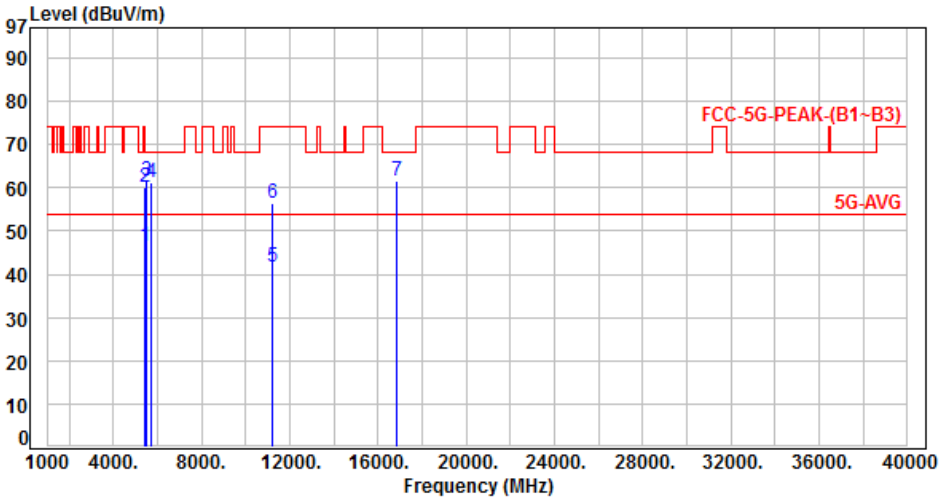
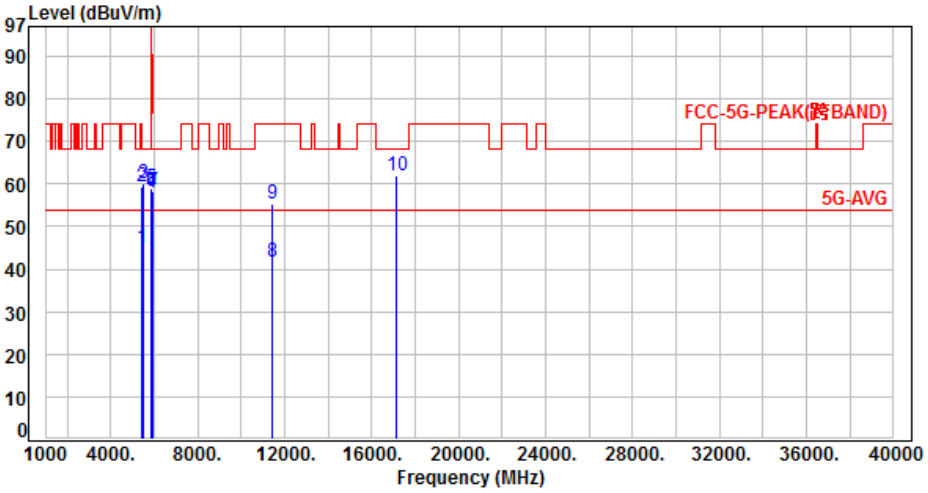
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 6, Band 3, CH122		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	41.40	46.60	54.00	-7.40	Average	161	181	P
2	5460.00	5.20	55.07	60.27	74.00	-13.73	Peak	161	181	P
3	5470.00	5.20	56.57	61.77	68.20	-6.43	Peak	161	181	P
4	5725.00	5.14	55.91	61.05	68.20	-7.15	Peak	161	181	P
5	11220.00	12.74	28.78	41.52	54.00	-12.48	Average	100	218	P
6	11220.00	12.74	43.57	56.31	74.00	-17.69	Peak	100	218	P
7	16830.00	16.75	44.67	61.42	68.20	-6.78	Peak	100	205	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

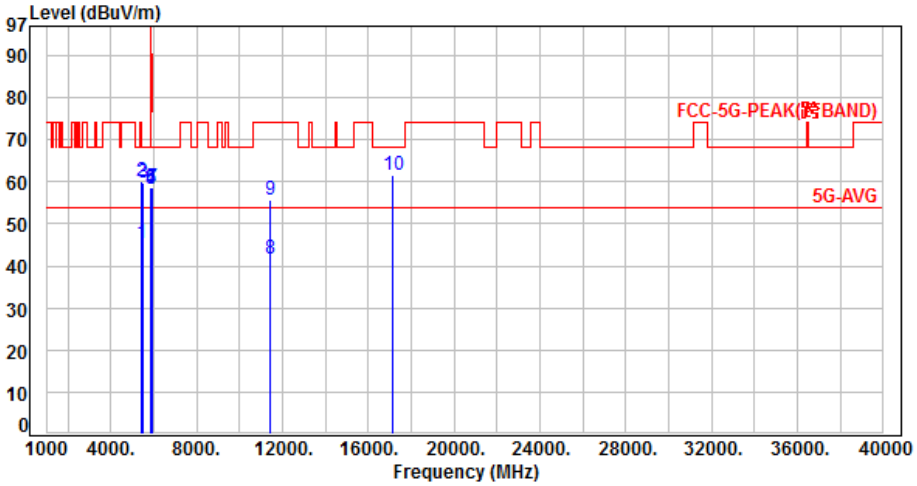
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 3 Straddle Channel, CH144		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	39.96	45.16	54.00	-8.84	Average	144	154	P
2	5460.00	5.20	54.24	59.44	74.00	-14.56	Peak	144	154	P
3	5470.00	5.20	54.89	60.09	68.20	-8.11	Peak	144	154	P
4	5850.00	5.21	52.80	58.01	122.20	-64.19	Peak	144	154	P
5	5855.00	5.23	53.83	59.06	110.80	-51.74	Peak	144	154	P
6	5875.00	5.31	53.04	58.35	105.20	-46.85	Peak	144	154	P
7	5925.00	5.49	52.87	58.36	68.20	-9.84	Peak	144	154	P
8	11440.00	13.08	28.43	41.51	54.00	-12.49	Average	100	138	P
9	11440.00	13.08	42.13	55.21	74.00	-18.79	Peak	100	138	P
10	17160.00	18.42	43.47	61.89	68.20	-6.31	Peak	100	126	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

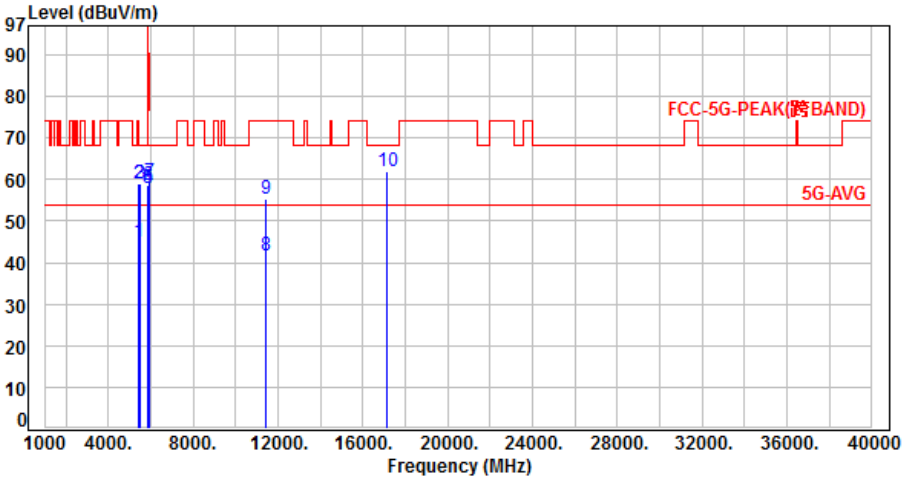
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 3 Straddle Channel, CH144		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	40.01	45.21	54.00	-8.79	Average	207	181	P
2	5460.00	5.20	54.81	60.01	74.00	-13.99	Peak	207	181	P
3	5470.00	5.20	54.59	59.79	68.20	-8.41	Peak	207	181	P
4	5850.00	5.21	53.24	58.45	122.20	-63.75	Peak	207	181	P
5	5855.00	5.23	53.05	58.28	110.80	-52.52	Peak	207	181	P
6	5875.00	5.31	53.20	58.51	105.20	-46.69	Peak	207	181	P
7	5925.00	5.49	53.08	58.57	68.20	-9.63	Peak	207	181	P
8	11440.00	13.08	28.55	41.63	54.00	-12.37	Average	100	192	P
9	11440.00	13.08	42.57	55.65	74.00	-18.35	Peak	100	192	P
10	17160.00	18.42	43.31	61.73	68.20	-6.47	Peak	100	174	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

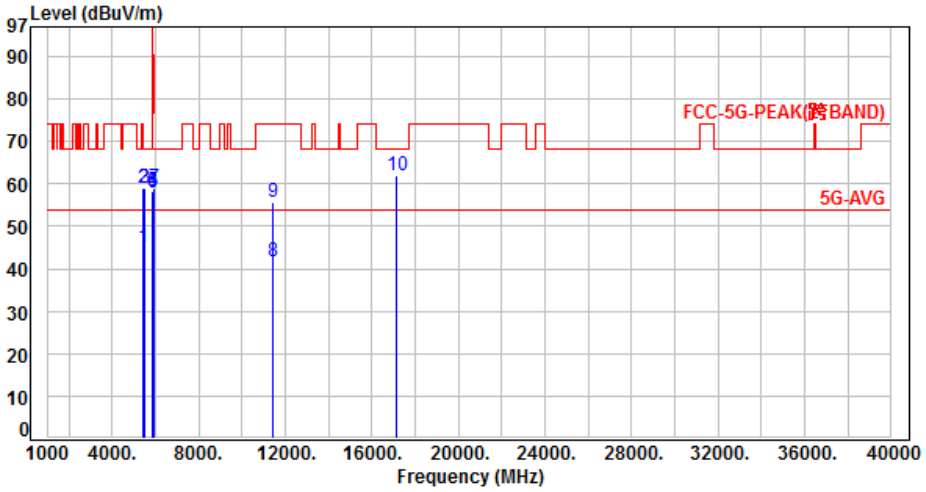
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 3 Straddle Channel, CH144		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	39.91	45.11	54.00	-8.89	Average	150	157	P
2	5460.00	5.20	53.90	59.10	74.00	-14.90	Peak	150	157	P
3	5470.00	5.20	53.95	59.15	68.20	-9.05	Peak	150	157	P
4	5850.00	5.21	52.58	57.79	122.20	-64.41	Peak	150	157	P
5	5855.00	5.23	52.67	57.90	110.80	-52.90	Peak	150	157	P
6	5875.00	5.31	53.20	58.51	105.20	-46.69	Peak	150	157	P
7	5925.00	5.49	53.79	59.28	68.20	-8.92	Peak	150	157	P
8	11440.00	13.08	28.56	41.64	54.00	-12.36	Average	100	142	P
9	11440.00	13.08	42.29	55.37	74.00	-18.63	Peak	100	142	P
10	17160.00	18.42	43.61	62.03	68.20	-6.17	Peak	100	133	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

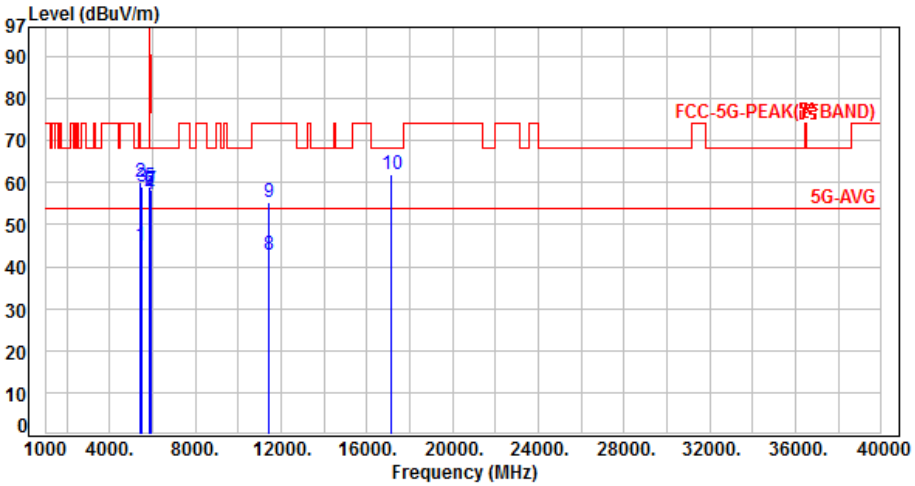
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 3 Straddle Channel, CH144		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	39.96	45.16	54.00	-8.84	Average	195	181	P
2	5460.00	5.20	53.92	59.12	74.00	-14.88	Peak	195	181	P
3	5470.00	5.20	53.85	59.05	68.20	-9.15	Peak	195	181	P
4	5850.00	5.21	52.94	58.15	122.20	-64.05	Peak	195	181	P
5	5855.00	5.23	52.91	58.14	110.80	-52.66	Peak	195	181	P
6	5875.00	5.31	52.66	57.97	105.20	-47.23	Peak	195	181	P
7	5925.00	5.49	53.63	59.12	68.20	-9.08	Peak	195	181	P
8	11440.00	13.08	28.69	41.77	54.00	-12.23	Average	100	186	P
9	11440.00	13.08	42.76	55.84	74.00	-18.16	Peak	100	186	P
10	17160.00	18.42	43.42	61.84	68.20	-6.36	Peak	100	171	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

