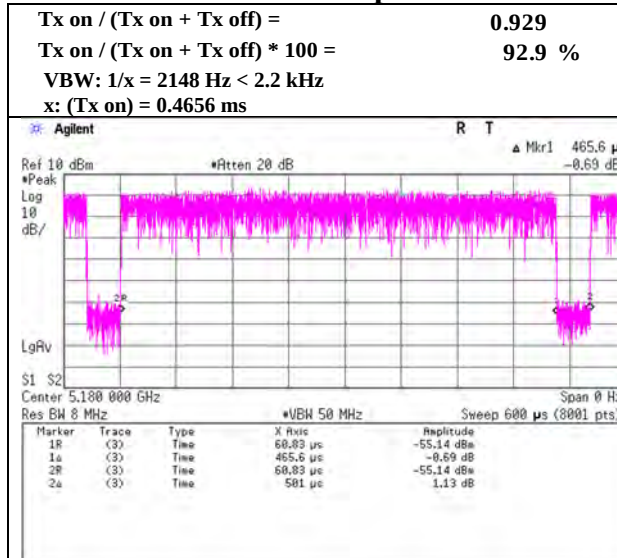


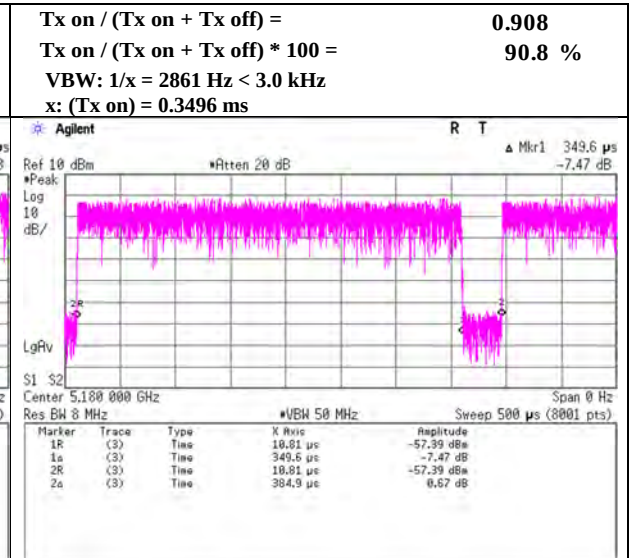
Burst rate confirmation

Report No. 13977035S-C-R1
Test place Shonan EMC Lab.
No.1 Measurement Room No.5 Shielded Room
Date October 21, 2021 October 28, 2021
Temperature / Humidity 24 deg. C / 43 % RH 24 deg. C / 46 % RH
Engineer Kenichi Adachi Kenichi Adachi
Mode Tx

11a 18 Mbps



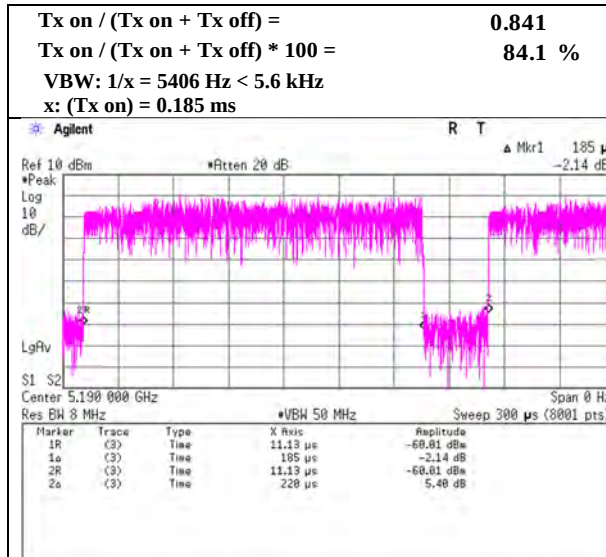
11ac-20 MCS 3



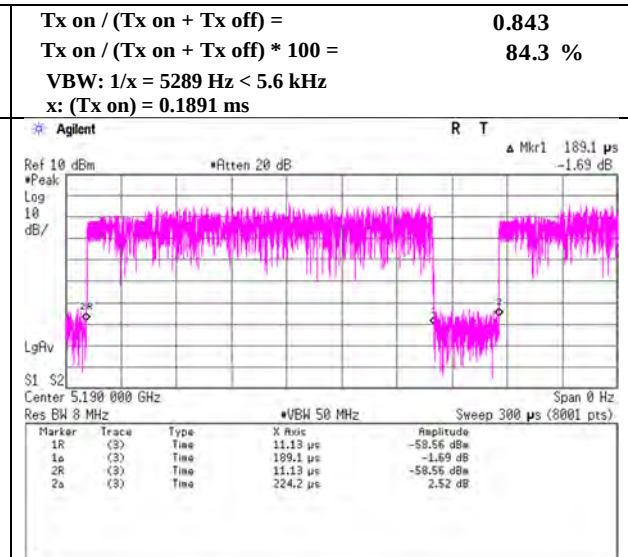
Burst rate confirmation

Report No. 13977035S-C-R1
Test place Shonan EMC Lab. No.5 Shielded Room
Date October 28, 2021
Temperature / Humidity 24 deg. C / 46 % RH
Engineer Kenichi Adachi
Mode Tx

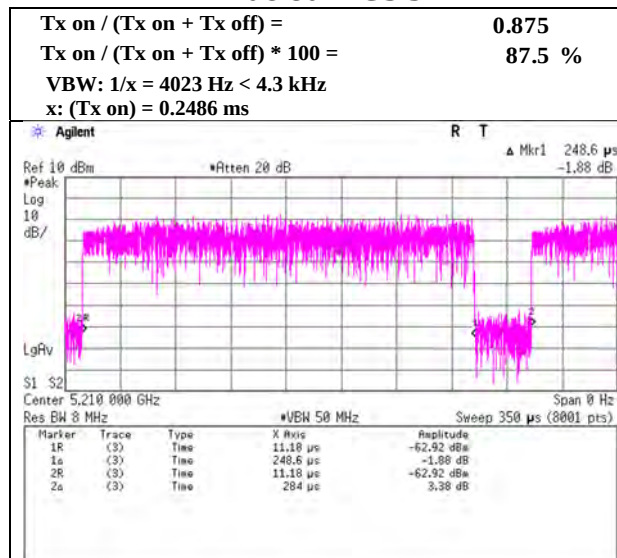
11n-40 MCS 3



11ac-40 MCS 3



11ac-80 MCS 5



Maximum Power Spectral Density

Report No. 13977035S-C-R1
Test place Shonan EMC Lab. No.5 Shielded Room
Date November 11, 2021
Temperature / Humidity 24 deg. C / 30 % RH
Engineer Shiro Kobayashi
Mode Tx 11a (SISO)

Chain1

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD Reading [dBm /MHz]	Cable Loss [dB]	Atten. Loss [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	-11.73	2.61	9.72	2.71	0.00	0.61	11.00	10.40	3.32	17.00	13.69
5220	-12.02	2.62	9.72	2.71	0.00	0.32	11.00	10.68	3.03	17.00	13.97
5240	-11.87	2.58	9.72	2.71	0.00	0.43	11.00	10.57	3.14	17.00	13.86
5260	-12.19	2.60	9.72	2.71	0.00	0.13	11.00	10.87	2.84	17.00	14.16
5300	-12.16	2.61	9.72	2.71	0.00	0.18	11.00	10.83	2.89	17.00	14.12
5320	-12.09	2.62	9.72	2.71	0.00	0.25	11.00	10.75	2.96	17.00	14.04
5500	-11.95	2.71	9.73	2.71	0.00	0.49	11.00	10.51	3.20	17.00	13.80
5580	-12.02	2.70	9.73	2.71	0.00	0.41	11.00	10.59	3.12	17.00	13.88
5700	-11.83	2.71	9.74	2.71	0.00	0.62	11.00	10.38	3.33	17.00	13.67
5720	-11.83	2.71	9.74	2.71	0.00	0.62	11.00	10.38	3.33	17.00	13.67
5745	-20.61	2.71	9.74	2.71	6.99	-1.17	30.00	31.17	1.54	36.00	34.46
5785	-20.73	2.73	9.74	2.71	6.99	-1.27	30.00	31.27	1.44	36.00	34.56
5825	-21.01	2.75	9.74	2.71	6.99	-1.53	30.00	31.53	1.18	36.00	34.82

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5850 MHz are based on any 500 kHz band.

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

PSD Result (Conducted) = Reading + Cable Loss + Atten. Loss + RBW Correction Factor

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

Maximum Power Spectral Density

Report No. 13977035S-C-R1
Test place Shonan EMC Lab. No.5 Shielded Room
Date November 11, 2021
Temperature / Humidity 24 deg. C / 30 % RH
Engineer Shiro Kobayashi
Mode Tx 11n-20 (SISO)

Chain1

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD Reading [dBm /MHz]	Cable Loss [dB]	Atten. Loss [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	-12.51	2.61	9.72	2.71	0.00	-0.18	11.00	11.18	2.53	17.00	14.47
5220	-12.31	2.62	9.72	2.71	0.00	0.03	11.00	10.97	2.74	17.00	14.26
5240	-12.39	2.58	9.72	2.71	0.00	-0.08	11.00	11.09	2.63	17.00	14.38
5260	-12.39	2.60	9.72	2.71	0.00	-0.07	11.00	11.07	2.64	17.00	14.36
5300	-12.19	2.61	9.72	2.71	0.00	0.15	11.00	10.86	2.86	17.00	14.15
5320	-12.68	2.62	9.72	2.71	0.00	-0.34	11.00	11.34	2.37	17.00	14.63
5500	-12.73	2.71	9.73	2.71	0.00	-0.29	11.00	11.29	2.42	17.00	14.58
5580	-12.42	2.70	9.73	2.71	0.00	0.01	11.00	10.99	2.72	17.00	14.28
5700	-11.82	2.71	9.74	2.71	0.00	0.63	11.00	10.37	3.34	17.00	13.66
5720	-12.47	2.71	9.74	2.71	0.00	-0.02	11.00	11.02	2.69	17.00	14.31
5745	-20.98	2.71	9.74	2.71	6.99	-1.54	30.00	31.54	1.17	36.00	34.83
5785	-21.40	2.73	9.74	2.71	6.99	-1.94	30.00	31.94	0.77	36.00	35.23
5825	-21.02	2.75	9.74	2.71	6.99	-1.54	30.00	31.54	1.17	36.00	34.83

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5850 MHz are based on any 500 kHz band.

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

PSD Result (Conducted) = Reading + Cable Loss + Atten. Loss + RBW Correction Factor

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

UL Japan, Inc.

Shonan EMC Lab.

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Facsimile : +81 463 50 6401

Maximum Power Spectral Density

Report No. 13977035S-C-R1
Test place Shonan EMC Lab. No.5 Shielded Room
Date November 11, 2021
Temperature / Humidity 24 deg. C / 30 % RH
Engineer Shiro Kobayashi
Mode Tx 11ac-20 (SISO)

Chain1

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD Reading [dBm /MHz]	Cable Loss [dB]	Atten. Loss [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	-16.54	2.61	9.72	2.71	0.00	-4.21	11.00	15.21	-1.50	17.00	18.50
5220	-16.29	2.62	9.72	2.71	0.00	-3.95	11.00	14.95	-1.24	17.00	18.24
5240	-16.39	2.58	9.72	2.71	0.00	-4.09	11.00	15.09	-1.38	17.00	18.38
5260	-16.06	2.60	9.72	2.71	0.00	-3.74	11.00	14.74	-1.03	17.00	18.03
5300	-16.52	2.61	9.72	2.71	0.00	-4.19	11.00	15.19	-1.48	17.00	18.48
5320	-16.76	2.62	9.72	2.71	0.00	-4.42	11.00	15.42	-1.71	17.00	18.71
5500	-16.66	2.71	9.73	2.71	0.00	-4.22	11.00	15.22	-1.51	17.00	18.51
5580	-16.27	2.70	9.73	2.71	0.00	-3.84	11.00	14.84	-1.13	17.00	18.13
5700	-16.12	2.71	9.74	2.71	0.00	-3.67	11.00	14.67	-0.96	17.00	17.96
5720	-16.50	2.71	9.74	2.71	0.00	-4.05	11.00	15.05	-1.34	17.00	18.34
5745	-24.75	2.71	9.74	2.71	6.99	-5.31	30.00	35.31	-2.60	36.00	38.60
5785	-25.38	2.73	9.74	2.71	6.99	-5.92	30.00	35.92	-3.21	36.00	39.21
5825	-25.36	2.75	9.74	2.71	6.99	-5.88	30.00	35.88	-3.17	36.00	39.17

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5850 MHz are based on any 500 kHz band.

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

PSD Result (Conducted) = Reading + Cable Loss + Atten. Loss + RBW Correction Factor

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

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Shonan EMC Lab.

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Facsimile : +81 463 50 6401

Maximum Power Spectral Density

Report No. 13977035S-C-R1
Test place Shonan EMC Lab. No.5 Shielded Room
Date November 11, 2021
Temperature / Humidity 24 deg. C / 30 % RH
Engineer Shiro Kobayashi
Mode Tx 11a (CDD)

Chain 1+2

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Chain 1 [mW/MHz]	Chain 2 [mW/MHz]	Sum [mW/MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Margin [dB]	Chain 1 [mW/MHz]	Chain 2 [mW/MHz]	Sum [mW/MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Margin [dB]
5180	0.53	0.48	1.01	0.04	11.00	10.96	1.96	1.81	3.77	5.77	17.00	11.23
5220	0.54	0.47	1.02	0.07	11.00	10.93	2.03	1.77	3.80	5.80	17.00	11.20
5240	0.55	0.54	1.09	0.37	11.00	10.63	2.07	2.00	4.08	6.10	17.00	10.90
5260	0.56	0.49	1.05	0.21	11.00	10.79	2.10	1.83	3.93	5.94	17.00	11.06
5300	0.57	0.50	1.06	0.26	11.00	10.74	2.12	1.85	3.97	5.99	17.00	11.01
5320	0.55	0.48	1.03	0.15	11.00	10.85	2.07	1.80	3.87	5.88	17.00	11.12
5500	0.52	0.45	0.97	-0.12	11.00	11.12	1.96	1.68	3.64	5.61	17.00	11.39
5580	0.63	0.44	1.07	0.29	11.00	10.71	2.37	1.63	4.00	6.02	17.00	10.98
5700	0.62	0.52	1.13	0.55	11.00	10.45	2.31	1.93	4.24	6.28	17.00	10.72
5720	0.59	0.38	0.98	-0.11	11.00	11.11	2.21	1.44	3.65	5.62	17.00	11.38
5745	0.41	0.31	0.71	-1.46	30.00	31.46	1.53	1.15	2.67	4.27	36.00	31.73
5785	0.35	0.31	0.67	-1.75	30.00	31.75	1.32	1.18	2.50	3.98	36.00	32.02
5825	0.39	0.31	0.70	-1.56	30.00	31.56	1.46	1.15	2.61	4.17	36.00	31.83

			Chain 1						Chain 2					
Tested Frequency	-	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result	
[MHz]		[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5180	-	0.00	-15.13	2.61	9.72	5.73	-2.80	2.93	-15.49	2.61	9.72	5.73	-3.16	2.57
5220	-	0.00	-14.99	2.62	9.72	5.73	-2.65	3.08	-15.59	2.62	9.72	5.73	-3.25	2.49
5240	-	0.00	-14.86	2.58	9.72	5.73	-2.56	3.17	-15.01	2.58	9.72	5.73	-2.71	3.02
5260	-	0.00	-14.84	2.60	9.72	5.73	-2.52	3.21	-15.43	2.60	9.72	5.73	-3.11	2.63
5300	-	0.00	-14.80	2.61	9.72	5.73	-2.47	3.26	-15.38	2.61	9.72	5.73	-3.05	2.68
5320	-	0.00	-14.91	2.62	9.72	5.73	-2.57	3.17	-15.52	2.62	9.72	5.73	-3.18	2.55
5500	-	0.00	-15.24	2.71	9.73	5.73	-2.80	2.93	-15.92	2.71	9.73	5.73	-3.48	2.25
5580	-	0.00	-14.42	2.70	9.73	5.73	-1.99	3.74	-16.04	2.70	9.73	5.73	-3.61	2.12
5700	-	0.00	-14.55	2.71	9.74	5.73	-2.10	3.64	-15.32	2.71	9.74	5.73	-2.87	2.86
5720	-	0.00	-14.74	2.71	9.74	5.73	-2.29	3.45	-16.60	2.71	9.74	5.73	-4.15	1.58
5745	-	6.99	-23.33	2.71	9.74	5.73	-3.89	1.84	-24.57	2.71	9.74	5.73	-5.13	0.60
5785	-	6.99	-23.98	2.73	9.74	5.73	-4.52	1.21	-24.48	2.73	9.74	5.73	-5.02	0.71
5825	-	6.99	-23.56	2.75	9.74	5.73	-4.08	1.65	-24.61	2.75	9.74	5.73	-5.13	0.60

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5850 MHz are based on any 500 kHz band.

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

PSD Result (Conducted) = Reading + Cable Loss + Atten. Loss + RBW Correction Factor

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

Directional Gain = $G_{\text{ANT}}(\text{Antenna Gain}) + \text{Array Gain}$

Array Gain = $10 \log(N_{\text{ANT}}/N_{\text{SS}})$

N_{ANT} (number of transmit antennas) = 2

N_{SS} (number of spatial streams) = 1

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Facsimile : +81 463 50 6401

Maximum Power Spectral Density

Report No. 13977035S-C-R1
Test place Shonan EMC Lab. No.5 Shielded Room
Date November 24, 2021
Temperature / Humidity 23 deg. C / 33 % RH
Engineer Shiro Kobayashi
Mode Tx 11n-20 (CDD)

Chain 1+2

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Chain		Sum	Result	Limit	Margin	Chain		Sum	Result	Limit	Margin
	1	2					1	2				
	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5180	0.49	0.43	0.92	-0.36	11.00	11.36	1.82	1.63	3.44	5.37	17.00	11.63
5220	0.48	0.46	0.93	-0.30	11.00	11.30	1.78	1.71	3.49	5.43	17.00	11.57
5240	0.48	0.46	0.95	-0.24	11.00	11.24	1.81	1.73	3.54	5.49	17.00	11.51
5260	0.47	0.43	0.90	-0.48	11.00	11.48	1.75	1.59	3.35	5.25	17.00	11.75
5300	0.46	0.44	0.90	-0.44	11.00	11.44	1.73	1.65	3.38	5.29	17.00	11.71
5320	0.43	0.41	0.84	-0.75	11.00	11.75	1.61	1.54	3.15	4.98	17.00	12.02
5500	0.50	0.36	0.86	-0.67	11.00	11.67	1.85	1.35	3.20	5.06	17.00	11.94
5580	0.50	0.39	0.90	-0.48	11.00	11.48	1.88	1.47	3.35	5.25	17.00	11.75
5700	0.51	0.42	0.93	-0.32	11.00	11.32	1.91	1.56	3.48	5.41	17.00	11.59
5720	0.50	0.39	0.88	-0.54	11.00	11.54	1.85	1.45	3.30	5.19	17.00	11.81
5745	0.36	0.27	0.63	-2.02	30.00	32.02	1.34	1.01	2.35	3.71	36.00	32.29
5785	0.34	0.29	0.63	-1.97	30.00	31.97	1.28	1.10	2.37	3.76	36.00	32.24
5825	0.33	0.28	0.61	-2.18	30.00	32.18	1.24	1.03	2.27	3.55	36.00	32.45

			Chain 1						Chain 2					
Tested Frequency	-	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result	
[MHz]		[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5180	-	0.00	-15.47	2.61	9.72	5.73	-3.14	2.59	-15.95	2.61	9.72	5.73	-3.62	2.11
5220	-	0.00	-15.57	2.62	9.72	5.73	-3.23	2.50	-15.73	2.62	9.72	5.73	-3.39	2.34
5240	-	0.00	-15.46	2.58	9.72	5.73	-3.16	2.57	-15.65	2.58	9.72	5.73	-3.35	2.38
5260	-	0.00	-15.61	2.60	9.72	5.73	-3.29	2.44	-16.03	2.60	9.72	5.73	-3.71	2.02
5300	-	0.00	-15.67	2.61	9.72	5.73	-3.34	2.39	-15.89	2.61	9.72	5.73	-3.56	2.17
5320	-	0.00	-16.00	2.62	9.72	5.73	-3.66	2.07	-16.20	2.62	9.72	5.73	-3.86	1.87
5500	-	0.00	-15.49	2.71	9.73	5.73	-3.05	2.68	-16.87	2.71	9.73	5.73	-4.43	1.30
5580	-	0.00	-15.41	2.70	9.73	5.73	-2.98	2.75	-16.49	2.70	9.73	5.73	-4.06	1.67
5700	-	0.00	-15.37	2.71	9.74	5.73	-2.92	2.81	-16.24	2.71	9.74	5.73	-3.79	1.94
5720	-	0.00	-15.50	2.71	9.74	5.73	-3.05	2.68	-16.56	2.71	9.74	5.73	-4.11	1.62
5745	-	6.99	-23.89	2.71	9.74	5.73	-4.45	1.28	-25.15	2.71	9.74	5.73	-5.71	0.02
5785	-	6.99	-24.12	2.73	9.74	5.73	-4.66	1.07	-24.79	2.73	9.74	5.73	-5.33	0.40
5825	-	6.99	-24.29	2.75	9.74	5.73	-4.81	0.92	-25.08	2.75	9.74	5.73	-5.60	0.13

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5850 MHz are based on any 500 kHz band.

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

PSD Result (Conducted) = Reading + Cable Loss + Atten. Loss + RBW Correction Factor

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

Directional Gain = $G_{\text{ANT}}(\text{Antenna Gain}) + \text{Array Gain}$

Array Gain = $10 \log(N_{\text{ANT}}/N_{\text{SS}})$

N_{ANT} (number of transmit antennas) = 2

N_{SS} (number of spatial streams) = 1

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Maximum Power Spectral Density

Report No. 13977035S-C-R1
Test place Shonan EMC Lab. No.5 Shielded Room
Date November 24, 2021
Temperature / Humidity 23 deg. C / 33 % RH
Engineer Shiro Kobayashi
Mode Tx 11ac-20 (CDD)

Chain 1+2

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Chain		Sum	Result	Limit	Margin	Chain		Sum	Result	Limit	Margin
	1	2					1	2				
	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5180	0.21	0.17	0.38	-4.17	11.00	15.17	0.78	0.65	1.43	1.56	17.00	15.44
5220	0.21	0.17	0.38	-4.15	11.00	15.15	0.79	0.65	1.44	1.58	17.00	15.42
5240	0.20	0.18	0.38	-4.19	11.00	15.19	0.74	0.68	1.43	1.54	17.00	15.46
5260	0.19	0.18	0.37	-4.28	11.00	15.28	0.71	0.69	1.40	1.45	17.00	15.55
5300	0.21	0.18	0.39	-4.08	11.00	15.08	0.78	0.68	1.46	1.65	17.00	15.35
5320	0.19	0.18	0.37	-4.32	11.00	15.32	0.71	0.67	1.38	1.41	17.00	15.59
5500	0.21	0.15	0.35	-4.55	11.00	15.55	0.77	0.54	1.31	1.18	17.00	15.82
5580	0.22	0.16	0.38	-4.17	11.00	15.17	0.82	0.61	1.43	1.56	17.00	15.44
5700	0.22	0.17	0.39	-4.12	11.00	15.12	0.82	0.63	1.45	1.61	17.00	15.39
5720	0.20	0.16	0.36	-4.42	11.00	15.42	0.76	0.59	1.35	1.31	17.00	15.69
5745	0.15	0.11	0.26	-5.87	30.00	35.87	0.57	0.40	0.97	-0.14	36.00	36.14
5785	0.15	0.12	0.27	-5.74	30.00	35.74	0.56	0.43	1.00	-0.01	36.00	36.01
5825	0.13	0.12	0.25	-5.96	30.00	35.96	0.50	0.45	0.95	-0.23	36.00	36.23

			Chain 1						Chain 2					
Tested Frequency	-	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result	
[MHz]		[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5180	-	0.00	-19.13	2.61	9.72	5.73	-6.80	-1.07	-19.93	2.61	9.72	5.73	-7.60	-1.87
5220	-	0.00	-19.07	2.62	9.72	5.73	-6.73	-1.00	-19.97	2.62	9.72	5.73	-7.63	-1.90
5240	-	0.00	-19.33	2.58	9.72	5.73	-7.03	-1.30	-19.68	2.58	9.72	5.73	-7.38	-1.65
5260	-	0.00	-19.53	2.60	9.72	5.73	-7.21	-1.48	-19.68	2.60	9.72	5.73	-7.36	-1.63
5300	-	0.00	-19.15	2.61	9.72	5.73	-6.82	-1.09	-19.72	2.61	9.72	5.73	-7.39	-1.66
5320	-	0.00	-19.57	2.62	9.72	5.73	-7.23	-1.50	-19.78	2.62	9.72	5.73	-7.44	-1.71
5500	-	0.00	-19.32	2.71	9.73	5.73	-6.88	-1.15	-20.81	2.71	9.73	5.73	-8.37	-2.64
5580	-	0.00	-19.02	2.70	9.73	5.73	-6.59	-0.86	-20.30	2.70	9.73	5.73	-7.87	-2.14
5700	-	0.00	-19.05	2.71	9.74	5.73	-6.60	-0.87	-20.20	2.71	9.74	5.73	-7.75	-2.02
5720	-	0.00	-19.37	2.71	9.74	5.73	-6.92	-1.19	-20.47	2.71	9.74	5.73	-8.02	-2.29
5745	-	6.99	-27.59	2.71	9.74	5.73	-8.15	-2.42	-29.20	2.71	9.74	5.73	-9.76	-4.03
5785	-	6.99	-27.69	2.73	9.74	5.73	-8.23	-2.50	-28.81	2.73	9.74	5.73	-9.35	-3.62
5825	-	6.99	-28.19	2.75	9.74	5.73	-8.71	-2.98	-28.72	2.75	9.74	5.73	-9.24	-3.51

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5850 MHz are based on any 500 kHz band.

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

PSD Result (Conducted) = Reading + Cable Loss + Atten. Loss + RBW Correction Factor

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

Directional Gain = $G_{\text{ANT}}(\text{Antenna Gain}) + \text{Array Gain}$

Array Gain = $10 \log(N_{\text{ANT}}/N_{\text{SS}})$

N_{ANT} (number of transmit antennas) = 2

N_{SS} (number of spatial streams) = 1

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Shonan EMC Lab.

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Maximum Power Spectral Density

Report No. 13977035S-C-R1
Test place Shonan EMC Lab. No.5 Shielded Room
Date November 11, 2021
Temperature / Humidity 24 deg. C / 30 % RH
Engineer Shiro Kobayashi
Mode Tx 11n-20 (MIMO)

Chain 1+2

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Chain 1 [mW/MHz]	Chain 2 [mW/MHz]	Sum [mW/MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Margin [dB]	Chain 1 [mW/MHz]	Chain 2 [mW/MHz]	Sum [mW/MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Margin [dB]
5180	0.48	0.47	0.95	-0.22	11.00	11.22	0.90	0.88	1.77	2.49	17.00	14.51
5220	0.52	0.45	0.97	-0.13	11.00	11.13	0.98	0.84	1.81	2.58	17.00	14.42
5240	0.49	0.45	0.93	-0.31	11.00	11.31	0.91	0.83	1.74	2.40	17.00	14.60
5260	0.47	0.45	0.93	-0.33	11.00	11.33	0.89	0.84	1.73	2.38	17.00	14.62
5300	0.47	0.43	0.90	-0.46	11.00	11.46	0.88	0.80	1.68	2.25	17.00	14.75
5320	0.47	0.42	0.89	-0.52	11.00	11.52	0.87	0.79	1.65	2.19	17.00	14.81
5500	0.42	0.39	0.82	-0.89	11.00	11.89	0.79	0.73	1.52	1.82	17.00	15.18
5580	0.55	0.38	0.93	-0.33	11.00	11.33	1.02	0.71	1.73	2.38	17.00	14.62
5700	0.53	0.40	0.94	-0.29	11.00	11.29	0.99	0.75	1.75	2.42	17.00	14.58
5720	0.50	0.37	0.87	-0.58	11.00	11.58	0.94	0.69	1.63	2.13	17.00	14.87
5745	0.35	0.28	0.63	-2.01	30.00	32.01	0.65	0.53	1.17	0.70	36.00	35.30
5785	0.33	0.30	0.63	-2.02	30.00	32.02	0.61	0.56	1.17	0.69	36.00	35.31
5825	0.32	0.31	0.63	-1.99	30.00	31.99	0.60	0.57	1.18	0.72	36.00	35.28

Tested Frequency [MHz]	-	RBW Correction Factor [dB]	Chain 1					Chain 2					PSD Result	
			PSD Reading [dBm/MHz]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	PSD Result Cond. [dBm/MHz]	PSD Result e.i.r.p. [dBm/MHz]	PSD Reading [dBm/MHz]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	PSD Result Cond. [dBm/MHz]	PSD Result e.i.r.p. [dBm/MHz]
5180	-	0.00	-15.51	2.61	9.72	2.71	-3.18	-0.47	-15.61	2.61	9.72	2.71	-3.28	-0.57
5220	-	0.00	-15.16	2.62	9.72	2.71	-2.82	-0.11	-15.83	2.62	9.72	2.71	-3.49	-0.78
5240	-	0.00	-15.44	2.58	9.72	2.71	-3.14	-0.43	-15.81	2.58	9.72	2.71	-3.51	-0.80
5260	-	0.00	-15.55	2.60	9.72	2.71	-3.23	-0.52	-15.77	2.60	9.72	2.71	-3.45	-0.74
5300	-	0.00	-15.62	2.61	9.72	2.71	-3.29	-0.58	-15.99	2.61	9.72	2.71	-3.66	-0.95
5320	-	0.00	-15.67	2.62	9.72	2.71	-3.33	-0.61	-16.09	2.62	9.72	2.71	-3.75	-1.04
5500	-	0.00	-16.17	2.71	9.73	2.71	-3.73	-1.02	-16.51	2.71	9.73	2.71	-4.07	-1.36
5580	-	0.00	-15.07	2.70	9.73	2.71	-2.64	0.08	-16.62	2.70	9.73	2.71	-4.19	-1.48
5700	-	0.00	-15.19	2.71	9.74	2.71	-2.74	-0.03	-16.39	2.71	9.74	2.71	-3.94	-1.23
5720	-	0.00	-15.42	2.71	9.74	2.71	-2.97	-0.26	-16.77	2.71	9.74	2.71	-4.32	-1.61
5745	-	6.99	-24.05	2.71	9.74	2.71	-4.61	-1.90	-24.92	2.71	9.74	2.71	-5.48	-2.77
5785	-	6.99	-24.31	2.73	9.74	2.71	-4.85	-2.14	-24.67	2.73	9.74	2.71	-5.21	-2.50
5825	-	6.99	-24.38	2.75	9.74	2.71	-4.90	-2.19	-24.60	2.75	9.74	2.71	-5.12	-2.41

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5850 MHz are based on any 500 kHz band.

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

PSD Result (Conducted) = Reading + Cable Loss + Atten. Loss + RBW Correction Factor

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

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Maximum Power Spectral Density

Report No. 13977035S-C-R1
Test place Shonan EMC Lab. No.5 Shielded Room
Date November 11, 2021
Temperature / Humidity 24 deg. C / 30 % RH
Engineer Shiro Kobayashi
Mode Tx 11ac-20 (MIMO)

Chain 1+2

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Chain		Sum	Result	Limit	Margin	Chain		Sum	Result	Limit	Margin
	1	2					1	2				
	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5180	0.24	0.20	0.44	-3.53	11.00	14.53	0.45	0.38	0.83	-0.82	17.00	17.82
5220	0.21	0.19	0.40	-3.99	11.00	14.99	0.40	0.35	0.75	-1.28	17.00	18.28
5240	0.20	0.18	0.38	-4.20	11.00	15.20	0.37	0.34	0.71	-1.49	17.00	18.49
5260	0.22	0.18	0.40	-3.94	11.00	14.94	0.41	0.34	0.75	-1.23	17.00	18.23
5300	0.19	0.18	0.37	-4.31	11.00	15.31	0.36	0.33	0.69	-1.60	17.00	18.60
5320	0.20	0.18	0.38	-4.15	11.00	15.15	0.38	0.34	0.72	-1.44	17.00	18.44
5500	0.20	0.15	0.35	-4.54	11.00	15.54	0.37	0.28	0.66	-1.83	17.00	18.83
5580	0.22	0.17	0.39	-4.10	11.00	15.10	0.42	0.31	0.73	-1.39	17.00	18.39
5700	0.24	0.16	0.40	-3.95	11.00	14.95	0.45	0.31	0.75	-1.24	17.00	18.24
5720	0.21	0.16	0.37	-4.29	11.00	15.29	0.39	0.31	0.69	-1.58	17.00	18.58
5745	0.15	0.12	0.27	-5.73	30.00	35.73	0.27	0.23	0.50	-3.02	36.00	39.02
5785	0.16	0.13	0.28	-5.51	30.00	35.51	0.29	0.24	0.53	-2.80	36.00	38.80
5825	0.14	0.12	0.26	-5.81	30.00	35.81	0.27	0.22	0.49	-3.10	36.00	39.10

Tested Frequency [MHz]		RBW Correction Factor [dB]	Chain 1					Chain 2					PSD Result	
			PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result Cond.	e.i.r.p.	PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result Cond.	e.i.r.p.
			[dBm/MHz]	[dB]	[dB]	[dBi]			[dBm/MHz]	[dB]	[dB]	[dBi]		
5180	-	0.00	-18.53	2.61	9.72	2.71	-6.20	-3.49	-19.24	2.61	9.72	2.71	-6.91	-4.20
5220	-	0.00	-19.05	2.62	9.72	2.71	-6.71	-4.00	-19.65	2.62	9.72	2.71	-7.31	-4.60
5240	-	0.00	-19.27	2.58	9.72	2.71	-6.97	-4.26	-19.76	2.58	9.72	2.71	-7.46	-4.75
5260	-	0.00	-18.91	2.60	9.72	2.71	-6.59	-3.88	-19.66	2.60	9.72	2.71	-7.34	-4.63
5300	-	0.00	-19.45	2.61	9.72	2.71	-7.12	-4.41	-19.87	2.61	9.72	2.71	-7.54	-4.83
5320	-	0.00	-19.23	2.62	9.72	2.71	-6.89	-4.18	-19.79	2.62	9.72	2.71	-7.45	-4.74
5500	-	0.00	-19.46	2.71	9.73	2.71	-7.02	-4.31	-20.60	2.71	9.73	2.71	-8.16	-5.45
5580	-	0.00	-18.96	2.70	9.73	2.71	-6.53	-3.82	-20.20	2.70	9.73	2.71	-7.77	-5.06
5700	-	0.00	-18.67	2.71	9.74	2.71	-6.22	-3.51	-20.30	2.71	9.74	2.71	-7.85	-5.14
5720	-	0.00	-19.27	2.71	9.74	2.71	-6.82	-4.11	-20.30	2.71	9.74	2.71	-7.85	-5.14
5745	-	6.99	-27.80	2.71	9.74	2.71	-8.36	-5.65	-28.60	2.71	9.74	2.71	-9.16	-6.45
5785	-	6.99	-27.55	2.73	9.74	2.71	-8.09	-5.38	-28.45	2.73	9.74	2.71	-8.99	-6.28
5825	-	6.99	-27.88	2.75	9.74	2.71	-8.40	-5.69	-28.77	2.75	9.74	2.71	-9.29	-6.58

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5850 MHz are based on any 500 kHz band.

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

PSD Result (Conducted) = Reading + Cable Loss + Atten. Loss + RBW Correction Factor

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

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Shonan EMC Lab.

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Maximum Power Spectral Density

Report No. 13977035S-C-R1
Test place Shonan EMC Lab. No.5 Shielded Room
Date November 11, 2021
Temperature / Humidity 24 deg. C / 30 % RH
Engineer Shiro Kobayashi
Mode Tx 11n-40 (SISO)

Chain1

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD Reading [dBm /MHz]	Cable Loss [dB]	Atten. Loss [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	-15.63	2.61	9.72	2.71	0.00	-3.30	11.00	14.30	-0.59	17.00	17.59
5230	-15.91	2.62	9.72	2.71	0.00	-3.57	11.00	14.57	-0.86	17.00	17.86
5270	-15.95	2.60	9.72	2.71	0.00	-3.63	11.00	14.63	-0.92	17.00	17.92
5310	-16.18	2.61	9.72	2.71	0.00	-3.85	11.00	14.85	-1.14	17.00	18.14
5510	-15.90	2.71	9.73	2.71	0.00	-3.46	11.00	14.46	-0.75	17.00	17.75
5550	-15.86	2.70	9.73	2.71	0.00	-3.43	11.00	14.43	-0.72	17.00	17.72
5670	-15.31	2.70	9.74	2.71	0.00	-2.87	11.00	13.87	-0.16	17.00	17.16
5710	-15.54	2.71	9.74	2.71	0.00	-3.09	11.00	14.09	-0.38	17.00	17.38
5755	-24.58	2.71	9.74	2.71	6.99	-5.14	30.00	35.14	-2.43	36.00	38.43
5795	-24.53	2.74	9.74	2.71	6.99	-5.06	30.00	35.06	-2.35	36.00	38.35

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5850 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 + Atten. Loss + RBW Correction Factor

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

Maximum Power Spectral Density

Report No. 13977035S-C-R1
Test place Shonan EMC Lab. No.5 Shielded Room
Date November 11, 2021
Temperature / Humidity 24 deg. C / 30 % RH
Engineer Shiro Kobayashi
Mode Tx 11ac-40 (SISO)

Chain1

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD Reading [dBm /MHz]	Cable Loss [dB]	Atten. Loss [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	-19.88	2.61	9.72	2.71	0.00	-7.55	11.00	18.55	-4.84	17.00	21.84
5230	-19.86	2.62	9.72	2.71	0.00	-7.52	11.00	18.52	-4.81	17.00	21.81
5270	-20.05	2.60	9.72	2.71	0.00	-7.73	11.00	18.73	-5.02	17.00	22.02
5310	-20.08	2.61	9.72	2.71	0.00	-7.75	11.00	18.75	-5.04	17.00	22.04
5510	-20.39	2.71	9.73	2.71	0.00	-7.95	11.00	18.95	-5.24	17.00	22.24
5550	-20.13	2.70	9.73	2.71	0.00	-7.70	11.00	18.70	-4.99	17.00	21.99
5670	-19.76	2.70	9.74	2.71	0.00	-7.32	11.00	18.32	-4.61	17.00	21.61
5710	-19.94	2.71	9.74	2.71	0.00	-7.49	11.00	18.49	-4.78	17.00	21.78
5755	-28.23	2.71	9.74	2.71	6.99	-8.79	30.00	38.79	-6.08	36.00	42.08
5795	-29.10	2.74	9.74	2.71	6.99	-9.63	30.00	39.63	-6.92	36.00	42.92

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5850 MHz are based on any 500 kHz band.

