

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: P1059328

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059328
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D830-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

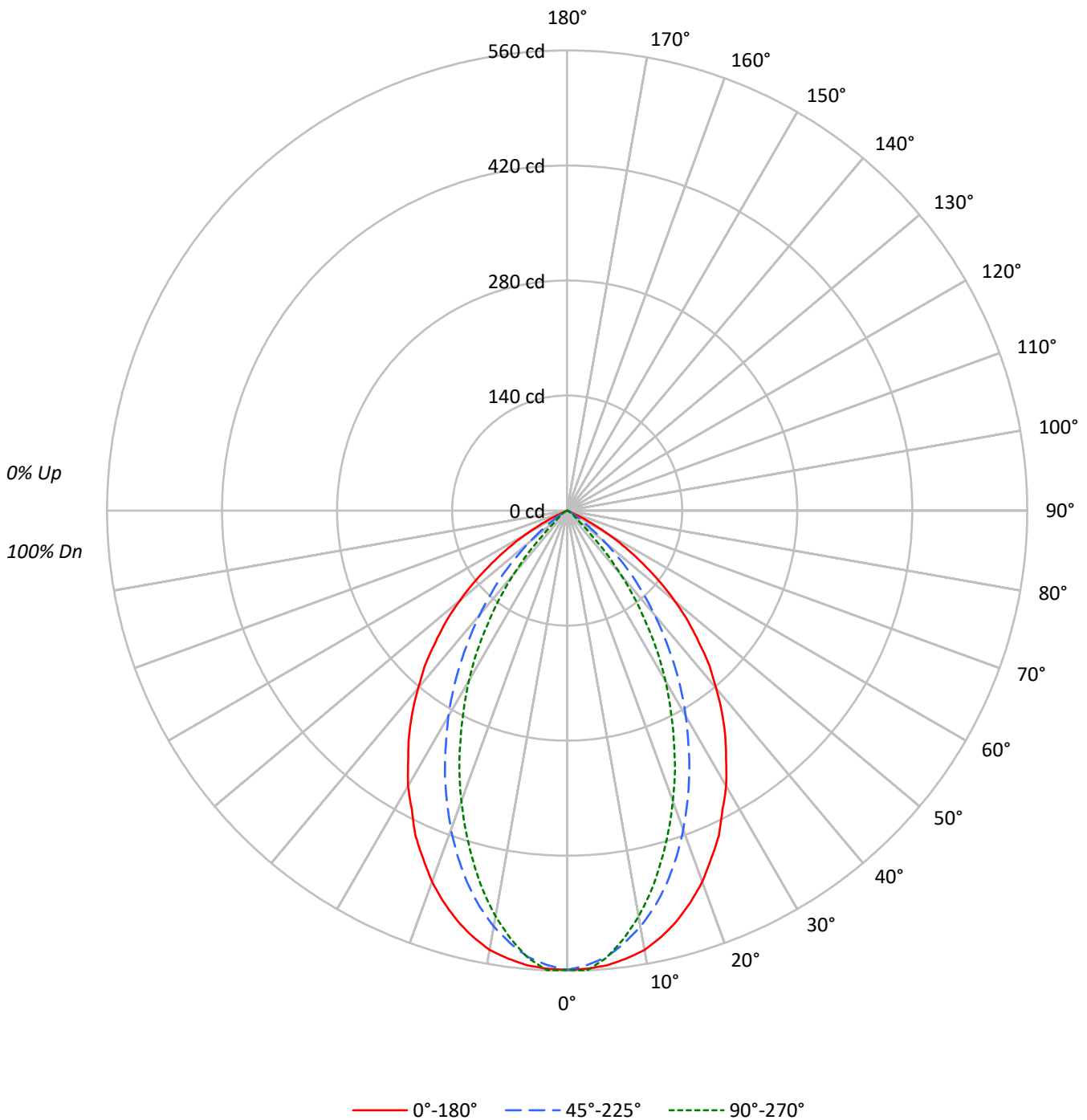
Lumens per Lamp: N/A
Luminaire Lumens: 637.8 lumens
Efficiency: N/A
Efficacy: 24.7 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6564	6564	6564
5°	6547	6430	6441
10°	6472	6129	5978
15°	6281	5701	5373
20°	6007	5163	4702
25°	5657	4561	3976
30°	5249	3917	3246
35°	4812	3238	2413
40°	4318	2538	1545
45°	3766	1853	643
50°	3124	1102	247
55°	2303	461	184
60°	1395	169	106
65°	375	100	50
70°	0	31	31
75°	0	0	41
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3766 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.5	8.1
10°-20°	132.8	20.8
20°-30°	165.5	26.0
30°-40°	148.0	23.2
40°-50°	93.4	14.6
50°-60°	39.1	6.1
60°-70°	7.4	1.2
70°-80°	0.2	0.0
80°-90°	0.0	0.0
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°	349.8	54.8
0°-40°	497.8	78.0
0°-60°	630.2	98.8
0°-90°	637.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	637.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	559	559	559	559	559	
5°	555	554	546	547	546	53
15°	517	504	469	449	442	145
25°	437	402	352	321	307	200
35°	336	287	226	185	168	209
45°	227	176	112	59	39	175
55°	112	77	22	9	9	101
65°	14	10	4	2	2	19
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	559.0	559.0	559.0	559.0	559.0
2.5°	558.1	559.0	553.6	559.0	559.9
5°	555.4	554.5	545.5	547.3	546.4
7.5°	550.0	547.3	531.1	527.5	525.7
10°	542.8	535.6	514.0	505.0	501.4
12.5°	531.1	521.2	493.3	478.9	473.5
15°	516.7	504.1	469.0	449.2	442.0
17.5°	499.6	481.6	442.0	420.4	409.6
20°	480.7	455.5	413.2	387.1	376.3
22.5°	458.2	430.3	382.6	354.7	343.0
25°	436.6	401.5	352.0	321.3	306.9
