

Appendix A7

WCDMA Test Data

Conducted Test Data

Conducted Output Power and ERP/EIRP

Condition	Band	Channel	Frequency (MHz)	Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Verdict
NVNT	WCDMA Band2	9262	1852.4	22.74	-1.00	21.74	33	PASS
NVNT	WCDMA Band2	9400	1880.0	22.74	-1.00	21.74	33	PASS
NVNT	WCDMA Band2	9538	1907.6	22.73	-1.00	21.73	33	PASS
Condition	Band	Channel	Frequency (MHz)	Power (dBm)	Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	Verdict
NVNT	WCDMA Band5	4132	826.4	23.35	-1.03	20.17	38.45	PASS
NVNT	WCDMA Band5	4182	836.4	23.38	-1.03	20.20	38.45	PASS
NVNT	WCDMA Band5	4233	846.6	23.29	-1.03	20.11	38.45	PASS

Condition	Band	Channel	Frequency (MHz)	Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Verdict
NVNT	HSDPA Band2 Subtest1	9262	1852.4	22.00	-1.00	21.00	33	PASS
NVNT	HSDPA Band2 Subtest2	9262	1852.4	21.71	-1.00	20.71	33	PASS
NVNT	HSDPA Band2 Subtest3	9262	1852.4	20.68	-1.00	19.68	33	PASS
NVNT	HSDPA Band2 Subtest4	9262	1852.4	20.77	-1.00	19.77	33	PASS
NVNT	HSDPA Band2 Subtest1	9400	1880.0	21.97	-1.00	20.97	33	PASS
NVNT	HSDPA Band2 Subtest2	9400	1880.0	21.53	-1.00	20.53	33	PASS
NVNT	HSDPA Band2 Subtest3	9400	1880.0	20.44	-1.00	19.44	33	PASS
NVNT	HSDPA Band2 Subtest4	9400	1880.0	20.69	-1.00	19.69	33	PASS
NVNT	HSDPA Band2 Subtest1	9538	1907.6	21.98	-1.00	20.98	33	PASS
NVNT	HSDPA Band2 Subtest2	9538	1907.6	21.53	-1.00	20.53	33	PASS
NVNT	HSDPA Band2 Subtest3	9538	1907.6	20.77	-1.00	19.77	33	PASS
NVNT	HSDPA Band2 Subtest4	9538	1907.6	20.41	-1.00	19.41	33	PASS
Condition	Band	Channel	Frequency (MHz)	Power (dBm)	Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	Verdict
NVNT	HSDPA Band5 Subtest1	4132	826.4	22.49	-1.03	19.31	38.45	PASS
NVNT	HSDPA Band5 Subtest2	4132	826.4	22.07	-1.03	18.89	38.45	PASS
NVNT	HSDPA Band5 Subtest3	4132	826.4	21.31	-1.03	18.13	38.45	PASS
NVNT	HSDPA Band5 Subtest4	4132	826.4	20.88	-1.03	17.70	38.45	PASS
NVNT	HSDPA Band5 Subtest1	4182	836.4	22.50	-1.03	19.32	38.45	PASS
NVNT	HSDPA Band5 Subtest2	4182	836.4	21.96	-1.03	18.78	38.45	PASS
NVNT	HSDPA Band5 Subtest3	4182	836.4	21.16	-1.03	17.98	38.45	PASS
NVNT	HSDPA Band5 Subtest4	4182	836.4	21.04	-1.03	17.86	38.45	PASS
NVNT	HSDPA Band5 Subtest1	4233	846.6	22.41	-1.03	19.23	38.45	PASS
NVNT	HSDPA Band5 Subtest2	4233	846.6	21.95	-1.03	18.77	38.45	PASS
NVNT	HSDPA Band5 Subtest3	4233	846.6	20.91	-1.03	17.73	38.45	PASS
NVNT	HSDPA Band5 Subtest4	4233	846.6	20.89	-1.03	17.71	38.45	PASS

Condition	Band	Channel	Frequency (MHz)	Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Verdict
NVNT	HSUPA Band2 Subtest1	9262	1852.4	19.84	-1.00	18.84	33	PASS
NVNT	HSUPA Band2 Subtest2	9262	1852.4	22.03	-1.00	21.03	33	PASS
NVNT	HSUPA Band2 Subtest3	9262	1852.4	20.45	-1.00	19.45	33	PASS
NVNT	HSUPA Band2 Subtest4	9262	1852.4	22.03	-1.00	21.03	33	PASS
NVNT	HSUPA Band2 Subtest5	9262	1852.4	20.42	-1.00	19.42	33	PASS
NVNT	HSUPA Band2 Subtest1	9400	1880.0	21.89	-1.00	20.89	33	PASS
NVNT	HSUPA Band2 Subtest2	9400	1880.0	21.86	-1.00	20.86	33	PASS
NVNT	HSUPA Band2 Subtest3	9400	1880.0	20.59	-1.00	19.59	33	PASS
NVNT	HSUPA Band2 Subtest4	9400	1880.0	22.01	-1.00	21.01	33	PASS
NVNT	HSUPA Band2 Subtest5	9400	1880.0	21.27	-1.00	20.27	33	PASS
NVNT	HSUPA Band2 Subtest1	9538	1907.6	21.82	-1.00	20.82	33	PASS
NVNT	HSUPA Band2 Subtest2	9538	1907.6	21.93	-1.00	20.93	33	PASS
NVNT	HSUPA Band2 Subtest3	9538	1907.6	20.60	-1.00	19.60	33	PASS
NVNT	HSUPA Band2 Subtest4	9538	1907.6	21.99	-1.00	20.99	33	PASS
NVNT	HSUPA Band2 Subtest5	9538	1907.6	21.27	-1.00	20.27	33	PASS
Condition	Band	Channel	Frequency (MHz)	Power (dBm)	Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	Verdict
NVNT	HSUPA Band5 Subtest1	4132	826.4	21.68	-1.03	18.5	38.45	PASS
NVNT	HSUPA Band5 Subtest2	4132	826.4	22.41	-1.03	19.23	38.45	PASS
NVNT	HSUPA Band5 Subtest3	4132	826.4	20.79	-1.03	17.61	38.45	PASS
NVNT	HSUPA Band5 Subtest4	4132	826.4	22.48	-1.03	19.30	38.45	PASS
NVNT	HSUPA Band5 Subtest5	4132	826.4	20.69	-1.03	17.51	38.45	PASS
NVNT	HSUPA Band5 Subtest1	4182	836.4	22.28	-1.03	19.10	38.45	PASS
NVNT	HSUPA Band5 Subtest2	4182	836.4	22.38	-1.03	19.20	38.45	PASS
NVNT	HSUPA Band5 Subtest3	4182	836.4	21.03	-1.03	17.85	38.45	PASS
NVNT	HSUPA Band5 Subtest4	4182	836.4	22.49	-1.03	19.31	38.45	PASS
NVNT	HSUPA Band5 Subtest5	4182	836.4	21.82	-1.03	18.64	38.45	PASS
NVNT	HSUPA Band5 Subtest1	4233	846.6	22.23	-1.03	19.05	38.45	PASS
NVNT	HSUPA Band5 Subtest2	4233	846.6	22.36	-1.03	19.18	38.45	PASS
NVNT	HSUPA Band5 Subtest3	4233	846.6	21.16	-1.03	17.98	38.45	PASS
NVNT	HSUPA Band5 Subtest4	4233	846.6	22.40	-1.03	19.22	38.45	PASS
NVNT	HSUPA Band5 Subtest5	4233	846.6	21.88	-1.03	18.70	38.45	PASS

