

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: P1217381

Luminaire Tested: S124DRP-H675D950-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217381
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-H675D950-X4F0-XX-UDD-G-W
Description: DEFINE 4, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

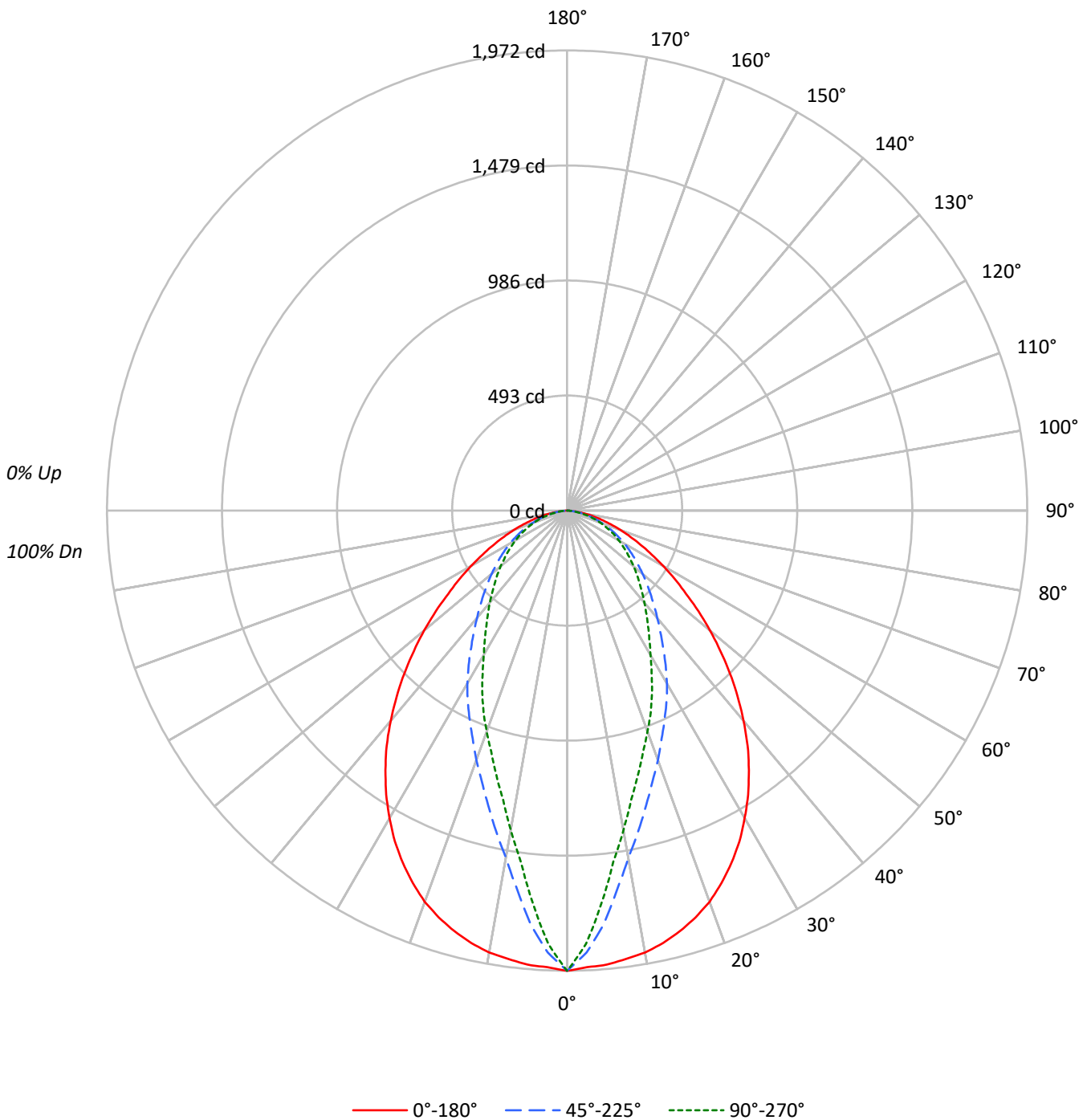
Lumens per Lamp: N/A
Luminaire Lumens: 2766.3 lumens
Efficiency: N/A
Efficacy: 116.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 23.8
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°	17439	17439	17439
5°	17336	15817	14993
10°	17263	13560	12476
15°	17085	11964	10732
20°	16785	10705	9479
25°	16251	9633	8396
30°	15535	8734	7288
35°	14652	7743	6525
40°	13573	6937	5944
45°	12337	6309	5484
50°	10991	5806	5125
55°	9586	5395	4792
60°	8417	5022	4516
65°	7287	4634	4215
70°	6310	4198	3885
75°	5250	3710	3413
80°	4068	3009	2785
85°	2556	2029	1846

