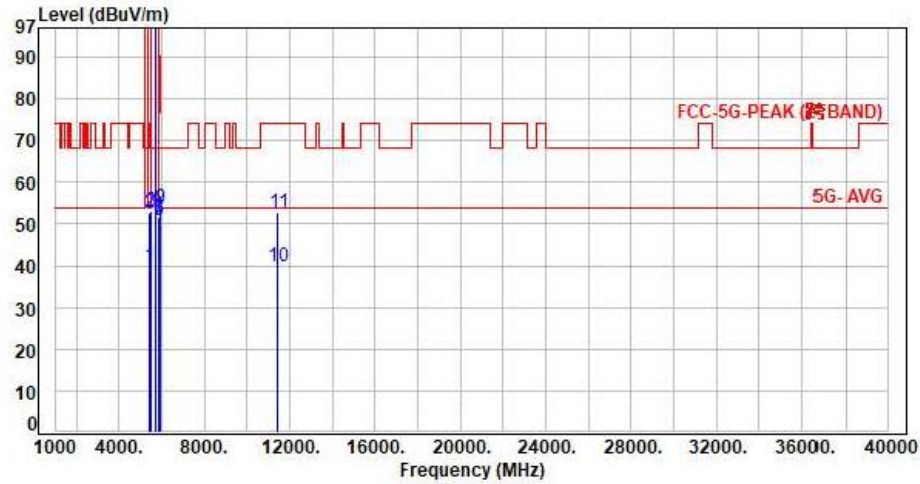




Power	: AC 120V / 60Hz	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, Band 3 Straddle Channel, CH144		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-7.16	46.84	39.68	54.00	-14.32	Average	359	86	P
2	5460.00	-7.16	60.07	52.91	74.00	-21.09	Peak	359	86	P
3	5470.00	-7.12	60.22	53.10	68.20	-15.10	Peak	359	86	P
4	5720.00	-6.59	103.60	97.01	200.00	-102.99	Average	359	86	P
5	5720.00	-6.59	113.38	106.79	200.00	-93.21	Peak	359	86	P
6	5850.00	-6.08	57.04	50.96	122.20	-71.24	Peak	359	86	P
7	5855.00	-6.06	57.42	51.36	110.80	-59.44	Peak	359	86	P
8	5875.00	-6.00	57.55	51.55	105.20	-53.65	Peak	359	86	P
9	5925.00	-5.75	59.47	53.72	68.20	-14.48	Peak	359	86	P
10	11440.00	4.28	35.46	39.74	54.00	-14.26	Average	100	164	P
11	11440.00	4.28	48.64	52.92	74.00	-21.08	Peak	100	164	P

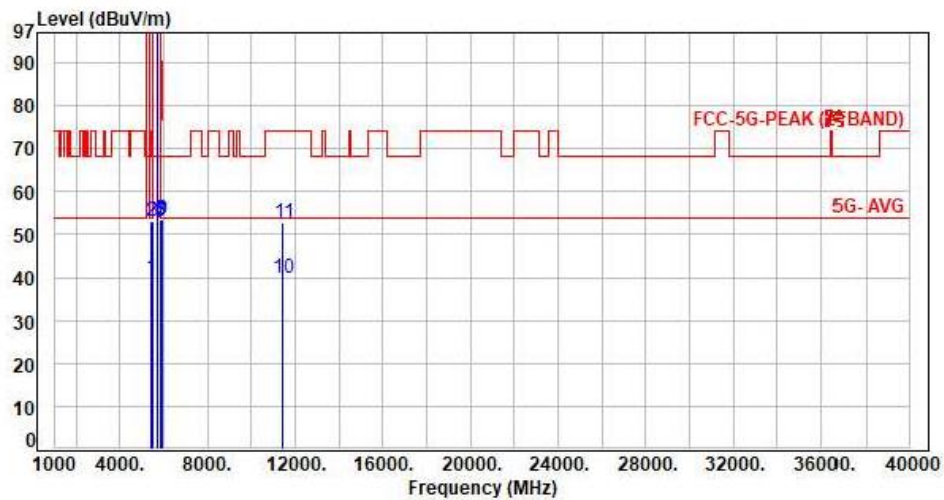
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



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



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-7.16	46.97	39.81	54.00	-14.19	Average	190	354	P
2	5460.00	-7.16	60.21	53.05	74.00	-20.95	Peak	190	354	P
3	5470.00	-7.12	60.35	53.23	68.20	-14.97	Peak	190	354	P
4	5720.00	-6.59	109.47	102.88	200.00	-97.12	Average	190	354	P
5	5720.00	-6.59	119.26	112.67	200.00	-87.33	Peak	190	354	P
6	5850.00	-6.08	59.21	53.13	122.20	-69.07	Peak	190	354	P
7	5855.00	-6.06	58.67	52.61	110.80	-58.19	Peak	190	354	P
8	5875.00	-6.00	59.43	53.43	105.20	-51.77	Peak	190	354	P
9	5925.00	-5.75	59.17	53.42	68.20	-14.78	Peak	190	354	P
10	11440.00	4.28	35.58	39.86	54.00	-14.14	Average	100	255	P
11	11440.00	4.28	48.49	52.77	74.00	-21.23	Peak	100	255	P

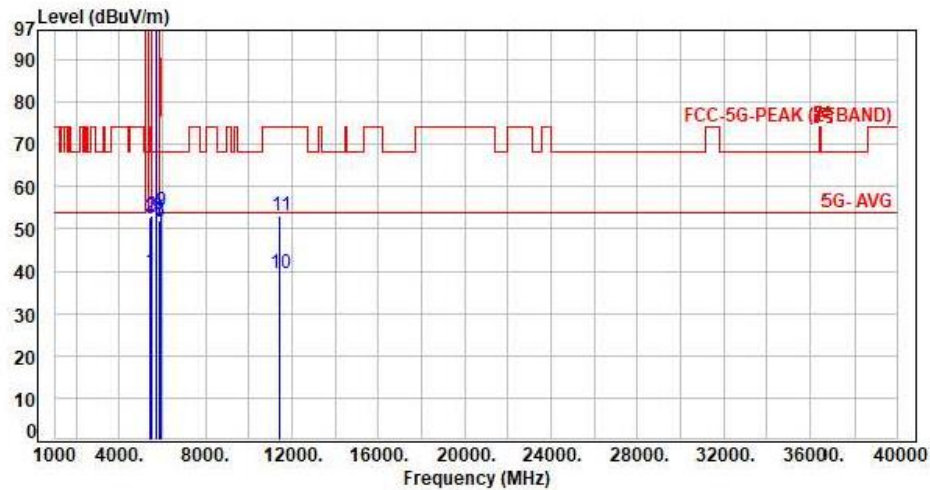
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: VERTICAL
Test Mode	: Mode 2, Band 3 Straddle Channel, CH144		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-7.16	46.85	39.69	54.00	-14.31	Average	340	88	P
2	5460.00	-7.16	59.94	52.78	74.00	-21.22	Peak	340	88	P
3	5470.00	-7.12	60.13	53.01	68.20	-15.19	Peak	340	88	P
4	5720.00	-6.59	103.45	96.86	200.00	-103.14	Average	340	88	P
5	5720.00	-6.59	113.16	106.57	200.00	-93.43	Peak	340	88	P
6	5850.00	-6.08	57.63	51.55	122.20	-70.65	Peak	340	88	P
7	5855.00	-6.06	57.61	51.55	110.80	-59.25	Peak	340	88	P
8	5875.00	-6.00	58.09	52.09	105.20	-53.11	Peak	340	88	P
9	5925.00	-5.75	60.07	54.32	68.20	-13.88	Peak	340	88	P
10	11440.00	4.28	35.32	39.60	54.00	-14.40	Average	100	144	P
11	11440.00	4.28	48.68	52.96	74.00	-21.04	Peak	100	144	P

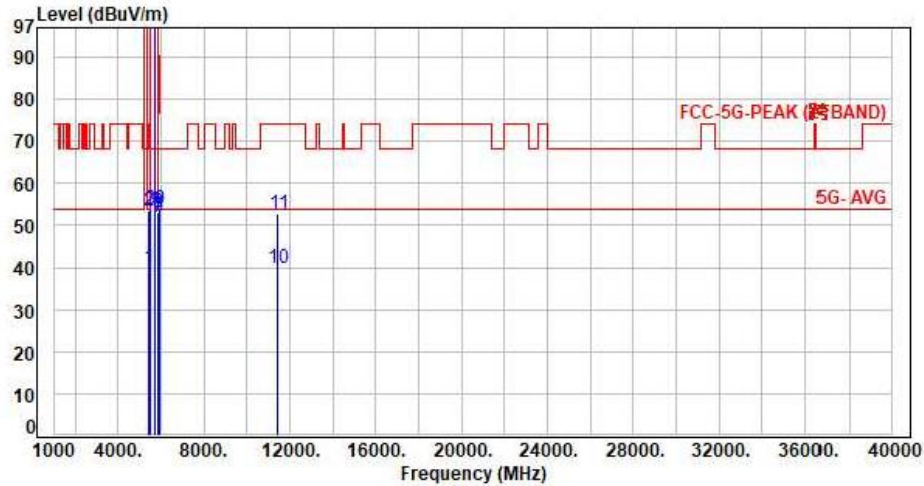
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 2, Band 3 Straddle Channel, CH144		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-7.16	47.15	39.99	54.00	-14.01	Average	187	348	P
2	5460.00	-7.16	60.73	53.57	74.00	-20.43	Peak	187	348	P
3	5470.00	-7.12	60.84	53.72	68.20	-14.48	Peak	187	348	P
4	5720.00	-6.59	109.43	102.84	200.00	-97.16	Average	187	348	P
5	5720.00	-6.59	119.62	113.03	200.00	-86.97	Peak	187	348	P
6	5850.00	-6.08	58.56	52.48	122.20	-69.72	Peak	187	348	P
7	5855.00	-6.06	58.23	52.17	110.80	-58.63	Peak	187	348	P
8	5875.00	-6.00	59.11	53.11	105.20	-52.09	Peak	187	348	P
9	5925.00	-5.75	59.54	53.79	68.20	-14.41	Peak	187	348	P
10	11440.00	4.28	35.52	39.80	54.00	-14.20	Average	100	165	P
11	11440.00	4.28	48.58	52.86	74.00	-21.14	Peak	100	165	P

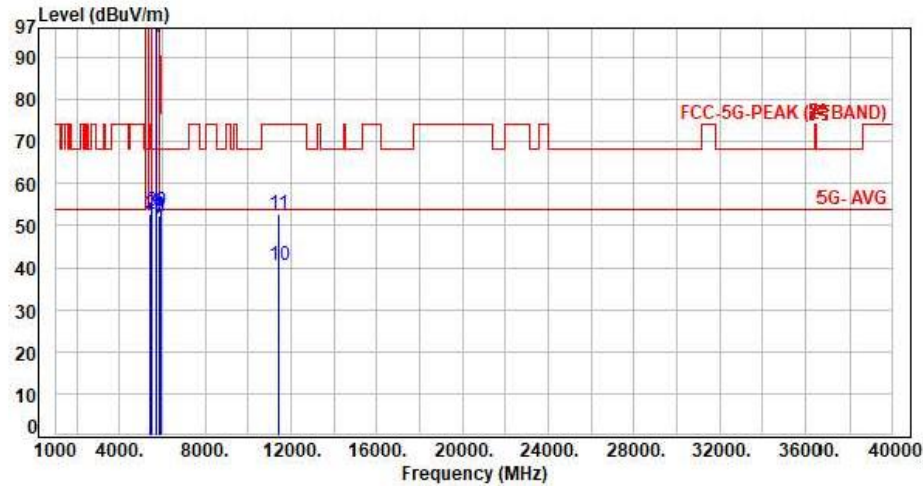
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



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



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-7.16	57.83	50.67	54.00	-3.33	Average	361	70	P
2	5460.00	-7.16	60.01	52.85	74.00	-21.15	Peak	361	70	P
3	5470.00	-7.12	60.45	53.33	68.20	-14.87	Peak	361	70	P
4	5710.00	-6.62	101.34	94.72	200.00	-105.28	Average	361	70	P
5	5710.00	-6.62	110.97	104.35	200.00	-95.65	Peak	361	70	P
6	5850.00	-6.08	58.28	52.20	122.20	-70.00	Peak	361	70	P
7	5855.00	-6.06	57.58	51.52	110.80	-59.28	Peak	361	70	P
8	5875.00	-6.00	58.05	52.05	105.20	-53.15	Peak	361	70	P
9	5925.00	-5.75	59.23	53.48	68.20	-14.72	Peak	361	70	P
10	11420.00	4.30	36.42	40.72	54.00	-13.28	Average	100	135	P
11	11420.00	4.30	48.38	52.68	74.00	-21.32	Peak	100	135	P