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

PSD Result (Conducted) = Reading + Cable Loss + Atten. Loss + RBW Correction Factor

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

Maximum Power Spectral Density

Report No. 13977035S-C-R1
Test place Shonan EMC Lab. No.5 Shielded Room
Date November 24, 2021
Temperature / Humidity 23 deg. C / 33 % RH
Engineer Shiro Kobayashi
Mode Tx 11n-40 (CDD)

Chain 1+2

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Chain		Sum	Result	Limit	Margin	Chain		Sum	Result	Limit	Margin
	1	2					1	2				
	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5190	0.21	0.21	0.43	-3.68	11.00	14.68	0.80	0.80	1.60	2.05	17.00	14.95
5230	0.21	0.19	0.39	-4.05	11.00	15.05	0.77	0.70	1.47	1.68	17.00	15.32
5270	0.20	0.17	0.37	-4.29	11.00	15.29	0.75	0.65	1.39	1.44	17.00	15.56
5310	0.19	0.19	0.38	-4.21	11.00	15.21	0.70	0.71	1.42	1.52	17.00	15.48
5510	0.21	0.15	0.36	-4.48	11.00	15.48	0.77	0.56	1.33	1.25	17.00	15.75
5550	0.23	0.15	0.38	-4.23	11.00	15.23	0.84	0.57	1.41	1.50	17.00	15.50
5670	0.22	0.19	0.41	-3.82	11.00	14.82	0.83	0.72	1.55	1.91	17.00	15.09
5710	0.22	0.18	0.40	-4.00	11.00	15.00	0.81	0.68	1.49	1.73	17.00	15.27
5755	0.14	0.11	0.26	-5.92	30.00	35.92	0.53	0.43	0.96	-0.19	36.00	36.19
5795	0.15	0.13	0.28	-5.54	30.00	35.54	0.57	0.48	1.05	0.19	36.00	35.81

Chain 1										Chain 2					
Tested Frequency [MHz]	-	RBW Correction Factor [dB]	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result		
			[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]		[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5190	-	0.00	-19.02	2.61	9.72	5.73	-6.69	-0.96	-19.01	2.61	9.72	5.73	-6.68	-0.95	
5230	-	0.00	-19.20	2.62	9.72	5.73	-6.86	-1.13	-19.62	2.62	9.72	5.73	-7.28	-1.55	
5270	-	0.00	-19.32	2.60	9.72	5.73	-7.00	-1.27	-19.94	2.60	9.72	5.73	-7.62	-1.89	
5310	-	0.00	-19.58	2.61	9.72	5.73	-7.25	-1.52	-19.52	2.61	9.72	5.73	-7.19	-1.46	
5510	-	0.00	-19.31	2.71	9.73	5.73	-6.87	-1.14	-20.66	2.71	9.73	5.73	-8.22	-2.49	
5550	-	0.00	-18.89	2.70	9.73	5.73	-6.46	-0.73	-20.62	2.70	9.73	5.73	-8.19	-2.46	
5670	-	0.00	-18.96	2.70	9.74	5.73	-6.52	-0.79	-19.62	2.70	9.74	5.73	-7.18	-1.45	
5710	-	0.00	-19.08	2.71	9.74	5.73	-6.63	-0.90	-19.87	2.71	9.74	5.73	-7.42	-1.69	
5755	-	6.99	-27.91	2.71	9.74	5.73	-8.47	-2.74	-28.88	2.71	9.74	5.73	-9.44	-3.71	
5795	-	6.99	-27.67	2.74	9.74	5.73	-8.20	-2.47	-28.40	2.74	9.74	5.73	-8.93	-3.20	

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5850 MHz are based on any 500 kHz band.

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

PSD Result (Conducted) = Reading + Cable Loss + Atten. Loss + RBW Correction Factor

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

Directional Gain = $G_{\text{ANT}}(\text{Antenna Gain}) + \text{Array Gain}$

Array Gain = $10 \log(N_{\text{ANT}}/N_{\text{SS}})$

N_{ANT} (number of transmit antennas) = 2

N_{SS} (number of spatial streams) = 1

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Facsimile : +81 463 50 6401

Maximum Power Spectral Density

Report No. 13977035S-C-R1
Test place Shonan EMC Lab. No.5 Shielded Room
Date November 24, 2021
Temperature / Humidity 23 deg. C / 33 % RH
Engineer Shiro Kobayashi
Mode Tx 11ac-40 (CDD)

Chain 1+2

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Chain 1 [mW/MHz]	Chain 2 [mW/MHz]	Sum [mW/MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Margin [dB]	Chain 1 [mW/MHz]	Chain 2 [mW/MHz]	Sum [mW/MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Margin [dB]
5190	0.09	0.09	0.18	-7.41	11.00	18.41	0.35	0.33	0.68	-1.68	17.00	18.68
5230	0.09	0.09	0.18	-7.44	11.00	18.44	0.35	0.33	0.67	-1.71	17.00	18.71
5270	0.08	0.08	0.16	-7.86	11.00	18.86	0.31	0.30	0.61	-2.13	17.00	19.13
5310	0.09	0.08	0.17	-7.75	11.00	18.75	0.33	0.30	0.63	-2.02	17.00	19.02
5510	0.09	0.06	0.15	-8.16	11.00	19.16	0.33	0.24	0.57	-2.43	17.00	19.43
5550	0.10	0.07	0.16	-7.90	11.00	18.90	0.36	0.25	0.61	-2.17	17.00	19.17
5670	0.10	0.08	0.17	-7.58	11.00	18.58	0.36	0.30	0.65	-1.85	17.00	18.85
5710	0.09	0.08	0.17	-7.68	11.00	18.68	0.36	0.28	0.64	-1.95	17.00	18.95
5755	0.06	0.05	0.10	-9.83	30.00	39.83	0.22	0.17	0.39	-4.10	36.00	40.10
5795	0.06	0.05	0.11	-9.59	30.00	39.59	0.23	0.18	0.41	-3.86	36.00	39.86

Chain 1										Chain 2					
Tested Frequency [MHz]	-	RBW Correction Factor [dB]	PSD Reading [dBm/MHz]	Cable Loss [dB]	Atten. Loss [dB]	Directional Gain [dBi]	PSD Result Cond. [dBm/MHz]	PSD Result e.i.r.p. [dBm/MHz]		PSD Reading [dBm/MHz]	Cable Loss [dB]	Atten. Loss [dB]	Directional Gain [dBi]	PSD Result Cond. [dBm/MHz]	PSD Result e.i.r.p. [dBm/MHz]
5190	-	0.00	-22.61	2.61	9.72	5.73	-10.28	-4.55		-22.90	2.61	9.72	5.73	-10.57	-4.84
5230	-	0.00	-22.64	2.62	9.72	5.73	-10.30	-4.57		-22.95	2.62	9.72	5.73	-10.61	-4.88
5270	-	0.00	-23.12	2.60	9.72	5.73	-10.80	-5.07		-23.26	2.60	9.72	5.73	-10.94	-5.21
5310	-	0.00	-22.84	2.61	9.72	5.73	-10.51	-4.78		-23.35	2.61	9.72	5.73	-11.02	-5.29
5510	-	0.00	-22.93	2.71	9.73	5.73	-10.49	-4.76		-24.42	2.71	9.73	5.73	-11.98	-6.25
5550	-	0.00	-22.61	2.70	9.73	5.73	-10.18	-4.45		-24.22	2.70	9.73	5.73	-11.79	-6.06
5670	-	0.00	-22.64	2.70	9.74	5.73	-10.20	-4.47		-23.47	2.70	9.74	5.73	-11.03	-5.30
5710	-	0.00	-22.68	2.71	9.74	5.73	-10.23	-4.50		-23.65	2.71	9.74	5.73	-11.20	-5.47
5755	-	6.99	-31.81	2.71	9.74	5.73	-12.37	-6.64		-32.80	2.71	9.74	5.73	-13.36	-7.63
5795	-	6.99	-31.63	2.74	9.74	5.73	-12.16	-6.43		-32.57	2.74	9.74	5.73	-13.10	-7.37

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5850 MHz are based on any 500 kHz band.

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

PSD Result (Conducted) = Reading + Cable Loss + Atten. Loss + RBW Correction Factor

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

Directional Gain = G_{ANT} (Antenna Gain) + Array Gain

Array Gain = $10 \log(N_{\text{ANT}}/N_{\text{SS}})$

N_{ANT} (number of transmit antennas) = 2

N_{SS} (number of spatial streams) = 1

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Maximum Power Spectral Density

Report No. 13977035S-C-R1
Test place Shonan EMC Lab. No.5 Shielded Room
Date November 11, 2021
Temperature / Humidity 24 deg. C / 30 % RH
Engineer Shiro Kobayashi
Mode Tx 11n-40 (MIMO)

Chain 1+2

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Chain			Result	Limit	Margin	Chain			Result	Limit	Margin
	1	2	Sum				1	2	Sum			
	[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	0.21	0.42	-3.72	11.00	14.72	0.40	0.39	0.79	-1.01	17.00	18.01
5230	0.22	0.20	0.42	-3.75	11.00	14.75	0.41	0.38	0.79	-1.04	17.00	18.04
5270	0.20	0.20	0.40	-3.98	11.00	14.98	0.38	0.37	0.75	-1.27	17.00	18.27
5310	0.22	0.19	0.41	-3.90	11.00	14.90	0.41	0.35	0.76	-1.19	17.00	18.19
5510	0.20	0.17	0.37	-4.30	11.00	15.30	0.37	0.32	0.69	-1.59	17.00	18.59
5550	0.22	0.17	0.40	-4.01	11.00	15.01	0.42	0.33	0.74	-1.30	17.00	18.30
5670	0.23	0.20	0.43	-3.64	11.00	14.64	0.44	0.37	0.81	-0.93	17.00	17.93
5710	0.22	0.19	0.41	-3.85	11.00	14.85	0.41	0.36	0.77	-1.14	17.00	18.14
5755	0.16	0.12	0.27	-5.61	30.00	35.61	0.30	0.22	0.51	-2.90	36.00	38.90
5795	0.14	0.12	0.26	-5.78	30.00	35.78	0.27	0.23	0.49	-3.07	36.00	39.07

Chain 1							Chain 2							
Tested Frequency	-	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result	
[MHz]		[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	Cond.	e.i.r.p.	[dBm/MHz]	[dB]	[dB]	[dBi]	Cond.	e.i.r.p.
5190	-	0.00	-19.00	2.61	9.72	2.71	-6.67	-3.96	-19.11	2.61	9.72	2.71	-6.78	-4.07
5230	-	0.00	-18.91	2.62	9.72	2.71	-6.57	-3.86	-19.30	2.62	9.72	2.71	-6.96	-4.25
5270	-	0.00	-19.24	2.60	9.72	2.71	-6.92	-4.21	-19.38	2.60	9.72	2.71	-7.06	-4.35
5310	-	0.00	-18.93	2.61	9.72	2.71	-6.60	-3.89	-19.58	2.61	9.72	2.71	-7.25	-4.54
5510	-	0.00	-19.42	2.71	9.73	2.71	-6.98	-4.27	-20.10	2.71	9.73	2.71	-7.66	-4.95
5550	-	0.00	-18.96	2.70	9.73	2.71	-6.53	-3.82	-20.02	2.70	9.73	2.71	-7.59	-4.88
5670	-	0.00	-18.76	2.70	9.74	2.71	-6.32	-3.61	-19.45	2.70	9.74	2.71	-7.01	-4.30
5710	-	0.00	-19.05	2.71	9.74	2.71	-6.60	-3.89	-19.58	2.71	9.74	2.71	-7.13	-4.42
5755	-	6.99	-27.45	2.71	9.74	2.71	-8.01	-5.30	-28.78	2.71	9.74	2.71	-9.34	-6.63
5795	-	6.99	-27.91	2.74	9.74	2.71	-8.44	-5.73	-28.63	2.74	9.74	2.71	-9.16	-6.45

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5850 MHz are based on any 500 kHz band.

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

PSD Result (Conducted) = Reading + Cable Loss + Atten. Loss + RBW Correction Factor

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

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Maximum Power Spectral Density

Report No. 13977035S-C-R1
Test place Shonan EMC Lab. No.5 Shielded Room
Date November 11, 2021
Temperature / Humidity 24 deg. C / 30 % RH
Engineer Shiro Kobayashi
Mode Tx 11ac-40 (MIMO)

Chain 1+2

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Chain 1 [mW/MHz]	Chain 2 [mW/MHz]	Sum [mW/MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Margin [dB]	Chain 1 [mW/MHz]	Chain 2 [mW/MHz]	Sum [mW/MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Margin [dB]
5190	0.09	0.08	0.17	-7.58	11.00	18.58	0.17	0.15	0.33	-4.87	17.00	21.87
5230	0.09	0.08	0.17	-7.60	11.00	18.60	0.17	0.15	0.32	-4.89	17.00	21.89
5270	0.08	0.07	0.15	-8.13	11.00	19.13	0.15	0.13	0.29	-5.42	17.00	22.42
5310	0.09	0.08	0.17	-7.75	11.00	18.75	0.17	0.14	0.31	-5.04	17.00	22.04
5510	0.08	0.07	0.15	-8.27	11.00	19.27	0.15	0.13	0.28	-5.56	17.00	22.56
5550	0.09	0.07	0.15	-8.11	11.00	19.11	0.16	0.12	0.29	-5.40	17.00	22.40
5670	0.09	0.07	0.17	-7.73	11.00	18.73	0.17	0.14	0.31	-5.02	17.00	22.02
5710	0.09	0.07	0.16	-7.88	11.00	18.88	0.16	0.14	0.30	-5.17	17.00	22.17
5755	0.06	0.04	0.10	-9.79	30.00	39.79	0.11	0.08	0.20	-7.08	36.00	43.08
5795	0.06	0.05	0.11	-9.78	30.00	39.78	0.11	0.09	0.20	-7.07	36.00	43.07

Chain 1										Chain 2					
Tested Frequency [MHz]	-	RBW Correction Factor [dB]	PSD Reading [dBm/MHz]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	PSD Result Cond. [dBm/MHz]	PSD Result e.i.r.p. [dBm/MHz]		PSD Reading [dBm/MHz]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	PSD Result Cond. [dBm/MHz]	PSD Result e.i.r.p. [dBm/MHz]
5190	-	0.00	-22.63	2.61	9.72	2.71	-10.30	-7.59		-23.24	2.61	9.72	2.71	-10.91	-8.20
5230	-	0.00	-22.64	2.62	9.72	2.71	-10.30	-7.59		-23.30	2.62	9.72	2.71	-10.96	-8.25
5270	-	0.00	-23.21	2.60	9.72	2.71	-10.89	-8.18		-23.73	2.60	9.72	2.71	-11.41	-8.70
5310	-	0.00	-22.72	2.61	9.72	2.71	-10.39	-7.68		-23.49	2.61	9.72	2.71	-11.16	-8.45
5510	-	0.00	-23.31	2.71	9.73	2.71	-10.87	-8.16		-24.18	2.71	9.73	2.71	-11.74	-9.03
5550	-	0.00	-23.00	2.70	9.73	2.71	-10.57	-7.86		-24.18	2.70	9.73	2.71	-11.75	-9.04
5670	-	0.00	-22.73	2.70	9.74	2.71	-10.29	-7.58		-23.69	2.70	9.74	2.71	-11.25	-8.54
5710	-	0.00	-23.01	2.71	9.74	2.71	-10.56	-7.85		-23.70	2.71	9.74	2.71	-11.25	-8.54
5755	-	6.99	-31.54	2.71	9.74	2.71	-12.10	-9.39		-33.08	2.71	9.74	2.71	-13.64	-10.93
5795	-	6.99	-31.89	2.74	9.74	2.71	-12.42	-9.71		-32.67	2.74	9.74	2.71	-13.20	-10.49

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5850 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 + Atten. Loss + RBW Correction Factor

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

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Maximum Power Spectral Density

Report No. 13977035S-C-R1
Test place Shonan EMC Lab. No.5 Shielded Room
Date November 11, 2021 March 14, 2022
Temperature / Humidity 24 deg. C / 30 % RH 23 deg. C / 34 % RH
Engineer Shiro Kobayashi Shiro Kobayashi
Mode Tx 11ac-80 (SISO)

Chain1

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD Reading [dBm /MHz]	Cable Loss [dB]	Atten. Loss [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]
5210	-24.23	2.62	9.72	2.71	0.00	-11.89	11.00	22.89	-9.18	17.00	26.18
5290	-24.05	2.61	9.72	2.71	0.00	-11.72	11.00	22.72	-9.01	17.00	26.01
5530	-24.07	2.71	9.73	2.71	0.00	-11.63	11.00	22.63	-8.92	17.00	25.92
5610	-23.40	2.70	9.74	2.71	0.00	-10.96	11.00	21.96	-8.25	17.00	25.25
5690	-23.33	2.70	9.74	2.71	0.00	-10.89	11.00	21.89	-8.18	17.00	25.18
5775	-33.32	2.78	9.74	2.71	6.99	-13.81	30.00	43.81	-11.10	36.00	47.10

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5850 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 + Atten. Loss + RBW Correction Factor

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

Maximum Power Spectral Density

Report No. 13977035S-C-R1
Test place Shonan EMC Lab. No.5 Shielded Room
Date November 24, 2021
Temperature / Humidity 23 deg. C / 33 % RH
Engineer Shiro Kobayashi
Mode Tx 11ac-80 (CDD)

Chain 1+2

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Chain		Sum	Result	Limit	Margin	Chain		Sum	Result	Limit	Margin
	1	2					1	2				
	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5210	0.04	0.04	0.08	-11.24	11.00	22.24	0.14	0.14	0.28	-5.51	17.00	22.51
5290	0.04	0.04	0.08	-11.20	11.00	22.20	0.15	0.14	0.28	-5.47	17.00	22.47
5530	0.04	0.03	0.07	-11.39	11.00	22.39	0.16	0.12	0.27	-5.66	17.00	22.66
5610	0.04	0.03	0.07	-11.38	11.00	22.38	0.15	0.12	0.27	-5.65	17.00	22.65
5690	0.05	0.04	0.08	-10.75	11.00	21.75	0.18	0.14	0.32	-5.02	17.00	22.02
5775	0.03	0.02	0.05	-13.40	30.00	43.40	0.10	0.08	0.17	-7.67	36.00	43.67

Chain 1								Chain 2						
Tested Frequency	-	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result	
[MHz]		[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5210	-	0.00	-26.53	2.62	9.72	5.73	-14.19	-8.46	-26.64	2.62	9.72	5.73	-14.30	-8.57
5290	-	0.00	-26.45	2.61	9.72	5.73	-14.12	-8.39	-26.64	2.61	9.72	5.73	-14.31	-8.58
5530	-	0.00	-26.24	2.71	9.73	5.73	-13.80	-8.07	-27.54	2.71	9.73	5.73	-15.10	-9.37
5610	-	0.00	-26.32	2.70	9.74	5.73	-13.88	-8.15	-27.41	2.70	9.74	5.73	-14.97	-9.24
5690	-	0.00	-25.64	2.70	9.74	5.73	-13.20	-7.47	-26.83	2.70	9.74	5.73	-14.39	-8.66
5775	-	6.99	-35.38	2.72	9.74	5.73	-15.93	-10.20	-36.41	2.72	9.74	5.73	-16.96	-11.23

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5850 MHz are based on any 500 kHz band.

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

PSD Result (Conducted) = Reading + Cable Loss + Atten. Loss + RBW Correction Factor

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

Directional Gain = G_{ANT} (Antenna Gain) + Array Gain

Array Gain = $10 \log(N_{\text{ANT}}/N_{\text{SS}})$

N_{ANT} (number of transmit antennas) = 2

N_{SS} (number of spatial streams) = 1

Maximum Power Spectral Density

Report No. 13977035S-C-R1
Test place Shonan EMC Lab. No.5 Shielded Room
Date November 11, 2021
Temperature / Humidity 24 deg. C / 30 % RH
Engineer Shiro Kobayashi
Mode Tx 11ac-80 (MIMO)

Chain 1+2

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Chain		Sum	Result	Limit	Margin	Chain		Sum	Result	Limit	Margin
	1	2					1	2				
	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5210	0.04	0.04	0.08	-10.94	11.00	21.94	0.08	0.07	0.15	-8.23	17.00	25.23
5290	0.04	0.04	0.08	-10.91	11.00	21.91	0.08	0.07	0.15	-8.20	17.00	25.20
5530	0.04	0.03	0.07	-11.45	11.00	22.45	0.08	0.06	0.13	-8.74	17.00	25.74
5610	0.04	0.03	0.07	-11.31	11.00	22.31	0.08	0.06	0.14	-8.60	17.00	25.60
5690	0.05	0.04	0.09	-10.42	11.00	21.42	0.09	0.08	0.17	-7.71	17.00	24.71
5775	0.03	0.02	0.05	-13.39	30.00	43.39	0.05	0.04	0.09	-10.68	36.00	46.68

			Chain 1						Chain 2					
Tested Frequency	-	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result	
[MHz]		[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5210	-	0.00	-26.03	2.62	9.72	2.71	-13.69	-10.98	-26.56	2.62	9.72	2.71	-14.22	-11.51
5290	-	0.00	-26.05	2.61	9.72	2.71	-13.72	-11.01	-26.47	2.61	9.72	2.71	-14.14	-11.43
5530	-	0.00	-26.34	2.71	9.73	2.71	-13.90	-11.19	-27.53	2.71	9.73	2.71	-15.09	-12.38
5610	-	0.00	-26.37	2.70	9.74	2.71	-13.93	-11.22	-27.20	2.70	9.74	2.71	-14.76	-12.05
5690	-	0.00	-25.57	2.70	9.74	2.71	-13.13	-10.42	-26.21	2.70	9.74	2.71	-13.77	-11.06
5775	-	6.99	-35.32	2.72	9.74	2.71	-15.87	-13.16	-36.46	2.72	9.74	2.71	-17.01	-14.30

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5850 MHz are based on any 500 kHz band.

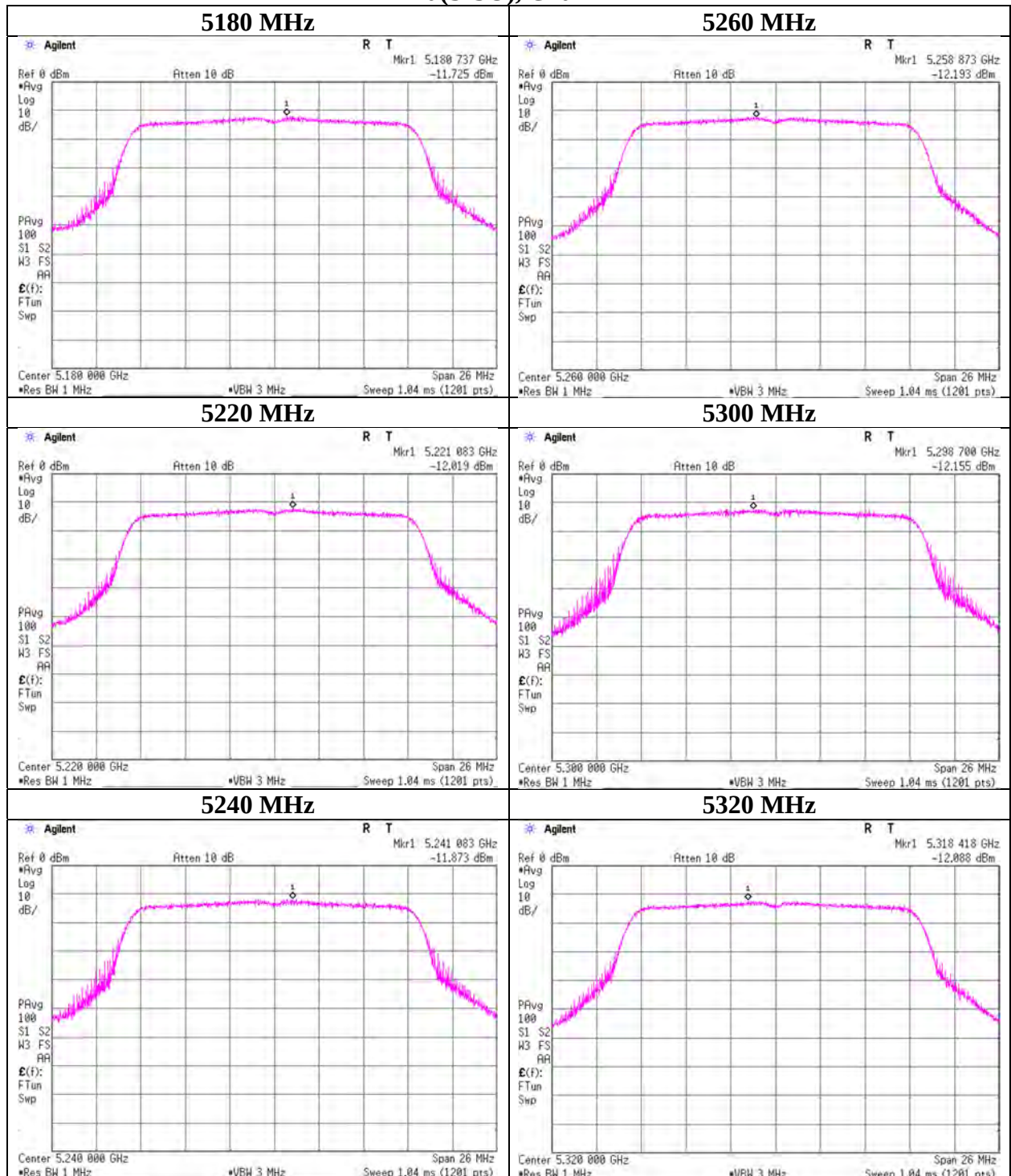
RBW Correction Factor = $10 * \log(\text{Specified bandwidth} / \text{Measured bandwidth})$

PSD Result (Conducted) = Reading + Cable Loss + Atten. Loss + RBW Correction Factor

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

Maximum Power Spectral Density

11a(SISO), Chain 1



UL Japan, Inc.

Shonan EMC Lab.

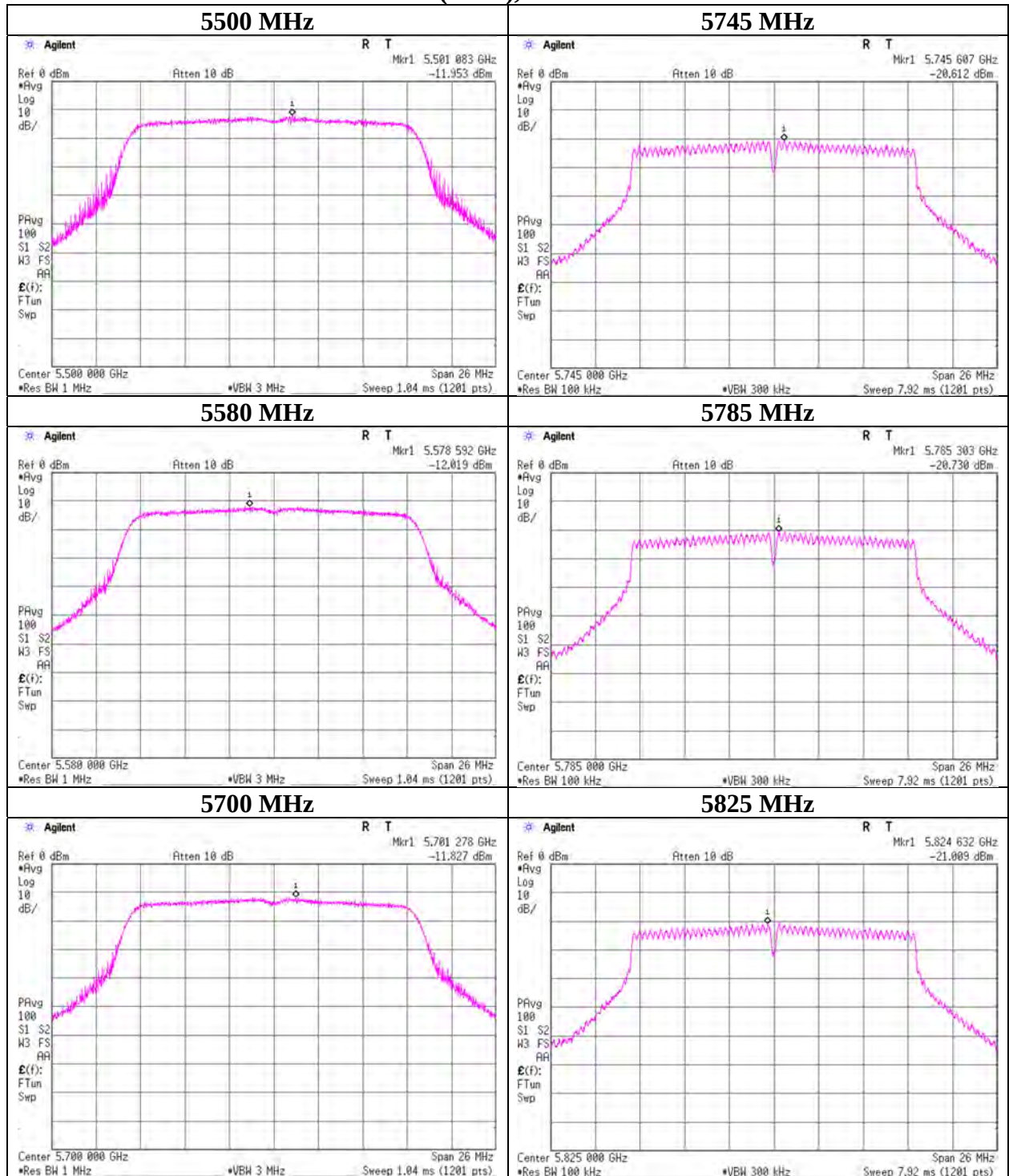
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Maximum Power Spectral Density

11a(SISO), Chain 1



UL Japan, Inc.

Shonan EMC Lab.

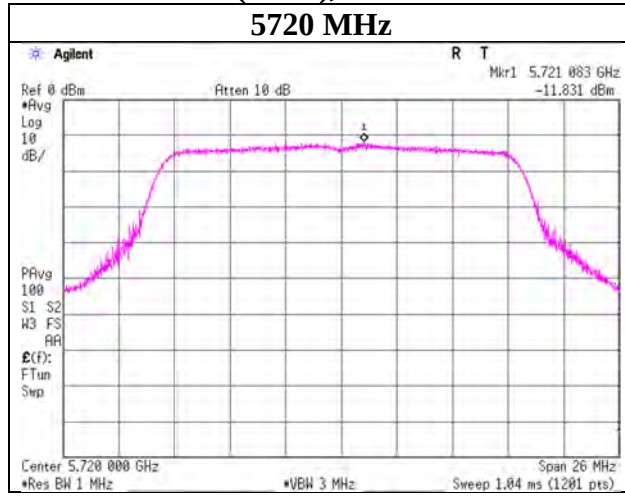
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Maximum Power Spectral Density

11a(SISO), Chain 1



UL Japan, Inc.

Shonan EMC Lab.

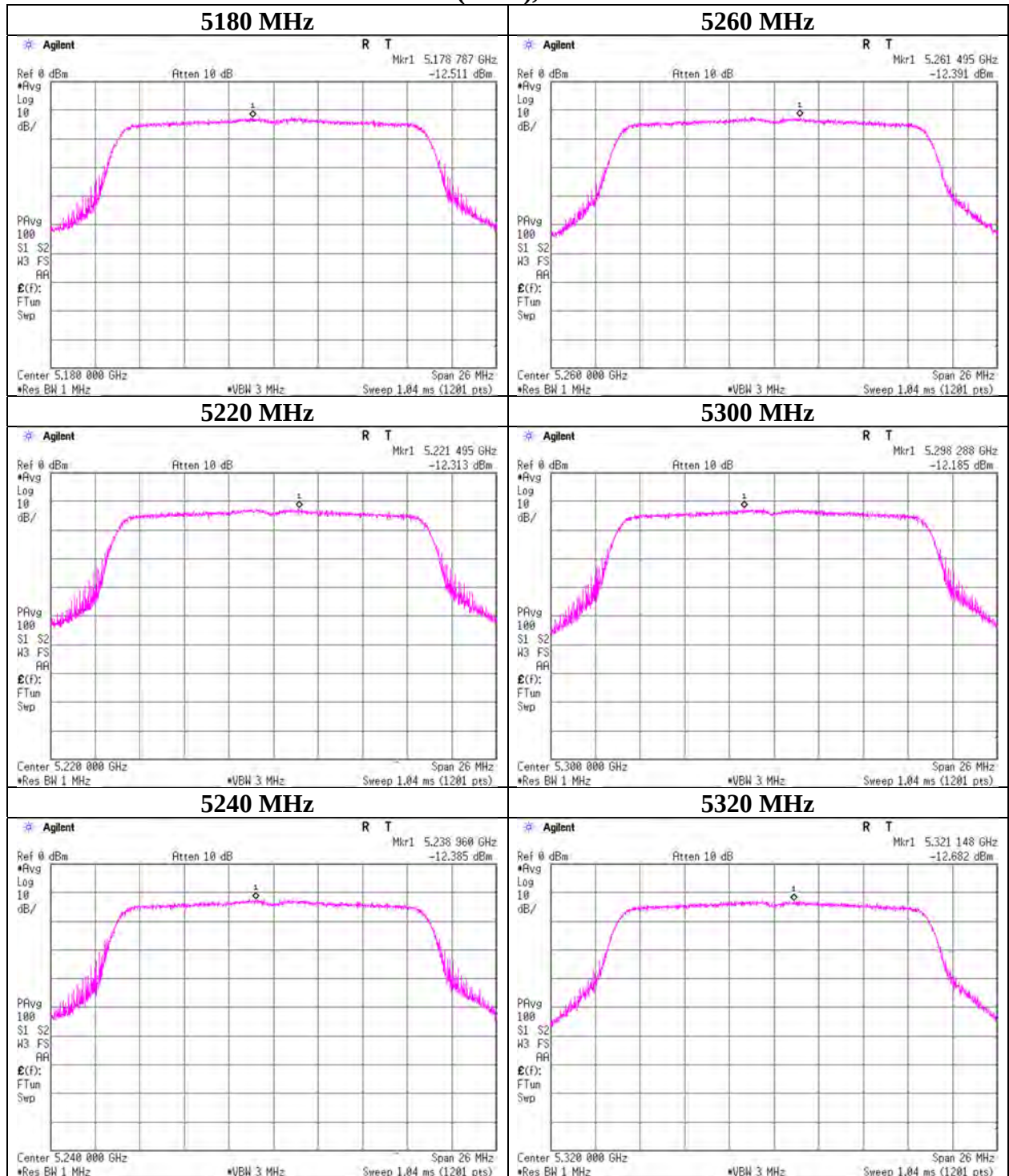
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Maximum Power Spectral Density

11n-20(SISO), Chain 1



UL Japan, Inc.

Shonan EMC Lab.

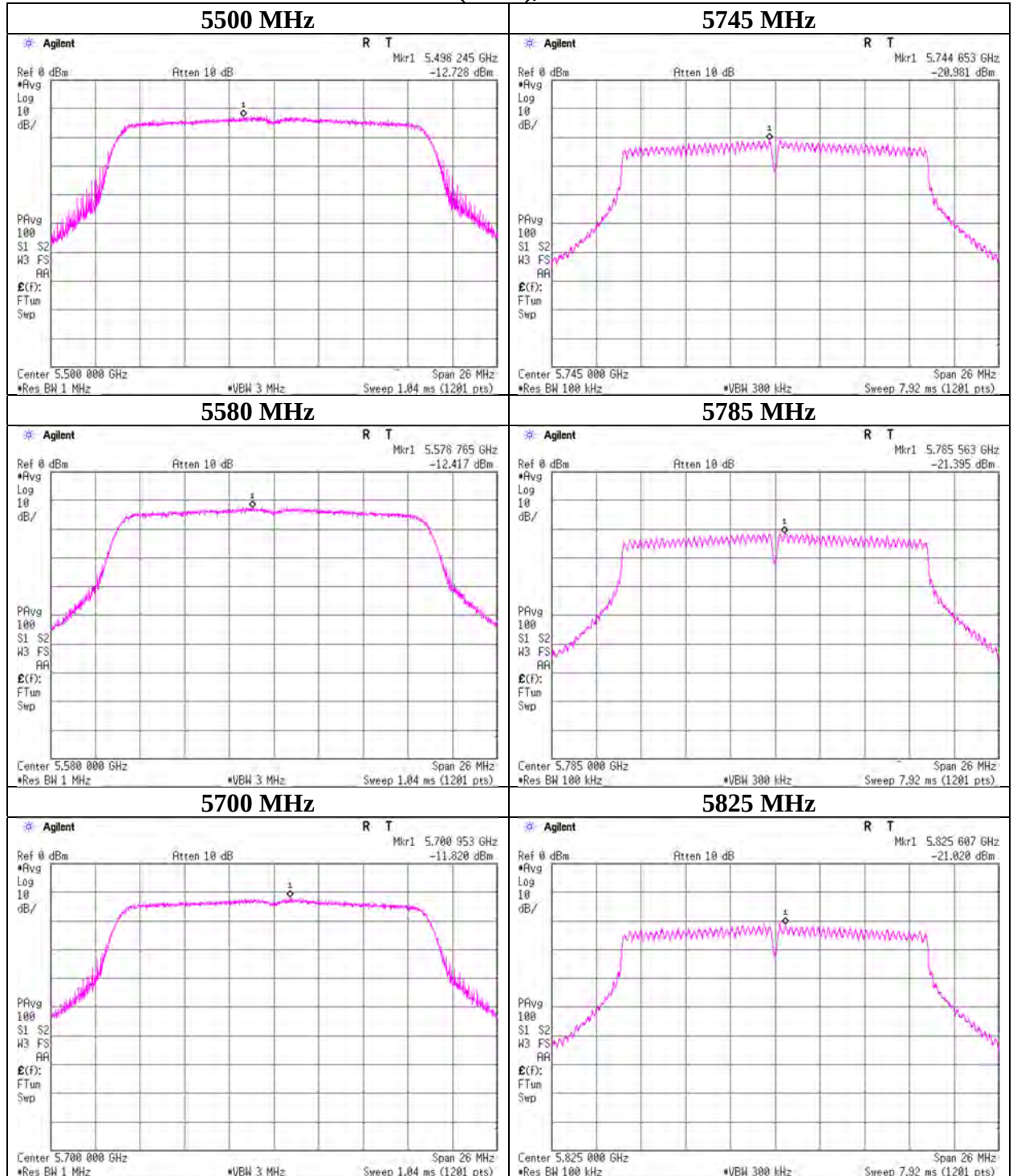
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Maximum Power Spectral Density

11n-20(SISO), Chain 1



Maximum Power Spectral Density

11n-20(SISO), Chain 1



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Shonan EMC Lab.

