

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: P1061770

Luminaire Tested: S125RDRP-S850D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061770
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D835-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

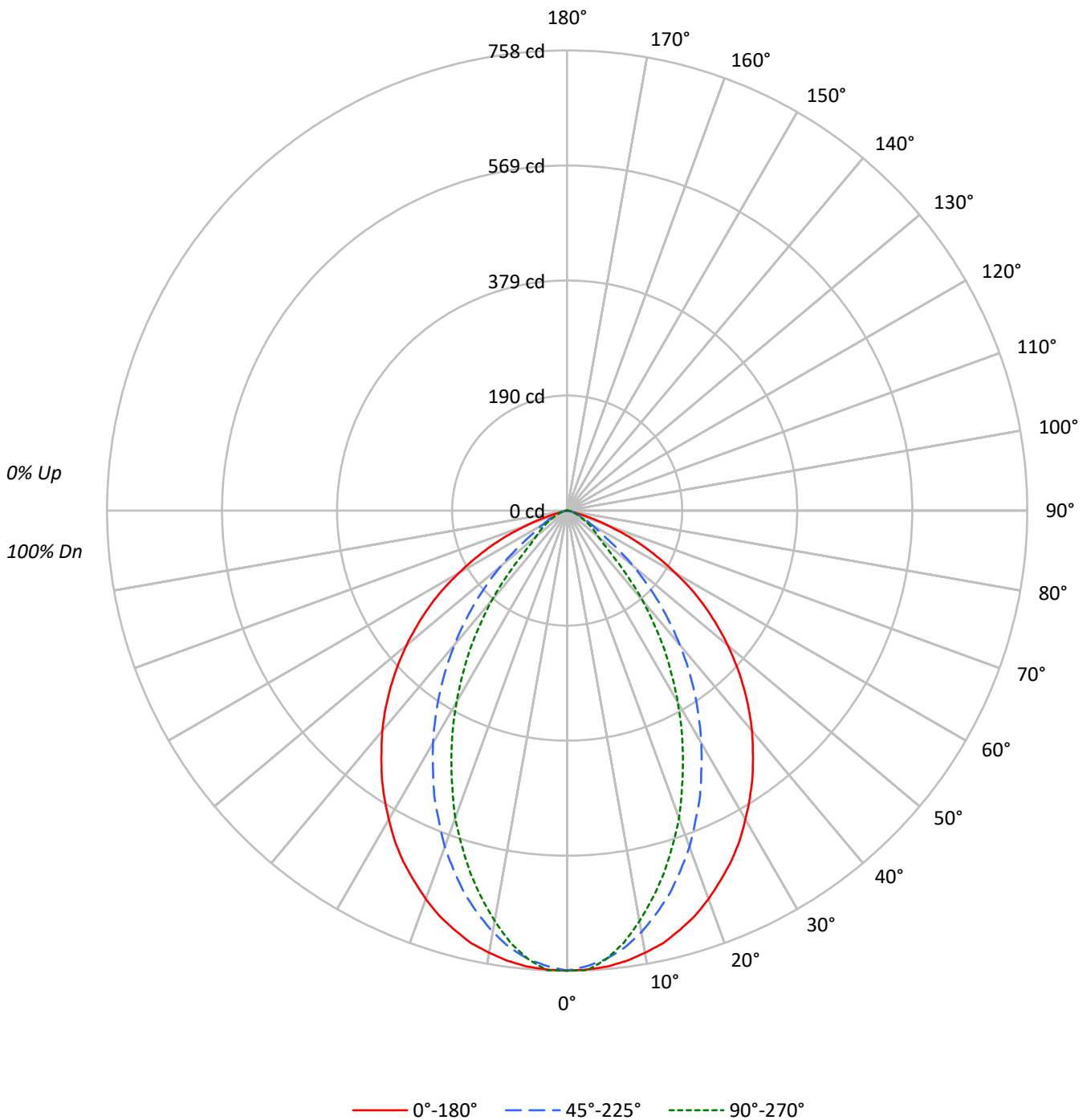
Lumens per Lamp: N/A
Luminaire Lumens: 1096.0 lumens
Efficiency: N/A
Efficacy: 42.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90					90			
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80					80			
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	79	73	68	77	71	67	75	70	66	73	69	65	63					63			
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57					57			
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52					52			
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47					47			
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43					43			
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39					39			
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5218	5218	5218
5°	5211	5124	5124
10°	5170	4928	4800
15°	5099	4653	4399
20°	4988	4318	3951
25°	4850	3935	3431
30°	4670	3514	2894
35°	4476	3076	2347
40°	4258	2597	1739
45°	4004	2082	1050
50°	3703	1526	722
55°	3341	936	601
60°	2838	636	478
65°	2243	487	376
70°	1415	348	310
75°	460	255	255
80°	155	190	230
85°	79	150	150

