

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: P1217351

Luminaire Tested: S124DRP-H1005D930-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217351
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-H1005D930-X4F0-XX-UDD-G-W
Description: DEFINE 4, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

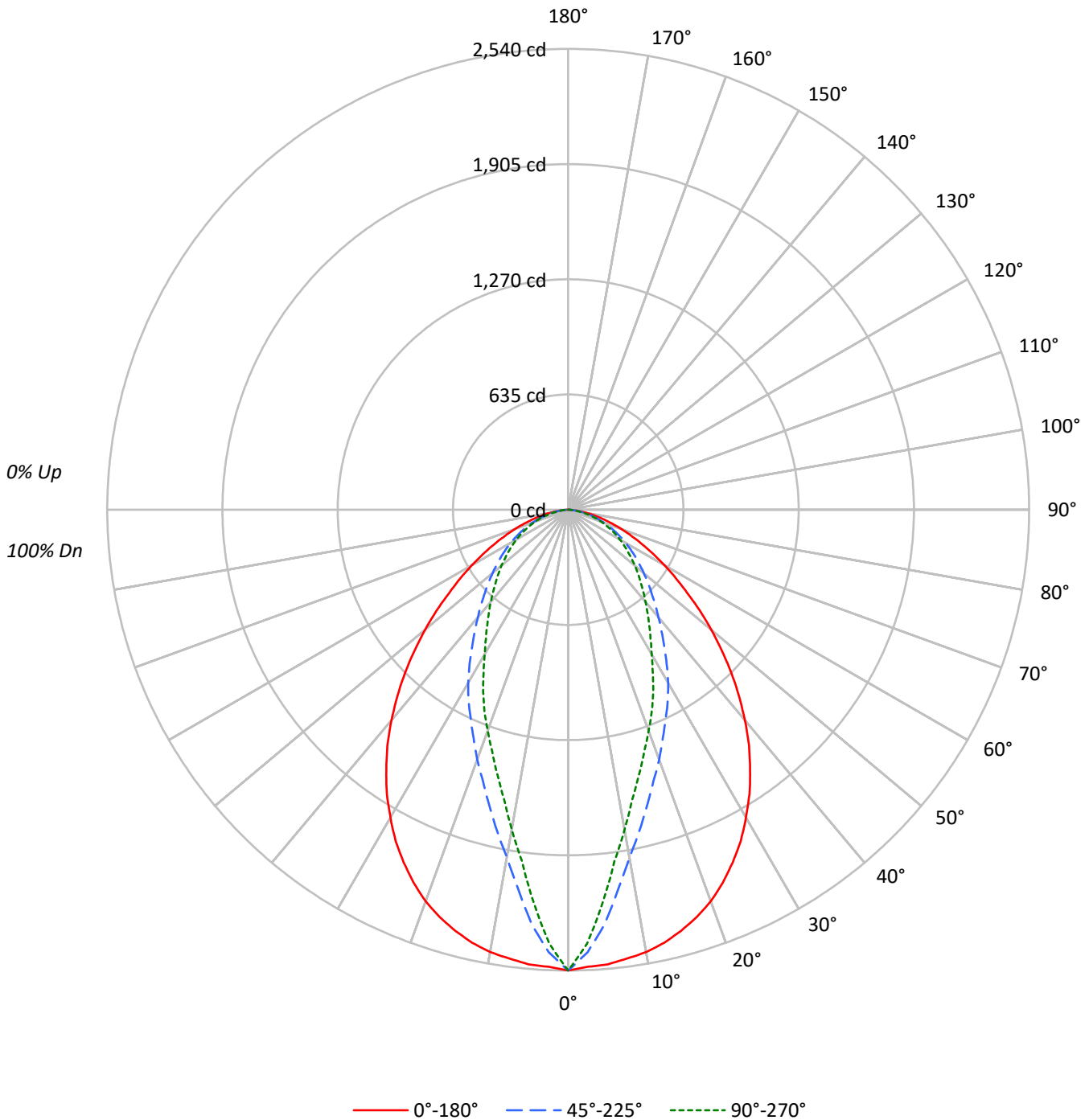
Lumens per Lamp: N/A
Luminaire Lumens: 3561.6 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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	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°	22453	22453	22453
5°	22320	20365	19303
10°	22227	17458	16063
15°	21996	15405	13818
20°	21611	13783	12205
25°	20923	12403	10811
30°	20002	11245	9384
35°	18865	9970	8400
40°	17475	8931	7653
45°	15883	8124	7061
50°	14151	7476	6598
55°	12342	6947	6170
60°	10836	6467	5814
65°	9381	5967	5427
70°	8122	5405	5002
75°	6760	4776	4393
80°	5239	3870	3584
85°	3287	2607	2384

