

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: P1059342

Luminaire Tested: S123RDRP-S775D835-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059342
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D835-X4F0-XX-UDD-SVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

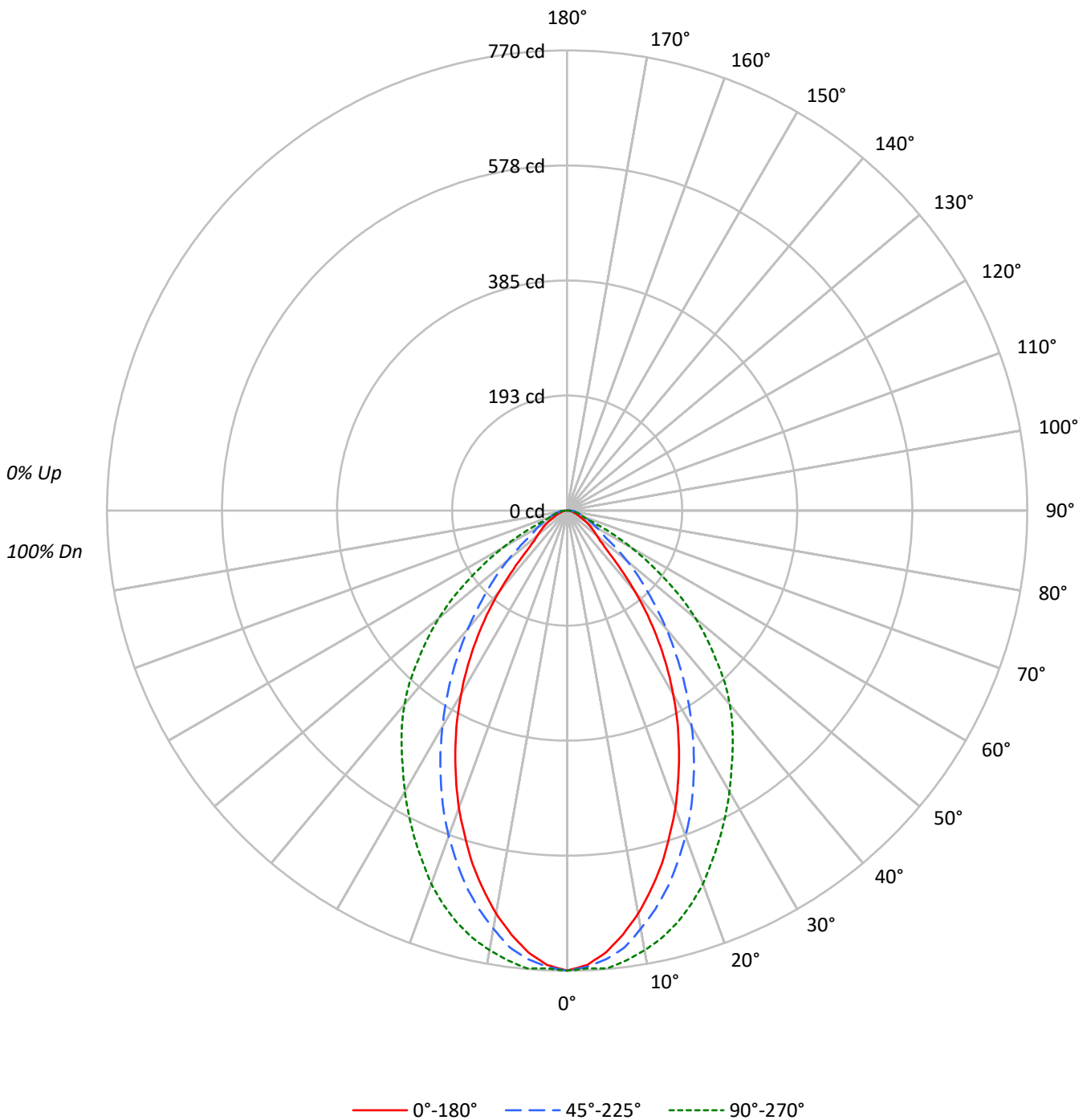
Lumens per Lamp: N/A
Luminaire Lumens: 1033.4 lumens
Efficiency: N/A
Efficacy: 40.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89					89			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71					71			
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64					64			
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58					58			
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52					52			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48					48			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44					44			
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40					40			
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9039	9039	9039
5°	8747	8883	9063
10°	8164	8472	8906
15°	7440	7918	8673
20°	6620	7241	8305
25°	5737	6481	7831
30°	4811	5654	7365
35°	3812	4812	6922
40°	2698	3958	6495
45°	1588	3129	5844
50°	1187	2377	5119
55°	999	1605	4111
60°	808	1369	2919
65°	639	1170	1542
70°	560	1016	951
75°	522	953	912
80°	521	1035	906
85°	647	1549	1159