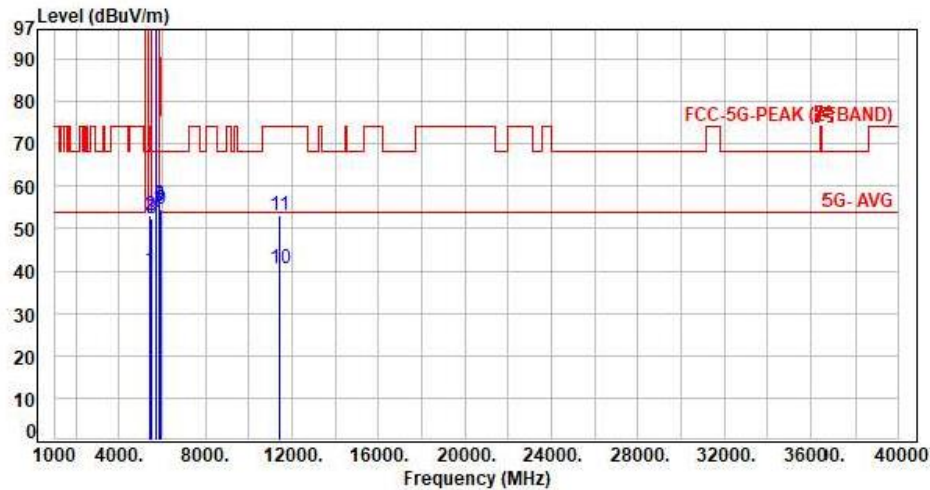
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



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



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-7.16	47.42	40.26	54.00	-13.74	Average	162	352	P
2	5460.00	-7.16	60.27	53.11	74.00	-20.89	Peak	162	352	P
3	5470.00	-7.12	59.62	52.50	68.20	-15.70	Peak	162	352	P
4	5710.00	-6.62	106.96	100.34	200.00	-99.66	Average	162	352	P
5	5710.00	-6.62	116.65	110.03	200.00	-89.97	Peak	162	352	P
6	5850.00	-6.08	61.68	55.60	122.20	-66.60	Peak	162	352	P
7	5855.00	-6.06	59.73	53.67	110.80	-57.13	Peak	162	352	P
8	5875.00	-6.00	61.15	55.15	105.20	-50.05	Peak	162	352	P
9	5925.00	-5.75	60.40	54.65	68.20	-13.55	Peak	162	352	P
10	11420.00	4.30	36.31	40.61	54.00	-13.39	Average	100	268	P
11	11420.00	4.30	48.72	53.02	74.00	-20.98	Peak	100	268	P

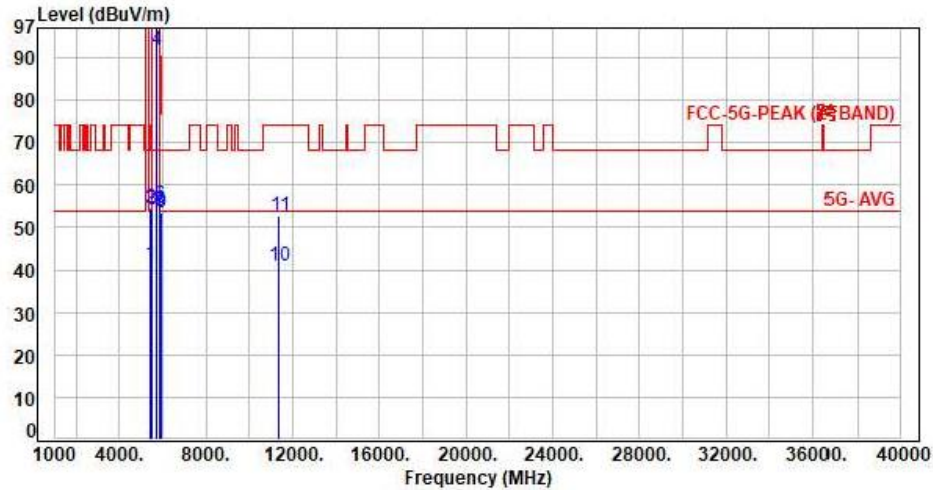
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, Band 3 Straddle Channel, CH138		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-7.16	48.52	41.36	54.00	-12.64	Average	346	87	P
2	5460.00	-7.16	61.92	54.76	74.00	-19.24	Peak	346	87	P
3	5470.00	-7.12	61.37	54.25	68.20	-13.95	Peak	346	87	P
4	5690.00	-6.71	98.66	91.95	200.00	-108.05	Average	346	87	P
5	5690.00	-6.71	108.43	101.72	200.00	-98.28	Peak	346	87	P
6	5850.00	-6.08	61.47	55.39	122.20	-66.81	Peak	346	87	P
7	5855.00	-6.06	60.08	54.02	110.80	-56.78	Peak	346	87	P
8	5875.00	-6.00	59.91	53.91	105.20	-51.29	Peak	346	87	P
9	5925.00	-5.75	59.36	53.61	68.20	-14.59	Peak	346	87	P
10	11380.00	4.26	36.72	40.98	54.00	-13.02	Average	100	159	P
11	11380.00	4.26	48.62	52.88	74.00	-21.12	Peak	100	159	P

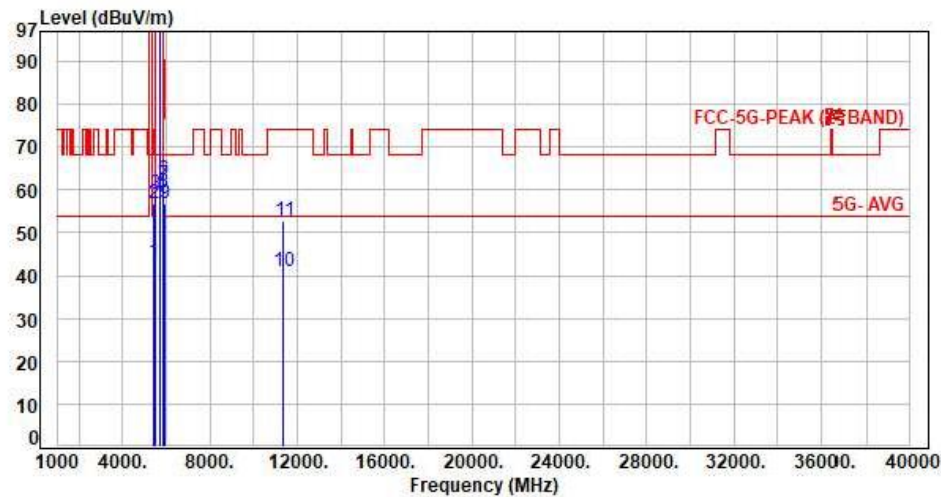
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 4, Band 3 Straddle Channel, CH138		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5460.00	-7.16	50.41	43.25	54.00	-10.75	Average	186	350	P
2	5460.00	-7.16	63.94	56.78	74.00	-17.22	Peak	186	350	P
3	5470.00	-7.12	66.27	59.15	68.20	-9.05	Peak	186	350	P
4	5690.00	-6.71	104.50	97.79	200.00	-102.21	Average	186	350	P
5	5690.00	-6.71	114.61	107.90	200.00	-92.10	Peak	186	350	P
6	5850.00	-6.08	68.30	62.22	122.20	-59.98	Peak	186	350	P
7	5855.00	-6.06	67.18	61.12	110.80	-49.68	Peak	186	350	P
8	5875.00	-6.00	65.32	59.32	105.20	-45.88	Peak	186	350	P
9	5925.00	-5.75	62.40	56.65	68.20	-11.55	Peak	186	350	P
10	11380.00	4.26	36.81	41.07	54.00	-12.93	Average	100	254	P
11	11380.00	4.26	48.56	52.82	74.00	-21.18	Peak	100	254	P

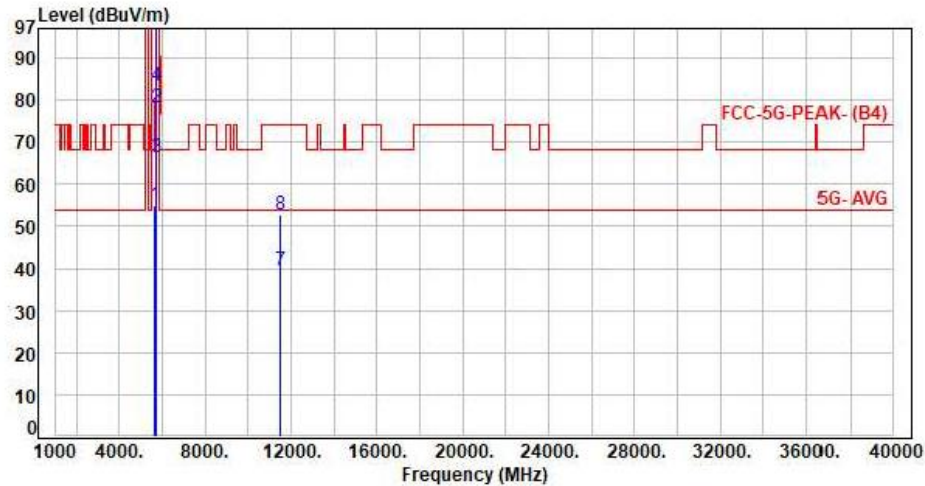
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



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



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-6.91	61.77	54.86	68.20	-13.34	Peak	370	77	P
2	5720.00	-6.59	84.72	78.13	110.80	-32.67	Peak	370	77	P
3	5720.00	-6.59	72.87	66.28	110.80	-44.52	Peak	370	77	P
4	5725.00	-6.58	89.87	83.29	122.20	-38.91	Peak	370	77	P
5	5745.00	-6.51	106.05	99.54	200.00	-100.46	Average	370	77	P
6	5745.00	-6.51	116.08	109.57	200.00	-90.43	Peak	370	77	P
7	11490.00	4.24	35.29	39.53	54.00	-14.47	Average	100	148	P
8	11490.00	4.24	48.40	52.64	74.00	-21.36	Peak	100	148	P

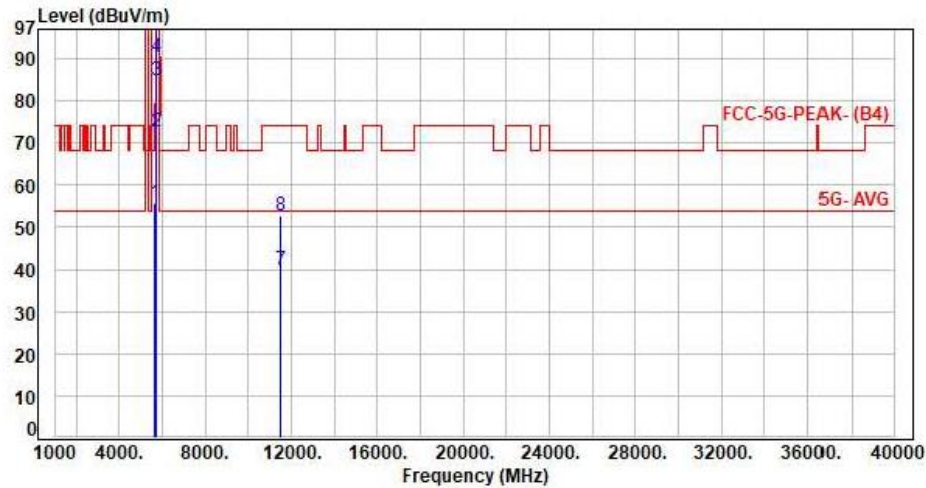
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



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



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-6.91	62.76	55.85	68.20	-12.35	Peak	185	352	P
2	5700.00	-6.65	79.19	72.54	105.20	-32.66	Peak	185	352	P
3	5720.00	-6.59	91.48	84.89	110.80	-25.91	Peak	185	352	P
4	5725.00	-6.58	96.79	90.21	122.20	-31.99	Peak	185	352	P
5	5745.00	-6.51	112.12	105.61	200.00	-94.39	Average	185	352	P
6	5745.00	-6.51	121.52	115.01	200.00	-84.99	Peak	185	352	P
7	11490.00	4.24	35.59	39.83	54.00	-14.17	Average	100	264	P
8	11490.00	4.24	48.35	52.59	74.00	-21.41	Peak	100	264	P

