

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: P1059331

Luminaire Tested: S123RDRP-S775D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059331
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D830-X4F0-XX-UDD-SVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

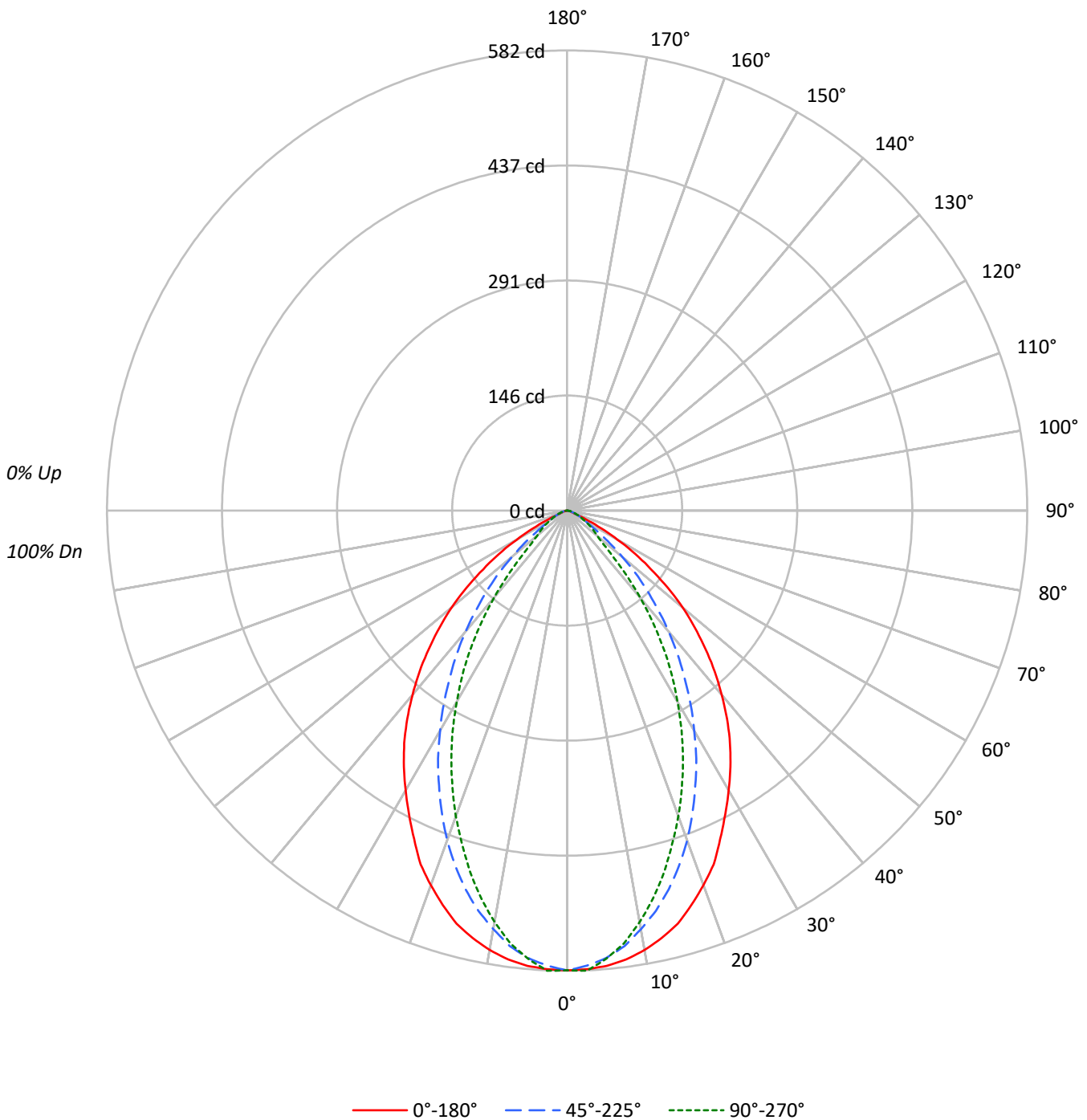
Lumens per Lamp: N/A
Luminaire Lumens: 750.7 lumens
Efficiency: N/A
Efficacy: 29.1 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6828	6828	6828
5°	6812	6695	6706
10°	6730	6408	6300
15°	6577	6030	5756
20°	6299	5546	5141
25°	5937	4969	4491
30°	5542	4358	3784
35°	5149	3717	3045
40°	4665	3063	2207
45°	4112	2376	1330
50°	3486	1661	904
55°	2653	995	755
60°	1733	634	592
65°	725	475	475
70°	247	340	371
75°	204	245	286
80°	122	183	243
85°	121	121	243

