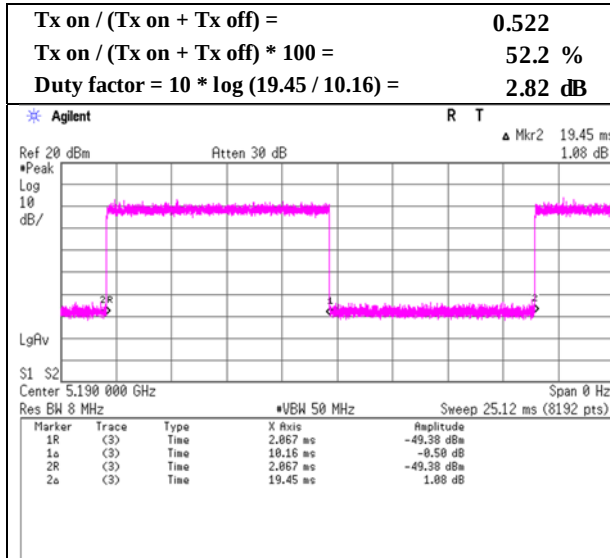


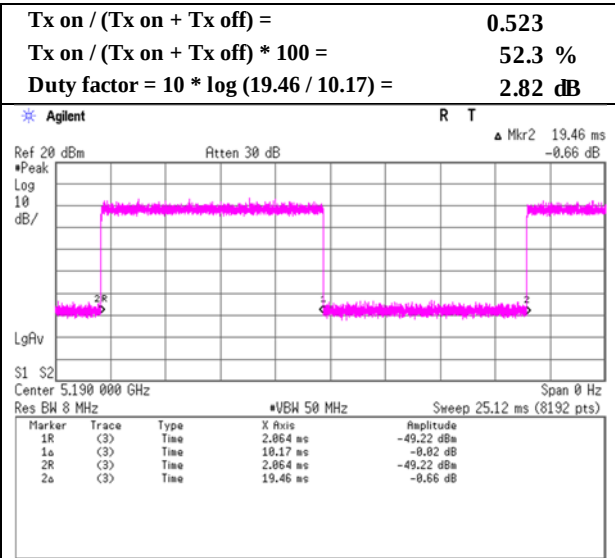
Burst rate confirmation

Test place Ise EMC Lab. No.8 Measurement Room
Date October 25, 2022
Temperature / Humidity 23 deg. C / 40 % RH
Engineer Sayaka Hara
Mode Tx

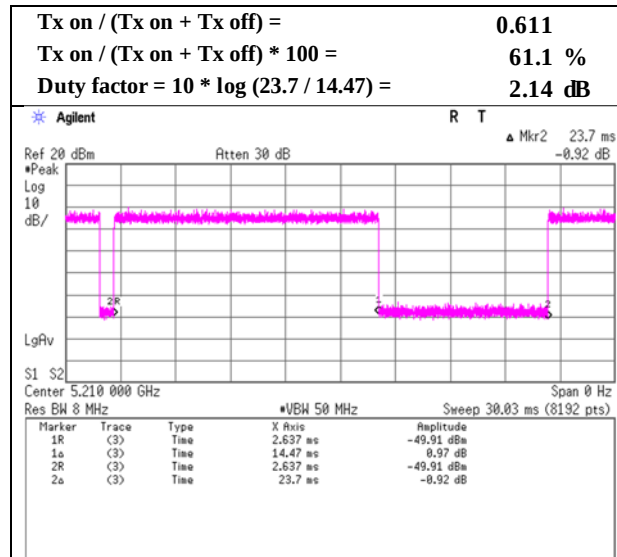
11n-40 MCS 0



11ac-40 MCS 0



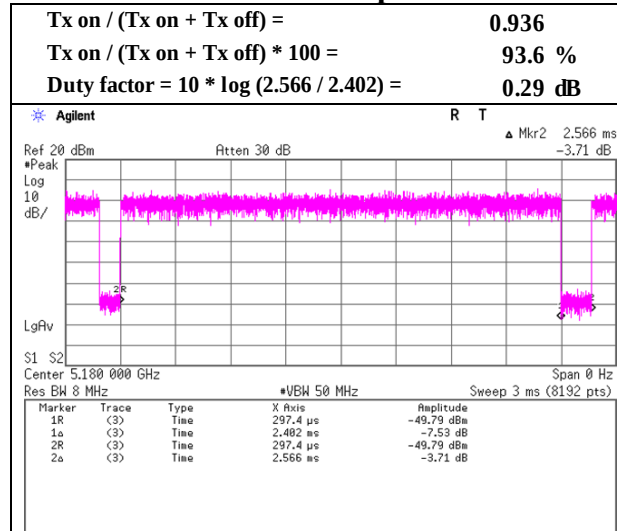
11ac-80 MCS 0



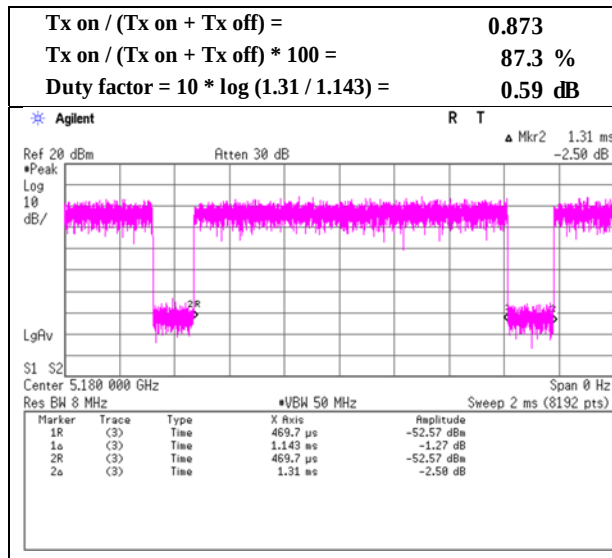
Burst rate confirmation

Test place	Ise EMC Lab. No.8 Measurement Room	
Date	October 25, 2022	November 18, 2022
Temperature / Humidity	23 deg. C / 40 % RH	21 deg. C / 44 % RH
Engineer	Sayaka Hara	Takafumi Noguchi
Mode	Tx	

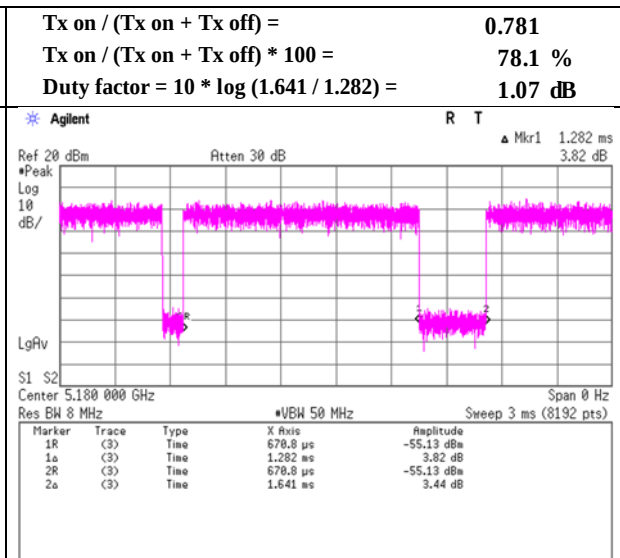
11a 54 Mbps



11n-20 MCS 14



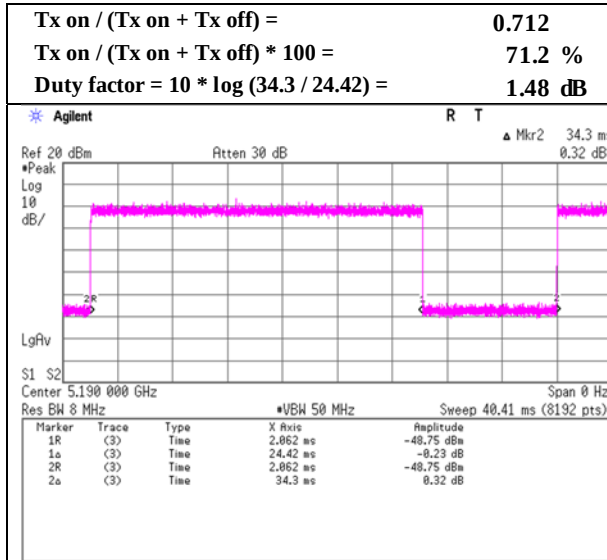
11ac-20 MCS 15



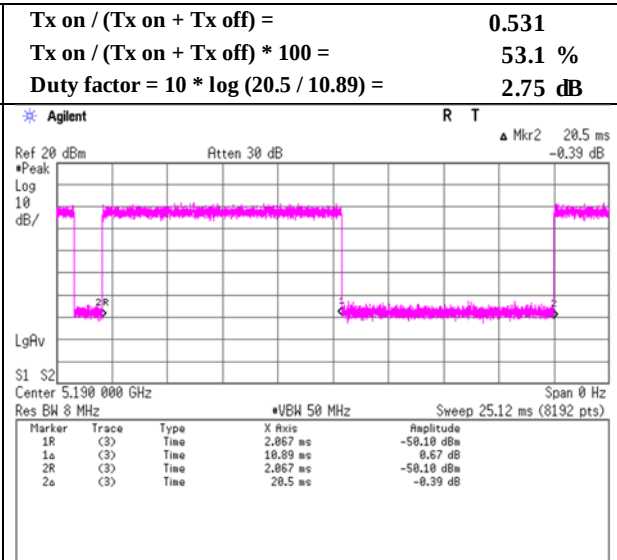
Burst rate confirmation

Test place	Ise EMC Lab. No.8 Measurement Room
Date	October 25, 2022 November 2, 2022
Temperature / Humidity	23 deg. C / 40 % RH 20 deg. C / 43 % RH
Engineer	Sayaka Hara Yuichiro Yamazaki
Mode	Tx

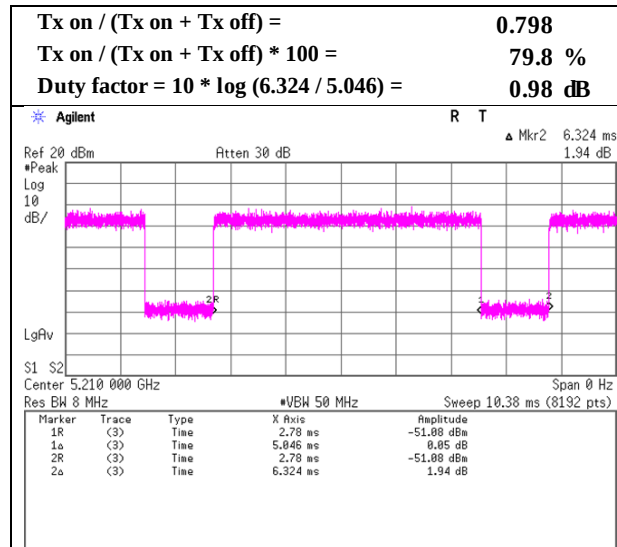
11n-40 MCS 11



11ac-40 MCS 16



11ac-80 MCS 16



Maximum Power Spectral Density

Test place Ise EMC Lab. No.8 Measurement Room
Date November 18, 2022
Temperature / Humidity 21 deg. C / 44 % RH
Engineer Takafumi Noguchi
Mode Tx 11a

Chain 0+1

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna			Result	Limit	Margin	Antenna			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]
5180	0.69	0.70	1.40	1.45	11.00	9.55	2.14	2.18	4.32	6.36	17.00	10.64
5220	0.80	0.70	1.50	1.77	11.00	9.23	2.48	2.18	4.66	6.68	17.00	10.32
5240	0.74	0.68	1.42	1.53	11.00	9.47	2.28	2.12	4.40	6.44	17.00	10.56
5260	0.75	0.75	1.49	1.74	11.00	9.26	2.31	2.31	4.62	6.65	17.00	10.35
5300	0.74	0.75	1.49	1.74	11.00	9.26	2.30	2.32	4.63	6.65	17.00	10.35
5320	0.79	0.73	1.53	1.84	11.00	9.16	2.46	2.27	4.73	6.75	17.00	10.25
5500	0.76	0.78	1.54	1.89	11.00	9.11	2.36	2.43	4.78	6.80	17.00	10.20
5580	0.67	0.78	1.45	1.62	11.00	9.38	2.08	2.41	4.49	6.53	17.00	10.47
5700	0.48	0.78	1.26	1.02	11.00	9.98	1.49	2.42	3.91	5.93	17.00	11.07
5720	0.47	0.93	1.40	1.45	11.00	9.55	1.45	2.87	4.33	6.36	17.00	10.64
5745	0.26	0.44	0.69	-1.59	30.00	31.59	0.80	1.35	2.15	3.32	36.00	32.68
5785	0.20	0.41	0.61	-2.14	30.00	32.14	0.61	1.28	1.89	2.77	36.00	33.23
5825	0.21	0.45	0.65	-1.86	30.00	31.86	0.64	1.38	2.02	3.05	36.00	32.95

Chain 0										Chain 1					
Tested Frequency [MHz]	Duty Factor [dB]	RBW Correction Factor [dB]	PSD	Cable	Atten.	Directional	PSD Result		PSD Reading [dBm/MHz]	Cable	Atten.	Directional	PSD Result		PSD Reading [dBm/MHz]
			Reading [dBm/MHz]	Loss [dB]	Loss [dB]	Gain [dBi]	Cond.	e.i.r.p.		Loss [dB]	Loss [dB]	Gain [dBi]	Cond.	e.i.r.p.	
5180	0.29	0.00	-13.47	1.97	9.60	4.91	-1.61	3.30	-13.35	1.94	9.60	4.91	-1.52	3.39	-13.39
5220	0.29	0.00	-12.82	1.97	9.60	4.91	-0.96	3.95	-13.36	1.94	9.60	4.91	-1.53	3.38	-13.38
5240	0.29	0.00	-13.18	1.97	9.60	4.91	-1.32	3.59	-13.48	1.94	9.60	4.91	-1.65	3.26	-13.48
5260	0.29	0.00	-13.13	1.97	9.60	4.91	-1.27	3.64	-13.10	1.94	9.60	4.91	-1.27	3.64	-13.10
5300	0.29	0.00	-13.15	1.97	9.60	4.91	-1.29	3.62	-13.08	1.94	9.60	4.91	-1.25	3.66	-13.08
5320	0.29	0.00	-12.87	1.97	9.60	4.91	-1.01	3.90	-13.17	1.94	9.60	4.91	-1.34	3.57	-13.17
5500	0.29	0.00	-13.13	2.05	9.60	4.91	-1.19	3.72	-12.97	2.02	9.60	4.91	-1.06	3.85	-12.97
5580	0.29	0.00	-13.67	2.05	9.60	4.91	-1.73	3.18	-13.00	2.02	9.60	4.91	-1.09	3.82	-13.00
5700	0.29	0.00	-15.11	2.05	9.60	4.91	-3.17	1.74	-12.98	2.02	9.60	4.91	-1.07	3.84	-12.98
5720	0.29	0.00	-15.23	2.05	9.60	4.91	-3.29	1.62	-12.23	2.02	9.60	4.91	-0.32	4.59	-12.23
5745	0.29	0.27	-18.11	2.05	9.60	4.91	-5.90	-0.99	-15.79	2.02	9.60	4.91	-3.61	1.30	-15.79
5785	0.29	0.27	-19.25	2.05	9.60	4.91	-7.04	-2.13	-16.01	2.02	9.60	4.91	-3.83	1.08	-16.01
5825	0.29	0.27	-19.08	2.05	9.60	4.91	-6.87	-1.96	-15.69	2.02	9.60	4.91	-3.51	1.40	-15.69

Sample Calculation:

PSD: Power Spectral Density

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

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

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

Directional Gain = G ANT + Array Gain

G ANT = Set equal to the gain of the antenna having the highest gain

Array Gain = $10 \log(N \text{ ANT} / N \text{ SS})$ dB.

N ANT = number of transmit antennas = 2

N SS = number of spatial streams = 1

Maximum Power Spectral Density

Test place Ise EMC Lab. No.6 Measurement Room
Date November 1, 2022
Temperature / Humidity 23 deg. C / 41 % RH
Engineer Hiroki Numata
Mode Tx 11n-20

Chain 0+1

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna			Result	Limit	Margin	Antenna			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]
5180	0.78	0.67	1.45	1.63	11.00	9.37	2.43	2.08	4.50	6.54	17.00	10.46
5220	0.83	0.56	1.38	1.41	11.00	9.59	2.57	1.72	4.29	6.32	17.00	10.68
5240	0.82	0.58	1.39	1.44	11.00	9.56	2.54	1.78	4.32	6.35	17.00	10.65
5260	0.66	0.54	1.20	0.78	11.00	10.22	2.04	1.67	3.71	5.69	17.00	11.31
5300	0.66	0.56	1.22	0.86	11.00	10.14	2.04	1.74	3.78	5.77	17.00	11.23
5320	0.63	0.53	1.16	0.65	11.00	10.35	1.95	1.64	3.59	5.56	17.00	11.44
5500	0.64	0.59	1.23	0.90	11.00	10.10	1.97	1.84	3.81	5.81	17.00	11.19
5580	0.57	0.58	1.15	0.62	11.00	10.38	1.77	1.80	3.57	5.53	17.00	11.47
5700	0.47	0.61	1.08	0.35	11.00	10.65	1.45	1.90	3.35	5.26	17.00	11.74
5720	0.69	0.63	1.32	1.22	11.00	9.78	2.15	1.96	4.10	6.13	17.00	10.87
5745	0.36	0.33	0.69	-1.64	30.00	31.64	1.11	1.02	2.12	3.27	36.00	32.73
5785	0.32	0.34	0.66	-1.79	30.00	31.79	1.00	1.05	2.05	3.12	36.00	32.88
5825	0.34	0.35	0.68	-1.64	30.00	31.64	1.04	1.08	2.12	3.27	36.00	32.73

Chain 0							Chain 1							
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Cond.	Result e.i.r.p.	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Cond.	Result e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5180	0.59	0.00	-13.22	1.97	9.60	4.91	-1.06	3.85	-13.86	1.94	9.60	4.91	-1.73	3.18
5220	0.59	0.00	-12.97	1.97	9.60	4.91	-0.81	4.10	-14.69	1.94	9.60	4.91	-2.56	2.36
5240	0.59	0.00	-13.03	1.97	9.60	4.91	-0.87	4.04	-14.53	1.94	9.60	4.91	-2.40	2.51
5260	0.59	0.00	-13.98	1.97	9.60	4.91	-1.82	3.09	-14.82	1.94	9.60	4.91	-2.69	2.23
5300	0.59	0.00	-13.97	1.97	9.60	4.91	-1.81	3.10	-14.64	1.94	9.60	4.91	-2.51	2.40
5320	0.59	0.00	-14.16	1.97	9.60	4.91	-2.00	2.91	-14.89	1.94	9.60	4.91	-2.76	2.15
5500	0.59	0.00	-14.20	2.05	9.60	4.91	-1.96	2.95	-14.48	2.02	9.60	4.91	-2.27	2.64
5580	0.59	0.00	-14.67	2.05	9.60	4.91	-2.43	2.48	-14.57	2.02	9.60	4.91	-2.36	2.55
5700	0.59	0.00	-15.53	2.05	9.60	4.91	-3.29	1.62	-14.33	2.02	9.60	4.91	-2.12	2.79
5720	0.59	0.00	-13.83	2.05	9.60	4.91	-1.59	3.32	-14.20	2.02	9.60	4.91	-1.99	2.92
5745	0.59	0.27	-16.99	2.05	9.60	4.91	-4.48	0.43	-17.30	2.02	9.60	4.91	-4.82	0.09
5785	0.59	0.27	-17.43	2.05	9.60	4.91	-4.92	-0.01	-17.16	2.02	9.60	4.91	-4.68	0.23
5825	0.59	0.27	-17.25	2.05	9.60	4.91	-4.74	0.17	-17.05	2.02	9.60	4.91	-4.57	0.34

Sample Calculation:

PSD: Power Spectral Density

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

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

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

Directional Gain = G ANT + Array Gain

G ANT = Set equal to the gain of the antenna having the highest gain

Array Gain = $10 \log(N \text{ ANT} / N \text{ SS})$ dB.

