



Cree, Inc.  
4600 Silicon Drive  
Durham, NC 27703

**IES LM-80-08 Data Summary  
Cree XP-G White XLamp  
2010.5 LM-80 Summary XPG.XLS**

1. Number of LED Sources Tested	See Table 1																									
2. Description of LED light sources	Cree XP-G XLamp LEDs																									
3. Description of auxiliary equipment	Instrument Systems ISP-500 Integrating Sphere Instrument Systems CAS-140 Spectrometer Keithley 2420 Sourcemeter																									
4. Operating Cycle	>6000 hours																									
5. Ambient Conditions	for 45°C Test: Tair = 45°C, RH < 45%, air flow = 800CFM for 55°C Test: Tair = 55°C, RH < 45%, air flow = 800CFM for 85°C Test: Tair = 85°C, RH < 45%, air flow = 800CFM																									
6. Case Temperature	for 45°C Test: 45°C for 55°C Test: 55°C for 85°C Test: 85°C																									
7. Drive Current During Test	See Table 1																									
8. Initial LF and Vf	See Table 1																									
9. Lumen Maintenance	See individual worksheets																									
10. LED failures	NONE																									
11. Photometric uncertainty	±2.0%																									
12. Projected L70*	<table border="0"> <thead> <tr> <th><u>product</u></th> <th><u>test conditions</u></th> <th><u>total test time</u></th> <th><u>% LF at time</u></th> <th><u>L70</u></th> </tr> </thead> <tbody> <tr> <td>XP-G Xlamp</td> <td>1000mA @ 45C</td> <td>6,048 hours</td> <td>98.75</td> <td>&gt;100,000 hours</td> </tr> <tr> <td>XP-G Xlamp</td> <td>350mA @ 55C</td> <td>6,048 hours</td> <td>94.50</td> <td>38,132 hours</td> </tr> <tr> <td>XP-G Xlamp</td> <td>350mA @ 85C</td> <td>6,048 hours</td> <td>98.78</td> <td>&gt;100,000 hours</td> </tr> <tr> <td>XP-G Xlamp</td> <td>1000mA @ 85C</td> <td>6,048 hours</td> <td>96.92</td> <td>68,953 hours</td> </tr> </tbody> </table>	<u>product</u>	<u>test conditions</u>	<u>total test time</u>	<u>% LF at time</u>	<u>L70</u>	XP-G Xlamp	1000mA @ 45C	6,048 hours	98.75	>100,000 hours	XP-G Xlamp	350mA @ 55C	6,048 hours	94.50	38,132 hours	XP-G Xlamp	350mA @ 85C	6,048 hours	98.78	>100,000 hours	XP-G Xlamp	1000mA @ 85C	6,048 hours	96.92	68,953 hours
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\* Using the Energy Star Exponential Curve Fit Projection Method and the maximum test time as shown on individual worksheets