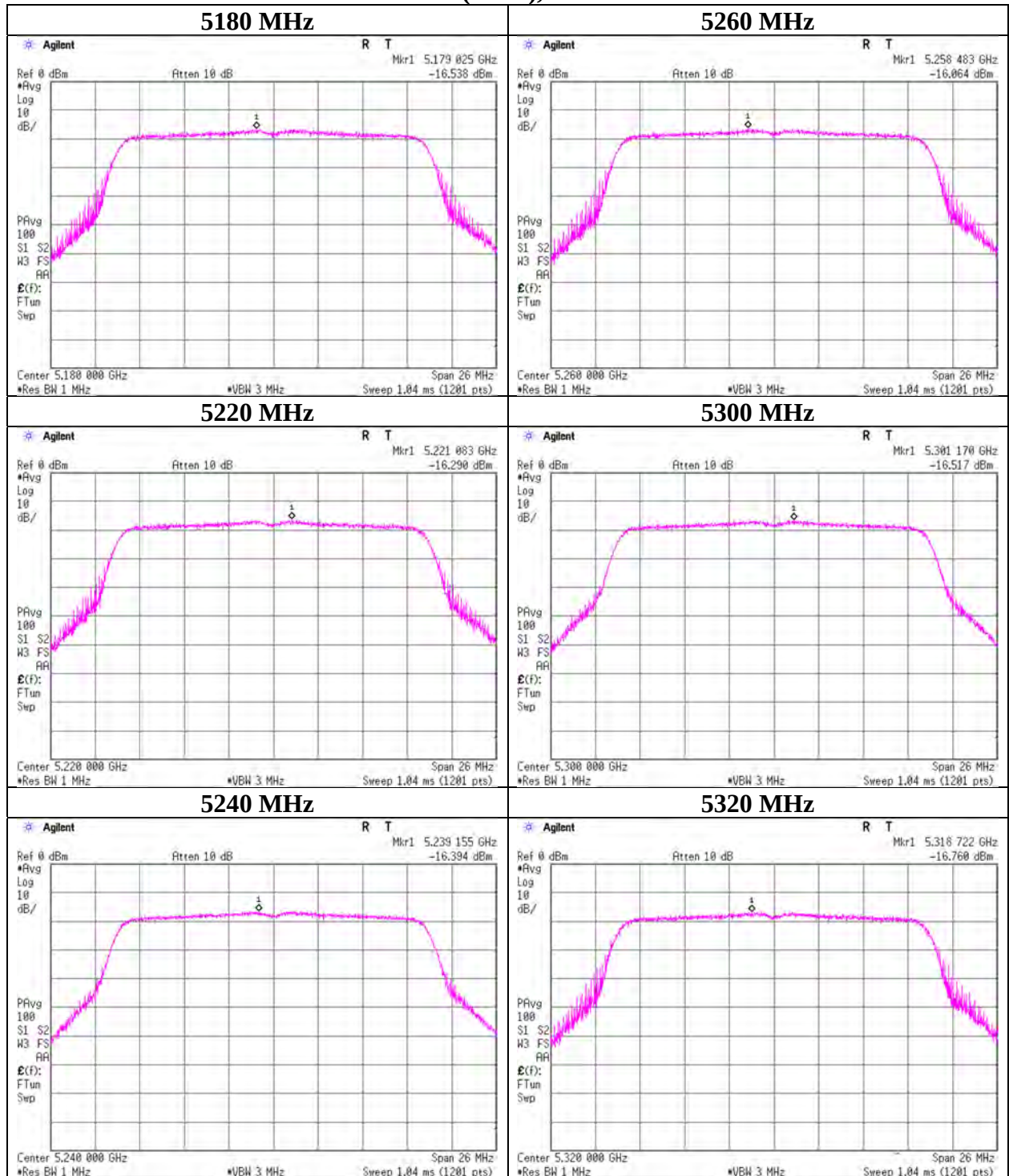
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

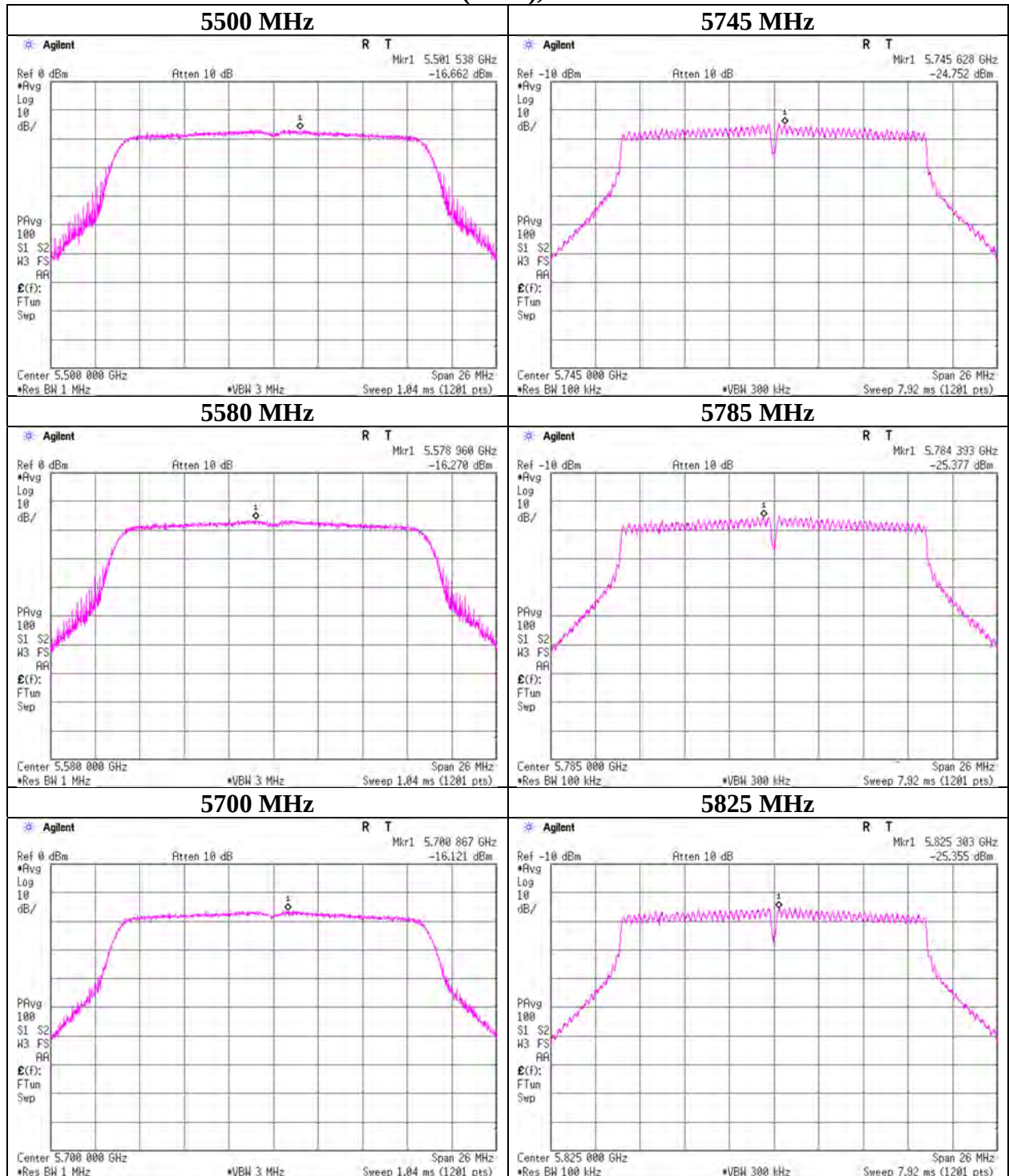
Maximum Power Spectral Density

11ac-20(SISO), Chain 1



Maximum Power Spectral Density

11ac-20(SISO), Chain 1



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Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Maximum Power Spectral Density

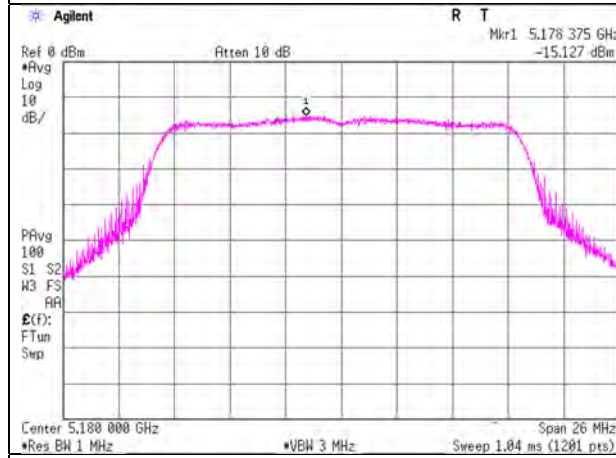
11ac-20(SISO), Chain 1



Maximum Power Spectral Density

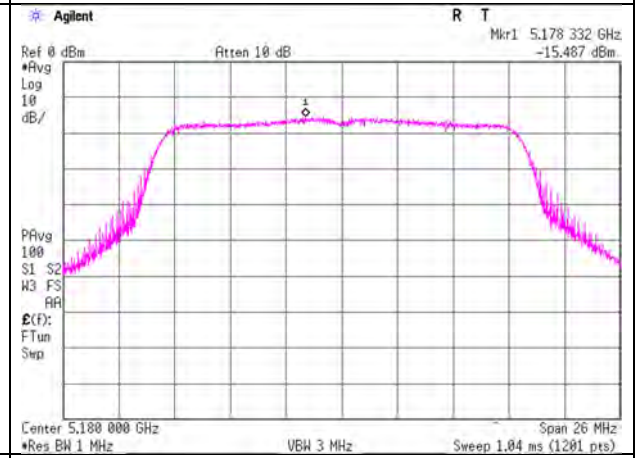
11a(CDD), Chain 1

5180 MHz

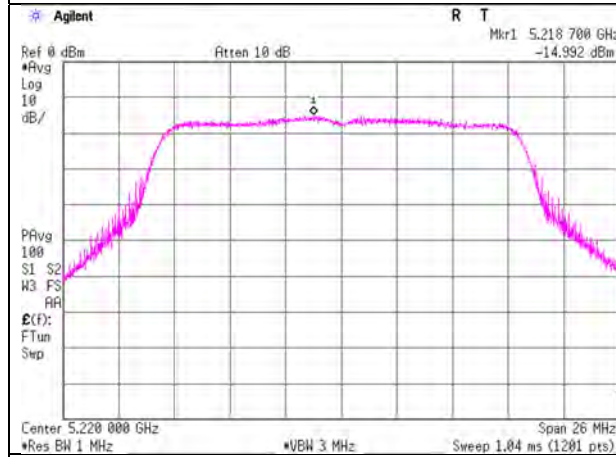


11a(CDD), Chain 2

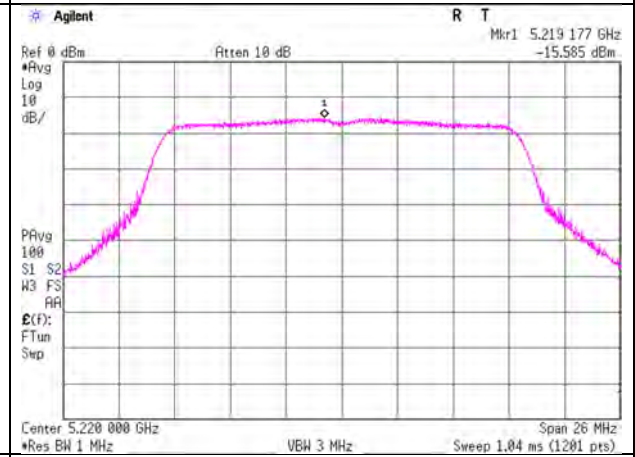
5180 MHz



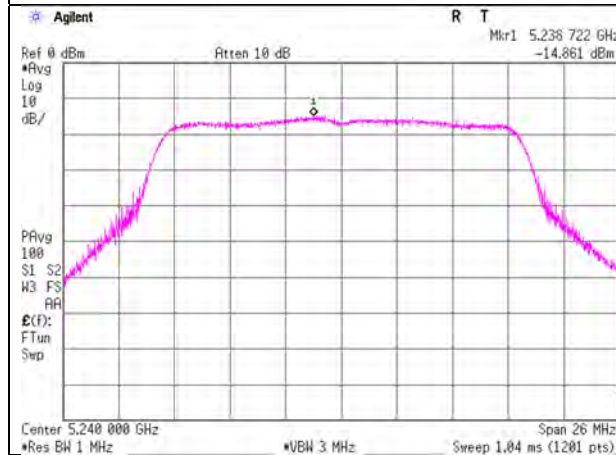
5220 MHz



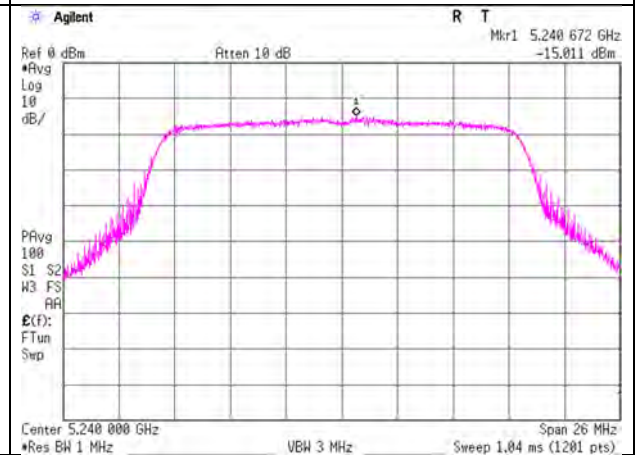
5220 MHz



5240 MHz



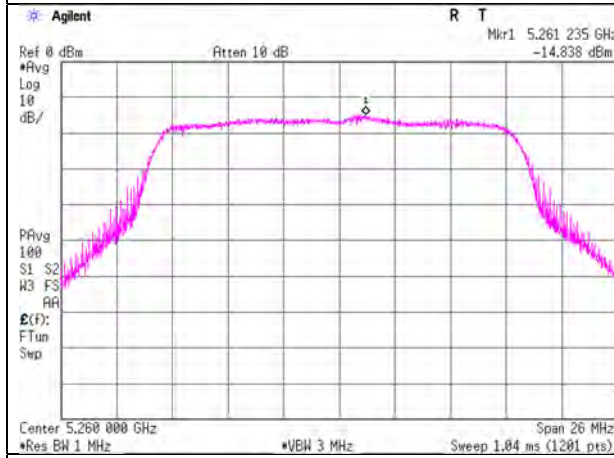
5240 MHz



Maximum Power Spectral Density

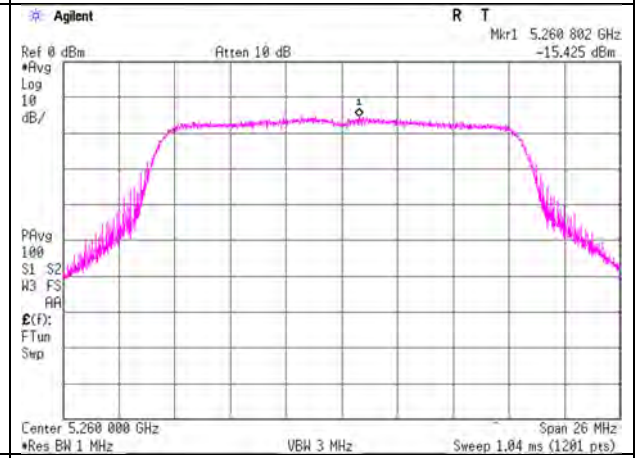
11a(CDD), Chain 1

5260 MHz

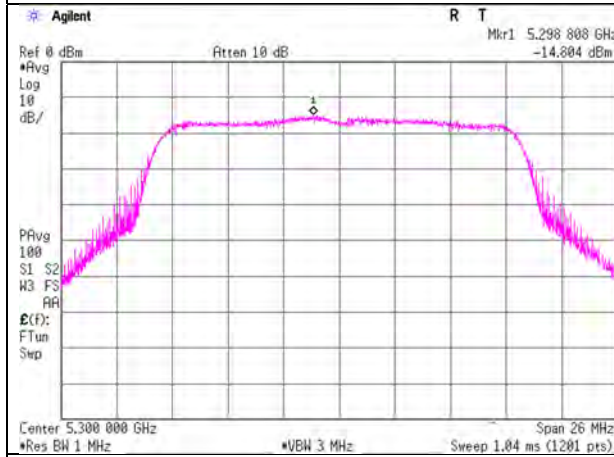


11a(CDD), Chain 2

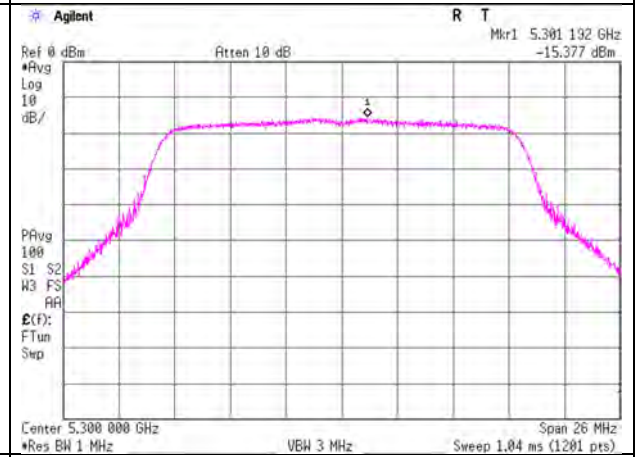
5260 MHz



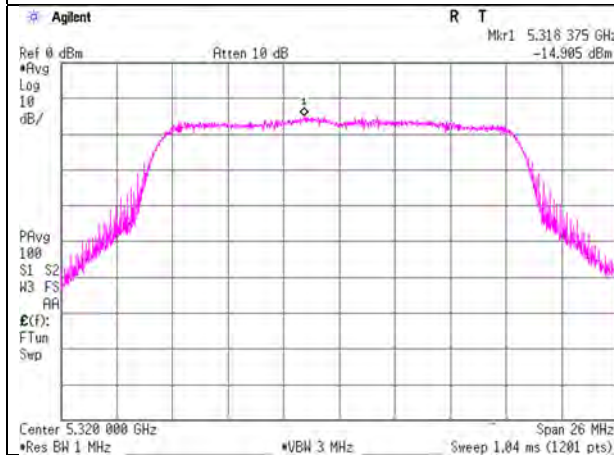
5300 MHz



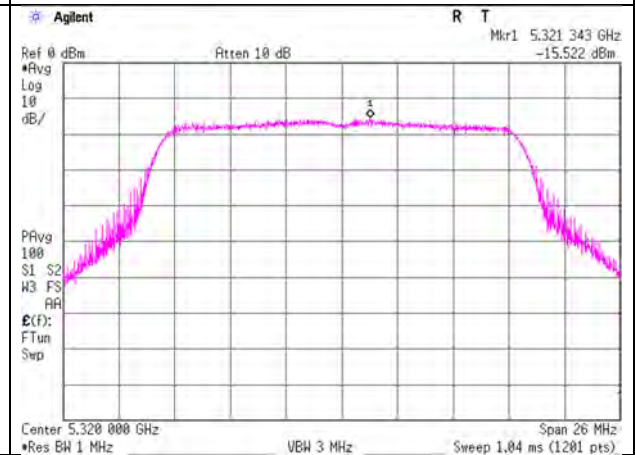
5300 MHz



5320 MHz



5320 MHz



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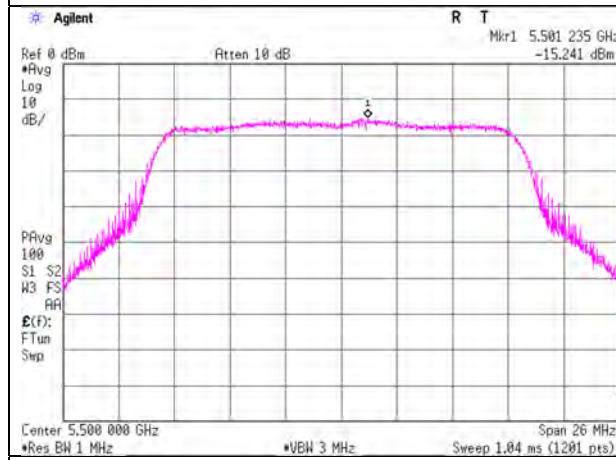
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Maximum Power Spectral Density

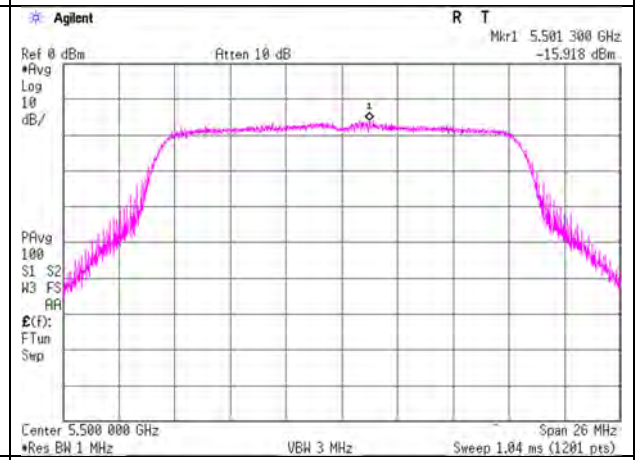
11a(CDD), Chain 1

5500 MHz

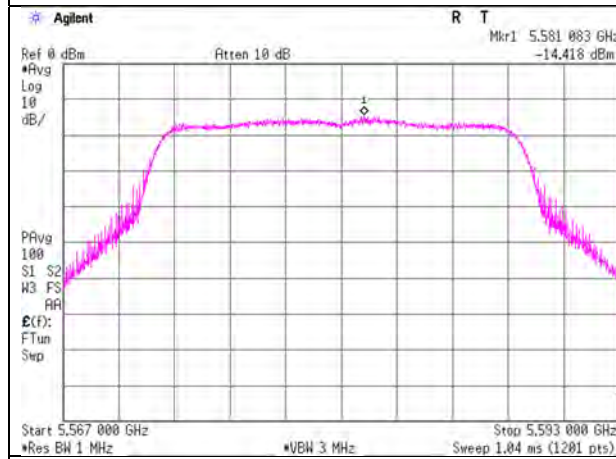


11a(CDD), Chain 2

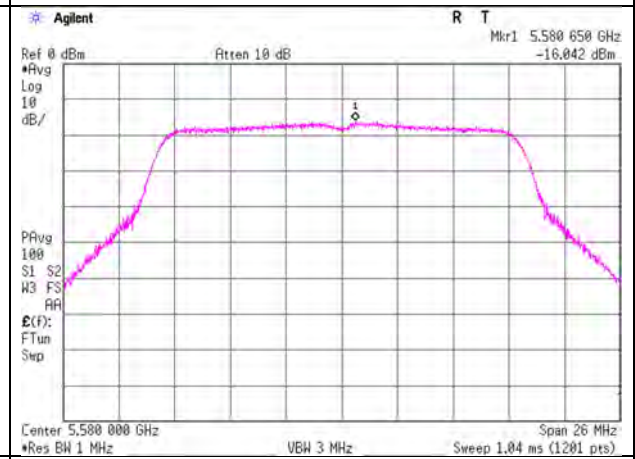
5500 MHz



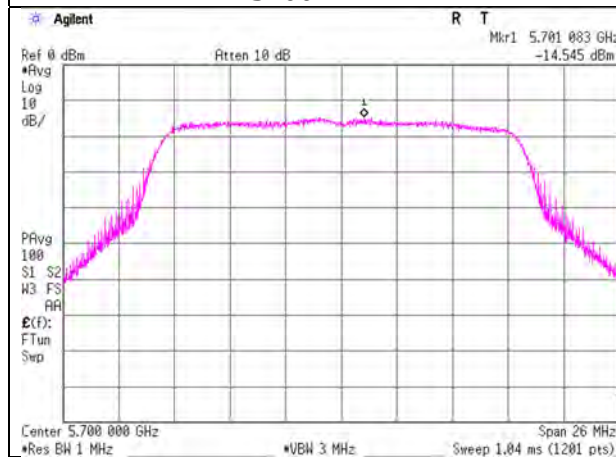
5580 MHz



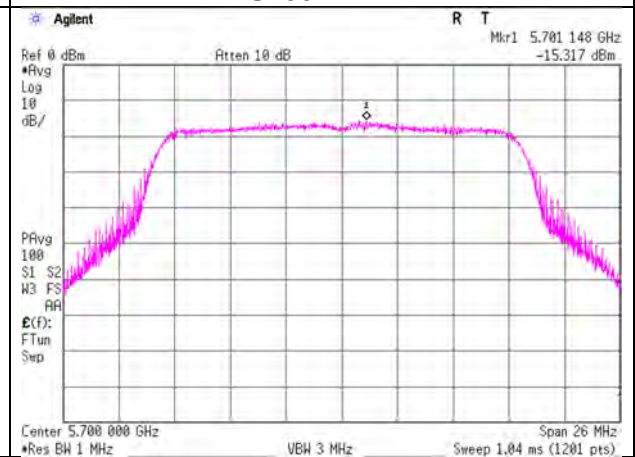
5580 MHz



5700 MHz



5700 MHz



Maximum Power Spectral Density

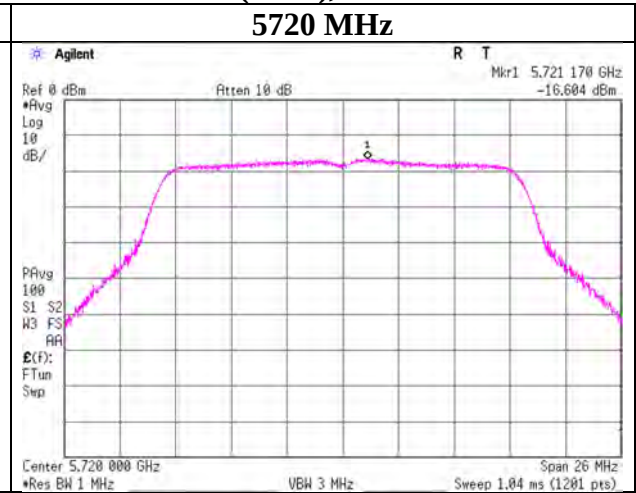
11a(CDD), Chain 1

5720 MHz



11a(CDD), Chain 2

5720 MHz



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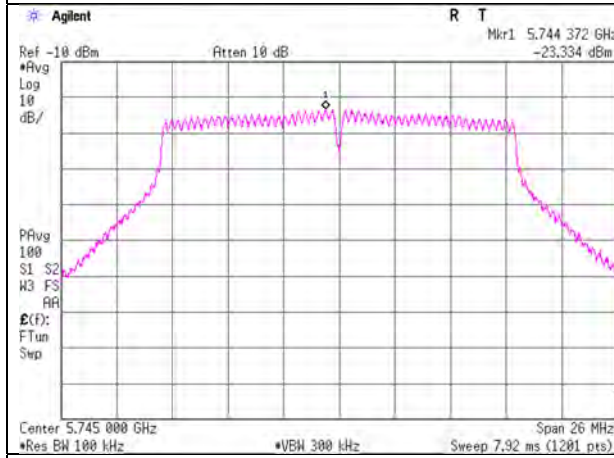
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Maximum Power Spectral Density

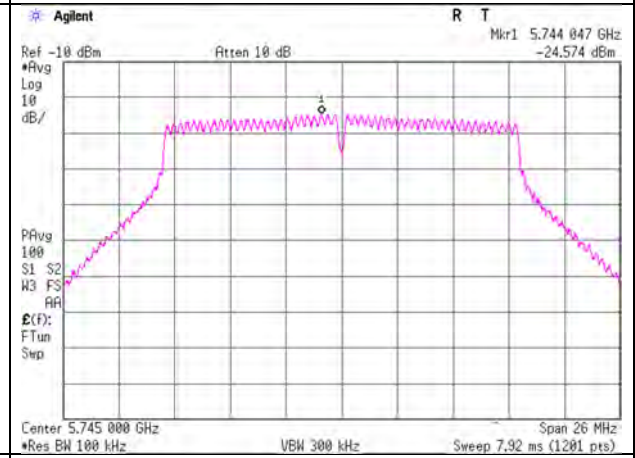
11a(CDD), Chain 1

5745 MHz

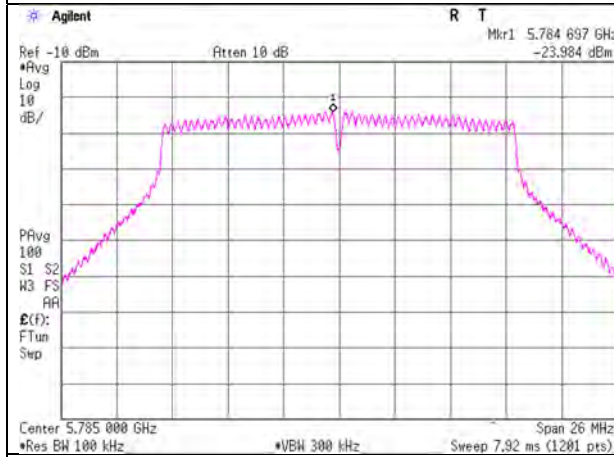


11a(CDD), Chain 2

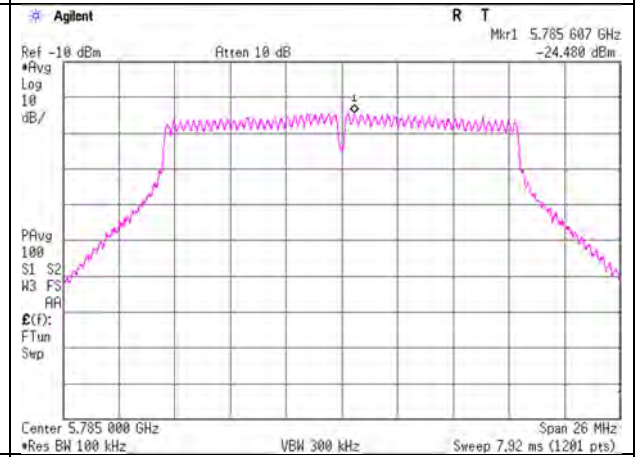
5745 MHz



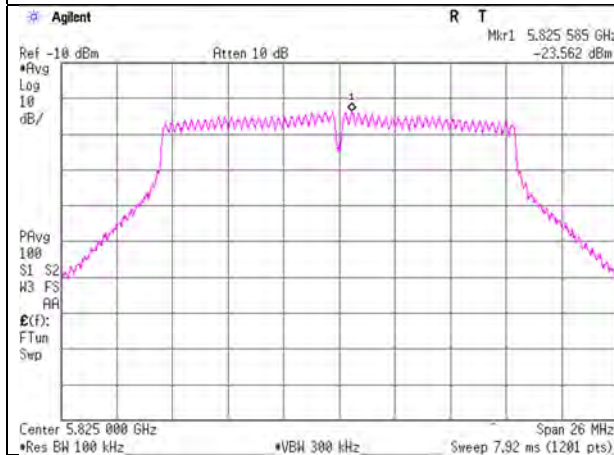
5785 MHz



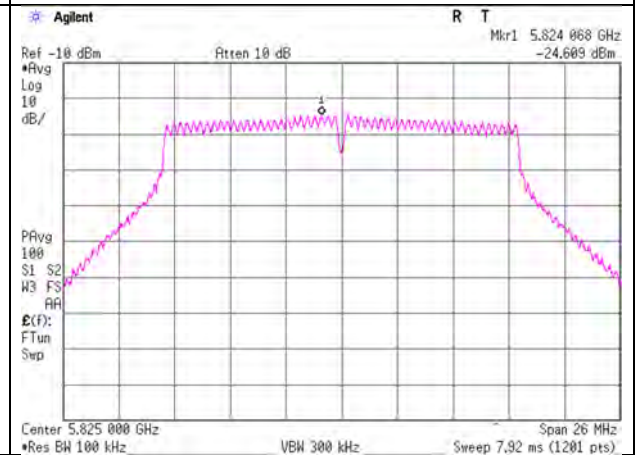
5785 MHz



5825 MHz



5825 MHz



Maximum Power Spectral Density

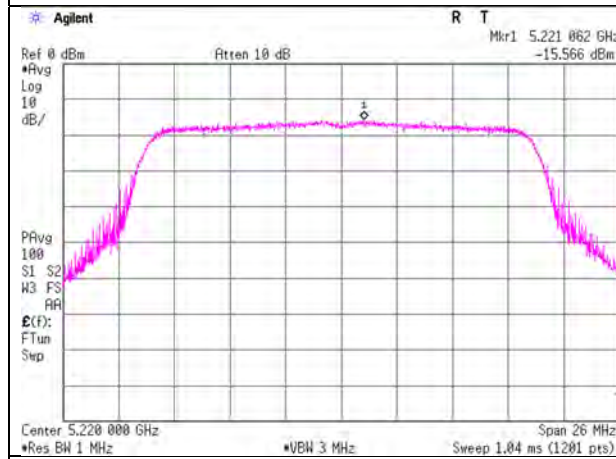
11n-20(CDD), Chain 1



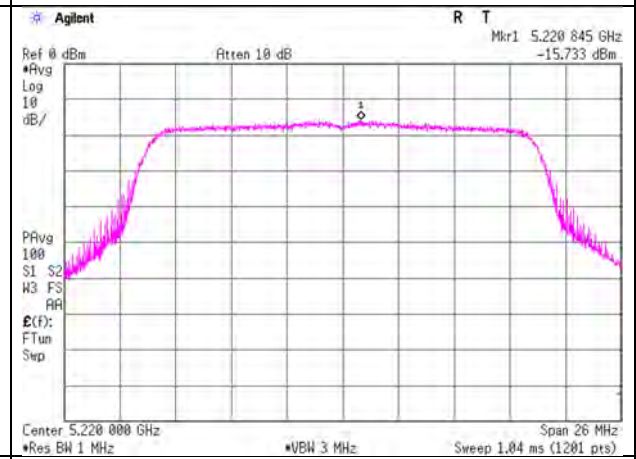
11n-20(CDD), Chain 2



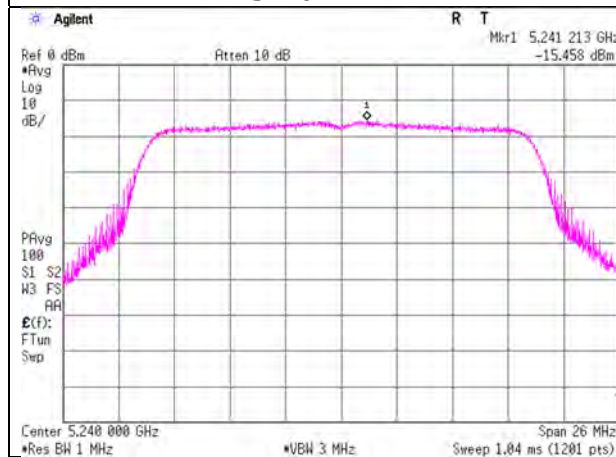
5220 MHz



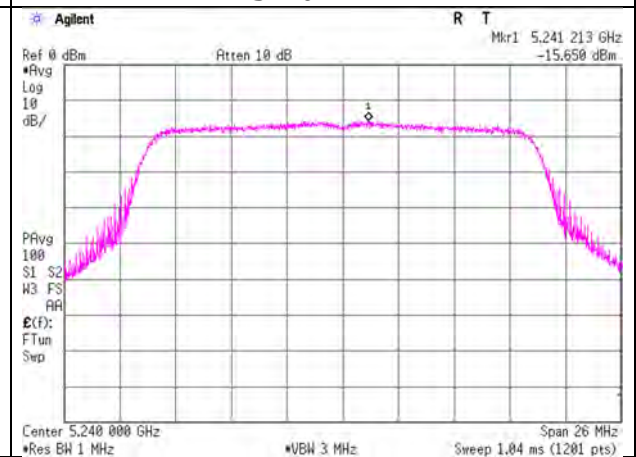
5220 MHz



5240 MHz



5240 MHz



Maximum Power Spectral Density

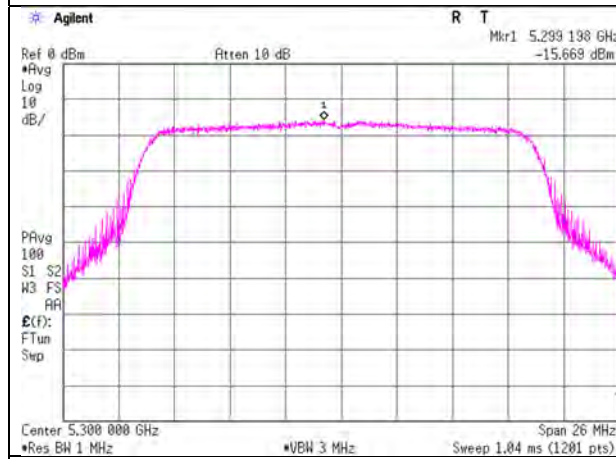
11n-20(CDD), Chain 1



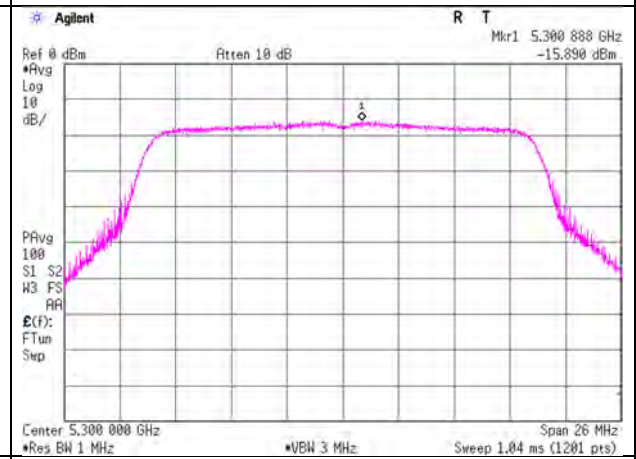
11n-20(CDD), Chain 2



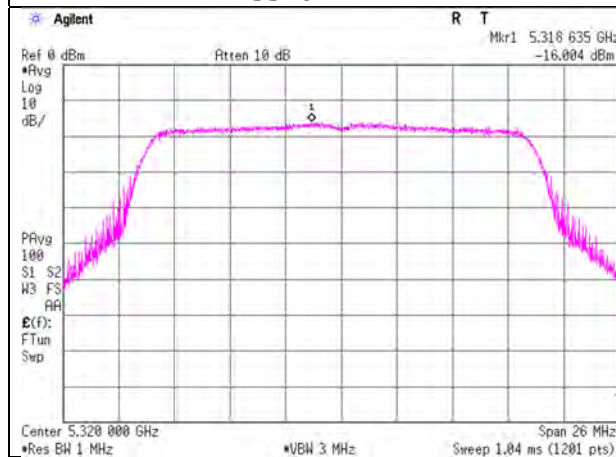
5300 MHz



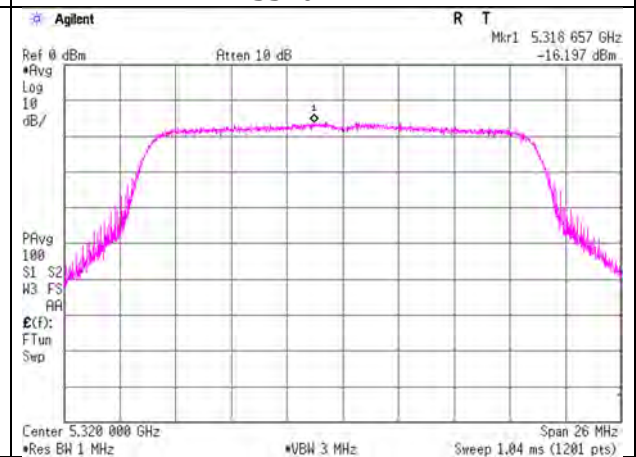
5300 MHz



5320 MHz



5320 MHz



Maximum Power Spectral Density

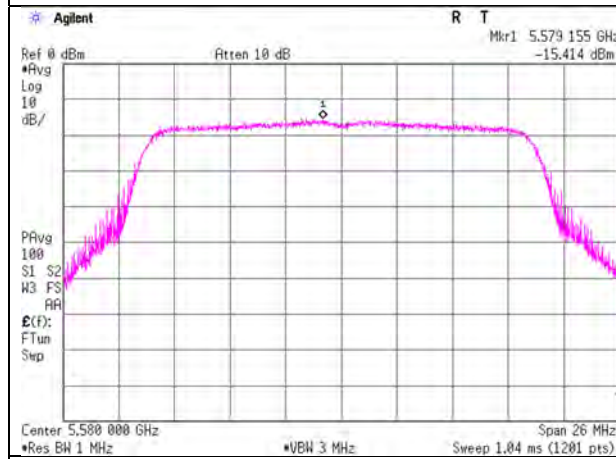
11n-20(CDD), Chain 1



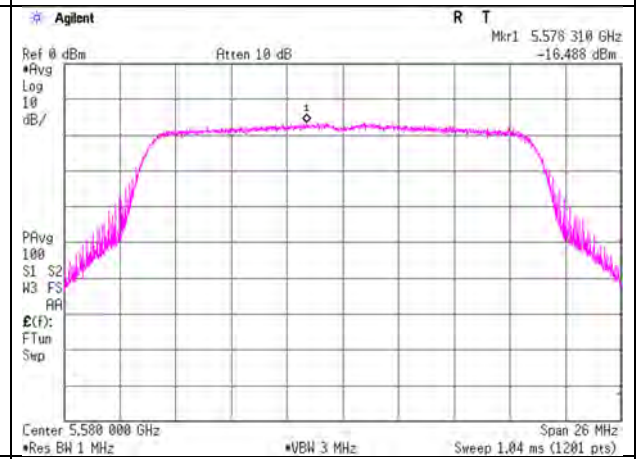
11n-20(CDD), Chain 2



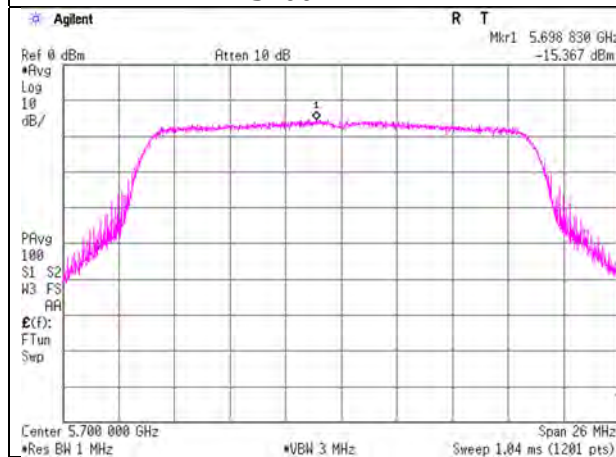
5580 MHz



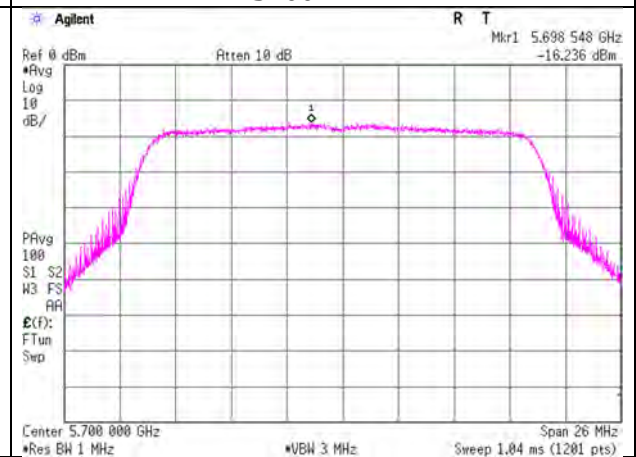
5580 MHz



5700 MHz

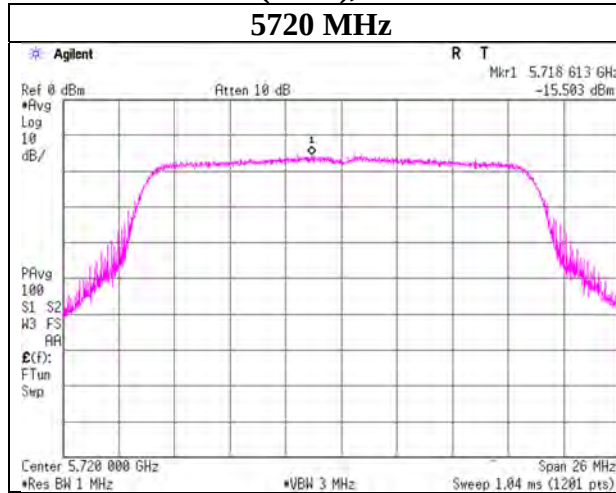


5700 MHz

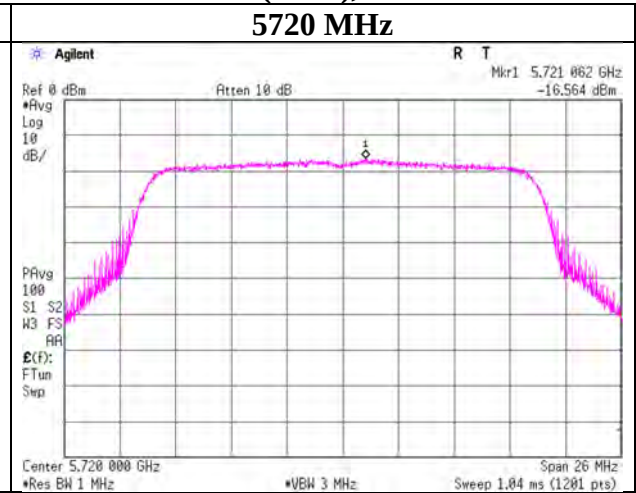


Maximum Power Spectral Density

11n-20(CDD), Chain 1



11n-20(CDD), Chain 2



UL Japan, Inc.