N ANT = number of transmit antennas = 2

N SS = number of spatial streams = 1

Maximum Power Spectral Density

Test place Ise EMC Lab. No.6 Measurement Room
Date November 1, 2022
Temperature / Humidity 23 deg. C / 41 % RH
Engineer Hiroki Numata
Mode Tx 11ac-20

Chain 0+1

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna			Result	Limit	Margin	Antenna			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]
5180	0.81	0.60	1.41	1.49	11.00	9.51	2.50	1.87	4.37	6.40	17.00	10.60
5220	0.87	0.59	1.46	1.65	11.00	9.35	2.70	1.84	4.53	6.56	17.00	10.44
5240	0.89	0.58	1.47	1.67	11.00	9.33	2.76	1.79	4.55	6.58	17.00	10.42
5260	0.99	0.57	1.56	1.92	11.00	9.08	3.05	1.77	4.82	6.83	17.00	10.17
5300	0.86	0.60	1.46	1.64	11.00	9.36	2.65	1.86	4.51	6.55	17.00	10.45
5320	0.95	0.61	1.55	1.92	11.00	9.08	2.93	1.88	4.81	6.83	17.00	10.17
5500	0.81	0.58	1.39	1.43	11.00	9.57	2.51	1.79	4.30	6.34	17.00	10.66
5580	0.81	0.63	1.43	1.57	11.00	9.43	2.51	1.94	4.44	6.48	17.00	10.52
5700	0.78	0.68	1.46	1.64	11.00	9.36	2.42	2.09	4.52	6.55	17.00	10.45
5720	0.76	0.69	1.45	1.63	11.00	9.37	2.35	2.15	4.50	6.54	17.00	10.46
5745	0.43	0.37	0.80	-0.95	30.00	30.95	1.33	1.16	2.49	3.96	36.00	32.04
5785	0.38	0.41	0.78	-1.06	30.00	31.06	1.17	1.26	2.43	3.85	36.00	32.15
5825	0.40	0.41	0.81	-0.92	30.00	30.92	1.24	1.27	2.51	3.99	36.00	32.01

Chain 0							Chain 1							
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Cond.	Result e.i.r.p.	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Cond.	Result e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5180	1.07	0.00	-13.57	1.97	9.60	4.91	-0.93	3.98	-14.81	1.94	9.60	4.91	-2.20	2.71
5220	1.07	0.00	-13.24	1.97	9.60	4.91	-0.60	4.31	-14.88	1.94	9.60	4.91	-2.27	2.64
5240	1.07	0.00	-13.14	1.97	9.60	4.91	-0.50	4.41	-15.00	1.94	9.60	4.91	-2.39	2.52
5260	1.07	0.00	-12.70	1.97	9.60	4.91	-0.06	4.85	-15.04	1.94	9.60	4.91	-2.43	2.48
5300	1.07	0.00	-13.31	1.97	9.60	4.91	-0.67	4.24	-14.82	1.94	9.60	4.91	-2.21	2.70
5320	1.07	0.00	-12.88	1.97	9.60	4.91	-0.24	4.68	-14.78	1.94	9.60	4.91	-2.17	2.74
5500	1.07	0.00	-13.63	2.05	9.60	4.91	-0.91	4.00	-15.08	2.02	9.60	4.91	-2.39	2.53
5580	1.07	0.00	-13.64	2.05	9.60	4.91	-0.92	3.99	-14.73	2.02	9.60	4.91	-2.04	2.87
5700	1.07	0.00	-13.79	2.05	9.60	4.91	-1.07	3.84	-14.39	2.02	9.60	4.91	-1.70	3.21
5720	1.07	0.00	-13.91	2.05	9.60	4.91	-1.19	3.72	-14.28	2.02	9.60	4.91	-1.59	3.32
5745	1.07	0.27	-16.67	2.05	9.60	4.91	-3.68	1.23	-17.22	2.02	9.60	4.91	-4.26	0.65
5785	1.07	0.27	-17.21	2.05	9.60	4.91	-4.22	0.69	-16.88	2.02	9.60	4.91	-3.92	0.99
5825	1.07	0.27	-16.98	2.05	9.60	4.91	-3.99	0.92	-16.83	2.02	9.60	4.91	-3.87	1.04

Sample Calculation:

PSD: Power Spectral Density

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

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

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

Directional Gain = G ANT + Array Gain

G ANT = Set equal to the gain of the antenna having the highest gain

Array Gain = $10 \log(N \text{ ANT} / N \text{ SS})$ dB.

N ANT = number of transmit antennas = 2

N SS = number of spatial streams = 1

Maximum Power Spectral Density

Test place Ise EMC Lab. No.6 Measurement Room
Date November 1, 2022
Temperature / Humidity 23 deg. C / 41 % RH
Engineer Hiroki Numata
Mode Tx 11n-40

Chain 0+1

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna			Result	Limit	Margin	Antenna			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	0.36	0.34	0.70	-1.56	11.00	12.56	1.11	1.05	2.16	3.35	17.00	13.65
5230	0.41	0.33	0.74	-1.32	11.00	12.32	1.27	1.01	2.28	3.59	17.00	13.41
5270	0.44	0.29	0.73	-1.34	11.00	12.34	1.37	0.90	2.27	3.57	17.00	13.43
5310	0.41	0.33	0.74	-1.31	11.00	12.31	1.28	1.01	2.29	3.60	17.00	13.40
5510	0.46	0.31	0.77	-1.13	11.00	12.13	1.43	0.96	2.39	3.78	17.00	13.22
5550	0.41	0.34	0.74	-1.29	11.00	12.29	1.26	1.04	2.30	3.62	17.00	13.38
5670	0.36	0.37	0.73	-1.37	11.00	12.37	1.13	1.13	2.26	3.54	17.00	13.46
5710	0.38	0.37	0.75	-1.26	11.00	12.26	1.18	1.14	2.32	3.65	17.00	13.35
5755	0.18	0.19	0.37	-4.26	30.00	34.26	0.56	0.60	1.16	0.65	36.00	35.35
5795	0.19	0.21	0.40	-3.95	30.00	33.95	0.58	0.66	1.25	0.96	36.00	35.04

Chain 0							Chain 1							
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Cond.	PSD Result e.i.r.p.	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Cond.	PSD Result e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5190	1.48	0.00	-17.50	1.97	9.60	4.91	-4.45	0.46	-17.71	1.94	9.60	4.91	-4.69	0.22
5230	1.48	0.00	-16.91	1.97	9.60	4.91	-3.86	1.06	-17.89	1.94	9.60	4.91	-4.87	0.04
5270	1.48	0.00	-16.59	1.97	9.60	4.91	-3.54	1.37	-18.38	1.94	9.60	4.91	-5.36	-0.45
5310	1.48	0.00	-16.88	1.97	9.60	4.91	-3.83	1.08	-17.89	1.94	9.60	4.91	-4.87	0.04
5510	1.48	0.00	-16.49	2.05	9.60	4.91	-3.36	1.55	-18.19	2.02	9.60	4.91	-5.09	-0.17
5550	1.48	0.00	-17.04	2.05	9.60	4.91	-3.91	1.00	-17.84	2.02	9.60	4.91	-4.74	0.17
5670	1.48	0.00	-17.51	2.05	9.60	4.91	-4.38	0.53	-17.47	2.02	9.60	4.91	-4.37	0.54
5710	1.48	0.00	-17.32	2.05	9.60	4.91	-4.19	0.72	-17.45	2.02	9.60	4.91	-4.35	0.56
5755	1.48	0.27	-20.82	2.05	9.60	4.91	-7.42	-2.51	-20.50	2.02	9.60	4.91	-7.14	-2.23
5795	1.48	0.27	-20.65	2.05	9.60	4.91	-7.25	-2.34	-20.06	2.02	9.60	4.91	-6.69	-1.78

Sample Calculation:

PSD: Power Spectral Density

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

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

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

Directional Gain = G ANT + Array Gain

G ANT = Set equal to the gain of the antenna having the highest gain

Array Gain = $10 \log(N \text{ ANT} / N \text{ SS})$ dB.

N ANT = number of transmit antennas = 2

N SS = number of spatial streams = 1

Maximum Power Spectral Density

Test place

Ise EMC Lab. No.6 Measurement Room

Date

November 2, 2022

Temperature / Humidity

20 deg. C / 43 % RH

Engineer

Yuichiro Yamazaki

Mode

Tx 11ac-40

Chain 0+1

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna 1 [mW/MHz]	Antenna 2 [mW/MHz]	Sum [mW/MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Margin [dB]	Antenna 1 [mW/MHz]	Antenna 2 [mW/MHz]	Sum [mW/MHz]	Result [dBm/MHz]	Limit [dBm/MHz]	Margin [dB]
5190	0.41	0.35	0.76	-1.19	11.00	12.19	1.26	1.09	2.35	3.72	17.00	13.28
5230	0.42	0.35	0.77	-1.11	11.00	12.11	1.30	1.10	2.40	3.80	17.00	13.20
5270	0.47	0.36	0.83	-0.83	11.00	11.83	1.44	1.12	2.56	4.08	17.00	12.92
5310	0.46	0.34	0.80	-0.97	11.00	11.97	1.41	1.07	2.48	3.94	17.00	13.06
5510	0.46	0.37	0.83	-0.81	11.00	11.81	1.44	1.13	2.57	4.10	17.00	12.90
5550	0.39	0.36	0.75	-1.24	11.00	12.24	1.20	1.13	2.33	3.67	17.00	13.33
5670	0.39	0.41	0.80	-0.99	11.00	11.99	1.20	1.27	2.47	3.92	17.00	13.08
5710	0.42	0.41	0.83	-0.80	11.00	11.80	1.30	1.27	2.58	4.11	17.00	12.89
5755	0.20	0.21	0.42	-3.82	30.00	33.82	0.62	0.66	1.29	1.09	36.00	34.91
5795	0.21	0.24	0.45	-3.46	30.00	33.46	0.64	0.76	1.40	1.45	36.00	34.55

Chain 0							Chain 1							
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result Cond.	e.i.r.p.	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result Cond.	e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5190	2.75	0.00	-18.21	1.97	9.60	4.91	-3.89	1.02	-18.83	1.94	9.60	4.91	-4.54	0.37
5230	2.75	0.00	-18.09	1.97	9.60	4.91	-3.77	1.14	-18.80	1.94	9.60	4.91	-4.51	0.40
5270	2.75	0.00	-17.63	1.97	9.60	4.91	-3.31	1.60	-18.72	1.94	9.60	4.91	-4.43	0.48
5310	2.75	0.00	-17.74	1.97	9.60	4.91	-3.42	1.49	-18.92	1.94	9.60	4.91	-4.63	0.28
5510	2.75	0.00	-17.73	2.05	9.60	4.91	-3.33	1.58	-18.74	2.02	9.60	4.91	-4.37	0.54
5550	2.75	0.00	-18.51	2.05	9.60	4.91	-4.11	0.80	-18.76	2.02	9.60	4.91	-4.39	0.52
5670	2.75	0.00	-18.53	2.05	9.60	4.91	-4.13	0.79	-18.25	2.02	9.60	4.91	-3.88	1.03
5710	2.75	0.00	-18.17	2.05	9.60	4.91	-3.77	1.15	-18.23	2.02	9.60	4.91	-3.86	1.05
5755	2.75	0.27	-21.65	2.05	9.60	4.91	-6.98	-2.07	-21.32	2.02	9.60	4.91	-6.68	-1.77
5795	2.75	0.27	-21.51	2.05	9.60	4.91	-6.84	-1.93	-20.76	2.02	9.60	4.91	-6.12	-1.21

Sample Calculation:

PSD: Power Spectral Density

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

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

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

Directional Gain = G ANT + Array Gain

G ANT = Set equal to the gain of the antenna having the highest gain

Array Gain = $10 \log(N \text{ ANT} / N \text{ SS})$ dB.

N ANT = number of transmit antennas = 2

N SS = number of spatial streams = 1

Maximum Power Spectral Density

Test place Ise EMC Lab. No.6 Measurement Room
Date November 2, 2022
Temperature / Humidity 20 deg. C / 43 % RH
Engineer Yuichiro Yamazaki
Mode Tx 11ac-80

Chain 0+1

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
	1	2	Sum				1	2	Sum			
[mW/MHz]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5210	0.19	0.15	0.33	-4.77	11.00	15.77	0.58	0.46	1.03	0.14	17.00	16.86
5290	0.19	0.13	0.32	-4.97	11.00	15.97	0.57	0.41	0.99	-0.06	17.00	17.06
5530	0.21	0.14	0.34	-4.68	11.00	15.68	0.64	0.42	1.06	0.23	17.00	16.77
5610	0.12	0.11	0.23	-6.31	11.00	17.31	0.37	0.35	0.72	-1.40	17.00	18.40
5690	0.18	0.13	0.31	-5.09	11.00	16.09	0.56	0.40	0.96	-0.18	17.00	17.18
5775	0.09	0.08	0.17	-7.74	30.00	37.74	0.27	0.25	0.52	-2.83	36.00	38.83

Chain 0										Chain 1					
Tested Frequency	Duty Factor	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]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]					[dBm/MHz]	[dBm/MHz]	
5210	0.98	0.00	-19.85	1.97	9.60	4.91	-7.30	-2.39	-20.84	1.94	9.60	4.91	-8.32	-3.41	
5290	0.98	0.00	-19.87	1.97	9.60	4.91	-7.32	-2.41	-21.27	1.94	9.60	4.91	-8.75	-3.84	
5530	0.98	0.00	-19.50	2.05	9.60	4.91	-6.87	-1.96	-21.29	2.02	9.60	4.91	-8.69	-3.78	
5610	0.98	0.00	-21.85	2.05	9.60	4.91	-9.22	-4.31	-22.02	2.02	9.60	4.91	-9.42	-4.51	
5690	0.98	0.00	-20.06	2.05	9.60	4.91	-7.43	-2.52	-21.50	2.02	9.60	4.91	-8.90	-3.99	
5775	0.98	0.27	-23.54	2.05	9.60	4.91	-10.64	-5.73	-23.74	2.02	9.60	4.91	-10.87	-5.96	

Sample Calculation:

PSD: Power Spectral Density

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

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

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

Directional Gain = G ANT + Array Gain

G ANT = Set equal to the gain of the antenna having the highest gain

Array Gain = $10 \log(N \text{ ANT} / N \text{ SS})$ dB.

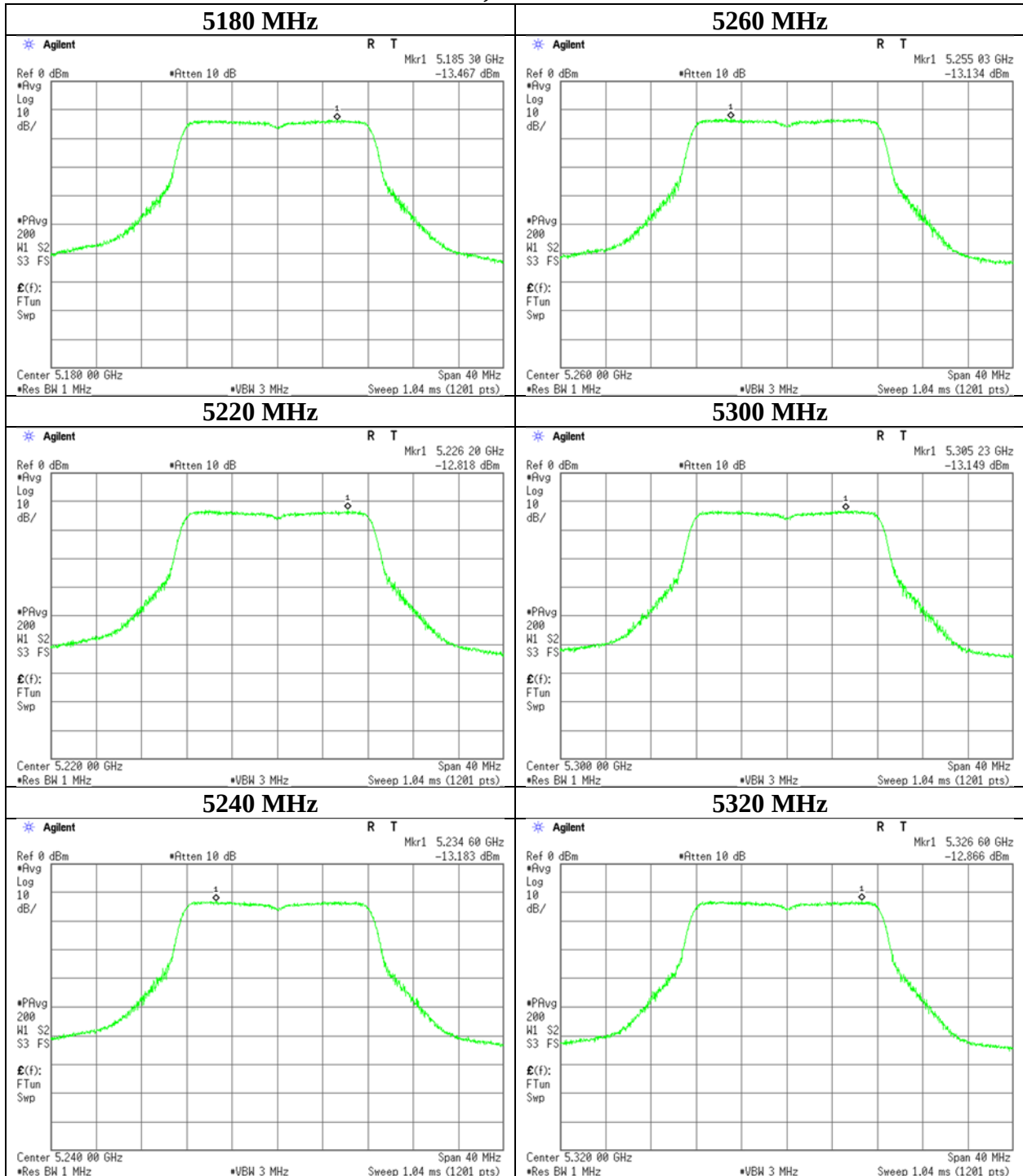
N ANT = number of transmit antennas = 2

N SS = number of spatial streams = 1

The conducted PSD limit was reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. (All frequencies for FCC, 5725 MHz-5850 MHz for IC)

