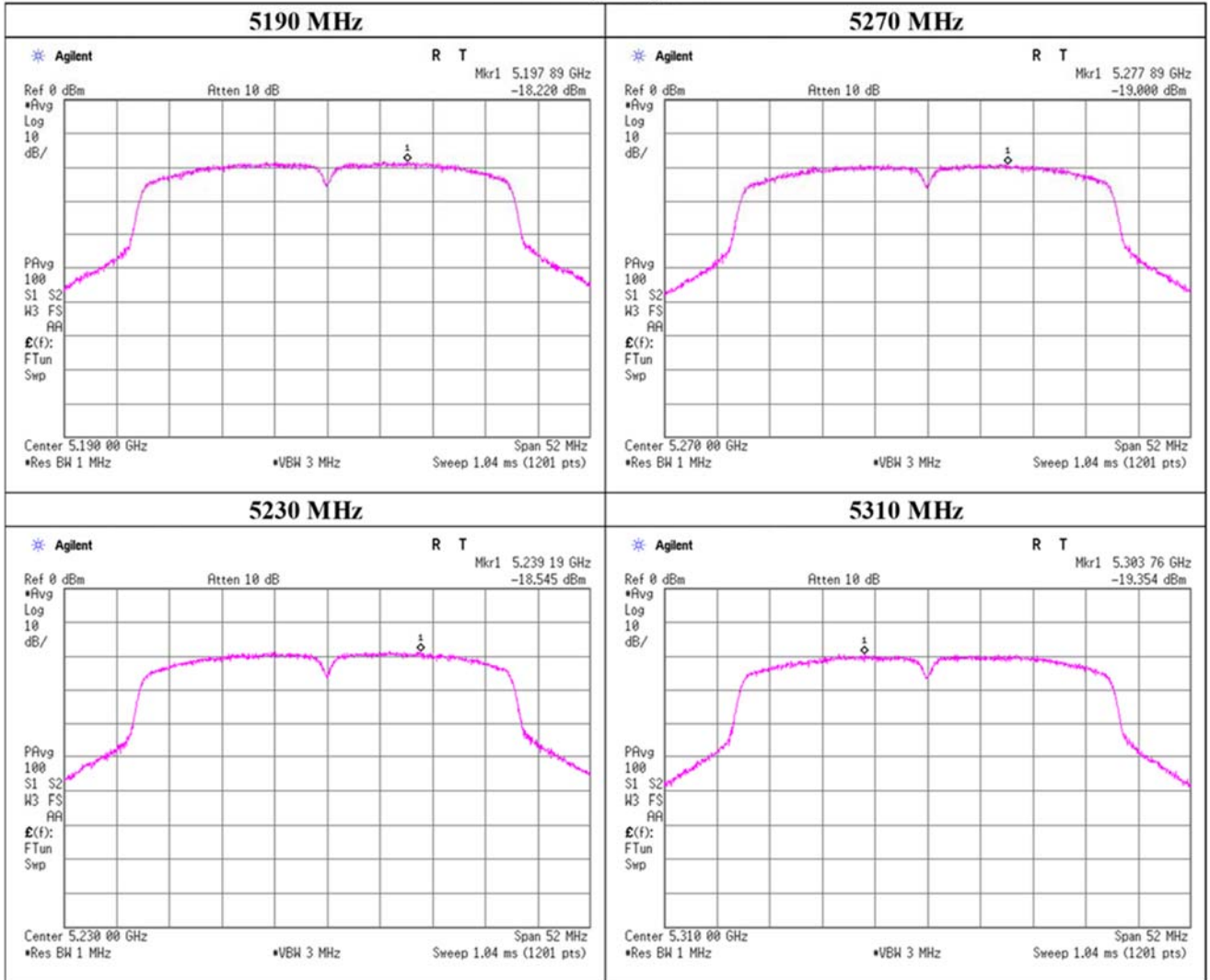
**Maximum Power Spectral Density**

**11n-40 (SISO), Main**



**Maximum Power Spectral Density**

**11n-40 (SISO), Sub**



**UL Japan, Inc.**

**Shonan EMC Lab.**

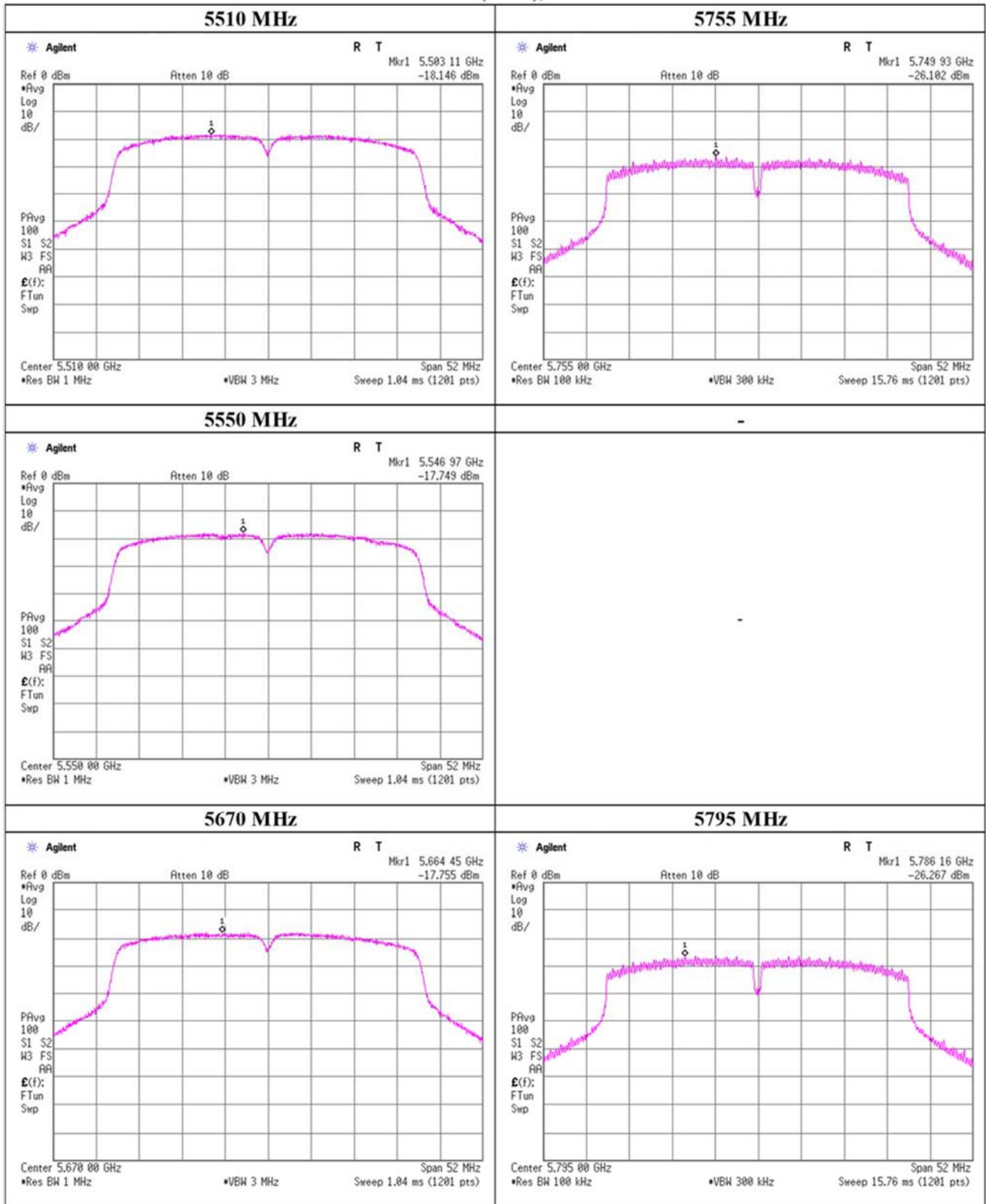
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

