

# NCO Series LED



PROJECT NAME	
CATALOG #	
NOTES	

## FEATURES

- > Driver temperature up to 167°F (75°C)
- > UL Listed Drivers with less than 1% failure rate
- > Patent-pending remote driver minimizes fixture operating temperature without re-gridding required
- > Patent-pending design extends fixture life by helping prevent build-up of insulating dust and debris and eliminating illumination dead spots
- > Includes 10 Year Module Warranty - Full light engine or plug & play driver module replacement, rather than parts
- > Fail off 15KA transient voltage surge suppressor (TVSS) protects fixture against failure due to power supply surges
- > Optional motion sensor. Choose from standard by Wattstopper with L7 lens (fig 1.1 & 1.2 on page 3), or Internet of Things (IOT) by Enlighted Sensors (fig 1.3).
- > Dimmable 0-10V
- > UL 1598 listed
- > IP65 rated

## LUMINOUS OUTPUT, DIMENSIONS & WEIGHT

WATTAGE	OUTPUT	STANDARD TEMP		HIGH TEMP		EXTREME TEMP	
		LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT
100 Watts	13,220 lumens	18 in	15.087 lbs	18 in	15.087 lbs	26 in	17.061 lbs
150 Watts	21,600 lumens	18 in	15.219 lbs	26 in	17.061 lbs	34 in	19.401 lbs
200 Watts	28,800 lumens	26 in	17.559 lbs	34 in	19.401 lbs	42 in	21.243 lbs
250 Watts	36,000 lumens	34 in	19.401 lbs	42 in	21.243 lbs	60 in	28.213 lbs
300 Watts	43,200 lumens	34 in	19.821 lbs	50 in	23.505 lbs	68 in	32.994 lbs
400 Watts	57,600 lumens	50 in	28.040 lbs	68 in	32.994 lbs	84 in	32.868 lbs
500 Watts	72,000 lumens	50 in	28.040 lbs	84 in	32.868 lbs	110 in	41.759 lbs
600 Watts	86,400 lumens	68 in	33.834 lbs	102 in	37.392 lbs	126 in	51.989 lbs
700 Watts	100,800 lumens	84 in	37.823 lbs	118 in	45.191 lbs	146 in	53.819 lbs
800 Watts	115,200 lumens	92 in	40.925 lbs	136 in	50.135 lbs	146 in	53.819 lbs
900 Watts	129,600 lumens	102 in	42.767 lbs	146 in	53.819 lbs	146 in	53.819 lbs

## OPERATIONAL TEMPERATURE

STANDARD TEMP	HIGH TEMP	EXTREME TEMP
-40°F to 130°F (or -40°C to 55°C)	-40°F to 195°F (-40°C to 90°C)	-40°F to 245°F (-40°C to 118°C)

## SPECIFICATIONS

Power Factor.....>0.9  
 Available Wattages..... 100, 150, 200, 250, 300, 400, 500, 600, 700, 800, 900  
 Kelvin Temperatures .....4000K, 5000K  
 Input Voltage ..... 120/277V & 347/480V  
 Performance..... Up to 151 lm/W  
 Distribution..... 120°, 60° & Aisle  
 Mount Type..... Suspension  
 Color Rendering Index (4000K) .....>70  
 Color Rendering Index (5000K) .....>90

## NCO ORDERING INFORMATION

ORDER NUMBER: NCO-1-100-40-1-2-1-1-1-X-X-X-1-1

SERIES	WATTAGE	KELVIN	OPTICS	LENS	FINISH	DRIVER VOLTAGE	REMOTE CABLE	MOTION SENSOR	BATTERY BACKUP	DLC	POWER CORD TYPE	CORD LENGTH
NCO-1 Std Temp	100	40- (4000K)	1- No Optics	2- Flat Poly Clear <sup>2</sup>	1- Black	1- 120/277V	1- 6'	X- No	X- No	X- N/A	1- whip 120-277V	1- 6'
NCO-2 High Temp	150 <sup>1</sup>	50- (5000K)	2- 60°	6- Tempered glass clear		2- 24V DC	2- 10'	1- Standard <sup>3</sup>	1- Yes	1- Standard	2- whip 347-480V	2- 12'
NCO-3 Extreme	200		4- Aisle			4- 347/480V	3- 25'	2- IOT <sup>3</sup>		2- Premium	3- 125V 15amp Straight	
	250 <sup>1</sup>						4- 50'				4- 125V 20amp Twistlock	
	300						5- 100'				5- 250V 20amp Twistlock	
	400 <sup>1</sup>						6- 200'				6- 277V 15amp Twistlock	
	500 <sup>1</sup>						7- 500'				7- 277V 20amp Twistlock	
	600 <sup>1</sup>						8- 1,000'				8- 480V 20amp Twistlock	
	700 <sup>1</sup>						9- Custom				9- 600V 20amp Twistlock	
	800 <sup>1</sup>										M- M12 3ft	
	900 <sup>1</sup>											

