

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: P1058126

Luminaire Tested: S122RDRP-S865D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058126  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S865D835-X4F0-XX-UDD-SVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

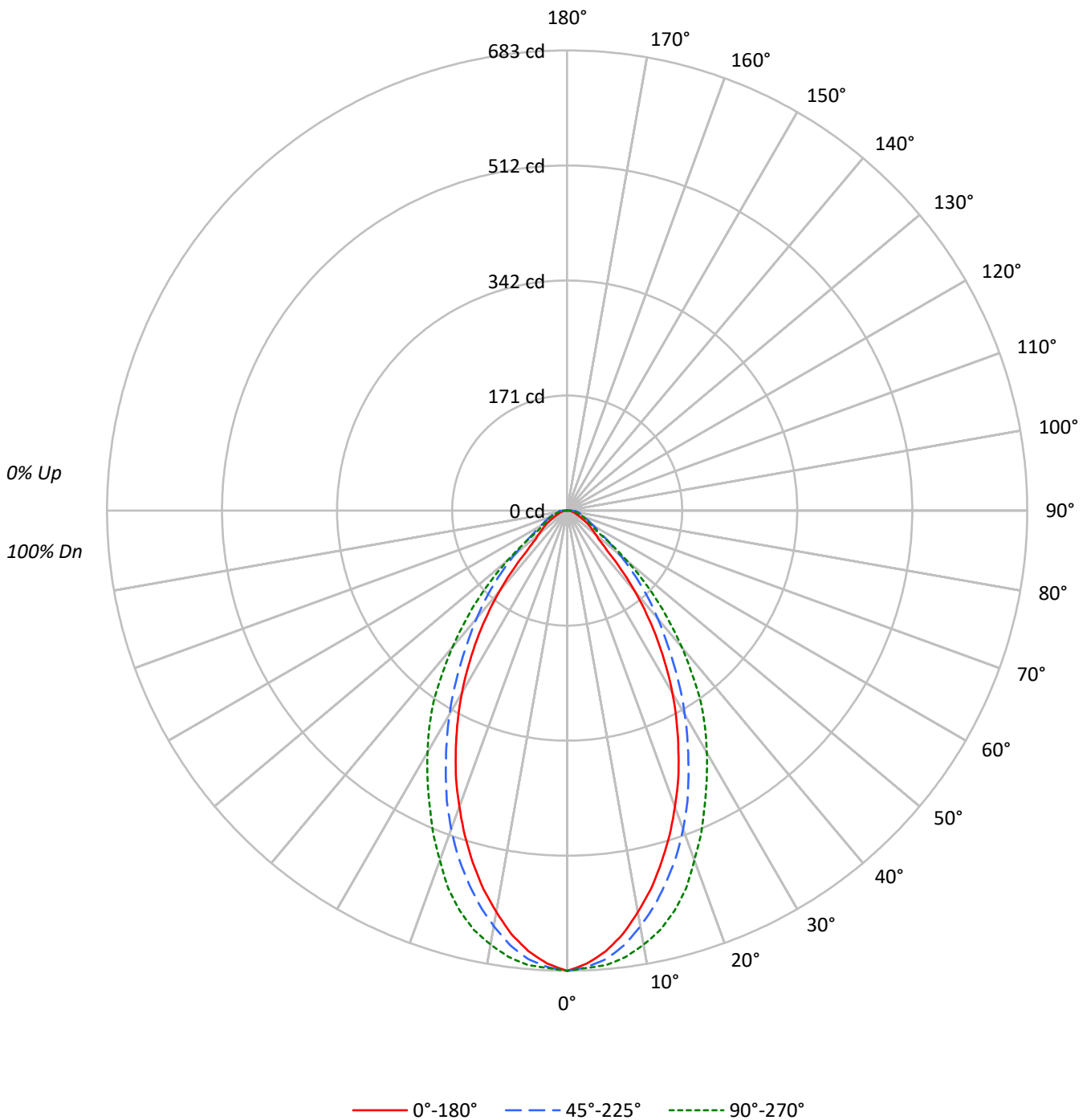
Lumens per Lamp: N/A  
Luminaire Lumens: 824.1 lumens  
Efficiency: N/A  
Efficacy: 23.5 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35  
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	101	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	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	66	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	44	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°	12607	12607	12607
5°	12164	12373	12538
10°	11336	11737	12258
15°	10329	10883	11751
20°	9182	9875	10841
25°	7955	8673	9830
30°	6661	7438	8836
35°	5253	6161	7781
40°	3765	5039	6376
45°	2205	3980	4935
50°	1593	2894	3330
55°	1338	2069	1744
60°	1070	1675	1487
65°	882	1485	1375
70°	750	1430	1289
75°	720	1526	1255
80°	808	1870	1339
85°	1334	2943	1863

