

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: P1060286

Luminaire Tested: S124RDRP-S1020D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060286
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-S1020D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

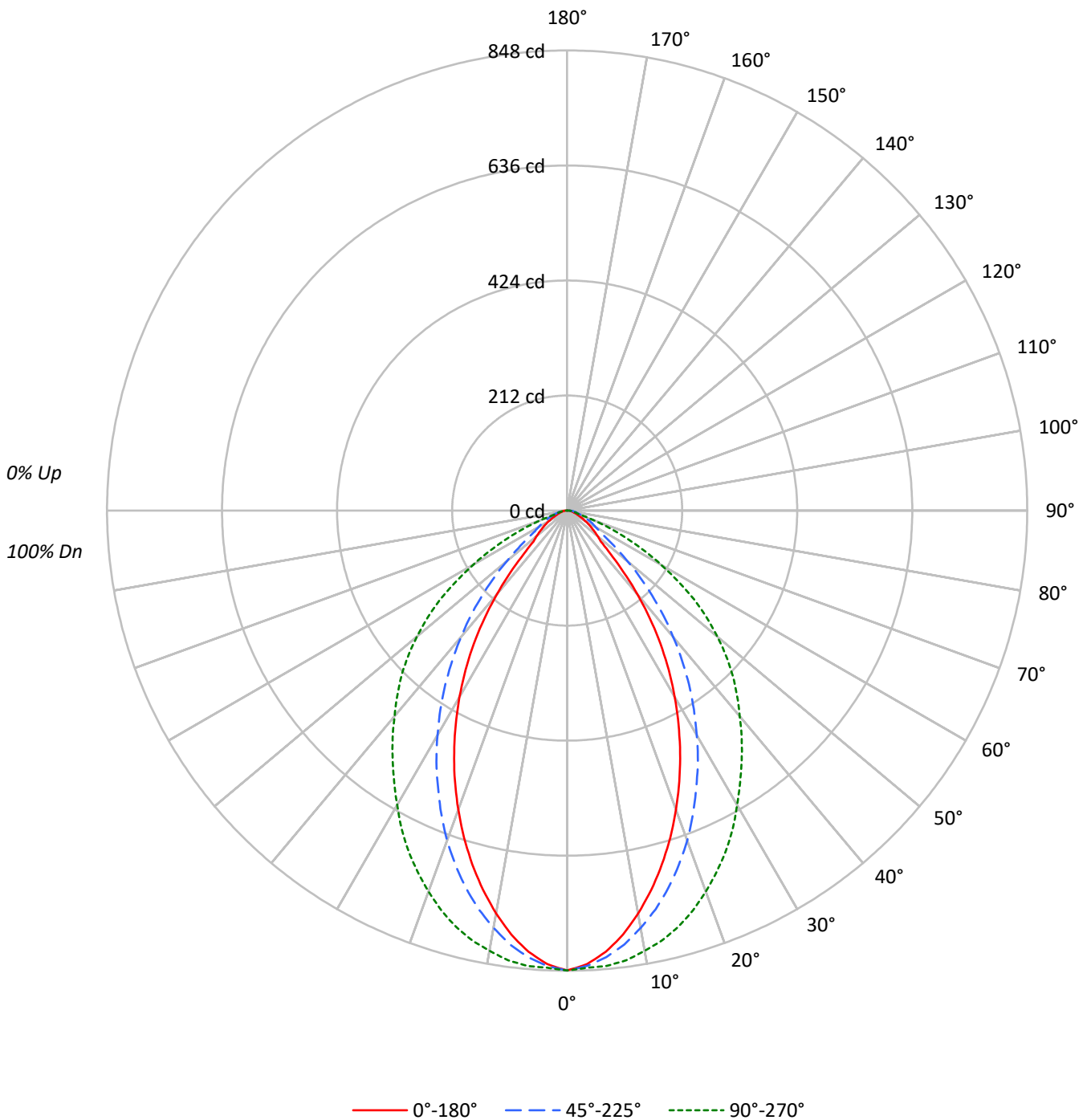
Lumens per Lamp: N/A
Luminaire Lumens: 1191.8 lumens
Efficiency: N/A
Efficacy: 34.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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	46	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°	7298	7298	7298
5°	7056	7140	7279
10°	6590	6826	7203
15°	6018	6421	7075
20°	5375	5929	6847
25°	4682	5348	6578
30°	3945	4750	6229
35°	3152	4114	5894
40°	2266	3418	5563
45°	1365	2691	5266
50°	982	1951	4839
55°	826	1311	4289
60°	668	1040	3455
65°	528	945	2482
70°	461	788	1329
75°	429	719	645
80°	426	749	590
85°	642	1067	741

