

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: P1217352

Luminaire Tested: S124DRP-H1005D935-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217352
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-H1005D935-X4F0-XX-UDD-G-W
Description: DEFINE 4, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

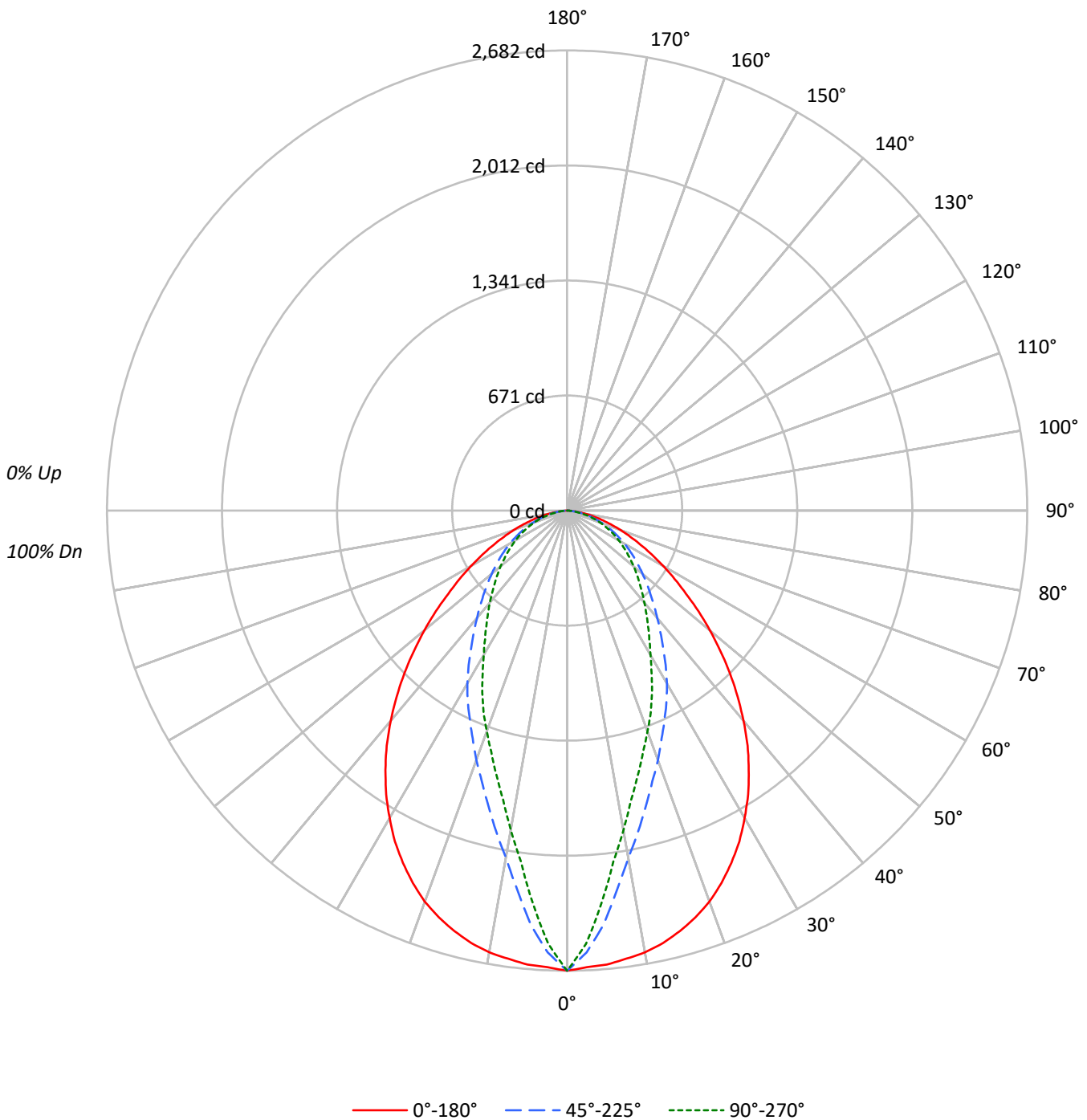
Lumens per Lamp: N/A
Luminaire Lumens: 3761.2 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 36.6
Input Voltage (V): 120
Input Current (Ain): 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°	23712	23712	23712
5°	23572	21507	20385
10°	23473	18437	16963
15°	23229	16268	14592
20°	22822	14555	12889
25°	22096	13099	11417
30°	21123	11875	9910
35°	19922	10528	8871
40°	18455	9432	8083
45°	16774	8579	7457
50°	14943	7894	6968
55°	13033	7336	6517
60°	11443	6829	6139
65°	9906	6299	5732
70°	8577	5708	5281
75°	7140	5042	4639
80°	5529	4089	3788
85°	3469	2759	2516