<sup>1</sup> Under review - DLC approval pending

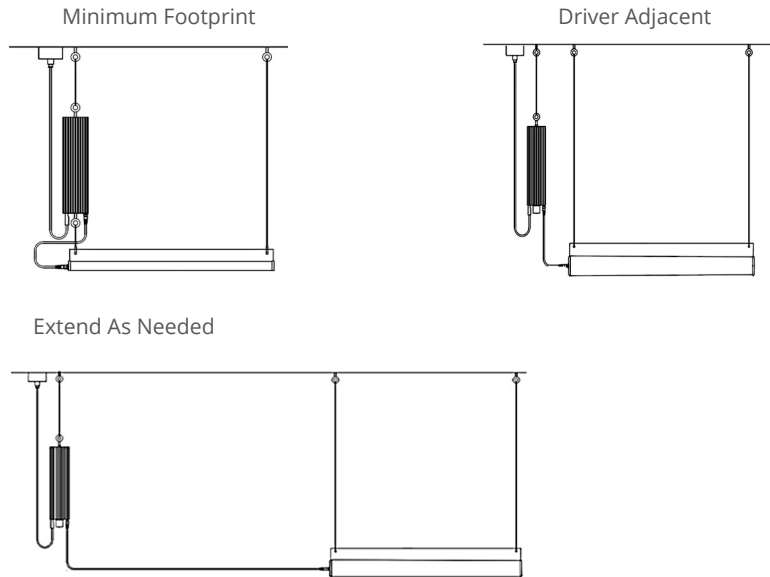
<sup>2</sup> Due to melting concerns, Flat Poly Clear Lenses are only available with NCO-1 Standard Temperature Fixtures

<sup>3</sup> Motion Sensor information: Standard (1) features sensors by Wattstopper with L7 lens. Internet of Things or IOT, (2) features sensors by Enlighted Sensors

# NCO Series LED

## REMOTE DRIVER SYSTEMS

Tactik Lighting uses drivers that operate in ambient temperatures up to 167°F, while the light engine can handle up to 245°F. If temperatures exceed 167°F, the driver must be relocated to a cooler area within 10' to 1000' without voltage drop-off. The driver box can be mounted at ground level, ceiling level, or on a wall or strut. Its universal plug-and-play design ensures complete accessibility.

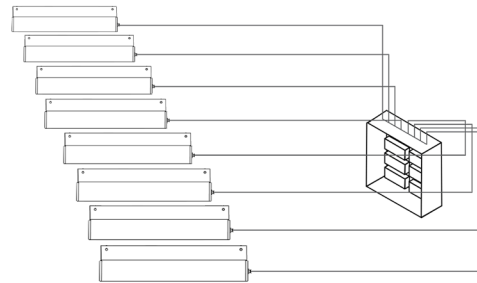


## DAISY CHAIN & CONTROL PANEL OPTIONS

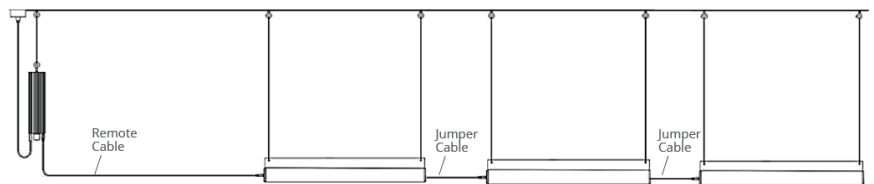
Our custom daisy chain configurations and custom control panel options allow you to power multiple fixtures with one driver, saving you money and space. And we can custom-mount your drivers at a height that best suits your environment.