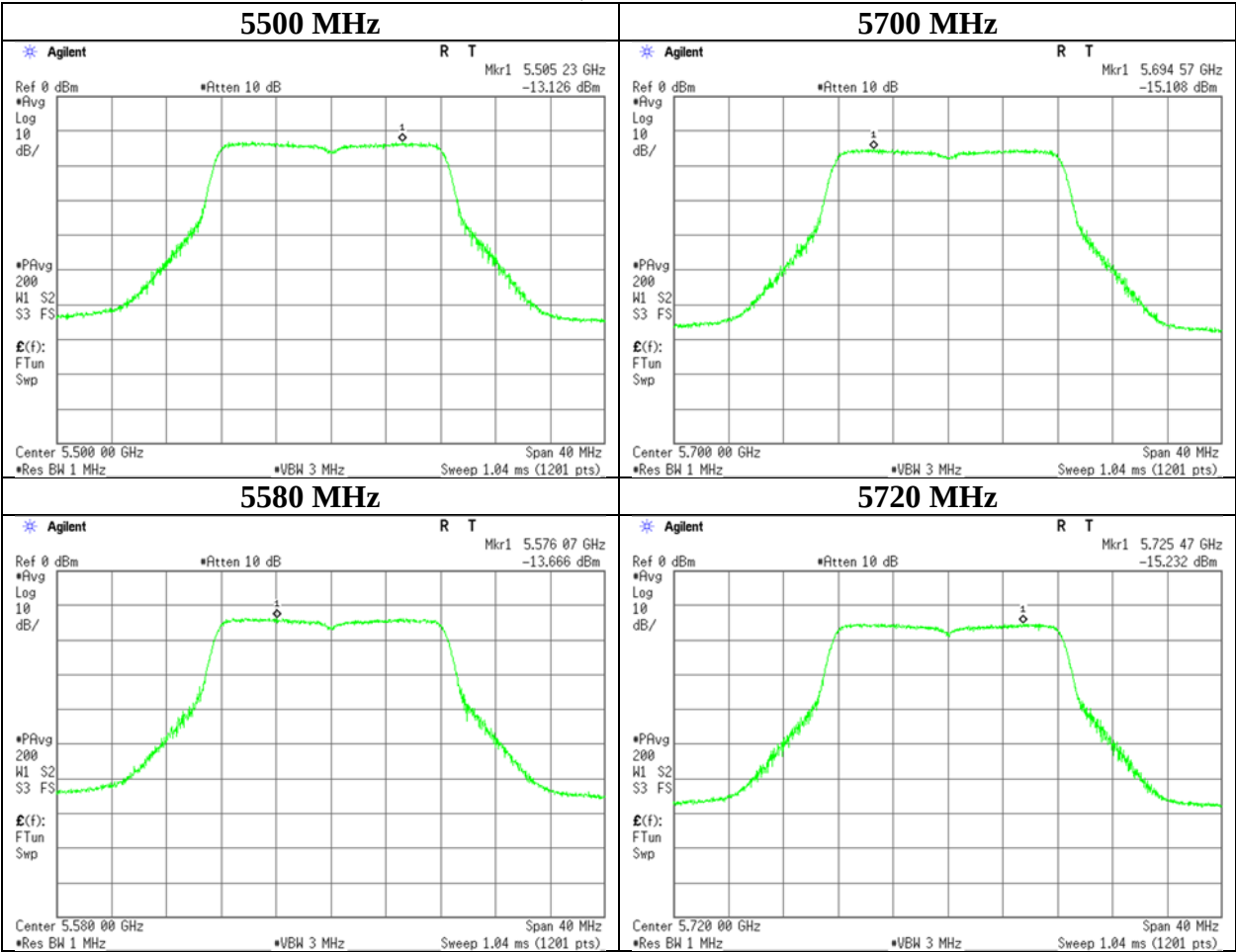
Maximum Power Spectral Density

11a, Chain 0



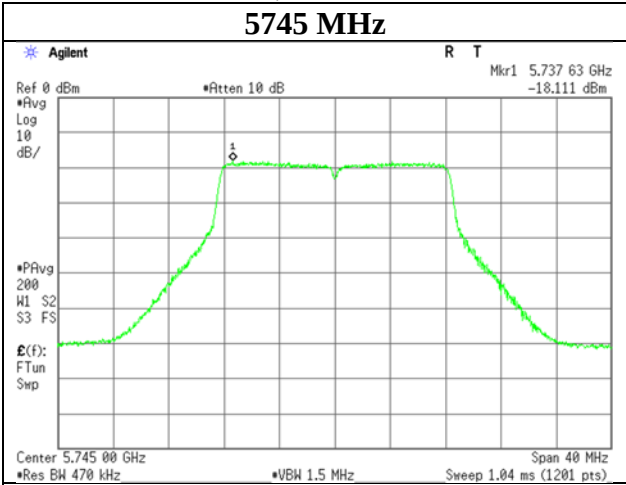
Maximum Power Spectral Density

11a, Chain 0

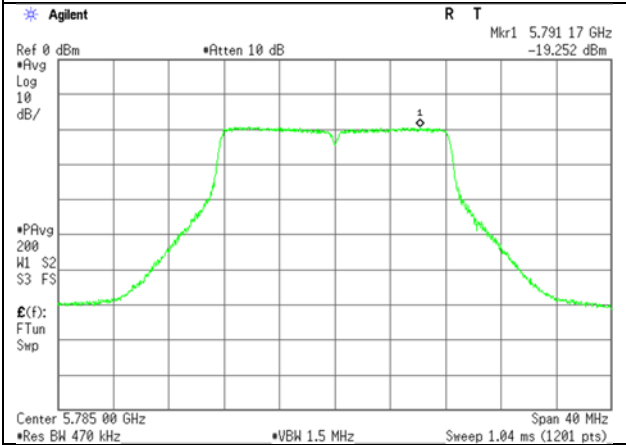


Maximum Power Spectral Density

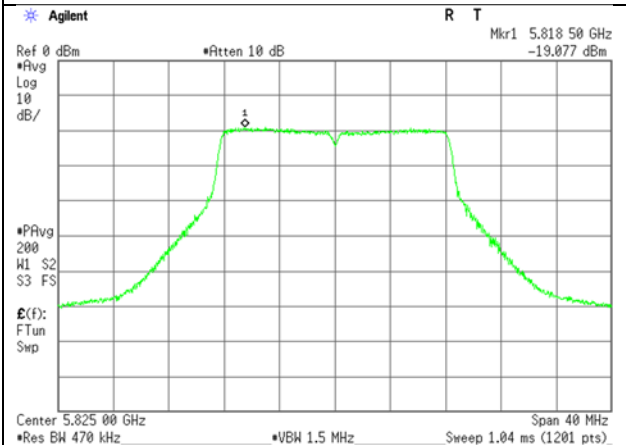
11a, Chain 0
5745 MHz



5785 MHz

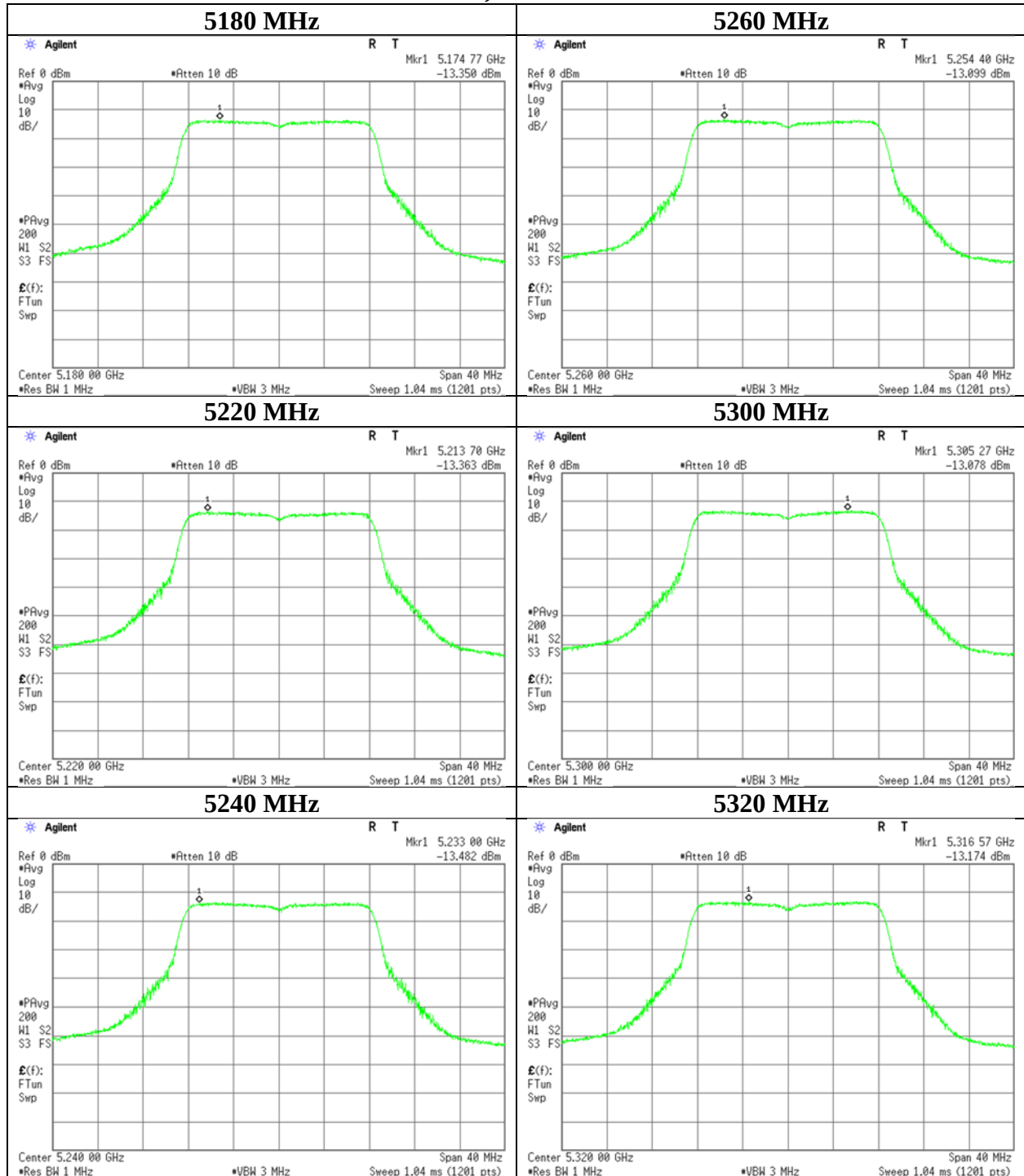


5825 MHz



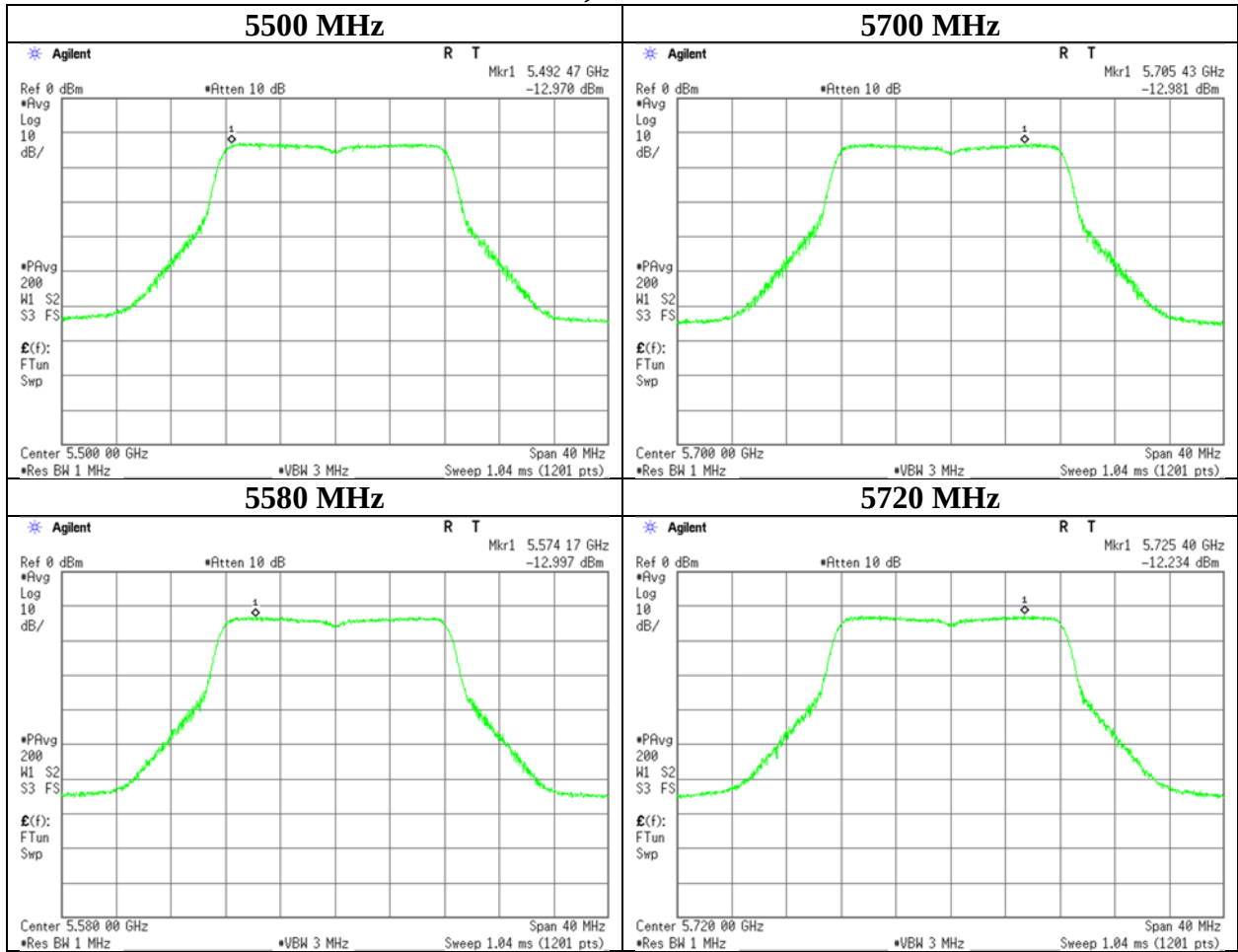
Maximum Power Spectral Density

11a, Chain 1



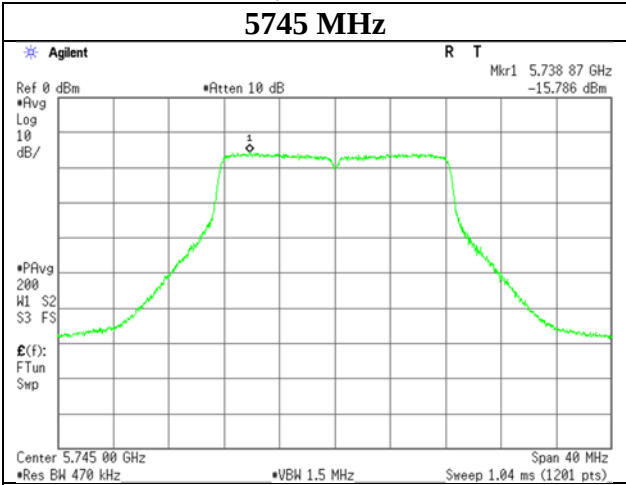
Maximum Power Spectral Density

11a, Chain 1

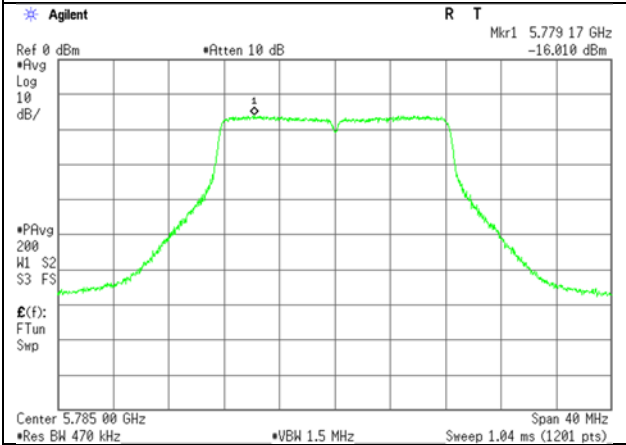


Maximum Power Spectral Density

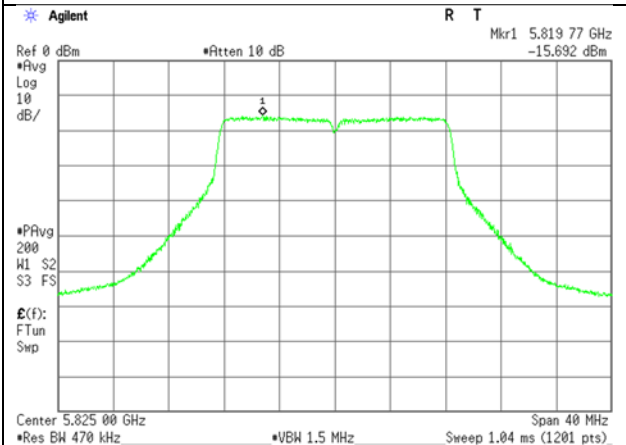
11a, Chain 1
5745 MHz



5785 MHz

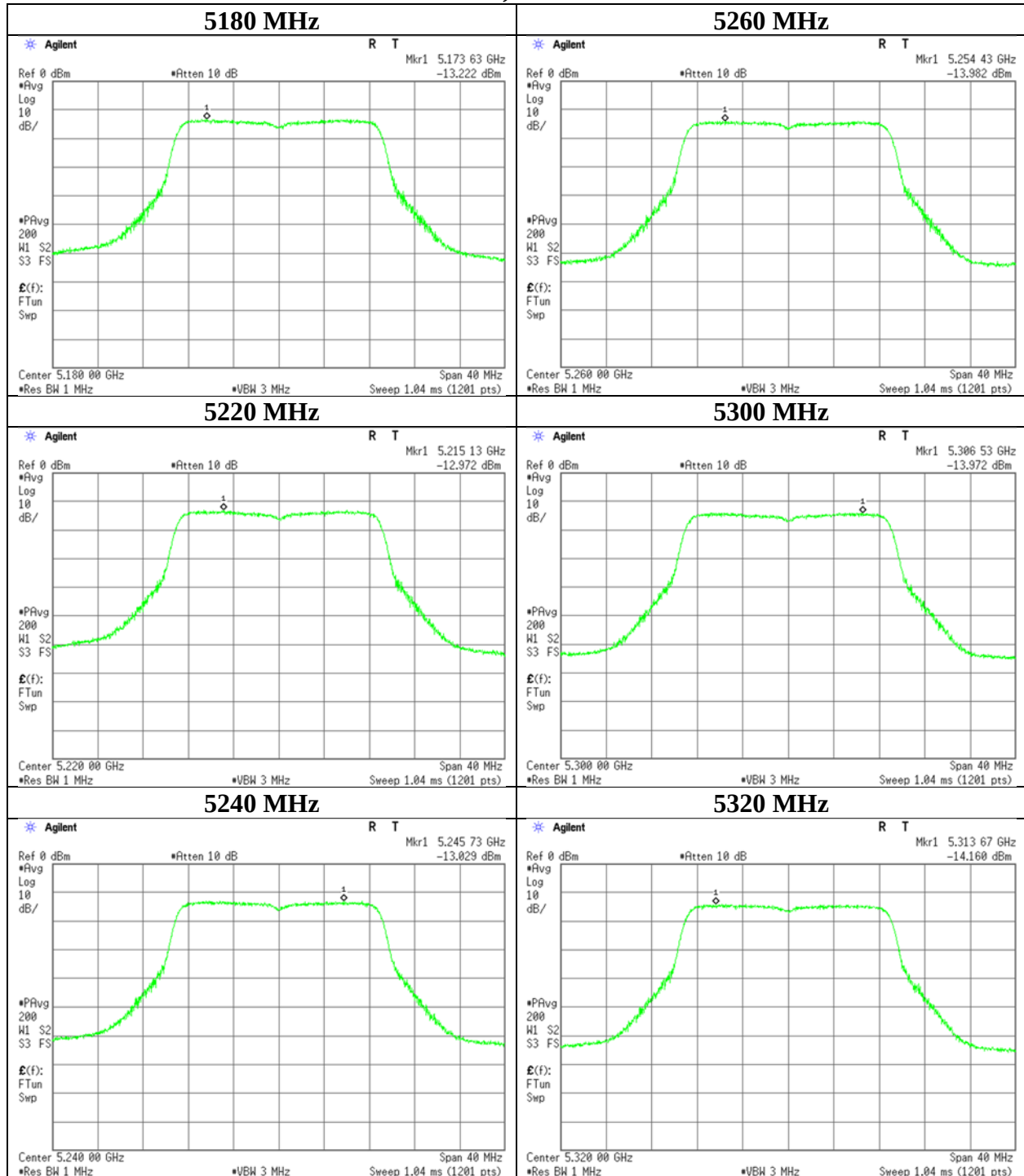


5825 MHz



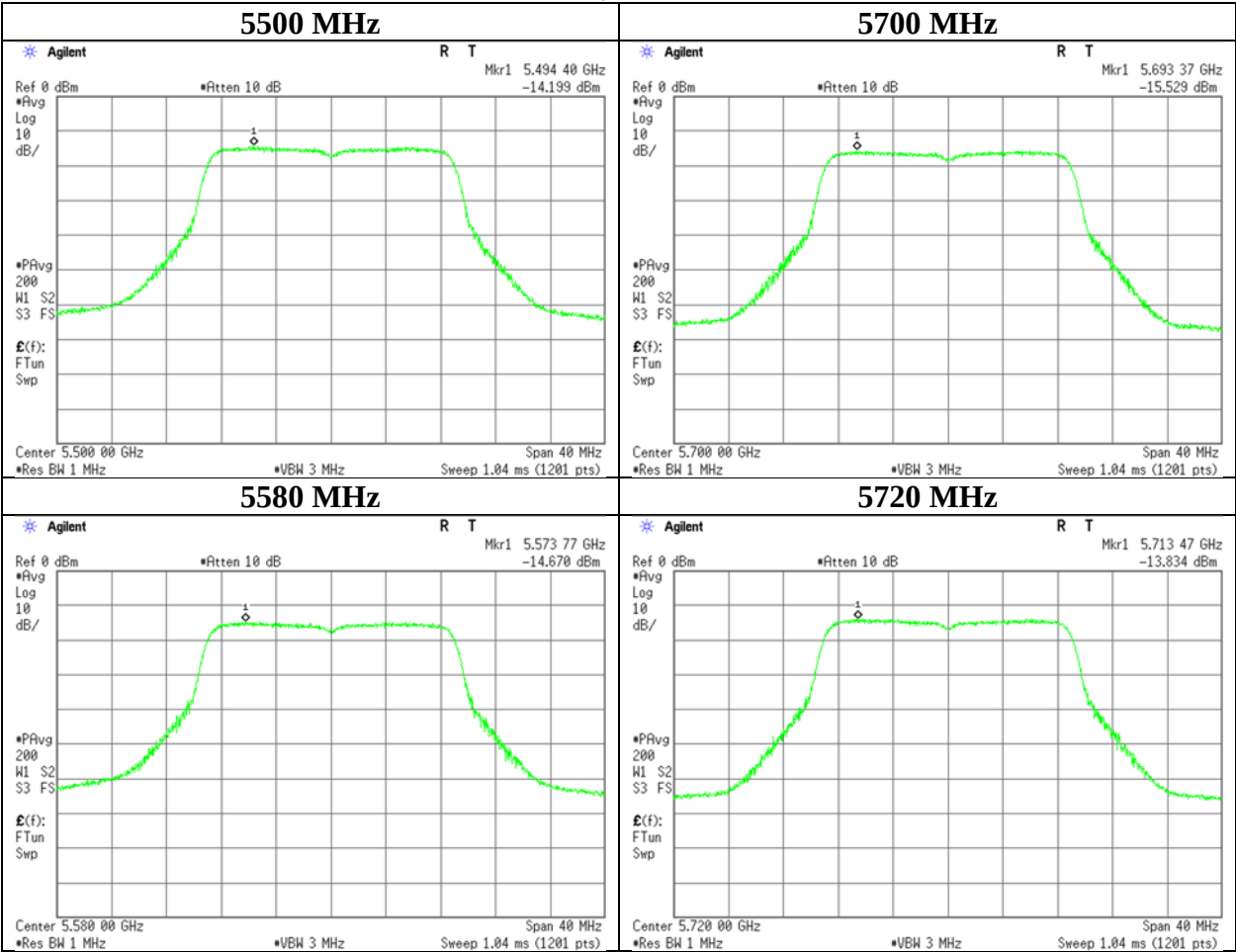
Maximum Power Spectral Density

11n-20, Chain 0



Maximum Power Spectral Density

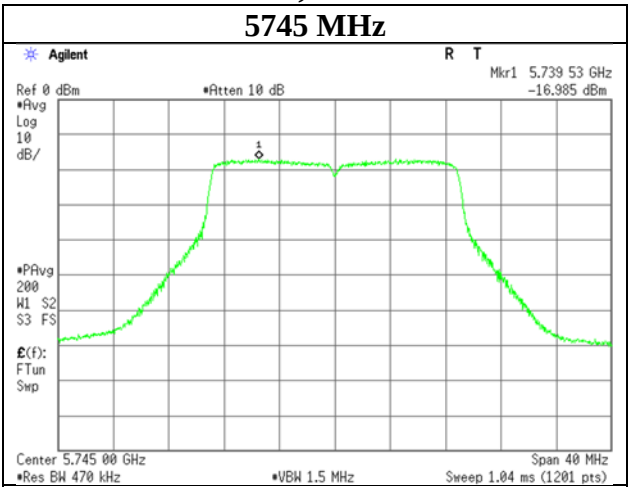
11n-20, Chain 0



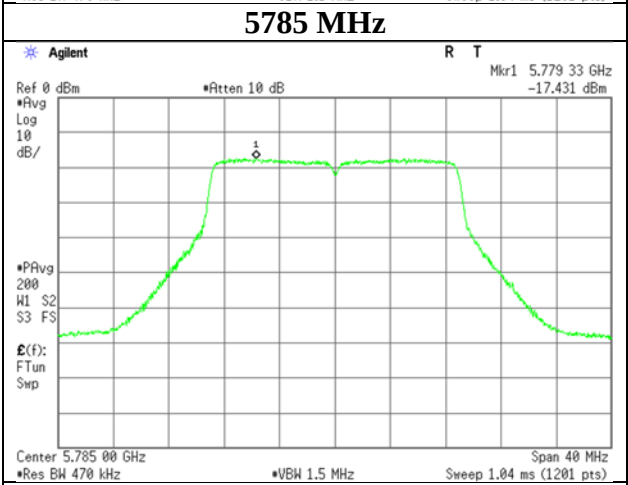
