

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: P995722

Luminaire Tested: DTR3-DS-4F0-100D-930-FLL-D

Issue Date: 1/22/2025

Test Information

Test Method: LM-79-2019
Report Number: P995722
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-930-FLL-D
Description: Define Torrent LED Luminaire
Light Source: -
Ballast/Driver: -

Summary

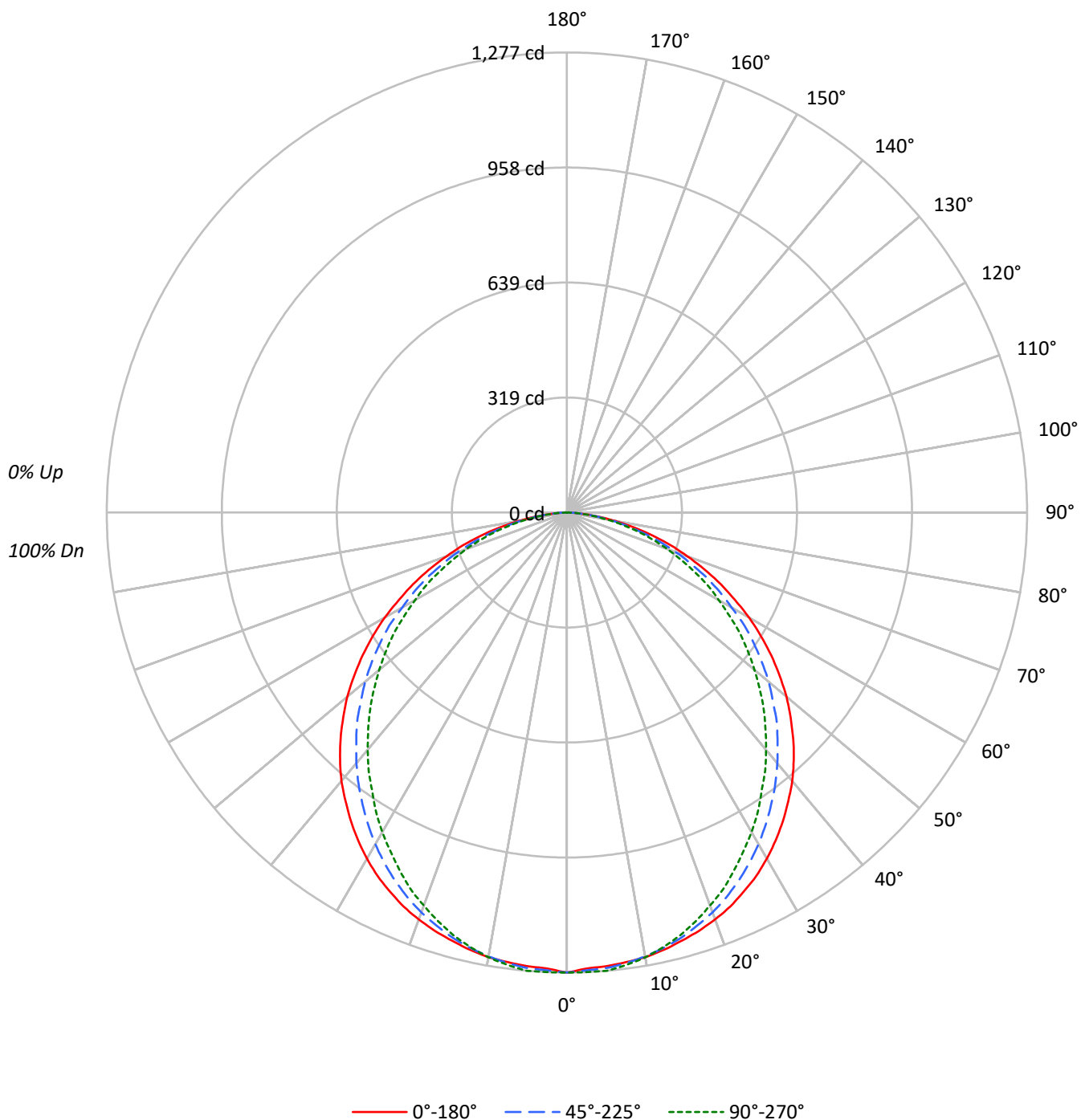
Lumens per Lamp: N/A
Luminaire Lumens: 3527.6 lumens
Efficiency: N/A
Efficacy: 60.1 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.2 / 1.35
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

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°	13746	13746	13746
5°	13659	13715	13798
10°	13704	13676	13704
15°	13714	13628	13542
20°	13772	13536	13300
25°	13790	13393	13026
30°	13791	13216	12736
35°	13736	12991	12382
40°	13675	12770	12083
45°	13521	12542	11758
50°	13321	12243	11380
55°	12996	11885	11016
60°	12581	11362	10475
65°	11999	10886	9969
70°	11182	10128	9319
75°	10173	9100	8459
80°	8455	7662	7023
85°	5718	5718	5088

