

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: P1058044

Luminaire Tested: S122RDRP-S675D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058044  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S675D835-X4F0-XX-UDD-SVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

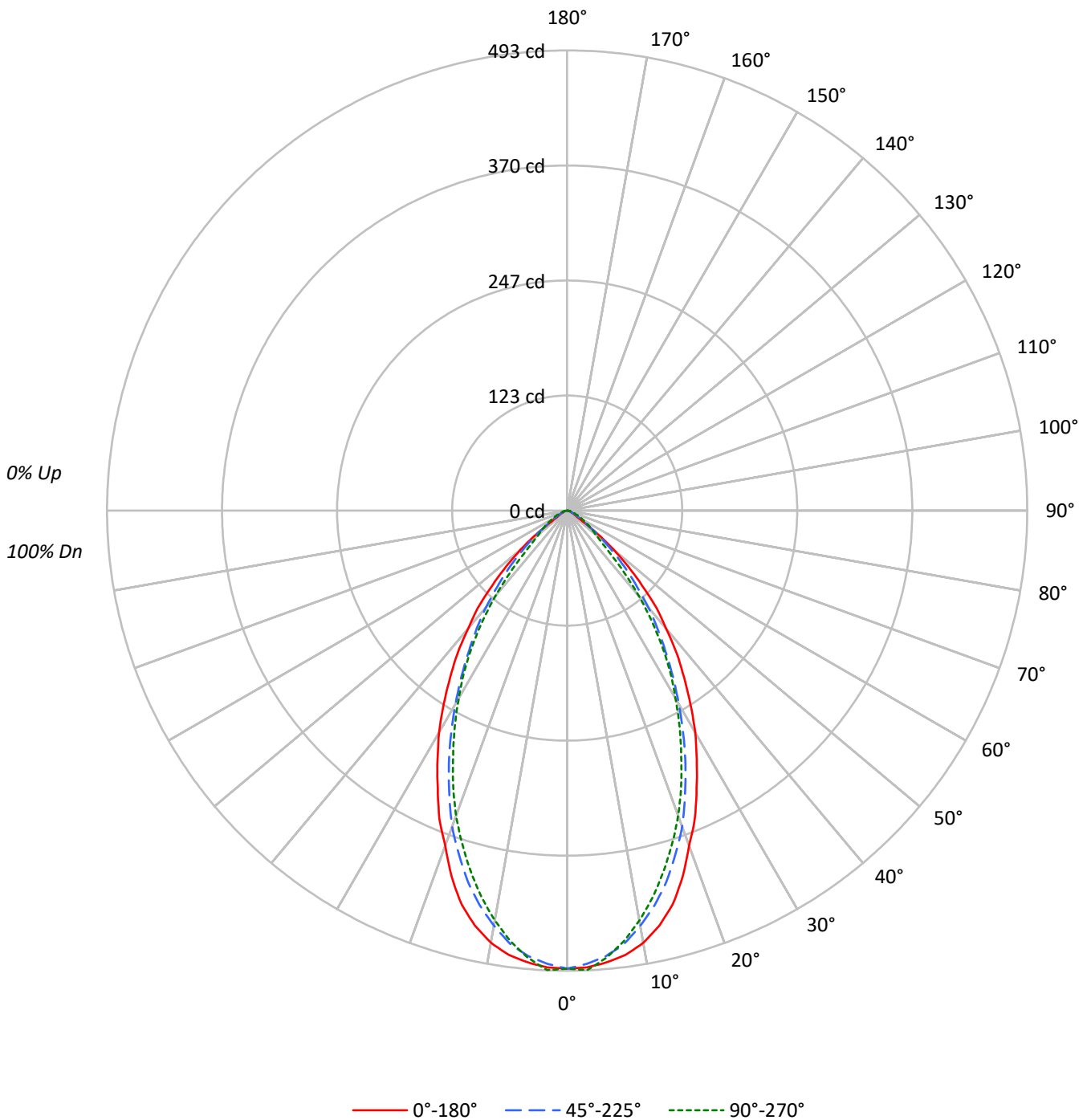
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 527.8 lumens  
Efficiency: N/A  
Efficacy: 20.5 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 25.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	99	100	98	96	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	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9056	9056	9056
5°	9000	8872	8910
10°	8810	8462	8351
15°	8346	7859	7636
20°	7501	7079	6828
25°	6680	6102	5884
30°	5845	5092	4948
35°	4920	4127	3994
40°	3965	3257	2879
45°	2964	2351	1712
50°	1857	1519	1125
55°	631	820	914
60°	362	506	723
65°	258	341	555
70°	210	264	421
75°	143	207	349
80°	106	213	308
85°	0	0	212