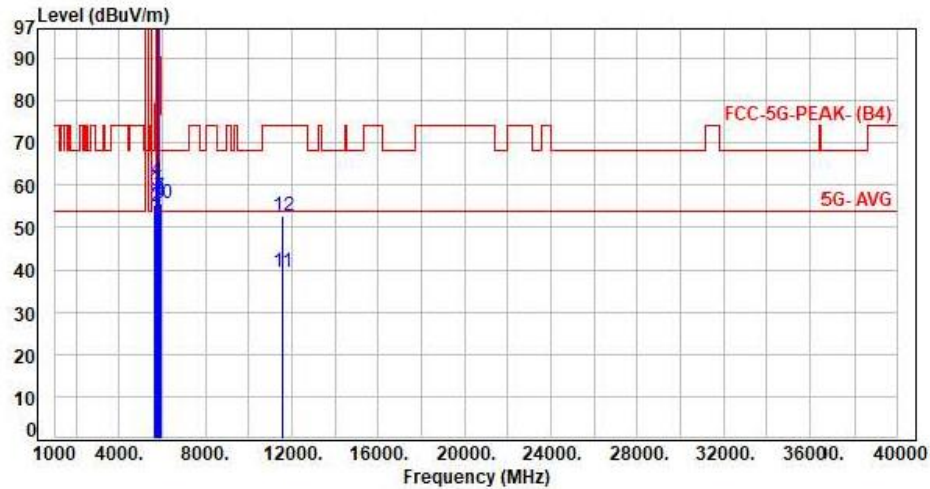
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



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



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-6.91	62.12	55.21	68.20	-12.99	Peak	351	84	P
2	5700.00	-6.65	61.70	55.05	105.20	-50.15	Peak	351	84	P
3	5720.00	-6.59	65.15	58.56	110.80	-52.24	Peak	351	84	P
4	5725.00	-6.58	67.76	61.18	122.20	-61.02	Peak	351	84	P
5	5785.00	-6.39	105.84	99.45	200.00	-100.55	Average	351	84	P
6	5785.00	-6.39	115.54	109.15	200.00	-90.85	Peak	351	84	P
7	5850.00	-6.08	63.11	57.03	122.20	-65.17	Peak	351	84	P
8	5855.00	-6.06	62.51	56.45	110.80	-54.35	Peak	351	84	P
9	5875.00	-6.00	61.77	55.77	105.20	-49.43	Peak	351	84	P
10	5925.00	-5.75	61.39	55.64	68.20	-12.56	Peak	351	84	P
11	11570.00	4.26	35.19	39.45	54.00	-14.55	Average	100	133	P
12	11570.00	4.26	48.49	52.75	74.00	-21.25	Peak	100	133	P

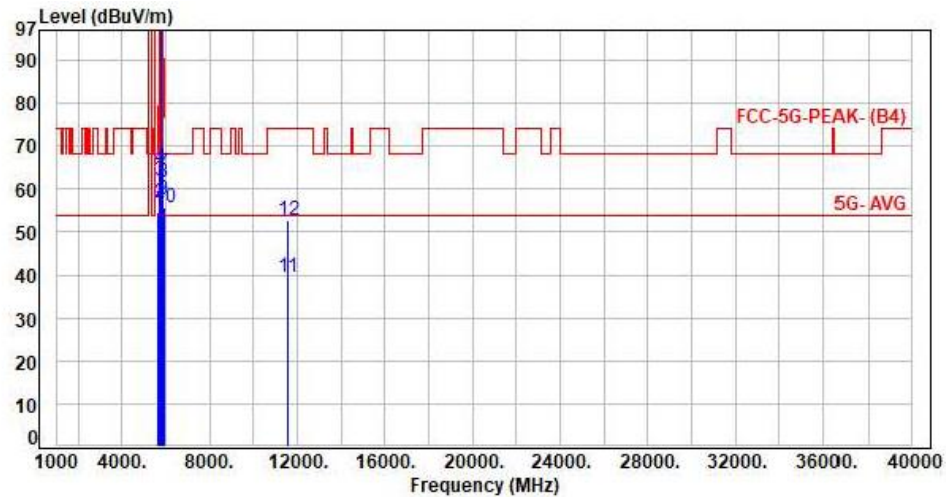
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



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



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-6.91	61.58	54.67	68.20	-13.53	Peak	170	348	P
2	5700.00	-6.65	63.34	56.69	105.20	-48.51	Peak	170	348	P
3	5720.00	-6.59	68.73	62.14	110.80	-48.66	Peak	170	348	P
4	5725.00	-6.58	71.64	65.06	122.20	-57.14	Peak	170	348	P
5	5785.00	-6.39	111.91	105.52	200.00	-94.48	Average	170	348	P
6	5785.00	-6.39	121.81	115.42	200.00	-84.58	Peak	170	348	P
7	5850.00	-6.08	70.05	63.97	122.20	-58.23	Peak	170	348	P
8	5855.00	-6.06	67.63	61.57	110.80	-49.23	Peak	170	348	P
9	5875.00	-6.00	63.38	57.38	105.20	-47.82	Peak	170	348	P
10	5925.00	-5.75	61.61	55.86	68.20	-12.34	Peak	170	348	P
11	11570.00	4.26	35.32	39.58	54.00	-14.42	Average	100	244	P
12	11570.00	4.26	48.62	52.88	74.00	-21.12	Peak	100	244	P

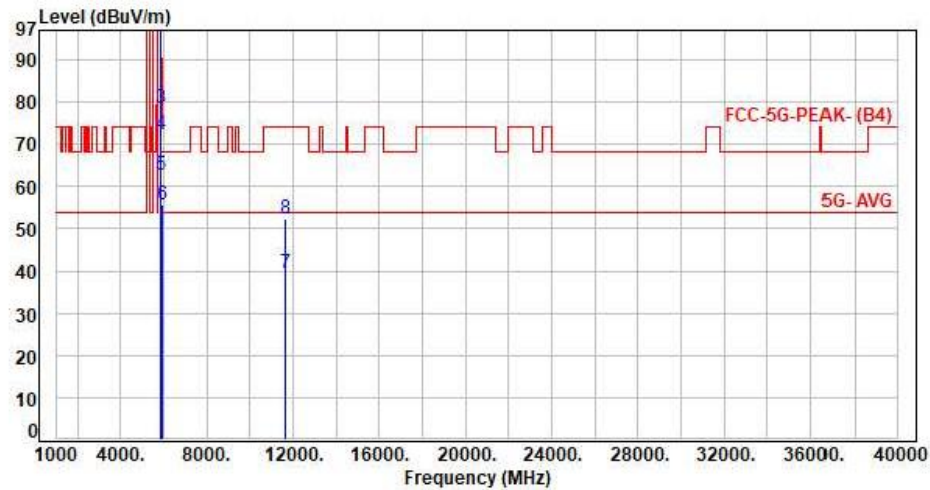
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



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



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5825.00	-6.21	105.29	99.08	200.00	-100.92	Average	377	76	P
2	5825.00	-6.21	115.07	108.86	200.00	-91.14	Peak	377	76	P
3	5850.00	-6.08	84.80	78.72	122.20	-43.48	Peak	377	76	P
4	5855.00	-6.06	78.38	72.32	110.80	-38.48	Peak	377	76	P
5	5875.00	-6.00	68.65	62.65	105.20	-42.55	Peak	377	76	P
6	5925.00	-5.75	61.46	55.71	68.20	-12.49	Peak	377	76	P
7	11650.00	4.10	35.22	39.32	54.00	-14.68	Average	100	147	P
8	11650.00	4.10	48.39	52.49	74.00	-21.51	Peak	100	147	P

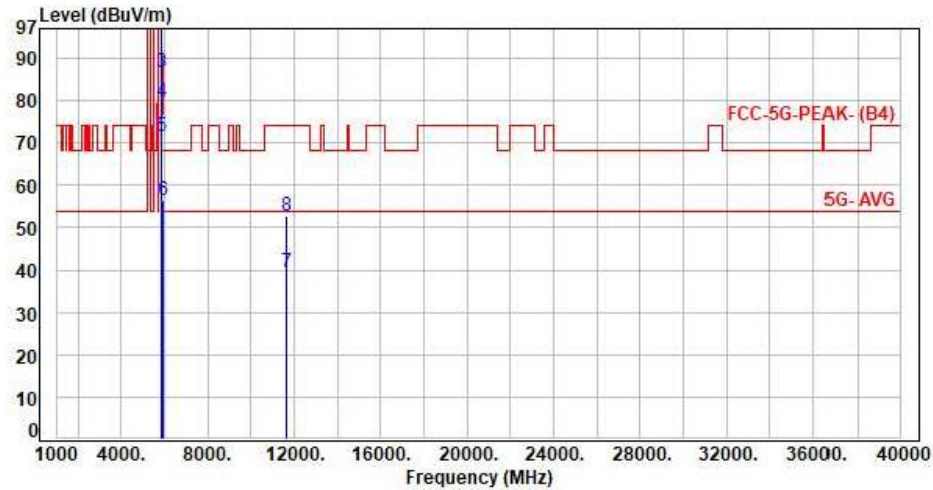
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



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



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5825.00	-6.21	111.88	105.67	200.00	-94.33	Average	171	340	P
2	5825.00	-6.21	121.67	115.46	200.00	-84.54	Peak	171	340	P
3	5850.00	-6.08	92.84	86.76	122.20	-35.44	Peak	171	340	P
4	5855.00	-6.06	85.81	79.75	110.80	-31.05	Peak	171	340	P
5	5875.00	-6.00	77.59	71.59	105.20	-33.61	Peak	171	340	P
6	5925.00	-5.75	62.01	56.26	68.20	-11.94	Peak	171	340	P
7	11650.00	4.10	35.52	39.62	54.00	-14.38	Average	100	243	P
8	11650.00	4.10	48.57	52.67	74.00	-21.33	Peak	100	243	P

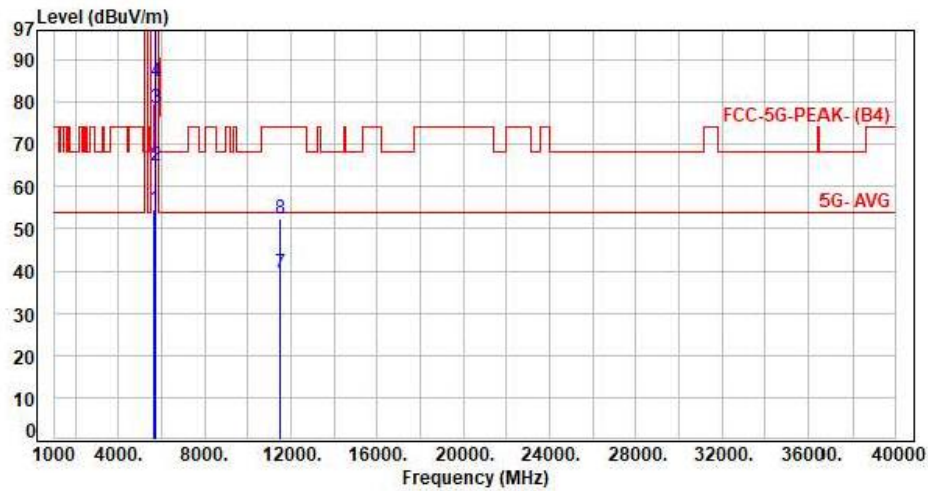
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 2, Band 4, CH149		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-6.91	61.36	54.45	68.20	-13.75	Peak	371	78	P
2	5700.00	-6.65	71.71	65.06	105.20	-40.14	Peak	371	78	P
3	5720.00	-6.59	85.15	78.56	110.80	-32.24	Peak	371	78	P
4	5725.00	-6.58	91.40	84.82	122.20	-37.38	Peak	371	78	P
5	5745.00	-6.51	105.74	99.23	200.00	-100.77	Average	371	78	P
6	5745.00	-6.51	116.17	109.66	200.00	-90.34	Peak	371	78	P
7	11490.00	4.24	35.39	39.63	54.00	-14.37	Average	100	165	P
8	11490.00	4.24	48.30	52.54	74.00	-21.46	Peak	100	165	P

