

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: P1059392

Luminaire Tested: S123RDRP-S775D940-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059392
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-S775D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

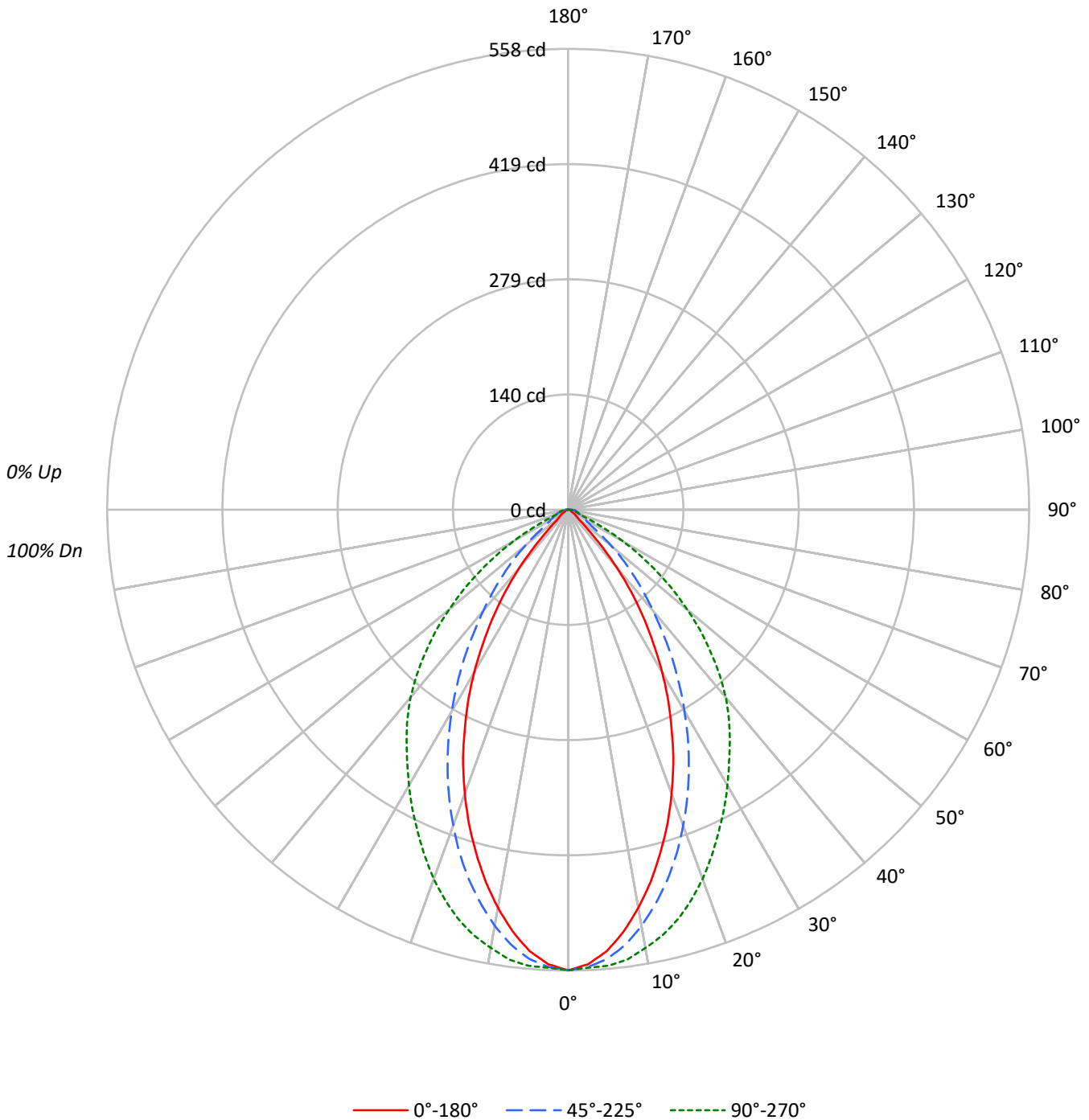
Lumens per Lamp: N/A
Luminaire Lumens: 669.9 lumens
Efficiency: N/A
Efficacy: 26.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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	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°	6549	6549	6549
5°	6323	6432	6534
10°	5837	6100	6426
15°	5235	5639	6240
20°	4571	5083	5946
25°	3844	4475	5579
30°	3087	3816	5226
35°	2262	3142	4890
40°	1398	2445	4548
45°	538	1842	4050
50°	265	1262	3427
55°	209	698	2688
60°	141	580	1801
65°	119	522	806
70°	117	467	467
75°	154	504	463
80°	230	636	521
85°	350	1037	687