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Facsimile : +81 463 50 6401

**Maximum Power Spectral Density**

**11n-40 (SISO), Sub**



**UL Japan, Inc.**

**Shonan EMC Lab.**

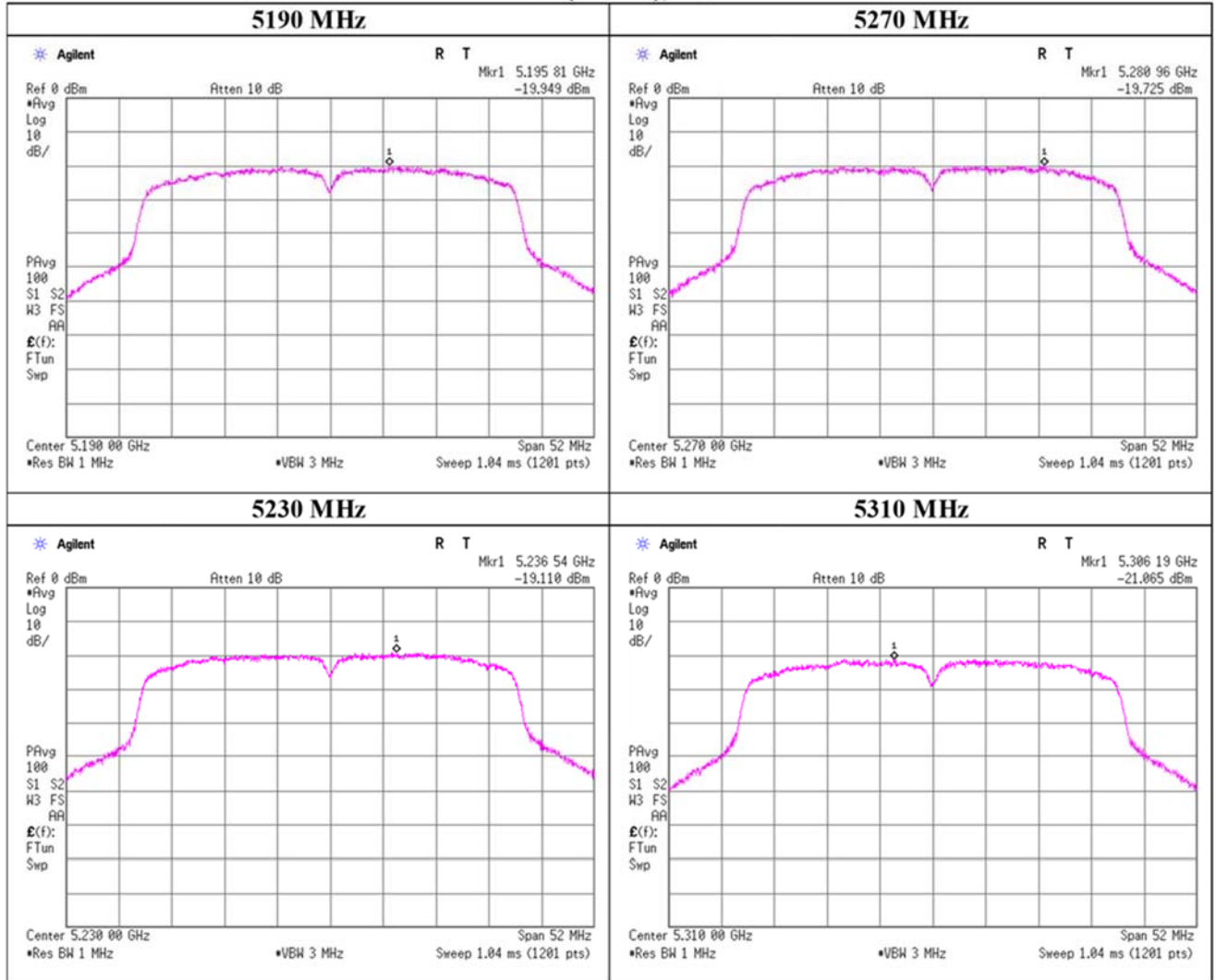
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Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

