

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: P1217399

Luminaire Tested: S124DRP-S1005D950-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217399
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-S1005D950-X4F0-XX-UDD-G-W
Description: DEFINE 4, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

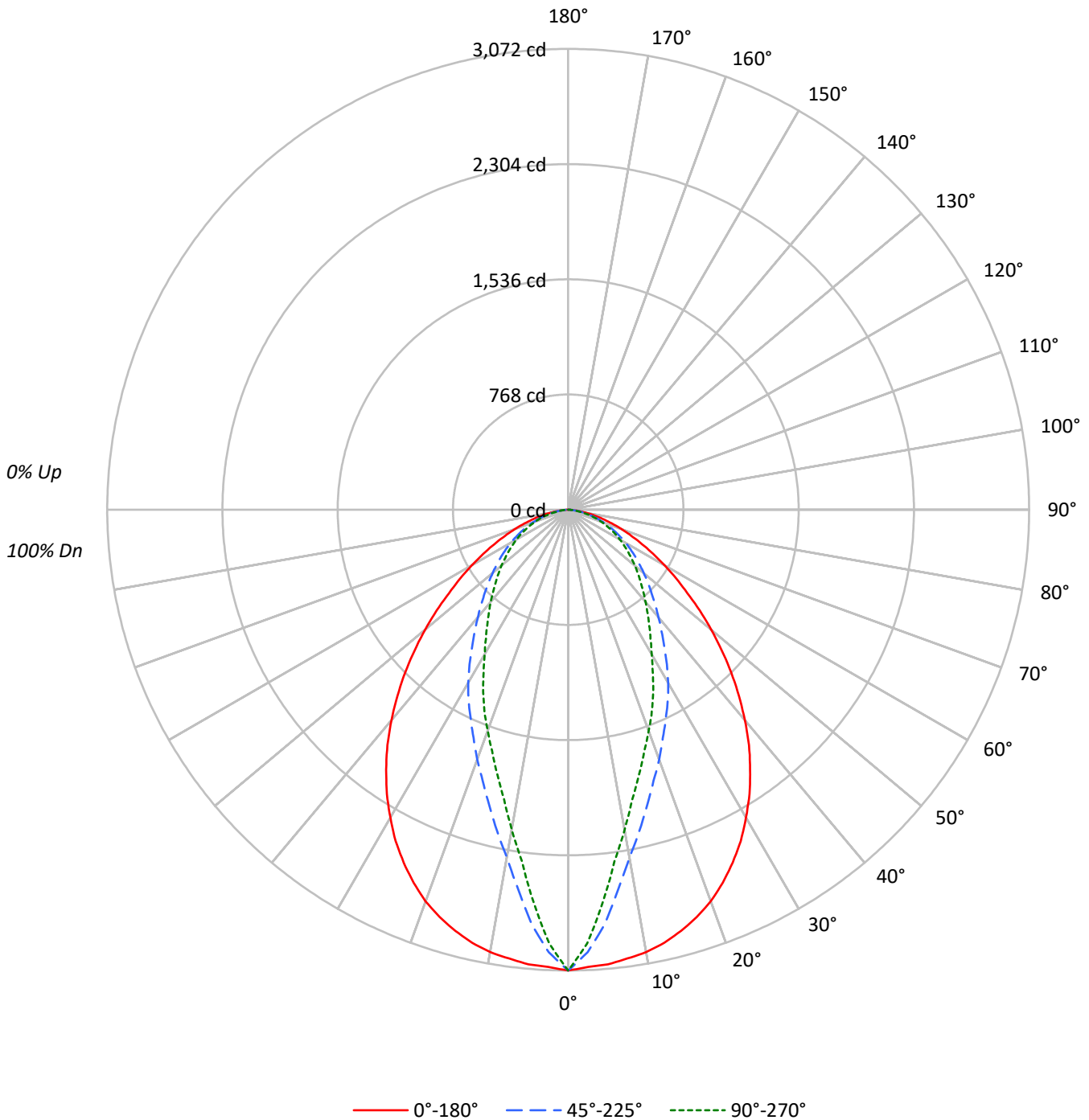
Lumens per Lamp: N/A
Luminaire Lumens: 4308.3 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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	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°	27160	27160	27160
5°	27000	24635	23350
10°	26887	21118	19431
15°	26608	18634	16715
20°	26141	16672	14763
25°	25309	15004	13077
30°	24195	13603	11352
35°	22819	12059	10162
40°	21138	10803	9258
45°	19213	9827	8541
50°	17118	9042	7982
55°	14929	8402	7465
60°	13108	7821	7032
65°	11347	7215	6565
70°	9826	6538	6049
75°	8178	5777	5315
80°	6334	4684	4338
85°	3977	3155	2881

