

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



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1217423

Luminaire Tested: S124DRP-S675D930-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217423
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G2-2509-563-3)
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DRP-S675D930-X4F0-XX-UDD-G-W
Description: DEFINE 4, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

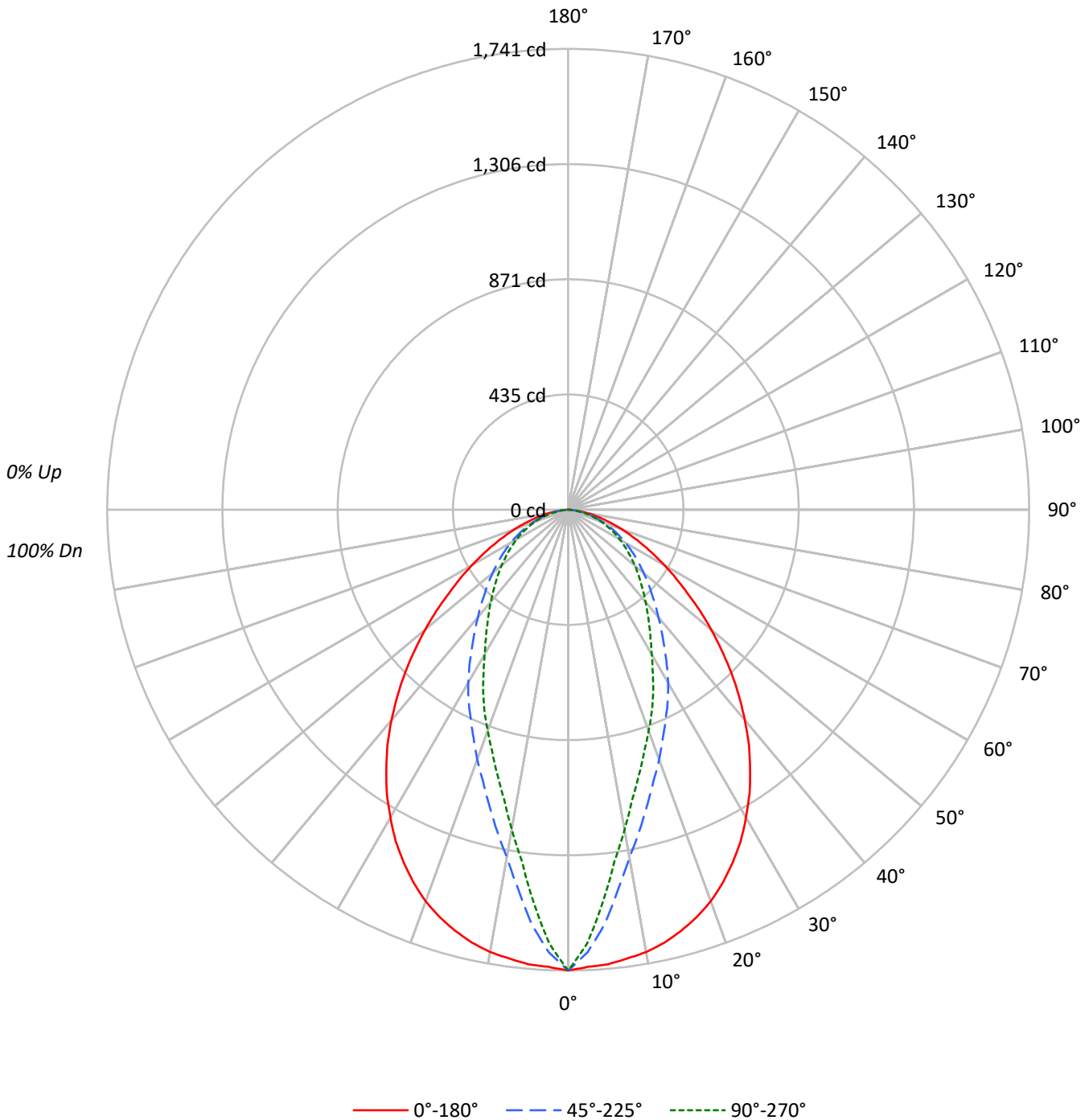
Lumens per Lamp: N/A
Luminaire Lumens: 2441.3 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	106	102	99	108	104	100	97	100	97	94	96	94	92	92	90	89				87	
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77				75	
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67				65	
4	87	76	68	62	84	75	67	62	72	66	61	70	64	60	68	63	59				57	
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53				51	
6	75	63	55	49	73	62	54	49	60	53	48	58	52	48	57	52	47				45	
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43				41	
8	66	53	45	40	64	52	45	40	51	44	40	50	44	39	49	43	39				37	
9	62	49	42	36	60	49	41	36	48	41	36	47	40	36	46	40	36				34	
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33				31	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15390	15390	15390
5°	15300	13960	13232
10°	15235	11967	11010
15°	15077	10559	9472
20°	14813	9447	8365
25°	14342	8502	7410
30°	13710	7708	6433
35°	12930	6833	5758
40°	11978	6122	5246
45°	10888	5568	4840
50°	9700	5124	4523
55°	8459	4762	4230
60°	7427	4431	3986
65°	6431	4090	3720
70°	5568	3704	3428
75°	4636	3273	3010
80°	3590	2653	2459
85°	2252	1785	1633