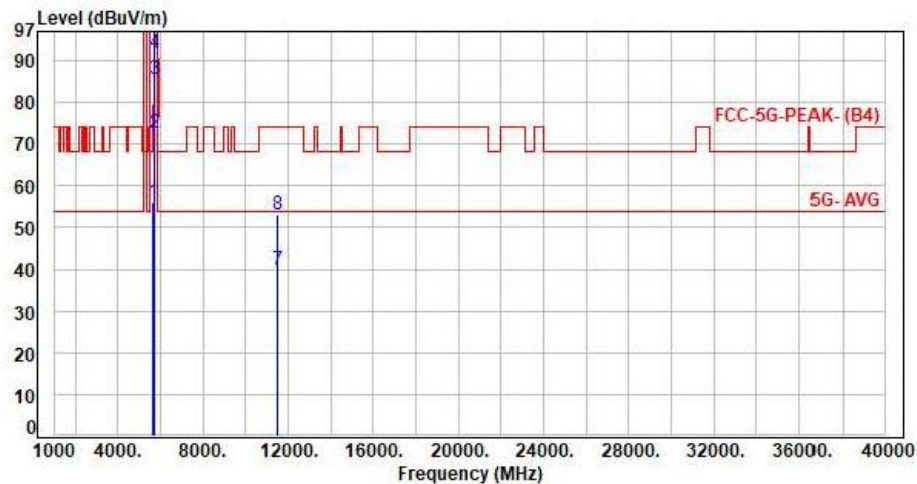
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 2, Band 4, CH149		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-6.91	62.99	56.08	68.20	-12.12	Peak	191	344	P
2	5700.00	-6.65	79.18	72.53	105.20	-32.67	Peak	191	344	P
3	5720.00	-6.59	92.34	85.75	110.80	-25.05	Peak	191	344	P
4	5725.00	-6.58	98.48	91.90	122.20	-30.30	Peak	191	344	P
5	5745.00	-6.51	111.79	105.28	200.00	-94.72	Average	191	344	P
6	5745.00	-6.51	121.84	115.33	200.00	-84.67	Peak	191	344	P
7	11490.00	4.24	35.47	39.71	54.00	-14.29	Average	100	273	P
8	11490.00	4.24	48.69	52.93	74.00	-21.07	Peak	100	273	P

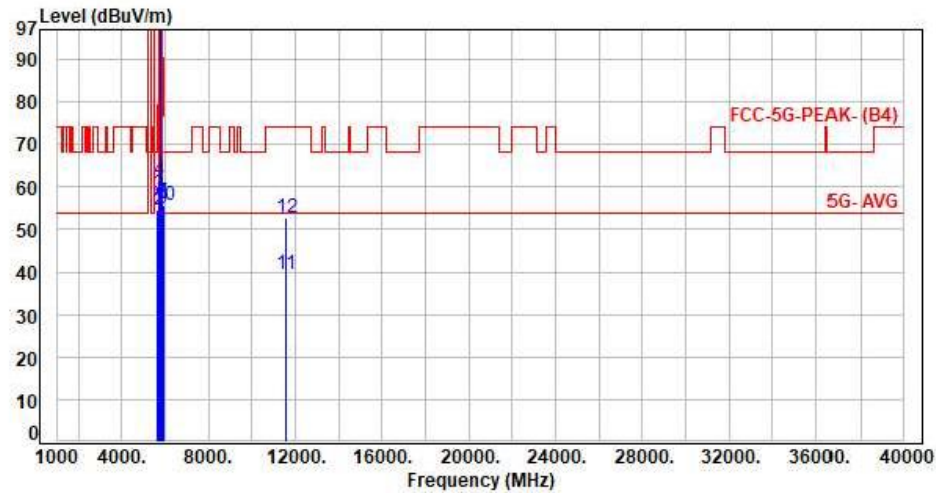
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: VERTICAL
Test Mode	: Mode 2, Band 4, CH157		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-6.91	61.59	54.68	68.20	-13.52	Peak	351	82	P
2	5700.00	-6.65	61.37	54.72	105.20	-50.48	Peak	351	82	P
3	5720.00	-6.59	64.72	58.13	110.80	-52.67	Peak	351	82	P
4	5725.00	-6.58	68.33	61.75	122.20	-60.45	Peak	351	82	P
5	5785.00	-6.39	105.53	99.14	200.00	-100.86	Average	351	82	P
6	5785.00	-6.39	115.64	109.25	200.00	-90.75	Peak	351	82	P
7	5850.00	-6.08	62.45	56.37	122.20	-65.83	Peak	351	82	P
8	5855.00	-6.06	62.22	56.16	110.80	-54.64	Peak	351	82	P
9	5875.00	-6.00	61.13	55.13	105.20	-50.07	Peak	351	82	P
10	5925.00	-5.75	61.53	55.78	68.20	-12.42	Peak	351	82	P
11	11570.00	4.26	35.34	39.60	54.00	-14.40	Average	100	129	P
12	11570.00	4.26	48.43	52.69	74.00	-21.31	Peak	100	129	P

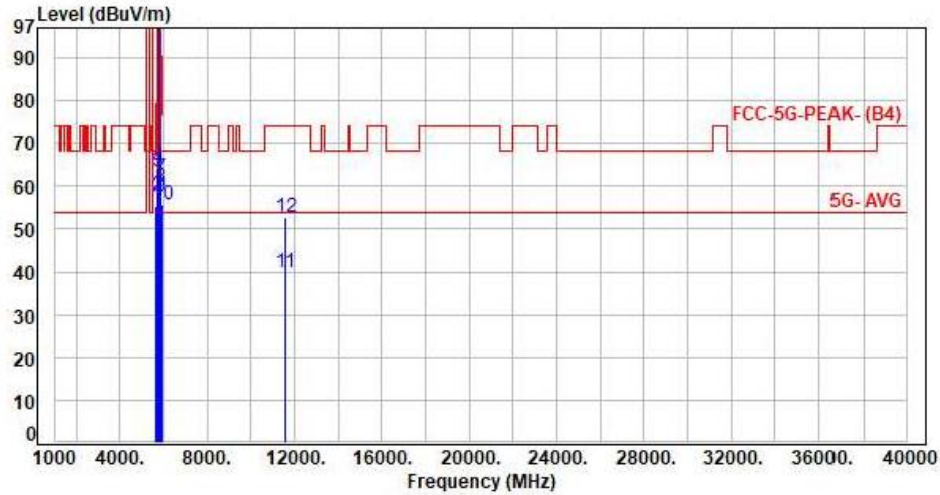
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	AC 120V / 60Hz	Pol/Phase	:	HORIZONTAL
Test Mode	:	Mode 2, Band 4, CH157		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-6.91	62.27	55.36	68.20	-12.84	Peak	260	326	P
2	5700.00	-6.65	64.39	57.74	105.20	-47.46	Peak	260	326	P
3	5720.00	-6.59	70.03	63.44	110.80	-47.36	Peak	260	326	P
4	5725.00	-6.58	70.64	64.06	122.20	-58.14	Peak	260	326	P
5	5785.00	-6.39	110.52	104.13	200.00	-95.87	Average	260	326	P
6	5785.00	-6.39	120.99	114.60	200.00	-85.40	Peak	260	326	P
7	5850.00	-6.08	68.08	62.00	122.20	-60.20	Peak	260	326	P
8	5855.00	-6.06	65.73	59.67	110.80	-51.13	Peak	260	326	P
9	5875.00	-6.00	63.41	57.41	105.20	-47.79	Peak	260	326	P
10	5925.00	-5.75	61.62	55.87	68.20	-12.33	Peak	260	326	P
11	11570.00	4.26	35.50	39.76	54.00	-14.24	Average	100	232	P
12	11570.00	4.26	48.32	52.58	74.00	-21.42	Peak	100	232	P

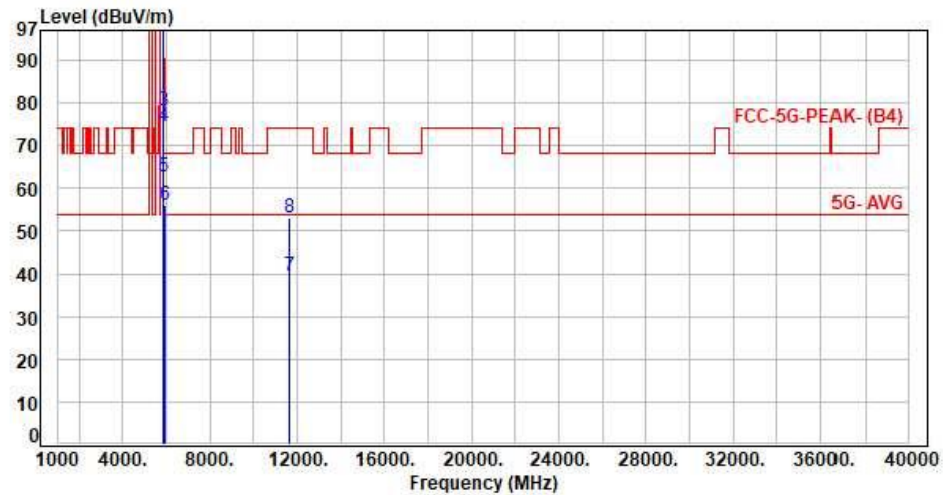
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: VERTICAL
Test Mode	: Mode 2, Band 4, CH165		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5825.00	-6.21	104.79	98.58	200.00	-101.42	Average	378	78	P
2	5825.00	-6.21	114.84	108.63	200.00	-91.37	Peak	378	78	P
3	5850.00	-6.08	84.19	78.11	122.20	-44.09	Peak	378	78	P
4	5855.00	-6.06	80.72	74.66	110.80	-36.14	Peak	378	78	P
5	5875.00	-6.00	68.75	62.75	105.20	-42.45	Peak	378	78	P
6	5925.00	-5.75	61.67	55.92	68.20	-12.28	Peak	378	78	P
7	11650.00	4.10	35.41	39.51	54.00	-14.49	Average	100	138	P
8	11650.00	4.10	48.83	52.93	74.00	-21.07	Peak	100	138	P

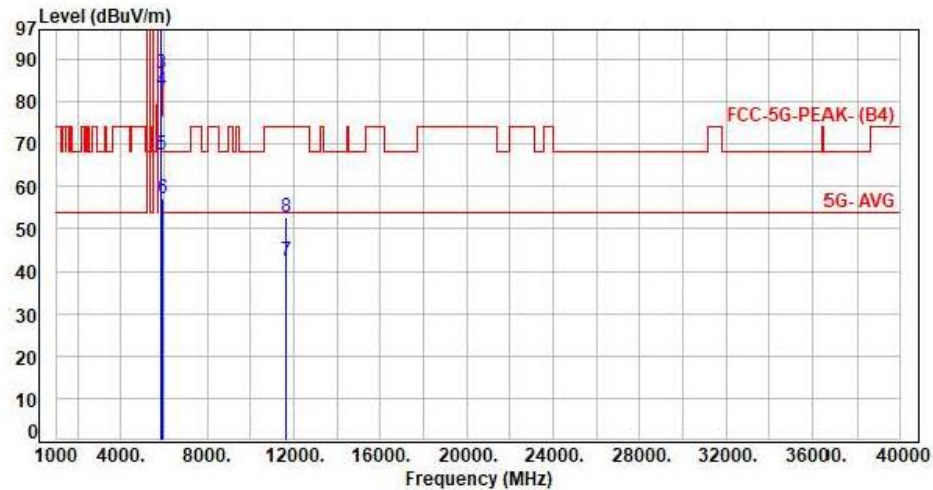
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2, Band 4, CH165		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5825.00	-6.21	111.23	105.02	200.00	-94.98	Average	158	350	P
2	5825.00	-6.21	121.26	115.05	200.00	-84.95	Peak	158	350	P
3	5850.00	-6.08	92.90	86.82	122.20	-35.38	Peak	158	350	P
4	5855.00	-6.06	88.51	82.45	110.80	-28.35	Peak	158	350	P
5	5875.00	-6.00	73.67	67.67	105.20	-37.53	Peak	158	350	P
6	5925.00	-5.75	62.79	57.04	68.20	-11.16	Peak	158	350	P
7	11650.00	4.10	38.47	42.57	54.00	-11.43	Average	100	258	P
8	11650.00	4.10	48.53	52.63	74.00	-21.37	Peak	100	258	P

