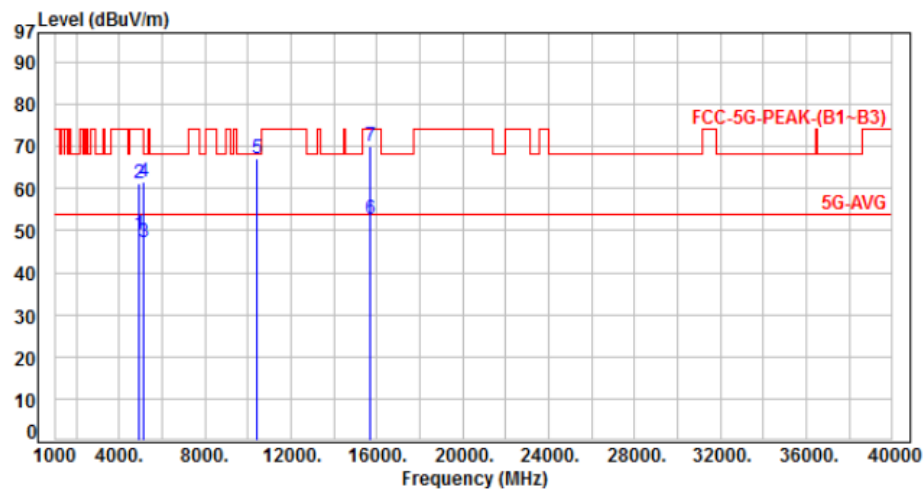




Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2, CH44, Band 1	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4900.00	-8.25	57.13	48.88	54.00	-5.12	Average	123	127	P
2	4900.00	-8.25	69.48	61.23	74.00	-12.77	Peak	123	127	P
3	5150.00	-7.68	55.00	47.32	54.00	-6.68	Average	180	68	P
4	5150.00	-7.68	69.30	61.62	74.00	-12.38	Peak	180	68	P
5	10440.00	-0.03	67.20	67.17	68.20	-1.03	Peak	200	347	P
6	15660.00	5.32	47.60	52.92	54.00	-1.08	Average	331	46	P
7	15660.00	5.32	64.70	70.02	74.00	-3.98	Peak	331	46	P

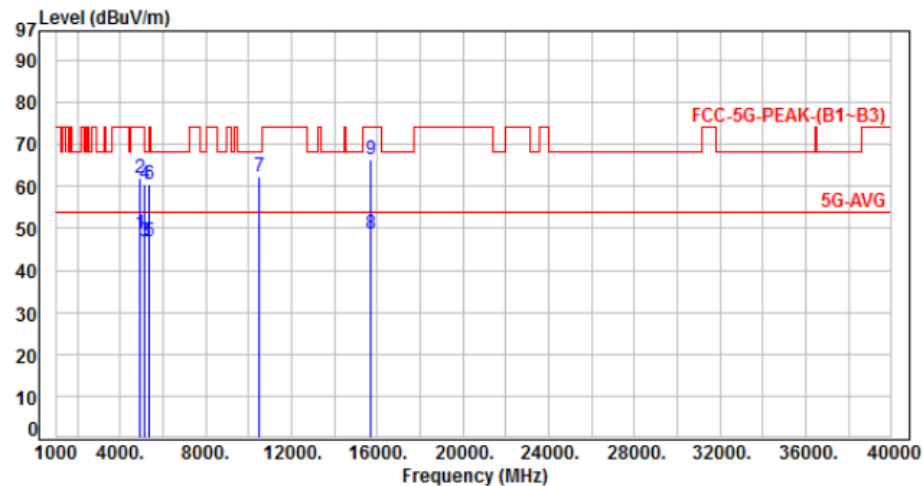
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 2, CH48, Band 1	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4920.00	-8.20	56.86	48.66	54.00	-5.34	Average	395	122	P
2	4920.00	-8.20	69.98	61.78	74.00	-12.22	Peak	395	122	P
3	5150.00	-7.68	54.50	46.82	54.00	-7.18	Average	385	138	P
4	5150.00	-7.68	68.25	60.57	74.00	-13.43	Peak	385	138	P
5	5350.00	-7.30	54.20	46.90	54.00	-7.10	Average	385	138	P
6	5350.00	-7.30	67.80	60.50	74.00	-13.50	Peak	385	138	P
7	10480.00	0.01	62.20	62.21	68.20	-5.99	Peak	312	350	P
8	15720.00	5.36	43.50	48.86	54.00	-5.14	Average	100	339	P
9	15720.00	5.36	61.00	66.36	74.00	-7.64	Peak	100	339	P

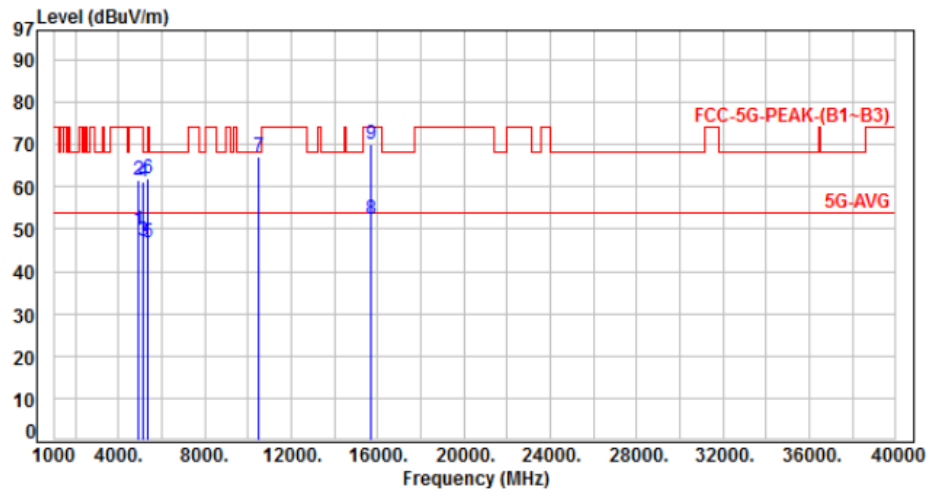
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2, CH48, Band 1	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4920.00	-8.20	58.12	49.92	54.00	-4.08	Average	122	163	P
2	4920.00	-8.20	69.89	61.69	74.00	-12.31	Peak	122	163	P
3	5150.00	-7.68	54.80	47.12	54.00	-6.88	Average	220	69	P
4	5150.00	-7.68	68.90	61.22	74.00	-12.78	Peak	220	69	P
5	5350.00	-7.30	54.30	47.00	54.00	-7.00	Average	220	69	P
6	5350.00	-7.30	69.10	61.80	74.00	-12.20	Peak	220	69	P
7	10480.00	0.01	67.10	67.11	68.20	-1.09	Peak	217	351	P
8	15720.00	5.36	46.90	52.26	54.00	-1.74	Average	308	47	P
9	15720.00	5.36	64.60	69.96	74.00	-4.04	Peak	308	47	P

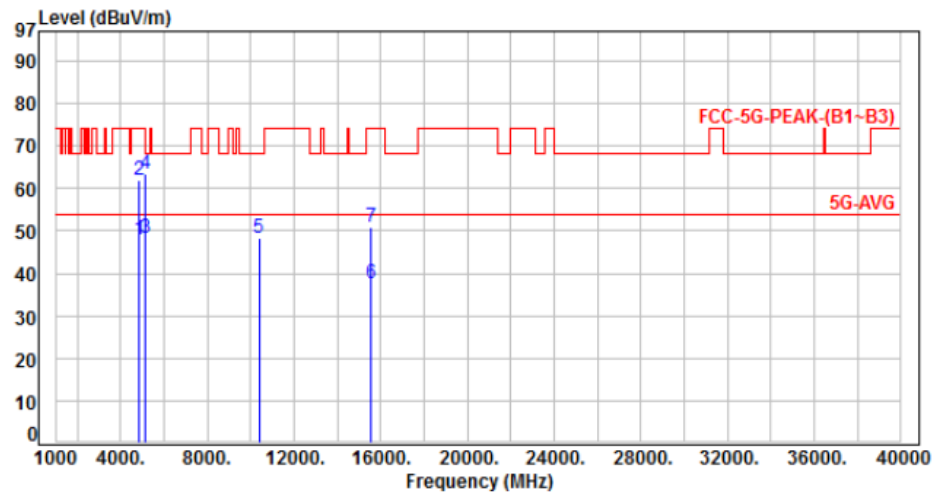
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 3, CH38, Band 1	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4870.00	-8.34	56.38	48.04	54.00	-5.96	Average	367	110	P
2	4870.00	-8.34	70.21	61.87	74.00	-12.13	Peak	367	110	P
3	5150.00	-7.68	56.10	48.42	54.00	-5.58	Average	393	49	P
4	5150.00	-7.68	71.20	63.52	74.00	-10.48	Peak	393	49	P
5	10380.00	-0.10	48.50	48.40	68.20	-19.80	Peak	363	325	P
6	15570.00	5.26	32.20	37.46	54.00	-16.54	Average	100	337	P
7	15570.00	5.26	45.50	50.76	74.00	-23.24	Peak	100	337	P

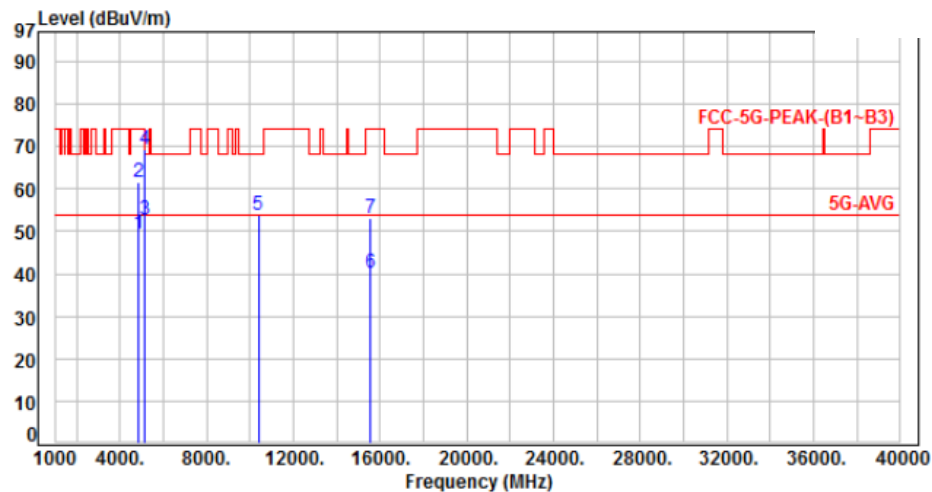
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 3, CH38, Band 1	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4870.00	-8.34	57.81	49.47	54.00	-4.53	Average	103	155	P
2	4870.00	-8.34	70.05	61.71	74.00	-12.29	Peak	103	155	P
3	5150.00	-7.68	60.60	52.92	54.00	-1.08	Average	220	66	P
4	5150.00	-7.68	76.90	69.22	74.00	-4.78	Peak	220	66	P
5	10380.00	-0.10	53.90	53.80	68.20	-14.40	Peak	176	301	P
6	15570.00	5.26	34.80	40.06	54.00	-13.94	Average	308	41	P
7	15570.00	5.26	47.70	52.96	74.00	-21.04	Peak	308	41	P