Reach out to a manufacturing representative today for a custom quote for your facility.

Control Panel for Multiple Lights



Daisy Chain for Multiple Lights



## NCO DAISY CHAIN ORDERING INFORMATION

ORDER NUMBER: NCO-1-100-40-1-2-1-1-1-X-X-X-1-1-2-1

SERIES	WATTAGE	KELVIN	OPTICS	LENS	FINISH	DRIVER VOLTAGE	REMOTE CABLE	MOTION SENSOR	BATTERY BACKUP	DLC	POWER CORD TYPE	CORD LENGTH	DAISY CHAIN	FIXTURE CABLE
NCO-1 Std	50	40- (4000K)	1- No Optics	2- Flat Poly Clear <sup>2</sup>	1- Black	1- 120/277V	1- 6'	X- No	X- No	X- N/A	1- whip 120-277V	1- 6'	2	1- 6'
NCO-2 High	100	50- (5000K)	2- 60°	6- Tempered glass clear		2- 24V DC	2- 10'	1- Standard <sup>3</sup>	1- Yes	1- Standard	2- whip 347-480V	2- 12'	3	2- 10'
NCO-3 Extreme	150		4- Aisle			4- 347/480V	3- 25'	2- IOT <sup>3</sup>		2- Premium	3- 125V 15amp Straight		4	3- 25'
							4- 50'				4- 125V 20amp Twistlock		5	4- 50'
							5- 100'				5- 250V 20amp Twistlock			5- 100'
							6- 200'				6- 277V 15amp Twistlock			6- 200'
							7- 500'				7- 277V 20amp Twistlock			7- 500'
							8- 1,000'				8- 480V 20amp Twistlock			8- 1,000'
							9- Custom				9- 600V 20amp Twistlock			9- Custom
											M- M12 3ft			

Note:  
100 Watt Max Daisy Chain = 3.  
150 Watt Max Daisy Chain = 2.

# NCO Series LED

## OPTIONS & ACCESSORIES

### > Emergency Battery Backup

#### OPERATION

When AC power fails, the EM series emergency LED driver immediately switches to the emergency mode, operating the LEDs at a reduced lumen output for a minimum of 90 minutes. When AC power is restored, the emergency driver automatically returns to the charging mode.



**EM-L2554-LBF**  
EM series  
emergency LED Driver

#### EMERGENCY LUMEN OUTPUT EXAMPLE - 25 WATT BATTERY

Est Luminaire Efficacy	Est Lumens @ 1 Minute	Est Lumens @ 45 Minutes	Est Lumens @ 90 Minutes
140 LPW	3500	3500	3500
150 LPW	3750	3750	3750
160 LPW	4000	4000	4000

### > Sensors

\*All Motion sensor purchases come as a set, including a motion sensor and an L7 Wattstopper lens. Coverage includes up to 40' and the maximum temperature rating for the motion sensors is 165°F

fig 1.1



**FSP-201**  
Wattstopper  
with L7 lens

fig 1.2



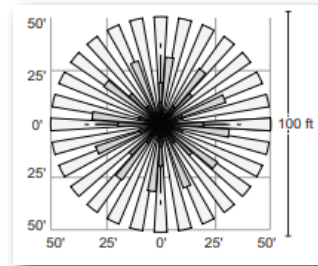
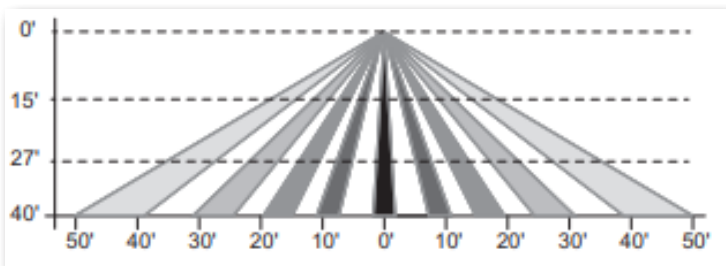
**FSP-L7**  
Wattstopper  
with L7 lens

fig 1.3



**IoT**  
IoT sensor by  
Siemens Enlighted

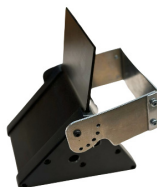
### MOTION SENSOR COVERAGE



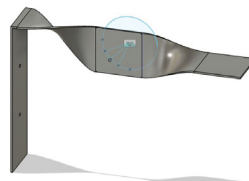
### > Fixture Brackets & Mounting Options



