

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: P1060259

Luminaire Tested: S124RDRP-S1020D927-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060259
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S1020D927-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

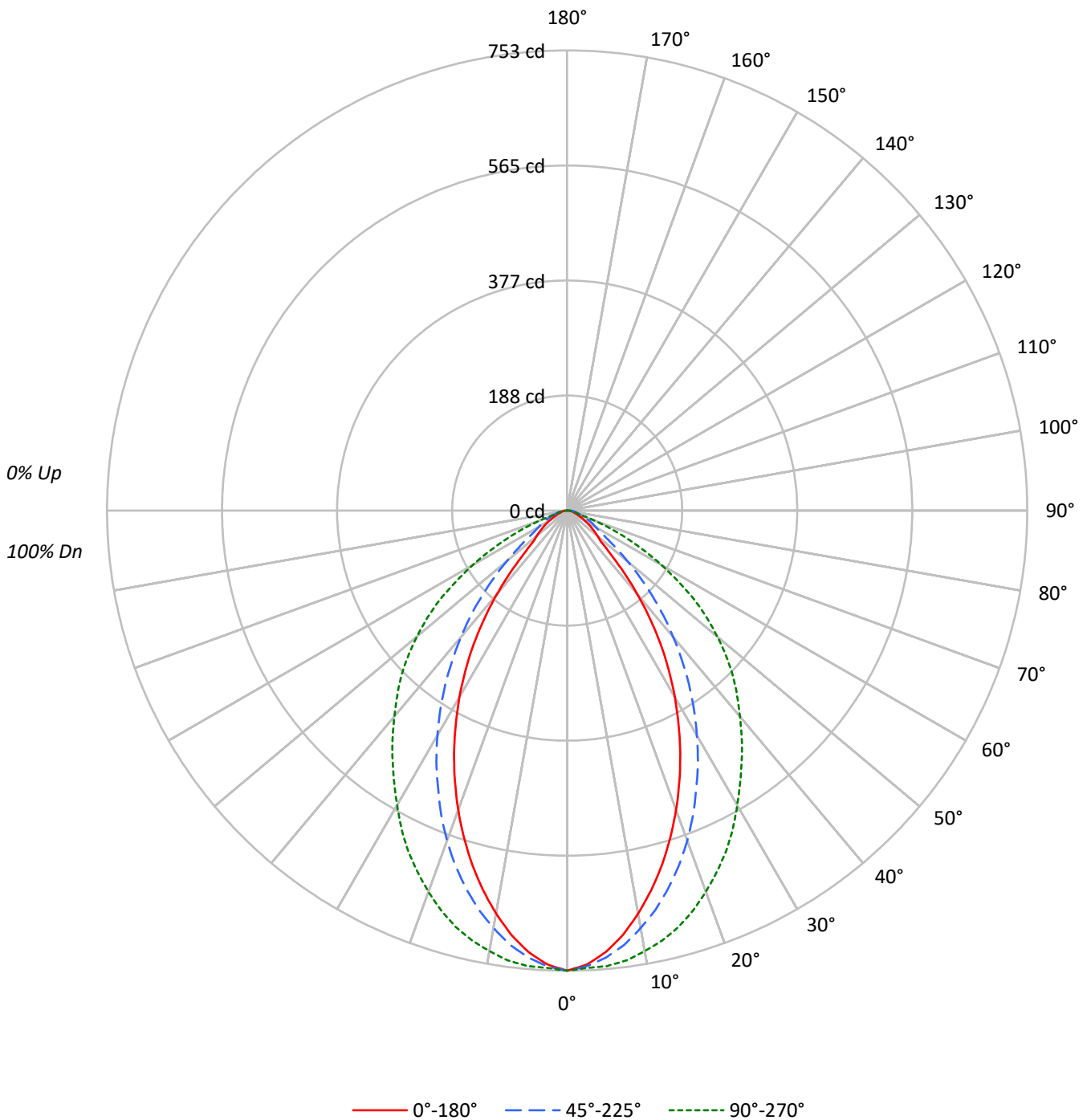
Lumens per Lamp: N/A
Luminaire Lumens: 1058.7 lumens
Efficiency: N/A
Efficacy: 30.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89																												
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79																												
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70																												
4	90	80	73	68	88	79	72	67	77	71	67	75	70	66	73	68	65	63																												
5	84	73	66	61	82	72	65	60	70	64	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	49	47																												
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43																												
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39																												
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6483	6483	6483
5°	6269	6343	6467
10°	5855	6064	6400
15°	5346	5705	6285
20°	4775	5267	6083
25°	4160	4751	5843
30°	3505	4220	5534
35°	2799	3655	5236
40°	2013	3036	4943
45°	1213	2392	4678
50°	872	1732	4299
55°	734	1165	3812
60°	594	923	3069
65°	469	839	2205
70°	410	700	1181
75°	383	639	572
80°	382	664	521
85°	563	948	662

