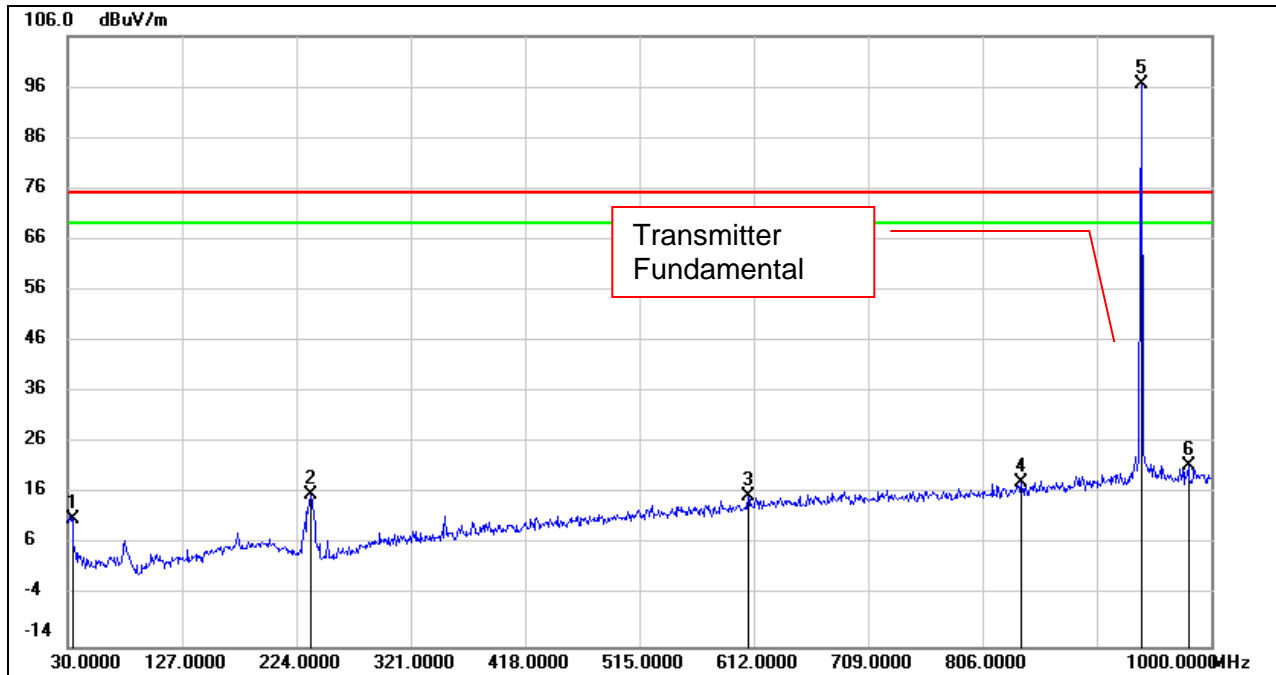


Measurement Method	Radiated	Test Channel	940.5 MHz
Channel Separation	12.5 kHz	Modulation	Analog
Polar	Horizontal		

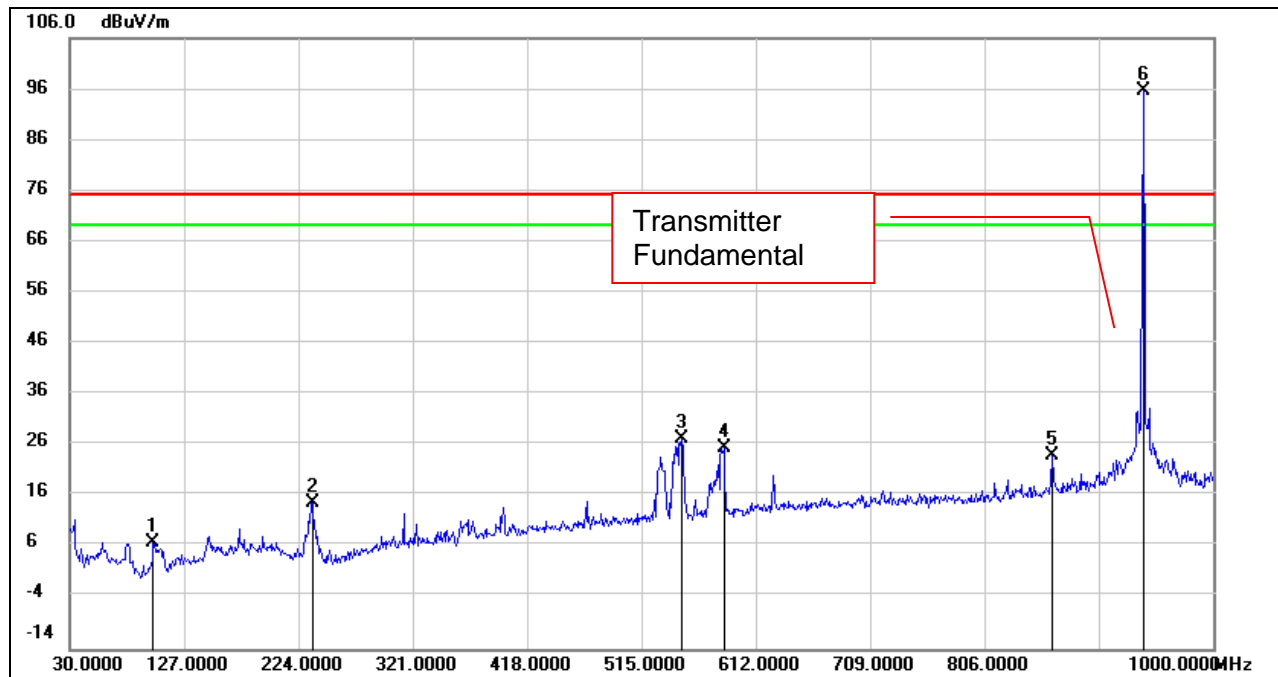


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	33.8800	30.34	-19.31	11.03	75.20	-64.17	peak
2	236.6100	34.90	-19.01	15.89	75.20	-59.31	peak
3	607.1500	25.07	-9.45	15.62	75.20	-59.58	peak
4	838.9800	24.72	-6.49	18.23	75.20	-56.97	peak
5	940.8300	/	/	/	/	/	/
6	980.6000	25.98	-4.34	21.64	75.20	-53.56	peak

Note: 1. Limit (dBuV/m) =  $-20 + 95.2 = 75.2$  dBuV/m  
2. Margin = Limit – Result



Measurement Method	Radiated	Test Channel	940.5 MHz
Channel Separation	12.5 kHz	Modulation	Analog
Polar	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	100.8100	27.84	-21.08	6.76	75.20	-68.44	peak
2	235.6400	33.54	-18.96	14.58	75.20	-60.62	peak
3	548.9500	37.72	-10.49	27.23	75.20	-47.97	peak
4	584.8400	35.48	-9.91	25.57	75.20	-49.63	peak
5	863.2300	29.93	-5.92	24.01	75.20	-51.19	peak
6	940.8300	/	/	/	/	/	/

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result

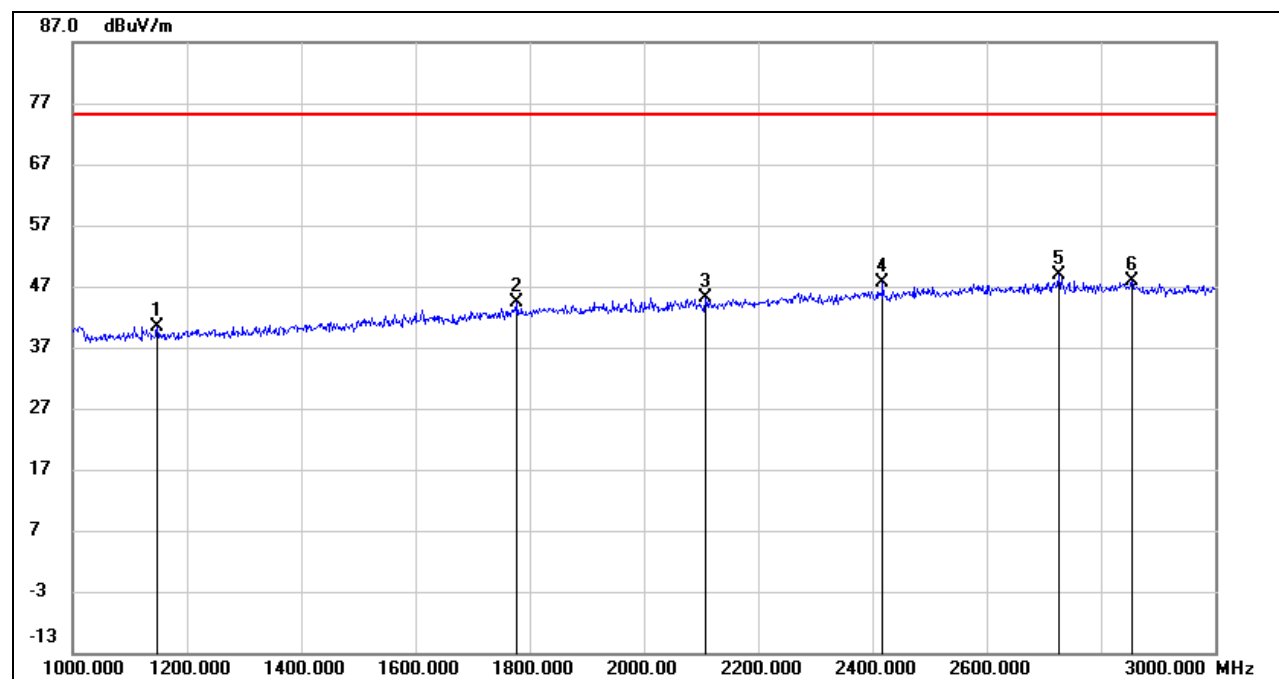
Note: All the modes had been tested, but only the worst data recorded in the report.

## RESULT – ABOVE 1 GHz

For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (Y axis) data recorded in the report.

Note, both battery PMNN4809A and PMNN4810 were tested with radio, only the worst data (PMNN4809A) was recorded in the report.

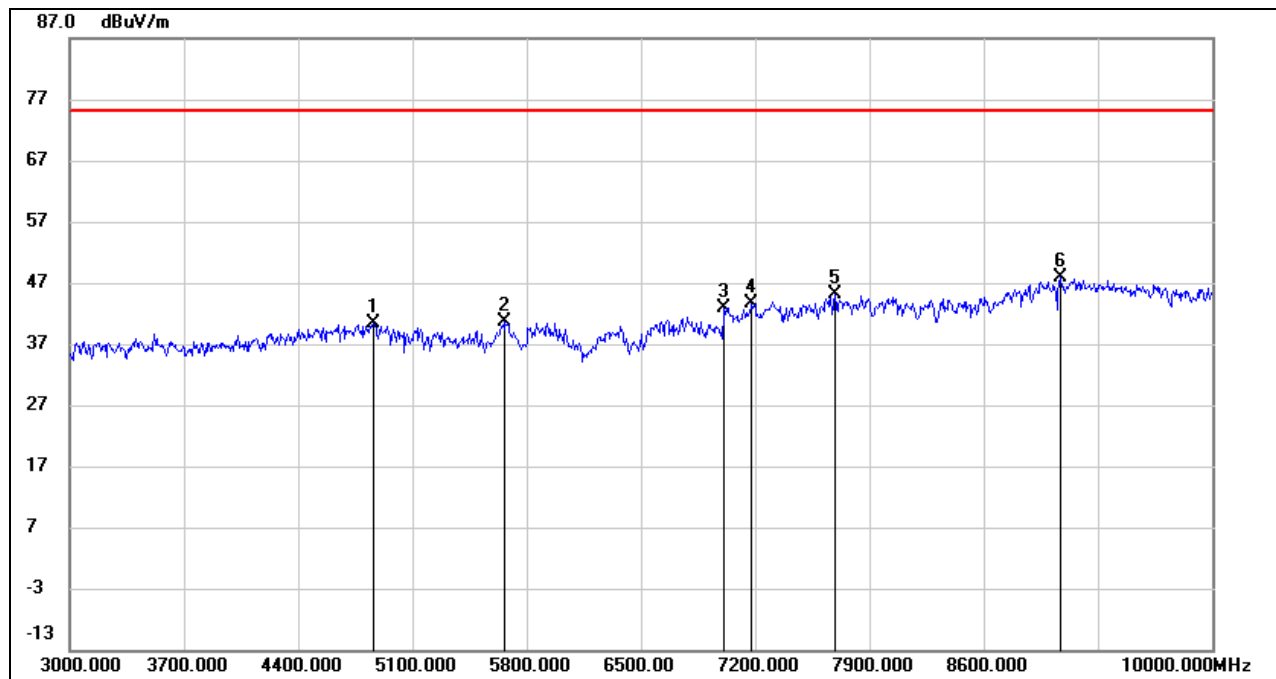
Measurement Method	Radiated	Test Channel	806.0125 MHz
Channel Separation	12.5 kHz	Modulation	Digital
Polar	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1148.000	13.04	27.38	40.42	75.20	-34.78	peak
2	1778.000	14.18	30.15	44.33	75.20	-30.87	peak
3	2108.000	13.92	31.31	45.23	75.20	-29.97	peak
4	2418.000	15.42	32.25	47.67	75.20	-27.53	peak
5	2726.000	15.97	32.93	48.90	75.20	-26.30	peak
6	2854.000	14.69	33.18	47.87	75.20	-27.33	peak

Note: 1. Limit (dBuV/m) = -20+95.2 = 75.2 dBuV/m

2. Margin = Limit – Result



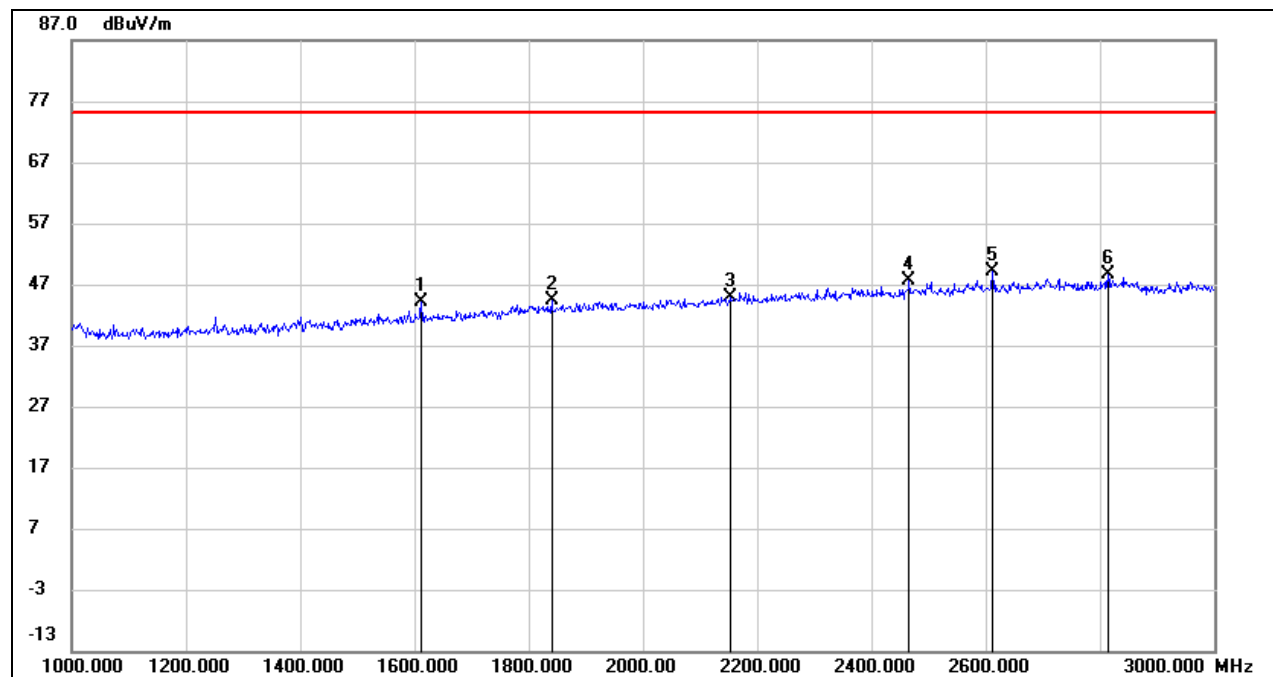
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4862.000	40.56	-0.08	40.48	75.20	-34.72	peak
2	5667.000	39.42	1.32	40.74	75.20	-34.46	peak
3	7011.000	36.29	6.68	42.97	75.20	-32.23	peak
4	7179.000	37.01	6.55	43.56	75.20	-31.64	peak
5	7690.000	38.81	6.32	45.13	75.20	-30.07	peak
6	9069.000	37.44	10.51	47.95	75.20	-27.25	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



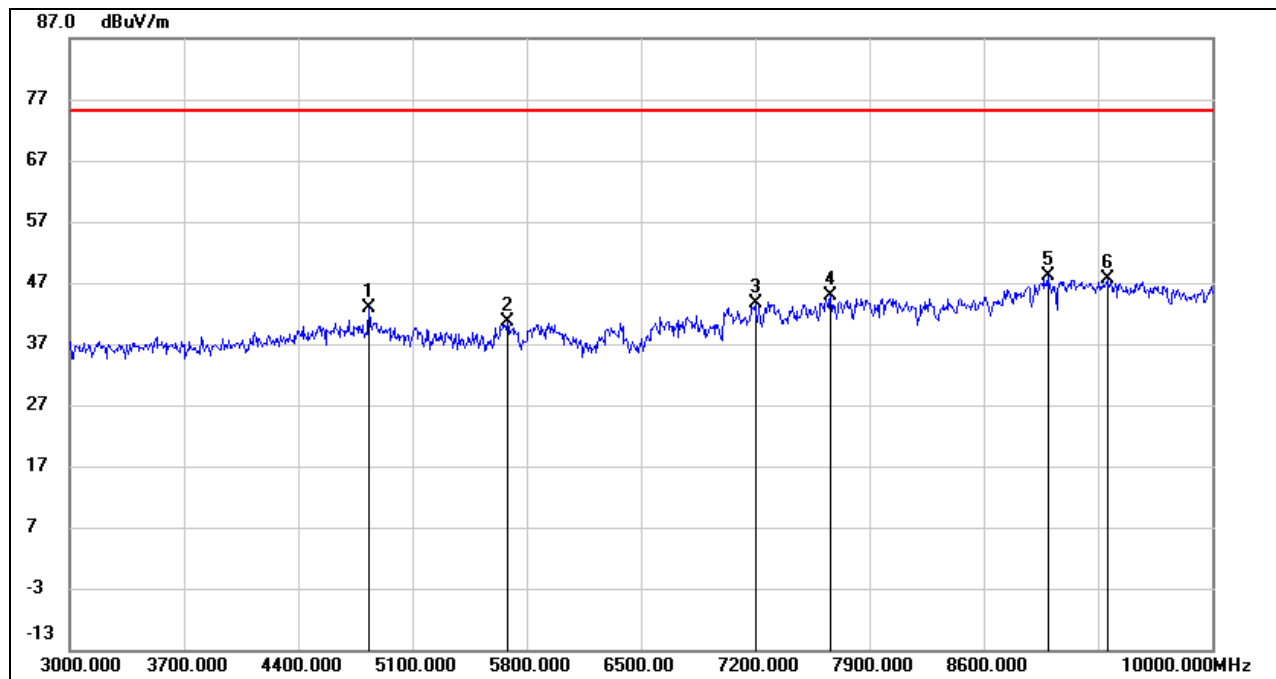
Measurement Method	Radiated	Test Channel	806.0125 MHz
Channel Separation	12.5 kHz	Modulation	Digital
Polar	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1612.000	14.68	29.52	44.20	75.20	-31.00	peak
2	1840.000	14.10	30.39	44.49	75.20	-30.71	peak
3	2154.000	13.48	31.45	44.93	75.20	-30.27	peak
4	2466.000	15.27	32.39	47.66	75.20	-27.54	peak
5	2612.000	16.43	32.71	49.14	75.20	-26.06	peak
6	2814.000	15.52	33.10	48.62	75.20	-26.58	peak

Note: 1. Limit (dBuV/m) = -20+95.2 = 75.2 dBuV/m

2. Margin = Limit – Result



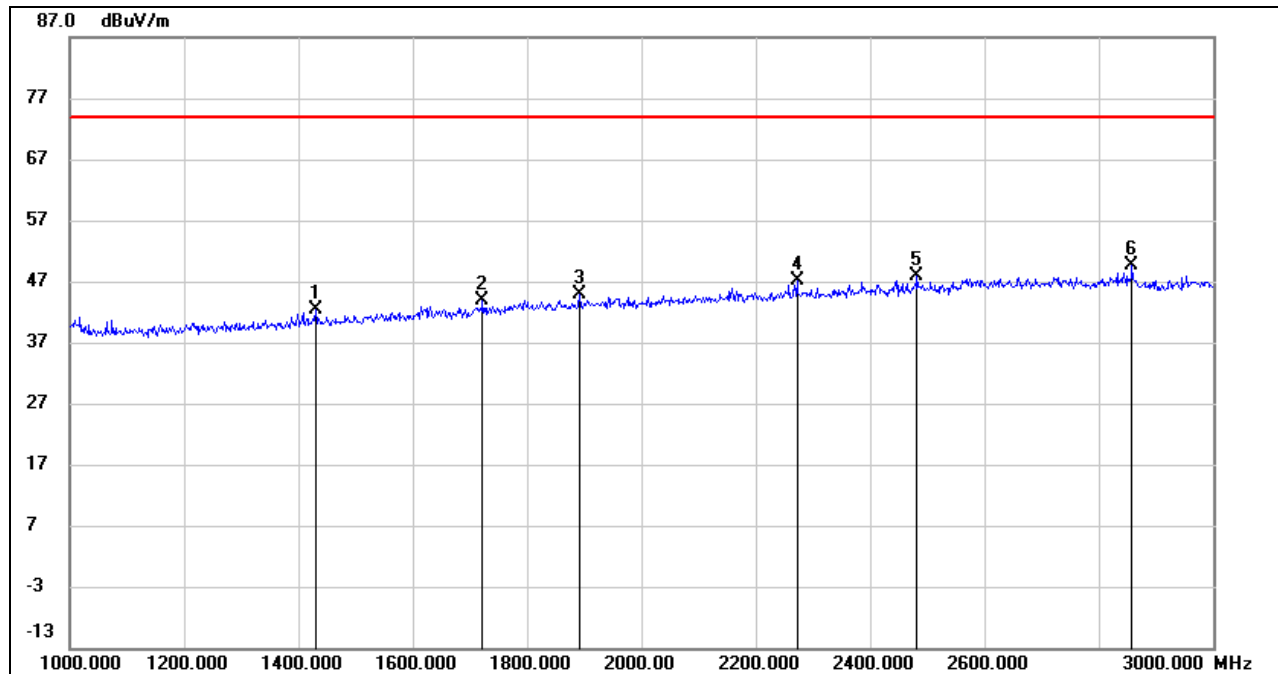
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4834.000	43.00	-0.19	42.81	75.20	-32.39	peak
2	5681.000	39.36	1.36	40.72	75.20	-34.48	peak
3	7200.000	37.06	6.55	43.61	75.20	-31.59	peak
4	7662.000	38.44	6.32	44.76	75.20	-30.44	peak
5	8992.000	37.78	10.42	48.20	75.20	-27.00	peak
6	9356.000	37.10	10.63	47.73	75.20	-27.47	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



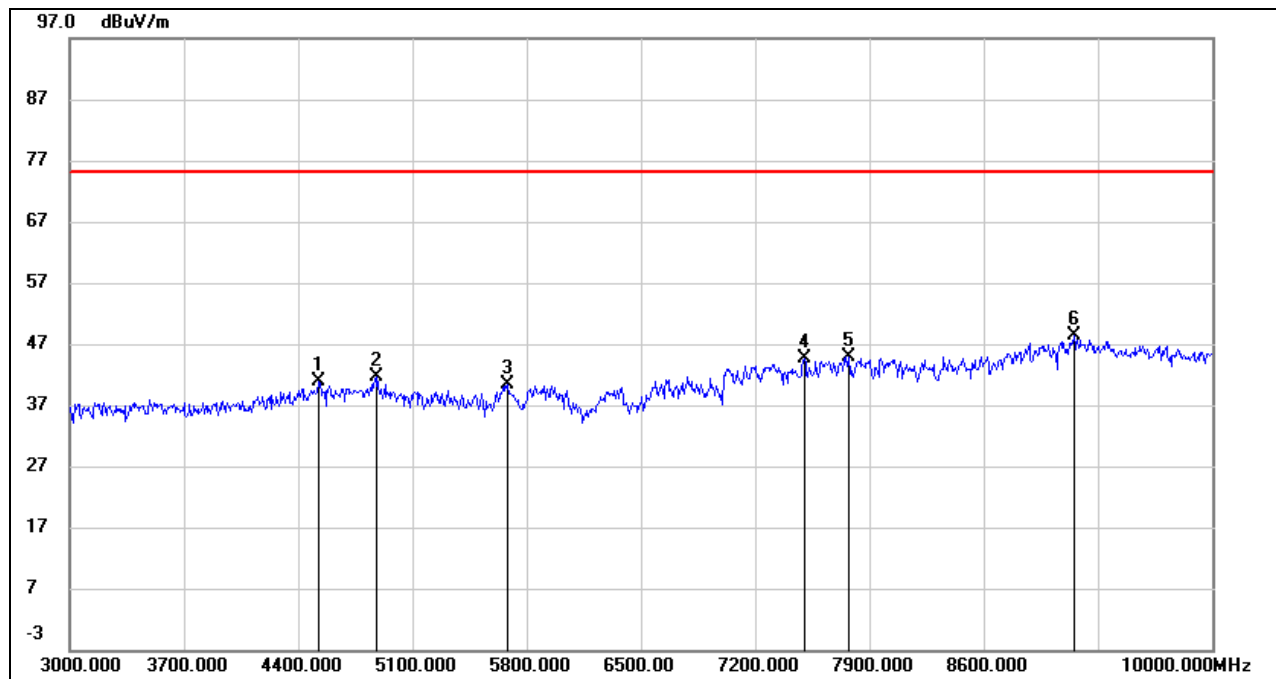
Measurement Method	Radiated	Test Channel	814.9875 MHz
Channel Separation	12.5 kHz	Modulation	Digital
Polar	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1430.000	13.52	28.75	42.27	74.00	-31.73	peak
2	1722.000	13.92	29.93	43.85	74.00	-30.15	peak
3	1892.000	14.30	30.58	44.88	74.00	-29.12	peak
4	2272.000	15.44	31.81	47.25	74.00	-26.75	peak
5	2482.000	15.37	32.43	47.80	74.00	-26.20	peak
6	2858.000	16.33	33.18	49.51	74.00	-24.49	peak

Note: 1. Limit (dBuV/m) = -20+95.2 = 75.2 dBuV/m

2. Margin = Limit – Result



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4526.000	42.30	-1.36	40.94	75.20	-34.26	peak
2	4883.000	41.59	0.01	41.60	75.20	-33.60	peak
3	5681.000	38.94	1.36	40.30	75.20	-34.90	peak
4	7501.000	38.23	6.33	44.56	75.20	-30.64	peak
5	7774.000	38.58	6.31	44.89	75.20	-30.31	peak
6	9153.000	37.78	10.54	48.32	75.20	-26.88	peak

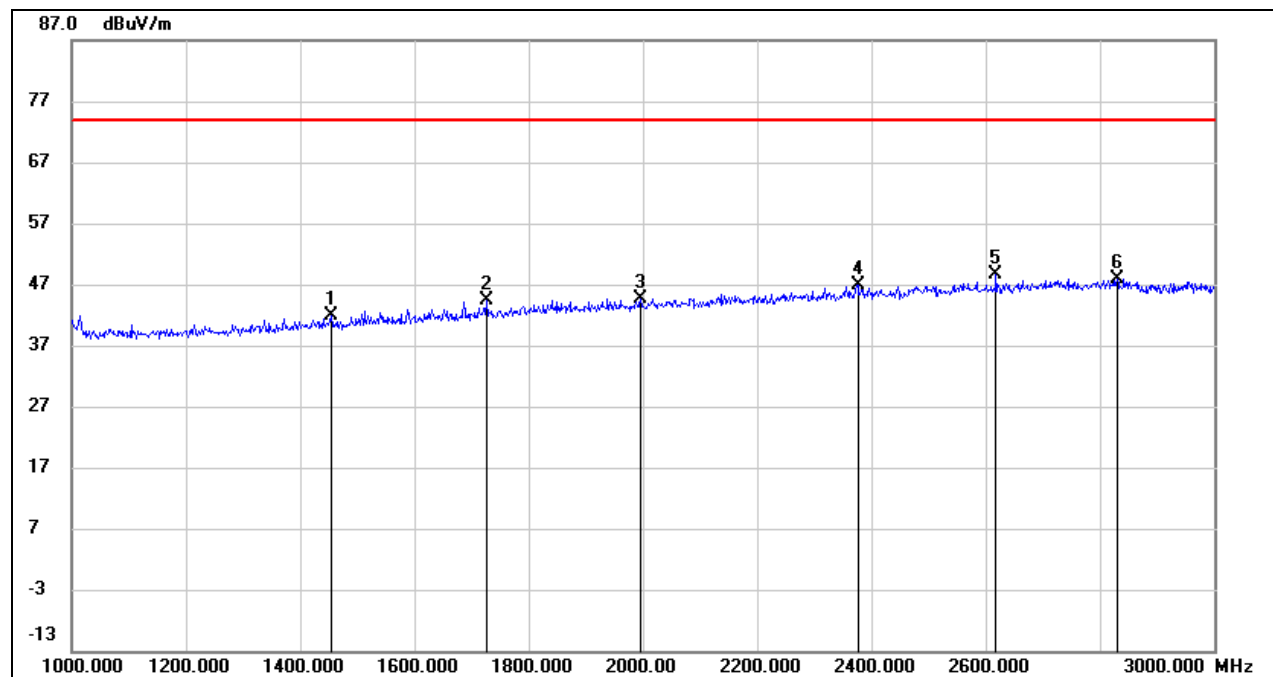
Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result





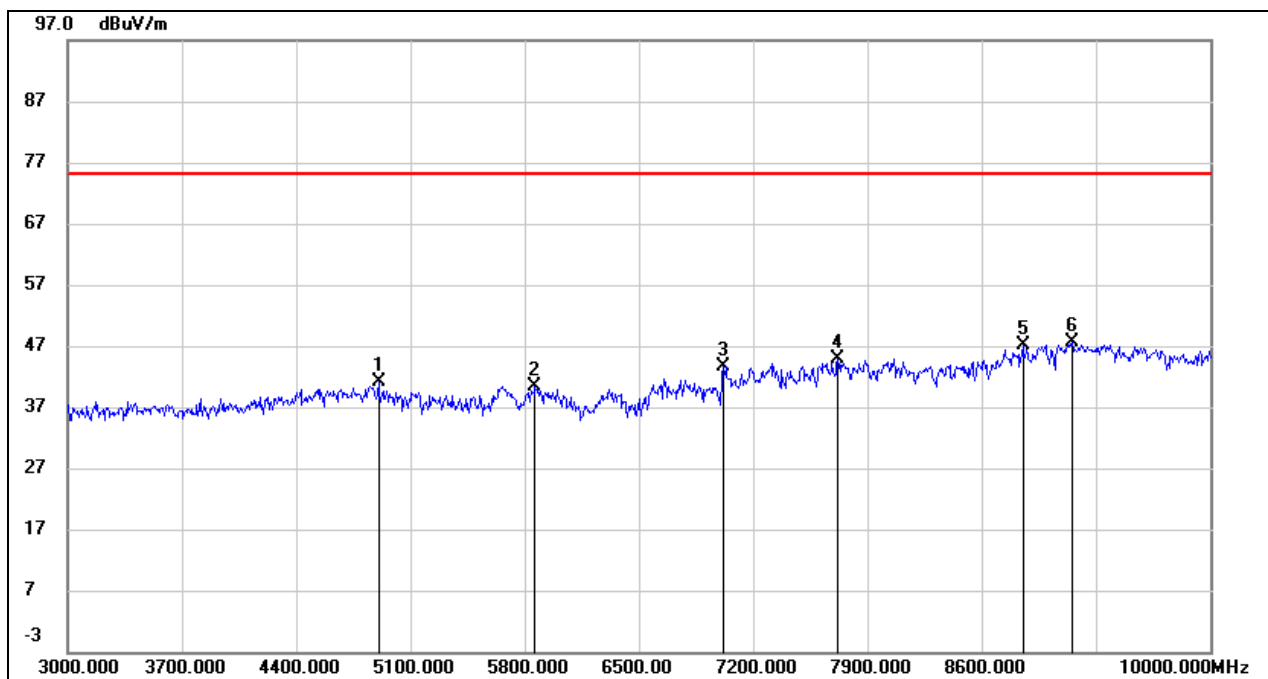
Measurement Method	Radiated	Test Channel	814.9875 MHz
Channel Separation	12.5 kHz	Modulation	Digital
Polar	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1454.000	12.92	28.86	41.78	74.00	-32.22	peak
2	1726.000	14.36	29.95	44.31	74.00	-29.69	peak
3	1996.000	13.62	30.97	44.59	74.00	-29.41	peak
4	2376.000	14.68	32.12	46.80	74.00	-27.20	peak
5	2618.000	15.86	32.72	48.58	74.00	-25.42	peak
6	2830.000	14.82	33.13	47.95	74.00	-26.05	peak

Note: 1. Limit (dBuV/m) = -20+95.2 = 75.2 dBuV/m

2. Margin = Limit – Result



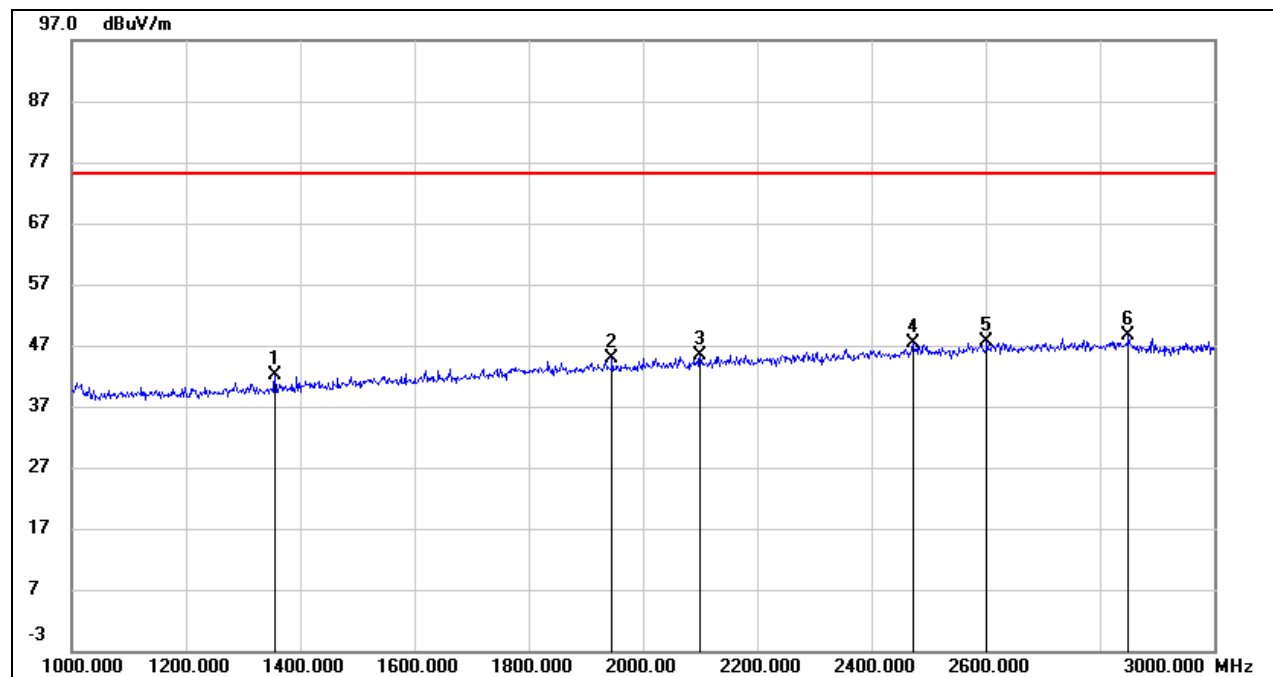
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4904.000	41.12	0.08	41.20	75.20	-34.00	peak
2	5863.000	38.55	1.87	40.42	75.20	-34.78	peak
3	7018.000	36.93	6.68	43.61	75.20	-31.59	peak
4	7718.000	38.68	6.32	45.00	75.20	-30.20	peak
5	8852.000	37.62	9.40	47.02	75.20	-28.18	peak
6	9153.000	37.01	10.54	47.55	75.20	-27.65	peak