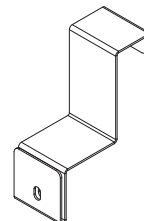
**DB-Strut**  
Strut Mount  
Driver Box



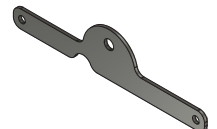
**NCO-WM**  
Universal Swivel  
Mount



**NCO-WM2**  
Wall  
Mount



**NCO-PR1**  
Pallet Racking  
Uplight



**NCO-HU**  
Hanging  
Uplight

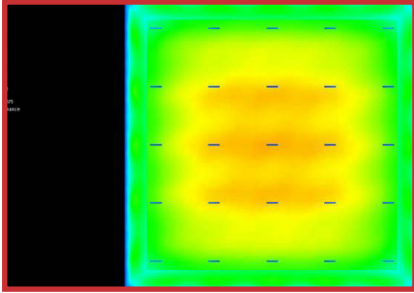
# NCO Series LED

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## OPTICS INFORMATION

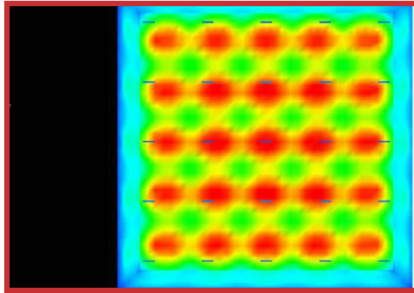
### No Optics

- > Great for general illumination. No Optics are also great if you want to maximize horizontal light & to achieve uniform lighting overall. Ideal for 30 feet and below.



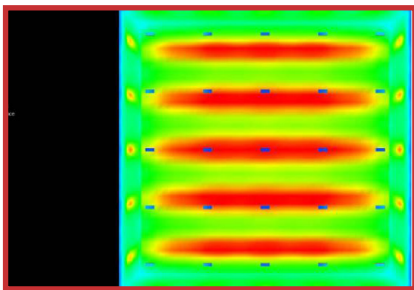
### 60 Degree Optics

- > Great for higher ceilings. Best used for fixtures mounted 30+ feet up. (This image captures a 25 foot mounting height).



### Aisle Optics

- > Great for racking. With Aisle Optics, light is not wasted in adjoining aisles. This means you can reduce the number of fixtures in your facility, or can substantially reduce wattage when switching from HID or Fluorescents to LED.



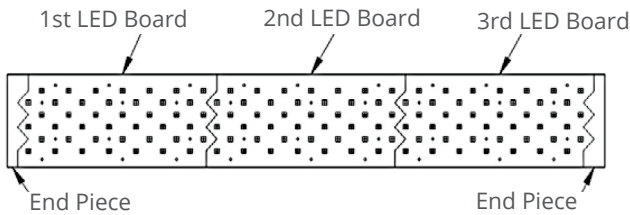
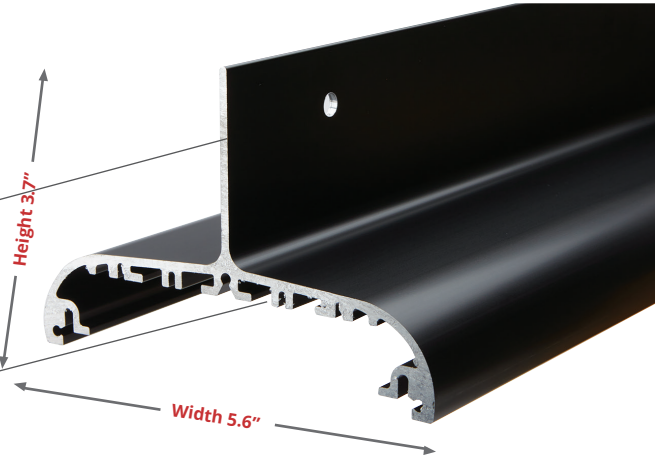
# NCO Series LED

## DISSIPATE HEAT MORE EFFICIENTLY

The NCO Series' unique design helps reduce unwanted heat build-up two different ways.