Maximum Power Spectral Density

11n-20, Chain 0

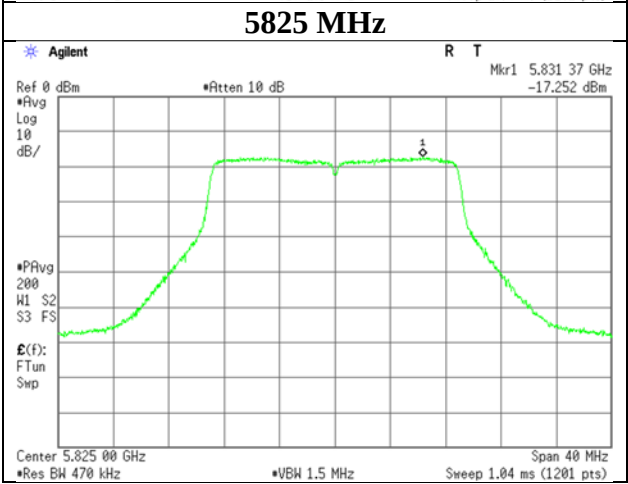
5745 MHz



5785 MHz

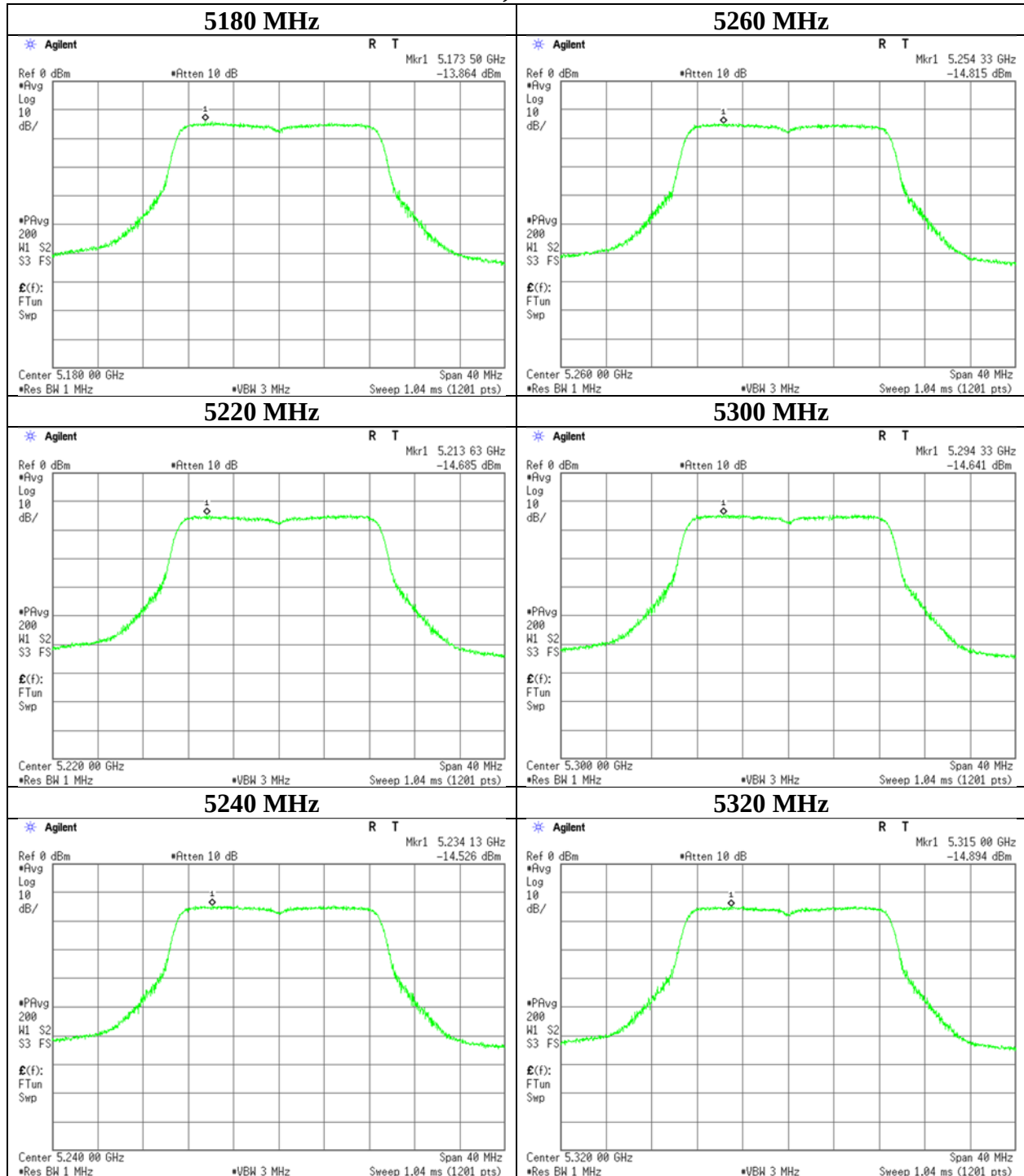


5825 MHz



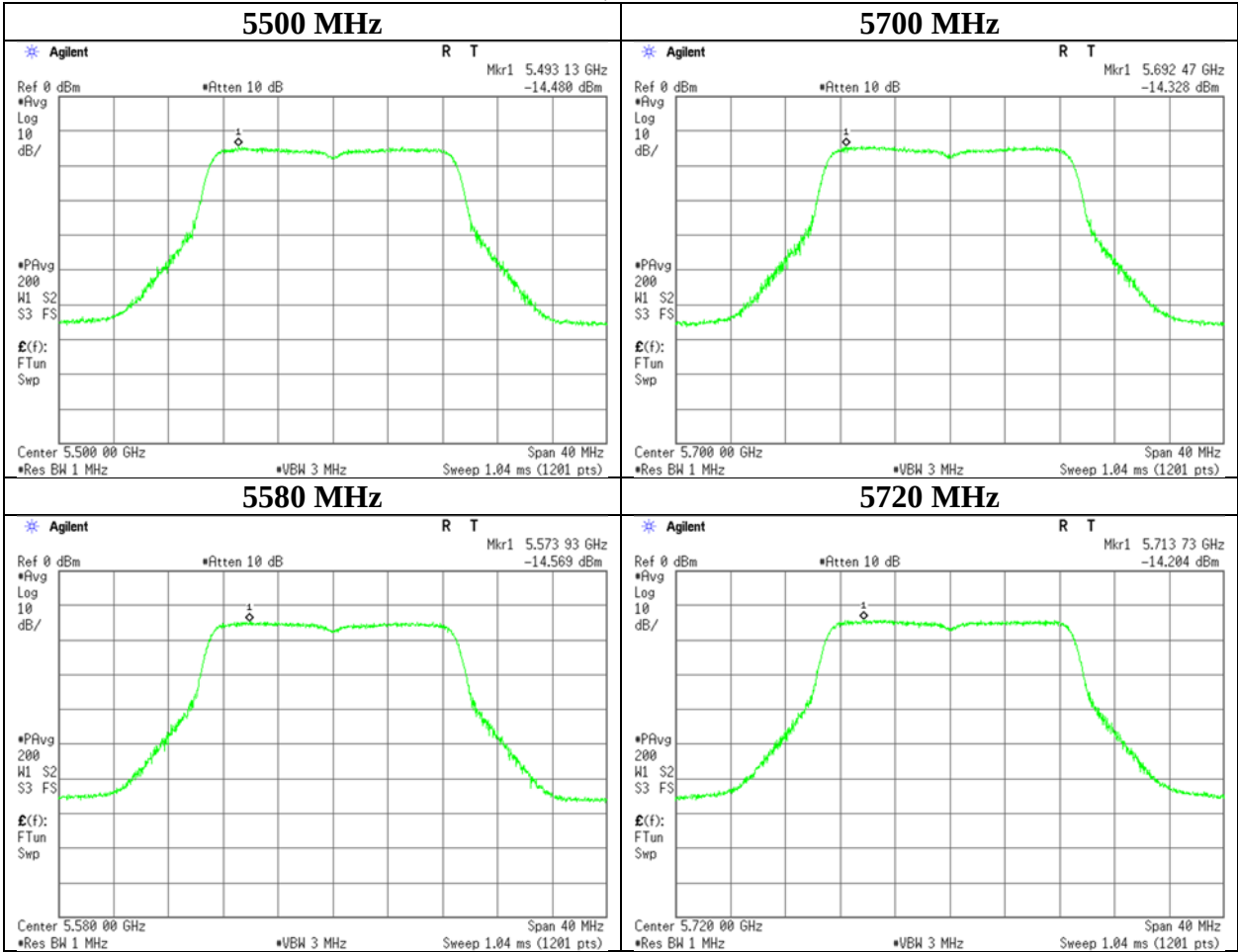
Maximum Power Spectral Density

11n-20, Chain 1



Maximum Power Spectral Density

11n-20, Chain 1



11n-20, Chain 1

Agilent

5745 MHz

Ref 0 dBm

*Atten 10 dB

Mkr1 5.739 70 GHz
-17.303 dBm

*Avg
Log
10
dB/

*PAvg
200
H1 S2
S3 FS

5.745 00 GHz

Span 40 MHz

Center 5.745 00 GHz

*Res BW 470 kHz

*VBW 1.5 MHz

Sweep 1.04 ms (1201 pts)

Agilent R T

Ref 0 dBm Mkr1 5.779 33 GHz
 *Atten 10 dB -17.159 dBm

*PAvg
 Log
 10
 dB/

*P1
 200
 HI S2
 S3 FS

Center 5.785 00 GHz
 *Res BW 470 kHz
 *VBW 1.5 MHz
 Span 40 MHz
 Sweep 1.04 ms (1201 pts)

Agilent R T

Ref 0 dBm Mkr1 5.820 20 GHz
 *Atten 10 dB -17.047 dBm

*PAvg
 Log
 10
 dB/

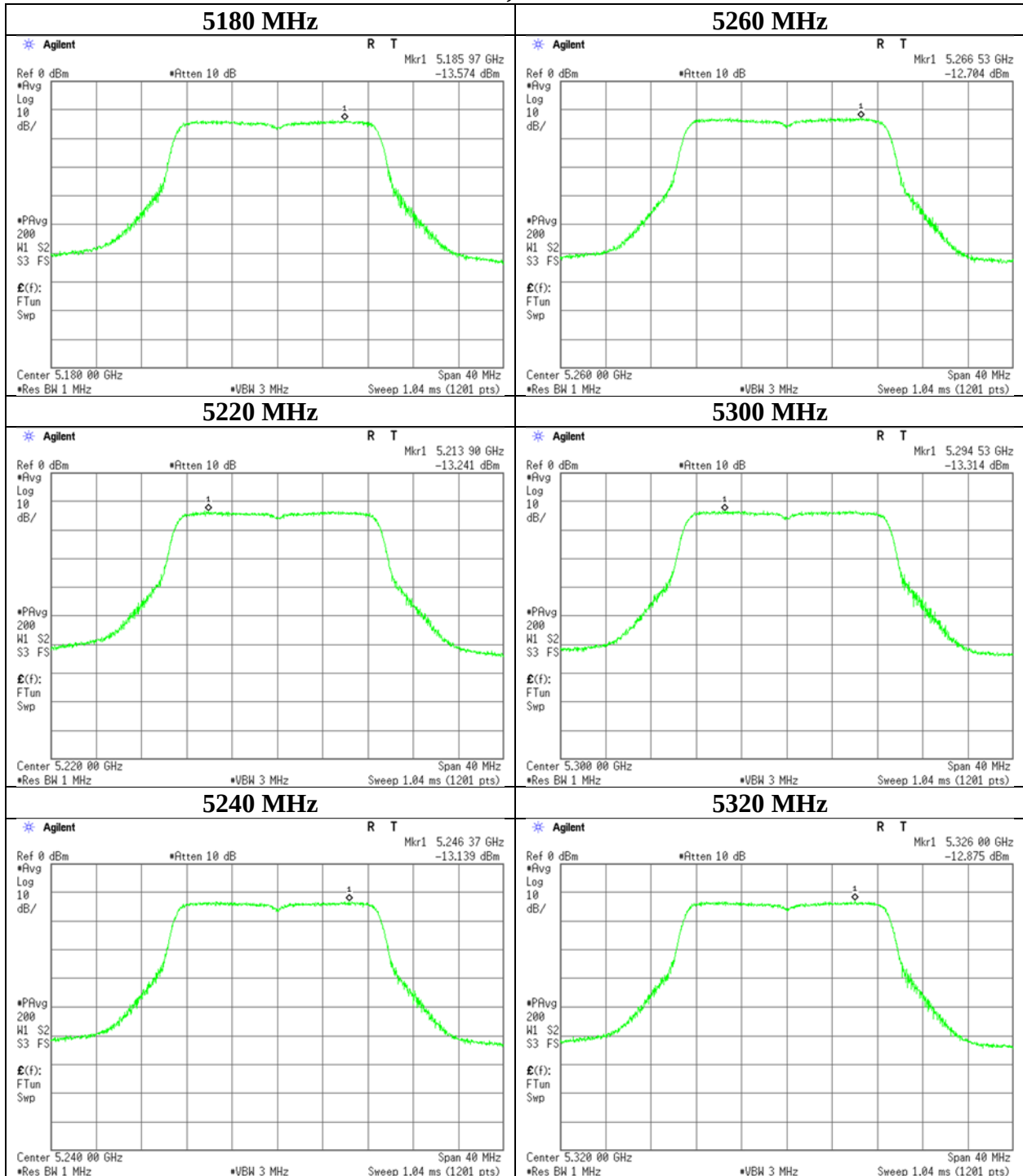
*P1
 1
 -17.047

*P1avg
 200
 H1 S2
 S3 FS

Center 5.825 00 GHz
 *Res BW 470 kHz
 *VBW 1.5 MHz
 Sweep 1.04 ms (1201 pts)
 Span 40 MHz

