# PCS Skylight Tuning Procedure


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| Type | | Document Number | Rev |
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## Revision History

| Rev/Ver | Description | Date | Changed By |
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## 1. Purpose

The purpose of this document is to outline a tuning procedure for defining maximum RF output power on Up link path and down link path.

## 2. RF Power Tuning Procedure

### 2.1. UUT Functional Test

#### 2.1.1. DC Test

Test UUT for proper DC voltage and current.

#### 2.1.2. Verify Uplink P1dB

Up link P1dB measurement is made to verify if maximum RF output power is acceptable.

#### 2.1.3. Verify Downlink P1dB

Down link P1dB measurement is made to verify if maximum RF output power is acceptable.

### 2.2. RF Output Power Level Calibration Sequence

#### 2.2.1. Downlink RF Output Power Level Calibration

##### 2.2.1.1. Measure Downlink –10dBm level

measure the Downlink RF Power Calibration at -10dBm output power level. Record the detected voltage level.

##### 2.2.1.2. Measure Downlink –5dBm level

measure the Downlink RF Power Calibration at -5dBm output power level. Record the detected voltage level.

##### 2.2.1.3. Measure Downlink 0dBm level

measure the Downlink RF Power Calibration at 0dBm output power level. Record the detected voltage level.

##### 2.2.1.4. Measure Downlink 5dBm level

measure the Downlink RF Power Calibration at 5dBm output power level. Record the detected voltage level.

##### 2.2.1.5. Measure Downlink 5dBm level

measure the Downlink RF Power Calibration at 10dBm output power level. Record the detected voltage level.

##### 2.2.1.6. Store Downlink maximum Level

Set maximum RF output power on the down link path by interpolating the detected voltage level curve.

### 2.2.2. Uplink RF Power Output Level CalibrationMake Loop Decision

#### 2.2.2.1.  Measure Uplink –10dBm level

measure the uplink RF Power Calibration at -10dBm output power level. Record the detected voltage level.

#### 2.2.2.2.  Measure Uplink –5dBm level

measure the uplink RF Power Calibration at -5dBm output power level. Record the detected voltage level.

#### 2.2.2.3.  Measure Uplink 0dBm level

measure the uplink RF Power Calibration at 0dBm output power level. Record the detected voltage level.

#### 2.2.2.4.  Measure Uplink 5dBm level

measure the uplink RF Power Calibration at 5dBm output power level. Record the detected voltage level.

#### 2.2.2.5.  Measure Uplink 10dBm level

measure the uplink RF Power Calibration at –d10Bm output power level. Record the detected voltage level.

#### 2.2.2.6.  Measure Uplink 15dBm level

measure the uplink RF Power Calibration at 15dBm output power level. Record the detected voltage level.

#### 2.2.2.7.  Measure Uplink 20dBm level

measure the uplink RF Power Calibration at 20dBm output power level. Record the detected voltage level.

#### 2.2.2.8.  Measure Uplink 25dBm level

measure the uplink RF Power Calibration at 25dBm output power level. Record the detected voltage level.

#### 2.2.2.9.  Measure Uplink 30dBm level

measure the uplink RF Power Calibration at 30dBm output power level. Record the detected voltage level.

#### 2.2.2.10. Store Uplink Maximum output power level

Set maximum RF output power on the up link path  by interpolating the detected voltage level curve.