## Source-based rf power output

Plots were taken of the transmitted rf with the TX key held in the on position. The following duty cycle is source-based because it is set in the firmware that resides on the rf board.

¥Բ F	ΑT RL	TEN 97	1 ØdE 7.ØdE	3 3μ∨	10	∆MKR −48.66dB 733µs						
	5											
Т	47	MKF 33	κ μs									
2		48.	66 0	яB								
	-		₩ŧ₽₩₩₩₩₩	ſ <b>`₩</b> ₽₩ <b>₽₩</b> ₩	****	<b>⋏</b> ୶⋴∼ <b>₩</b> ₽₽₽₽	ļ	γľψ	1 <b></b>	der la constante	****	hirest solar

## The width of one pulse is 733 microseconds

CENTER 2.43100000GHz SPAN 0Hz \*RBW 1.0MHz VBW 1.0MHz \*SWP 20.0ms There are 10 rf pulses in 100 msec.



is well below the FCC requirements.



Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{PG}{4\pi R^2}$$

where: S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Maximum peak eirp:	3.57 (dBm)
Maximum peak eirp:	2.275097431 (mW)
Antenna gain(maximum):	2 (dBi)
Maximum antenna gain:	1.584893192 (numeric)
Time Averaging:	<u>7.33</u> (%)
Prediction distance:	<u> </u>
Prediction frequency:	<u>2450</u> (MHz)
MPE limit for uncontrolled exposure at prediction frequency:	<u>1.000</u> (mW/cm^2)
Power density at prediction frequency:	0.000841 (mW/cm^2)
Margin of compliance:	-30.8 (dB)
This equates to:	0.008413062 W/m^2