

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: P995723

Luminaire Tested: DTR3-DS-4F0-100D-935-FLL-D

Issue Date: 1/22/2025

Test Information

Test Method: LM-79-2019
Report Number: P995723
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-935-FLL-D
Description: Define Torrent LED Luminaire
Light Source: -
Ballast/Driver: -

Summary

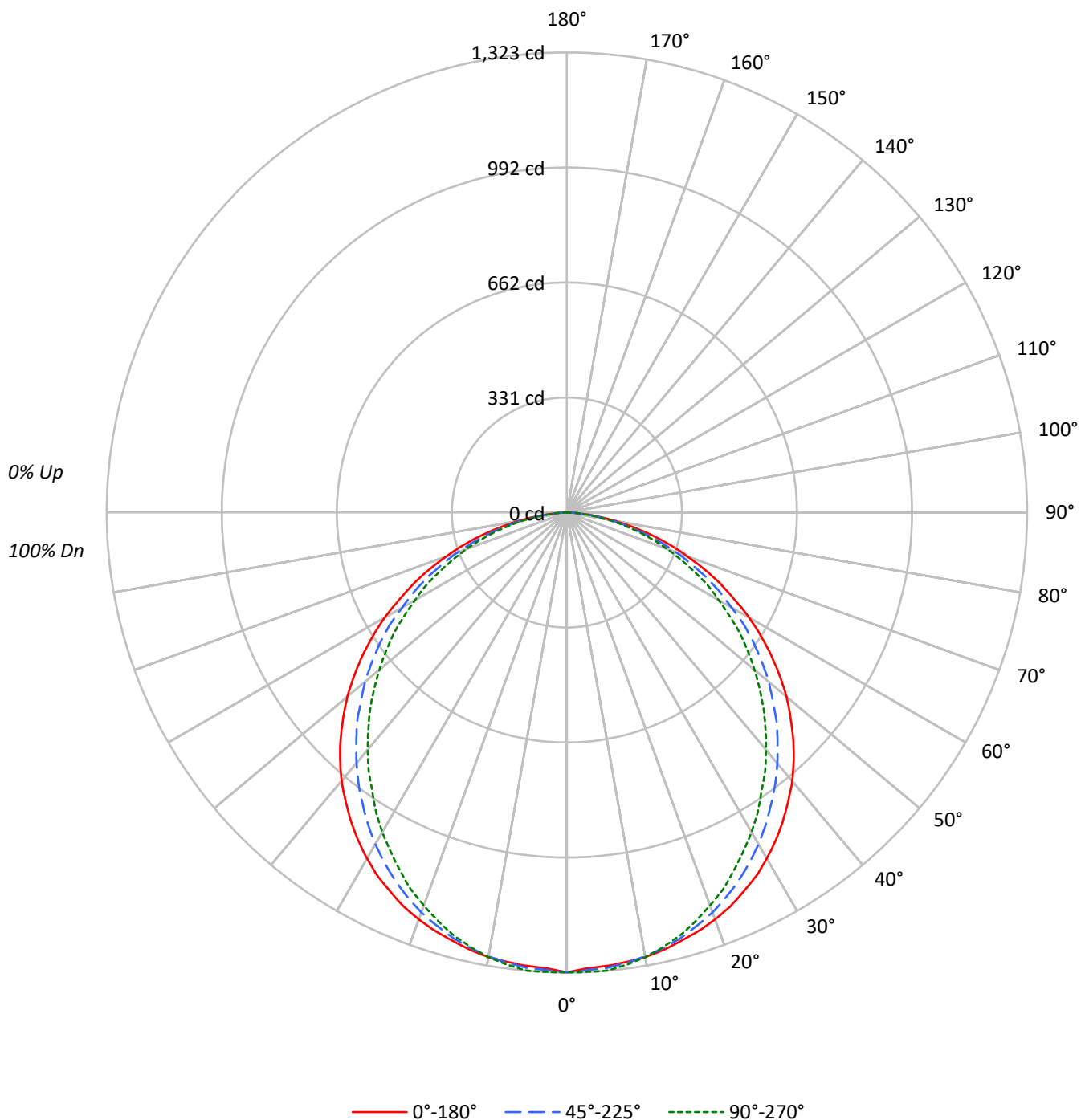
Lumens per Lamp: N/A
Luminaire Lumens: 3653.7 lumens
Efficiency: N/A
Efficacy: 62.2 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.2 / 1.35
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

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°	14236	14236	14236
5°	14147	14204	14291
10°	14194	14165	14194
15°	14204	14115	14025
20°	14265	14021	13775
25°	14283	13872	13491
30°	14285	13688	13191
35°	14227	13456	12825
40°	14164	13226	12514
45°	14005	12989	12176
50°	13797	12682	11789
55°	13461	12311	11410
60°	13031	11769	10850
65°	12427	11275	10323
70°	11582	10493	9649
75°	10534	9428	8763
80°	8759	7934	7271
85°	5928	5928	5261

