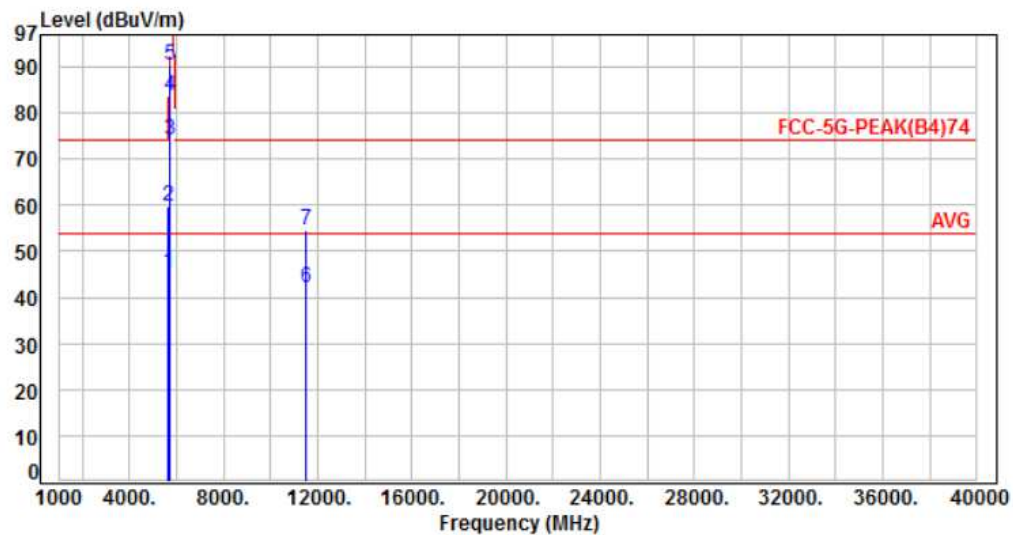




Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH149	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-5.77	51.09	45.32	54.00	-8.68	Average	121	107	P
2	5650.00	-5.77	65.48	59.71	74.00	-14.29	Peak	121	107	P
3	5700.00	-5.79	80.10	74.31	105.20	-30.89	Peak	121	107	P
4	5720.00	-5.80	89.52	83.72	110.80	-27.08	Peak	121	107	P
5	5725.00	-5.80	96.04	90.24	122.20	-31.96	Peak	121	107	P
6	11490.00	2.06	40.16	42.22	54.00	-11.78	Average	100	256	P
7	11490.00	2.06	52.70	54.76	74.00	-19.24	Peak	100	256	P

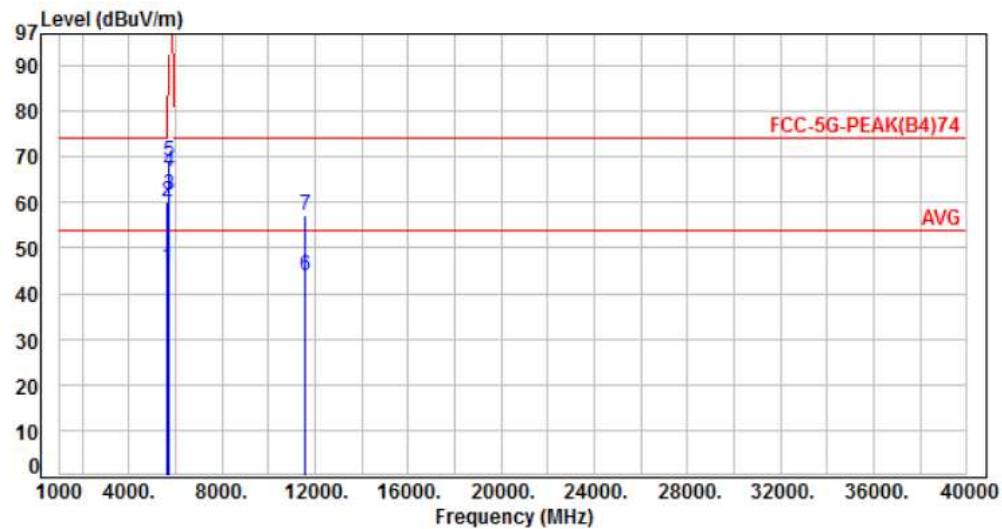
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH157	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-5.77	51.53	45.76	54.00	-8.24	Average	102	151	P
2	5650.00	-5.77	65.71	59.94	74.00	-14.06	Peak	102	151	P
3	5700.00	-5.79	67.37	61.58	105.20	-43.62	Peak	102	151	P
4	5720.00	-5.80	72.58	66.78	110.80	-44.02	Peak	102	151	P
5	5725.00	-5.80	74.76	68.96	122.20	-53.24	Peak	102	151	P
6	11570.00	2.09	41.81	43.90	54.00	-10.10	Average	155	296	P
7	11570.00	2.09	54.94	57.03	74.00	-16.97	Peak	155	296	P

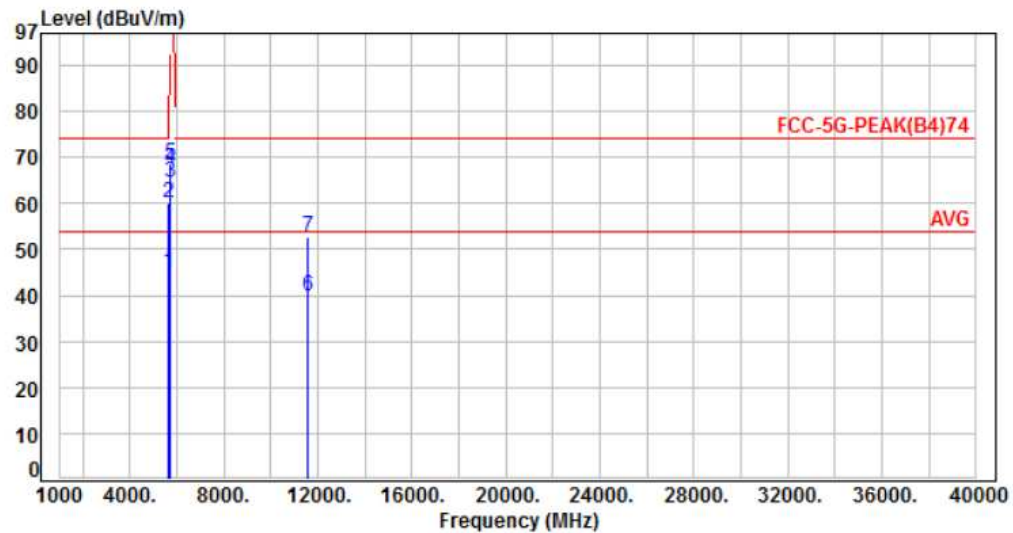
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH157	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-5.77	50.88	45.11	54.00	-8.89	Average	118	196	P
2	5650.00	-5.77	65.71	59.94	74.00	-14.06	Peak	118	196	P
3	5700.00	-5.79	70.20	64.41	105.20	-40.79	Peak	118	196	P
4	5720.00	-5.80	73.43	67.63	110.80	-43.17	Peak	118	196	P
5	5725.00	-5.80	74.54	68.74	122.20	-53.46	Peak	118	196	P
6	11570.00	2.09	37.62	39.71	54.00	-14.29	Average	100	247	P
7	11570.00	2.09	50.58	52.67	74.00	-21.33	Peak	100	247	P

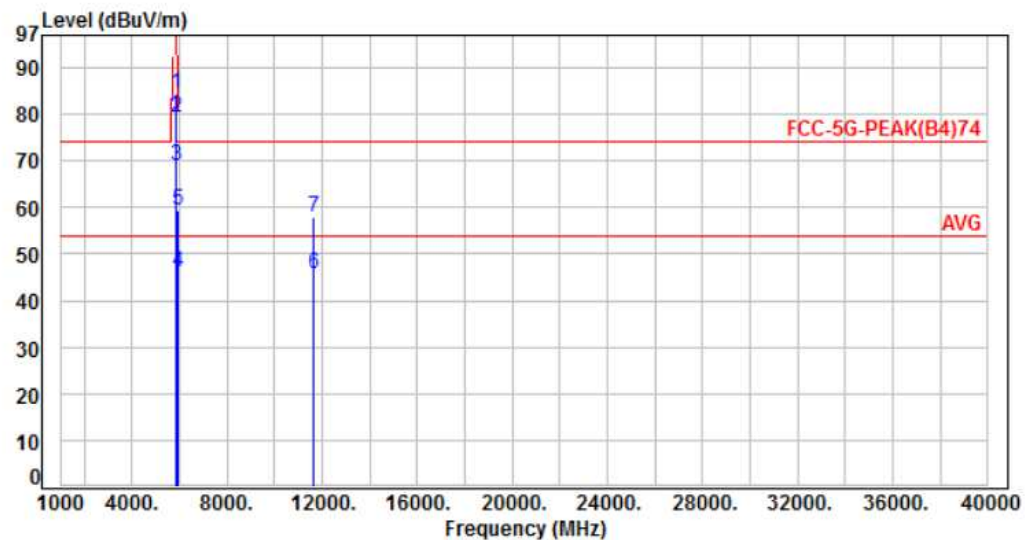
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH165	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	-5.84	90.45	84.61	122.20	-37.59	Peak	106	122	P
2	5855.00	-5.84	85.20	79.36	110.80	-31.44	Peak	106	122	P
3	5875.00	-5.85	74.71	68.86	105.20	-36.34	Peak	106	122	P
4	5925.00	-5.87	51.88	46.01	54.00	-7.99	Average	106	122	P
5	5925.00	-5.87	65.35	59.48	74.00	-14.52	Peak	106	122	P
6	11650.00	2.12	43.78	45.90	54.00	-8.10	Average	149	248	P
7	11650.00	2.12	55.89	58.01	74.00	-15.99	Peak	149	248	P

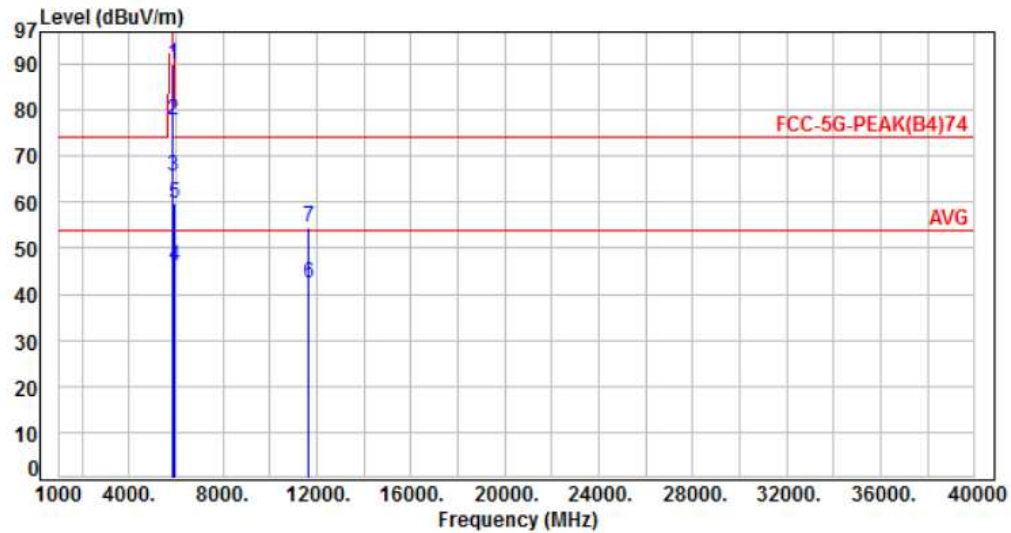
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH165	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5850.00	-5.84	95.94	90.10	122.20	-32.10	Peak	100	231	P
2	5855.00	-5.84	83.62	77.78	110.80	-33.02	Peak	100	231	P
3	5875.00	-5.85	71.42	65.57	105.20	-39.63	Peak	100	231	P
4	5925.00	-5.87	51.83	45.96	54.00	-8.04	Average	100	231	P
5	5925.00	-5.87	65.49	59.62	74.00	-14.38	Peak	100	231	P
6	11650.00	2.12	40.22	42.34	54.00	-11.66	Average	100	252	P
7	11650.00	2.12	52.31	54.43	74.00	-19.57	Peak	100	252	P

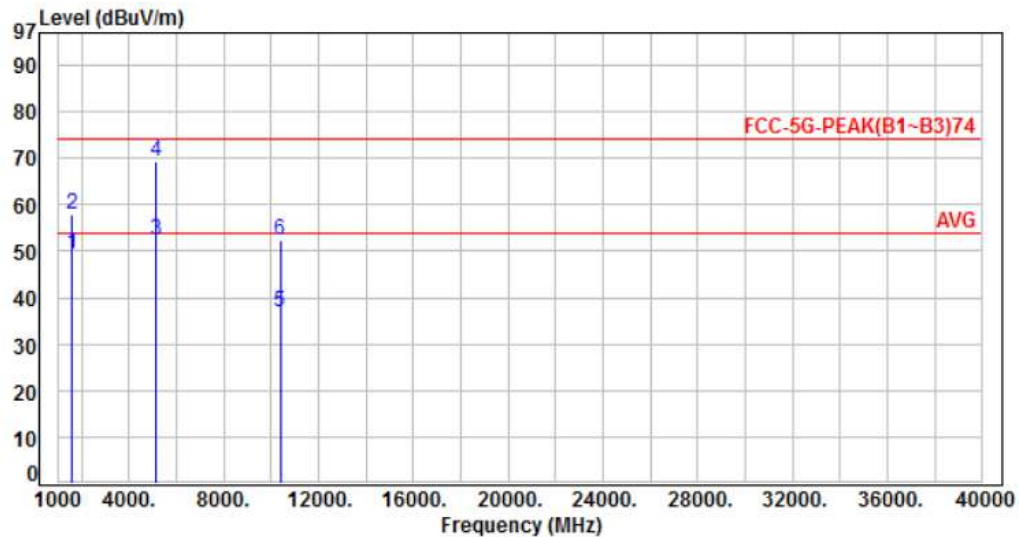
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 5, CH38	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-19.35	68.65	49.30	54.00	-4.70	Average	198	210	P
2	1600.00	-19.35	77.12	57.77	74.00	-16.23	Peak	198	210	P
3	5150.00	-6.54	59.07	52.53	54.00	-1.47	Average	150	148	P
4	5150.00	-6.54	75.72	69.18	74.00	-4.82	Peak	150	148	P
5	10380.00	0.68	36.30	36.98	54.00	-17.02	Average	100	114	P
6	10380.00	0.68	51.75	52.43	74.00	-21.57	Peak	100	114	P

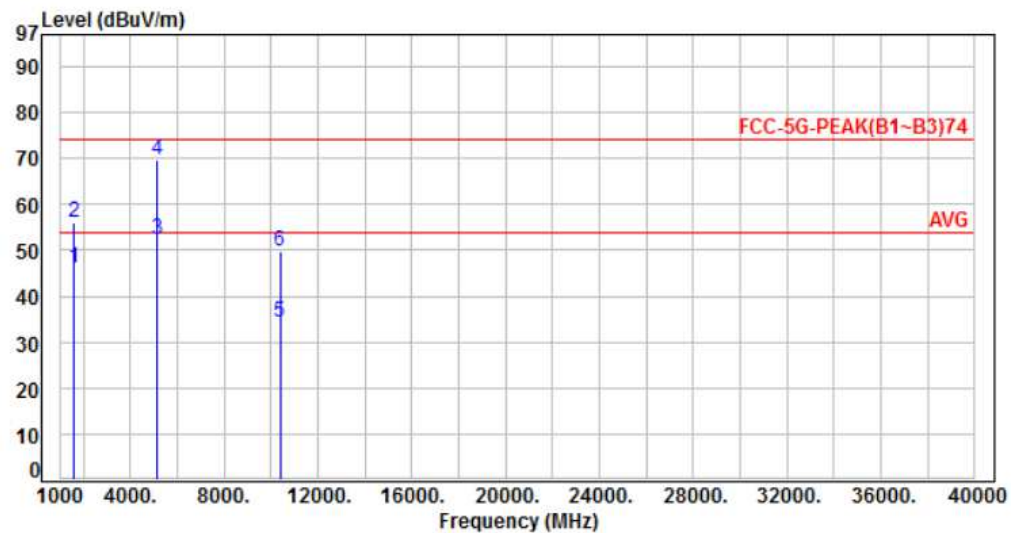
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 5, CH38	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-19.35	65.56	46.21	54.00	-7.79	Average	100	198	P
2	1600.00	-19.35	75.32	55.97	74.00	-18.03	Peak	100	198	P
3	5150.00	-6.54	58.82	52.28	54.00	-1.72	Average	122	108	P
4	5150.00	-6.54	76.22	69.68	74.00	-4.32	Peak	122	108	P
5	10380.00	0.68	33.79	34.47	54.00	-19.53	Average	117	221	P
6	10380.00	0.68	49.10	49.78	74.00	-24.22	Peak	117	221	P

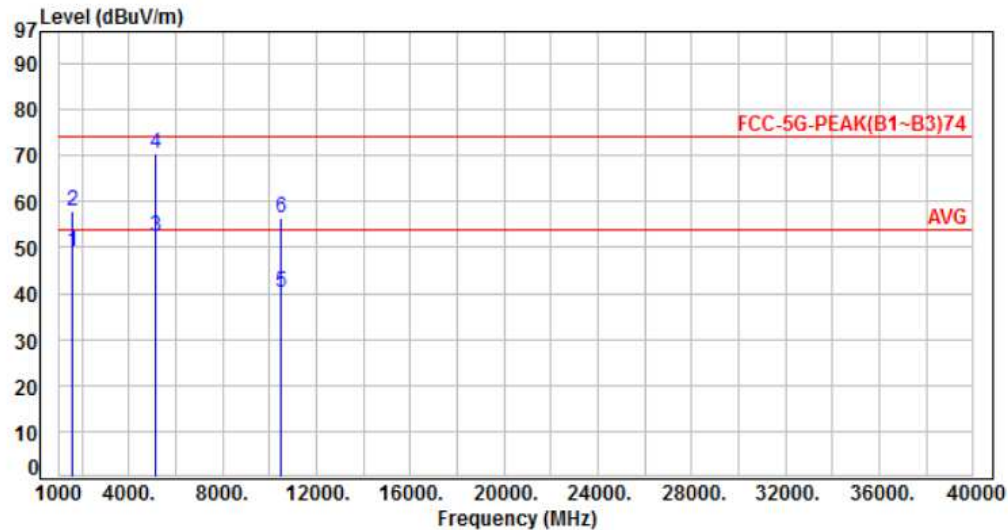
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 5, CH46	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-19.41	68.54	49.13	54.00	-4.87	Average	195	202	P
2	1600.00	-19.41	77.49	58.08	74.00	-15.92	Peak	195	202	P
3	5150.00	-6.47	58.89	52.42	54.00	-1.58	Average	150	137	P
4	5150.00	-6.47	76.78	70.31	74.00	-3.69	Peak	150	137	P
5	10460.00	0.31	39.84	40.15	54.00	-13.85	Average	100	352	P
6	10460.00	0.31	56.08	56.39	74.00	-17.61	Peak	100	352	P

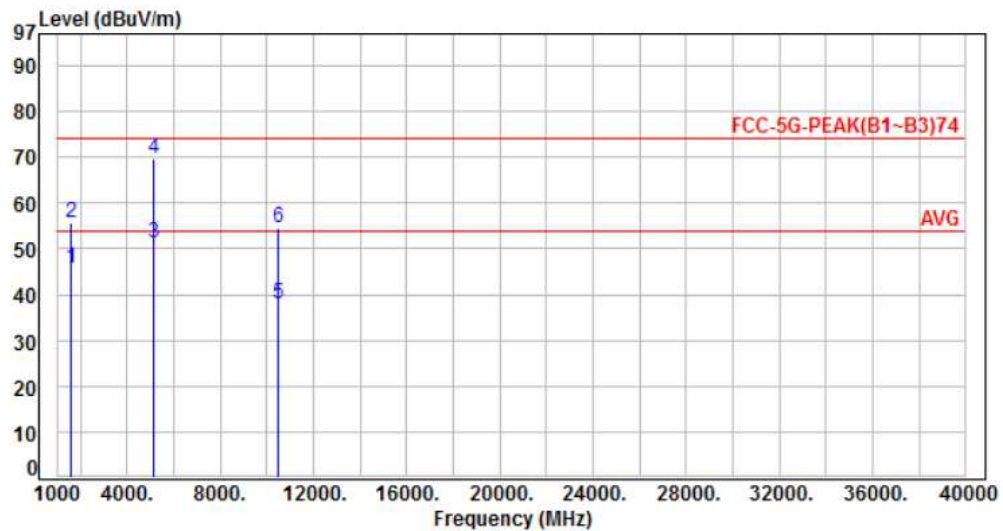
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 5, CH46	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	1600.00	-19.29	65.12	45.83	54.00	-8.17	Average	100	198	P
2	1600.00	-19.29	74.83	55.54	74.00	-18.46	Peak	100	198	P
3	5150.00	-6.47	57.77	51.30	54.00	-2.70	Average	301	290	P
4	5150.00	-6.47	76.12	69.65	74.00	-4.35	Peak	301	290	P
5	10460.00	0.91	37.25	38.16	54.00	-15.84	Average	297	41	P
6	10460.00	0.91	53.77	54.68	74.00	-19.32	Peak	297	41	P