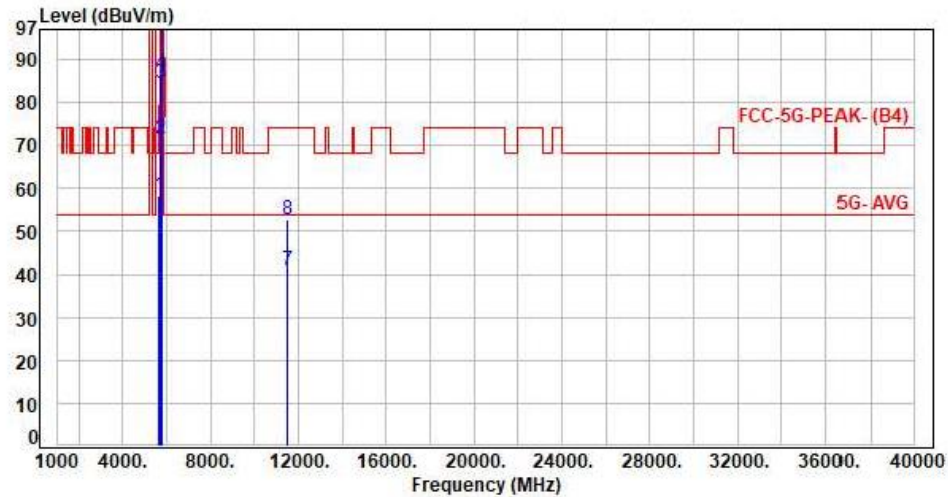
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: VERTICAL
Test Mode	: Mode 3, Band 4, CH151		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-6.91	65.32	58.41	68.20	-9.79	Peak	337	76	P
2	5700.00	-6.65	78.13	71.48	105.20	-33.72	Peak	337	76	P
3	5720.00	-6.59	90.97	84.38	110.80	-26.42	Peak	337	76	P
4	5725.00	-6.58	93.11	86.53	122.20	-35.67	Peak	337	76	P
5	5755.00	-6.48	104.70	98.22	200.00	-101.78	Average	337	76	P
6	5755.00	-6.48	113.89	107.41	200.00	-92.59	Peak	337	76	P
7	11510.00	4.24	36.57	40.81	54.00	-13.19	Average	100	154	P
8	11510.00	4.24	48.64	52.88	74.00	-21.12	Peak	100	154	P

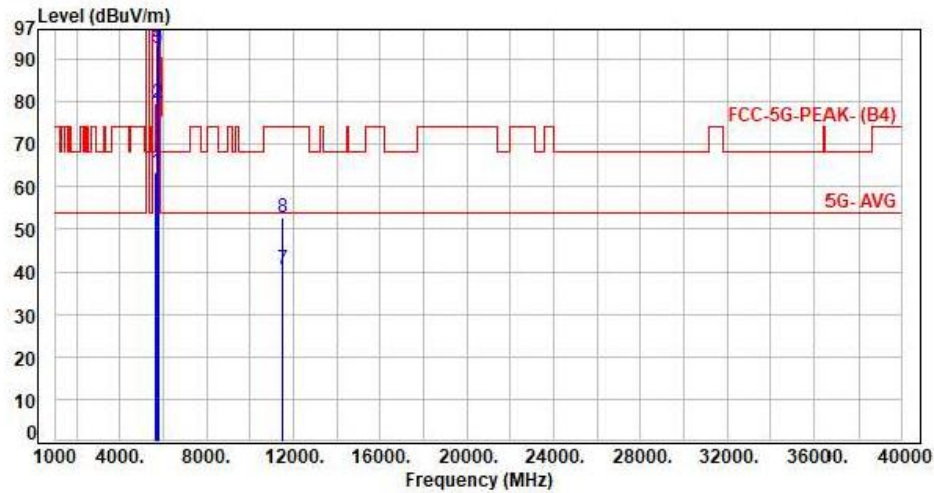
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 3, Band 4, CH151		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-6.91	70.42	63.51	68.20	-4.69	Peak	195	349	P
2	5700.00	-6.65	86.26	79.61	105.20	-25.59	Peak	195	349	P
3	5720.00	-6.59	99.12	92.53	110.80	-18.27	Peak	195	349	P
4	5725.00	-6.58	99.97	93.39	122.20	-28.81	Peak	195	349	P
5	5755.00	-6.48	109.90	103.42	200.00	-96.58	Average	195	349	P
6	5755.00	-6.48	119.74	113.26	200.00	-86.74	Peak	195	349	P
7	11510.00	4.24	36.43	40.67	54.00	-13.33	Average	100	273	P
8	11510.00	4.24	48.58	52.82	74.00	-21.18	Peak	100	273	P

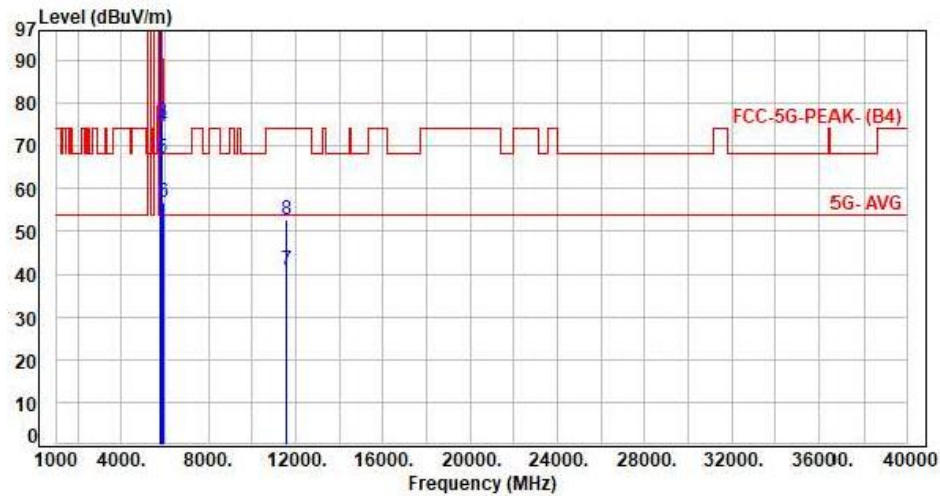
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: VERTICAL
Test Mode	: Mode 3, Band 4, CH159		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5795.00	-6.35	104.04	97.69	200.00	-102.31	Average	347	79	P
2	5795.00	-6.35	113.27	106.92	200.00	-93.08	Peak	347	79	P
3	5850.00	-6.08	81.60	75.52	122.20	-46.68	Peak	347	79	P
4	5855.00	-6.06	80.60	74.54	110.80	-36.26	Peak	347	79	P
5	5875.00	-6.00	73.10	67.10	105.20	-38.10	Peak	347	79	P
6	5925.00	-5.75	62.71	56.96	68.20	-11.24	Peak	347	79	P
7	11590.00	4.27	36.65	40.92	54.00	-13.08	Average	100	146	P
8	11590.00	4.27	48.42	52.69	74.00	-21.31	Peak	100	146	P

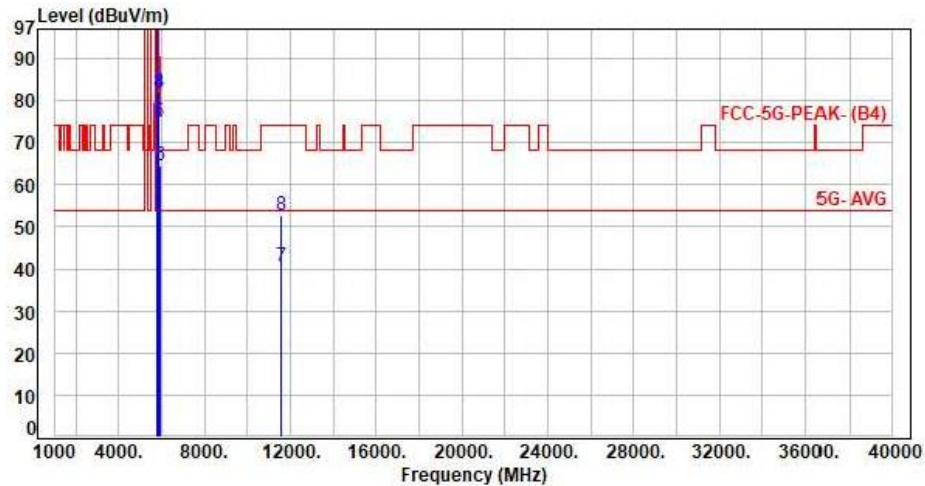
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 3, Band 4, CH159		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5795.00	-6.35	110.11	103.76	200.00	-96.24	Average	197	351	P
2	5795.00	-6.35	119.16	112.81	200.00	-87.19	Peak	197	351	P
3	5850.00	-6.08	87.93	81.85	122.20	-40.35	Peak	197	351	P
4	5855.00	-6.06	88.07	82.01	110.80	-28.79	Peak	197	351	P
5	5875.00	-6.00	80.74	74.74	105.20	-30.46	Peak	197	351	P
6	5925.00	-5.75	70.30	64.55	68.20	-3.65	Peak	197	351	P
7	11590.00	4.27	36.39	40.66	54.00	-13.34	Average	100	245	P
8	11590.00	4.27	48.51	52.78	74.00	-21.22	Peak	100	245	P

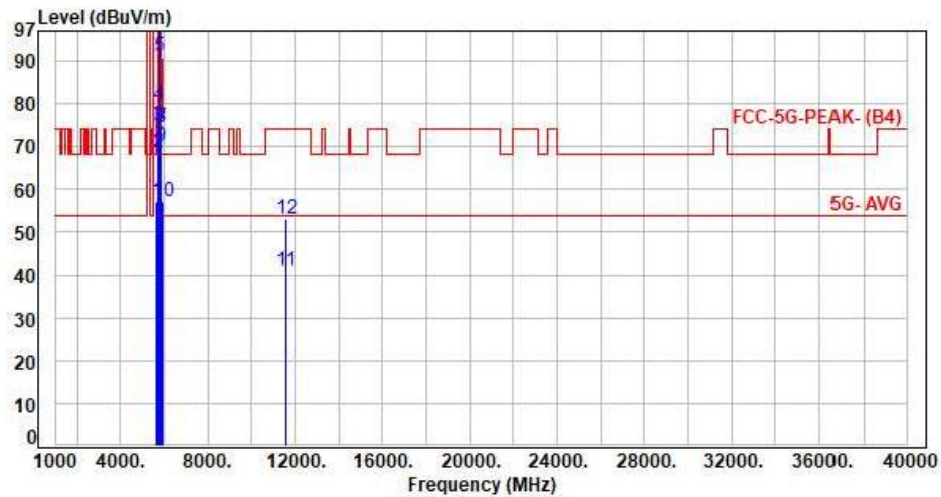
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



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



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-6.91	64.23	57.32	68.20	-10.88	Peak	340	82	P
2	5700.00	-6.65	75.40	68.75	105.20	-36.45	Peak	340	82	P
3	5720.00	-6.59	81.56	74.97	110.80	-35.83	Peak	340	82	P
4	5725.00	-6.58	86.28	79.70	122.20	-42.50	Peak	340	82	P
5	5775.00	-6.41	97.62	91.21	200.00	-108.79	Average	340	82	P
6	5775.00	-6.41	107.98	101.57	200.00	-98.43	Peak	340	82	P
7	5850.00	-6.08	80.66	74.58	122.20	-47.62	Peak	340	82	P
8	5855.00	-6.06	80.47	74.41	110.80	-36.39	Peak	340	82	P
9	5875.00	-6.00	75.97	69.97	105.20	-35.23	Peak	340	82	P
10	5925.00	-5.75	62.73	56.98	68.20	-11.22	Peak	340	82	P
11	11550.00	4.26	36.72	40.98	54.00	-13.02	Average	100	162	P
12	11550.00	4.26	48.68	52.94	74.00	-21.06	Peak	100	162	P

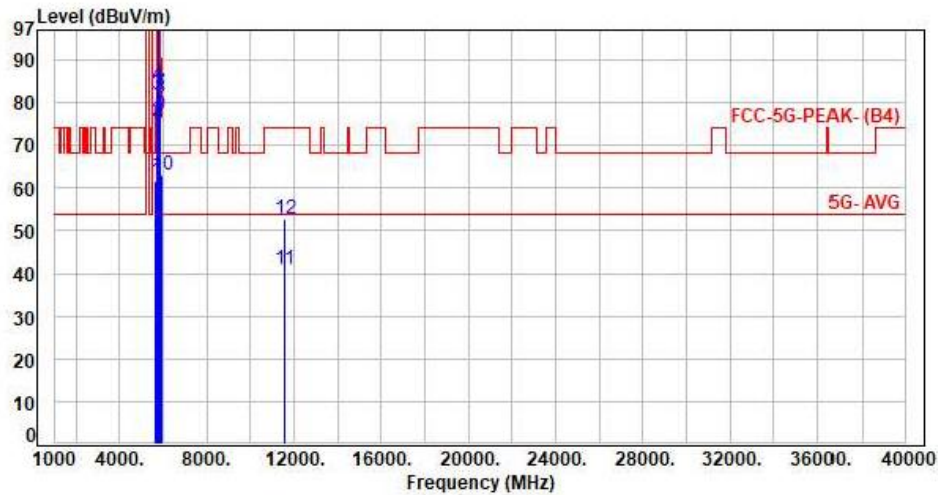
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



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



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	5650.00	-6.91	68.52	61.61	68.20	-6.59	Peak	188	348	P
2	5700.00	-6.65	82.21	75.56	105.20	-29.64	Peak	188	348	P
3	5720.00	-6.59	88.51	81.92	110.80	-28.88	Peak	188	348	P
4	5725.00	-6.58	90.53	83.95	122.20	-38.25	Peak	188	348	P
5	5775.00	-6.41	104.06	97.65	200.00	-102.35	Average	188	348	P
6	5775.00	-6.41	114.60	108.19	200.00	-91.81	Peak	188	348	P
7	5850.00	-6.08	88.15	82.07	122.20	-40.13	Peak	188	348	P
8	5855.00	-6.06	87.21	81.15	110.80	-29.65	Peak	188	348	P
9	5875.00	-6.00	83.16	77.16	105.20	-28.04	Peak	188	348	P
10	5925.00	-5.75	68.64	62.89	68.20	-5.31	Peak	188	348	P
11	11550.00	4.26	36.67	40.93	54.00	-13.07	Average	100	266	P
12	11550.00	4.26	48.58	52.84	74.00	-21.16	Peak	100	266	P

Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



6.7. Restricted Bands of Operation

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

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

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



7. On Time, Duty Cycle and Measurement methods

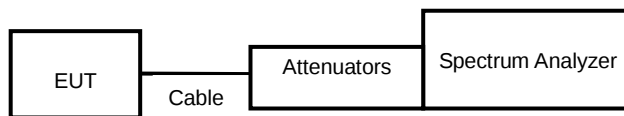
7.1. Test Limit

None; for reporting purposes only.