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14005 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.2	3.4
10°-20°	357.8	9.8
20°-30°	539.1	14.8
30°-40°	643.2	17.6
40°-50°	660.2	18.1
50°-60°	588.7	16.1
60°-70°	439.3	12.0
70°-80°	242.7	6.6
80°-90°	57.6	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°	1022.1	28.0
0°-40°	1665.3	45.6
0°-60°	2914.2	79.8
0°-90°	3653.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3653.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1323	1323	1323	1323	1323	
5°	1309	1325	1315	1315	1323	125
15°	1275	1285	1267	1256	1259	360
25°	1203	1203	1168	1139	1136	555
35°	1083	1069	1024	989	976	677
45°	920	901	853	813	800	709
55°	717	699	656	621	608	640
65°	488	472	443	416	405	482
75°	253	243	227	216	211	267
85°	48	48	48	45	43	61
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1322.6	1322.6	1322.6	1322.6	1322.6
2.5°	1312.0	1328.0	1317.3	1320.0	1322.6
5°	1309.3	1325.3	1314.6	1314.6	1322.6
7.5°	1304.0	1320.0	1306.6	1304.0	1312.0
10°	1298.6	1312.0	1296.0	1290.6	1298.6
12.5°	1288.0	1298.6	1282.6	1274.6	1280.0
15°	1274.6	1285.3	1266.6	1256.0	1258.6
17.5°	1261.3	1269.3	1245.3	1232.0	1232.0
20°	1245.3	1248.0	1224.0	1205.3	1202.6
22.5°	1226.6	1229.3	1197.3	1173.3	1173.3
25°	1202.6	1202.6	1168.0	1138.7	1135.9
27.5°	1178.6	1173.3	1135.9	1106.7	1098.7
30°	1149.3	1141.3	1101.3	1069.3	1061.3
32.5°	1117.3	1106.7	1063.9	1029.3	1021.3
35°	1082.7	1069.3	1024.0	989.3	976.0
37.5°	1045.3	1029.3	984.0	946.6	936.0
40°	1008.0	989.3	941.3	904.0	890.6
42.5°	965.3	946.6	896.0	858.6	845.3
45°	920.0	901.3	853.3	813.3	799.9
47.5°	872.0	853.3	802.7	765.3	752.0
50°	823.9	802.7	757.3	717.3	704.0
52.5°	770.7	752.0	706.6	669.3	656.0
55°	717.3	698.6	656.0	621.4	608.0
57.5°	661.3	645.4	605.3	568.0	554.7
60°	605.3	586.6	546.7	517.3	504.0
62.5°	544.0	528.0	496.0	466.7	458.7
65°	487.9	471.9	442.7	416.0	405.3
67.5°	429.3	416.0	386.7	365.3	354.6
70°	368.0	357.3	333.4	314.6	306.6
72.5°	312.0	298.6	280.0	264.0	258.6
75°	253.3	242.7	226.7	216.0	210.7
77.5°	194.7	186.7	176.0	168.0	162.7
80°	141.3	133.3	128.0	122.7	117.3
82.5°	90.7	85.3	85.3	80.0	77.3
85°	48.0	48.0	48.0	45.4	42.6
87.5°	16.0	18.6	18.6	16.0	16.0
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	21.33	22.96	21.70	23.28	23.59	20.39	22.02	20.75	22.33	22.64
	3H	23.11	24.58	23.49	24.91	25.27	22.10	23.57	22.48	23.90	24.26
	4H	23.75	25.14	24.15	25.49	25.86	22.72	24.11	23.12	24.45	24.83
	6H	24.18	25.46	24.59	25.83	26.22	23.14	24.42	23.55	24.78	25.18
	8H	24.29	25.52	24.71	25.91	26.30	23.25	24.47	23.67	24.86	25.26
	12H	24.35	25.52	24.78	25.90	26.33	23.31	24.48	23.74	24.86	25.29
4H	2H	21.86	23.24	22.25	23.59	23.97	21.10	22.49	21.50	22.84	23.21
	3H	23.85	25.01	24.26	25.41	25.81	23.02	24.18	23.43	24.58	24.98
	4H	24.62	25.67	25.05	26.08	26.52	23.75	24.80	24.19	25.22	25.65
	6H	25.16	26.08	25.62	26.52	26.98	24.28	25.20	24.73	25.64	26.09
	8H	25.31	26.17	25.77	26.61	27.08	24.43	25.28	24.89	25.73	26.19
	12H	25.40	26.17	25.88	26.65	27.12	24.52	25.29	25.00	25.76	26.23
8H	4H	24.86	25.71	25.32	26.15	26.62	24.09	24.94	24.55	25.38	25.85
	6H	25.50	26.21	25.99	26.69	27.17	24.71	25.43	25.21	25.91	26.39
	8H	25.70	26.34	26.21	26.84	27.33	24.92	25.56	25.43	26.06	26.55
	12H	25.84	26.40	26.35	26.89	27.45	25.06	25.63	25.57	26.12	26.68
12H	4H	24.87	25.64	25.35	26.12	26.59	24.12	24.89	24.60	25.36	25.83
	6H	25.52	26.16	26.03	26.67	27.15	24.76	25.40	25.27	25.91	26.40
	8H	25.77	26.34	26.28	26.83	27.39	25.02	25.58	25.53	26.07	26.63