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4050 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.1	7.6
10°-20°	130.9	19.5
20°-30°	162.5	24.3
30°-40°	145.6	21.7
40°-50°	95.7	14.3
50°-60°	47.9	7.2
60°-70°	18.9	2.8
70°-80°	10.6	1.6
80°-90°	6.7	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°	344.5	51.4
0°-40°	490.1	73.2
0°-60°	633.7	94.6
0°-90°	669.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	669.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	558	558	558	558	558	
5°	536	545	546	549	554	50
15°	431	444	464	495	513	120
25°	297	316	345	394	431	136
35°	158	179	219	286	341	98
45°	32	54	111	187	244	31
55°	10	12	34	92	131	9
65°	4	12	19	24	29	4
75°	3	11	11	10	10	4
85°	3	8	8	8	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	557.7	557.7	557.7	557.7	557.7
2.5°	550.9	558.5	554.3	554.3	555.1
5°	536.4	544.9	545.7	549.2	554.3
7.5°	515.0	526.1	531.2	541.5	549.2
10°	489.5	501.4	511.6	529.5	538.9
12.5°	461.3	473.3	488.6	513.3	527.8
15°	430.6	444.3	463.9	495.4	513.3
17.5°	399.1	412.7	436.6	472.4	495.4
20°	365.8	381.2	406.8	447.7	475.8
22.5°	332.6	349.6	376.9	421.2	453.7
25°	296.7	315.5	345.4	394.0	430.6
27.5°	262.6	282.3	313.8	366.7	408.5
30°	227.7	247.3	281.4	338.5	385.4
32.5°	191.9	214.0	249.8	312.1	362.4
35°	157.8	179.1	219.2	286.5	341.1
37.5°	124.5	145.8	187.6	261.8	319.8
40°	91.2	113.4	159.5	237.9	296.7
42.5°	59.7	82.7	134.7	214.0	271.2
45°	32.4	53.7	110.9	186.7	243.9
47.5°	17.9	29.0	89.5	161.2	217.4
50°	14.5	16.2	69.1	137.3	187.6
52.5°	11.9	13.6	49.5	114.3	160.3
55°	10.2	11.9	34.1	92.1	131.3
57.5°	8.5	10.2	27.3	70.8	103.2
60°	6.0	10.2	24.7	52.0	76.7
62.5°	5.1	10.2	21.3	35.8	51.2
65°	4.3	11.9	18.8	23.9	29.0
67.5°	3.4	11.9	16.2	15.3	15.3
70°	3.4	11.9	13.6	12.8	13.6
72.5°	3.4	12.8	12.8	11.9	11.9
75°	3.4	11.1	11.1	10.2	10.2
77.5°	3.4	10.2	10.2	9.4	9.4
80°	3.4	9.4	9.4	8.5	7.7
82.5°	3.4	8.5	8.5	7.7	6.8
85°	2.6	7.7	7.7	7.7	5.1
87.5°	2.6	6.8	7.7	6.8	4.3
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	0.22	0.00	0.54	0.85	13.08	14.33	13.44	14.65	14.96
	3H	1.49	2.60	1.87	2.93	3.30	13.16	14.27	13.54	14.60	14.96
	4H	2.66	3.70	3.07	4.05	4.43	13.22	14.25	13.62	14.60	14.99
	6H	3.71	4.66	4.13	5.04	5.43	13.32	14.27	13.73	14.64	15.03
	8H	4.25	5.15	4.68	5.54	5.95	13.38	14.28	13.81	14.67	15.07
	12H	4.74	5.60	5.17	5.98	6.41	13.45	14.31	13.88	14.69	15.12
4H	2H	2.25	3.28	2.65	3.64	4.02	12.94	13.97	13.34	14.32	14.71
	3H	4.70	5.55	5.12	5.95	6.36	13.11	13.96	13.52	14.36	14.77
	4H	6.05	6.81	6.49	7.23	7.67	13.24	13.99	13.67	14.41	14.86
	6H	7.18	7.84	7.65	8.28	8.75	13.45	14.11	13.92	14.55	15.02
	8H	7.69	8.30	8.16	8.75	9.22	13.58	14.19	14.05	14.64	15.11
	12H	8.15	8.69	8.64	9.18	9.65	13.74	14.28	14.22	14.76	15.24
8H	4H	6.97	7.58	7.44	8.03	8.50	13.24	13.85	13.71	14.30	14.77
	6H	8.57	9.07	9.07	9.57	10.05	13.57	14.07	14.07	14.57	15.05
	8H	9.39	9.84	9.92	10.36	10.85	13.80	14.25	14.32	14.77	15.26
	12H	10.18	10.58	10.69	11.07	11.64	14.13	14.52	14.64	15.02	15.59
12H	4H	7.14	7.68	7.62	8.16	8.63	13.23	13.77	13.72	14.25	14.73
	6H	8.88	9.33	9.41	9.85	10.34	13.60	14.05	14.12	14.57	15.06
	8H	9.89	10.29	10.41	10.78	11.36	13.91	14.31	14.43	14.81	15.38