

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: P1217418

Luminaire Tested: S124DRP-S675D830-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217418
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-S675D830-X4F0-XX-UDD-G-W
Description: DEFINE 4, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

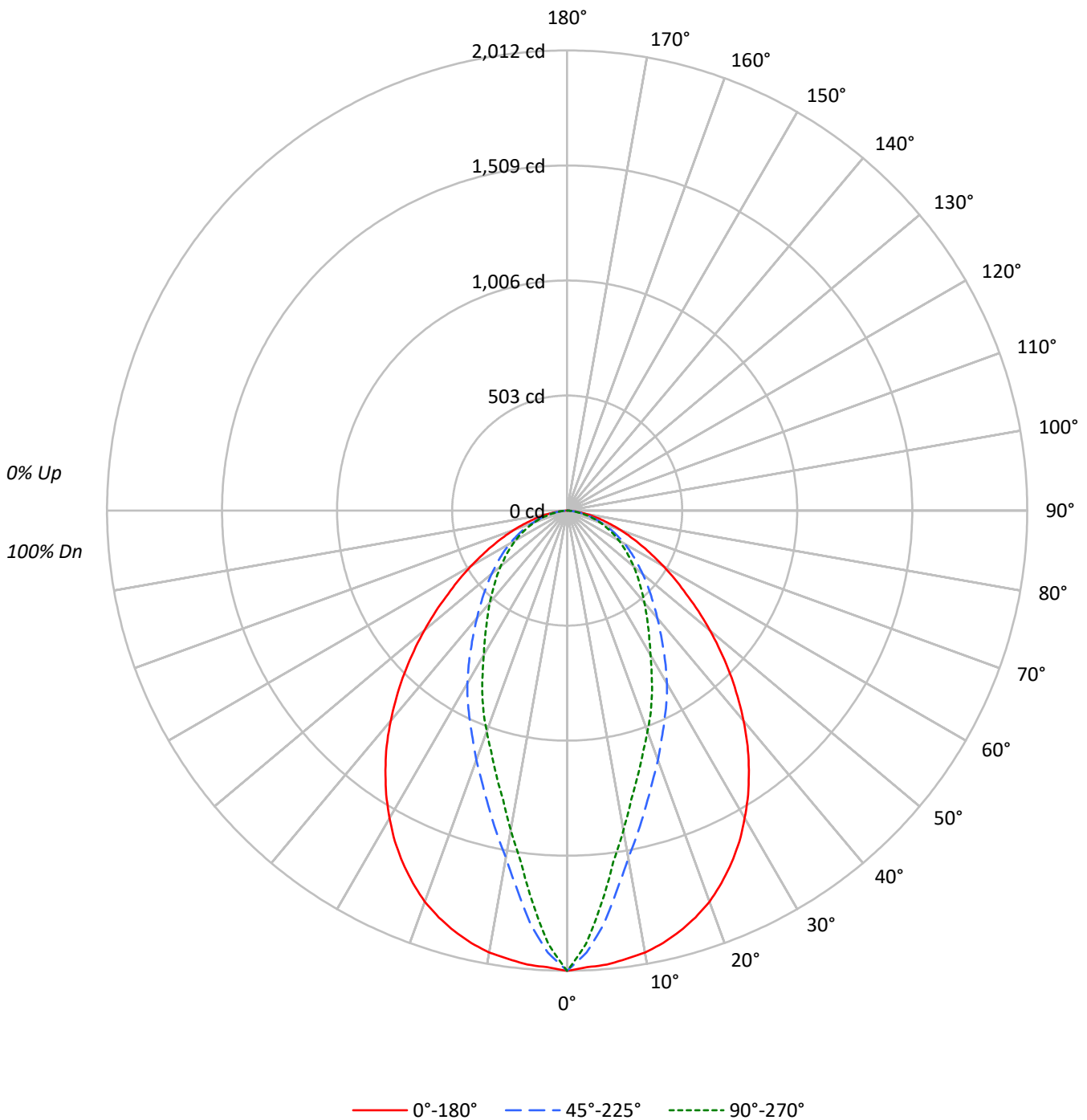
Lumens per Lamp: N/A
Luminaire Lumens: 2822.4 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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°	17792	17792	17792
5°	17687	16138	15296
10°	17613	13835	12729
15°	17431	12207	10950
20°	17125	10922	9671
25°	16580	9829	8567
30°	15850	8911	7436
35°	14949	7900	6656
40°	13848	7077	6065
45°	12586	6437	5595
50°	11213	5924	5230
55°	9780	5505	4889
60°	8587	5124	4606
65°	7433	4728	4301
70°	6437	4283	3963
75°	5356	3785	3481
80°	4150	3070	2841
85°	2607	2069	1887

