

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: P1058046

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058046  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)  
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-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

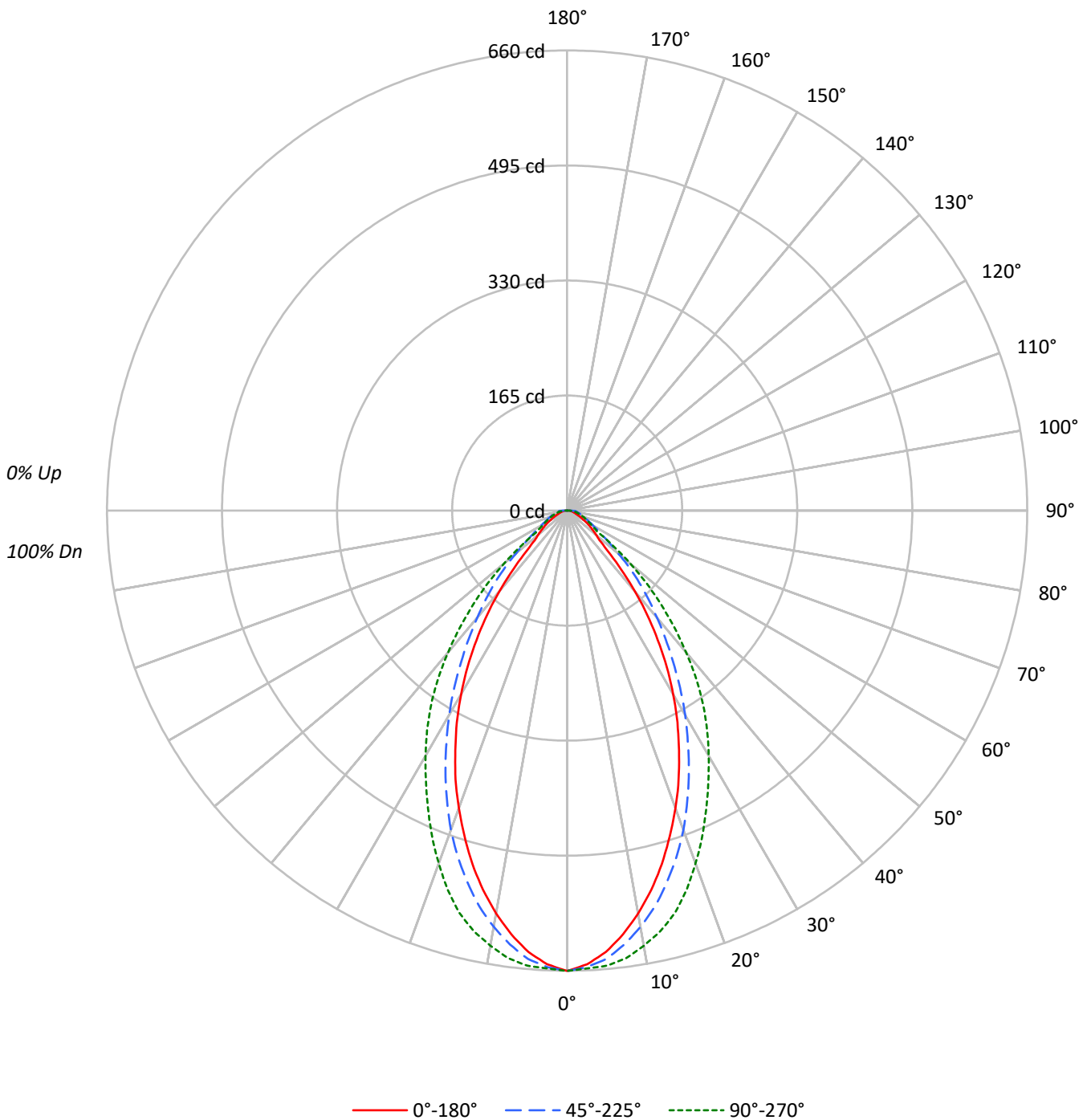
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 800.8 lumens  
Efficiency: N/A  
Efficacy: 31.0 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95  
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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

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

	0°	45°	90°
0°	12182	12182	12182
5°	11775	11957	12138
10°	10991	11360	11874
15°	10025	10551	11412
20°	8919	9575	10576
25°	7729	8409	9608
30°	6479	7210	8653
35°	5104	5967	7668
40°	3640	4820	6403
45°	2150	3815	4966
50°	1550	2759	3379
55°	1293	1988	1705
60°	1048	1594	1447
65°	856	1415	1327
70°	739	1376	1268
75°	699	1397	1262
80°	733	1668	1360
85°	1037	2710	1651

