

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: P1060325

Luminaire Tested: S124RDRP-S1195D840-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060325
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S1195D840-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

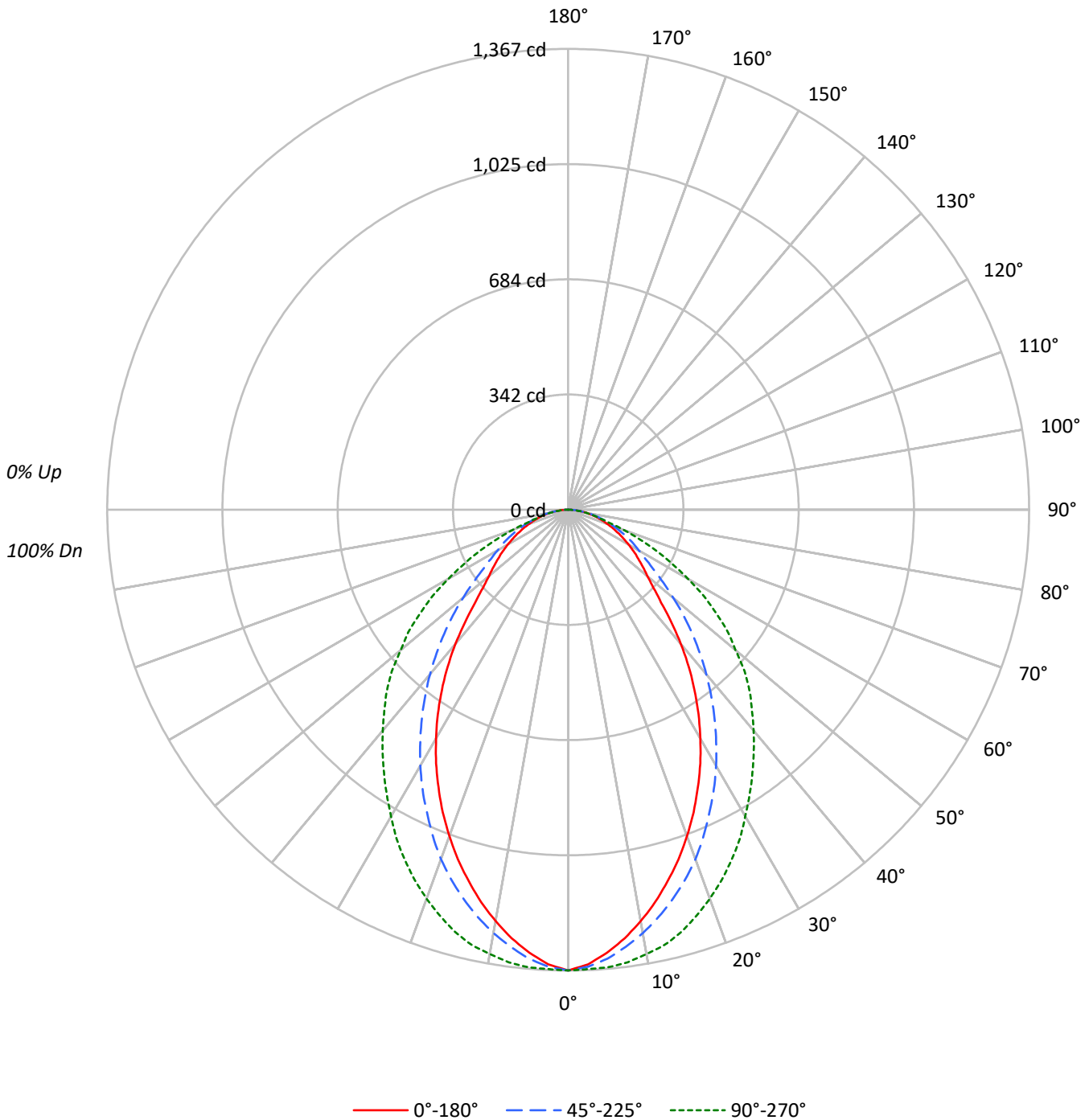
Lumens per Lamp: N/A
Luminaire Lumens: 2488.3 lumens
Efficiency: N/A
Efficacy: 59.5 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	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	74	67	61	72	66	61	70	64	60	68	63	59	57
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11770	11770	11770
5°	11406	11554	11777
10°	10836	11149	11700
15°	10167	10665	11559
20°	9440	10109	11251
25°	8644	9420	10889
30°	7793	8718	10442
35°	6868	7953	10015
40°	5846	7166	9614
45°	4746	6334	9265
50°	4107	5451	8676
55°	3807	4624	8044
60°	3553	4170	7056
65°	3327	3912	5868
70°	3102	3608	4436
75°	2954	3337	3194
80°	2772	3055	2698
85°	2549	2836	2124