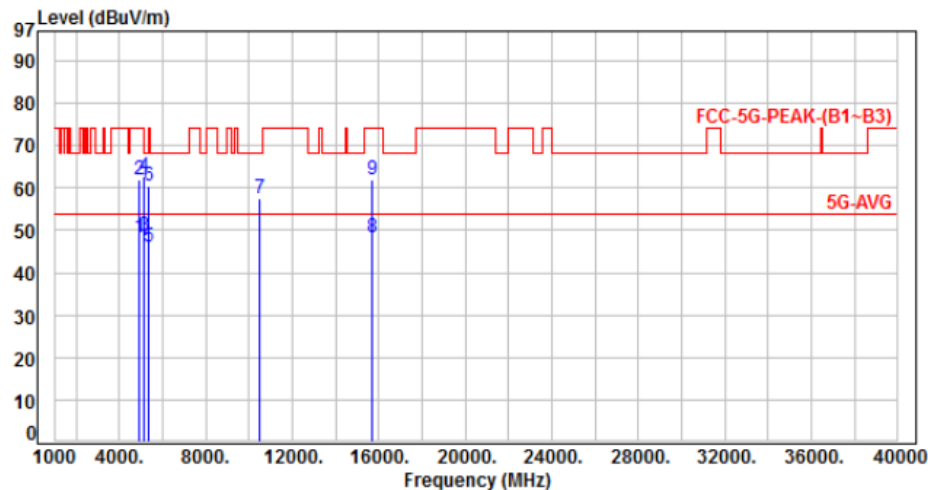
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 3, CH46, Band 1	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4910.00	-8.22	56.66	48.44	54.00	-5.56	Average	391	57	P
2	4910.00	-8.22	70.23	62.01	74.00	-11.99	Peak	391	57	P
3	5150.00	-7.68	56.30	48.62	54.00	-5.38	Average	100	135	P
4	5150.00	-7.68	70.50	62.82	74.00	-11.18	Peak	100	135	P
5	5350.00	-7.30	53.40	46.10	54.00	-7.90	Average	100	135	P
6	5350.00	-7.30	67.80	60.50	74.00	-13.50	Peak	100	135	P
7	10460.00	-0.02	57.51	57.49	68.20	-10.71	Peak	317	344	P
8	15690.00	5.34	42.80	48.14	54.00	-5.86	Average	100	339	P
9	15690.00	5.34	56.50	61.84	74.00	-12.16	Peak	100	339	P

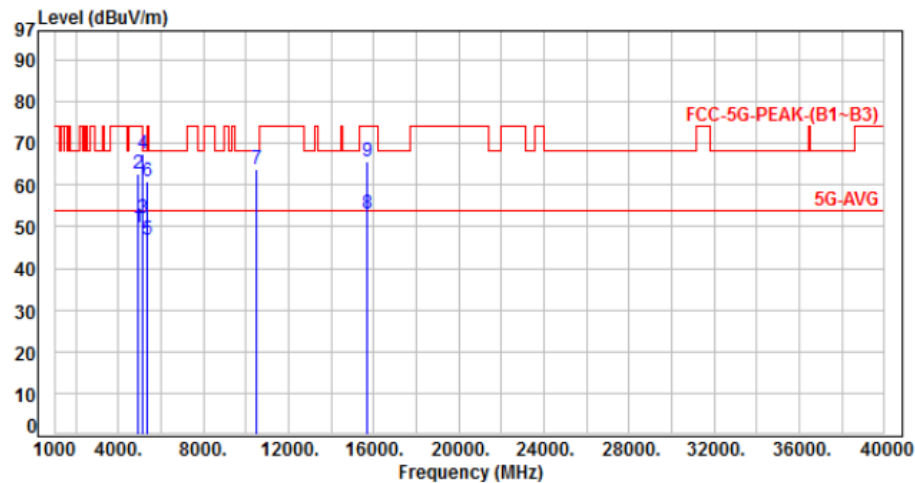
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 3, CH46, Band 1	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4910.00	-8.22	57.95	49.73	54.00	-4.27	Average	122	165	P
2	4910.00	-8.22	71.02	62.80	74.00	-11.20	Peak	122	165	P
3	5150.00	-7.68	59.70	52.02	54.00	-1.98	Average	294	73	P
4	5150.00	-7.68	75.20	67.52	74.00	-6.48	Peak	294	73	P
5	5350.00	-7.30	54.30	47.00	54.00	-7.00	Average	294	73	P
6	5350.00	-7.30	68.10	60.80	74.00	-13.20	Peak	294	73	P
7	10460.00	-0.02	63.91	63.89	68.20	-4.31	Peak	200	352	P
8	15690.00	5.34	47.60	52.94	54.00	-1.06	Average	292	46	P
9	15690.00	5.34	60.30	65.64	74.00	-8.36	Peak	292	46	P

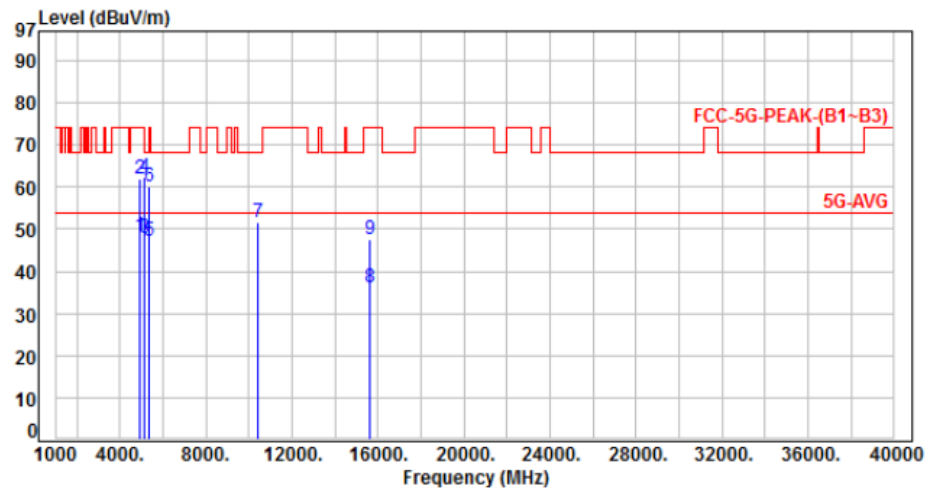
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH42, Band 1	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4890.00	-8.28	56.51	48.23	54.00	-5.77	Average	400	0	P
2	4890.00	-8.28	70.23	61.95	74.00	-12.05	Peak	400	0	P
3	5150.00	-7.68	55.60	47.92	54.00	-6.08	Average	112	135	P
4	5150.00	-7.68	70.10	62.42	74.00	-11.58	Peak	112	135	P
5	5350.00	-7.30	54.60	47.30	54.00	-6.70	Average	112	135	P
6	5350.00	-7.30	67.50	60.20	74.00	-13.80	Peak	112	135	P
7	10420.00	-0.05	51.60	51.55	68.20	-16.65	Peak	178	300	P
8	15630.00	5.30	31.00	36.30	54.00	-17.70	Average	322	28	P
9	15630.00	5.30	42.20	47.50	74.00	-26.50	Peak	322	28	P

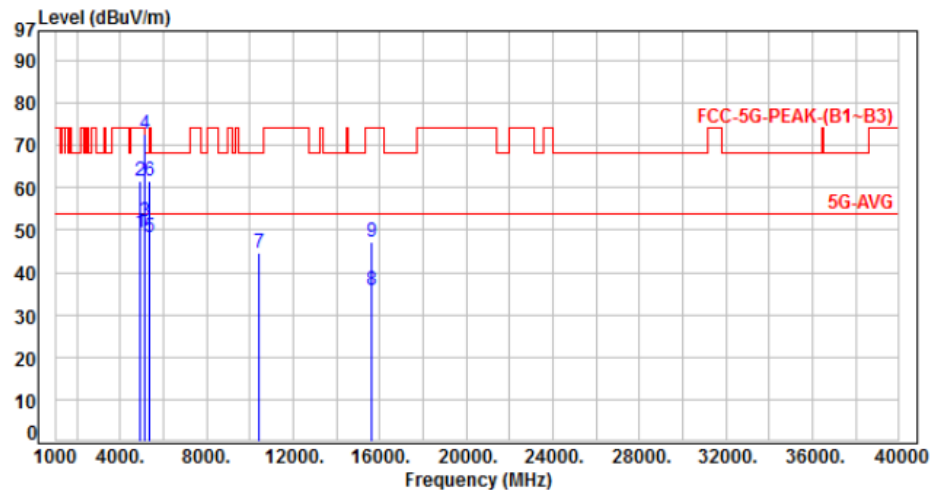
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH42, Band 1	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	4890.00	-8.28	57.58	49.30	54.00	-4.70	Average	122	165	P
2	4890.00	-8.28	70.02	61.74	74.00	-12.26	Peak	122	165	P
3	5150.00	-7.68	59.80	52.12	54.00	-1.88	Average	182	63	P
4	5150.00	-7.68	80.20	72.52	74.00	-1.48	Peak	182	63	P
5	5350.00	-7.30	55.70	48.40	54.00	-5.60	Average	182	63	P
6	5350.00	-7.30	68.90	61.60	74.00	-12.40	Peak	182	63	P
7	10420.00	-0.05	44.80	44.75	68.20	-23.45	Peak	100	100	P
8	15630.00	5.30	30.55	35.85	54.00	-18.15	Average	100	162	P
9	15630.00	5.30	41.80	47.10	74.00	-26.90	Peak	100	162	P