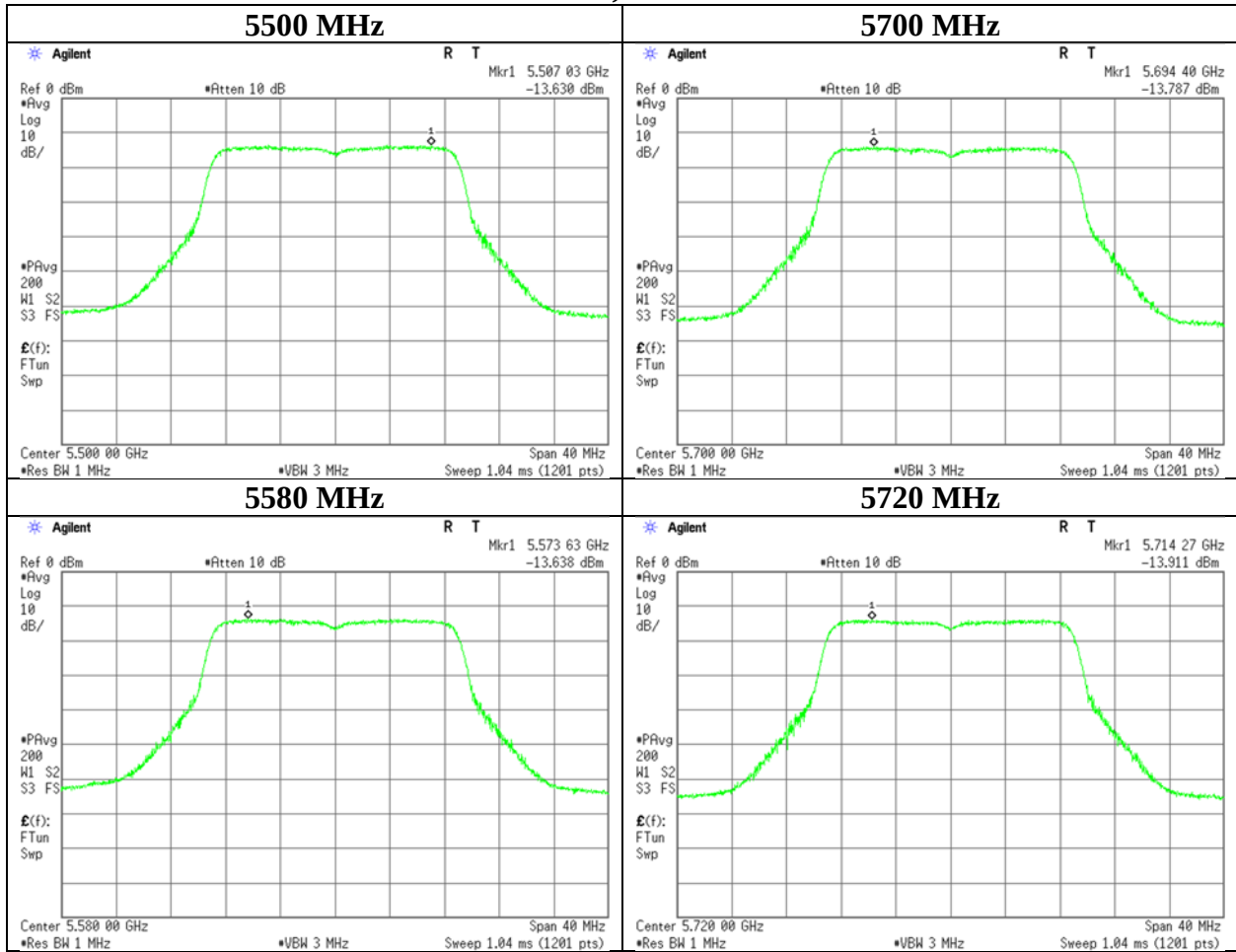
Maximum Power Spectral Density

11ac-20, Chain 0



Maximum Power Spectral Density

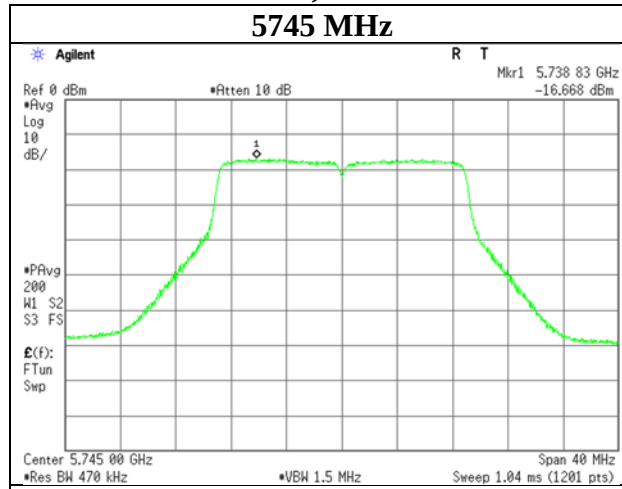
11ac-20, Chain 0



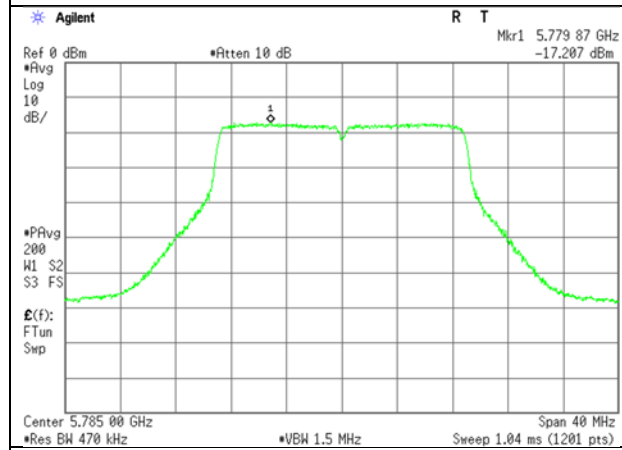
Maximum Power Spectral Density

11ac-20, Chain 0

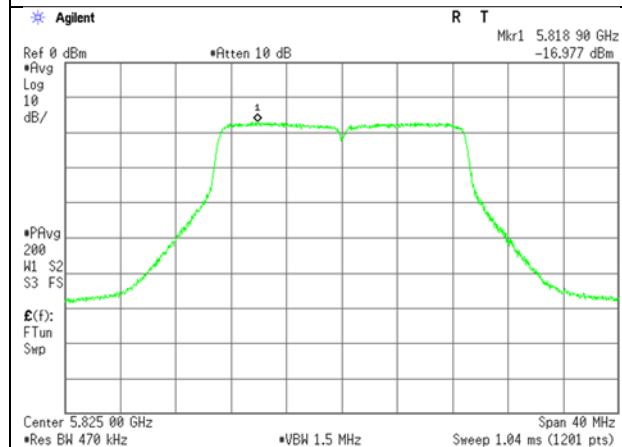
5745 MHz



5785 MHz

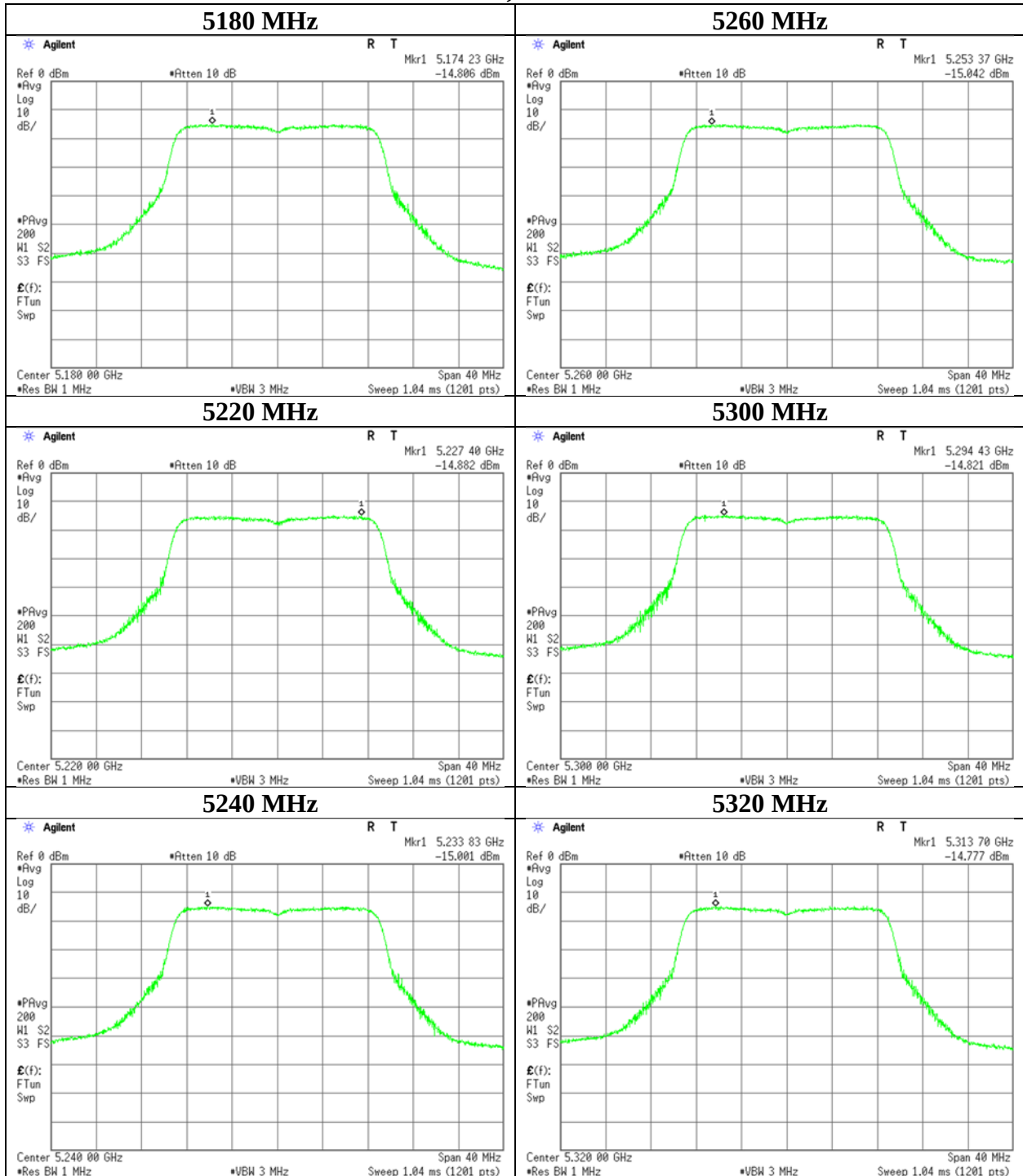


5825 MHz



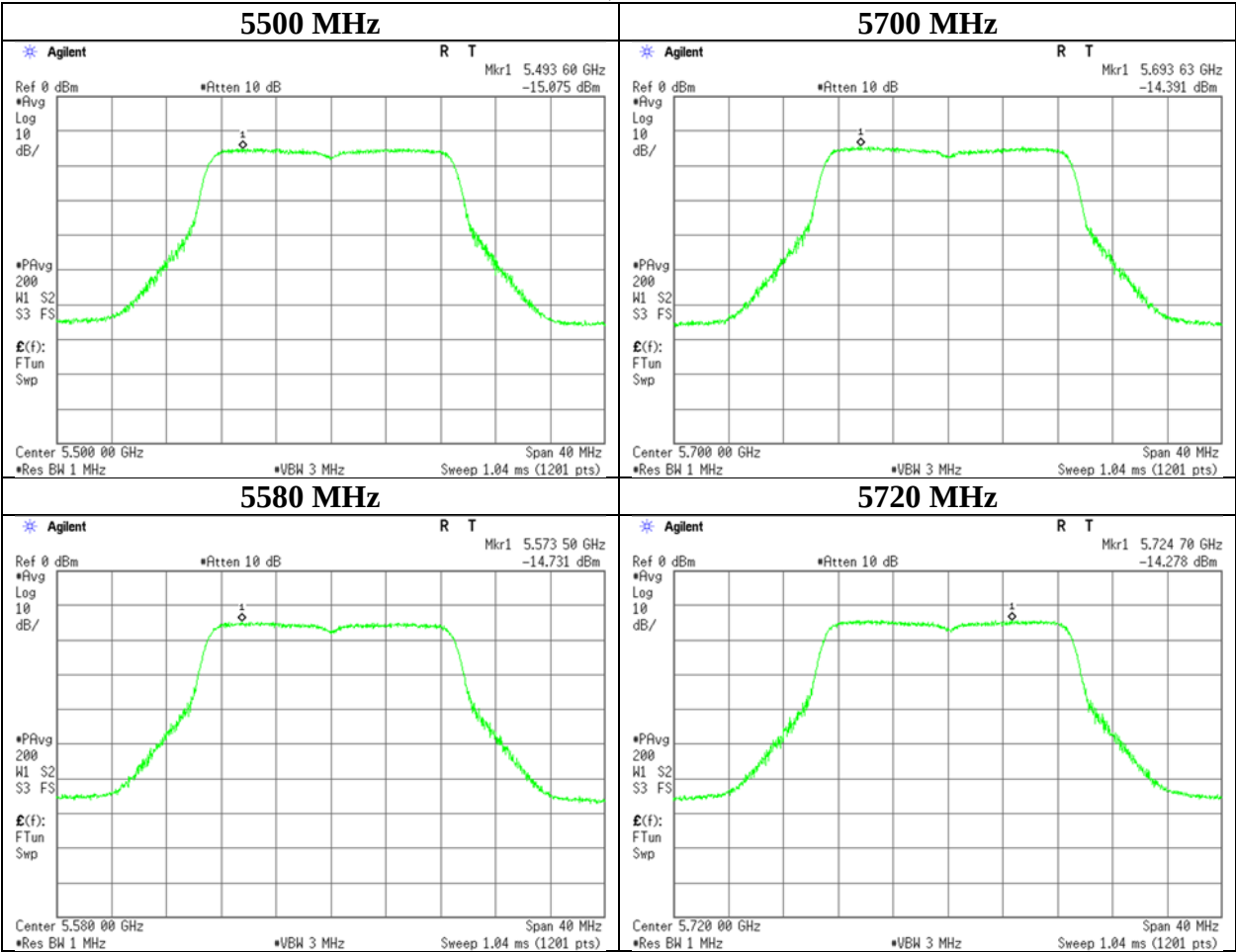
Maximum Power Spectral Density

11ac-20, Chain 1



Maximum Power Spectral Density

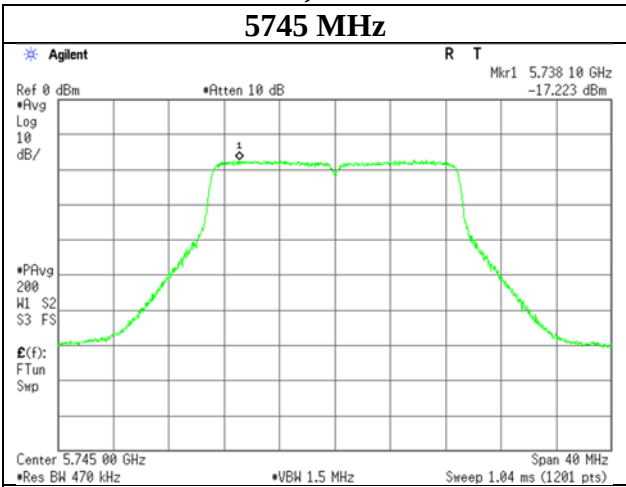
11ac-20, Chain 1



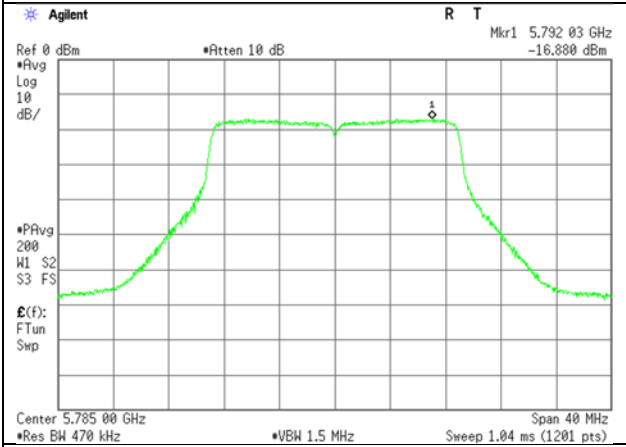
Maximum Power Spectral Density

11ac-20, Chain 1

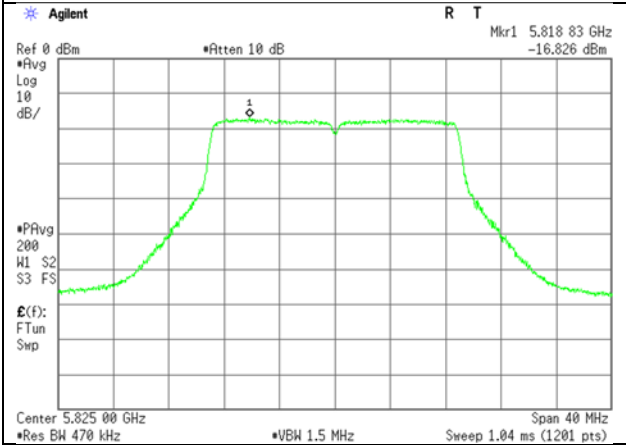
5745 MHz



5785 MHz

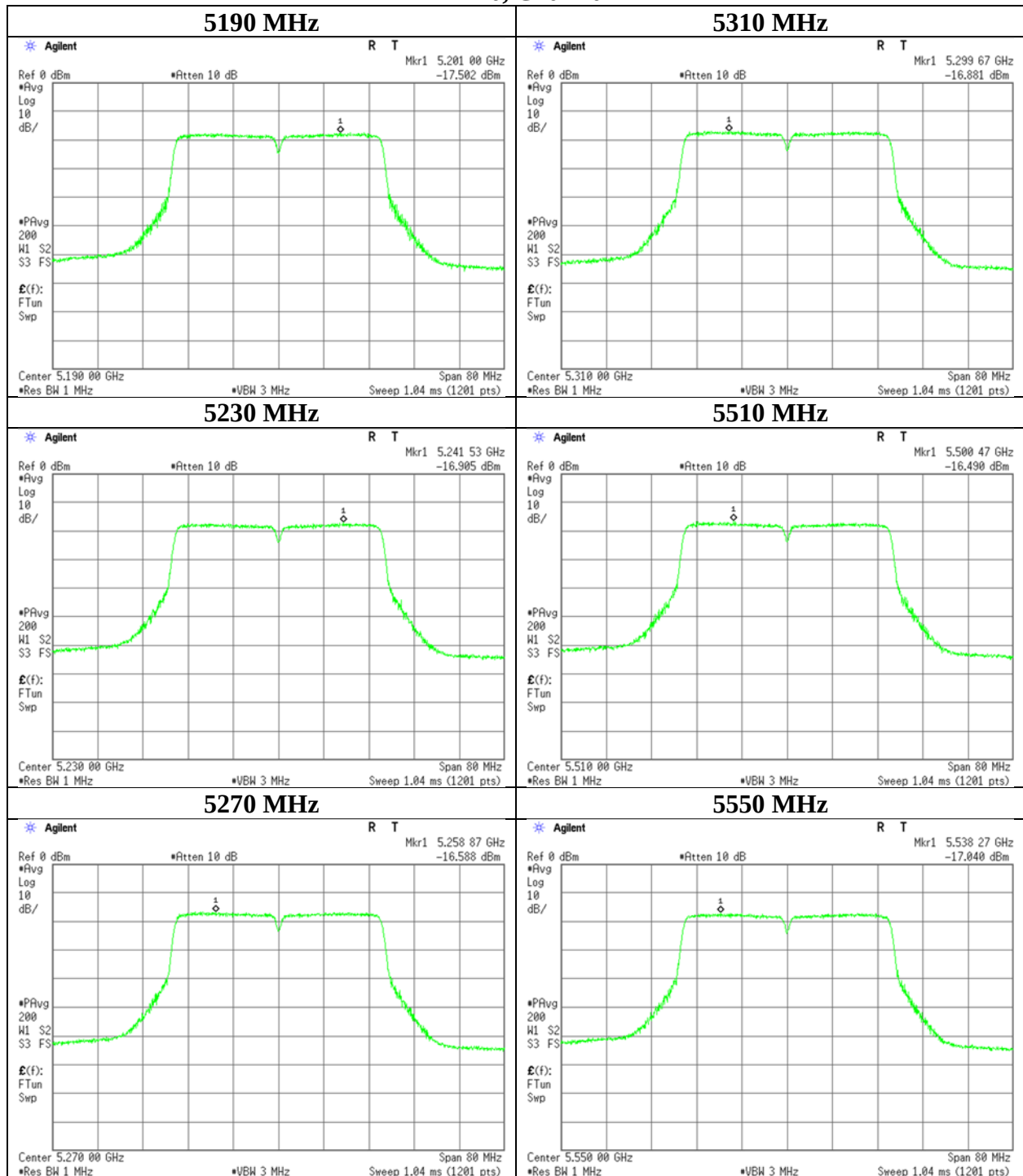


5825 MHz



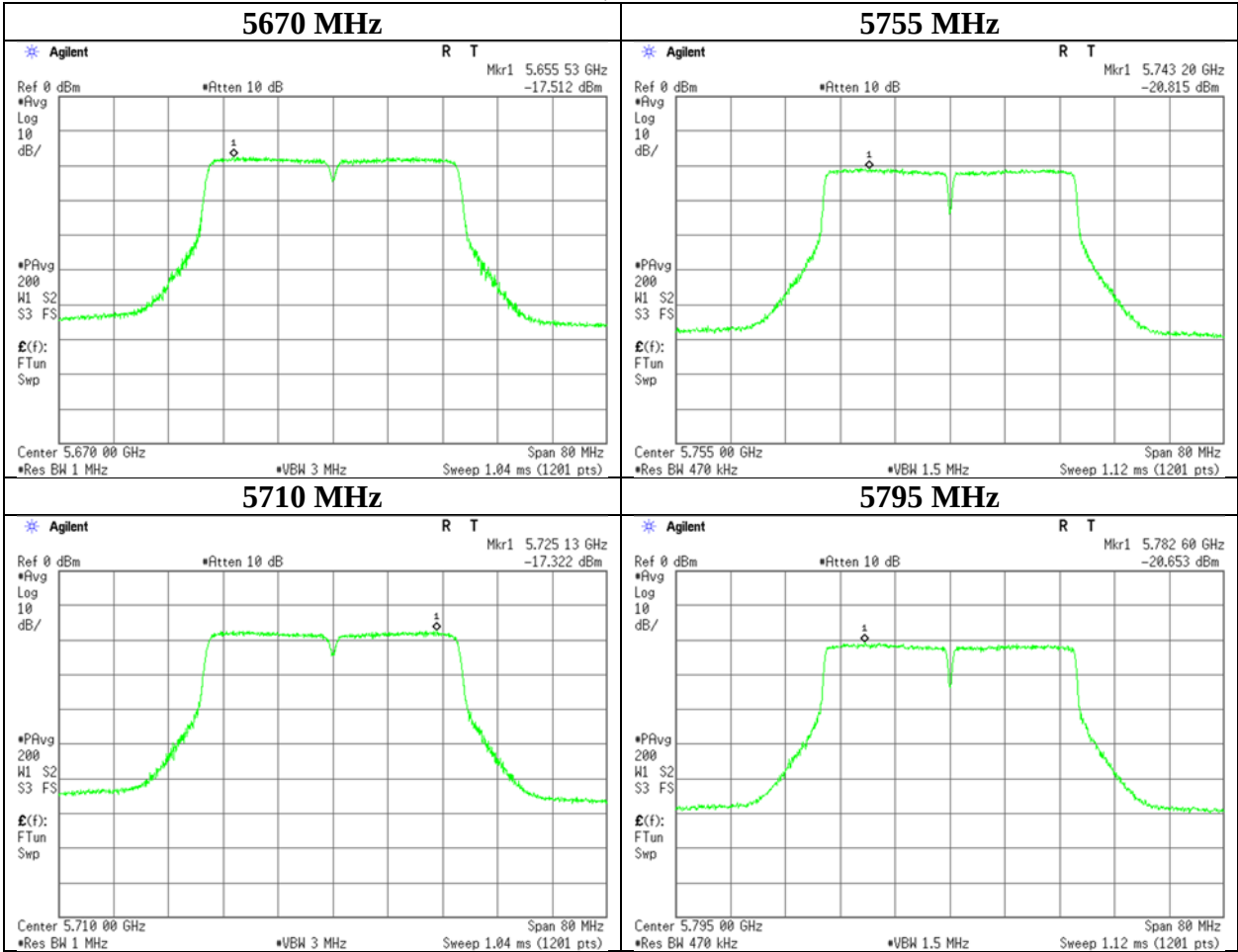
Maximum Power Spectral Density

11n-40, Chain 0



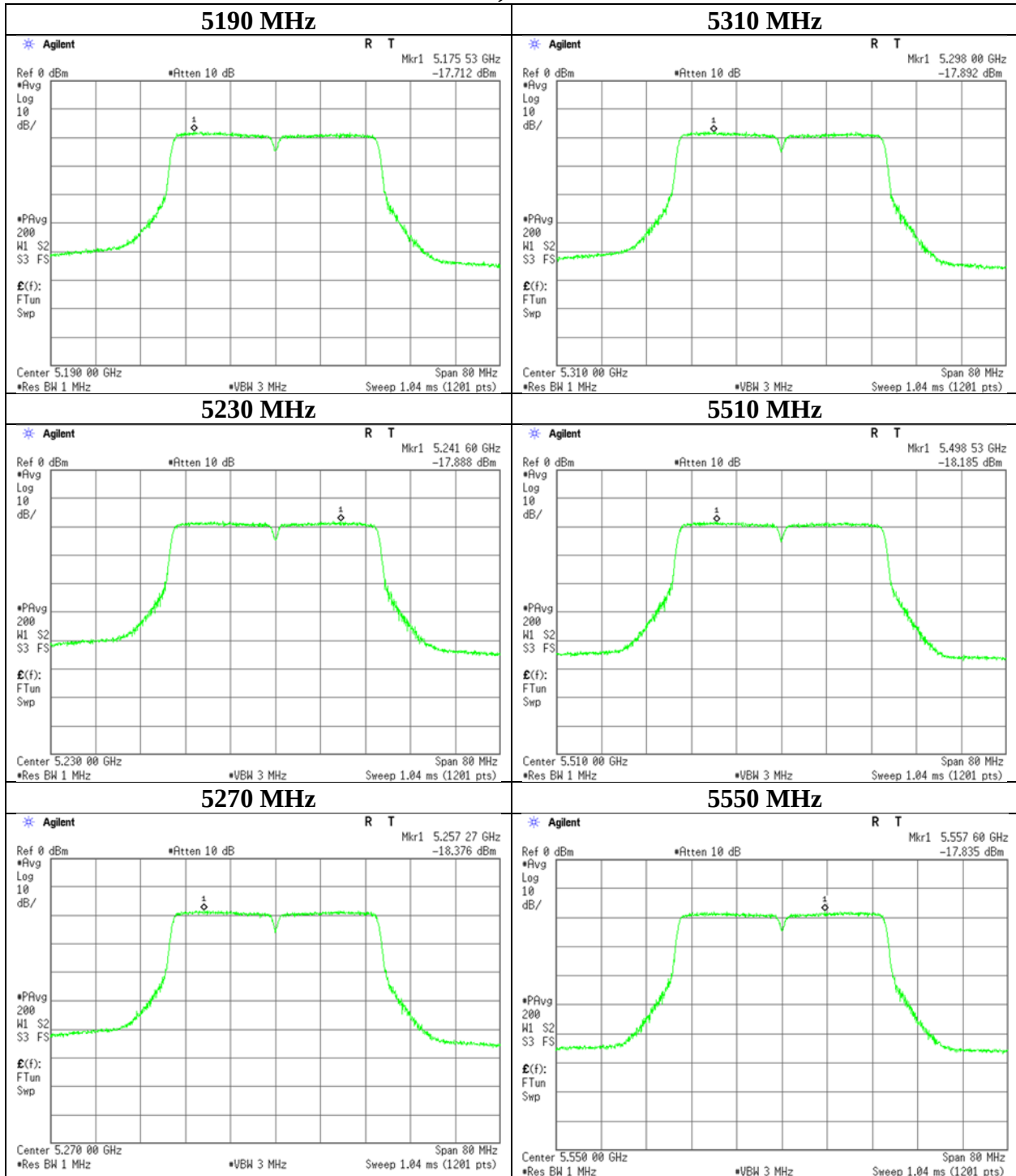
Maximum Power Spectral Density

11n-40, Chain 0



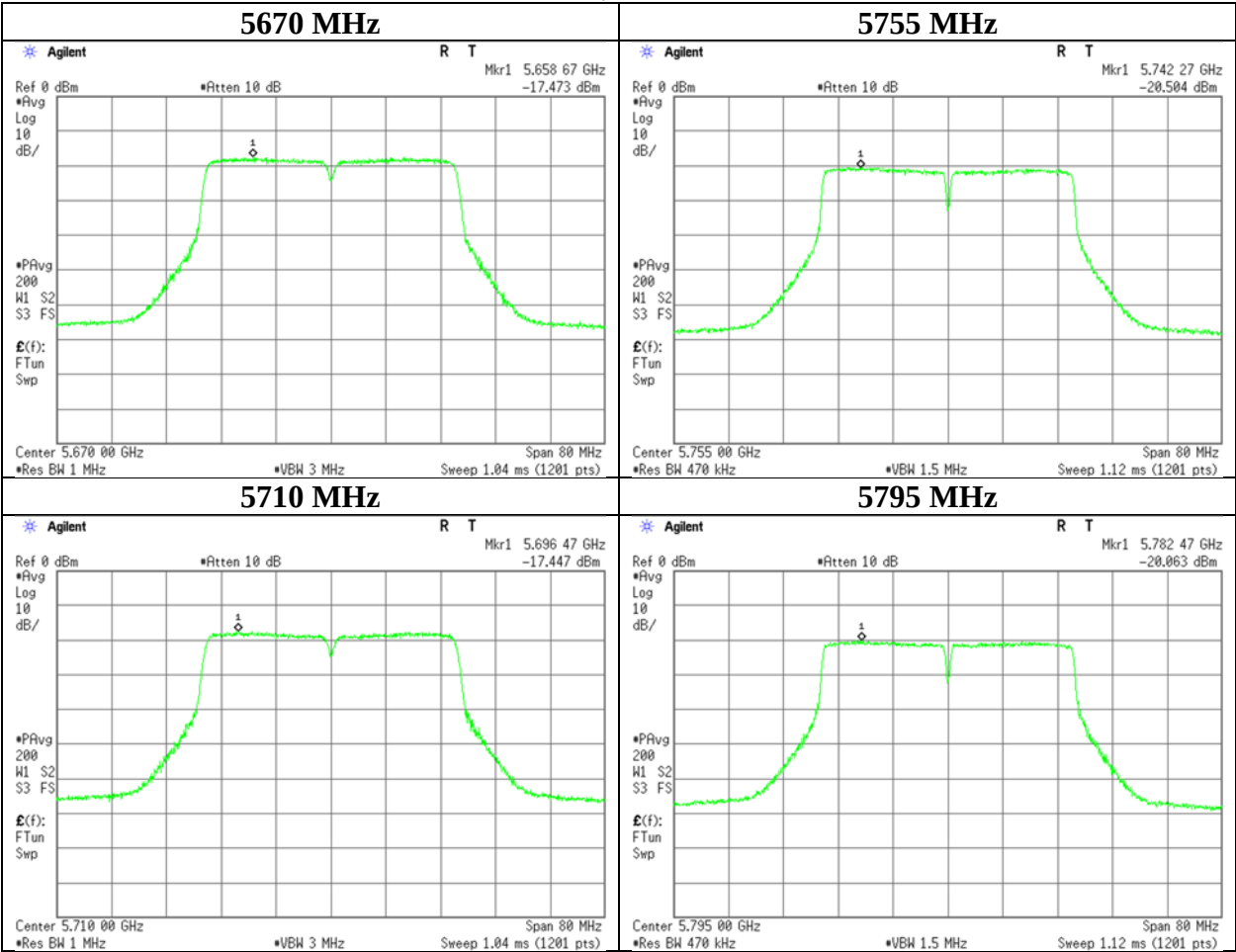
Maximum Power Spectral Density

11n-40, Chain 1



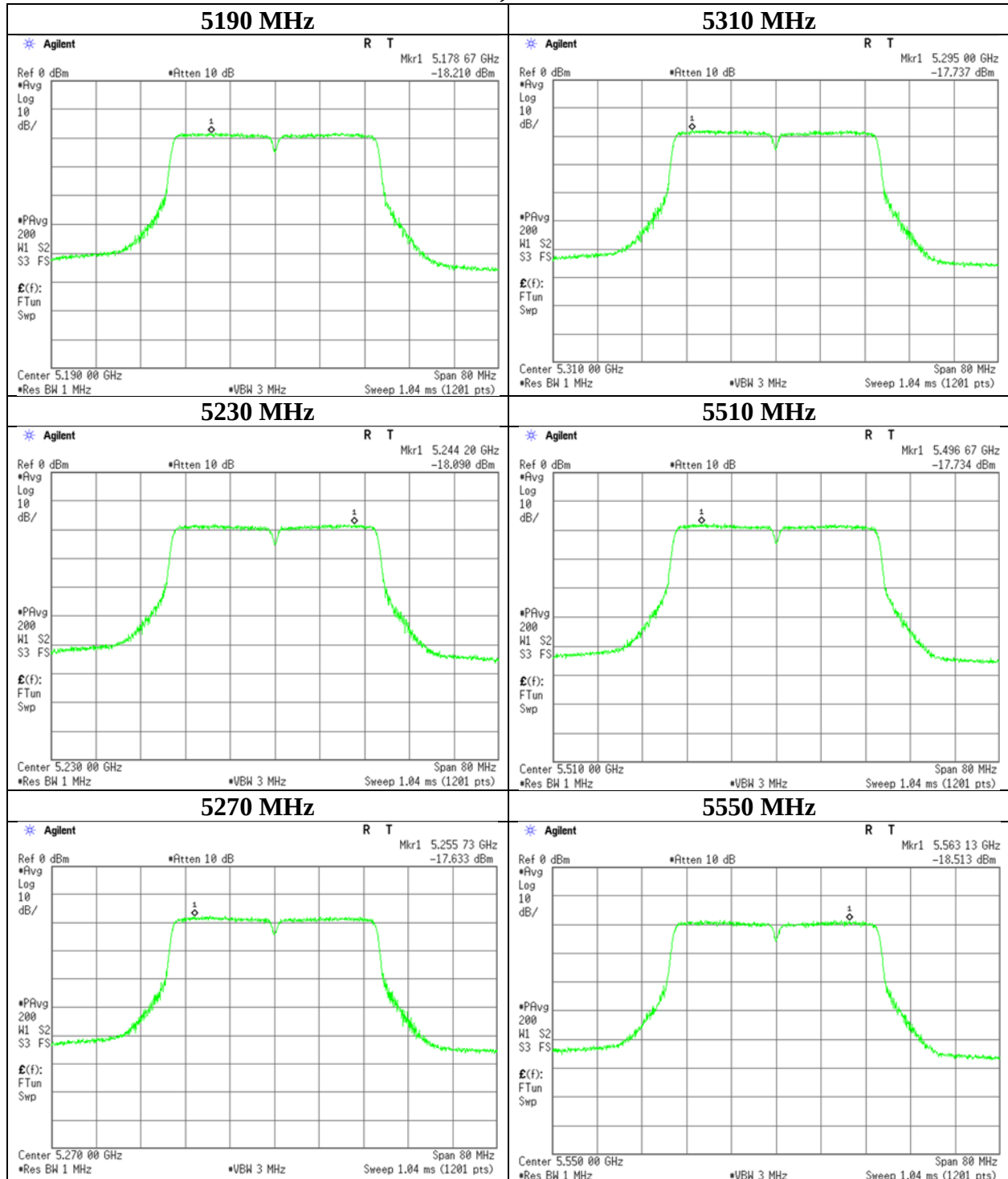
Maximum Power Spectral Density

11n-40, Chain 1



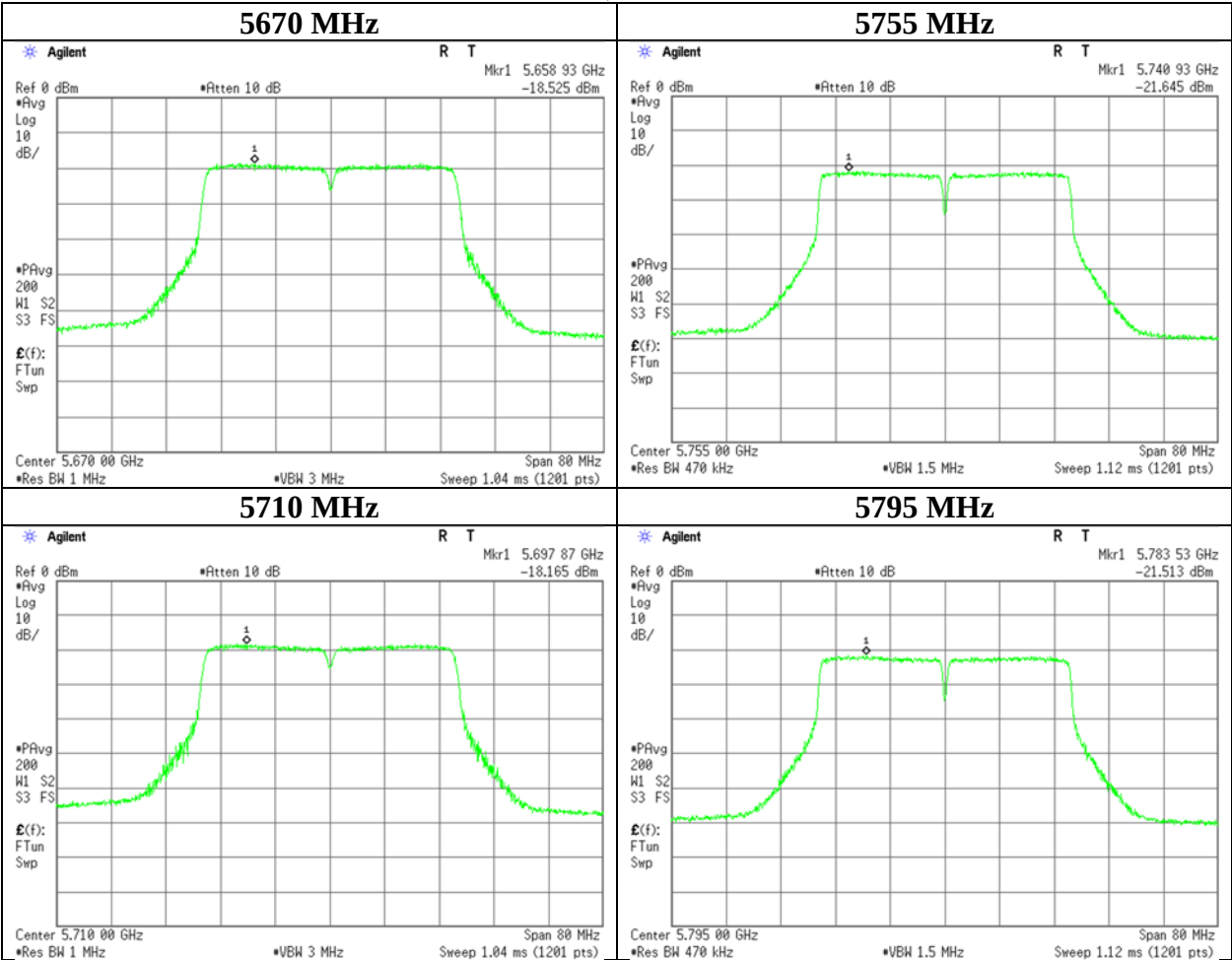
Maximum Power Spectral Density

11ac-40, Chain 0



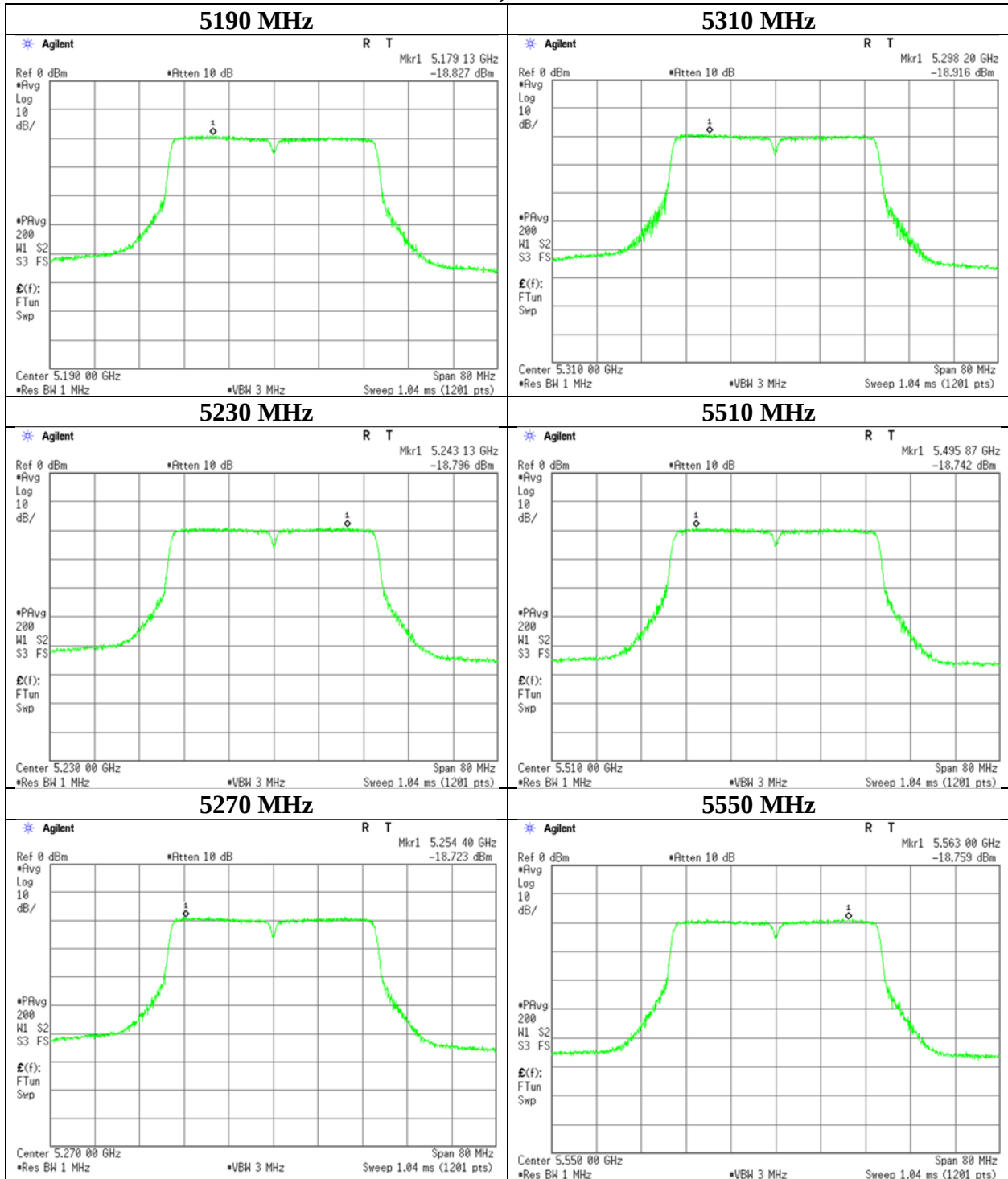
Maximum Power Spectral Density

11ac-40, Chain 0



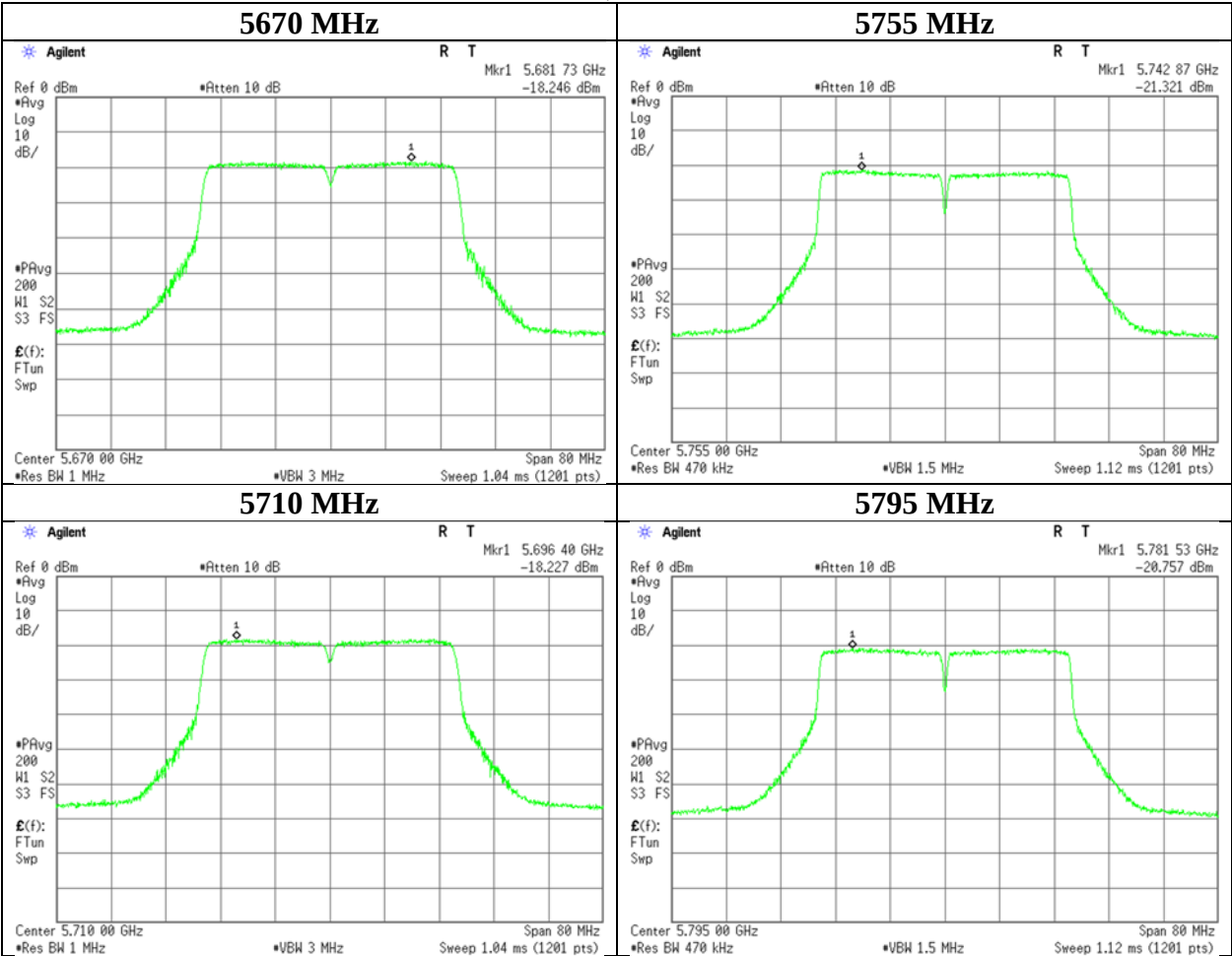
Maximum Power Spectral Density

11ac-40, Chain 1



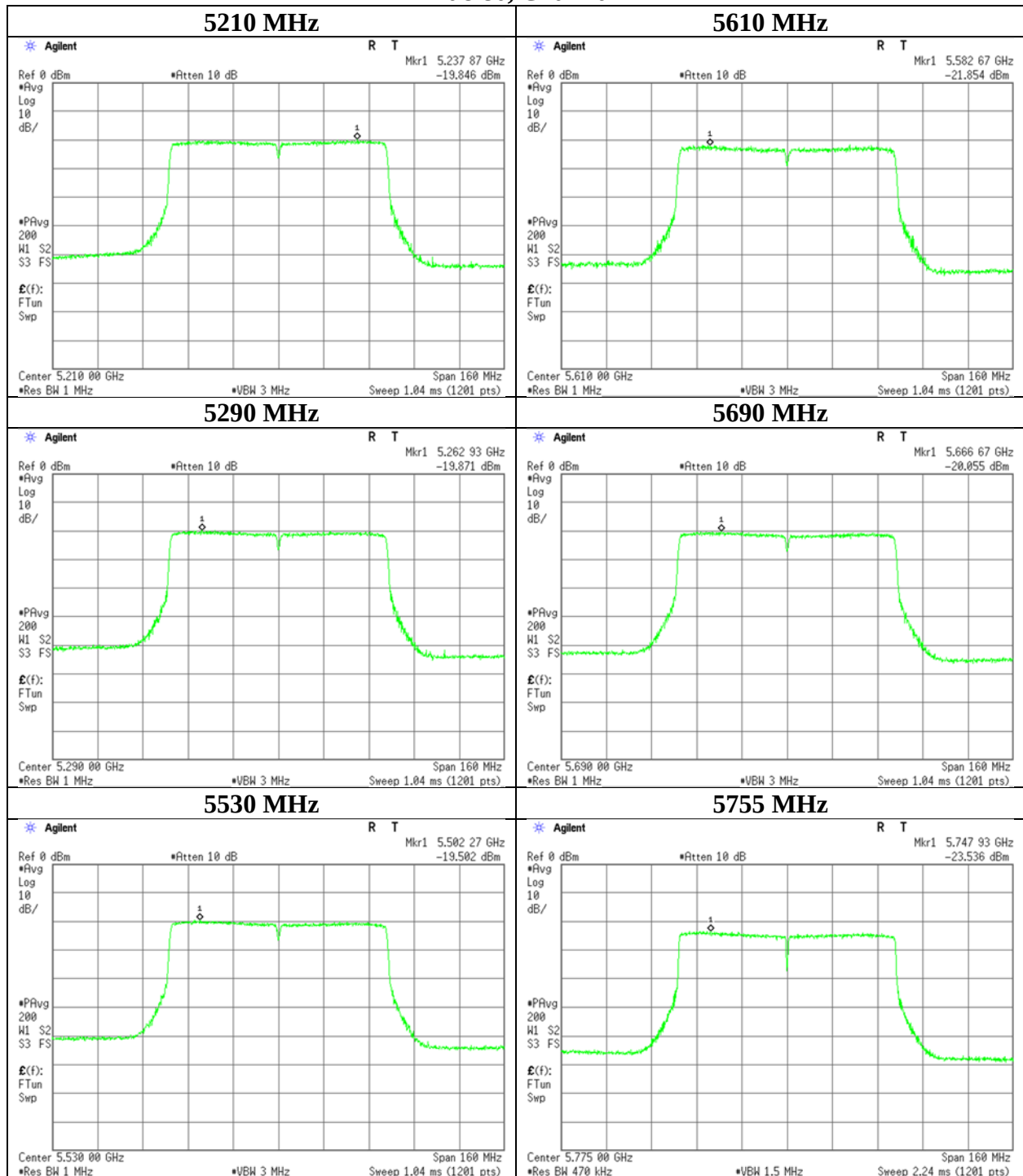
Maximum Power Spectral Density

11ac-40, Chain 1



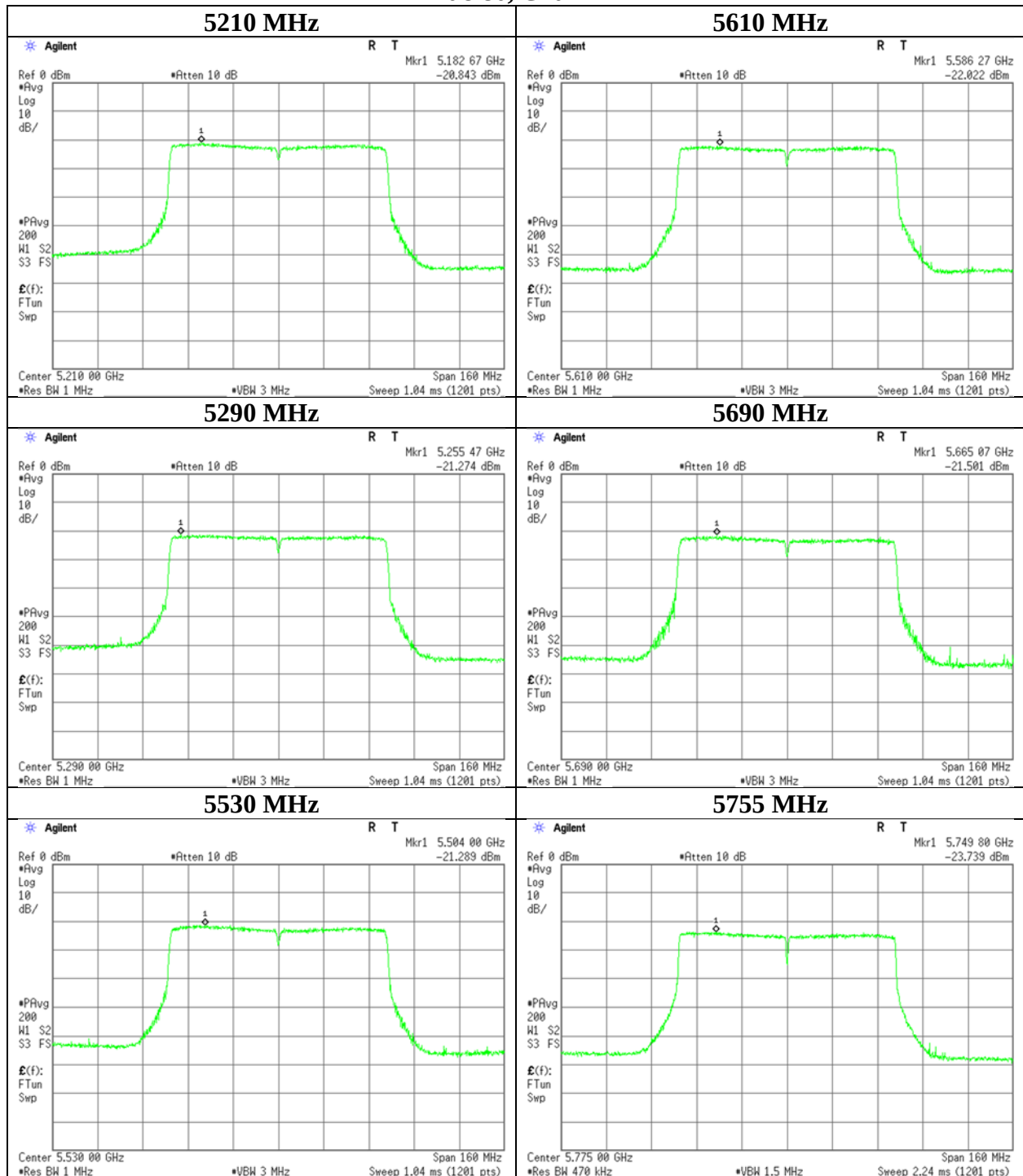
Maximum Power Spectral Density

11ac-80, Chain 0



Maximum Power Spectral Density

11ac-80, Chain 1



Radiated Spurious Emission

Chain 0 + 1 (MIMO)

Test place	Ise EMC Lab.		
Semi Anechoic Chamber	No.3	No.3	No.2
Date	November 6, 2022	November 8, 2022	November 9, 2022
Temperature / Humidity	21 deg. C / 35 % RH	25 deg. C / 45 % RH	24 deg. C / 38 % RH
Engineer	Tetsuro Yoshida	Tetsuro Yoshida	Tetsuro Yoshida
	(1 GHz to 10 GHz)	(10 GHz to 26.5 GHz)	(26.5 GHz to 40 GHz)
Mode	Tx 11ac-20 5180 MHz		

Polarity	Frequency	Reading (QP / PK)	Reading (AV)	Ant. Factor	Loss	Gain	Duty Factor	Result (QP / PK)	Result (AV)	Limit (QP / PK)	Limit (AV)	Margin (QP / PK)	Margin (AV)	Remark
[Hori/Vert]	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	
Hori.	5150.0	48.7	33.4	31.9	6.6	31.9	-	55.2	39.9	73.9	53.9	18.7	14.0	
Hori.	10360.0	42.1	-	39.9	-1.9	33.8	-	46.3	-	68.2	-	21.9	-	Floor noise
Hori.	15540.0	43.2	35.8	37.6	0.0	33.0	-	47.9	40.4	73.9	53.9	26.0	13.5	Floor noise
Vert.	5150.0	50.0	34.1	31.9	6.6	31.9	-	56.6	40.6	73.9	53.9	17.3	13.3	
Vert.	10360.0	42.2	-	39.9	-1.9	33.8	-	46.4	-	68.2	-	21.8	-	Floor noise
Vert.	15540.0	43.3	35.8	37.6	0.0	33.0	-	48.0	40.5	73.9	53.9	25.9	13.4	Floor noise