Note: 1. Limit (dBuV/m) = -20+95.2 = 75.2 dBuV/m

2. Margin = Limit – Result



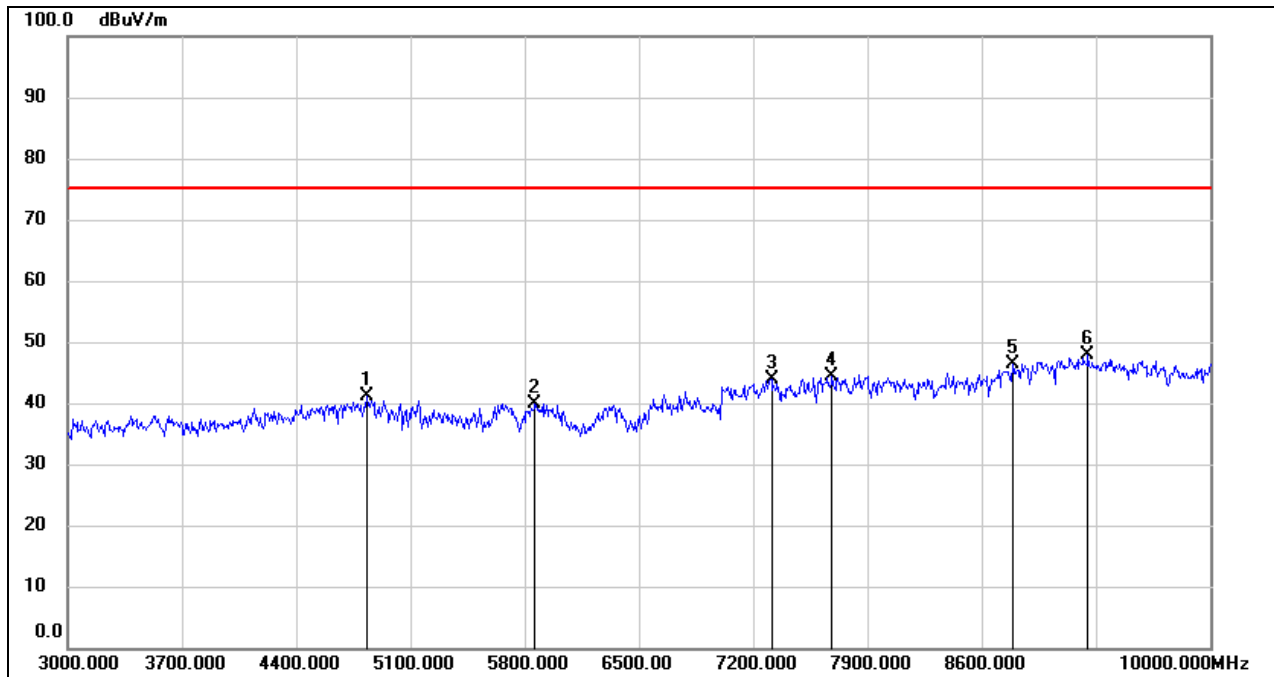
Measurement Method	Radiated	Test Channel	823.9875 MHz
Channel Separation	12.5 kHz	Modulation	Digital
Polar	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1356.000	13.62	28.39	42.01	75.20	-33.19	peak
2	1946.000	14.01	30.78	44.79	75.20	-30.41	peak
3	2100.000	14.06	31.29	45.35	75.20	-29.85	peak
4	2472.000	14.97	32.41	47.38	75.20	-27.82	peak
5	2602.000	14.96	32.68	47.64	75.20	-27.56	peak
6	2850.000	15.56	33.17	48.73	75.20	-26.47	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



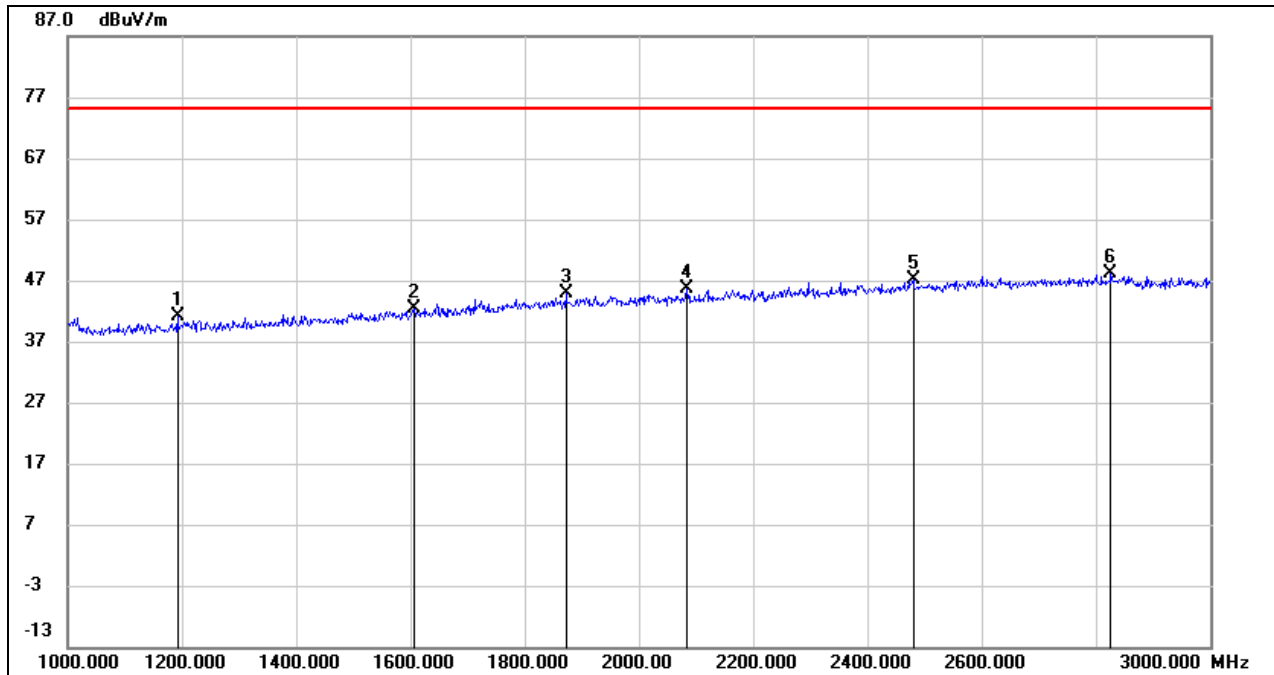
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4834.000	41.23	-0.19	41.04	75.20	-34.16	peak
2	5863.000	38.05	1.87	39.92	75.20	-35.28	peak
3	7312.000	37.49	6.46	43.95	75.20	-31.25	peak
4	7683.000	38.01	6.32	44.33	75.20	-30.87	peak
5	8789.000	37.50	8.95	46.45	75.20	-28.75	peak
6	9251.000	37.25	10.58	47.83	75.20	-27.37	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



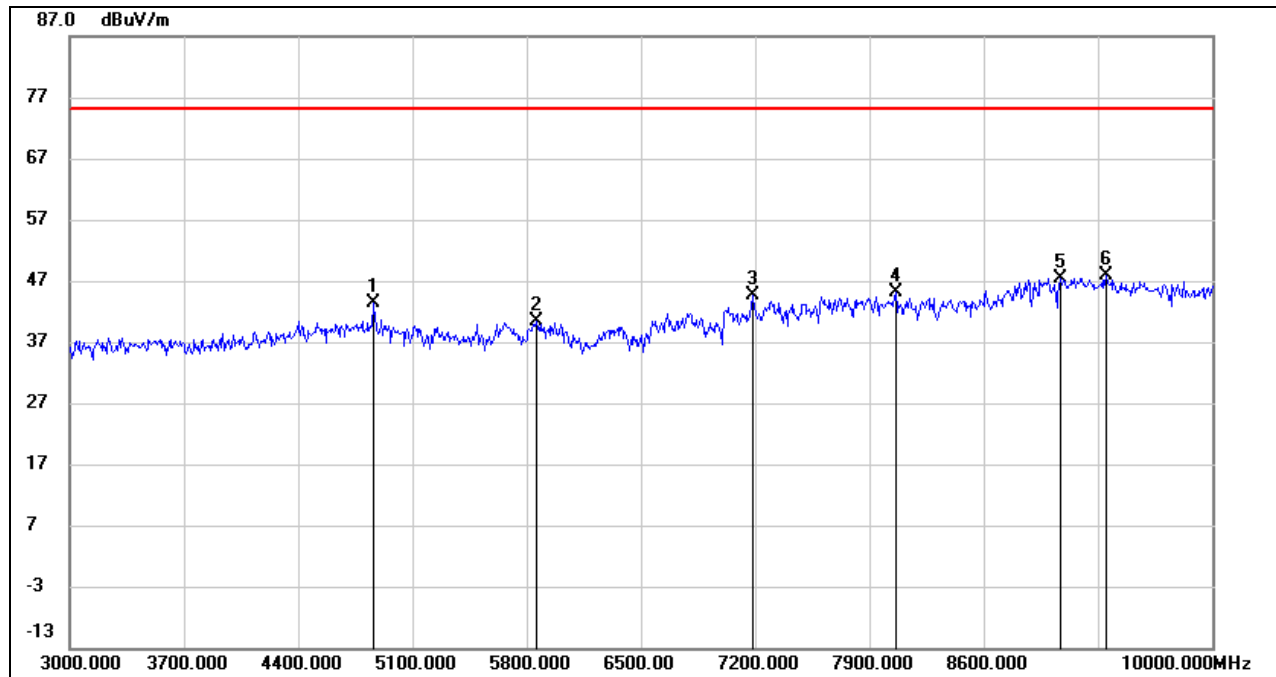
Measurement Method	Radiated	Test Channel	823.9875 MHz
Channel Separation	12.5 kHz	Modulation	Digital
Polar	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1192.000	13.49	27.59	41.08	75.20	-34.12	peak
2	1606.000	12.94	29.49	42.43	75.20	-32.77	peak
3	1872.000	14.39	30.50	44.89	75.20	-30.31	peak
4	2084.000	14.31	31.24	45.55	75.20	-29.65	peak
5	2480.000	14.64	32.43	47.07	75.20	-28.13	peak
6	2826.000	15.10	33.13	48.23	75.20	-26.97	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



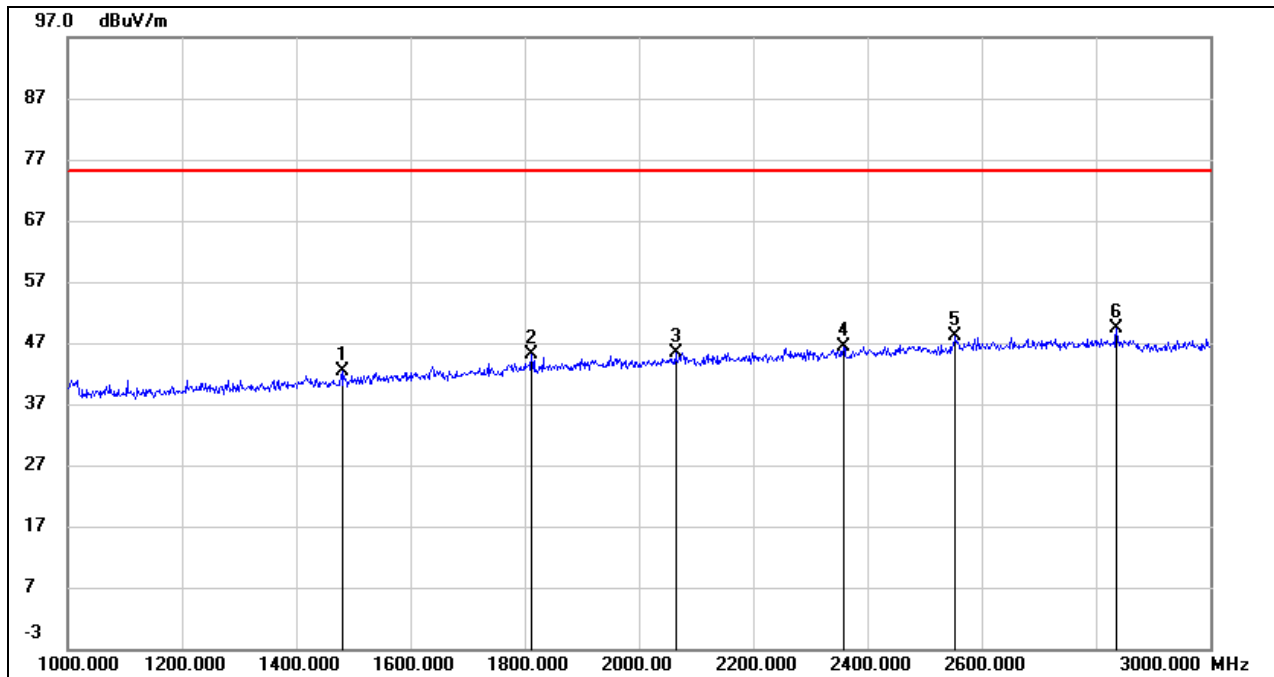
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4862.000	43.41	-0.08	43.33	75.20	-31.87	peak
2	5863.000	38.53	1.87	40.40	75.20	-34.80	peak
3	7186.000	38.07	6.55	44.62	75.20	-30.58	peak
4	8061.000	38.78	6.38	45.16	75.20	-30.04	peak
5	9069.000	36.91	10.51	47.42	75.20	-27.78	peak
6	9349.000	37.33	10.63	47.96	75.20	-27.24	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



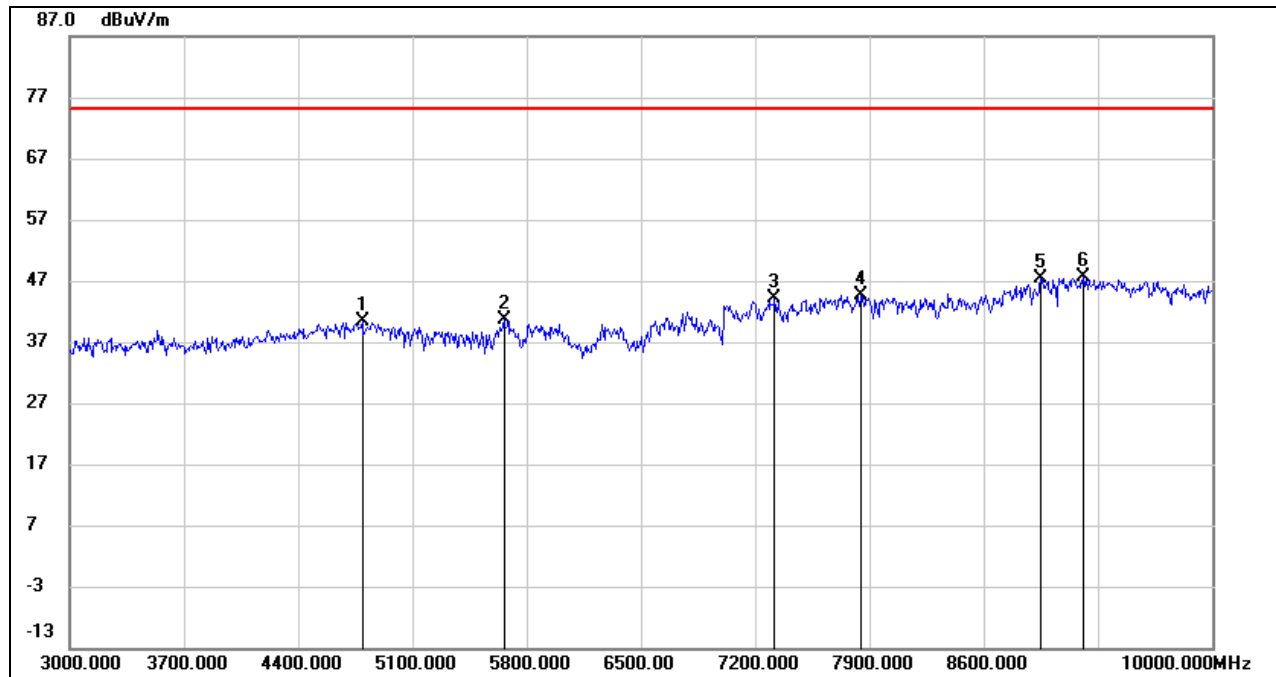
Measurement Method	Radiated	Test Channel	851.0125 MHz
Channel Separation	12.5 kHz	Modulation	Digital
Polar	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1482.000	13.33	29.00	42.33	75.20	-32.87	peak
2	1812.000	14.78	30.28	45.06	75.20	-30.14	peak
3	2064.000	14.24	31.19	45.43	75.20	-29.77	peak
4	2358.000	14.29	32.06	46.35	75.20	-28.85	peak
5	2554.000	15.55	32.60	48.15	75.20	-27.05	peak
6	2836.000	16.24	33.14	49.38	75.20	-25.82	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4792.000	40.82	-0.35	40.47	75.20	-34.73	peak
2	5660.000	39.29	1.30	40.59	75.20	-34.61	peak
3	7319.000	37.67	6.46	44.13	75.20	-31.07	peak
4	7844.000	38.41	6.32	44.73	75.20	-30.47	peak
5	8950.000	37.34	10.12	47.46	75.20	-27.74	peak
6	9209.000	37.04	10.56	47.60	75.20	-27.60	peak

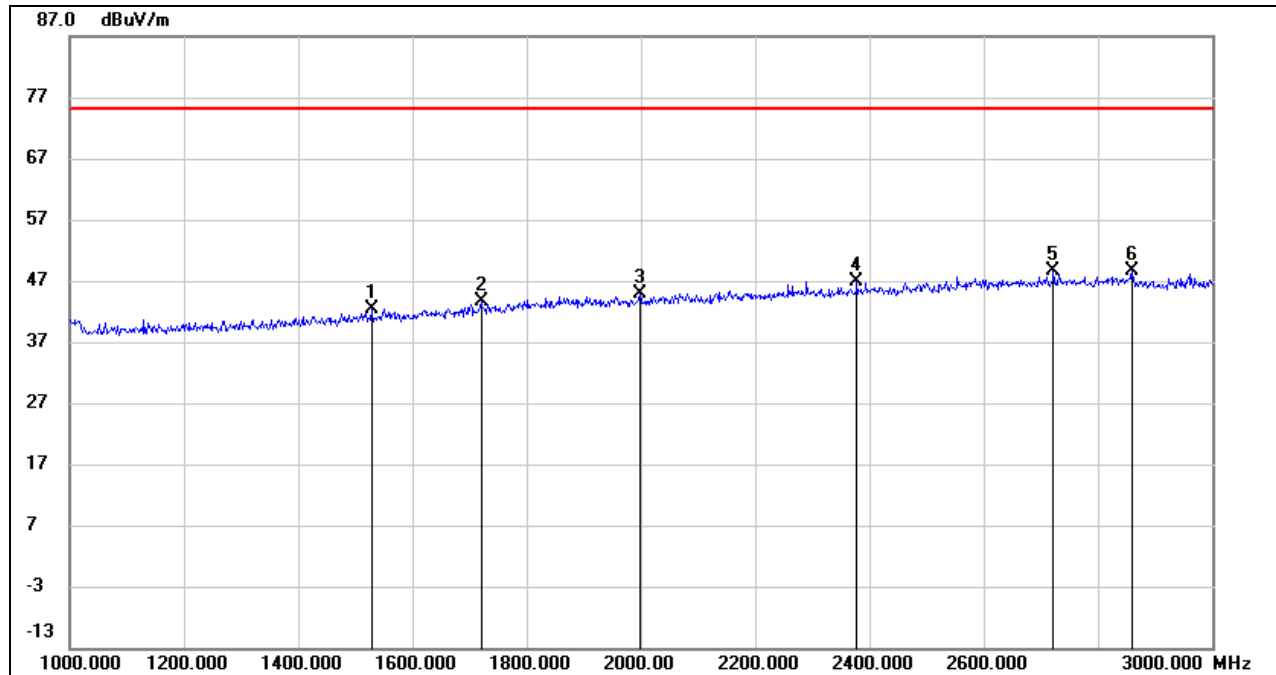
Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result





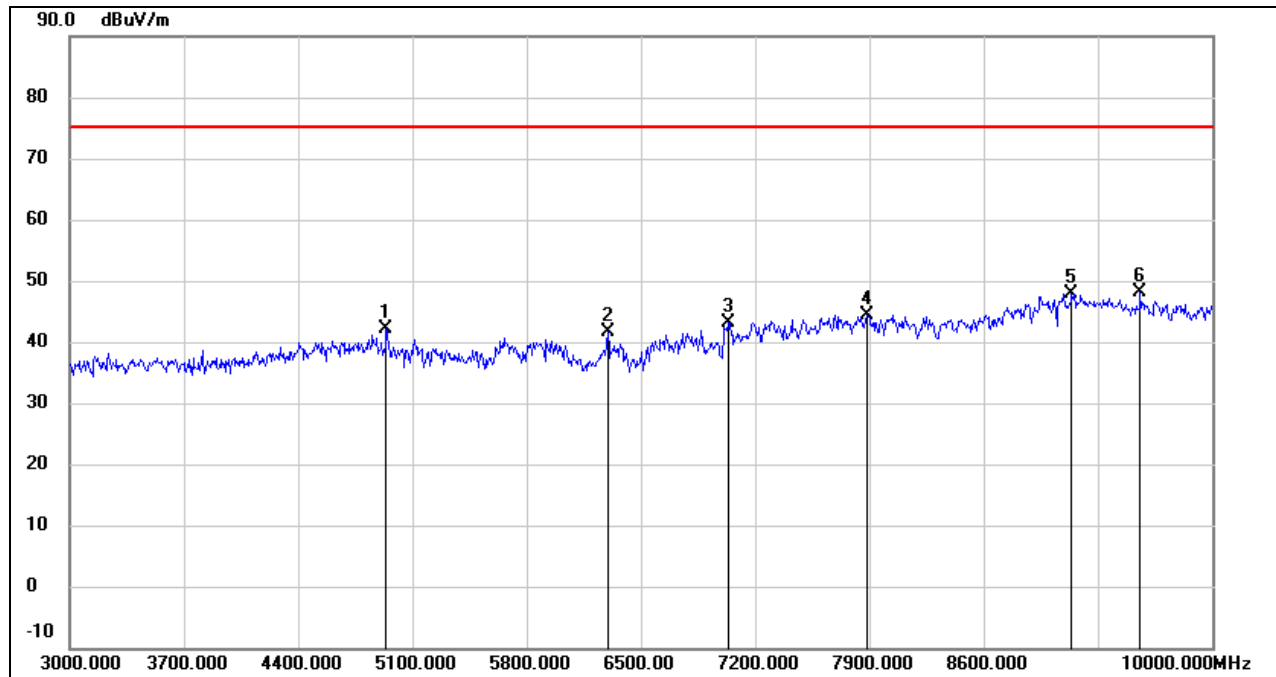
Measurement Method	Radiated	Test Channel	851.0125 MHz
Channel Separation	12.5 kHz	Modulation	Digital
Polar	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1528.000	13.06	29.20	42.26	75.20	-32.94	peak
2	1720.000	13.75	29.93	43.68	75.20	-31.52	peak
3	1998.000	13.77	30.99	44.76	75.20	-30.44	peak
4	2378.000	14.71	32.12	46.83	75.20	-28.37	peak
5	2722.000	15.68	32.92	48.60	75.20	-26.60	peak
6	2860.000	15.41	33.19	48.60	75.20	-26.60	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



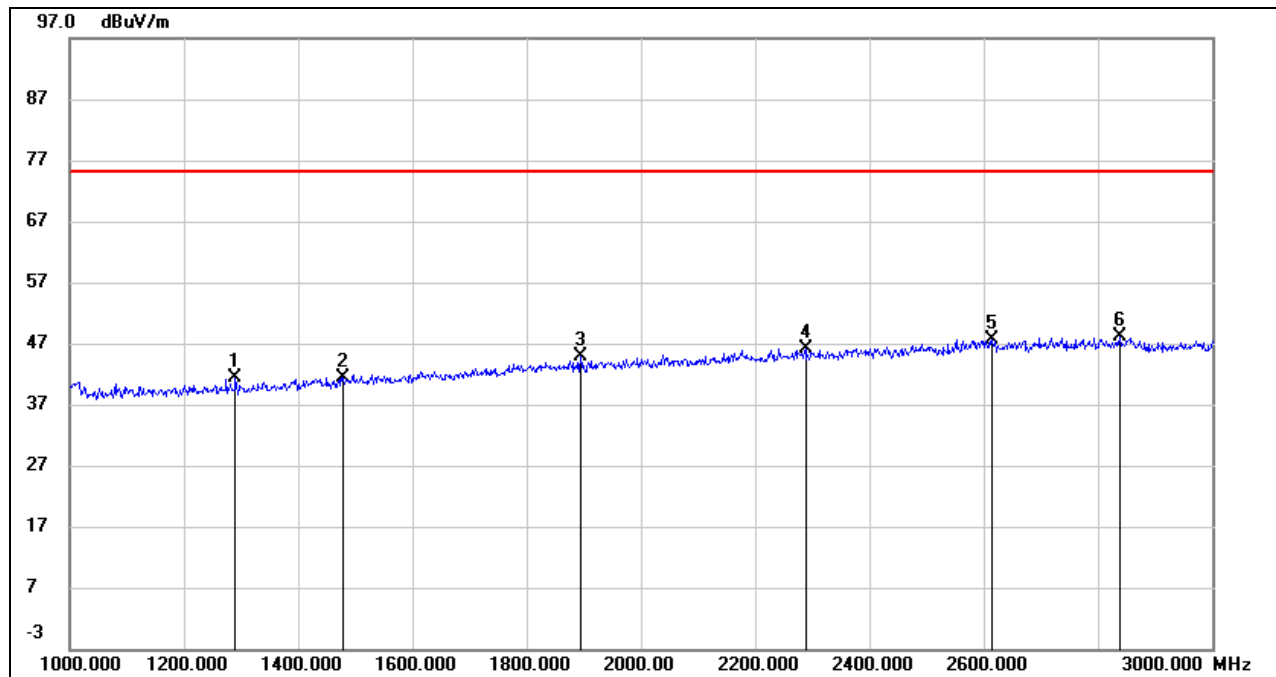
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4939.000	41.93	0.21	42.14	75.20	-33.06	peak
2	6297.000	38.20	3.42	41.62	75.20	-33.58	peak
3	7032.000	36.47	6.67	43.14	75.20	-32.06	peak
4	7886.000	38.11	6.31	44.42	75.20	-30.78	peak
5	9139.000	37.46	10.54	48.00	75.20	-27.20	peak
6	9559.000	37.26	10.85	48.11	75.20	-27.09	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



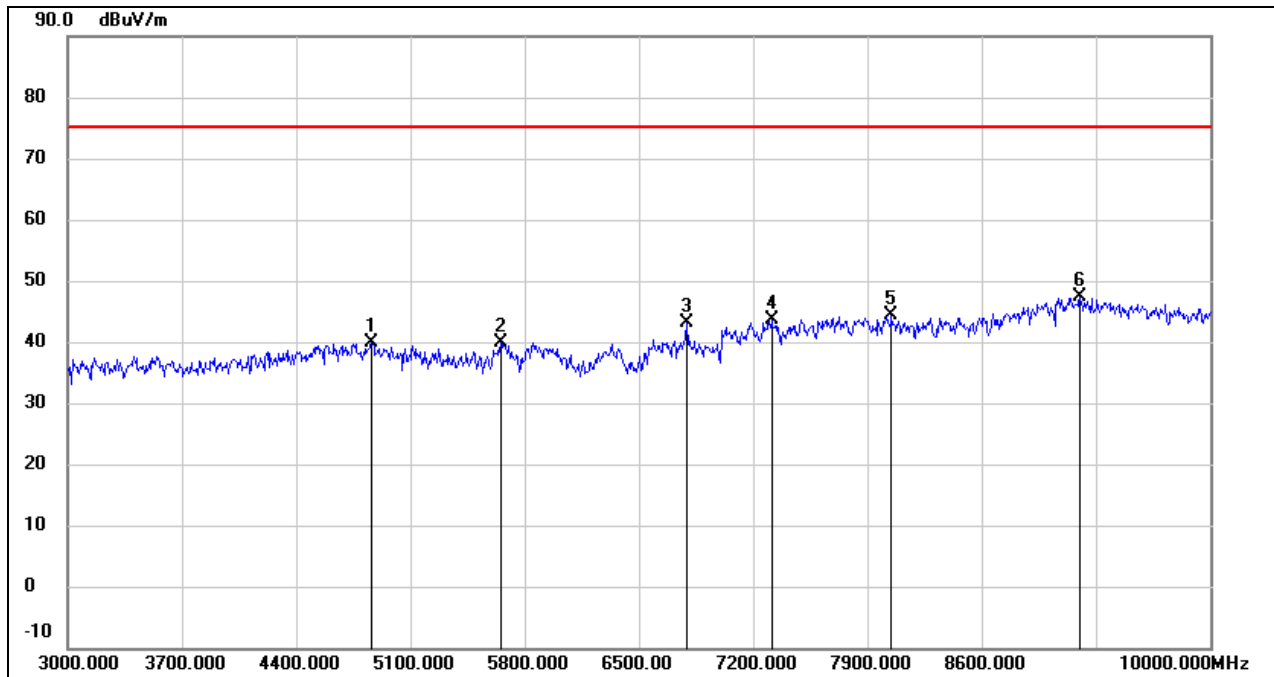
Measurement Method	Radiated	Test Channel	860.0125 MHz
Channel Separation	12.5 kHz	Modulation	Digital
Polar	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1290.000	13.25	28.07	41.32	75.20	-33.88	peak
2	1478.000	12.43	28.99	41.42	75.20	-33.78	peak
3	1894.000	14.18	30.59	44.77	75.20	-30.43	peak
4	2288.000	14.35	31.86	46.21	75.20	-28.99	peak
5	2614.000	15.02	32.72	47.74	75.20	-27.46	peak
6	2838.000	14.96	33.15	48.11	75.20	-27.09	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result

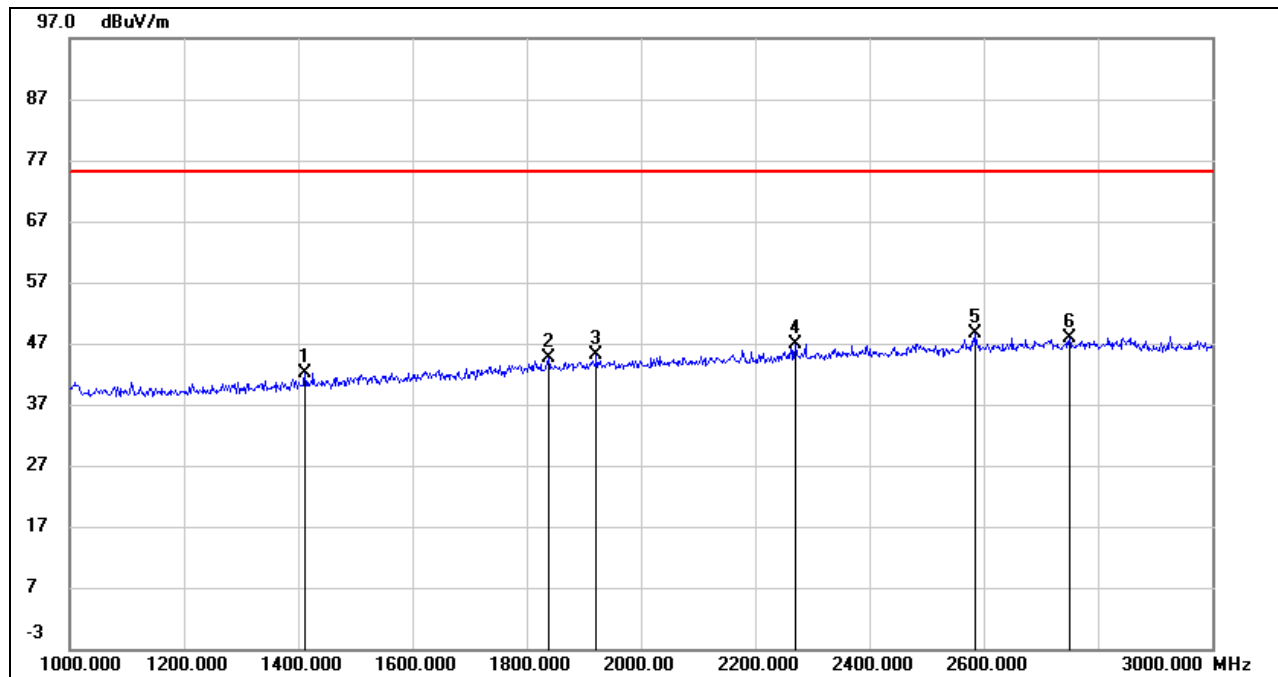


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4862.000	40.03	-0.08	39.95	75.20	-35.25	peak
2	5653.000	38.63	1.28	39.91	75.20	-35.29	peak
3	6794.000	37.35	5.68	43.03	75.20	-32.17	peak
4	7312.000	37.07	6.46	43.53	75.20	-31.67	peak
5	8047.000	37.94	6.36	44.30	75.20	-30.90	peak
6	9202.000	36.84	10.56	47.40	75.20	-27.80	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

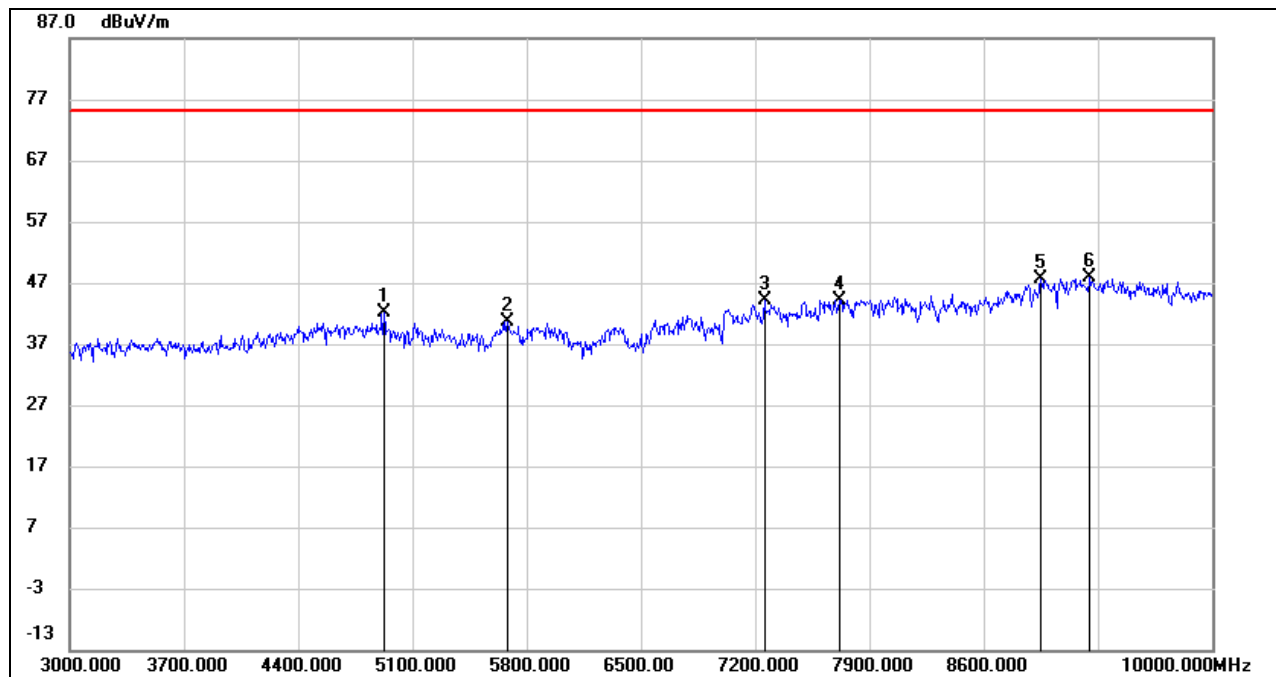
2. Margin = Limit – Result

Measurement Method	Radiated	Test Channel	860.0125 MHz
Channel Separation	12.5 kHz	Modulation	Digital
Polar	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1412.000	13.54	28.66	42.20	75.20	-33.00	peak
2	1838.000	14.19	30.37	44.56	75.20	-30.64	peak
3	1922.000	14.38	30.69	45.07	75.20	-30.13	peak
4	2270.000	15.05	31.80	46.85	75.20	-28.35	peak
5	2586.000	15.89	32.65	48.54	75.20	-26.66	peak
6	2750.000	14.88	32.97	47.85	75.20	-27.35	peak