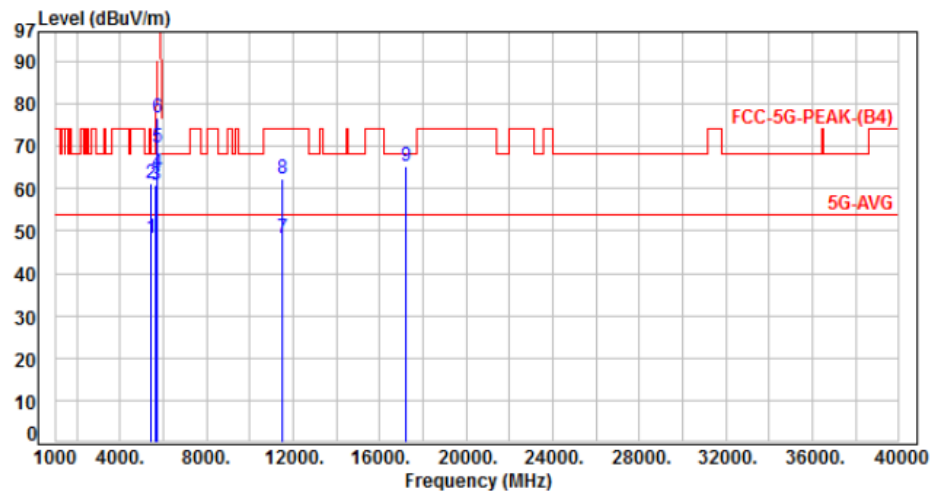
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH149, Band 4	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5425.00	-7.16	55.30	48.14	54.00	-5.86	Average	366	352	P
2	5425.00	-7.16	68.50	61.34	74.00	-12.66	Peak	366	352	P
3	5650.00	-6.97	67.80	60.83	68.20	-7.37	Peak	383	108	P
4	5700.00	-6.95	70.90	63.95	105.20	-41.25	Peak	383	108	P
5	5720.00	-6.95	76.70	69.75	110.80	-41.05	Peak	383	108	P
6	5725.00	-6.95	83.81	76.86	122.20	-45.34	Peak	383	108	P
7	11490.00	1.18	47.31	48.49	54.00	-5.51	Average	256	20	P
8	11490.00	1.18	61.31	62.49	74.00	-11.51	Peak	256	20	P
9	17235.00	11.64	53.60	65.24	68.20	-2.96	Peak	201	298	P

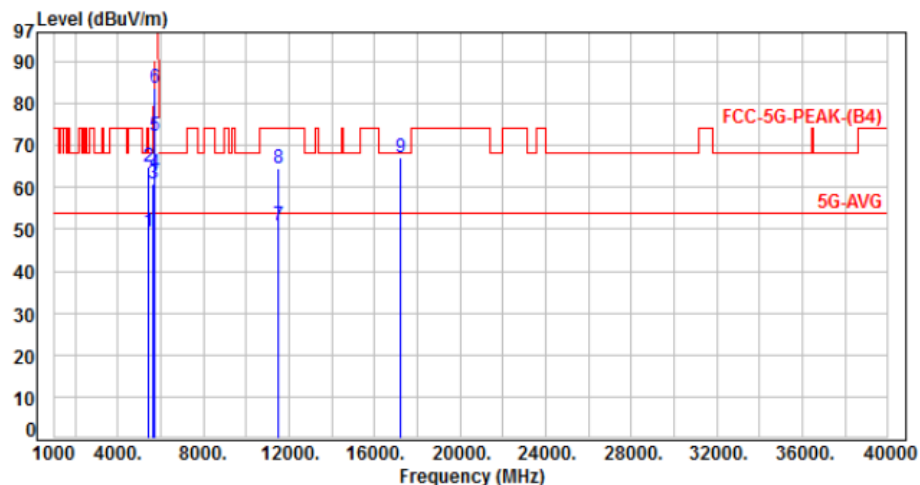
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH149, Band 4	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5425.00	-7.16	56.60	49.44	54.00	-4.56	Average	207	297	P
2	5425.00	-7.16	72.00	64.84	74.00	-9.16	Peak	207	297	P
3	5650.00	-6.97	67.80	60.83	68.20	-7.37	Peak	368	260	P
4	5700.00	-6.95	70.50	63.55	105.20	-41.65	Peak	368	260	P
5	5720.00	-6.95	79.30	72.35	110.80	-38.45	Peak	368	260	P
6	5725.00	-6.95	90.61	83.66	122.20	-38.54	Peak	368	260	P
7	11490.00	1.18	49.71	50.89	54.00	-3.11	Average	177	15	P
8	11490.00	1.18	63.21	64.39	74.00	-9.61	Peak	177	15	P
9	17235.00	11.64	55.40	67.04	68.20	-1.16	Peak	288	341	P

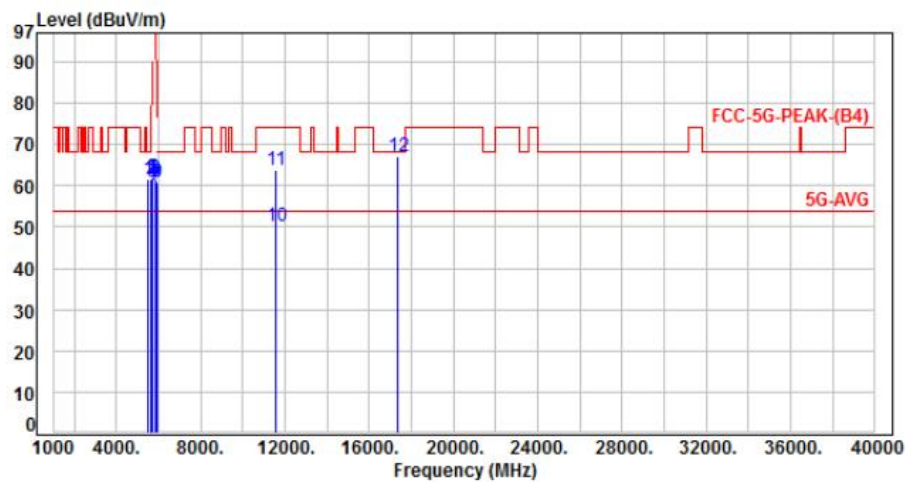
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH157, Band 4	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5465.00	-7.09	68.50	61.41	68.20	-6.79	Peak	370	352	P
2	5650.00	-6.97	68.50	61.53	68.20	-6.67	Peak	366	354	P
3	5700.00	-6.95	67.90	60.95	105.20	-44.25	Peak	366	354	P
4	5720.00	-6.95	67.98	61.03	110.80	-49.77	Peak	366	354	P
5	5725.00	-6.95	68.81	61.86	122.20	-60.34	Peak	366	354	P
6	5850.00	-6.90	67.90	61.00	122.20	-61.20	Peak	366	354	P
7	5855.00	-6.90	66.90	60.00	110.80	-50.80	Peak	366	354	P
8	5875.00	-6.89	68.40	61.51	105.20	-43.69	Peak	366	354	P
9	5925.00	-6.88	67.80	60.92	68.20	-7.28	Peak	366	354	P
10	11570.00	1.28	48.85	50.13	54.00	-3.87	Average	197	10	P
11	11570.00	1.28	62.50	63.78	74.00	-10.22	Peak	197	10	P
12	17355.00	12.41	54.60	67.01	68.20	-1.19	Peak	296	300	P

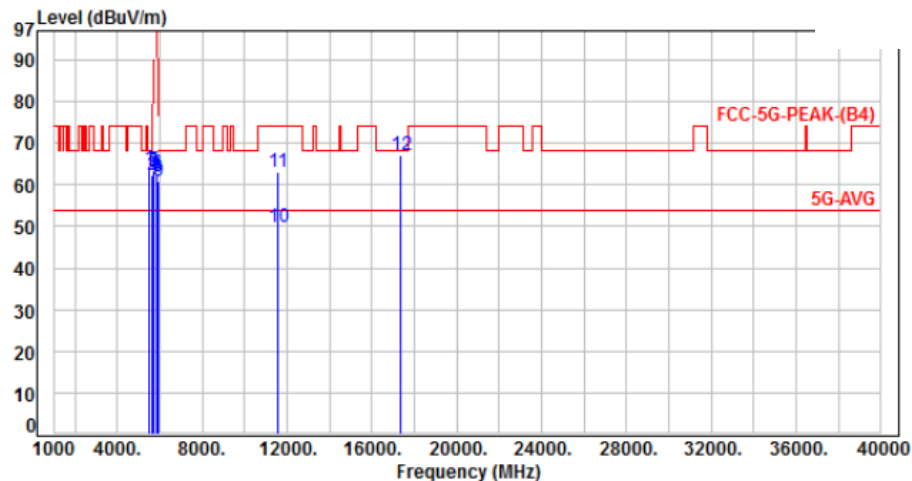
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH157, Band 4	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5465.00	-7.09	70.80	63.71	68.20	-4.49	Peak	200	70	P
2	5650.00	-6.97	69.30	62.33	68.20	-5.87	Peak	257	77	P
3	5700.00	-6.95	70.00	63.05	105.20	-42.15	Peak	257	77	P
4	5720.00	-6.95	69.60	62.65	110.80	-48.15	Peak	257	77	P
5	5725.00	-6.95	70.21	63.26	122.20	-58.94	Peak	257	77	P
6	5850.00	-6.90	69.50	62.60	122.20	-59.60	Peak	257	77	P
7	5855.00	-6.90	68.30	61.40	110.80	-49.40	Peak	257	77	P
8	5875.00	-6.89	68.90	62.01	105.20	-43.19	Peak	257	77	P
9	5925.00	-6.88	67.80	60.92	68.20	-7.28	Peak	257	77	P
10	11570.00	1.28	48.50	49.78	54.00	-4.22	Average	183	16	P
11	11570.00	1.28	61.80	63.08	74.00	-10.92	Peak	183	16	P
12	17355.00	12.41	54.76	67.17	68.20	-1.03	Peak	230	340	P

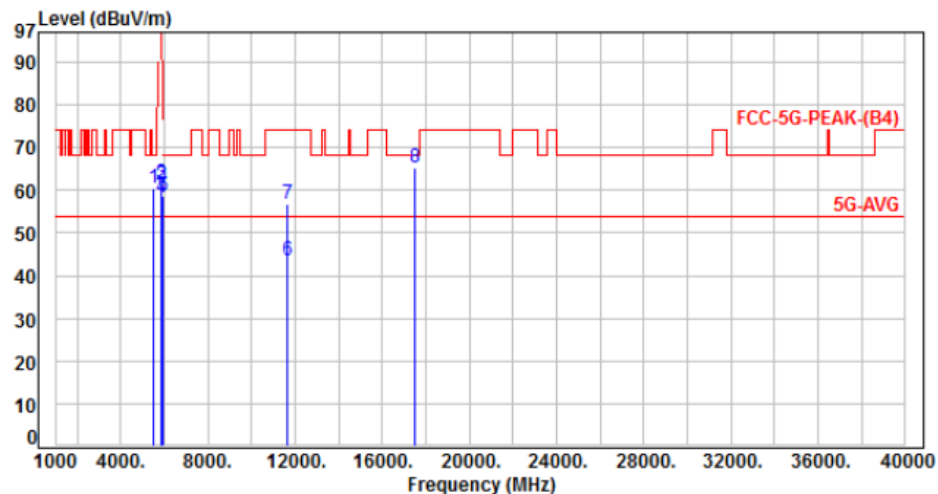
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH165, Band 4	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5505.00	-7.02	67.49	60.47	68.20	-7.73	Peak	100	198	P
2	5850.00	-6.90	68.07	61.17	122.20	-61.03	Peak	400	286	P
3	5855.00	-6.90	68.63	61.73	110.80	-49.07	Peak	400	286	P
4	5875.00	-6.89	65.25	58.36	105.20	-46.84	Peak	400	286	P
5	5925.00	-6.88	65.63	58.75	68.20	-9.45	Peak	400	286	P
6	11650.00	1.37	42.33	43.70	54.00	-10.30	Average	400	325	P
7	11650.00	1.37	55.50	56.87	74.00	-17.13	Peak	400	325	P
8	17475.00	13.18	52.03	65.21	68.20	-2.99	Peak	200	296	P