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor

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

*QP detector was used up to 1GHz.

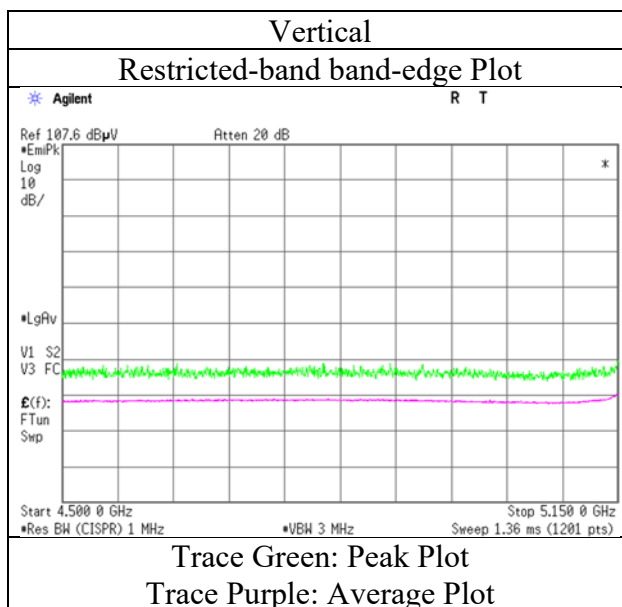
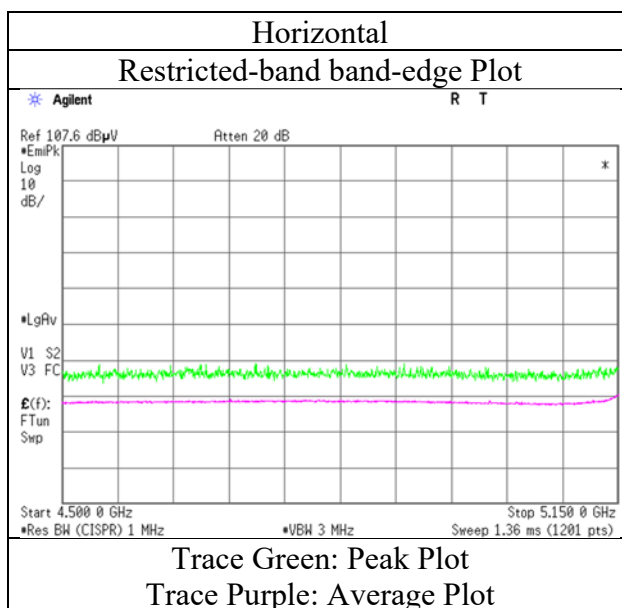
Distance factor:

1 GHz - 10 GHz	$20\log(4\text{ m} / 3.0\text{ m}) = 2.5\text{ dB}$
10 GHz - 40 GHz	$20\log(1.0\text{ m} / 3.0\text{ m}) = -9.5\text{ dB}$

Radiated Spurious Emission

Chain 0 + 1 (MIMO)

Test place	Ise EMC Lab.
Semi Anechoic Chamber	No.3
Date	November 6, 2022
Temperature / Humidity	21 deg. C / 35 % RH
Engineer	Tetsuro Yoshida
	(1 GHz to 10 GHz)
Mode	Tx 11ac-20 5180 MHz



* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Chain 0 + 1 (MIMO)

Test place	Ise EMC Lab.		
Semi Anechoic Chamber	No.3	No.3	No.2
Date	November 6, 2022	November 8, 2022	November 9, 2022
Temperature / Humidity	21 deg. C / 35 % RH	25 deg. C / 45 % RH	24 deg. C / 38 % RH
Engineer	Tetsuro Yoshida	Tetsuro Yoshida	Tetsuro Yoshida
	(1 GHz to 10 GHz)	(10 GHz to 26.5 GHz)	(26.5 GHz to 40 GHz)
Mode	Tx 11ac-20 5260 MHz		

Polarity	Frequency	Reading (QP / PK)	Reading (AV)	Ant. Factor	Loss	Gain	Duty Factor	Result (QP / PK)	Result (AV)	Limit (QP / PK)	Limit (AV)	Margin (QP / PK)	Margin (AV)	Remark
[Hori/Vert]	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	
Hori.	10520.0	42.1	-	39.8	-1.9	33.8	-	46.3	-	68.2	-	21.9	-	Floor noise
Hori.	15780.0	43.2	35.7	37.5	0.1	33.0	-	47.8	40.3	73.9	53.9	26.1	13.6	Floor noise
Vert.	10520.0	42.4	-	39.8	-1.9	33.8	-	46.6	-	68.2	-	21.6	-	Floor noise
Vert.	15780.0	43.2	35.8	37.5	0.1	33.0	-	47.8	40.4	73.9	53.9	26.1	13.5	Floor noise

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor

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

*QP detector was used up to 1GHz.

Distance factor:	1 GHz - 10 GHz	20log (4 m / 3.0 m) = 2.5 dB
	10 GHz - 40 GHz	20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Chain 0 + 1 (MIMO)

Test place	Ise EMC Lab.		
Semi Anechoic Chamber	No.3	No.3	No.2
Date	November 6, 2022	November 8, 2022	November 9, 2022
Temperature / Humidity	21 deg. C / 35 % RH	25 deg. C / 45 % RH	24 deg. C / 38 % RH
Engineer	Tetsuro Yoshida	Tetsuro Yoshida	Tetsuro Yoshida
	(1 GHz to 10 GHz)	(10 GHz to 26.5 GHz)	(26.5 GHz to 40 GHz)
Mode	Tx 11ac-20 5320 MHz		

Polarity	Frequency	Reading (QP / PK)	Reading (AV)	Ant. Factor	Loss	Gain	Duty Factor	Result (QP / PK)	Result (AV)	Limit (QP / PK)	Limit (AV)	Margin (QP / PK)	Margin (AV)	Remark
[Hori/Vert]	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	
Hori.	5350.0	47.1	32.2	31.7	6.7	31.9	-	53.5	38.6	73.9	53.9	20.4	15.3	
Hori.	10640.0	42.3	34.1	39.8	-1.8	33.8	-	46.6	38.4	73.9	53.9	27.4	15.6	Floor noise
Hori.	15960.0	43.2	35.5	37.5	0.1	33.0	-	47.9	40.2	73.9	53.9	26.0	13.8	Floor noise
