

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: P1059337

Luminaire Tested: S123RDRP-S775D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059337
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-S775D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

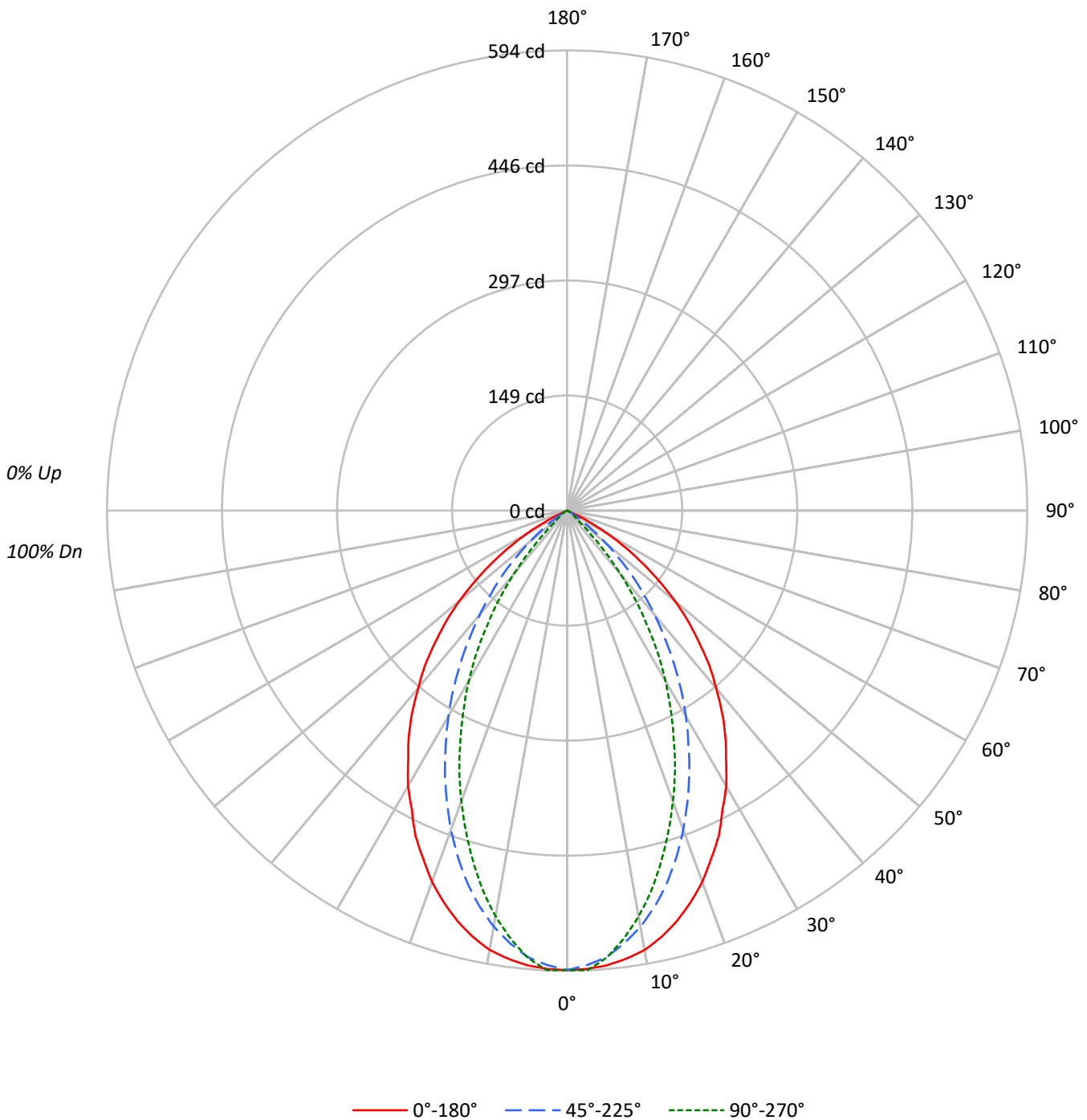
Lumens per Lamp: N/A
Luminaire Lumens: 676.7 lumens
Efficiency: N/A
Efficacy: 26.2 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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°	6964	6964	6964
5°	6945	6821	6833
10°	6867	6502	6342
15°	6664	6049	5700
20°	6373	5477	4988
25°	6001	4838	4220
30°	5569	4157	3444
35°	5106	3436	2560
40°	4582	2693	1640
45°	3997	1966	683
50°	3316	1169	261
55°	2444	489	197
60°	1480	178	113
65°	397	106	53
70°	0	34	34
75°	0	0	45
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3997 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.6	8.1
10°-20°	140.9	20.8
20°-30°	175.6	25.9
30°-40°	157.0	23.2
40°-50°	99.1	14.6
50°-60°	41.5	6.1
60°-70°	7.8	1.2
70°-80°	0.3	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°	371.1	54.8
0°-40°	528.1	78.0
0°-60°	668.7	98.8
0°-90°	676.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	676.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	593	593	593	593	593	
5°	589	588	579	581	580	56
15°	548	535	498	476	469	154
25°	463	426	373	341	326	212
35°	356	305	240	197	179	222
45°	241	187	118	63	41	186
55°	119	82	24	10	10	107
65°	14	10	4	2	2	20
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°	593.1	593.1	593.1	593.1	593.1
2.5°	592.1	593.1	587.3	593.1	594.0
5°	589.2	588.3	578.7	580.6	579.7
7.5°	583.5	580.6	563.5	559.6	557.7
10°	575.9	568.2	545.3	535.8	531.9
12.5°	563.5	552.9	523.3	508.1	502.3
15°	548.2	534.8	497.6	476.5	468.9
17.5°	530.0	510.9	468.9	446.0	434.5
20°	510.0	483.2	438.3	410.7	399.2
22.5°	486.1	456.5	405.9	376.3	363.9