Shonan EMC Lab.

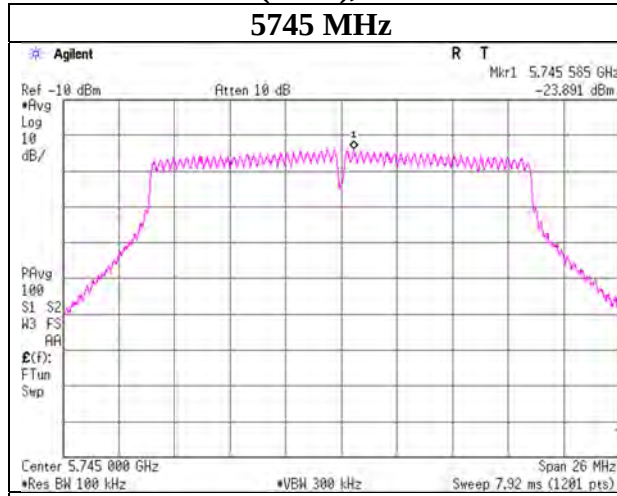
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Maximum Power Spectral Density

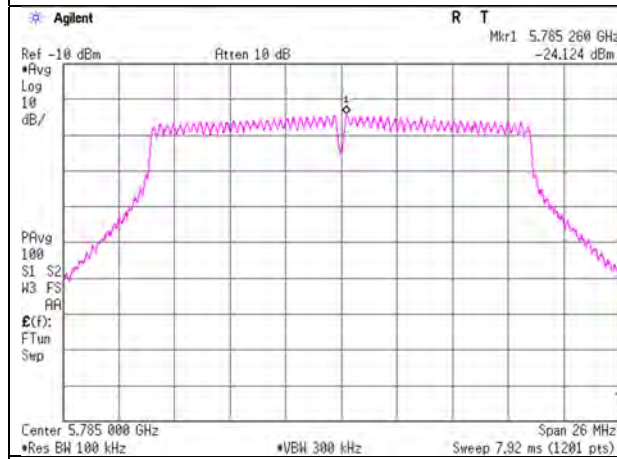
11n-20(CDD), Chain 1



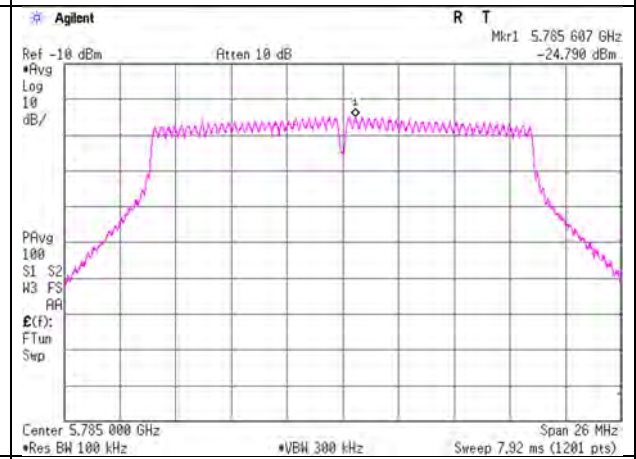
11n-20(CDD), Chain 2



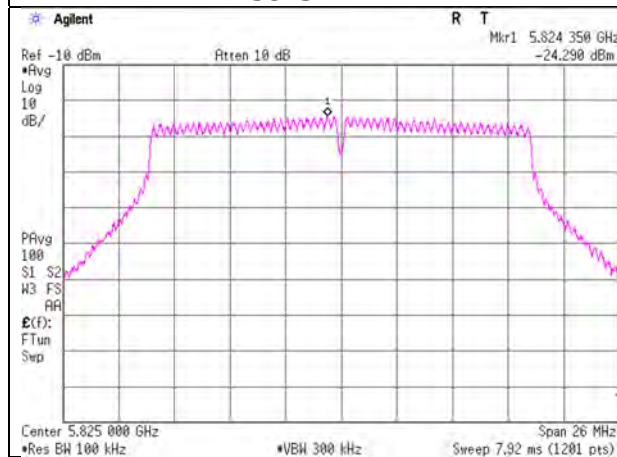
5785 MHz



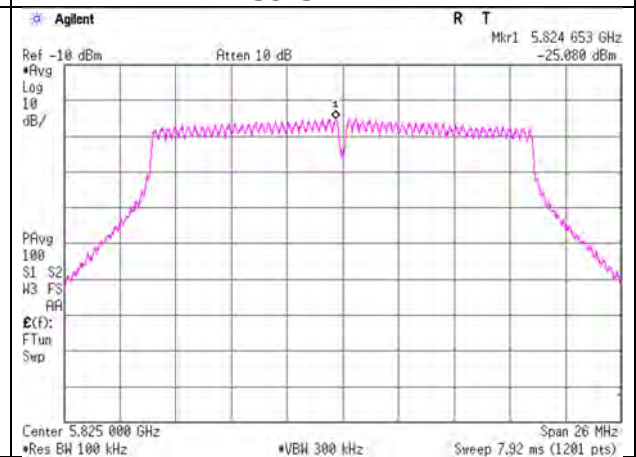
5785 MHz



5825 MHz

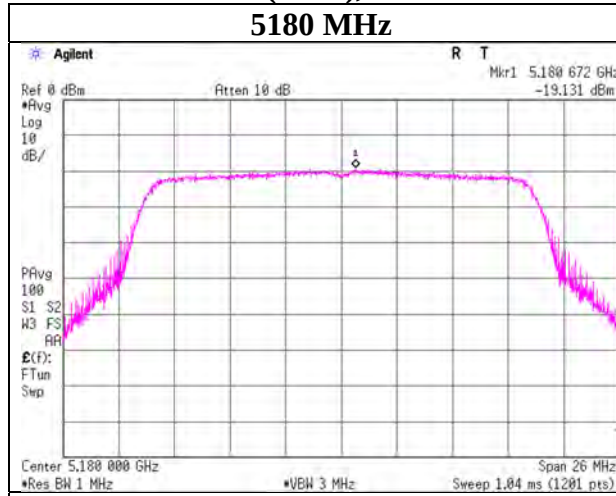


5825 MHz



Maximum Power Spectral Density

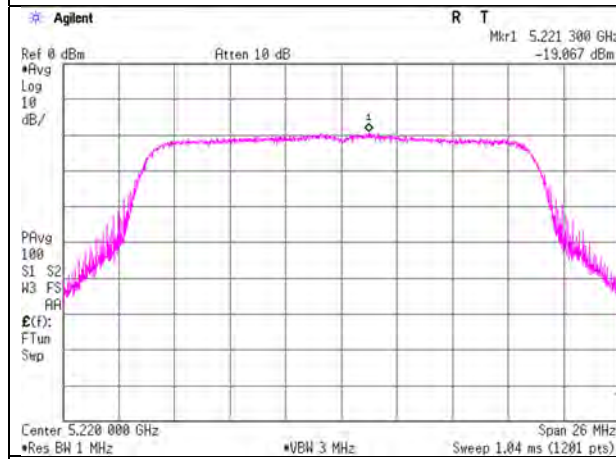
11ac-20(CDD), Chain 1



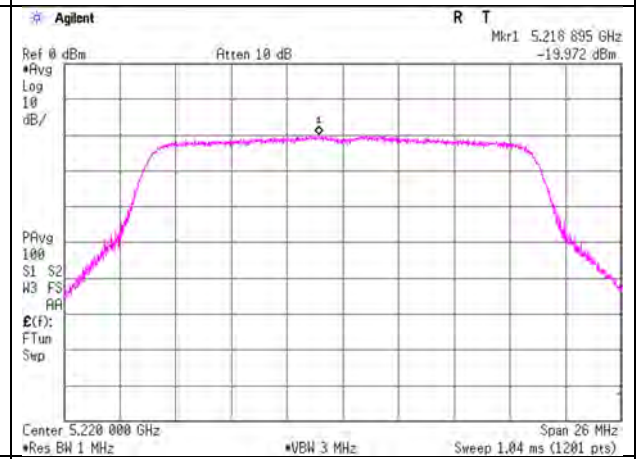
11ac-20(CDD), Chain 2



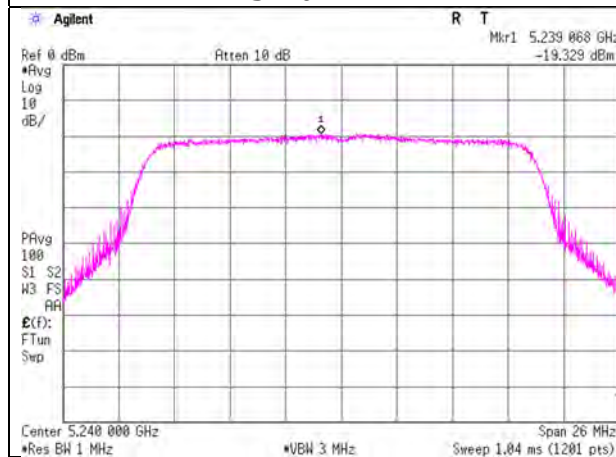
5220 MHz



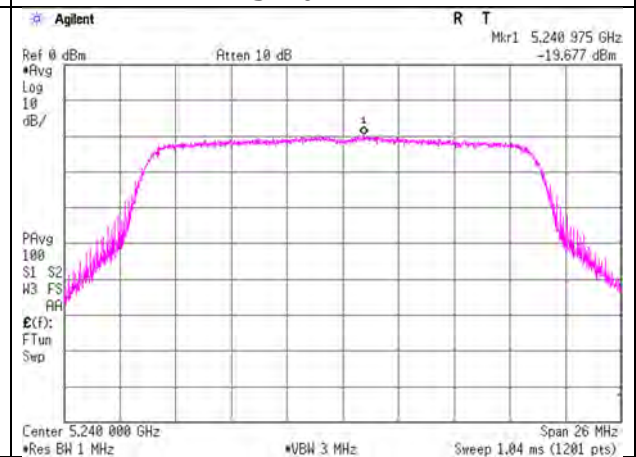
5220 MHz



5240 MHz

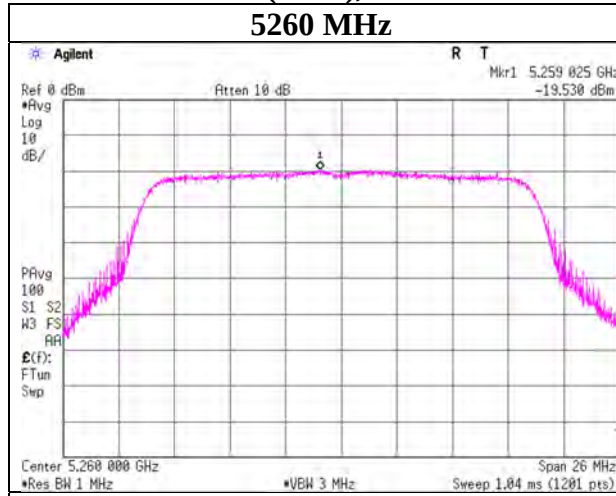


5240 MHz



Maximum Power Spectral Density

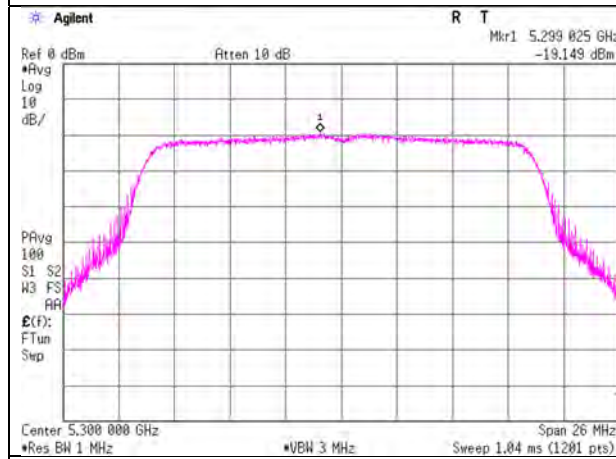
11ac-20(CDD), Chain 1



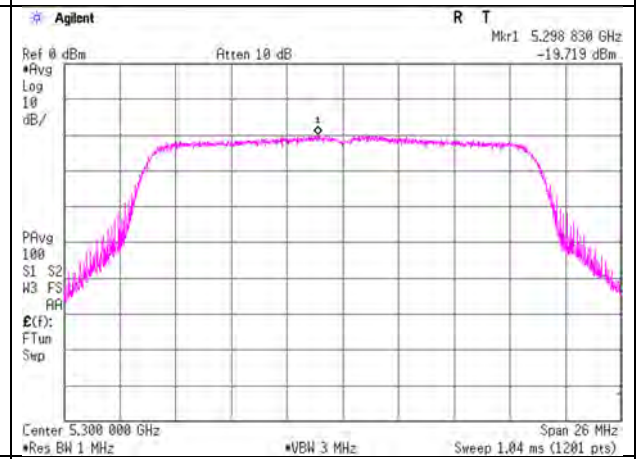
11ac-20(CDD), Chain 2



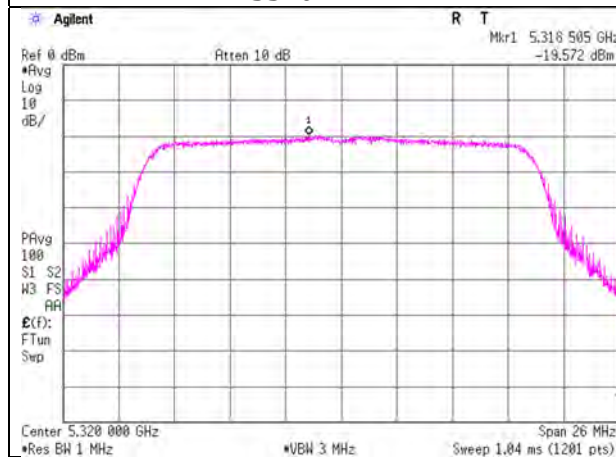
5300 MHz



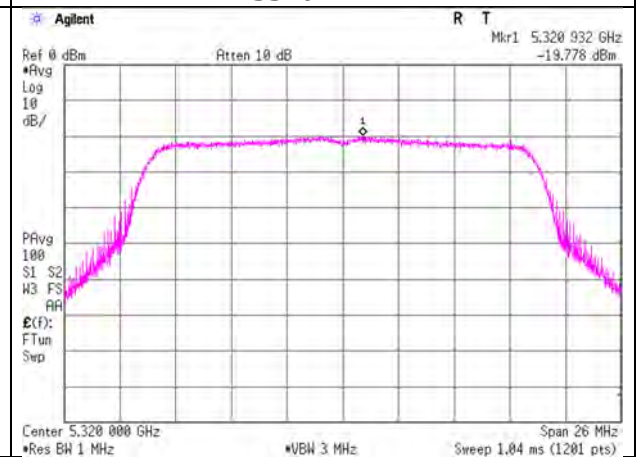
5300 MHz



5320 MHz

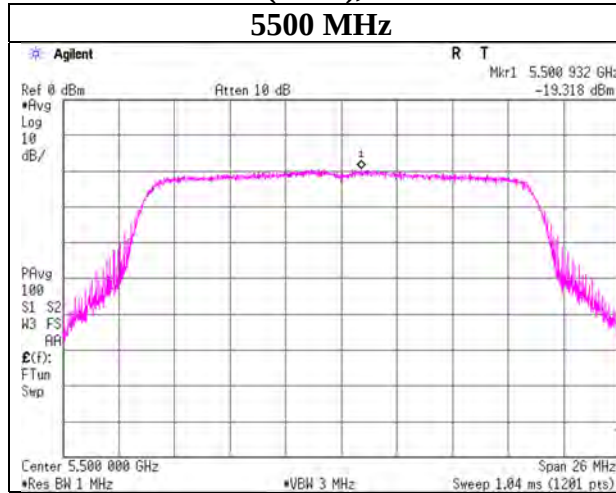


5320 MHz

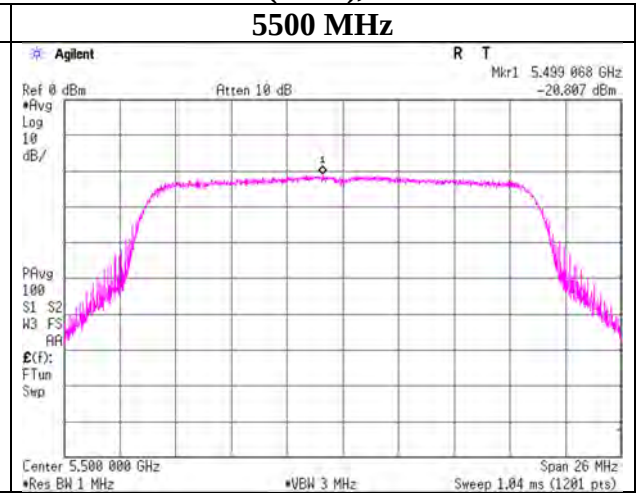


Maximum Power Spectral Density

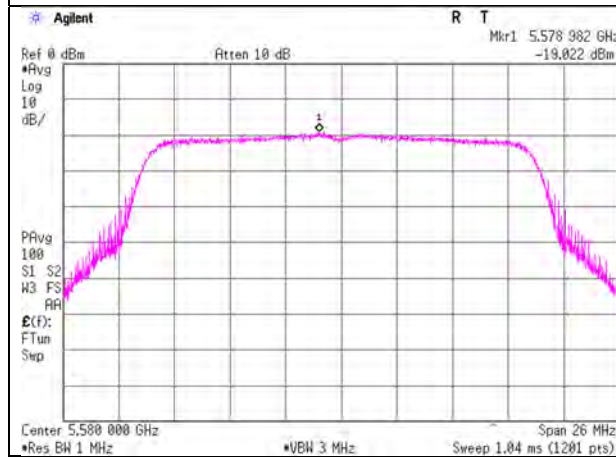
11ac-20(CDD), Chain 1



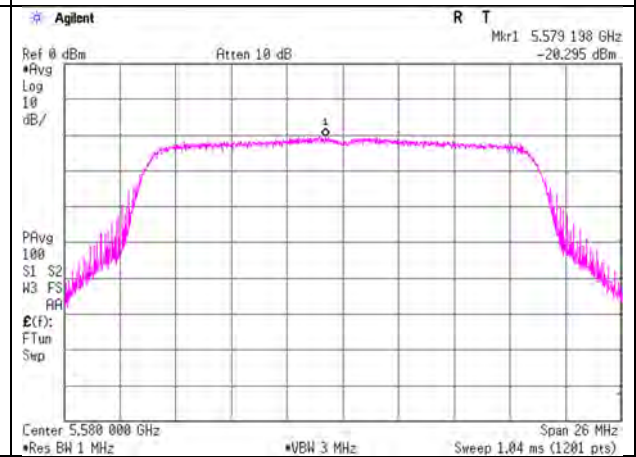
11ac-20(CDD), Chain 2



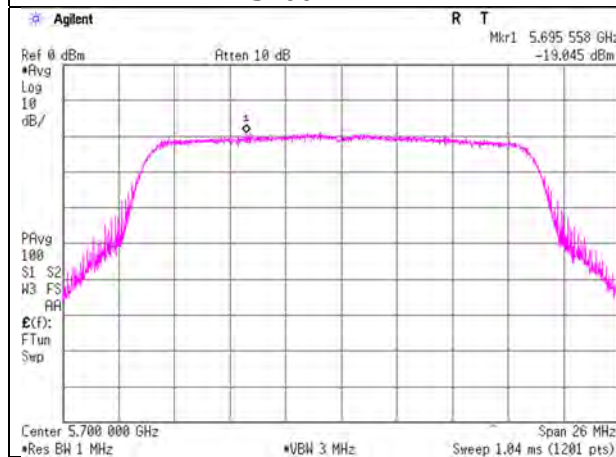
5580 MHz



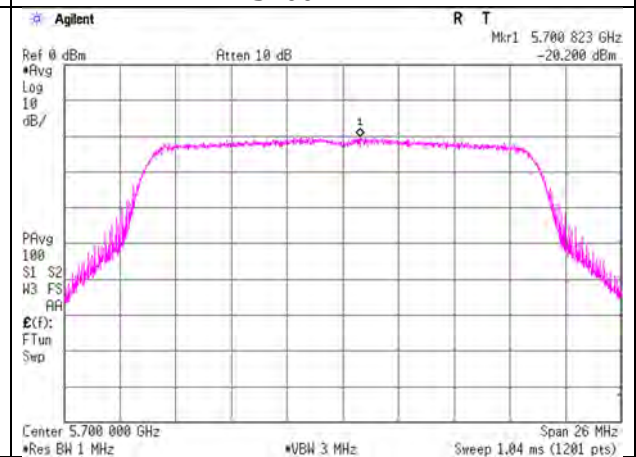
5580 MHz



5700 MHz

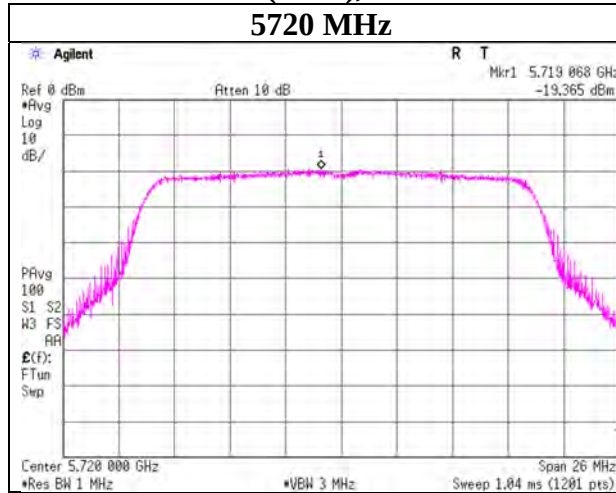


5700 MHz

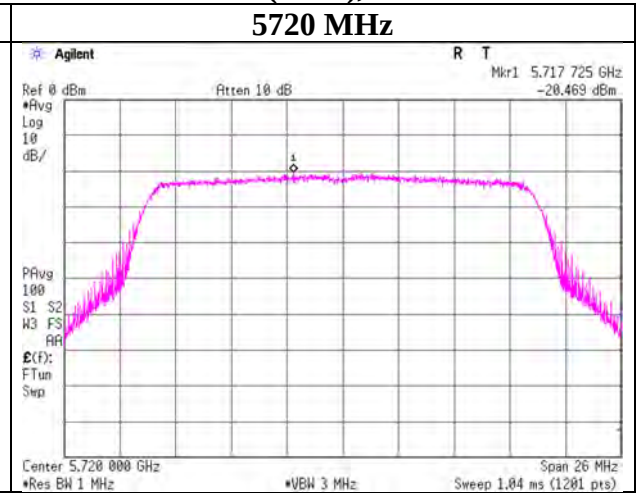


Maximum Power Spectral Density

11ac-20(CDD), Chain 1



11ac-20(CDD), Chain 2



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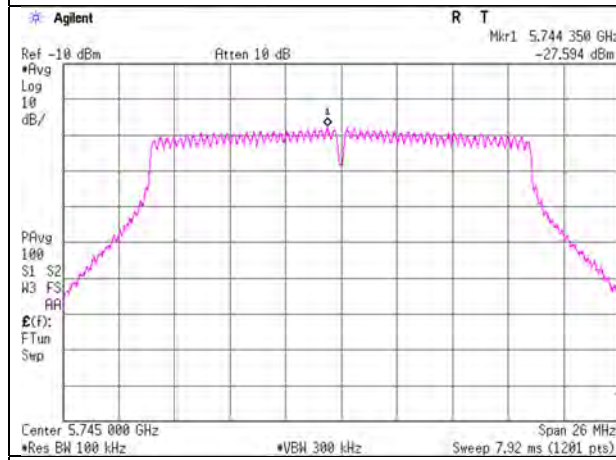
Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