1. Patent-pending vertical exterior heat transfer cooling fin dissipates heat

2. Internal heat transfer cooling fins prevent buildup of dust and debris that can hinder cooling



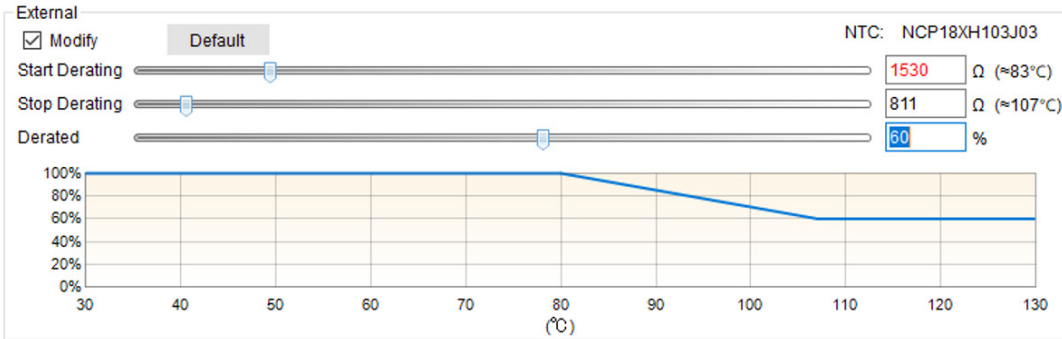
## LED BOARD CONFIGURATIONS

Patent-pending shark tooth design enables LED boards to be configured for any of 11 models, ranging from 100-900 Watts. The resulting array provides uniform light distribution with no dead spots.

Each 8" board has a maximum wattage of 75W. The higher the selected wattage of the fixture, the longer the fixture gets.

# NCO Series LED

## EXTERNAL THERMISTOR DIMMING



\* LEDs set to dim to 60% once the boards reach 108°C

## LM80 REPORT

DATA AVERAGES					
AMBIENT TEMPERATURE	OPERATING HOURS				
	0	6,000	9,000	12,000	13,000
55°C	100%	96.92%	95.99%	95.33%	95.08%
85°C	100%	96.33%	95.14%	94.21%	93.88%
105°C	100%	95.48%	93.97%	92.70%	92.31%

## FLICKER TEST



## REPORT

TEST CONDITIONS			
TEMPERATURE	VOLTAGE	POWER FACTOR	FREQUENCY
25.1°C	120.0 VAC	0.999	60Hz

OPERATIONAL DATA			
PACKAGE	INPUT WATTAGE	CCT	NCO-X LUMENS (LPW)
100W	89.24 W	4000K	13,220 (156)
		5000K	13,881 (139)
150W	153.3 W	4000K	21,600 (153)
		5000K	22,680 (151)
200W	203.6 W	4000K	32,900 (157)
		5000K	34,545 (165)
250W	258.0 W	4000K	36,000 (144)
		5000K	39,910 (151)
300W	299.0 W	4000K	42,820 (159)
		5000K	49,550 (159)
350W	348.7 W	4000K	57,793 (165)
		5000K	57,973 (165)
400W	398.4 W	4000K	66,050 (165)
		5000K	66,050 (165)

## ADDITIONAL LITERATURE

### Component Temperature Ratings

- > Cord(s): Up to 90°C (194°F)
- > Nylon Nut(s): Up to 121°C (250°F)
- > Polycarbonate Lens: Up to 138°C (280°F)
- > Motion Sensor: Up to 77°C (167°F)