7.2. Test Procedure

KDB 789033 Zero-Span Spectrum Analyzer Method.

7.3. Test Setup Layout





7.4. Test Result and Data

Modulation Type	On Time (ms)	Period Time (ms)	Duty Cycle (%)
802.11a,6M	1.39	1.49	93.24%
802.11n HT20	1.31	1.41	92.92%
802.11n HT40	0.66	0.76	86.75%
802.11ac VHT20	1.32	1.42	92.81%
802.11ac VHT40	0.66	0.76	86.92%
802.11ac VHT80	0.33	0.43	76.82%

7.5. Measurement Methods

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



Modulation Type: 802.11a (6Mbps)



Modulation Type: 802.11ac VHT20 (6.5Mbps)



Modulation Type: 802.11n HT20 (6.5Mbps)



Modulation Type: 802.11ac VHT40 (13.5Mbps)



Modulation Type: 802.11n HT40 (13.5Mbps)



Modulation Type: 802.11ac VHT80 (29.3Mbps)





8. 6dB Bandwidth & 99% Occupied Bandwidth

8.1. Test Limit

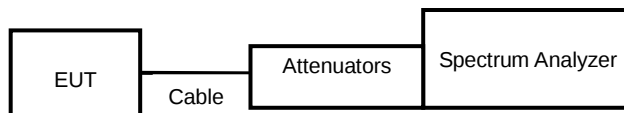
FCC §15.407

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

8.2. Test Procedure

Reference to 789033 D02 General UNII Test Procedures New Rules v01: The transmitter output is connected to a spectrum analyzer with the RBW set to 100KHz, the VBW $\geq 3 \times$ RBW, peak detector and max hold.

8.3. Test Setup Layout





8.4. Test Result and Data

In the 5.8G Band

Modulation Type	Channel	Frequency (MHz)	6dB Bandwidth(MHz)	Minimum Limit (MHz)
			ANT A	
11a	149	5745	16.05	0.50
11a	157	5785	16.05	0.50
11a	165	5825	15.84	0.50
11ac VHT20	149	5745	17.28	0.50
11ac VHT20	157	5785	17.19	0.50
11ac VHT20	165	5825	17.25	0.50
11ac VHT40	151	5755	36.06	0.50
11ac VHT40	159	5795	35.94	0.50
11ac VHT80	155	5775	75.12	0.50

In the 5.8G Band

Modulation Type	Channel	Frequency (MHz)	99% Bandwidth(MHz)
			ANT A
11a	149	5745	21.17
11a	157	5785	21.55
11a	165	5825	21.29
11ac VHT20	149	5745	20.25
11ac VHT20	157	5785	20.08
11ac VHT20	165	5825	20.24
11ac VHT40	151	5755	39.45
11ac VHT40	159	5795	38.50
11ac VHT80	155	5775	77.63



UNII Emission Bandwidth Result (Extends across 5725MHz band)				
Modulation Type	Data Rate / MCS	Frequency (MHz)	6dB Bandwidth(MHz)	99% Bandwidth(MHz)
			ANT A	ANT A
11a	6 Mbps	5720	3.25	11.51
11ac VHT20	NSS1-MCS0	5720	3.66	11.46
11ac VHT40	NSS1-MCS0	5710	3.28	28.00
11ac VHT80	NSS1-MCS0	5690	2.97	11.46



6dB Bandwidth

Modulation Type: 802.11a (6Mbps)
CH149Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH149

CH157



CH157



CH165



CH165





6dB Bandwidth

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH151



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH155



CH159





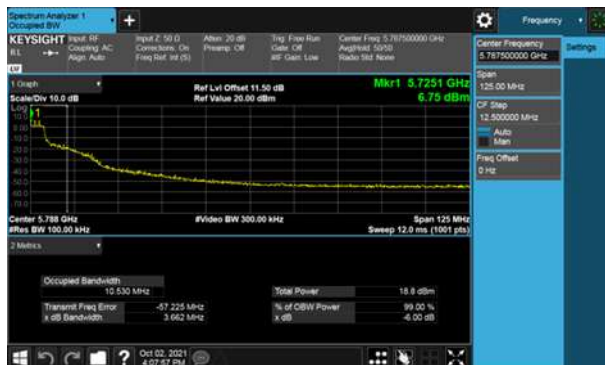
6dB Bandwidth
Extends across 5725MHz Band, Straddle Channel
Modulation Type: 802.11a (6Mbps)
CH144



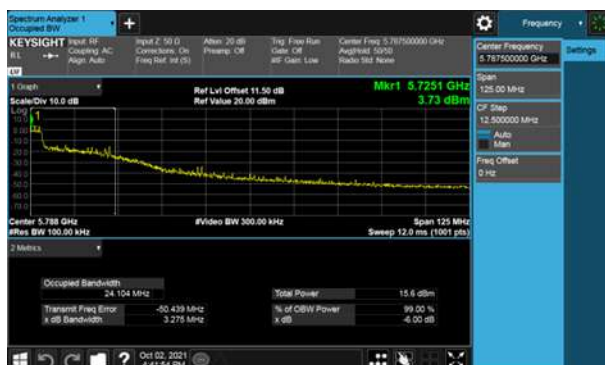
Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142





99% Occupied Bandwidth
Modulation Type: 802.11a (6Mbps)
CH149



Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH149



CH157



CH157



CH165



CH165





99% Occupied Bandwidth

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH151



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH155



CH159





99% Bandwidth

Extends across 5725MHz Band, Straddle Channel

Modulation Type: 802.11a (6Mbps)
CH144



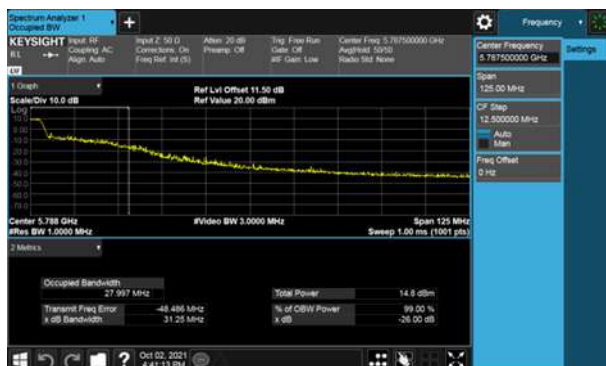
Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142





9. 26dB Bandwidth & 99% Occupied Bandwidth

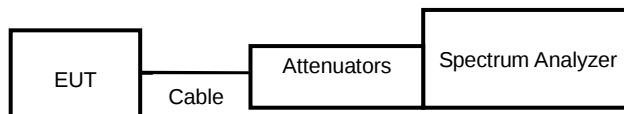
9.1. Test Limit

None; for reporting purposes only.

9.2. Test Procedure

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

9.3. Test Setup Layout



**9.4. Test Result and Data**

In the 5.2G Band

Mode	Channel	Frequency (MHz)	26dB Bandwidth(MHz)
			ANT A
11a	36	5180	23.42
11a	40	5200	33.71
11a	48	5240	35.67
11ac VHT20	36	5180	24.15
11ac VHT20	40	5200	34.66
11ac VHT20	48	5240	36.68
11ac VHT40	38	5190	46.09
11ac VHT40	46	5230	74.12
11ac VHT80	42	5210	82.00

In the 5.3G Band

Mode	Channel	Frequency (MHz)	26dB Bandwidth(MHz)
			ANT A
11a	52	5260	35.89
11a	60	5300	35.78
11a	64	5320	22.83
11ac VHT20	52	5260	37.34
11ac VHT20	60	5300	38.64
11ac VHT20	64	5320	25.36
11ac VHT40	54	5270	72.06
11ac VHT40	62	5310	40.95
11ac VHT80	58	5290	81.89



In the 5.5G Band

Mode	Channel	Frequency (MHz)	26dB Bandwidth(MHz)
			ANT A
11a	100	5500	22.81
11a	116	5580	37.29
11a	140	5700	21.72
11ac VHT20	100	5500	25.16
11ac VHT20	116	5580	36.38
11ac VHT20	140	5700	22.54
11ac VHT40	102	5510	40.96
11ac VHT40	110	5550	98.85
11ac VHT40	134	5670	67.05
11ac VHT80	106	5530	81.69
11ac VHT80	122	5610	137.00



UNII Emission Bandwidth Result (Within 5470-5725MHz band)			
Modulation Type	Data Rate / MCS	Frequency (MHz)	26dB Bandwidth(MHz)
			ANT A
11a	6 Mbps	5720	21.68
11ac VHT20	NSS1-MCS0	5720	24.77
11ac VHT40	NSS1-MCS0	5710	52.39
11ac VHT80	NSS1-MCS0	5690	108.70



In the 5.2G Band

Modulation Type	Channel	Frequency (MHz)	99% Bandwidth(MHz)
			ANT A
11a	36	5180	16.98
11a	40	5200	18.41
11a	48	5240	18.70
11ac VHT20	36	5180	18.06
11ac VHT20	40	5200	18.81
11ac VHT20	48	5240	18.83
11ac VHT40	38	5190	36.58
11ac VHT40	46	5230	37.55
11ac VHT80	42	5210	75.42

In the 5.3G Band

Modulation Type	Channel	Frequency (MHz)	99% Bandwidth(MHz)
			ANT A
11a	52	5260	18.91
11a	60	5300	19.43
11a	64	5320	17.03
11ac VHT20	52	5260	18.92
11ac VHT20	60	5300	19.18
11ac VHT20	64	5320	18.09
11ac VHT40	54	5270	37.06
11ac VHT40	62	5310	36.52
11ac VHT80	58	5290	75.45



In the 5.5G Band

Modulation Type	Channel	Frequency (MHz)	99% Bandwidth(MHz)
			ANT A
11a	100	5500	17.07
11a	116	5580	19.15
11a	140	5700	17.00
11ac VHT20	100	5500	18.16
11ac VHT20	116	5580	18.90
11ac VHT20	140	5700	18.08
11ac VHT40	102	5510	36.56
11ac VHT40	110	5550	39.83
11ac VHT40	134	5670	36.84
11ac VHT80	106	5530	75.51
11ac VHT80	122	5610	76.38



UNII Emission Bandwidth Result (Within 5470-5725MHz band)			
Modulation Type	Data Rate / MCS	Frequency (MHz)	99% Bandwidth(MHz)
			ANT A
11a	6 Mbps	5720	15.54
11ac VHT20	NSS1-MCS0	5720	14.84
11ac VHT40	NSS1-MCS0	5710	34.02
11ac VHT80	NSS1-MCS0	5690	72.95



