Arc Wireless	**************************************	5077.34.4	Test Number:	111109A			
		z 5GHz Module					
MPE Calculator	MPE uses EIRP for calculation. EIRP is based on TX power added to the antenna gain in dBi.						
	_	compared to an isotropic ra	adiator.				
	S = power der	nsity in mW/cm^2				_	
					Antenna Gain (dBi)		
		Output Power		dBd + 2.17 = dBi	dBi to dBd		
Tx Frequency (MHz)	2437	Maximum (Watts)	0.1880		Antenna Gain (dBd)	15.8	
Cable Loss (dB)	0.0	(dBm)	22.74	An	tenna minus cable (dBi)	18.0	
Calculated ERP (mw)		7107 105		EIRP = Po(dBM) + Gain (dB)			
	ted EIRP (mw)			End -10(dbW) + Gal	Radiated (EIRP) dBm	40.74	
Calcula	ted ERG (IIIW)	11001.770		ERP = EIRP - 2.17 dB	Radiated (EIRT) doin	40.74	
Occup	ational Limit	Power density (S)		ERI - ERI - 2.17 db	Radiated (ERP) dBm	38.57	
		EIRP			Radiated (ERF) dbiii	30.37	
	mW/cm ²	= mW/cm^2					
50.00000	W/m ²	4 p r^2					
Genera	l Public Limit	r (cm) EIRP (mW)					
1.00000	mW/cm ²						
10.00000	W/m ²						
		•	cy radiation exposure li				
		Frequency (MHz)	Occupational Limit	Public Limit			
		300-1,500	f/300	f/1500			
		1,500-10,000	5	1			
		FCC radio frequen	cy radiation exposure li	mits per 1 1310			
		rcc radio frequen	· ·	Public Limit @ Tx			
			Occupational Limit @				
		Frequency (MHz)	Tx Freq	Freq (mW/cm ²)			
		300-1,500 (mW/cm2)	8.123333333	1.624666667			
		300-1,500 (W/m2)	81.23333333	16.24666667			
		1,500-10,000 (mW/cm2) 1,500-10,000 (W/m2)	50	1 10			
		-,,,					
EIRP	S	S	Distance	Distance	Distance	Distance	
milliwatts	mW/cm ²	W/m ²	cm	meter	inches	Feet	
11861.998	0.09439	0.94395	100.00	1.00	39.37	0.08	
11861.998	0.11654	1.16537	90.00	0.90	35.43	0.08	
11861.998	0.14749	1.47492	80.00	0.80	31.50	0.07	
11861.998	0.16781	1.67813	75.00	0.75	29.53	0.06	
11861.998	0.19264	1.92642	70.00	0.70	27.56	0.06	
11861.998	0.37758	3.77579	50.00	0.50	19.69	0.04	
11861.998	0.58997	5.89967	40.00	0.40	15.75	0.03	
11861.998	0.98226	9.82256	31.00	0.31	12.20	0.03	
11861.998	2.35987	23.59870	20.00	0.20	7.87	0.02	
11861.998	2.61481	26.14814	19.00	0.19	7.48	0.02	
11861.998	2.91342	29.13419	18.00	0.18	7.09	0.02	
11861.998	4.19532	41.95324	15.00	0.15	5.91	0.01	
11861.998	4.81606	48.16060	14.00	0.14	5.51	0.01	
11861.998	4.95667	49.56668	13.80	0.14	5.43	0.01	
11861.998	5.58549	55.85490	13.00	0.13	5.12	0.01	
11861.998	9.43948	94.39478	10.00	0.10	3.94	0.01	
11861.998	11.65368	116.53677	9.00	0.090	3.54	0.01	
			Occupational Limit	Occupational Limit	Public Limit minimum	Public Limit minimum	
			minimum Distance	minimum Distance	distance (meters)	distance (cm / inches	
			(meters)	(cm / inches)	mstance (meters)	unstance (cm / mcnes	
		Frequency (MHz)	, ,	, ,	27/1	3	
		300-1,500	N/A	N/A	N/A	N/A	
		1,500-10,000	0.14	13.8 / 5.4	0.31	31 / 12.2	

Rogers Labs, Inc. 4405 W. 259th Terrace Louisburg, KS 66053 Phone/Fax: (913) 837-3214 Revision 1 ARC Wireless LLC

