

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P995721

Luminaire Tested: DTR3-DS-4F0-100D-927-FLL-D

Issue Date: 1/22/2025

Test Information

Test Method: LM-79-2019
Report Number: P995721
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2501-325-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/22/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: DTR3-DS-4F0-100D-927-FLL-D
Description: Define Torrent LED Luminaire
Light Source: -
Ballast/Driver: -

Summary

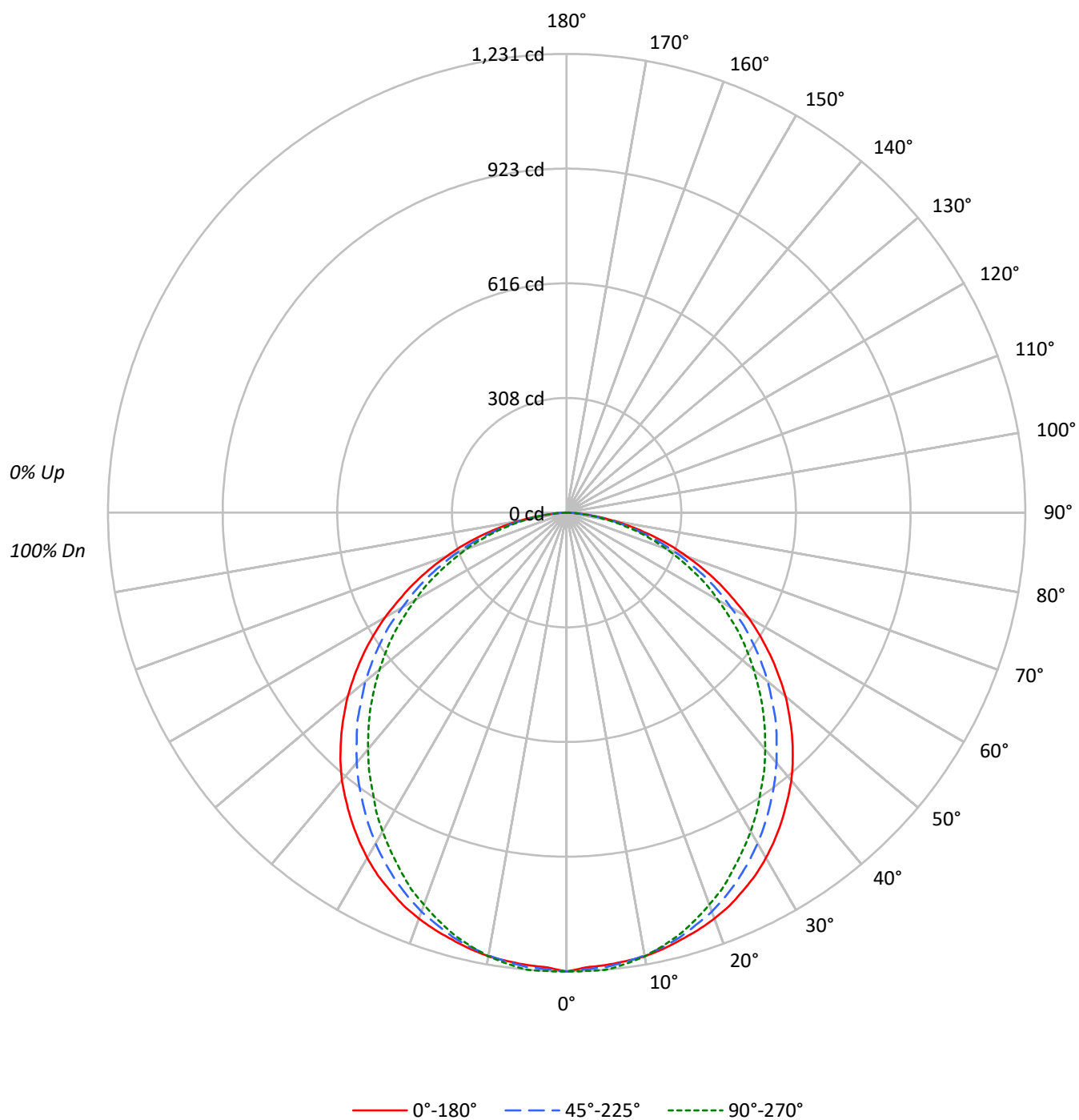
Lumens per Lamp: N/A
Luminaire Lumens: 3401.4 lumens
Efficiency: N/A
Efficacy: 57.9 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.2 / 1.35
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 58.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9935
Total Harmonic Distortion (THDi): 7.68
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90
2	99	91	84	78	96	89	83	77	85	80	76		82	78	74		79
3	90	80	72	65	88	78	71	65	75	69	64		73	67	62		70
4	83	71	62	55	80	69	61	55	67	60	54		65	58	53		62
5	76	63	54	48	74	62	54	47	60	53	47		58	52	46		56
6	70	57	48	42	68	56	48	41	54	47	41		53	46	41		51
7	65	52	43	37	63	51	43	37	49	42	36		48	41	36		47
8	61	47	39	33	59	46	38	33	45	38	33		44	37	32		43
9	57	43	35	30	55	43	35	29	42	34	29		40	34	29		39
10	53	40	32	27	52	39	32	27	38	31	27		37	31	26		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13254	13254	13254
5°	13170	13224	13304
10°	13214	13187	13214
15°	13223	13141	13057
20°	13279	13052	12825
25°	13297	12913	12560
30°	13298	12742	12280
35°	13244	12527	11939
40°	13184	12313	11650
45°	13037	12093	11338
50°	12846	11806	10973
55°	12532	11461	10622
60°	12131	10956	10101
65°	11568	10496	9610
70°	10782	9766	8982
75°	9807	8775	8156
80°	8157	7389	6769
85°	5521	5521	4903