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5844 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.8	6.9
10°-20°	184.1	17.8
20°-30°	234.5	22.7
30°-40°	220.6	21.3
40°-50°	158.9	15.4
50°-60°	91.7	8.9
60°-70°	41.9	4.1
70°-80°	21.0	2.0
80°-90°	9.9	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°	489.5	47.4
0°-40°	710.0	68.7
0°-60°	960.6	93.0
0°-90°	1033.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1033.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	770	770	770	770	770	
5°	742	754	754	761	769	69
15°	612	634	651	688	713	171
25°	443	466	500	556	604	203
35°	266	289	336	413	483	165
45°	96	120	188	283	352	81
55°	49	51	78	149	201	44
65°	23	32	42	47	56	23
75°	12	22	21	20	20	12
85°	5	10	12	10	9	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	769.8	769.8	769.8	769.8	769.8
2.5°	761.2	770.8	764.1	765.1	767.0
5°	742.1	754.5	753.6	761.2	768.9
7.5°	715.3	729.7	737.3	748.8	759.3
10°	684.7	701.0	710.5	731.6	746.9
12.5°	649.3	670.4	682.8	710.5	732.5
15°	612.0	634.0	651.3	687.6	713.4
17.5°	570.0	593.9	615.9	658.9	690.5
20°	529.8	552.8	579.5	626.4	664.6
22.5°	485.8	510.7	541.3	591.0	634.0
25°	442.8	465.7	500.2	555.6	604.4
27.5°	399.7	422.7	459.0	520.2	573.8
30°	354.8	378.7	417.0	484.9	543.2
32.5°	310.8	333.8	376.8	450.4	511.6
35°	265.9	288.8	335.7	413.1	482.9
37.5°	221.9	245.8	295.5	382.5	454.3
40°	176.0	201.8	258.2	351.0	423.7
42.5°	132.9	160.7	220.9	318.5	390.2
45°	95.6	119.5	188.4	283.1	351.9
47.5°	74.6	87.0	158.7	246.7	316.5
50°	65.0	66.9	130.1	213.3	280.2
52.5°	56.4	58.3	102.3	181.7	241.9
55°	48.8	50.7	78.4	149.2	200.8
57.5°	41.1	44.0	65.0	118.6	161.6
60°	34.4	38.3	58.3	90.9	124.3
62.5°	27.7	34.4	49.7	66.9	88.9
65°	23.0	32.5	42.1	46.9	55.5
67.5°	19.1	29.6	35.4	33.5	32.5
70°	16.3	26.8	29.6	26.8	27.7
72.5°	13.4	24.9	24.9	23.0	23.0
75°	11.5	22.0	21.0	20.1	20.1
77.5°	9.6	19.1	18.2	17.2	16.3
80°	7.7	15.3	15.3	14.3	13.4
82.5°	6.7	12.4	12.4	12.4	10.5
85°	4.8	10.5	11.5	10.5	8.6
87.5°	3.8	9.6	9.6	8.6	5.7
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	7.62	8.94	7.99	9.25	9.57	14.98	16.30	15.35	16.61	16.93
	3H	9.01	10.18	9.39	10.51	10.87	15.21	16.38	15.59	16.71	17.08
	4H	9.56	10.65	9.97	11.00	11.39	15.33	16.42	15.73	16.77	17.15
	6H	10.00	11.00	10.41	11.37	11.77	15.44	16.45	15.86	16.82	17.21
	8H	10.18	11.13	10.61	11.52	11.92	15.49	16.44	15.93	16.84	17.24
	12H	10.33	11.24	10.76	11.62	12.05	15.55	16.46	15.99	16.84	17.28
4H	2H	8.72	9.81	9.12	10.16	10.55	14.94	16.03	15.34	16.38	16.77
	3H	10.38	11.28	10.80	11.68	12.08	15.30	16.20	15.71	16.60	17.00
	4H	11.19	11.99	11.63	12.41	12.86	15.50	16.30	15.93	16.72	17.16
	6H	11.83	12.52	12.29	12.97	13.43	15.73	16.42	16.19	16.86	17.33
	8H	12.07	12.71	12.53	13.16	13.63	15.83	16.48	16.30	16.92	17.39
	12H	12.28	12.85	12.77	13.33	13.81	15.96	16.53	16.44	17.01	17.49
8H	4H	11.64	12.28	12.11	12.73	13.20	15.54	16.18	16.01	16.63	17.10
	6H	12.55	13.08	13.05	13.57	14.05	15.86	16.39	16.37	16.89	17.37
	8H	12.96	13.44	13.49	13.96	14.45	16.05	16.53	16.57	17.05	17.54
	12H	13.38	13.80	13.90	14.30	14.87	16.30	16.72	16.82	17.22	17.79
12H	4H	11.69	12.26	12.18	12.75	13.22	15.53	16.10	16.01	16.58	17.06
	6H	12.68	13.16	13.20	13.67	14.16	15.88	16.36	16.40	16.87	17.36
	8H	13.22	13.64	13.73	14.14	14.71	16.14	16.56	16.65	17.05	17.62