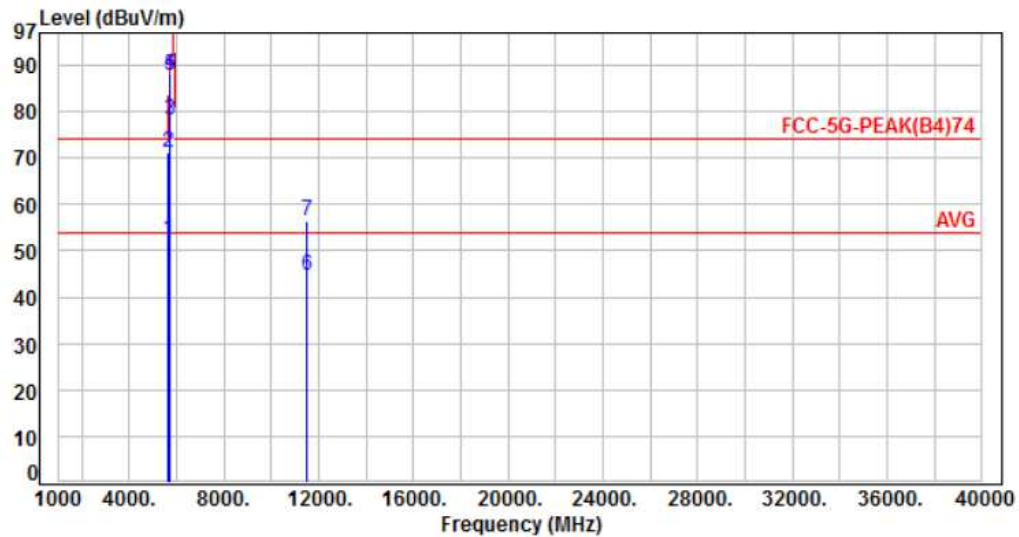
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 5, CH151	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-5.77	58.07	52.30	54.00	-1.70	Average	164	209	P
2	5650.00	-5.77	76.80	71.03	74.00	-2.97	Peak	164	209	P
3	5700.00	-5.79	83.90	78.11	105.20	-27.09	Peak	164	209	P
4	5720.00	-5.80	93.93	88.13	110.80	-22.67	Peak	164	209	P
5	5725.00	-5.80	93.65	87.85	122.20	-34.35	Peak	164	209	P
6	11510.00	2.07	42.69	44.76	54.00	-9.24	Average	141	237	P
7	11510.00	2.07	54.39	56.46	74.00	-17.54	Peak	141	237	P

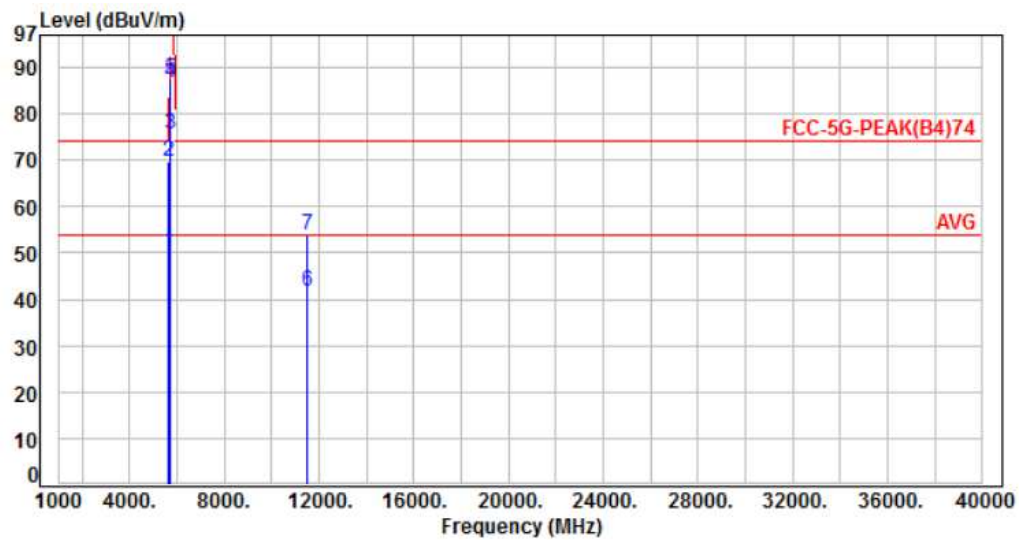
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 5, CH151	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-5.77	55.98	50.21	54.00	-3.79	Average	175	210	P
2	5650.00	-5.77	75.31	69.54	74.00	-4.46	Peak	175	210	P
3	5700.00	-5.79	81.54	75.75	105.20	-29.45	Peak	175	210	P
4	5720.00	-5.80	92.31	86.51	110.80	-24.29	Peak	175	210	P
5	5725.00	-5.80	93.35	87.55	122.20	-34.65	Peak	175	210	P
6	11510.00	2.07	39.54	41.61	54.00	-12.39	Average	100	244	P
7	11510.00	2.07	51.67	53.74	74.00	-20.26	Peak	100	244	P

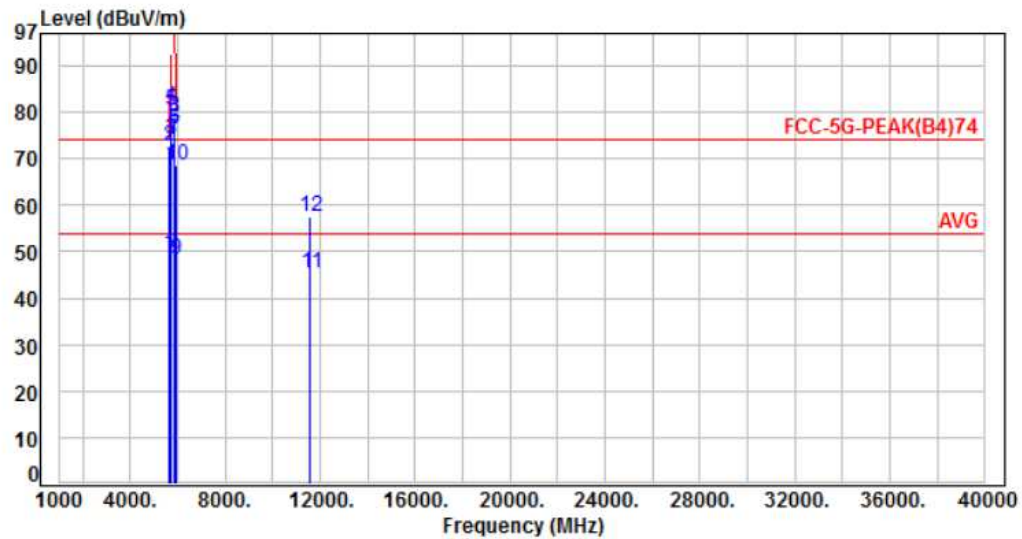
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 5, CH159	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-5.77	55.30	49.53	54.00	-4.47	Average	247	152	P
2	5650.00	-5.77	78.34	72.57	74.00	-1.43	Peak	247	152	P
3	5700.00	-5.79	79.96	74.17	105.20	-31.03	Peak	247	152	P
4	5720.00	-5.80	86.91	81.11	110.80	-29.69	Peak	247	152	P
5	5725.00	-5.80	86.35	80.55	122.20	-41.65	Peak	247	152	P
6	5850.00	-5.84	82.24	76.40	122.20	-45.80	Peak	223	154	P
7	5855.00	-5.84	80.54	74.70	110.80	-36.10	Peak	223	154	P
8	5875.00	-5.85	84.65	78.80	105.20	-26.40	Peak	223	154	P
9	5925.00	-5.87	54.20	48.33	54.00	-5.67	Average	223	154	P
10	5925.00	-5.87	74.61	68.74	74.00	-5.26	Peak	223	154	P
11	11590.00	2.10	43.12	45.22	54.00	-8.78	Average	138	244	P
12	11590.00	2.10	55.27	57.37	74.00	-16.63	Peak	138	244	P

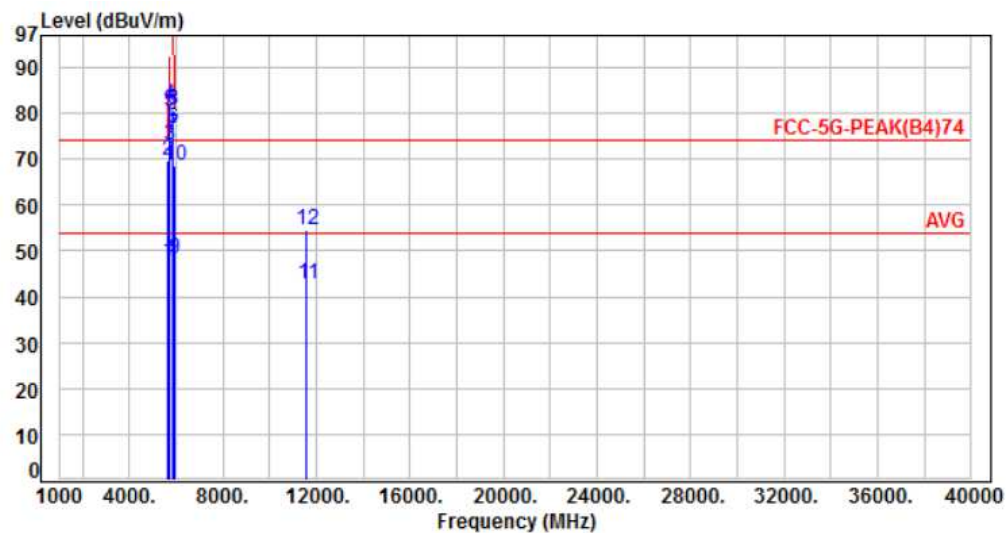
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 5, CH159	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-5.77	53.20	47.43	54.00	-6.57	Average	299	296	P
2	5650.00	-5.77	75.29	69.52	74.00	-4.48	Peak	299	296	P
3	5700.00	-5.79	78.79	73.00	105.20	-32.20	Peak	299	296	P
4	5720.00	-5.80	87.54	81.74	110.80	-29.06	Peak	299	296	P
5	5725.00	-5.80	86.13	80.33	122.20	-41.87	Peak	299	296	P
6	5850.00	-5.84	82.74	76.90	122.20	-45.30	Peak	310	296	P
7	5855.00	-5.84	81.20	75.36	110.80	-35.44	Peak	310	296	P
8	5875.00	-5.85	86.77	80.92	105.20	-24.28	Peak	310	296	P
9	5925.00	-5.87	54.23	48.36	54.00	-5.64	Average	310	296	P
10	5925.00	-5.87	74.35	68.48	74.00	-5.52	Peak	310	296	P
11	11590.00	2.10	40.61	42.71	54.00	-11.29	Average	100	235	P
12	11590.00	2.10	52.58	54.68	74.00	-19.32	Peak	100	235	P

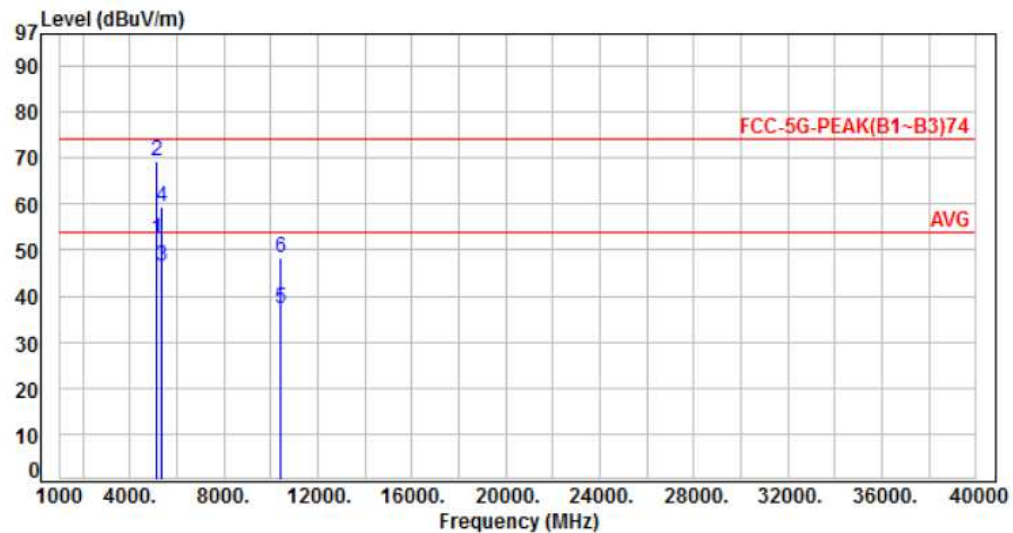
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 6, CH42	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-6.54	58.92	52.38	54.00	-1.62	Average	301	328	P
2	5150.00	-6.54	75.74	69.20	74.00	-4.80	Peak	301	328	P
3	5350.00	-6.06	52.39	46.33	54.00	-7.67	Average	360	177	P
4	5350.00	-6.06	65.34	59.28	74.00	-14.72	Peak	360	177	P
5	10420.00	0.69	36.44	37.13	54.00	-16.87	Average	131	161	P
6	10420.00	0.69	47.78	48.47	74.00	-25.53	Peak	131	161	P

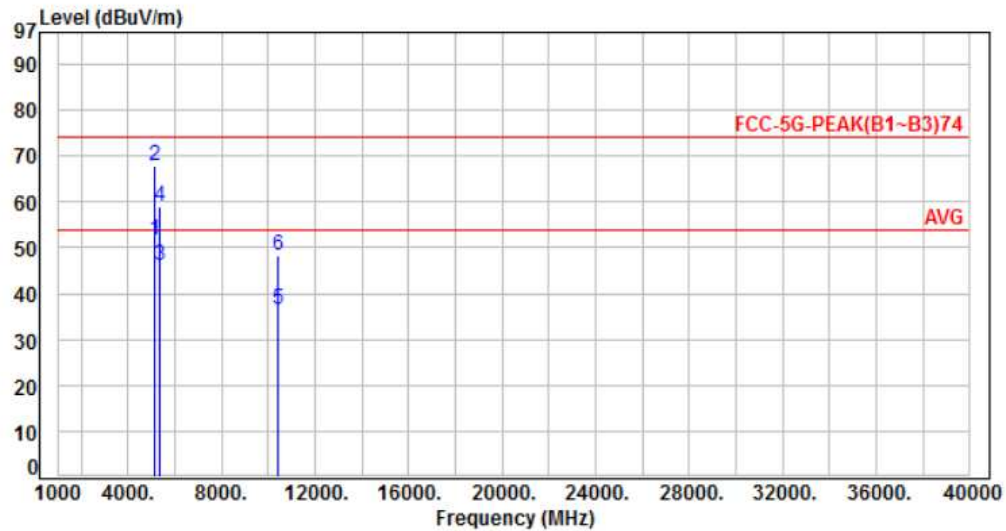
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 6, CH42	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5150.00	-6.54	58.10	51.56	54.00	-2.44	Average	336	295	P
2	5150.00	-6.54	74.53	67.99	74.00	-6.01	Peak	336	295	P
3	5350.00	-6.06	52.22	46.16	54.00	-7.84	Average	336	295	P
4	5350.00	-6.06	65.25	59.19	74.00	-14.81	Peak	336	295	P
5	10420.00	0.69	35.70	36.39	54.00	-17.61	Average	100	189	P
6	10420.00	0.69	47.53	48.22	74.00	-25.78	Peak	100	189	P

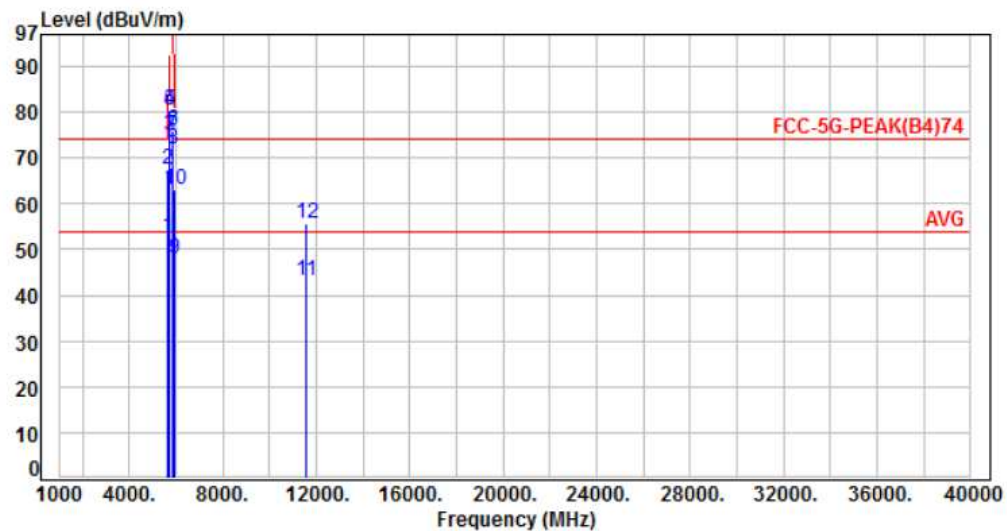
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 6, CH155	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-5.77	58.36	52.59	54.00	-1.41	Average	194	167	P
2	5650.00	-5.77	73.28	67.51	74.00	-6.49	Peak	194	167	P
3	5700.00	-5.79	80.77	74.98	105.20	-30.22	Peak	194	167	P
4	5720.00	-5.80	86.24	80.44	110.80	-30.36	Peak	194	167	P
5	5725.00	-5.80	86.17	80.37	122.20	-41.83	Peak	194	167	P
6	5850.00	-5.84	81.94	76.10	122.20	-46.10	Peak	201	194	P
7	5855.00	-5.84	81.38	75.54	110.80	-35.26	Peak	201	194	P
8	5875.00	-5.85	77.68	71.83	105.20	-33.37	Peak	201	194	P
9	5925.00	-5.87	53.73	47.86	54.00	-6.14	Average	201	194	P
10	5925.00	-5.87	68.82	62.95	74.00	-11.05	Peak	201	194	P
11	11550.00	2.09	40.89	42.98	54.00	-11.02	Average	103	241	P
12	11550.00	2.09	53.45	55.54	74.00	-18.46	Peak	103	241	P

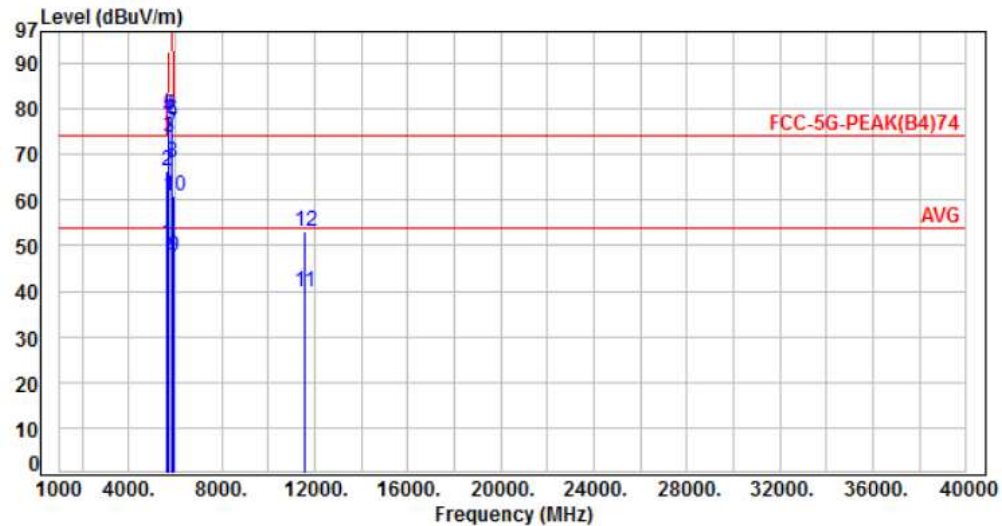
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 6, CH155	Temperature	: 24°C
Test Date	: Apr. 10, 2017	Humidity	: 63%