25°	463.2	425.9	373.4	340.9	325.7
27.5°	434.5	395.4	339.0	305.6	289.4
30°	410.7	365.8	306.6	269.3	254.0
32.5°	382.0	335.2	273.1	232.1	217.7
35°	356.2	304.6	239.7	196.7	178.6
37.5°	328.5	275.0	206.3	161.4	144.2
40°	298.9	245.4	175.7	126.1	107.0
42.5°	272.2	215.8	145.2	93.6	74.5
45°	240.7	187.2	118.4	63.0	41.1
47.5°	212.0	160.4	89.8	35.3	22.0
50°	181.5	132.7	64.0	18.1	14.3
52.5°	149.9	106.0	42.0	12.4	11.5
55°	119.4	82.1	23.9	9.6	9.6
57.5°	89.8	59.2	12.4	7.6	6.7
60°	63.0	39.2	7.6	5.7	4.8
62.5°	36.3	22.9	5.7	3.8	3.8
65°	14.3	10.5	3.8	1.9	1.9
67.5°	1.0	2.9	1.9	1.0	1.0
70°	0.0	0.0	1.0	1.0	1.0
72.5°	0.0	0.0	1.0	1.0	1.0
75°	0.0	0.0	0.0	0.0	1.0
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	11.93	13.11	12.30	13.42	13.74	0.00	0.00	0.00	0.00	0.00
	3H	11.77	12.81	12.15	13.14	13.50	0.00	0.00	0.00	0.00	0.00
	4H	11.69	12.64	12.09	12.99	13.38	0.00	0.00	0.00	0.00	0.00
	6H	11.59	12.47	12.01	12.84	13.24	0.00	0.00	0.00	0.00	0.00
	8H	11.55	12.37	11.98	12.76	13.17	0.00	0.00	0.00	0.00	0.00
	12H	11.49	12.28	11.93	12.66	13.09	0.00	0.00	0.00	0.00	0.00
4H	2H	11.69	12.65	12.10	13.00	13.39	0.00	0.00	0.00	0.00	0.00
	3H	11.53	12.30	11.94	12.70	13.11	0.00	0.00	0.00	0.00	0.00
	4H	11.42	12.10	11.86	12.53	12.97	0.00	0.00	0.00	0.00	0.00
	6H	11.33	11.91	11.79	12.36	12.83	0.00	0.00	0.00	0.00	0.00
	8H	11.26	11.81	11.73	12.25	12.73	0.00	0.00	0.00	0.00	0.00
	12H	11.20	11.68	11.69	12.17	12.64	0.00	0.00	0.00	0.00	0.00
8H	4H	11.26	11.81	11.73	12.26	12.73	0.00	0.00	0.00	0.00	0.00
	6H	11.14	11.59	11.65	12.09	12.57	0.00	0.00	0.00	0.00	0.00
	8H	11.07	11.47	11.60	11.99	12.48	0.00	0.00	0.00	0.00	0.00
	12H	11.02	11.37	11.54	11.87	12.44	0.00	0.00	0.00	0.00	0.00
12H	4H	11.20	11.68	11.69	12.17	12.64	0.00	0.00	0.00	0.00	0.00
	6H	11.07	11.47	11.60	11.99	12.48	0.00	0.00	0.00	0.00	0.00
	8H	11.02	11.37	11.54	11.87	12.44	0.00	0.00	0.00	0.00	0.00