

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: P1059452

Luminaire Tested: S123RDRP-H1000D927-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059452
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-H1000D927-X4F0-XX-UDD-WVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

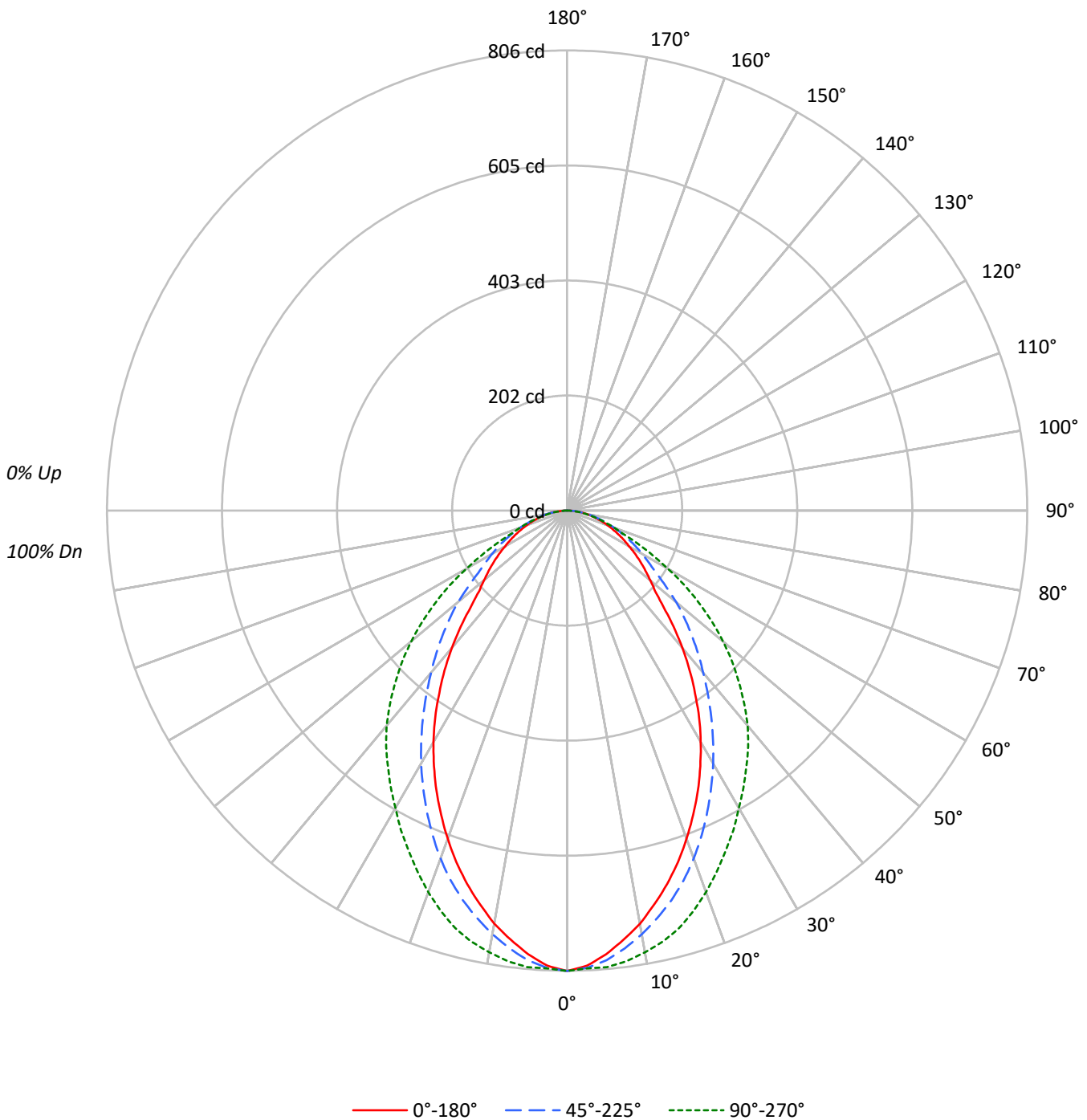
Lumens per Lamp: N/A
Luminaire Lumens: 1456.7 lumens
Efficiency: N/A
Efficacy: 46.7 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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	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	78	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	66	59	54	64	58	53	62	57	53	51																												
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45																												
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41																												
8	65	53	45	39	64	52	45	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	36	45	39	35	34																												
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9469	9469	9469
5°	9194	9317	9462
10°	8759	8984	9367
15°	8229	8585	9206
20°	7644	8105	8885
25°	7018	7533	8514
30°	6346	6935	8153
35°	5598	6302	7847
40°	4812	5681	7536
45°	3956	5118	7064
50°	3471	4560	6511
55°	3212	3890	5767
60°	2952	3574	4774
65°	2759	3284	3757
70°	2596	2987	2987
75°	2445	2745	2572
80°	2299	2495	2171
85°	2169	2425	1657