Vert.	5350.0	48.1	32.3	31.7	6.7	31.9	-	54.5	38.7	73.9	53.9	19.4	15.2	
Vert.	10640.0	42.5	34.2	39.8	-1.8	33.8	-	46.8	38.4	73.9	53.9	27.1	15.5	Floor noise
Vert.	15960.0	43.3	35.8	37.5	0.1	33.0	-	48.0	40.5	73.9	53.9	25.9	13.4	Floor noise

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor

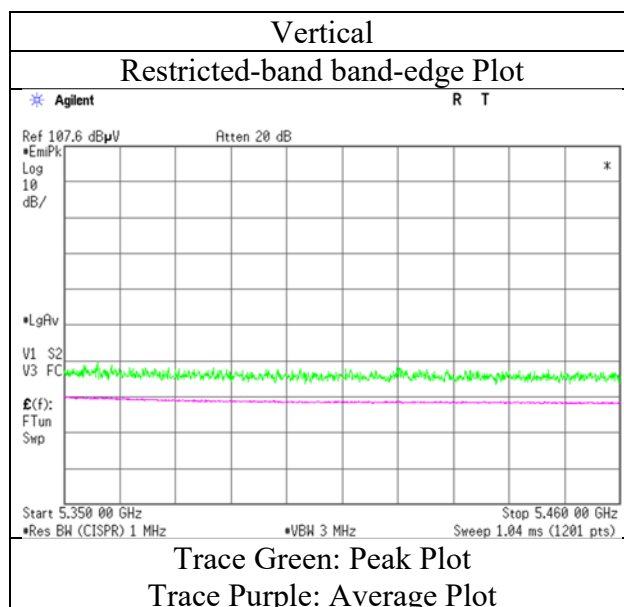
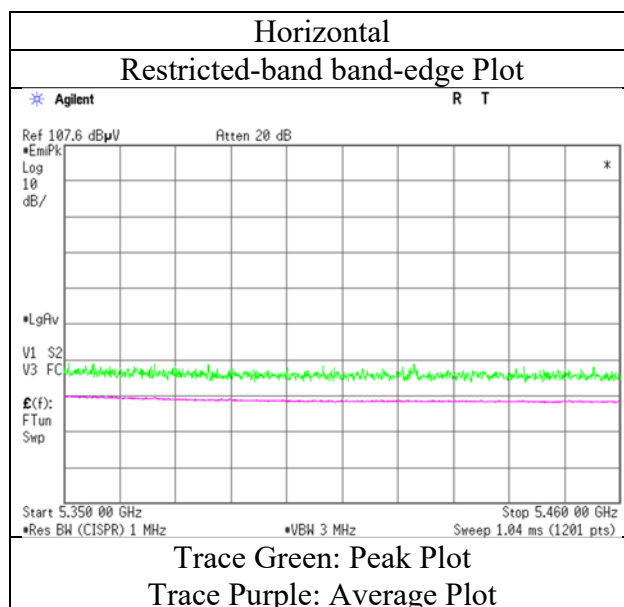
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

*QP detector was used up to 1GHz.

Distance factor:	1 GHz - 10 GHz	20log(4 m / 3.0 m) = 2.5 dB
	10 GHz - 40 GHz	20log(1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission
Chain 0 + 1 (MIMO)

Test place	Ise EMC Lab.
Semi Anechoic Chamber	No.3
Date	November 6, 2022
Temperature / Humidity	21 deg. C / 35 % RH
Engineer	Tetsuro Yoshida
Mode	Tx 11ac-20 5320 MHz



* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Chain 0 + 1 (MIMO)

Test place	Ise EMC Lab.		
Semi Anechoic Chamber	No.3	No.3	No.2
Date	November 6, 2022	November 8, 2022	November 9, 2022
Temperature / Humidity	21 deg. C / 35 % RH	25 deg. C / 45 % RH	24 deg. C / 38 % RH
Engineer	Tetsuro Yoshida	Tetsuro Yoshida	Tetsuro Yoshida
	(1 GHz to 10 GHz)	(10 GHz to 26.5 GHz)	(26.5 GHz to 40 GHz)
Mode	Tx 11ac-20 5500 MHz		

Polarity	Frequency	Reading (QP / PK)	Reading (AV)	Ant. Factor	Loss	Gain	Duty Factor	Result (QP / PK)	Result (AV)	Limit (QP / PK)	Limit (AV)	Margin (QP / PK)	Margin (AV)	Remark
[Hori/Vert]	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	
Hori.	5460.0	46.1	32.4	31.9	6.7	31.9	-	52.8	39.1	73.9	53.9	21.1	14.8	
Hori.	5470.0	47.0	-	31.9	6.7	31.9	-	53.7	-	73.9	-	20.2	-	
Hori.	11000.0	42.2	34.1	40.3	-1.7	33.8	-	47.0	38.9	73.9	53.9	26.9	15.0	Floor noise
Hori.	16500.0	43.0	-	39.8	0.3	33.0	-	50.1	-	68.2	-	18.1	-	Floor noise
Vert.	5460.0	49.5	35.0	31.9	6.7	31.9	-	56.1	41.7	73.9	53.9	17.8	12.3	
Vert.	5470.0	49.7	-	31.9	6.7	31.9	-	56.3	-	73.9	-	17.6	-	
Vert.	11000.0	42.2	34.2	40.3	-1.7	33.8	-	47.0	39.0	73.9	53.9	26.9	14.9	Floor noise
Vert.	16500.0	43.1	-	39.8	0.3	33.0	-	50.2	-	68.2	-	18.0	-	Floor noise

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor

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

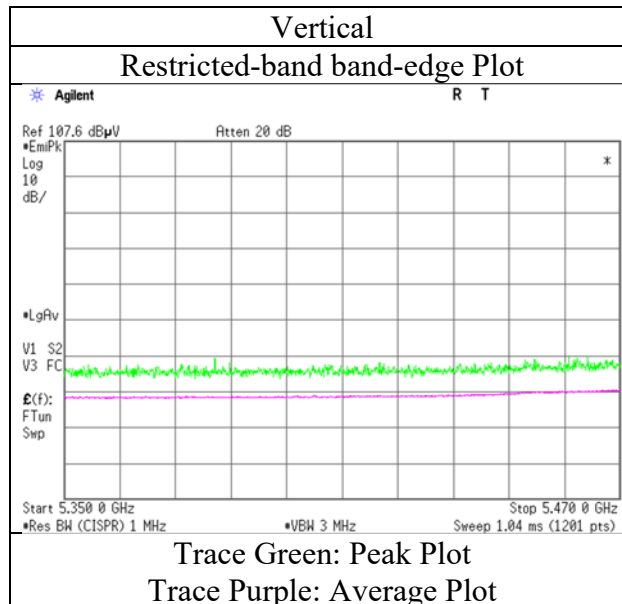
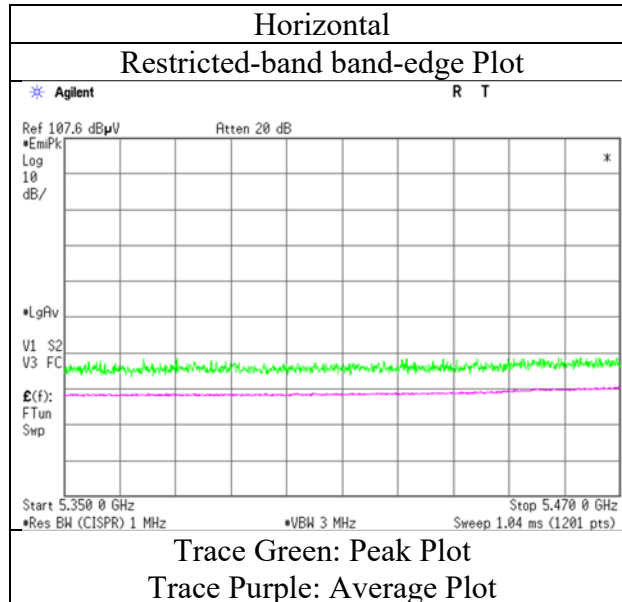
*QP detector was used up to 1GHz.

Distance factor: 1 GHz - 10 GHz $20\log(4\text{ m} / 3.0\text{ m}) = 2.5\text{ dB}$
 10 GHz - 40 GHz $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.5\text{ dB}$

Radiated Spurious Emission

Chain 0 + 1 (MIMO)

Test place	Ise EMC Lab.
Semi Anechoic Chamber	No.3
Date	November 6, 2022
Temperature / Humidity	21 deg. C / 35 % RH
Engineer	Tetsuro Yoshida
Mode	Tx 11ac-20 5500 MHz



* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.

Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Chain 0 + 1 (MIMO)

Test place	Ise EMC Lab.		
Semi Anechoic Chamber	No.3	No.3	No.2
Date	November 6, 2022	November 8, 2022	November 9, 2022
Temperature / Humidity	21 deg. C / 35 % RH	25 deg. C / 45 % RH	24 deg. C / 38 % RH
Engineer	Tetsuro Yoshida	Tetsuro Yoshida	Tetsuro Yoshida
	(1 GHz to 10 GHz)	(10 GHz to 26.5 GHz)	(26.5 GHz to 40 GHz)
Mode	Tx 11ac-20 5580 MHz		

Polarity	Frequency	Reading (QP / PK)	Reading (AV)	Ant. Factor	Loss	Gain	Duty Factor	Result (QP / PK)	Result (AV)	Limit (QP / PK)	Limit (AV)	Margin (QP / PK)	Margin (AV)	Remark
[Hori/Vert]	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	
Hori.	11160.0	42.1	34.0	39.9	-1.5	33.8	-	46.7	38.6	73.9	53.9	27.2	15.3	Floor noise
Hori.	16740.0	43.2	-	40.8	0.4	33.0	-	51.4	-	68.2	-	16.8	-	Floor noise
Vert.	11160.0	42.4	34.3	39.9	-1.5	33.8	-	47.0	38.9	73.9	53.9	26.9	15.0	Floor noise
Vert.	16740.0	43.3	-	40.8	0.4	33.0	-	51.5	-	68.2	-	16.7	-	Floor noise

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor

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

*QP detector was used up to 1GHz.

Distance factor:	1 GHz - 10 GHz	20log (4 m / 3.0 m) = 2.5 dB
	10 GHz - 40 GHz	20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Chain 0 + 1 (MIMO)

Test place	Ise EMC Lab.		
Semi Anechoic Chamber	No.3	No.3	No.2
Date	November 6, 2022	November 8, 2022	November 9, 2022
Temperature / Humidity	21 deg. C / 35 % RH	25 deg. C / 45 % RH	24 deg. C / 38 % RH
Engineer	Tetsuro Yoshida	Tetsuro Yoshida	Tetsuro Yoshida
	(1 GHz to 10 GHz)	(10 GHz to 26.5 GHz)	(26.5 GHz to 40 GHz)
Mode	Tx 11ac-20 5700 MHz		

Polarity	Frequency	Reading (QP / PK)	Reading (AV)	Ant. Factor	Loss	Gain	Duty Factor	Result (QP / PK)	Result (AV)	Limit (QP / PK)	Limit (AV)	Margin (QP / PK)	Margin (AV)	Remark
[Hori/Vert]	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	
Hori.	5725.0	46.0	-	32.1	6.8	32.0	-	53.0	-	73.9	-	20.9	-	
Hori.	11400.0	42.5	34.3	40.1	-1.3	33.7	-	47.6	39.4	73.9	53.9	26.3	14.5	Floor noise
Hori.	17100.0	43.3	-	42.0	0.5	33.0	-	52.8	-	68.2	-	15.4	-	Floor noise
Vert.	5725.0	47.5	-	32.1	6.8	32.0	-	54.5	-	73.9	-	19.4	-	
Vert.	11400.0	42.6	34.5	40.1	-1.3	33.7	-	47.7	39.5	73.9	53.9	26.2	14.4	Floor noise
Vert.	17100.0	43.4	-	42.0	0.5	33.0	-	52.9	-	68.2	-	15.3	-	Floor noise

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor

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

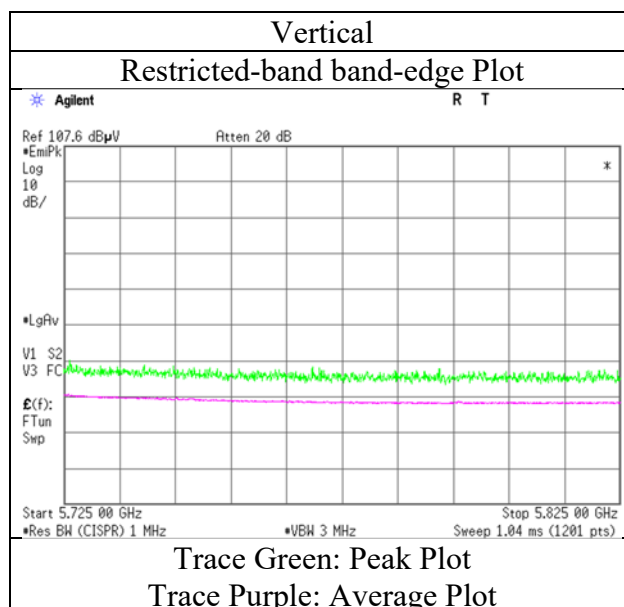
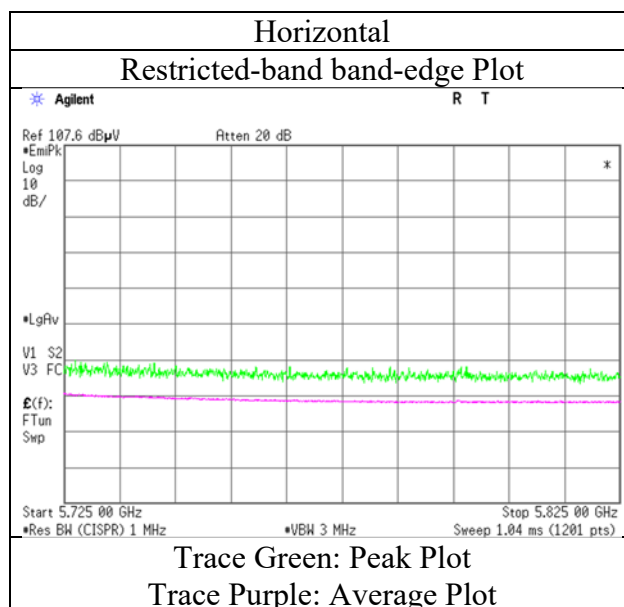
*QP detector was used up to 1GHz.

Distance factor:	1 GHz - 10 GHz	20log (4 m / 3.0 m) = 2.5 dB
	10 GHz - 40 GHz	20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Chain 0 + 1 (MIMO)

Test place	Ise EMC Lab.
Semi Anechoic Chamber	No.3
Date	November 6, 2022
Temperature / Humidity	21 deg. C / 35 % RH
Engineer	Tetsuro Yoshida
Mode	Tx 11ac-20 5700 MHz



* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Chain 0 + 1 (MIMO)

Test place	Ise EMC Lab.		
Semi Anechoic Chamber	No.3	No.3	No.2
Date	November 6, 2022	November 8, 2022	November 9, 2022
Temperature / Humidity	21 deg. C / 35 % RH	25 deg. C / 45 % RH	24 deg. C / 38 % RH
Engineer	Tetsuro Yoshida	Tetsuro Yoshida	Tetsuro Yoshida
	(1 GHz to 10 GHz)	(10 GHz to 26.5 GHz)	(26.5 GHz to 40 GHz)
Mode	Tx 11ac-20 5745 MHz		

Polarity	Frequency	Reading (QP / PK)	Reading (AV)	Ant. Factor	Loss	Gain	Duty Factor	Result (QP / PK)	Result (AV)	Limit (QP / PK)	Limit (AV)	Margin (QP / PK)	Margin (AV)	Remark
[Hori/Vert]	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	
Hori.	5650.0	42.2	-	31.9	6.8	32.0	-	48.9	-	68.2	-	19.3	-	
Hori.	5700.0	43.6	-	32.1	6.8	32.0	-	50.5	-	105.2	-	54.7	-	
Hori.	5720.0	46.2	-	32.1	6.8	32.0	-	53.1	-	110.8	-	57.7	-	
Hori.	5725.0	51.5	-	32.1	6.8	32.0	-	58.5	-	122.2	-	63.7	-	
Hori.	11490.0	42.6	34.0	39.9	-1.3	33.7	-	47.5	39.0	73.9	53.9	26.4	15.0	Floor noise
Hori.	17235.0	43.3	-	43.0	0.5	33.0	-	53.8	-	68.2	-	14.4	-	Floor noise
Vert.	5650.0	42.1	-	31.9	6.8	32.0	-	48.9	-	68.2	-	19.3	-	
Vert.	5700.0	42.4	-	32.1	6.8	32.0	-	49.3	-	105.2	-	55.9	-	
Vert.	5720.0	44.9	-	32.1	6.8	32.0	-	51.9	-	110.8	-	58.9	-	
Vert.	5725.0	51.3	-	32.1	6.8	32.0	-	58.3	-	122.2	-	63.9	-	
Vert.	11490.0	42.8	34.2	39.9	-1.3	33.7	-	47.7	39.1	73.9	53.9	26.2	14.8	Floor noise
Vert.	17235.0	43.2	-	43.0	0.5	33.0	-	53.7	-	68.2	-	14.5	-	Floor noise

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

Result (AV) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor

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

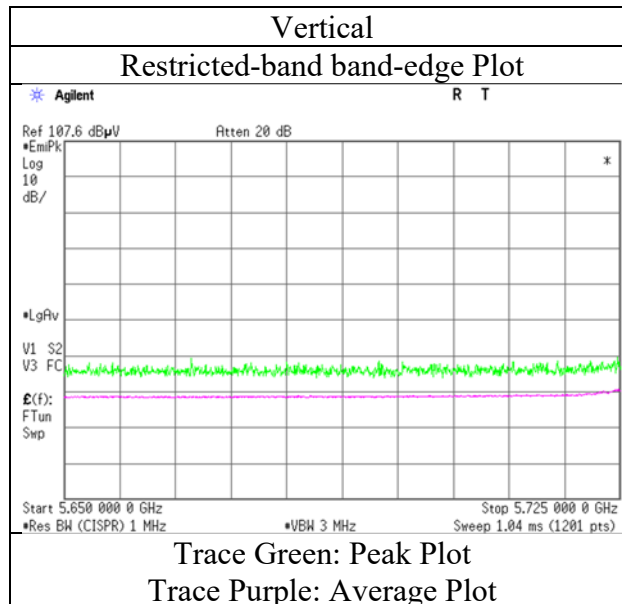
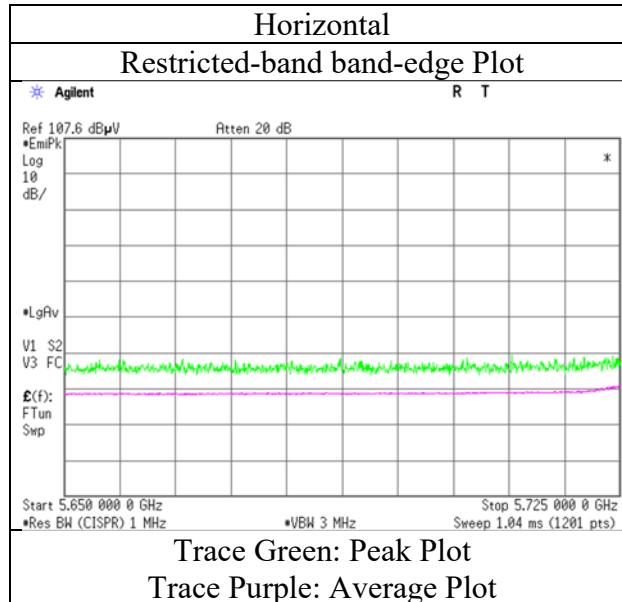
*QP detector was used up to 1GHz.

Distance factor: 1 GHz - 10 GHz $20\log(4\text{ m} / 3.0\text{ m}) = 2.5\text{ dB}$
 10 GHz - 40 GHz $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.5\text{ dB}$

Radiated Spurious Emission

Chain 0 + 1 (MIMO)

Test place	Ise EMC Lab.
Semi Anechoic Chamber	No.3
Date	November 6, 2022
Temperature / Humidity	21 deg. C / 35 % RH
Engineer	Tetsuro Yoshida
Mode	Tx 11ac-20 5745 MHz



* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.

Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Chain 0 + 1 (MIMO)

Test place	Ise EMC Lab.		
Semi Anechoic Chamber	No.3	No.3	No.2
Date	November 6, 2022	November 8, 2022	November 9, 2022
Temperature / Humidity	21 deg. C / 35 % RH	25 deg. C / 45 % RH	24 deg. C / 38 % RH
Engineer	Tetsuro Yoshida	Tetsuro Yoshida	Tetsuro Yoshida
	(1 GHz to 10 GHz)	(10 GHz to 26.5 GHz)	(26.5 GHz to 40 GHz)
Mode	Tx 11ac-20 5785 MHz		

Polarity	Frequency	Reading (QP / PK)	Reading (AV)	Ant. Factor	Loss	Gain	Duty Factor	Result (QP / PK)	Result (AV)	Limit (QP / PK)	Limit (AV)	Margin (QP / PK)	Margin (AV)	Remark
[Hori/Vert]	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	
Hori.	11570.0	42.6	34.2	39.5	-1.2	33.7	-	47.2	38.8	73.9	53.9	26.7	15.1	Floor noise
Hori.	17355.0	43.5	-	44.0	0.5	33.0	-	55.0	-	68.2	-	13.2	-	Floor noise
Vert.	11570.0	42.7	34.3	39.5	-1.2	33.7	-	47.3	39.0	73.9	53.9	26.6	15.0	Floor noise
Vert.	17355.0	43.1	-	44.0	0.5	33.0	-	54.7	-	68.2	-	13.5	-	Floor noise

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor

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

*QP detector was used up to 1GHz.

Distance factor:	1 GHz - 10 GHz	20log (4 m / 3.0 m) = 2.5 dB
	10 GHz - 40 GHz	20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Chain 0 + 1 (MIMO)

Test place	Ise EMC Lab.		
Semi Anechoic Chamber	No.3	No.3	No.2
Date	November 6, 2022	November 8, 2022	November 9, 2022
Temperature / Humidity	21 deg. C / 35 % RH	25 deg. C / 45 % RH	24 deg. C / 38 % RH
Engineer	Tetsuro Yoshida	Tetsuro Yoshida	Tetsuro Yoshida
	(1 GHz to 10 GHz)	(10 GHz to 26.5 GHz)	(26.5 GHz to 40 GHz)
Mode	Tx 11ac-20 5825 MHz		

Polarity	Frequency	Reading (QP / PK)	Reading (AV)	Ant. Factor	Loss	Gain	Duty Factor	Result (QP / PK)	Result (AV)	Limit (QP / PK)	Limit (AV)	Margin (QP / PK)	Margin (AV)	Remark
[Hori/Vert]	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	
Hori.	5850.0	49.0	-	32.5	6.9	32.0	-	56.4	-	122.2	-	65.8	-	
Hori.	5855.0	45.8	-	32.5	6.9	32.0	-	53.1	-	110.8	-	57.7	-	
Hori.	5875.0	42.6	-	32.5	6.9	32.0	-	50.0	-	105.2	-	55.2	-	
Hori.	5925.0	41.3	-	32.5	6.9	32.0	-	48.7	-	68.2	-	19.5	-	
Hori.	11650.0	42.4	34.1	39.2	-1.1	33.7	-	46.8	38.5	73.9	53.9	27.1	15.4	Floor noise
Hori.	17475.0	43.3	-	44.7	0.6	33.0	-	55.6	-	68.2	-	12.6	-	Floor noise
Vert.	5850.0	48.8	-	32.5	6.9	32.0	-	56.1	-	122.2	-	66.1	-	
Vert.	5855.0	43.6	-	32.5	6.9	32.0	-	51.0	-	110.8	-	59.9	-	
Vert.	5875.0	41.7	-	32.5	6.9	32.0	-	49.1	-	105.2	-	56.1	-	
Vert.	5925.0	41.6	-	32.5	6.9	32.0	-	49.0	-	68.2	-	19.2	-	
Vert.	11650.0	42.6	34.2	39.2	-1.1	33.7	-	46.9	38.5	73.9	53.9	27.0	15.4	Floor noise
Vert.	17475.0	43.0	-	44.7	0.6	33.0	-	55.3	-	68.2	-	12.9	-	Floor noise

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

Result (AV) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor

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

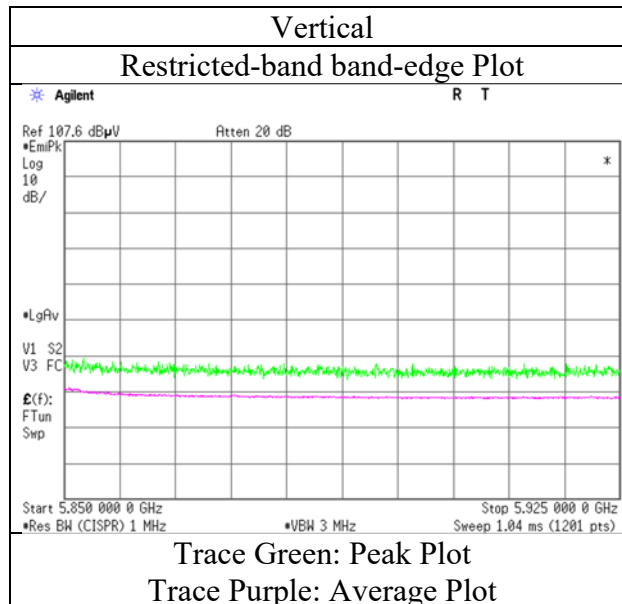
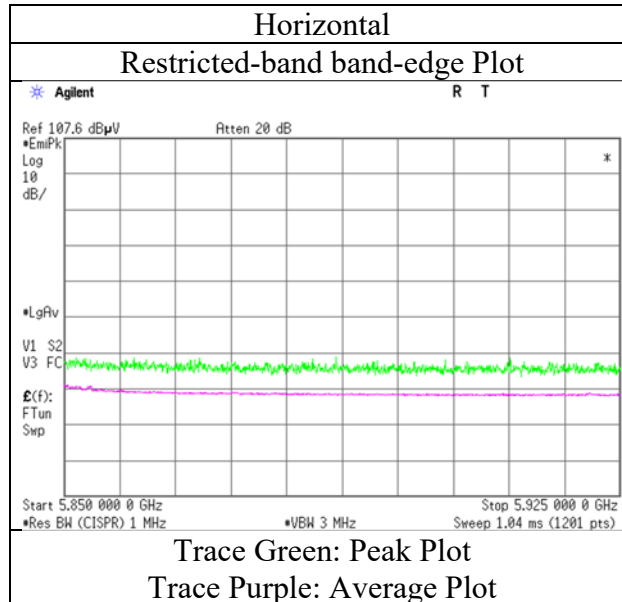
*QP detector was used up to 1GHz.

Distance factor: 1 GHz - 10 GHz $20\log(4\text{ m} / 3.0\text{ m}) = 2.5\text{ dB}$
 10 GHz - 40 GHz $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.5\text{ dB}$

Radiated Spurious Emission

Chain 0 + 1 (MIMO)

Test place	Ise EMC Lab.
Semi Anechoic Chamber	No.3
Date	November 6, 2022
Temperature / Humidity	21 deg. C / 35 % RH
Engineer	Tetsuro Yoshida
Mode	Tx 11ac-20 5825 MHz



* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.

Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Chain 0 + 1 (MIMO)

Test place	Ise EMC Lab.			
Semi Anechoic Chamber	No.3	No.2	No.3	No.2
Date	November 6, 2022	November 7, 2022	November 8, 2022	November 9, 2022
Temperature / Humidity	21 deg. C / 35 % RH	23 deg. C / 46 % RH	25 deg. C / 45 % RH	24 deg. C / 38 % RH
Engineer	Tetsuro Yoshida	Tetsuro Yoshida	Tetsuro Yoshida	Tetsuro Yoshida
	(1 GHz to 10 GHz)	(10 GHz to 18 GHz)	(18 GHz to 26.5 GHz)	(26.5 GHz to 40 GHz)
Mode	Tx 11ac-40 5190 MHz			

Polarity [Hori/Vert]	Frequency [MHz]	Reading (QP / PK) [dBuV]	Reading (AV) [dBuV]	Ant. Factor [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result (QP / PK) [dBuV/m]	Result (AV) [dBuV/m]	Limit (QP / PK) [dBuV/m]	Limit (AV) [dBuV/m]	Margin (QP / PK) [dB]	Margin (AV) [dB]	Remark
Hori.	5150.0	54.0	37.5	32.2	7.5	31.9	-	61.8	45.3	73.9	53.9	12.1	8.6	
Hori.	10380.0	43.0	-	39.7	-2.5	34.5	-	45.8	-	68.2	-	22.4	-	Floor noise
Hori.	15570.0	44.2	36.0	37.7	-0.8	33.5	-	47.6	39.4	73.9	53.9	26.3	14.5	Floor noise
Vert.	5150.0	55.4	38.1	32.2	7.5	31.9	-	63.2	45.9	73.9	53.9	10.7	8.0	
Vert.	10380.0	43.0	-	39.7	-2.5	34.5	-	45.7	-	68.2	-	22.5	-	Floor noise
Vert.	15570.0	44.3	36.1	37.7	-0.8	33.5	-	47.7	39.5	73.9	53.9	26.2	14.4	Floor noise

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

Result (AV) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor

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

*QP detector was used up to 1GHz.

Distance factor:	1 GHz - 10 GHz	20log(4 m / 3.0 m) = 2.5 dB
	10 GHz - 40 GHz	20log(1.0 m / 3.0 m) = -9.5 dB