

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: P1058053

Luminaire Tested: S122RDRP-S675D840-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058053  
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-S675D840-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

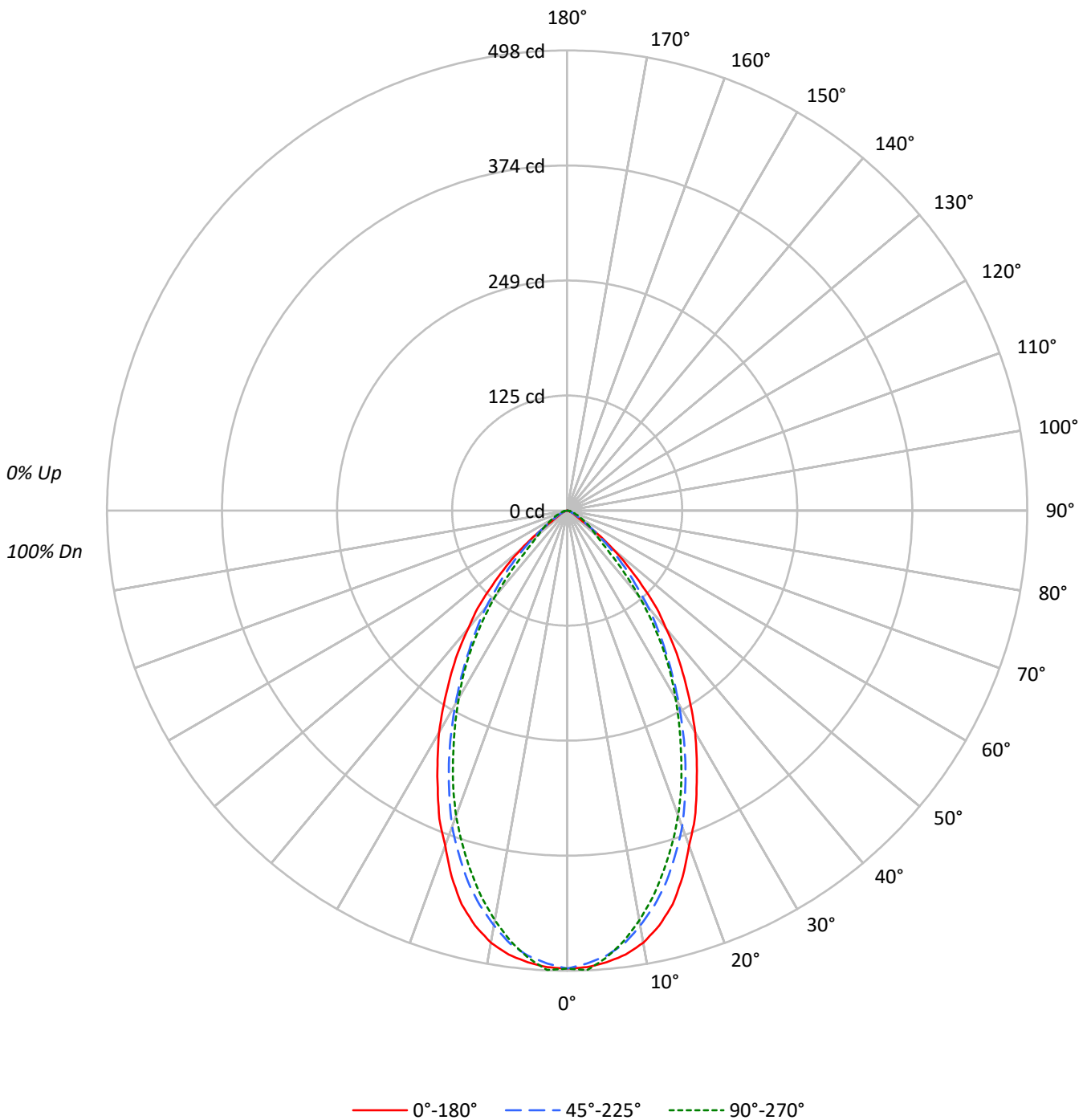
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 533.0 lumens  
Efficiency: N/A  
Efficacy: 20.7 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°	9145	9145	9145
5°	9089	8960	8997
10°	8896	8544	8434
15°	8428	7937	7710
20°	7576	7148	6896
25°	6747	6163	5941
30°	5902	5144	4994
35°	4969	4167	4032
40°	4003	3288	2907
45°	2993	2375	1730
50°	1875	1533	1137
55°	637	827	923
60°	365	509	731
65°	258	345	563
70°	216	264	426
75°	143	214	349
80°	106	213	319
85°	0	0	212

