

Executive Summary

The LED Evolution NT 20 Downlight uses 1 XLamp® CXA2520 LED. The luminaire produces 1535 lumens with a 4265K CCT while consuming 23.4W of power. With an optical efficiency of nearly 62% the luminaire delivers 66 lumens per watt.

Cree Services' TEMPO24 Evaluation process is a thorough multi-point evaluation and analysis of a customer's lighting product. Cree Application Engineering personnel perform a battery of thermal, electrical, mechanical and photometric tests and provide a comprehensive report that includes all relevant data necessary to confirm the performance of the product.

In addition to this standard set of tests, products will also be reviewed against appropriate Energy Star or DesignLights™ Consortium (DLC) criteria, TM-21 LED Lifetime estimates, and LM-79 conformant tests where applicable. Table 1 below provides a quick summary of the test data. Additional detailed test results are covered in the following pages.

Criteria	Result	Test Compliance
Total Luminous Flux (lm)	1535	IES LM-79-08
Power (W)	23.43	
Tc (°C) ¹	66.3	
Power Factor	0.964	
Lumens per Watt (LPW)	65.5	IES LM-79-08
Optical Efficiency (%)	62	
Driver Efficiency (%)	92	
CCT (K)	4265	IES LM-79-08
CRI (Ra)	81	IES LM-79-08
Chromaticity (x-coord)	0.3692	IES LM-79-08
Chromaticity (y-coord)	0.3688	IES LM-79-08
LED Lumen Maintenance ²	Projected L ₇₀ (6K) : 79,200	IES TM-21
	Reported L ₇₀ (6K) : 36,300	
DLC/Energy Star Criteria	Not Applicable	

Table 1: Summary of Test Results

¹ Measured at ambient temperature of 24°C.

² Per IES TM-21-2011