

C.1.5 Radiated spurious emission

Standards references

FCC part	RSS part	Limits					
		Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a):					
			Freq Range (MHz)	Field Stregth (μV/m)	Field Stregth (dBμV/m)	Meas. Distance (m)	
			30-88	100	40	3	
			88-216	150	43.5	3	
	RSS-247		216-960	200	46	3	
15.247 (d) 15.209	Clause 5.5		Above 960	500	54	3	
	RSS-Gen A1 Clause 8.9	The emission limits shown in the above table are based on measurements employing CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector. For average radiated emission measurements above 1000 MHz, there is also a limit specified when measuring with peak detector function, corresponding to 20 dB above the indicated values in the table.					

Test procedure

The radiated setups shown in section *Test & System Description* were used to measure the radiated spurious emissions. were used to measure the radiated spurious emissions.

Depending of the frequency range and bands being tested, different antennas and filters were used.

The final measurement is done by varying the antenna height from 1 to 4 meters, the EUT azimuth over 360° and for both Vertical and Horizontal polarizations.

The radiated spurious emissions were measured on the lowest, middle and highest channels.

Test Results

Radiated spurious - 30 MHz - 1 GHz

Radiated Spurious - All modes

Frequency	Quasi-Peak	Limit	Margin	Polar
MHz	dBµV/m	dBµV/m	dB	
264.0	38.3	46.0	7.7	Н

Note 1: The spurious signals detected do not depend on either the operating channel or the modulation mode.

1 GHz - 26.5 GHz, BLE

Radiated Spurious – 2402 MHz

Frequency	MaxPeak	Average	Limit	Margin	Polar
MHz	dBµV/m	dBµV/m	dBµV/m	dB	
2995.5	59.8		74.0	14.2	Н
2996.5		47.7	54.0	6.3	V
7437.5		34.7	54.0	19.3	V
7437.5	48.2		74.0	25.8	Н
25866.5	50.3		74.0	23.7	Н
25884.0		37.2	54.0	16.8	V

Radiated Spurious - 2440 MHz

Frequency	MaxPeak	Average	Limit	Margin	Polar
MHz	dBµV/m	dBµV/m	dBµV/m	dB	
3013.5		47.9	54.0	6.1	Н
3013.5	62		74.0	12.0	Н
7338.0		34.7	54.0	19.3	Н
7338.0	48.2		74.0	25.8	V
25927.0	50.9		74.0	23.1	Н
25935.0		37.8	54.0	16.2	Н



Radiated Spurious – 2480 MHz

Frequency	MaxPeak	Average	Limit	Margin	Polar
MHz	dBµV/m	dBµV/m	dBμV/m	dB	
3003.0	60.5		74.0	13.5	V
3004.5		47.9	54.0	6.1	Н
8108.0		35.6	54.0	18.4	Н
8108.0	48.3		74.0	25.7	Н
25960.0	50.9		74.0	23.1	Н
25973.0		37.5	54.0	16.5	Н