

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: P1059365

Luminaire Tested: S123RDRP-S775D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059365
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D927-X4F0-XX-UDD-BVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

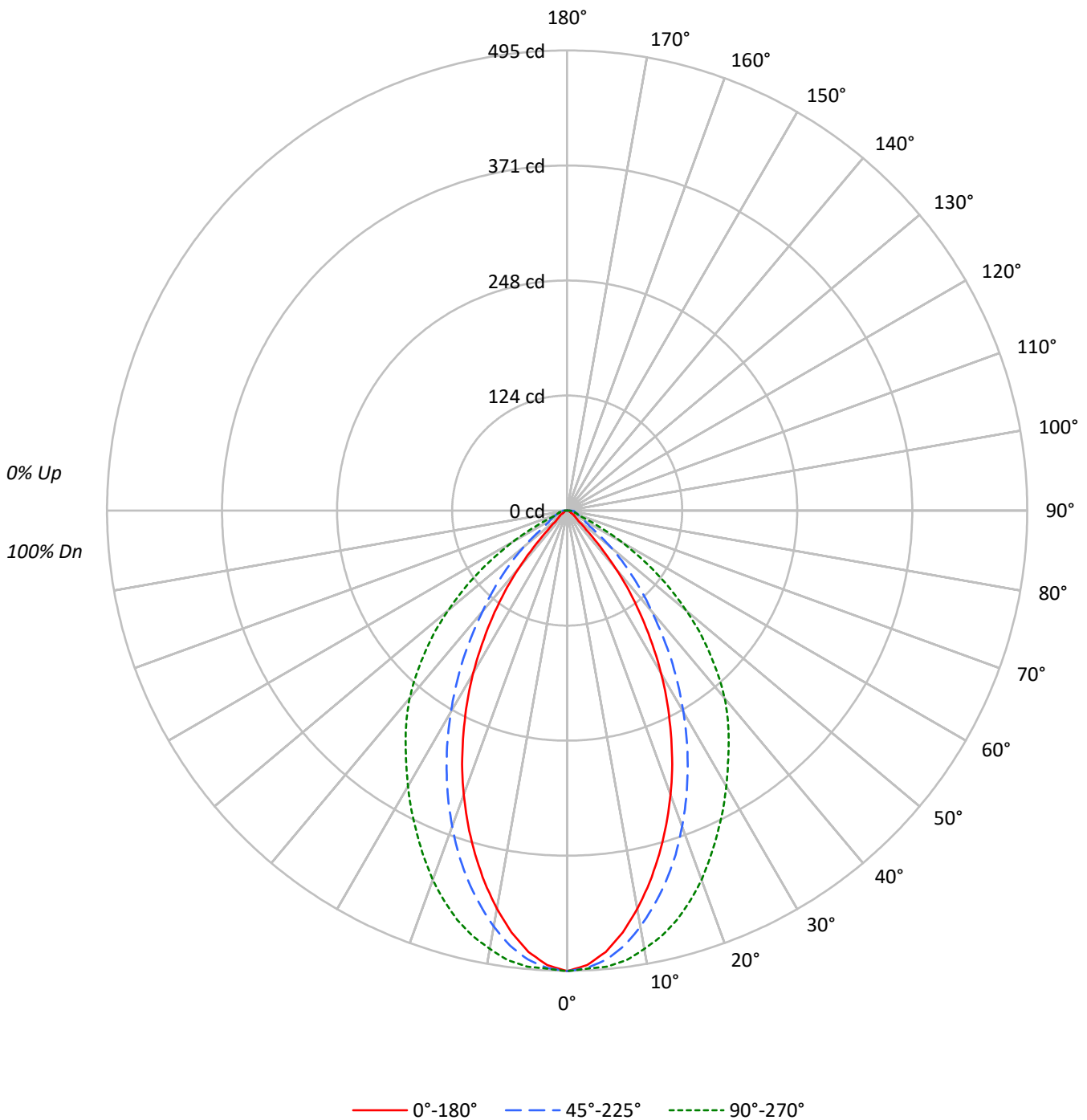
Lumens per Lamp: N/A
Luminaire Lumens: 595.1 lumens
Efficiency: N/A
Efficacy: 23.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92					90				
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83					81				
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75					73				
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68					66				
5	86	76	69	64	84	75	68	64	73	67	63	71	66	62	70	65	62					60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57					55				
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	61	56	52					50				
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48					46				
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45					43				
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41					40				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5817	5817	5817
5°	5617	5714	5804
10°	5184	5419	5709
15°	4651	5010	5543
20°	4061	4516	5282
25°	3415	3975	4957
30°	2743	3390	4643
35°	2008	2791	4343
40°	1243	2172	4041
45°	478	1636	3599
50°	236	1122	3045
55°	186	620	2389
60°	124	517	1602
65°	106	464	717
70°	103	415	415
75°	136	445	413
80°	203	561	460
85°	310	916	606

