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To Whom It May Concern:

Subject: PSD Compliance

In the test report, at 5.3GHz the output power tested is 19.5dBm and 19.2dBm. The PSD tested under that output power is 3.5dBm/MHz and 2.6dBm/MHz. Since the EIRP limit for output power is +30dBm, it allows use of less than 11dBi antenna under the maximum equipment output power. Under such conditions, the PSD of the equipment is under (3.5+11) dBm/MHz, which is within the PSD EIRP limit of 17dBm/MHz. When higher gain antennas are used, output power of the equipment will have to be reduced by an equivalent amount the antenna gain exceeds 11dBi to maintain the +30dBm EIRP limit. This will ensure the reduction of the PSD in the same scale, which will maintain the compliance of PSD to the +17dBm/MHz limit. Example showing compliance of PSD when using different gain antennas are shown in the following table:

G_{ant}	$P_{out\ limit}$ [30- G_{ant}] dBm	PSD [3.5 - (19.5- $P_{out\ limit}$)] dBm/MHz	PSD limit 11-(G_{ant} -6) dBm/MHz
23.5dBi	6.5	-9.5	-6.5
28.5dBi	1.5	-14.5	-11.5
34.2	-4.2	-20.2	-17.2
37.5	-7.5	-23.5	-20.5
39.8	-9.8	-25.8	-22.8

There are instructions in the Installation and Maintenance manual to professional installers on how to adjust equipment output power to ensure EIRP limit is maintained.

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