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-5.77	56.44	50.67	54.00	-3.33	Average	140	209	P
2	5650.00	-5.77	71.98	66.21	74.00	-7.79	Peak	140	209	P
3	5700.00	-5.79	79.49	73.70	105.20	-31.50	Peak	140	209	P
4	5720.00	-5.80	83.96	78.16	110.80	-32.64	Peak	140	209	P
5	5725.00	-5.80	84.21	78.41	122.20	-43.79	Peak	140	209	P
6	5850.00	-5.84	83.25	77.41	122.20	-44.79	Peak	187	219	P
7	5855.00	-5.84	80.88	75.04	110.80	-35.76	Peak	187	219	P
8	5875.00	-5.85	74.19	68.34	105.20	-36.86	Peak	187	219	P
9	5925.00	-5.87	53.31	47.44	54.00	-6.56	Average	187	219	P
10	5925.00	-5.87	66.88	61.01	74.00	-12.99	Peak	187	219	P
11	11550.00	2.09	37.89	39.98	54.00	-14.02	Average	100	251	P
12	11550.00	2.09	50.89	52.98	74.00	-21.02	Peak	100	251	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

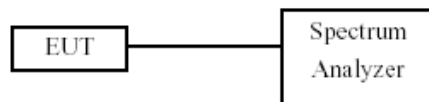
7.1. Test Limit

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: 24°C

Humidity: 63%

Test Date: Apr. 13, 2017

Non Beamforming

Modulation Type	On Time (msec)	Period Time (msec)	Duty Cycle (%)	1/T Minimum VBW(Hz)	Duty Cycle correction Factor (dB)
802.11a	2.09	2.10	99.52%	478.47	0.02
802.11ac VHT20	1.95	1.96	99.49%	512.82	0.02
802.11ac VHT40	0.98	0.99	98.39%	1024.59	0.07
802.11ac VHT80	0.47	0.49	95.95%	2109.70	0.18

Beamforming

Modulation Type	On Time (msec)	Period Time (msec)	Duty Cycle (%)	1/T Minimum VBW(Hz)	Duty Cycle correction Factor (dB)
802.11ac VHT20	3.92	5.00	78.40%	255.10	1.06
802.11ac VHT40	3.00	4.32	69.44%	333.33	1.58
802.11ac VHT80	5.20	6.04	86.09%	192.31	0.65

7.5. Measurement Methods

26 dB and 6dB Emission BW	KDB 789033 D02 v01, Section C
99% Occupied BW	KDB 789033 D02 v01, Section D
Conducted Output Power	KDB 789033 D02 v01, Section E.2.d and E.3.b (Method PM-G)
Power Spectral Density	KDB 789033 D02 v01, Section F
Unwanted emissions in restricted bands	KDB 789033 D02 v01, Sections G and H
Unwanted emissions in non-restricted bands	KDB 789033 D02 v01, Sections G and H



8. 6dB Bandwidth

8.1. Test Limit

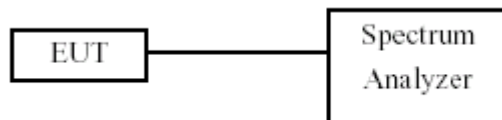
FCC §15.407

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

Temperature: 24°C

Humidity: 63%

Test Date: Apr. 13, 2017

Non Beamforming

In the 5.8G Band

Modulation Type	Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)
			ANT 1	ANT 2	
802.11a	149	5745	16.40	16.40	0.50
	157	5785	16.30	16.40	0.50
	165	5825	16.30	16.30	0.50
802.11ac VHT20	149	5745	17.50	17.50	0.50
	157	5785	17.60	17.60	0.50
	165	5825	17.60	17.60	0.50
802.11ac VHT40	155	5755	35.60	36.60	0.50
	159	5795	36.40	36.40	0.50
802.11ac VHT80	155	5775	76.16	76.16	0.50

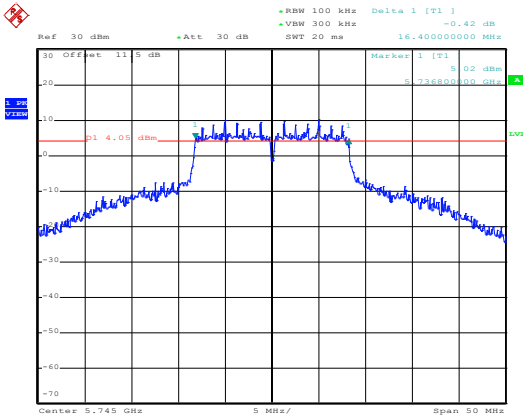
Beamforming

In the 5.8G Band

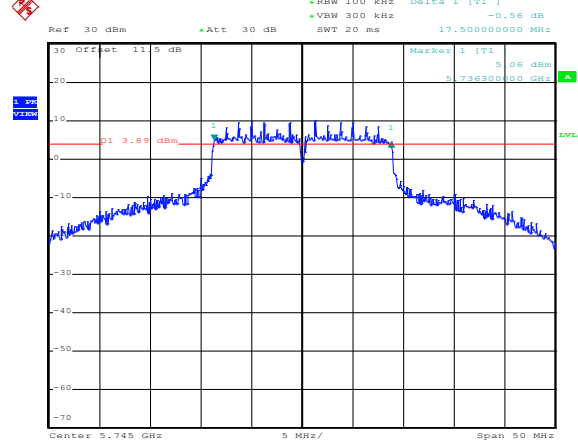
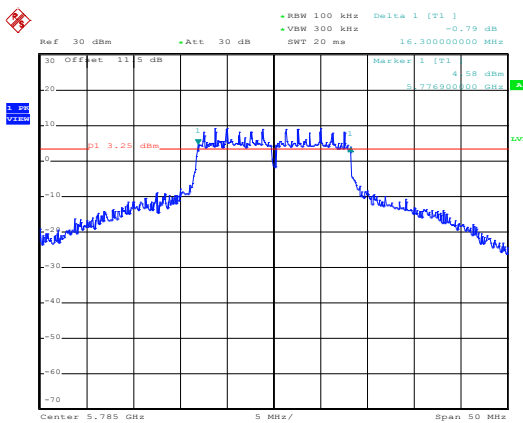
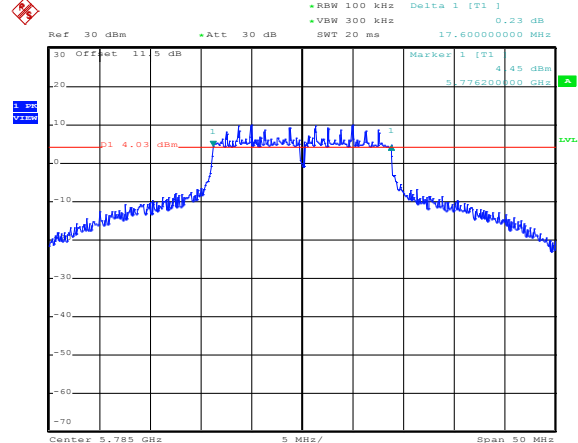
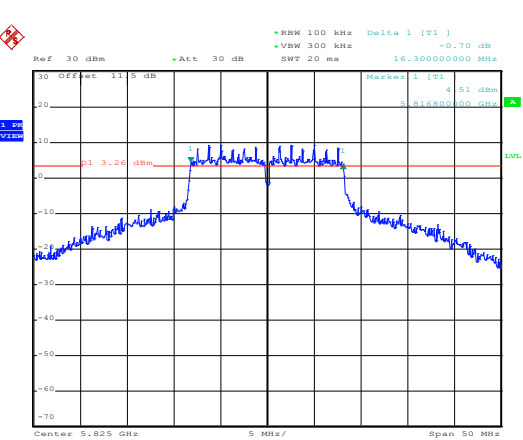
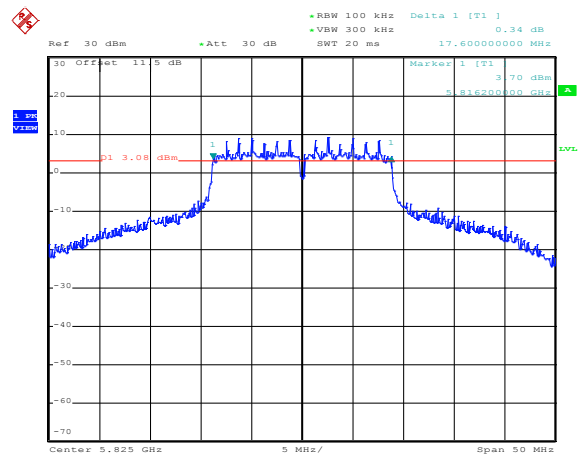
Modulation Type	Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)
			ANT 1	ANT 2	
802.11ac VHT20	149	5745	17.60	17.50	0.50
	157	5785	17.60	17.50	0.50
	165	5825	17.60	17.60	0.50
802.11ac VHT40	155	5755	36.60	36.60	0.50
	159	5795	36.40	36.40	0.50
802.11ac VHT80	155	5775	75.84	76.48	0.50

**Non Beamforming****ANT 1**

Modulation Standard: 802.11a (6Mbps)
CH149

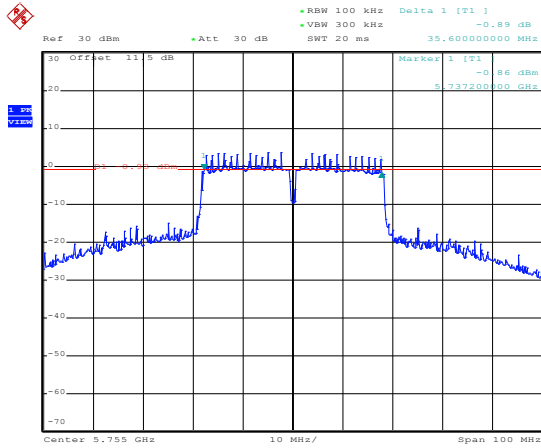
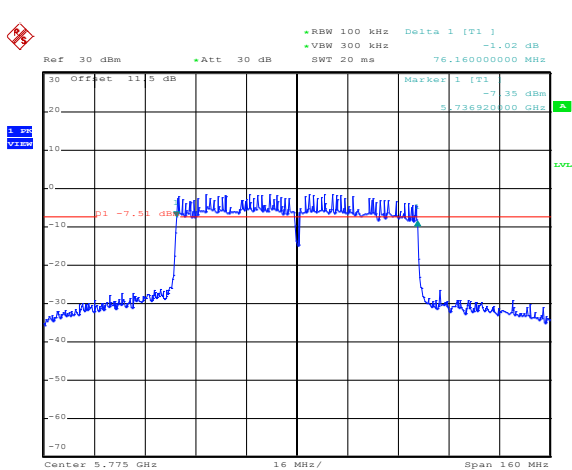


Modulation Standard: 802.11ac, VHT20 (6.5Mbps)
CH149

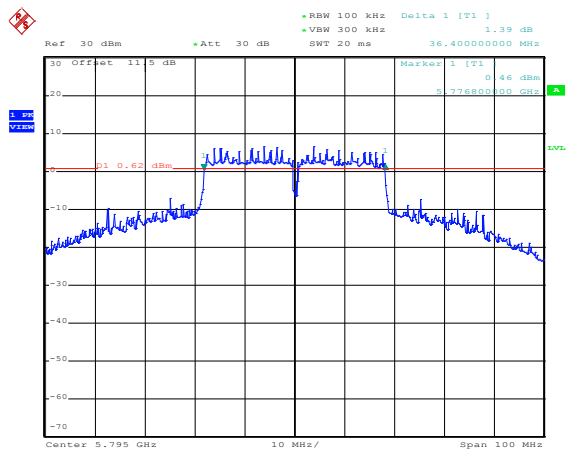
**CH157****CH157****CH165****CH165**



ANT 1

Modulation Standard: 802.11ac, VHT40 (13.5Mbps)
CH151Modulation Standard: 802.11ac, VHT80 (29.3Mbps)
CH155

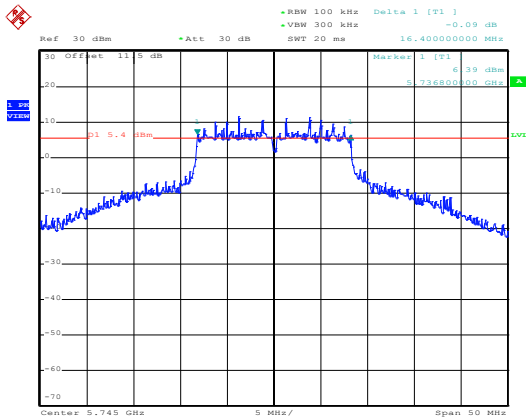
CH159



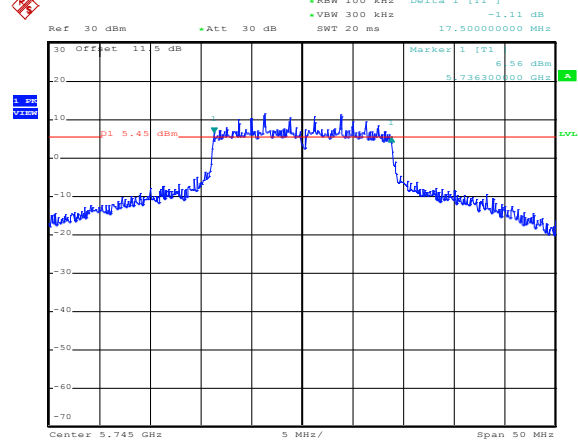


ANT 2

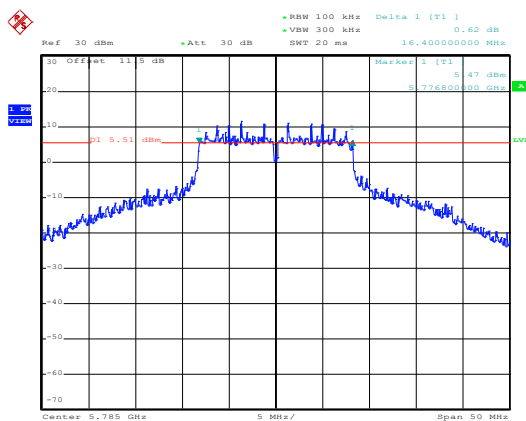
Modulation Standard: 802.11a (6Mbps)
CH149



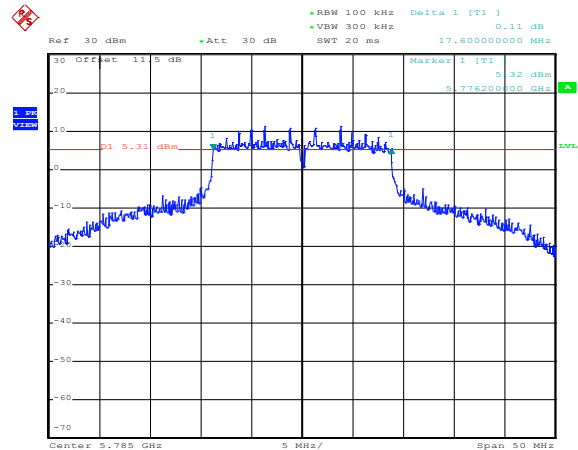
Modulation Standard: 802.11ac, VHT20 (6.5Mbps)
CH149



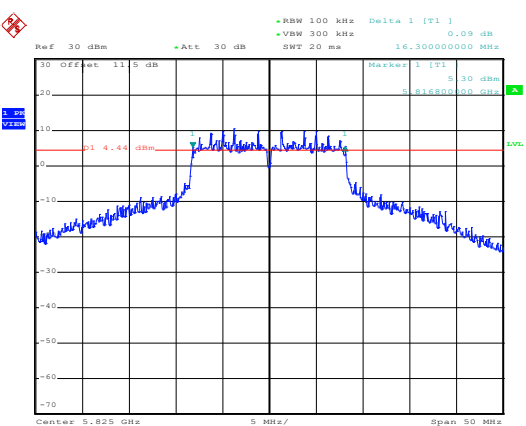
CH157



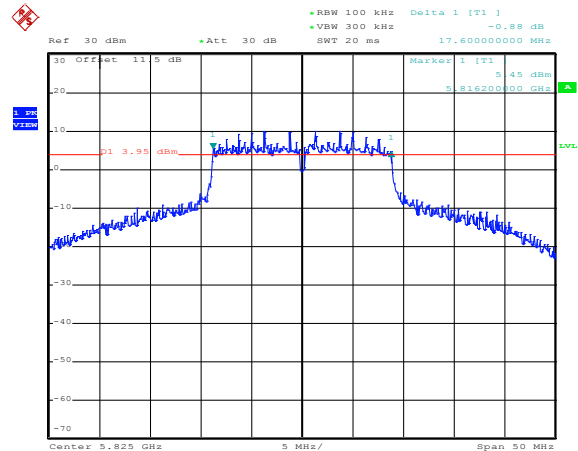
CH157



CH165



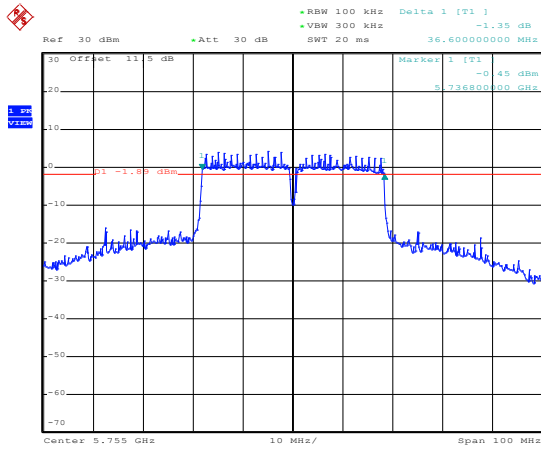
CH165



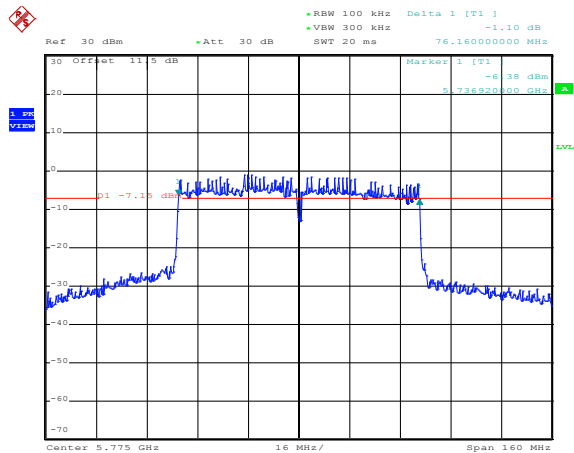


ANT 2

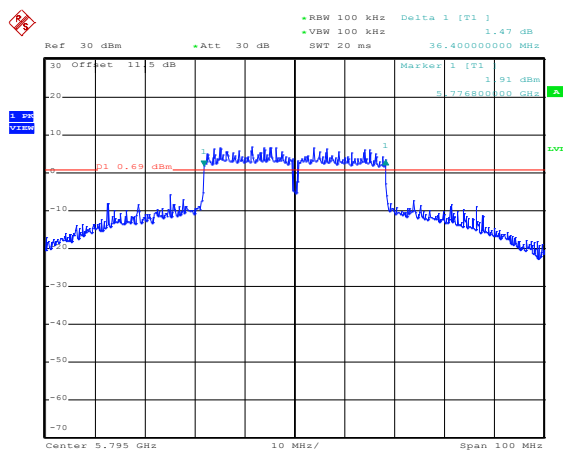
Modulation Standard: 802.11ac, VHT40 (13.5Mbps)
CH151