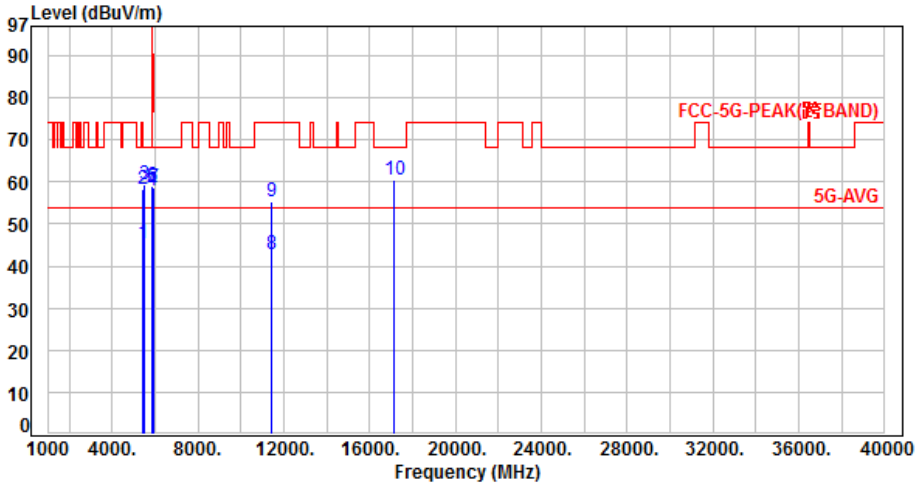
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 5, Band 3 Straddle Channel, CH142		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	39.91	45.11	54.00	-8.89	Average	160	155	P
2	5460.00	5.20	54.77	59.97	74.00	-14.03	Peak	160	155	P
3	5470.00	5.20	53.92	59.12	68.20	-9.08	Peak	160	155	P
4	5850.00	5.21	52.06	57.27	122.20	-64.93	Peak	160	155	P
5	5855.00	5.23	53.62	58.85	110.80	-51.95	Peak	160	155	P
6	5875.00	5.31	53.11	58.42	105.20	-46.78	Peak	160	155	P
7	5925.00	5.49	52.96	58.45	68.20	-9.75	Peak	160	155	P
8	11420.00	13.01	29.82	42.83	54.00	-11.17	Average	100	147	P
9	11420.00	13.01	42.39	55.40	74.00	-18.60	Peak	100	147	P
10	17130.00	18.23	43.69	61.92	68.20	-6.28	Peak	100	129	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

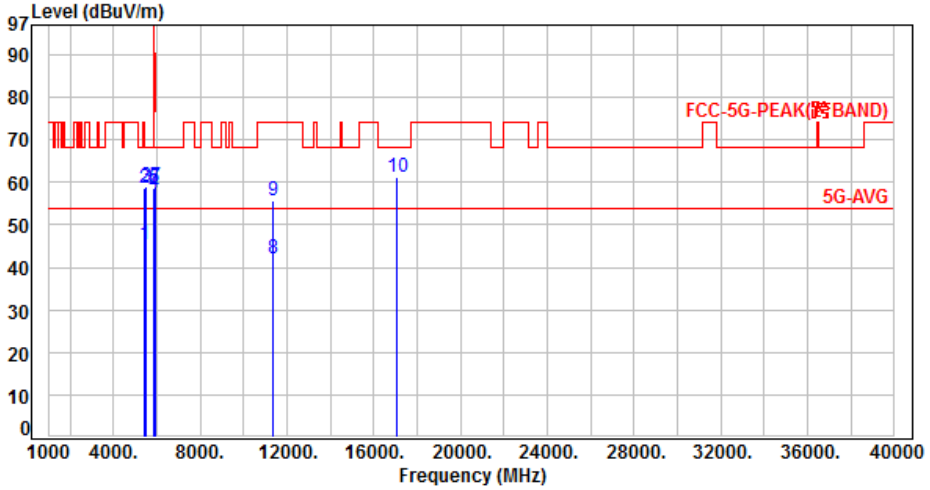
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 3 Straddle Channel, CH142		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	40.09	45.29	54.00	-8.71	Average	100	181	P
2	5460.00	5.20	53.23	58.43	74.00	-15.57	Peak	100	181	P
3	5470.00	5.20	54.08	59.28	68.20	-8.92	Peak	100	181	P
4	5850.00	5.21	52.78	57.99	122.20	-64.21	Peak	100	181	P
5	5855.00	5.23	53.54	58.77	110.80	-52.03	Peak	100	181	P
6	5875.00	5.31	53.52	58.83	105.20	-46.37	Peak	100	181	P
7	5925.00	5.49	53.02	58.51	68.20	-9.69	Peak	100	181	P
8	11420.00	13.01	29.70	42.71	54.00	-11.29	Average	100	192	P
9	11420.00	13.01	42.42	55.43	74.00	-18.57	Peak	100	192	P
10	17130.00	18.23	42.42	60.65	68.20	-7.55	Peak	100	174	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

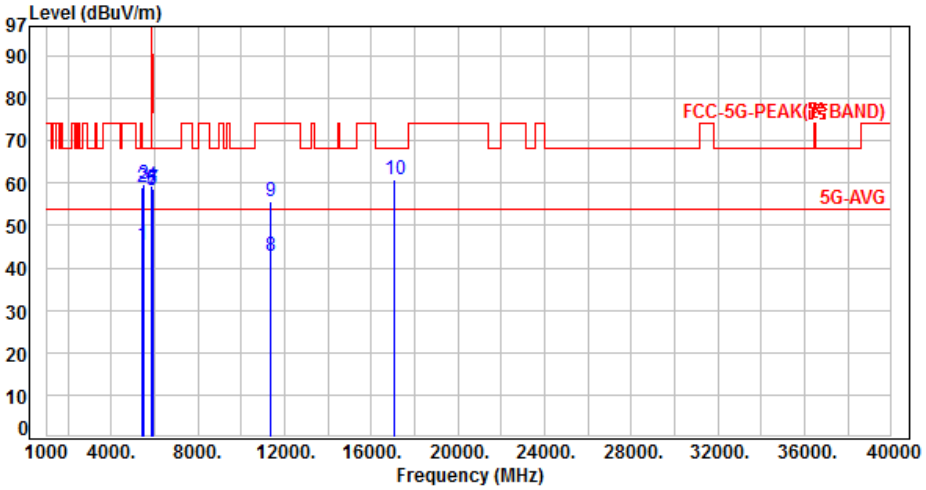
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 6, Band 3 Straddle Channel, CH138		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	40.17	45.37	54.00	-8.63	Average	140	157	P
2	5460.00	5.20	53.57	58.77	74.00	-15.23	Peak	140	157	P
3	5470.00	5.20	53.98	59.18	68.20	-9.02	Peak	140	157	P
4	5850.00	5.21	52.42	57.63	122.20	-64.57	Peak	140	157	P
5	5855.00	5.23	53.47	58.70	110.80	-52.10	Peak	140	157	P
6	5875.00	5.31	53.45	58.76	105.20	-46.44	Peak	140	157	P
7	5925.00	5.49	53.48	58.97	68.20	-9.23	Peak	140	157	P
8	11380.00	12.91	29.13	42.04	54.00	-11.96	Average	100	151	P
9	11380.00	12.91	42.64	55.55	74.00	-18.45	Peak	100	151	P
10	17070.00	17.93	43.43	61.36	68.20	-6.84	Peak	100	126	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

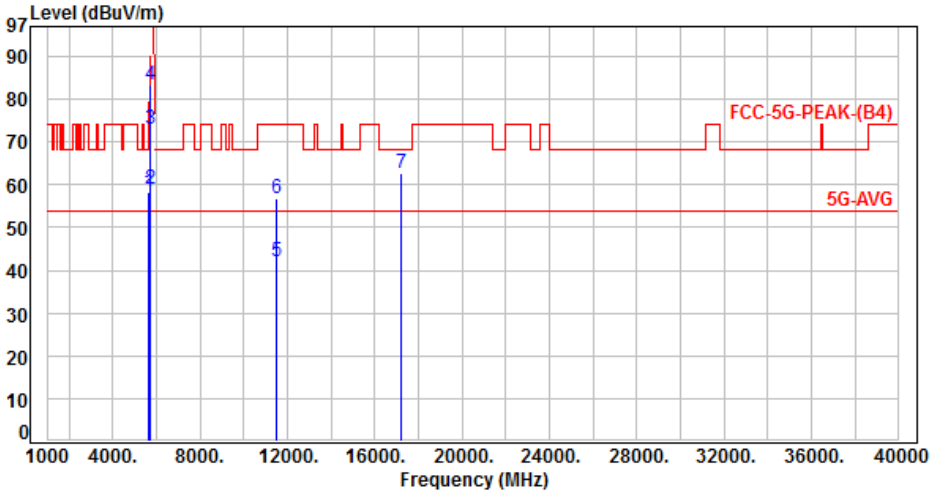
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 6, Band 3 Straddle Channel, CH138		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	5.20	40.19	45.39	54.00	-8.61	Average	210	183	P
2	5460.00	5.20	53.76	58.96	74.00	-15.04	Peak	210	183	P
3	5470.00	5.20	54.53	59.73	68.20	-8.47	Peak	210	183	P
4	5850.00	5.21	54.16	59.37	122.20	-62.83	Peak	210	183	P
5	5855.00	5.23	52.95	58.18	110.80	-52.62	Peak	210	183	P
6	5875.00	5.31	53.34	58.65	105.20	-46.55	Peak	210	183	P
7	5925.00	5.49	53.17	58.66	68.20	-9.54	Peak	210	183	P
8	11380.00	12.91	29.99	42.90	54.00	-11.10	Average	100	187	P
9	11380.00	12.91	42.64	55.55	74.00	-18.45	Peak	100	187	P
10	17070.00	17.93	42.81	60.74	68.20	-7.46	Peak	100	179	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

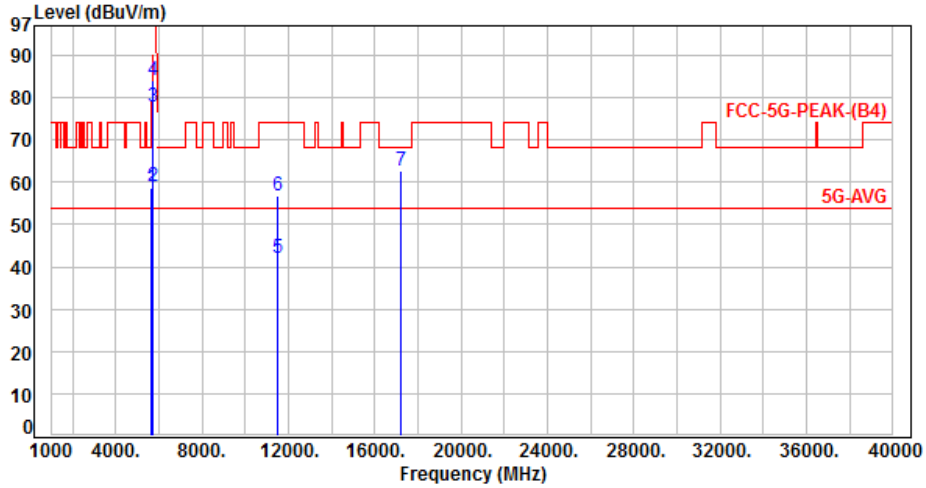
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 4, CH149		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.09	53.23	58.32	68.20	-9.88	Peak	170	154	P
2	5700.00	5.12	53.88	59.00	105.20	-46.20	Peak	170	154	P
3	5720.00	5.13	67.92	73.05	110.80	-37.75	Peak	170	154	P
4	5725.00	5.14	78.09	83.23	122.20	-38.97	Peak	170	154	P
5	11490.00	13.27	28.78	42.05	54.00	-11.95	Average	100	141	P
6	11490.00	13.27	43.34	56.61	74.00	-17.39	Peak	100	141	P
7	17235.00	18.83	43.74	62.57	68.20	-5.63	Peak	100	148	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

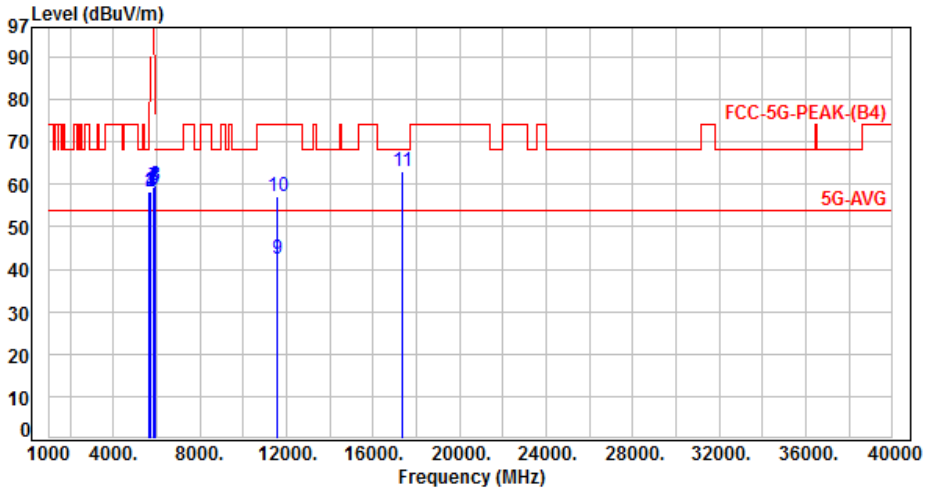
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 4, CH149		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.09	53.43	58.52	68.20	-9.68	Peak	100	182	P
2	5700.00	5.12	53.98	59.10	105.20	-46.10	Peak	100	182	P
3	5720.00	5.13	72.65	77.78	110.80	-33.02	Peak	100	182	P
4	5725.00	5.14	79.10	84.24	122.20	-37.96	Peak	100	182	P
5	11490.00	13.27	28.85	42.12	54.00	-11.88	Average	100	176	P
6	11490.00	13.27	43.65	56.92	74.00	-17.08	Peak	100	176	P
7	17235.00	18.83	43.90	62.73	68.20	-5.47	Peak	100	188	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

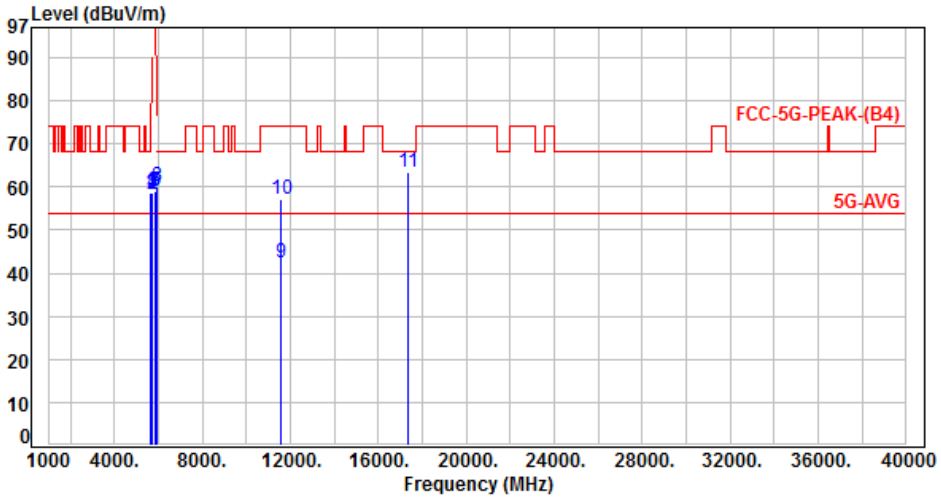
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 4, CH157		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.09	53.19	58.28	68.20	-9.92	Peak	168	158	P
2	5700.00	5.12	53.21	58.33	105.20	-46.87	Peak	168	158	P
3	5720.00	5.13	53.17	58.30	110.80	-52.50	Peak	168	158	P
4	5725.00	5.14	53.13	58.27	122.20	-63.93	Peak	168	158	P
5	5850.00	5.21	53.43	58.64	122.20	-63.56	Peak	168	158	P
6	5855.00	5.23	53.62	58.85	110.80	-51.95	Peak	168	158	P
7	5875.00	5.31	53.91	59.22	105.20	-45.98	Peak	168	158	P
8	5925.00	5.49	54.19	59.68	68.20	-8.52	Peak	168	158	P
9	11570.00	13.50	28.88	42.38	54.00	-11.62	Average	100	136	P
10	11570.00	13.50	43.55	57.05	74.00	-16.95	Peak	100	136	P
11	17355.00	19.47	43.66	63.13	68.20	-5.07	Peak	100	152	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