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12337 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.1	6.0
10°-20°	392.2	14.2
20°-30°	501.2	18.1
30°-40°	509.0	18.4
40°-50°	451.2	16.3
50°-60°	354.6	12.8
60°-70°	241.5	8.7
70°-80°	124.0	4.5
80°-90°	27.5	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°	1058.5	38.3
0°-40°	1567.6	56.7
0°-60°	2373.4	85.8
0°-90°	2766.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2766.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1972	1972	1972	1972	1972	
5°	1953	1904	1782	1714	1689	185
15°	1866	1558	1307	1200	1172	526
25°	1666	1221	988	893	861	766
35°	1358	925	717	626	604	847
45°	987	666	505	452	439	760
55°	622	444	350	319	311	562
65°	348	269	222	206	202	348
75°	154	127	109	103	100	165
85°	25	24	20	20	18	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1972.4	1972.4	1972.4	1972.4	1972.4
2.5°	1958.6	1961.2	1896.0	1872.6	1858.7
5°	1953.3	1903.8	1782.2	1713.6	1689.3
7.5°	1937.7	1830.0	1638.1	1543.4	1518.2
10°	1922.9	1745.8	1510.4	1416.6	1389.7
12.5°	1898.6	1652.8	1407.9	1300.2	1268.1
15°	1866.5	1558.2	1307.1	1199.5	1172.5
17.5°	1828.3	1467.8	1216.0	1112.6	1083.1
20°	1784.0	1384.4	1137.8	1031.8	1007.5
22.5°	1728.4	1301.9	1057.9	962.3	935.4
25°	1665.9	1221.2	987.5	892.9	860.7
27.5°	1599.0	1143.0	922.4	817.3	783.4
30°	1521.7	1068.3	855.5	745.2	713.9
32.5°	1443.5	994.5	785.2	680.9	655.7
35°	1357.5	925.0	717.4	626.2	604.5
37.5°	1270.7	858.1	656.6	576.7	557.6
40°	1176.0	793.0	601.0	530.7	515.0
42.5°	1081.3	727.8	550.7	489.9	475.1
45°	986.7	666.2	504.6	452.5	438.6
47.5°	891.1	605.4	462.1	416.0	404.7
50°	799.1	548.0	422.1	382.2	372.6
52.5°	709.6	494.2	383.9	350.0	339.6
55°	621.9	443.8	350.0	318.8	310.9
57.5°	547.2	396.9	316.1	289.2	283.1
60°	476.0	351.8	284.0	261.4	255.4
62.5°	409.1	310.1	251.9	233.6	229.3
65°	348.3	269.2	221.5	205.8	201.5
67.5°	292.7	231.9	190.2	178.9	175.4
70°	244.1	194.6	162.4	152.9	150.3
72.5°	195.4	158.9	134.6	127.7	125.1
75°	153.7	126.8	108.6	103.4	99.9
77.5°	115.5	96.4	83.4	79.0	76.4
80°	79.9	68.6	59.1	57.3	54.7
82.5°	50.4	43.4	38.2	37.3	34.7
85°	25.2	23.5	20.0	20.0	18.2
87.5°	8.7	7.8	7.8	7.8	6.9
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	18.84	20.32	19.20	20.64	20.95	16.16	17.65	16.53	17.96	18.28
	3H	20.43	21.76	20.81	22.09	22.45	17.76	19.09	18.14	19.42	19.78
	4H	20.96	22.21	21.36	22.56	22.94	18.32	19.57	18.72	19.92	20.30
	6H	21.29	22.44	21.70	22.81	23.20	18.67	19.83	19.09	20.19	20.59
	8H	21.37	22.47	21.80	22.86	23.26	18.76	19.86	19.19	20.25	20.65
	12H	21.40	22.45	21.83	22.83	23.26	18.80	19.85	19.23	20.23	20.66
4H	2H	19.07	20.32	19.47	20.66	21.04	16.84	18.09	17.24	18.44	18.82
	3H	20.85	21.89	21.26	22.29	22.69	18.63	19.66	19.04	20.06	20.46
	4H	21.49	22.42	21.92	22.84	23.28	19.29	20.22	19.72	20.64	21.08
	6H	21.94	22.74	22.39	23.19	23.65	19.75	20.56	20.20	21.00	21.46
	8H	22.05	22.80	22.51	23.25	23.72	19.86	20.62	20.33	21.06	21.53
	12H	22.10	22.78	22.59	23.26	23.73	19.92	20.60	20.40	21.08	21.55
8H	4H	21.59	22.35	22.06	22.79	23.26	19.59	20.35	20.05	20.79	21.26
	6H	22.11	22.73	22.61	23.23	23.70	20.14	20.76	20.64	21.25	21.73
	8H	22.27	22.82	22.78	23.34	23.82	20.30	20.86	20.82	21.37	21.86
	12H	22.37	22.86	22.88	23.35	23.92	20.41	20.90	20.92	21.40	21.96
12H	4H	21.58	22.26	22.07	22.74	23.21	19.61	20.29	20.10	20.77	21.24
	6H	22.10	22.66	22.62	23.17	23.66	20.18	20.73	20.69	21.24	21.73
	8H	22.30	22.79	22.81	23.28	23.85	20.39	20.88	20.90	21.37	21.94