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



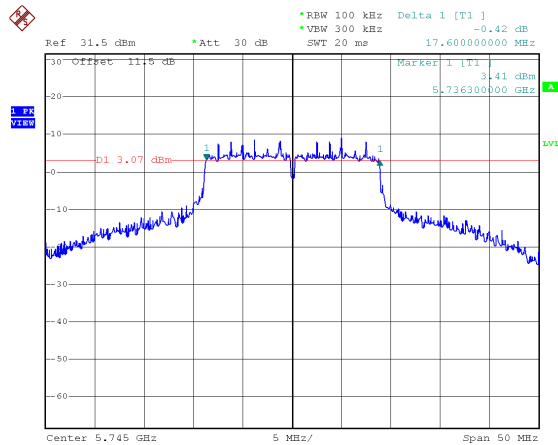
CH159



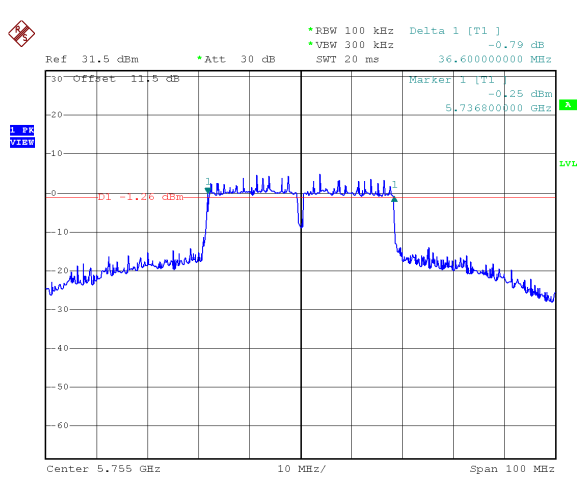


Beamforming

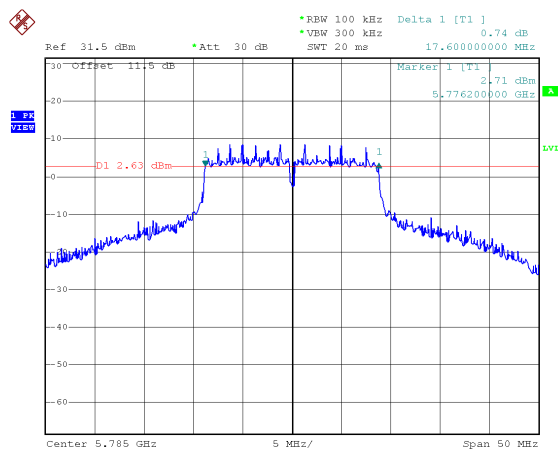
ANT 1

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

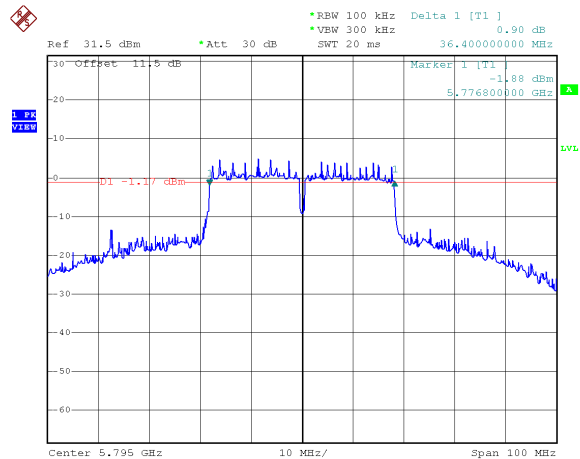
Modulation Standard: 802.11ac, VHT40 (13.5Mbps)
CH151



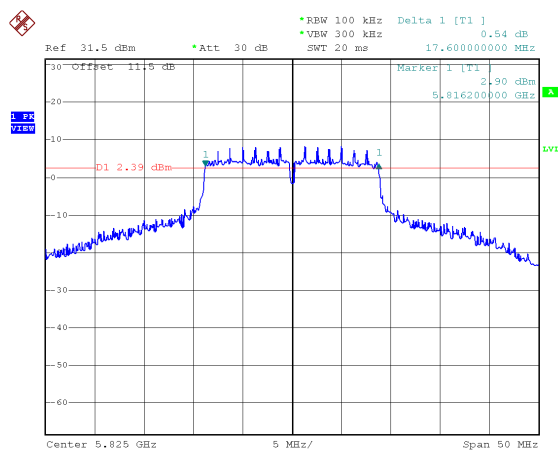
CH157



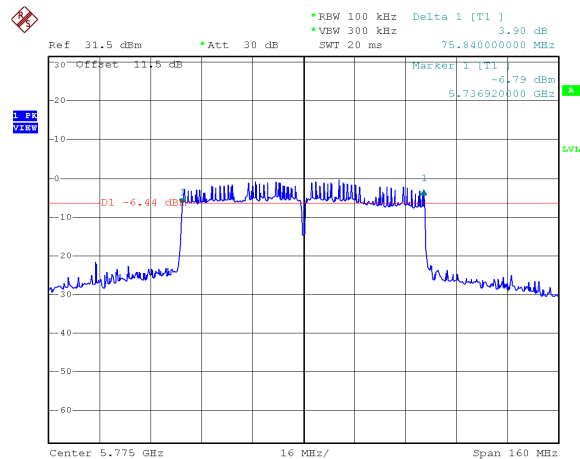
CH159



CH165

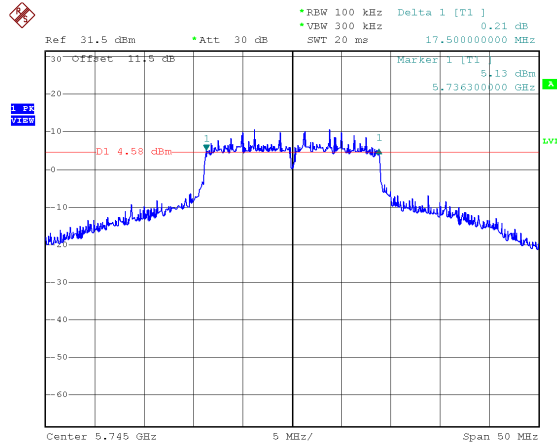
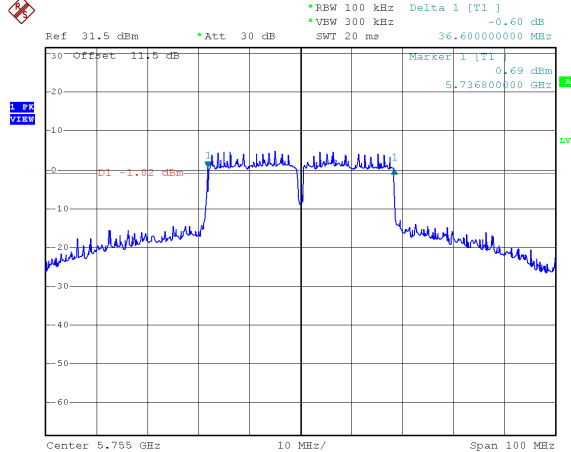


Modulation Standard: 802.11ac, VHT80 (29.3Mbps)
CH155

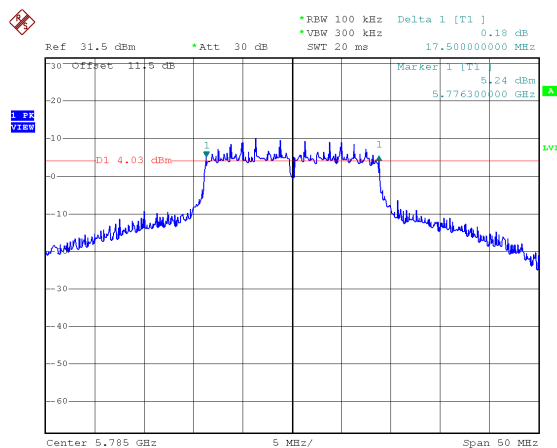




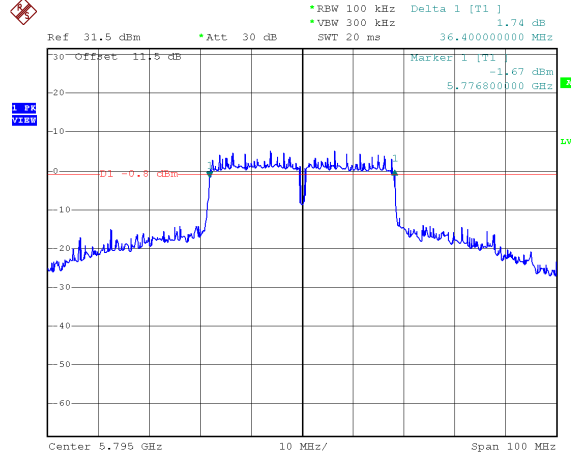
ANT 2

Modulation Standard: 802.11ac, VHT20 (6.5Mbps)
CH149Modulation Standard: 802.11ac, VHT40 (13.5Mbps)
CH151

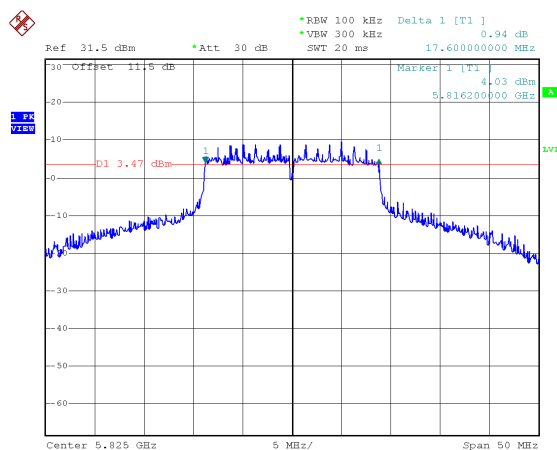
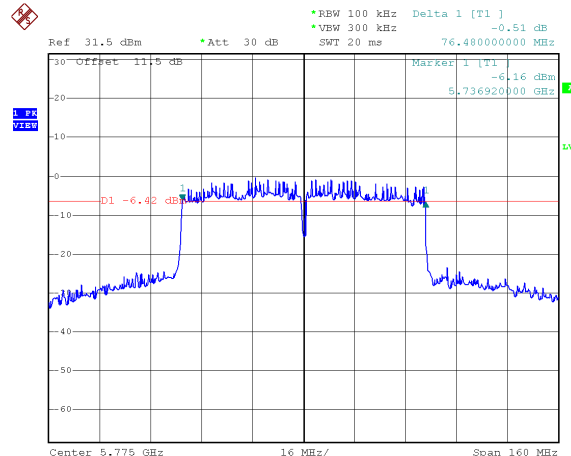
CH157



CH159



CH165

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



9. 26dB Bandwidth

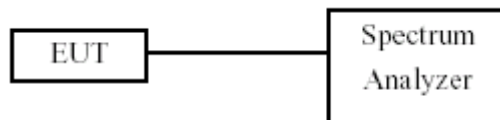
9.1. Test Limit

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 $\geq 3 \times$ RBW, peak detector and max hold.

9.3. Test Setup Layout



9.4. Test Result and Data

Temperature: 24°C

Humidity: 63%

Test Date: Apr. 13, 2017

Non Beamforming

In the 5.2G Band

Modulation Type	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	
			ANT 1	ANT 2
802.11a	36	5180	21.90	21.80
	44	5220	42.00	44.40
	48	5240	41.80	44.50
802.11ac VHT20	36	5180	22.20	22.00
	44	5220	45.00	47.90
	48	5240	48.20	48.00
802.11ac VHT40	38	5190	41.80	41.60
	46	5230	60.60	57.00
802.11ac VHT80	42	5210	82.88	82.56

Beamforming

In the 5.2G Band

Modulation Type	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	
			ANT 1	ANT 2
802.11ac VHT20	36	5180	22.20	22.20
	44	5220	42.40	47.70
	48	5240	42.70	41.80
802.11ac VHT40	38	5190	42.20	42.40
	46	5230	77.00	64.00
802.11ac VHT80	42	5210	82.88	82.56

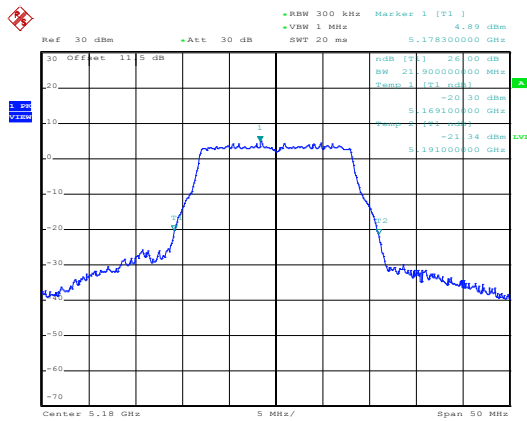
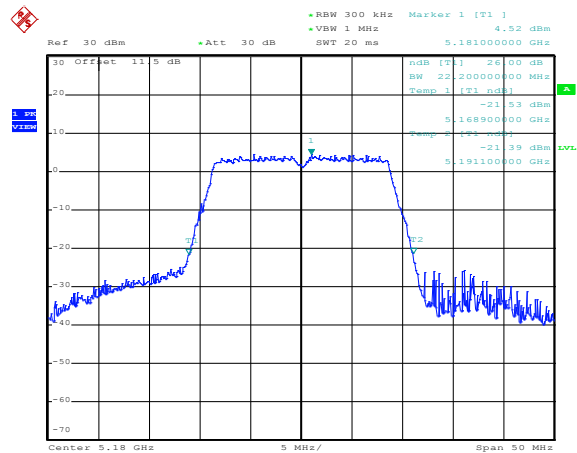


Non Beamforming

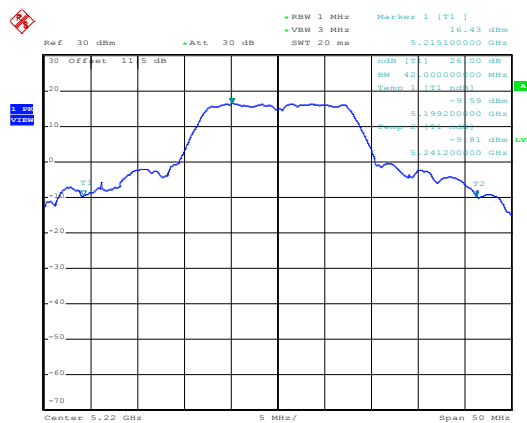
ANT 1

Modulation Standard: 802.11a (6Mbps)

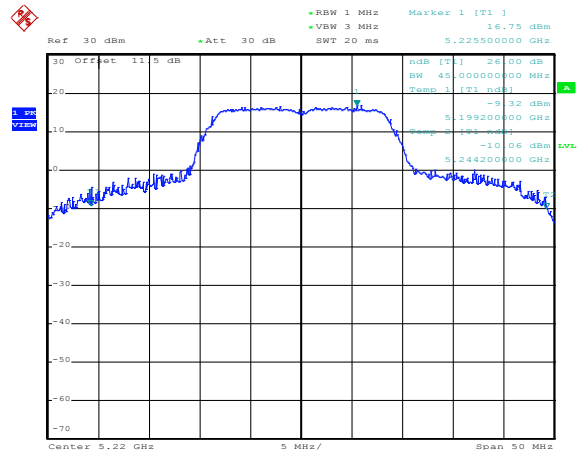
CH36

802.11ac VHT20 (6.5Mbps)
CH36

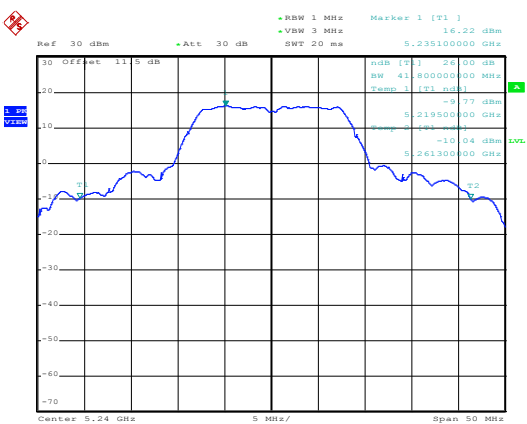
CH44



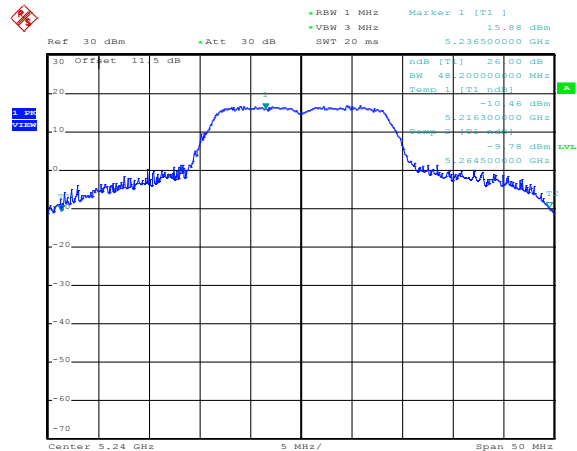
CH44



CH48



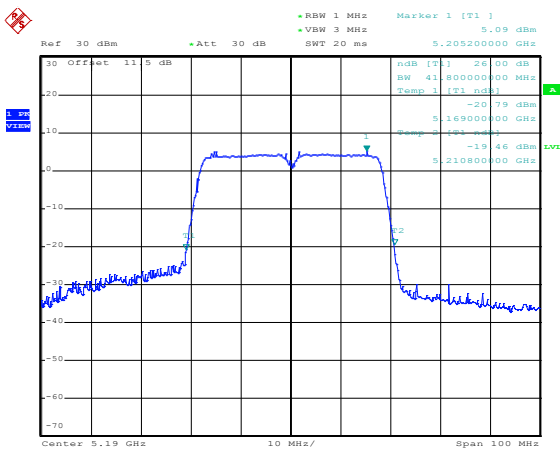
CH48



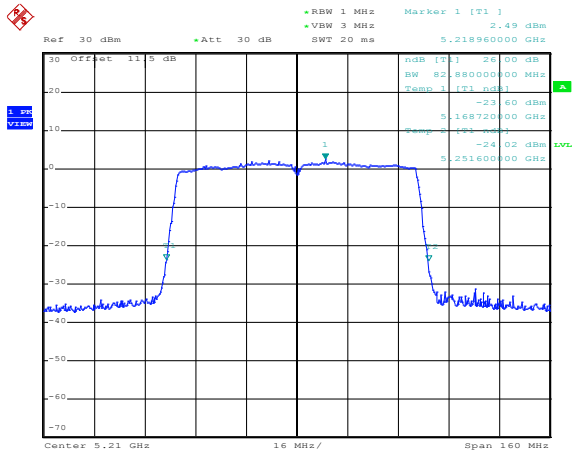


ANT 1

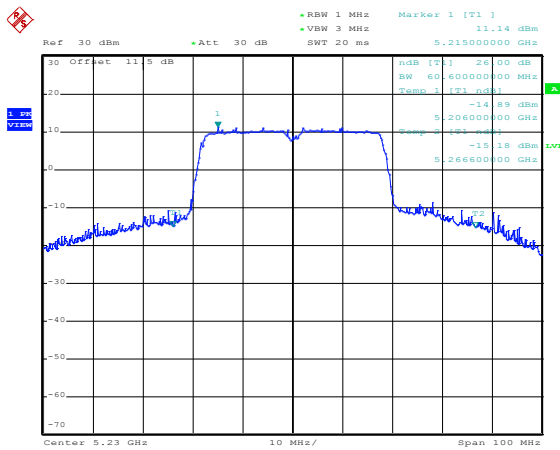
Modulation Standard: 802.11ac VHT40 (13.5Mbps)
CH38



Modulation Standard: 802.11ac VHT80 (29.3Mbps)
CH42

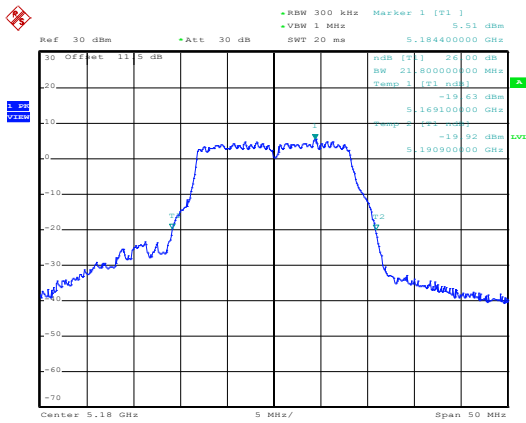
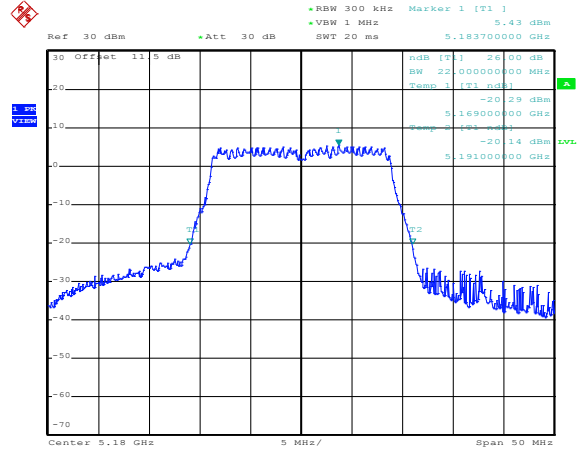