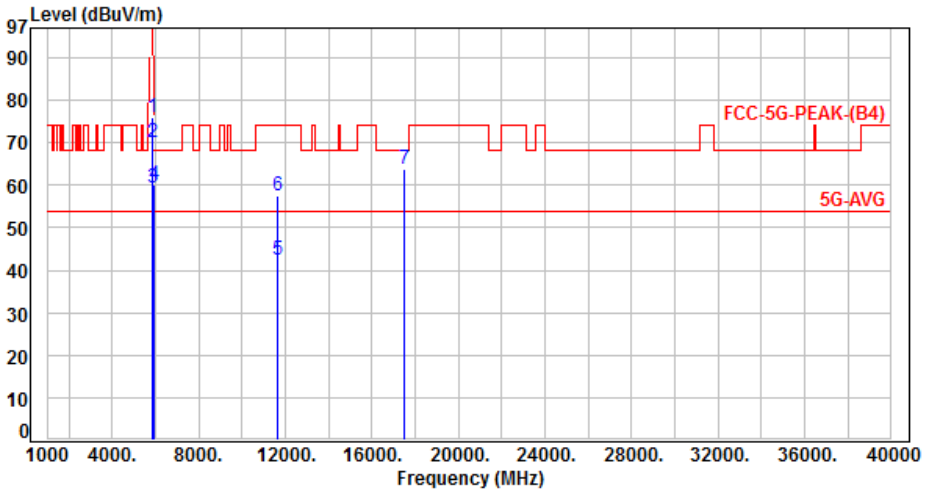
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 4, CH157		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.09	53.66	58.75	68.20	-9.45	Peak	100	187	P
2	5700.00	5.12	53.29	58.41	105.20	-46.79	Peak	100	187	P
3	5720.00	5.13	53.35	58.48	110.80	-52.32	Peak	100	187	P
4	5725.00	5.14	53.33	58.47	122.20	-63.73	Peak	100	187	P
5	5850.00	5.21	53.72	58.93	122.20	-63.27	Peak	100	187	P
6	5855.00	5.23	53.81	59.04	110.80	-51.76	Peak	100	187	P
7	5875.00	5.31	53.72	59.03	105.20	-46.17	Peak	100	187	P
8	5925.00	5.49	54.47	59.96	68.20	-8.24	Peak	100	187	P
9	11570.00	13.50	28.93	42.43	54.00	-11.57	Average	100	171	P
10	11570.00	13.50	43.81	57.31	74.00	-16.69	Peak	100	171	P
11	17355.00	19.47	43.87	63.34	68.20	-4.86	Peak	100	185	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

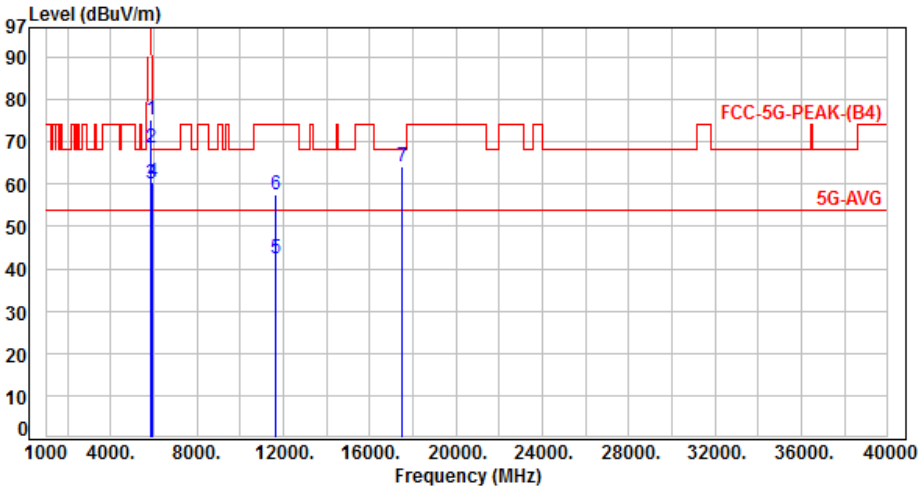
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, Band 4, CH165		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	5.21	70.85	76.06	122.20	-46.14	Peak	164	161	P
2	5855.00	5.23	64.86	70.09	110.80	-40.71	Peak	164	161	P
3	5875.00	5.31	54.13	59.44	105.20	-45.76	Peak	164	161	P
4	5925.00	5.49	54.69	60.18	68.20	-8.02	Peak	164	161	P
5	11650.00	13.68	28.75	42.43	54.00	-11.57	Average	100	134	P
6	11650.00	13.68	43.68	57.36	74.00	-16.64	Peak	100	134	P
7	17475.00	20.39	43.55	63.94	68.20	-4.26	Peak	100	146	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

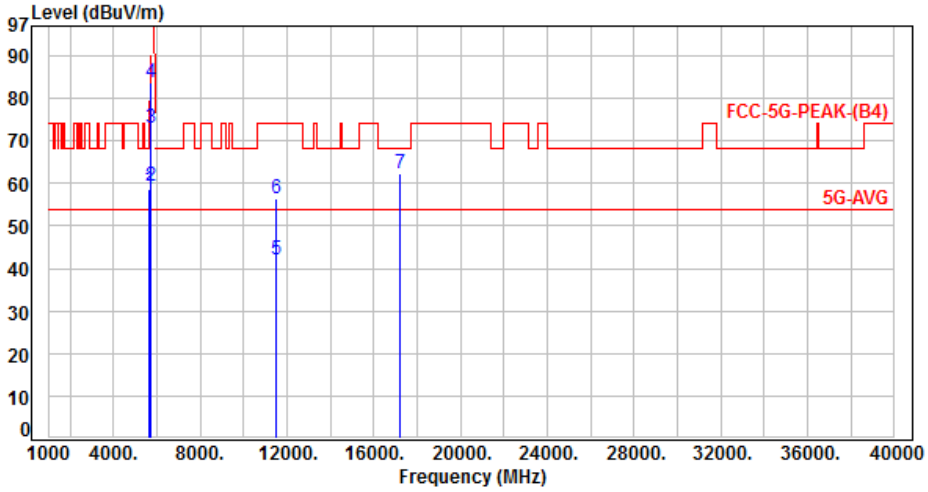
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 1, Band 4, CH165		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	5.21	70.18	75.39	122.20	-46.81	Peak	100	180	P
2	5855.00	5.23	63.40	68.63	110.80	-42.17	Peak	100	180	P
3	5875.00	5.31	54.98	60.29	105.20	-44.91	Peak	100	180	P
4	5925.00	5.49	54.97	60.46	68.20	-7.74	Peak	100	180	P
5	11650.00	13.68	28.83	42.51	54.00	-11.49	Average	100	177	P
6	11650.00	13.68	43.91	57.59	74.00	-16.41	Peak	100	177	P
7	17475.00	20.39	43.71	64.10	68.20	-4.10	Peak	100	193	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

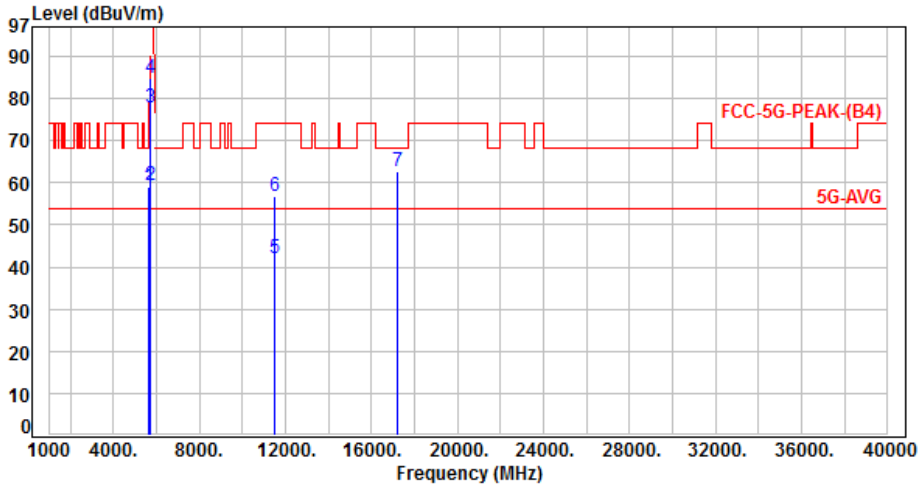
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 4, CH149		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.09	53.55	58.64	68.20	-9.56	Peak	167	152	P
2	5700.00	5.12	54.11	59.23	105.20	-45.97	Peak	167	152	P
3	5720.00	5.13	68.03	73.16	110.80	-37.64	Peak	167	152	P
4	5725.00	5.14	78.55	83.69	122.20	-38.51	Peak	167	152	P
5	11490.00	13.27	28.70	41.97	54.00	-12.03	Average	100	138	P
6	11490.00	13.27	43.23	56.50	74.00	-17.50	Peak	100	138	P
7	17235.00	18.83	43.55	62.38	68.20	-5.82	Peak	100	145	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

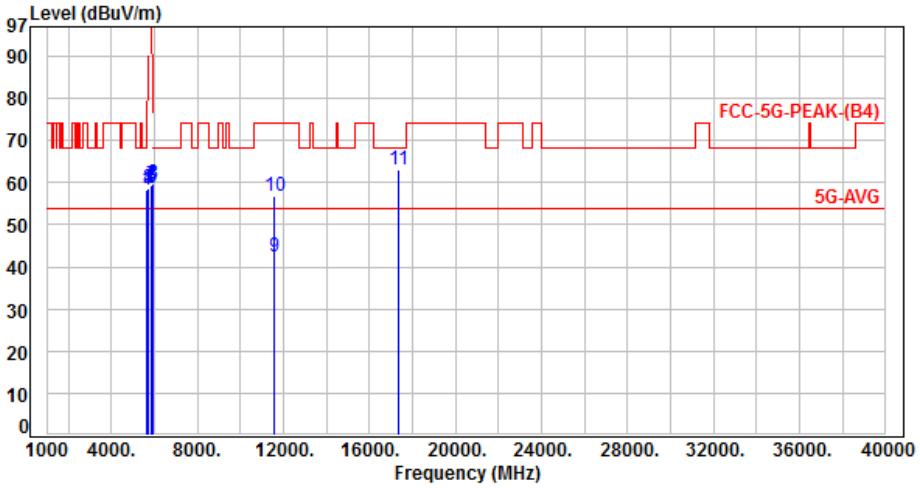
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 4, CH149		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.09	53.78	58.87	68.20	-9.33	Peak	100	185	P
2	5700.00	5.12	54.16	59.28	105.20	-45.92	Peak	100	185	P
3	5720.00	5.13	72.87	78.00	110.80	-32.80	Peak	100	185	P
4	5725.00	5.14	79.66	84.80	122.20	-37.40	Peak	100	185	P
5	11490.00	13.27	28.76	42.03	54.00	-11.97	Average	100	174	P
6	11490.00	13.27	43.51	56.78	74.00	-17.22	Peak	100	174	P
7	17235.00	18.83	43.78	62.61	68.20	-5.59	Peak	100	186	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

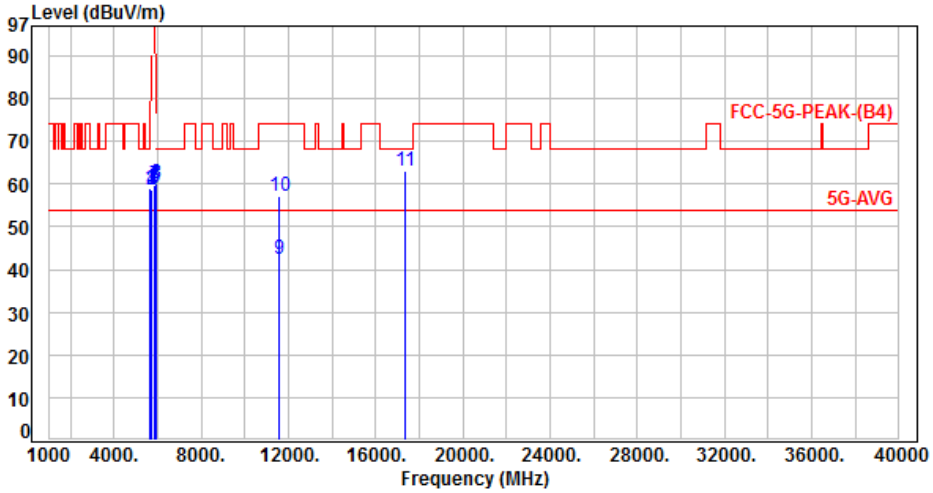
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 4, CH157		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.09	53.34	58.43	68.20	-9.77	Peak	169	160	P
2	5700.00	5.12	53.48	58.60	105.20	-46.60	Peak	169	160	P
3	5720.00	5.13	53.42	58.55	110.80	-52.25	Peak	169	160	P
4	5725.00	5.14	53.47	58.61	122.20	-63.59	Peak	169	160	P
5	5850.00	5.21	53.57	58.78	122.20	-63.42	Peak	169	160	P
6	5855.00	5.23	53.83	59.06	110.80	-51.74	Peak	169	160	P
7	5875.00	5.31	54.09	59.40	105.20	-45.80	Peak	169	160	P
8	5925.00	5.49	54.37	59.86	68.20	-8.34	Peak	169	160	P
9	11570.00	13.50	28.77	42.27	54.00	-11.73	Average	100	134	P
10	11570.00	13.50	43.37	56.87	74.00	-17.13	Peak	100	134	P
11	17355.00	19.47	43.56	63.03	68.20	-5.17	Peak	100	156	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