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4935 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.6	7.6
10°-20°	160.4	19.5
20°-30°	197.1	23.9
30°-40°	174.3	21.1
40°-50°	111.2	13.5
50°-60°	54.3	6.6
60°-70°	32.3	3.9
70°-80°	20.6	2.5
80°-90°	11.4	1.4
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°	420.1	51.0
0°-40°	594.3	72.1
0°-60°	759.8	92.2
0°-90°	824.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	824.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	683	683	683	683	683	
5°	657	671	668	671	677	61
15°	541	556	570	595	615	151
25°	391	405	426	452	483	179
35°	233	246	274	311	345	145
45°	84	108	152	171	189	71
55°	42	56	64	60	54	37
65°	20	38	34	32	32	20
75°	10	23	21	19	18	11
85°	6	13	14	13	9	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	683.2	683.2	683.2	683.2	683.2
2.5°	673.1	685.7	678.1	678.1	679.4
5°	656.7	670.6	668.0	670.6	676.9
7.5°	634.0	647.9	650.4	660.5	668.0
10°	605.0	618.9	626.4	642.8	654.2
12.5°	574.8	588.6	600.0	621.4	637.8
15°	540.7	555.9	569.7	594.9	615.1
17.5°	505.4	520.6	538.2	563.4	587.4
20°	467.6	481.5	502.9	526.9	552.1
22.5°	431.1	443.7	466.4	489.1	519.3
25°	390.7	404.6	426.0	452.5	482.8
27.5°	351.7	365.5	387.0	417.2	448.7
30°	312.6	325.2	349.1	380.7	414.7
32.5°	272.3	284.9	311.3	345.4	380.7
35°	233.2	245.8	273.5	311.3	345.4
37.5°	194.1	208.0	239.5	274.8	303.8
40°	156.3	172.7	209.2	239.5	264.7
42.5°	118.5	141.2	180.2	205.5	225.6
45°	84.5	108.4	152.5	171.4	189.1
47.5°	64.3	83.2	126.0	139.9	151.3
50°	55.5	68.1	100.8	110.9	116.0
52.5°	47.9	60.5	80.7	84.5	81.9
55°	41.6	55.5	64.3	60.5	54.2
57.5°	35.3	51.7	52.9	45.4	46.6
60°	29.0	46.6	45.4	39.1	40.3
62.5°	23.9	42.9	39.1	35.3	35.3
65°	20.2	37.8	34.0	31.5	31.5
67.5°	16.4	34.0	30.3	27.7	27.7
70°	13.9	30.3	26.5	23.9	23.9
72.5°	12.6	26.5	23.9	21.4	21.4
75°	10.1	22.7	21.4	18.9	17.6
77.5°	8.8	18.9	18.9	17.6	15.1
80°	7.6	16.4	17.6	15.1	12.6
82.5°	7.6	15.1	15.1	13.9	10.1
85°	6.3	12.6	13.9	12.6	8.8
87.5°	3.8	11.3	11.3	10.1	6.3
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	10.83	12.11	11.20	12.43	12.74	10.36	11.64	10.73	11.95	12.27
	3H	12.01	13.15	12.39	13.48	13.85	11.92	13.06	12.30	13.39	13.75
	4H	12.44	13.50	12.84	13.85	14.24	12.60	13.66	13.00	14.01	14.40
	6H	12.79	13.76	13.20	14.13	14.53	13.25	14.22	13.66	14.59	14.99
	8H	12.98	13.91	13.41	14.30	14.71	13.54	14.46	13.97	14.85	15.26
	12H	13.20	14.09	13.64	14.47	14.90	13.85	14.74	14.29	15.12	15.55
4H	2H	11.34	12.40	11.74	12.75	13.13	10.96	12.02	11.36	12.37	12.75
	3H	12.98	13.86	13.40	14.26	14.67	12.75	13.63	13.17	14.03	14.44
	4H	13.75	14.53	14.18	14.95	15.40	13.59	14.38	14.03	14.80	15.24
	6H	14.35	15.03	14.81	15.48	15.94	14.45	15.13	14.91	15.57	16.04
	8H	14.65	15.29	15.12	15.73	16.20	14.84	15.48	15.31	15.92	16.39
	12H	14.96	15.53	15.45	16.01	16.48	15.28	15.84	15.76	16.32	16.80
8H	4H	14.16	14.80	14.63	15.25	15.72	14.05	14.69	14.52	15.14	15.61
	6H	15.11	15.63	15.61	16.13	16.61	15.16	15.68	15.66	16.18	16.66
	8H	15.66	16.13	16.18	16.64	17.14	15.74	16.21	16.26	16.72	17.22
	12H	16.22	16.64	16.74	17.13	17.70	16.41	16.83	16.93	17.32	17.89
12H	4H	14.23	14.80	14.72	15.28	15.75	14.13	14.70	14.62	15.18	15.66
	6H	15.29	15.76	15.82	16.28	16.77	15.34	15.81	15.87	16.33	16.82
	8H	15.99	16.40	16.50	16.90	17.47	16.06	16.47	16.57	16.97	17.54