

# NT10 LED Downlight

LED*evolution*

## Features

### BSI Part L Certified to >60 lm/circuit watt

The NT10 has been tested by the BSI in accordance with the 2013 requirements for UK Building Regulation Part L1 (Domestic) and Part L2 (Industrial) both A & B.

### 100,000 Hours Life

The NT10 has been independently tested in accordance with LM-80 and has a predicted TM-21 L70 lifetime estimate of 100,000 hours.

### UL Approval Pending

Both the NT10 Series and PSU10 Driver have been submitted to UL for approval and certification is pending.

### Highly Efficient Driver

The NT10 Driver (PSU10) has an independently tested power factor correction of >0.9 and efficiency of >85%.

### 5 Year Warranty

The NT10 is available with a 5 Year Warranty.

## High Performance Design



## Technical Data

<b>Power:</b>	9.6W			
<b>Lumen Output (lm):</b>	3000K:-	40° - 620	60° - 612	EL - 607
	4250K:-	40° - 729	60° - 718	EL - 705
<b>Lumen Circuit Watt (lm/w):</b>	3000K:-	40° - 60.3	60° - 60.6	EL - 60.4
	4250K:-	40° - 69.6	60° - 70.4	EL - 70.6
<b>CRI:</b>	70CRI, 80CRI and 90CRI versions available			
<b>Life (L70):</b>	100,000 hours (see LM-80 test data)			
<b>Beam Angle Options:</b>	40°, 60°, and 5 x 2 Elliptical Beam versions (17°, 26°, 38° & 54° version available soon)			
<b>Warranty:</b>	5 Years (subject to product registration - see terms & conditions)			
<b>Fire Rating:</b>	1.5 Hours fire rated version available soon			
<b>Optical Efficiency:</b>	84% (Test data - with optics flux = 750lm, without optics flux = 894lm)			
<b>Environmental Rating:</b>	IP65			
<b>Bezel Options:</b>	Chrome, White, Black, Gold, Pewter (other colours on request)			
<b>Power Supply Options:</b>	On/Off + Dimming (see Driver Options overleaf)			

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Pending Pending

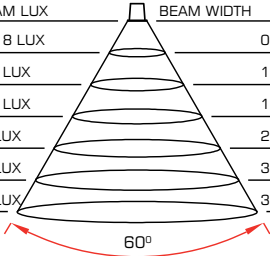
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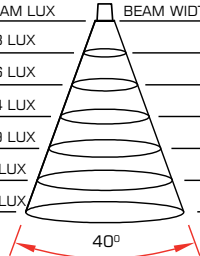


## Photometric Data

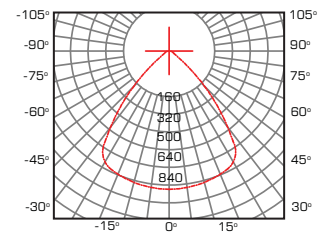
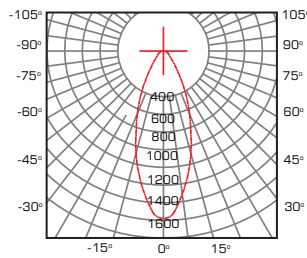
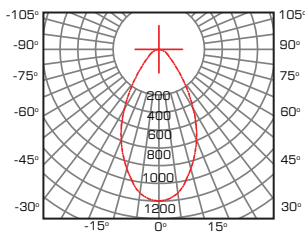
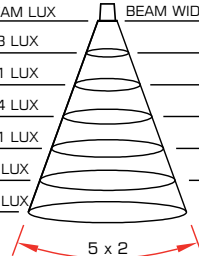
CENTER BEAM LUX	BEAM WIDTH	MIN / MAX
0.5M 1,264.8 LUX		0.5M / 0.6M
1.0M 316.2 LUX		1.2M / 1.5M
1.5M 140.5 LUX		1.8M / 2.3M
2.0M 79.0 LUX		2.4M / 3.1M
2.5M 50.6 LUX		3.0M / 3.9M
3.0M 35.1 LUX		3.6M / 4.6M



