

Turret 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 and allows fixture to evolve with changing plant floor demands with no re-gridding required
- > 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, or Internet of Things (IOT) by Enlighted Sensors (fig 1.3).
- > Dimmable 0-10V
- > UL 1598 listed
- > IP65 rated

LUMINOUS OUTPUT & DIMENSIONS

WATTAGE	STANDARD TEMP		HIGH TEMP	
	OUTPUT	DIMENSIONS	OUTPUT	DIMENSIONS
100 Watts	14,400 lumens	11" Diameter x 1.9" Height	13,940 lumens	11" Diameter x 1.9" Height
150 Watts	22,180 lumens	11" Diameter x 1.9" Height	22,180 lumens	16" Diameter x 2.2" Height
200 Watts	32,730 lumens	16" Diameter x 2.2" Height	32,730 lumens	16" Diameter x 2.2" Height
250 Watts	39,910 lumens	16" Diameter x 2.2" Height	39,910 lumens	18" Diameter x 3.5" Height
300 Watts	49,550 lumens	18" Diameter x 3.5" Height	49,550 lumens	18" Diameter x 3.5" Height
350 Watts	57,973 lumens	18" Diameter x 3.5" Height	N/A	N/A
400 Watts	66,050 lumens	18" Diameter x 3.5" Height	N/A	N/A

OPERATIONAL TEMPERATURE

STANDARD TEMP	HIGH TEMP
-40°F to 167°F (or -40°C to 75°C)	-40°F to 185°F (or -40°C to 80°C)

SPECIFICATIONS

Power Factor.....>0.9
 Available Wattages.....100, 150, 200, 250, 300, 350, 400
 Kelvin Temperatures 4000K, 5000K
 Input Voltage 120/277V & 347/480V
 Performance.....Up to 163 lm/W
 Distribution.....120°
 Mount Type.....Suspension
 Color Rendering Index (4000K)>70
 Color Rendering Index (5000K)>90

TURRET ORDERING INFORMATION

SAMPLE ORDER NUMBER: TUR-1-100-40-1-2-1-1-X-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
TUR-1 Std Temp	100	40- (4000K)	1- None	2- Flat Poly Clear ⁴	1- Black	1- 120/277V	X- Integrated Driver	X- No	X- No	X- N/A	1- whip 120-277V	1- 6'
TUR-2 High Temp	150	50- (5000K)		6- Tempered glass clear		4- 347/480V	0- Top Mount	1- Standard ⁵	1- Yes	1- Standard	2- whip 347-480V	2- 12'
TUR-4 Crane Bay ¹	200						1- 6'	2- IOT ⁵			3- 125V 15amp Straight	
	250						2- 10'				4- 125V 20amp Twistlock	
	300						3- 25'				5- 250V 20amp Twistlock	
	350 ³						4- 50'				6- 277V 15amp Twistlock	
	400 ^{2,3}						5- 100'				7- 277V 20amp Twistlock	
							6- 200'				8- 480V 20amp Twistlock	
							7- 500'				9- 600V 20amp Twistlock	
							8- 1,000'					
							9- Custom					

¹ TUR-4 must come as a Top Mount

² Under Review - DLC approval pending

³ 350 Watt & 400 Watt fixtures are only available with TUR-1 Standard Temperature

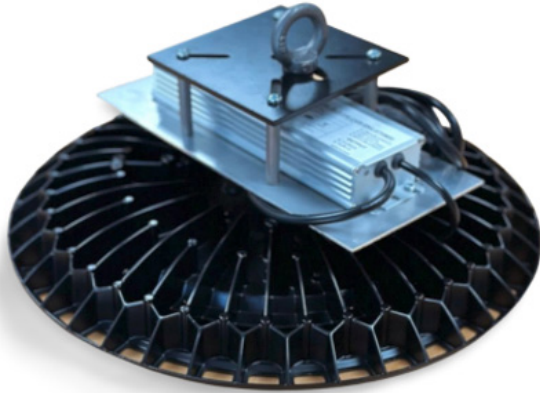
⁴ Due to melting concerns, Flat Poly Clear Lenses are only available with TUR-1 Standard Temperature Fixtures

⁵ Motion Sensor information: Standard (1) features sensors by Wattstopper with L7 lens. Internet of Things or IOT, (2) features sensors by Enlighted Sensors

Turret Series LED

PRODUCT EXAMPLES

Top-Mount Driver



No Driver Box. Top Mount Plate with Hook.