Maximum Power Spectral Density

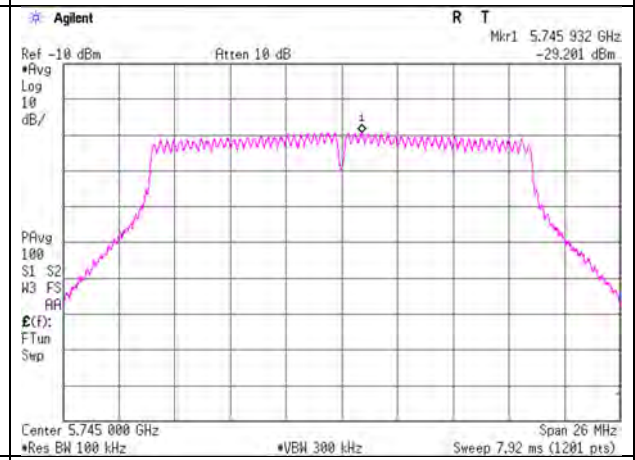
11ac-20(CDD), Chain 1

5745 MHz

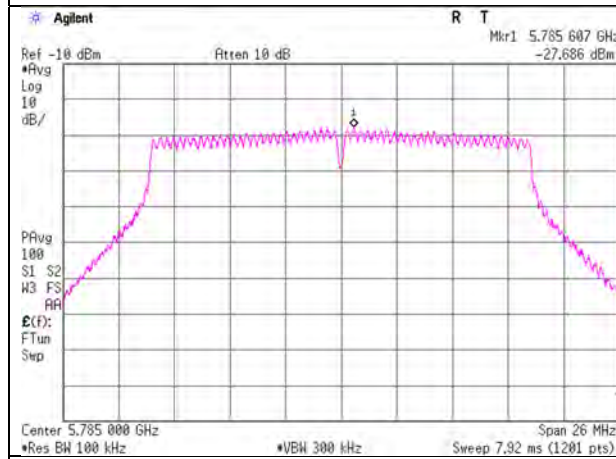


11ac-20(CDD), Chain 2

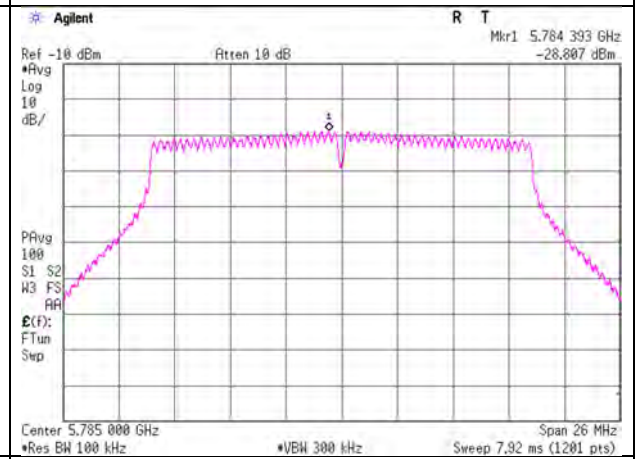
5745 MHz



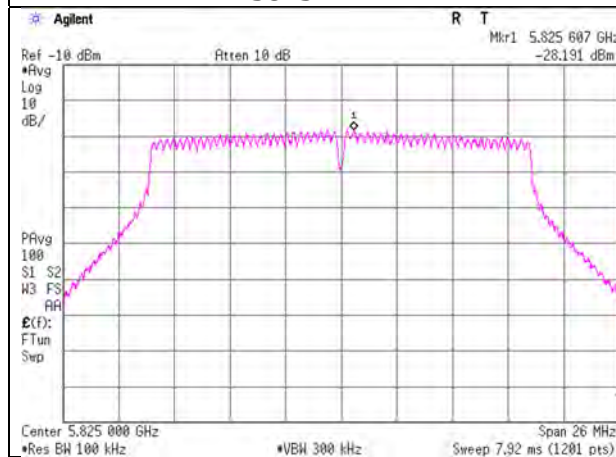
5785 MHz



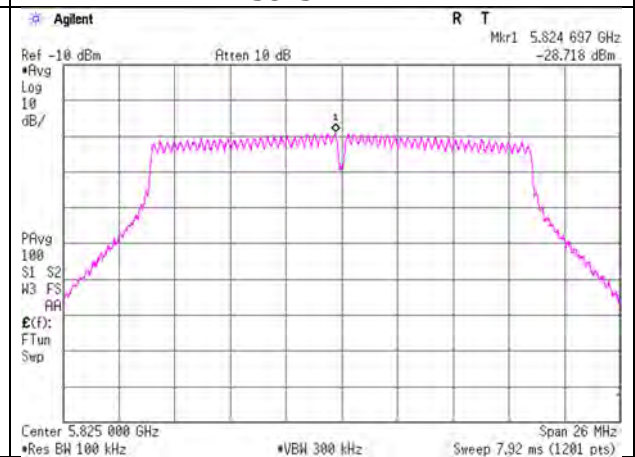
5785 MHz



5825 MHz

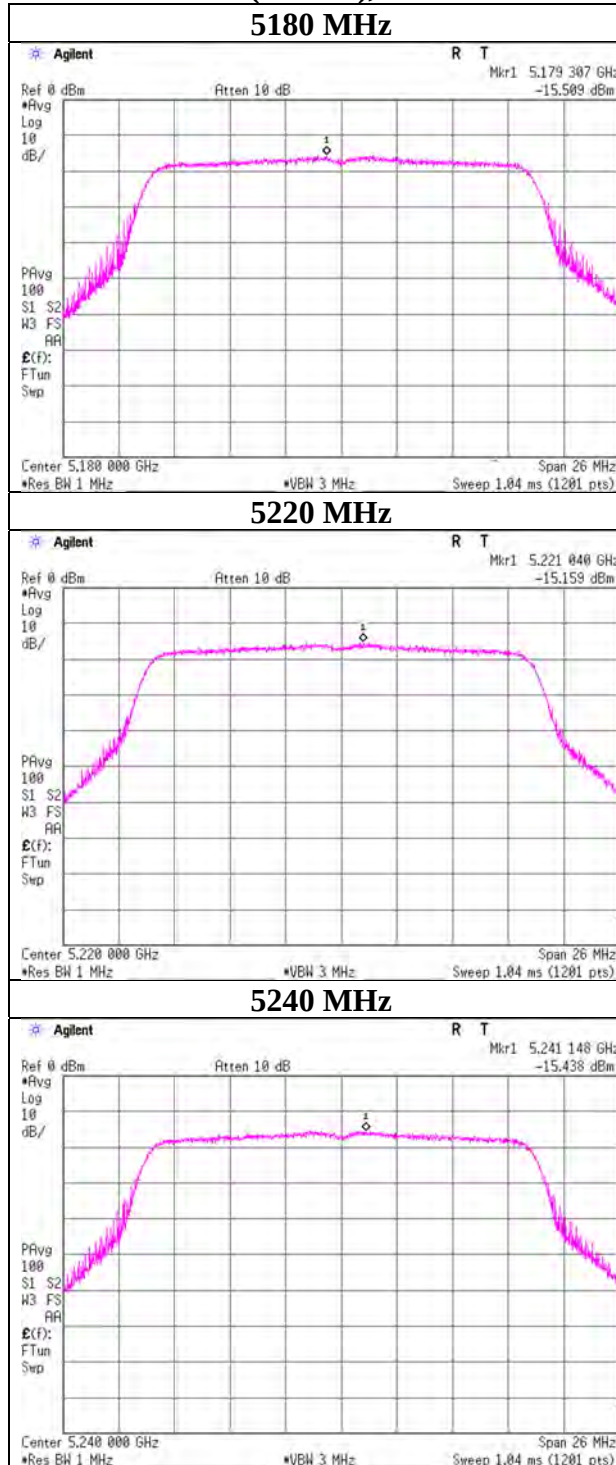


5825 MHz

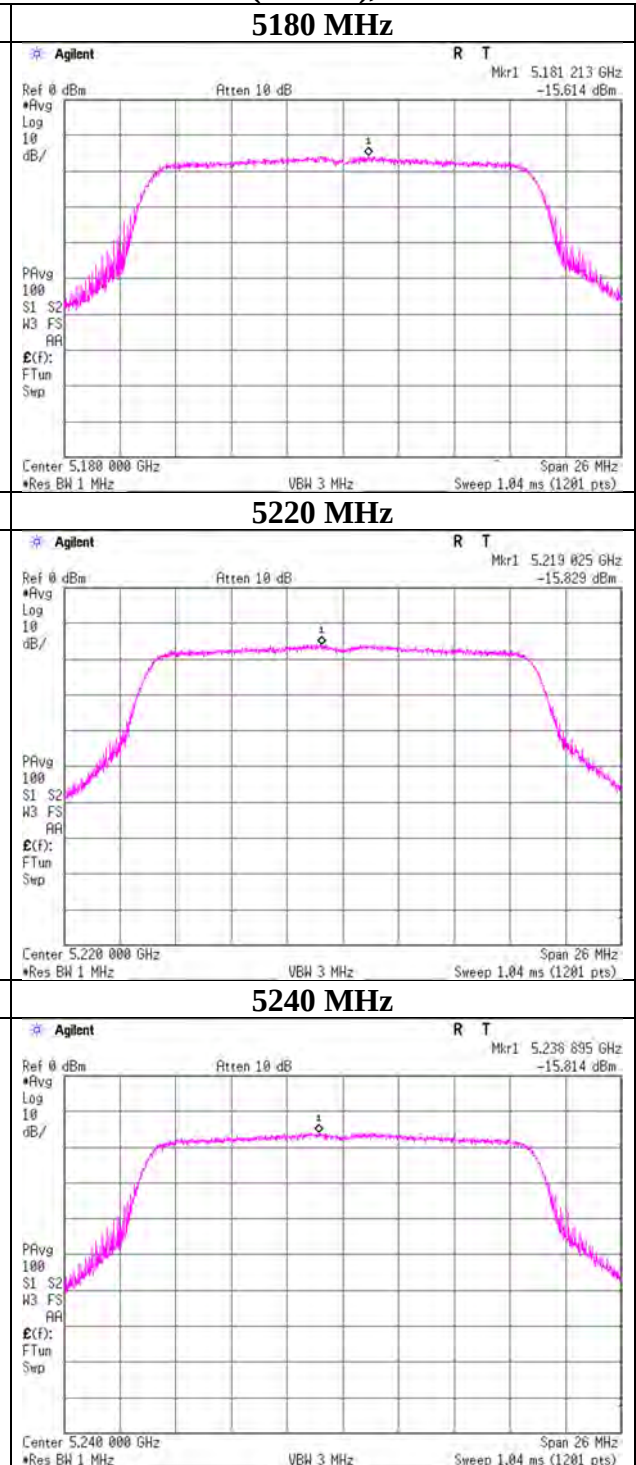


Maximum Power Spectral Density

11n-20 (MIMO), Chain 1



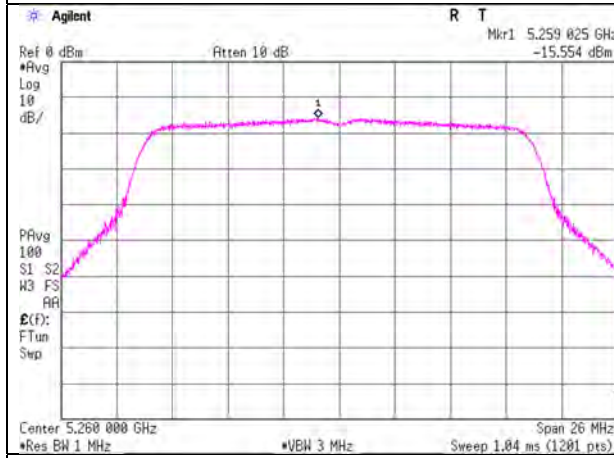
11n-20 (MIMO), Chain 2



Maximum Power Spectral Density

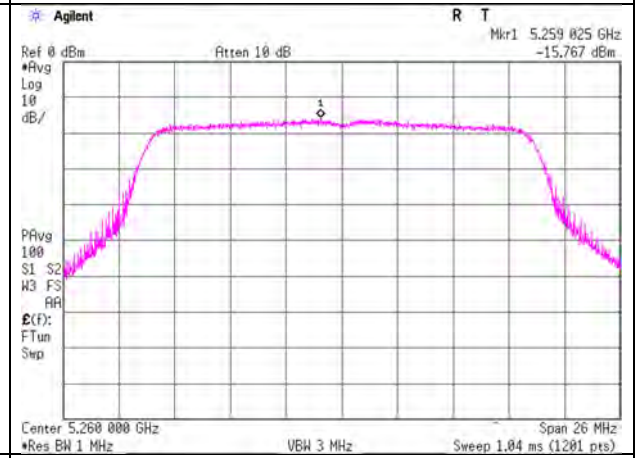
11n-20 (MIMO), Chain 1

5260 MHz

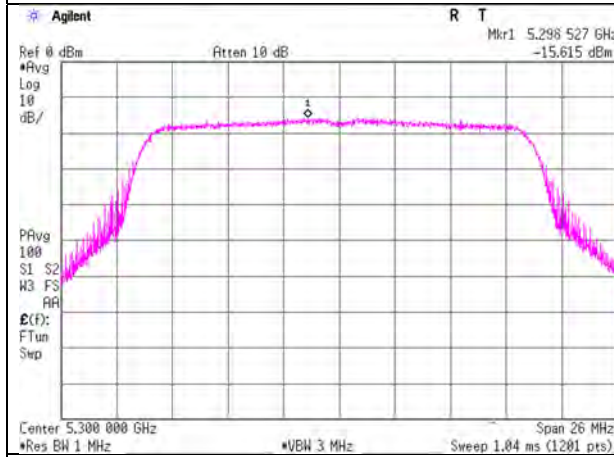


11n-20 (MIMO), Chain 2

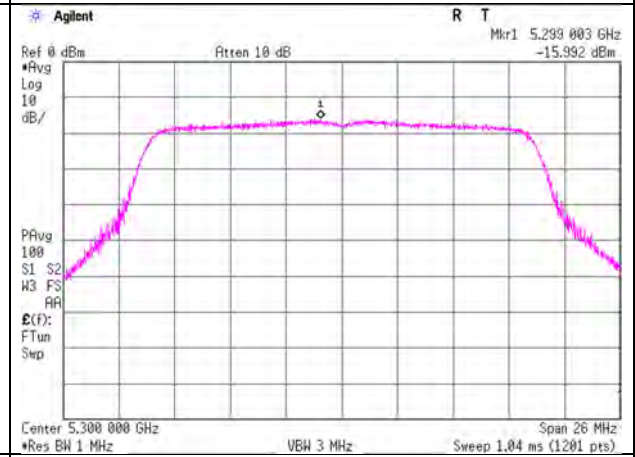
5260 MHz



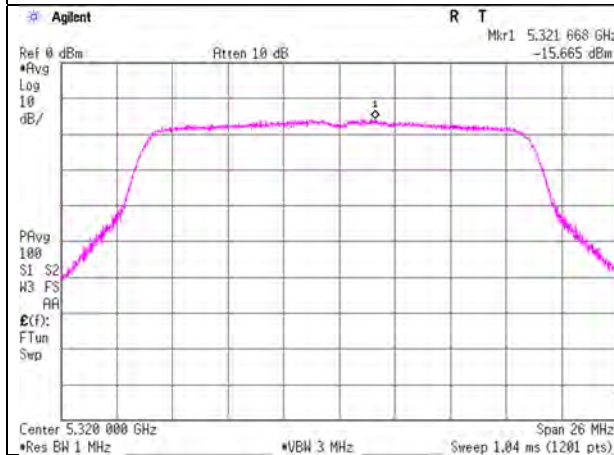
5300 MHz



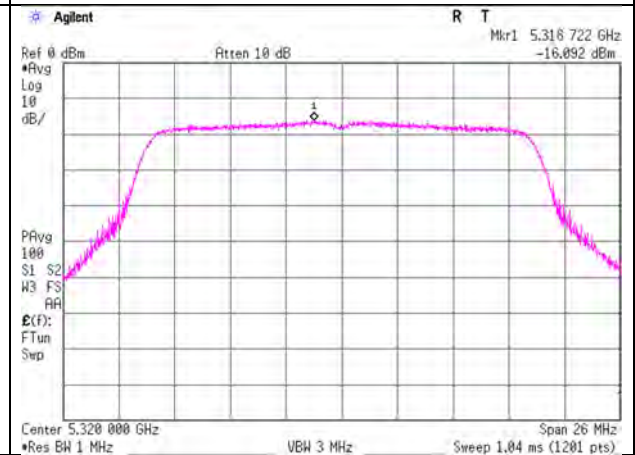
5300 MHz



5320 MHz



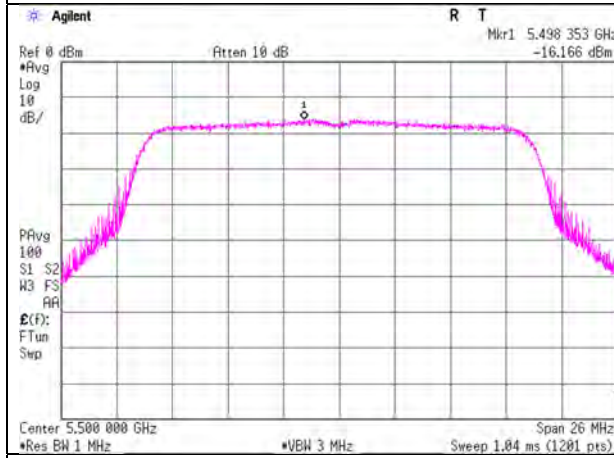
5320 MHz



Maximum Power Spectral Density

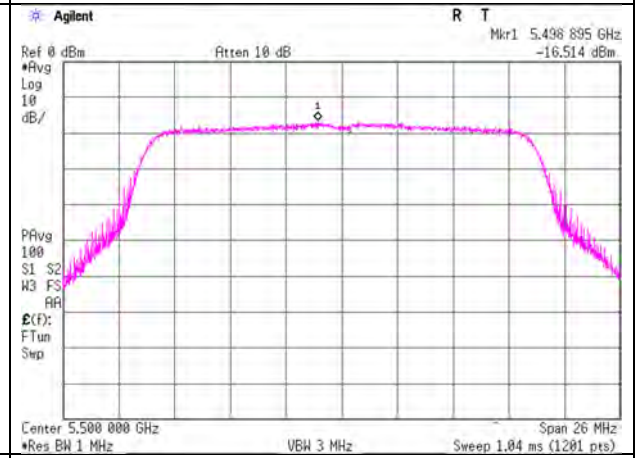
11n-20 (MIMO), Chain 1

5500 MHz

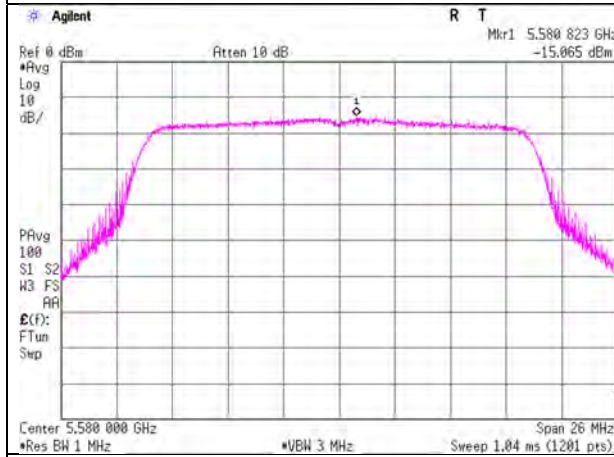


11n-20 (MIMO), Chain 2

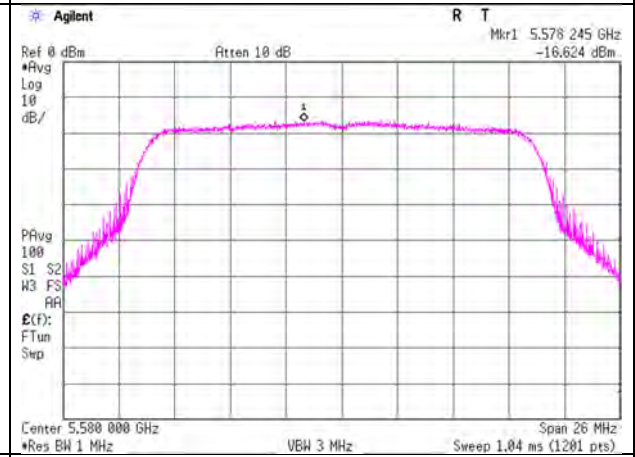
5500 MHz



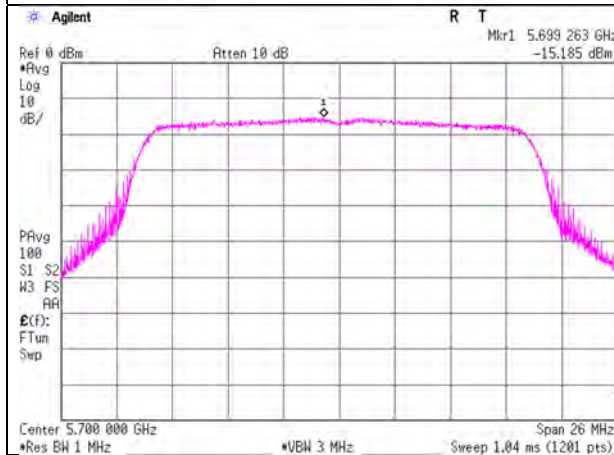
5580 MHz



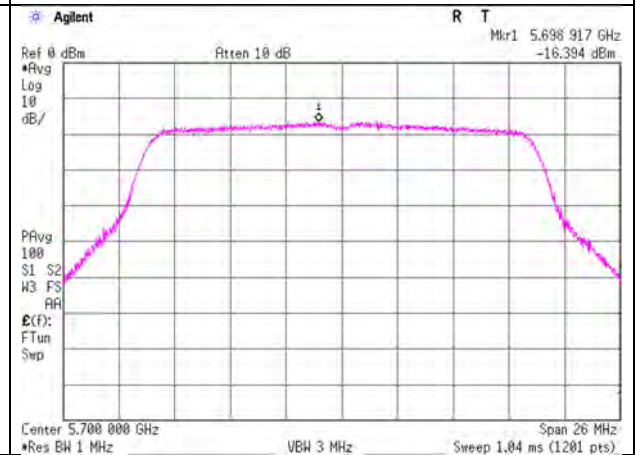
5580 MHz



5700 MHz



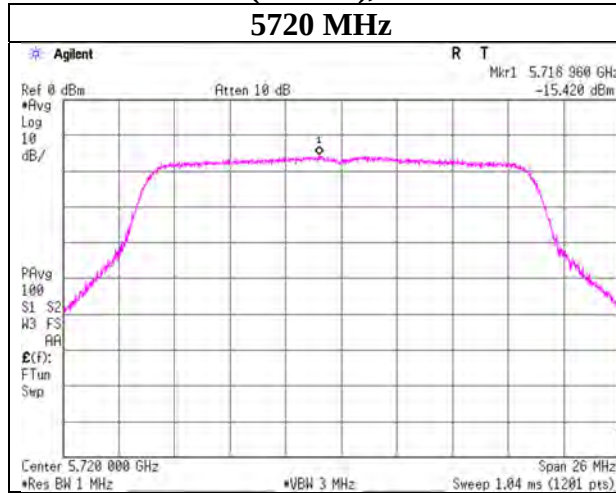
5700 MHz



Maximum Power Spectral Density

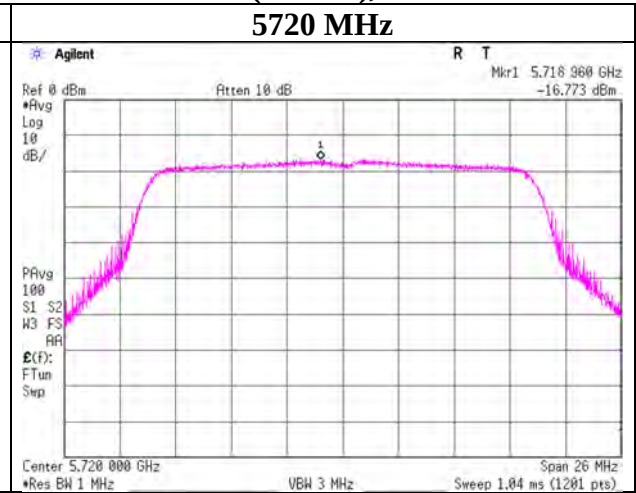
11n-20 (MIMO), Chain 1

5720 MHz



11n-20 (MIMO), Chain 2

5720 MHz



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Maximum Power Spectral Density

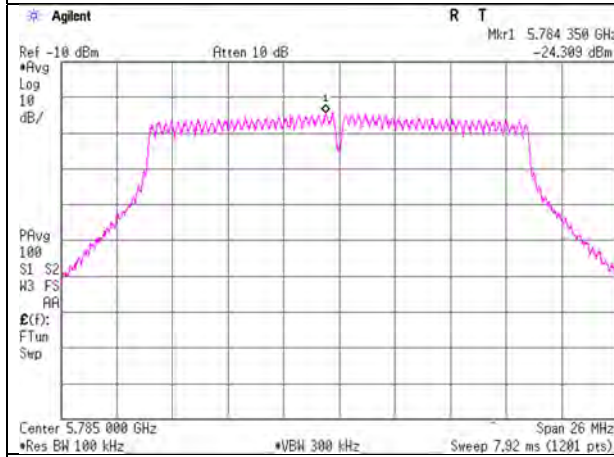
11n-20(MIMO), Chain 1



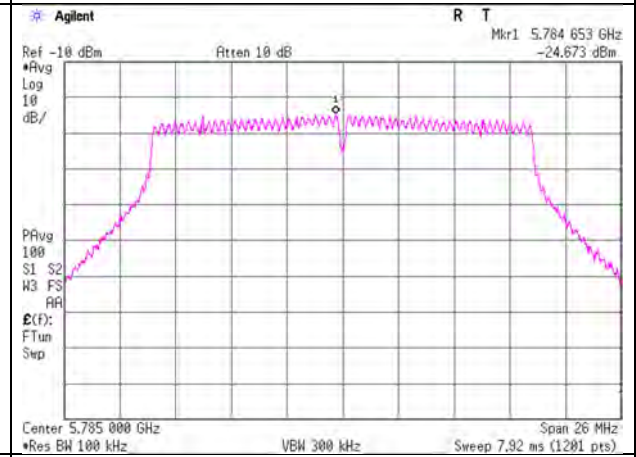
11n-20 (MIMO), Chain 2



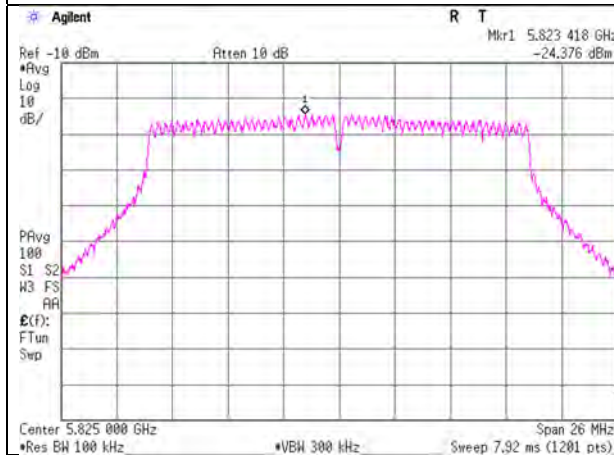
5785 MHz



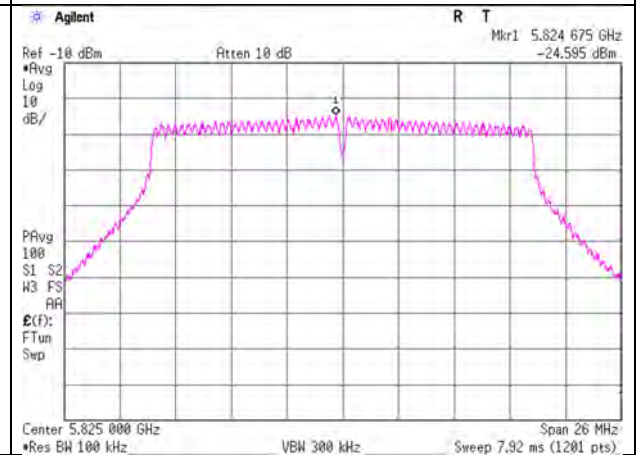
5785 MHz



5825 MHz

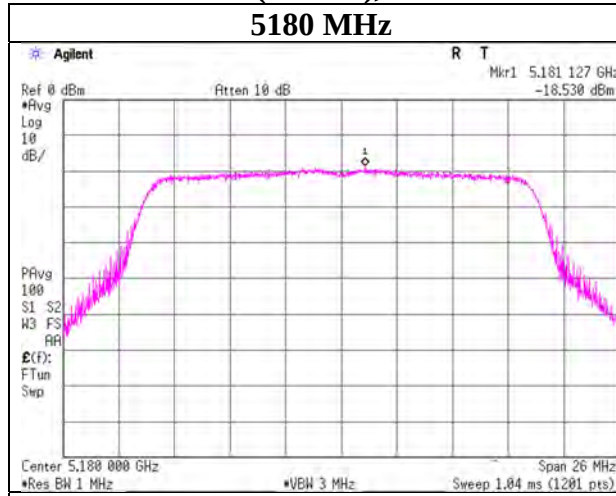


5825 MHz



Maximum Power Spectral Density

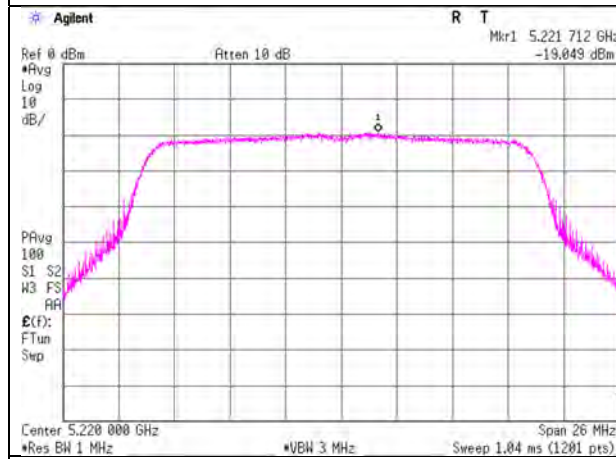
11ac-20 (MIMO), Chain 1



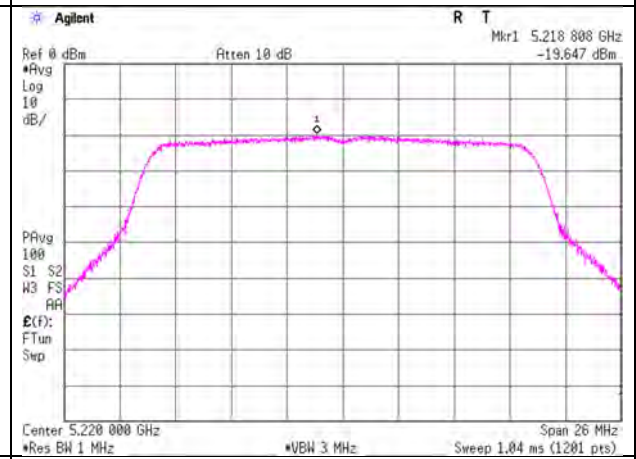
11ac-20 (MIMO), Chain 2



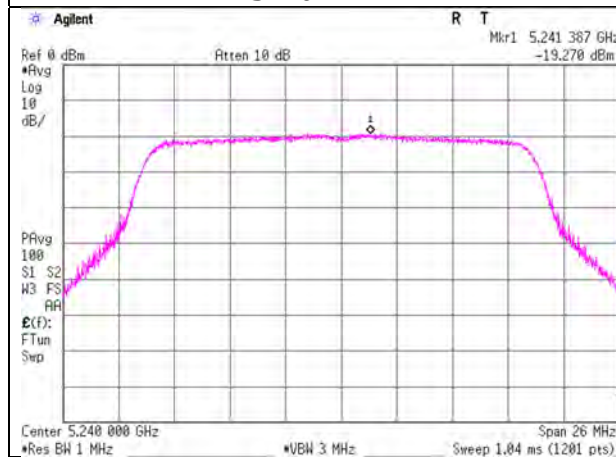
5220 MHz



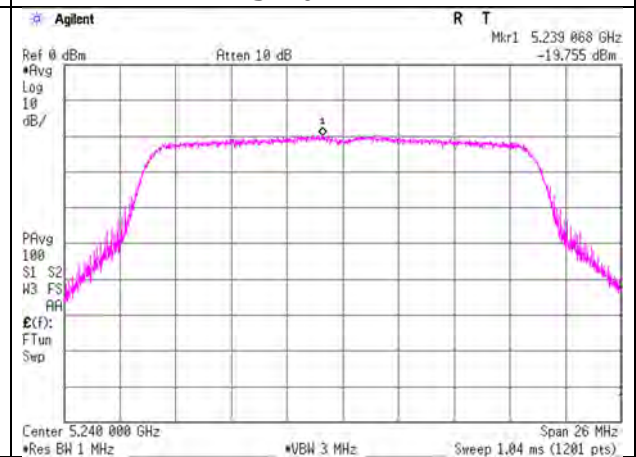
5220 MHz



5240 MHz

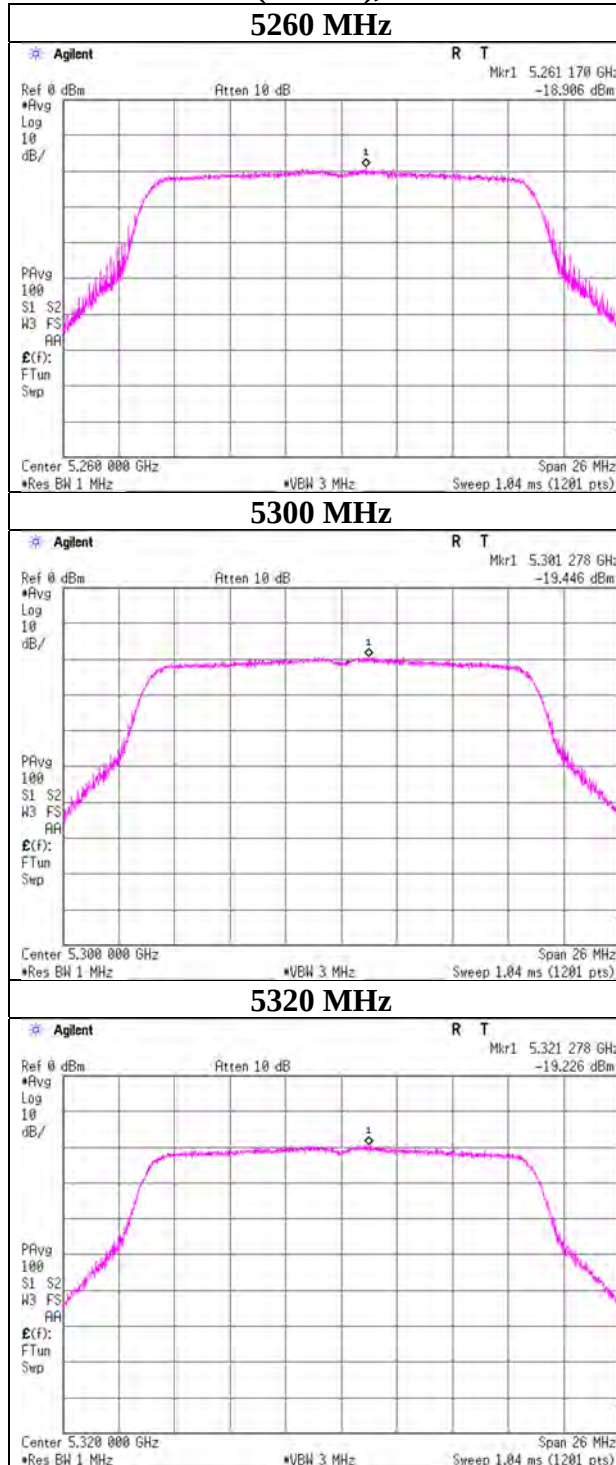


5240 MHz

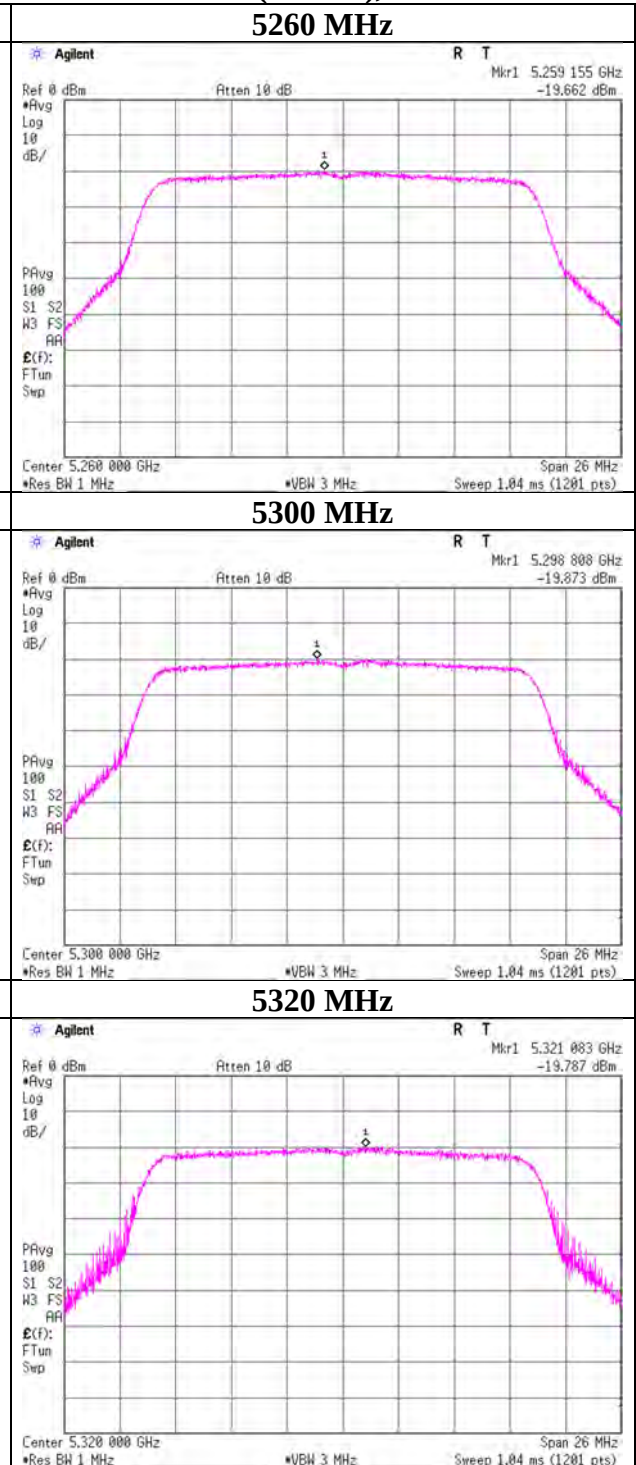


Maximum Power Spectral Density

11ac-20 (MIMO), Chain 1

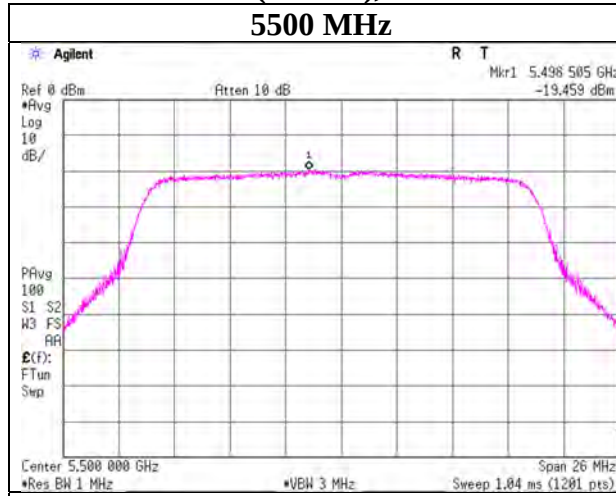


11ac-20 (MIMO), Chain 2

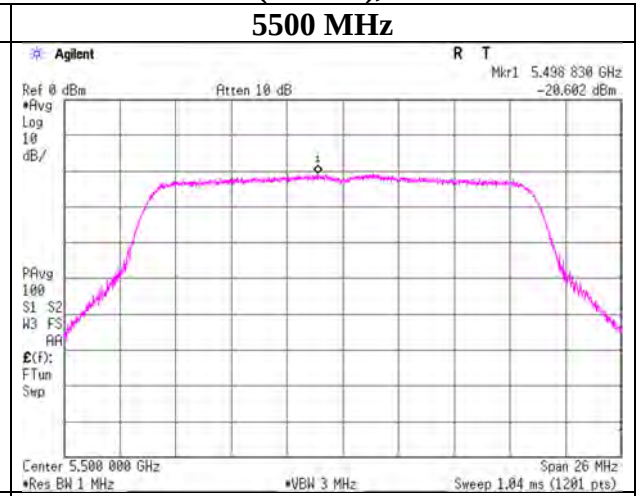


Maximum Power Spectral Density

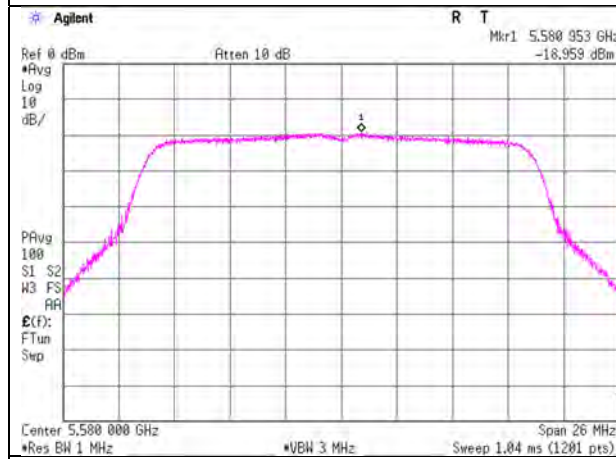
11ac-20 (MIMO), Chain 1



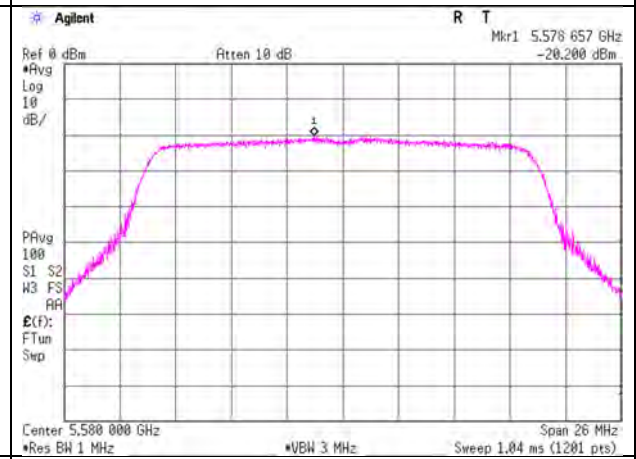
11ac-20 (MIMO), Chain 2



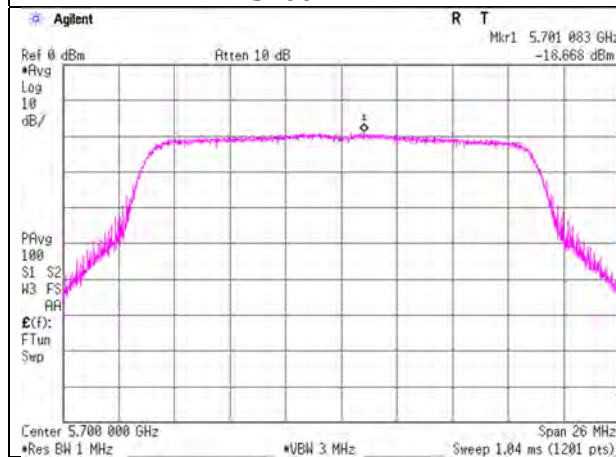
5580 MHz



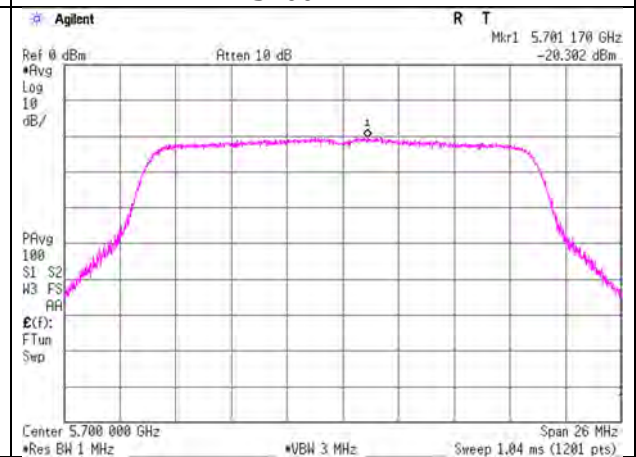
5580 MHz



5700 MHz

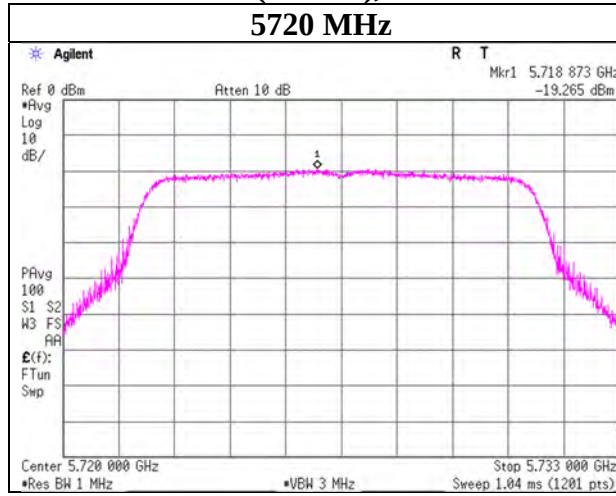


5700 MHz

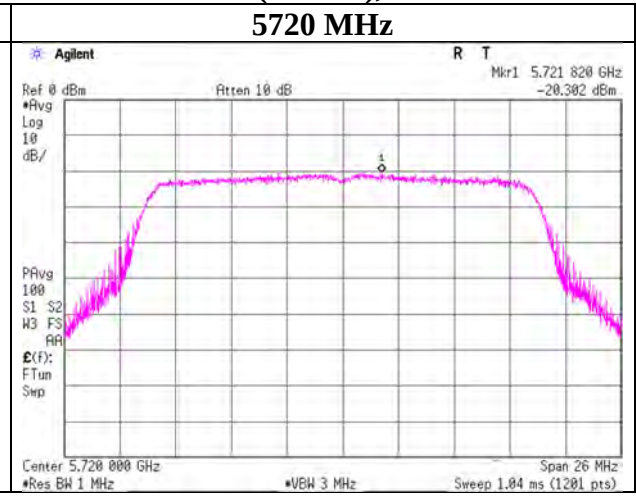


Maximum Power Spectral Density

11ac-20 (MIMO), Chain 1



11ac-20 (MIMO), Chain 2



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Maximum Power Spectral Density