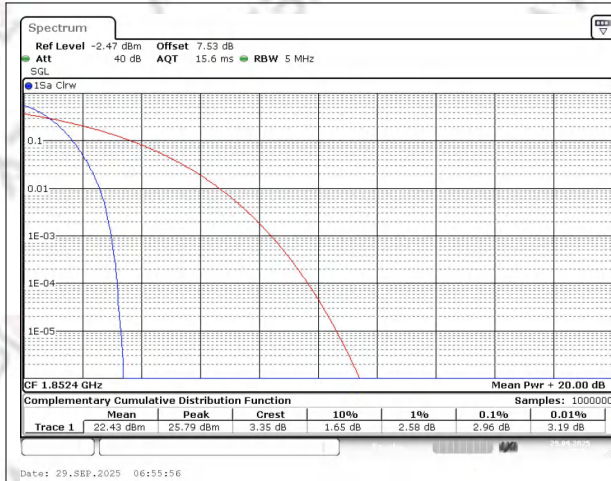
Frequency stability

Band	Channel	Frequency (MHz)	Voltage (Vdc)	Temperature(°C)	Result (Hz)	Result (ppm)	Verdict
WCDMA Band2	9400	1880.0	VL	NT	-12.65	-0.007	PASS
WCDMA Band2	9400	1880.0	VN	NT	-9.68	-0.005	PASS
WCDMA Band2	9400	1880.0	VH	NT	-15.51	-0.008	PASS
WCDMA Band4	1450	1740	VL	NT	-13.55	-0.008	PASS
WCDMA Band4	1450	1740	VN	NT	-14.18	-0.008	PASS
WCDMA Band4	1450	1740	VH	NT	-8.85	-0.005	PASS

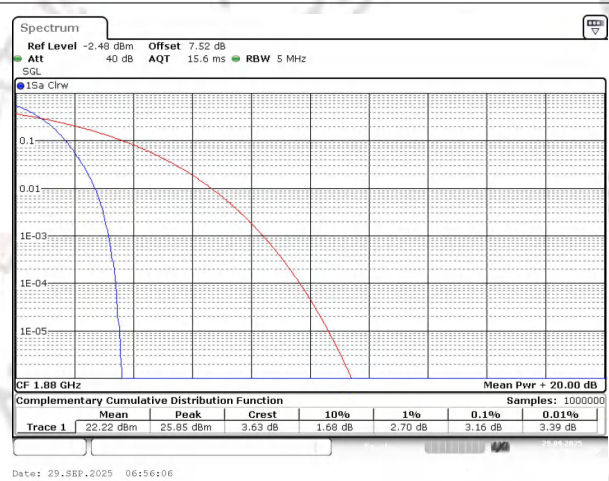
Band	Channel	Frequency (MHz)	Voltage (Vdc)	Temperature(°C)	Result (Hz)	Result (ppm)	Limit(ppm)	Verdict
WCDMA Band5	4182	836.4	VL	NT	-6.37	-0.008	±2.5	PASS
WCDMA Band5	4182	836.4	VN	NT	-8.03	-0.010	±2.5	PASS
WCDMA Band5	4182	836.4	VH	NT	-5.01	-0.006	±2.5	PASS

Peak-to-Average Ratio

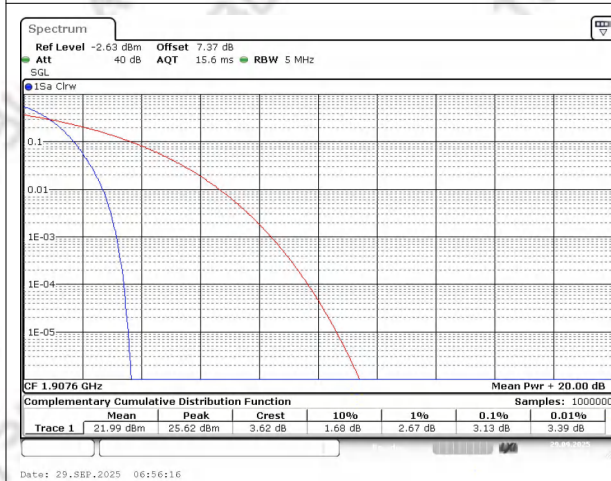
Condition	Band	Channel	Frequency (MHz)	Result (dB)	high Limit (dB)	Verdict
NVNT	WCDMA Band2	9262	1852.4	2.96	13	PASS
NVNT	WCDMA Band2	9400	1880.0	3.16	13	PASS
NVNT	WCDMA Band2	9538	1907.6	3.13	13	PASS
NVNT	WCDMA Band5	4132	826.4	4.12	13	PASS
NVNT	WCDMA Band5	4182	836.4	3.97	13	PASS
NVNT	WCDMA Band5	4233	846.6	4.23	13	PASS