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15883 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.6	6.0
10°-20°	505.0	14.2
20°-30°	645.3	18.1
30°-40°	655.4	18.4
40°-50°	581.0	16.3
50°-60°	456.5	12.8
60°-70°	310.9	8.7
70°-80°	159.6	4.5
80°-90°	35.4	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°	1362.9	38.3
0°-40°	2018.2	56.7
0°-60°	3055.8	85.8
0°-90°	3561.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3561.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2540	2540	2540	2540	2540	
5°	2515	2451	2295	2206	2175	239
15°	2403	2006	1683	1544	1510	677
25°	2145	1572	1271	1150	1108	986
35°	1748	1191	924	806	778	1091
45°	1270	858	650	583	565	979
55°	801	571	451	410	400	723
65°	448	347	285	265	259	449
75°	198	163	140	133	129	213
85°	32	30	26	26	24	43
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2539.5	2539.5	2539.5	2539.5	2539.5
2.5°	2521.6	2525.0	2441.1	2410.9	2393.0
5°	2514.9	2451.2	2294.6	2206.3	2175.0
7.5°	2494.8	2356.1	2109.0	1987.1	1954.7
10°	2475.8	2247.7	1944.6	1823.9	1789.2
12.5°	2444.5	2128.0	1812.7	1674.0	1632.6
15°	2403.1	2006.1	1683.0	1544.3	1509.6
17.5°	2353.9	1889.8	1565.5	1432.5	1394.4
20°	2296.9	1782.5	1464.9	1328.5	1297.2
22.5°	2225.3	1676.2	1362.0	1239.0	1204.3
25°	2144.8	1572.2	1271.4	1149.6	1108.2
27.5°	2058.7	1471.6	1187.6	1052.3	1008.7
30°	1959.2	1375.4	1101.5	959.5	919.2
32.5°	1858.5	1280.4	1010.9	876.7	844.3
35°	1747.8	1190.9	923.7	806.3	778.3
37.5°	1636.0	1104.8	845.4	742.5	717.9
40°	1514.1	1021.0	773.8	683.2	663.1
42.5°	1392.2	937.1	709.0	630.7	611.7
45°	1270.3	857.7	649.7	582.6	564.7
47.5°	1147.3	779.4	594.9	535.6	521.1
50°	1028.8	705.6	543.5	492.0	479.7
52.5°	913.6	636.3	494.3	450.7	437.2
55°	800.7	571.4	450.7	410.4	400.3
57.5°	704.5	511.0	407.0	372.4	364.5
60°	612.8	452.9	365.7	336.6	328.8
62.5°	526.7	399.2	324.3	300.8	295.2
65°	448.4	346.7	285.2	265.0	259.4
67.5°	376.8	298.6	244.9	230.4	225.9
70°	314.2	250.5	209.1	196.8	193.5
72.5°	251.6	204.6	173.3	164.4	161.0
75°	197.9	163.3	139.8	133.1	128.6
77.5°	148.7	124.1	107.4	101.8	98.4
80°	102.9	88.3	76.0	73.8	70.4
82.5°	64.9	55.9	49.2	48.1	44.7
85°	32.4	30.2	25.7	25.7	23.5
87.5°	11.2	10.1	10.1	10.1	8.9
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	19.71	21.20	20.08	21.51	21.83	17.04	18.53	17.41	18.84	19.16
	3H	21.31	22.64	21.68	22.97	23.33	18.64	19.97	19.02	20.30	20.66
	4H	21.84	23.09	22.24	23.44	23.81	19.20	20.45	19.60	20.80	21.17
	6H	22.17	23.32	22.58	23.69	24.08	19.55	20.71	19.96	21.07	21.47
	8H	22.25	23.34	22.67	23.73	24.14	19.64	20.74	20.07	21.13	21.53
	12H	22.28	23.33	22.71	23.71	24.14	19.68	20.73	20.11	21.11	21.54
4H	2H	19.94	21.19	20.34	21.54	21.92	17.72	18.97	18.12	19.31	19.69
	3H	21.73	22.76	22.14	23.16	23.57	19.50	20.54	19.91	20.94	21.34
	4H	22.37	23.30	22.80	23.72	24.15	20.17	21.10	20.60	21.52	21.96
	6H	22.81	23.62	23.27	24.07	24.53	20.62	21.43	21.08	21.88	22.34
	8H	22.92	23.68	23.39	24.13	24.59	20.74	21.50	21.20	21.94	22.41
	12H	22.98	23.66	23.47	24.14	24.61	20.80	21.47	21.28	21.95	22.43
8H	4H	22.47	23.23	22.94	23.67	24.14	20.47	21.22	20.93	21.67	22.14
	6H	22.99	23.61	23.49	24.10	24.58	21.02	21.64	21.51	22.13	22.61
	8H	23.14	23.70	23.66	24.21	24.70	21.18	21.74	21.70	22.25	22.74
	12H	23.25	23.74	23.76	24.23	24.80	21.29	21.78	21.80	22.28	22.84
12H	4H	22.46	23.14	22.94	23.62	24.09	20.49	21.16	20.97	21.64	22.12
	6H	22.98	23.54	23.50	24.05	24.54	21.05	21.61	21.57	22.12	22.61
	8H	23.18	23.67	23.69	24.16	24.73	21.27	21.76	21.78	22.25	22.82