CH46

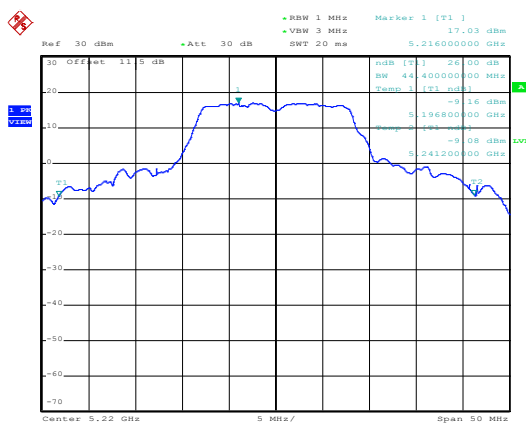




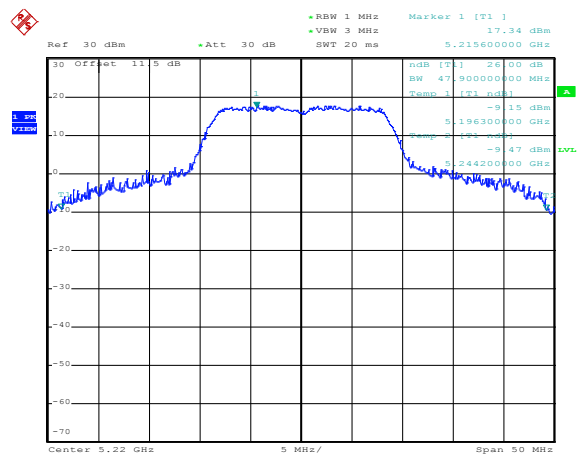
ANT 2

Modulation Standard: 802.11a (6Mbps)
CH36802.11ac VHT20 (6.5Mbps)
CH36

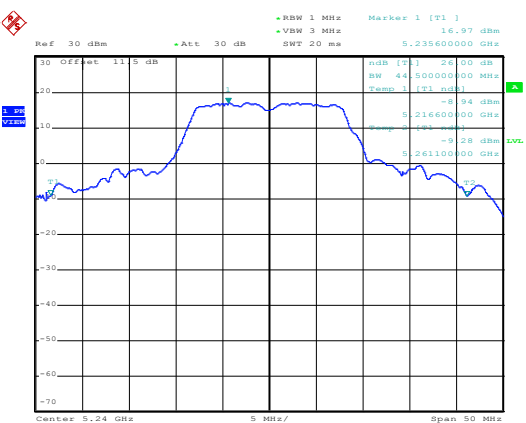
CH44



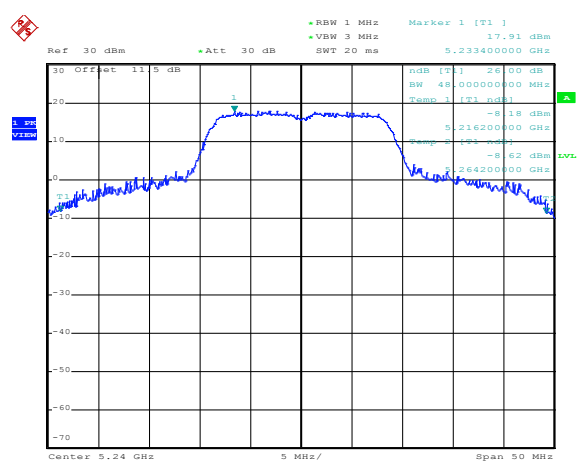
CH44



CH48

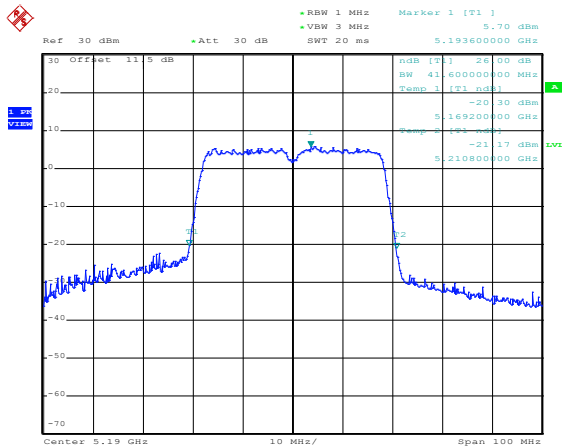
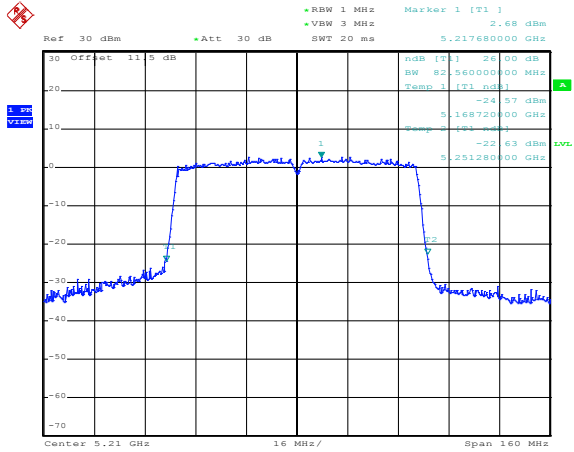


CH48

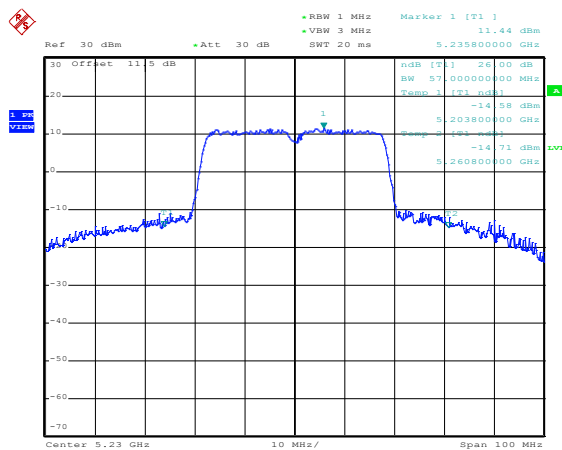


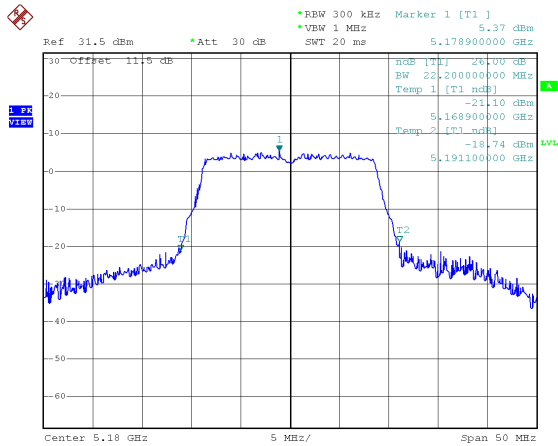
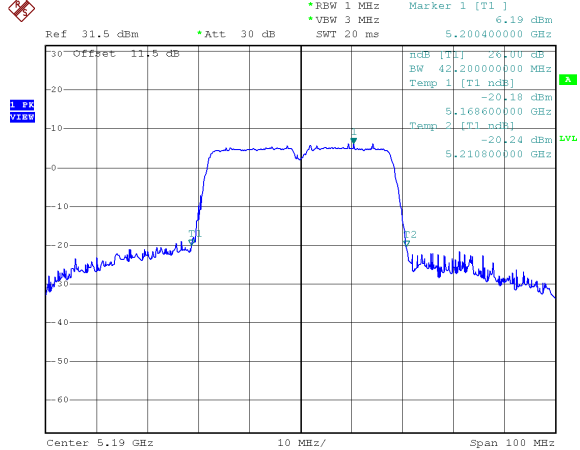
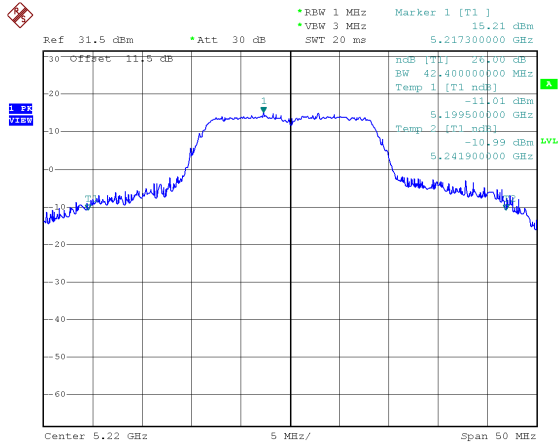
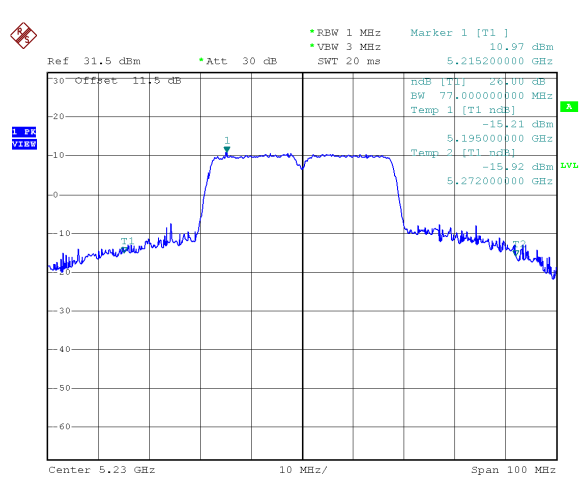
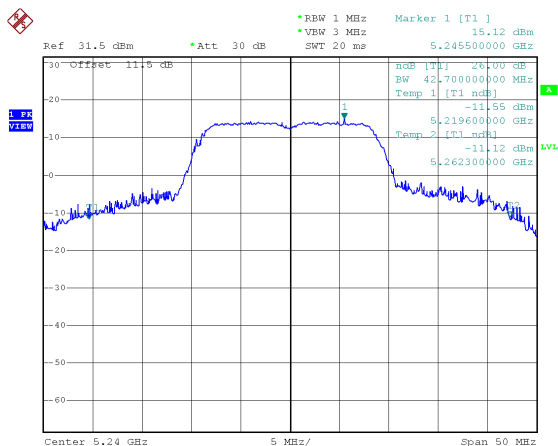
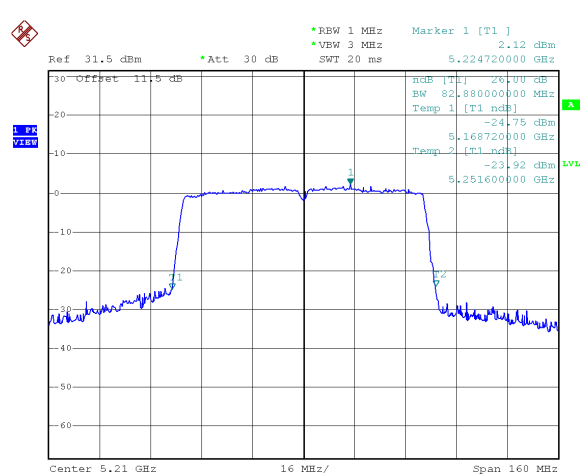


ANT 2

Modulation Standard: 802.11ac VHT40 (13.5Mbps)
CH38Modulation Standard: 802.11ac VHT80 (29.3Mbps)
CH42

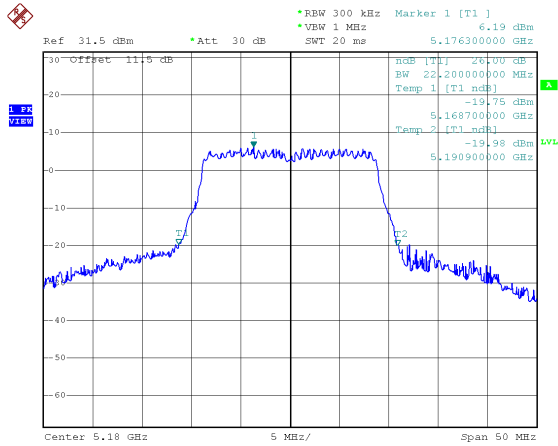
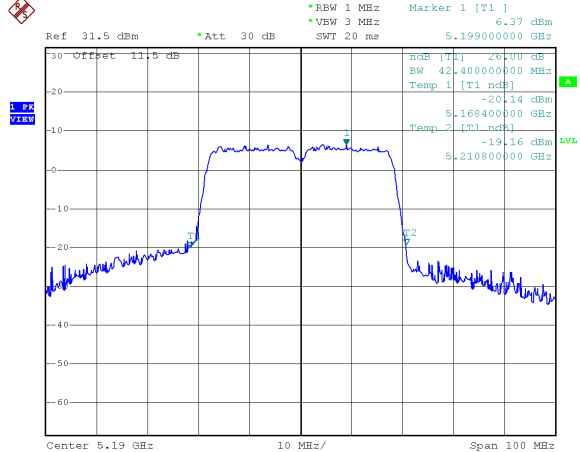
CH46



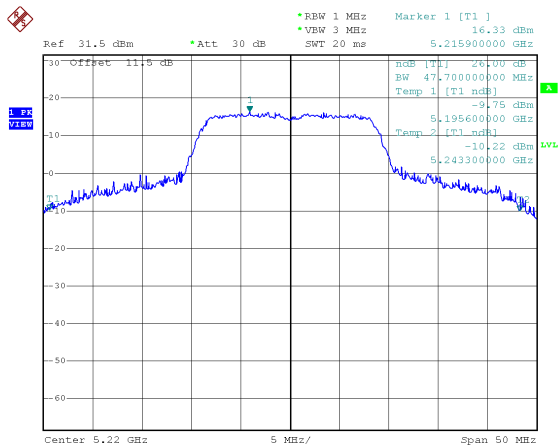
**Beamforming****ANT 1****Modulation Standard: 802.11ac, VHT20 (6.5Mbps)
CH36****Modulation Standard: 802.11ac, VHT40 (13.5Mbps)
CH38****CH44****CH46****CH48****Modulation Standard: 802.11ac, VHT80 (29.3Mbps)
CH42**



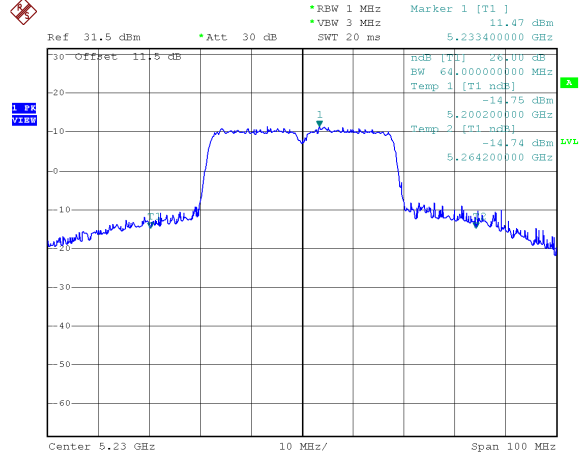
ANT 2

Modulation Standard: 802.11ac, VHT20 (6.5Mbps)
CH36Modulation Standard: 802.11ac, VHT40 (13.5Mbps)
CH38

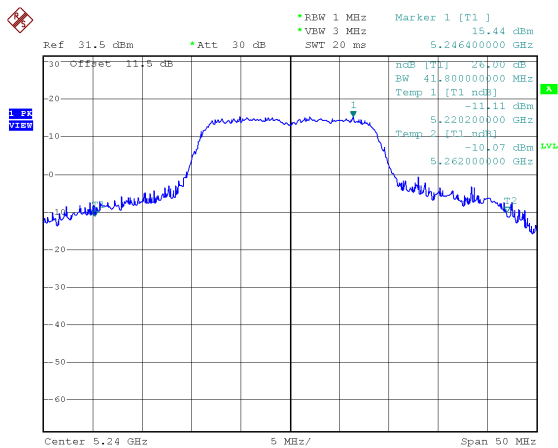
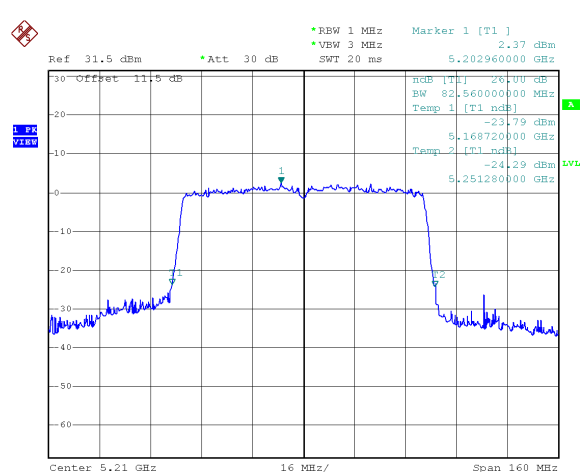
CH44



CH46



CH48

Modulation Standard: 802.11ac, VHT80 (29.3Mbps)
CH42



10. Average Power

10.1. Test Limit

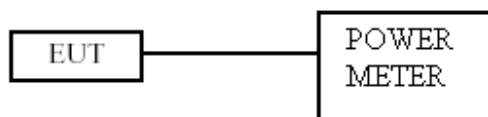
None; for reporting purposes only.

10.2. Test Procedure

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 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

Temperature: 24°C

Humidity: 63%

Test Date: Apr. 13, 2017

Non Beamforming

In the 5.2G Band

Modulation Type	Channel	Frequency (MHz)	Avg Power Output (dBm)		Total Power (dBm)	Total Power (mW)	Power Limit (dBm)
			ANT 1	ANT 2			
802.11a	36	5180	13.05	13.31	16.19	41.61	30.00
	44	5220	19.05	19.11	22.09	161.82	30.00
	48	5240	19.12	19.33	22.24	167.36	30.00
802.11an HT20	36	5180	11.98	12.15	15.08	32.18	30.00
	44	5220	19.09	19.37	22.24	167.59	30.00
	48	5240	19.14	19.22	22.19	165.60	30.00
802.11an HT40	38	5190	9.83	9.91	12.88	19.41	30.00
	46	5230	15.88	15.91	18.91	77.72	30.00
802.11ac VHT20	36	5180	12.04	12.21	15.14	32.63	30.00
	44	5220	19.23	19.42	22.34	171.25	30.00
	48	5240	19.21	19.33	22.28	169.07	30.00
802.11ac VHT40	38	5190	9.98	10.03	13.02	20.02	30.00
	46	5230	15.92	16.02	18.98	79.08	30.00
802.11ac VHT80	42	5210	9.87	9.95	12.92	19.59	30.00

In the 5.8G Band

Modulation Type	Channel	Frequency (MHz)	Avg Power Output (dBm)		Total Power (dBm)	Total Power (mW)	Power Limit (dBm)
			ANT 1	ANT 2			
802.11a	149	5745	20.08	20.44	23.27	212.52	30.00
	157	5785	20.12	20.67	23.41	219.48	30.00
	165	5825	20.05	20.77	23.44	220.56	30.00
802.11an HT20	149	5745	19.87	20.54	23.23	210.29	30.00
	157	5785	19.89	20.53	23.23	210.48	30.00
	165	5825	19.85	20.44	23.17	207.27	30.00
802.11an HT40	151	5755	17.19	17.44	20.33	107.82	30.00
	159	5795	20.86	21.16	24.02	252.52	30.00
802.11ac VHT20	149	5745	19.95	20.58	23.29	213.14	30.00
	157	5785	20.02	20.67	23.37	217.14	30.00
	165	5825	19.94	20.61	23.30	213.71	30.00
802.11ac VHT40	151	5755	17.28	17.56	20.43	110.47	30.00
	159	5795	20.98	21.31	24.16	260.52	30.00
802.11ac VHT80	155	5775	14.43	14.66	17.56	56.97	30.00

**Beamforming****In the 5.2G Band**

Modulation Type	Channel	Frequency (MHz)	Avg Power Output (dBm)		Total Power (dBm)	Total Power (mW)	Power Limit (dBm)
			ANT 1	ANT 2			
802.11ac VHT20	36	5180	14.33	14.28	17.32	53.89	29.99
	44	5220	20.43	20.55	23.50	223.91	29.99
	48	5240	18.52	18.34	21.44	139.36	29.99
802.11ac VHT40	38	5190	12.35	12.33	15.35	34.28	29.99
	46	5230	17.53	17.62	20.59	114.43	29.99
802.11ac VHT80	42	5210	11.32	10.86	14.11	25.74	29.99

In the 5.8G Band

Modulation Type	Channel	Frequency (MHz)	Avg Power Output (dBm)		Total Power (dBm)	Total Power (mW)	Power Limit (dBm)
			ANT 1	ANT 2			
802.11ac VHT20	149	5745	19.78	21.2	23.56	226.89	29.99
	157	5785	19.81	21.13	23.53	225.44	29.99
	165	5825	19.64	20.97	23.37	217.07	29.99
802.11ac VHT40	151	5755	19.67	19.86	22.78	189.51	29.99
	159	5795	19.51	20.1	22.83	191.66	29.99
802.11ac VHT80	155	5775	15.88	16.43	19.17	82.68	29.99



11. Output Power and PPSD

11.1. 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 exceed 125 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.
☐	Mobile and portable 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.