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4678 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	6.5
10°-20°	181.1	17.1
20°-30°	235.0	22.2
30°-40°	225.9	21.3
40°-50°	167.6	15.8
50°-60°	102.7	9.7
60°-70°	49.9	4.7
70°-80°	19.0	1.8
80°-90°	8.5	0.8
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°	485.2	45.8
0°-40°	711.1	67.2
0°-60°	981.3	92.7
0°-90°	1058.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1058.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	753	753	753	753	753	
5°	725	736	734	740	748	67
15°	600	617	640	678	705	167
25°	438	460	500	564	615	200
35°	266	290	348	430	498	165
45°	100	124	196	300	384	83
55°	49	51	78	175	254	44
65°	23	25	41	65	108	24
75°	12	18	19	17	17	12
85°	6	10	10	9	7	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	752.9	752.9	752.9	752.9	752.9
2.5°	743.4	752.0	746.2	748.1	749.1
5°	725.2	735.7	733.8	740.5	748.1
7.5°	700.2	712.7	716.5	729.9	742.4
10°	669.6	684.9	693.5	715.6	731.9
12.5°	636.1	652.3	668.6	698.3	720.4
15°	599.7	616.9	639.9	678.2	705.0
17.5°	561.3	580.5	608.3	654.3	685.9
20°	521.1	541.2	574.8	625.5	663.8
22.5°	479.9	501.0	538.4	594.9	639.9
25°	437.8	459.8	500.0	564.2	615.0
27.5°	394.7	417.7	463.6	531.7	587.2
30°	352.5	374.6	424.4	498.1	556.6
32.5°	309.4	332.4	386.0	463.6	526.9
35°	266.3	290.3	347.7	430.1	498.1
37.5°	222.2	248.1	308.5	397.5	469.4
40°	179.1	204.0	270.1	364.0	439.7
42.5°	137.0	163.8	233.7	330.5	411.9
45°	99.6	124.5	196.4	299.8	384.1
47.5°	74.7	90.0	161.9	271.1	353.5
50°	65.1	68.0	129.3	239.5	320.9
52.5°	56.5	58.4	100.6	205.0	288.3
55°	48.9	50.8	77.6	175.3	253.9
57.5°	41.2	43.1	62.3	146.6	214.6
60°	34.5	36.4	53.6	116.9	178.2
62.5°	28.7	29.7	47.9	89.1	142.7
65°	23.0	24.9	41.2	65.1	108.2
67.5°	19.2	21.1	33.5	45.0	75.7
70°	16.3	21.1	27.8	31.6	46.9
72.5°	13.4	19.2	23.0	22.0	22.0
75°	11.5	18.2	19.2	17.2	17.2
77.5°	9.6	16.3	15.3	14.4	13.4
80°	7.7	13.4	13.4	11.5	10.5
82.5°	6.7	10.5	10.5	10.5	8.6
85°	5.7	9.6	9.6	8.6	6.7
87.5°	3.8	7.7	8.6	7.7	4.8
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	6.31	7.65	6.67	7.96	8.27	15.41	16.75	15.77	17.06	17.38
	3H	7.36	8.54	7.73	8.87	9.24	15.91	17.10	16.29	17.43	17.79
	4H	7.87	8.98	8.27	9.33	9.71	15.92	17.03	16.33	17.38	17.76
	6H	8.32	9.34	8.74	9.71	10.10	15.92	16.94	16.34	17.31	17.70
	8H	8.51	9.48	8.94	9.87	10.27	15.92	16.88	16.35	17.27	17.68
	12H	8.72	9.64	9.16	10.03	10.46	15.92	16.84	16.35	17.22	17.65
4H	2H	7.40	8.51	7.80	8.86	9.24	15.30	16.40	15.70	16.76	17.14
	3H	8.68	9.58	9.09	9.99	10.39	15.88	16.78	16.29	17.18	17.59
	4H	9.38	10.19	9.82	10.61	11.05	15.92	16.73	16.36	17.15	17.59
	6H	10.01	10.71	10.48	11.16	11.62	15.97	16.67	16.44	17.12	17.59
	8H	10.26	10.91	10.73	11.36	11.83	15.99	16.64	16.46	17.09	17.56
	12H	10.53	11.11	11.02	11.59	12.07	16.02	16.60	16.51	17.08	17.56
8H	4H	9.81	10.46	10.28	10.91	11.38	15.87	16.52	16.34	16.97	17.44
	6H	10.68	11.22	11.19	11.72	12.20	15.96	16.50	16.47	17.00	17.48
	8H	11.09	11.57	11.61	12.08	12.58	16.02	16.51	16.55	17.02	17.51
	12H	11.57	11.99	12.08	12.49	13.06	16.12	16.55	16.64	17.04	17.61
12H	4H	9.85	10.43	10.34	10.91	11.38	15.84	16.42	16.33	16.90	17.38
	6H	10.80	11.28	11.32	11.79	12.28	15.94	16.42	16.46	16.94	17.43
	8H	11.31	11.74	11.83	12.23	12.80	16.05	16.47	16.56	16.97	17.54