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2964 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.2	8.6
10°-20°	115.8	21.9
20°-30°	139.4	26.4
30°-40°	119.1	22.6
40°-50°	69.8	13.2
50°-60°	25.3	4.8
60°-70°	9.0	1.7
70°-80°	3.6	0.7
80°-90°	0.6	0.1
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°	300.4	56.9
0°-40°	419.6	79.5
0°-60°	514.6	97.5
0°-90°	527.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	527.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	491	491	491	491	491	
5°	486	487	479	481	481	46
15°	437	430	411	404	400	121
25°	328	314	300	295	289	151
35°	218	202	183	181	177	136
45°	114	102	90	75	66	88
55°	20	27	26	26	28	24
65°	6	7	8	11	13	6
75°	2	3	3	4	5	2
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	490.8	490.8	490.8	490.8	490.8
2.5°	489.8	490.8	485.9	490.8	492.7
5°	485.9	486.8	479.0	481.0	481.0
7.5°	480.0	479.0	468.2	466.3	465.3
10°	470.2	467.2	451.6	448.6	445.7
12.5°	455.5	449.6	433.0	428.1	424.1
15°	436.9	430.0	411.4	403.6	399.7
17.5°	411.4	403.6	385.9	378.1	374.2
20°	382.0	374.2	360.5	351.7	347.7
22.5°	357.5	344.8	330.1	324.2	319.3
25°	328.1	314.4	299.7	294.8	289.0
27.5°	300.7	284.1	269.4	265.5	260.6
30°	274.3	256.6	239.0	239.0	232.2
32.5°	245.9	229.2	210.6	209.6	205.7
35°	218.4	201.8	183.2	181.2	177.3
37.5°	193.0	176.3	158.7	152.8	147.9
40°	164.6	149.9	135.2	125.4	119.5
42.5°	142.0	125.4	110.7	98.9	91.1
45°	113.6	101.9	90.1	75.4	65.6
47.5°	88.2	80.3	70.5	53.9	49.0
50°	64.7	60.7	52.9	40.2	39.2
52.5°	41.1	43.1	38.2	31.3	34.3
55°	19.6	27.4	25.5	26.4	28.4
57.5°	12.7	13.7	18.6	21.6	23.5
60°	9.8	9.8	13.7	17.6	19.6
62.5°	7.8	7.8	10.8	14.7	15.7
65°	5.9	6.9	7.8	10.8	12.7
67.5°	4.9	4.9	5.9	8.8	9.8
70°	3.9	3.9	4.9	6.9	7.8
72.5°	2.9	2.9	3.9	5.9	5.9
75°	2.0	2.9	2.9	3.9	4.9
77.5°	2.0	2.0	2.0	2.9	3.9
80°	1.0	1.0	2.0	2.0	2.9
82.5°	1.0	1.0	1.0	1.0	2.0
85°	0.0	0.0	0.0	1.0	1.0
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	3.53	4.69	3.90	5.00	5.32	6.95	8.11	7.31	8.42	8.74
	3H	4.05	5.07	4.43	5.40	5.77	7.67	8.69	8.05	9.03	9.39
	4H	4.18	5.13	4.59	5.48	5.87	7.89	8.84	8.29	9.19	9.58
	6H	4.27	5.13	4.68	5.51	5.90	8.04	8.90	8.45	9.28	9.67
	8H	4.27	5.09	4.71	5.48	5.89	8.07	8.89	8.50	9.28	9.69
	12H	4.24	5.02	4.67	5.40	5.83	8.07	8.85	8.50	9.23	9.67
4H	2H	3.84	4.78	4.24	5.14	5.52	6.91	7.86	7.32	8.21	8.60
	3H	4.49	5.26	4.91	5.67	6.07	7.79	8.55	8.20	8.96	9.36
	4H	4.73	5.42	5.17	5.84	6.28	8.06	8.75	8.50	9.17	9.62
	6H	4.86	5.45	5.33	5.90	6.37	8.29	8.87	8.75	9.32	9.79
	8H	4.88	5.43	5.35	5.88	6.35	8.33	8.88	8.81	9.33	9.80
	12H	4.85	5.32	5.34	5.81	6.29	8.36	8.83	8.85	9.32	9.80
8H	4H	4.84	5.39	5.31	5.84	6.31	7.99	8.54	8.47	8.99	9.46
	6H	5.02	5.46	5.53	5.96	6.45	8.25	8.69	8.76	9.19	9.68
	8H	5.07	5.47	5.60	5.99	6.48	8.32	8.71	8.85	9.23	9.73
	12H	5.05	5.40	5.57	5.89	6.47	8.38	8.73	8.90	9.23	9.80
12H	4H	4.83	5.31	5.32	5.79	6.27	7.95	8.42	8.44	8.91	9.39
	6H	5.02	5.42	5.55	5.94	6.43	8.20	8.60	8.73	9.12	9.61
	8H	5.10	5.45	5.62	5.94	6.52	8.29	8.64	8.81	9.14	9.71