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5266 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.8	6.5
10°-20°	203.9	17.1
20°-30°	264.5	22.2
30°-40°	254.3	21.3
40°-50°	188.6	15.8
50°-60°	115.6	9.7
60°-70°	56.1	4.7
70°-80°	21.4	1.8
80°-90°	9.6	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°	546.2	45.8
0°-40°	800.4	67.2
0°-60°	1104.6	92.7
0°-90°	1191.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1191.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	848	848	848	848	848	
5°	816	828	826	834	842	76
15°	675	694	720	763	794	188
25°	493	518	563	635	692	225
35°	300	327	391	484	561	186
45°	112	140	221	338	432	93
55°	55	57	87	197	286	49
65°	26	28	46	73	122	27
75°	13	20	22	19	19	14
85°	6	11	11	10	8	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	847.5	847.5	847.5	847.5	847.5
2.5°	836.7	846.5	840.0	842.1	843.2
5°	816.3	828.1	826.0	833.5	842.1
7.5°	788.2	802.2	806.6	821.7	835.7
10°	753.7	771.0	780.7	805.5	823.8
12.5°	716.0	734.3	752.6	786.1	810.9
15°	675.0	694.4	720.3	763.4	793.6
17.5°	631.9	653.4	684.7	736.5	772.1
20°	586.6	609.2	647.0	704.1	747.2
22.5°	540.2	563.9	606.0	669.6	720.3
25°	492.8	517.6	562.9	635.1	692.3
27.5°	444.3	470.1	521.9	598.4	661.0
30°	396.8	421.6	477.7	560.7	626.5
32.5°	348.3	374.2	434.5	521.9	593.1
35°	299.8	326.7	391.4	484.1	560.7
37.5°	250.2	279.3	347.2	447.5	528.4
40°	201.6	229.7	304.1	409.7	494.9
42.5°	154.2	184.4	263.1	372.0	463.7
45°	112.1	140.2	221.0	337.5	432.4
47.5°	84.1	101.4	182.2	305.2	397.9
50°	73.3	76.6	145.6	269.6	361.2
52.5°	63.6	65.8	113.2	230.8	324.6
55°	55.0	57.1	87.3	197.3	285.7
57.5°	46.4	48.5	70.1	165.0	241.5
60°	38.8	41.0	60.4	131.6	200.6
62.5°	32.3	33.4	53.9	100.3	160.7
65°	25.9	28.0	46.4	73.3	121.8
67.5°	21.6	23.7	37.7	50.7	85.2
70°	18.3	23.7	31.3	35.6	52.8
72.5°	15.1	21.6	25.9	24.8	24.8
75°	12.9	20.5	21.6	19.4	19.4
77.5°	10.8	18.3	17.3	16.2	15.1
80°	8.6	15.1	15.1	12.9	11.9
82.5°	7.5	11.9	11.9	11.9	9.7
85°	6.5	10.8	10.8	9.7	7.5
87.5°	4.3	8.6	9.7	8.6	5.4
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	6.72	8.06	7.08	8.37	8.68	15.82	17.16	16.18	17.47	17.79
	3H	7.76	8.95	8.14	9.28	9.64	16.32	17.51	16.70	17.84	18.20
	4H	8.28	9.38	8.68	9.73	10.12	16.33	17.44	16.74	17.79	18.17
	6H	8.73	9.74	9.14	10.11	10.51	16.33	17.35	16.75	17.72	18.11
	8H	8.92	9.88	9.35	10.27	10.68	16.33	17.29	16.76	17.68	18.09
	12H	9.13	10.05	9.56	10.43	10.86	16.33	17.25	16.76	17.63	18.06
4H	2H	7.81	8.92	8.22	9.27	9.65	15.71	16.81	16.11	17.17	17.55
	3H	9.08	9.99	9.50	10.39	10.80	16.29	17.19	16.70	17.60	18.00
	4H	9.79	10.60	10.22	11.02	11.46	16.33	17.14	16.77	17.56	18.00
	6H	10.42	11.12	10.88	11.56	12.03	16.39	17.09	16.85	17.53	18.00
	8H	10.66	11.32	11.13	11.76	12.23	16.40	17.06	16.87	17.50	17.97
	12H	10.94	11.52	11.43	12.00	12.48	16.44	17.01	16.92	17.50	17.97
8H	4H	10.22	10.87	10.69	11.32	11.79	16.28	16.94	16.75	17.38	17.85
	6H	11.09	11.63	11.60	12.12	12.61	16.38	16.91	16.88	17.41	17.89
	8H	11.50	11.98	12.02	12.50	12.99	16.44	16.92	16.96	17.43	17.92
	12H	11.98	12.41	12.49	12.90	13.47	16.54	16.96	17.05	17.46	18.03
12H	4H	10.26	10.84	10.75	11.32	11.79	16.25	16.83	16.74	17.32	17.79
	6H	11.21	11.69	11.73	12.20	12.69	16.36	16.84	16.88	17.35	17.84
	8H	11.72	12.15	12.24	12.64	13.22	16.46	16.89	16.98	17.38	17.95