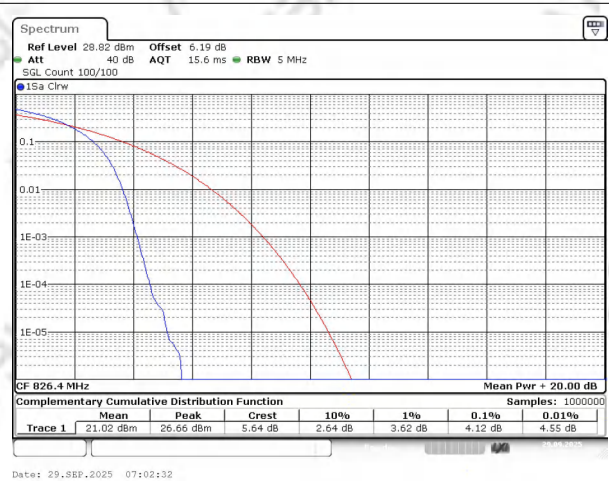
WCDMA Band2 Channel=9262 NVNT



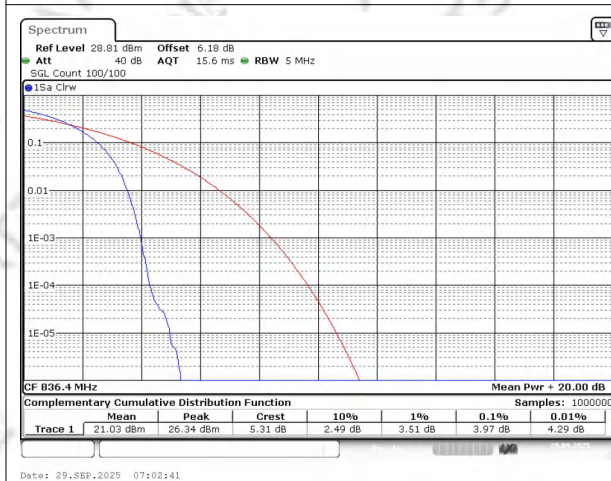
WCDMA Band2 Channel=9400 NVNT



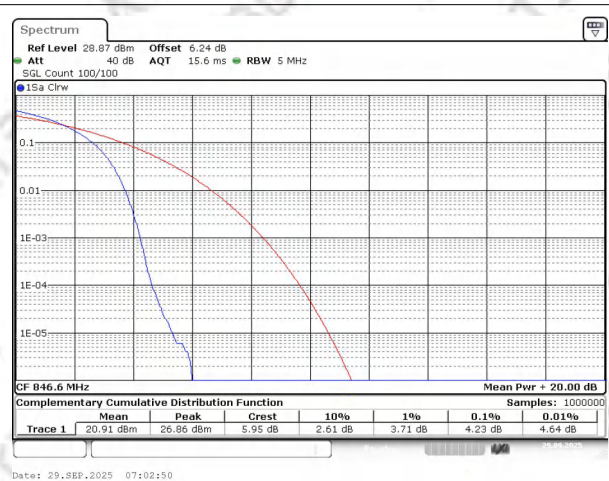
WCDMA Band2 Channel=9538 NVNT



WCDMA Band5 Channel=4132 NVNT



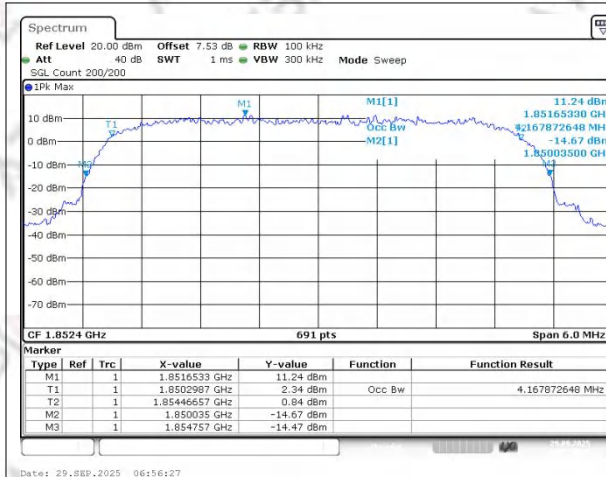
WCDMA Band5 Channel=4182 NVNT



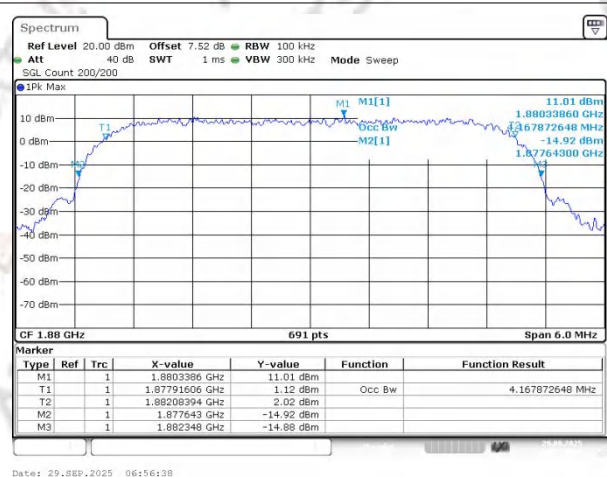
WCDMA Band5 Channel=4233 NVNT

Occupied bandwidth

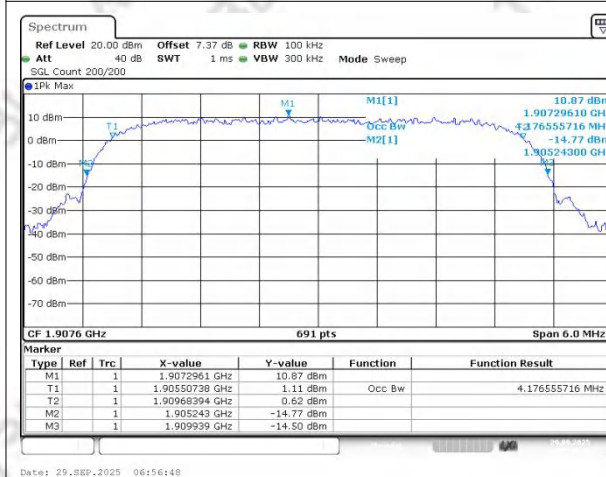
Condition	Band	Channel	Frequency (MHz)	99% OBW (kHz)	-26dB EBW (kHz)	Verdict
NVNT	WCDMA Band2	9262	1852.4	4168.000	4722.000	PASS
NVNT	WCDMA Band2	9400	1880.0	4168.000	4704.000	PASS
NVNT	WCDMA Band2	9538	1907.6	4177.000	4696.000	PASS
NVNT	WCDMA Band5	4132	826.4	4188.000	4694.000	PASS
NVNT	WCDMA Band5	4182	836.4	4177.000	4779.000	PASS
NVNT	WCDMA Band5	4233	846.6	4182.000	4688.000	PASS