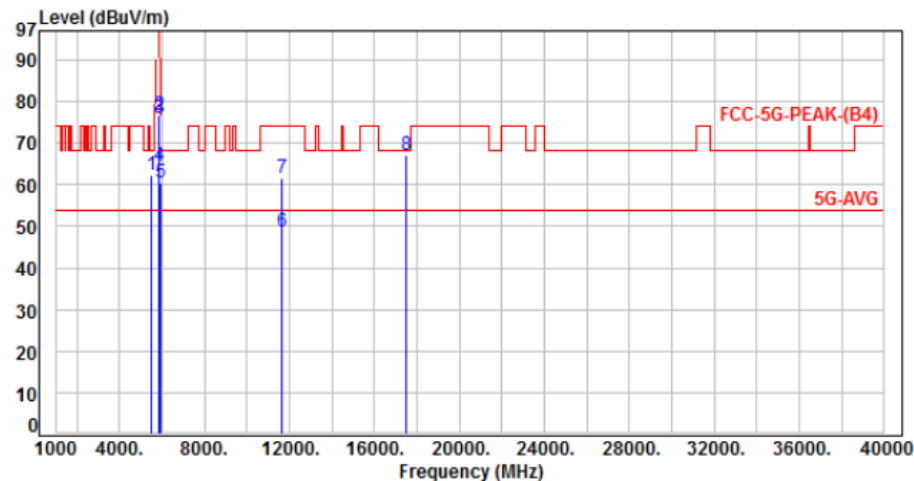
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH165, Band 4	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5505.00	-7.02	69.32	62.30	68.20	-5.90	Peak	200	10	P
2	5850.00	-6.90	83.59	76.69	122.20	-45.51	Peak	400	257	P
3	5855.00	-6.90	82.91	76.01	110.80	-34.79	Peak	400	257	P
4	5875.00	-6.89	71.37	64.48	105.20	-40.72	Peak	400	257	P
5	5925.00	-6.88	67.18	60.30	68.20	-7.90	Peak	400	257	P
6	11650.00	1.37	47.39	48.76	54.00	-5.24	Average	200	10	P
7	11650.00	1.37	60.21	61.58	74.00	-12.42	Peak	200	10	P
8	17475.00	13.18	53.97	67.15	68.20	-1.05	Peak	300	340	P

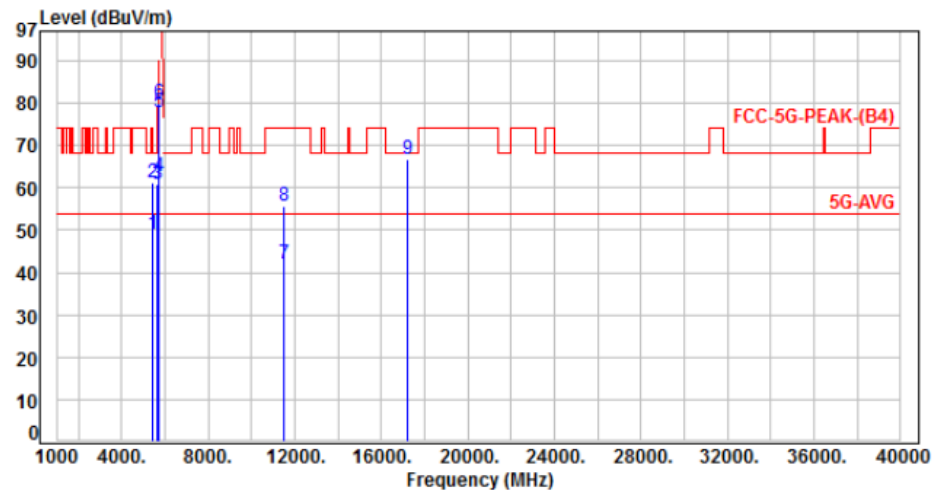
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 2, CH149, Band 4	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5425.00	-7.16	56.26	49.10	54.00	-4.90	Average	300	80	P
2	5425.00	-7.16	68.50	61.34	74.00	-12.66	Peak	300	80	P
3	5650.00	-6.97	67.94	60.97	68.20	-7.23	Peak	400	130	P
4	5700.00	-6.95	69.61	62.66	105.20	-42.54	Peak	400	130	P
5	5720.00	-6.95	84.68	77.73	110.80	-33.07	Peak	400	130	P
6	5725.00	-6.95	86.82	79.87	122.20	-42.33	Peak	400	130	P
7	11490.00	1.18	40.85	42.03	54.00	-11.97	Average	400	322	P
8	11490.00	1.18	54.68	55.86	74.00	-18.14	Peak	400	322	P
9	17235.00	11.64	55.11	66.75	68.20	-1.45	Peak	200	298	P

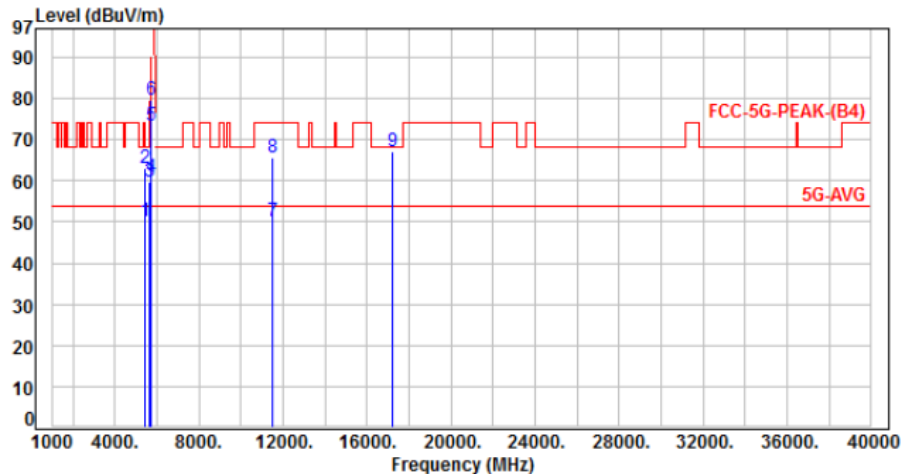
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2, CH149, Band 4	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5425.00	-7.16	57.37	50.21	54.00	-3.79	Average	100	75	P
2	5425.00	-7.16	70.13	62.97	74.00	-11.03	Peak	100	75	P
3	5650.00	-6.97	66.74	59.77	68.20	-8.43	Peak	290	160	P
4	5700.00	-6.95	67.71	60.76	105.20	-44.44	Peak	290	160	P
5	5720.00	-6.95	80.20	73.25	110.80	-37.55	Peak	290	160	P
6	5725.00	-6.95	86.75	79.80	122.20	-42.40	Peak	290	160	P
7	11490.00	1.18	49.04	50.22	54.00	-3.78	Average	198	10	P
8	11490.00	1.18	64.55	65.73	74.00	-8.27	Peak	198	10	P
9	17235.00	11.64	55.51	67.15	68.20	-1.05	Peak	300	340	P

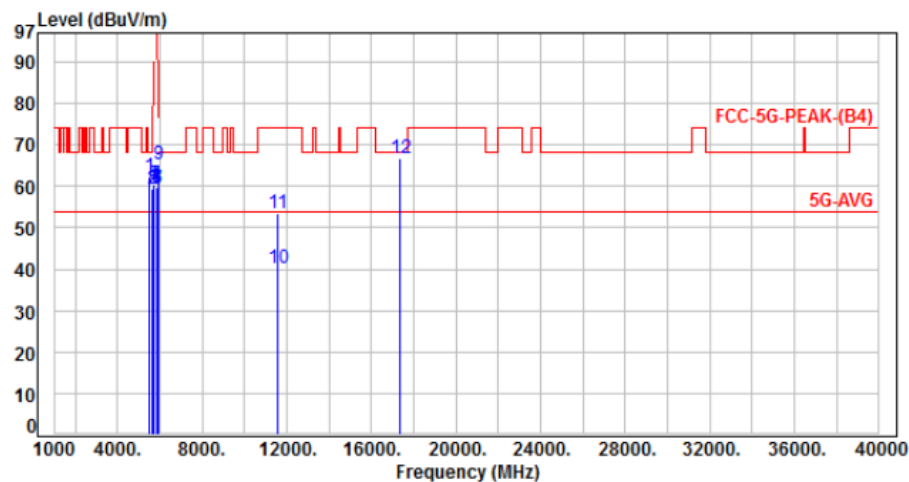
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 2, CH157, Band 4	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5465.00	-7.09	69.47	62.38	68.20	-5.82	Peak	330	354	P
2	5650.00	-6.97	66.41	59.44	68.20	-8.76	Peak	400	157	P
3	5700.00	-6.95	66.27	59.32	105.20	-45.88	Peak	400	157	P
4	5720.00	-6.95	67.29	60.34	110.80	-50.46	Peak	400	157	P
5	5725.00	-6.95	67.26	60.31	122.20	-61.89	Peak	400	157	P
6	5850.00	-6.90	66.23	59.33	122.20	-62.87	Peak	205	310	P
7	5855.00	-6.90	66.35	59.45	110.80	-51.35	Peak	205	310	P
8	5875.00	-6.89	66.51	59.62	105.20	-45.58	Peak	205	310	P
9	5925.00	-6.88	72.22	65.34	68.20	-2.86	Peak	205	310	P
10	11570.00	1.28	38.95	40.23	54.00	-13.77	Average	400	318	P
11	11570.00	1.28	52.23	53.51	74.00	-20.49	Peak	400	318	P
12	17355.00	12.41	54.51	66.92	68.20	-1.28	Peak	202	300	P

