

<b>TITLE: SPECIFICATION SHEET FOR M50E032 &amp; M50E033</b>					
PROCEDURE 16300536				REV A	
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REV	REVISION DESCRIPTION	ECN #	INIT.	DATE	APPR.
A	Release to Production	0-934	BJT	5/21/02	IKE
<b><i>SPECIFICATION SHEET</i></b>					

**FOR WIRE TERMINAL SPECIFICATIONS, SEE S30241**

DESCRIPTION	SPEC	TEST CONDITION
<b>Radiometrics</b>  bandpass 320-410nm  320-500nm	Ave = 1.50 W Min. = 1.25 W  Ref. = 2.70 W	Watts of radiometric power measured with calibrated EFOS radiometer through a 5mm quartz rod. Entrance of rod at lamp F2. The meter reading is divided by 0.553 (the transmission coefficient of the rod) to get the actual watts at F2.
<b>STABLE OPERATION</b>	flicker < 5 percent	During any one minute of operation after the lamp reaches it's steady operation point (at least 2 minutes of warm up required), the maximum output minus the minimum output divided by the average output will be less than 5 percent. This evaluation is made only the visible region of the spectrum (400 – 500 nm).
<b>LAMP VOLTAGE</b>	52 ± 6 VOLTS	Connect lamp to 50w ballast and measure lamp voltage.
<b>MEDIAN LIFE @ 50 watts</b>	4000 hours Median  Use Weibull Plot and Maximum Likelihood prediction	Tests to be conducted to ensure life and maintenance requirements, cycle is 11 hours on, 30 minutes off as tested with forced cooling on lab test rack. Anode tip to run between 190 degrees C and 250 degrees C. 1. The median life is defined as the point where one half of the population of lamps have failed and one half of the population continues to operate. Lamps are subjected to

		<p>11 hour on / 30 minute off duty cycle in a laboratory environment with forced air cooling.</p> <p>2. A failed lamp is defined as one that either fails to operate or has a radiometric output less than fifty percent of its initial output.</p>
<p><b>MAINTENANCE</b> @50 watts</p>	<p>Ave.=60%</p>	<p>After cycling (11hours on, 30 minutes off) with forced cooling on lab test rack at median life, radiometric power is measured with calibrated EFOS radiometer through a 5mm quartz rod. The maintenance is defined as the relative light output compared to its initial light output expressed as a percentage. This is based on the population of lamps still operational at median life. Thus, the average maintenance will be specified at median life.</p>
<p><b>BOND STRENGTH</b> (Reflector to ceramic lamp connector)</p>	<p>Must withstand a 12.5 lb. minimum pull.</p>	<p>Initial bond strength of reflector to ceramic lamp connector must be a minimum of 12.5 lbs. axial pull off force as measured with Chatillon gage.</p>
<p><b>SHOCK TEST</b></p>	<p>Lamps must light on a 7.0kV ballast <math>\leq</math> 1 sec</p>	<p>Lamp to withstand dropping 3 times at 150G shock. Lamp to be mounted horizontal in shock test fixture. Lamps to be functional (light up) and have no physical defects.</p>