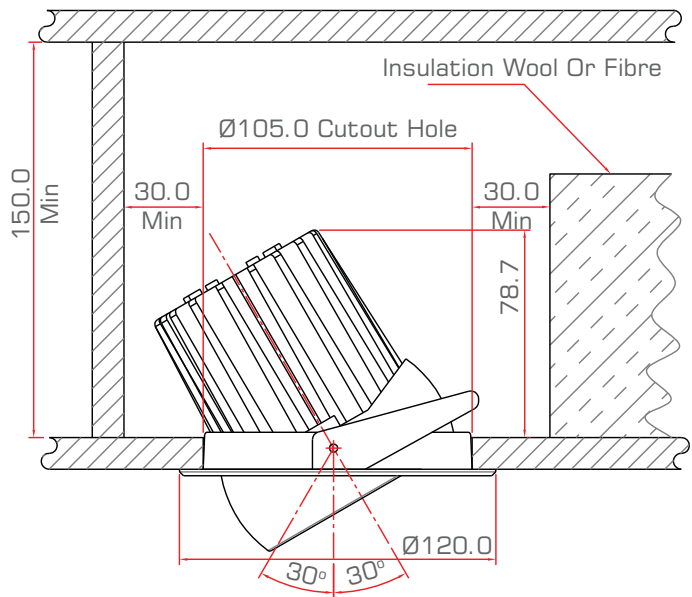
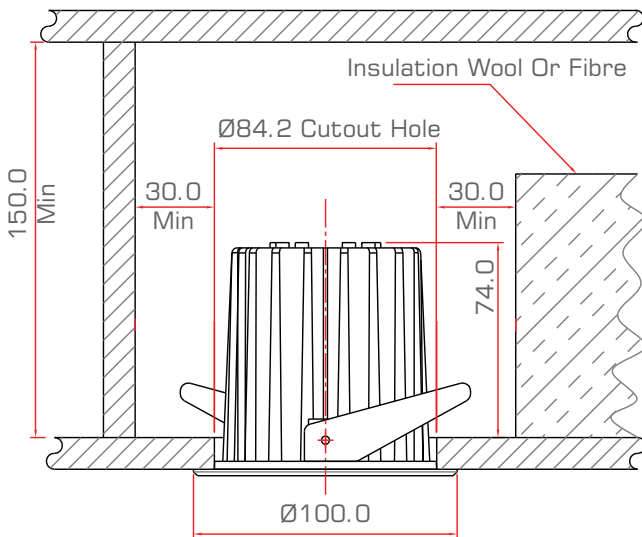
CENTER BEAM LUX	BEAM WIDTH	MIN / MAX
0.5M 1,473 LUX		0.37M / 0.5M
1.0M 427.6 LUX		0.65M / 0.8M
1.5M 209.4 LUX		1.2M / 1.45M
2.0M 127.9 LUX		1.8M / 2.15M
2.5M 80.4 LUX		2.4M / 2.7M
3.0M 57.3 LUX		3.0M / 3.4M



CENTER BEAM LUX	BEAM WIDTH	MIN / MAX
0.5M 1,293 LUX		0.5M / 0.7M
1.0M 302.1 LUX		0.65M / 1.6M
1.5M 187.4 LUX		1.2M / 2.75M
2.0M 103.1 LUX		1.8M / 3.45M
2.5M 60.7 LUX		2.4M / 4.35M
3.0M 27.1 LUX		3.0M / 4.95M