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4112 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	7.2
10°-20°	140.6	18.7
20°-30°	180.3	24.0
30°-40°	169.2	22.5
40°-50°	118.0	15.7
50°-60°	61.0	8.1
60°-70°	20.9	2.8
70°-80°	6.0	0.8
80°-90°	1.3	0.2
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°	374.5	49.9
0°-40°	543.7	72.4
0°-60°	722.7	96.3
0°-90°	750.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	750.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	582	582	582	582	582	
5°	578	577	568	571	569	55
15°	541	528	496	480	474	152
25°	458	429	384	357	347	211
35°	359	315	259	226	212	224
45°	248	202	143	99	80	191
55°	130	97	49	38	37	117
65°	26	22	17	16	17	31
75°	4	4	5	6	6	5
85°	1	1	1	1	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	581.5	581.5	581.5	581.5	581.5
2.5°	580.6	581.5	576.1	581.5	582.4
5°	577.9	577.0	568.0	570.7	568.9
7.5°	572.5	569.8	555.4	551.8	551.8
10°	564.4	559.0	537.4	531.1	528.4
12.5°	553.6	546.4	518.5	506.8	502.3
15°	541.0	527.5	496.0	479.8	473.5
17.5°	523.0	505.0	470.8	451.9	442.0
20°	504.1	481.6	443.8	421.3	411.4
22.5°	484.3	457.3	414.1	389.8	379.0
25°	458.2	429.4	383.5	357.4	346.6
27.5°	433.0	402.4	353.8	324.1	313.3
30°	408.7	372.7	321.4	292.6	279.1
32.5°	384.4	343.9	290.8	259.3	246.7
35°	359.2	315.1	259.3	226.0	212.4
37.5°	332.2	287.2	229.6	193.5	177.3
40°	304.3	257.5	199.8	159.3	144.0
42.5°	276.4	230.5	170.1	128.7	110.7
45°	247.6	202.5	143.1	99.0	80.1
47.5°	218.7	174.6	117.0	72.0	60.3
50°	190.8	148.5	90.9	53.1	49.5
52.5°	160.2	123.3	68.4	44.1	43.2
55°	129.6	97.2	48.6	37.8	36.9
57.5°	102.6	75.6	35.1	31.5	30.6
60°	73.8	54.0	27.0	26.1	25.2
62.5°	48.6	36.9	21.6	20.7	20.7
65°	26.1	22.5	17.1	16.2	17.1
67.5°	10.8	12.6	12.6	13.5	13.5
70°	7.2	8.1	9.9	10.8	10.8
72.5°	5.4	6.3	7.2	8.1	8.1
75°	4.5	4.5	5.4	6.3	6.3
77.5°	2.7	3.6	3.6	4.5	5.4
80°	1.8	2.7	2.7	3.6	3.6
82.5°	0.9	1.8	1.8	2.7	2.7
85°	0.9	0.9	0.9	0.9	1.8
87.5°	0.0	0.0	0.0	0.0	0.9
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	13.01	14.27	13.37	14.58	14.89	6.51	7.77	6.88	8.08	8.40
	3H	12.96	14.07	13.34	14.40	14.76	7.29	8.40	7.67	8.73	9.09
	4H	12.91	13.94	13.31	14.29	14.67	7.49	8.52	7.89	8.87	9.25
	6H	12.84	13.78	13.25	14.15	14.55	7.63	8.58	8.05	8.95	9.34
	8H	12.79	13.68	13.22	14.08	14.48	7.67	8.56	8.10	8.95	9.36
	12H	12.75	13.60	13.18	13.98	14.42	7.69	8.54	8.12	8.92	9.35
4H	2H	12.85	13.88	13.26	14.23	14.62	6.77	7.80	7.17	8.15	8.53
	3H	12.84	13.67	13.25	14.08	14.48	7.68	8.51	8.09	8.92	9.32
	4H	12.79	13.53	13.22	13.95	14.39	7.95	8.69	8.38	9.11	9.56
	6H	12.73	13.37	13.19	13.81	14.28	8.16	8.80	8.63	9.25	9.72
	8H	12.68	13.27	13.15	13.72	14.19	8.23	8.82	8.70	9.27	9.74
	12H	12.63	13.15	13.12	13.64	14.11	8.26	8.79	8.75	9.27	9.75
8H	4H	12.67	13.27	13.14	13.72	14.19	7.93	8.53	8.40	8.97	9.45
	6H	12.61	13.09	13.11	13.59	14.07	8.20	8.68	8.71	9.18	9.67
	8H	12.56	12.99	13.08	13.51	14.00	8.31	8.74	8.83	9.26	9.75
	12H	12.52	12.91	13.04	13.40	13.98	8.38	8.77	8.90	9.26	9.84
12H	4H	12.63	13.15	13.11	13.63	14.11	7.89	8.42	8.38	8.90	9.38
	6H	12.55	12.99	13.08	13.50	14.00	8.16	8.60	8.69	9.11	9.61
	8H	12.52	12.91	13.04	13.40	13.98	8.30	8.69	8.82	9.18	9.76