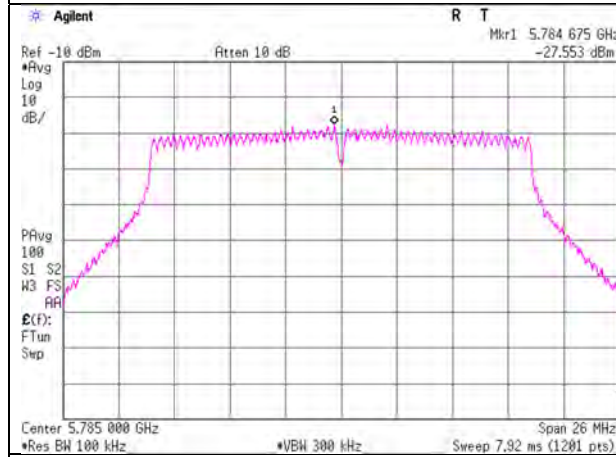
11ac-20(MIMO), Chain 1



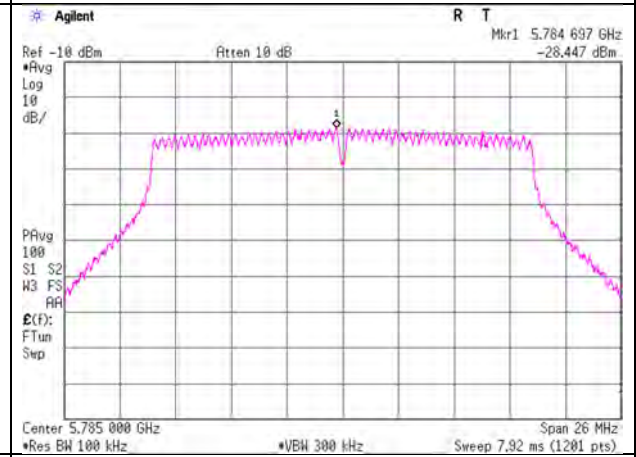
11ac-20 (MIMO), Chain 2



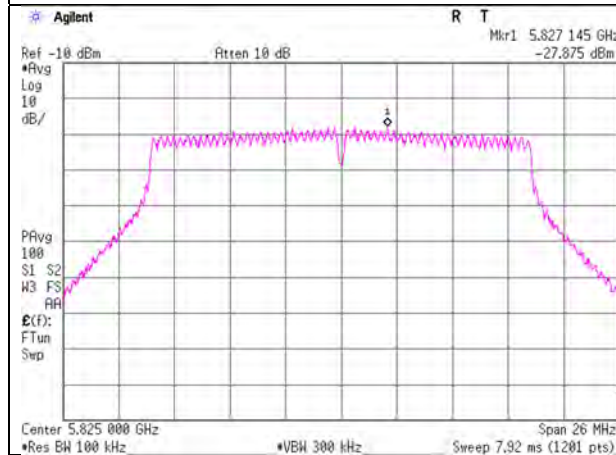
5785 MHz



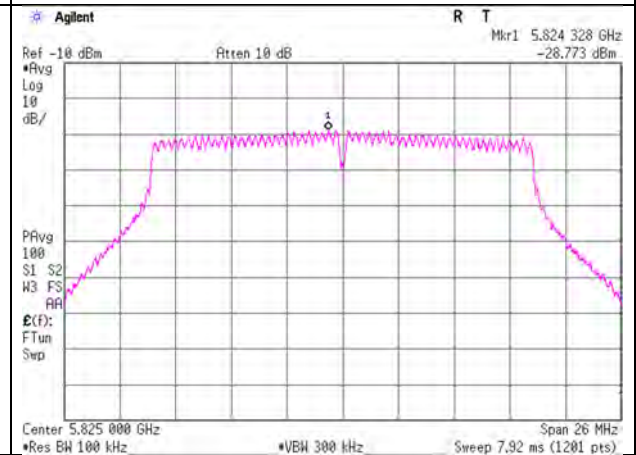
5785 MHz



5825 MHz

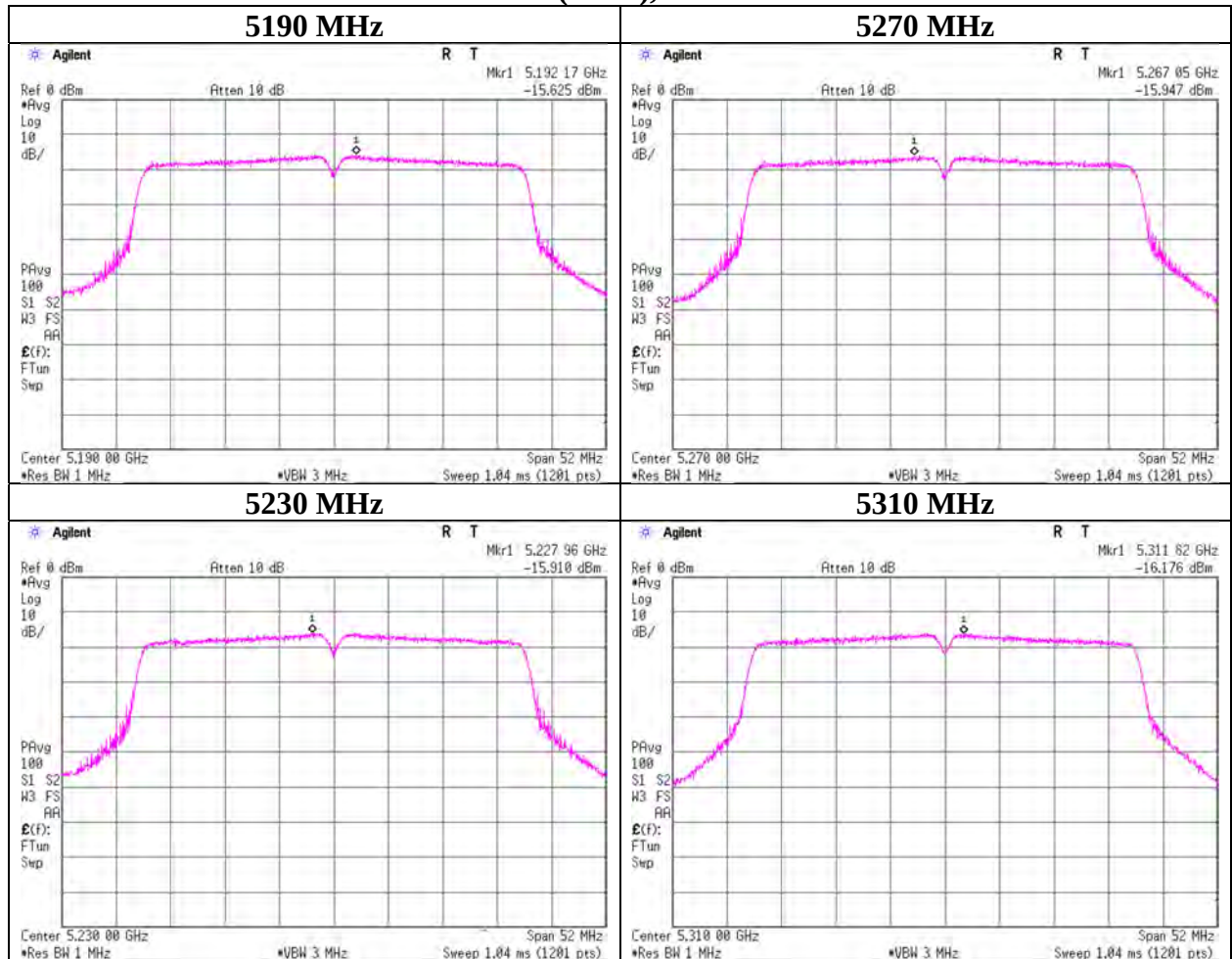


5825 MHz



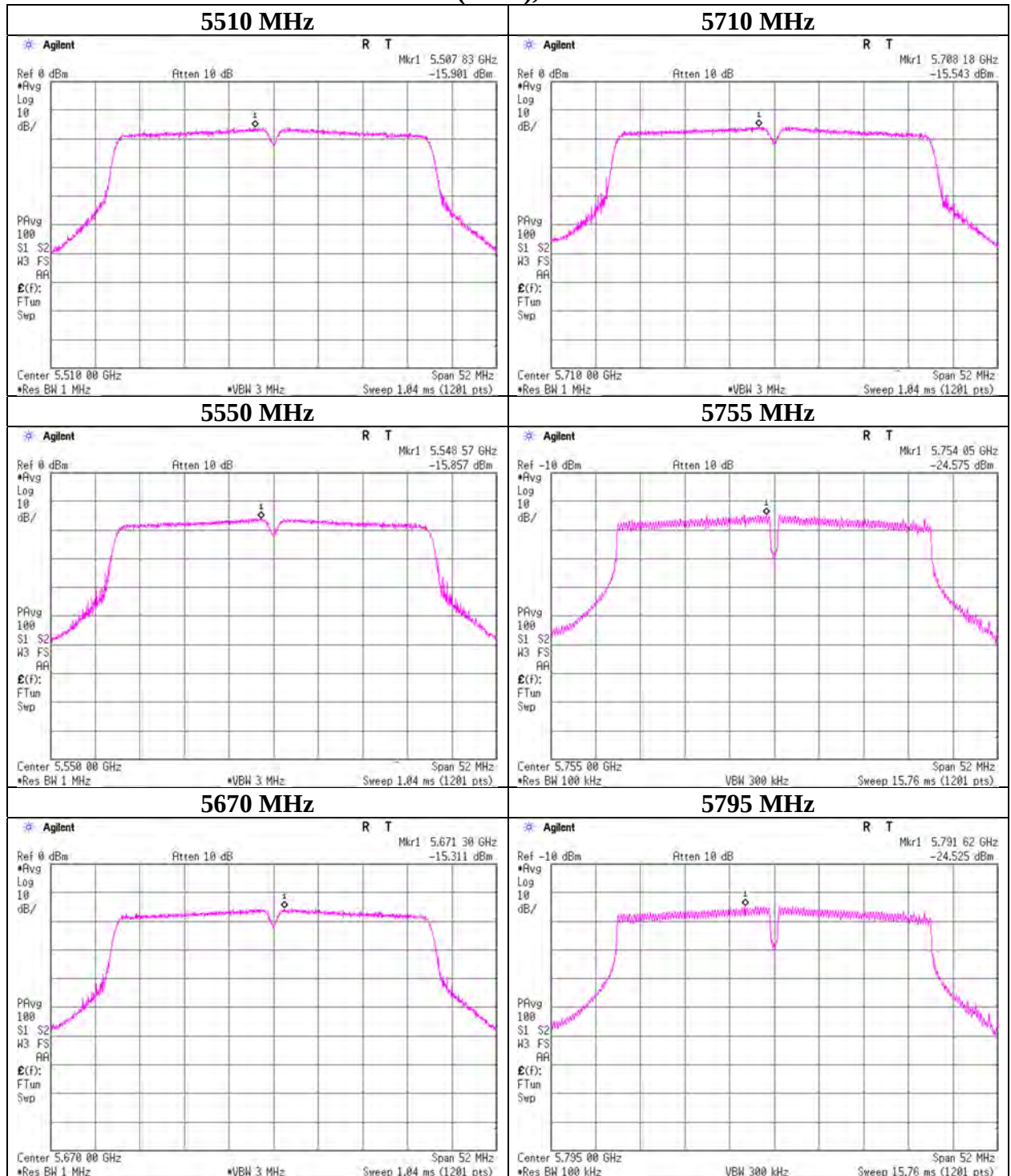
Maximum Power Spectral Density

11n-40(SISO), Chain 1



Maximum Power Spectral Density

11n-40(SISO), Chain 1



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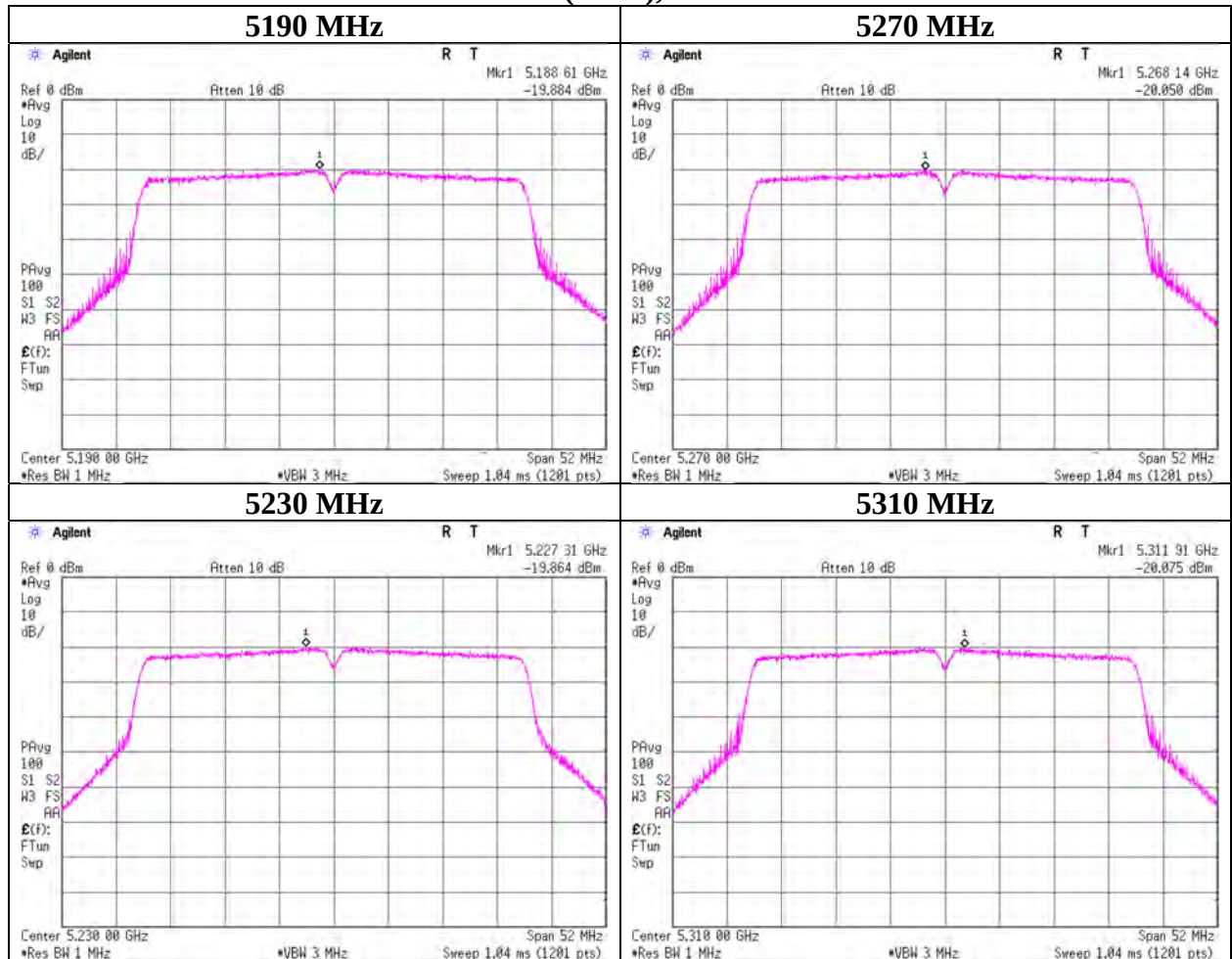
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401