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 19213 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.1	6.0
10°-20°	610.9	14.2
20°-30°	780.6	18.1
30°-40°	792.8	18.4
40°-50°	702.8	16.3
50°-60°	552.3	12.8
60°-70°	376.1	8.7
70°-80°	193.1	4.5
80°-90°	42.8	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°	1648.6	38.3
0°-40°	2441.4	56.7
0°-60°	3696.4	85.8
0°-90°	4308.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4308.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3072	3072	3072	3072	3072	
5°	3042	2965	2776	2669	2631	289
15°	2907	2427	2036	1868	1826	819
25°	2594	1902	1538	1390	1340	1192
35°	2114	1441	1117	975	942	1319
45°	1537	1038	786	705	683	1184
55°	968	691	545	496	484	875
65°	542	419	345	321	314	543
75°	239	198	169	161	156	257
85°	39	36	31	31	28	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3071.9	3071.9	3071.9	3071.9	3071.9
2.5°	3050.3	3054.3	2952.9	2916.4	2894.7
5°	3042.2	2965.1	2775.7	2668.8	2630.9
7.5°	3017.8	2850.1	2551.1	2403.7	2364.5
10°	2994.8	2718.9	2352.3	2206.2	2164.3
12.5°	2956.9	2574.1	2192.7	2025.0	1974.9
15°	2906.9	2426.7	2035.8	1868.0	1826.1
17.5°	2847.4	2286.0	1893.7	1732.8	1686.8
20°	2778.4	2156.2	1772.0	1607.0	1569.1
22.5°	2691.8	2027.7	1647.6	1498.8	1456.8
25°	2594.4	1901.9	1538.0	1390.5	1340.5
27.5°	2490.3	1780.1	1436.5	1272.9	1220.1
30°	2369.9	1663.8	1332.4	1160.6	1111.9
32.5°	2248.1	1548.8	1222.8	1060.5	1021.3
35°	2114.2	1440.6	1117.3	975.3	941.5
37.5°	1979.0	1336.4	1022.6	898.2	868.4
40°	1831.5	1235.0	936.0	826.5	802.1
42.5°	1684.1	1133.5	857.6	762.9	739.9
45°	1536.6	1037.5	785.9	704.7	683.1
47.5°	1387.8	942.8	719.6	647.9	630.3
50°	1244.5	853.5	657.4	595.2	580.3
52.5°	1105.1	769.7	597.9	545.1	528.9
55°	968.5	691.2	545.1	496.4	484.3
57.5°	852.2	618.2	492.4	450.4	441.0
60°	741.3	547.8	442.3	407.2	397.7
62.5°	637.1	482.9	392.3	363.9	357.1
65°	542.4	419.3	344.9	320.6	313.8
67.5°	455.9	361.2	296.2	278.7	273.2
70°	380.1	303.0	252.9	238.1	234.0
72.5°	304.4	247.5	209.7	198.8	194.8
75°	239.4	197.5	169.1	161.0	155.6
77.5°	179.9	150.1	129.9	123.1	119.0
80°	124.4	106.9	92.0	89.3	85.2
82.5°	78.5	67.6	59.5	58.2	54.1
85°	39.2	36.5	31.1	31.1	28.4
87.5°	13.5	12.2	12.2	12.2	10.8
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	20.38	21.86	20.74	22.18	22.49	17.70	19.19	18.07	19.50	19.82
	3H	21.97	23.30	22.35	23.63	23.99	19.30	20.63	19.68	20.96	21.32
	4H	22.50	23.75	22.90	24.10	24.48	19.86	21.11	20.26	21.46	21.84
	6H	22.83	23.98	23.24	24.35	24.74	20.21	21.37	20.63	21.73	22.13
	8H	22.91	24.01	23.33	24.40	24.80	20.30	21.40	20.73	21.79	22.19
	12H	22.94	23.99	23.37	24.37	24.80	20.34	21.39	20.77	21.77	22.20
4H	2H	20.60	21.85	21.00	22.20	22.58	18.38	19.63	18.78	19.98	20.35
	3H	22.39	23.43	22.80	23.83	24.23	20.16	21.20	20.58	21.60	22.00
	4H	23.03	23.96	23.46	24.38	24.82	20.83	21.76	21.26	22.18	22.62
	6H	23.47	24.28	23.93	24.73	25.19	21.28	22.09	21.74	22.54	23.00
	8H	23.59	24.34	24.05	24.79	25.26	21.40	22.16	21.87	22.60	23.07
	12H	23.64	24.32	24.13	24.80	25.27	21.46	22.14	21.94	22.62	23.09
8H	4H	23.13	23.89	23.60	24.33	24.80	21.13	21.88	21.59	22.33	22.80
	6H	23.65	24.27	24.15	24.77	25.24	21.68	22.30	22.17	22.79	23.27
	8H	23.81	24.36	24.32	24.87	25.36	21.84	22.40	22.36	22.91	23.40
	12H	23.91	24.40	24.42	24.89	25.46	21.95	22.44	22.46	22.94	23.50
12H	4H	23.12	23.80	23.61	24.28	24.75	21.15	21.83	21.63	22.30	22.78
	6H	23.64	24.20	24.16	24.71	25.20	21.71	22.27	22.23	22.78	23.27
	8H	23.84	24.33	24.35	24.82	25.39	21.93	22.42	22.44	22.91	23.48