

From: JIM GESSFORD

To: Leann Nguyen

Date: December 08, 2015

Subject: Request for Info - File # 0757-EX-PL-2015

Message:

- Please provide a detailed calculation(s) for the link budget specified on item 6 of section 8.3.28. Please make certain the ERP submitted on your application matches with what you calculate on the link budget.

By separate email to Leann Nguyen dated Dec. 8, 2015, we have included a .PDF that provides the ERP/ERIP calculation.

The bottom two lines of the .PDF show the power level 100' from the building in ERIP and ERP. This calculation shows an ERP of -145.4 dBm/24Mhz.

The calculation assumes -130dBm signal input to the system.

The system gain is calculated as sum of Roof Antenna gain, cable loss, amplifier gain, and indoor antenna gain (50.6dBm).

The free air loss at 100' (30m) from the building is based on 8.6m to nearest outside wall for a total of 38.6m. This produces a free air loss of 66dBm.

Summing these three components $(-130 + 50.6 - 66.0)$ produces -145.4 dBm/24MHz. This satisfies the requirement of being less than -140dBm.

This value is ERIP. To report as ERP, 2.15dB would be subtracted from the number producing a value of -147.6dBm.

- Name and telephone of person who will terminate the system if interference occurs.

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