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10888 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.7	6.0
10°-20°	346.1	14.2
20°-30°	442.3	18.1
30°-40°	449.2	18.4
40°-50°	398.2	16.3
50°-60°	312.9	12.8
60°-70°	213.1	8.7
70°-80°	109.4	4.5
80°-90°	24.2	1.0
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°	934.2	38.3
0°-40°	1383.4	56.7
0°-60°	2094.6	85.8
0°-90°	2441.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2441.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1741	1741	1741	1741	1741	
5°	1724	1680	1573	1512	1491	164
15°	1647	1375	1154	1058	1035	464
25°	1470	1078	872	788	760	676
35°	1198	816	633	553	534	748
45°	871	588	445	399	387	671
55°	549	392	309	281	274	496
65°	307	238	196	182	178	308
75°	136	112	96	91	88	146
85°	22	21	18	18	16	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1740.7	1740.7	1740.7	1740.7	1740.7
2.5°	1728.5	1730.8	1673.3	1652.6	1640.3
5°	1723.9	1680.2	1572.9	1512.3	1490.9
7.5°	1710.1	1615.0	1445.6	1362.1	1339.9
10°	1697.0	1540.7	1333.0	1250.2	1226.4
12.5°	1675.6	1458.7	1242.5	1147.5	1119.1
15°	1647.2	1375.1	1153.6	1058.5	1034.8
17.5°	1613.5	1295.4	1073.1	981.9	955.8
20°	1574.4	1221.8	1004.1	910.6	889.1
22.5°	1525.3	1149.0	933.6	849.3	825.5
25°	1470.2	1077.7	871.5	788.0	759.6
27.5°	1411.1	1008.7	814.0	721.3	691.4
30°	1342.9	942.8	755.0	657.7	630.1
32.5°	1273.9	877.6	692.9	600.9	578.7
35°	1198.0	816.3	633.1	552.7	533.5
37.5°	1121.4	757.3	579.5	509.0	492.1
40°	1037.8	699.8	530.4	468.3	454.5
42.5°	954.3	642.3	486.0	432.3	419.3
45°	870.8	587.9	445.3	399.3	387.1
47.5°	786.4	534.3	407.8	367.2	357.2
50°	705.2	483.7	372.5	337.3	328.8
52.5°	626.2	436.1	338.8	308.9	299.7
55°	548.8	391.7	308.9	281.3	274.4
57.5°	482.9	350.3	279.0	255.2	249.9
60°	420.0	310.4	250.6	230.7	225.4
62.5°	361.0	273.6	222.3	206.2	202.4
65°	307.4	237.6	195.5	181.7	177.8
67.5°	258.3	204.7	167.9	157.9	154.8
70°	215.4	171.7	143.3	134.9	132.6
72.5°	172.5	140.3	118.8	112.7	110.4
75°	135.7	111.9	95.8	91.2	88.1
77.5°	101.9	85.1	73.6	69.8	67.5
80°	70.5	60.6	52.1	50.6	48.3
82.5°	44.5	38.3	33.7	33.0	30.7
85°	22.2	20.7	17.6	17.6	16.1
87.5°	7.7	6.9	6.9	6.9	6.1
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	18.40	19.89	18.77	20.20	20.52	15.73	17.21	16.09	17.53	17.84
	3H	20.00	21.33	20.37	21.66	22.02	17.33	18.66	17.70	18.99	19.35
	4H	20.53	21.77	20.93	22.12	22.50	17.88	19.13	18.28	19.48	19.86
	6H	20.86	22.01	21.27	22.38	22.77	18.24	19.39	18.65	19.76	20.15
	8H	20.93	22.03	21.36	22.42	22.82	18.33	19.42	18.75	19.81	20.22
	12H	20.96	22.01	21.39	22.40	22.83	18.36	19.41	18.79	19.80	20.23
4H	2H	18.63	19.88	19.03	20.23	20.61	16.40	17.65	16.80	18.00	18.38
	3H	20.41	21.45	20.83	21.85	22.25	18.19	19.23	18.60	19.63	20.03
	4H	21.06	21.99	21.49	22.40	22.84	18.85	19.79	19.29	20.20	20.64
	6H	21.50	22.31	21.96	22.75	23.22	19.31	20.12	19.77	20.56	21.03
	8H	21.61	22.37	22.08	22.81	23.28	19.43	20.18	19.89	20.63	21.10
	12H	21.67	22.35	22.15	22.82	23.30	19.49	20.16	19.97	20.64	21.11
8H	4H	21.16	21.92	21.62	22.36	22.83	19.15	19.91	19.62	20.35	20.82
	6H	21.68	22.30	22.17	22.79	23.27	19.70	20.33	20.20	20.82	21.30
	8H	21.83	22.39	22.35	22.90	23.39	19.87	20.43	20.39	20.94	21.43
	12H	21.93	22.43	22.44	22.92	23.48	19.98	20.47	20.49	20.96	21.53
12H	4H	21.15	21.82	21.63	22.30	22.78	19.18	19.85	19.66	20.33	20.80
	6H	21.67	22.23	22.19	22.74	23.23	19.74	20.30	20.26	20.81	21.30
	8H	21.86	22.36	22.37	22.85	23.41	19.95	20.45	20.47	20.94	21.51