# NCO Series LED

## 3.1 DATA SET 1, 55°C, 200mA (LUMEN MAINTENANCE)

No.	V <sub>F</sub> (V)	Φ(lm)	Lumen Maintenance (%)												
			0hr (Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs	11000hrs	12000hrs
1	25.92	630.4	99.21	98.86	98.41	97.76	97.27	97.08	96.83	96.51	96.05	95.78	95.59	95.42	95.02
2	26.25	650.3	98.94	98.77	98.59	98.37	97.42	96.97	96.79	96.54	96.14	96.05	95.91	95.62	95.59
3	26.16	648.8	99.21	99.18	99.11	98.38	98.06	97.63	97.33	96.95	96.62	96.41	96.18	96.09	95.92
4	26.47	640.9	99.14	98.85	98.08	97.04	96.77	96.69	96.43	96.07	95.90	95.80	95.65	95.37	94.98
5	26.19	638.1	99.14	98.82	98.14	97.38	97.09	96.72	96.44	95.89	95.61	95.38	95.27	95.05	94.80
6	26.05	641.3	99.20	99.06	98.35	97.97	96.99	96.55	96.09	95.73	95.26	94.95	94.79	94.45	94.09
7	26.34	636.7	98.93	98.51	98.30	97.68	97.19	96.80	96.29	95.90	95.65	95.38	95.16	94.93	94.58
8	26.27	645.8	99.24	98.84	98.58	97.89	97.51	97.38	97.04	96.78	96.30	96.07	95.63	95.52	95.42
9	26.22	644.8	99.40	99.12	98.71	98.60	97.98	97.64	97.02	96.71	96.53	96.20	95.87	95.63	95.39
10	26.15	635.3	98.77	98.73	98.24	97.75	96.95	96.76	96.49	96.29	95.92	95.75	95.42	95.17	95.01
11	26.14	639.0	99.17	98.92	98.23	97.48	96.90	96.54	96.31	95.96	95.62	95.41	95.40	95.12	94.91
12	26.12	607.8	98.96	98.21	97.96	97.22	96.78	96.33	95.99	95.41	95.13	94.95	94.62	94.46	94.27
13	25.86	627.6	99.09	98.66	98.12	97.55	96.75	96.22	95.94	95.73	95.54	95.38	95.14	94.89	94.60
14	26.06	625.6	99.38	99.26	98.90	98.31	97.55	97.15	96.55	96.36	96.15	95.88	95.72	95.40	95.24
15	26.17	643.6	99.18	98.87	98.71	98.07	97.14	96.92	96.38	96.22	95.87	95.71	95.49	95.18	94.73
16	26.24	627.3	98.80	98.37	97.85	96.83	96.33	96.14	95.73	95.36	95.01	94.91	94.69	94.29	94.23
17	26.25	632.9	99.37	98.70	98.53	98.09	97.14	96.93	96.70	96.56	96.43	96.21	95.97	98.53	95.70
18	26.28	631.3	99.02	98.56	98.26	97.54	92.20	96.71	96.64	96.45	96.09	95.88	95.69	95.31	95.20
19	26.09	651.5	99.22	98.77	98.30	97.76	97.59	97.18	97.13	96.88	96.70	96.52	96.21	95.92	95.56
20	26.13	636.2	99.76	99.07	98.83	98.77	98.02	97.74	97.60	97.25	96.81	96.70	96.49	96.37	96.05
21	26.25	636.4	99.31	99.01	98.65	98.51	98.05	97.42	97.28	96.18	96.53	96.28	96.15	95.80	95.44
22	25.99	634.1	99.10	98.63	98.42	98.23	97.40	96.81	96.69	96.39	96.04	95.90	95.82	95.43	95.02
Ave.	26.16	636.6	99.16	98.81	98.42	97.87	97.28	96.92	96.62	96.31	95.99	95.79	95.59	95.33	95.08
Med.	26.17	636.6	99.17	98.83	98.38	97.81	97.19	96.87	96.59	96.37	96.05	95.84	95.64	95.38	95.02
st dev	0.1374	9.7938	0.2177	0.2599	0.3172	0.5154	0.4691	0.4494	0.4822	0.5046	0.5055	0.5035	0.4987	0.5278	0.5342
Min.	25.86	607.8	98.77	98.21	97.85	96.83	96.33	96.14	95.73	95.36	95.01	94.91	94.62	94.29	94.09
Max.	26.47	651.5	99.76	99.26	99.11	98.77	98.06	97.74	97.60	97.25	96.81	96.70	96.49	96.37	96.05