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

As an alternative to FCC KDB-789033, the EUT maximum conducted output power was Measured with an average power meter employing a video bandwidth greater than 6dB BW of the emission under test. Maximum conducted output power was read directly from the meter across all data rates, and across three channels within each sub-band. Special care was used to make sure that the EUT was transmitting in continuous mode. This method exceeds the limitations of FCC KDB-789033, and provides more accurate measurements.

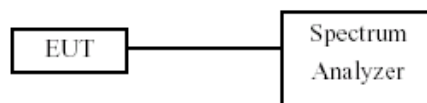
802.11an ($BW \leq 40\text{MHz}$) Maximum conducted output power using KDB 789033 section E)3)b) Method PM-G (Measurement using a gated RF average power meter)

Note: the power meter have a video bandwidth that is greater than or equal to the measurement bandwidth, (Anritsu/ MA2411B video bandwidth: 65MHz)

802.11ac ($BW=80\text{MHz}$) Maximum conducted output power using KDB 789033 section E)2)b) Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep).

When transmitted signals consist of two or more non-contiguous spectrum segments (e.g., 80+80 MHz mode) or when a single spectrum segment of a transmission crosses the boundary between two adjacent U-NII bands, KDB 644545 D01 section F) procedure is used for measurements.

11.3. Test Setup Layout



**11.4. Test Result and Data**

Temperature: 24°C

Humidity: 63%

Test Date: Apr. 13, 2017

Non Beamforming**In the 5.2G Band**

Modulation Type	CH	Freq. (MHz)	Meas PPSS (dBm/MHz)		Sum chain (dBm)	Duty Cycle CF(dB)	Total Corr'd PPSS (dBm/MHz)	PPSS Limit (dBm/MHz)
			ANT 1	ANT 2				
802.11a	36	5180	1.99	1.76	4.89	0.00	4.89	16.99
	44	5220	7.72	7.84	10.79	0.00	10.79	16.99
	48	5240	7.38	7.94	10.68	0.00	10.68	16.99
802.11ac VHT20	36	5180	0.70	0.55	3.64	0.00	3.64	16.99
	44	5220	7.27	7.56	10.43	0.00	10.43	16.99
	48	5240	7.58	7.65	10.63	0.00	10.63	16.99
802.11ac VHT40	38	5190	-4.42	-4.69	-1.54	0.00	-1.54	16.99
	46	5230	1.35	1.50	4.44	0.00	4.44	16.99
802.11ac VHT80	42	5210	-7.40	-7.74	-4.56	0.18	-4.38	16.99

In the 5.8G Band

Modulation Type	CH	Freq. (MHz)	Meas PPSS (dBm/MHz)		Sum chain (dBm)	Duty Cycle CF(dB)	10log(500KHz /RBW) CF (dB)	Total Corr'd PPSS (dBm/MHz)	PPSS Limit (dBm/MHz)
			ANT 1	ANT 2					
802.11a	149	5745	9.79	10.26	13.04	0.00	-3.01	10.03	30.00
	157	5785	9.38	10.26	12.85	0.00	-3.01	9.84	30.00
	165	5825	9.07	9.45	12.27	0.00	-3.01	9.26	30.00
802.11ac VHT20	149	5745	9.29	10.05	12.70	0.00	-3.01	9.69	30.00
	157	5785	9.19	9.84	12.54	0.00	-3.01	9.53	30.00
	165	5825	8.69	9.40	12.07	0.00	-3.01	9.06	30.00
802.11ac VHT40	155	5755	3.60	4.05	6.84	0.00	-3.01	3.83	30.00
	159	5795	6.63	7.25	9.96	0.00	-3.01	6.95	30.00
802.11ac VHT80	155	5775	-2.03	-1.85	1.07	0.18	-3.01	-1.76	30.00

**Beamforming****In the 5.2G Band**

Modulation Type	CH	Freq. (MHz)	Meas PPSS (dBm/MHz)		Sum chain (dBm)	Duty Cycle CF(dB)	Total Corr'd PPSS (dBm/MHz)	PPSS Limit (dBm/MHz)
			ANT 1	ANT 2				
802.11ac VHT20	36	5180	1.89	1.76	4.84	1.06	5.90	16.99
	44	5220	6.67	7.40	10.06	1.06	11.12	16.99
	48	5240	5.68	6.08	8.89	1.06	9.95	16.99
802.11ac VHT40	38	5190	-3.55	-3.71	-0.62	1.58	0.96	16.99
	46	5230	1.95	1.83	4.90	1.58	6.48	16.99
802.11ac VHT80	42	5210	-7.06	-7.12	-4.08	0.65	-3.43	16.99

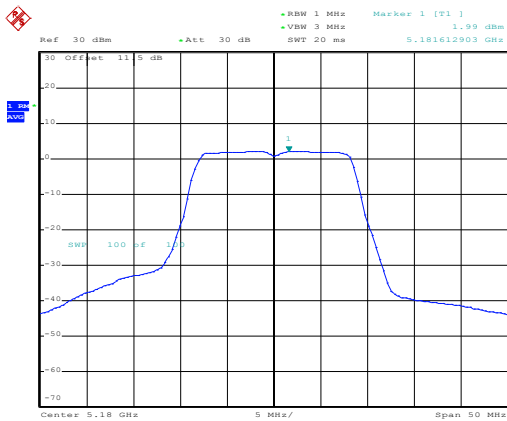
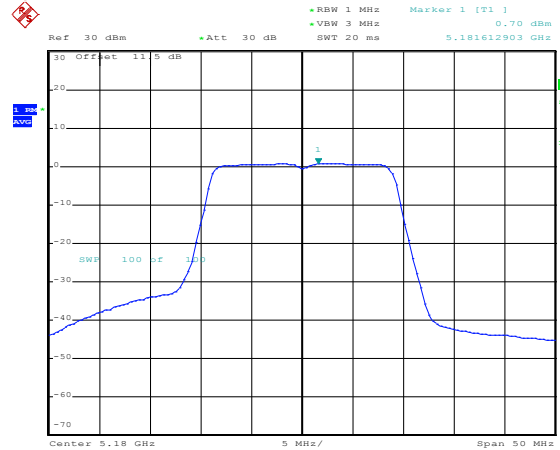
In the 5.8G Band

Modulation Type	CH	Freq. (MHz)	Meas PPSS (dBm/MHz)		Sum chain (dBm)	Duty Cycle CF(dB)	10log(500KHz /RBW) CF (dB)	Total Corr'd PPSS (dBm/MHz)	PPSS Limit (dBm/MHz)
			ANT 1	ANT 2					
802.11ac VHT20	149	5745	6.93	7.99	10.50	1.06	-3.01	8.55	30.00
	157	5785	7.13	8.39	10.82	1.06	-3.01	8.87	30.00
	165	5825	7.28	8.62	11.01	1.06	-3.01	9.06	30.00
802.11ac VHT40	155	5755	3.12	3.53	6.34	1.58	-3.01	4.91	30.00
	159	5795	3.53	3.96	6.76	1.58	-3.01	5.33	30.00
802.11ac VHT80	155	5775	-2.52	-2.14	0.68	0.65	-3.01	-1.68	30.00

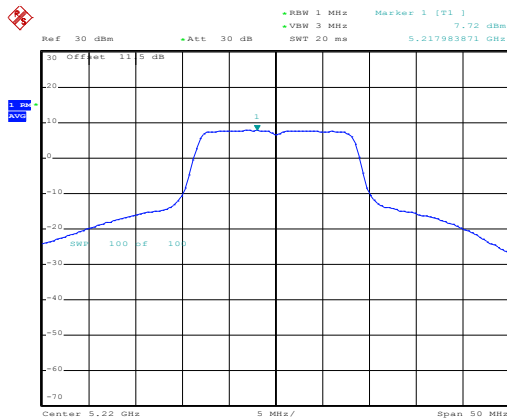
**Non Beamforming**

5.2G Band

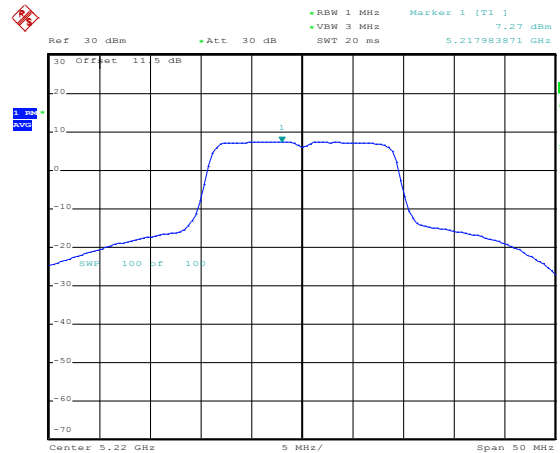
ANT 1

Modulation Standard: 802.11a (6Mbps)
CH36Modulation Standard: 802.11ac VHT20 (6.5Mbps)
CH36

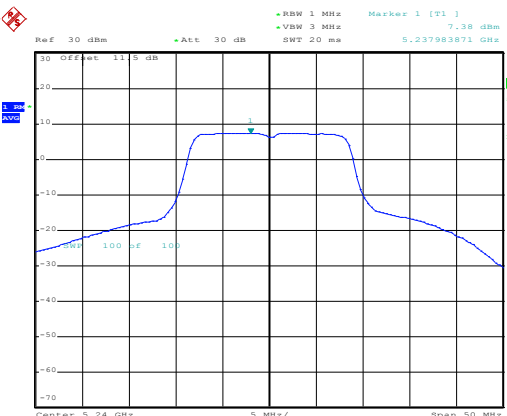
CH44



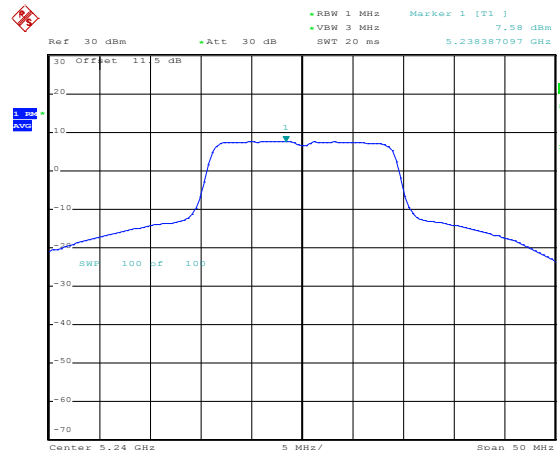
CH44



CH48



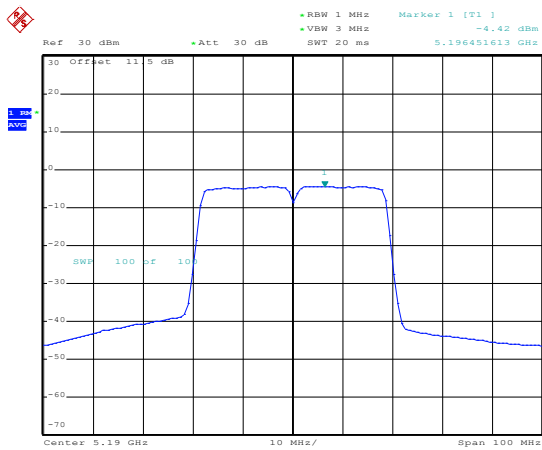
CH48



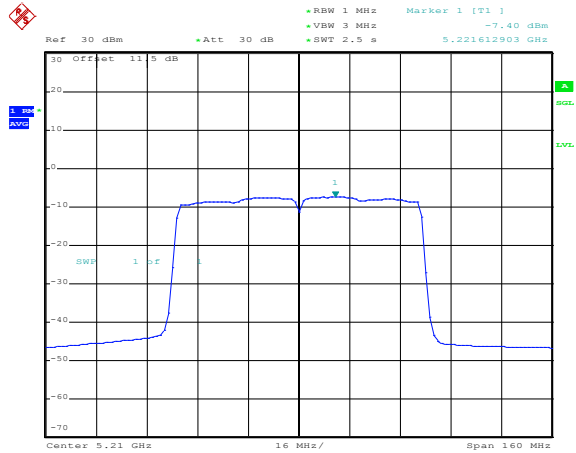


ANT 1

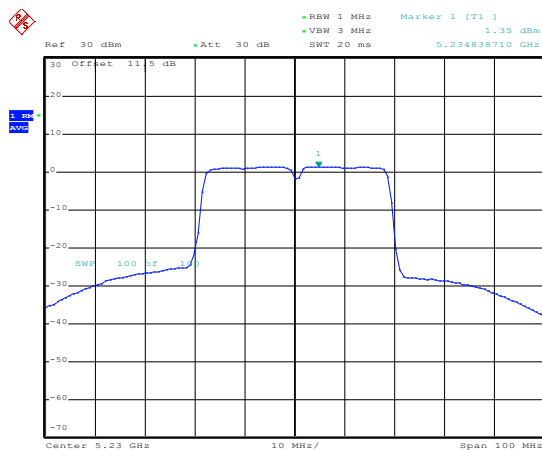
Modulation Standard: 802.11ac VHT40 (13.5Mbps)
CH38



Modulation Standard: 802.11ac VHT80 (29.3Mbps)
CH42



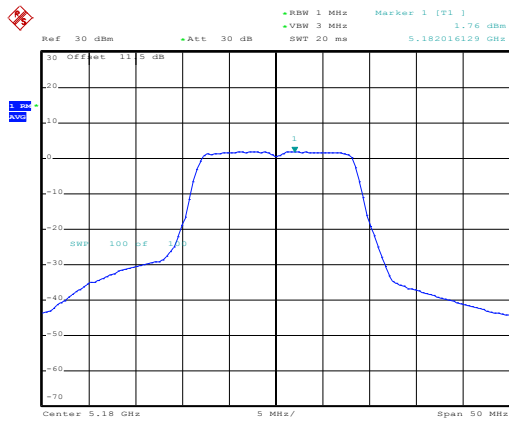
CH46



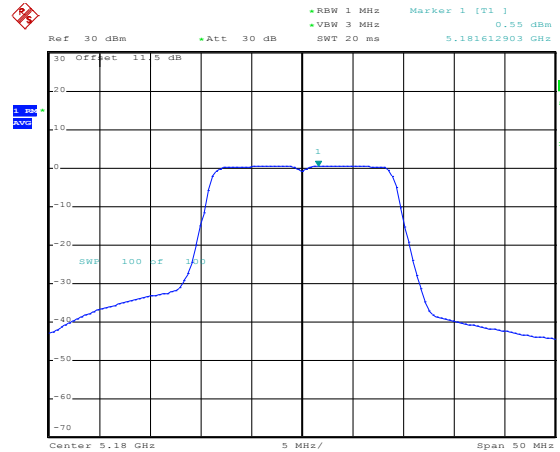


ANT 2

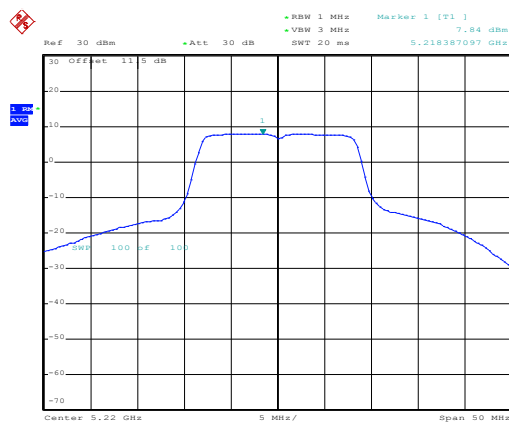
Modulation Standard: 802.11a (6Mbps)
CH36



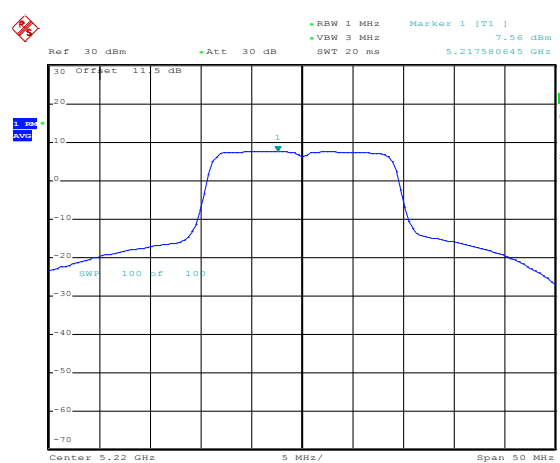
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CH36



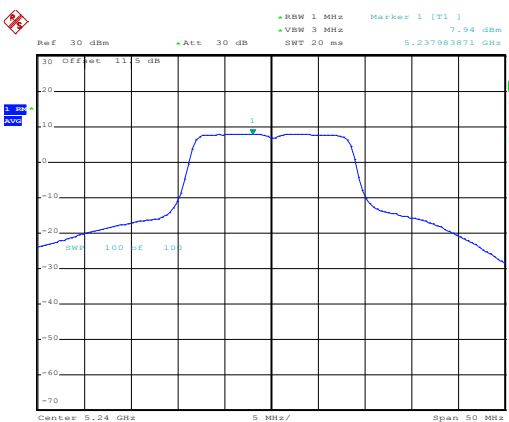
CH44



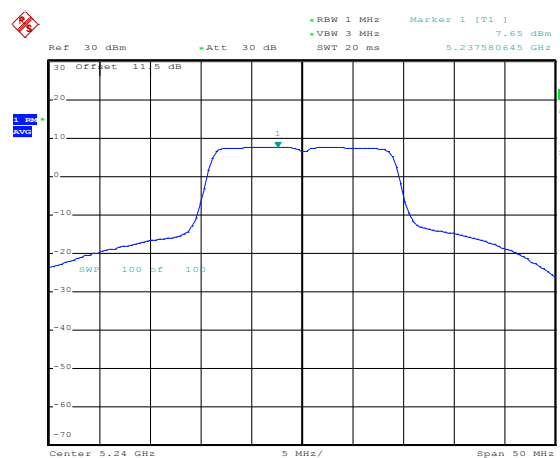
CH44



CH48



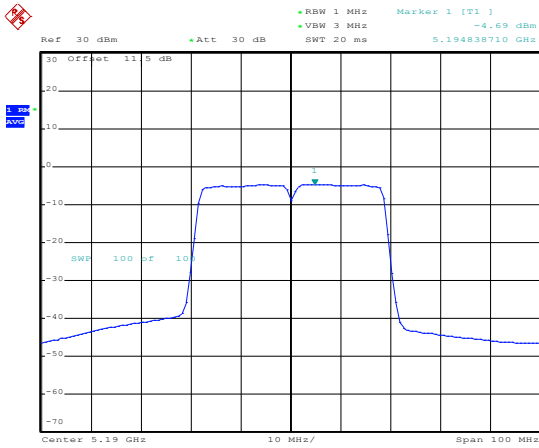
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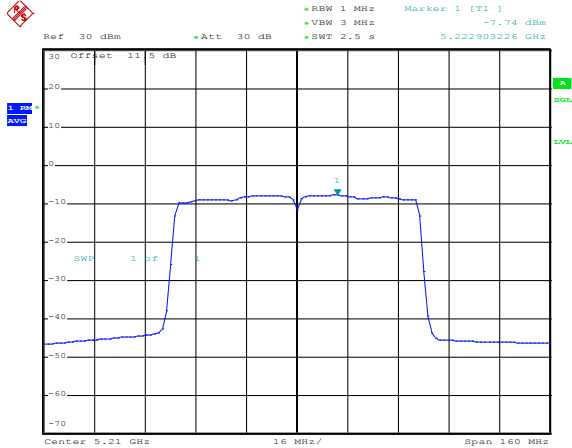


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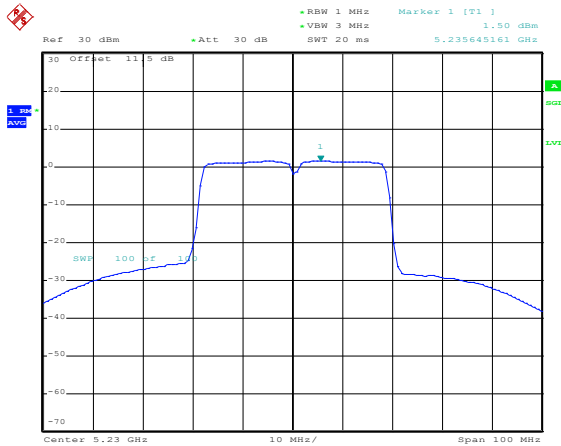
Modulation Standard: 802.11ac VHT40 (13.5Mbps)
CH38



