



EMC Test Data

Client: SAFEmine Technology, Inc.	Job Number: J94480
Model: QC250	T-Log Number: T94590
Contact: Lukas Herzog	Project Manager: Christine Krebill
Standard: FCC Part 15	Project Coordinator: Irene Rademacher
	Class: N/A

Maximum Permissible Exposure

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Date of Evaluation: 4/30/2014

Engineer: David Bare

General Test Configuration

Calculation uses the free space transmission formula:

$$S = (PG)/(4 \pi d^2)$$

Where: S is power density (mW/m²), P is output power (mW), G is antenna gain relative to isotropic, and d is separation distance from the transmitting antenna (m).

Summary of Results

Device complies with Power Density requirements at 20cm separation:	Yes
If not, required separation distance (in cm):	

Use: General

Antenna: 3dBi for 900 MHz and 5 dBi for 2.4 GHz radios respectively

Band (MHz)	Mode	Output Power		Antenna gain (Max)	EIRP		Channels Available	Channels Used	Total EIRP	
		Peak	Average		dBm	W			W	dBm
2412 - 2472	WiFi	21.0	-	5.0	26.0	0.394	13	1	0.394	25.96
908-927.6	Hopping	13.0	-	3.0	16.0	0.040	4	1	0.040	16.00
Totals:								2	0.434	26.38

Band (MHz)	S @ 20 cm mW/cm ²	MPE Limit mW/cm ²	Percentage of MPE limit for each radio
2412 - 2472	0.078	1.000	8%
908-927.6	0.008	0.605	1%
Total			9%

As the total of the percentages is 9%, the device complies with the limits at a distance of 20 cm even when both radios transmit simultaneously.