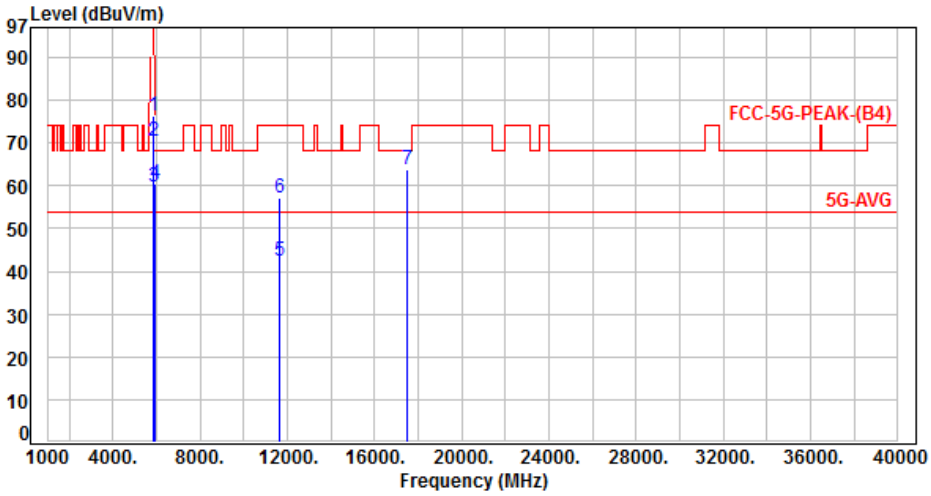
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 4, CH157		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.09	53.88	58.97	68.20	-9.23	Peak	100	189	P
2	5700.00	5.12	53.55	58.67	105.20	-46.53	Peak	100	189	P
3	5720.00	5.13	53.67	58.80	110.80	-52.00	Peak	100	189	P
4	5725.00	5.14	53.59	58.73	122.20	-63.47	Peak	100	189	P
5	5850.00	5.21	53.95	59.16	122.20	-63.04	Peak	100	189	P
6	5855.00	5.23	54.02	59.25	110.80	-51.55	Peak	100	189	P
7	5875.00	5.31	54.27	59.58	105.20	-45.62	Peak	100	189	P
8	5925.00	5.49	54.81	60.30	68.20	-7.90	Peak	100	189	P
9	11570.00	13.50	28.85	42.35	54.00	-11.65	Average	100	173	P
10	11570.00	13.50	43.72	57.22	74.00	-16.78	Peak	100	173	P
11	17355.00	19.47	43.76	63.23	68.20	-4.97	Peak	100	181	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

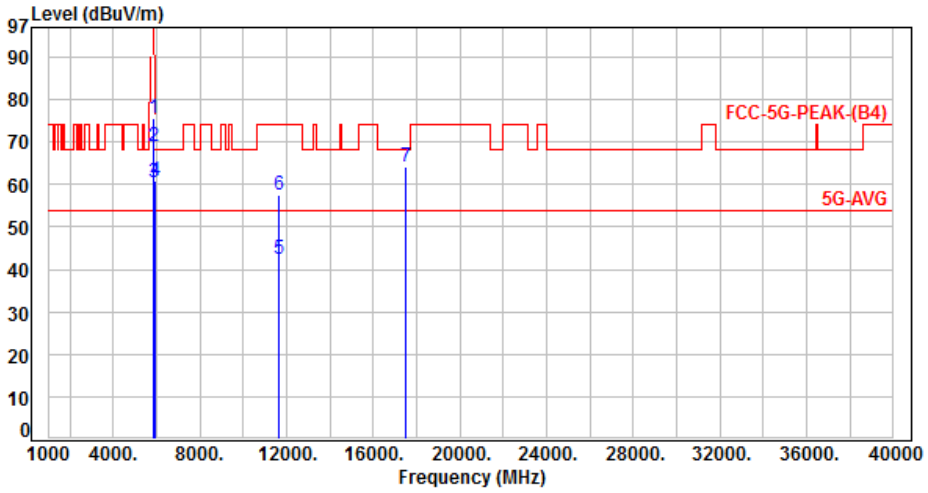
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, Band 4, CH165		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	5.21	71.10	76.31	122.20	-45.89	Peak	166	162	P
2	5855.00	5.23	65.12	70.35	110.80	-40.45	Peak	166	162	P
3	5875.00	5.31	54.45	59.76	105.20	-45.44	Peak	166	162	P
4	5925.00	5.49	54.91	60.40	68.20	-7.80	Peak	166	162	P
5	11650.00	13.68	28.64	42.32	54.00	-11.68	Average	100	137	P
6	11650.00	13.68	43.57	57.25	74.00	-16.75	Peak	100	137	P
7	17475.00	20.39	43.47	63.86	68.20	-4.34	Peak	100	143	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

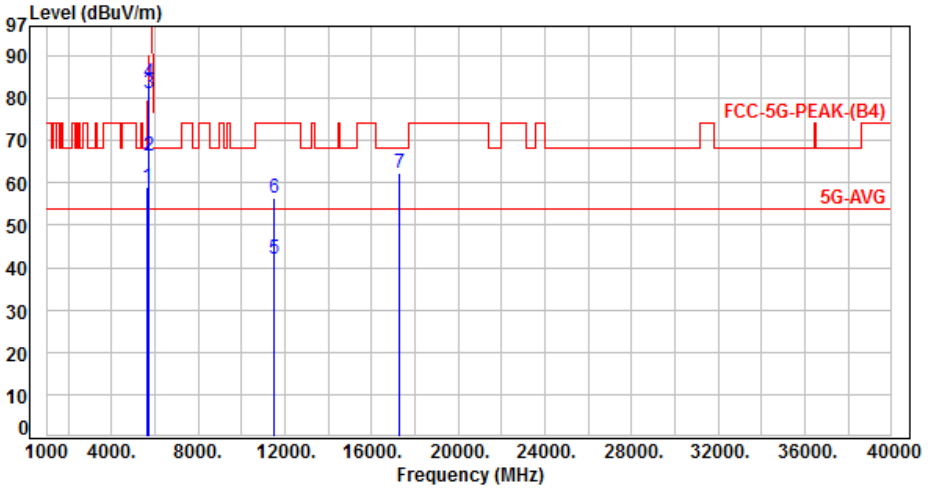
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 4, CH165		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	5.21	70.58	75.79	122.20	-46.41	Peak	100	181	P
2	5855.00	5.23	63.86	69.09	110.80	-41.71	Peak	100	181	P
3	5875.00	5.31	55.23	60.54	105.20	-44.66	Peak	100	181	P
4	5925.00	5.49	55.19	60.68	68.20	-7.52	Peak	100	181	P
5	11650.00	13.68	28.75	42.43	54.00	-11.57	Average	100	176	P
6	11650.00	13.68	43.77	57.45	74.00	-16.55	Peak	100	176	P
7	17475.00	20.39	43.66	64.05	68.20	-4.15	Peak	100	190	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

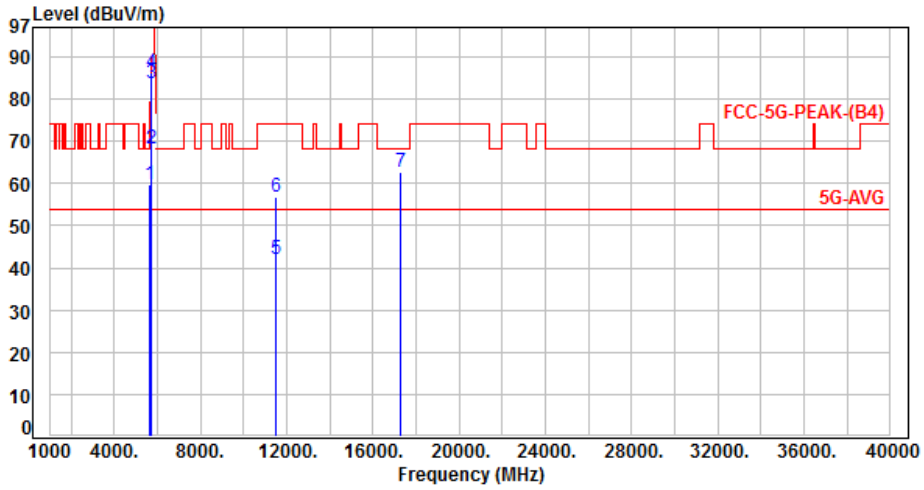
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 5, Band 4, CH151		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.09	53.88	58.97	68.20	-9.23	Peak	163	151	P
2	5700.00	5.12	61.18	66.30	105.20	-38.90	Peak	163	151	P
3	5720.00	5.13	75.99	81.12	110.80	-29.68	Peak	163	151	P
4	5725.00	5.14	78.69	83.83	122.20	-38.37	Peak	163	151	P
5	11510.00	13.32	28.64	41.96	54.00	-12.04	Average	100	135	P
6	11510.00	13.32	43.12	56.44	74.00	-17.56	Peak	100	135	P
7	17265.00	18.96	43.48	62.44	68.20	-5.76	Peak	100	142	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

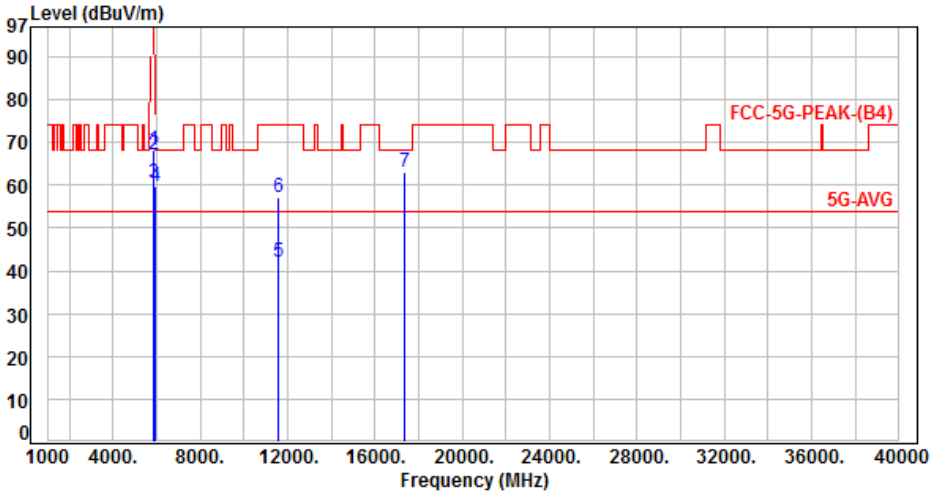
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 4, CH151		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.09	54.60	59.69	68.20	-8.51	Peak	100	184	P
2	5700.00	5.12	63.09	68.21	105.20	-36.99	Peak	100	184	P
3	5720.00	5.13	78.54	83.67	110.80	-27.13	Peak	100	184	P
4	5725.00	5.14	81.19	86.33	122.20	-35.87	Peak	100	184	P
5	11510.00	13.32	28.84	42.16	54.00	-11.84	Average	100	177	P
6	11510.00	13.32	43.63	56.95	74.00	-17.05	Peak	100	177	P
7	17265.00	18.96	43.66	62.62	68.20	-5.58	Peak	100	188	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

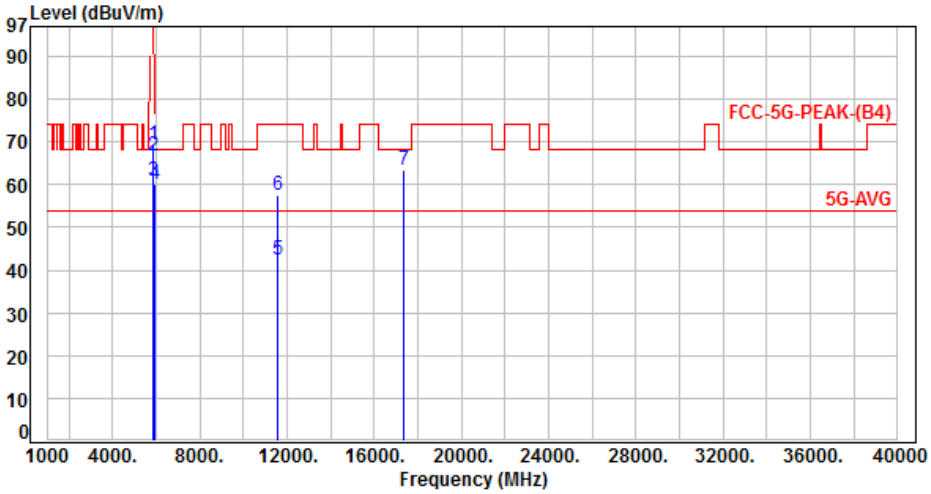
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 5, Band 4, CH159		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	5.21	63.12	68.33	122.20	-53.87	Peak	148	153	P
2	5855.00	5.23	61.79	67.02	110.80	-43.78	Peak	148	153	P
3	5875.00	5.31	55.27	60.58	105.20	-44.62	Peak	148	153	P
4	5925.00	5.49	54.24	59.73	68.20	-8.47	Peak	148	153	P
5	11590.00	13.55	28.52	42.07	54.00	-11.93	Average	100	135	P
6	11590.00	13.55	43.43	56.98	74.00	-17.02	Peak	100	135	P
7	17385.00	19.66	43.58	63.24	68.20	-4.96	Peak	100	141	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

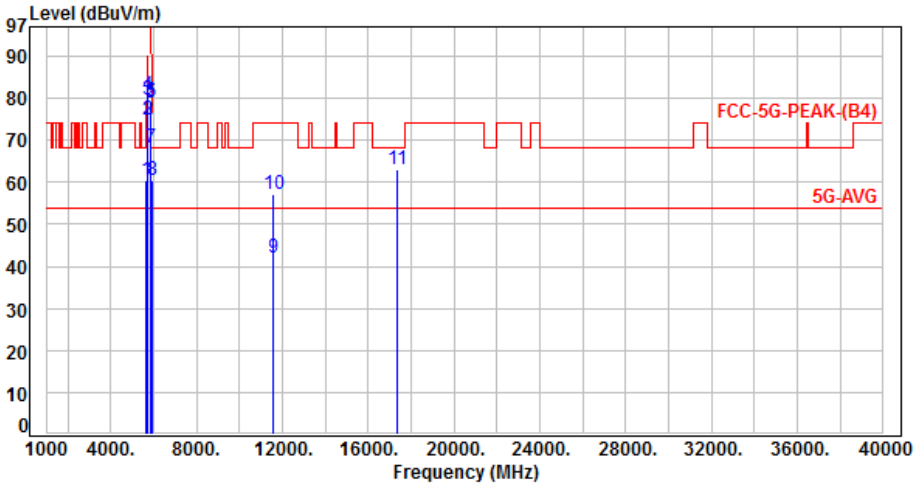
Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 5, Band 4, CH159		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	5.21	64.02	69.23	122.20	-52.97	Peak	100	183	P
2	5855.00	5.23	61.60	66.83	110.80	-43.97	Peak	100	183	P
3	5875.00	5.31	55.61	60.92	105.20	-44.28	Peak	100	183	P
4	5925.00	5.49	54.55	60.04	68.20	-8.16	Peak	100	183	P
5	11590.00	13.55	28.83	42.38	54.00	-11.62	Average	100	179	P
6	11590.00	13.55	43.88	57.43	74.00	-16.57	Peak	100	179	P
7	17385.00	19.66	43.76	63.42	68.20	-4.78	Peak	100	187	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

