Radiated Spurious Emission

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the emissions below the noise floor will not be recorded in the report.

Because the Margin is relatively large, only one worst point is recorded in the report.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes. EUT stand-up position (Z axis), lie-down position (X, Y axis). Receiver antenna polarization (Horizontal and Vertical). The worst-case configuration and its corresponding results are documented in the test report.

NB-IoT	Z axis, Horizontal polarization

NB-IoT Band 2 CH-Middle

Band width	Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
15kHz	2	3759.50	-46.81	2.60	12.50	Horizontal	-36.91	-13.00	23.91	162
	3	5640.20	--	--	--	--	--	--	--	--
	4	7520.00	--	--	--	--	--	--	--	--
	5	9400.00	--	--	--	--	--	--	--	--
	6	11280.00	--	--	--	--	--	--	--	--
	7	13160.00	--	--	--	--	--	--	--	--
	8	15040.00	--	--	--	--	--	--	--	--
	9	16920.00	--	--	--	--	--	--	--	--
	10	18800.00	--	--	--	--	--	--	--	--

Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor.
2. The worst emission was found in the antenna is Horizontal position.

NB-IoT Band 4 CH-Middle

Band width	Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
15kHz	2	3465.00	-44.83	2.70	12.70	Horizontal	-34.83	-13.00	21.83	12
	3	5197.50	-64.05	3.20	12.50	Horizontal	-54.75	-13.00	41.75	135
	4	6930.00	--	--	--	--	--	--	--	--
	5	8662.50	--	--	--	--	--	--	--	--
	6	10395.00	--	--	--	--	--	--	--	--
	7	12127.50	--	--	--	--	--	--	--	--
	8	13860.00	--	--	--	--	--	--	--	--
	9	15592.50	--	--	--	--	--	--	--	--
	10	17325.00	--	--	--	--	--	--	--	--
Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Horizontal position.										

NB-IoT Band 5 CH-Middle

Band width	Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
15kHz	2	1672.90	-55.56	1.70	8.70	Horizontal	-50.71	-13.00	37.71	23
	3	2509.50	-59.08	2.30	12.00	Horizontal	-51.53	-13.00	38.53	14
	4	3346.00	--	--	--	--	--	--	--	--
	5	4182.50	--	--	--	--	--	--	--	--
	6	5019.00	--	--	--	--	--	--	--	--
	7	5855.50	--	--	--	--	--	--	--	--
	8	6692.00	--	--	--	--	--	--	--	--
	9	7528.50	--	--	--	--	--	--	--	--
	10	8365.00	-50.57	4.30	12.50	Horizontal	-44.52	-13.00	31.52	0
Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Horizontal position.										

NB-IoT Band 12 CH-Middle

Band width	Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
15kHz	2	1415.00	-64.35	1.70	8.70	Horizontal	-59.50	-13.00	46.50	76
	3	2122.50	-52.32	2.10	11.10	Horizontal	-45.47	-13.00	32.47	81
	4	2830.00	-62.00	2.30	13.10	Horizontal	-53.35	-13.00	40.35	69
	5	3525.50	--	--	--	--	--	--	--	--
	6	4230.60	--	--	--	--	--	--	--	--
	7	4935.70	--	--	--	--	--	--	--	--
	8	5640.80	--	--	--	--	--	--	--	--
	9	6345.90	--	--	--	--	--	--	--	--
	10	7051.00	-52.75	4.20	11.80	Horizontal	-47.30	-13.00	34.30	12
Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Horizontal position.										

NB-IoT Band 13 CH-Middle

Band width	Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
15kHz	2	1563.91	-64.94	1.70	8.70	Horizontal	-57.94	-40.00	17.94	65
	3	2345.83	-62.14	2.10	12.00	Horizontal	-54.39	-13.00	41.39	84
	4	3128.00	--	--	--	--	--	--	--	--
	5	3910.00	--	--	--	--	--	--	--	--
	6	4692.00	--	--	--	--	--	--	--	--
	7	5474.00	--	--	--	--	--	--	--	--
	8	6256.00	--	--	--	--	--	--	--	--
	9	7038.00	--	--	--	--	--	--	--	--
	10	7820.00	-52.01	4.40	12.30	Horizontal	-46.26	-13.00	33.26	35
Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Horizontal position.										

NB-IoT Band 25 CH-Middle

Band width	Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
15kHz	2	3765.00	--	--	--	--	--	--	--	--
	3	5647.50	--	--	--	--	--	--	--	--
	4	7530.00	--	--	--	--	--	--	--	--
	5	9412.50	--	--	--	--	--	--	--	--
	6	11295.00	--	--	--	--	--	--	--	--
	7	13177.50	--	--	--	--	--	--	--	--
	8	15060.00	--	--	--	--	--	--	--	--
	9	16942.50	-51.59	6.10	14.60	Horizontal	-43.09	-13.00	30.09	2
	10	18825.00	--	--	--	--	--	--	--	--
Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Horizontal position.										

LTE Band 66 CH-Middle

Band width	Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
15kHz	2	3489.90	-42.61	2.70	12.70	Horizontal	-32.61	-13.00	19.61	74
	3	5234.00	--	--	--	--	--	--	--	--
	4	6979.00	--	--	--	--	--	--	--	--
	5	8724.00	--	--	--	--	--	--	--	--
	6	10530.00	--	--	--	--	--	--	--	--
	7	12285.00	--	--	--	--	--	--	--	--
	8	14040.00	--	--	--	--	--	--	--	--
	9	15795.00	--	--	--	--	--	--	--	--
	10	17550.00	--	--	--	--	--	--	--	--
Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Horizontal position.										

NB-IoT Band 71 CH-Middle

Band width	Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
15kHz	2	1361.00	-70.60	1.70	8.70	Horizontal	-65.75	-13.00	52.75	14
	3	2041.50	-53.64	2.10	11.10	Horizontal	-46.79	-13.00	33.79	274
	4	2722.00	-61.30	2.30	13.10	Horizontal	-52.65	-13.00	39.65	49
	5	3402.50	--	--	--	--	--	--	--	--
	6	4083.00	--	--	--	--	--	--	--	--
	7	4763.50	--	--	--	--	--	--	--	--
	8	5444.00	--	--	--	--	--	--	--	--
	9	6124.50	--	--	--	--	--	--	--	--
	10	6805.00	-54.01	4.20	11.80	Horizontal	-48.56	-13.00	35.56	85
Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Horizontal position.										

NB-IoT Band 85 CH-Middle

Band width	Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	Result Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
15kHz	2	1400.00	-69.41	1.70	8.70	Horizontal	-64.56	-13.00	51.56	14
	3	2101.27	-50.62	2.10	11.10	Horizontal	-43.77	-13.00	30.77	274
	4	2801.67	-60.02	2.30	13.10	Horizontal	-51.37	-13.00	38.37	49
	5	3535.00	--	--	--	--	--	--	--	--
	6	4242.00	--	--	--	--	--	--	--	--
	7	4949.00	--	--	--	--	--	--	--	--
	8	5656.00	--	--	--	--	--	--	--	--
	9	6363.00	--	--	--	--	--	--	--	--
	10	7070.00	-54.27	4.20	11.80	Horizontal	-48.82	-13.00	35.82	12
Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Horizontal position.										