Model: ARCFlex 802.11 abgn Module

Test #: 111109A

Test to: CFR47 (15.247) File: RFExp Z2BAFM2 SN: ENG1 FCC ID#: Z2B-AFM2 Date: December 5, 2011

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Arc Wireless			Test Number:	111109A			
		z 5GHz Module					
MPE Calculator	MPE uses EIRP for calculation. EIRP is based on TX power added to the antenna gain in dBi.						
	_	compared to an isotropic ra	idiator.				
	S = power der	nsity in mW/cm^2				_	
					Antenna Gain (dBi)		
		Output Power		dBd + 2.17 = dBi	dBi to dBd		
Tx Frequency (MHz)	5785	Maximum (Watts)	0.1710	<u> </u>	Antenna Gain (dBd)	21.83	
0.11.7 (17)	0.0	/4D \	22.22			24.00	
Cable Loss (dB)	0.0	(dBm)	22.33	An	tenna minus cable (dBi)	24.00	
0-11	4- 4EDD ()	26066 700		FIDD - D- (4D) O + C-:	- (4D)		
	ated ERP (mw)			EIRP = Po(dBM) + Gai		46.331	
Calcula	ted EIRP (mw)	42902.280		ERP = EIRP - 2.17 dB	Radiated (EIRP) dBm	40.331	
0	stiemel Timit	Power density (S)		ERF - EIRF - 2.17 db	D = 4:-4 - 4 (EDD) 4D	44.161	
	ational Limit	EIRP			Radiated (ERP) dBm	44.161	
	mW/cm ²	= mW/cm^2					
50.00000	W/m ²	4 p r^2					
Genera	l Public Limit	r (cm) EIRP (mW)					
1.00000	mW/cm ²						
10.00000							
10.00000	W/m	FCC 4:- 6		::t 1 1210			
			cy radiation exposure l	Public Limit			
		Frequency (MHz)	Occupational Limit				
		300-1,500	f/300	f/1500			
		1,500-10,000	5	1			
		E00 1: 0	e e				
		FCC radio frequen	cy radiation exposure l				
			Occupational Limit @	Public Limit @ Tx			
		Frequency (MHz)	Tx Freq	Freq (mW/cm2)			
		300-1,500 (mW/cm2)	19.28333333	3.856666667			
		300-1,500 (W/m2)	192.8333333	38.56666667			
		1,500-10,000 (mW/cm2)	5	1			
		1,500-10,000 (W/m2)	50	10			
EIDD		~	D: 4	D: 4	D: /	D: /	
EIRP	S	S	Distance	Distance	Distance	Distance	
milliwatts	mW/cm ²	W/m^2	cm	meter	inches	Feet	
11861.998	0.09439	0.94395	100.00	1.00	39.37	0.08	
11861.998	0.11654	1.16537	90.00	0.90	35.43	0.08	
11861.998	0.14749	1.47492	80.00	0.80	31.50	0.07	
11861.998	0.16781	1.67813	75.00	0.75	29.53	0.06	
11861.998	0.19264	1.92642	70.00	0.70	27.56	0.06	
11861.998	0.37758	3.77579	50.00	0.50	19.69	0.04	
11861.998	0.58997	5.89967	40.00	0.40	15.75	0.03	
11861.998	0.98226	9.82256	31.00	0.31	12.20	0.03	
	2.35987	23.59870	20.00	0.20	7.87	0.02	
11861.998				0.19	7.48	0.02	
11861.998 11861.998	2.61481	26.14814	19.00				
11861.998 11861.998 11861.998	2.61481 2.91342	29.13419	18.00	0.18	7.09	0.02	
11861.998 11861.998 11861.998 11861.998	2.61481 2.91342 4.19532	29.13419 41.95324	18.00 15.00	0.18 0.15	5.91	0.01	
11861.998 11861.998 11861.998 11861.998 11861.998	2.61481 2.91342 4.19532 4.81606	29.13419 41.95324 48.16060	18.00 15.00 14.00	0.18 0.15 0.14	5.91 5.51	0.01 0.01	