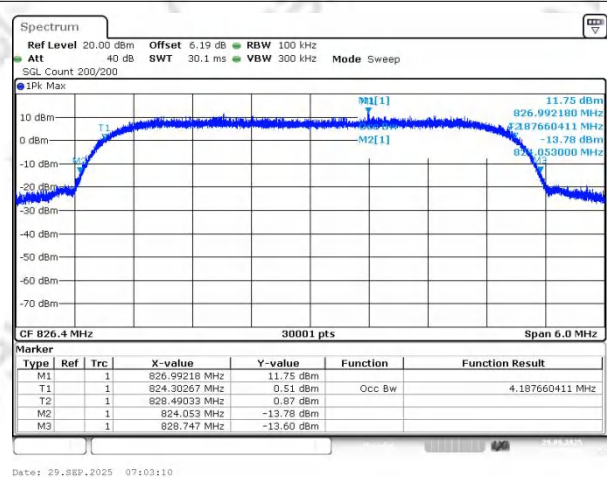
WCDMA Band2 Channel=9262 NVNT



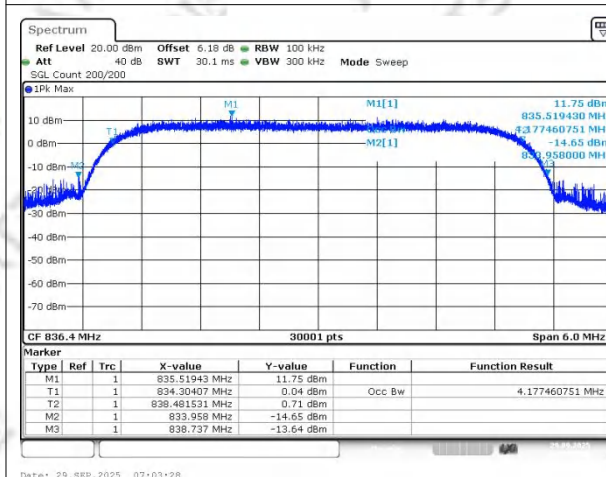
WCDMA Band2 Channel=9400 NVNT



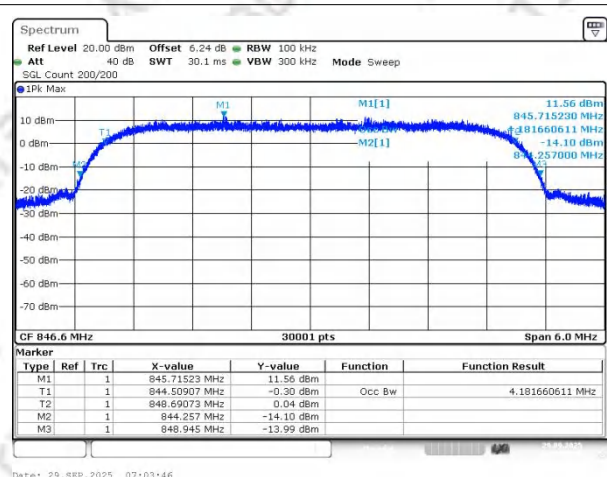
WCDMA Band2 Channel=9538 NVNT



WCDMA Band5 Channel=4132 NVNT



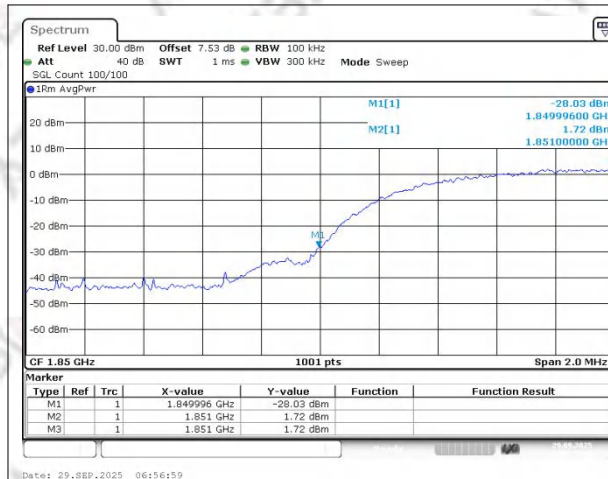
WCDMA Band5 Channel=4182 NVNT



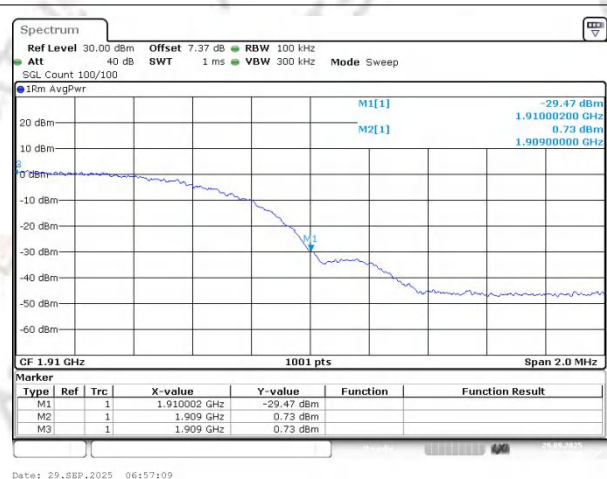
WCDMA Band5 Channel=4233 NVNT

Band edge

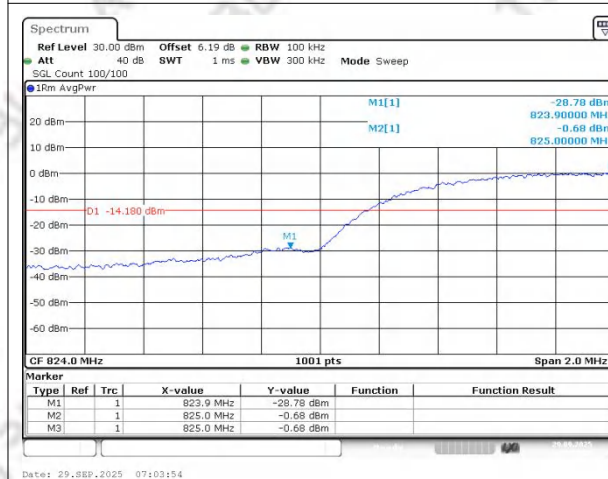
Condition	Band	Channel	Frequency (MHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
NVNT	WCDMA Band2	9262	1852.4	1850.00	-28.02	-13	PASS
NVNT	WCDMA Band2	9538	1907.6	1910.00	-29.46	-13	PASS
NVNT	WCDMA Band5	4132	826.4	823.90	-28.77	-13	PASS
NVNT	WCDMA Band5	4233	846.6	849.08	-28.74	-13	PASS



