

3M EMC Laboratory

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Page 24 of 25

4.8	RF Exposure Evaluation		
Reference Standard(s):			☑ MPE☐ SAR Evaluation☐ SAR Test Exclusion
Frequency Range(s):			
Antenna Separation Distance:		>20cm	
RF Exposure Conditions:		Mobile	
Repeater Peak Antenna Gain:		4.3dBi (numeric gain 2.7dBi)	
Repeater the source-based output power:		102mW(20.1dBm)*0.2(worst case duty cycle)=20.4mW(13.1dBm)	
Repeater EIRP/ERP output power:		EIRP=13.1dBm + 4.3dBi=17.4dBm	
Power Density (S=PG/4 πR^2)		0.11Watts/m ² /0.011 mW/cm ²	
Pak-Tracker the source-based output power:		20mW(13.1dBm)*0.2(worst case duty cycle)=4mW(6.0dBm)	
Pak-Tracker Peak Antenna Gain:		0.7dBi (numeric gain 1.2dBi)	
Pak-Tracker EIRP/ERP output power:		EIRP= 6.0dBm + 0.7dBi=6.7dBm	
Power Density (S=PG/4 πR^2):		0.01 Watts/m ² /0.001 mW/cm ²	
The sum of simultaneous transmission:		0.12Watts/m ² /0.012 mW/cm ²	
MPE Limit			
	FCC Part 1.1310 1.0 mW/cm ² @2.4GHz		
RSS 102, Issue 5		5.3508 Watts/m² @2.4GHz	
Note:		The device has two simultaneously transmitting antennas	