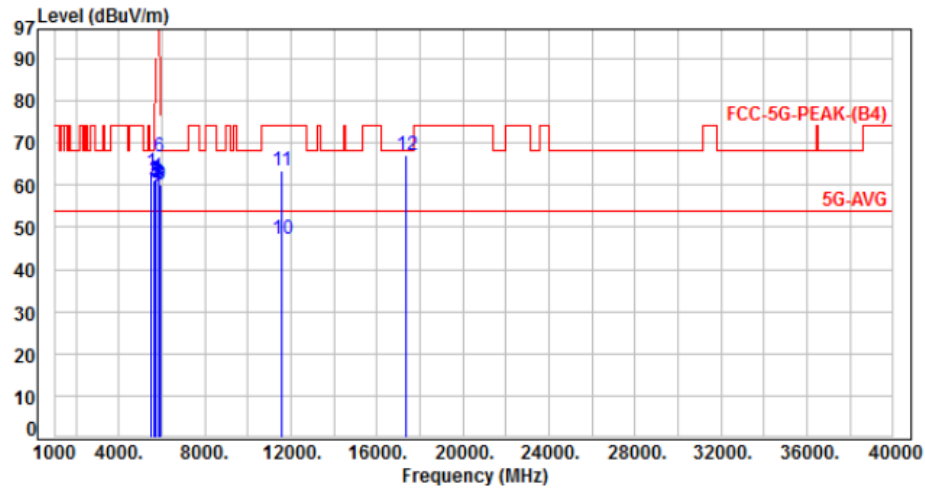
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2, CH157, Band 4	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5465.00	-7.09	70.19	63.10	68.20	-5.10	Peak	200	66	P
2	5650.00	-6.97	68.36	61.39	68.20	-6.81	Peak	214	75	P
3	5700.00	-6.95	67.51	60.56	105.20	-44.64	Peak	214	75	P
4	5720.00	-6.95	68.36	61.41	110.80	-49.39	Peak	214	75	P
5	5725.00	-6.95	67.98	61.03	122.20	-61.17	Peak	214	75	P
6	5850.00	-6.90	73.57	66.67	122.20	-55.53	Peak	214	75	P
7	5855.00	-6.90	66.68	59.78	110.80	-51.02	Peak	214	75	P
8	5875.00	-6.89	67.21	60.32	105.20	-44.88	Peak	214	75	P
9	5925.00	-6.88	66.96	60.08	68.20	-8.12	Peak	214	75	P
10	11570.00	1.28	46.09	47.37	54.00	-6.63	Average	204	36	P
11	11570.00	1.28	62.17	63.45	74.00	-10.55	Peak	204	36	P
12	17355.00	12.41	54.76	67.17	68.20	-1.03	Peak	303	342	P

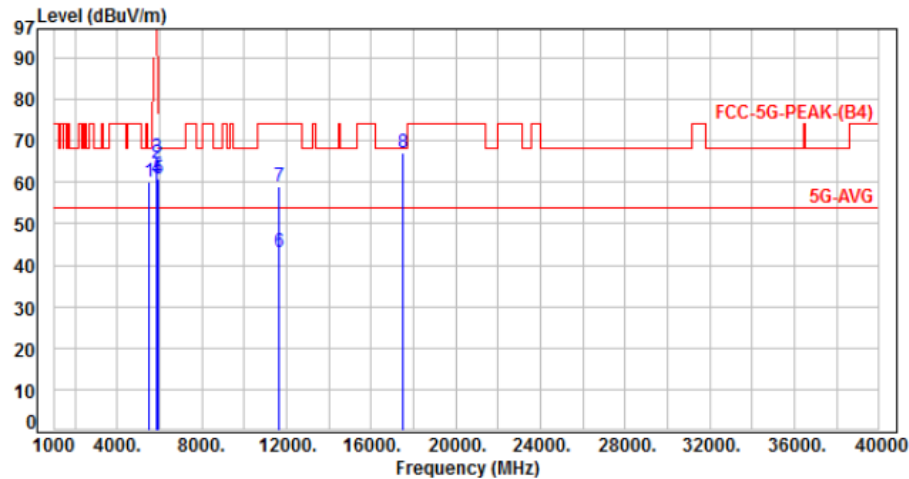
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 2, CH165, Band 4	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5505.00	-7.02	67.22	60.20	68.20	-8.00	Peak	166	300	P
2	5850.00	-6.90	71.50	64.60	122.20	-57.60	Peak	100	347	P
3	5855.00	-6.90	72.90	66.00	110.80	-44.80	Peak	100	347	P
4	5875.00	-6.89	67.90	61.01	105.20	-44.19	Peak	100	347	P
5	5925.00	-6.88	67.85	60.97	68.20	-7.23	Peak	100	347	P
6	11650.00	1.37	41.73	43.10	54.00	-10.90	Average	400	324	P
7	11650.00	1.37	57.60	58.97	74.00	-15.03	Peak	400	324	P
8	17475.00	13.18	53.89	67.07	68.20	-1.13	Peak	207	299	P

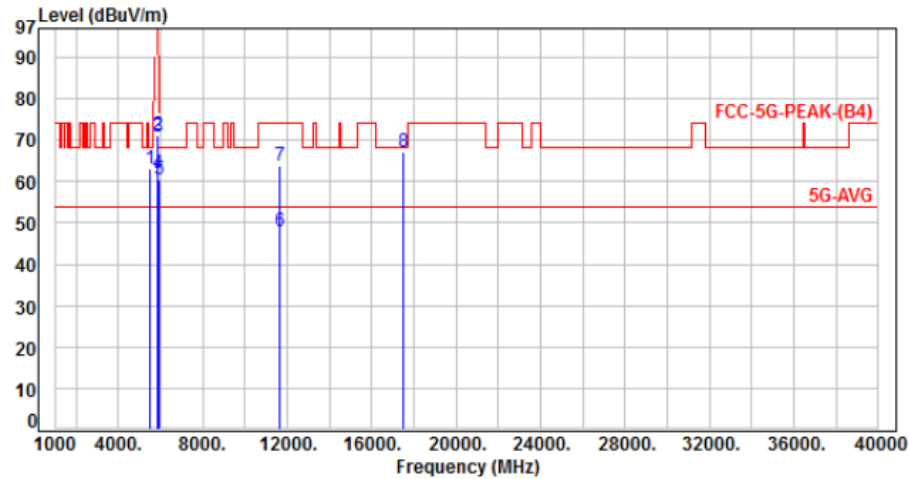
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2, CH165, Band 4	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5505.00	-7.02	70.20	63.18	68.20	-5.02	Peak	110	247	P
2	5850.00	-6.90	77.90	71.00	122.20	-51.20	Peak	350	240	P
3	5855.00	-6.90	77.60	70.70	110.80	-40.10	Peak	350	240	P
4	5875.00	-6.89	68.70	61.81	105.20	-43.39	Peak	350	240	P
5	5925.00	-6.88	67.40	60.52	68.20	-7.68	Peak	350	240	P
6	11650.00	1.37	46.40	47.77	54.00	-6.23	Average	200	10	P
7	11650.00	1.37	62.30	63.67	74.00	-10.33	Peak	200	10	P
8	17475.00	13.18	53.95	67.13	68.20	-1.07	Peak	297	339	P

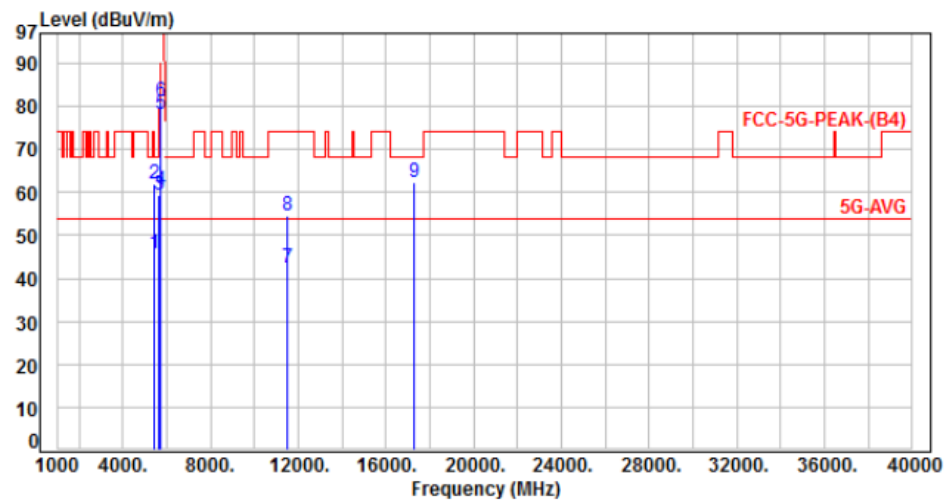
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 3, CH151, Band 4	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5435.00	-7.14	52.90	45.76	54.00	-8.24	Average	112	190	P
2	5435.00	-7.14	69.20	62.06	74.00	-11.94	Peak	112	190	P
3	5650.00	-6.97	66.31	59.34	68.20	-8.86	Peak	305	176	P
4	5700.00	-6.95	67.37	60.42	105.20	-44.78	Peak	305	176	P
5	5720.00	-6.95	85.31	78.36	110.80	-32.44	Peak	305	176	P
6	5725.00	-6.95	88.27	81.32	122.20	-40.88	Peak	305	176	P
7	11510.00	1.22	41.19	42.41	54.00	-11.59	Average	112	10	P
8	11510.00	1.22	53.49	54.71	74.00	-19.29	Peak	112	10	P
9	17265.00	11.84	50.50	62.34	68.20	-5.86	Peak	109	341	P