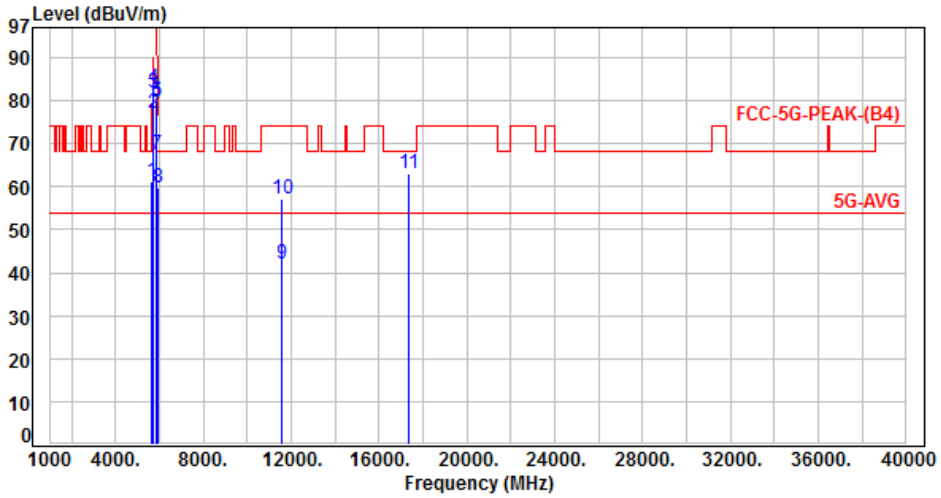
Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 6, Band 4, CH155		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.09	55.30	60.39	68.20	-7.81	Peak	154	155	P
2	5700.00	5.12	69.92	75.04	105.20	-30.16	Peak	154	155	P
3	5720.00	5.13	74.41	79.54	110.80	-31.26	Peak	154	155	P
4	5725.00	5.14	75.63	80.77	122.20	-41.43	Peak	154	155	P
5	5850.00	5.21	73.65	78.86	122.20	-43.34	Peak	154	155	P
6	5855.00	5.23	73.94	79.17	110.80	-31.63	Peak	154	155	P
7	5875.00	5.31	62.86	68.17	105.20	-37.03	Peak	154	155	P
8	5925.00	5.49	55.14	60.63	68.20	-7.57	Peak	154	155	P
9	11550.00	13.44	28.68	42.12	54.00	-11.88	Average	100	129	P
10	11550.00	13.44	43.55	56.99	74.00	-17.01	Peak	100	129	P
11	17325.00	19.27	43.78	63.05	68.20	-5.15	Peak	100	142	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 6, Band 4, CH155		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	5.09	56.18	61.27	68.20	-6.93	Peak	100	182	P
2	5700.00	5.12	72.08	77.20	105.20	-28.00	Peak	100	182	P
3	5720.00	5.13	76.57	81.70	110.80	-29.10	Peak	100	182	P
4	5725.00	5.14	77.82	82.96	122.20	-39.24	Peak	100	182	P
5	5850.00	5.21	74.32	79.53	122.20	-42.67	Peak	100	182	P
6	5855.00	5.23	74.67	79.90	110.80	-30.90	Peak	100	182	P
7	5875.00	5.31	62.36	67.67	105.20	-37.53	Peak	100	182	P
8	5925.00	5.49	54.18	59.67	68.20	-8.53	Peak	100	182	P
9	11550.00	13.44	28.77	42.21	54.00	-11.79	Average	100	175	P
10	11550.00	13.44	43.65	57.09	74.00	-16.91	Peak	100	175	P
11	17325.00	19.27	43.89	63.16	68.20	-5.04	Peak	100	194	P

Note: Level=Reading+Factor
Margin=Level-Limit
Factor=Antenna Factor + cable loss - Amplifier Factor

6.7. Restricted Bands of Operation

Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.09000 – 0.11000	16.42000 – 16.42300	399.9 – 410.0	4.500 – 5.150
0.49500 – 0.505**	16.69475 – 16.69525	608.0 – 614.0	5.350 – 5.460
2.17350 – 2.19050	16.80425 – 16.80475	960.0 – 1240.0	7.250 – 7.750
4.12500 – 4.12800	25.50000 – 25.67000	1300.0 – 1427.0	8.025 – 8.500
4.17725 – 4.17775	37.50000 – 38.25000	1435.0 – 1626.5	9.000 – 9.200
4.20725 – 4.20775	73.00000 – 74.60000	1645.5 – 1646.5	9.300 – 9.500
6.21500 – 6.21800	74.80000 – 75.20000	1660.0 – 1710.0	10.600 – 12.700
6.26775 – 6.26825	108.00000 – 121.94000	1718.8 – 1722.2	13.250 – 13.400
6.31175 – 6.31225	123.00000 – 138.00000	2200.0 – 2300.0	14.470 – 14.500
8.29100 – 8.29400	149.90000 – 150.05000	2310.0 – 2390.0	15.350 – 16.200
8.36200 – 8.36600	156.52475 – 156.52525	2483.5 – 2500.0	17.700 – 21.400
8.37625 – 8.38675	156.70000 – 156.90000	2655.0 – 2900.0	22.010 – 23.120
8.41425 – 8.41475	162.01250 – 167.17000	3260.0 – 3267.0	23.600 – 24.000
12.29000 – 12.29300	167.72000 – 173.20000	3332.0 – 3339.0	31.200 – 31.800
12.51975 – 12.52025	240.00000 – 285.00000	3345.8 – 3358.0	36.430 – 36.500
12.57675 – 12.57725	322.00000 – 335.40000	3600.0 – 4400.0	Above 38.6
13.36000 – 13.41000			

**: Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

7. On Time, Duty Cycle and Measurement methods

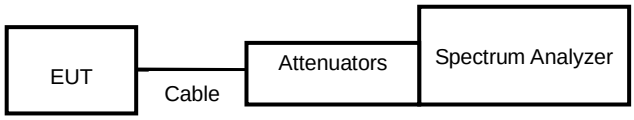
7.1. Test Limit

None; for reporting purposes only.

7.2. Test Procedure

KDB 789033 Zero-Span Spectrum Analyzer Method.

7.3. Test Setup Layout



7.4. Test Result and Data

Modulation Type	On Time (ms)	Period Time (ms)	Duty Cycle (%)
802.11a,6M	100.00	100.00	100.00%
802.11n HT20	100.00	100.00	100.00%
802.11n HT40	100.00	100.00	100.00%
802.11ac VHT20	100.00	100.00	100.00%
802.11ac VHT40	100.00	100.00	100.00%
802.11ac VHT80	100.00	100.00	100.00%

7.5. Measurement Methods

26 dB and 6dB Emission BW	KDB 789033 D02 v02r01, Section C
99% Occupied BW	KDB 789033 D02 v02r01, Section D
Conducted Output Power	KDB 789033 D02 v02r01, Section E.2.d and E.3.b (Method PM-G)
Power Spectral Density	KDB 789033 D02 v02r01, Section F
Unwanted emissions in restricted bands	KDB 789033 D02 v02r01, Sections G and H
Unwanted emissions in non-restricted bands	KDB 789033 D02 v02r01, Sections G and H

Modulation Type: 802.11a (6Mbps)

Modulation Type: 802.11ac VHT20 (6.5Mbps)

Modulation Type: 802.11n HT20 (6.5Mbps)

Modulation Type: 802.11ac VHT40 (13.5Mbps)

Modulation Type: 802.11n HT40 (13.5Mbps)

Modulation Type: 802.11ac VHT80 (29.3Mbps)

8. 6dB Bandwidth & 99% Occupied Bandwidth

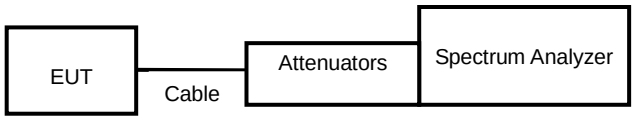
8.1. Test Limit

FCC §15.407
The minimum 6 dB bandwidth shall be at least 500 kHz.

8.2. Test Procedure

Reference to 789033 D02 General UNII Test Procedures New Rules v01: The transmitter output is connected to a spectrum analyzer with the RBW set to100KHz, the VBW >= 3 x RBW, peak detector and max hold.

8.3. Test Setup Layout



8.4. Test Result and Data (6dB Bandwidth)

In the 5.8G Band

Modulation Type	Channel	Frequency (MHz)	6dB Bandwidth(MHz)	Minimum Limit (MHz)
			ANT A	
11a	149	5745	16.35	0.50
11a	157	5785	16.35	0.50
11a	165	5825	16.35	0.50
11ac VHT20	149	5745	17.58	0.50
11ac VHT20	157	5785	17.61	0.50
11ac VHT20	165	5825	17.61	0.50
11ac VHT40	151	5755	35.16	0.50
11ac VHT40	159	5795	35.16	0.50
11ac VHT80	155	5775	75.12	0.50

UNII Emission Bandwidth Result (Extends across 5725MHz band)				
Modulation Type	Data Rate / MCS	Frequency (MHz)	6dB Bandwidth(MHz)	
			ANT A	
11a	6 Mbps	5720	12.03	
11n HT20	MCS 0	5720	12.54	
11n HT40	MCS 0	5710	24.89	
11ac VHT20	NSS1-MCS0	5720	12.90	
11ac VHT40	NSS1-MCS0	5710	24.91	
11ac VHT80	NSS1-MCS0	5690	55.18	

8.5. Test Result and Data (99% Occupied Bandwidth)

In the 5.8G Band

Modulation Type	Channel	Frequency (MHz)	99% Bandwidth(MHz)
			ANT A
11a	149	5745	18.84
11a	157	5785	18.90
11a	165	5825	18.79
11ac VHT20	149	5745	19.06
11ac VHT20	157	5785	18.56
11ac VHT20	165	5825	18.71
11ac VHT40	151	5755	37.73
11ac VHT40	159	5795	37.55
11ac VHT80	155	5775	77.17

UNII Emission Bandwidth Result (Extends across 5725MHz band)			
Modulation Type	Data Rate / MCS	Frequency (MHz)	99% Bandwidth(MHz)
			ANT A
11a	6 Mbps	5720	12.79
11n HT20	MCS 0	5720	13.26
11n HT40	MCS 0	5710	26.15
11ac VHT20	NSS1-MCS0	5720	13.64
11ac VHT40	NSS1-MCS0	5710	26.06
11ac VHT80	NSS1-MCS0	5690	55.21

6dB Bandwidth

Modulation Type: 802.11a (6Mbps)

CH149

Modulation Type: 802.11ac, VHT20 (6.5Mbps)

CH149

CH157

CH157

CH165

CH165

6dB Bandwidth

Modulation Type: 802.11ac, VHT40 (13.5Mbps)

CH151

Modulation Type: 802.11ac, VHT80 (29.3Mbps)

CH155

CH159

6dB Bandwidth
Extends across 5725MHz Band, Straddle Channel

Modulation Type: 802.11a (6Mbps)
CH144

802.11ac VHT20 (6.5Mbps)
CH144

Modulation Type: 802. 11n HT20 (6.5Mbps)
CH144

Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142

Modulation Type: 802.11n HT40 (13.5Mbps)
CH142

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138

99% Occupied Bandwidth

Modulation Type: 802.11a (6Mbps)

CH149

Modulation Type: 802.11ac, VHT20 (6.5Mbps)

CH149

CH157

CH157

CH165

CH165

99% Occupied Bandwidth

Modulation Type: 802.11ac, VHT40 (13.5Mbps)

CH151

Modulation Type: 802.11ac, VHT80 (29.3Mbps)