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4004 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.1	6.4
10°-20°	185.1	16.9
20°-30°	243.5	22.2
30°-40°	239.2	21.8
40°-50°	181.0	16.5
50°-60°	109.7	10.0
60°-70°	51.8	4.7
70°-80°	13.5	1.2
80°-90°	2.0	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°	498.6	45.5
0°-40°	737.9	67.3
0°-60°	1028.6	93.9
0°-90°	1096.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1096.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	754	752	741	742	741	72
15°	715	696	653	628	617	202
25°	638	590	518	470	452	293
35°	532	461	366	301	279	332
45°	411	324	214	136	108	317
55°	278	191	78	53	50	248
65°	138	70	30	25	23	136
75°	17	12	10	10	10	27
85°	1	1	2	2	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	757.8	757.8	757.8	757.8	757.8
2.5°	756.8	756.8	751.1	757.8	757.8
5°	754.0	752.0	741.4	742.4	741.4
7.5°	748.2	744.3	726.0	721.2	717.4
10°	739.5	731.8	704.8	693.3	686.6
12.5°	729.9	716.4	679.8	663.4	652.8
15°	715.4	696.2	652.8	627.8	617.2
17.5°	700.0	672.1	621.1	591.2	577.7
20°	680.8	648.0	589.3	552.7	539.2
22.5°	659.6	621.1	552.7	512.3	494.0
25°	638.4	590.3	518.0	469.9	451.6
27.5°	614.3	559.4	478.6	428.5	408.3
30°	587.4	528.6	442.0	390.0	364.0
32.5°	560.4	496.9	403.5	346.6	320.6
35°	532.5	461.2	365.9	301.4	279.2
37.5°	502.6	427.5	327.4	260.0	234.0
40°	473.7	393.8	288.9	217.6	193.5
42.5°	442.9	360.1	250.4	176.2	149.3
45°	411.2	323.5	213.8	135.8	107.8
47.5°	378.4	290.8	177.2	100.1	80.9
50°	345.7	256.1	142.5	74.1	67.4
52.5°	312.0	222.4	107.8	61.6	58.7
55°	278.3	190.7	78.0	53.0	50.1
57.5°	243.6	156.0	58.7	45.3	42.4
60°	206.1	125.2	46.2	37.6	34.7
62.5°	171.4	98.2	37.6	30.8	28.9
65°	137.7	70.3	29.9	25.0	23.1
67.5°	103.0	47.2	23.1	19.3	19.3
70°	70.3	30.8	17.3	15.4	15.4
72.5°	42.4	18.3	12.5	12.5	12.5
75°	17.3	11.6	9.6	9.6	9.6
77.5°	5.8	6.7	6.7	7.7	7.7
80°	3.9	3.9	4.8	5.8	5.8
82.5°	1.9	2.9	2.9	3.9	3.9
85°	1.0	1.0	1.9	1.9	1.9
87.5°	0.0	0.0	0.0	1.0	1.0
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	15.07	16.40	15.43	16.71	17.03	5.73	7.06	6.10	7.38	7.69
	3H	15.77	16.95	16.15	17.28	17.65	6.51	7.69	6.89	8.02	8.38
	4H	15.79	16.89	16.19	17.24	17.62	6.76	7.86	7.16	8.21	8.59
	6H	15.72	16.73	16.14	17.10	17.49	6.94	7.94	7.35	8.31	8.71
	8H	15.68	16.63	16.11	17.02	17.43	6.98	7.94	7.41	8.33	8.73
	12H	15.64	16.55	16.07	16.93	17.36	6.99	7.90	7.42	8.28	8.71
4H	2H	14.90	16.00	15.30	16.35	16.73	6.22	7.31	6.62	7.67	8.05
	3H	15.65	16.54	16.06	16.94	17.35	7.13	8.02	7.54	8.42	8.82
	4H	15.66	16.46	16.10	16.88	17.32	7.44	8.23	7.87	8.65	9.09
	6H	15.60	16.29	16.07	16.73	17.20	7.70	8.38	8.16	8.83	9.29
	8H	15.55	16.19	16.02	16.64	17.11	7.76	8.40	8.23	8.85	9.32
	12H	15.51	16.07	15.99	16.55	17.03	7.79	8.35	8.28	8.84	9.31
8H	4H	15.55	16.18	16.02	16.63	17.10	7.55	8.19	8.02	8.63	9.10
	6H	15.47	15.99	15.97	16.49	16.97	7.87	8.39	8.37	8.88	9.36
	8H	15.42	15.88	15.94	16.40	16.89	7.97	8.44	8.50	8.96	9.45
	12H	15.38	15.79	15.89	16.28	16.86	8.04	8.45	8.55	8.94	9.51
12H	4H	15.50	16.07	15.99	16.55	17.02	7.52	8.08	8.01	8.56	9.04
	6H	15.41	15.88	15.94	16.40	16.89	7.84	8.30	8.36	8.82	9.31
	8H	15.38	15.79	15.89	16.29	16.86	7.98	8.39	8.50	8.89	9.46