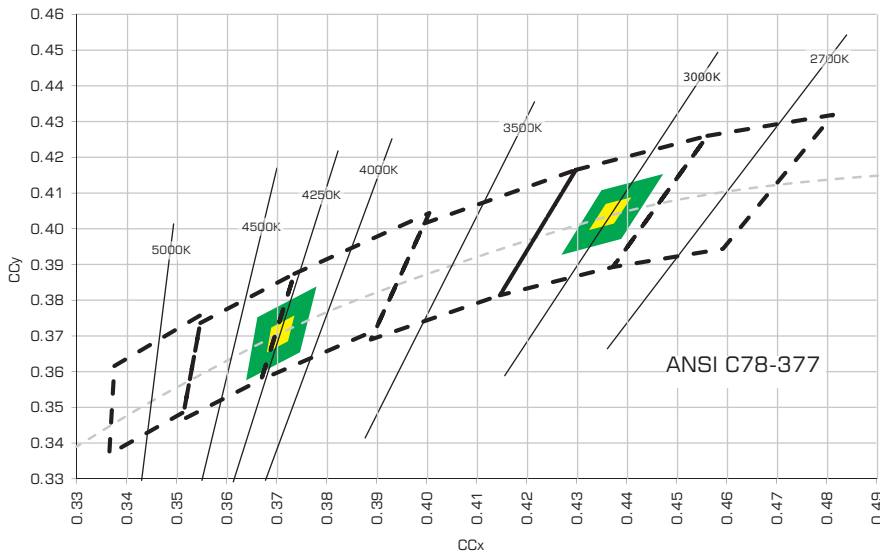
## Dimensions



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## LED Specification

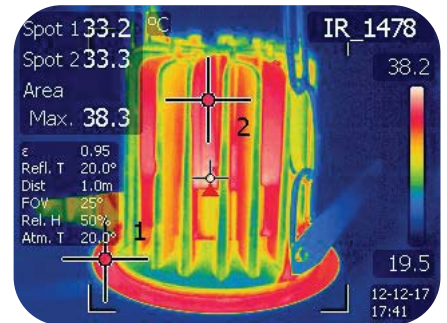
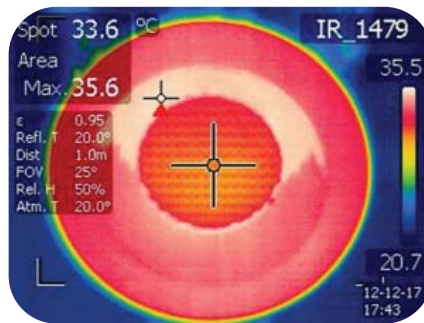
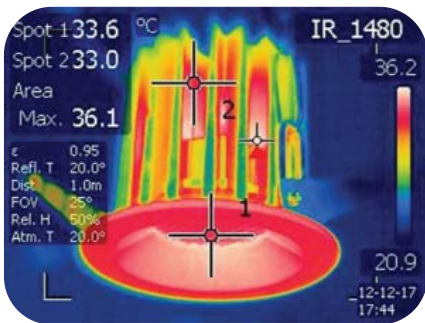


LED Evolution follows the ANSI recommendation that lamp manufacturers select LEDs from within a 4 step ellipse of any correlated colour temperature (CCT) target point.

LEDs are selected within 4 bins of the target CCT point on the chart (left) in standard manufacturing. A special manufacturing option selected from 4 sub-bins (representing a 2 step ellipse variation) is also available.

All LEDs used in manufacturing are logged against the product serial numbers for traceability.

## Thermal Efficiency and Lifetime



The primary influencing factor prevailing negatively upon LED life and efficiency is high temperature. The NT10 has been designed to operate with a junction temperature of less than 60°C and the excellent thermal efficiency of its heat-sink design extracts and dissipates this heat in a highly efficient manner.

The NT10 has been independently tested in accordance with LM-80 indicating a measured Tsp of 56°C and a reported L70 of 66,300 hours (limited by the 6x rule as defined in TM-21). The projected L70 at 23°C ambient is 427,000 hours. As a consequence, LED Evolution specify an L70 of 100,000 hours under normal conditions and 60,000 hours under extreme temperature conditions.

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## Options & Ordering

<b>NT10</b>	-	<b>300</b>	-	<b>W</b>	-	<b>40</b>	-	<b>F</b>	-	<b>7</b>
3000K Warm White		<b>300</b>								<b>7</b> 70+CRI
4250K Natural White		<b>425</b>								<b>8</b> 80+CRI
										<b>9</b> 90+CRI
				White Bezel	<b>W</b>			<b>F</b> Fixed Head		
				Chrome Bezel	<b>C</b>			<b>S</b> Swivel Head		
				Black Bezel	<b>B</b>					
				Gold Bezel	<b>G</b>					
				Nickel Bezel	<b>N</b>					
				Brass Bezel	<b>X</b>					
						<b>40</b>		<b>40°</b> Beam Angle		
						<b>60</b>		<b>60°</b> Beam Angle		
						<b>EL</b>		<b>5 x 2 Elliptical Beam Angle</b> (Fixed Head version only)		

## Driver Options & Ordering

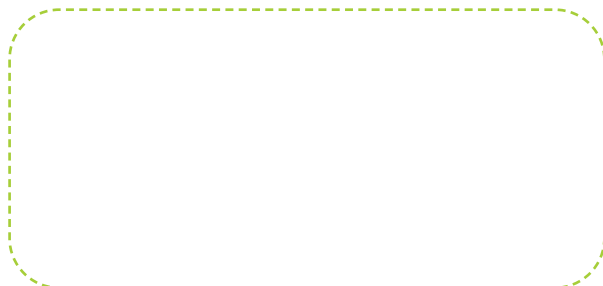
A range of 196V-265V driver options are available with instant start-up and illumination.

- Power Factor Correction >0.9, efficiency >85%
- On/Off
- Dimmable (Triac Phase)
- Dimmable (1 -10 Volt Analogue)
- Dimmable (DALI)
- IP20

<b>PSU10</b>	-	<b>750</b>	-	<b>OFF</b>
700mA Current (lav)		<b>750</b>		
				On/Off Version
				<b>OFF</b>
				Phase Dimming Version
				<b>PHASE</b>
				1-10V Dimming Version
				<b>TEN</b>
				DALI Dimming Version
				<b>DALI</b>



Your Local Supplier



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NT10 Data - V4 11-13

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