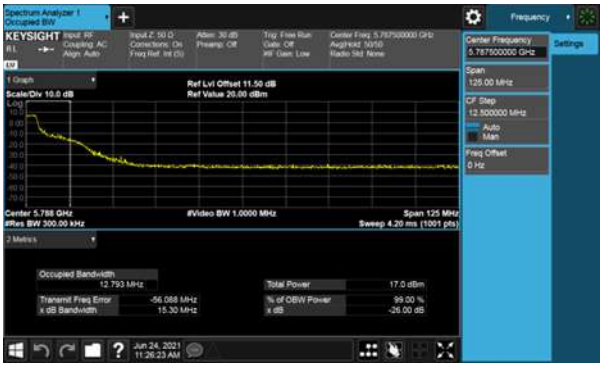
CH155

CH159

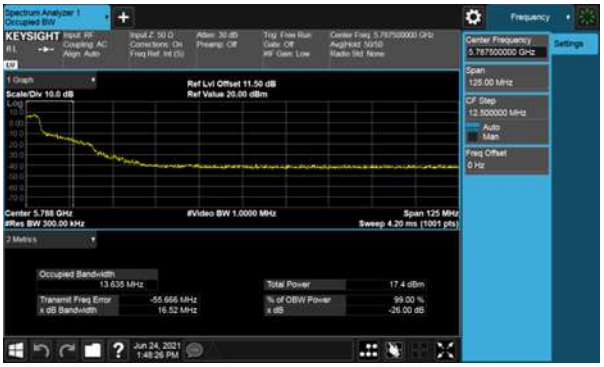
99% Bandwidth

Extends across 5725MHz Band, Straddle Channel

Modulation Type: 802.11a (6Mbps)
CH144

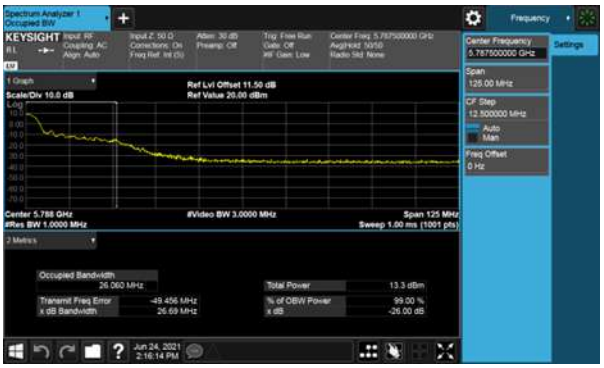


802.11ac VHT20 (6.5Mbps)
CH144

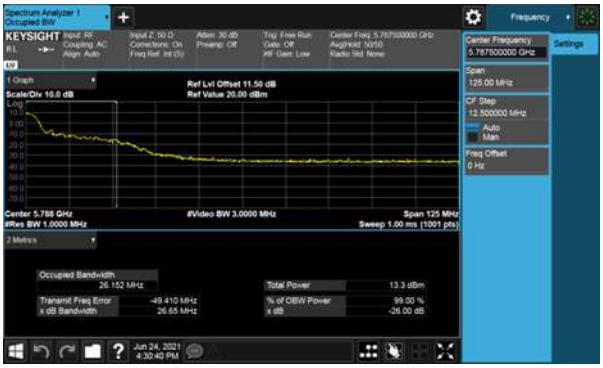


Modulation Type: 802. 11n HT20 (6.5Mbps)
CH144

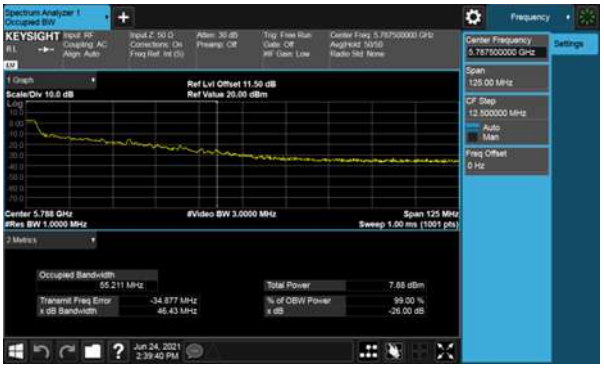
Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142



Modulation Type: 802.11n HT40 (13.5Mbps)
CH142



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



9. 26dB Bandwidth & 99% Occupied Bandwidth

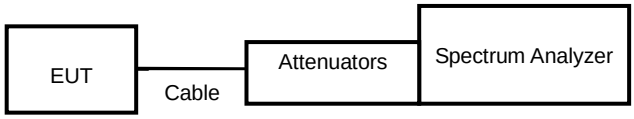
9.1. Test Limit

None; for reporting purposes only.

9.2. Test Procedure

Reference to 789033 D02 General UNII Test Procedures New Rules v01: The transmitter output is connected to a spectrum analyzer with the RBW = approximately 1% of the emission bandwidth, the VBW >= 3 x RBW, peak detector and max hold.

9.3. Test Setup Layout



9.4. Test Result and Data (26dB Bandwidth)

In the 5.2G Band

Mode	Channel	Frequency (MHz)	26dB Bandwidth(MHz)
			ANT A
11a	36	5180	29.90
11a	40	5200	28.87
11a	48	5240	29.32
11ac VHT20	36	5180	28.23
11ac VHT20	40	5200	27.34
11ac VHT20	48	5240	27.62
11ac VHT40	38	5190	47.86
11ac VHT40	46	5230	52.07
11ac VHT80	42	5210	93.65

In the 5.3G Band

Mode	Channel	Frequency (MHz)	26dB Bandwidth(MHz)
			ANT A
11a	52	5260	26.66
11a	60	5300	26.45
11a	64	5320	28.31
11ac VHT20	52	5260	27.23
11ac VHT20	60	5300	27.58
11ac VHT20	64	5320	27.69
11ac VHT40	54	5270	51.49
11ac VHT40	62	5310	47.86
11ac VHT80	58	5290	99.37

In the 5.5G Band

Mode	Channel	Frequency (MHz)	26dB Bandwidth(MHz)
			ANT A
11a	100	5500	35.00
11a	116	5580	35.46
11a	140	5700	37.94
11ac VHT20	100	5500	29.95
11ac VHT20	116	5580	30.00
11ac VHT20	140	5700	29.09
11ac VHT40	102	5510	45.45
11ac VHT40	110	5550	71.22
11ac VHT40	134	5670	71.57
11ac VHT80	106	5530	92.66
11ac VHT80	122	5610	122.6

UNII Emission Bandwidth Result (Within 5470-5725MHz band)			
Modulation Type	Data Rate / MCS	Frequency (MHz)	26dB Bandwidth(MHz)
			ANT A
11a	6 Mbps	5720	24.28
11n HT20	MCS 0	5720	25.89
11n HT40	MCS 0	5710	51.49
11ac VHT20	NSS1-MCS0	5720	25.92
11ac VHT40	NSS1-MCS0	5710	51.45
11ac VHT80	NSS1-MCS0	5690	100.60

9.5. Test Result and Data (99% Occupied Bandwidth)

In the 5.2G Band

Modulation Type	Channel	Frequency (MHz)	99% Bandwidth(MHz)
			ANT A
11a	36	5180	17.32
11a	40	5200	17.52
11a	48	5240	17.59
11ac VHT20	36	5180	18.29
11ac VHT20	40	5200	18.25
11ac VHT20	48	5240	18.25
11ac VHT40	38	5190	36.99
11ac VHT40	46	5230	37.17
11ac VHT80	42	5210	74.92

In the 5.3G Band

Modulation Type	Channel	Frequency (MHz)	99% Bandwidth(MHz)
			ANT A
11a	52	5260	17.36
11a	60	5300	17.37
11a	64	5320	17.36
11ac VHT20	52	5260	18.21
11ac VHT20	60	5300	18.24
11ac VHT20	64	5320	18.25
11ac VHT40	54	5270	37.13
11ac VHT40	62	5310	36.98
11ac VHT80	58	5290	75.01

In the 5.5G Band

Modulation Type	Channel	Frequency (MHz)	99% Bandwidth(MHz)
			ANT A
11a	100	5500	17.94
11a	116	5580	17.93
11a	140	5700	18.56
11ac VHT20	100	5500	18.47
11ac VHT20	116	5580	18.39
11ac VHT20	140	5700	18.30
11ac VHT40	102	5510	36.85
11ac VHT40	110	5550	37.59
11ac VHT40	134	5670	37.45
11ac VHT80	106	5530	74.86
11ac VHT80	122	5610	75.83

UNII Emission Bandwidth Result (Within 5470-5725MHz band)			
Modulation Type	Data Rate / MCS	Frequency (MHz)	99% Bandwidth(MHz)
			ANT A
11a	6 Mbps	5720	17.53
11n HT20	MCS 0	5720	17.86
11n HT40	MCS 0	5710	36.30
11ac VHT20	NSS1-MCS0	5720	18.63
11ac VHT40	NSS1-MCS0	5710	35.98
11ac VHT80	NSS1-MCS0	5690	73.14

26dB Bandwidth Band 1

Modulation Type: 802.11a (6Mbps)

CH36

802.11ac VHT20 (6.5Mbps)

CH36

CH40

CH40

CH48

CH48

26dB Bandwidth Band 1

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42

CH46

26dB Bandwidth Band 2

Modulation Type: 802.11a (6Mbps)

CH52

802.11ac VHT20 (6.5Mbps)

CH52

CH60

CH60

CH64

CH64

26dB Bandwidth Band 2

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH54

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH58

CH62

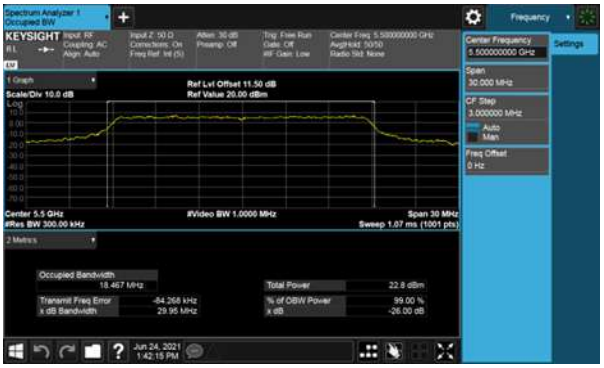
26dB Bandwidth Band 3

Modulation Type: 802.11a (6Mbps)

CH100

802.11ac VHT20 (6.5Mbps)

CH100



CH116

CH116

CH140

CH140

26dB Bandwidth Band 3

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH102

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH106

CH110

CH122

CH134

26dB Bandwidth

Within 5470-5725MHz Band, Straddle Channel

Modulation Type: 802.11a (6Mbps)
CH144

802.11ac VHT20 (6.5Mbps)
CH144

Modulation Type: 802. 11n HT20 (6.5Mbps)
CH144

Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142

Modulation Type: 802.11n HT40 (13.5Mbps)
CH142

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138

99% Bandwidth Band 1

Modulation Type: 802.11a (6Mbps)

CH36

802.11ac VHT20 (6.5Mbps)

CH36

CH40

CH40

CH48

CH48

99% Bandwidth Band 1

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42

CH46

99% Bandwidth Band 2

Modulation Type: 802.11a (6Mbps)

CH52

802.11ac VHT20 (6.5Mbps)

CH52

CH60

CH60

CH64

CH64

99% Bandwidth Band 2

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH54

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH58

CH62

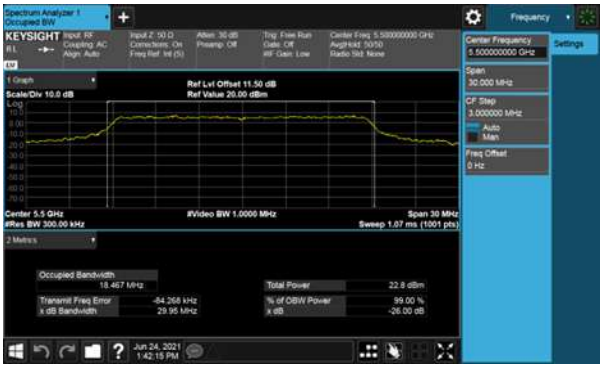
99% Bandwidth Band 3

Modulation Type: 802.11a (6Mbps)

CH100

802.11ac VHT20 (6.5Mbps)

CH100



CH116

CH116

CH140

CH140

99% Bandwidth Band 3

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH102

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH106

CH110

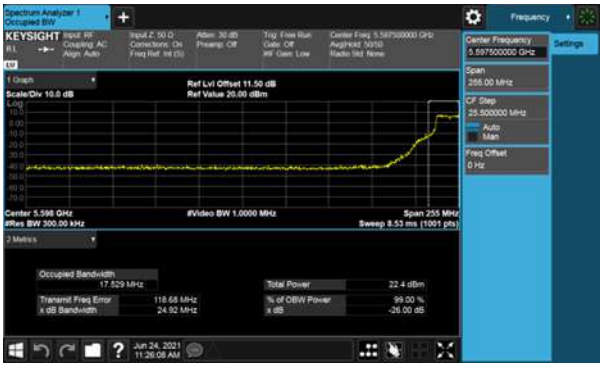
CH122

CH134

99% Bandwidth

Within 5470-5725MHz Band, Straddle Channel

Modulation Type: 802.11a (6Mbps)
CH144



802.11ac VHT20 (6.5Mbps)
CH144

Modulation Type: 802. 11n HT20 (6.5Mbps)
CH144

Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142

Modulation Type: 802.11n HT40 (13.5Mbps)
CH142

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138

10. Average Power

10.1. Test Limit

Output Power:

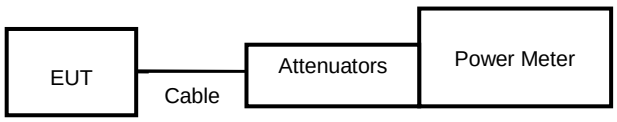
Frequency Band			Limit
☒	5.15~5.25GHz		
	Operating Mode		
	☐	Outdoor access point	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm) provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30degrees as measured from the horizon must not exceed125 mW (21 dBm).
	☐	Indoor access point	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm) provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
	☐	Fixed point-to-point access points	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm). Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi.
	☒	client devices	The maximum conducted output power over the frequency band of operation shall not exceed 250 mW (24dBm) provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Frequency Band		Limit
☒	5.25-5.35 GHz	The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (24dBm) or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
☒	5.470-5.725 GHz	
☒	5.725~5.85 GHz	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm). If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power.