- > Available in ambient temperatures lower than 125°F

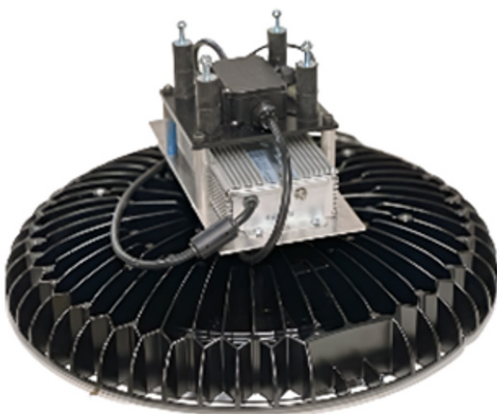
Integrated Driver



Includes Heat Dissipating Driver Box with Hook.

- > Available in ambient temperatures lower than 167°F

Crane Bay



Vibration Resistant Surface Mount.

- > Available in ambient temperatures lower than 125°F

Turret Series LED

OPTIONS & ACCESSORIES

> Emergency Battery Backup

OPERATION

When AC power fails, OKT's 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
OKT 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



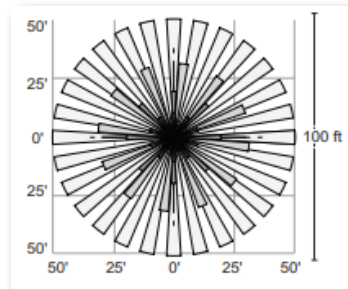
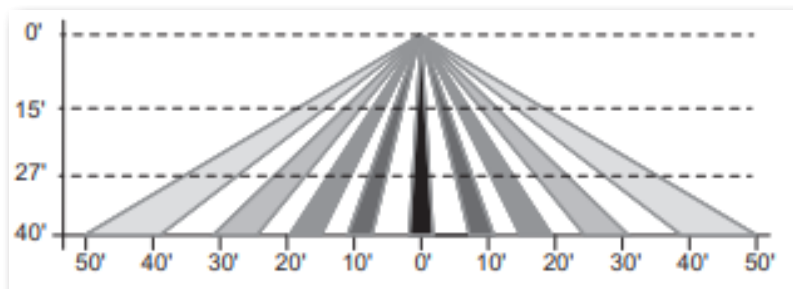
FSP-L7
Wattstopper
with L7 lens

fig 1.3



IoT
IoT sensor by
Siemens Enlighted

MOTION SENSOR COVERAGE



> Accessories



DB-Strut
Strut Mount
Driver Box



TUR-APS
Prismatic
Shroud

> 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)

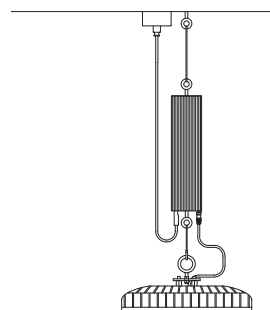
Turret Series LED

REMOTE DRIVER SYSTEMS

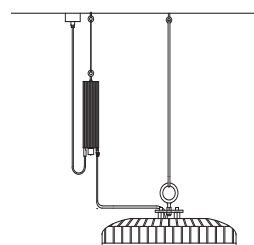
Tactik Lighting uses drivers that are capable of being in ambient temperatures up to 167°F. With the light engine itself being capable of being in ambient temperatures of 185°F.

If an environment is above 167°F, the driver must be relocated to an area where the temperature falls below that threshold. This can range anywhere from 10' to 1000' with no voltage drop-off.