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12586 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.5	6.0
10°-20°	400.2	14.2
20°-30°	511.4	18.1
30°-40°	519.3	18.4
40°-50°	460.4	16.3
50°-60°	361.8	12.8
60°-70°	246.4	8.7
70°-80°	126.5	4.5
80°-90°	28.0	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°	1080.0	38.3
0°-40°	1599.3	56.7
0°-60°	2421.5	85.8
0°-90°	2822.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2822.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2012	2012	2012	2012	2012	
5°	1993	1942	1818	1748	1724	189
15°	1904	1590	1334	1224	1196	536
25°	1700	1246	1008	911	878	781
35°	1385	944	732	639	617	864
45°	1007	680	515	462	448	775
55°	634	453	357	325	317	573
65°	355	275	226	210	206	355
75°	157	129	111	106	102	168
85°	26	24	20	20	19	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2012.4	2012.4	2012.4	2012.4	2012.4
2.5°	1998.2	2000.9	1934.4	1910.5	1896.3
5°	1992.9	1942.4	1818.3	1748.3	1723.5
7.5°	1977.0	1867.1	1671.2	1574.7	1549.0
10°	1961.9	1781.1	1541.0	1445.3	1417.8
12.5°	1937.1	1686.3	1436.4	1326.5	1293.8
15°	1904.3	1589.7	1333.6	1223.8	1196.3
17.5°	1865.3	1497.6	1240.6	1135.1	1105.0
20°	1820.1	1412.5	1160.8	1052.7	1027.9
22.5°	1763.4	1328.3	1079.3	981.8	954.4
25°	1699.6	1245.9	1007.5	910.9	878.2
27.5°	1631.4	1166.2	941.1	833.9	799.3
30°	1552.5	1089.9	872.8	760.3	728.4
32.5°	1472.8	1014.6	801.1	694.7	669.0
35°	1385.0	943.7	731.9	638.9	616.7
37.5°	1296.4	875.5	669.9	588.4	568.9
40°	1199.8	809.0	613.2	541.4	525.5
42.5°	1103.2	742.6	561.8	499.8	484.7
45°	1006.6	679.7	514.8	461.7	447.5
47.5°	909.2	617.6	471.4	424.5	412.9
50°	815.2	559.2	430.7	389.9	380.2
52.5°	724.0	504.2	391.7	357.1	346.5
55°	634.5	452.8	357.1	325.2	317.2
57.5°	558.3	405.0	322.6	295.1	288.9
60°	485.6	358.9	289.8	266.7	260.5
62.5°	417.4	316.4	257.0	238.4	233.9
65°	355.3	274.7	226.0	210.0	205.6
67.5°	298.6	236.6	194.1	182.5	179.0
70°	249.0	198.5	165.7	156.0	153.3
72.5°	199.4	162.2	137.4	130.3	127.6
75°	156.8	129.4	110.8	105.5	101.9
77.5°	117.9	98.4	85.1	80.6	78.0
80°	81.5	70.0	60.3	58.5	55.8
82.5°	51.4	44.3	39.0	38.1	35.4
85°	25.7	23.9	20.4	20.4	18.6
87.5°	8.9	8.0	8.0	8.0	7.1
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	18.91	20.39	19.27	20.71	21.02	16.23	17.72	16.60	18.03	18.35
	3H	20.50	21.83	20.88	22.16	22.52	17.83	19.16	18.21	19.49	19.85
	4H	21.03	22.28	21.43	22.63	23.01	18.39	19.64	18.79	19.99	20.37
	6H	21.36	22.51	21.77	22.88	23.27	18.74	19.90	19.16	20.26	20.66
	8H	21.44	22.54	21.87	22.93	23.33	18.83	19.93	19.26	20.32	20.72
	12H	21.47	22.52	21.90	22.90	23.33	18.87	19.92	19.30	20.30	20.73
4H	2H	19.14	20.39	19.54	20.73	21.11	16.91	18.16	17.31	18.51	18.89
	3H	20.92	21.96	21.33	22.36	22.76	18.70	19.73	19.11	20.13	20.53
	4H	21.56	22.49	21.99	22.91	23.35	19.36	20.29	19.79	20.71	21.15
	6H	22.01	22.82	22.46	23.26	23.72	19.82	20.63	20.27	21.07	21.53
	8H	22.12	22.87	22.58	23.32	23.79	19.93	20.69	20.40	21.13	21.60
	12H	22.17	22.85	22.66	23.33	23.80	19.99	20.67	20.47	21.15	21.62
8H	4H	21.66	22.42	22.13	22.86	23.33	19.66	20.42	20.12	20.86	21.33
	6H	22.18	22.80	22.68	23.30	23.77	20.21	20.83	20.71	21.32	21.80
	8H	22.34	22.89	22.85	23.41	23.89	20.38	20.93	20.89	21.44	21.93
	12H	22.44	22.93	22.95	23.42	23.99	20.48	20.97	20.99	21.47	22.03
12H	4H	21.65	22.33	22.14	22.81	23.28	19.68	20.36	20.17	20.84	21.31
	6H	22.17	22.73	22.69	23.24	23.73	20.25	20.80	20.76	21.32	21.80
	8H	22.37	22.86	22.88	23.35	23.92	20.46	20.95	20.97	21.44	22.01