Note: 1. Limit (dBuV/m) = -20+95.2 = 75.2 dBuV/m  
2. Margin = Limit – Result



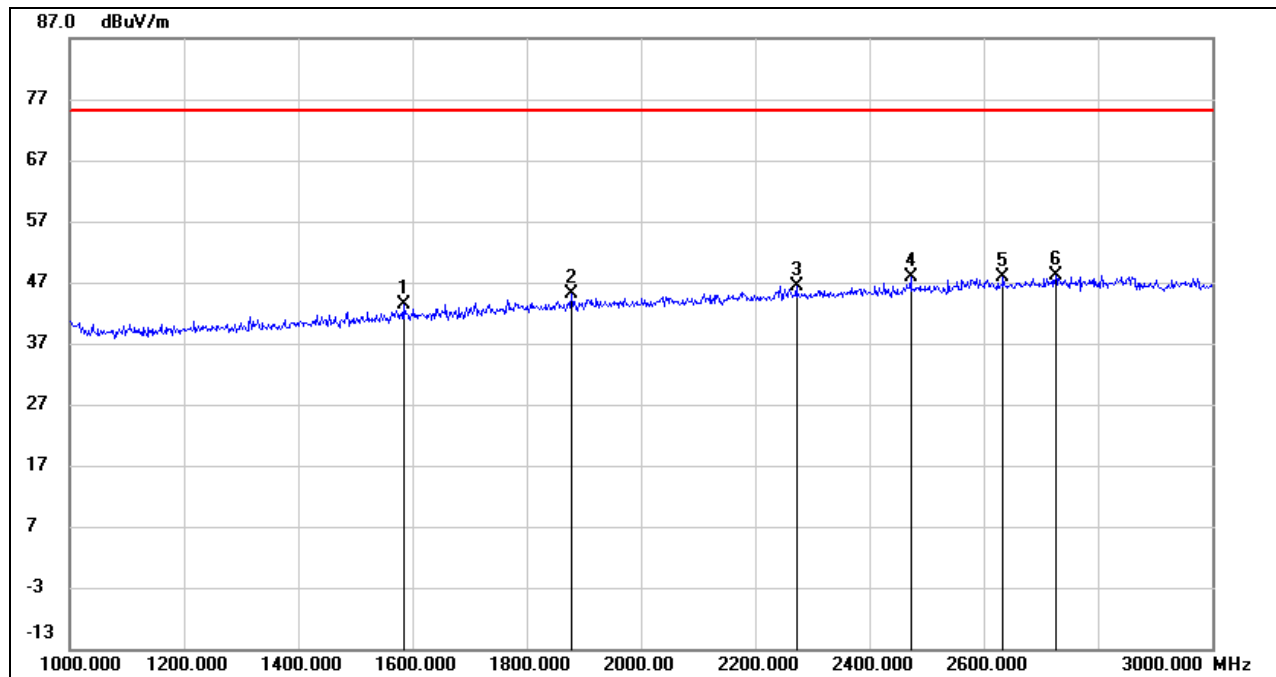
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4925.000	42.05	0.16	42.21	75.20	-32.99	peak
2	5681.000	39.30	1.36	40.66	75.20	-34.54	peak
3	7256.000	37.61	6.50	44.11	75.20	-31.09	peak
4	7718.000	37.86	6.32	44.18	75.20	-31.02	peak
5	8950.000	37.42	10.12	47.54	75.20	-27.66	peak
6	9251.000	37.24	10.58	47.82	75.20	-27.38	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



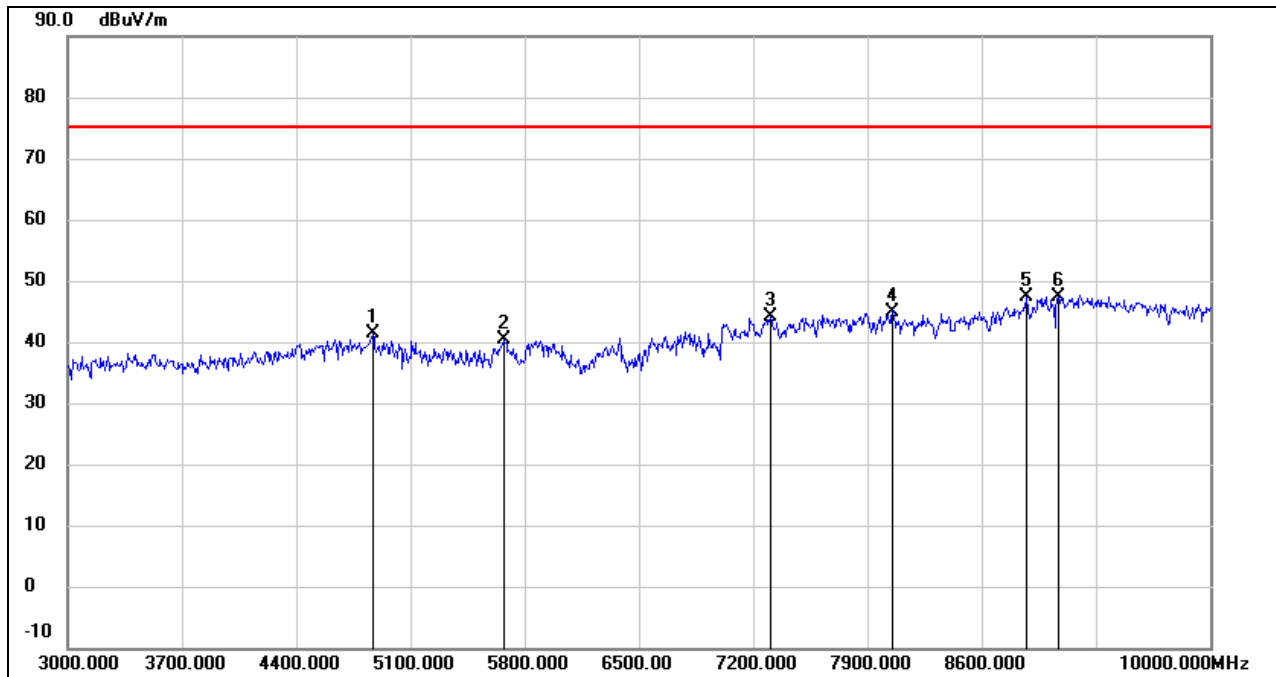
Measurement Method	Radiated	Test Channel	868.8875 MHz
Channel Separation	12.5 kHz	Modulation	Digital
Polar	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1584.000	13.91	29.41	43.32	75.20	-31.88	peak
2	1878.000	14.64	30.53	45.17	75.20	-30.03	peak
3	2272.000	14.57	31.81	46.38	75.20	-28.82	peak
4	2472.000	15.46	32.41	47.87	75.20	-27.33	peak
5	2634.000	15.16	32.75	47.91	75.20	-27.29	peak
6	2726.000	15.16	32.93	48.09	75.20	-27.11	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4869.000	41.43	-0.05	41.38	75.20	-33.82	peak
2	5674.000	39.13	1.34	40.47	75.20	-34.73	peak
3	7305.000	37.61	6.47	44.08	75.20	-31.12	peak
4	8054.000	38.63	6.37	45.00	75.20	-30.20	peak
5	8873.000	37.70	9.56	47.26	75.20	-27.94	peak
6	9069.000	36.93	10.51	47.44	75.20	-27.76	peak

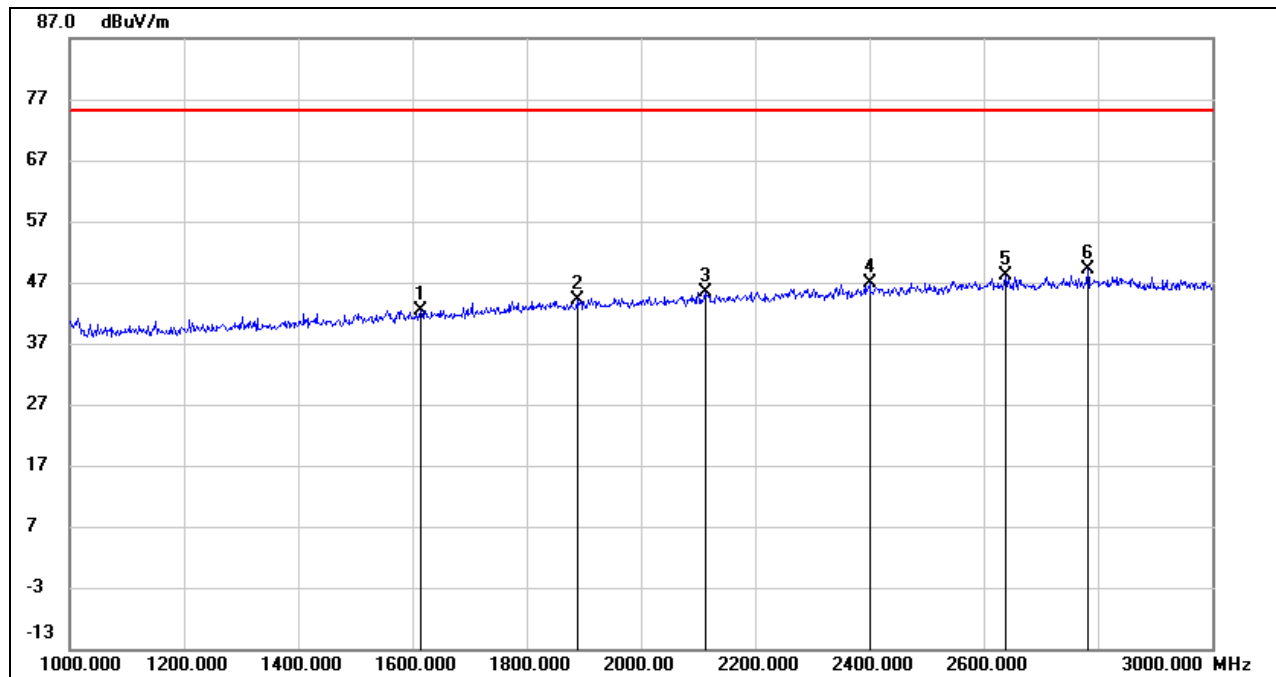
Note: 1. Limit (dBuV/m) = -20+95.2 = 75.2 dBuV/m

2. Margin = Limit – Result





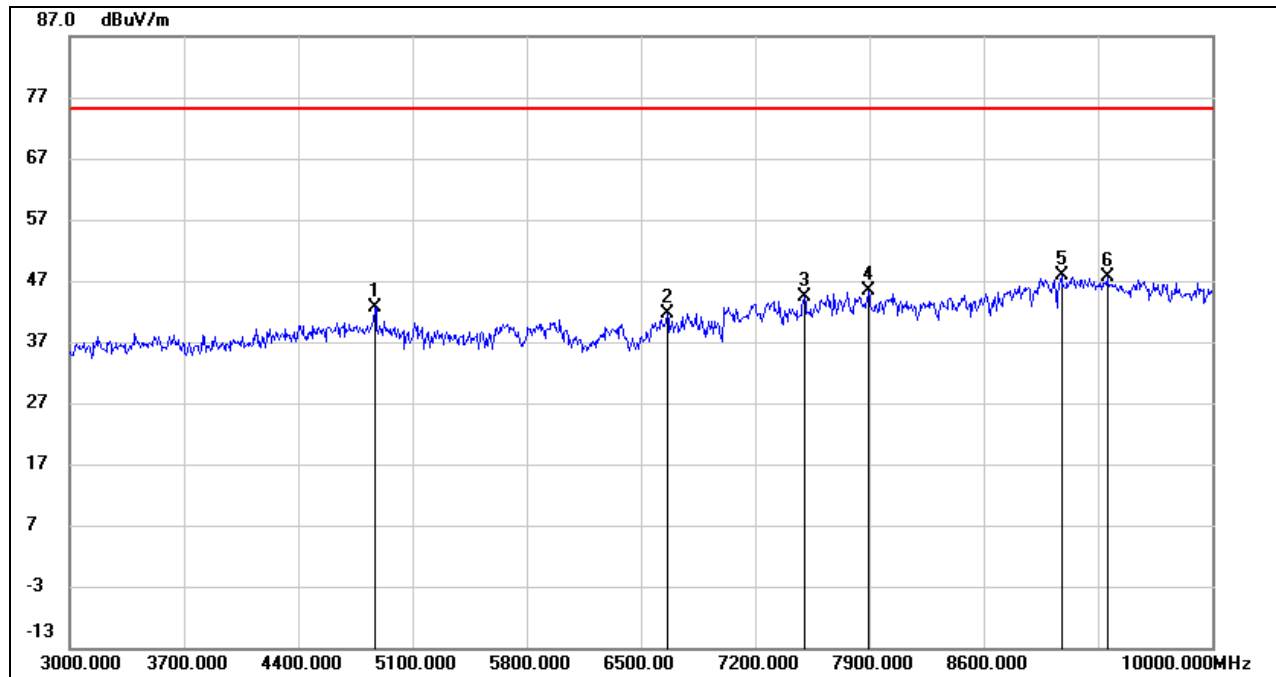
Measurement Method	Radiated	Test Channel	868.8875 MHz
Channel Separation	12.5 kHz	Modulation	Digital
Polar	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1614.000	12.83	29.52	42.35	75.20	-32.85	peak
2	1888.000	13.67	30.56	44.23	75.20	-30.97	peak
3	2112.000	14.09	31.32	45.41	75.20	-29.79	peak
4	2400.000	14.72	32.19	46.91	75.20	-28.29	peak
5	2638.000	15.26	32.76	48.02	75.20	-27.18	peak
6	2782.000	16.01	33.04	49.05	75.20	-26.15	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result

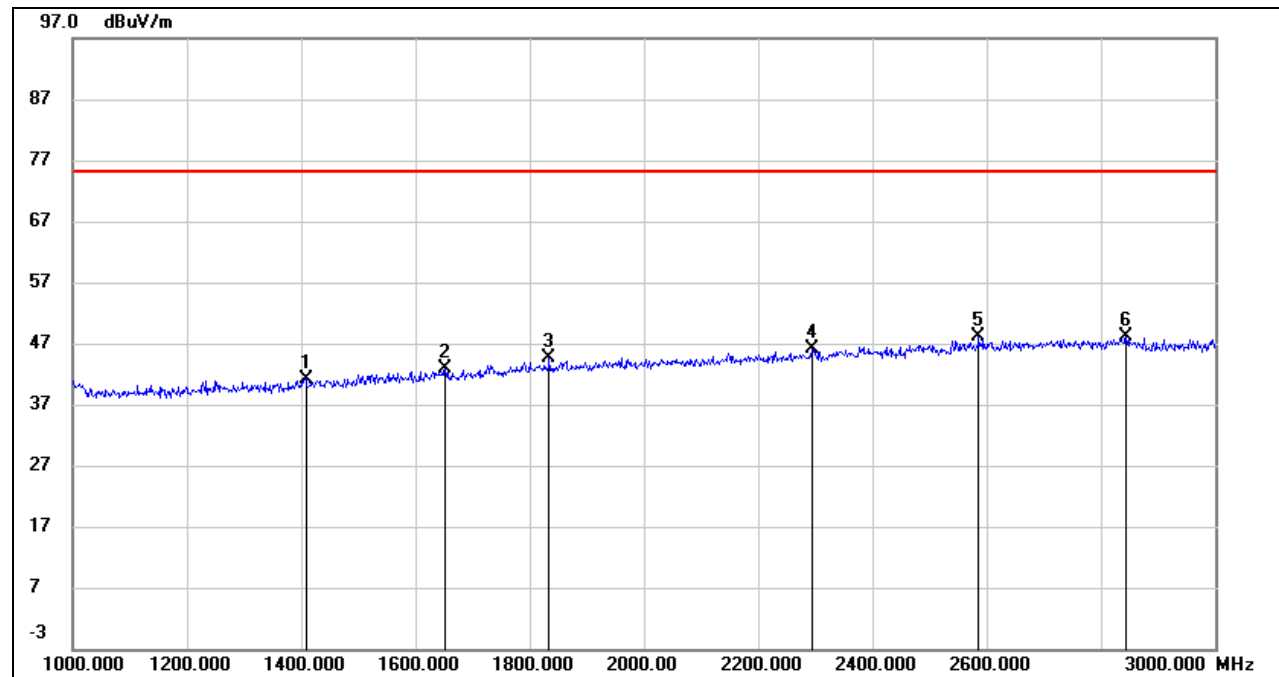


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4869.000	42.63	-0.05	42.58	75.20	-32.62	peak
2	6661.000	36.65	5.02	41.67	75.20	-33.53	peak
3	7501.000	38.10	6.33	44.43	75.20	-30.77	peak
4	7893.000	39.04	6.32	45.36	75.20	-29.84	peak
5	9076.000	37.44	10.51	47.95	75.20	-27.25	peak
6	9356.000	37.04	10.63	47.67	75.20	-27.53	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result

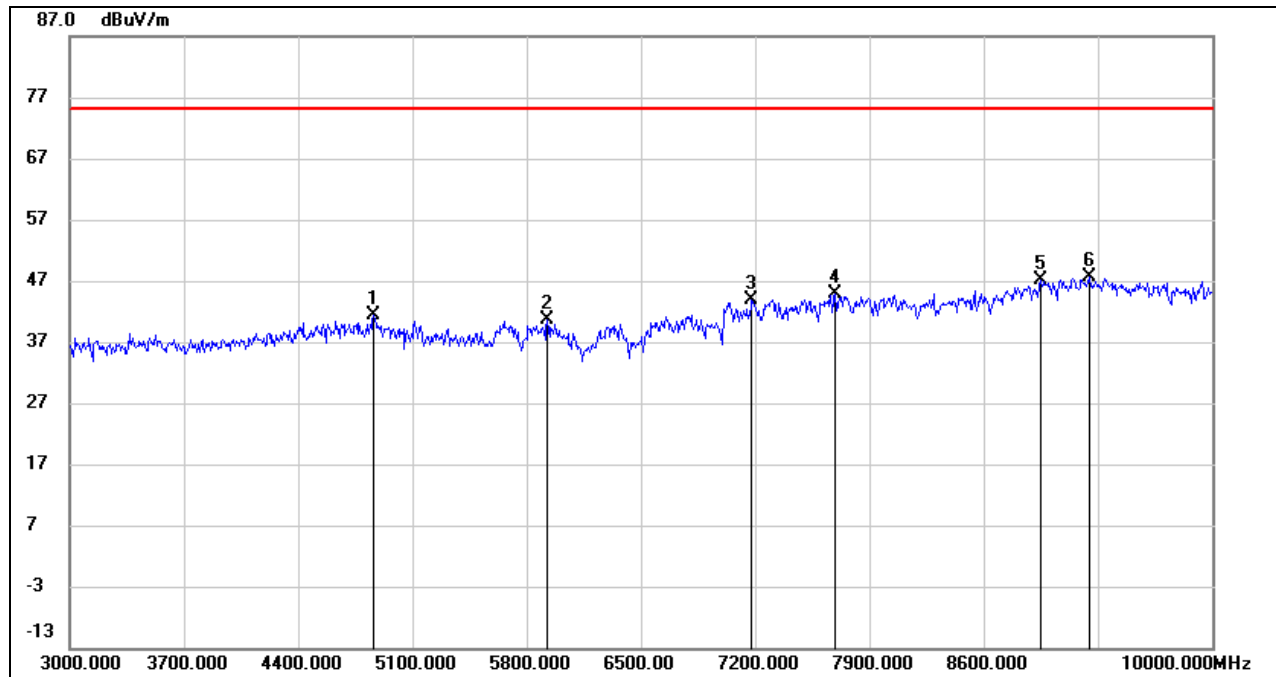
Measurement Method	Radiated	Test Channel	896.0125 MHz
Channel Separation	12.5 kHz	Modulation	Analog
Polar	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1408.000	12.60	28.65	41.25	75.20	-33.95	peak
2	1652.000	13.23	29.66	42.89	75.20	-32.31	peak
3	1834.000	14.35	30.36	44.71	75.20	-30.49	peak
4	2294.000	14.32	31.87	46.19	75.20	-29.01	peak
5	2586.000	15.37	32.65	48.02	75.20	-27.18	peak
6	2844.000	14.93	33.16	48.09	75.20	-27.11	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



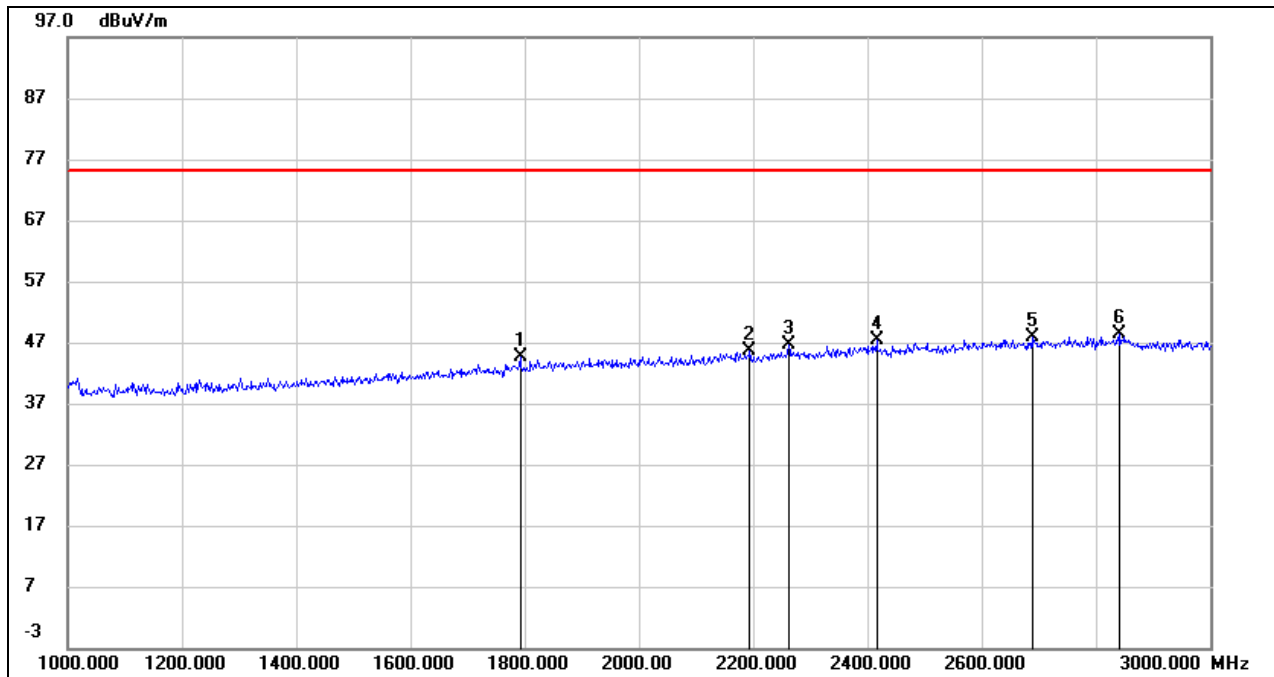
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4862.000	41.50	-0.08	41.42	75.20	-33.78	peak
2	5926.000	38.68	2.04	40.72	75.20	-34.48	peak
3	7179.000	37.26	6.55	43.81	75.20	-31.39	peak
4	7690.000	38.60	6.32	44.92	75.20	-30.28	peak
5	8950.000	37.05	10.12	47.17	75.20	-28.03	peak
6	9244.000	37.04	10.58	47.62	75.20	-27.58	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



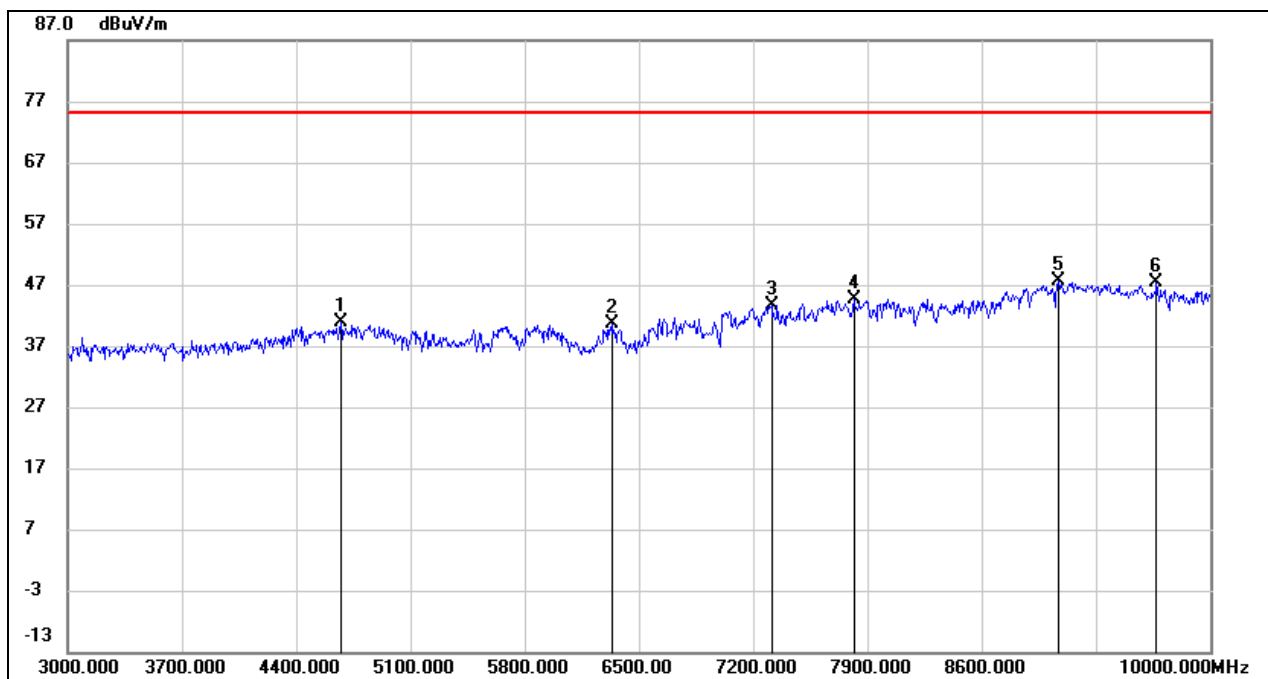
Measurement Method	Radiated	Test Channel	896.0125 MHz
Channel Separation	12.5 kHz	Modulation	Analog
Polar	Vertical I		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1792.000	14.51	30.20	44.71	75.20	-30.49	peak
2	2194.000	14.04	31.57	45.61	75.20	-29.59	peak
3	2262.000	14.83	31.77	46.60	75.20	-28.60	peak
4	2416.000	15.04	32.24	47.28	75.20	-27.92	peak
5	2688.000	15.02	32.86	47.88	75.20	-27.32	peak
6	2842.000	15.12	33.16	48.28	75.20	-26.92	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



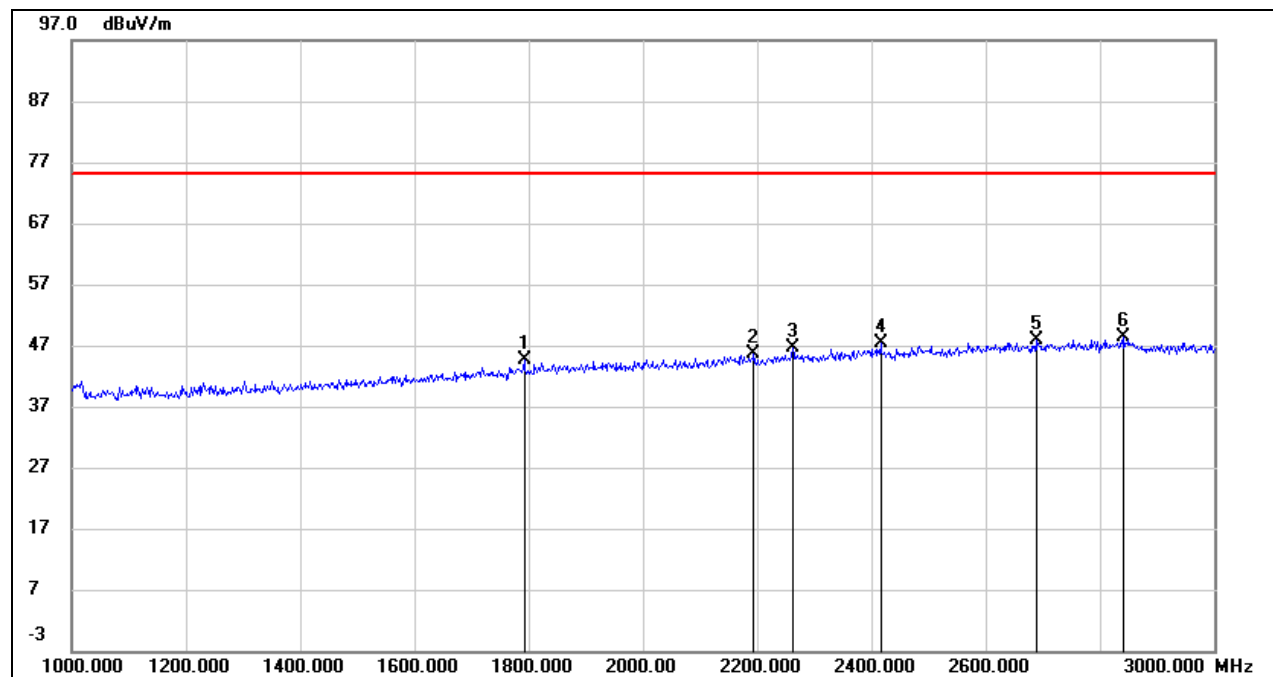
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4673.000	41.60	-0.80	40.80	75.20	-34.40	peak
2	6339.000	36.94	3.58	40.52	75.20	-34.68	peak
3	7312.000	37.23	6.46	43.69	75.20	-31.51	peak
4	7816.000	38.30	6.32	44.62	75.20	-30.58	peak
5	9069.000	37.11	10.51	47.62	75.20	-27.58	peak
6	9671.000	36.24	11.14	47.38	75.20	-27.82	peak

Note: 1. Limit (dBuV/m) = -20+95.2 = 75.2 dBuV/m

2. Margin = Limit – Result



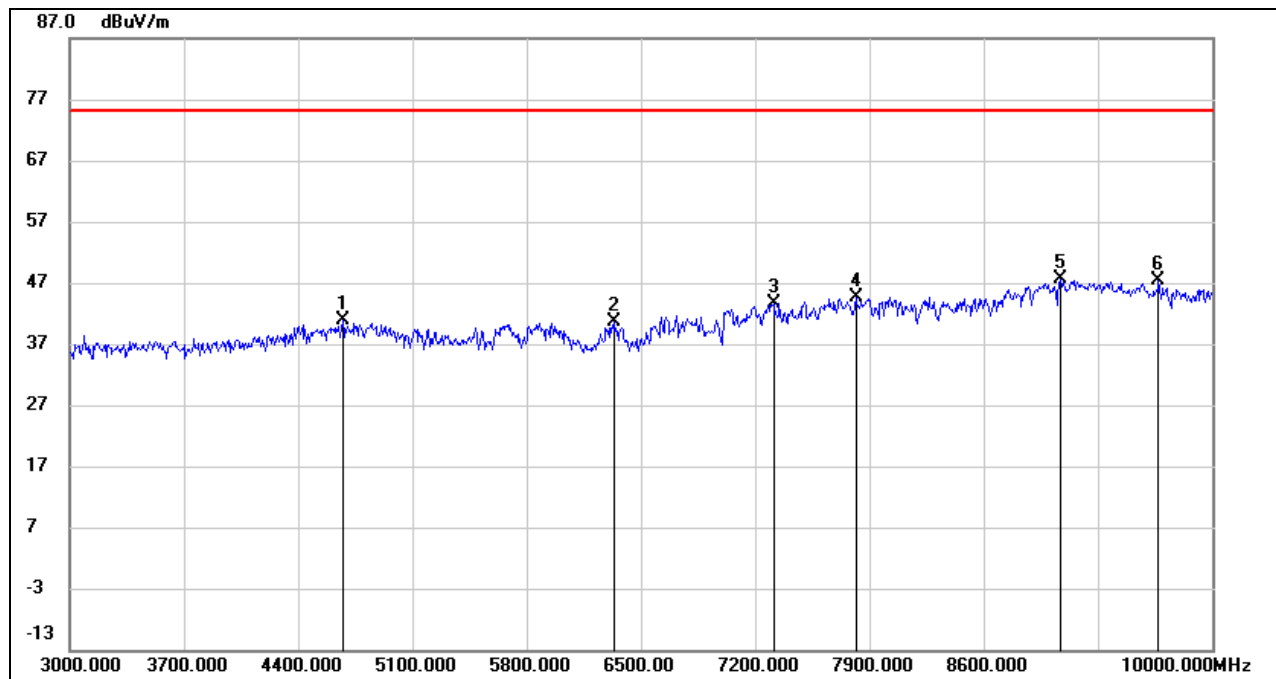
Measurement Method	Radiated	Test Channel	900.9875MHz
Channel Separation	12.5 kHz	Modulation	Analog
Polar	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1792.000	14.51	30.20	44.71	75.20	-30.49	peak
2	2194.000	14.04	31.57	45.61	75.20	-29.59	peak
3	2262.000	14.83	31.77	46.60	75.20	-28.60	peak
4	2416.000	15.04	32.24	47.28	75.20	-27.92	peak
5	2688.000	15.02	32.86	47.88	75.20	-27.32	peak
6	2842.000	15.12	33.16	48.28	75.20	-26.92	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4673.000	41.60	-0.80	40.80	75.20	-34.40	peak
2	6339.000	36.94	3.58	40.52	75.20	-34.68	peak
3	7312.000	37.23	6.46	43.69	75.20	-31.51	peak
4	7816.000	38.30	6.32	44.62	75.20	-30.58	peak
5	9069.000	37.11	10.51	47.62	75.20	-27.58	peak
6	9671.000	36.24	11.14	47.38	75.20	-27.82	peak

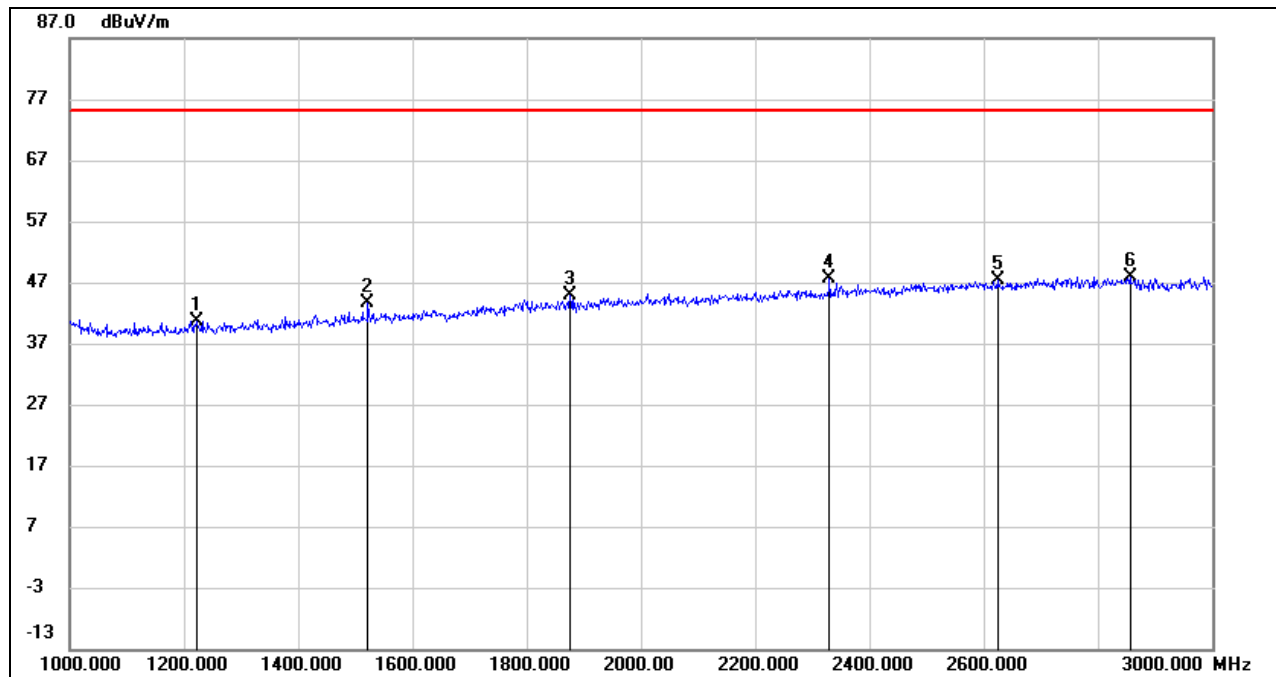
Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result