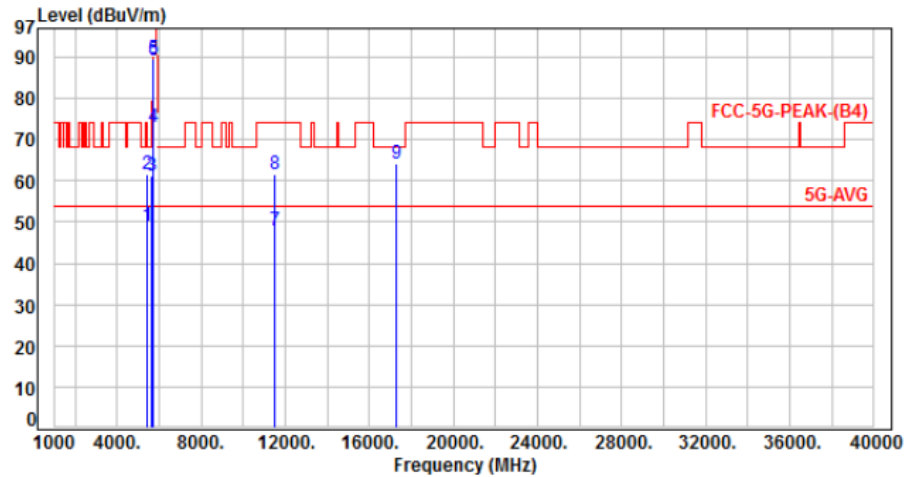
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 3, CH151, Band 4	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5435.00	-7.14	56.20	49.06	54.00	-4.94	Average	200	80	P
2	5435.00	-7.14	68.80	61.66	74.00	-12.34	Peak	200	80	P
3	5650.00	-6.97	68.35	61.38	68.20	-6.82	Peak	309	73	P
4	5700.00	-6.95	80.06	73.11	105.20	-32.09	Peak	309	73	P
5	5720.00	-6.95	96.45	89.50	110.80	-21.30	Peak	309	73	P
6	5725.00	-6.95	96.05	89.10	122.20	-33.10	Peak	309	73	P
7	11510.00	1.22	46.74	47.96	54.00	-6.04	Average	200	9	P
8	11510.00	1.22	60.55	61.77	74.00	-12.23	Peak	200	9	P
9	17265.00	11.84	52.50	64.34	68.20	-3.86	Peak	290	342	P

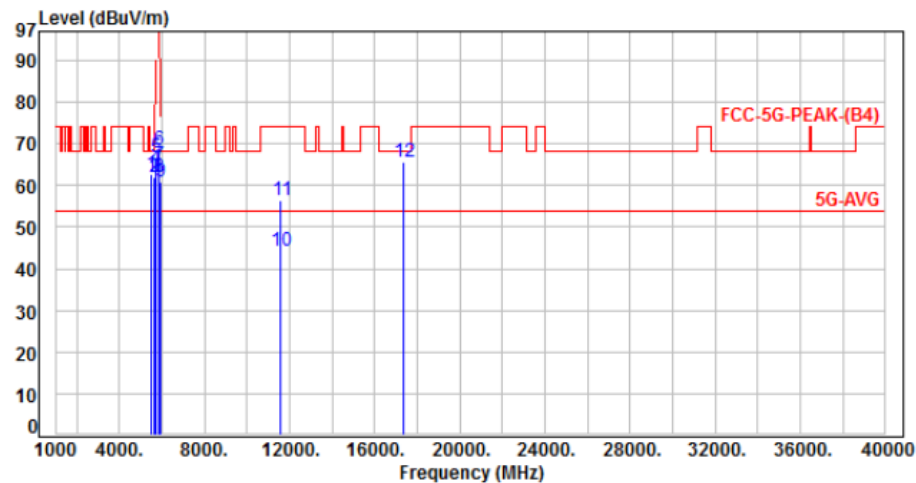
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 3, CH159, Band 4	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5475.00	-7.06	69.65	62.59	68.20	-5.61	Peak	100	200	P
2	5650.00	-6.97	68.90	61.93	68.20	-6.27	Peak	300	188	P
3	5700.00	-6.95	68.80	61.85	105.20	-43.35	Peak	300	188	P
4	5720.00	-6.95	71.30	64.35	110.80	-46.45	Peak	300	188	P
5	5725.00	-6.95	73.71	66.76	122.20	-55.44	Peak	300	188	P
6	5850.00	-6.90	75.60	68.70	122.20	-53.50	Peak	300	188	P
7	5855.00	-6.90	71.90	65.00	110.80	-45.80	Peak	300	188	P
8	5875.00	-6.89	68.80	61.91	105.20	-43.29	Peak	300	188	P
9	5925.00	-6.88	67.80	60.92	68.20	-7.28	Peak	300	188	P
10	11590.00	1.29	43.04	44.33	54.00	-9.67	Average	400	336	P
11	11590.00	1.29	55.09	56.38	74.00	-17.62	Peak	400	336	P
12	17385.00	12.60	52.95	65.55	68.20	-2.65	Peak	203	298	P

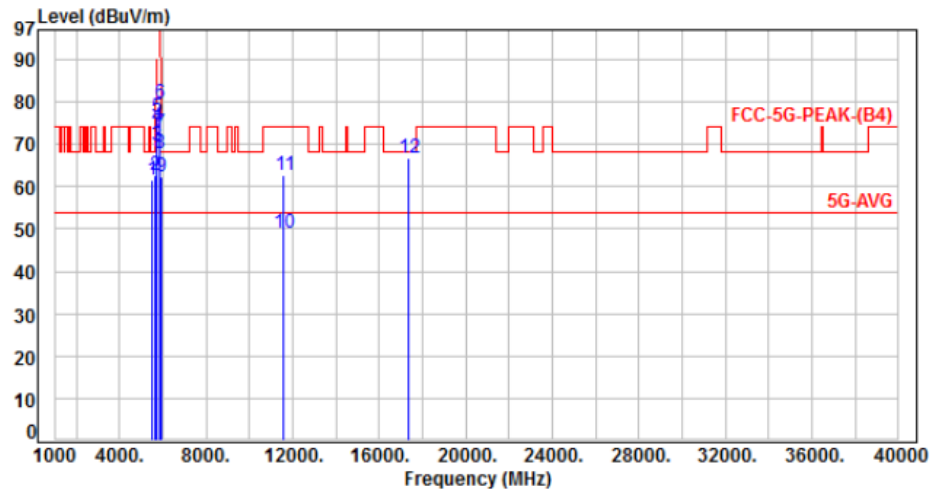
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 3, CH159, Band 4	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5475.00	-7.06	68.59	61.53	68.20	-6.67	Peak	123	246	P
2	5650.00	-6.97	69.60	62.63	68.20	-5.57	Peak	197	78	P
3	5700.00	-6.95	76.50	69.55	105.20	-35.65	Peak	197	78	P
4	5720.00	-6.95	81.20	74.25	110.80	-36.55	Peak	197	78	P
5	5725.00	-6.95	83.21	76.26	122.20	-45.94	Peak	197	78	P
6	5850.00	-6.90	86.50	79.60	122.20	-42.60	Peak	197	78	P
7	5855.00	-6.90	79.60	72.70	110.80	-38.10	Peak	197	78	P
8	5875.00	-6.89	74.80	67.91	105.20	-37.29	Peak	197	78	P
9	5925.00	-6.88	69.20	62.32	68.20	-5.88	Peak	197	78	P
10	11590.00	1.29	47.84	49.13	54.00	-4.87	Average	196	10	P
11	11590.00	1.29	61.37	62.66	74.00	-11.34	Peak	196	10	P
12	17385.00	12.60	54.21	66.81	68.20	-1.39	Peak	298	342	P

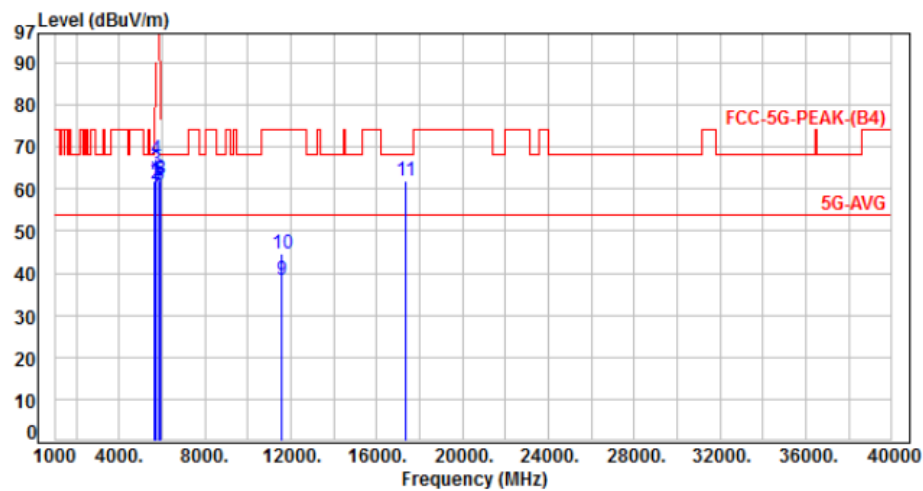
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH155, Band 4	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



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	-6.97	68.80	61.83	68.20	-6.37	Peak	400	163	P
2	5700.00	-6.95	68.05	61.10	105.20	-44.10	Peak	400	163	P
3	5720.00	-6.95	71.55	64.60	110.80	-46.20	Peak	400	163	P
4	5725.00	-6.95	74.26	67.31	122.20	-54.89	Peak	400	163	P
5	5850.00	-6.90	68.73	61.83	122.20	-60.37	Peak	400	163	P
6	5855.00	-6.90	67.63	60.73	110.80	-50.07	Peak	400	163	P
7	5875.00	-6.89	67.45	60.56	105.20	-44.64	Peak	400	163	P
8	5925.00	-6.88	69.33	62.45	68.20	-5.75	Peak	400	163	P
9	11550.00	1.26	37.14	38.40	54.00	-15.60	Average	200	42	P
10	11550.00	1.26	43.53	44.79	74.00	-29.21	Peak	200	42	P
11	17325.00	12.22	49.88	62.10	68.20	-6.10	Peak	300	166	P

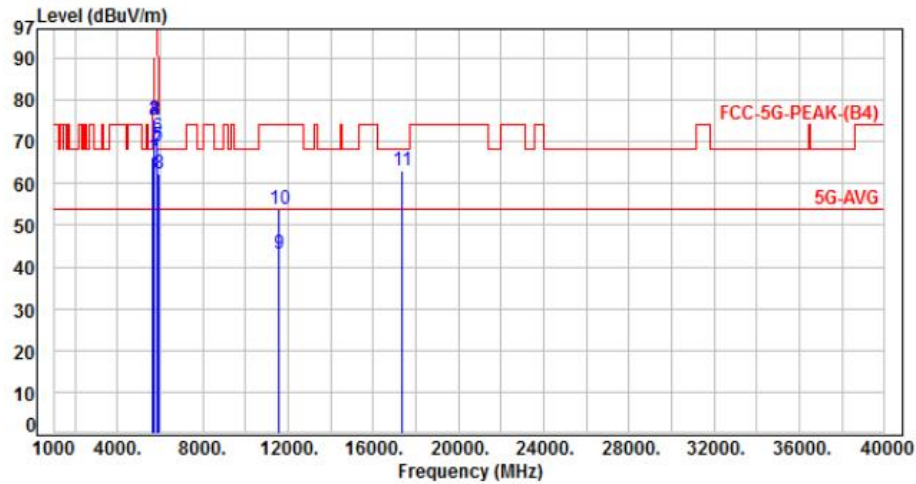
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH155, Band 4	Temperature	: 23 °C
Test Date	: Sep. 28, 2018	Humidity	: 62 %