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9265 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.2	5.1
10°-20°	339.2	13.6
20°-30°	463.1	18.6
30°-40°	485.2	19.5
40°-50°	420.0	16.9
50°-60°	315.6	12.7
60°-70°	203.5	8.2
70°-80°	104.3	4.2
80°-90°	31.2	1.3
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°	928.5	37.3
0°-40°	1413.7	56.8
0°-60°	2149.3	86.4
0°-90°	2488.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2488.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1367	1367	1367	1367	1367	
5°	1320	1340	1337	1347	1362	123
15°	1140	1169	1196	1251	1297	320
25°	910	944	991	1069	1146	417
35°	653	691	756	857	953	407
45°	390	430	520	648	761	307
55°	254	262	308	440	536	228
65°	163	166	192	232	288	162
75°	89	99	100	99	96	94
85°	26	30	29	27	22	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1366.8	1366.8	1366.8	1366.8	1366.8
2.5°	1349.6	1366.8	1356.8	1359.6	1363.9
5°	1319.5	1339.6	1336.7	1346.7	1362.5
7.5°	1282.3	1303.7	1308.0	1331.0	1353.9
10°	1239.3	1263.6	1275.1	1309.5	1338.1
12.5°	1192.0	1217.8	1237.8	1280.8	1322.4
15°	1140.4	1169.1	1196.3	1250.7	1296.6
17.5°	1087.4	1116.1	1151.9	1212.1	1263.6
20°	1030.1	1061.6	1103.2	1166.2	1227.8
22.5°	971.4	1004.3	1048.7	1117.5	1189.1
25°	909.8	944.1	991.4	1068.8	1146.1
27.5°	848.1	882.5	935.5	1017.2	1101.7
30°	783.7	819.5	876.8	965.6	1050.2
32.5°	719.2	757.9	816.6	911.2	1001.4
35°	653.3	690.6	756.5	856.7	952.7
37.5°	587.4	626.1	696.3	803.7	904.0
40°	520.1	560.2	637.5	750.7	855.3
42.5°	452.7	495.7	577.4	696.3	806.6
45°	389.7	429.8	520.1	647.6	760.8
47.5°	342.4	369.6	462.8	600.3	709.2
50°	306.6	320.9	406.9	548.7	647.6
52.5°	279.4	289.4	355.3	492.8	597.4
55°	253.6	262.2	308.0	439.8	535.8
57.5°	230.7	235.0	272.2	388.3	477.1
60°	206.3	210.6	242.1	332.4	409.7
62.5°	184.8	187.7	217.8	279.4	348.1
65°	163.3	166.2	192.0	232.1	288.0
67.5°	143.3	147.6	167.6	189.1	229.2
70°	123.2	131.8	143.3	153.3	176.2
72.5°	106.0	114.6	120.3	123.2	124.6
75°	88.8	98.9	100.3	98.9	96.0
77.5°	71.6	80.2	80.2	77.4	74.5
80°	55.9	63.0	61.6	58.7	54.4
82.5°	41.5	45.8	44.4	41.5	37.2
85°	25.8	30.1	28.7	27.2	21.5
87.5°	12.9	17.2	15.8	14.3	8.6
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	15.00	16.48	15.36	16.80	17.11	18.77	20.26	19.14	20.57	20.88
	3H	16.65	17.98	17.03	18.31	18.67	19.89	21.22	20.26	21.54	21.91
	4H	17.32	18.57	17.72	18.92	19.30	20.18	21.42	20.58	21.77	22.15
	6H	17.84	18.99	18.25	19.35	19.75	20.37	21.52	20.79	21.89	22.28
	8H	18.02	19.11	18.45	19.50	19.90	20.43	21.52	20.85	21.91	22.31
	12H	18.14	19.19	18.57	19.57	20.00	20.45	21.50	20.88	21.88	22.31
4H	2H	15.78	17.03	16.18	17.38	17.76	18.93	20.18	19.33	20.53	20.91
	3H	17.64	18.68	18.05	19.08	19.48	20.24	21.28	20.65	21.68	22.08
	4H	18.45	19.38	18.89	19.80	20.24	20.65	21.58	21.08	22.00	22.44
	6H	19.10	19.91	19.56	20.35	20.81	20.97	21.77	21.42	22.22	22.68
	8H	19.33	20.08	19.79	20.53	20.99	21.06	21.81	21.52	22.26	22.73
	12H	19.50	20.17	19.98	20.65	21.12	21.12	21.79	21.60	22.27	22.74
8H	4H	18.80	19.56	19.27	20.00	20.47	20.78	21.54	21.25	21.98	22.45
	6H	19.59	20.22	20.09	20.71	21.19	21.20	21.82	21.69	22.31	22.79
	8H	19.91	20.47	20.43	20.98	21.47	21.35	21.91	21.86	22.42	22.90
	12H	20.18	20.67	20.69	21.17	21.73	21.47	21.96	21.98	22.46	23.02
12H	4H	18.83	19.50	19.31	19.98	20.45	20.79	21.46	21.27	21.94	22.41
	6H	19.66	20.22	20.17	20.73	21.21	21.22	21.78	21.73	22.29	22.78
	8H	20.04	20.54	20.55	21.03	21.59	21.42	21.91	21.93	22.41	22.97