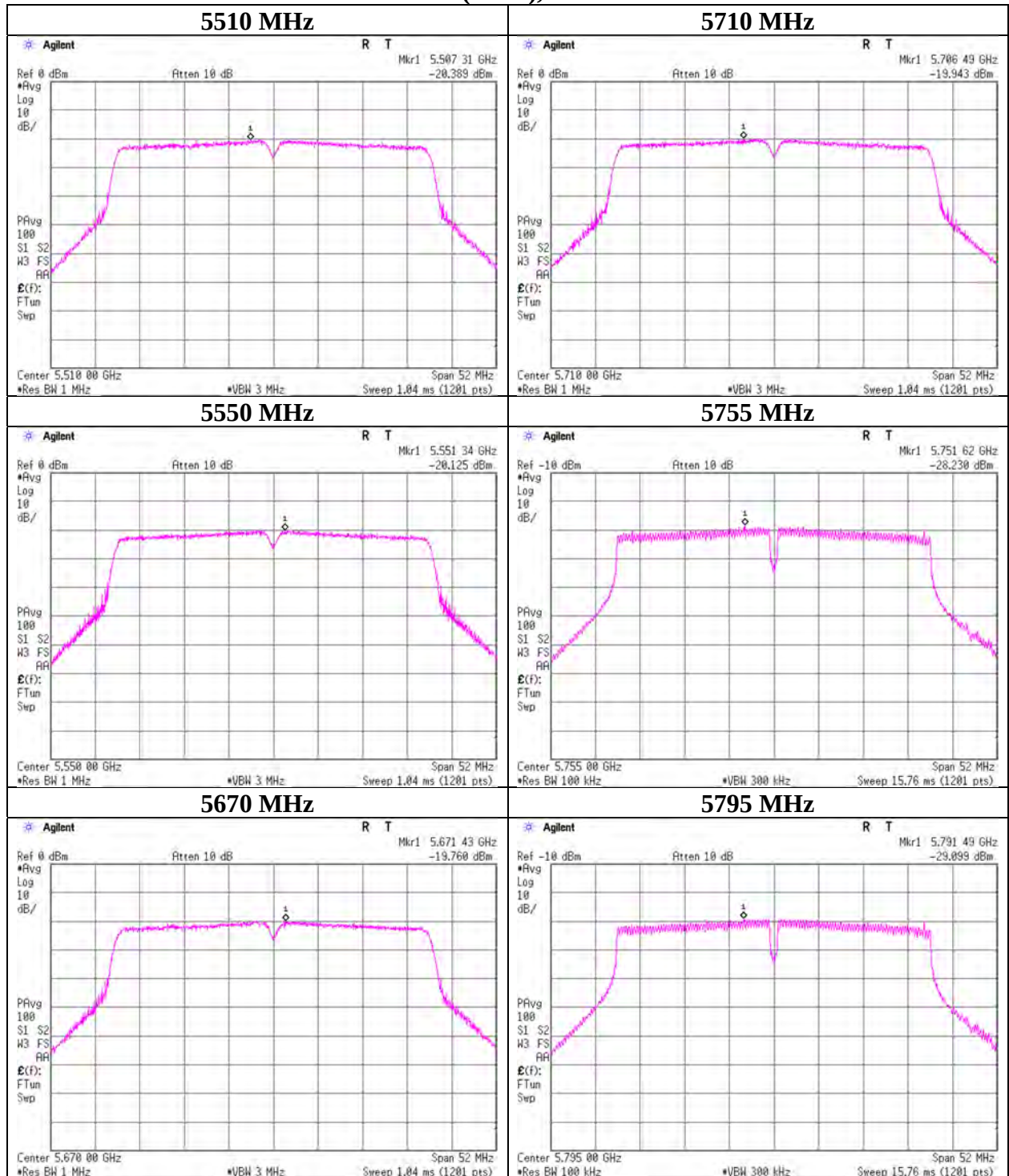
Maximum Power Spectral Density

11ac-40(SISO), Chain 1



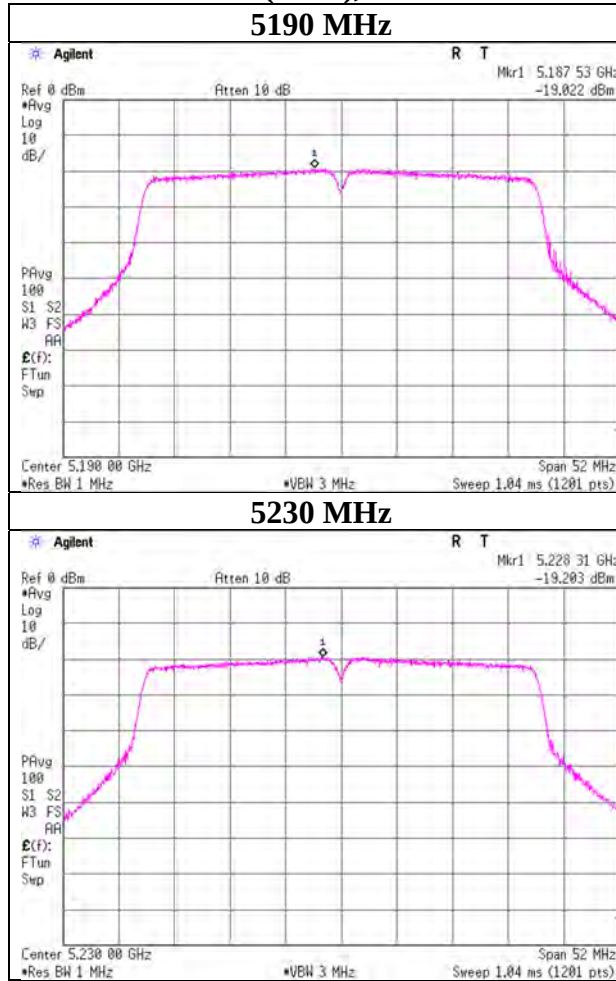
Maximum Power Spectral Density

11ac-40(SISO), Chain 1

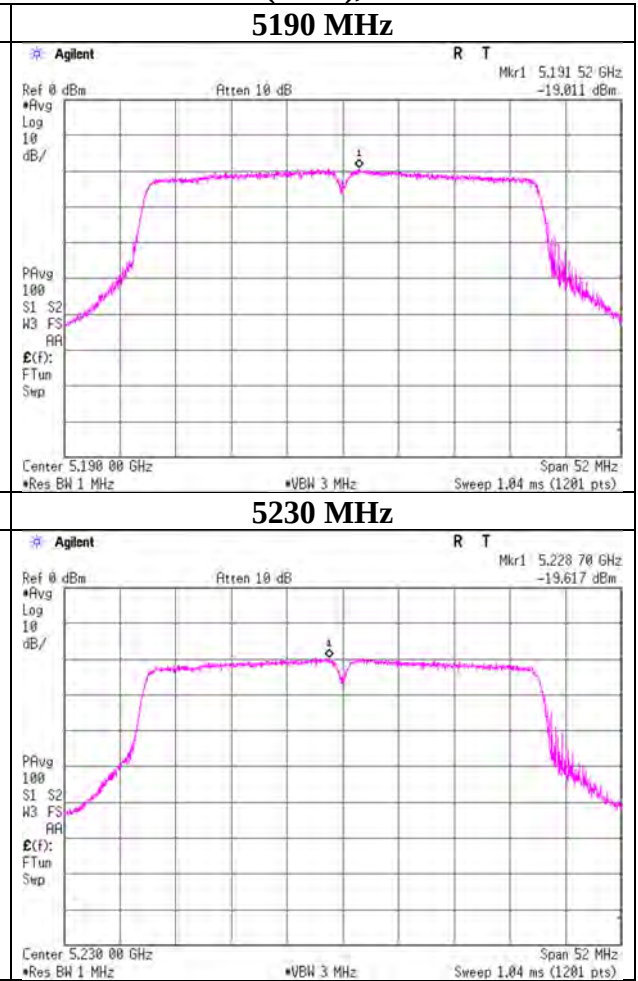


Maximum Power Spectral Density

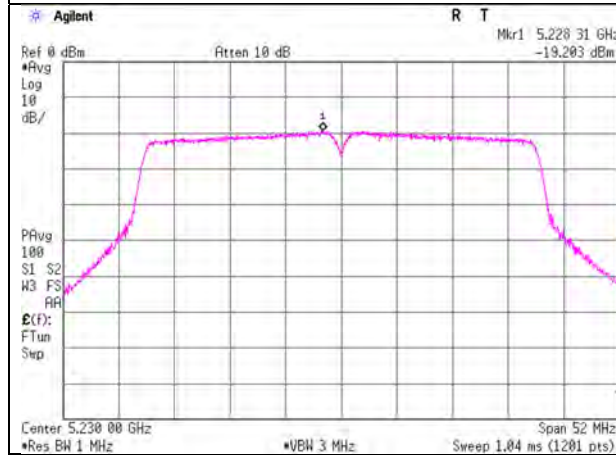
11n-40 (CDD), Chain 1



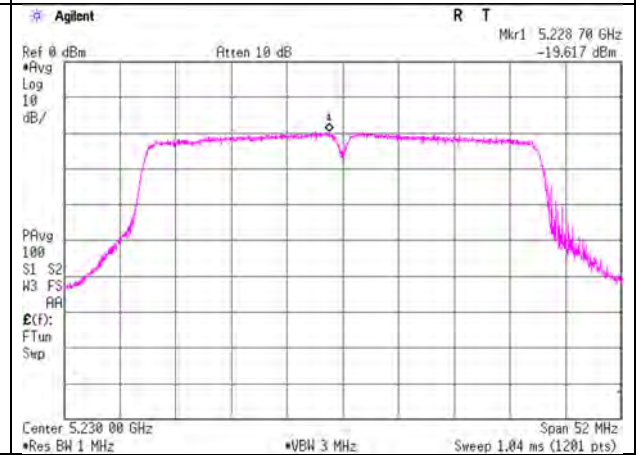
11n-40 (CDD), Chain 2



5230 MHz

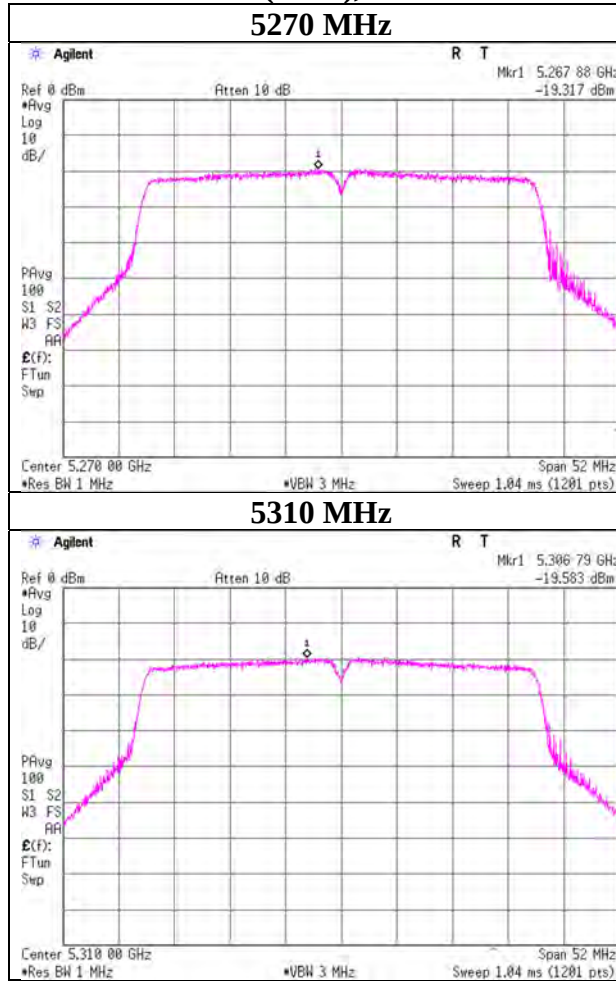


5230 MHz

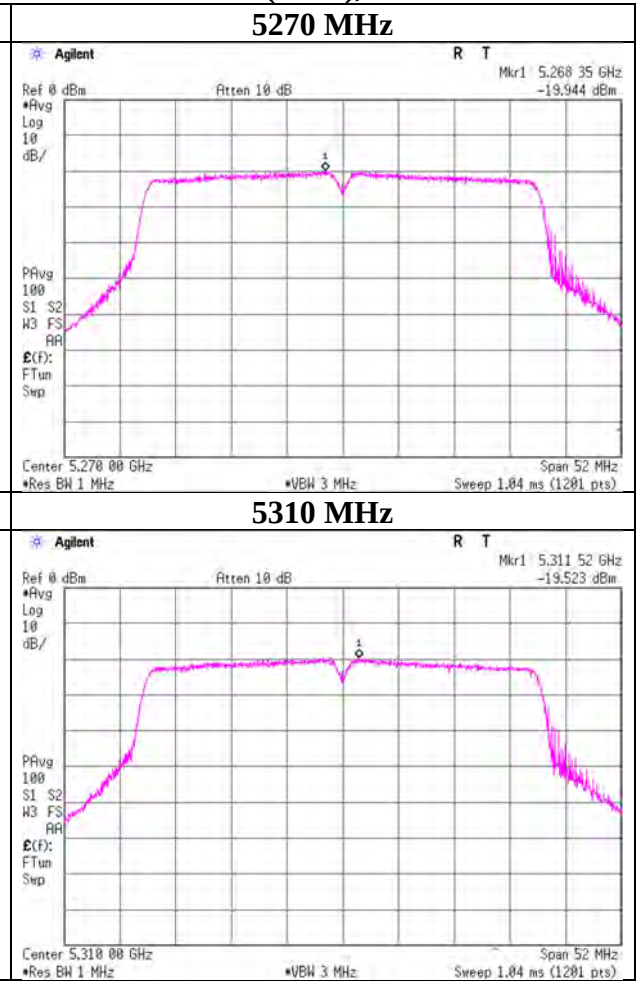


Maximum Power Spectral Density

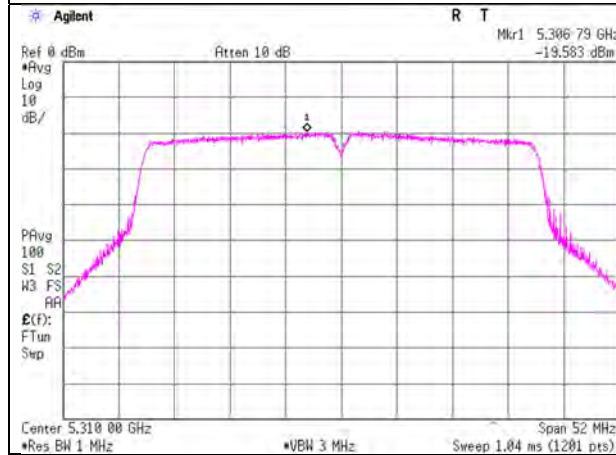
11n-40 (CDD), Chain 1



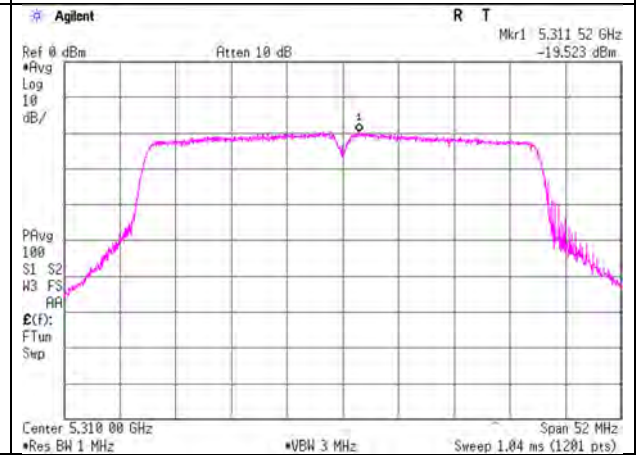
11n-40 (CDD), Chain 2



5310 MHz



5310 MHz

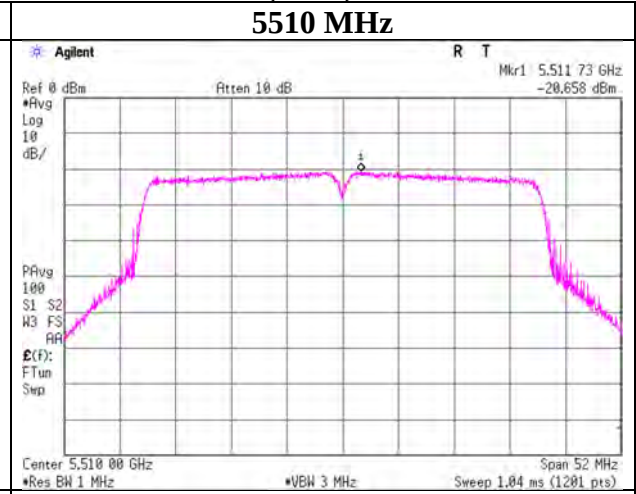


Maximum Power Spectral Density

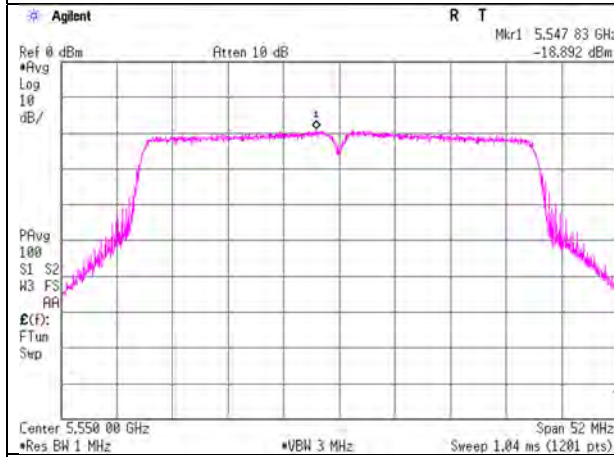
11n-40 (CDD), Chain 1



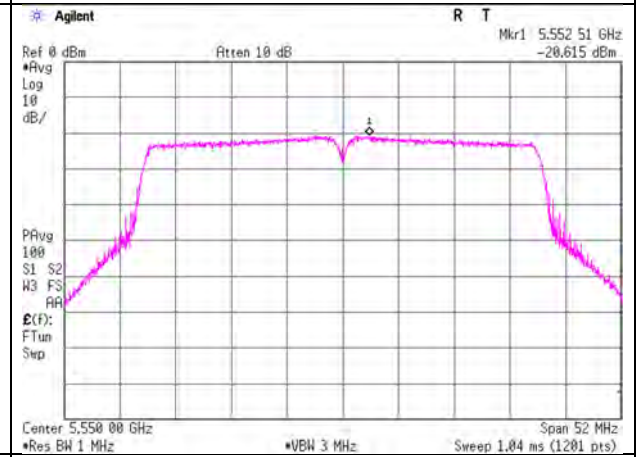
11n-40 (CDD), Chain 2



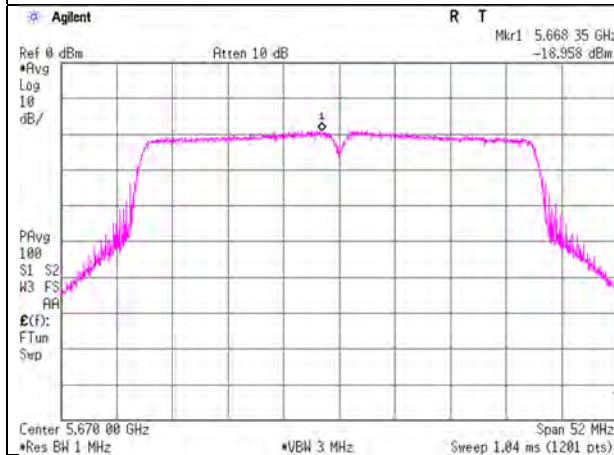
5550 MHz



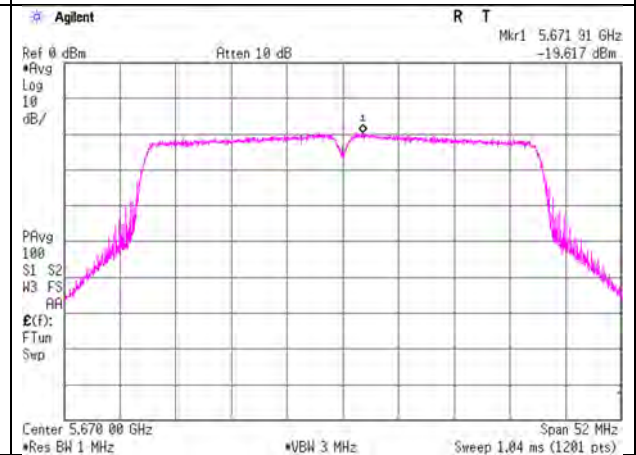
5550 MHz



5670 MHz

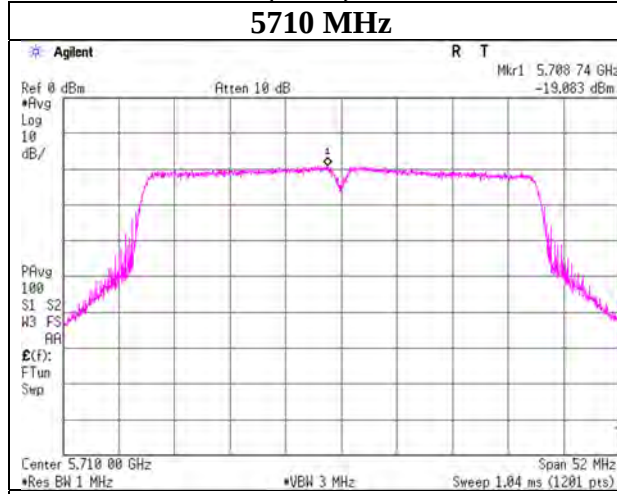


5670 MHz

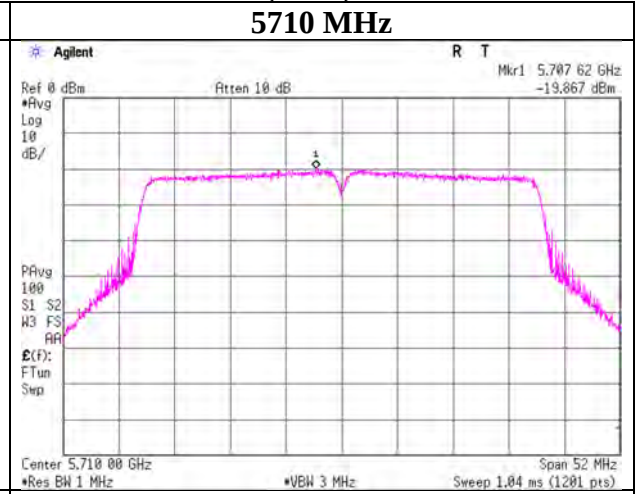


Maximum Power Spectral Density

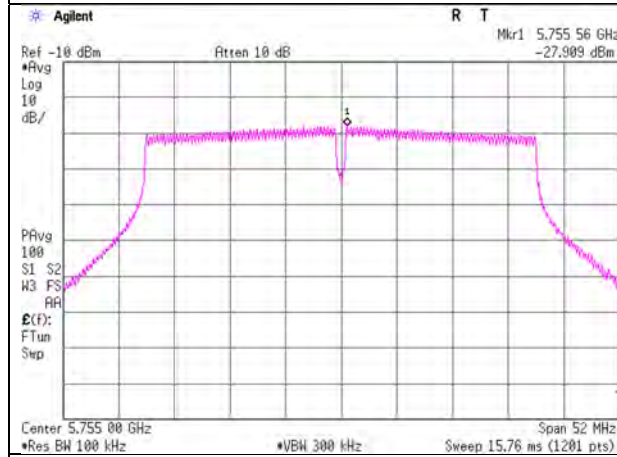
11n-40 (CDD), Chain 1



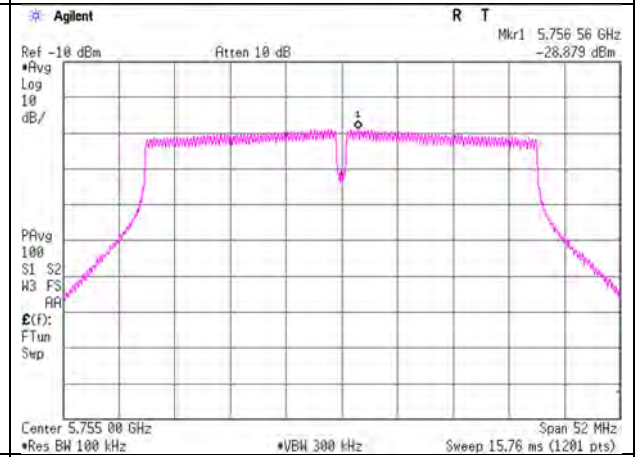
11n-40 (CDD), Chain 2



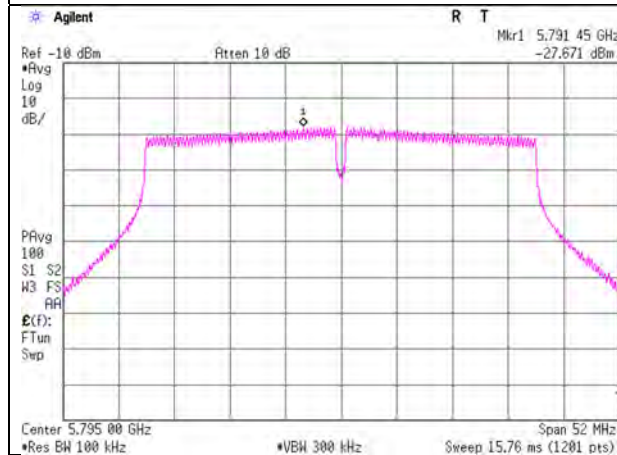
5755 MHz



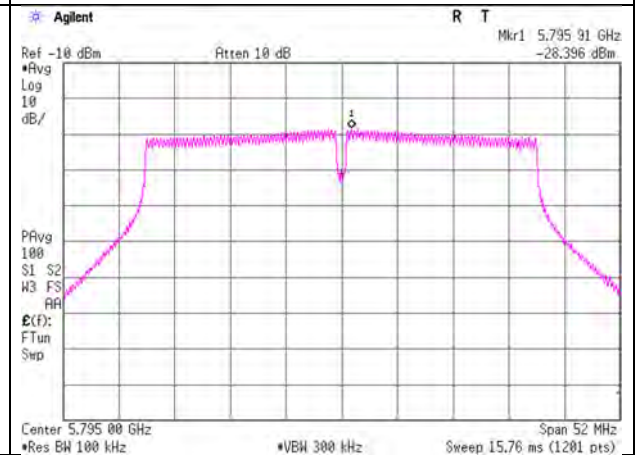
5755 MHz



5795 MHz



5795 MHz



Maximum Power Spectral Density

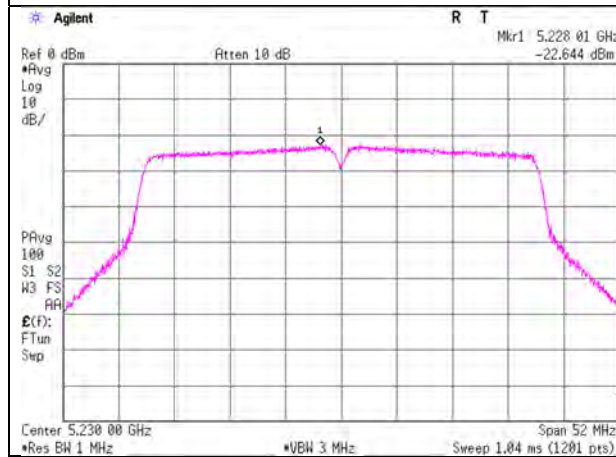
11ac-40 (CDD), Chain 1



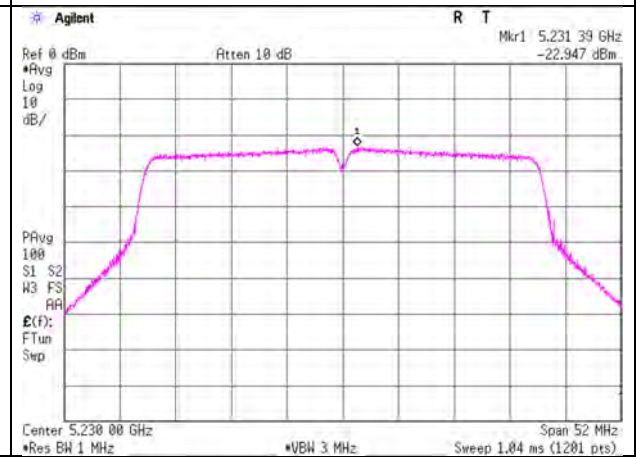
11ac-40 (CDD), Chain 2



5230 MHz

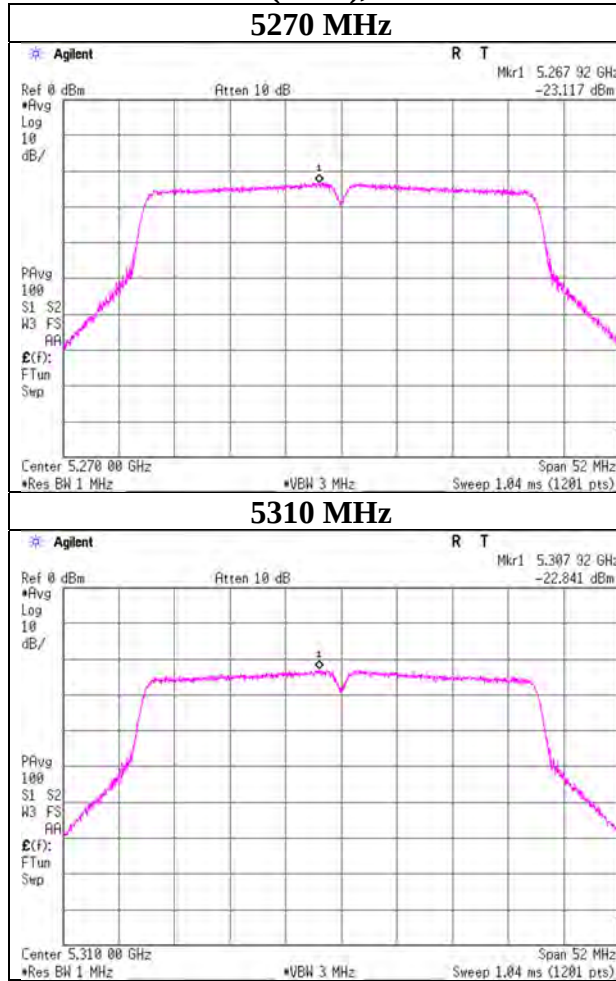


5230 MHz

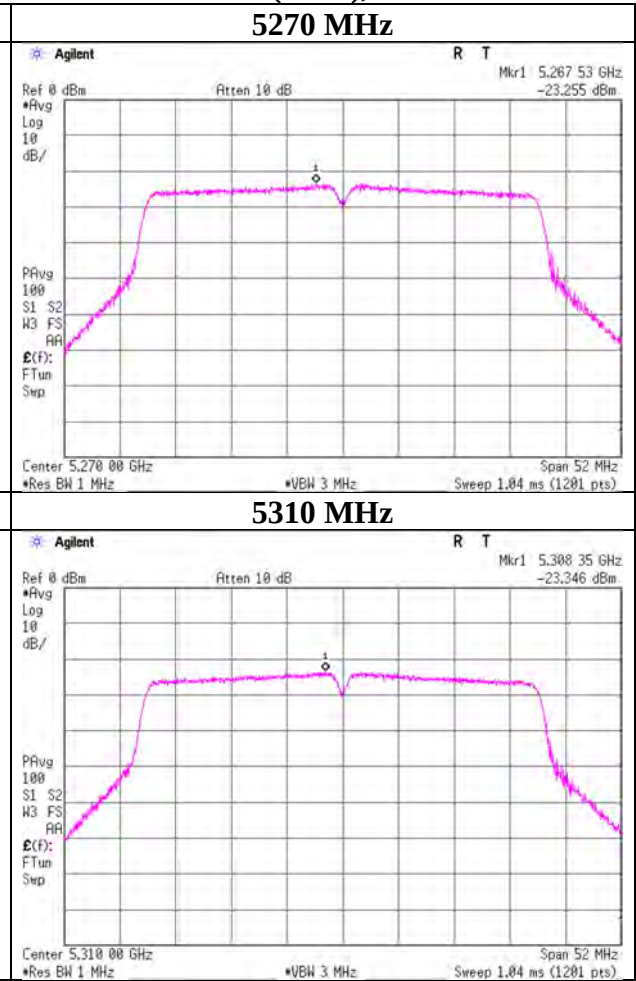


Maximum Power Spectral Density

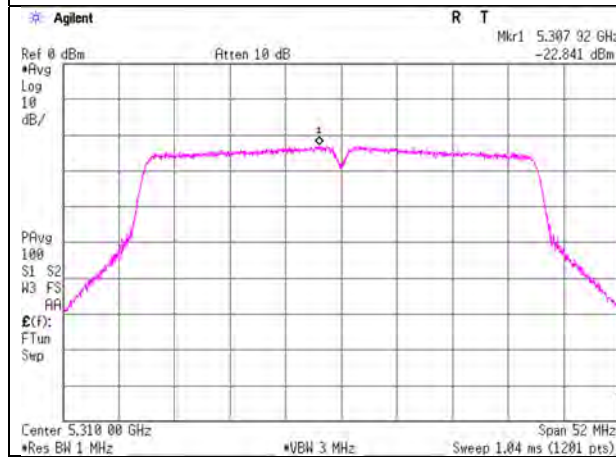
11ac-40 (CDD), Chain 1



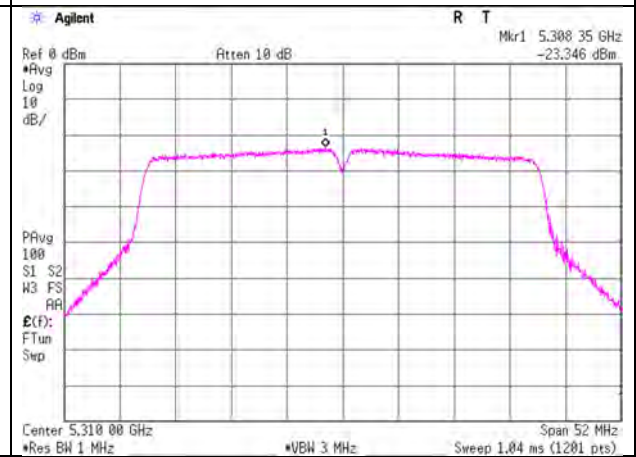
11ac-40 (CDD), Chain 2



5310 MHz

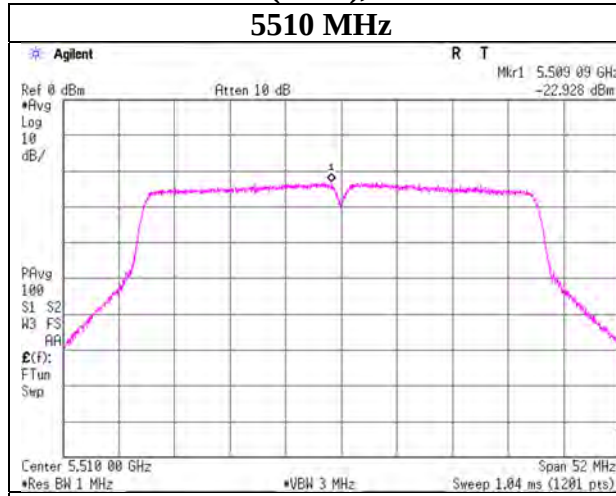


5310 MHz



Maximum Power Spectral Density

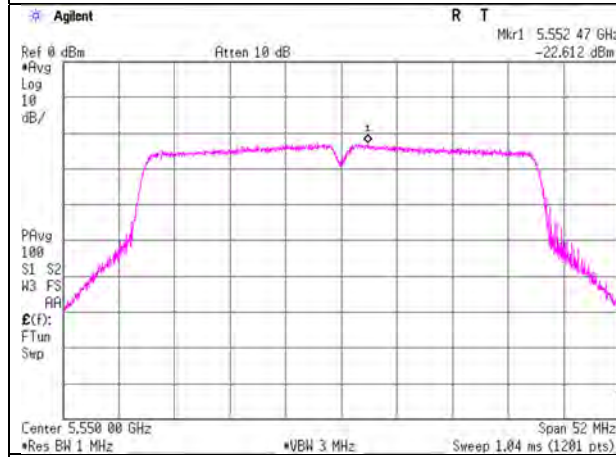
11ac-40 (CDD), Chain 1



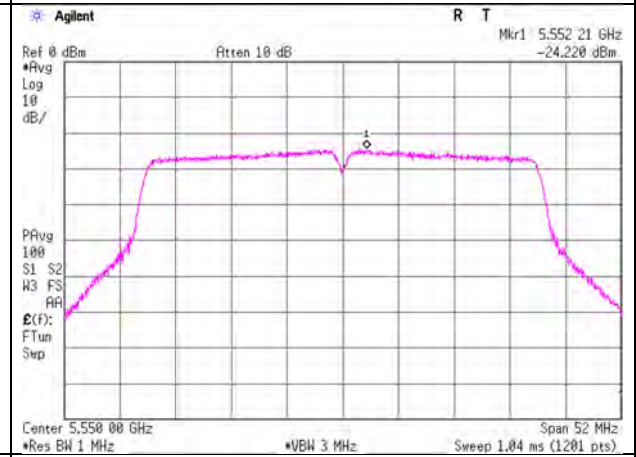
11ac-40 (CDD), Chain 2



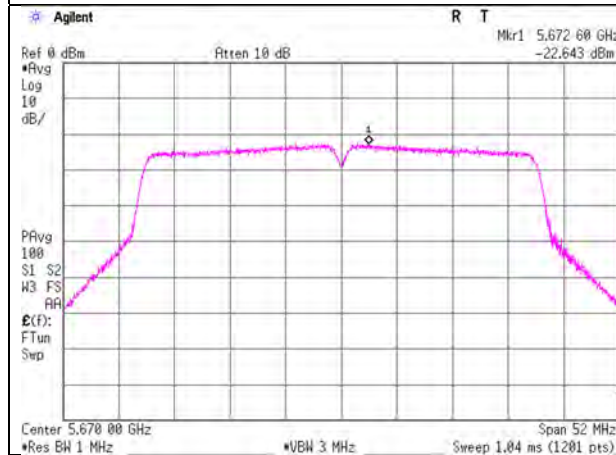
5550 MHz



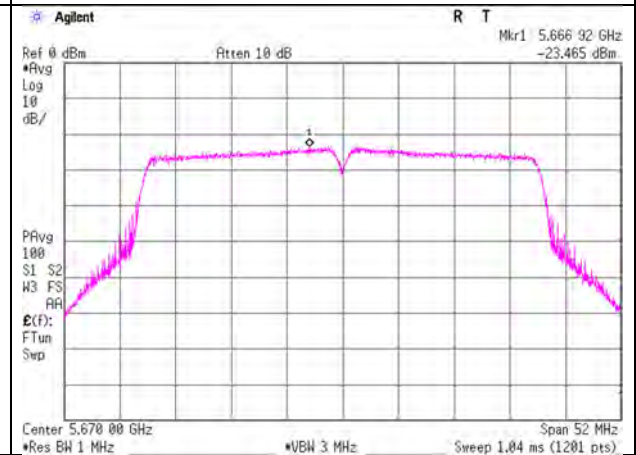
5550 MHz



5670 MHz

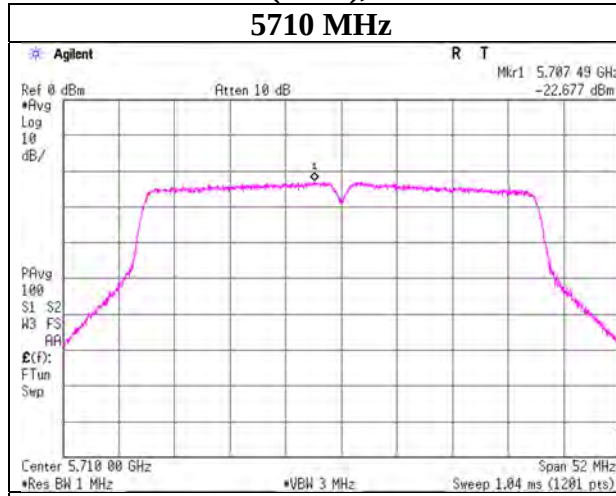


5670 MHz



Maximum Power Spectral Density

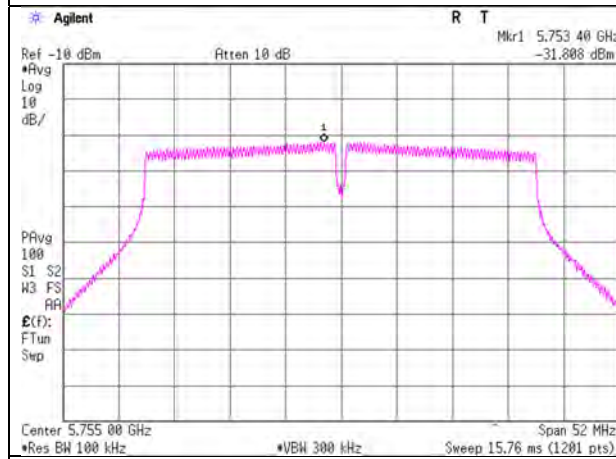
11ac-40 (CDD), Chain 1



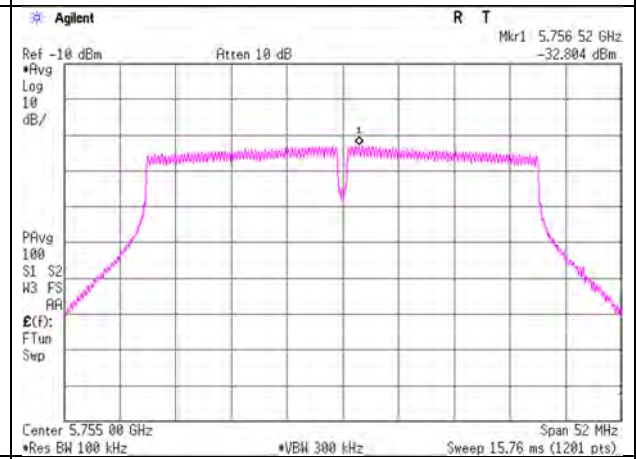
11ac-40 (CDD), Chain 2



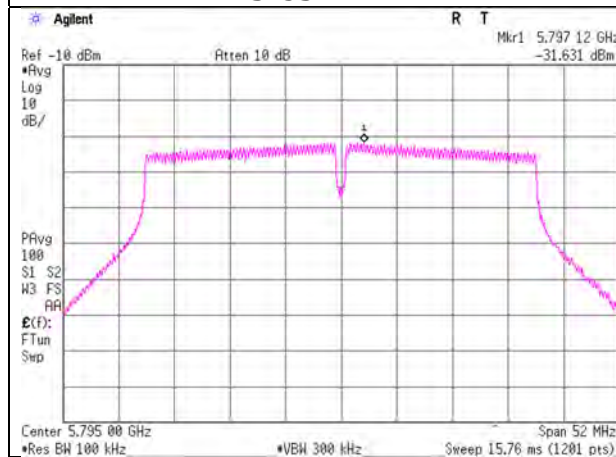
5755 MHz



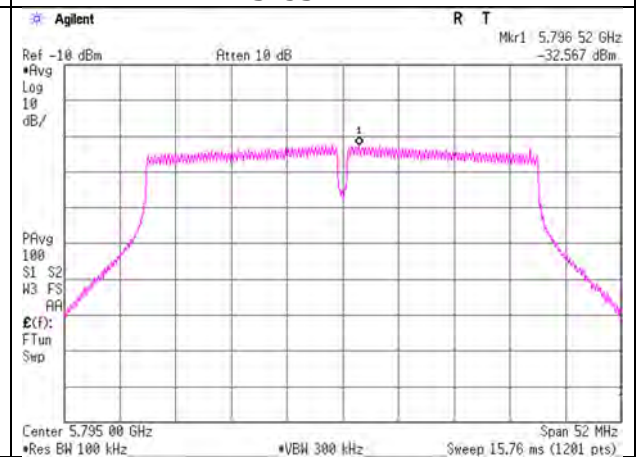
5755 MHz



5795 MHz



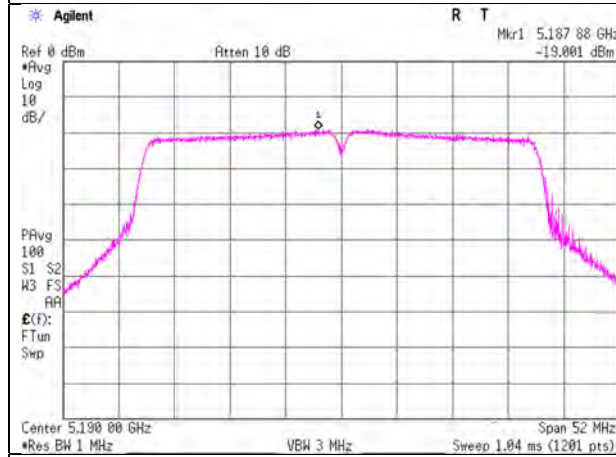
5795 MHz



Maximum Power Spectral Density

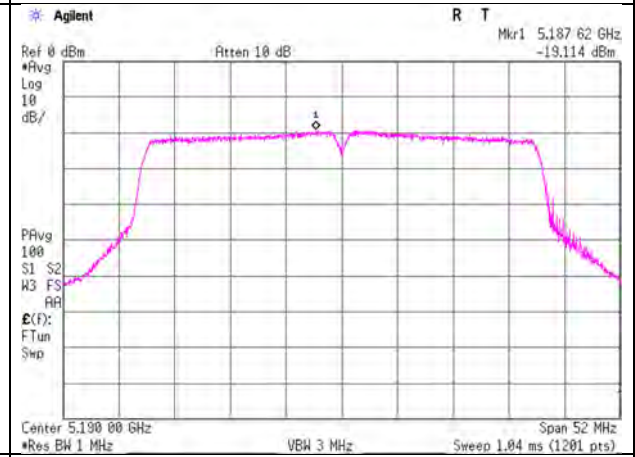
11n-40 (MIMO), Chain 1

5190 MHz

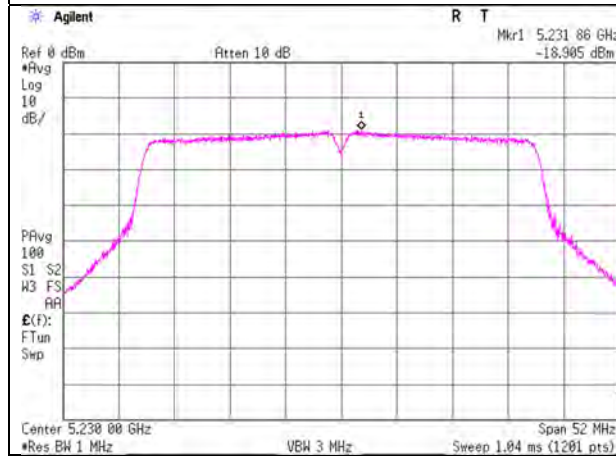


11n-40 (MIMO), Chain 2

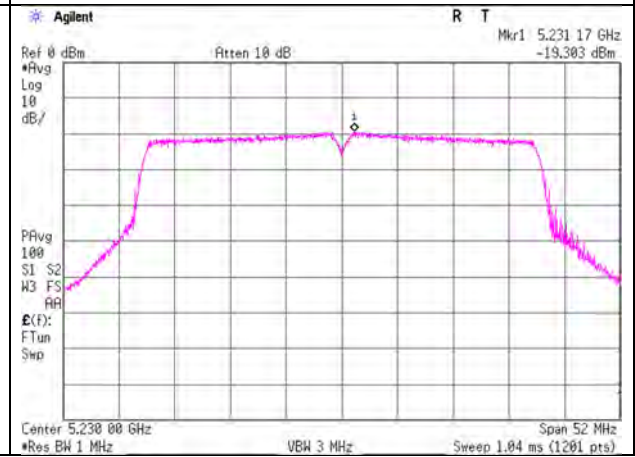
5190 MHz



5230 MHz



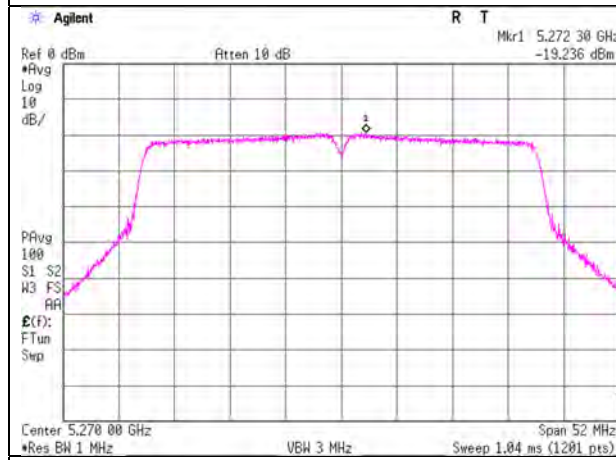
5230 MHz



Maximum Power Spectral Density

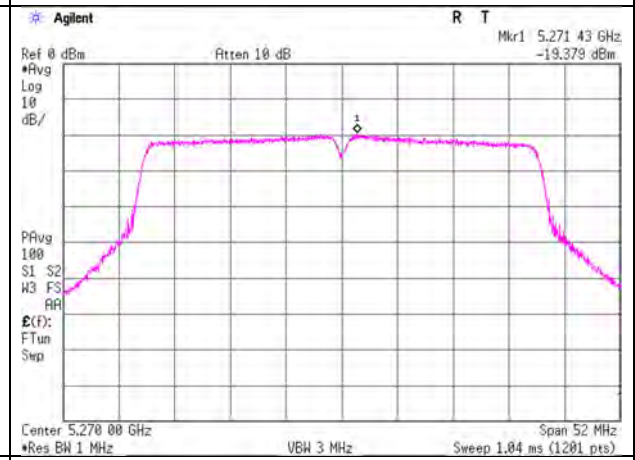
11n-40 (MIMO), Chain 1

5270 MHz

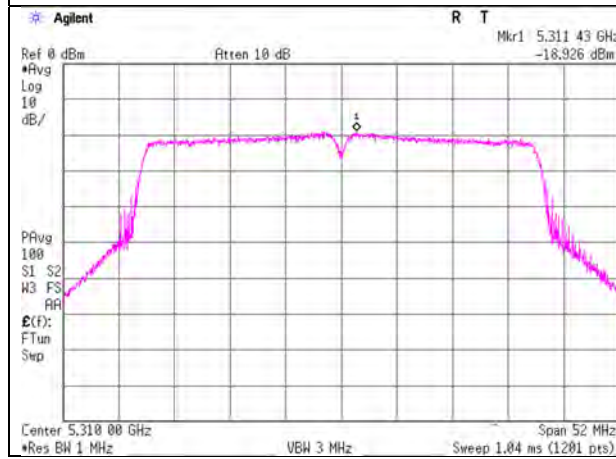


11n-40 (MIMO), Chain 2

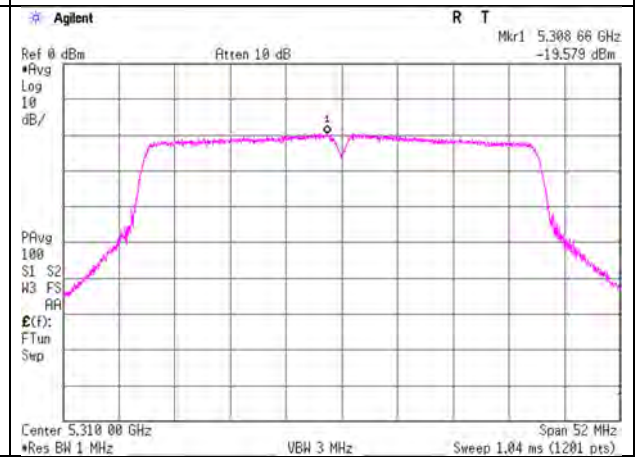
5270 MHz



5310 MHz

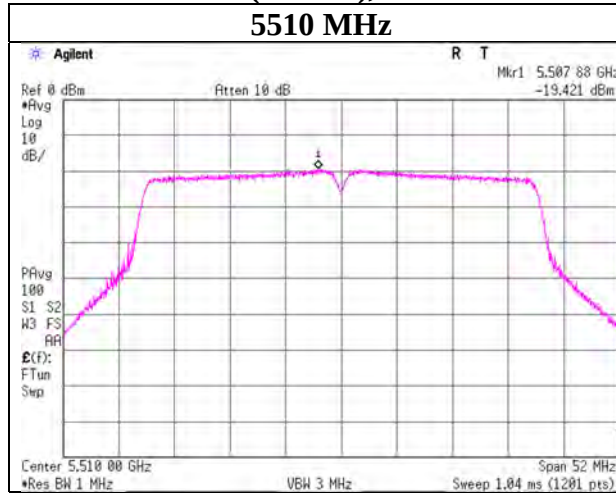


5310 MHz

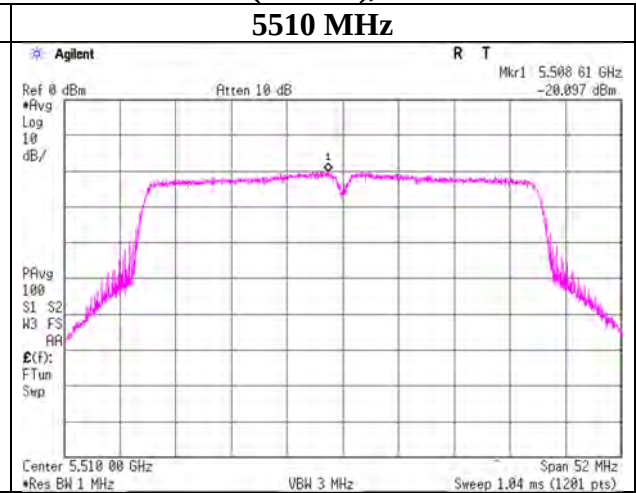


Maximum Power Spectral Density

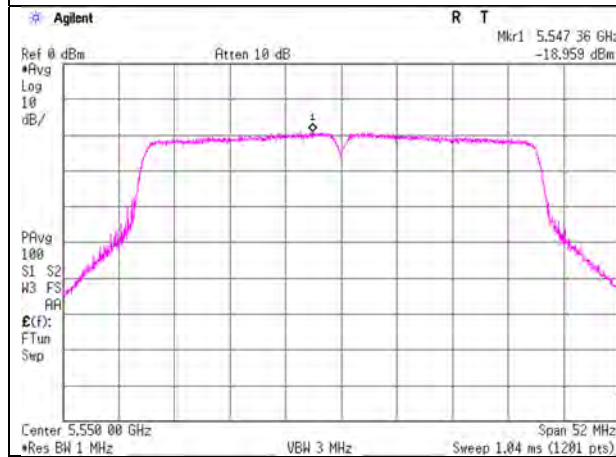
11n-40 (MIMO), Chain 1



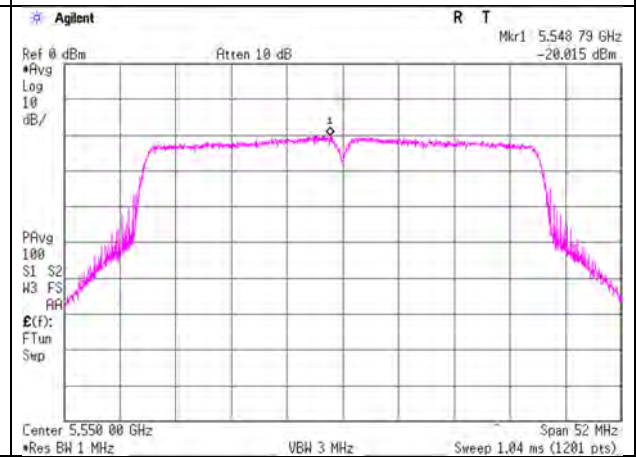
11n-40 (MIMO), Chain 2



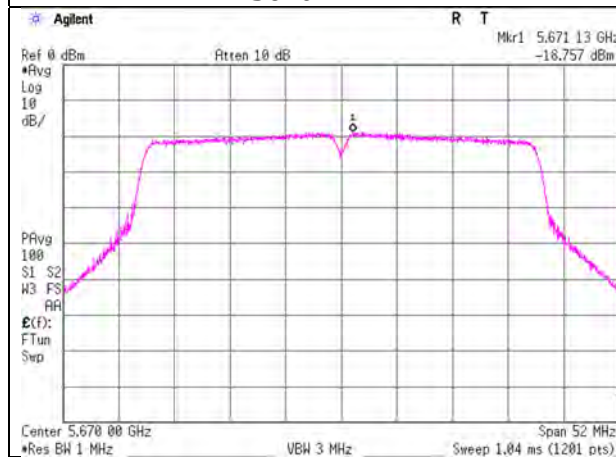
5550 MHz



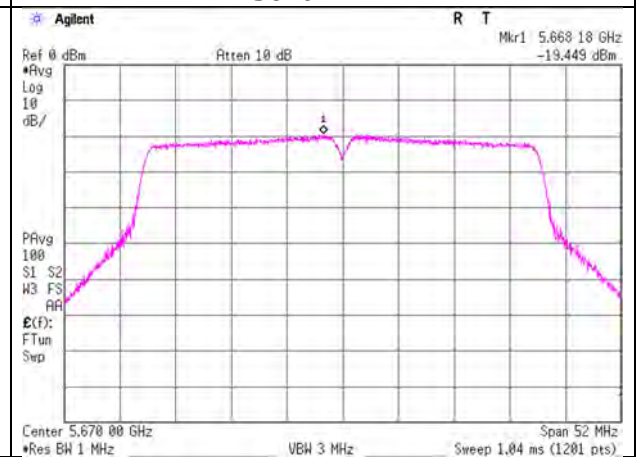
5550 MHz



5670 MHz

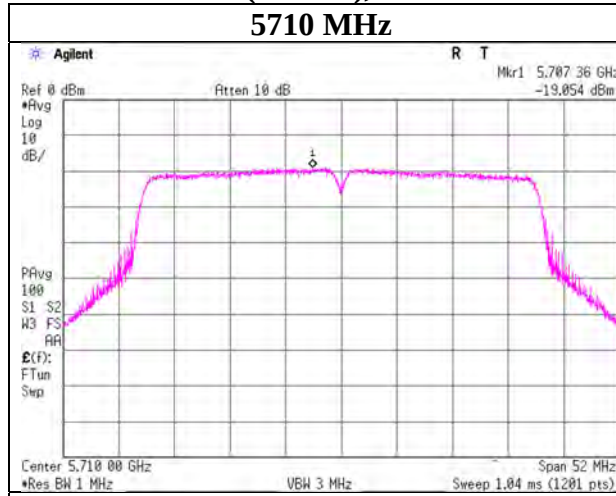


5670 MHz

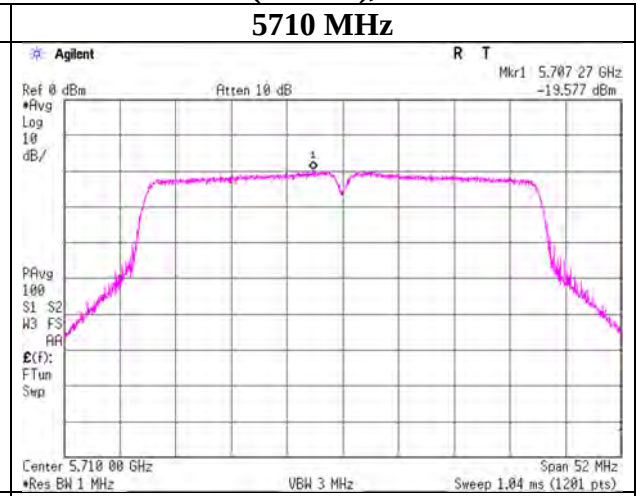


Maximum Power Spectral Density

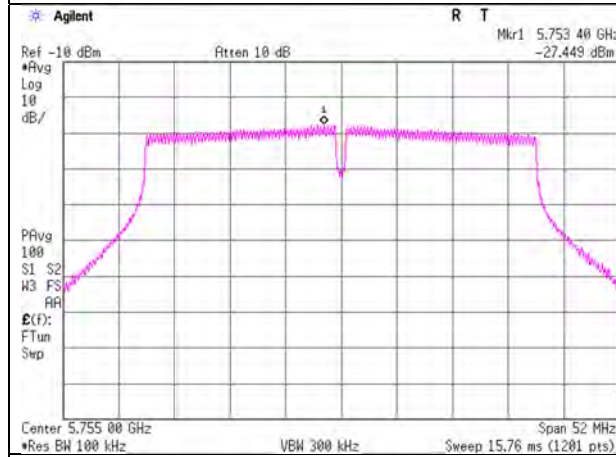
11n-40(MIMO), Chain 1



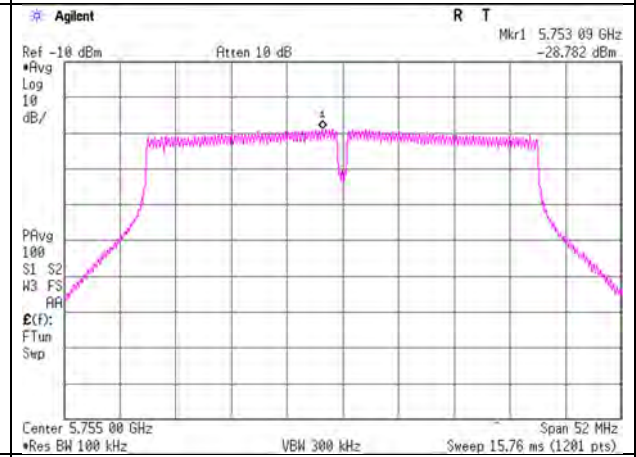
11n-40 (MIMO), Chain 2



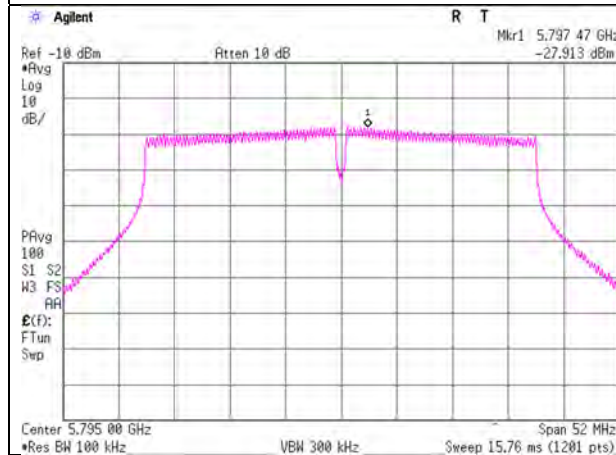
5755 MHz



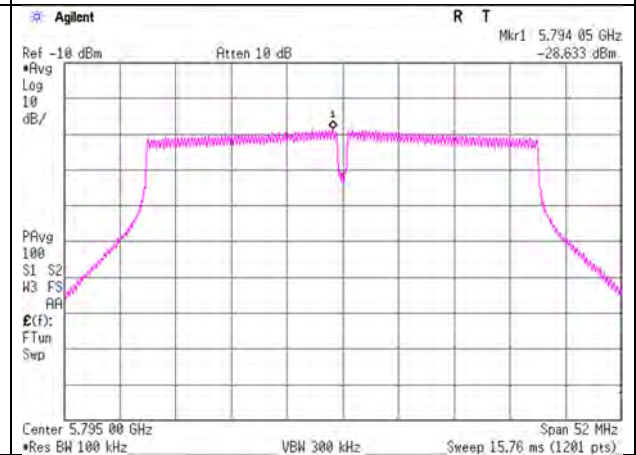
5755 MHz



5795 MHz

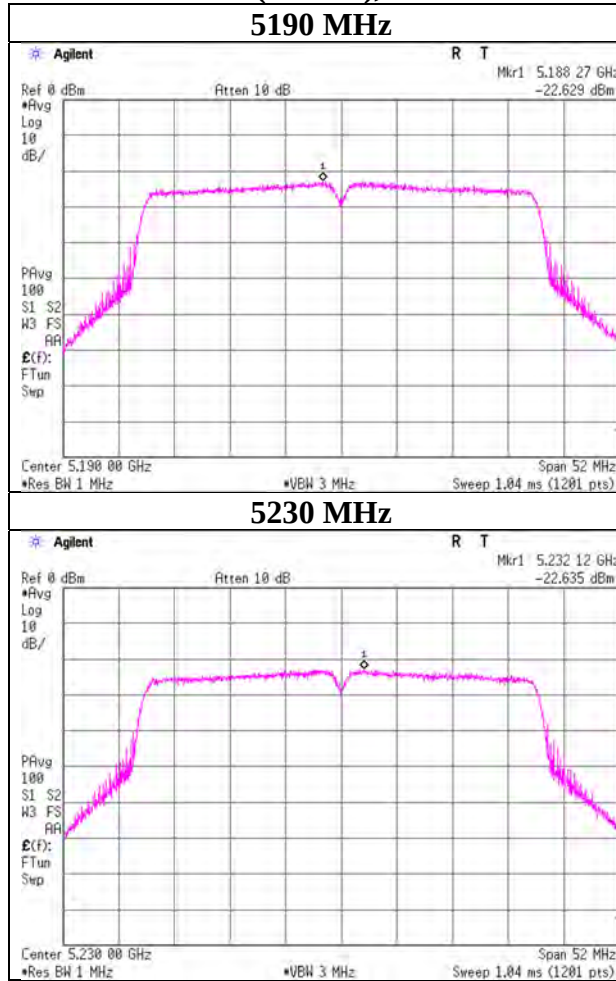


5795 MHz

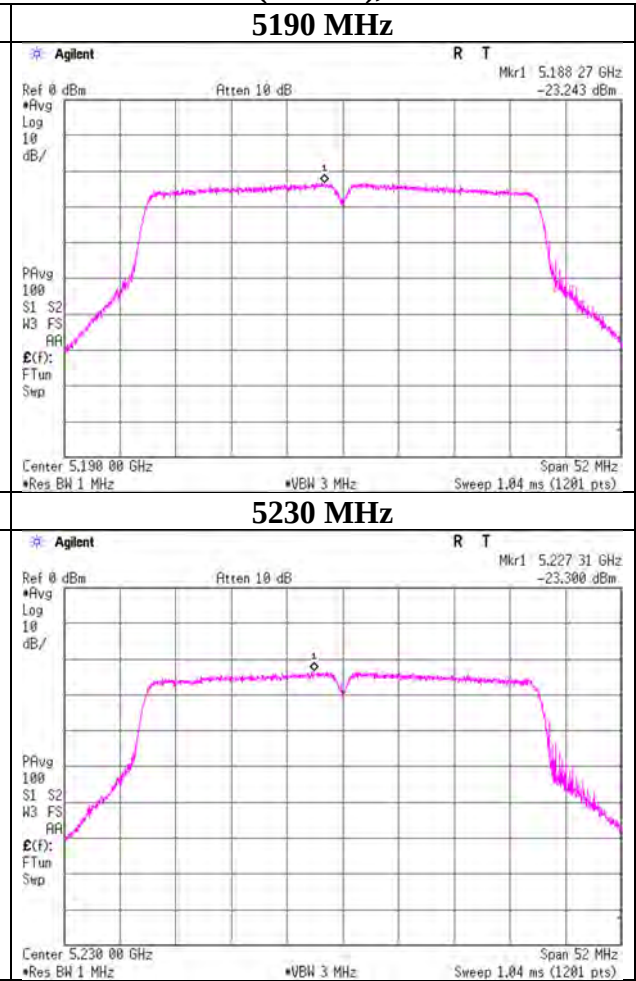


Maximum Power Spectral Density

11ac-40 (MIMO), Chain 1

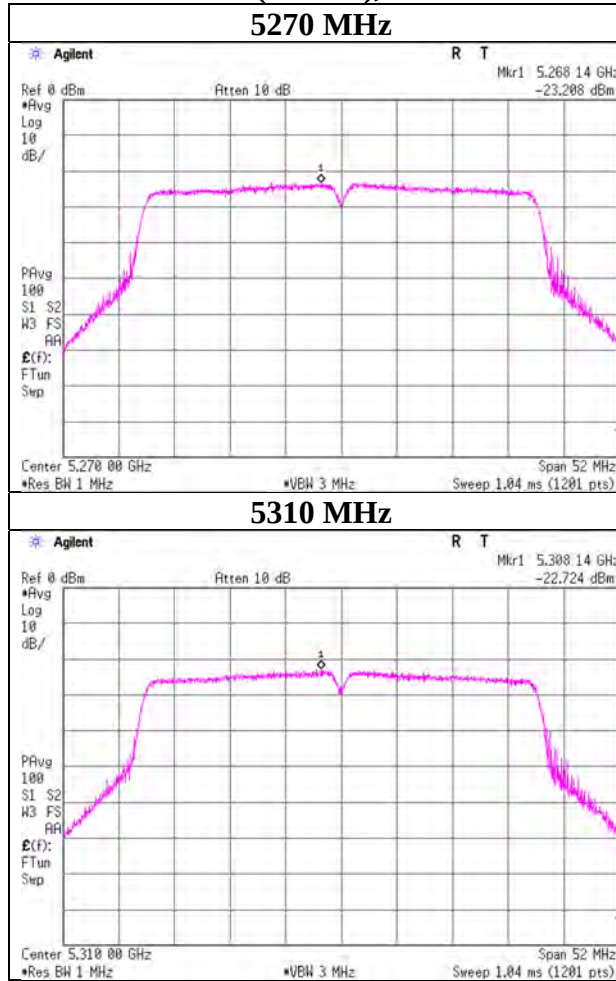


11ac-40 (MIMO), Chain 2

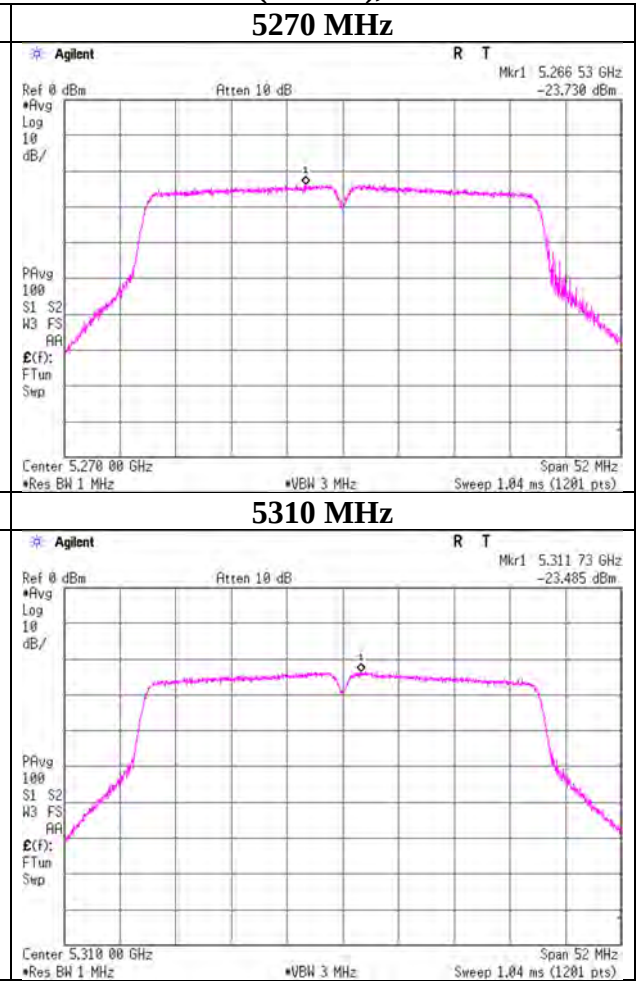


Maximum Power Spectral Density

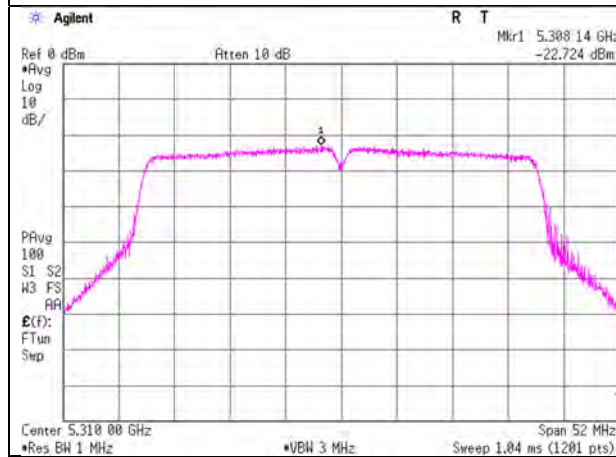
11ac-40 (MIMO), Chain 1



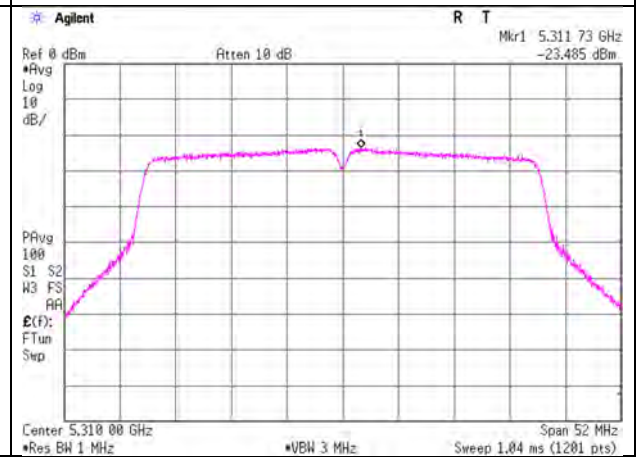
11ac-40 (MIMO), Chain 2



5310 MHz

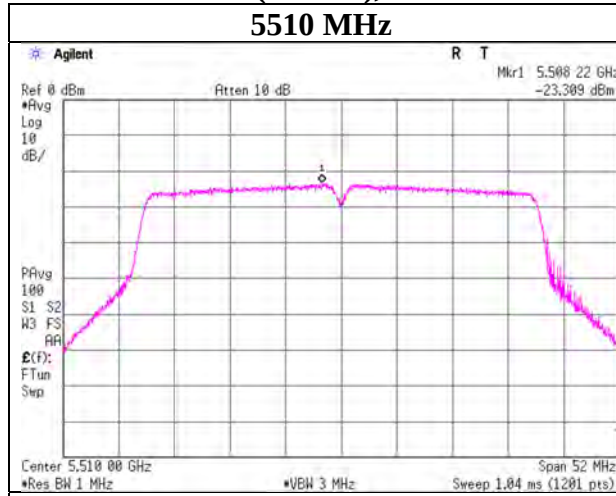


5310 MHz



Maximum Power Spectral Density

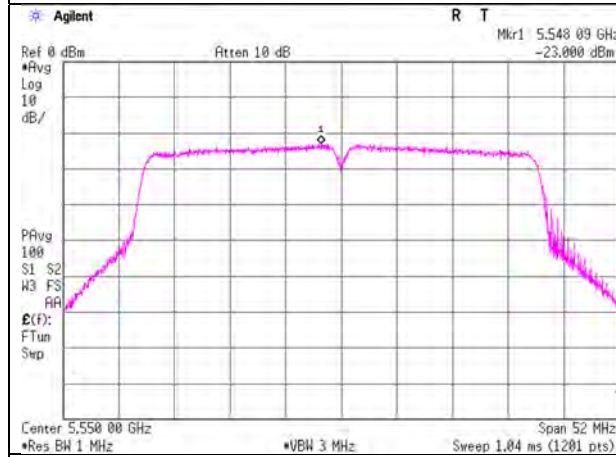
11ac-40 (MIMO), Chain 1