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4966 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.6	7.6
10°-20°	155.6	19.4
20°-30°	191.9	24.0
30°-40°	170.7	21.3
40°-50°	109.0	13.6
50°-60°	52.3	6.5
60°-70°	30.7	3.8
70°-80°	19.6	2.4
80°-90°	10.5	1.3
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°	408.0	51.0
0°-40°	578.7	72.3
0°-60°	740.0	92.4
0°-90°	800.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	800.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	660	660	660	660	660	
5°	636	648	646	649	655	59
15°	525	538	552	578	597	146
25°	380	394	413	442	472	174
35°	227	244	265	305	340	141
45°	82	107	146	170	190	69
55°	40	52	62	60	53	36
65°	20	35	32	29	30	20
75°	10	22	20	19	18	11
85°	5	12	13	11	8	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	660.2	660.2	660.2	660.2	660.2
2.5°	651.4	662.2	655.3	655.3	657.3
5°	635.7	647.5	645.5	649.4	655.3
7.5°	613.1	625.9	627.8	638.6	647.5
10°	586.6	600.4	606.3	622.0	633.7
12.5°	557.2	570.9	581.7	601.3	618.0
15°	524.8	537.6	552.3	577.8	597.4
17.5°	489.5	506.2	520.9	547.4	570.0
20°	454.2	469.9	487.6	513.1	538.6
22.5°	417.9	432.6	450.3	476.8	506.2
25°	379.6	394.4	413.0	442.4	471.9
27.5°	342.4	357.1	374.7	407.1	438.5
30°	304.1	318.8	338.4	371.8	406.1
32.5°	265.8	281.5	301.2	337.5	373.8
35°	226.6	244.3	264.9	305.1	340.4
37.5°	188.4	206.0	231.5	270.8	304.1
40°	151.1	171.7	200.1	235.4	265.8
42.5°	114.8	137.3	172.7	201.1	227.6
45°	82.4	106.9	146.2	169.7	190.3
47.5°	62.8	80.4	120.7	139.3	154.0
50°	54.0	64.7	96.1	109.9	117.7
52.5°	47.1	56.9	76.5	83.4	83.4
55°	40.2	52.0	61.8	59.8	53.0
57.5°	34.3	47.1	51.0	43.2	45.1
60°	28.4	43.2	43.2	38.3	39.2
62.5°	23.5	40.2	37.3	33.4	34.3
65°	19.6	35.3	32.4	29.4	30.4
67.5°	15.7	31.4	28.4	26.5	26.5
70°	13.7	28.4	25.5	23.5	23.5
72.5°	11.8	24.5	22.6	20.6	20.6
75°	9.8	21.6	19.6	18.6	17.7
77.5°	8.8	18.6	17.7	15.7	14.7
80°	6.9	15.7	15.7	14.7	12.8
82.5°	5.9	13.7	13.7	12.8	10.8
85°	4.9	11.8	12.8	10.8	7.8
87.5°	3.9	10.8	10.8	8.8	5.9
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	10.36	11.63	10.72	11.95	12.26	10.15	11.43	10.52	11.74	12.06
	3H	11.59	12.72	11.97	13.05	13.42	11.74	12.88	12.12	13.21	13.57
	4H	12.04	13.10	12.44	13.45	13.83	12.46	13.52	12.86	13.87	14.25
	6H	12.42	13.39	12.84	13.77	14.16	13.11	14.08	13.53	14.46	14.85
	8H	12.58	13.50	13.01	13.89	14.29	13.44	14.36	13.87	14.75	15.16
	12H	12.73	13.62	13.17	14.00	14.43	13.74	14.62	14.17	15.00	15.43
4H	2H	10.91	11.97	11.31	12.32	12.70	10.75	11.80	11.15	12.15	12.54
	3H	12.60	13.47	13.01	13.88	14.28	12.58	13.45	12.99	13.85	14.26
	4H	13.40	14.18	13.83	14.60	15.04	13.45	14.23	13.89	14.65	15.10
	6H	14.04	14.72	14.50	15.16	15.63	14.30	14.97	14.76	15.42	15.89
	8H	14.29	14.92	14.76	15.37	15.84	14.72	15.36	15.19	15.80	16.27
	12H	14.54	15.10	15.02	15.58	16.05	15.12	15.68	15.61	16.17	16.64
8H	4H	13.81	14.45	14.28	14.90	15.37	13.87	14.50	14.34	14.95	15.42
	6H	14.79	15.31	15.29	15.81	16.29	14.96	15.47	15.46	15.97	16.45
	8H	15.28	15.75	15.80	16.26	16.76	15.55	16.02	16.07	16.53	17.02
	12H	15.79	16.20	16.30	16.69	17.26	16.15	16.56	16.67	17.06	17.63
12H	4H	13.88	14.44	14.37	14.92	15.40	13.94	14.50	14.43	14.99	15.46
	6H	14.96	15.43	15.48	15.94	16.43	15.12	15.59	15.64	16.10	16.59
	8H	15.60	16.01	16.11	16.50	17.07	15.83	16.25	16.35	16.74	17.31