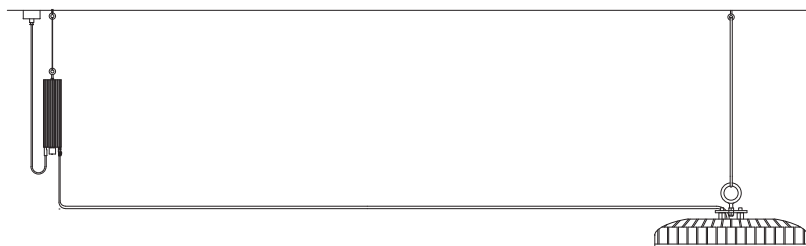
The driver box can be hung at ground level, ceiling level, mounted to strut or to a wall. The universal plug and play allow for complete accessibility.



Minimum Footprint



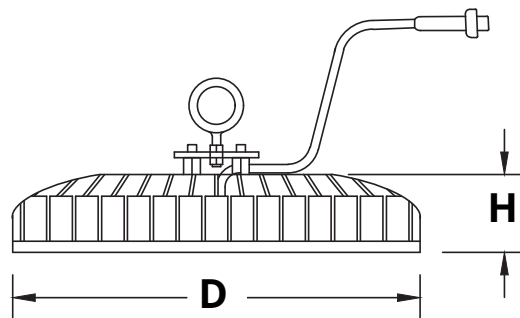
Driver Adjacent



Extend As Needed

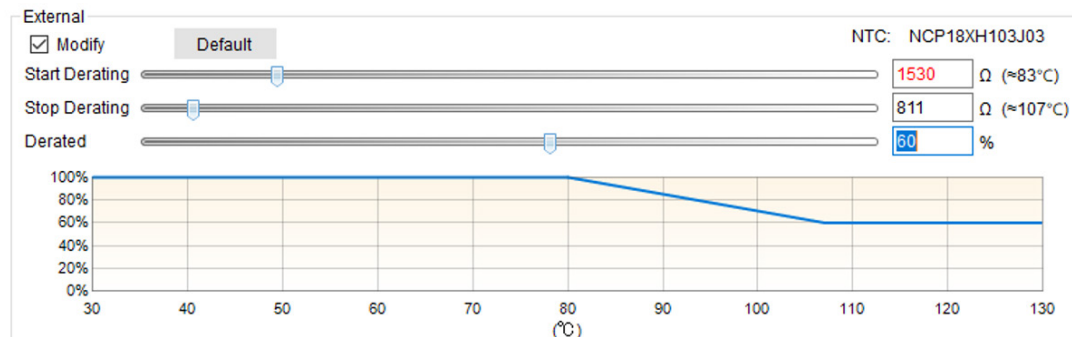
PRODUCT WATTAGE & DIMENSIONS

WATTAGE	STANDARD TEMPERATURE	HIGH TEMPERATURE
100 Watts	11" Diameter x 1.9" Height	11" Diameter x 1.9" Height
150 Watts	11" Diameter x 1.9" Height	16" Diameter x 2.2" Height
200 Watts	16" Diameter x 2.2" Height	16" Diameter x 2.2" Height
250 Watts	16" Diameter x 3.5" Height	18" Diameter x 3.5" Height
300 Watts	18" Diameter x 3.5" Height	18" Diameter x 3.5" Height
350 Watts	18" Diameter x 3.5" Height	N/A
400 Watts	18" Diameter x 3.5" Height	N/A