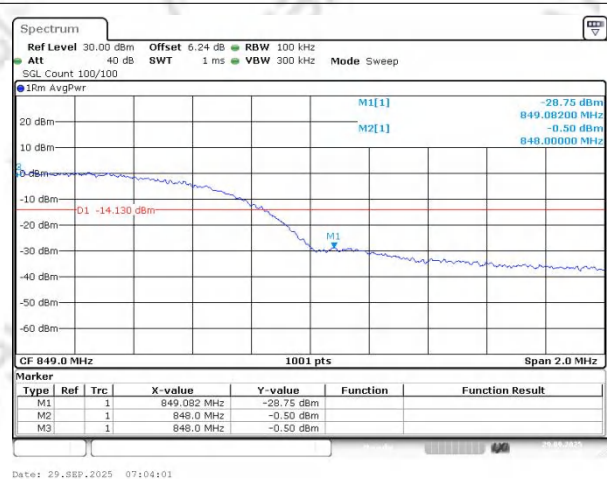
WCDMA Band2 Channel=9262 NVNT



WCDMA Band2 Channel=9538 NVNT



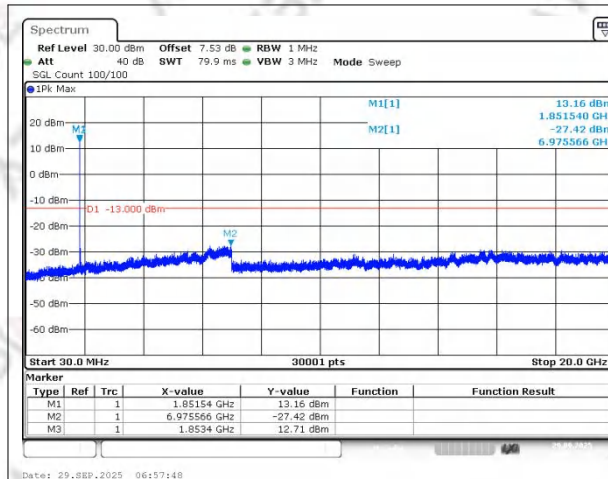
WCDMA Band5 Channel=4132 NVNT



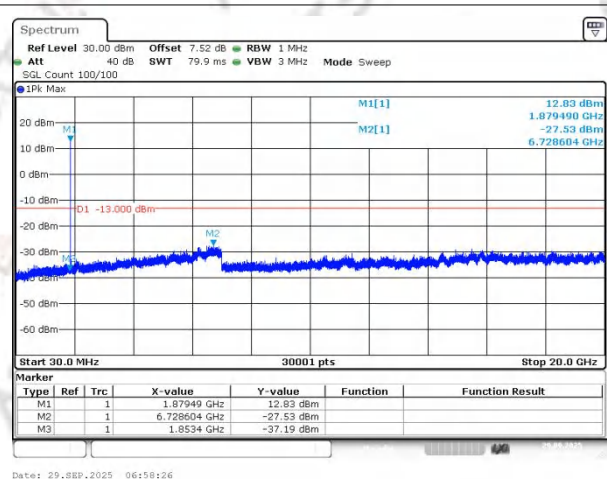
WCDMA Band5 Channel=4233 NVNT

Out-of-band emissions

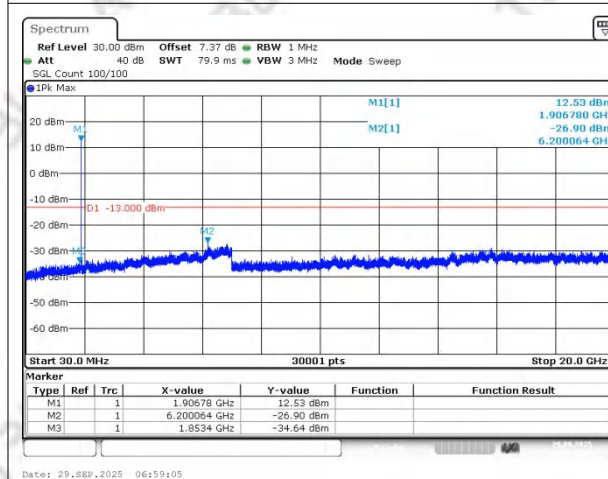
Condition	Band	Channel	Frequency (MHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
NVNT	WCDMA Band2	9262	1852.4	6975.57	-27.41	-13	PASS
NVNT	WCDMA Band2	9400	1880.0	6728.60	-27.52	-13	PASS
NVNT	WCDMA Band2	9538	1907.6	6200.06	-26.89	-13	PASS
NVNT	WCDMA Band5	4132	826.4	6772.38	-28.48	-13	PASS
NVNT	WCDMA Band5	4182	836.4	6568.99	-29.25	-13	PASS
NVNT	WCDMA Band5	4233	846.6	6828.88	-28.54	-13	PASS