26dB Bandwidth Band 1
Modulation Type: 802.11a (6Mbps)
CH36



802.11ac VHT20 (6.5Mbps)
CH36



CH40



CH40



CH48



CH48





26dB Bandwidth Band 1

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42



CH46





26dB Bandwidth Band 2
Modulation Type: 802.11a (6Mbps)
CH52

802.11ac VHT20 (6.5Mbps)
CH52



CH60



CH60



CH64



CH64





26dB Bandwidth Band 2

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH54



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH58



CH62





26dB Bandwidth Band 3
Modulation Type: 802.11a (6Mbps)
CH100



802.11ac VHT20 (6.5Mbps)
CH100



CH116



CH116



CH140



CH140





26dB Bandwidth Band 3

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH102



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH106



CH110



CH122



CH134





26dB Bandwidth

Within 5470-5725MHz Band, Straddle Channel

Modulation Type: 802.11a (6Mbps)
CH144



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142





99% Bandwidth Band 1
Modulation Type: 802.11a (6Mbps)
CH36



802.11ac VHT20 (6.5Mbps)
CH36



CH40



CH40



CH48



CH48





99% Bandwidth Band 1

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42



CH46





99% Bandwidth Band 2
Modulation Type: 802.11a (6Mbps)
CH52

802.11ac VHT20 (6.5Mbps)
CH52



CH60



CH60



CH64



CH64





99% Bandwidth Band 2

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH54



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH58



CH62





99% Bandwidth Band 3
Modulation Type: 802.11a (6Mbps)
CH100



802.11ac VHT20 (6.5Mbps)
CH100



CH116



CH116



CH140



CH140





99% Bandwidth Band 3

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH102



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH106



CH110



CH122



CH134





99% Bandwidth

Within 5470-5725MHz Band, Straddle Channel

Modulation Type: 802.11a (6Mbps)
CH144



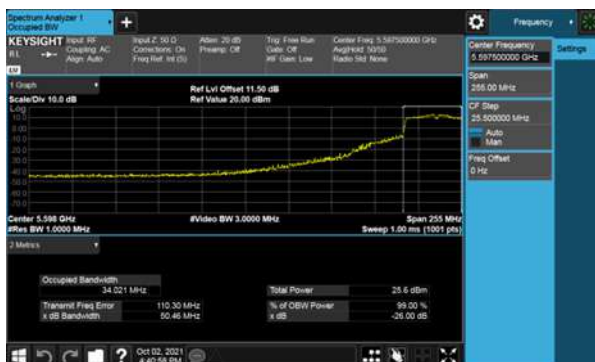
Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142





10. Average Power

10.1. Test Limit

Output Power:

Frequency Band		Limit
☒	5.15~5.25GHz	
	Operating Mode	
☐	Outdoor access point	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm) provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30degrees as measured from the horizon must not 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.
☒	client devices	The maximum conducted output power over the frequency band of operation shall not exceed 250 mW (24dBm) provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.



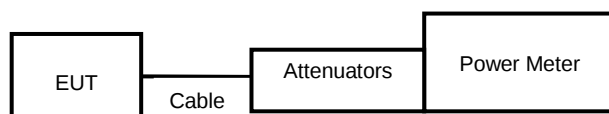
Frequency Band		Limit
☒	5.25-5.35 GHz	The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (24dBm) or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used,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

10.2.Test Procedure

The transmitter output is connected to a power meter.

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

10.3.Test Setup Layout





10.4. Test Result and Data

In the 5.2GHz Band

Modulation Type	Data Rate	Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)	Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A			
11a	6 Mbps	62	36	5180	16.06	16.06	40.365	24.00
11a	6 Mbps	74	40	5200	18.87	18.87	77.090	24.00
11a	6 Mbps	74	48	5240	18.69	18.69	73.961	24.00
11n HT20	MCS 0	60	36	5180	15.21	15.21	33.189	24.00
11n HT20	MCS 0	74	40	5200	18.59	18.59	72.277	24.00
11n HT20	MCS 0	74	48	5240	18.50	18.50	70.795	24.00
11n HT40	MCS 0	50	38	5190	12.87	12.87	19.364	24.00
11n HT40	MCS 0	72	46	5230	18.44	18.44	69.823	24.00
11ac VHT20	NSS1-MCS0	60	36	5180	15.26	15.26	33.574	24.00
11ac VHT20	NSS1-MCS0	74	40	5200	18.62	18.62	72.778	24.00
11ac VHT20	NSS1-MCS0	74	48	5240	18.53	18.53	71.285	24.00
11ac VHT40	NSS1-MCS0	50	38	5190	12.91	12.91	19.543	24.00
11ac VHT40	NSS1-MCS0	72	46	5230	18.48	18.48	70.469	24.00
11ac VHT80	NSS1-MCS0	42	42	5210	10.86	10.86	12.190	24.00



In the 5.3GHz Band

Modulation Type	Data Rate	Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)	Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A			
11a	6 Mbps	74	52	5260	18.81	18.81	76.033	24.00
11a	6 Mbps	74	60	5300	18.85	18.85	76.736	24.00
11a	6 Mbps	62	64	5320	16.10	16.10	40.738	24.00
11n HT20	MCS 0	74	52	5260	18.73	18.73	74.645	24.00
11n HT20	MCS 0	74	60	5300	18.65	18.65	73.282	24.00
11n HT20	MCS 0	61	64	5320	15.60	15.60	36.308	24.00
11n HT40	MCS 0	67	54	5270	17.11	17.11	51.404	24.00
11n HT40	MCS 0	49	62	5310	12.80	12.80	19.055	24.00
11ac VHT20	NSS1-MCS0	74	52	5260	18.76	18.76	75.162	24.00
11ac VHT20	NSS1-MCS0	74	60	5300	18.69	18.69	73.961	24.00
11ac VHT20	NSS1-MCS0	61	64	5320	15.63	15.63	36.559	24.00
11ac VHT40	NSS1-MCS0	67	54	5270	17.13	17.13	51.642	24.00
11ac VHT40	NSS1-MCS0	49	62	5310	12.84	12.84	19.231	24.00
11ac VHT80	NSS1-MCS0	43	58	5290	11.06	11.06	12.764	24.00



In the 5.5GHz Band

Modulation Type	Data Rate	Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)	Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A			
11a	6 Mbps	61	100	5500	14.65	14.65	29.174	24.00
11a	6 Mbps	74	116	5580	18.53	18.53	71.285	24.00
11a	6 Mbps	61	140	5700	15.04	15.04	31.915	24.00
11n HT20	MCS 0	64	100	5500	15.28	15.28	33.729	24.00
11n HT20	MCS 0	74	116	5580	18.52	18.52	71.121	24.00
11n HT20	MCS 0	60	140	5700	14.51	14.51	28.249	24.00
11n HT40	MCS 0	48	102	5510	11.51	11.51	14.158	24.00
11n HT40	MCS 0	74	110	5550	18.54	18.54	71.450	24.00
11n HT40	MCS 0	66	134	5670	16.31	16.31	42.756	24.00
11ac VHT20	NSS1-MCS0	64	100	5500	15.31	15.31	33.963	24.00
11ac VHT20	NSS1-MCS0	74	116	5580	18.57	18.57	71.945	24.00
11ac VHT20	NSS1-MCS0	60	140	5700	14.54	14.54	28.445	24.00
11ac VHT40	NSS1-MCS0	48	102	5510	11.53	11.53	14.223	24.00
11ac VHT40	NSS1-MCS0	74	110	5550	18.62	18.62	72.778	24.00
11ac VHT40	NSS1-MCS0	66	134	5670	16.34	16.34	43.053	24.00
11ac VHT80	NSS1-MCS0	42	106	5530	9.64	9.64	9.204	24.00
11ac VHT80	NSS1-MCS0	72	122	5610	17.96	17.96	62.517	24.00



FCC Maximum Conducted Output Power (Within 5470-5725MHz band)
RF Output Power(dBm)

Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)	W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
			ANT A					
11a	6M	5720	17.14	17.14	0.30	55.463	17.44	24.00
11n HT20	MCS0	5720	16.38	16.38	0.32	46.774	16.70	24.00
11n HT40	MCS0	5710	17.04	17.04	0.62	58.345	17.66	24.00
11ac VHT20	NSS1-MCS0	5720	16.59	16.59	0.32	49.091	16.91	24.00
11ac VHT40	NSS1-MCS0	5710	17.14	17.14	0.61	59.566	17.75	24.00
11ac VHT80	NSS1-MCS0	5690	17.09	17.09	1.15	66.681	18.24	24.00

FCC Maximum Conducted Output Power (Extends across 5725MHz band)
RF Output Power(dBm)

Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)	W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
			ANT A					
11a	6M	5720	9.88	9.88	0.30	10.423	10.18	30.00
11n HT20	MCS0	5720	9.64	9.64	0.32	9.908	9.96	30.00
11n HT40	MCS0	5710	5.93	5.93	0.62	4.519	6.55	30.00
11ac VHT20	NSS1-MCS0	5720	10.03	10.03	0.32	10.839	10.35	30.00
11ac VHT40	NSS1-MCS0	5710	6.07	6.07	0.61	4.656	6.68	30.00
11ac VHT80	NSS1-MCS0	5690	2.51	2.51	1.15	2.323	3.66	30.00

Reference Power Meter

Modulation Type	Data Rate	Setting	Channel	Avg Power Output (dBm)	Total Power
				ANT A	(dBm)
Meter power (for full power)					
11a	6 Mbps	74	Ch144	18.63	18.63
11n HT20	MCS 0	74	Ch144	18.52	18.52
11n HT40	MCS 0	72	Ch142	18.48	18.48
11ac VHT20	NSS1-MCS0	74	Ch144	18.54	18.54
11ac VHT40	NSS1-MCS0	72	Ch142	18.51	18.51
11ac VHT80	NSS1-MCS0	74	Ch138	18.59	18.59

*For Power Meter reference only

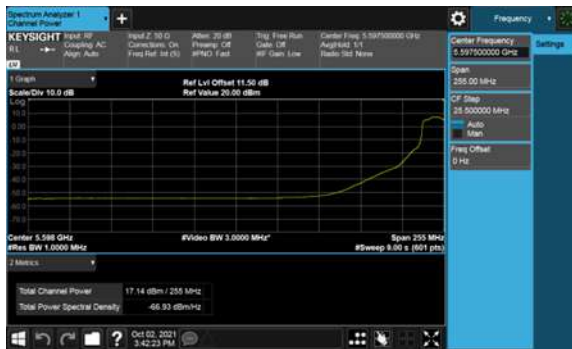


In the 5.8GHz Band

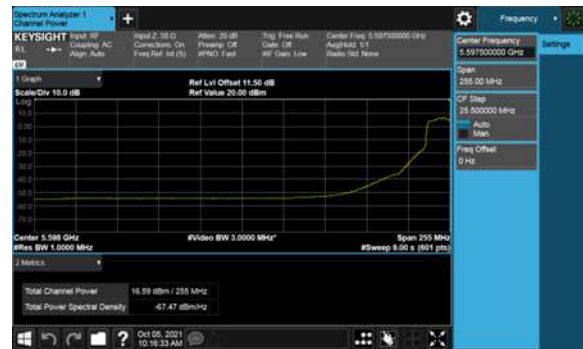
Modulation Type	Data Rate	Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)	Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A			
11a	6 Mbps	76	149	5745	18.90	18.90	77.625	30.00
11a	6 Mbps	77	157	5785	18.96	18.96	78.705	30.00
11a	6 Mbps	77	165	5825	18.92	18.92	77.983	30.00
11n HT20	MCS 0	76	149	5745	18.76	18.76	75.162	30.00
11n HT20	MCS 0	76	157	5785	18.73	18.73	74.645	30.00
11n HT20	MCS 0	77	165	5825	18.75	18.75	74.989	30.00
11n HT40	MCS 0	74	151	5755	18.88	18.88	77.268	30.00
11n HT40	MCS 0	74	159	5795	18.71	18.71	74.302	30.00
11ac VHT20	NSS1-MCS0	76	149	5745	18.79	18.79	75.683	30.00
11ac VHT20	NSS1-MCS0	76	157	5785	18.76	18.76	75.162	30.00
11ac VHT20	NSS1-MCS0	77	165	5825	18.78	18.78	75.509	30.00
11ac VHT40	NSS1-MCS0	74	151	5755	18.91	18.91	77.804	30.00
11ac VHT40	NSS1-MCS0	74	159	5795	18.74	18.74	74.817	30.00
11ac VHT80	NSS1-MCS0	76	155	5775	18.73	18.73	74.645	30.00



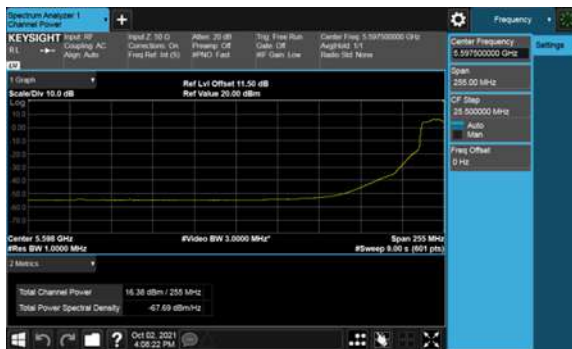
Within 5470-5725MHz Band, Straddle Channel
Modulation Type: 802.11a (6Mbps)
CH144