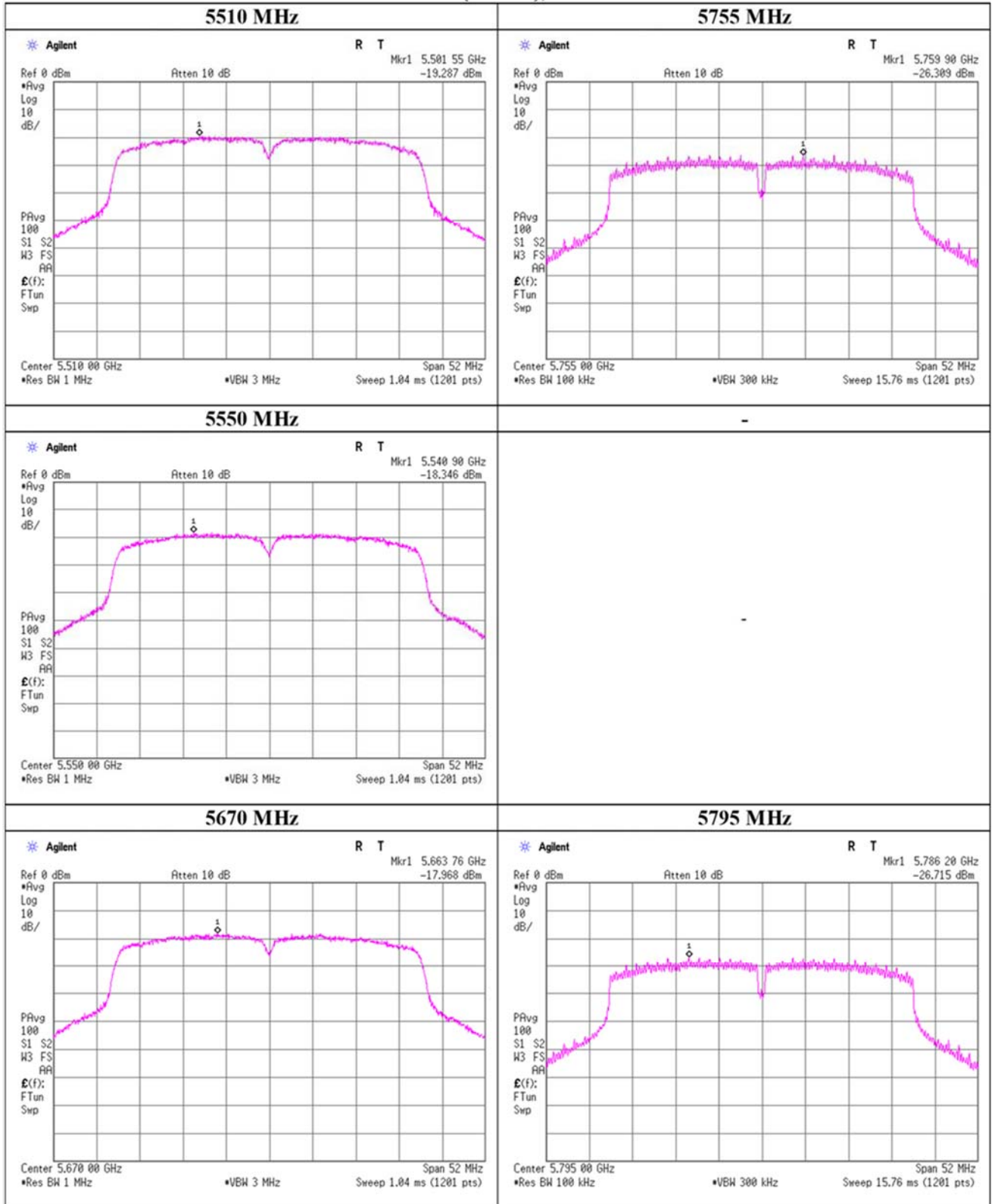
**Maximum Power Spectral Density**

**11n-40 (MIMO), Main**



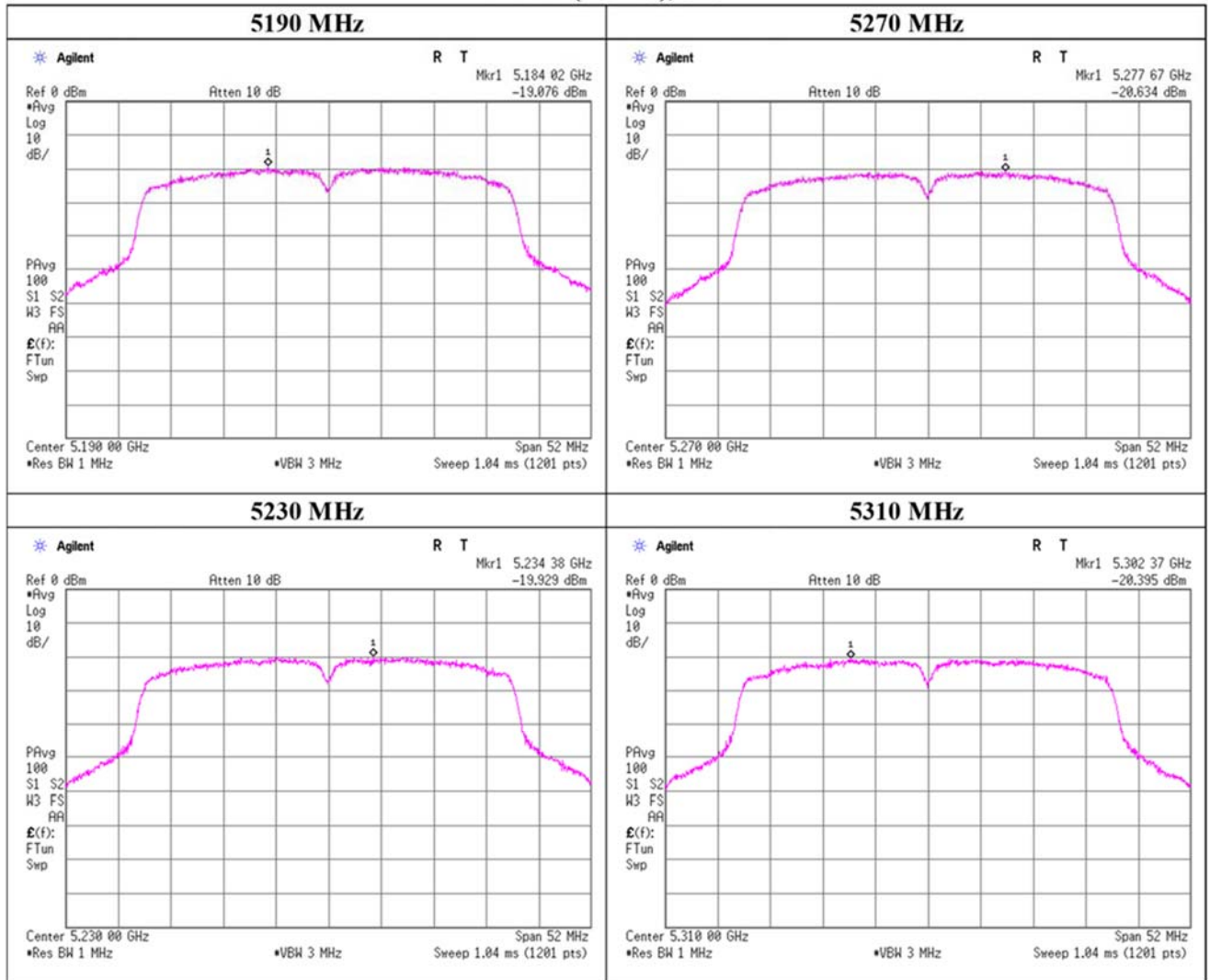