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2993 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.7	8.6
10°-20°	116.9	21.9
20°-30°	140.8	26.4
30°-40°	120.3	22.6
40°-50°	70.5	13.2
50°-60°	25.5	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°	303.4	56.9
0°-40°	423.7	79.5
0°-60°	519.7	97.5
0°-90°	533.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	533.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	496	496	496	496	496	
5°	491	492	484	486	486	46
15°	441	434	416	408	404	123
25°	331	318	303	298	292	152
35°	221	204	185	183	179	138
45°	115	103	91	76	66	89
55°	20	28	26	27	29	25
65°	6	7	8	11	13	6
75°	2	3	3	4	5	3
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°	495.6	495.6	495.6	495.6	495.6
2.5°	494.6	495.6	490.7	495.6	497.6
5°	490.7	491.6	483.7	485.7	485.7
7.5°	484.7	483.7	472.8	470.9	469.9
10°	474.8	471.9	456.0	453.1	450.1
12.5°	460.0	454.0	437.2	432.3	428.3
15°	441.2	434.3	415.5	407.6	403.6
17.5°	415.5	407.6	389.8	381.8	377.9
20°	385.8	377.9	364.0	355.1	351.2
22.5°	361.1	348.2	333.4	327.4	322.5
25°	331.4	317.5	302.7	297.8	291.8
27.5°	303.7	286.9	272.0	268.1	263.1
30°	277.0	259.2	241.4	241.4	234.4
32.5°	248.3	231.5	212.7	211.7	207.7
35°	220.6	203.8	185.0	183.0	179.0
37.5°	194.9	178.1	160.3	154.3	149.4
40°	166.2	151.3	136.5	126.6	120.7
42.5°	143.4	126.6	111.8	99.9	92.0
45°	114.7	102.9	91.0	76.2	66.3
47.5°	89.0	81.1	71.2	54.4	49.5
50°	65.3	61.3	53.4	40.6	39.6
52.5°	41.5	43.5	38.6	31.7	34.6
55°	19.8	27.7	25.7	26.7	28.7
57.5°	12.9	13.8	18.8	21.8	23.7
60°	9.9	9.9	13.8	17.8	19.8
62.5°	7.9	7.9	10.9	14.8	15.8
65°	5.9	6.9	7.9	10.9	12.9
67.5°	4.9	4.9	5.9	8.9	9.9
70°	4.0	4.0	4.9	6.9	7.9
72.5°	3.0	3.0	4.0	5.9	5.9
75°	2.0	3.0	3.0	4.0	4.9
77.5°	2.0	2.0	2.0	3.0	4.0
80°	1.0	1.0	2.0	2.0	3.0
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	3.56	4.72	3.92	5.03	5.35	6.98	8.14	7.34	8.45	8.77
	3H	4.08	5.10	4.46	5.43	5.80	7.70	8.72	8.08	9.06	9.42
	4H	4.22	5.17	4.62	5.52	5.90	7.92	8.86	8.32	9.22	9.60
	6H	4.30	5.16	4.71	5.54	5.93	8.07	8.94	8.49	9.31	9.71
	8H	4.30	5.12	4.74	5.51	5.92	8.10	8.92	8.54	9.31	9.72
	12H	4.27	5.05	4.70	5.43	5.86	8.11	8.89	8.54	9.27	9.70
4H	2H	3.87	4.81	4.27	5.17	5.55	6.94	7.89	7.35	8.24	8.63
	3H	4.53	5.30	4.95	5.71	6.11	7.81	8.58	8.23	8.99	9.39
	4H	4.78	5.46	5.22	5.88	6.33	8.09	8.78	8.53	9.20	9.65
	6H	4.90	5.49	5.37	5.94	6.41	8.33	8.91	8.79	9.36	9.83
	8H	4.92	5.47	5.39	5.92	6.39	8.37	8.92	8.85	9.37	9.84
	12H	4.89	5.36	5.38	5.85	6.33	8.39	8.87	8.88	9.36	9.83
8H	4H	4.89	5.44	5.36	5.88	6.36	8.03	8.57	8.50	9.02	9.49
	6H	5.06	5.50	5.57	6.00	6.49	8.29	8.73	8.80	9.24	9.72
	8H	5.11	5.51	5.64	6.02	6.52	8.36	8.75	8.89	9.27	9.77
	12H	5.09	5.43	5.61	5.93	6.51	8.42	8.77	8.94	9.26	9.84
12H	4H	4.88	5.35	5.37	5.84	6.32	7.98	8.46	8.47	8.94	9.42
	6H	5.06	5.46	5.59	5.98	6.47	8.24	8.64	8.77	9.16	9.65
	8H	5.14	5.48	5.66	5.98	6.56	8.33	8.68	8.85	9.18	9.75