

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: P1060879

Luminaire Tested: S124RDRP-H575D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060879
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-H575D835-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

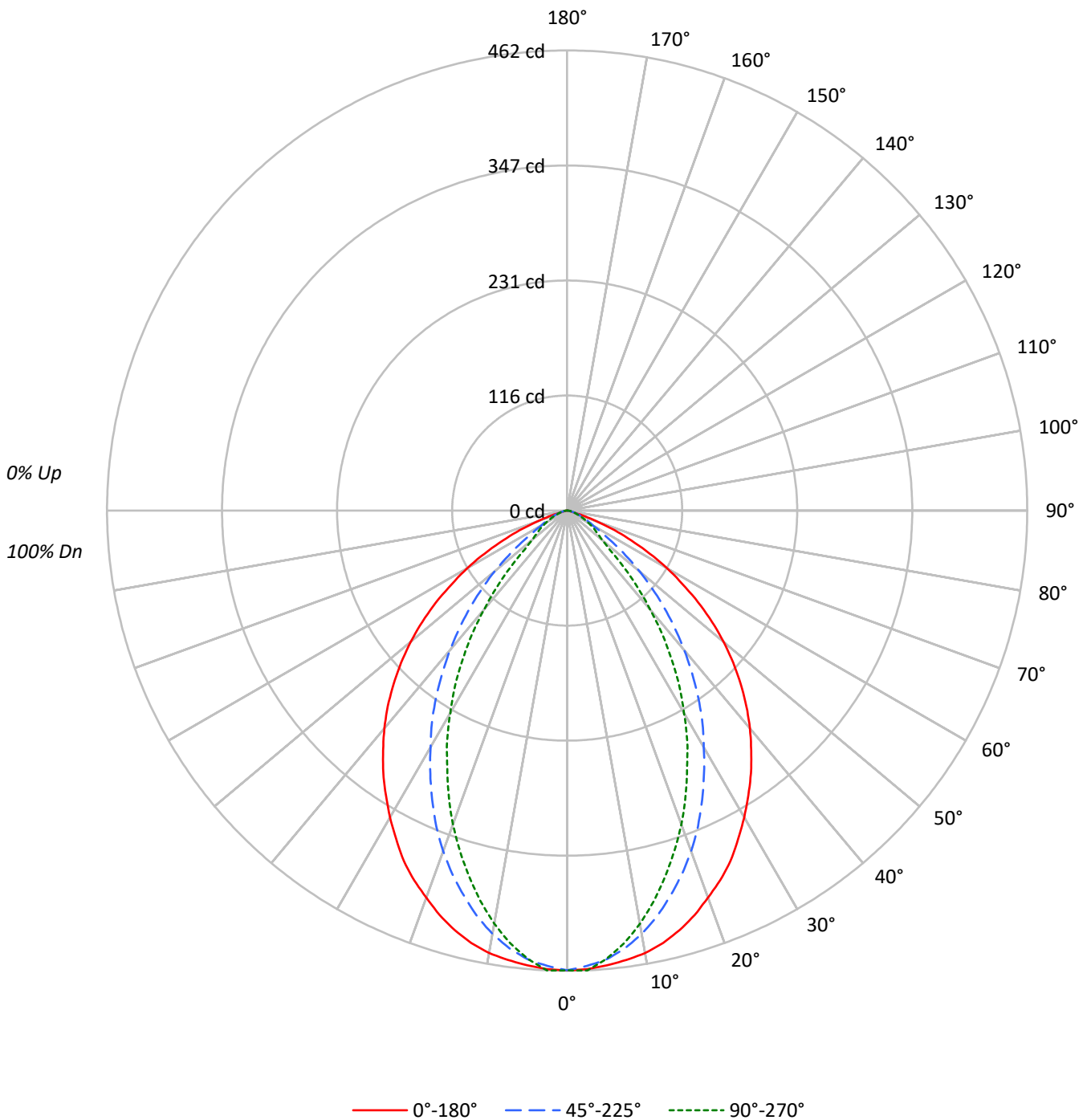
Lumens per Lamp: N/A
Luminaire Lumens: 680.6 lumens
Efficiency: N/A
Efficacy: 39.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	61	54	49	60	54	49	59	53	49	58	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3974	3974	3974
5°	3962	3911	3905
10°	3944	3774	3683
15°	3889	3570	3390
20°	3788	3336	3074
25°	3687	3045	2705
30°	3536	2727	2334
35°	3383	2413	1927
40°	3208	2054	1461
45°	3001	1678	982
50°	2744	1271	610
55°	2411	839	518
60°	1993	515	425
65°	1445	397	344
70°	786	295	262
75°	173	216	240
80°	129	164	193
85°	128	128	198

