

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: P1058156

Luminaire Tested: S122RDRP-S865D927-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058156  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S865D927-X4F0-XX-UDD-WVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

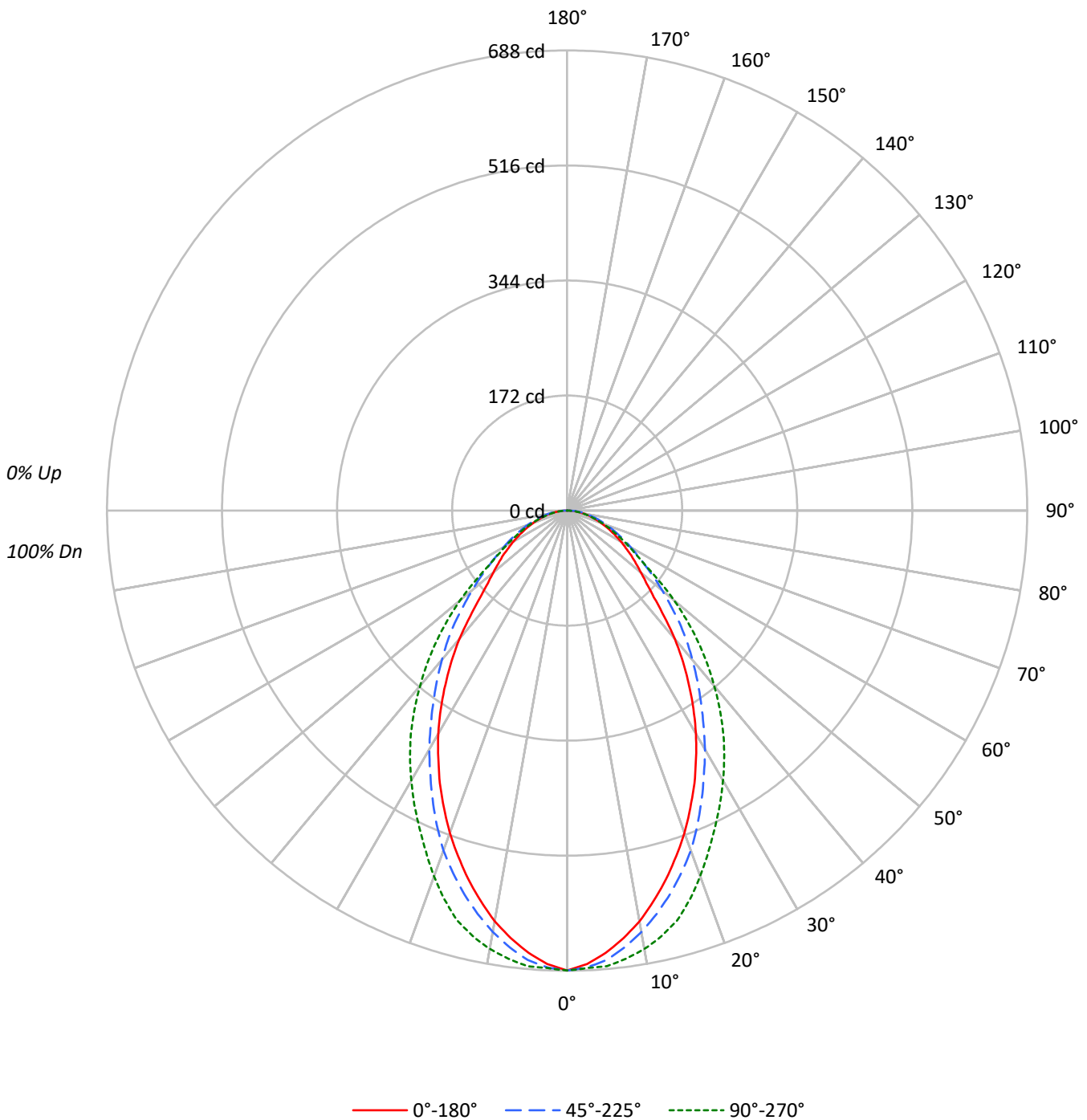
Lumens per Lamp: N/A  
Luminaire Lumens: 1119.7 lumens  
Efficiency: N/A  
Efficacy: 32.0 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct

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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33

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

	0°	45°	90°
0°	12688	12688	12688
5°	12294	12496	12662
10°	11686	11986	12471
15°	10904	11344	12125
20°	10074	10621	11425
25°	9164	9691	10646
30°	8207	8783	9931
35°	7150	7846	9173
40°	6034	7019	8245
45°	4791	6198	7213
50°	4125	5328	5988
55°	3758	4559	4591
60°	3425	4052	3905
65°	3139	3659	3441
70°	2908	3394	3070
75°	2702	3201	2702
80°	2550	3071	2444
85°	2541	3176	2117

