

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: P1060276

Luminaire Tested: S124RDRP-S1020D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060276
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-S1020D935-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

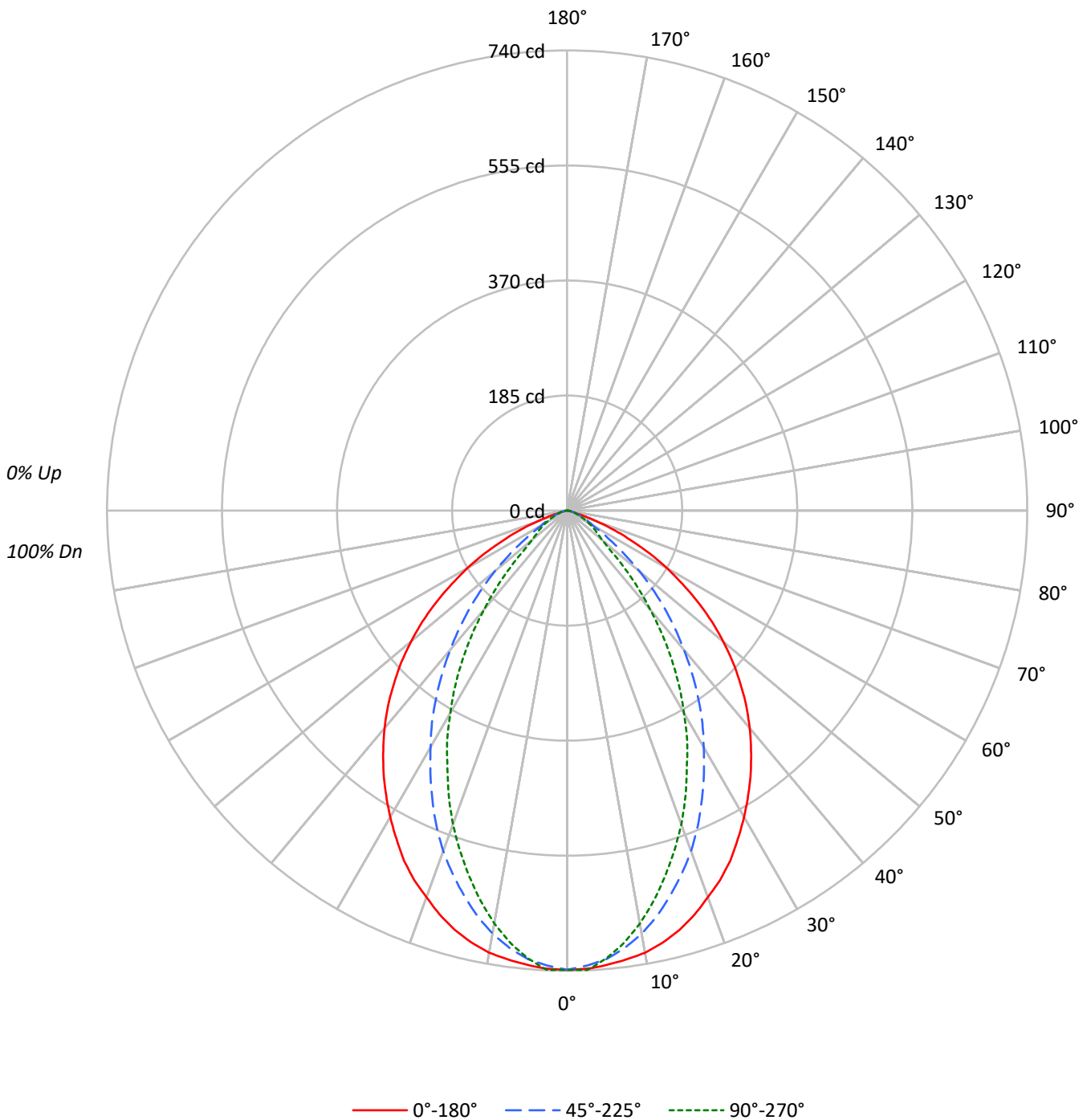
Lumens per Lamp: N/A
Luminaire Lumens: 1088.9 lumens
Efficiency: N/A
Efficacy: 31.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	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	62	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°	6360	6360	6360
5°	6340	6258	6249
10°	6312	6039	5894
15°	6223	5713	5425
20°	6063	5338	4919
25°	5900	4872	4329
30°	5658	4365	3734
35°	5413	3860	3083
40°	5134	3286	2338
45°	4801	2685	1571
50°	4390	2035	975
55°	3857	1344	827
60°	3190	823	680
65°	2311	636	550
70°	1256	471	418
75°	276	346	379
80°	208	258	307
85°	207	207	306