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3001 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.8	6.3
10°-20°	113.6	16.7
20°-30°	150.4	22.1
30°-40°	149.3	21.9
40°-50°	114.9	16.9
50°-60°	68.5	10.1
60°-70°	31.1	4.6
70°-80°	8.1	1.2
80°-90°	1.8	0.3
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°	306.8	45.1
0°-40°	456.1	67.0
0°-60°	639.5	94.0
0°-90°	680.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	680.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	462	462	462	462	462	
5°	458	459	452	452	452	44
15°	436	425	400	387	380	123
25°	388	360	320	294	285	178
35°	322	282	230	194	183	201
45°	246	198	138	96	81	190
55°	161	114	56	35	34	143
65°	71	42	20	17	17	71
75°	5	6	6	7	7	11
85°	1	1	1	2	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	461.5	461.5	461.5	461.5	461.5
2.5°	460.9	461.5	457.6	460.9	462.2
5°	458.3	458.9	452.4	452.4	451.8
7.5°	455.0	453.7	443.3	439.4	438.1
10°	451.1	446.6	431.6	423.8	421.2
12.5°	444.6	437.5	417.3	406.3	401.7
15°	436.2	425.1	400.4	386.8	380.3
17.5°	425.8	412.1	382.9	365.3	358.2
20°	413.4	395.2	364.0	341.9	335.4
22.5°	401.7	379.0	343.2	317.9	310.7
25°	388.1	360.1	320.5	293.8	284.7
27.5°	371.8	341.9	297.7	270.4	261.3
30°	355.6	322.4	274.3	245.7	234.7
32.5°	338.7	302.3	252.9	220.4	210.0
35°	321.8	281.5	229.5	194.4	183.3
37.5°	303.6	260.7	206.1	169.7	157.3
40°	285.4	240.5	182.7	145.6	130.0
42.5°	266.5	219.7	159.9	120.9	105.3
45°	246.4	198.3	137.8	96.2	80.6
47.5°	226.2	178.1	115.7	72.2	57.9
50°	204.8	156.7	94.9	52.7	45.5
52.5°	183.3	135.9	74.1	41.0	39.0
55°	160.6	114.4	55.9	35.1	34.5
57.5°	137.2	94.9	40.3	30.6	29.3
60°	115.7	76.7	29.9	26.0	24.7
62.5°	93.6	57.9	24.7	21.5	20.2
65°	70.9	42.3	19.5	16.9	16.9
67.5°	51.4	28.6	15.6	13.7	13.0
70°	31.2	17.6	11.7	11.1	10.4
72.5°	15.6	10.4	9.1	8.5	8.5
75°	5.2	6.5	6.5	7.2	7.2
77.5°	3.9	4.6	4.6	5.2	5.2
80°	2.6	3.3	3.3	3.9	3.9
82.5°	2.0	2.0	2.6	2.6	3.3
85°	1.3	1.3	1.3	2.0	2.0
87.5°	0.7	0.7	0.7	1.3	1.3
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	13.91	15.25	14.28	15.56	15.87	5.47	6.81	5.84	7.12	7.43
	3H	14.42	15.60	14.80	15.93	16.30	6.29	7.47	6.67	7.80	8.16
	4H	14.39	15.49	14.79	15.84	16.22	6.58	7.67	6.98	8.02	8.41
	6H	14.32	15.33	14.74	15.70	16.10	6.75	7.75	7.16	8.12	8.52
	8H	14.29	15.24	14.72	15.63	16.04	6.81	7.77	7.24	8.16	8.56
	12H	14.25	15.16	14.68	15.54	15.97	6.86	7.77	7.29	8.15	8.59
4H	2H	13.75	14.85	14.16	15.20	15.59	5.91	7.01	6.31	7.36	7.74
	3H	14.31	15.20	14.72	15.61	16.01	6.88	7.77	7.29	8.18	8.58
	4H	14.28	15.07	14.71	15.49	15.94	7.25	8.04	7.68	8.46	8.90
	6H	14.23	14.91	14.69	15.36	15.82	7.50	8.18	7.96	8.63	9.09
	8H	14.18	14.82	14.65	15.27	15.74	7.59	8.23	8.05	8.67	9.14
	12H	14.14	14.71	14.63	15.19	15.66	7.67	8.23	8.15	8.71	9.19
8H	4H	14.17	14.81	14.64	15.26	15.73	7.33	7.97	7.80	8.42	8.89
	6H	14.11	14.63	14.61	15.13	15.61	7.64	8.17	8.15	8.66	9.14
	8H	14.06	14.53	14.58	15.04	15.54	7.78	8.25	8.30	8.76	9.25
	12H	14.03	14.44	14.54	14.94	15.51	7.92	8.33	8.43	8.83	9.40
12H	4H	14.13	14.69	14.61	15.17	15.65	7.31	7.87	7.80	8.36	8.83
	6H	14.05	14.52	14.57	15.04	15.53	7.62	8.09	8.15	8.61	9.10
	8H	14.03	14.44	14.54	14.93	15.51	7.80	8.21	8.31	8.71	9.28