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16774 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.5	6.0
10°-20°	533.3	14.2
20°-30°	681.5	18.1
30°-40°	692.1	18.4
40°-50°	613.5	16.3
50°-60°	482.1	12.8
60°-70°	328.3	8.7
70°-80°	168.5	4.5
80°-90°	37.3	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°	1439.3	38.3
0°-40°	2131.4	56.7
0°-60°	3227.1	85.8
0°-90°	3761.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3761.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2682	2682	2682	2682	2682	
5°	2656	2589	2423	2330	2297	252
15°	2538	2119	1777	1631	1594	715
25°	2265	1660	1343	1214	1170	1041
35°	1846	1258	975	851	822	1152
45°	1342	906	686	615	596	1033
55°	846	604	476	433	423	764
65°	474	366	301	280	274	474
75°	209	172	148	140	136	224
85°	34	32	27	27	25	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2681.9	2681.9	2681.9	2681.9	2681.9
2.5°	2663.0	2666.5	2578.0	2546.1	2527.2
5°	2655.9	2588.6	2423.3	2330.0	2296.9
7.5°	2634.6	2488.2	2227.2	2098.5	2064.3
10°	2614.6	2373.7	2053.6	1926.1	1889.5
12.5°	2581.5	2247.3	1914.3	1767.8	1724.1
15°	2537.8	2118.6	1777.3	1630.9	1594.2
17.5°	2485.8	1995.8	1653.3	1512.8	1472.6
20°	2425.6	1882.4	1547.0	1402.9	1369.9
22.5°	2350.0	1770.2	1438.4	1308.5	1271.9
25°	2265.0	1660.4	1342.7	1214.0	1170.3
27.5°	2174.1	1554.1	1254.1	1111.2	1065.2
30°	2069.0	1452.5	1163.2	1013.2	970.7
32.5°	1962.7	1352.2	1067.6	925.8	891.6
35°	1845.8	1257.7	975.4	851.4	821.9
37.5°	1727.7	1166.8	892.8	784.1	758.2
40°	1599.0	1078.2	817.2	721.5	700.3
42.5°	1470.2	989.6	748.7	666.0	646.0
45°	1341.5	905.8	686.1	615.3	596.4
47.5°	1211.6	823.1	628.3	565.7	550.3
50°	1086.4	745.2	573.9	519.6	506.6
52.5°	964.8	671.9	522.0	475.9	461.7
55°	845.5	603.5	475.9	433.4	422.8
57.5°	744.0	539.7	429.9	393.2	385.0
60°	647.1	478.3	386.2	355.5	347.2
62.5°	556.2	421.6	342.5	317.7	311.8
65°	473.5	366.1	301.1	279.9	274.0
67.5°	398.0	315.3	258.6	243.3	238.5
70°	331.8	264.5	220.8	207.8	204.3
72.5°	265.7	216.1	183.0	173.6	170.1
75°	209.0	172.4	147.6	140.5	135.8
77.5°	157.1	131.1	113.4	107.5	103.9
80°	108.6	93.3	80.3	77.9	74.4
82.5°	68.5	59.0	52.0	50.8	47.2
85°	34.2	31.9	27.2	27.2	24.8
87.5°	11.8	10.6	10.6	10.6	9.4
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	19.90	21.39	20.27	21.70	22.02	17.23	18.72	17.59	19.03	19.34
	3H	21.50	22.83	21.87	23.16	23.52	18.83	20.16	19.21	20.49	20.85
	4H	22.03	23.28	22.43	23.63	24.00	19.39	20.64	19.79	20.98	21.36
	6H	22.36	23.51	22.77	23.88	24.27	19.74	20.89	20.15	21.26	21.65
	8H	22.44	23.53	22.86	23.92	24.33	19.83	20.93	20.25	21.32	21.72
	12H	22.46	23.52	22.90	23.90	24.33	19.86	20.91	20.29	21.30	21.73
4H	2H	20.13	21.38	20.53	21.73	22.11	17.90	19.15	18.30	19.50	19.88
	3H	21.92	22.95	22.33	23.35	23.75	19.69	20.73	20.10	21.13	21.53
	4H	22.56	23.49	22.99	23.91	24.34	20.36	21.29	20.79	21.70	22.14
	6H	23.00	23.81	23.46	24.26	24.72	20.81	21.62	21.27	22.07	22.53
	8H	23.11	23.87	23.58	24.32	24.78	20.93	21.68	21.39	22.13	22.60
	12H	23.17	23.85	23.65	24.33	24.80	20.99	21.66	21.47	22.14	22.61
8H	4H	22.66	23.42	23.12	23.86	24.33	20.66	21.41	21.12	21.86	22.32
	6H	23.18	23.80	23.68	24.29	24.77	21.20	21.83	21.70	22.32	22.80
	8H	23.33	23.89	23.85	24.40	24.89	21.37	21.93	21.89	22.44	22.93
	12H	23.43	23.93	23.95	24.42	24.99	21.48	21.97	21.99	22.46	23.03
12H	4H	22.65	23.33	23.13	23.80	24.28	20.68	21.35	21.16	21.83	22.30
	6H	23.17	23.73	23.69	24.24	24.73	21.24	21.80	21.76	22.31	22.80
	8H	23.36	23.86	23.88	24.35	24.92	21.46	21.95	21.97	22.44	23.01