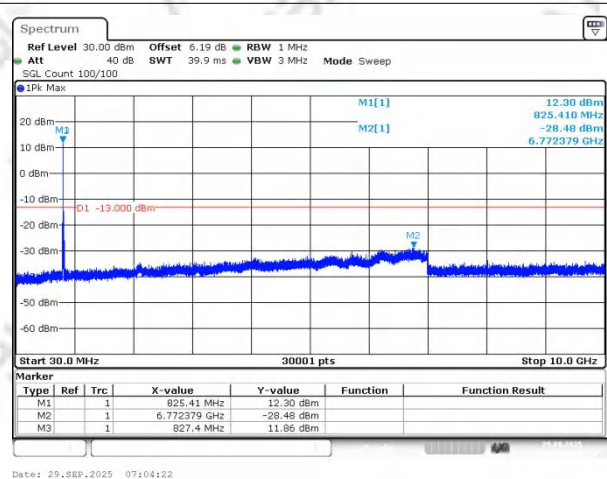
WCDMA Band2 Channel=9262 NVNT



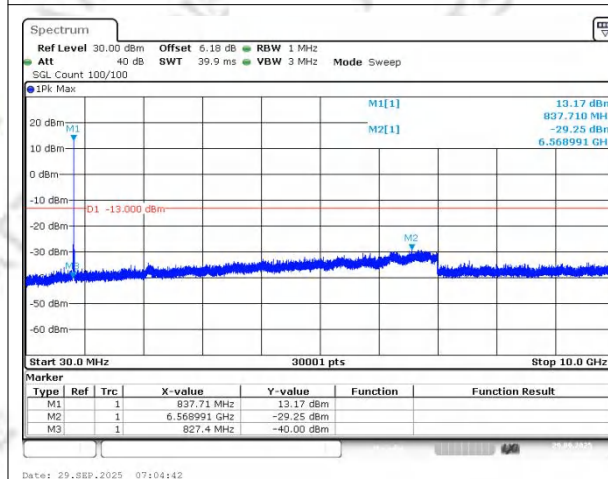
WCDMA Band2 Channel=9400 NVNT



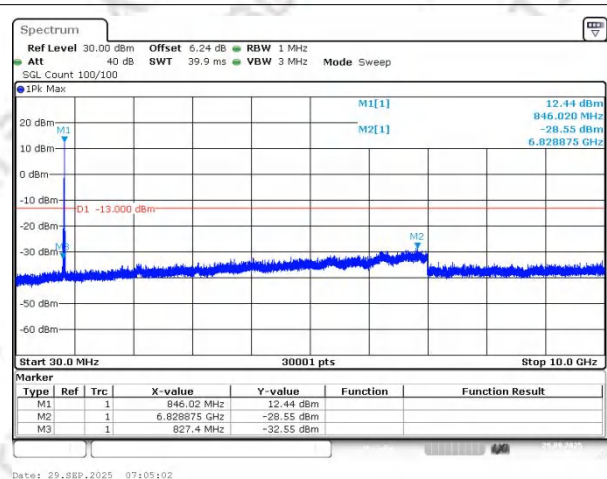
WCDMA Band2 Channel=9538 NVNT



WCDMA Band5 Channel=4132 NVNT



WCDMA Band5 Channel=4182 NVNT

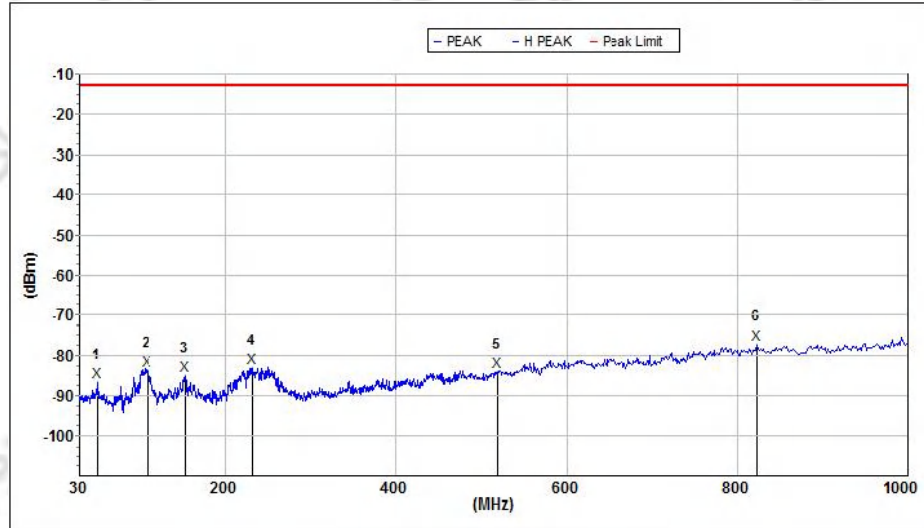


WCDMA Band5 Channel=4233 NVNT

Radiated Test Data

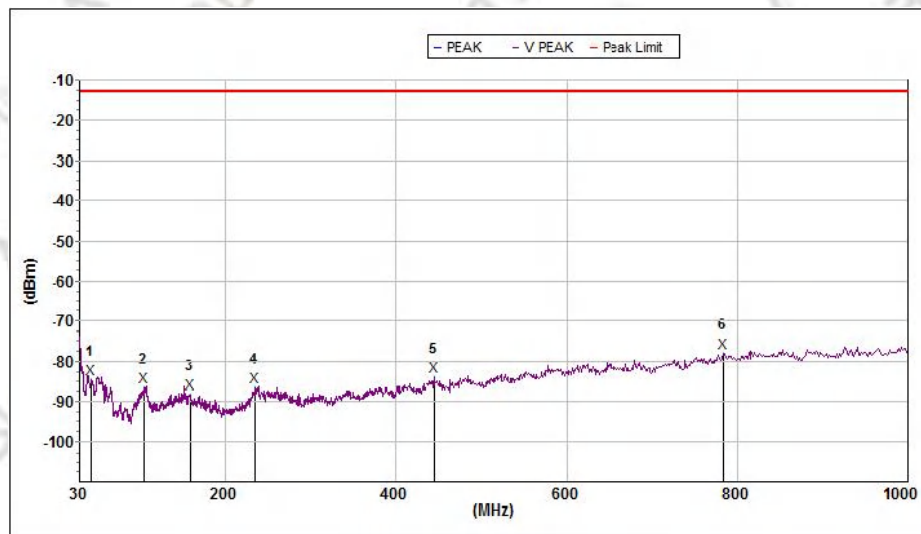
For 30 MHz ~ 1 GHz

Mode:UMTS FDD Band II /Middle Channel / Horizontal



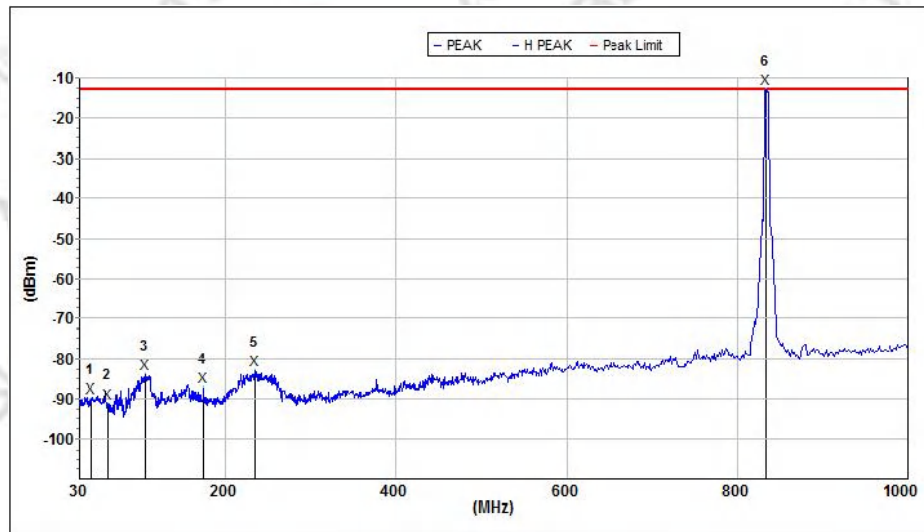
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB)	Amp.G. (dB)	Pol.
Peak							
1	50.853	-86.6	-13.0	73.6	19.5	30.9	H
2	109.029	-83.6	-13.0	70.6	15.6	30.9	H
3	153.469	-85.0	-13.0	72.0	19.0	31.3	H
4	232.125	-82.9	-13.0	69.9	16.9	32.0	H
5	519.065	-84.0	-13.0	71.0	23.9	31.5	H
6	823.152	-77.1	-13.0	64.1	28.6	32.1	H