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7064 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.6	5.1
10°-20°	199.9	13.7
20°-30°	271.0	18.6
30°-40°	283.4	19.5
40°-50°	245.8	16.9
50°-60°	182.8	12.6
60°-70°	117.3	8.1
70°-80°	62.9	4.3
80°-90°	19.0	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°	545.5	37.4
0°-40°	828.9	56.9
0°-60°	1257.5	86.3
0°-90°	1456.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1456.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	806	806	806	806	806	
5°	780	793	790	796	803	73
15°	677	693	706	735	757	190
25°	542	559	581	620	657	248
35°	390	409	440	495	547	244
45°	238	256	308	374	425	187
55°	157	161	190	244	282	140
65°	99	108	118	126	135	99
75°	54	62	60	58	57	57
85°	16	20	18	15	12	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	806.4	806.4	806.4	806.4	806.4
2.5°	797.9	809.3	801.7	801.7	802.7
5°	780.0	793.2	790.4	796.0	802.7
7.5°	758.2	772.4	773.4	786.6	796.0
10°	734.6	748.8	753.5	772.4	785.6
12.5°	706.2	722.3	730.8	754.5	773.4
15°	676.9	693.0	706.2	734.6	757.3
17.5°	645.7	661.8	678.8	711.0	735.5
20°	611.7	628.7	648.6	680.7	711.0
22.5°	576.7	594.7	615.5	650.5	684.5
25°	541.7	558.7	581.4	620.2	657.1
27.5°	504.9	522.8	546.5	589.0	630.6
30°	468.0	485.9	511.5	556.9	601.3
32.5°	430.2	448.1	475.5	526.6	574.8
35°	390.5	409.4	439.6	495.4	547.4
37.5°	352.6	370.6	404.6	466.1	520.9
40°	313.9	332.8	370.6	436.8	491.6
42.5°	276.1	295.0	339.4	405.6	459.5
45°	238.2	256.2	308.2	374.4	425.4
47.5°	208.9	222.2	278.9	341.3	392.4
50°	190.0	194.8	249.6	309.2	356.4
52.5°	173.0	176.8	217.4	277.0	319.6
55°	156.9	160.7	190.0	243.9	281.7
57.5°	140.9	145.6	169.2	209.9	243.9
60°	125.7	131.4	152.2	179.6	203.3
62.5°	112.5	119.1	135.2	152.2	168.3
65°	99.3	107.8	118.2	125.7	135.2
67.5°	87.0	96.4	102.1	104.0	104.9
70°	75.6	85.1	87.0	87.0	87.0
72.5°	64.3	74.7	72.8	71.9	70.9
75°	53.9	62.4	60.5	57.7	56.7
77.5°	43.5	51.1	48.2	46.3	43.5
80°	34.0	39.7	36.9	35.0	32.1
82.5°	25.5	29.3	26.5	24.6	21.7
85°	16.1	19.9	18.0	15.1	12.3
87.5°	8.5	11.3	9.5	8.5	4.7
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	14.60	16.08	14.96	16.39	16.71	17.35	18.84	17.72	19.15	19.46
	3H	16.31	17.64	16.68	17.96	18.33	18.37	19.70	18.75	20.03	20.39
	4H	16.97	18.21	17.37	18.56	18.94	18.74	19.98	19.14	20.33	20.71
	6H	17.47	18.62	17.88	18.98	19.38	18.99	20.14	19.41	20.51	20.90
	8H	17.65	18.74	18.07	19.13	19.53	19.06	20.16	19.49	20.55	20.95
	12H	17.77	18.82	18.20	19.20	19.63	19.10	20.15	19.53	20.53	20.96
4H	2H	15.37	16.62	15.77	16.97	17.35	17.62	18.87	18.02	19.22	19.60
	3H	17.30	18.33	17.71	18.73	19.13	18.88	19.91	19.29	20.31	20.71
	4H	18.11	19.04	18.54	19.45	19.89	19.37	20.29	19.80	20.71	21.15
	6H	18.75	19.56	19.21	20.00	20.46	19.75	20.55	20.20	21.00	21.46
	8H	18.98	19.73	19.44	20.18	20.64	19.86	20.61	20.32	21.06	21.53
	12H	19.15	19.82	19.63	20.30	20.77	19.93	20.60	20.41	21.08	21.55
8H	4H	18.43	19.18	18.89	19.63	20.10	19.56	20.31	20.02	20.76	21.22
	6H	19.22	19.85	19.72	20.34	20.82	20.04	20.67	20.54	21.16	21.64
	8H	19.55	20.11	20.06	20.62	21.11	20.22	20.78	20.74	21.29	21.78
	12H	19.83	20.32	20.34	20.81	21.38	20.35	20.85	20.86	21.34	21.91
12H	4H	18.45	19.13	18.94	19.61	20.08	19.57	20.25	20.05	20.72	21.20
	6H	19.27	19.84	19.79	20.35	20.84	20.08	20.64	20.60	21.15	21.64
	8H	19.67	20.16	20.18	20.66	21.22	20.31	20.81	20.82	21.30	21.87