**Maximum Power Spectral Density**

**11n-40 (MIMO), Main**



**Maximum Power Spectral Density**

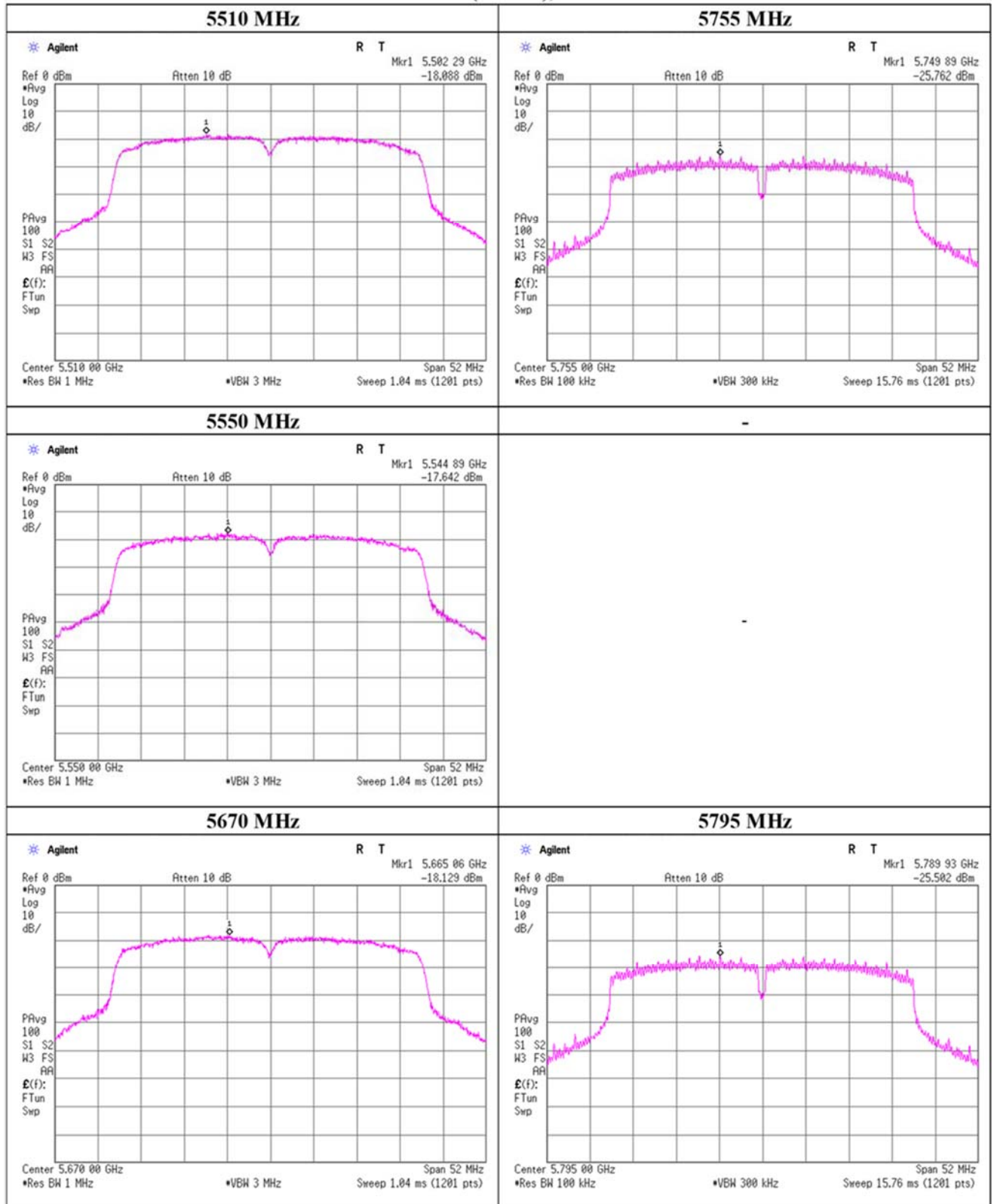
**11n-40 (MIMO), Sub**





## Maximum Power Spectral