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13037 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.5	3.4
10°-20°	333.1	9.8
20°-30°	501.9	14.8
30°-40°	598.8	17.6
40°-50°	614.6	18.1
50°-60°	548.0	16.1
60°-70°	409.0	12.0
70°-80°	225.9	6.6
80°-90°	53.6	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	951.5	28.0
0°-40°	1550.3	45.6
0°-60°	2712.9	79.8
0°-90°	3401.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3401.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1231	1231	1231	1231	1231	
5°	1219	1234	1224	1224	1231	116
15°	1187	1197	1179	1169	1172	335
25°	1120	1120	1087	1060	1058	516
35°	1008	996	953	921	909	631
45°	856	839	794	757	745	660
55°	668	650	611	578	566	596
65°	454	439	412	387	377	449
75°	236	226	211	201	196	249
85°	45	45	45	42	40	57
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1231.3	1231.3	1231.3	1231.3	1231.3
2.5°	1221.3	1236.3	1226.3	1228.8	1231.3
5°	1218.9	1233.8	1223.9	1223.9	1231.3
7.5°	1213.9	1228.8	1216.4	1213.9	1221.3
10°	1209.0	1221.3	1206.5	1201.5	1209.0
12.5°	1199.0	1209.0	1194.0	1186.6	1191.6
15°	1186.6	1196.6	1179.2	1169.3	1171.7
17.5°	1174.2	1181.6	1159.3	1146.9	1146.9
20°	1159.3	1161.8	1139.4	1122.1	1119.6
22.5°	1142.0	1144.4	1114.7	1092.3	1092.3
25°	1119.6	1119.6	1087.3	1060.0	1057.5
27.5°	1097.2	1092.3	1057.5	1030.2	1022.8
30°	1069.9	1062.5	1025.2	995.5	988.0
32.5°	1040.1	1030.2	990.5	958.2	950.8
35°	1007.9	995.5	953.3	921.0	908.6
37.5°	973.1	958.2	916.0	881.3	871.3
40°	938.3	921.0	876.3	841.6	829.1
42.5°	898.6	881.3	834.1	799.4	787.0
45°	856.4	839.1	794.4	757.1	744.8
47.5°	811.8	794.4	747.2	712.5	700.1
50°	767.1	747.2	705.0	667.8	655.3
52.5°	717.5	700.1	657.9	623.1	610.7
55°	667.8	650.4	610.7	578.4	566.0
57.5°	615.6	600.7	563.5	528.8	516.4
60°	563.5	546.1	508.9	481.6	469.2
62.5°	506.4	491.5	461.8	434.5	426.9
65°	454.2	439.4	412.1	387.3	377.3
67.5°	399.6	387.3	359.9	340.0	330.2
70°	342.6	332.6	310.3	292.9	285.4
72.5°	290.4	278.0	260.7	245.7	240.8
75°	235.8	225.9	211.0	201.1	196.1
77.5°	181.2	173.8	163.8	156.4	151.4
80°	131.6	124.1	119.2	114.2	109.2
82.5°	84.4	79.5	79.5	74.5	72.0
85°	44.7	44.7	44.7	42.2	39.7
87.5°	14.9	17.4	17.4	14.9	14.9
90°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	21.08	22.71	21.45	23.03	23.34	20.14	21.77	20.50	22.08	22.40
	3H	22.86	24.33	23.24	24.66	25.02	21.85	23.32	22.23	23.65	24.01
	4H	23.50	24.89	23.90	25.24	25.61	22.47	23.86	22.87	24.21	24.58
	6H	23.93	25.21	24.34	25.58	25.97	22.89	24.17	23.30	24.54	24.93
	8H	24.04	25.27	24.46	25.66	26.05	23.00	24.23	23.42	24.61	25.01
	12H	24.10	25.27	24.53	25.65	26.08	23.06	24.23	23.49	24.62	25.04
4H	2H	21.61	22.99	22.00	23.34	23.72	20.86	22.24	21.25	22.59	22.97
	3H	23.60	24.76	24.01	25.16	25.56	22.77	23.93	23.18	24.33	24.73
	4H	24.37	25.42	24.80	25.83	26.27	23.51	24.55	23.94	24.97	25.40
	6H	24.91	25.83	25.37	26.27	26.73	24.03	24.95	24.48	25.39	25.84
	8H	25.06	25.92	25.52	26.36	26.83	24.18	25.03	24.64	25.48	25.94
	12H	25.15	25.92	25.63	26.40	26.87	24.27	25.04	24.75	25.51	25.98
8H	4H	24.61	25.46	25.07	25.91	26.37	23.84	24.69	24.30	25.14	25.60
	6H	25.25	25.96	25.74	26.45	26.92	24.47	25.18	24.96	25.67	26.14
	8H	25.45	26.09	25.96	26.59	27.08	24.67	25.31	25.18	25.81	26.30
	12H	25.59	26.15	26.10	26.64	27.20	24.81	25.38	25.32	25.87	26.43
12H	4H	24.62	25.39	25.10	25.87	26.34	23.87	24.64	24.35	25.11	25.58
	6H	25.27	25.91	25.78	26.42	26.91	24.52	25.16	25.03	25.66	26.15
	8H	25.52	26.09	26.03	26.58	27.14	24.77	25.33	25.28	25.82	26.39