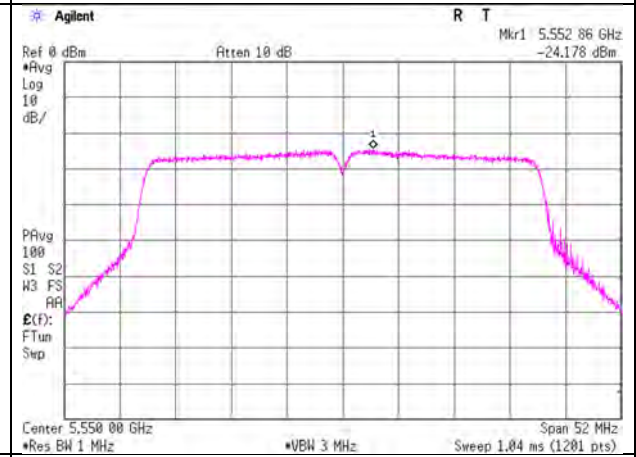
11ac-40 (MIMO), Chain 2



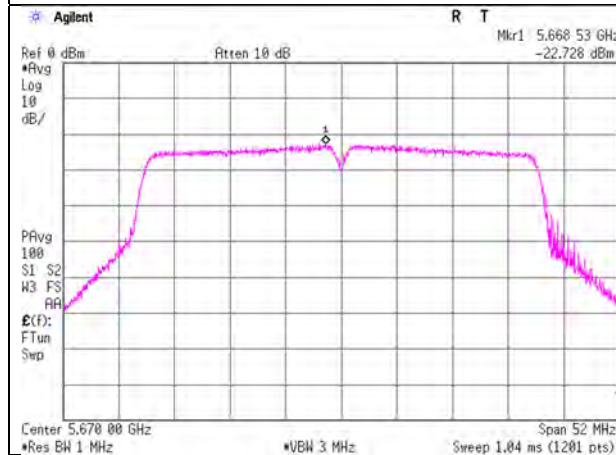
5550 MHz



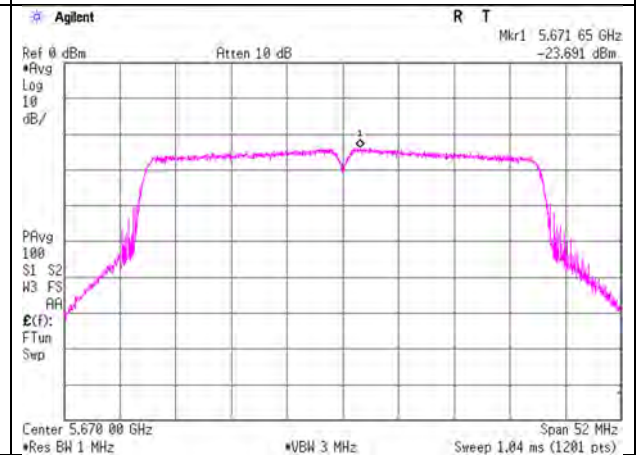
5550 MHz



5670 MHz



5670 MHz

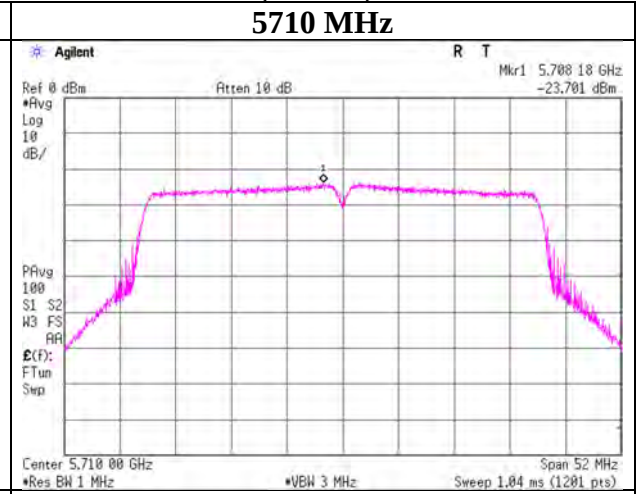


Maximum Power Spectral Density

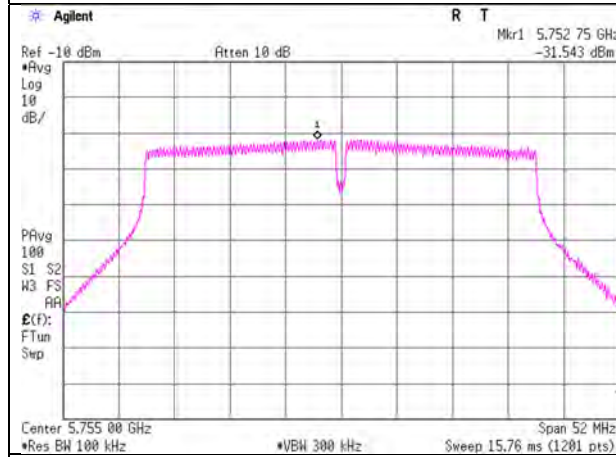
11ac-40(MIMO), Chain 1



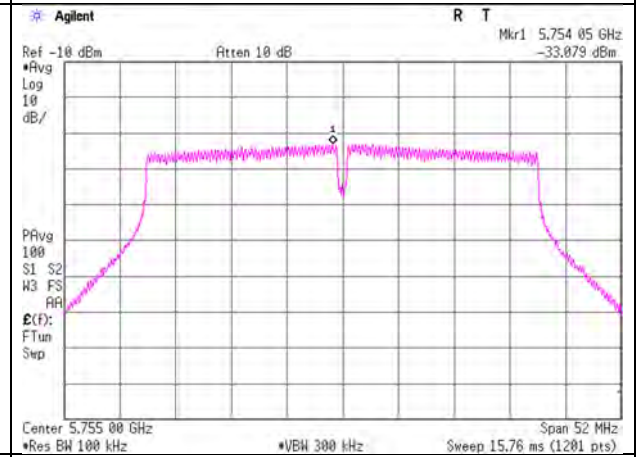
11ac-40 (MIMO), Chain 2



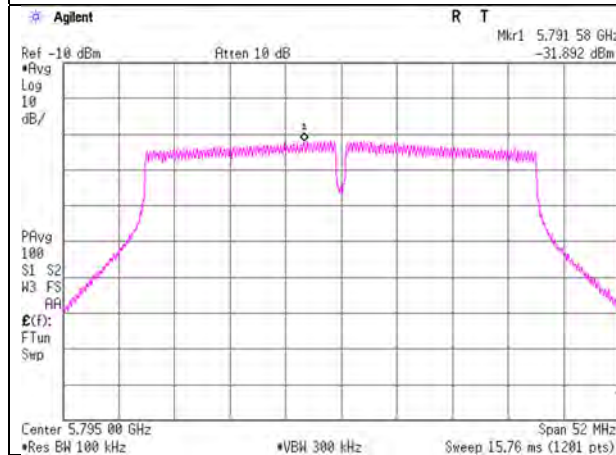
5755 MHz



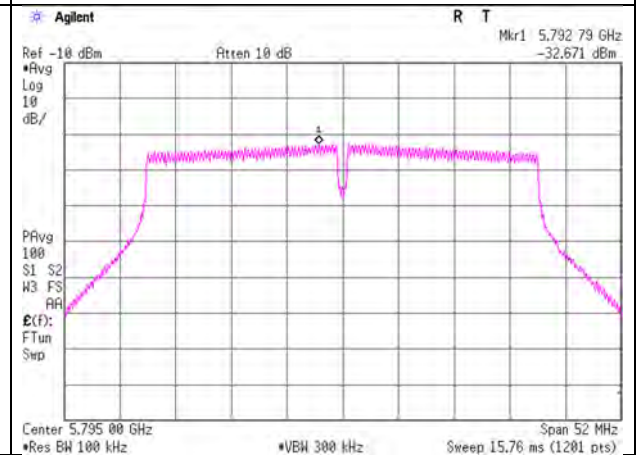
5755 MHz



5795 MHz

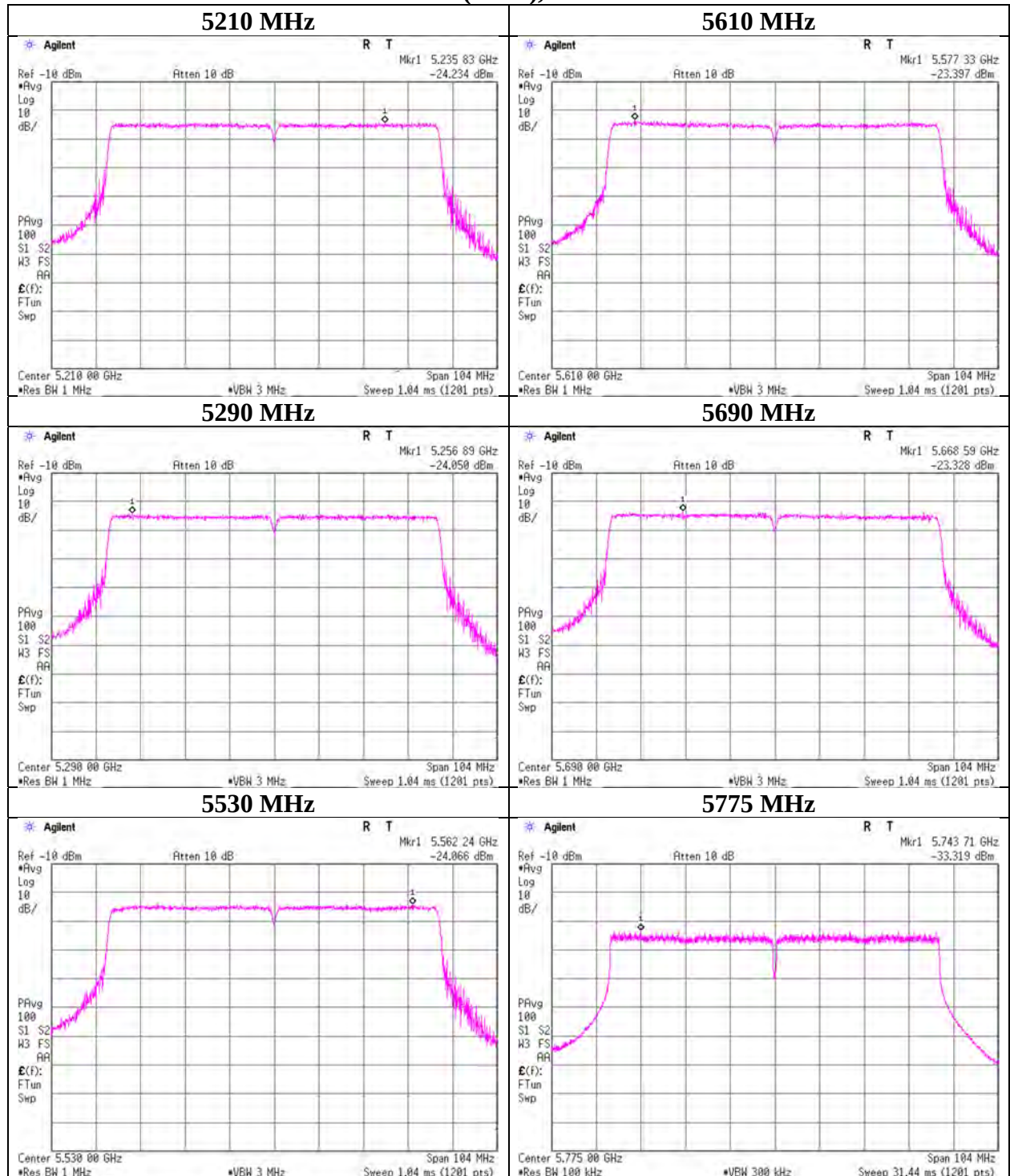


5795 MHz



Maximum Power Spectral Density

11ac-80(SISO), Chain 1



UL Japan, Inc.

Shonan EMC Lab.

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

Telephone : +81 463 50 6400

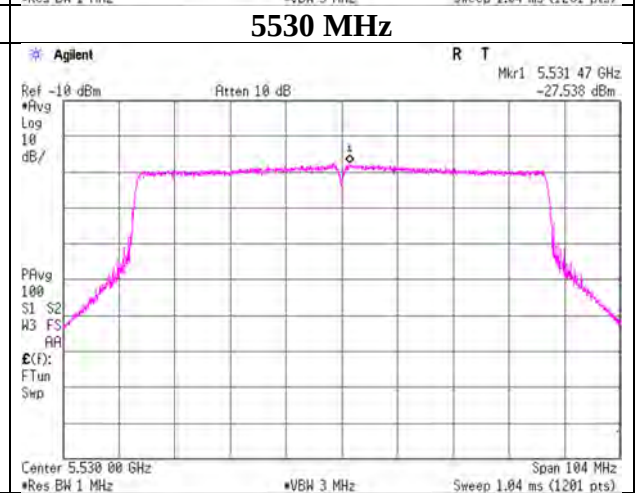
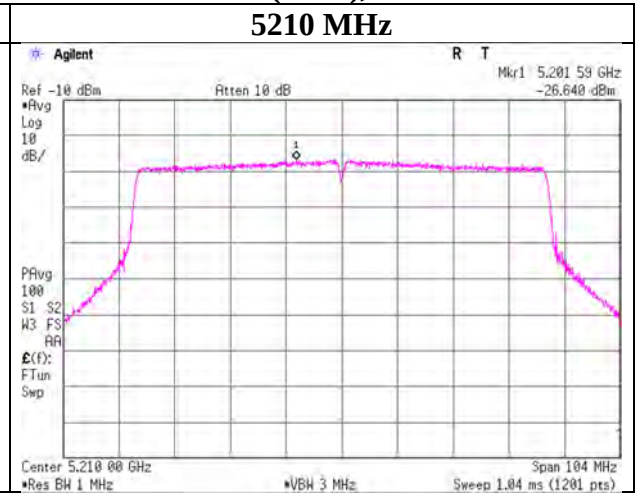
Facsimile : +81 463 50 6401

Maximum Power Spectral Density

11ac-80 (CDD), Chain 1



11ac-80 (CDD), Chain 2



Maximum Power Spectral Density

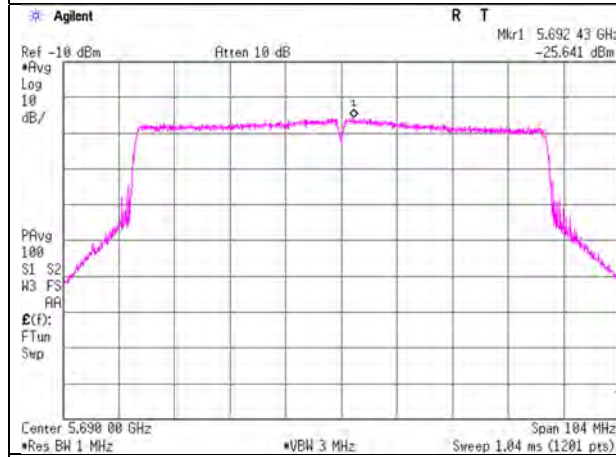
11ac-80 (CDD), Chain 1



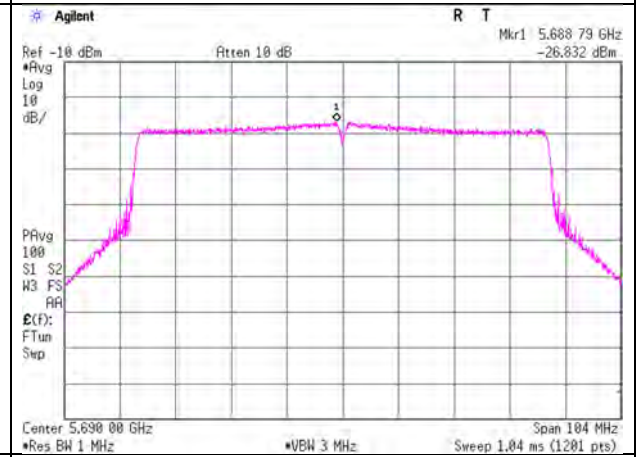
11ac-80 (CDD), Chain 2



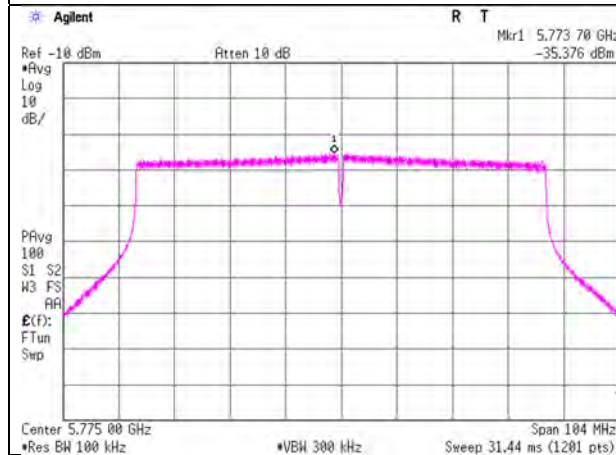
5690 MHz



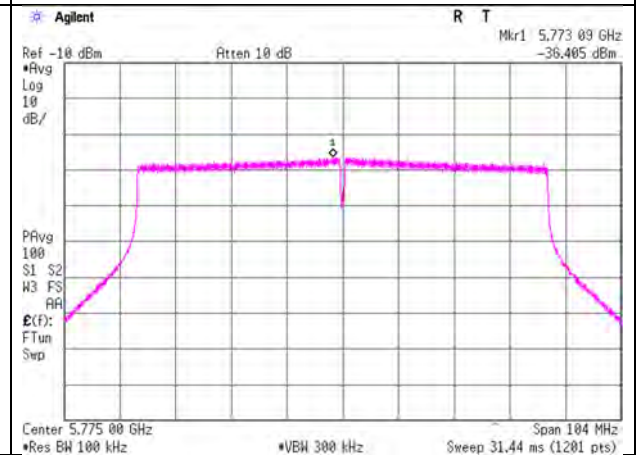
5690 MHz



5775 MHz

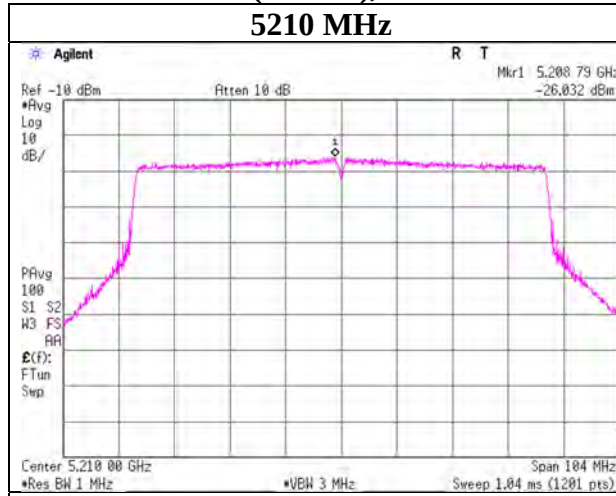


5775 MHz

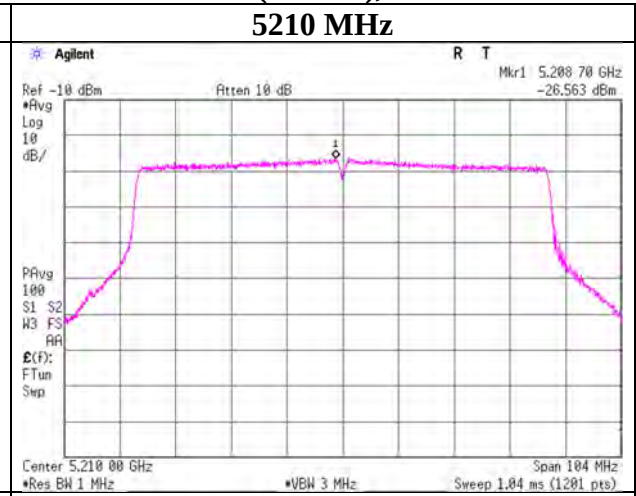


Maximum Power Spectral Density

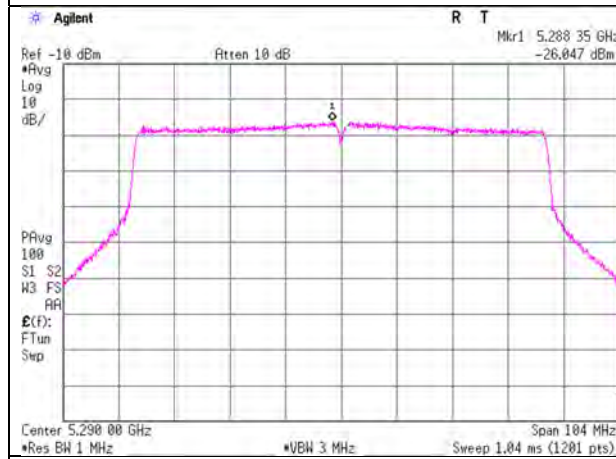
11ac-80(MIMO), Chain 1



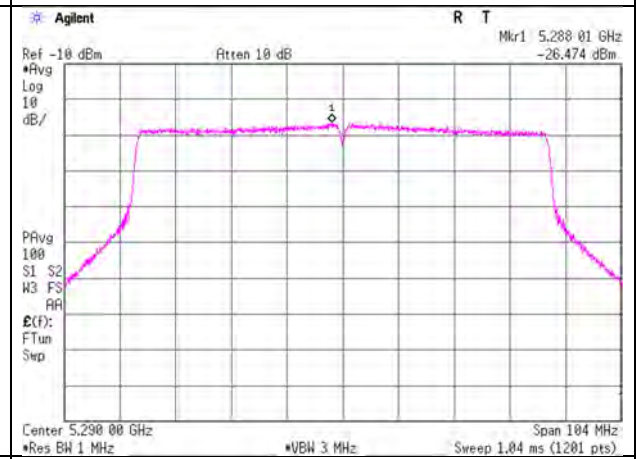
11ac-80 (MIMO), Chain 2



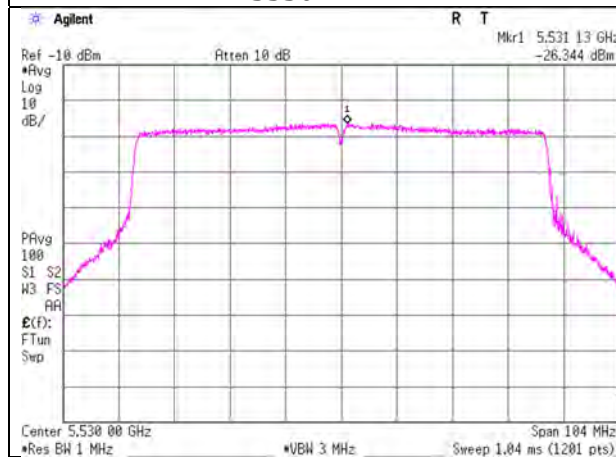
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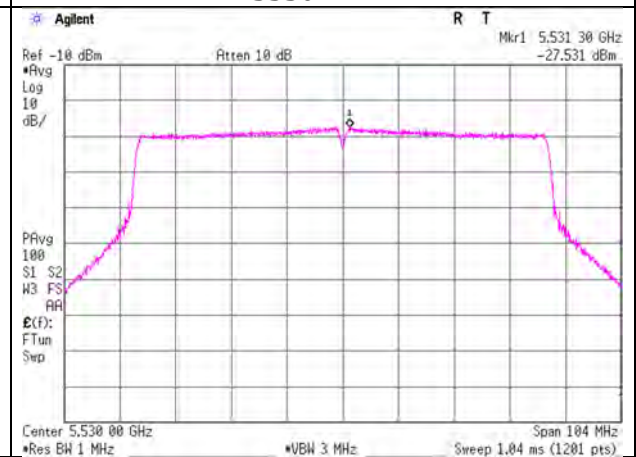
5290 MHz



5530 MHz



5530 MHz



Maximum Power Spectral Density

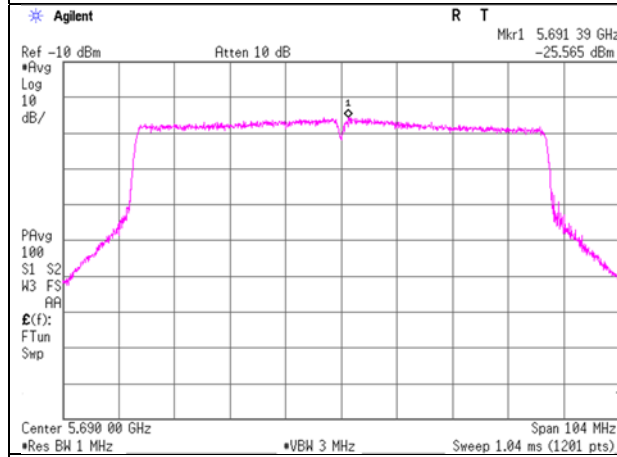
11ac-80(MIMO), Chain 1



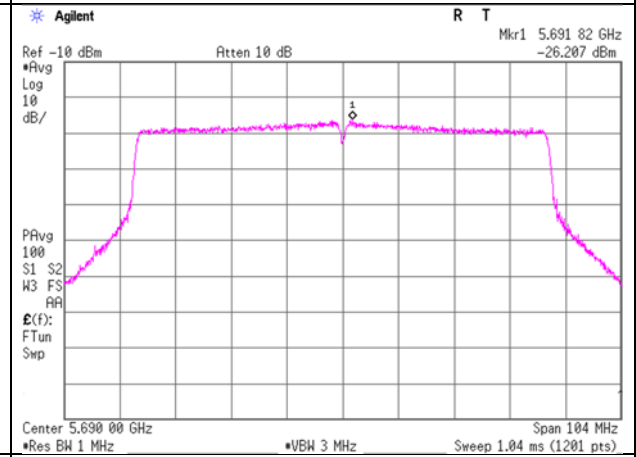
11ac-80 (MIMO), Chain 2



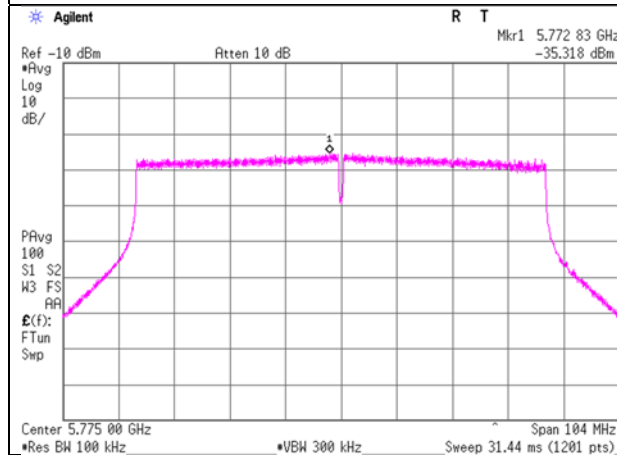
5690 MHz



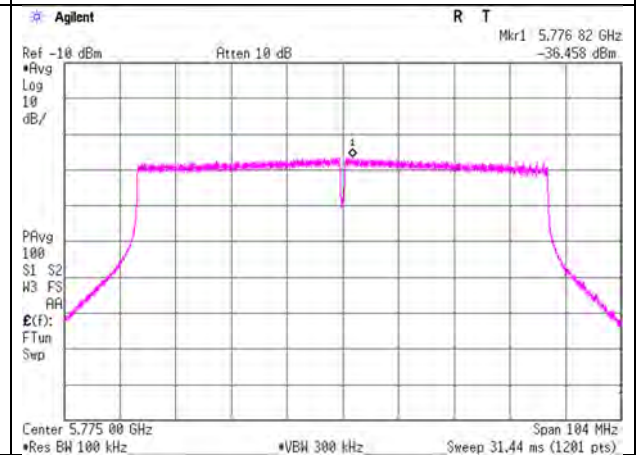
5690 MHz



5775 MHz

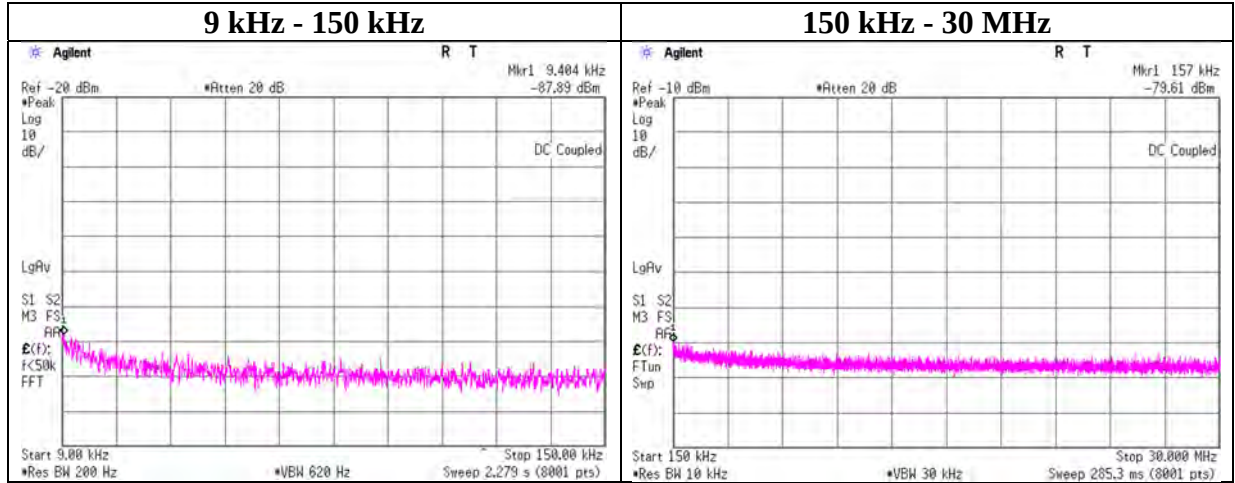


5775 MHz



Conducted Spurious Emission

Report No. 13977035S-C-R1
Test place Shonan EMC Lab. No.5 Shielded Room
Date November 11, 2021
Temperature / Humidity 24 deg. C / 30 % RH
Engineer Shiro Kobayashi
Mode Tx 11a (SISO) 5700 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
9.40	-87.89	0.01	9.54	2.71	1	-75.63	300	6.0	-14.4	48.1	62.5	-
157.00	-79.61	0.01	9.54	2.71	1	-67.35	300	6.0	-6.1	23.6	29.7	-

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

$$\text{EIRP [dBm]} = \text{Reading [dBm]} + \text{Cable loss [dB]} + \text{Attenuator Loss [dB]} + \text{Antenna gain [dBi]} + 10 * \log (N)$$

N: Number of output

APPENDIX 2: Test instruments

Test equipment

Test Item	Local ID	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
AT	KTS-08	145095	Digital Tester	SANWA	PC500	7019224	2021/04/26	12
AT	SAT10-09	145132	Attenuator	Weinschel Corp.	54A-10	W5692	2021/10/05	12 *1)
AT	SCC-G14	145175	Coaxial Cable	Suhner	SUCOFLEX 102	31600/2	2021/12/06	12
AT	SCC-H22	197396	Microwave cable	RS Pro	R-132G7210 100CO	-	2021/04/08	12
AT	SCC-H23	199603	Microwave cable	RS Pro	R-132G7210 100CO	-	2021/06/14	12
AT	SOS-27	191845	Humidity Indicator	CUSTOM. Inc	CTH-201	-	2021/08/02	12
AT	SOS-28	191846	Humidity Indicator	CUSTOM. Inc	CTH-201	-	2021/08/02	12
AT	SPM-07	146247	Power Meter	Keysight Technologies Inc	8990B	MY5100272	2021/05/25	12
AT	SPM-13	169910	Power Meter	Keysight Technologies Inc	8990B	MY51000448	2021/01/25	12 *1)
AT	SPSS-04	146310	Power sensor	Keysight Technologies Inc	N1923A	MY5326009	2021/05/25	12
AT	SPSS-06	169911	Power sensor	Keysight Technologies Inc	N1923A	MY57270004	2021/01/25	12 *1)
AT	SRENT-09	150461	Spectrum Analyzer	Keysight Technologies Inc	E4440A	MY46186392	2021/02/22	12 *1)
AT	SSA-02	145800	Spectrum Analyzer	Keysight Technologies Inc	E4448A	MY48250106	2021/04/13	12
AT	SSA-03	145801	Spectrum Analyzer	Keysight Technologies Inc	E4448A	MY48250152	2021/08/09	12
AT	STM-G6	146207	Terminator	JFW	50T-128	-	2021/11/09	12
AT	STM-G7	171614	Terminator	Weinschel - API Technologies Corp	M1459A	88995	2021/05/17	12
AT	STS-05	146212	Digital Hitester	HIOKI E.E. CORPORATION	3805-50	80997828	2021/09/14	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.

The expiration*1) This test equipment was used for the tests before the expiration date of the calibration. 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

UL Japan, Inc.

Shonan EMC Lab.

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

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