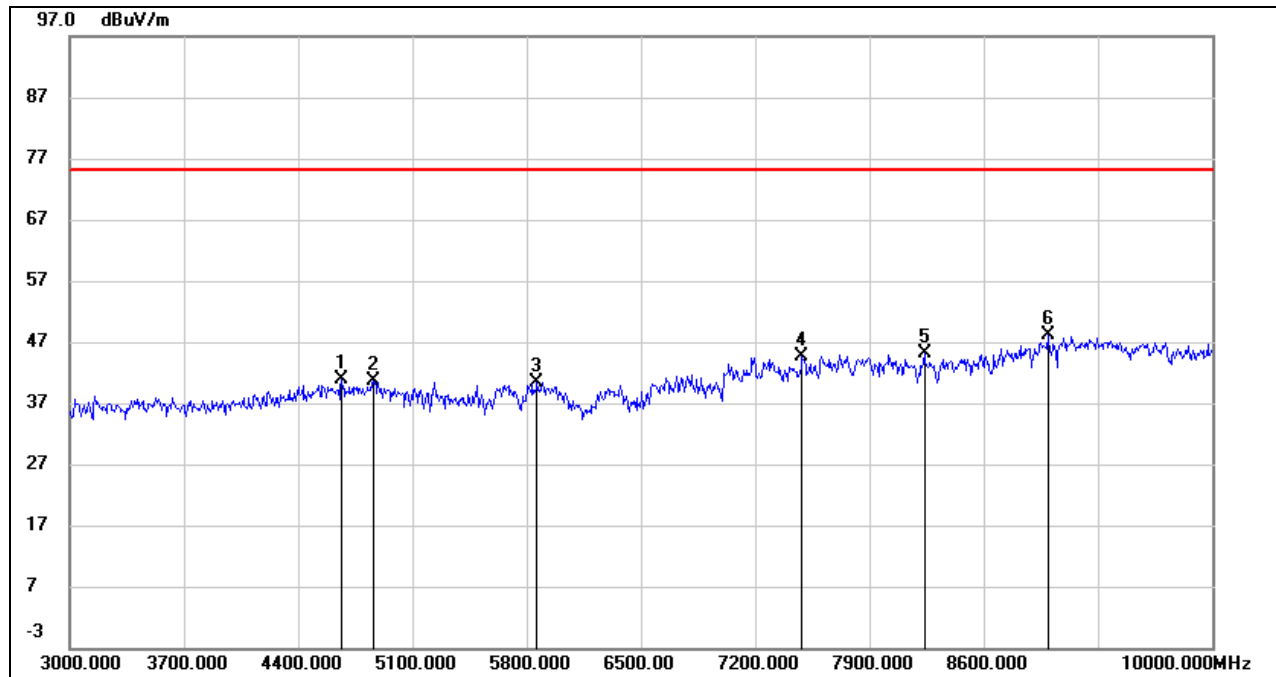
Measurement Method	Radiated	Test Channel	900.9875MHz
Channel Separation	12.5 kHz	Modulation	Analog
Polar	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1222.000	12.93	27.73	40.66	75.20	-34.54	peak
2	1522.000	14.54	29.17	43.71	75.20	-31.49	peak
3	1876.000	14.41	30.52	44.93	75.20	-30.27	peak
4	2330.000	15.65	31.98	47.63	75.20	-27.57	peak
5	2624.000	14.66	32.73	47.39	75.20	-27.81	peak
6	2856.000	14.80	33.18	47.98	75.20	-27.22	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



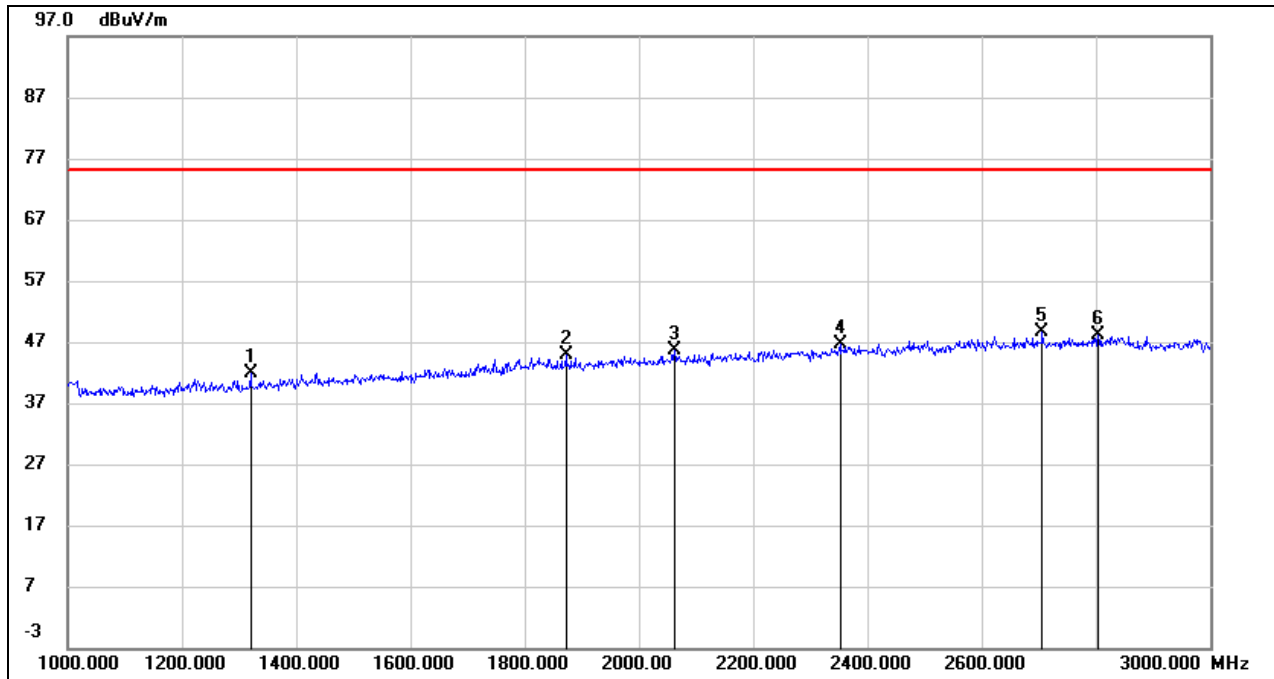
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4666.000	41.68	-0.82	40.86	75.20	-34.34	peak
2	4862.000	40.67	-0.08	40.59	75.20	-34.61	peak
3	5863.000	38.61	1.87	40.48	75.20	-34.72	peak
4	7487.000	38.32	6.33	44.65	75.20	-30.55	peak
5	8236.000	38.61	6.56	45.17	75.20	-30.03	peak
6	8992.000	37.74	10.42	48.16	75.20	-27.04	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



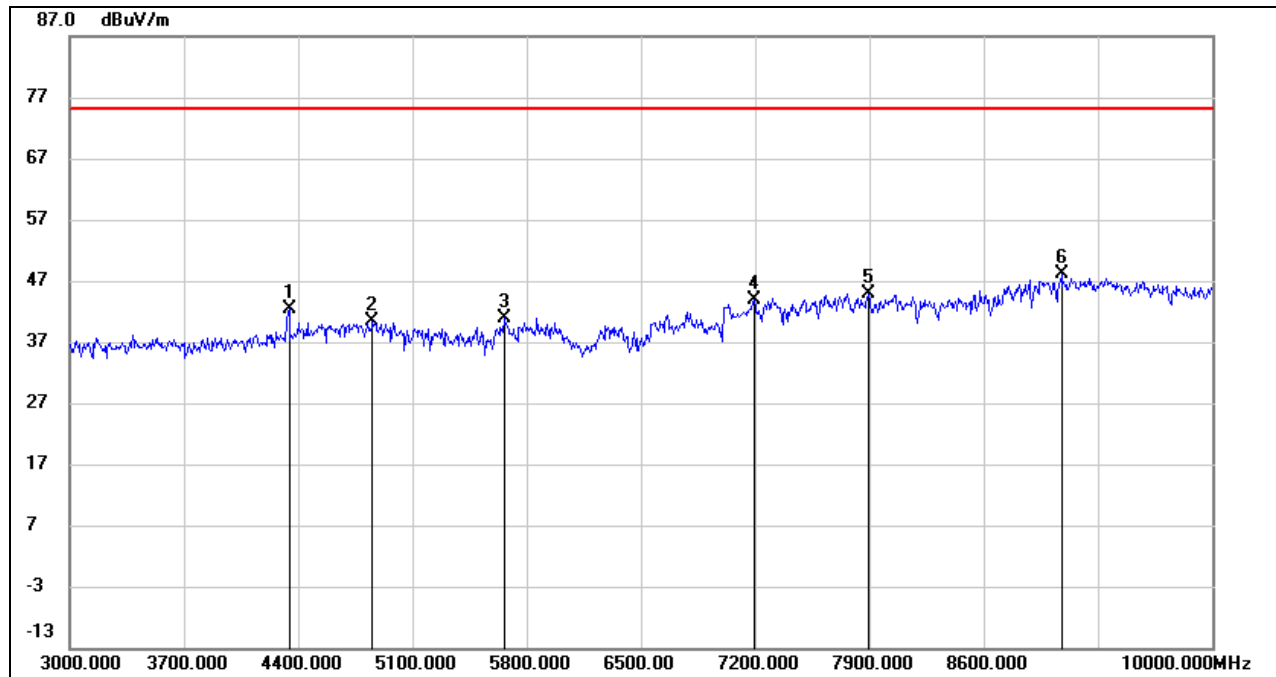
Measurement Method	Radiated	Test Channel	901.5 MHz
Channel Separation	12.5 kHz	Modulation	Analog
Polar	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1320.000	13.55	28.22	41.77	75.20	-33.43	peak
2	1872.000	14.30	30.50	44.80	75.20	-30.40	peak
3	2062.000	14.49	31.17	45.66	75.20	-29.54	peak
4	2352.000	14.58	32.05	46.63	75.20	-28.57	peak
5	2706.000	15.63	32.89	48.52	75.20	-26.68	peak
6	2804.000	15.09	33.08	48.17	75.20	-27.03	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



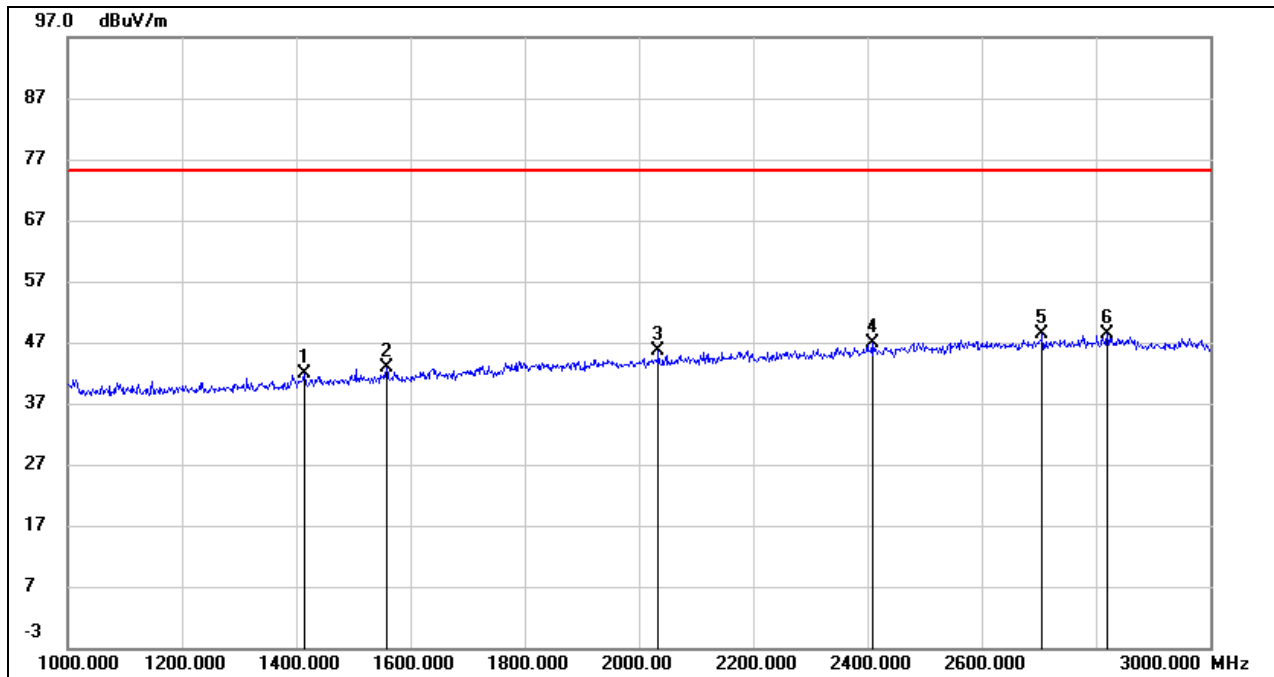
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4344.000	44.69	-2.19	42.50	75.20	-32.70	peak
2	4855.000	40.44	-0.10	40.34	75.20	-34.86	peak
3	5660.000	39.68	1.30	40.98	75.20	-34.22	peak
4	7193.000	37.24	6.55	43.79	75.20	-31.41	peak
5	7893.000	38.64	6.32	44.96	75.20	-30.24	peak
6	9076.000	37.54	10.51	48.05	75.20	-27.15	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



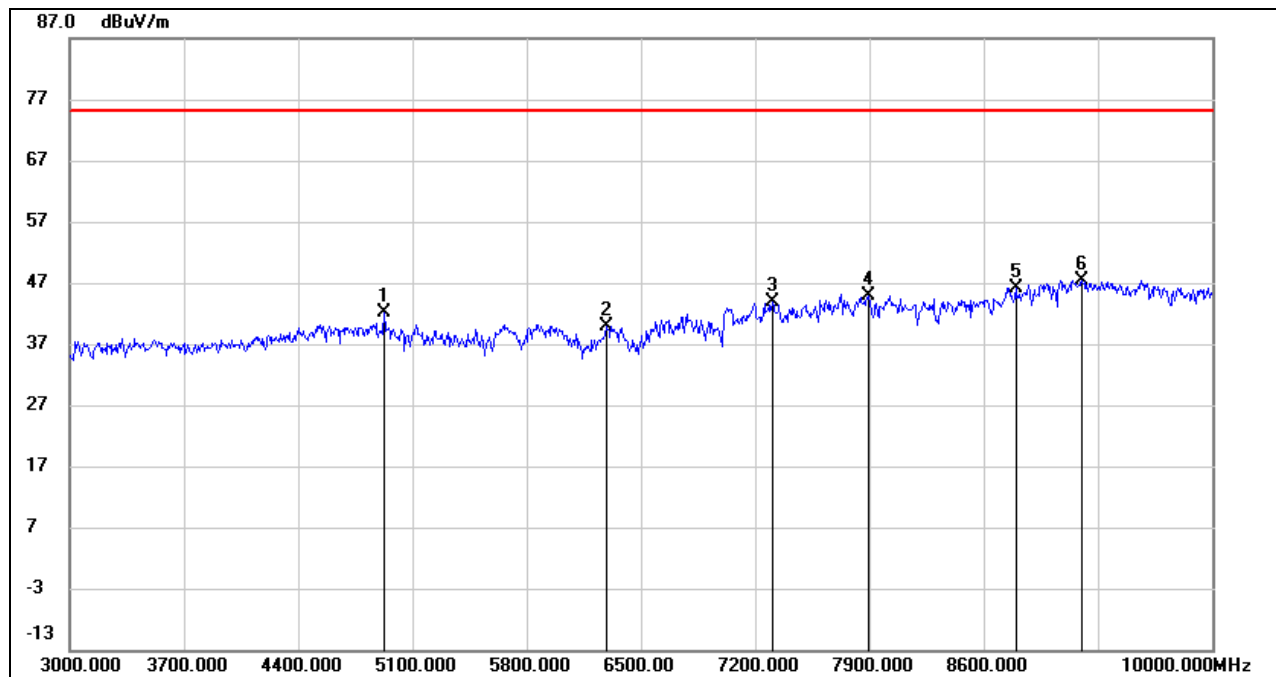
Measurement Method	Radiated	Test Channel	901.5 MHz
Channel Separation	12.5 kHz	Modulation	Analog
Polar	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1414.000	13.17	28.67	41.84	75.20	-33.36	peak
2	1558.000	13.68	29.31	42.99	75.20	-32.21	peak
3	2034.000	14.56	31.09	45.65	75.20	-29.55	peak
4	2408.000	14.73	32.21	46.94	75.20	-28.26	peak
5	2706.000	15.44	32.89	48.33	75.20	-26.87	peak
6	2820.000	15.21	33.11	48.32	75.20	-26.88	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



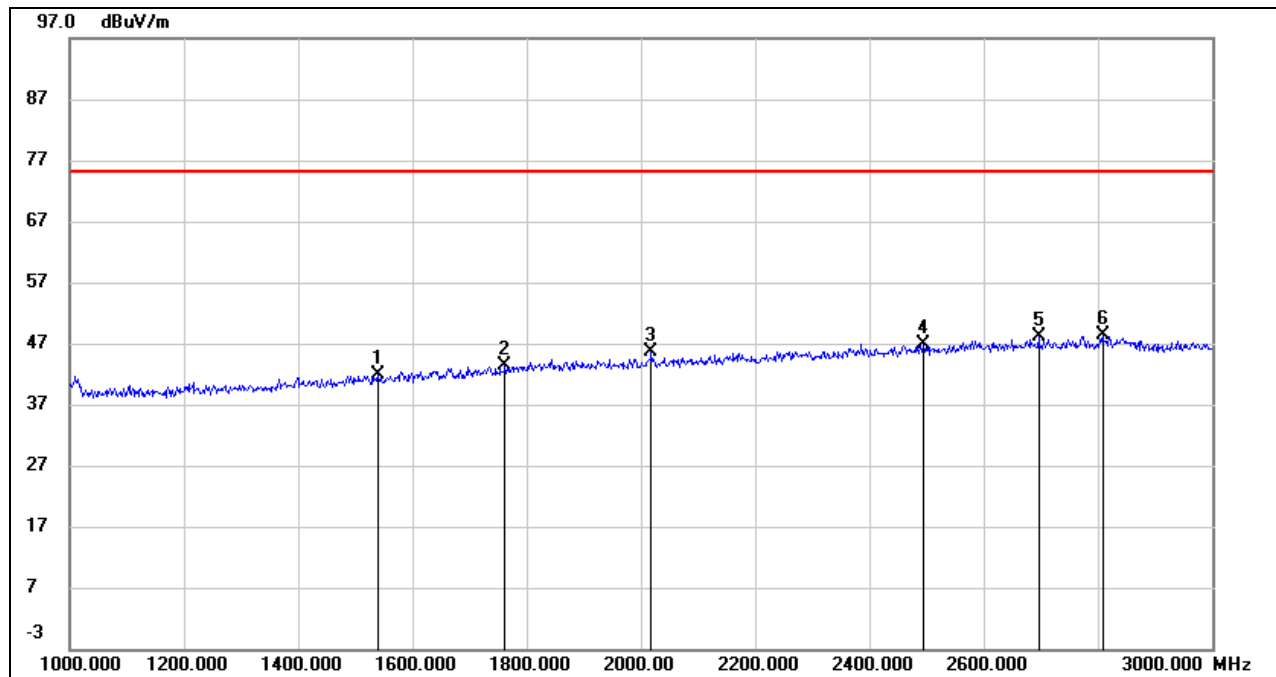
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4925.000	41.98	0.16	42.14	75.20	-33.06	peak
2	6290.000	36.56	3.39	39.95	75.20	-35.25	peak
3	7305.000	37.51	6.47	43.98	75.20	-31.22	peak
4	7893.000	38.52	6.32	44.84	75.20	-30.36	peak
5	8796.000	37.18	9.00	46.18	75.20	-29.02	peak
6	9202.000	36.93	10.56	47.49	75.20	-27.71	peak

Note: 1. Limit (dBuV/m) = -20+95.2 = 75.2 dBuV/m

2. Margin = Limit – Result



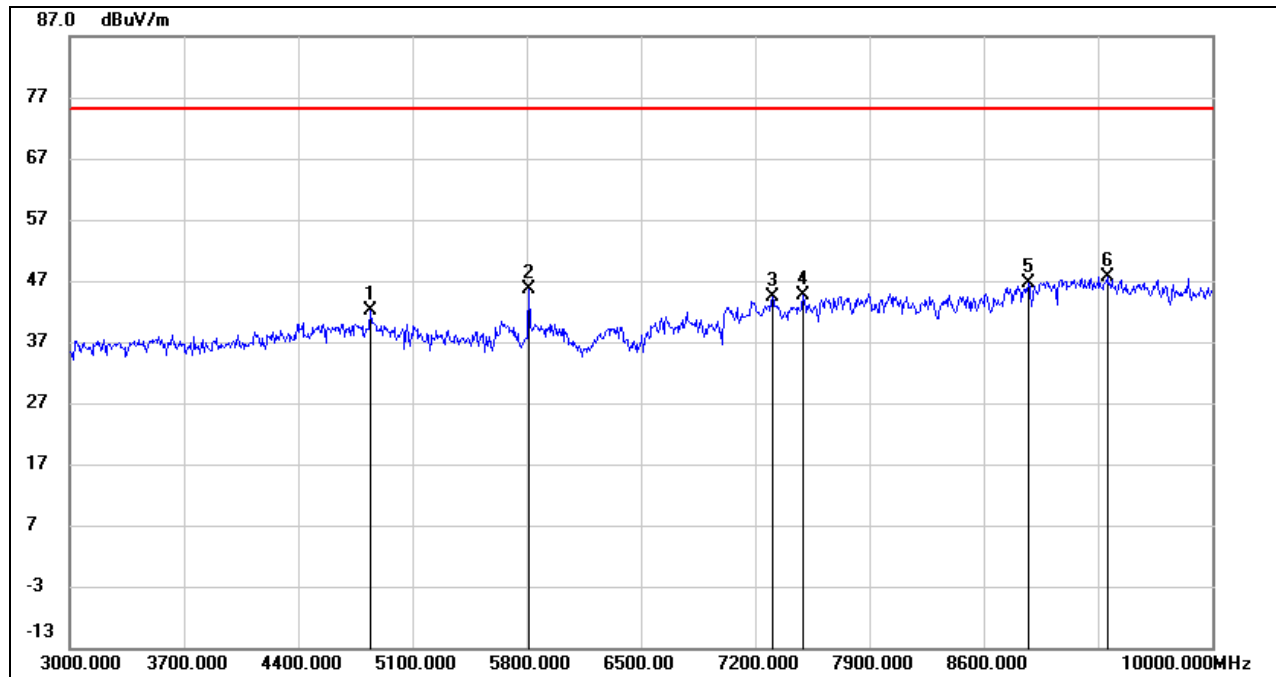
Measurement Method	Radiated	Test Channel	935.0125 MHz
Channel Separation	12.5 kHz	Modulation	Analog
Polar	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1540.000	12.51	29.25	41.76	75.20	-33.44	peak
2	1762.000	13.19	30.09	43.28	75.20	-31.92	peak
3	2018.000	14.55	31.05	45.60	75.20	-29.60	peak
4	2494.000	14.41	32.47	46.88	75.20	-28.32	peak
5	2696.000	15.16	32.87	48.03	75.20	-27.17	peak
6	2808.000	15.22	33.08	48.30	75.20	-26.90	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4841.000	42.24	-0.15	42.09	75.20	-33.11	peak
2	5814.000	43.81	1.72	45.53	75.20	-29.67	peak
3	7305.000	37.90	6.47	44.37	75.20	-30.83	peak
4	7494.000	38.40	6.33	44.73	75.20	-30.47	peak
5	8873.000	37.17	9.56	46.73	75.20	-28.47	peak
6	9356.000	37.02	10.63	47.65	75.20	-27.55	peak

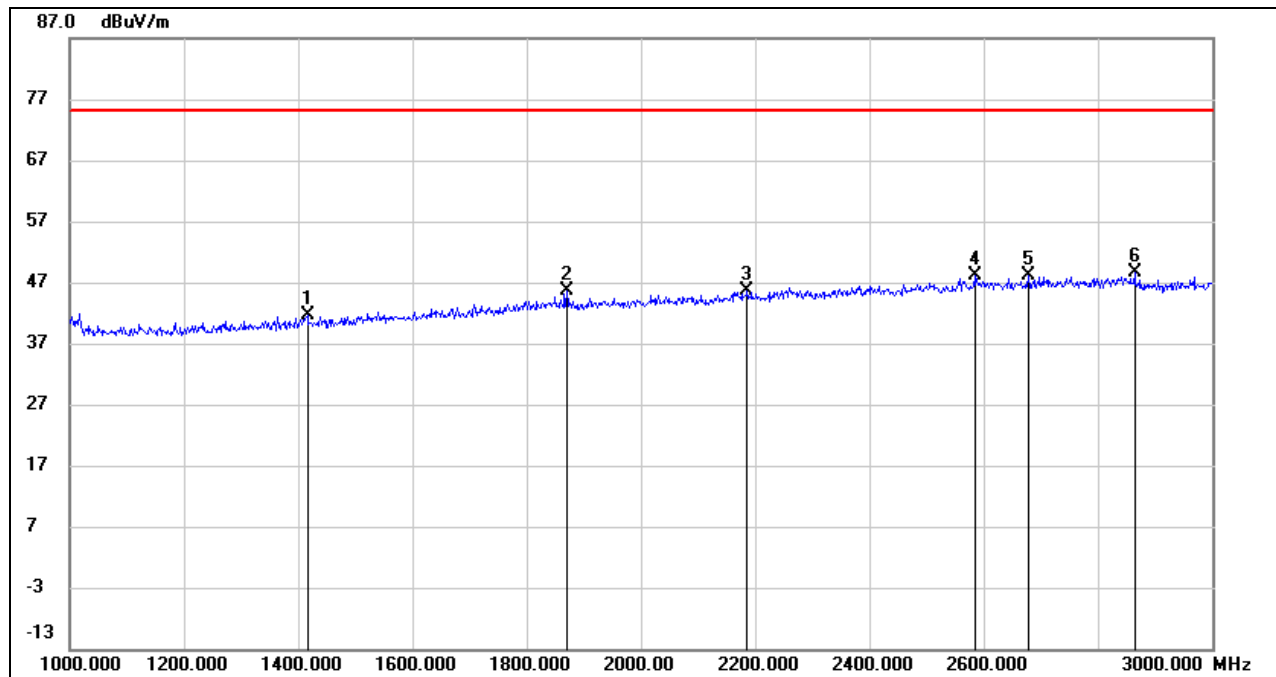
Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result





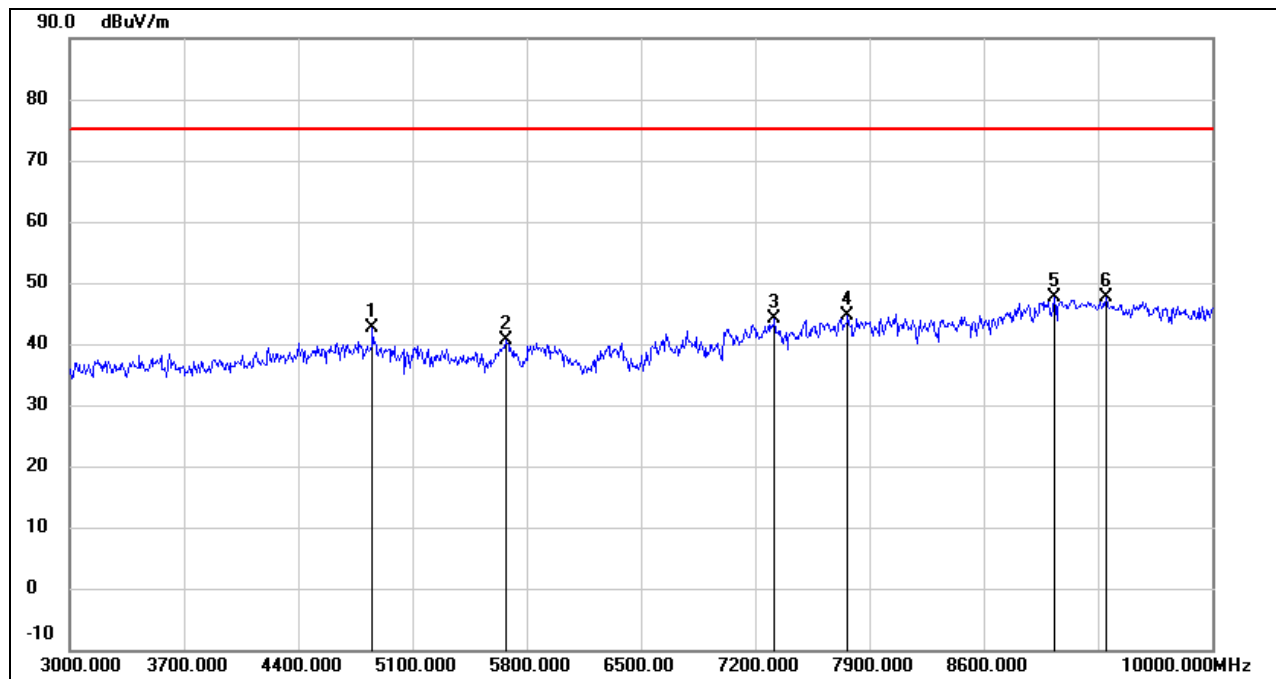
Measurement Method	Radiated	Test Channel	935.0125 MHz
Channel Separation	12.5 kHz	Modulation	Analog
Polar	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1416.000	12.87	28.68	41.55	75.20	-33.65	peak
2	1870.000	15.19	30.50	45.69	75.20	-29.51	peak
3	2186.000	14.00	31.54	45.54	75.20	-29.66	peak
4	2584.000	15.42	32.65	48.07	75.20	-27.13	peak
5	2678.000	15.22	32.83	48.05	75.20	-27.15	peak
6	2864.000	15.45	33.20	48.65	75.20	-26.55	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



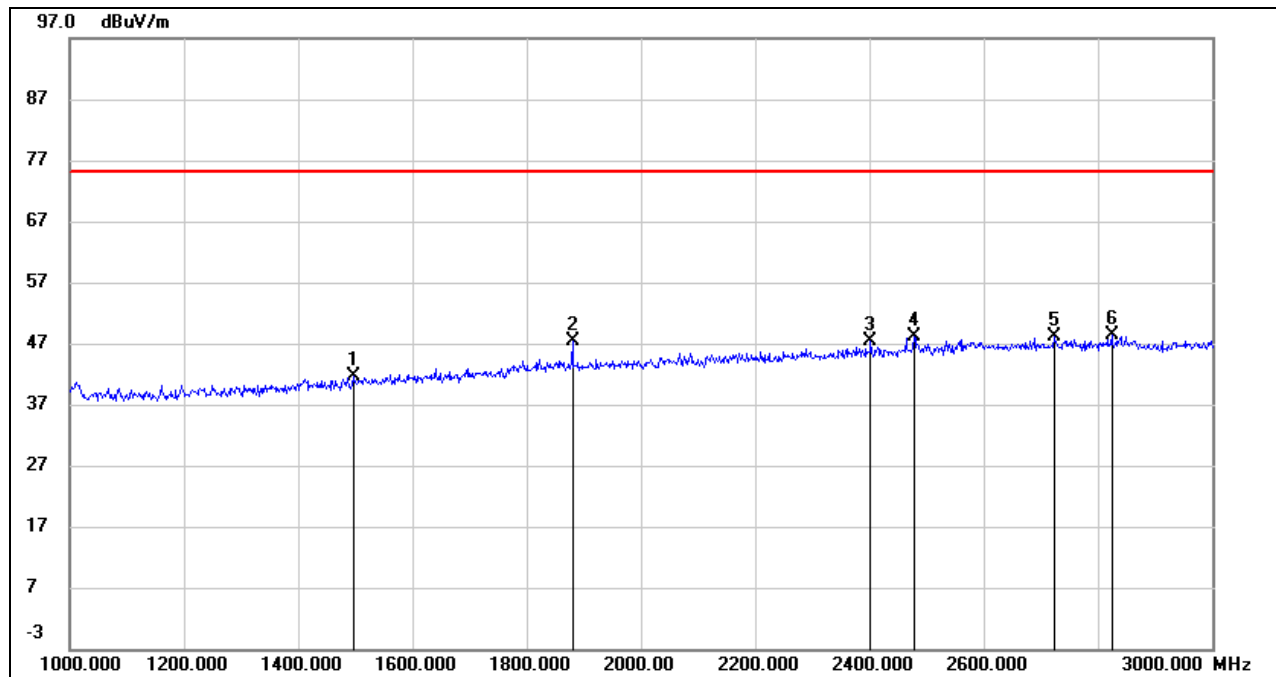
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4855.000	42.71	-0.10	42.61	75.20	-32.59	peak
2	5674.000	39.21	1.34	40.55	75.20	-34.65	peak
3	7319.000	37.72	6.46	44.18	75.20	-31.02	peak
4	7767.000	38.40	6.32	44.72	75.20	-30.48	peak
5	9034.000	37.19	10.49	47.68	75.20	-27.52	peak
6	9349.000	37.08	10.63	47.71	75.20	-27.49	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



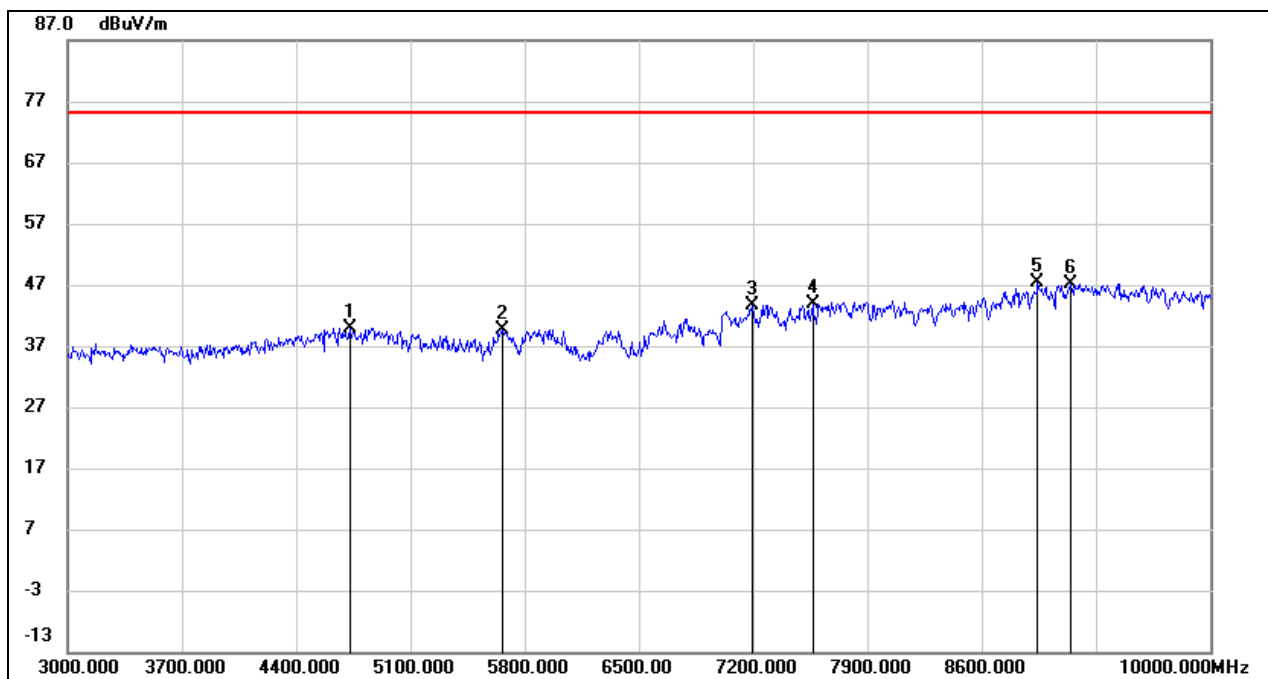
Measurement Method	Radiated	Test Channel	939.9875 MHz
Channel Separation	12.5 kHz	Modulation	Analog
Polar	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1496.000	12.45	29.07	41.52	75.20	-33.68	peak
2	1880.000	16.84	30.53	47.37	75.20	-27.83	peak
3	2402.000	15.14	32.20	47.34	75.20	-27.86	peak
4	2478.000	15.62	32.42	48.04	75.20	-27.16	peak
5	2724.000	15.32	32.92	48.24	75.20	-26.96	peak
6	2824.000	15.35	33.12	48.47	75.20	-26.73	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