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3599 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.4	7.6
10°-20°	116.3	19.5
20°-30°	144.3	24.3
30°-40°	129.3	21.7
40°-50°	85.0	14.3
50°-60°	42.6	7.2
60°-70°	16.8	2.8
70°-80°	9.4	1.6
80°-90°	5.9	1.0
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°	306.1	51.4
0°-40°	435.4	73.2
0°-60°	563.0	94.6
0°-90°	595.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	595.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	495	495	495	495	495	
5°	476	484	485	488	492	44
15°	383	395	412	440	456	107
25°	264	280	307	350	383	121
35°	140	159	195	254	303	87
45°	29	48	98	166	217	27
55°	9	11	30	82	117	8
65°	4	11	17	21	26	4
75°	3	10	10	9	9	3
85°	2	7	7	7	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	495.4	495.4	495.4	495.4	495.4
2.5°	489.4	496.2	492.4	492.4	493.2
5°	476.5	484.1	484.8	487.9	492.4
7.5°	457.6	467.4	472.0	481.0	487.9
10°	434.8	445.4	454.5	470.4	478.8
12.5°	409.8	420.4	434.1	456.0	468.9
15°	382.6	394.7	412.1	440.1	456.0
17.5°	354.5	366.7	387.9	419.7	440.1
20°	325.0	338.6	361.4	397.7	422.7
22.5°	295.4	310.6	334.8	374.2	403.0
25°	263.6	280.3	306.8	350.0	382.6
27.5°	233.3	250.7	278.8	325.7	362.9
30°	202.3	219.7	250.0	300.7	342.4
32.5°	170.4	190.1	222.0	277.3	322.0
35°	140.1	159.1	194.7	254.5	303.0
37.5°	110.6	129.5	166.7	232.6	284.1
40°	81.1	100.8	141.7	211.4	263.6
42.5°	53.0	73.5	119.7	190.1	240.9
45°	28.8	47.7	98.5	165.9	216.7
47.5°	15.9	25.8	79.5	143.2	193.2
50°	12.9	14.4	61.4	122.0	166.7
52.5°	10.6	12.1	43.9	101.5	142.4
55°	9.1	10.6	30.3	81.8	116.7
57.5°	7.6	9.1	24.2	62.9	91.7
60°	5.3	9.1	22.0	46.2	68.2
62.5°	4.5	9.1	18.9	31.8	45.5
65°	3.8	10.6	16.7	21.2	25.8
67.5°	3.0	10.6	14.4	13.6	13.6
70°	3.0	10.6	12.1	11.4	12.1
72.5°	3.0	11.4	11.4	10.6	10.6
75°	3.0	9.8	9.8	9.1	9.1
77.5°	3.0	9.1	9.1	8.3	8.3
80°	3.0	8.3	8.3	7.6	6.8
82.5°	3.0	7.6	7.6	6.8	6.1
85°	2.3	6.8	6.8	6.8	4.5
87.5°	2.3	6.1	6.8	6.1	3.8
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	0.00	0.00	0.00	0.15	0.47	12.67	13.92	13.03	14.24	14.55
	3H	1.09	2.21	1.47	2.54	2.90	12.75	13.86	13.13	14.19	14.55
	4H	2.25	3.29	2.66	3.64	4.02	12.81	13.84	13.21	14.19	14.58
	6H	3.30	4.25	3.71	4.62	5.01	12.91	13.86	13.32	14.23	14.62
	8H	3.83	4.73	4.26	5.12	5.53	12.97	13.87	13.40	14.26	14.66
	12H	4.32	5.18	4.75	5.56	5.99	13.04	13.89	13.47	14.28	14.71
4H	2H	1.85	2.88	2.25	3.23	3.62	12.53	13.56	12.93	13.91	14.30
	3H	4.30	5.15	4.72	5.55	5.96	12.70	13.55	13.11	13.95	14.36
	4H	5.64	6.39	6.07	6.81	7.26	12.83	13.59	13.26	14.01	14.45
	6H	6.76	7.42	7.23	7.86	8.33	13.04	13.70	13.51	14.14	14.61
	8H	7.27	7.88	7.74	8.33	8.80	13.17	13.78	13.64	14.23	14.70
	12H	7.73	8.27	8.22	8.76	9.23	13.33	13.87	13.81	14.35	14.82
8H	4H	6.55	7.16	7.02	7.61	8.08	12.83	13.44	13.30	13.89	14.36
	6H	8.15	8.65	8.65	9.15	9.63	13.16	13.66	13.66	14.16	14.64
	8H	8.98	9.43	9.50	9.95	10.44	13.39	13.84	13.91	14.36	14.85
	12H	9.76	10.16	10.28	10.65	11.23	13.71	14.11	14.23	14.61	15.18
12H	4H	6.72	7.26	7.21	7.75	8.22	12.82	13.36	13.31	13.84	14.32
	6H	8.47	8.92	8.99	9.43	9.93	13.19	13.64	13.71	14.16	14.65
	8H	9.48	9.88	9.99	10.37	10.95	13.50	13.90	14.02	14.40	14.97