# NCO Series LED

## 3.3 DATA SET 2, 85°C, 200mA (LUMEN MAINTENANCE)

No.	V <sub>F</sub> (V)	Φ(lm)	Lumen Maintenance (%)												
			Ohr (Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs	11000hrs	12000hrs
23	26.04	643.5	98.63	98.14	97.95	97.16	96.29	95.85	95.49	94.95	94.78	94.58	94.30	93.94	93.80
24	25.93	632.3	98.92	98.50	97.91	96.74	95.94	95.68	95.19	94.78	94.37	94.18	93.82	93.56	93.14
25	26.44	640.0	99.16	98.66	98.09	97.16	96.66	95.89	95.39	95.08	94.59	94.16	93.81	93.47	93.25
26	25.99	647.6	99.09	98.36	97.82	97.16	96.14	95.92	95.35	94.86	94.50	94.26	94.15	93.76	93.47
27	26.45	633.6	98.99	98.48	98.22	97.35	97.14	96.84	96.69	96.29	95.94	95.50	95.14	94.89	94.41
28	26.34	641.7	98.66	98.24	97.48	96.70	95.75	95.28	94.90	94.50	94.17	93.98	93.45	93.16	92.68
29	26.24	649.2	98.86	98.55	97.66	96.78	95.83	95.07	94.73	94.49	94.05	93.68	93.30	92.98	92.84
30	26.03	641.7	98.74	98.52	97.87	97.07	96.59	96.57	96.35	95.98	95.56	95.12	94.90	94.76	94.27
31	25.87	648.2	98.83	98.59	98.15	97.55	96.65	96.54	96.31	95.97	95.62	95.33	94.85	94.40	93.95
32	26.37	658.1	98.63	97.92	97.33	96.47	96.08	95.49	94.71	94.33	93.89	93.60	93.47	93.28	92.90
33	26.04	637.3	98.95	98.42	97.80	97.38	96.56	96.42	95.70	95.43	94.88	94.59	94.24	93.90	93.44
34	25.89	648.5	98.83	98.23	98.20	97.83	97.18	96.95	96.58	96.30	96.14	95.76	95.57	95.45	95.16
35	26.02	651.4	99.25	98.53	98.33	97.97	97.18	96.71	96.28	95.75	98.43	95.15	94.73	94.37	94.12
36	26.01	649.0	99.85	99.32	98.67	98.14	97.35	97.06	96.38	95.82	95.62	95.21	94.87	94.67	94.51
37	26.16	656.6	99.03	98.58	99.21	98.48	98.00	97.56	97.11	96.74	96.38	96.09	95.92	95.74	95.23
38	26.40	636.1	99.18	98.70	98.16	97.44	96.75	96.45	96.07	95.69	95.32	95.16	94.86	94.51	94.21
39	26.09	648.5	99.34	98.81	98.43	97.50	96.79	96.19	96.02	95.64	95.40	95.08	94.76	94.48	94.09
40	26.03	642.8	99.30	99.22	98.46	97.96	97.43	97.12	96.58	96.25	95.86	95.44	95.38	95.19	94.80
41	26.16	640.4	98.86	98.81	98.16	97.64	97.41	97.19	96.89	96.58	96.22	95.78	95.58	95.21	94.89
42	26.28	634.7	98.93	98.52	97.48	96.86	96.27	95.64	95.27	94.83	94.34	93.92	93.51	93.07	92.94
43	26.20	646.0	98.62	98.34	97.49	96.55	96.21	95.98	95.50	94.77	94.15	93.79	93.44	93.00	92.68
44	26.15	652.6	99.31	99.07	98.39	97.61	97.59	96.87	96.75	96.23	95.88	95.66	95.23	94.94	94.51
Ave.	26.14	644.5	99.00	98.57	98.06	97.34	96.72	96.33	95.92	95.51	95.14	94.82	94.51	94.21	93.88
Med.	26.12	644.8	98.94	98.52	98.12	97.36	96.65	96.43	96.05	95.66	95.36	95.10	94.75	94.38	94.02
st dev	0.1774	7.1951	0.2970	0.3350	0.4440	0.5369	0.6255	0.6785	0.7263	0.7411	0.7882	0.7680	0.8051	0.8488	0.8147
Min.	25.87	632.3	98.62	97.92	97.33	96.47	95.75	95.07	94.71	94.33	93.89	93.60	93.30	92.98	92.68
Max.	26.45	658.1	99.85	99.32	99.21	98.48	98.00	97.56	97.11	96.74	96.38	96.09	95.92	95.74	95.23