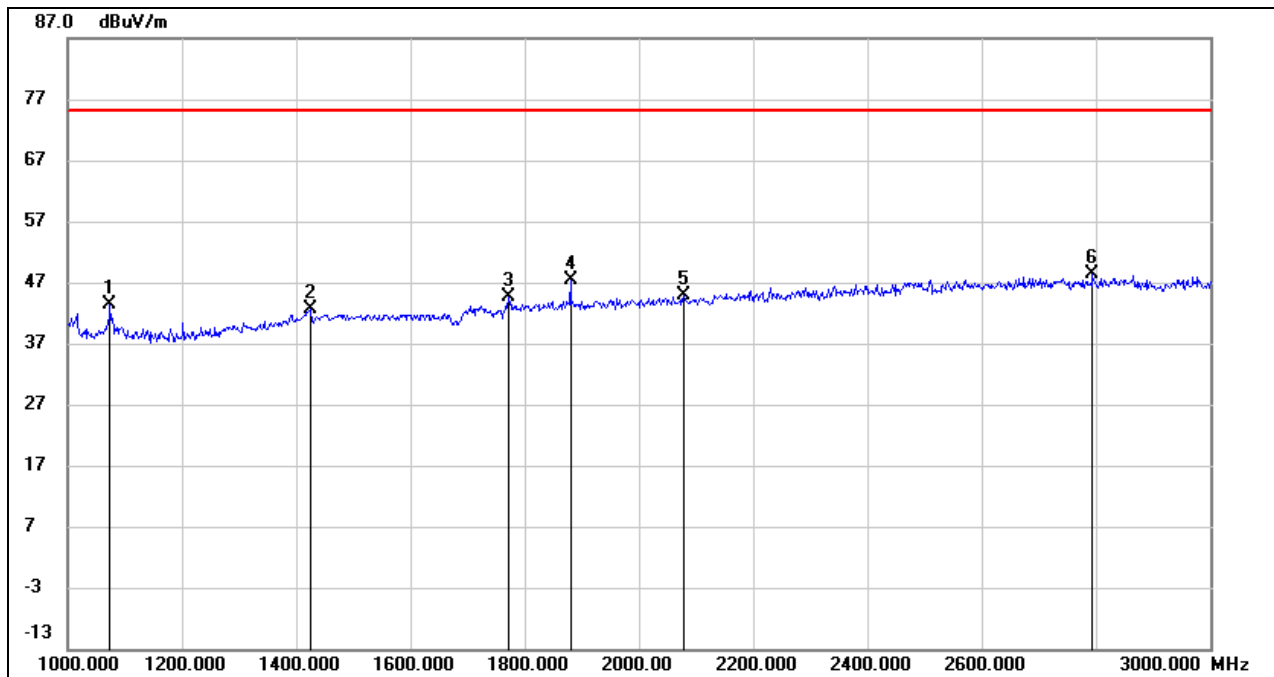
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4729.000	40.51	-0.59	39.92	75.20	-35.28	peak
2	5660.000	38.44	1.30	39.74	75.20	-35.46	peak
3	7193.000	37.08	6.55	43.63	75.20	-31.57	peak
4	7564.000	37.48	6.33	43.81	75.20	-31.39	peak
5	8943.000	37.24	10.07	47.31	75.20	-27.89	peak
6	9146.000	36.66	10.54	47.20	75.20	-28.00	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



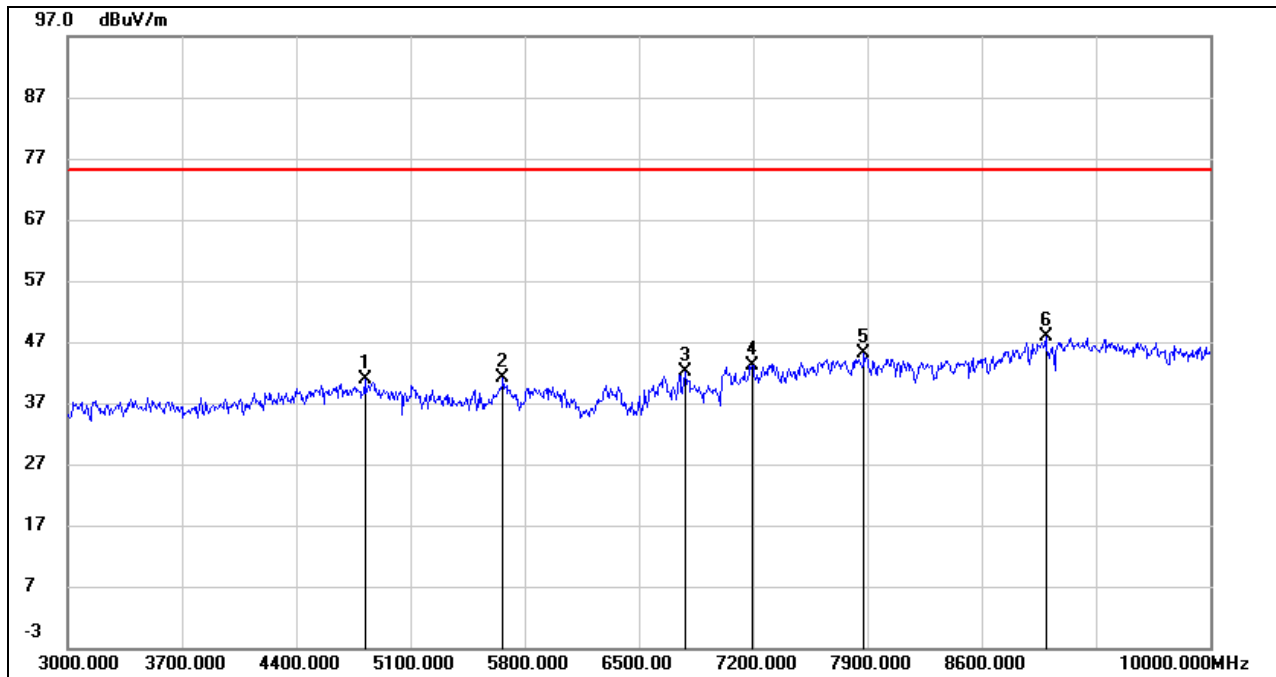
Measurement Method	Radiated	Test Channel	939.9875 MHz
Channel Separation	12.5 kHz	Modulation	Analog
Polar	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1074.000	16.25	27.02	43.27	75.20	-31.93	peak
2	1426.000	13.93	28.73	42.66	75.20	-32.54	peak
3	1772.000	14.46	30.12	44.58	75.20	-30.62	peak
4	1880.000	16.91	30.53	47.44	75.20	-27.76	peak
5	2078.000	13.55	31.22	44.77	75.20	-30.43	peak
6	2794.000	15.25	33.06	48.31	75.20	-26.89	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

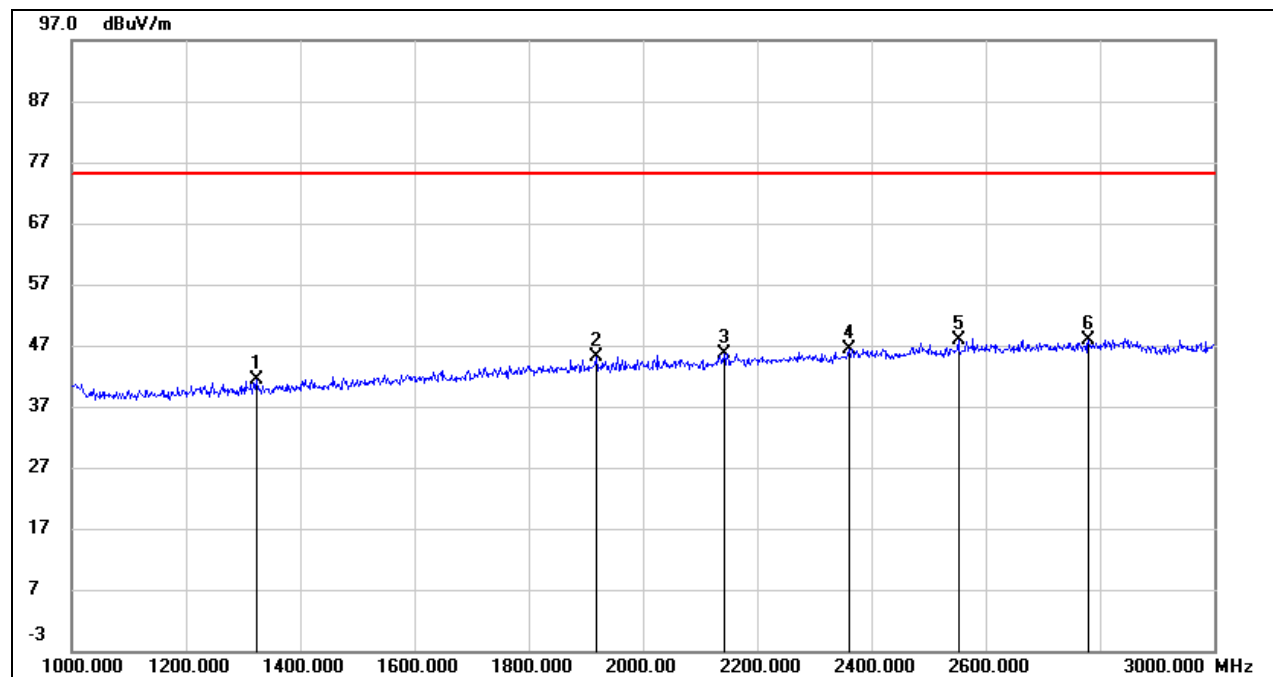
2. Margin = Limit – Result



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4820.000	41.04	-0.24	40.80	75.20	-34.40	peak
2	5667.000	39.88	1.32	41.20	75.20	-34.00	peak
3	6787.000	36.38	5.64	42.02	75.20	-33.18	peak
4	7193.000	36.53	6.55	43.08	75.20	-32.12	peak
5	7879.000	38.74	6.32	45.06	75.20	-30.14	peak
6	8992.000	37.46	10.42	47.88	75.20	-27.32	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m  
2. Margin = Limit – Result

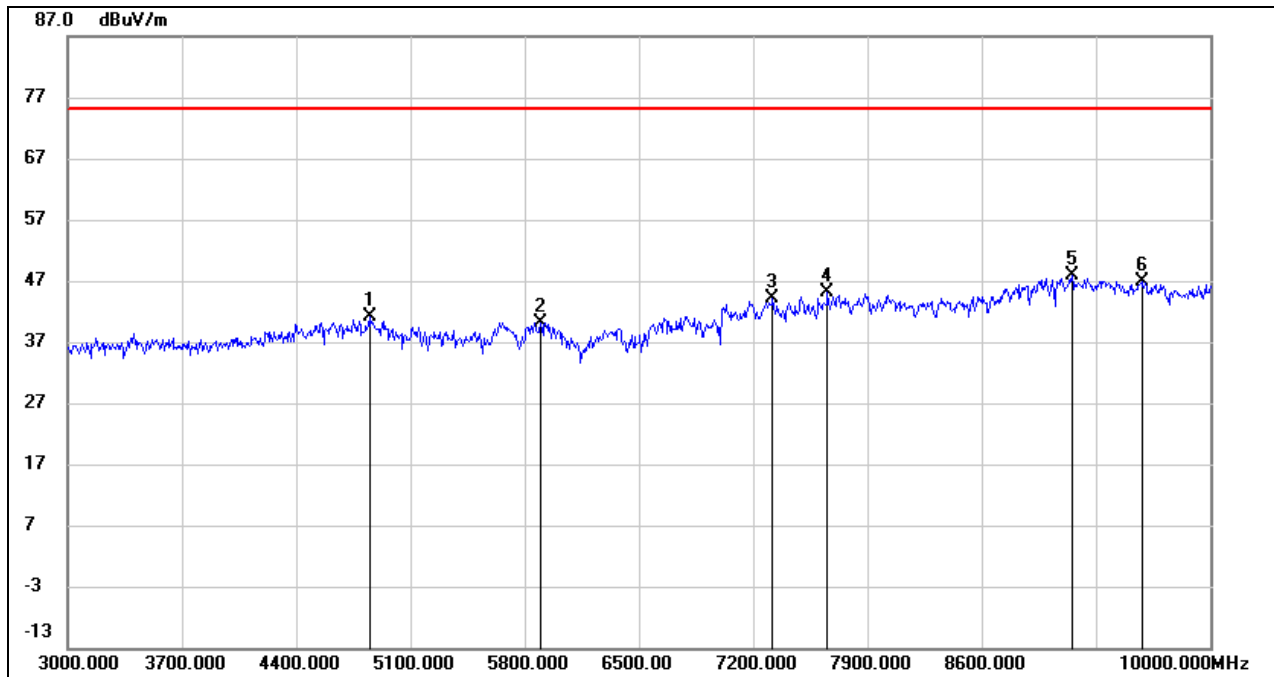
Measurement Method	Radiated	Test Channel	940.5 MHz
Channel Separation	12.5 kHz	Modulation	Analog
Polar	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1324.000	13.19	28.23	41.42	75.20	-33.78	peak
2	1918.000	14.48	30.68	45.16	75.20	-30.04	peak
3	2142.000	14.16	31.42	45.58	75.20	-29.62	peak
4	2360.000	14.33	32.07	46.40	75.20	-28.80	peak
5	2552.000	15.23	32.59	47.82	75.20	-27.38	peak
6	2780.000	14.91	33.03	47.94	75.20	-27.26	peak

Note: 1. Limit (dBuV/m) = -20+95.2 = 75.2 dBuV/m

2. Margin = Limit – Result



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4848.000	41.28	-0.13	41.15	75.20	-34.05	peak
2	5898.000	38.25	1.97	40.22	75.20	-34.98	peak
3	7319.000	37.66	6.46	44.12	75.20	-31.08	peak
4	7655.000	38.86	6.32	45.18	75.20	-30.02	peak
5	9153.000	37.35	10.54	47.89	75.20	-27.31	peak
6	9580.000	35.88	10.90	46.78	75.20	-28.42	peak

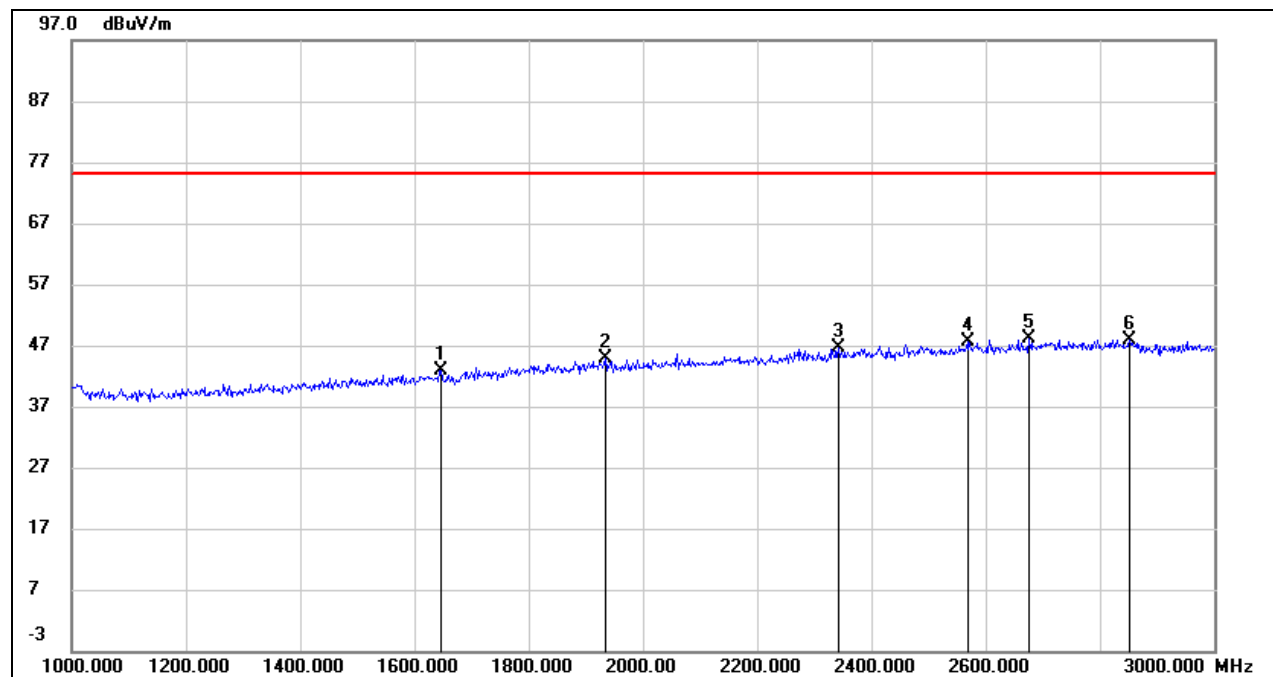
Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result





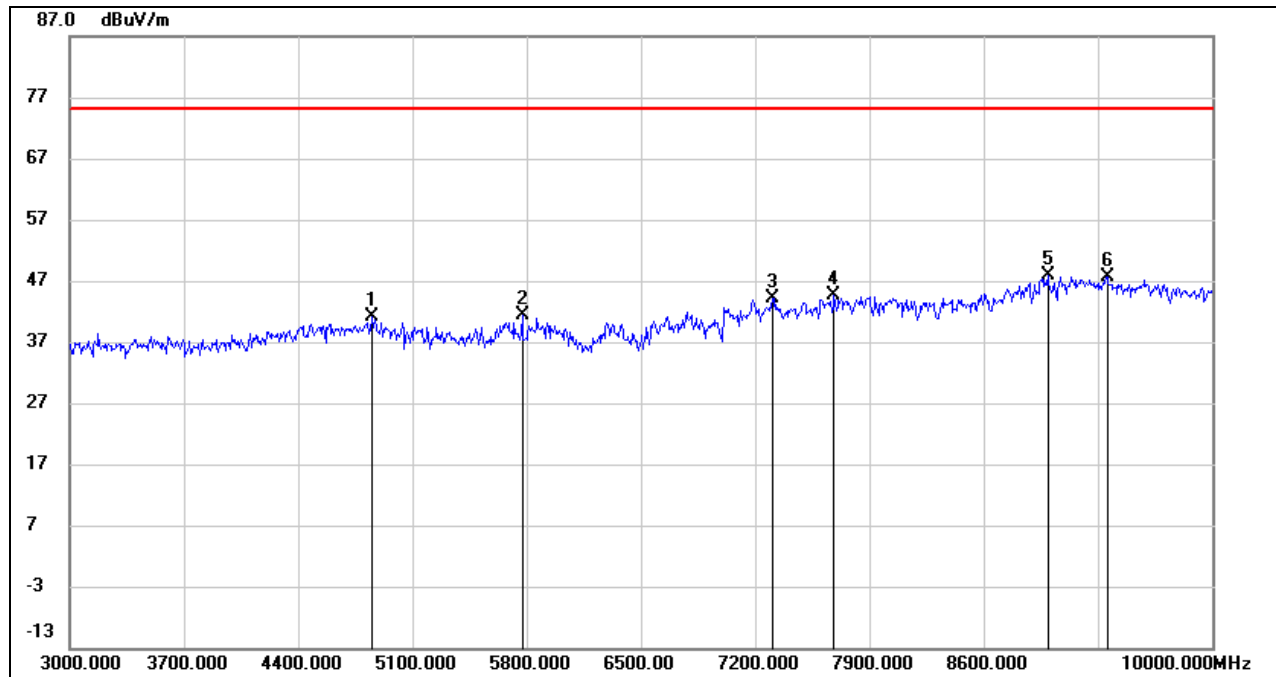
Measurement Method	Radiated	Test Channel	940.5 MHz
Channel Separation	12.5 kHz	Modulation	Analog
Polar	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1646.000	13.29	29.64	42.93	75.20	-32.27	peak
2	1934.000	14.08	30.74	44.82	75.20	-30.38	peak
3	2342.000	14.70	32.02	46.72	75.20	-28.48	peak
4	2568.000	15.05	32.62	47.67	75.20	-27.53	peak
5	2676.000	15.22	32.83	48.05	75.20	-27.15	peak
6	2852.000	14.71	33.17	47.88	75.20	-27.32	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4855.000	41.26	-0.10	41.16	75.20	-34.04	peak
2	5772.000	39.89	1.61	41.50	75.20	-33.70	peak
3	7305.000	37.60	6.47	44.07	75.20	-31.13	peak
4	7683.000	38.29	6.32	44.61	75.20	-30.59	peak
5	8992.000	37.46	10.42	47.88	75.20	-27.32	peak
6	9356.000	37.02	10.63	47.65	75.20	-27.55	peak

Note: 1. Limit (dBuV/m) =  $-20+95.2 = 75.2$  dBuV/m

2. Margin = Limit – Result

## 6.6. MODULATION LIMITING

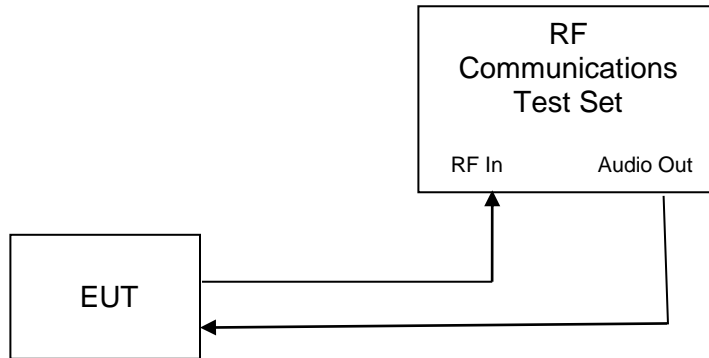
### LIMITS

According to CFR 47 section 2.1047(a), for Voice Modulation Communication Equipment, the frequency response of the audio modulation circuit over a range of 100 to 5000Hz shall be measured.

### TEST PROCEDURE

- a) The DUT transmitter output port was connected to RF Communications Test Set.
- b) Path loss for the measurement included.
- c) Adjust the transmitter per the manufacturer's procedure for full rated system deviation.
- d) Set the audio bandwidth filter  $\leq 0.25$  Hz to  $\geq 15\ 000$  Hz.
- e) Apply a 1000 Hz modulating signal to the transmitter from the RF Communications Test Set, and adjust the level to obtain 60 % of full rated system deviation. This is the 0dB reference level.
- f) Increase the level from the audio generator by 20 dB in 5 dB increments recording the deviation as measured from the test receiver in each step. Verify that the audio level used to make the OBW measurement is included in the sweep.
- g) Repeat for step f) at 300 Hz, 2500 Hz and 3000 Hz at a minimum using the 0dB reference level obtained in step e).
- h) The values recorded in step f) and step g) are the modulation limiting.

### TEST SETUP

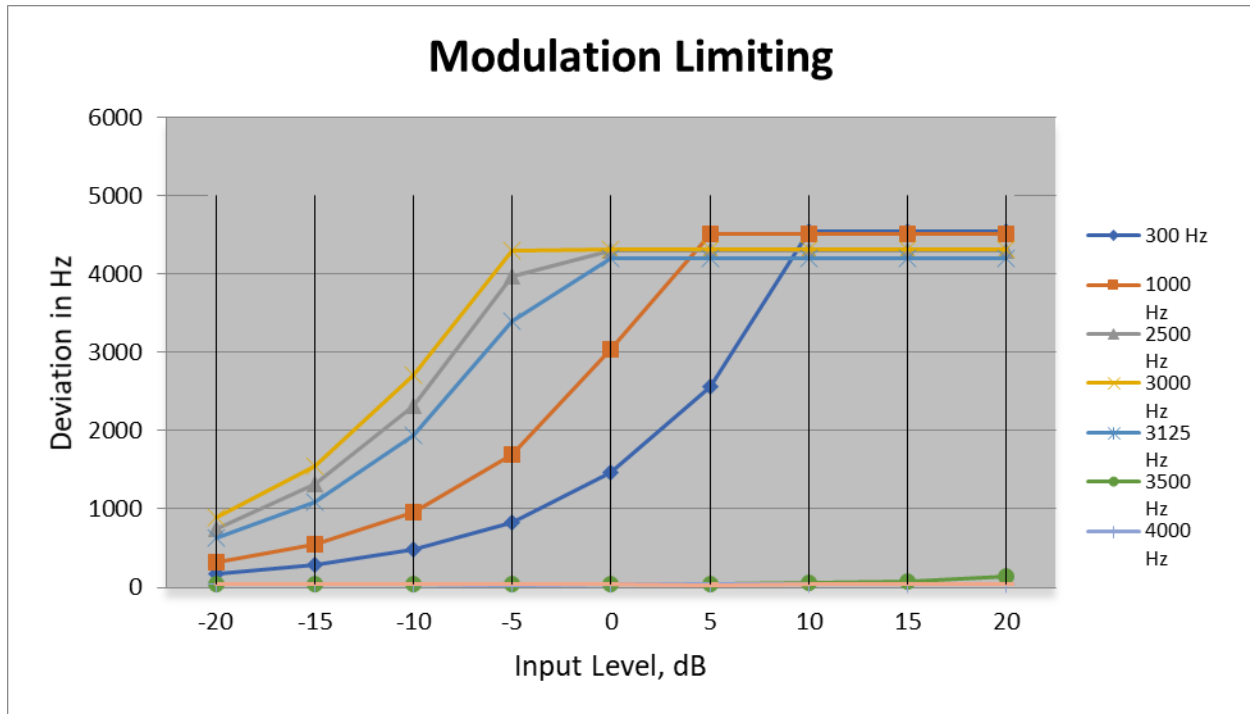


### TEST ENVIRONMENT

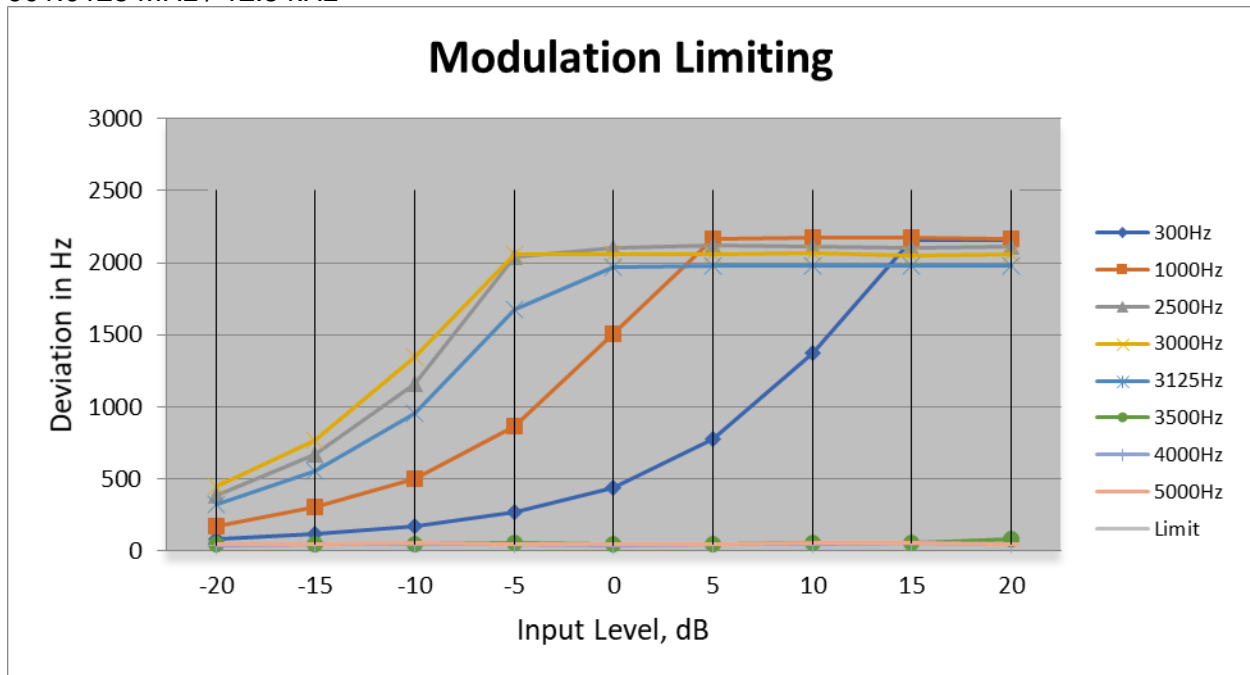
Temperature	23.8 °C	Relative Humidity	59 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 7.5 V

## RESULTS

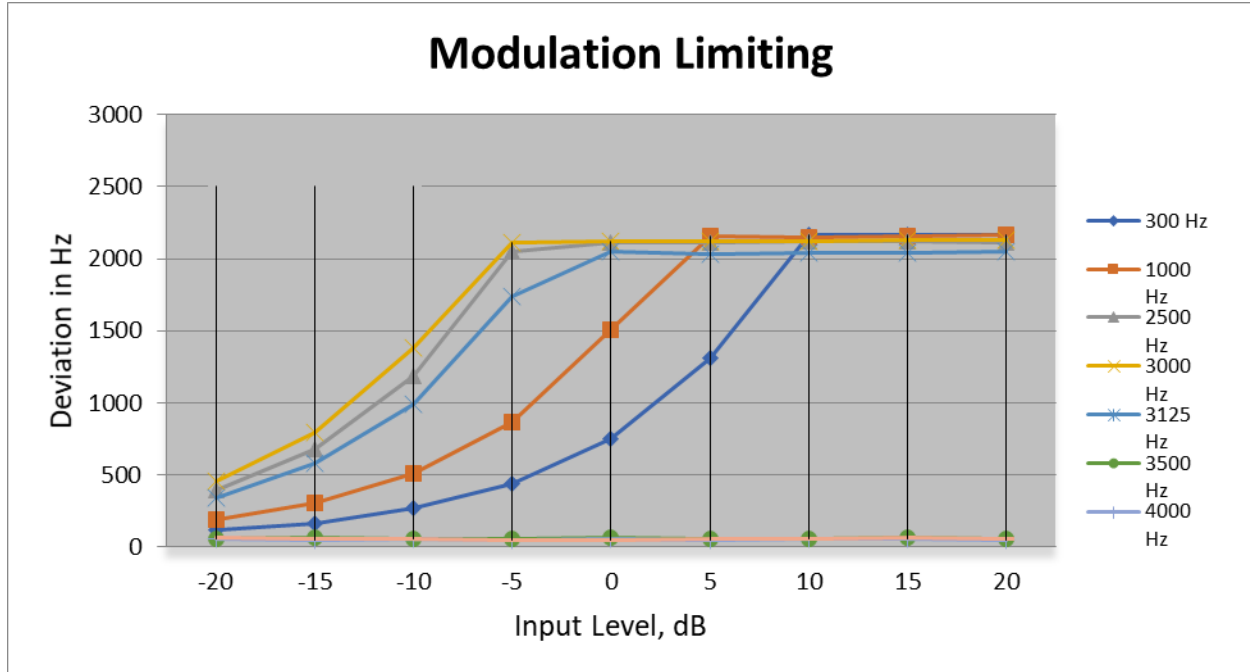
851.0125 MHz / 25 kHz



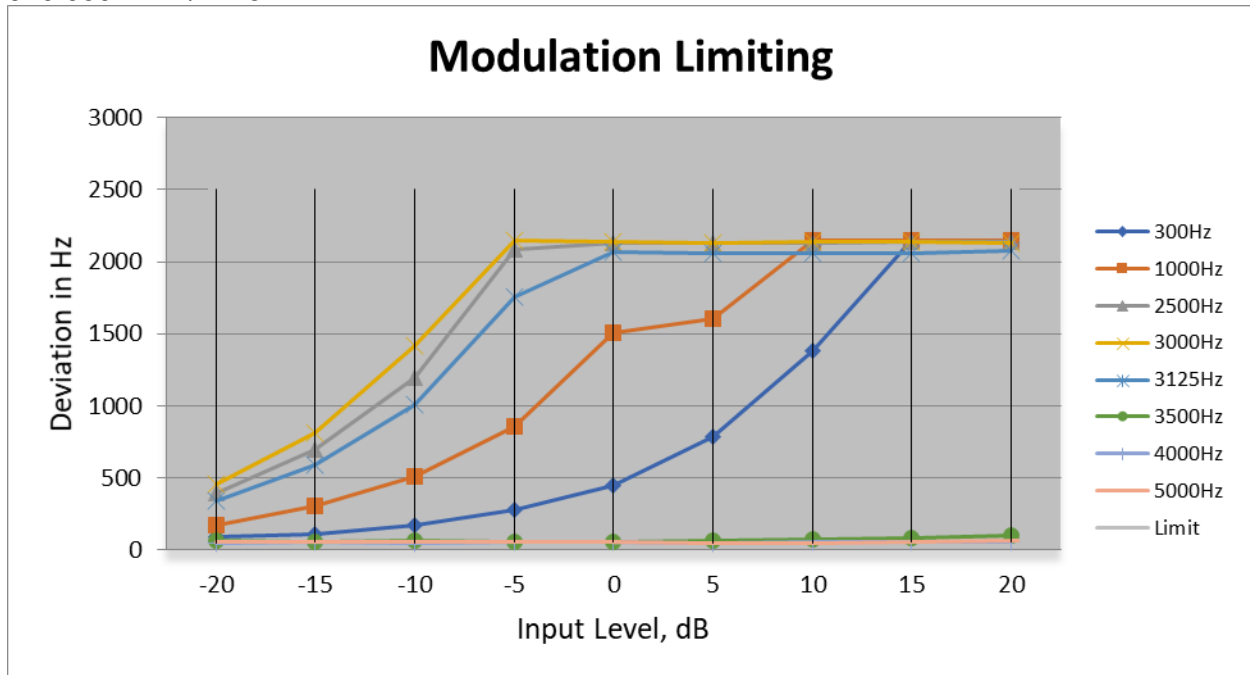
901.0125 MHz / 12.5 kHz



935.0125 MHz / 12.5 kHz



940.050 MHz / 12.5 kHz

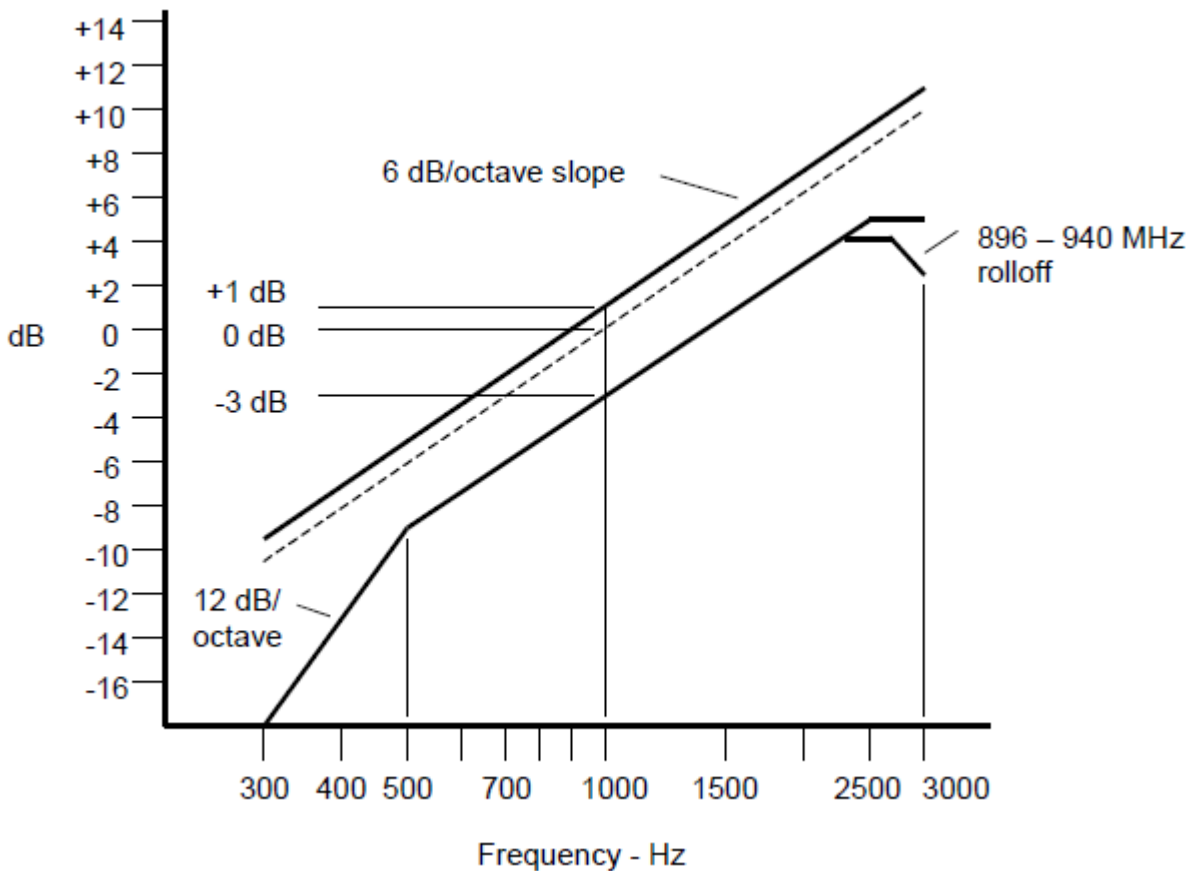


## 6.7. AUDIO FREQUENCY RESPONSE

### LIMITS

According to CFR 47 section 2.1047(a), for Voice Modulation Communication Equipment, the frequency response of the audio modulation circuit over a range of 100 to 5000Hz shall be measured.