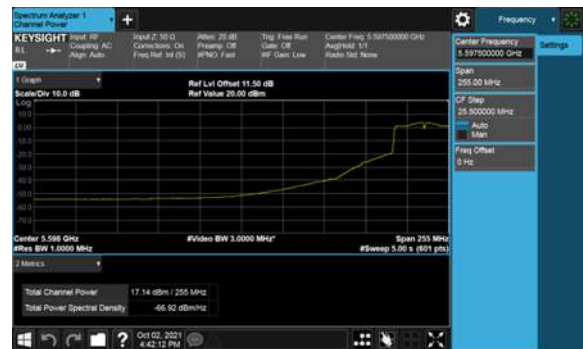
Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



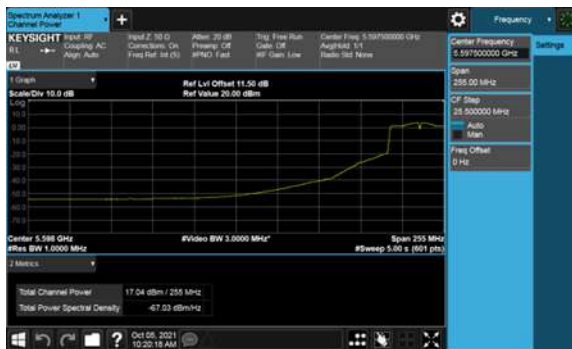
Modulation Type: 802.11n HT20 (6.5Mbps)
CH144



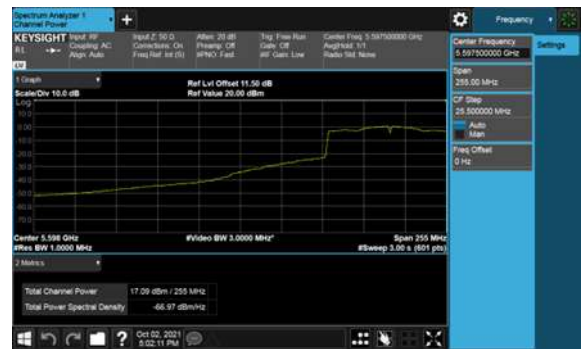
Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142



Modulation Type: 802.11n HT40 (13.5Mbps)
CH142

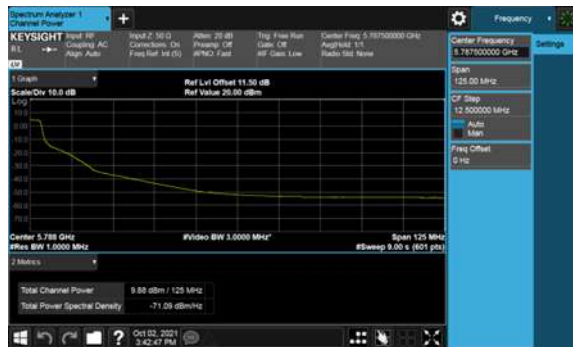


Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138

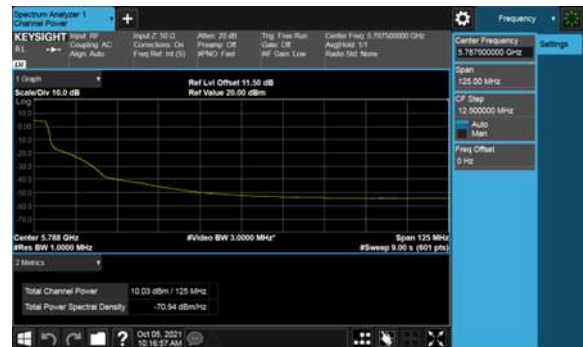




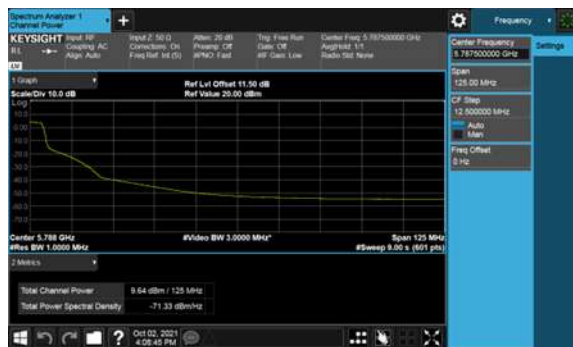
Extends across 5725MHz band, Straddle Channel
Modulation Type: 802.11a (6Mbps)
CH144



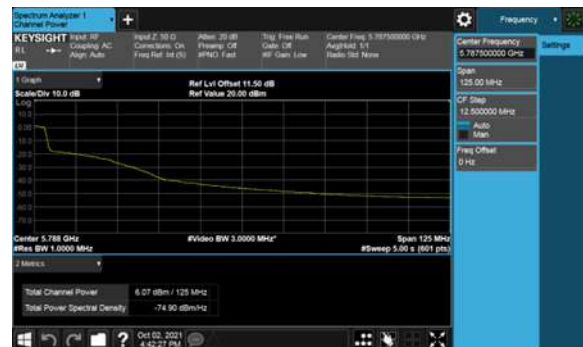
Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



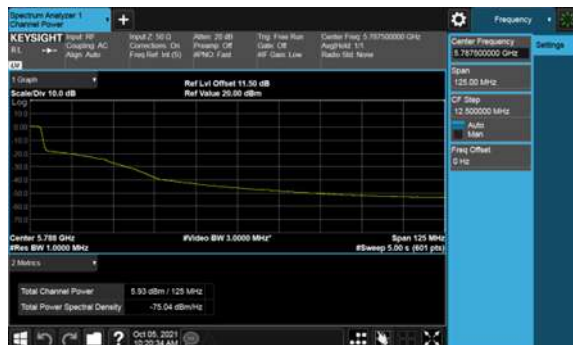
Modulation Type: 802.11n HT20 (6.5Mbps)
CH144



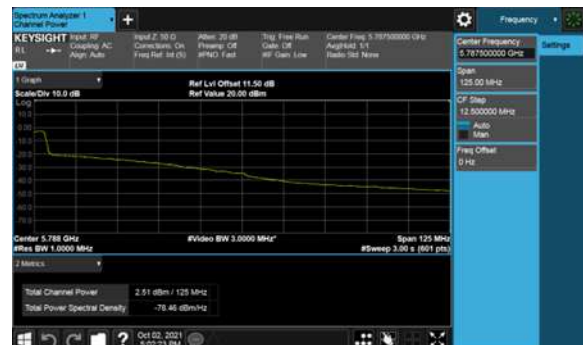
Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142



Modulation Type: 802.11n HT40 (13.5Mbps)
CH142



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138





11. Power Spectral Density

11.1. Test Limit

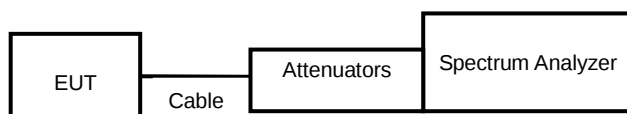
PSD:

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

11.2. Test Procedure

Reference to KDB789033 D02 General UNII Test Procedures New Rules v02r01

11.3. Test Setup Layout





11.4. Test Result and Data

In the 5.2G Band

Modulation Type	Channel	Frequency (MHz)	Meas PSD (dBm/MHz)	Sum chain (dBm)	Duty Cycle CF(dB)	Total Corr'd PSD (dBm/MHz)	PSD Limit (dBm/MHz)
			ANT A				
11a	36	5180	4.77	4.77	0.30	5.07	11.00
11a	40	5200	7.61	7.61	0.30	7.91	11.00
11a	48	5240	7.71	7.71	0.30	8.01	11.00
11ac VHT20	36	5180	3.29	3.29	0.32	3.61	11.00
11ac VHT20	40	5200	6.56	6.56	0.32	6.88	11.00
11ac VHT20	48	5240	6.74	6.74	0.32	7.06	11.00
11ac VHT40	38	5190	-1.96	-1.96	0.61	-1.35	11.00
11ac VHT40	46	5230	3.73	3.73	0.61	4.34	11.00
11ac VHT80	42	5210	-7.25	-7.25	1.15	-6.10	11.00



In the 5.3G Band

Modulation Type	Channel	Frequency (MHz)	Meas PSD (dBm/MHz)	Sum chain (dBm)	Duty Cycle CF(dB)	Total Corr'd PSD (dBm/MHz)	PSD Limit (dBm/MHz)
			ANT A				
11a	52	5260	7.92	7.92	0.30	8.22	11.00
11a	60	5300	7.94	7.94	0.30	8.24	11.00
11a	64	5320	5.22	5.22	0.30	5.52	11.00
11ac VHT20	52	5260	6.99	6.99	0.32	7.31	11.00
11ac VHT20	60	5300	7.19	7.19	0.32	7.51	11.00
11ac VHT20	64	5320	3.92	3.92	0.32	4.24	11.00
11ac VHT40	54	5270	2.82	2.82	0.61	3.43	11.00
11ac VHT40	62	5310	-1.57	-1.57	0.61	-0.96	11.00
11ac VHT80	58	5290	-6.84	-6.84	1.15	-5.69	11.00



In the 5.5G Band

Modulation Type	Channel (MHz)	Frequency (MHz)	Meas PSD (dBm/MHz)	Sum chain (dBm)	Duty Cycle CF(dB)	Total Corr'd PSD (dBm/MHz)	PSD Limit (dBm/MHz)
			ANT A				
11a	100	5500	3.32	3.32	0.30	3.62	11.00
11a	116	5580	7.07	7.07	0.30	7.37	11.00
11a	140	5700	4.46	4.46	0.30	4.76	11.00
11a	144	5720	7.35	7.35	0.30	7.65	11.00
11ac VHT20	100	5500	3.16	3.16	0.32	3.48	11.00
11ac VHT20	116	5580	6.60	6.60	0.32	6.92	11.00
11ac VHT20	140	5700	3.16	3.16	0.32	3.48	11.00
11ac VHT20	144	5720	6.43	6.43	0.32	6.75	11.00
11ac VHT40	102	5510	-3.43	-3.43	0.61	-2.82	11.00
11ac VHT40	110	5550	3.33	3.81	0.61	3.94	11.00
11ac VHT40	134	5670	2.28	2.28	0.61	2.89	11.00
11ac VHT40	142	5710	3.72	3.72	0.61	4.33	11.00
11ac VHT80	106	5530	-8.40	-8.40	1.15	-7.25	11.00
11ac VHT80	122	5610	-0.35	-0.35	1.15	0.80	11.00
11ac VHT80	138	5690	0.70	0.70	1.15	1.85	11.00



In the 5.8G Band

Modulation Type	Channel (MHz)	Frequency (MHz)	Meas PSD (dBm/MHz)	Sum chain (dBm)	Duty Cycle CF(dB)	10log(500KHz/RBW) CF (dB)	Total Corr'd PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)
			ANT A					
11a	149	5745	7.96	7.96	0.30	-3.01	5.25	30.00
11a	157	5785	7.83	7.83	0.30	-3.01	5.12	30.00
11a	165	5825	7.60	7.60	0.30	-3.01	4.89	30.00
11ac VHT20	149	5745	7.13	7.13	0.32	-3.01	4.44	30.00
11ac VHT20	157	5785	6.67	6.67	0.32	-3.01	3.98	30.00
11ac VHT20	165	5825	6.60	6.60	0.32	-3.01	3.91	30.00
11ac VHT40	151	5755	4.31	4.31	0.61	-3.01	1.91	30.00
11ac VHT40	159	5795	3.92	3.92	0.61	-3.01	1.52	30.00
11ac VHT80	155	5775	0.82	0.82	1.15	-3.01	-1.04	30.00



Modulation Type: 802.11a (6Mbps)

CH36



Modulation Type: 802.11ac VHT20 (6.5Mbps)

CH36



CH40



CH40



CH48



CH48





Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42



CH46





Modulation Type: 802.11a (6Mbps)
CH52



802.11ac VHT20 (6.5Mbps)
CH52



CH60



CH60



CH64



CH64





Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH54



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH58



CH62





Modulation Type: 802.11a (6Mbps)
CH100



802.11ac VHT20 (6.5Mbps)
CH100



CH116



CH116



CH140



CH140





Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH102



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH106



CH110



CH122



CH134





Straddle Channel
Modulation Type: 802.11a (6Mbps)
CH144



Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138





Modulation Type: 802.11a (6Mbps)

CH149



Modulation Type: 802.11ac VHT20 (6.5Mbps)

CH149



CH157



CH157



CH165



CH165





Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH151



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH155



CH159