10.2. Test Procedure

The transmitter output is connected to a power meter.
The cable assembly insertion loss of 11.5 dB (including 10 dB pad and 1.5 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

10.3. Test Setup Layout



10.4.Test Result and Data

Modulation Type	Data Rate	Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)	Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A			
11a	6 Mbps	15	36	5180	14.59	14.59	28.774	24.00
11a	6 Mbps	15	40	5200	14.93	14.93	31.117	24.00
11a	6 Mbps	15	48	5240	15.58	15.58	36.141	24.00
11n HT20	MCS 0	15	36	5180	14.63	14.63	29.040	24.00
11n HT20	MCS 0	14.5	40	5200	14.73	14.73	29.717	24.00
11n HT20	MCS 0	14.5	48	5240	14.76	14.76	29.923	24.00
11n HT40	MCS 0	13	38	5190	13.20	13.20	20.893	24.00
11n HT40	MCS 0	14.5	46	5230	14.49	14.49	28.119	24.00
11ac VHT20	NSS1-MCS0	15	36	5180	14.66	14.66	29.242	24.00
11ac VHT20	NSS1-MCS0	14.5	40	5200	14.76	14.76	29.923	24.00
11ac VHT20	NSS1-MCS0	14.5	48	5240	14.79	14.79	30.130	24.00
11ac VHT40	NSS1-MCS0	13	38	5190	13.23	13.23	21.038	24.00
11ac VHT40	NSS1-MCS0	14.5	46	5230	14.52	14.52	28.314	24.00
11ac VHT80	NSS1-MCS0	12.5	42	5210	12.33	12.33	17.100	24.00

Modulation Type	Data Rate	Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)	Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A			
11a	6 Mbps	14	52	5260	14.65	14.65	29.174	24.00
11a	6 Mbps	14.5	60	5300	14.81	14.81	30.269	24.00
11a	6 Mbps	14.5	64	5320	15.01	15.01	31.696	24.00
11n HT20	MCS 0	14	52	5260	14.80	14.80	30.200	24.00
11n HT20	MCS 0	14.5	60	5300	14.97	14.97	31.405	24.00
11n HT20	MCS 0	14.5	64	5320	15.06	15.06	32.063	24.00
11n HT40	MCS 0	14	54	5270	14.71	14.71	29.580	24.00
11n HT40	MCS 0	13	62	5310	13.58	13.58	22.803	24.00
11ac VHT20	NSS1-MCS0	14	52	5260	14.84	14.84	30.479	24.00
11ac VHT20	NSS1-MCS0	14.5	60	5300	15.01	15.01	31.696	24.00
11ac VHT20	NSS1-MCS0	14.5	64	5320	15.10	15.10	32.359	24.00
11ac VHT40	NSS1-MCS0	14	54	5270	14.75	14.75	29.854	24.00
11ac VHT40	NSS1-MCS0	13	62	5310	13.62	13.62	23.014	24.00
11ac VHT80	NSS1-MCS0	13.5	58	5290	12.87	12.87	19.364	24.00

Modulation Type	Data Rate	Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)	Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A			
11a	6 Mbps	16	100	5500	16.09	16.09	40.644	24.00
11a	6 Mbps	16.5	116	5580	16.23	16.23	41.976	24.00
11a	6 Mbps	16.5	140	5700	16.78	16.78	47.643	24.00
11n HT20	MCS 0	16	100	5500	15.91	15.91	38.994	24.00
11n HT20	MCS 0	16.5	116	5580	16.49	16.49	44.566	24.00
11n HT20	MCS 0	15	140	5700	15.38	15.38	34.514	24.00
11n HT40	MCS 0	12	102	5510	12.41	12.41	17.418	24.00
11n HT40	MCS 0	17	110	5550	16.06	16.06	40.365	24.00
11n HT40	MCS 0	16	134	5670	16.11	16.11	40.832	24.00
11ac VHT20	NSS1-MCS0	16	100	5500	15.94	15.94	39.264	24.00
11ac VHT20	NSS1-MCS0	16.5	116	5580	16.52	16.52	44.875	24.00
11ac VHT20	NSS1-MCS0	15	140	5700	15.41	15.41	34.754	24.00
11ac VHT40	NSS1-MCS0	12	102	5510	12.44	12.44	17.539	24.00
11ac VHT40	NSS1-MCS0	17	110	5550	16.09	16.09	40.644	24.00
11ac VHT40	NSS1-MCS0	16	134	5670	16.14	16.14	41.115	24.00
11ac VHT80	NSS1-MCS0	12.5	106	5530	12.29	12.29	16.943	24.00
11ac VHT80	NSS1-MCS0	17.5	122	5610	16.41	16.41	43.752	24.00

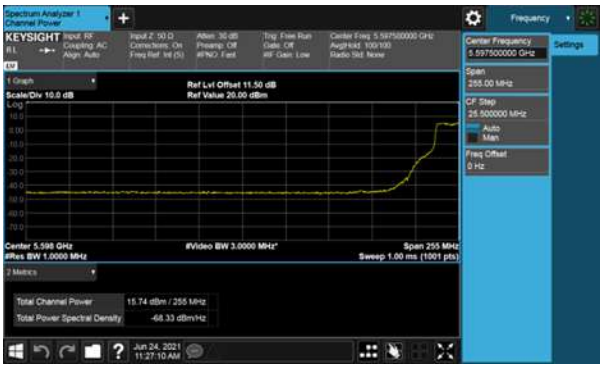
FCC Maximum Conducted Output Power (Within 5470-5725MHz band) RF Output Power(dBm)									
Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm) ANT A	W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
19.5	11a	6M	5720	15.74	15.74	0.00	37.497	15.74	24.00
19.5	11n HT20	MCS0	5720	15.63	15.63	0.00	36.559	15.63	24.00
19.5	11n HT40	MCS0	5710	16.23	16.23	0.00	41.976	16.23	24.00
19.5	11ac VHT20	NSS1-MCS0	5720	15.77	15.77	0.00	37.757	15.77	24.00
19.5	11ac VHT40	NSS1-MCS0	5710	16.24	16.24	0.00	42.073	16.24	24.00
19.5	11ac VHT80	NSS1-MCS0	5690	16.37	16.37	0.00	43.351	16.37	24.00

FCC Maximum Conducted Output Power (Extends across 5725MHz band) RF Output Power(dBm)									
Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm) ANT A	W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
19.5	11a	6M	5720	9.87	9.87	0.00	9.705	9.87	30.00
19.5	11n HT20	MCS0	5720	10.25	10.25	0.00	10.593	10.25	30.00
19.5	11n HT40	MCS0	5710	5.14	5.14	0.00	3.266	5.14	30.00
19.5	11ac VHT20	NSS1-MCS0	5720	10.40	10.40	0.00	10.965	10.40	30.00
19.5	11ac VHT40	NSS1-MCS0	5710	5.23	5.23	0.00	3.334	5.23	30.00
19.5	11ac VHT80	NSS1-MCS0	5690	-0.09	-0.09	0.00	0.979	-0.09	30.00

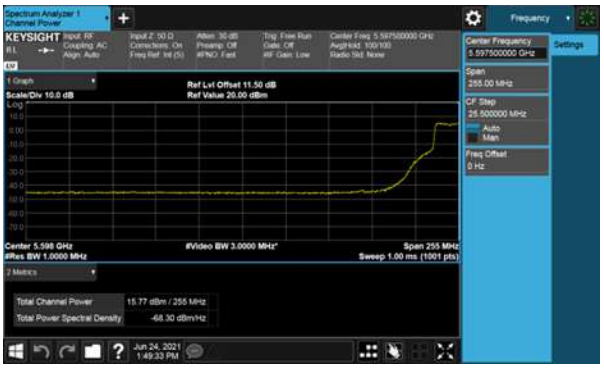
Modulation Type	Data Rate	Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)	Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A			
11a	6 Mbps	17	149	5745	16.49	16.49	44.566	30.00
11a	6 Mbps	16.5	157	5785	16.52	16.52	44.875	30.00
11a	6 Mbps	17	165	5825	16.43	16.43	43.954	30.00
11n HT20	MCS 0	17	149	5745	16.51	16.51	44.771	30.00
11n HT20	MCS 0	16	157	5785	16.29	16.29	42.560	30.00
11n HT20	MCS 0	16.5	165	5825	16.18	16.18	41.495	30.00
11n HT40	MCS 0	16.5	151	5755	16.19	16.19	41.591	30.00
11n HT40	MCS 0	16	159	5795	16.15	16.15	41.210	30.00
11ac VHT20	NSS1-MCS0	17	149	5745	16.54	16.54	45.082	30.00
11ac VHT20	NSS1-MCS0	16	157	5785	16.32	16.32	42.855	30.00
11ac VHT20	NSS1-MCS0	16.5	165	5825	16.21	16.21	41.783	30.00
11ac VHT40	NSS1-MCS0	16.5	151	5755	16.22	16.22	41.879	30.00
11ac VHT40	NSS1-MCS0	16	159	5795	16.18	16.18	41.495	30.00
11ac VHT80	NSS1-MCS0	16.5	155	5775	16.08	16.08	40.551	30.00

Within 5470-5725MHz Band, Straddle Channel

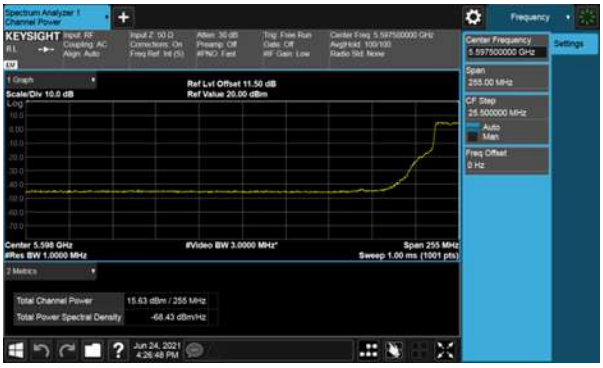
Modulation Type: 802.11a (6Mbps)
CH144



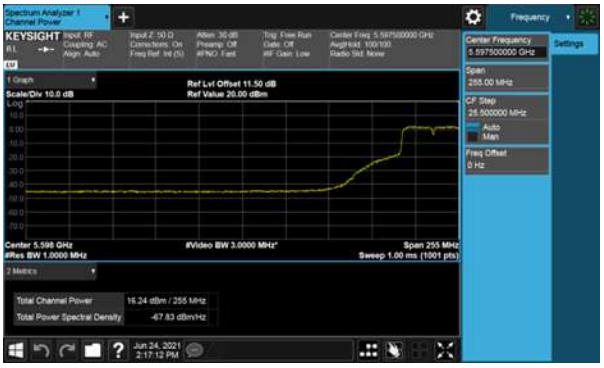
802.11ac VHT20 (6.5Mbps)
CH144



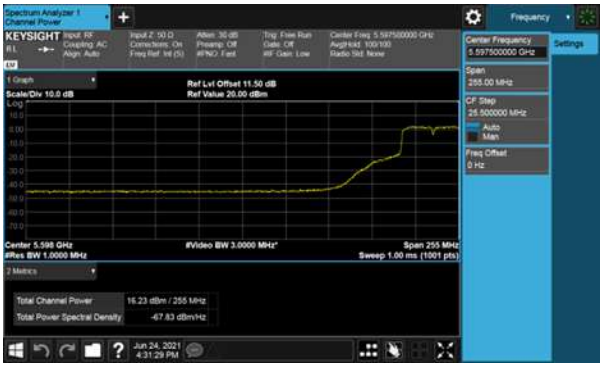
Modulation Type: 802.11n HT20 (6.5Mbps)
CH144



802.11ac VHT40 (13.5Mbps)
CH142



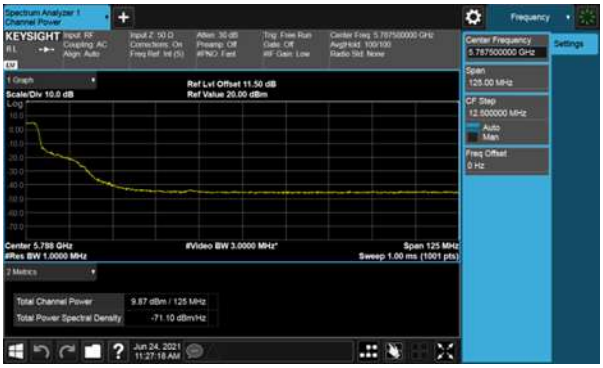
Modulation Type: 802.11n HT40 (13.5Mbps)
CH142



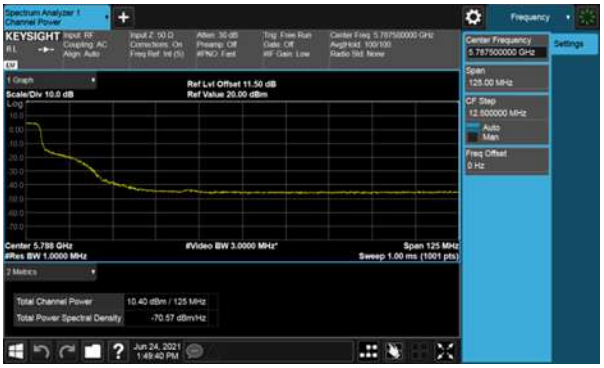
Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138

Extends across 5725MHz band, Straddle Channel

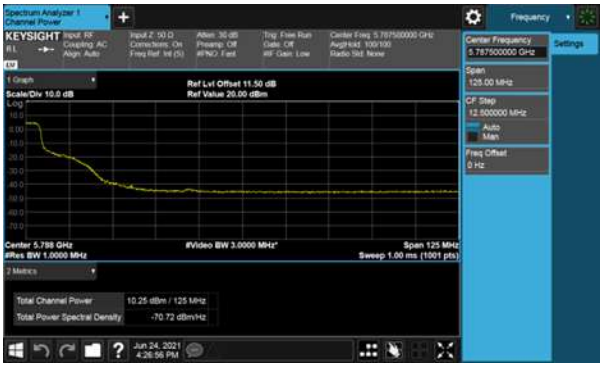
Modulation Type: 802.11a (6Mbps)
CH144



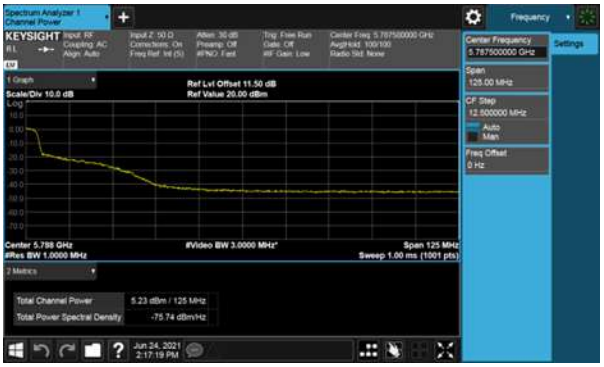
802.11ac VHT20 (6.5Mbps)
CH144



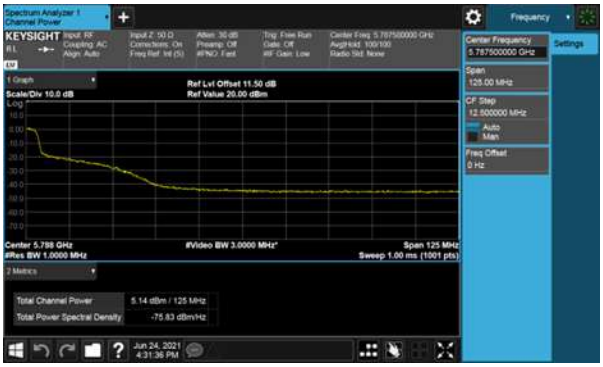
Modulation Type: 802.11n HT20 (6.5Mbps)
CH144



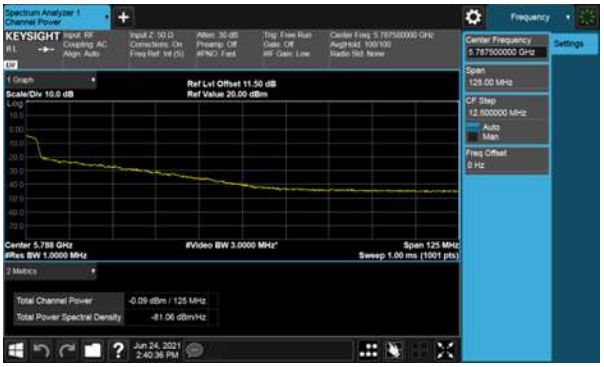
802.11ac VHT40 (13.5Mbps)
CH142



Modulation Type: 802.11n HT40 (13.5Mbps)
CH142



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



11. Power Spectral Density

11.1.Test Limit

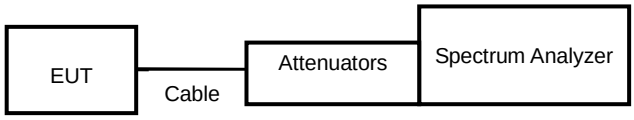
PSD:

Frequency Band			Limit
☒	5.15~5.25GHz		
	Operating Mode		
	☐	Outdoor access point	17 dBm/MHz
	☐	Indoor access point	17 dBm/MHz
	☐	Fixed point-to-point access points	17 dBm/MHz
	☒	Mobile and portable client devices	11 dBm/MHz
☒	5.725~5.85 GHz		11 dBm/MHz
☒	5.470-5.725 GHz		11 dBm/MHz
☒	5.725~5.85 GHz		30 dBm/500kHz

11.2.Test Procedure

Reference to KDB789033 D02 General UNII Test Procedures New Rules v02r01

11.3.Test Setup Layout



11.4. Test Result and Data

In the 5.2G Band

Modulation Type	Channel	Frequency (MHz)	Meas PSD (dBm/MHz) ANT A	Sum chain (dBm)	Duty Cycle CF(dB)	Total Corr'd PSD (dBm/MHz)	PSD Limit (dBm/MHz)
11a	36	5180	3.82	3.82	0.00	3.82	11.00
11a	40	5200	4.19	4.19	0.00	4.19	11.00
11a	48	5240	4.23	4.23	0.00	4.23	11.00
11ac VHT20	36	5180	4.20	4.20	0.00	4.20	11.00
11ac VHT20	40	5200	3.74	3.74	0.00	3.74	11.00
11ac VHT20	48	5240	3.84	3.84	0.00	3.84	11.00
11ac VHT40	38	5190	-0.77	-0.77	0.00	-0.77	11.00
11ac VHT40	46	5230	0.87	0.87	0.00	0.87	11.00
11ac VHT80	42	5210	-4.26	-4.26	0.00	-4.26	11.00

In the 5.3G Band

Modulation Type	Channel	Frequency (MHz)	Meas PSD (dBm/MHz) ANT A	Sum chain (dBm)	Duty Cycle CF(dB)	Total Corr'd PSD (dBm/MHz)	PSD Limit (dBm/MHz)
11a	52	5260	3.47	3.47	0.00	3.47	11.00
11a	60	5300	3.66	3.66	0.00	3.66	11.00
11a	64	5320	3.87	3.87	0.00	3.87	11.00
11ac VHT20	52	5260	3.45	3.45	0.00	3.45	11.00
11ac VHT20	60	5300	3.67	3.67	0.00	3.67	11.00
11ac VHT20	64	5320	3.70	3.70	0.00	3.70	11.00
11ac VHT40	54	5270	0.71	0.71	0.00	0.71	11.00
11ac VHT40	62	5310	-0.44	-0.44	0.00	-0.44	11.00
11ac VHT80	58	5290	-2.93	-2.93	0.00	-2.93	11.00

In the 5.5G Band

Modulation Type	Channel (MHz)	Frequency (MHz)	Meas PSD (dBm/MHz) ANT A	Sum chain (dBm)	Duty Cycle CF(dB)	Total Corr'd PSD (dBm/MHz)	PSD Limit (dBm/MHz)
11a	100	5500	4.58	4.58	0.00	4.58	11.00
11a	116	5580	4.89	4.89	0.00	4.89	11.00
11a	140	5700	4.98	4.98	0.00	4.98	11.00
11a	144	5720	5.64	5.64	0.00	5.64	11.00
11ac VHT20	100	5500	4.45	4.45	0.00	4.45	11.00
11ac VHT20	116	5580	4.32	4.32	0.00	4.32	11.00
11ac VHT20	140	5700	3.59	3.59	0.00	3.59	11.00
11ac VHT20	144	5720	5.69	5.69	0.00	5.69	11.00
11ac VHT40	102	5510	-2.17	-2.17	0.00	-2.17	11.00
11ac VHT40	110	5550	1.74	1.74	0.00	1.74	11.00
11ac VHT40	134	5670	1.52	1.52	0.00	1.52	11.00
11ac VHT40	142	5710	2.43	2.43	0.00	2.43	11.00
11ac VHT80	106	5530	-4.85	-4.85	0.00	-4.85	11.00
11ac VHT80	122	5610	-0.67	-0.67	0.00	-0.67	11.00
11ac VHT80	138	5690	-0.75	-0.75	0.00	-0.75	11.00

In the 5.8G Band

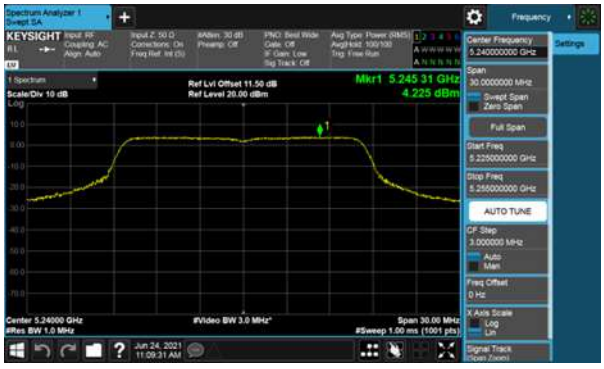
Modulation Type	Channel (MHz)	Frequency (MHz)	Meas PSD (dBm/MHz) ANT A	Sum chain (dBm)	Duty Cycle CF(dB)	10log(500KHz/ RBW) CF (dB)	Total Corr'd PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)
11a	149	5745	4.87	4.87	0.00	-3.01	1.85	30.00
11a	157	5785	4.72	4.72	0.00	-3.01	1.71	30.00
11a	165	5825	4.47	4.47	0.00	-3.01	1.46	30.00
11ac VHT20	149	5745	5.04	5.04	0.00	-3.01	2.03	30.00
11ac VHT20	157	5785	4.00	4.00	0.00	-3.01	0.99	30.00
11ac VHT20	165	5825	3.95	3.95	0.00	-3.01	0.94	30.00
11ac VHT40	151	5755	1.39	1.39	0.00	-3.01	-1.62	30.00
11ac VHT40	159	5795	0.86	0.86	0.00	-3.01	-2.15	30.00
11ac VHT80	155	5775	-1.60	-1.60	0.00	-3.01	-4.61	30.00

Modulation Type: 802.11a (6Mbps)

CH36

CH40

CH48



Modulation Type: 802.11ac VHT20 (6.5Mbps)

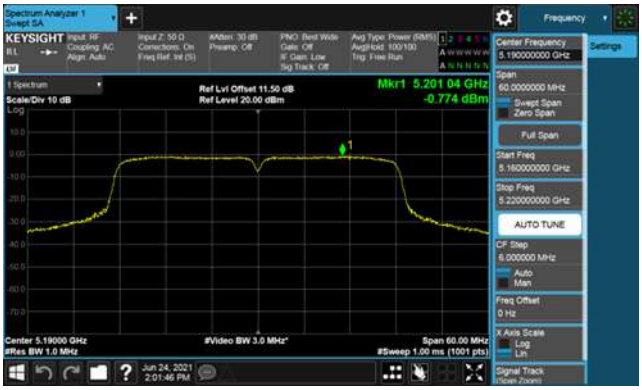
CH36

CH40

CH48

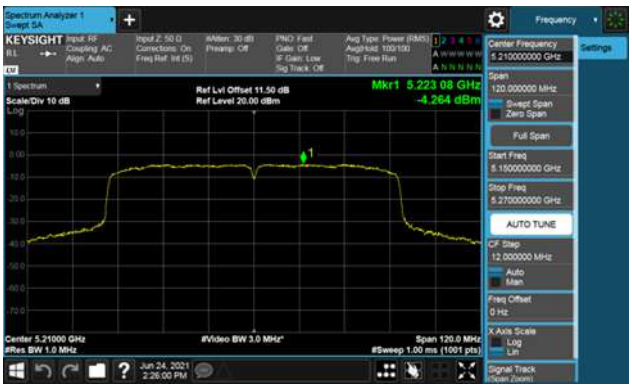
Modulation Type: 802.11ac VHT40 (13.5Mbps)

CH38



Modulation Type: 802.11ac VHT80 (29.3Mbps)

CH42



CH46

Modulation Type: 802.11a (6Mbps)
CH52

802.11ac VHT20 (6.5Mbps)
CH52

CH60

CH60

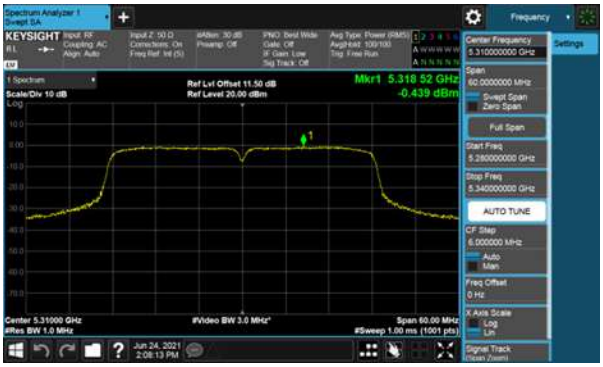
CH64

CH64

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH54

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH58

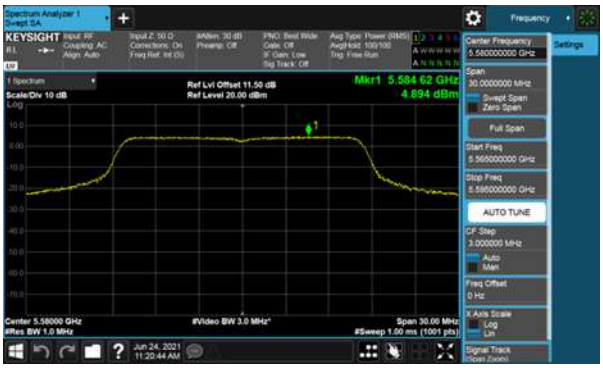
CH62



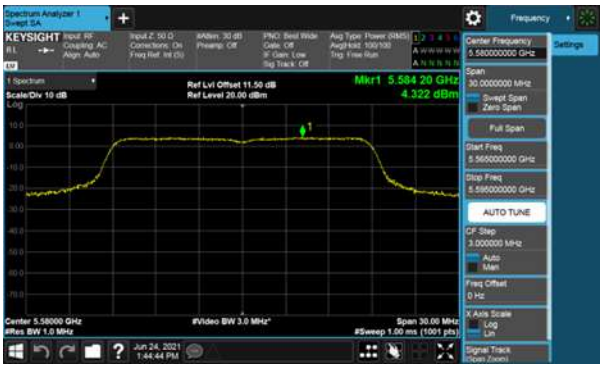
Modulation Type: 802.11a (6Mbps)
CH100

802.11ac VHT20 (6.5Mbps)
CH100

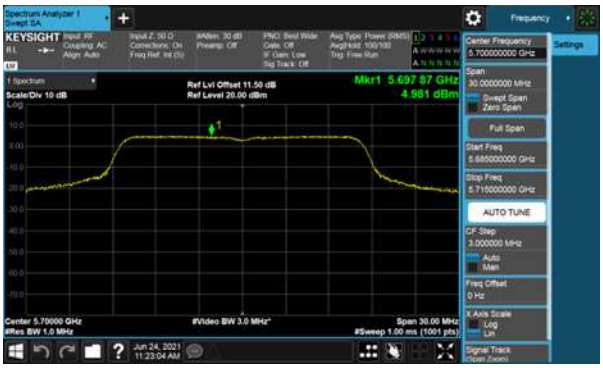
CH116



CH116



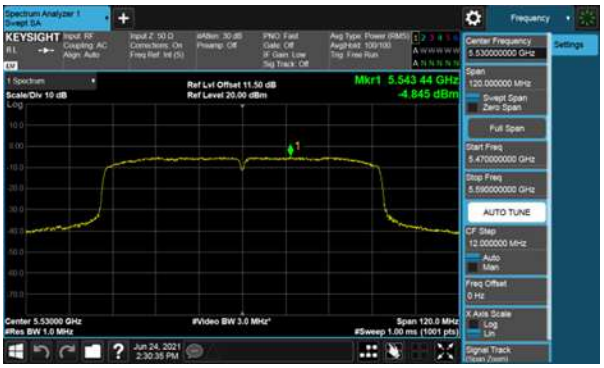
CH140



CH140

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH102

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH106



CH110

CH122

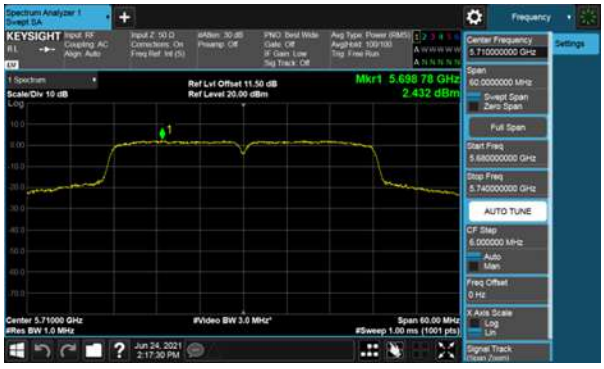
CH134

Straddle Channel

Modulation Type: 802.11a (6Mbps)
CH144

Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142



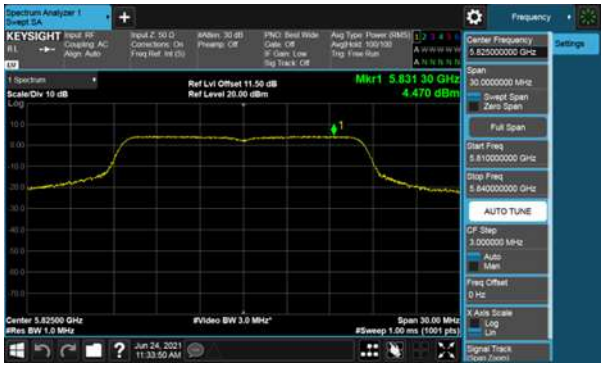
Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138

Modulation Type: 802.11a (6Mbps)

CH149

CH157

CH165



Modulation Type: 802.11ac VHT20 (6.5Mbps)

CH149

CH157

CH165

Modulation Type: 802.11ac VHT40 (13.5Mbps)

CH151

Modulation Type: 802.11ac VHT80 (29.3Mbps)

CH155

CH159