According to clause 3.2.6.2 of ANSI/TIA-603-E-2016  
Recommended Standard  
300 Hz to 3000 Hz (refer to the following figure)

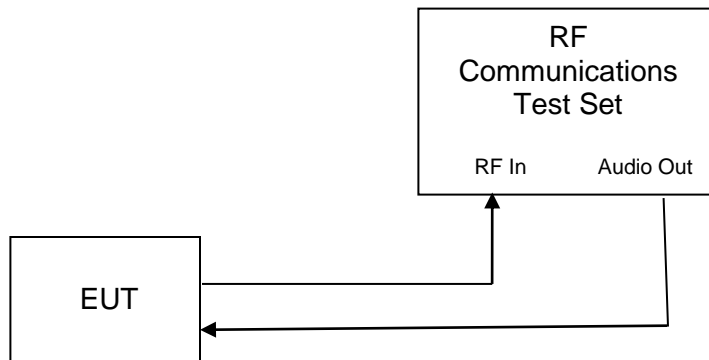


The audio frequency response from 300 Hz to 3000 Hz shall not vary more than +1 dB or -3 dB from a true 6 dB per octave pre-emphasis characteristic as referenced to the 1000 Hz level. The exception is from 500 Hz to 300 Hz, where an additional 6 dB per octave rolloff is allowed.

## TEST PROCEDURE

- a) The DUT transmitter output port was connected to RF Communications Test Set.
- b) Path loss for the measurement included.
- c) Adjust the transmitter per the manufacturer's procedure for full rated system deviation.
- d) Set the audio bandwidth filter to 15 kHz and 50 Hz.
- e) Apply a 1000 Hz tone and adjust the RF Communications Test Set to produce 20 % of the rated system deviation.
- f) Set the test receiver to measure rms deviation and record the deviation reading as  $DEV_{REF}$ .
- g) Set the RF Communications Test Set to the desired test frequency between 300 Hz and 3000 Hz.
- h) Record the test receiver deviation reading as  $DEV_{FREQ}$ .
- i) Calculate the audio frequency response at the present frequency as follows:  
 $20\log_{10} (DEV_{REF} / DEV_{FREQ})$ .
- j) Repeat step f) through step h) for all the desired test frequencies.

## TEST SETUP



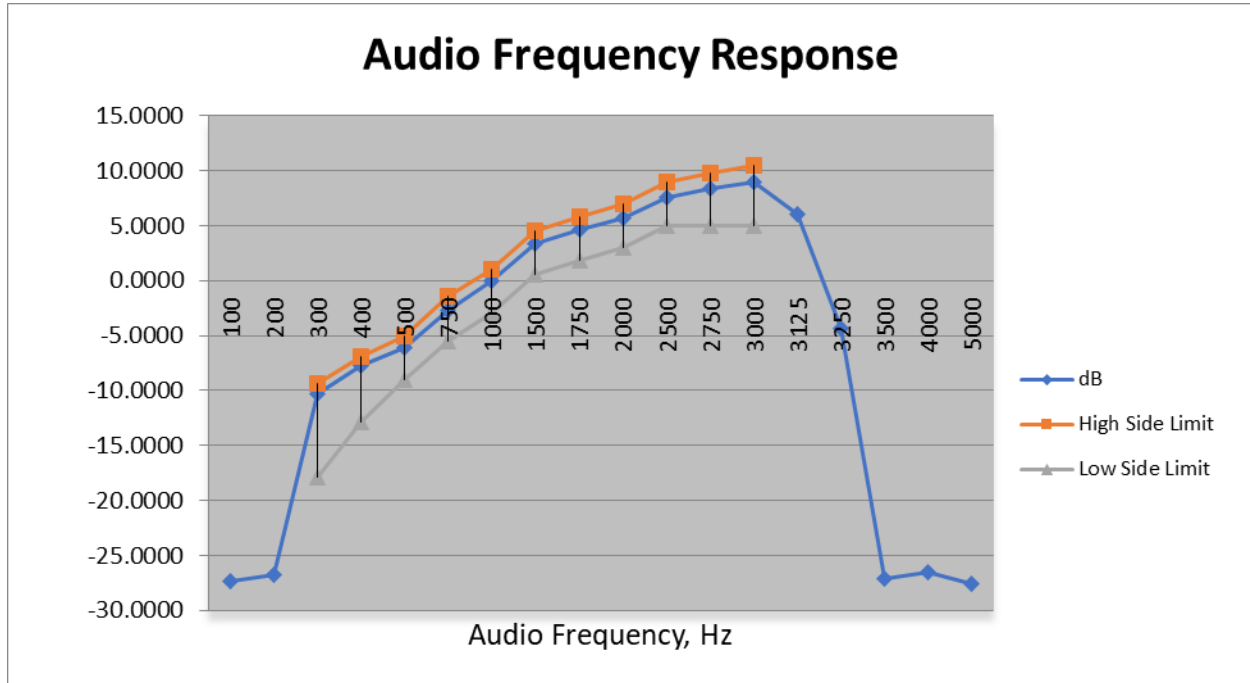
## TEST ENVIRONMENT

Temperature	23.8 °C	Relative Humidity	59 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 7.5 V

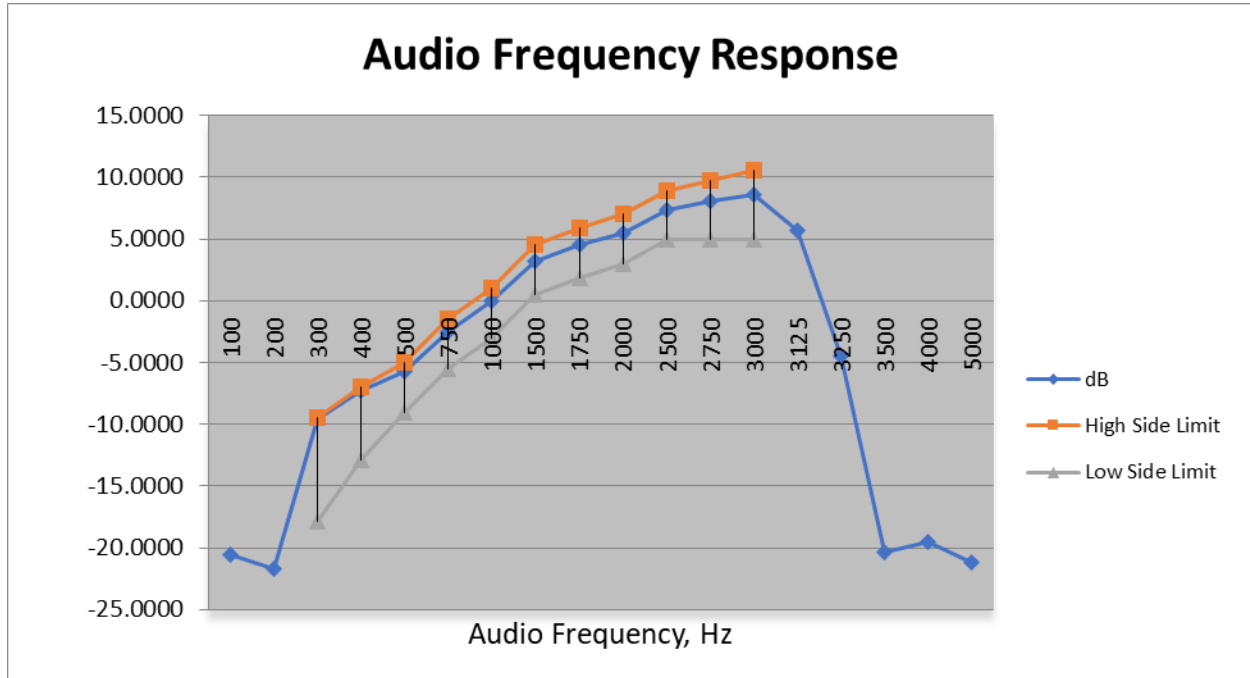


## RESULTS

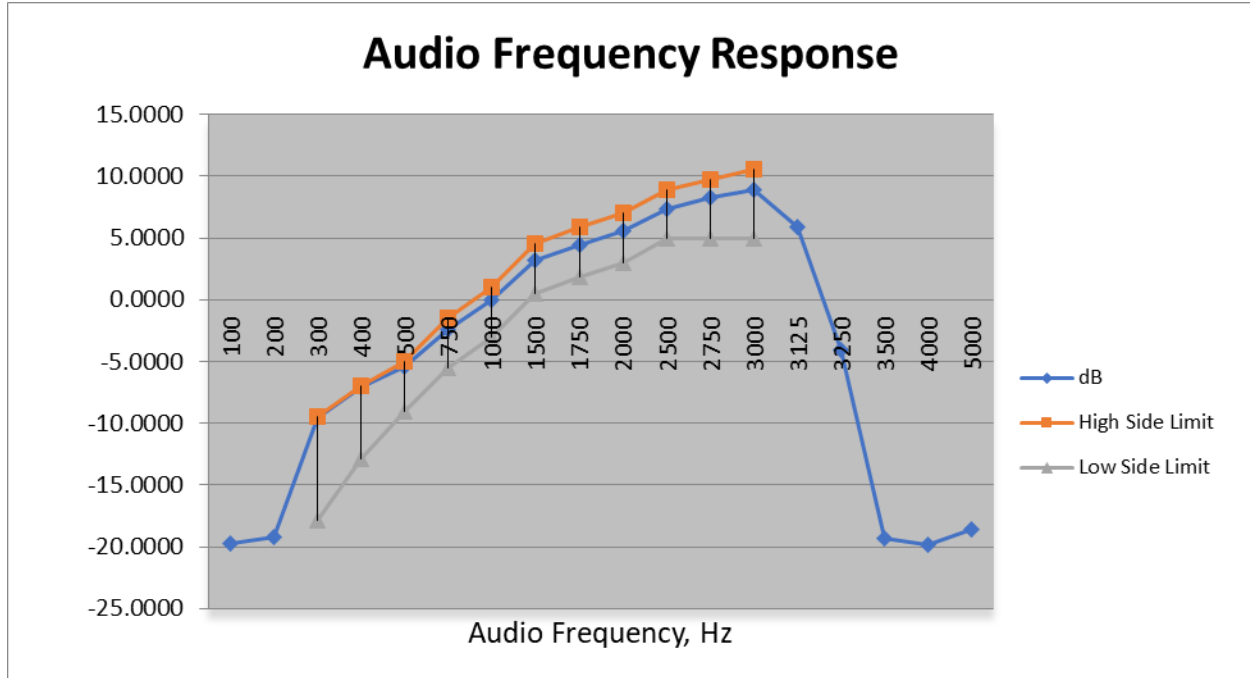
851.0125 MHz / 25 kHz



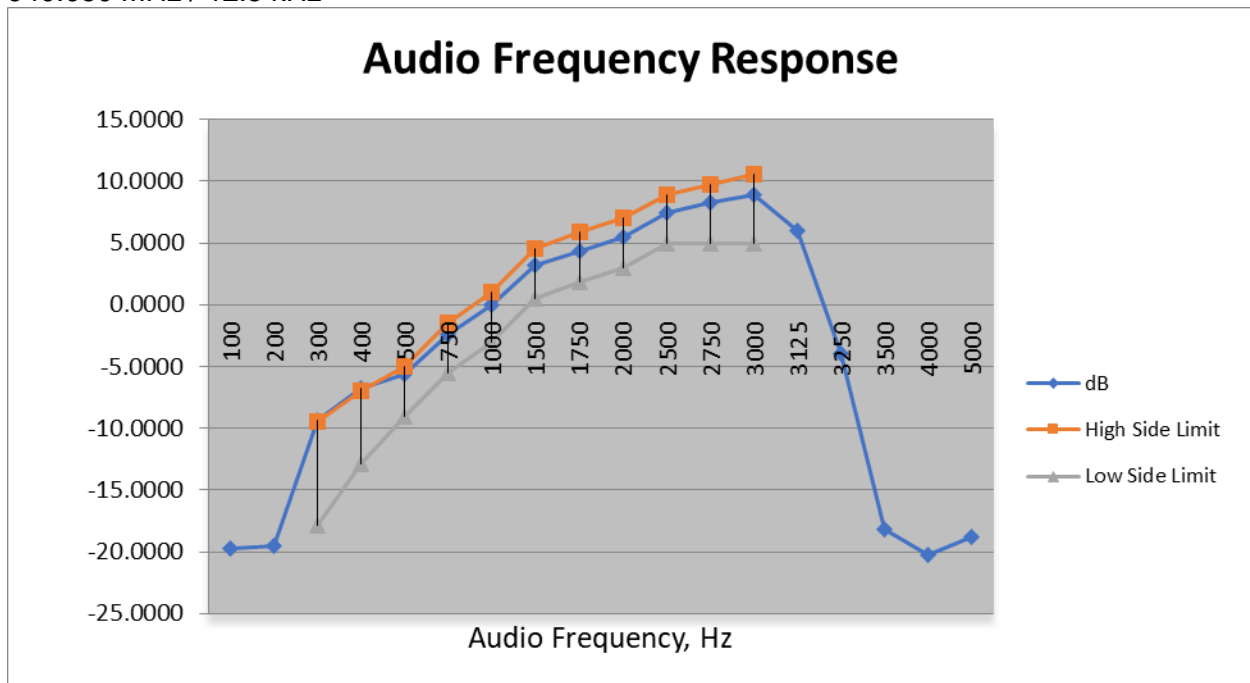
901.0125 MHz / 12.5 kHz



935.0125 MHz / 12.5 kHz



940.050 MHz / 12.5 kHz





## 6.8. AUDIO LOW PASS FILTER RESPONSE

### LIMITS

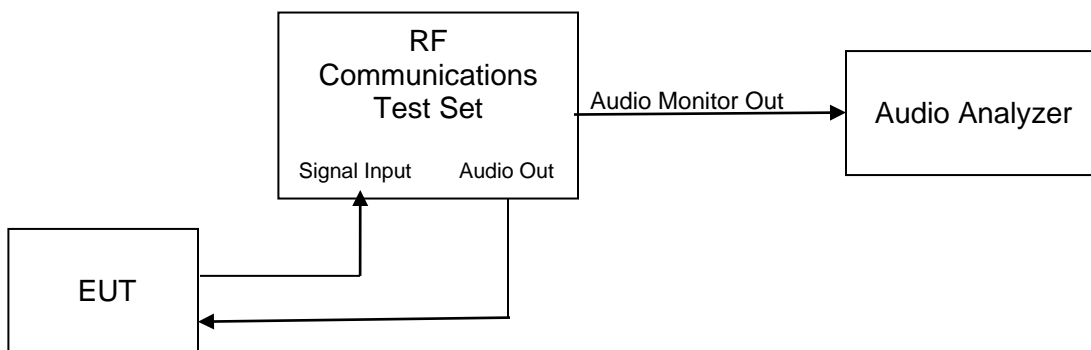
According to CFR 47 section 2.1047(a), for Voice Modulation Communication Equipment, the frequency response of the audio modulation circuit over a range of 100 to 5000Hz shall be measured.

### TEST PROCEDURE

Refer to ANSI/TIA-603-E-2016 clause 2.2.15.2

- a) Connect the equipment as illustrated.
- b) Connect the RF Communications Test Set as close as possible the input of the post limiter low pass filter within the transmitter under test.
- c) Connect the RF Communications Test Set to the output of the post limiter low pass filter within the transmitter under test.
- d) Apply a 1000 Hz tone from the RF Communications Test Set and adjust the level per manufacturer's specifications.
- e) Record the dB level of the 1000 Hz spectral line on the audio analyzer as  $LEV_{REF}$ .
- f) Set the RF Communications Test Set to the desired test frequency between 3000 Hz and the upper low pass filter limit.
- g) Record audio analyzer levels, at the test frequency in step f).
- h) Record the dB level on the audio analyzer as  $LEV_{FREQ}$ .
- i) Calculate the audio frequency response at the test frequency as:  
low pass frequency response =  $LEV_{FREQ} - LEV_{REF}$
- j) Repeat steps f) through i) for all the desired test frequencies.

### TEST SETUP

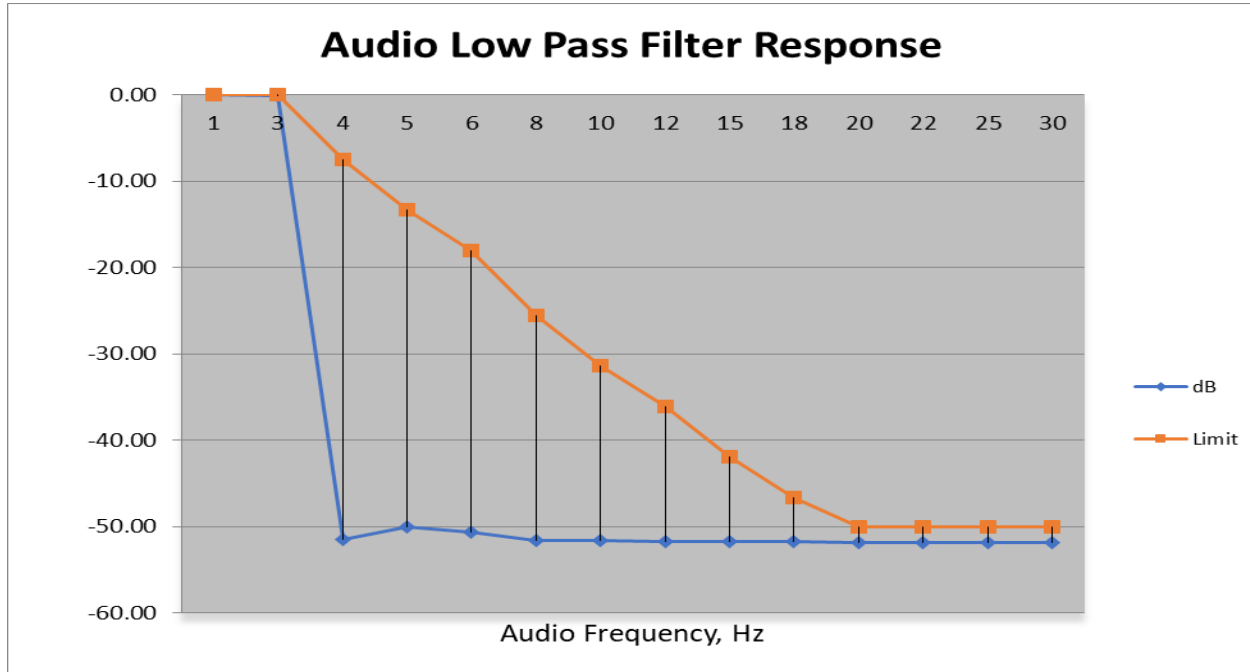


### TEST ENVIRONMENT

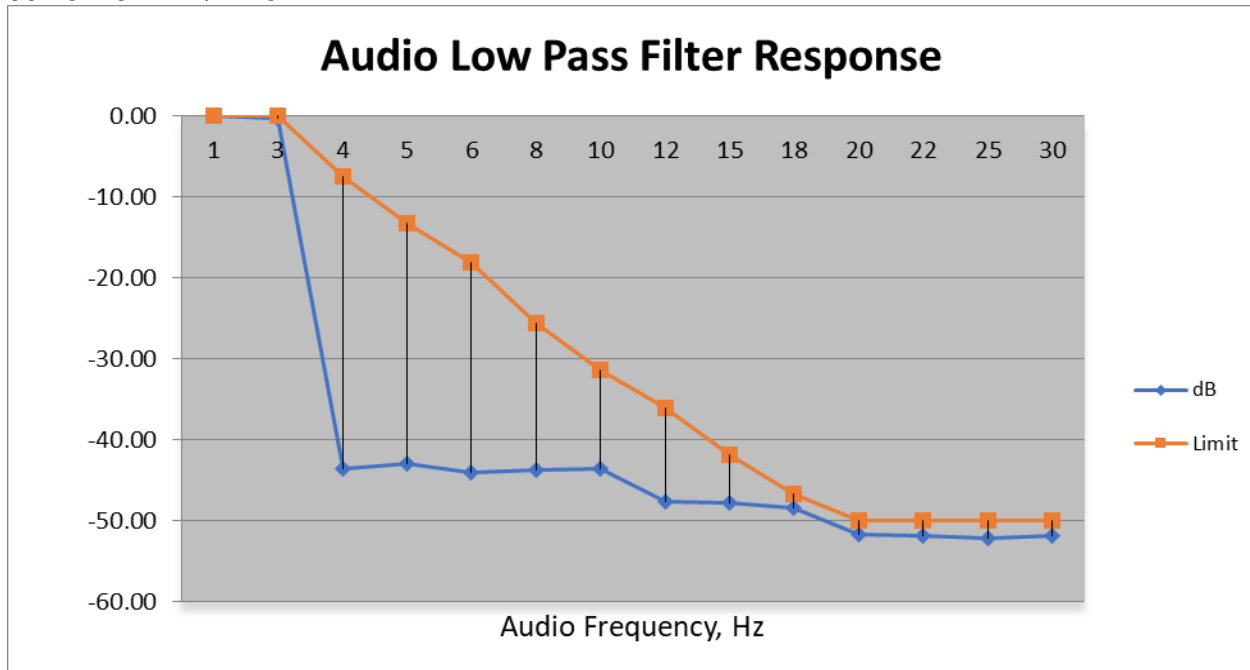
Temperature	23.8 °C	Relative Humidity	59 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 7.5 V

## RESULTS

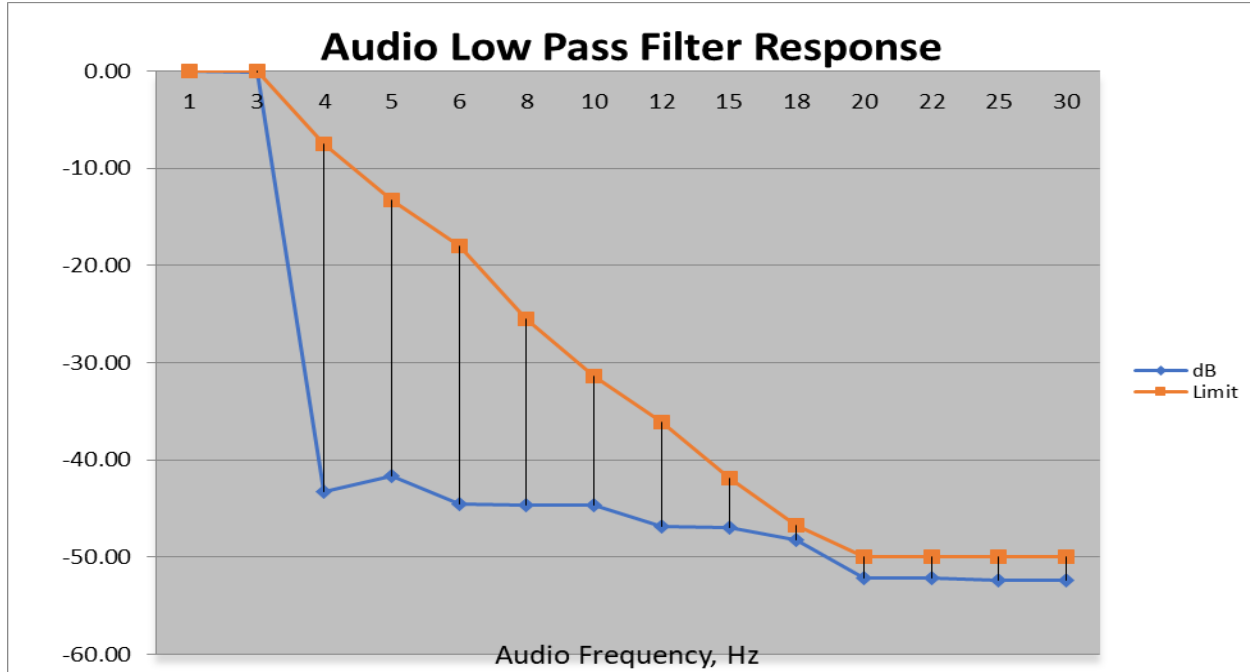
851.0125 MHz / 25 kHz



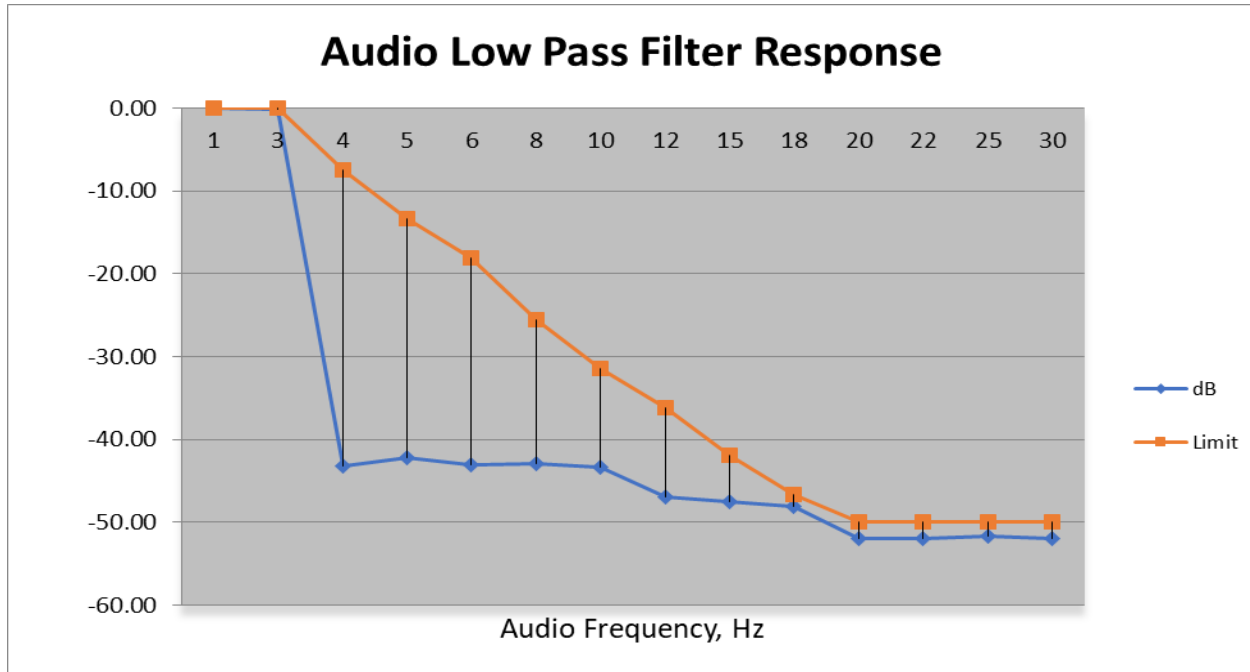
901.0125 MHz / 12.5 kHz



935.0125 MHz / 12.5 kHz



940.050 MHz / 12.5 kHz



## 6.9. EMISSION MASK

### LIMITS

Applicable Emission Masks

Frequency band (MHz)	Mask for equipment with audio low pass filter	Mask for equipment without audio low pass filter
Below 25 <sup>1</sup>	A or B	A or C
25-50	B	C
72-76	B	C
150-174 <sup>2</sup>	B, D, or E	C, D or E
150 paging only	B	C
220-222	F	F
421-512 <sup>25</sup>	B, D, or E	C, D, or E
450 paging only	B	G
806-809/851-854 <sup>6</sup>	B	H
809-824/854-869 <sup>35</sup>	B, D	D, G.
896-901/935-940	I	J
902-928	K	K
929-930	B	G
4940-4990 MHz	L or M	L or M
5850-5925 <sup>4</sup>		
All other bands	B	C

CFR 47 FCC Part 24.133

For transmitters authorized a bandwidth greater than 10 kHz:

(i) On any frequency outside the authorized bandwidth and removed from the edge of the authorized bandwidth by a displacement frequency ( $f_d$  in kHz) of up to and including 40 kHz: at least  $116 \log_{10} ((f_d + 10)/6.1)$  decibels or 50 plus  $10 \log_{10} (P)$  decibels or 70 decibels, whichever is the lesser attenuation;

(ii) On any frequency outside the authorized bandwidth and removed from the edge of the authorized bandwidth by a displacement frequency ( $f_d$  in kHz) of more than 40 kHz: at least  $43 + 10 \log_{10} (P)$  decibels or 80 decibels, whichever is the lesser attenuation.

(2) For transmitters authorized a bandwidth of 10 kHz:

(i) On any frequency outside the authorized bandwidth and removed from the edge of the authorized bandwidth by a displacement frequency ( $f_d$  in kHz) of up to and including 20 kHz: at least  $116 \times \log_{10} ((f_d + 5)/3.05)$  decibels or  $50 + 10 \times \log_{10} (P)$  decibels or 70 decibels, whichever is the lesser attenuation;

(ii) On any frequency outside the authorized bandwidth and removed from the edge of the authorized bandwidth by a displacement frequency ( $f_d$  in kHz) of more than 20 kHz: at least  $43 + 10 \log_{10} (P)$  decibels or 80 decibels, whichever is the lesser attenuation.

### CFR 47 FCC Part 90.691 Emission mask requirements for EA-based systems.

(a) Out-of-band emission requirement shall apply only to the “outer” channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least  $116 \log_{10}(f/6.1)$  decibels or  $50 + 10 \log_{10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log_{10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

### TEST PROCEDURE

- 1) The DUT transmitter output port was connected to RF Communications Test Set.
- 2) Path loss for the measurement included.
- 3) Spectrum set as follow:  
Centre frequency = fundamental frequency, span=62.50 kHz, RBW=300 Hz, VBW=910 Hz, Sweep = auto, Detector function = peak, Trace = max hold
- 4) Key the transmitter and set the level of the unmodulated carrier to a full scale reference line. This is the 0dB reference for the measurement.
- 5) Set RF Communications Test Set audio bandwidth filter to 15 kHz low pass filter and 50 Hz high pass filter.
- 6) Transmit the radio and set the RF Communications Test Set to 2.5 kHz tone at an input level 16 dB greater than that necessary to produce 50 % deviation
- 7) Measure and record the results in the test report.
- 8) Use the 99 % occupied bandwidth and ndB bandwidth function to test the bandwidth.

### TEST SETUP



### TEST ENVIRONMENT

Temperature	25.3 °C	Relative Humidity	66 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 4.5 V



## RESULTS

Frequency (MHz)	Channel Spacing (kHz)	Modulation Type	99 % Occupied Bandwidth (kHz)	Emission Designator	26 dB Bandwidth (kHz)	Mask Limit
806.0125	25	Analog	14.923	16K0F3E	15.58	B
814.9875	25	Analog	14.942	16K0F3E	15.59	B & §90.691
823.9875	25	Analog	15.017	16K0F3E	15.61	B & §90.691
851.0125	25	Analog	15.012	16K0F3E	15.61	B & §90.691
860.0125	25	Analog	15.015	16K0F3E	15.61	B & §90.691
868.8875	25	Analog	15.032	16K0F3E	15.61	B & §90.691
896.0125	12.5	Analog	9.849	11K0F3E	10.46	I
900.9875	12.5	Analog	9.846	11K0F3E	10.46	I
901.5000	12.5	Analog	9.845	10K0F3E	10.46	§ 24.133
935.0125	12.5	Analog	9.848	11K0F3E	10.46	I
939.9875	12.5	Analog	9.857	11K0F3E	10.46	I
940.5000	12.5	Analog	9.853	10K0F3E	10.46	§ 24.133

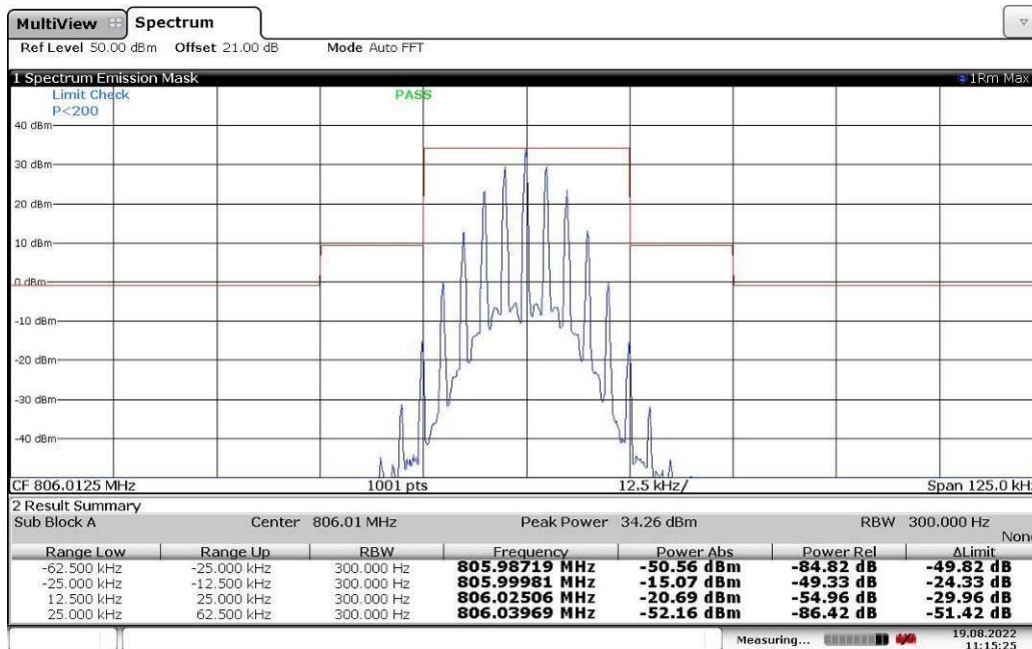
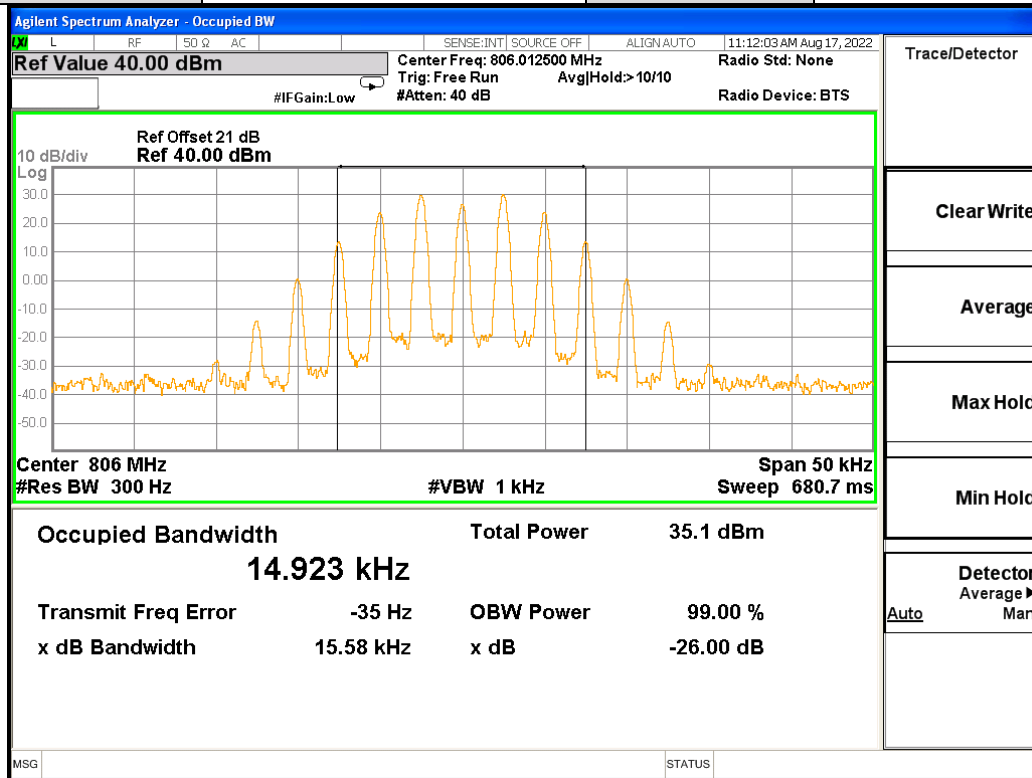
806.0125	12.5	Digital	7.344	7K6F1D	9.209	D & H
853.9875	12.5	Digital	/	8K10F1D	/	H
814.9875	12.5	Digital	7.755	7K6F1D	10.34	D & §90.691
823.9875	12.5	Digital	7.516	7K6F1D	9.491	D & §90.691
851.0125	12.5	Digital	7.457	7K6F1D	9.312	D & §90.691
860.0125	12.5	Digital	7.712	7K6F1D	10.02	D & §90.691
868.8875	12.5	Digital	7.367	7K6F1D	9.333	D & §90.691
896.0125	12.5	Digital	7.542	7K6F1D	9.970	I
900.9875	12.5	Digital	7.937	7K6F1D	10.67	I
901.5000	12.5	Digital	7.726	7K6F1D	9.658	§ 24.133
935.0125	12.5	Digital	7.691	7K6F1D	9.809	I
939.9875	12.5	Digital	7.740	7K6F1D	9.614	I
940.5000	12.5	Digital	7.756	7K6F1D	10.09	§ 24.133

### \*Note:

- the 4FSK data and O.153 test pattern was used during the digital Modulation test.
- For Digital Modulation, 12.5 kHz Data F1D & FXD would be the same, therefore only measurements with F1D modulation shown below.
- For Digital Modulation, 12.5 kHz Data F1E & FXE would be the same, therefore only measurements with F1E modulation shown below.
- For F1D, F1E, F1W and F3E had been evaluated, only the worst data recorded in the report.



