



EMC Test Data

Client: ARRIS	Job Number: JD102669
Model: C61W	T-Log Number: T103891
	Project Manager: Christine Krebill
Contact: Mark Rieger	Project Coordinator: -
Standard: FCC 15.B / FCC 15.247 / 15.E	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 Test: 5/8/2017
Test Engineer: Mark Hill

General Test Configuration

Calculation uses the free space transmission formula:

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

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

Summary of Results

Device complies with Power Density requirements at 20cm separation:	Yes
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Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.



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FCC MPE Calculation

Use: General
 Antenna: 3.27dBi for RF4CE
 6.7dBi for UNII1 (Directional TxBF gain)
 6.5dBi for UNII2a (Directional TxBF gain)
 6.8dBi for UNII2c (Directional TxBF gain)
 6.6dBi for UNII3 (Directional TxBF gain)

Worse case mode: n40 for UNII1
 n40 for UNII2a
 n40 for UNII2c
 n20 for UNII3

Assessment of individual radio operation

Freq. MHz	EUT Power		Cable Loss	Ant Gain	Power at Ant	EIRP	Power Density (S)	MPE Limit
	dBm	mW*	Loss dB	dBi	dBm	mW	at 20 cm mW/cm ²	at 20 cm mW/cm ²
RFCE Operation								
2450	5.9	3.9	0	3.27	5.9	8.26	0.002	1.000
5GHz Wifi Operation								
5200	23.4	218.8	0	6.7	23.4	1023.29	0.204	1.000
5300	23.8	239.9	0	6.5	23.8	1071.52	0.213	1.000
5600	23.9	245.5	0	6.8	23.9	1174.90	0.234	1.000
5785	28.6	724.4	0	6.6	28.6	3311.31	0.659	1.000

Simultaneous transmission calculation using worse case (as a % of MPE limit @ 20cm) of RF4CE and 5GHz operation

Freq. MHz	% of limit
2450	0.2
5785	65.9
Total:	66.1

Note: Calculations performed using the measured power. Manufacturer states that the measured power will be equal to or higher than the rated power plus any production tolerance.