# Tested By: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_

# LSC Style Detector Measured Parameters

All transimpedance measurements are referred to plane of the physical output connector and include the effect of the voltage divider created by the 50 Ω termination. All notch rejection ratios are relative to the magnitude of the transimpedance at the respective RF detection center frequency of the given RF output port.

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| --- | --- |
| **Parameter** | **Value** |
| Detector serial number |  |
| Detector schematic D# and revision |  |
| Diode element manufacturer’s serial number |  |
| Quiescent DC current (amps at +18 VDC) |  |
| Quiescent DC current (amps at -18 VDC) |  |
| PD bias regulator output voltage (VDC) |  |
| RF opamp positive voltage regulator (VDC) |  |
| RF opamp negative voltage regulator (VDC) |  |
| Audio opamp positive voltage regulator (VDC) |  |
| Audio opamp negative voltage regulator (VDC) |  |
| DC path transimpedance and zero light offset (Ω/mVDC at BNC out) | Ω | mVDC |
| DC path transimpedance and zero light offset (Ω/mVDC at differential out) | Ω | mVDC |
| DC path zero frequency (Hz) |  |
| DC path pole frequency (Hz) |  |
| Inferred DC path shot noise limited input photo sensitivity (mA) at 100Hz measured at differential output |  |
| RF detection center frequency (MHz), f low |  |
| RF detection center frequency (MHz), f hi |  |
| Notch frequencies (MHz) used in design |  |
| F low feedback notch frequency |  |
| F hi feedback notch frequency |  |
| Rejection (dB) at notch1 (f low) |  |
| Rejection (dB) at notch2 (f low) |  |
| Rejection (dB) at notch3 (f low) |  |
| Rejection (dB) at notch4 (f low) |  |
| Rejection (dB) f low to f hi |  |
| Rejection (dB) at notch1 (f hi) |  |
| Rejection (dB) at notch2 (f hi) |  |
| Rejection (dB) at notch3 (f hi) |  |
| Rejection (dB) at notch4 (f hi)  |  |
| Rejection (dB) f hi to f low |  |
| Transimpedance (Ω) at f low (note PD Current) | Ω | mA |
| RF dark/light noise used for f low Trans-Z | dBm/Hz | dBm/Hz |
| Transimpedance (Ω) at f hi (note PD Current) | Ω | mA |
| RF dark/light noise used for f hi Trans-Z | dBm/Hz | dBm/Hz |
| RF preamp used during testing (noise/gain) | dBm/Hz | dB |
| f low, shot-noise limited input sensitivity (mA) |  |
| f hi, shot-noise limited input sensitivity (mA) |  |
| Test input transconductance at f1(mA/V) |  |
| Test switch isolation at f1 (dB) |  |
| Test input transconductance at f2(mA/V) |  |
| Test switch isolation at f2 (dB) |  |