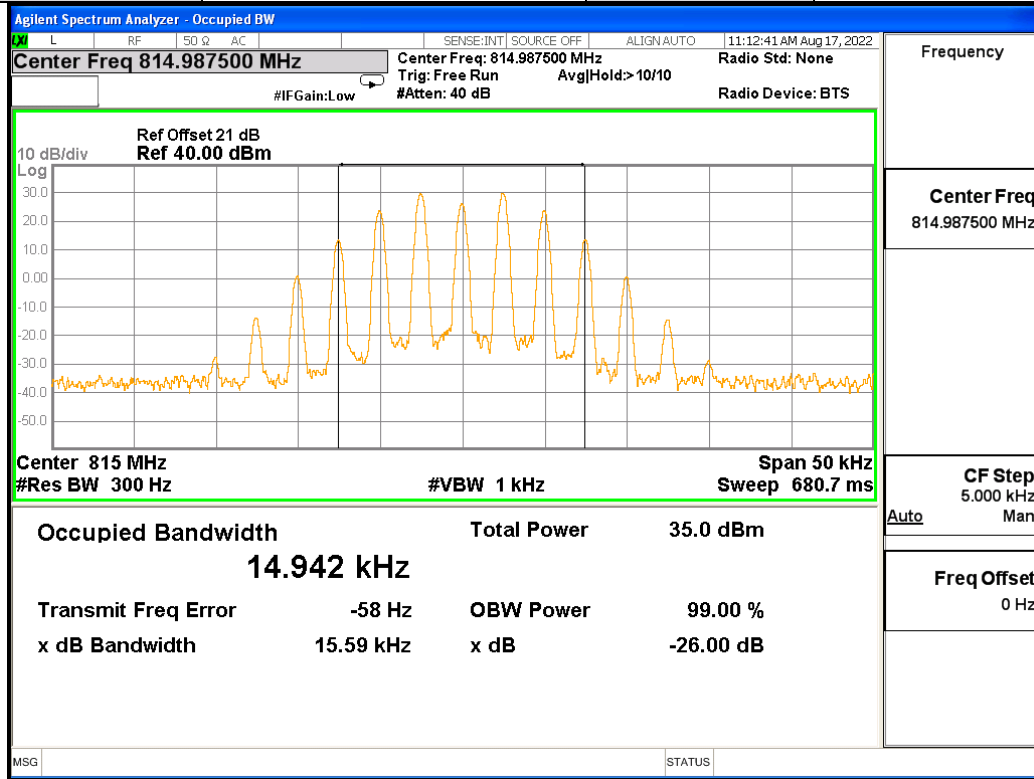
Measurement Method	Conducted	Test Channel	806.0125 MHz
Channel Separation	25 kHz	Modulation	Analog



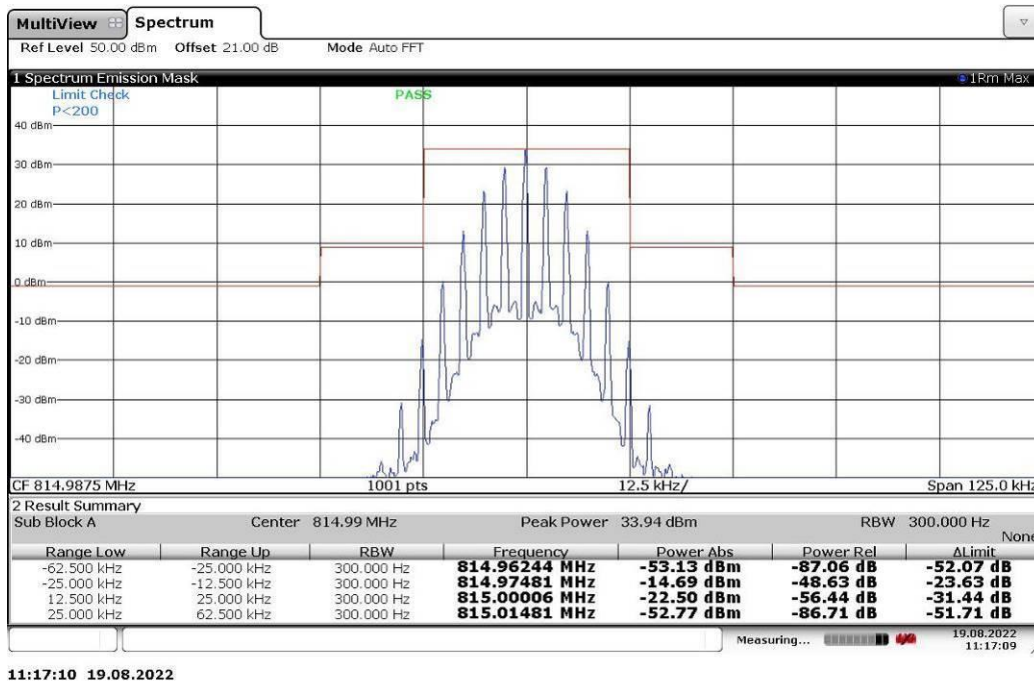
11:15:25 19.08.2022



Measurement Method	Conducted	Test Channel	814.9875 MHz
Channel Separation	25 kHz	Modulation	Analog

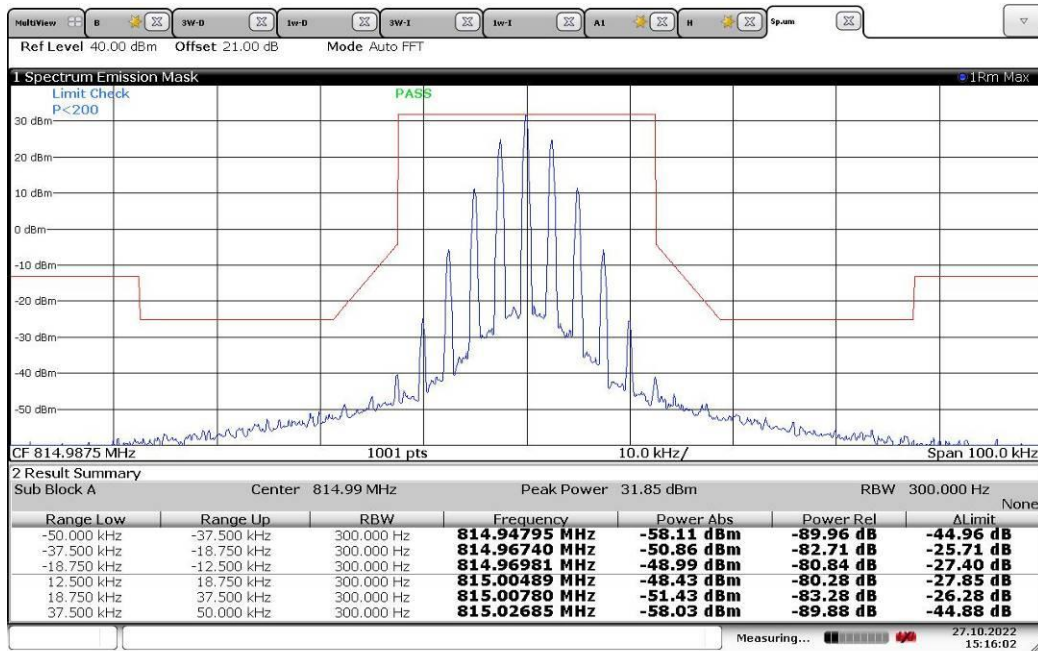


Mask B





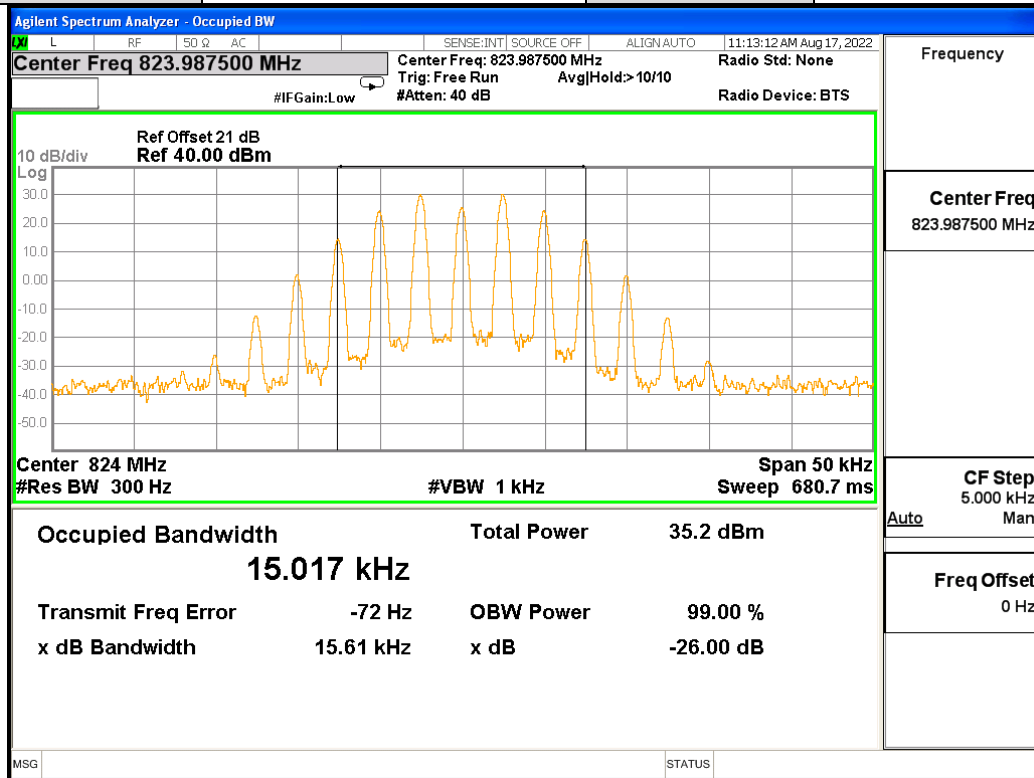
### Mask §90.691



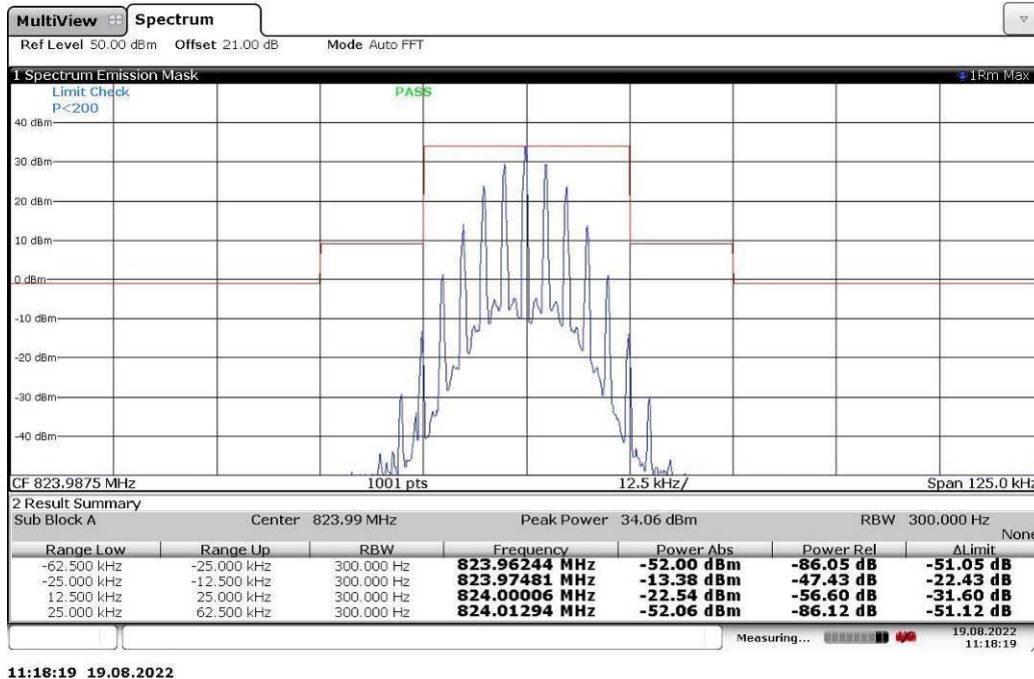
15:16:03 27.10.2022



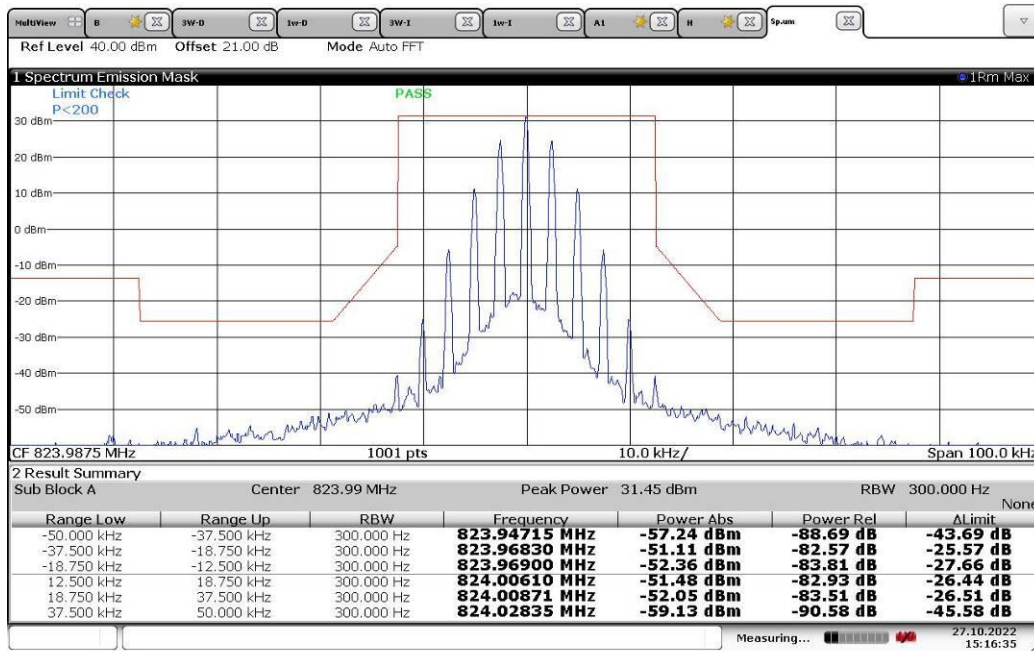
Measurement Method	Conducted	Test Channel	823.9875 MHz
Channel Separation	25 kHz	Modulation	Analog



## Mask B



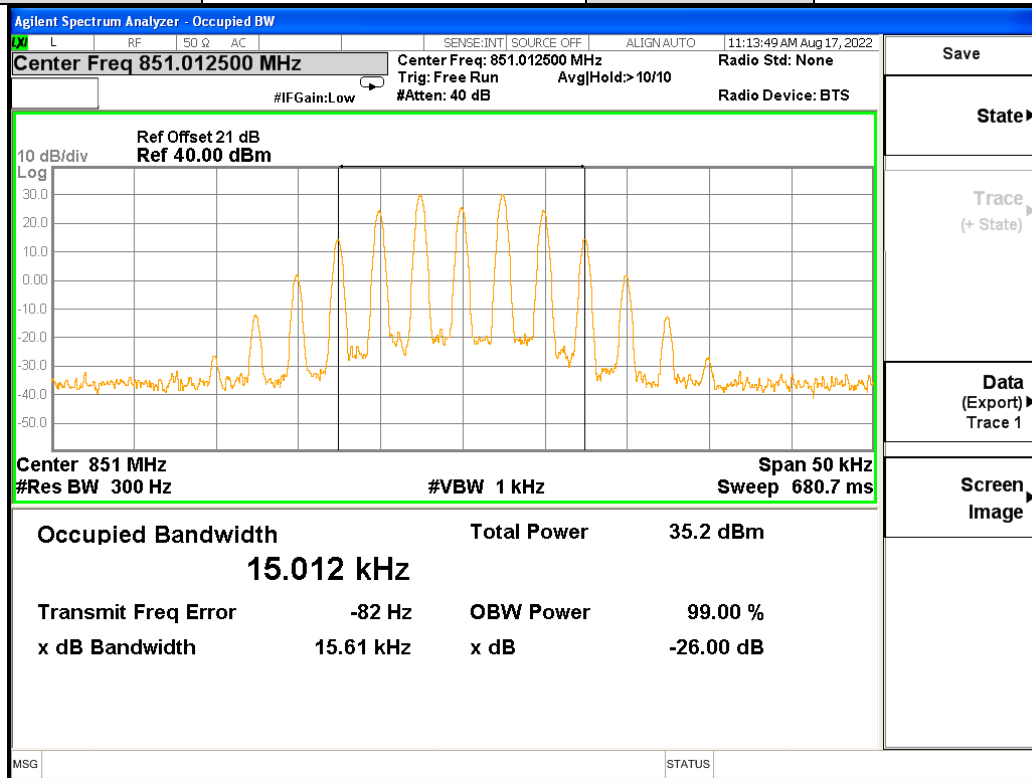
### Mask §90.691



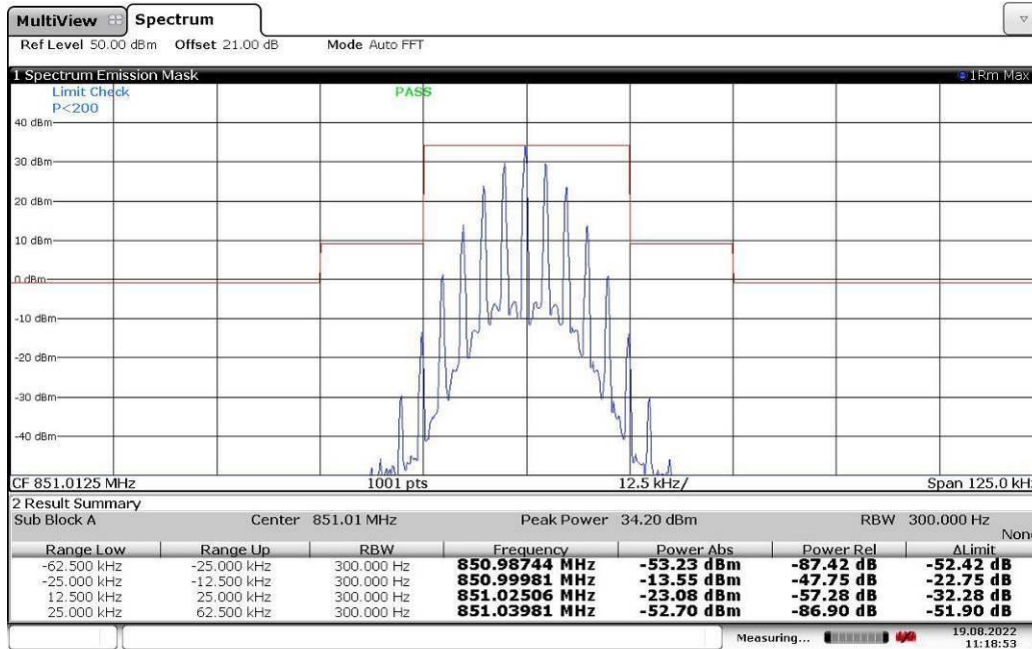
15:16:36 27.10.2022



Measurement Method	Conducted	Test Channel	851.0125 MHz
Channel Separation	25 kHz	Modulation	Analog

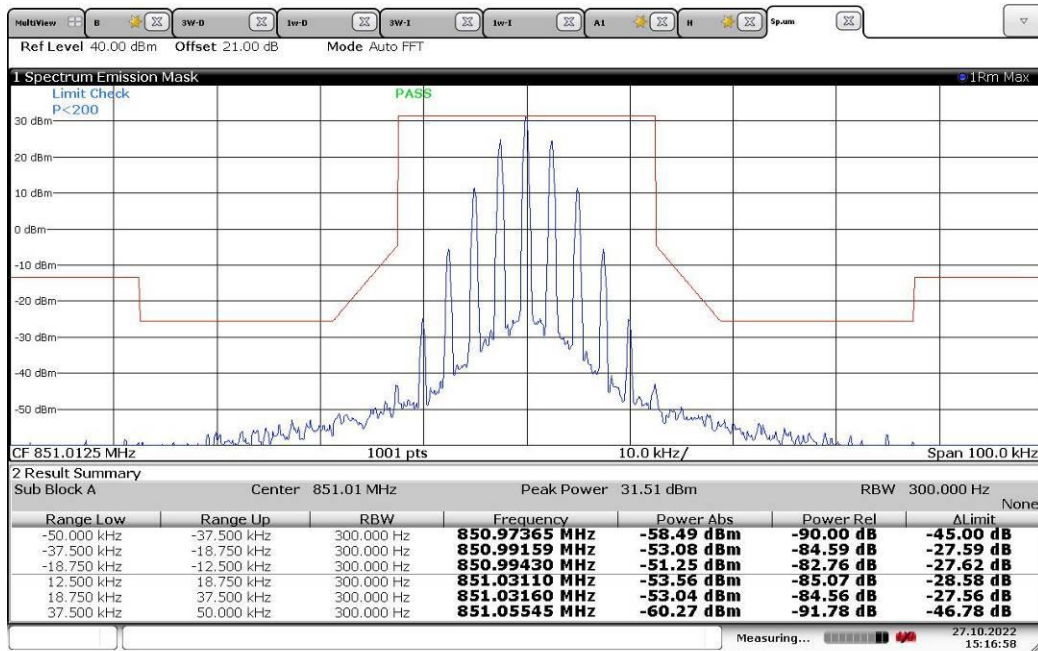


## Mask B





### Mask §90.691

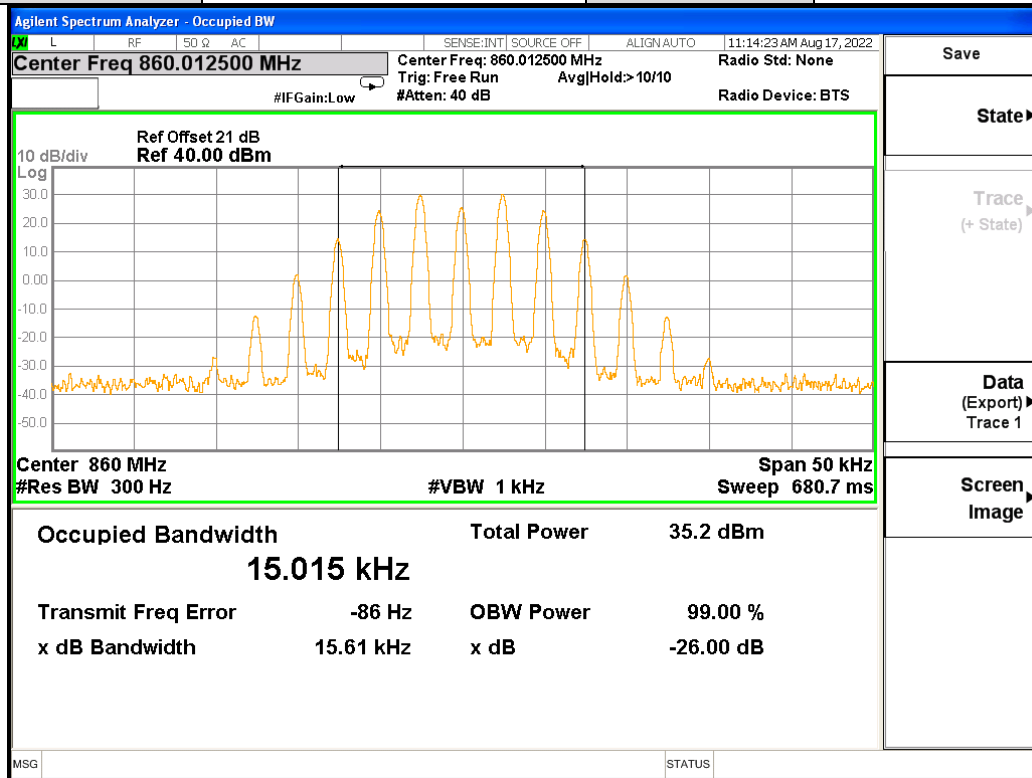


15:16:58 27.10.2022

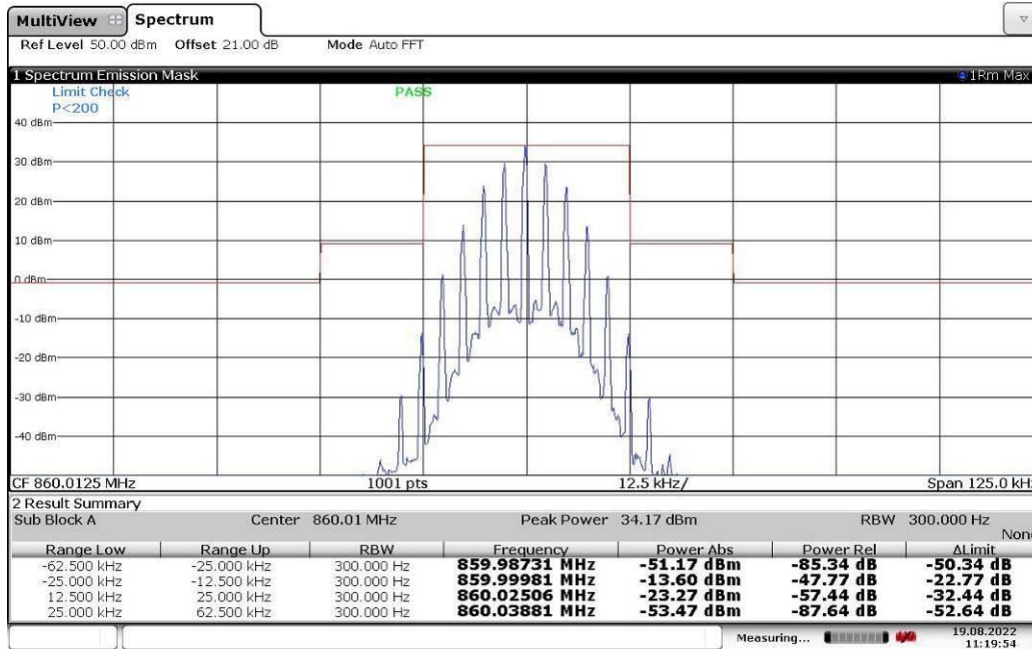




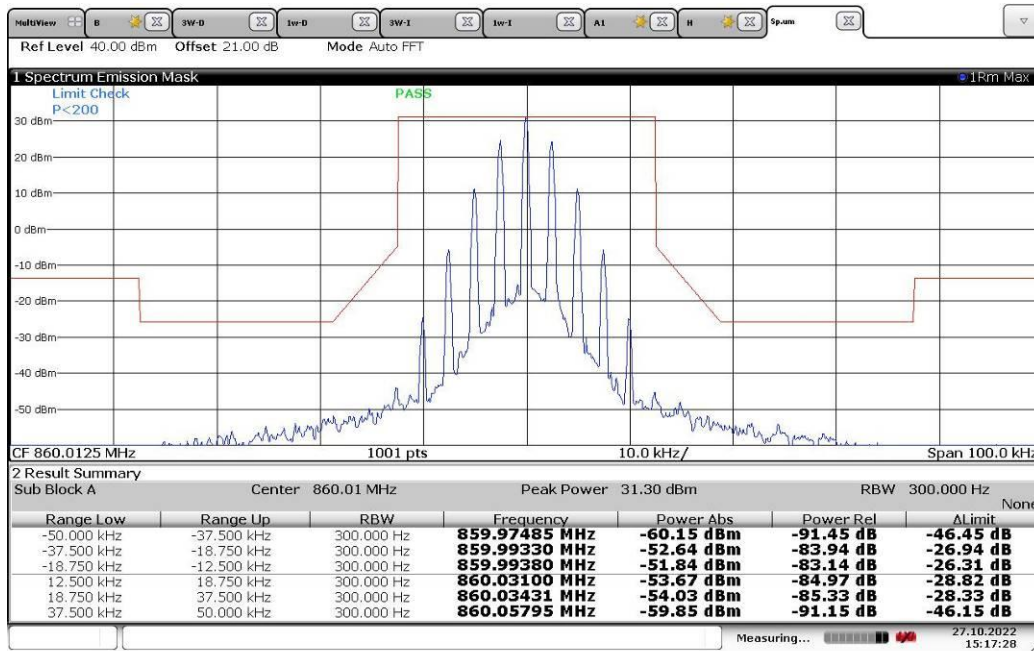
Measurement Method	Conducted	Test Channel	860.0125 MHz
Channel Separation	25 kHz	Modulation	Analog



## Mask B



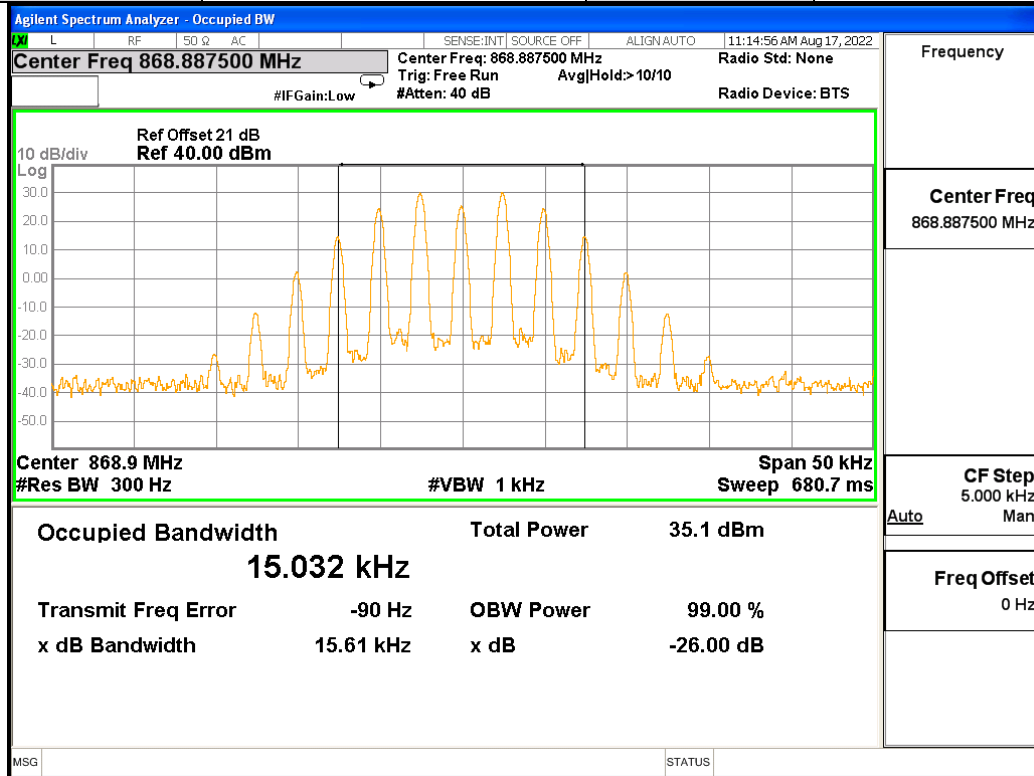
### Mask §90.691



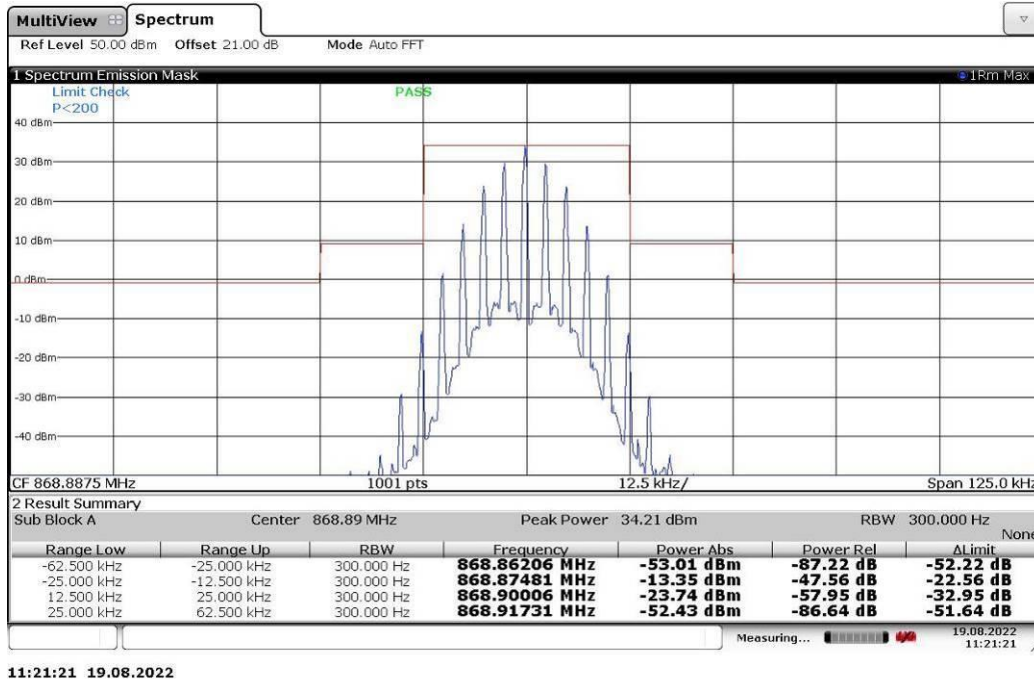
15:17:29 27.10.2022



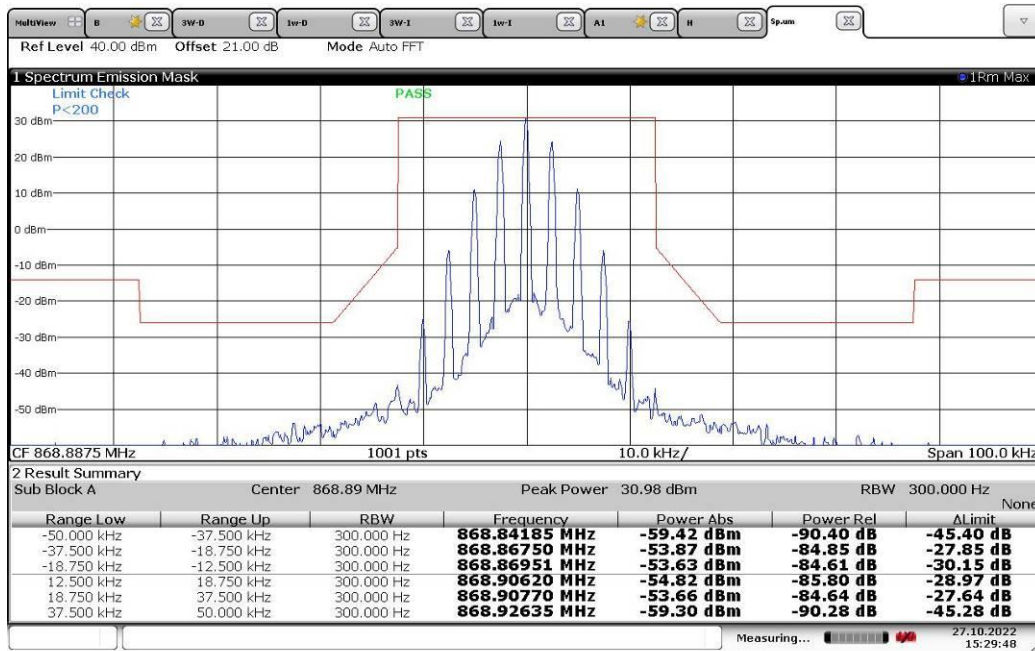
Measurement Method	Conducted	Test Channel	868.8875 MHz
Channel Separation	25 kHz	Modulation	Analog