Turret Series LED

EXTERNAL THERMISTOR DIMMING

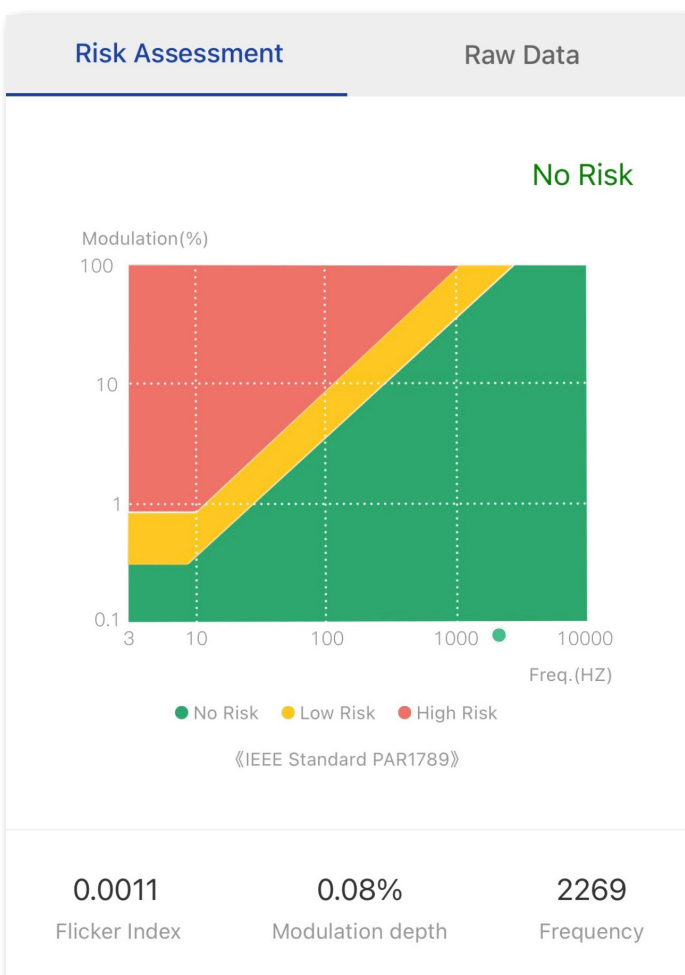


* LEDs set to dim to 60% once the boards reach 108°C

LM80 REPORT

AMBIENT TEMPERATURE	DATA AVERAGES				
	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
24.9°C	120.0 VAC	0.999	60Hz

OPERATIONAL DATA			
PACKAGE	INPUT WATTAGE	CCT	TUR-X LUMENS (LPW)
100W	87.78 W	4000K	13,940 (156)
		5000K	14,400 (163)
150W	153.3 W	4000K	22,180 (153)
		5000K	22,180 (153)
200W	203.6 W	4000K	32,730 (157)
		5000K	32,730 (157)
250W	258.0 W	4000K	39,910 (155)
		5000K	39,910 (155)
300W	302.2 W	4000K	49,550 (159)
		5000K	49,550 (159)
350W	348.7 W	4000K	57,793 (165)
		5000K	57,793 (165)
400W	398.4 W	4000K	66,050 (165)
		5000K	66,050 (165)

Turret Series LED

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

No.	V _F (V)	Φ(lm)	Lumen Maintenance (%)												
	0hr (Initial)		1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs	11000hrs	12000hrs	13000hrs
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

Turret Series LED

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

No.	V _F (V)	Φ(lm)	Lumen Maintenance (%)												
	0hr (Initial)		1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs	11000hrs	12000hrs	13000hrs
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

Turret Series LED

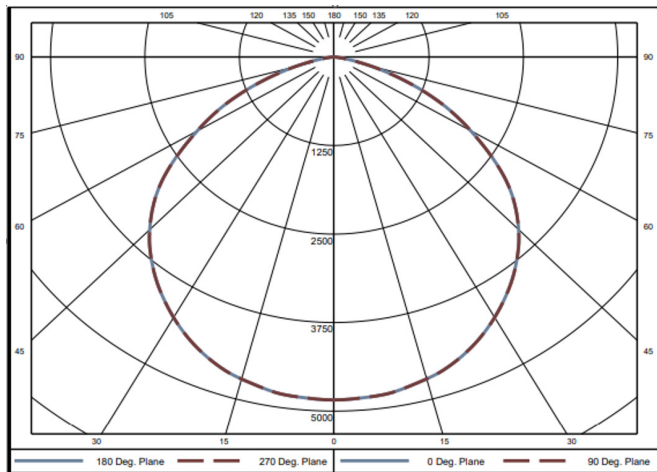
3.5 DATA SET 3, 105°C, 200mA (LUMEN MAINTENANCE)

No.	V _F (V)	Φ(lm)	Lumen Maintenance (%)												
	0hr (Initial)		1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs	11000hrs	12000hrs	13000hrs
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	97398	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