# NCO Series LED

## 3.5 DATA SET 3, 105°C, 200mA (LUMEN MAINTENANCE)

No.	V <sub>F</sub> (V)	Φ(lm)	Lumen Maintenance (%)												
			0hr (Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs	11000hrs	12000hrs
45	26.31	639.0	99.01	98.48	97.79	96.73	95.92	95.31	94.87	94.26	93.80	93.40	92.94	92.47	92.16
46	26.17	645.4	98.99	98.22	97.57	97.07	96.16	95.32	95.18	94.67	94.17	93.76	93.11	92.84	92.28
47	26.05	648.0	99.15	98.37	98.02	97.13	96.67	96.11	95.57	95.02	94.34	93.83	93.46	93.16	92.75
48	26.20	639.6	98.95	98.55	97.72	96.89	95.95	95.29	94.89	94.15	93.62	93.14	92.60	92.03	91.74
49	26.24	648.5	99.03	98.57	97.67	96.75	96.31	95.81	95.20	94.71	94.40	94.12	93.69	93.28	92.74
50	26.08	648.2	99.35	98.72	98.21	97.42	97.16	96.84	96.48	95.87	95.22	94.88	94.32	93.88	93.58
51	26.41	635.7	98.87	98.54	97.84	97.06	96.07	95.33	94.56	93.79	93.24	92.76	92.45	92.01	91.57
52	26.29	633.8	98.97	98.37	98.01	97.18	96.45	95.55	94.87	94.29	93.83	93.48	92.88	92.54	92.19
53	26.07	641.5	99.08	98.07	97.68	95.88	94.86	94.50	94.01	93.42	93.11	92.67	92.11	91.69	91.32
54	26.35	637.9	99.03	98.21	97.52	97.02	95.85	95.69	95.20	94.73	94.37	93.84	93.35	92.84	92.33
55	25.99	639.0	98.89	98.47	97.398	96.85	96.48	96.06	95.32	94.90	94.30	93.96	93.57	93.10	92.52
56	26.18	639.4	99.12	98.20	97.79	96.67	95.93	95.87	95.20	94.64	93.98	93.73	93.53	92.99	92.71
57	26.32	632.3	99.04	97.96	97.31	96.28	95.40	95.14	94.65	94.35	93.71	93.20	92.88	92.33	92.12
58	26.26	643.2	98.63	97.89	97.25	96.10	95.60	95.18	94.50	93.92	93.27	92.79	92.40	91.95	91.51
59	26.26	632.8	99.05	98.44	97.49	96.78	95.97	95.73	94.99	94.47	94.11	93.63	93.14	92.86	92.57
60	26.30	638.0	99.17	98.43	97.38	96.45	95.47	95.25	94.81	94.12	93.50	93.21	92.57	92.26	91.93
61	26.20	636.0	99.09	98.52	97.91	96.70	96.35	96.05	95.68	95.24	94.81	94.48	94.06	93.73	93.33
62	26.24	636.8	98.90	98.65	97.71	96.69	95.74	94.60	94.38	94.13	93.50	93.07	92.57	92.09	91.79
63	25.97	641.9	98.91	98.33	97.55	96.73	96.15	95.45	95.12	94.73	94.20	93.68	93.29	92.88	92.43
64	25.91	632.0	99.22	98.28	97.31	96.11	95.71	94.97	94.54	94.13	93.48	93.07	92.82	92.50	92.20
65	26.48	636.3	98.54	97.64	96.83	96.20	96.18	95.29	94.92	94.59	94.17	93.84	93.37	92.85	92.39
66	26.18	644.5	98.63	98.03	97.15	97.01	96.25	95.25	94.97	94.66	94.29	93.98	93.55	93.17	92.68
Ave.	26.20	639.5	98.98	98.33	97.62	96.71	96.03	95.48	95.00	94.49	93.97	93.57	93.12	92.70	92.31
Med.	26.22	639.0	99.02	98.40	97.67	96.74	96.02	95.32	94.95	94.53	94.04	93.65	93.12	92.84	92.31
st dev	0.1442	5.1046	0.1938	0.2787	0.3303	0.3981	0.4818	0.5227	0.5109	0.5227	0.5261	0.5567	0.5583	0.5739	0.5549
Min.	25.91	632.0	98.54	97.64	96.83	95.88	94.83	94.50	94.01	93.42	93.11	92.67	92.11	91.69	91.32
Max.	26.48	648.5	99.35	98.72	98.21	97.42	97.16	96.84	96.48	95.87	95.22	94.88	94.32	93.88	93.58