Density

### 11n-40 (MIMO), Sub



**UL Japan, Inc.**

**Shonan EMC Lab.**

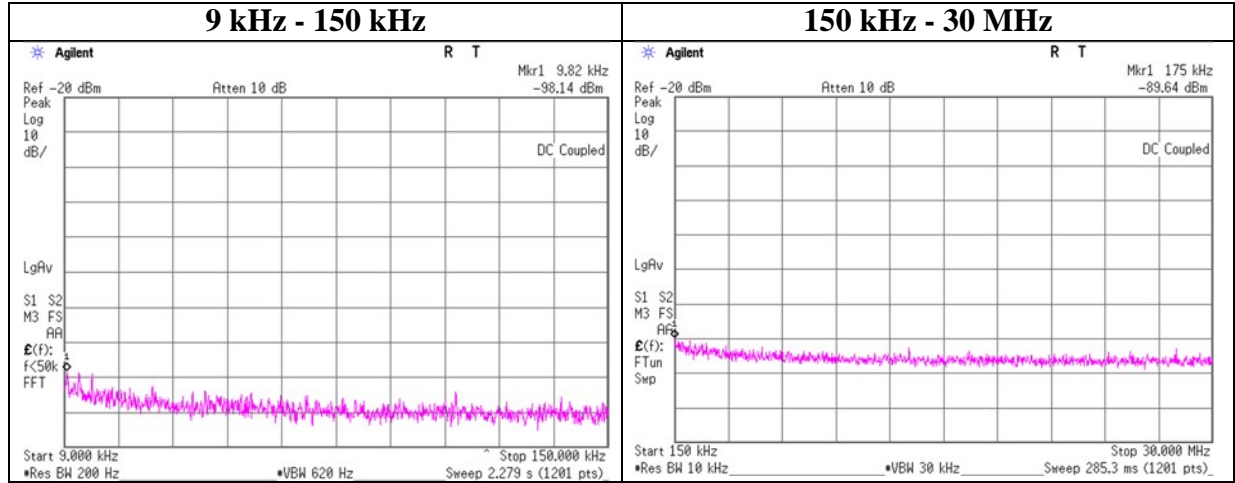
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