Mode:UMTS FDD Band II /Middle Channel / Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB)	Amp.G. (dB)	Pol.
Peak							
1	43.506	-84.5	-13.0	71.5	19.2	31.5	V
2	105.087	-86.3	-13.0	73.3	15.2	30.9	V
3	158.946	-88.1	-13.0	75.1	18.6	31.4	V
4	236.230	-86.2	-13.0	73.2	17.1	32.0	V
5	445.632	-83.8	-13.0	70.8	22.8	32.4	V
6	783.718	-77.6	-13.0	64.6	28.2	32.0	V

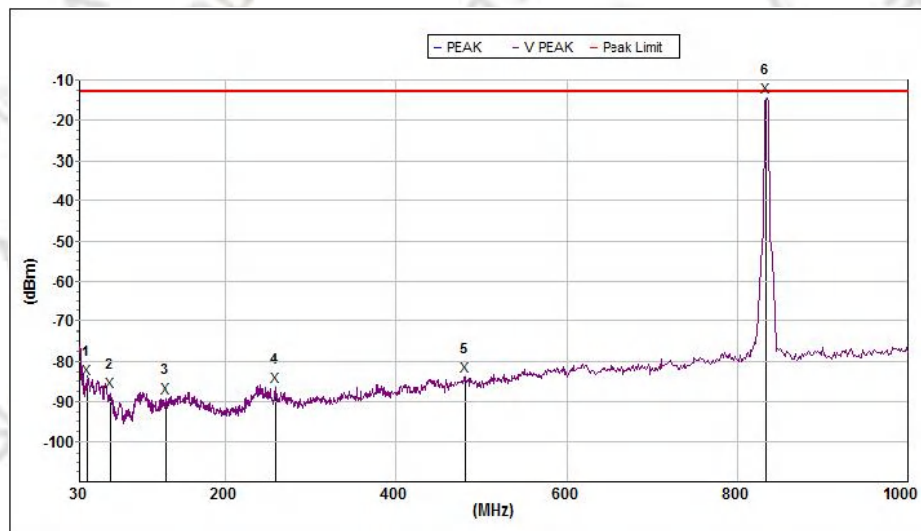
Mode:UMTS FDD Band V /Middle Channel / Horizontal



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB)	Amp.G. (dB)	Pol.
Peak							
1	43.050	-89.7	-13.0	76.7	19.2	31.5	H
2	63.424	-91.0	-13.0	78.0	17.5	31.8	H
3	105.642	-83.6	-13.0	70.6	15.3	30.9	H
4	174.730	-87.1	-13.0	74.1	17.5	31.5	H
5	235.816	-82.8	-13.0	69.8	17.1	32.0	H
6	833.317	-12.7	-13.0	-0.3	28.7	32.1	H

Note:Point 6 serves as the primary frequency signal.

Mode:UMTS FDD Band V /Middle Channel / Vertical

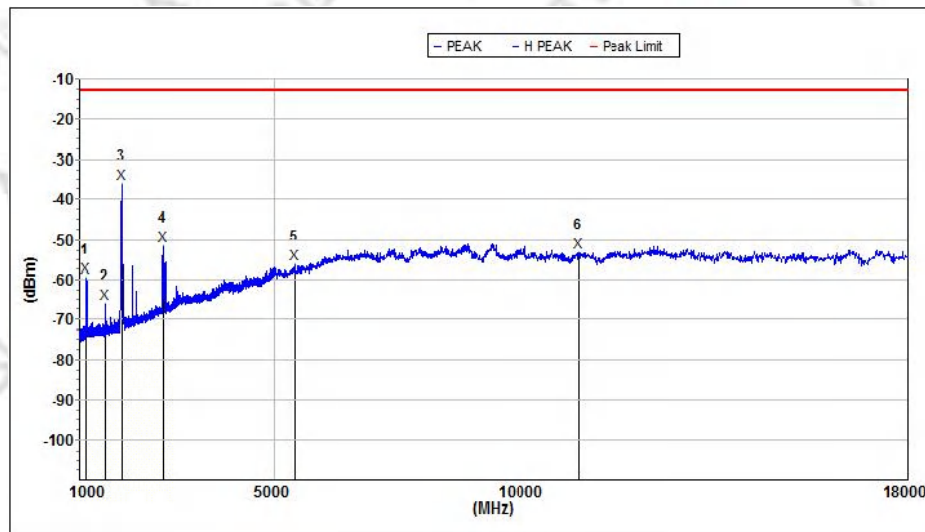


Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB)	Amp.G. (dB)	Pol.
Peak							
1	39.437	-84.3	-13.0	71.3	19.0	31.8	V
2	65.803	-87.6	-13.0	74.6	17.1	32.2	V
3	131.758	-88.8	-13.0	75.8	17.6	31.1	V
4	258.780	-86.2	-13.0	73.2	17.9	32.1	V
5	481.371	-83.7	-13.0	70.7	23.2	31.8	V
6	833.317	-14.2	-13.0	1.2	28.7	32.1	V

Note:Point 6 serves as the primary frequency signal.