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	-6.97	73.32	66.35	68.20	-1.85	Peak	206	51	P
2	5700.00	-6.95	82.10	75.15	105.20	-30.05	Peak	206	51	P
3	5720.00	-6.95	82.08	75.13	110.80	-35.67	Peak	206	51	P
4	5725.00	-6.95	82.11	75.16	122.20	-47.04	Peak	206	51	P
5	5850.00	-6.90	75.82	68.92	122.20	-53.28	Peak	206	51	P
6	5855.00	-6.90	78.15	71.25	110.80	-39.55	Peak	206	51	P
7	5875.00	-6.89	74.64	67.75	105.20	-37.45	Peak	206	51	P
8	5925.00	-6.88	69.04	62.16	68.20	-6.04	Peak	206	51	P
9	11550.00	1.26	41.98	43.24	54.00	-10.76	Average	200	293	P
10	11550.00	1.26	52.74	54.00	74.00	-20.00	Peak	200	293	P
11	17325.00	12.22	50.73	62.95	68.20	-5.25	Peak	300	186	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

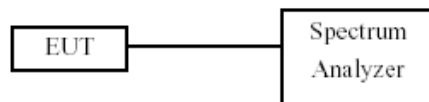
7.1. Test Limit

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

Temperature : 21°C Humidity : 62%
Test Date : Jan. 29, 2019 :

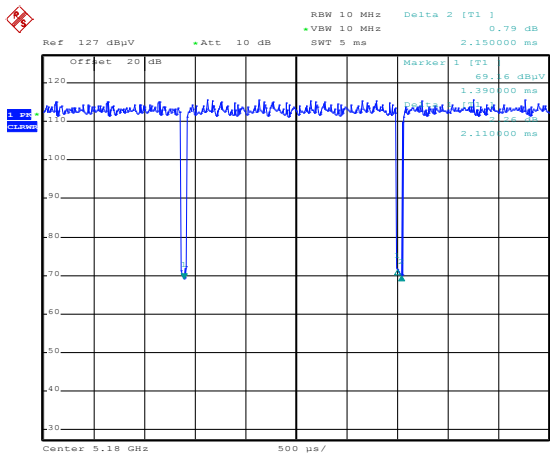
Modulation Type	On Time (msec)	Period Time (msec)	Duty Cycle (%)
802.11a	2.11	2.15	98.14%
802.11ac VHT20	5.06	5.08	99.61%
802.11ac VHT40	2.47	2.51	98.41%
802.11ac VHT80	1.18	1.22	96.72%

7.5. Measurement Methods

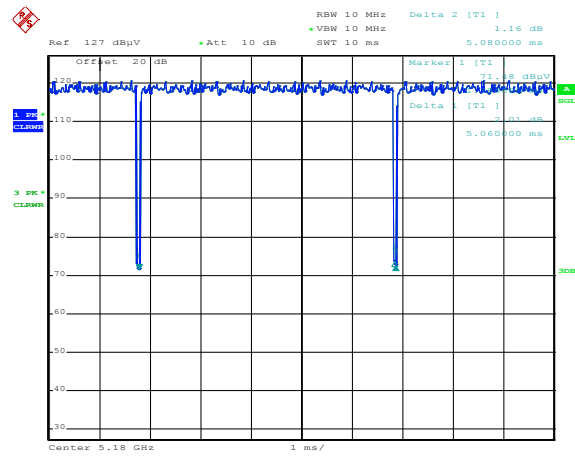
26 dB and 6dB Emission BW	KDB 789033 D02 v02r01, Section C
99% Occupied BW	KDB 789033 D02 v02r01, Section D
Conducted Output Power	KDB 789033 D02 v02r01, Section E.2.d and E.3.b (Method PM-G)
Power Spectral Density	KDB 789033 D02 v02r01, Section F
Unwanted emissions in restricted bands	KDB 789033 D02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



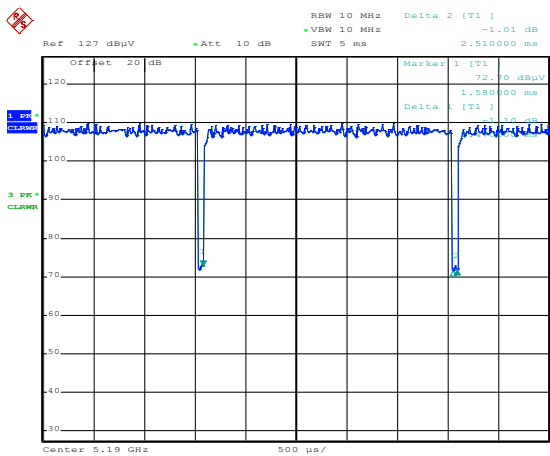
Modulation Standard: 802.11a (6Mbps)



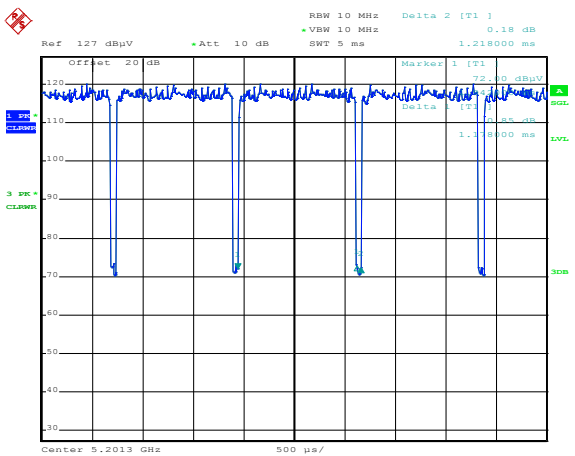
Modulation Standard: 802.11ac VHT20 (6.5Mbps)



Modulation Standard: 802.11ac VHT40 (13.5Mbps)



Modulation Standard: 802.11ac VHT80 (29.3Mbps)





8. 6dB Bandwidth & 99% Bandwidth

8.1. Test Limit

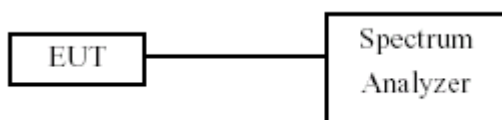
FCC §15.407

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 to 100KHz, the VBW $\geq 3 \times$ RBW, peak detector and max hold.

8.3. Test Setup Layout



8.4. Test Result and Data (6dB Bandwidth)

Temperature : 21°C

Humidity : 62%

Test Date : Jan. 29, 2019

:

In the 5.8G Band

Modulation Type	Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)
			ANT A	ANT B	
802.11a	149	5745	16.30	16.30	0.50
	157	5785	16.30	16.30	0.50
	165	5825	16.30	16.30	0.50
802.11ac VHT20	149	5745	17.00	17.20	0.50
	157	5785	16.80	17.60	0.50
	165	5825	17.20	16.50	0.50
802.11ac VHT40	155	5755	35.20	35.20	0.50
	159	5795	35.20	35.20	0.50
802.11ac VHT80	155	5775	75.20	75.20	0.50



8.5. Test Result and Data (99% Bandwidth)

Temperature : 23°C

Humidity : 64%

Test Date : Dec. 19, 2018

:

In the 5.8G Band

Modulation Type	Channel	Frequency (MHz)	99% Bandwidth (MHz)	
			ANT A	ANT B
802.11a	149	5745	16.60	16.60
	157	5785	16.60	16.60
	165	5825	16.60	16.60
802.11ac VHT20	149	5745	17.70	17.70
	157	5785	17.70	17.70
	165	5825	17.70	17.70
802.11ac VHT40	155	5755	36.40	36.40
	159	5795	36.40	36.40
802.11ac VHT80	155	5775	75.84	75.84

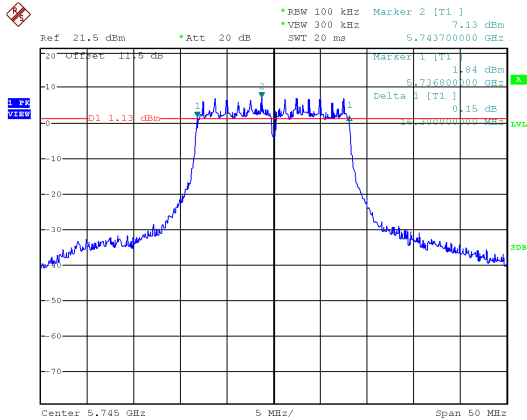


6dB Bandwidth

ANT A

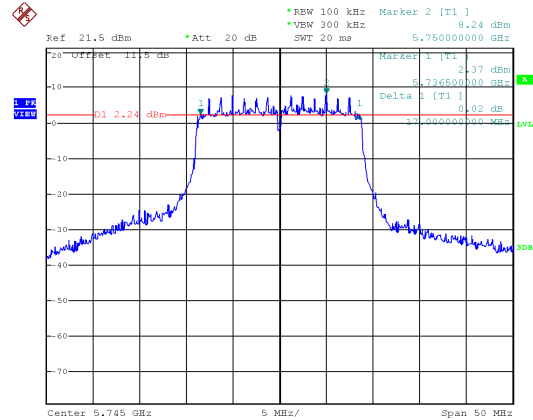
Modulation Standard: 802.11a (6Mbps)

CH149

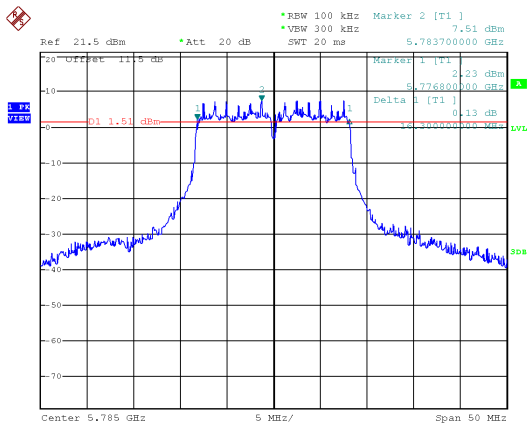


Modulation Standard: 802.11ac, VHT20 (6.5Mbps)