Modulation Standard: 802.11ac VHT80 (29.3Mbps)
CH42



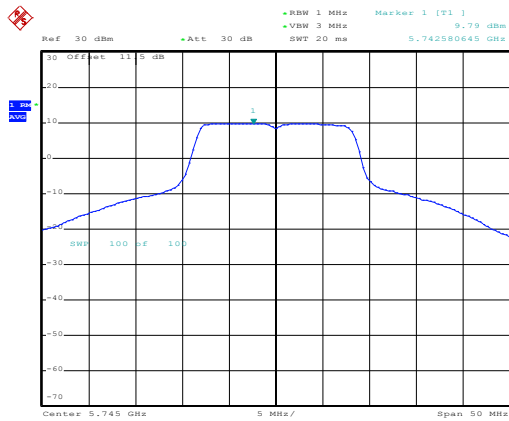
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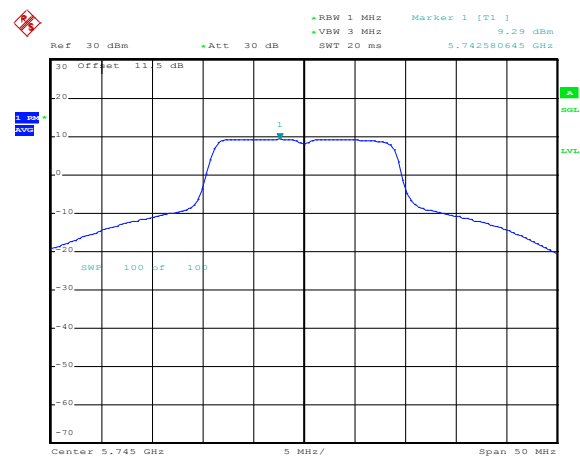


5.8G Band
ANT 1

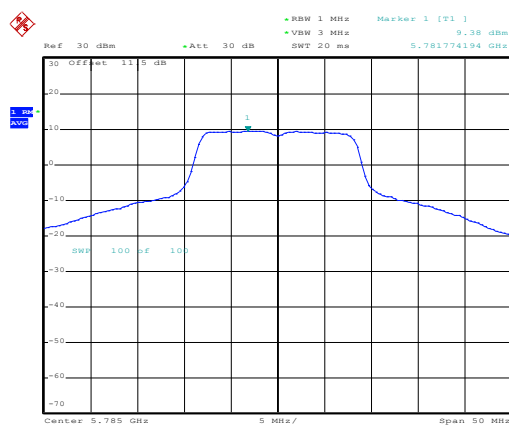
Modulation Standard: 802.11a (6Mbps)
CH149



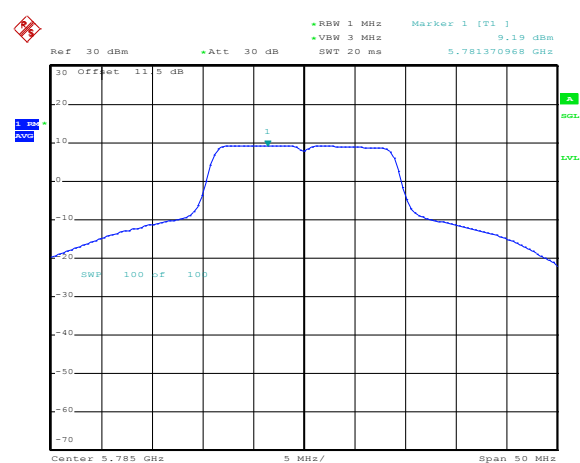
Modulation Standard: 802.11ac, VHT20 (6.5Mbps)
CH149



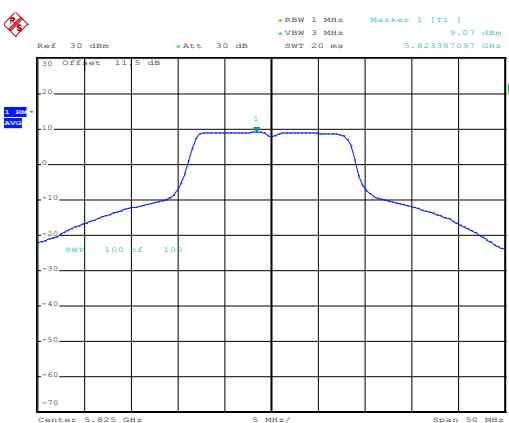
CH157



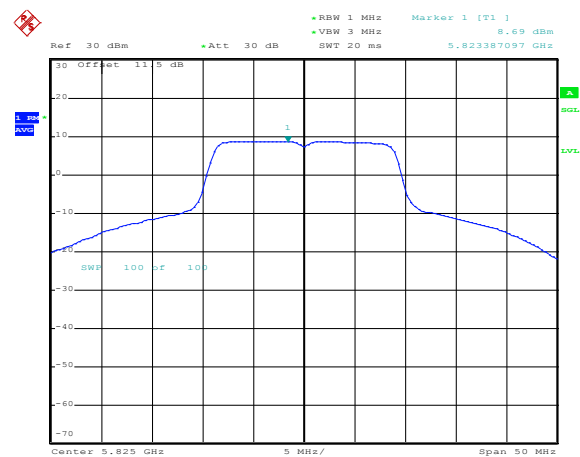
CH157



CH165



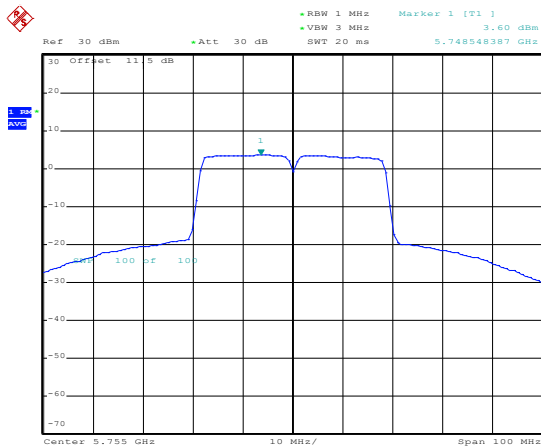
CH165



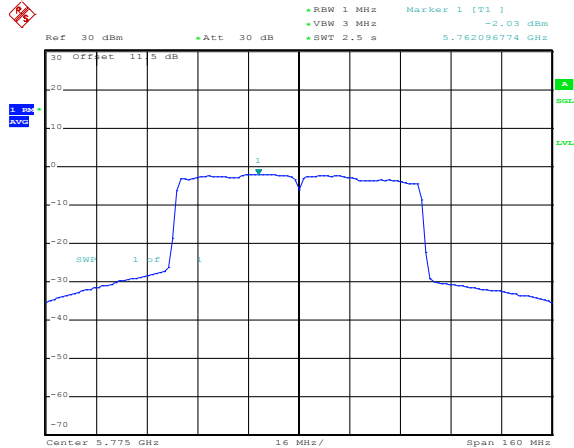


ANT 1

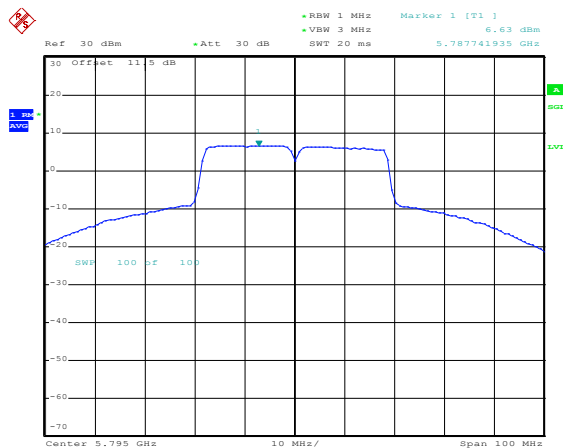
Modulation Standard: 802.11ac, VHT40 (13.5Mbps)
CH151



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



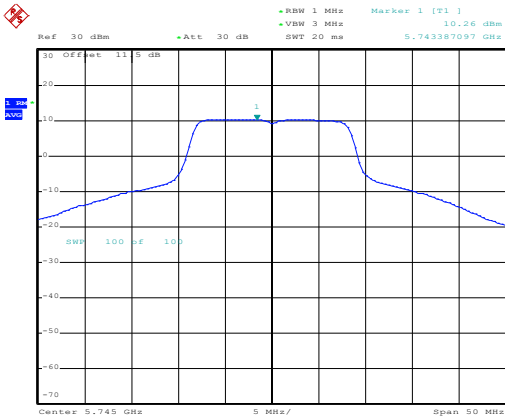
CH159



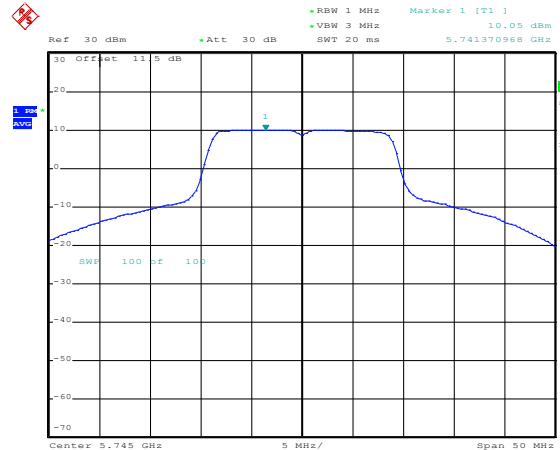


ANT 2

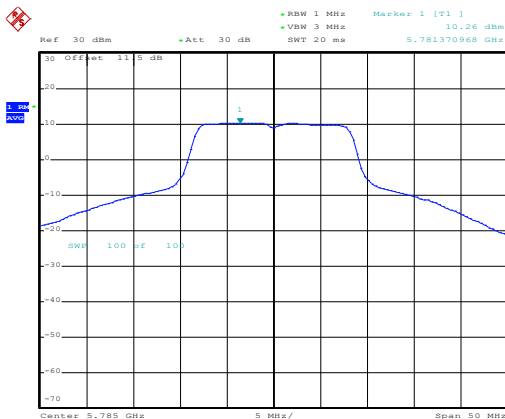
Modulation Standard: 802.11a (6Mbps)
CH149



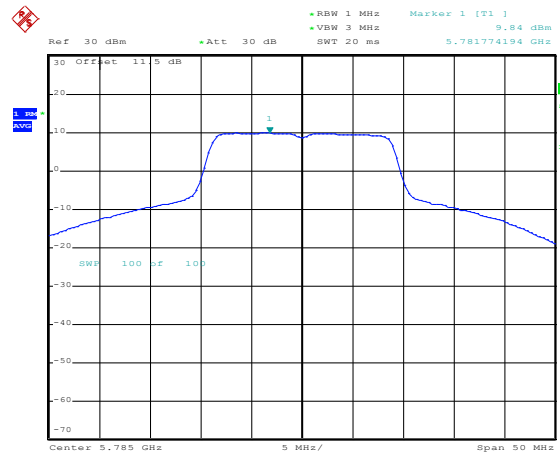
Modulation Standard: 802.11ac, VHT20 (6.5Mbps)
CH149



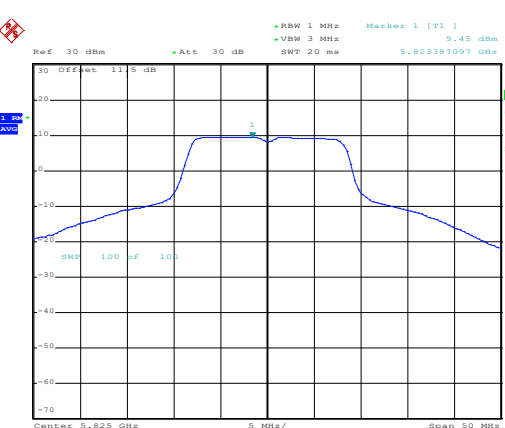
CH157



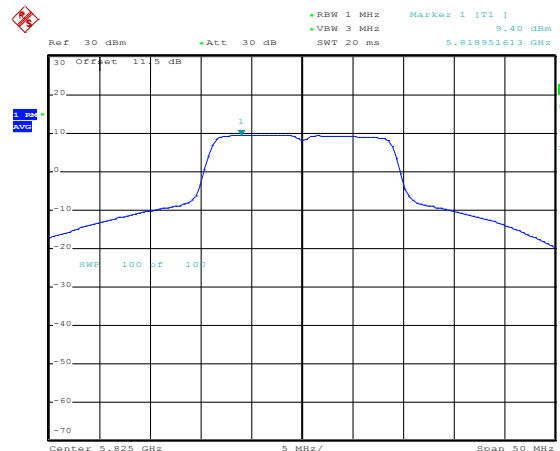
CH157



CH165



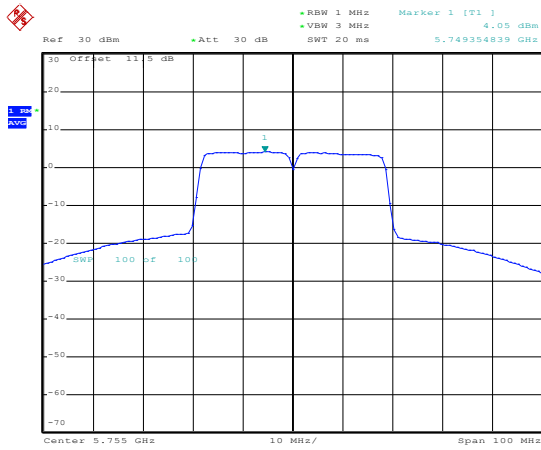
CH165



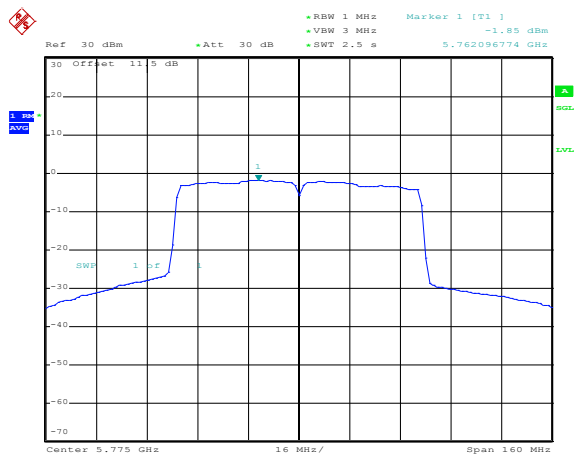


ANT 2

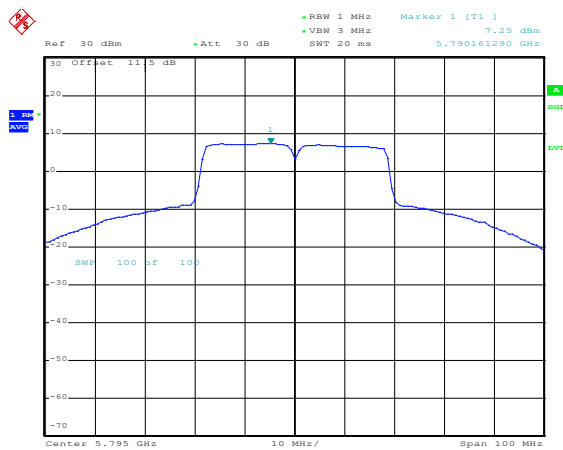
Modulation Standard: 802.11ac, VHT40 (13.5Mbps)
CH151



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



CH159



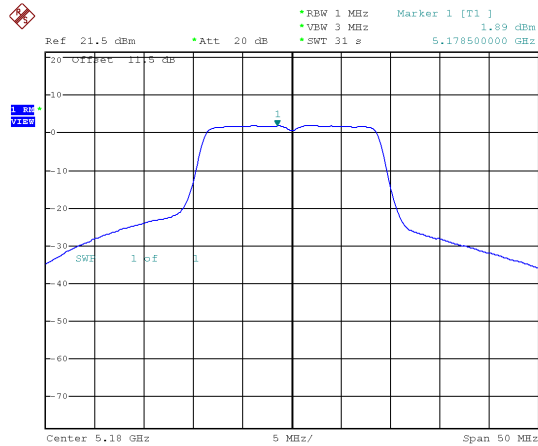


Beamforming

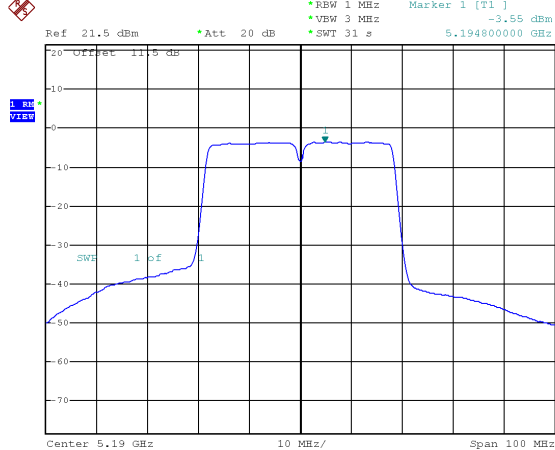
5.2G Band

ANT 1

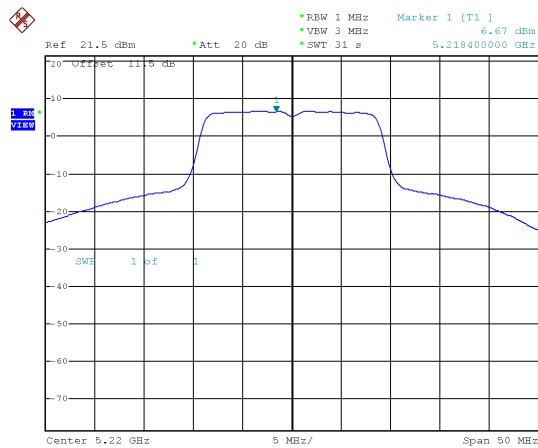
Modulation Standard: 802.11ac, VHT20 (6.5Mbps)
CH36



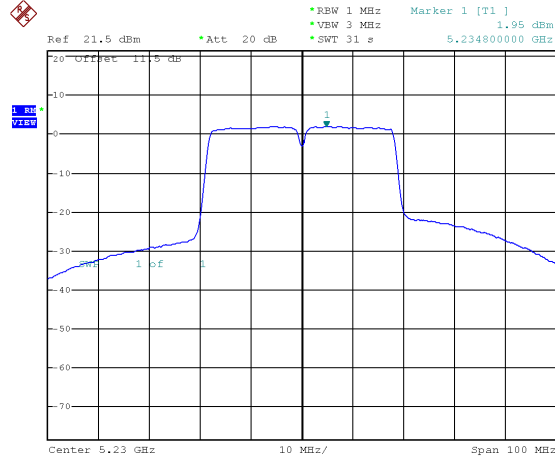
Modulation Standard: 802.11ac, VHT40 (13.5Mbps)
CH38



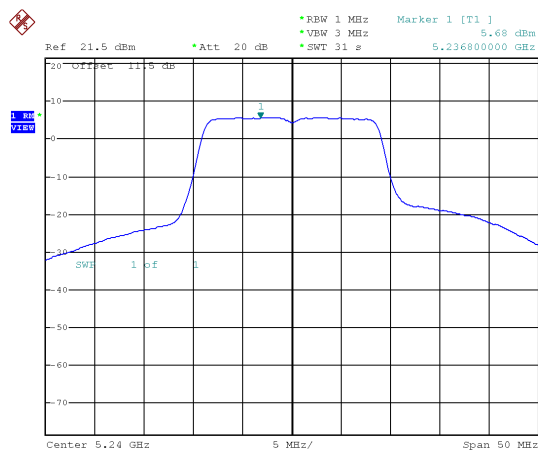
CH44



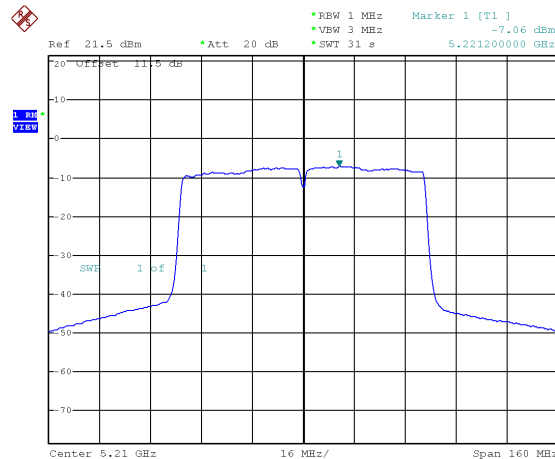
CH46



CH48

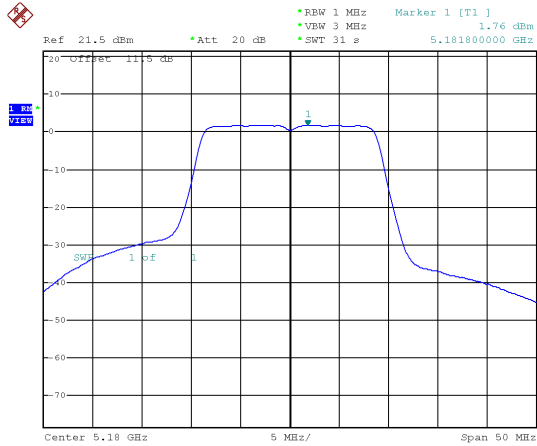
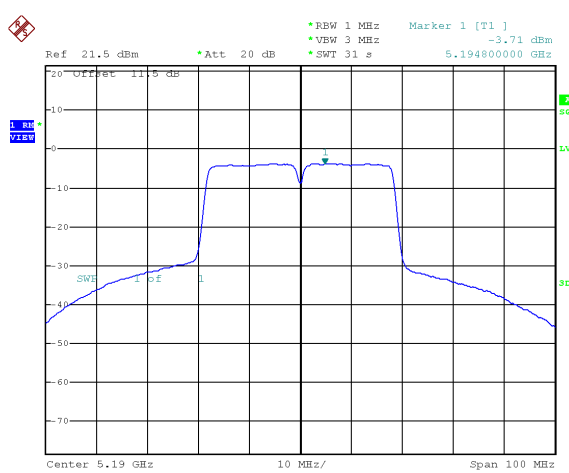