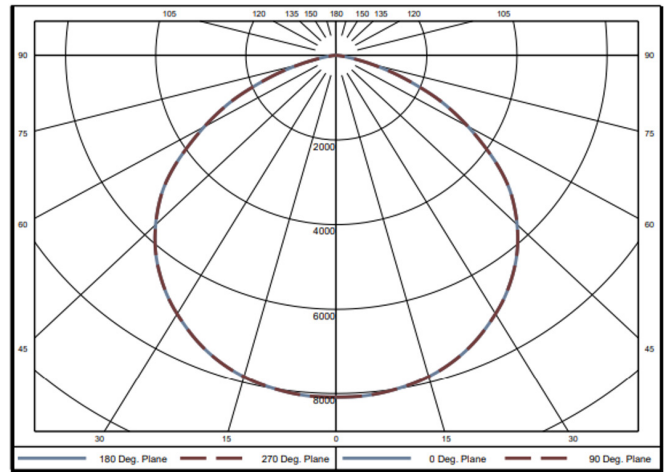
Turret Series LED

DISTRIBUTION - POLAR PLOT

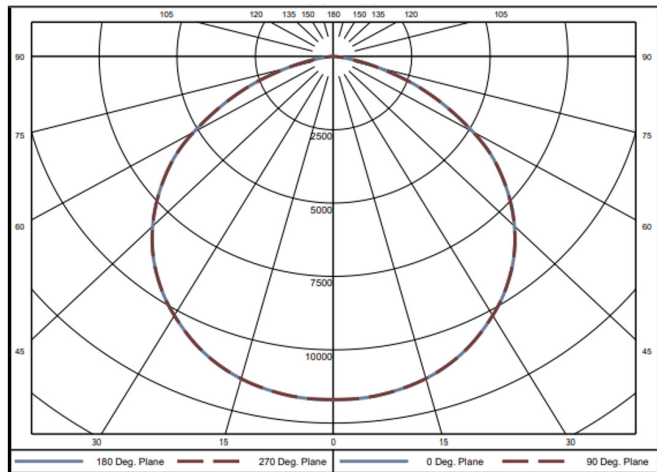
> 100W



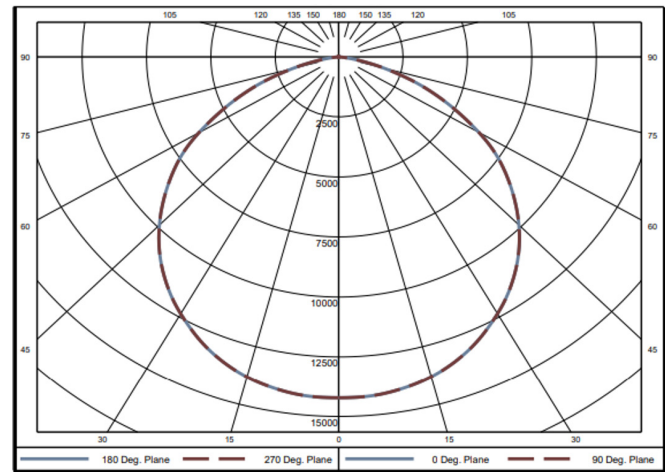
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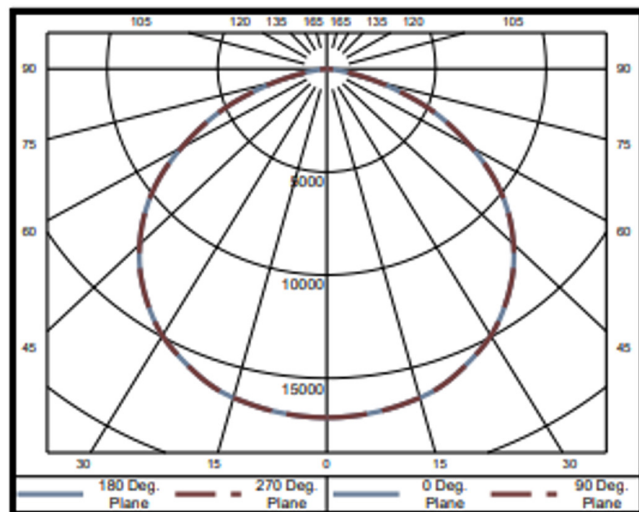
> 200W



> 250W



> 300W



> 400W - NOT TESTED