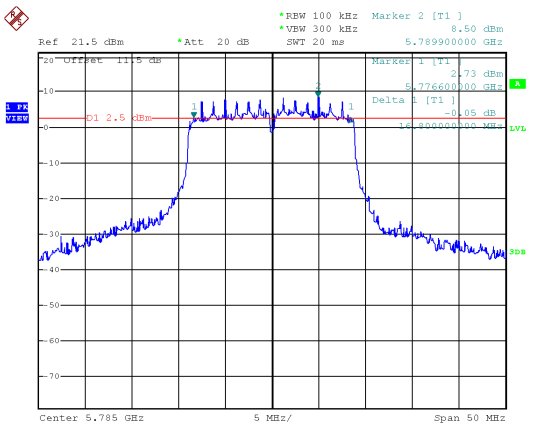
CH149



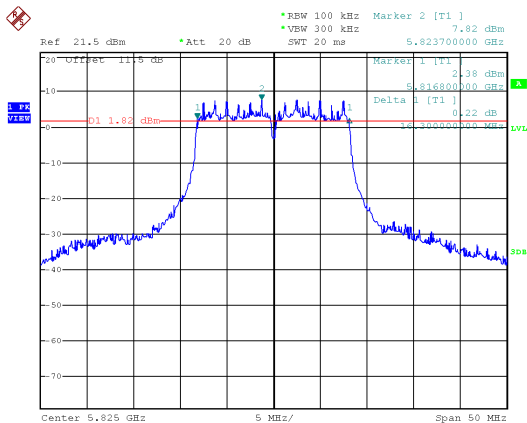
CH157



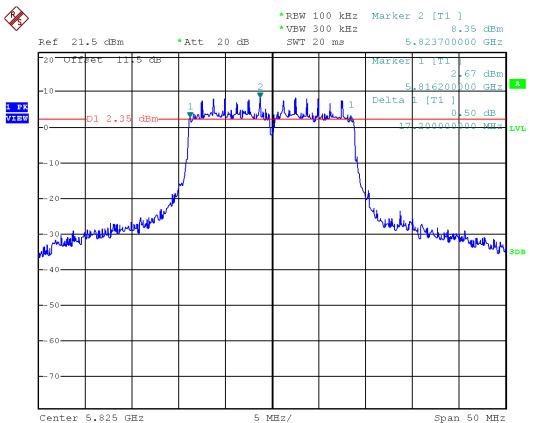
CH157



CH165

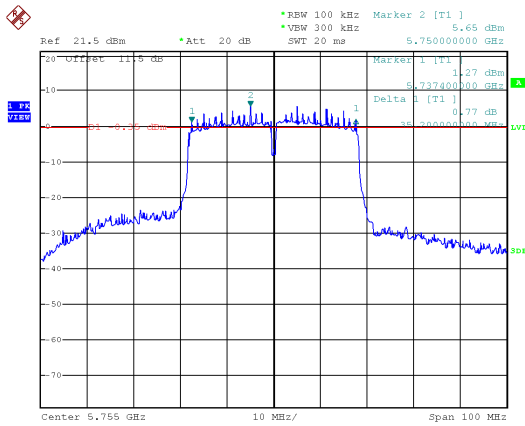


CH165

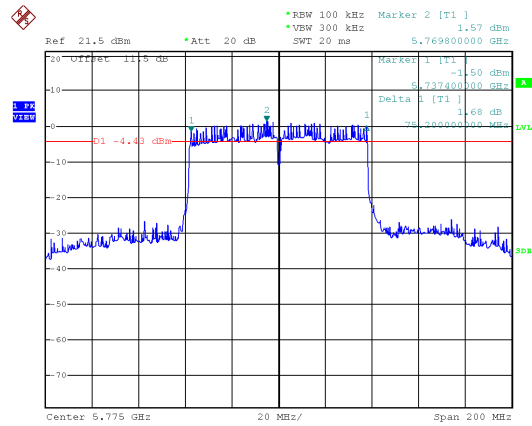




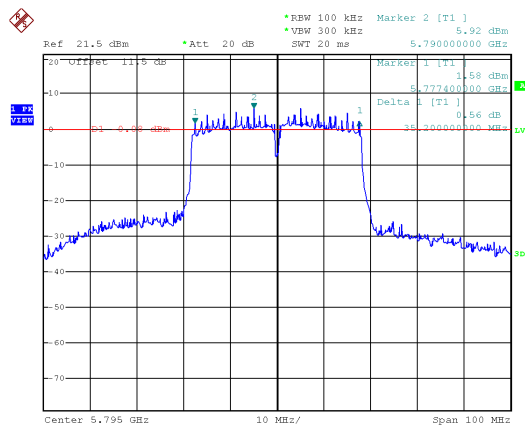
Modulation Standard: 802.11ac, VHT40 (13.5Mbps)
CH151



Modulation Standard: 802.11ac, VHT80 (29.3Mbps)
CH155

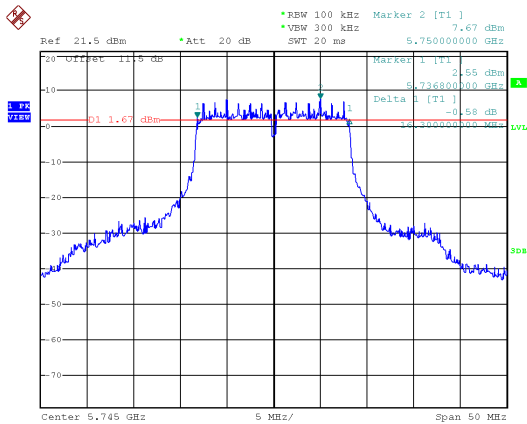


CH159

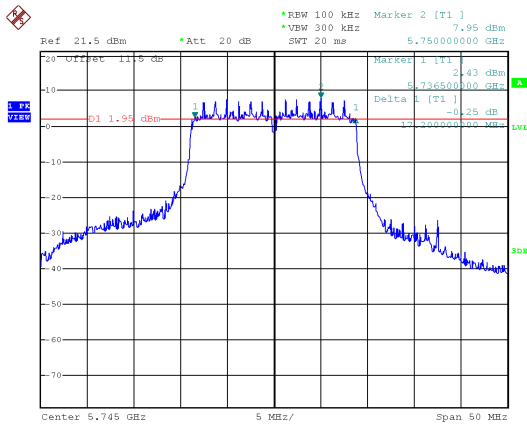




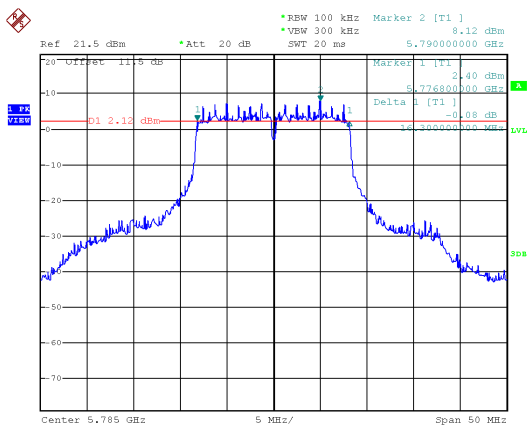
ANT B
Modulation Standard: 802.11a (6Mbps)
CH149



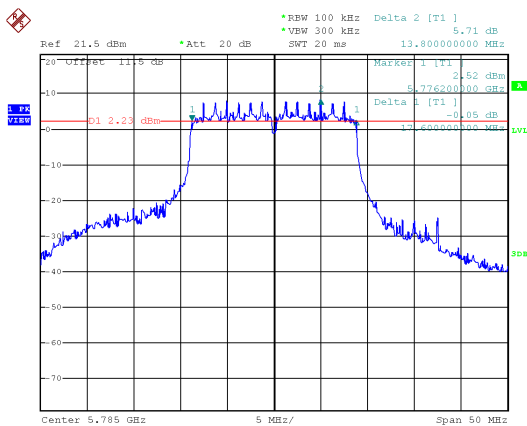
Modulation Standard: 802.11ac, VHT20 (6.5Mbps)
CH149



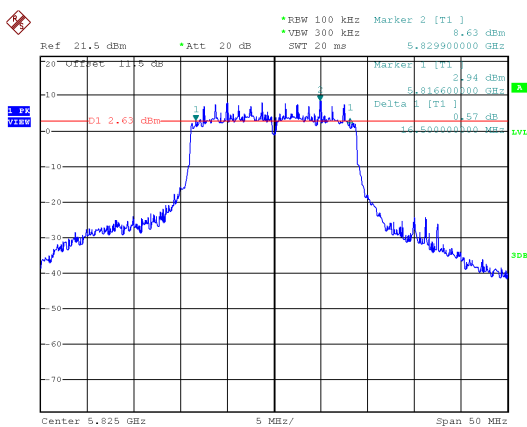
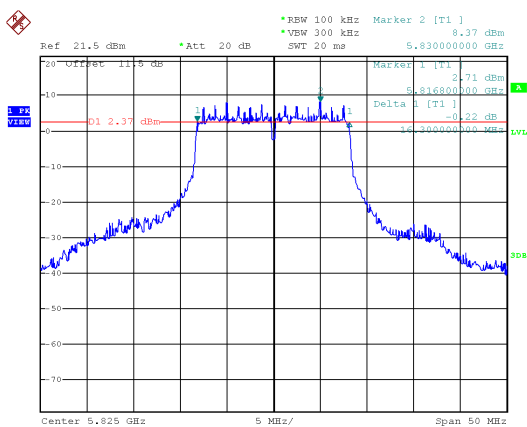
CH157



CH157

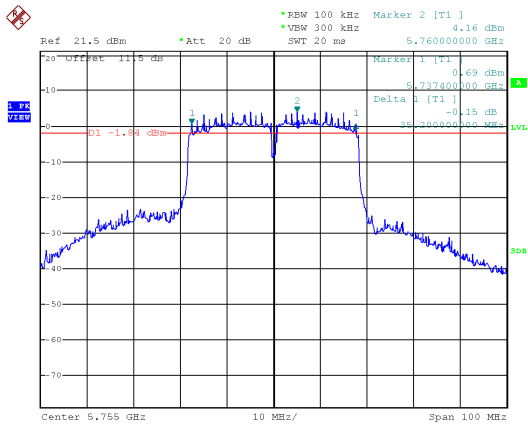


CH165

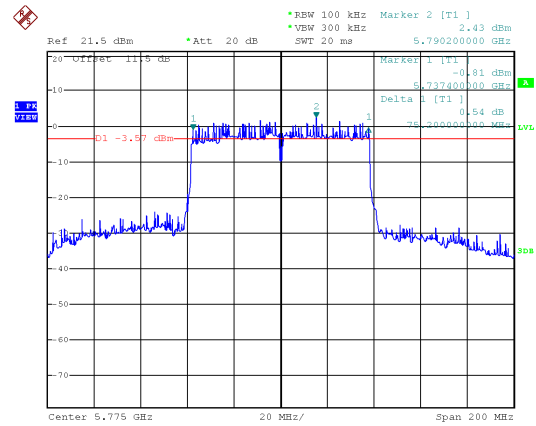




Modulation Standard: 802.11ac, VHT40 (13.5Mbps)
CH151



Modulation Standard: 802.11ac, VHT80 (29.3Mbps)
CH155



CH159