11861.998 11861.998 11861.998 11861.998 11861.998 11861.998	2.61481 2.91342 4.19532 4.81606 4.95667	29.13419 41.95324 48.16060 49.56668	18.00 15.00 14.00 13.80	0.18 0.15 0.14 0.14	5.91 5.51 5.43	0.01 0.01 0.01	
11861.998 11861.998 11861.998 11861.998 11861.998 11861.998 11861.998	2.61481 2.91342 4.19532 4.81606 4.95667 5.58549	29.13419 41.95324 48.16060 49.56668 55.85490	18.00 15.00 14.00 13.80 13.00	0.18 0.15 0.14 0.14 0.13	5.91 5.51 5.43 5.12	0.01 0.01 0.01 0.01	
11861.998 11861.998 11861.998 11861.998 11861.998 11861.998 11861.998 11861.998	2.61481 2.91342 4.19532 4.81606 4.95667 5.58549 9.43948	29.13419 41.95324 48.16060 49.56668 55.85490 94.39478	18.00 15.00 14.00 13.80 13.00 10.00	0.18 0.15 0.14 0.14 0.13 0.10	5.91 5.51 5.43 5.12 3.94	0.01 0.01 0.01 0.01 0.01	
11861.998 11861.998 11861.998 11861.998 11861.998 11861.998 11861.998	2.61481 2.91342 4.19532 4.81606 4.95667 5.58549	29.13419 41.95324 48.16060 49.56668 55.85490	18.00 15.00 14.00 13.80 13.00	0.18 0.15 0.14 0.14 0.13	5.91 5.51 5.43 5.12	0.01 0.01 0.01 0.01	
11861.998 11861.998 11861.998 11861.998 11861.998 11861.998 11861.998 11861.998	2.61481 2.91342 4.19532 4.81606 4.95667 5.58549 9.43948	29.13419 41.95324 48.16060 49.56668 55.85490 94.39478	18.00 15.00 14.00 13.80 13.00 10.00	0.18 0.15 0.14 0.14 0.13 0.10	5.91 5.51 5.43 5.12 3.94	0.01 0.01 0.01 0.01 0.01	
11861.998 11861.998 11861.998 11861.998 11861.998 11861.998 11861.998 11861.998	2.61481 2.91342 4.19532 4.81606 4.95667 5.58549 9.43948	29.13419 41.95324 48.16060 49.56668 55.85490 94.39478	18.00 15.00 14.00 13.80 13.00 10.00	0.18 0.15 0.14 0.14 0.13 0.10	5.91 5.51 5.43 5.12 3.94	0.01 0.01 0.01 0.01 0.01 0.01	
11861.998 11861.998 11861.998 11861.998 11861.998 11861.998 11861.998 11861.998	2.61481 2.91342 4.19532 4.81606 4.95667 5.58549 9.43948	29.13419 41.95324 48.16060 49.56668 55.85490 94.39478	18.00 15.00 14.00 13.80 13.00 10.00 9.00	0.18 0.15 0.14 0.14 0.13 0.10 0.090	5.91 5.51 5.43 5.12 3.94 3.54	0.01 0.01 0.01 0.01 0.01 0.01 Public Limit minimum	
11861.998 11861.998 11861.998 11861.998 11861.998 11861.998 11861.998 11861.998	2.61481 2.91342 4.19532 4.81606 4.95667 5.58549 9.43948	29.13419 41.95324 48.16060 49.56668 55.85490 94.39478 116.53677	18.00 15.00 14.00 13.80 13.00 10.00 9.00 Occupational Limit minimum Distance	0.18 0.15 0.14 0.14 0.13 0.10 0.090 Occupational Limit minimum Distance	5.91 5.51 5.43 5.12 3.94 3.54	0.01 0.01 0.01 0.01 0.01 0.01 Public Limit minimum	
11861.998 11861.998 11861.998 11861.998 11861.998 11861.998 11861.998 11861.998	2.61481 2.91342 4.19532 4.81606 4.95667 5.58549 9.43948	29.13419 41.95324 48.16060 49.56668 55.85490 94.39478	18.00 15.00 14.00 13.80 13.00 10.00 9.00	0.18 0.15 0.14 0.14 0.13 0.10 0.090 Occupational Limit	5.91 5.51 5.43 5.12 3.94 3.54	0.01 0.01 0.01 0.01 0.01	

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