## Mask B



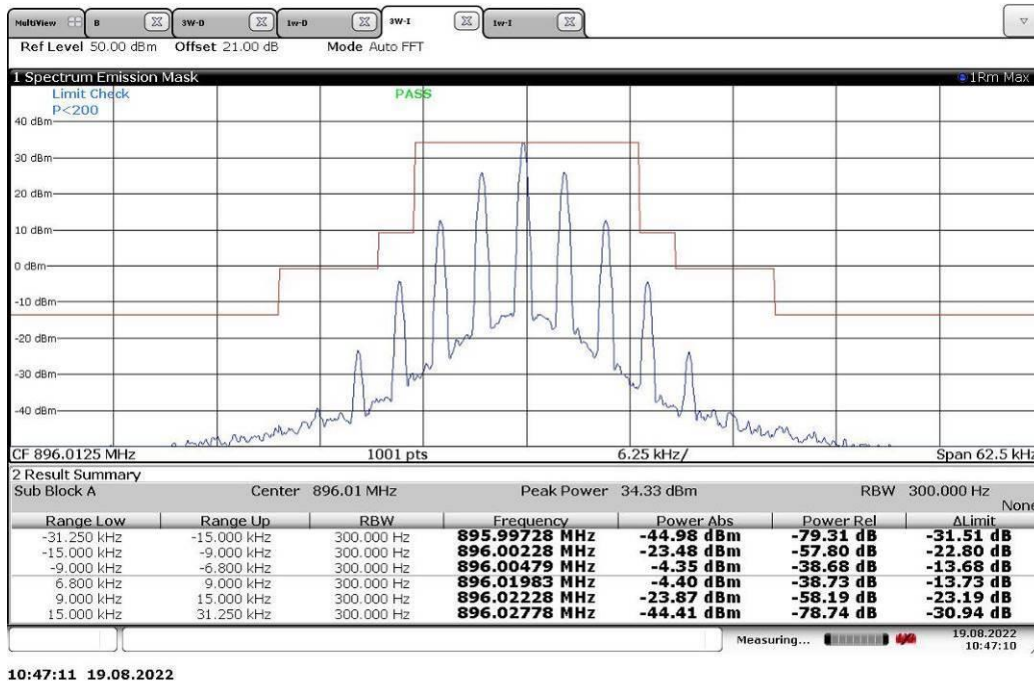
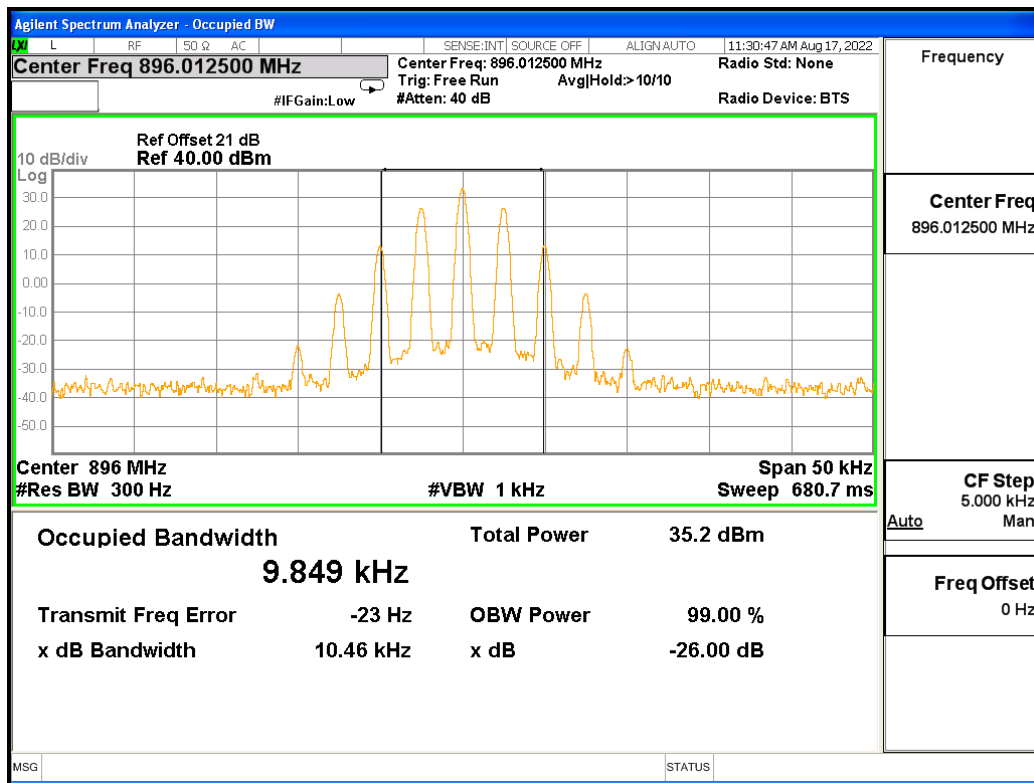
### Mask §90.691



15:29:49 27.10.2022

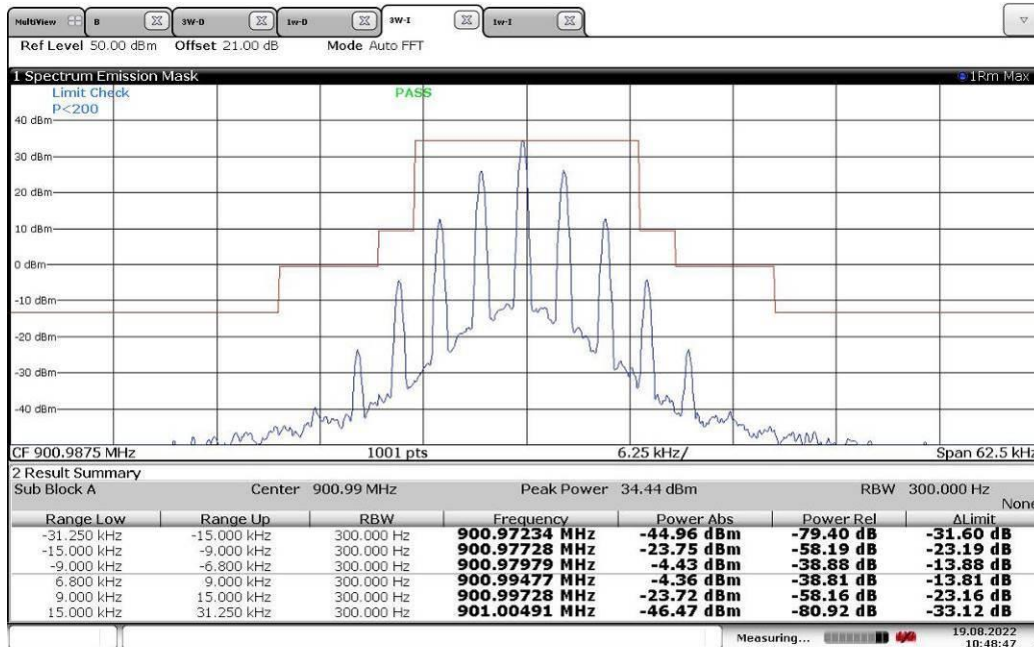
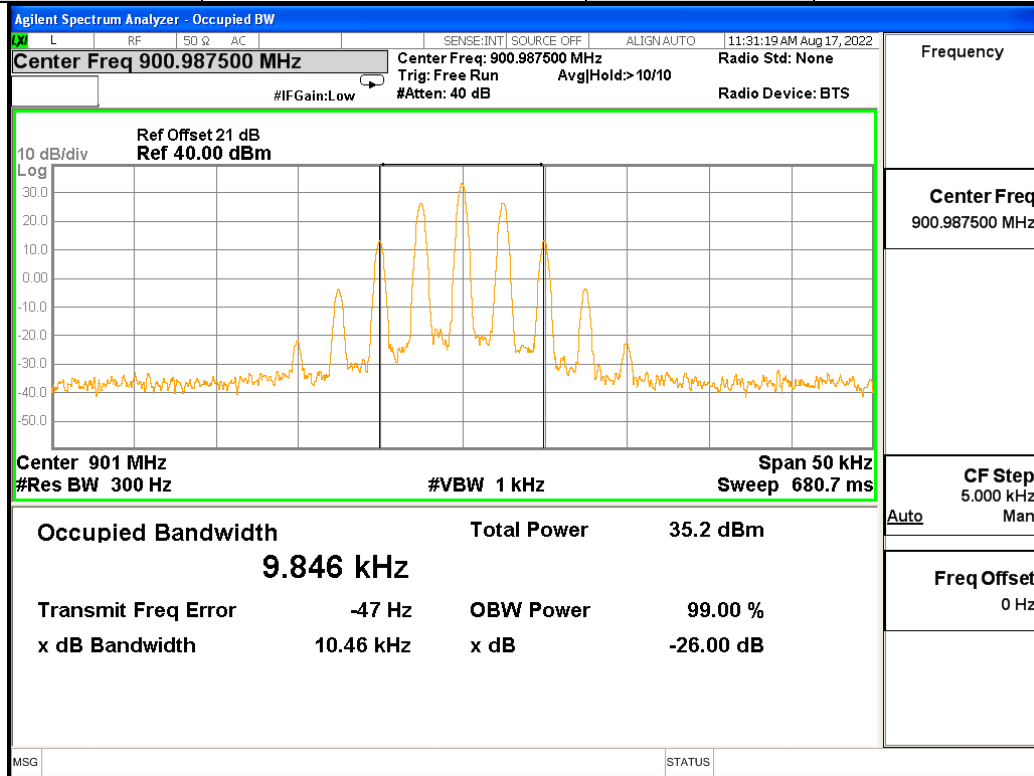


Measurement Method	Conducted	Test Channel	896.0125 MHz
Channel Separation	12.5 kHz	Modulation	Analog





Measurement Method	Conducted	Test Channel	900.9875MHz
Channel Separation	12.5 kHz	Modulation	Analog

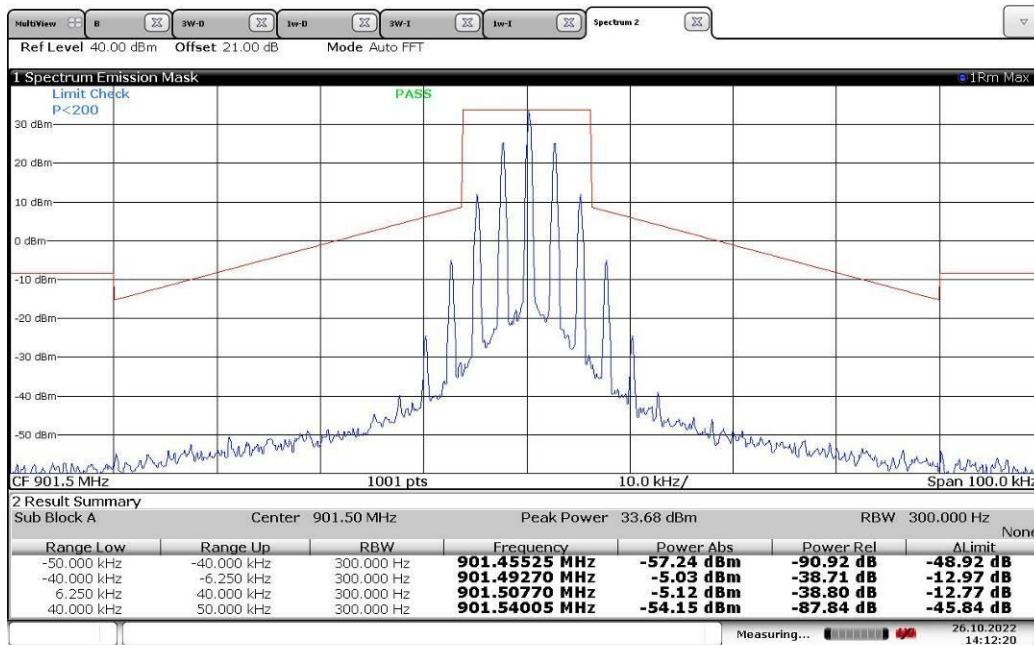
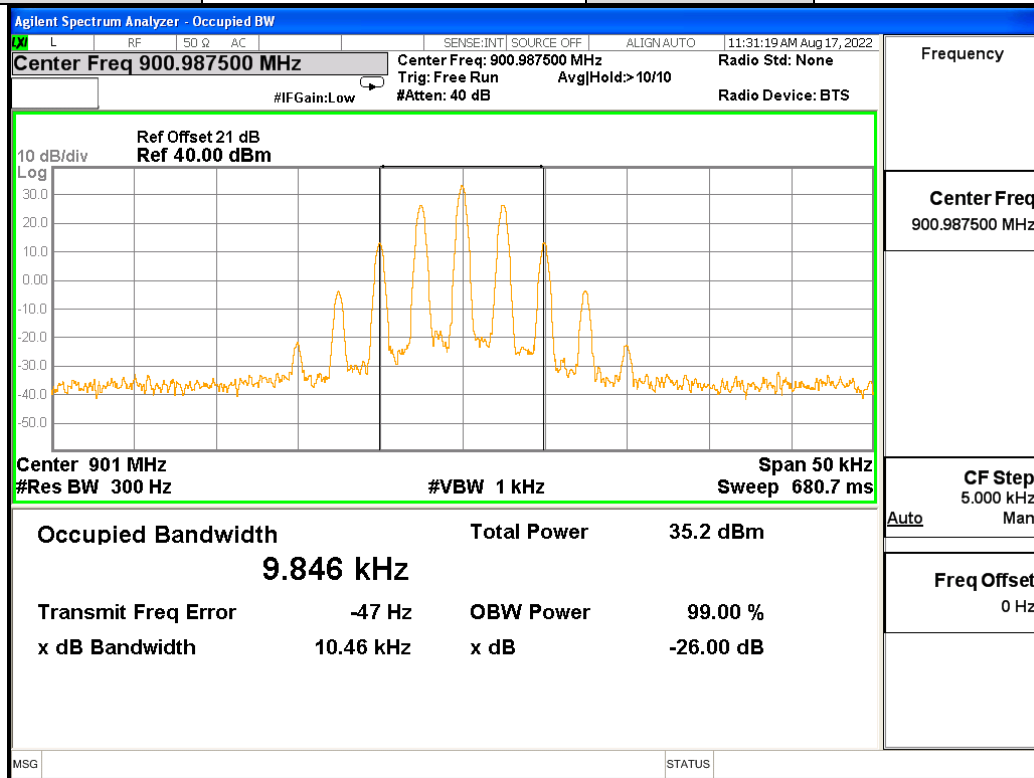


10:48:47 19.08.2022





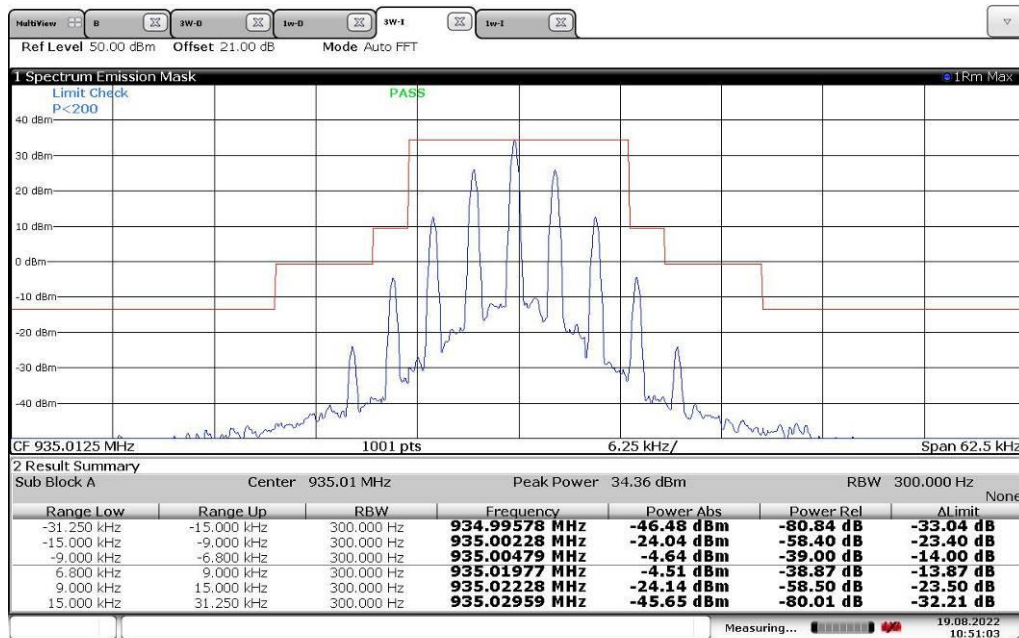
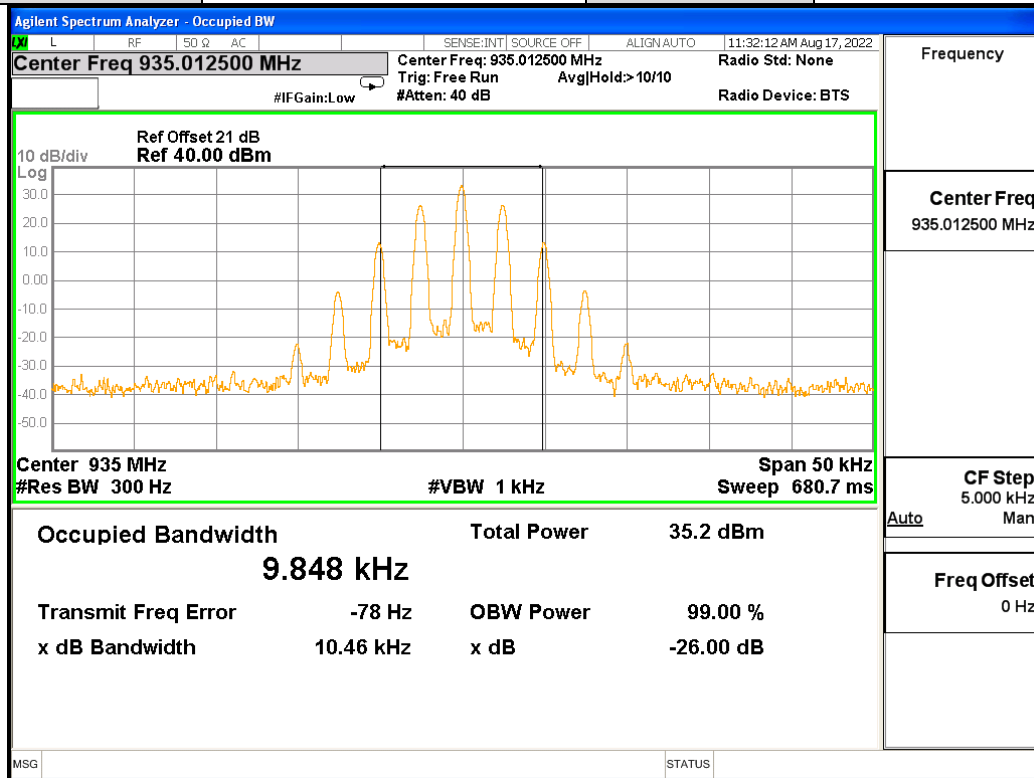
Measurement Method	Conducted	Test Channel	901.5 MHz
Channel Separation	12.5 kHz	Modulation	Analog



14:12:21 26.10.2022



Measurement Method	Conducted	Test Channel	935.0125 MHz
Channel Separation	12.5 kHz	Modulation	Analog

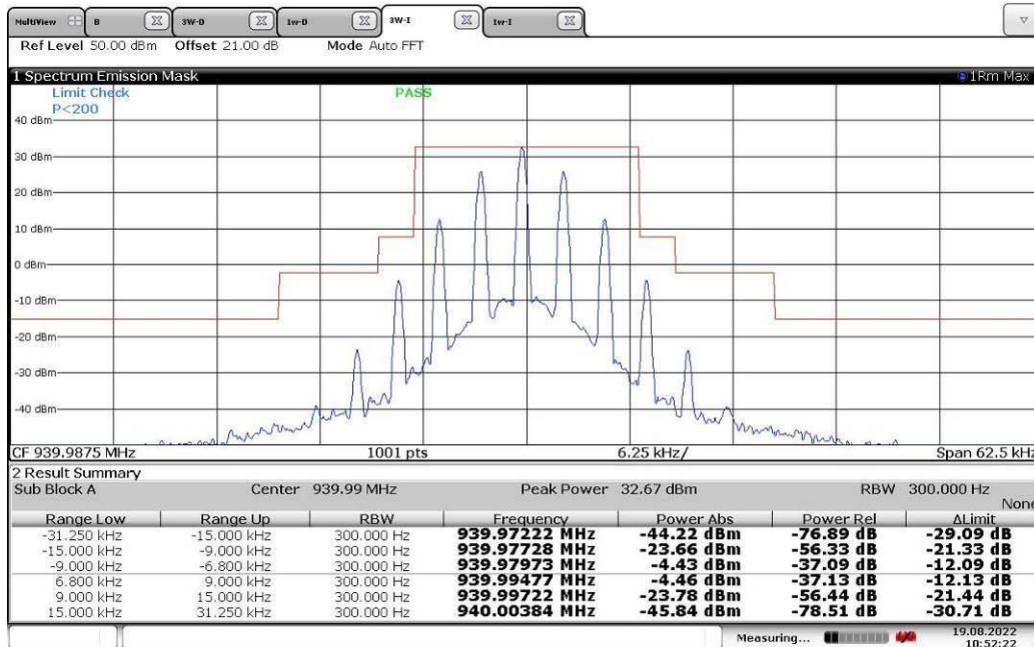
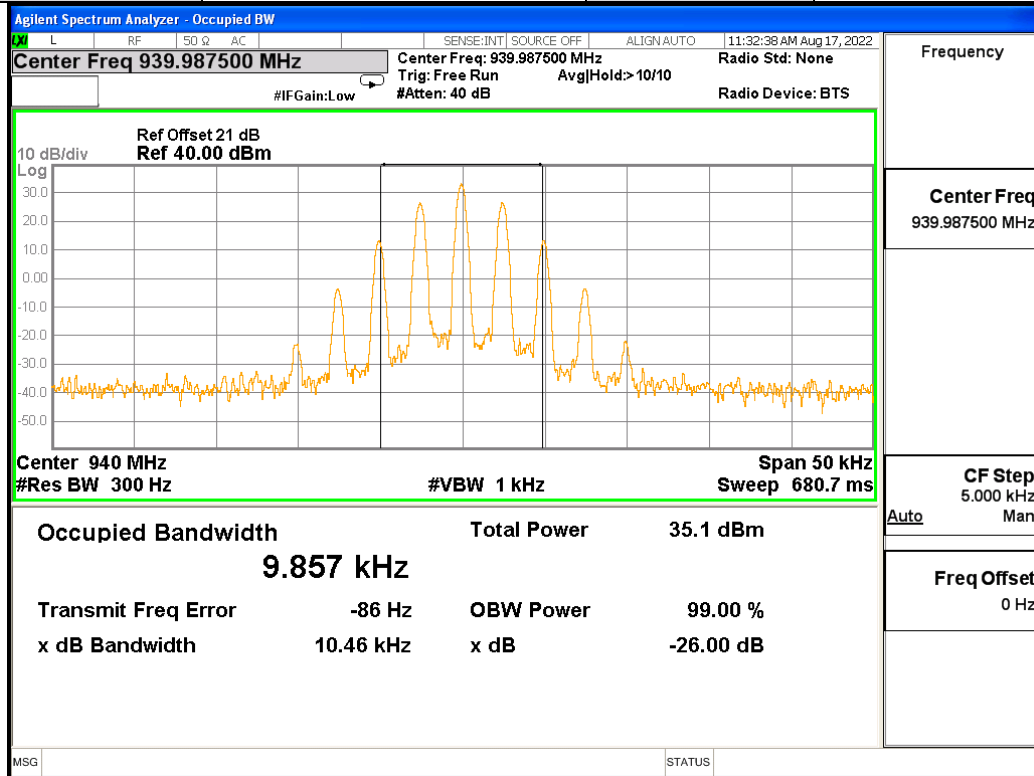


10:51:03 19.08.2022





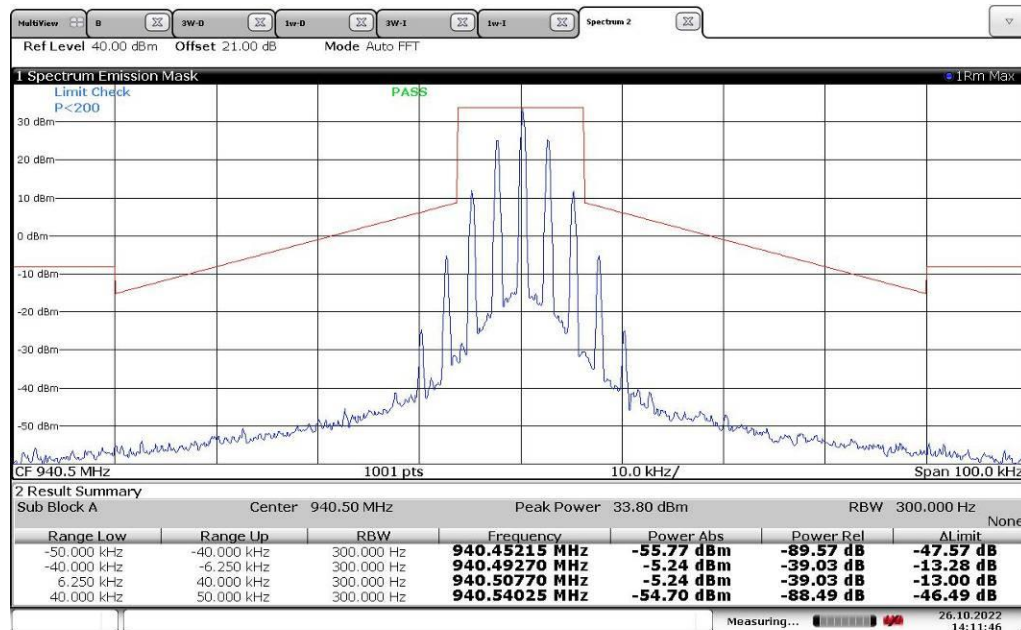
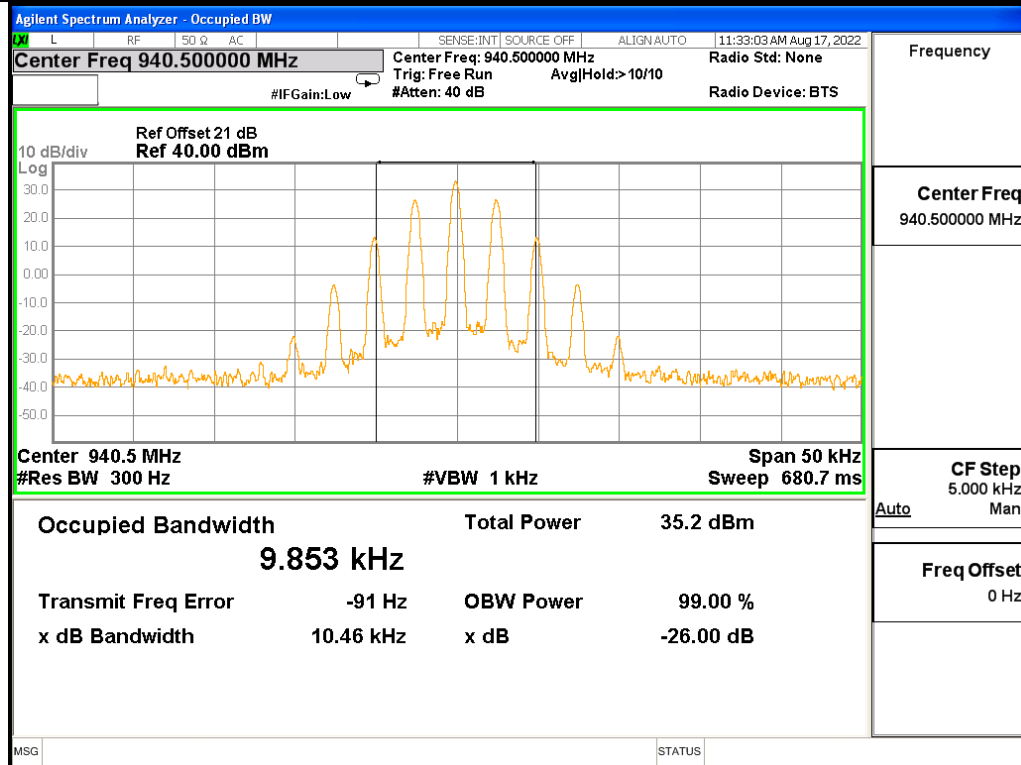
Measurement Method	Conducted	Test Channel	939.9875 MHz
Channel Separation	12.5 kHz	Modulation	Analog



10:52:22 19.08.2022



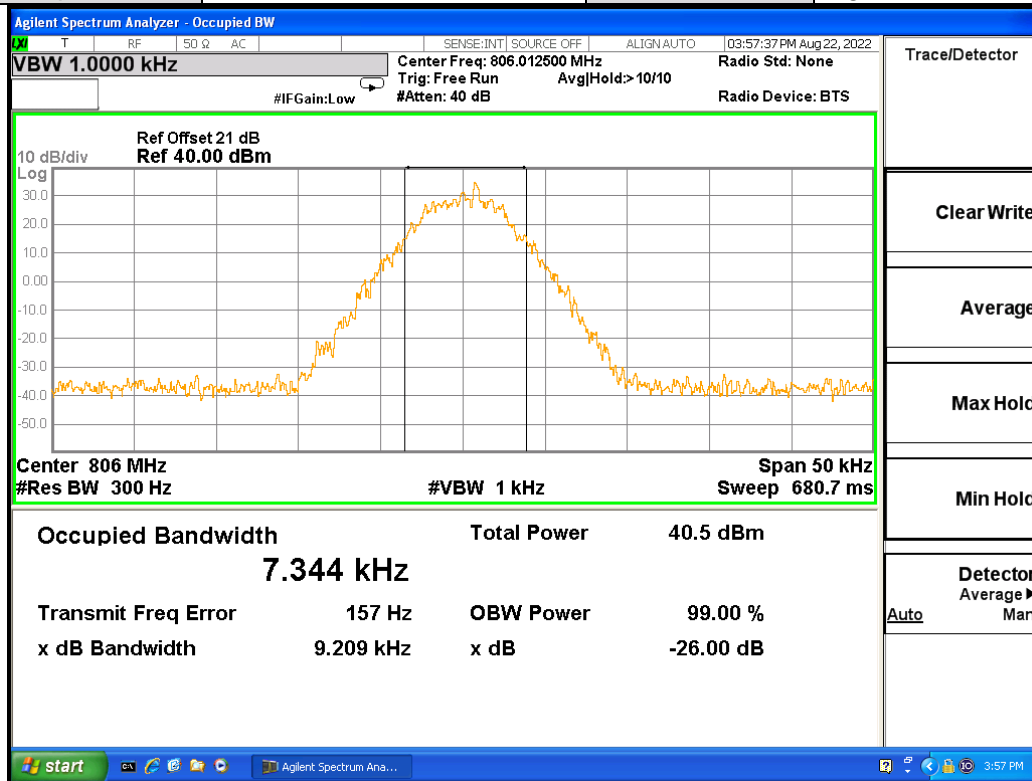
Measurement Method	Conducted	Test Channel	940.5 MHz
Channel Separation	12.5 kHz	Modulation	Analog



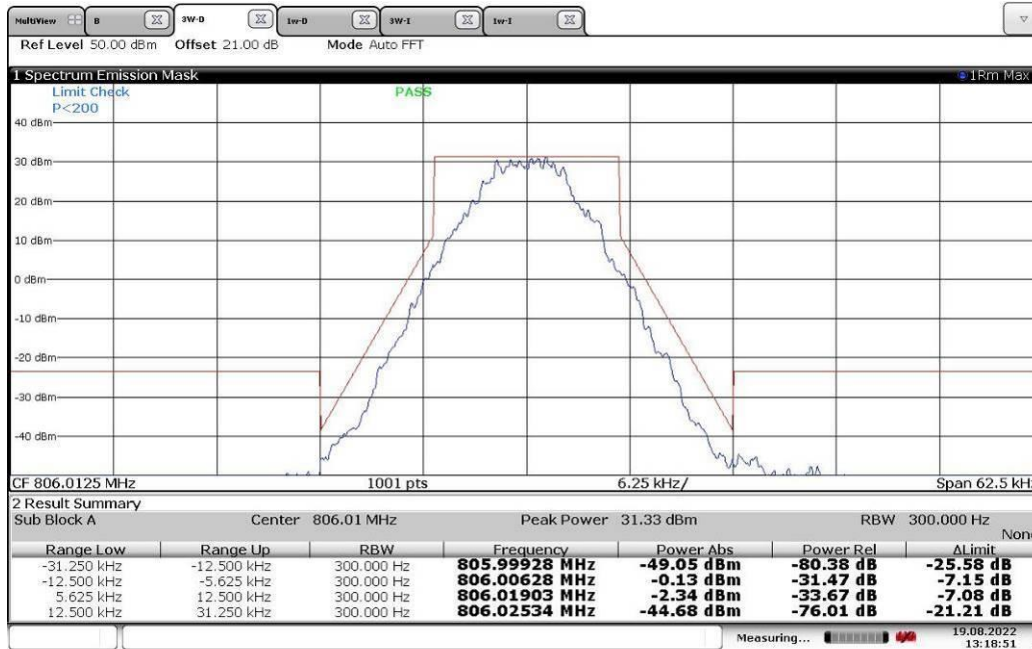
14:11:47 26.10.2022



Measurement Method	Conducted	Test Channel	806.0125 MHz
Channel Separation	12.5 kHz	Modulation	Digital



### Mask D



13:18:51 19.08.2022