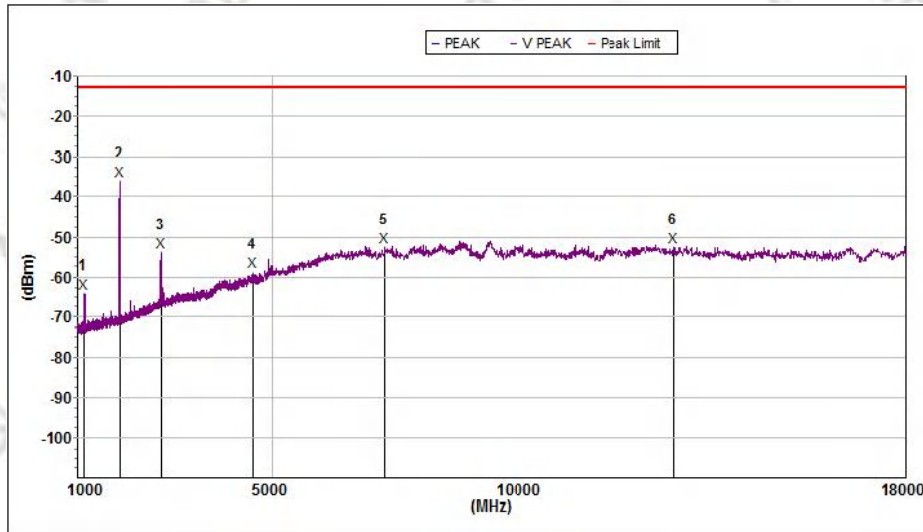
For 1 GHz ~ 18 GHz

Mode:UMTS FDD Band II /Middle Channel / Horizontal



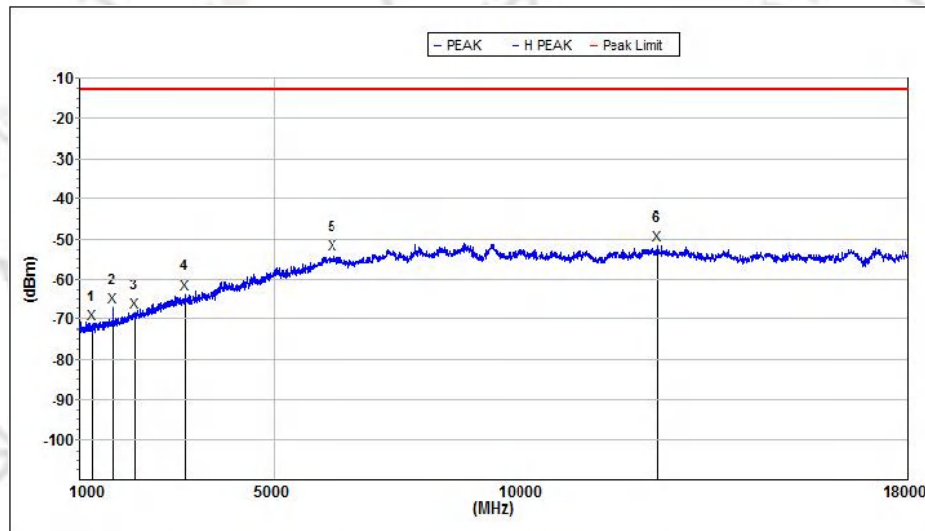
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB)	Amp.G. (dB)	Pol.
Peak							
1	1141.545	-59.3	-13.0	46.3	25.5	53.6	H
2	1526.482	-65.9	-13.0	52.9	25.4	53.4	H
3	1850.069	-36.1	-13.0	23.1	25.5	53.8	H
4	2714.584	-51.6	-13.0	38.6	28.4	54.1	H
5	5406.354	-56.2	-13.0	43.2	32.9	52.3	H
6	11234.485	-53.0	-13.0	40.0	38.7	51.7	H

Mode:UMTS FDD Band II /Middle Channel / Vertical



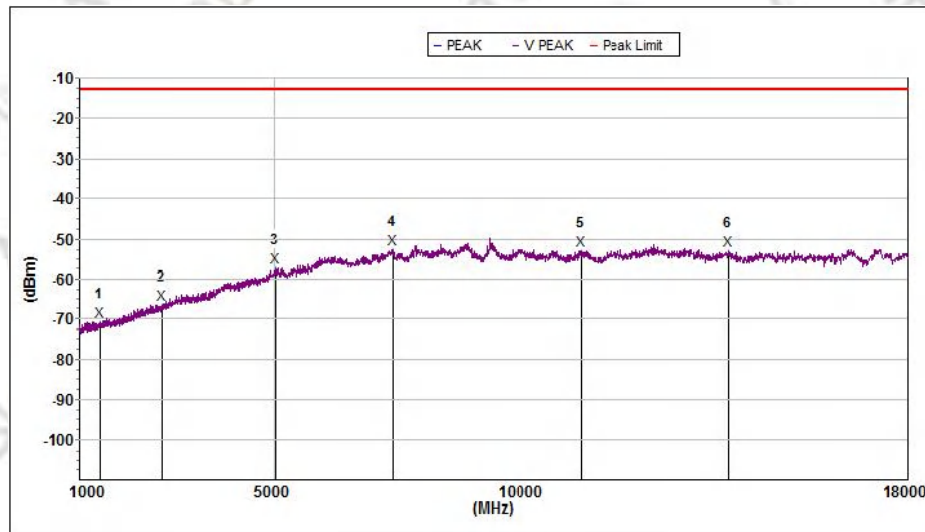
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB)	Amp.G. (dB)	Pol.
Peak							
1	1140.918	-63.9	-13.0	50.9	25.5	53.6	V
2	1850.069	-36.1	-13.0	23.1	25.5	53.8	V
3	2711.603	-53.7	-13.0	40.7	28.4	54.1	V
4	4611.126	-58.8	-13.0	45.8	31.9	52.9	V
5	7300.580	-52.3	-13.0	39.3	36.2	51.8	V
6	13227.621	-52.5	-13.0	39.5	39.7	51.8	V

Mode:UMTS FDD Band V /Middle Channel / Horizontal



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB)	Amp.G. (dB)	Pol.
Peak							
1	1269.184	-71.1	-13.0	58.1	25.6	53.5	H
2	1671.498	-66.9	-13.0	53.9	25.2	53.6	H
3	2123.503	-68.1	-13.0	55.1	26.8	53.9	H
4	3173.699	-63.7	-13.0	50.7	29.4	54.0	H
5	6192.370	-53.9	-13.0	40.9	34.6	51.5	H
6	12866.354	-51.4	-13.0	38.4	39.6	51.7	H

Mode:UMTS FDD Band V /Middle Channel / Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB)	Amp.G. (dB)	Pol.
Peak							
1	1413.929	-70.5	-13.0	57.5	25.5	53.5	V
2	2689.877	-66.1	-13.0	53.1	28.3	54.1	V
3	5013.762	-57.0	-13.0	44.0	33.1	52.4	V
4	7411.628	-52.5	-13.0	39.5	36.2	51.8	V
5	11299.429	-52.7	-13.0	39.7	38.7	51.7	V
6	14328.983	-52.7	-13.0	39.7	39.6	51.9	V

*****END OF THE APPENDIX A7*****