

The EIRP value in Exhibit 1, Table 1 is the maximum power from the antenna. The maximum antenna gain is only seen in the same direction as the antenna is pointed. Therefore, the antenna signal strength seen at 100' from the nearest exterior wall is calculated based on the slant angle, slant range and the resulting reduced antenna gain. Exhibit 2 provides a graphical drawing and the calculations proving that the maximum equivalent isotropically radiated power (EIRP) are no greater than -140 dBm/24 MHz as received by an isotropic antenna at a distance of 100 feet (30 meters) from the building where the test is being conducted. As a result, based on our calculations the power levels noted below do not need to be amended.

FCC File No. 0477-EX-PL-2014:

TABLE 1	L1			L2		
Reradiator Identifier	Maximum RF Power at the Transmitter Output Terminal	Maximum EIRP from the Antenna		Maximum RF Power at the Transmitter Output Terminal	Maximum EIRP from the Antenna	
	Watts	dBm	Watts	Watts	dBm	Watts
601T1	32.4E-12	-69.99	100.1E-12	45.7E-12	-69.91	102.2E-12
601T2	32.4E-12	-69.99	100.1E-12	45.7E-12	-69.91	102.2E-12

T1: 235.8 feet is the slant range distance from the transmitter antenna to 100' beyond the nearest exterior wall. These values are in Exhibit 2 with the extra 100' added in the Free Space Loss (FSL) calculation. The actual transmitter power based on the antenna slant angle is used in the final calculations in Exhibit 2. The exhibit includes a graphical display of the GPS reradiator installation and power levels.

T1: FSL for (L1 = 73.5 & L2 = 71.4) based on the slant range. These values are in Exhibit 2

L1: $-69.99 - 73.5 = -143.49$ without taking into account the reduced antenna power based on the slant angle.

L2: $-69.91 - 71.4 = -141.31$ without taking into account the reduced antenna power based on the slant angle.

T2: 350.5 feet is the slant range distance from the transmitter antenna to 100' beyond the nearest exterior wall. These values are in Exhibit 2 with the extra 100' added in the Free Space Loss (FSL) calculation. The actual transmitter power based on the antenna slant angle is used in the final calculations in Exhibit 2. The exhibit includes a graphical display of the GPS reradiator installation and power levels.

T2: FSL for (L1 = 77 & L2 = 74.8) based on the slant range. These values are in Exhibit 2

L1: $-69.99 - 77 = -146.9$ without taking into account the reduced antenna power based on the slant angle.

L2: $-69.91 - 74.8 = -144.71$ without taking into account the reduced antenna power based on the slant angle.