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13521 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.8	3.4
10°-20°	345.5	9.8
20°-30°	520.5	14.8
30°-40°	621.0	17.6
40°-50°	637.4	18.1
50°-60°	568.3	16.1
60°-70°	424.1	12.0
70°-80°	234.3	6.6
80°-90°	55.6	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°	986.8	28.0
0°-40°	1607.8	45.6
0°-60°	2813.5	79.8
0°-90°	3527.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3527.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1277	1277	1277	1277	1277	
5°	1264	1280	1269	1269	1277	120
15°	1231	1241	1223	1213	1215	348
25°	1161	1161	1128	1099	1097	536
35°	1045	1032	989	955	942	654
45°	888	870	824	785	772	685
55°	692	674	633	600	587	618
65°	471	456	427	402	391	465
75°	245	234	219	208	203	258
85°	46	46	46	44	41	59
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1277.0	1277.0	1277.0	1277.0	1277.0
2.5°	1266.7	1282.1	1271.8	1274.4	1277.0
5°	1264.1	1279.5	1269.3	1269.3	1277.0
7.5°	1258.9	1274.4	1261.5	1258.9	1266.7
10°	1253.8	1266.7	1251.2	1246.1	1253.8
12.5°	1243.5	1253.8	1238.4	1230.7	1235.7
15°	1230.7	1240.9	1222.9	1212.6	1215.2
17.5°	1217.8	1225.5	1202.3	1189.4	1189.4
20°	1202.3	1204.9	1181.7	1163.7	1161.1
22.5°	1184.2	1186.9	1156.0	1132.7	1132.7
25°	1161.1	1161.1	1127.7	1099.3	1096.8
27.5°	1137.9	1132.7	1096.8	1068.4	1060.7
30°	1109.6	1101.9	1063.3	1032.4	1024.7
32.5°	1078.7	1068.4	1027.2	993.8	986.1
35°	1045.3	1032.4	988.6	955.2	942.3
37.5°	1009.2	993.8	950.0	914.0	903.7
40°	973.2	955.2	908.8	872.7	859.9
42.5°	931.9	914.0	865.0	829.0	816.1
45°	888.2	870.2	823.9	785.3	772.4
47.5°	841.8	823.9	774.9	738.8	726.0
50°	795.5	774.9	731.1	692.5	679.6
52.5°	744.0	726.0	682.3	646.2	633.3
55°	692.5	674.5	633.3	599.9	587.0
57.5°	638.5	623.0	584.4	548.4	535.5
60°	584.4	566.4	527.8	499.4	486.6
62.5°	525.2	509.8	478.8	450.6	442.9
65°	471.1	455.7	427.4	401.6	391.4
67.5°	414.5	401.6	373.3	352.7	342.4
70°	355.3	344.9	321.8	303.8	296.1
72.5°	301.3	288.4	270.3	254.8	249.8
75°	244.6	234.3	218.8	208.5	203.4
77.5°	187.9	180.2	169.9	162.2	157.0
80°	136.4	128.7	123.6	118.4	113.3
82.5°	87.6	82.4	82.4	77.2	74.7
85°	46.3	46.3	46.3	43.8	41.2
87.5°	15.4	18.0	18.0	15.4	15.4
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	21.21	22.84	21.58	23.15	23.47	20.26	21.89	20.63	22.21	22.52
	3H	22.99	24.46	23.36	24.79	25.15	21.98	23.45	22.35	23.78	24.14
	4H	23.63	25.02	24.03	25.36	25.74	22.60	23.98	23.00	24.33	24.71
	6H	24.05	25.34	24.47	25.70	26.09	23.01	24.30	23.42	24.66	25.05
	8H	24.17	25.39	24.59	25.78	26.18	23.13	24.35	23.55	24.74	25.14
	12H	24.22	25.40	24.65	25.78	26.21	23.19	24.36	23.62	24.74	25.17
4H	2H	21.73	23.12	22.13	23.47	23.84	20.98	22.37	21.38	22.72	23.09
	3H	23.73	24.89	24.14	25.29	25.69	22.90	24.06	23.31	24.46	24.86
	4H	24.50	25.55	24.93	25.96	26.40	23.63	24.68	24.06	25.09	25.53
	6H	25.04	25.96	25.49	26.40	26.85	24.16	25.07	24.61	25.51	25.97
	8H	25.19	26.05	25.65	26.49	26.95	24.30	25.16	24.76	25.60	26.07
	12H	25.28	26.05	25.76	26.52	26.99	24.40	25.16	24.88	25.64	26.11
8H	4H	24.73	25.59	25.19	26.03	26.50	23.96	24.82	24.42	25.26	25.73
	6H	25.37	26.08	25.87	26.57	27.05	24.59	25.30	25.09	25.79	26.27
	8H	25.58	26.21	26.09	26.72	27.21	24.80	25.43	25.30	25.94	26.43
	12H	25.72	26.28	26.22	26.77	27.33	24.94	25.50	25.45	25.99	26.55
12H	4H	24.75	25.52	25.23	25.99	26.46	24.00	24.77	24.48	25.24	25.71
	6H	25.40	26.04	25.91	26.55	27.03	24.64	25.28	25.15	25.79	26.27
	8H	25.65	26.21	26.16	26.70	27.27	24.90	25.46	25.40	25.95	26.51

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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