27.5°	409.6	372.7	319.5	288.0	272.7
30°	387.1	344.8	288.9	253.8	239.4
32.5°	360.1	315.9	257.4	218.7	205.2
35°	335.7	287.1	225.9	185.4	168.3
37.5°	309.6	259.2	194.4	152.1	135.9
40°	281.7	231.3	165.6	118.8	100.8
42.5°	256.5	203.4	136.8	88.2	70.2
45°	226.8	176.4	111.6	59.4	38.7
47.5°	199.8	151.2	84.6	33.3	20.7
50°	171.0	125.1	60.3	17.1	13.5
52.5°	141.3	99.9	39.6	11.7	10.8
55°	112.5	77.4	22.5	9.0	9.0
57.5°	84.6	55.8	11.7	7.2	6.3
60°	59.4	36.9	7.2	5.4	4.5
62.5°	34.2	21.6	5.4	3.6	3.6
65°	13.5	9.9	3.6	1.8	1.8
67.5°	0.9	2.7	1.8	0.9	0.9
70°	0.0	0.0	0.9	0.9	0.9
72.5°	0.0	0.0	0.9	0.9	0.9
75°	0.0	0.0	0.0	0.0	0.9
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	11.73	12.90	12.09	13.22	13.53	0.00	0.00	0.00	0.00	0.00
	3H	11.57	12.60	11.95	12.93	13.30	0.00	0.00	0.00	0.00	0.00
	4H	11.48	12.44	11.89	12.79	13.17	0.00	0.00	0.00	0.00	0.00
	6H	11.39	12.26	11.81	12.63	13.03	0.00	0.00	0.00	0.00	0.00
	8H	11.34	12.16	11.77	12.55	12.96	0.00	0.00	0.00	0.00	0.00
	12H	11.29	12.07	11.72	12.46	12.89	0.00	0.00	0.00	0.00	0.00
4H	2H	11.49	12.44	11.89	12.79	13.18	0.00	0.00	0.00	0.00	0.00
	3H	11.32	12.09	11.74	12.50	12.90	0.00	0.00	0.00	0.00	0.00
	4H	11.22	11.90	11.65	12.32	12.77	0.00	0.00	0.00	0.00	0.00
	6H	11.12	11.70	11.59	12.15	12.62	0.00	0.00	0.00	0.00	0.00
	8H	11.05	11.60	11.53	12.05	12.52	0.00	0.00	0.00	0.00	0.00
	12H	11.00	11.47	11.49	11.96	12.44	0.00	0.00	0.00	0.00	0.00
8H	4H	11.05	11.60	11.53	12.05	12.52	0.00	0.00	0.00	0.00	0.00
	6H	10.94	11.38	11.44	11.88	12.36	0.00	0.00	0.00	0.00	0.00
	8H	10.87	11.26	11.39	11.78	12.28	0.00	0.00	0.00	0.00	0.00
	12H	10.81	11.16	11.33	11.66	12.23	0.00	0.00	0.00	0.00	0.00
12H	4H	11.00	11.47	11.49	11.96	12.44	0.00	0.00	0.00	0.00	0.00
	6H	10.87	11.26	11.39	11.78	12.28	0.00	0.00	0.00	0.00	0.00
	8H	10.81	11.16	11.33	11.66	12.23	0.00	0.00	0.00	0.00	0.00