## Conducted Spurious Emission

Report No. 13568152S-L  
Test place Shonan EMC Lab. No.5 Shielded Room  
Date January 14, 2021  
Temperature / Humidity 21 deg. C / 51 % RH  
Engineer Shiro kobayashi  
Mode Tx 11n-20 (MIMO) 5180 MHz



Frequency [kHz]	Reading [dBm]	Cable Loss [dB]	Attenuator [dB]	Antenna Gain* [dBi]	N (Number of Output)	EIRP [dBm]	Distance [m]	Ground bounce [dB]	E (field strength) [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
9.82	-98.1	0.01	10.1	2.0	2	-83.0	300	6.0	-21.8	47.7	69.5	-
175.00	-89.6	0.01	10.1	2.0	2	-74.5	300	6.0	-13.3	22.7	36.0	-

$$E \text{ [dBuV/m]} = \text{EIRP [dBm]} - 20 \log (\text{Distance [m]}) + \text{Ground bounce [dB]} + 104.8 \text{ [dBuV/m]}$$

$$\text{EIRP [dBm]} = \text{Reading [dBm]} + \text{Cable loss [dB]} + \text{Attenuator Loss [dB]} + \text{Antenna gain [dBi]} +$$

$$10 * \log (N) \text{ N: Number of output}$$

\*2.0 dBi was applied to the test result based on KDB 789033 since antenna gain was less than 2.0 dBi.

## **APPENDIX 2: Test instruments**

### **Test equipment**

Test Item	Local ID	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
AT	KTS-07	145111	Digital Tester	SANWA	PC500	7019232	2020/10/21	12
AT	SAT10-15	160493	Attenuator	Weinschel Corp.	54A-10	83406	2020/12/21	12
AT	SAT10-16	160494	Attenuator	Weinschel Corp.	54A-10	83420	2020/12/21	12
AT	SCC-G11	145174	Coaxial Cable	Suhner	SUCOFLEX 102	31595/2	2020/03/02	12
AT	SCC-G60	196941	Coaxial Cable	HUBER+SUNER	SUCOFLEX 102	803093/2	2020/03/10	12
AT	SOS-27	191845	Humidity Indicator	CUSTOM. Inc	CTH-201	-	2020/09/29	12
AT	SPM-07	146247	Power Meter	Keysight Technologies Inc	8990B	MY5100272	2020/05/27	12
AT	SPSS-04	146310	Power sensor	Keysight Technologies Inc	N1923A	MY5326009	2020/05/27	12
AT	SPSS-05	146311	Power sensor	Keysight Technologies Inc	N1923A	MY5349008	2020/05/27	12
AT	SRENT-22	202830	Spectrum Analyzer	Keysight Technologies Inc	E4440A	MY48250036	2020/11/24	12
AT	STM-G7	171614	Terminator	Weinschel - API Technologies Corp	M1459A	88995	2020/06/03	12

**\*Hyphens for Last Calibration Date and Cal Int (month) are instruments that Calibration is not required (e.g. software), or instruments checked in advance before use.**

**The expiration date of the calibration is the end of the expired month.**

**As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.**

**All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or international standards.**

**Test item: AT: Antenna Terminal Conducted test**