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7213 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.5	5.7
10°-20°	167.8	15.0
20°-30°	220.8	19.7
30°-40°	222.1	19.8
40°-50°	180.0	16.1
50°-60°	124.0	11.1
60°-70°	81.1	7.2
70°-80°	45.2	4.0
80°-90°	15.3	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°	452.1	40.4
0°-40°	674.1	60.2
0°-60°	978.1	87.4
0°-90°	1119.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1119.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	664	677	675	678	684	62
15°	571	585	594	616	635	160
25°	450	462	476	497	523	206
35°	317	332	348	379	407	198
45°	184	205	238	258	276	145
55°	117	130	142	145	143	105
65°	72	86	84	80	79	72
75°	38	47	45	40	38	41
85°	12	16	15	13	10	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	687.6	687.6	687.6	687.6	687.6
2.5°	678.6	690.6	683.6	683.6	684.6
5°	663.7	676.6	674.6	677.6	683.6
7.5°	644.7	658.7	658.7	667.6	675.6
10°	623.7	637.7	639.7	653.7	665.6
12.5°	597.8	611.8	617.7	635.7	651.7
15°	570.8	584.8	593.8	615.7	634.7
17.5°	541.9	555.9	567.8	590.8	609.8
20°	513.0	525.9	540.9	560.9	581.8
22.5°	481.0	495.0	509.0	527.9	551.9
25°	450.1	462.1	476.0	497.0	522.9
27.5°	417.2	430.1	443.1	468.0	495.0
30°	385.2	398.2	412.2	438.1	466.1
32.5°	351.3	365.3	379.2	408.2	437.1
35°	317.4	332.3	348.3	379.2	407.2
37.5°	284.4	300.4	319.4	351.3	375.2
40°	250.5	267.5	291.4	319.4	342.3
42.5°	214.6	235.5	264.5	288.4	309.4
45°	183.6	204.6	237.5	258.5	276.4
47.5°	160.7	177.6	209.6	227.5	242.5
50°	143.7	156.7	185.6	198.6	208.6
52.5°	129.7	142.7	162.7	171.7	174.6
55°	116.8	129.7	141.7	144.7	142.7
57.5°	103.8	117.8	124.7	121.8	121.8
60°	92.8	107.8	109.8	105.8	105.8
62.5°	81.8	96.8	96.8	91.8	91.8
65°	71.9	85.8	83.8	79.8	78.8
67.5°	62.9	75.8	72.9	68.9	67.9
70°	53.9	65.9	62.9	57.9	56.9
72.5°	45.9	56.9	52.9	48.9	46.9
75°	37.9	46.9	44.9	39.9	37.9
77.5°	30.9	37.9	35.9	31.9	29.9
80°	24.0	29.9	28.9	24.9	23.0
82.5°	18.0	23.0	22.0	19.0	16.0
85°	12.0	16.0	15.0	13.0	10.0
87.5°	6.0	11.0	10.0	9.0	5.0
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	15.56	17.00	15.92	17.31	17.63	15.92	17.36	16.28	17.67	17.99
	3H	17.10	18.39	17.48	18.72	19.08	17.27	18.55	17.64	18.88	19.25
	4H	17.67	18.88	18.07	19.23	19.61	17.75	18.95	18.15	19.30	19.68
	6H	18.10	19.22	18.52	19.59	19.98	18.10	19.22	18.51	19.58	19.98
	8H	18.26	19.32	18.68	19.71	20.11	18.22	19.28	18.64	19.67	20.07
	12H	18.37	19.39	18.80	19.77	20.20	18.29	19.31	18.72	19.69	20.12
4H	2H	16.14	17.35	16.54	17.70	18.08	16.43	17.64	16.83	17.99	18.37
	3H	17.97	18.97	18.38	19.37	19.77	18.01	19.01	18.42	19.41	19.81
	4H	18.71	19.61	19.15	20.03	20.47	18.61	19.51	19.04	19.93	20.37
	6H	19.30	20.08	19.76	20.52	20.99	19.09	19.87	19.55	20.32	20.78
	8H	19.51	20.24	19.97	20.69	21.15	19.25	19.99	19.72	20.43	20.90
	12H	19.68	20.33	20.16	20.81	21.28	19.38	20.03	19.86	20.51	20.98
8H	4H	19.00	19.73	19.46	20.17	20.64	18.91	19.64	19.37	20.09	20.55
	6H	19.75	20.36	20.25	20.85	21.33	19.53	20.13	20.02	20.62	21.10
	8H	20.08	20.62	20.59	21.13	21.62	19.78	20.32	20.29	20.83	21.32
	12H	20.36	20.84	20.87	21.34	21.90	19.99	20.47	20.50	20.96	21.53
12H	4H	19.02	19.67	19.50	20.15	20.62	18.94	19.60	19.43	20.08	20.55
	6H	19.81	20.35	20.33	20.87	21.36	19.60	20.15	20.12	20.66	21.15
	8H	20.21	20.69	20.72	21.18	21.75	19.92	20.40	20.43	20.90	21.46