Modulation Standard: 802.11ac, VHT80 (29.3Mbps)
CH42

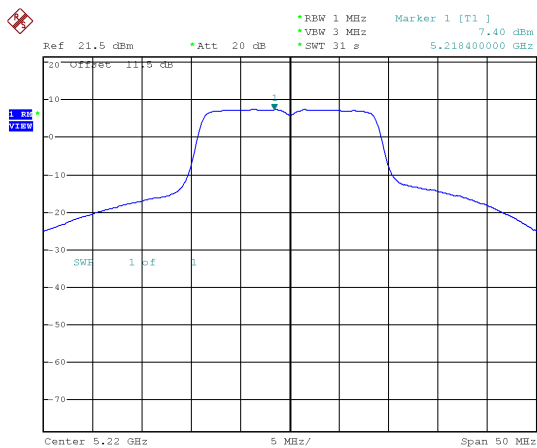




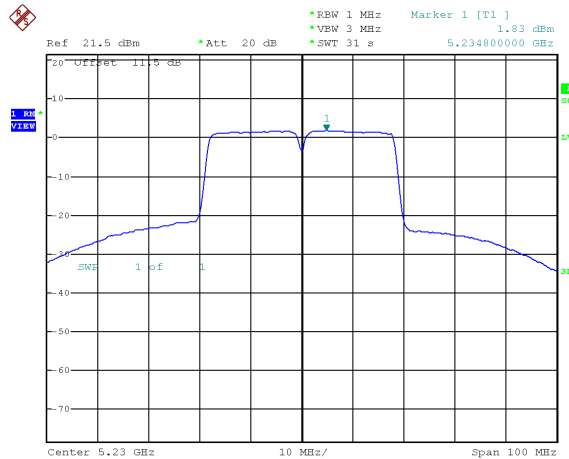
ANT 2

Modulation Standard: 802.11ac, VHT20 (6.5Mbps)
CH36Modulation Standard: 802.11ac, VHT40 (13.5Mbps)
CH38

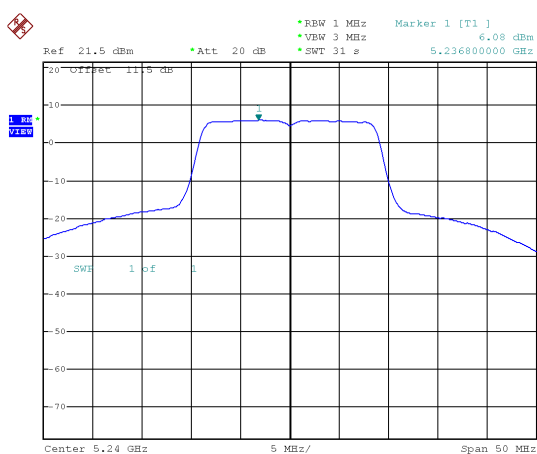
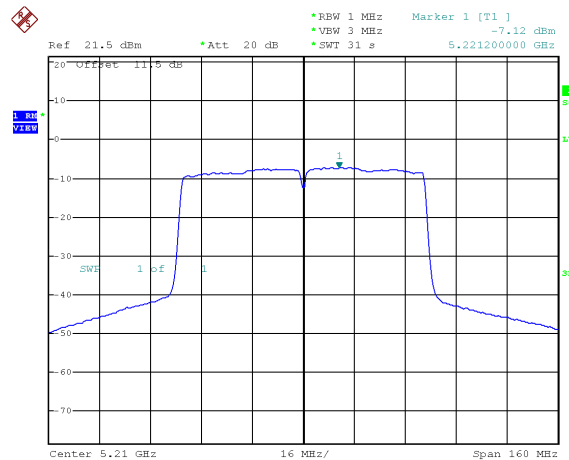
CH44

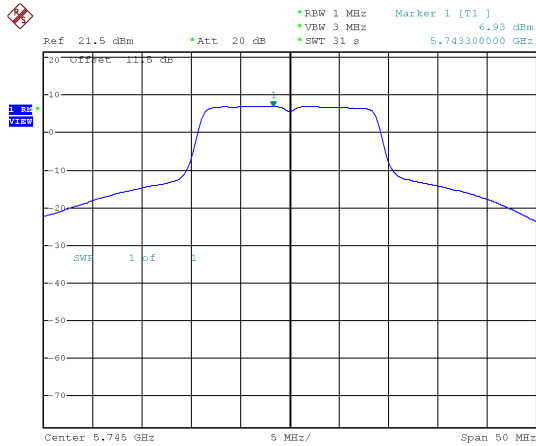
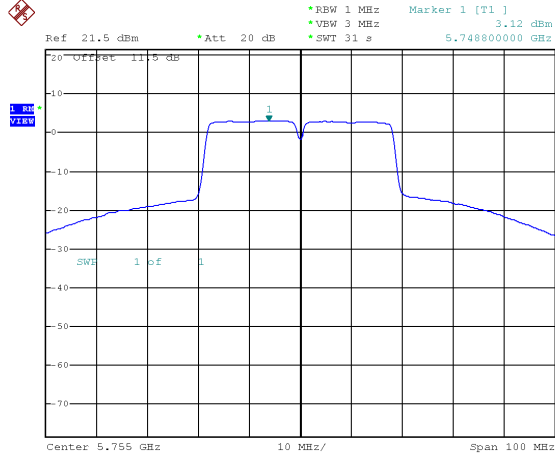


CH46

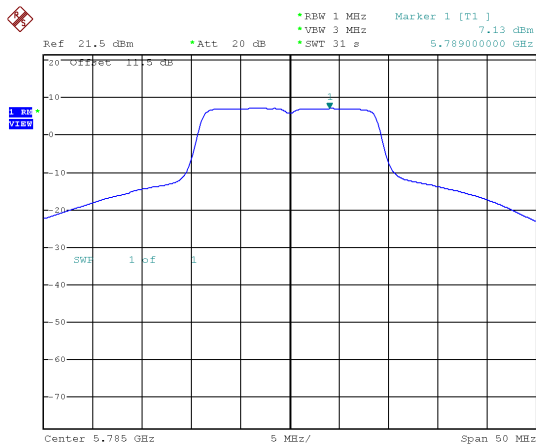


CH48

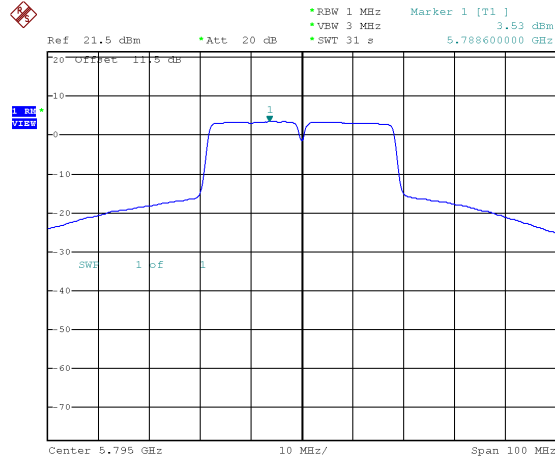
Modulation Standard: 802.11ac, VHT80 (29.3Mbps)
CH42

5.8G Band
ANT 1Modulation Standard: 802.11ac, VHT20 (6.5Mbps)
CH149Modulation Standard: 802.11ac, VHT40 (13.5Mbps)
CH151

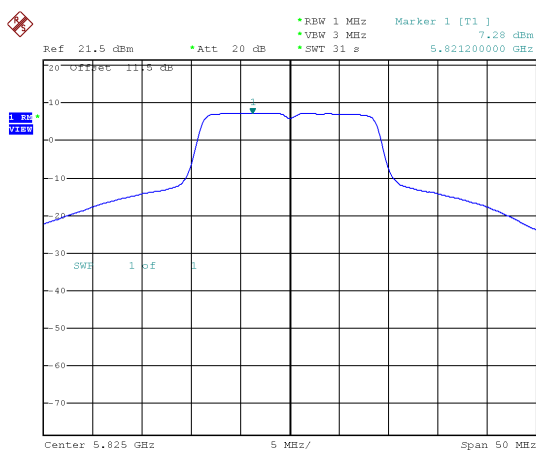
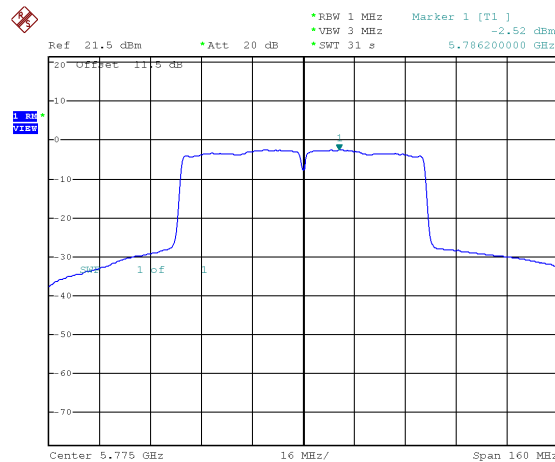
CH157



CH159

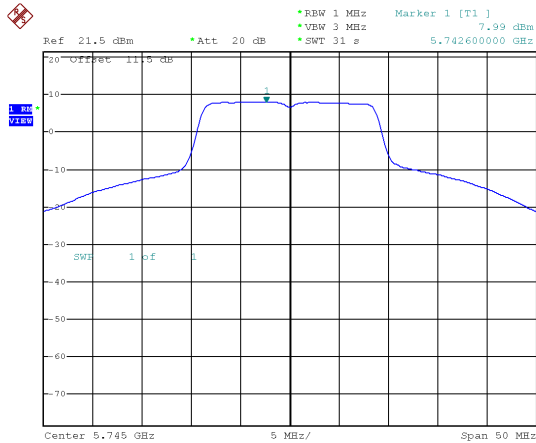
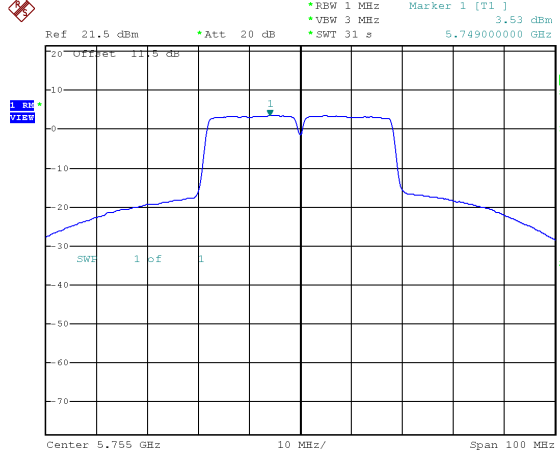


CH165

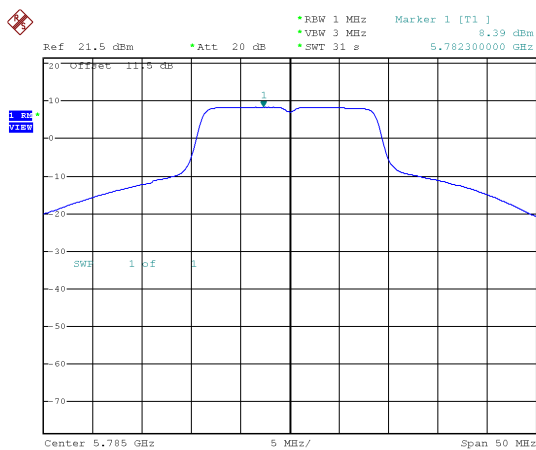
Modulation Standard: 802.11ac, VHT80 (29.3Mbps)
CH155



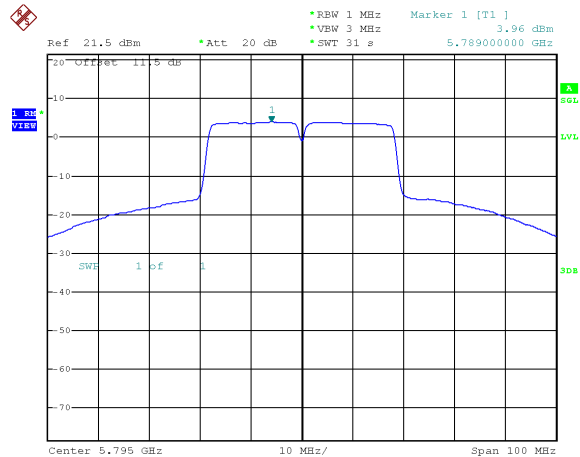
ANT 2

Modulation Standard: 802.11ac, VHT20 (6.5Mbps)
CH149Modulation Standard: 802.11ac, VHT40 (13.5Mbps)
CH151

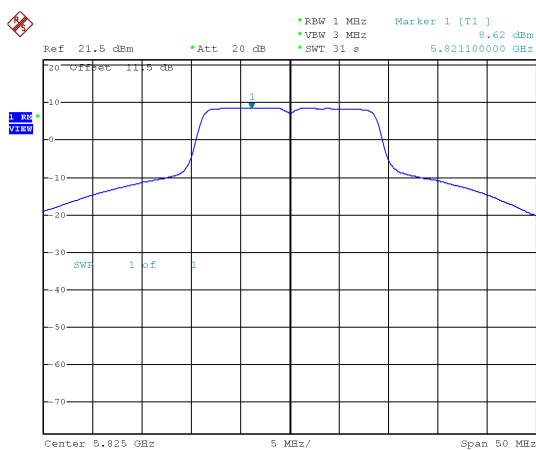
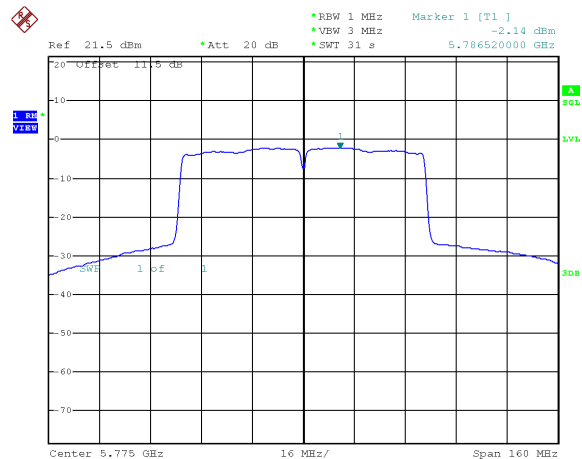
CH157



CH159



CH165

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

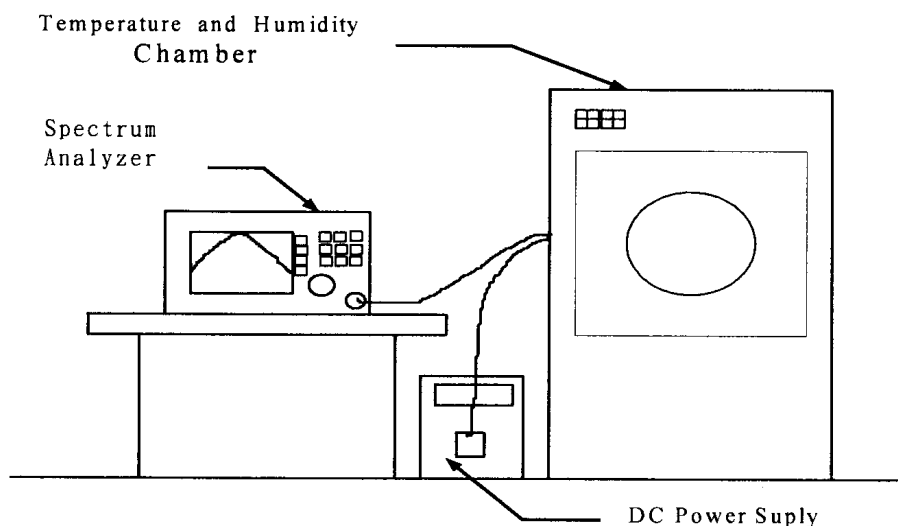


12. Frequency Stability

12.1. Test Procedure

1. The EUT was placed inside the Temperature and Humidity chamber.
2. The transmitter output was connected to spectrum analyzer.
3. Turn the EUT on and couple its output to a spectrum analyzer.
4. Turn the EUT off and set the chamber to the highest temperature specified.
5. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
6. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
7. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

12.2. Test Setup Layout





12.3. Test Result and Data

Temperature: 24°C

Humidity: 63%

Test Date: Apr. 13, 2017

Operating frequency: 5795 MHz							
Temp	Power supply	2 minute		5 minute		10 minute	
(°C)	(V)	(MHz)	(%)	(MHz)	(%)	(MHz)	(%)
55	102	5794.9946	-0.000093	5794.6510	-0.006023	5794.5564	-0.076557
	120	5794.9649	-0.000606	5794.6132	-0.006675	5794.7077	-0.050433
	138	5794.7807	-0.003785	5794.9739	-0.000451	5794.3699	-0.108725
40	102	5794.8766	-0.002129	5794.8411	-0.002743	5794.0391	-0.165822
	120	5794.2347	-0.013206	5794.0882	-0.015733	5794.5197	-0.082886
	138	5794.0231	-0.016857	5794.5949	-0.006991	5794.3103	-0.119011
30	102	5794.2504	-0.012936	5794.8678	-0.002281	5794.1597	-0.144999
	120	5794.5597	-0.007598	5794.8665	-0.002305	5794.8092	-0.032929
	138	5794.5526	-0.007721	5794.2556	-0.012846	5794.5465	-0.078257
20	102	5794.3506	-0.011207	5794.4781	-0.009006	5794.9324	-0.011667
	120	5794.9512	-0.000842	5794.1088	-0.015380	5794.6786	-0.055457
	138	5794.1432	-0.014785	5794.2876	-0.012293	5794.3088	-0.119277
10	102	5794.1512	-0.014648	5794.9578	-0.000728	5794.0212	-0.168896
	120	5794.4638	-0.009252	5794.0221	-0.016875	5794.0735	-0.159881
	138	5794.2057	-0.013707	5794.2065	-0.013694	5794.6168	-0.066132
0	102	5794.6164	-0.006619	5794.0258	-0.016810	5794.3969	-0.104074
	120	5794.9948	-0.000090	5794.1530	-0.014617	5794.1797	-0.141556
	138	5794.3795	-0.010708	5794.8199	-0.003109	5794.7987	-0.034734
-10	102	5794.1912	-0.013958	5794.0715	-0.016023	5794.3512	-0.111951
	120	5794.7516	-0.004286	5794.0945	-0.015625	5794.1042	-0.154585
	138	5794.1365	-0.014901	5794.0558	-0.016293	5794.5071	-0.085052
-20	102	5794.5035	-0.008567	5794.9963	-0.000064	5794.9753	-0.004270
	120	5794.0765	-0.015936	5794.6764	-0.005584	5794.9148	-0.014696
	138	5794.7250	-0.004746	5794.7435	-0.004426	5794.2591	-0.127847
-30	102	5794.3831	-0.010645	5794.7611	-0.004122	5794.7606	-0.041310
	120	5794.2649	-0.012686	5794.0974	-0.015576	5794.4584	-0.093456
	138	5794.7197	-0.004837	5794.8827	-0.002025	5794.8384	-0.027884

Limit:

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.



13. Automatically Discontinue Transmission

13.1.Limit of Automatically Discontinue Transmission

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

13.2.Test Result of Automatically Discontinue Transmission

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.