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4801 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.4	6.3
10°-20°	181.7	16.7
20°-30°	240.8	22.1
30°-40°	238.9	21.9
40°-50°	183.9	16.9
50°-60°	109.6	10.1
60°-70°	49.8	4.6
70°-80°	12.9	1.2
80°-90°	2.9	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°	490.9	45.1
0°-40°	729.9	67.0
0°-60°	1023.3	94.0
0°-90°	1088.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1088.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	739	739	739	739	739	
5°	733	734	724	724	723	70
15°	698	680	641	619	608	196
25°	621	576	513	470	456	285
35°	515	450	367	311	293	321
45°	394	317	220	154	129	304
55°	257	183	90	56	55	229
65°	113	68	31	27	27	114
75°	8	10	10	11	11	17
85°	2	2	2	3	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	738.6	738.6	738.6	738.6	738.6
2.5°	737.5	738.6	732.3	737.5	739.6
5°	733.4	734.4	724.0	724.0	722.9
7.5°	728.1	726.1	709.4	703.2	701.1
10°	721.9	714.6	690.7	678.2	674.1
12.5°	711.5	700.1	667.8	650.1	642.9
15°	698.0	680.3	640.8	618.9	608.5
17.5°	681.3	659.5	612.7	584.6	573.2
20°	661.6	632.4	582.5	547.2	536.8
22.5°	642.9	606.4	549.2	508.7	497.2
25°	621.0	576.3	512.8	470.2	455.6
27.5°	595.0	547.2	476.4	432.7	418.2
30°	569.0	515.9	439.0	393.2	375.5
32.5°	542.0	483.7	404.6	352.6	336.0
35°	514.9	450.4	367.2	311.0	293.3
37.5°	485.8	417.1	329.7	271.5	251.7
40°	456.7	384.9	292.3	233.0	208.0
42.5°	426.5	351.6	255.9	193.5	168.5
45°	394.2	317.3	220.5	154.0	129.0
47.5°	362.0	285.0	185.2	115.5	92.6
50°	327.7	250.7	151.9	84.3	72.8
52.5°	293.3	217.4	118.6	65.5	62.4
55°	256.9	183.1	89.5	56.2	55.1
57.5°	219.5	151.9	64.5	48.9	46.8
60°	185.2	122.7	47.8	41.6	39.5
62.5°	149.8	92.6	39.5	34.3	32.2
65°	113.4	67.6	31.2	27.0	27.0
67.5°	82.2	45.8	25.0	21.8	20.8
70°	49.9	28.1	18.7	17.7	16.6
72.5°	25.0	16.6	14.6	13.5	13.5
75°	8.3	10.4	10.4	11.4	11.4
77.5°	6.2	7.3	7.3	8.3	8.3
80°	4.2	5.2	5.2	6.2	6.2
82.5°	3.1	3.1	4.2	4.2	5.2
85°	2.1	2.1	2.1	3.1	3.1
87.5°	1.0	1.0	1.0	2.1	2.1
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	15.55	16.88	15.91	17.19	17.51	7.10	8.43	7.46	8.74	9.06
	3H	16.06	17.24	16.44	17.57	17.93	7.91	9.09	8.29	9.42	9.79
	4H	16.02	17.12	16.43	17.47	17.85	8.19	9.29	8.59	9.64	10.02
	6H	15.96	16.97	16.37	17.34	17.73	8.36	9.37	8.78	9.74	10.13
	8H	15.92	16.87	16.35	17.26	17.67	8.43	9.38	8.86	9.77	10.18
	12H	15.88	16.79	16.31	17.18	17.61	8.47	9.38	8.90	9.77	10.20
4H	2H	15.39	16.49	15.79	16.84	17.22	7.54	8.64	7.94	8.99	9.37
	3H	15.94	16.84	16.36	17.24	17.64	8.50	9.39	8.91	9.80	10.20
	4H	15.91	16.71	16.35	17.13	17.57	8.86	9.66	9.30	10.08	10.52
	6H	15.86	16.55	16.32	16.99	17.46	9.11	9.80	9.57	10.24	10.71
	8H	15.81	16.45	16.28	16.90	17.37	9.20	9.84	9.67	10.29	10.76
	12H	15.77	16.34	16.26	16.82	17.30	9.27	9.84	9.76	10.32	10.80
8H	4H	15.80	16.44	16.27	16.89	17.36	8.95	9.59	9.42	10.04	10.51
	6H	15.74	16.26	16.24	16.76	17.24	9.26	9.78	9.76	10.28	10.76
	8H	15.69	16.16	16.22	16.68	17.17	9.39	9.86	9.91	10.37	10.87
	12H	15.66	16.08	16.18	16.57	17.14	9.53	9.94	10.04	10.44	11.01
12H	4H	15.76	16.32	16.25	16.81	17.28	8.92	9.49	9.41	9.97	10.45
	6H	15.68	16.15	16.21	16.67	17.16	9.24	9.71	9.76	10.22	10.72
	8H	15.66	16.07	16.17	16.57	17.14	9.41	9.82	9.93	10.32	10.89