

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058579

Luminaire Tested: S122RDR-H865D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058579  
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: S122RDR-H865D935-X4F0-XX-UDD-WVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

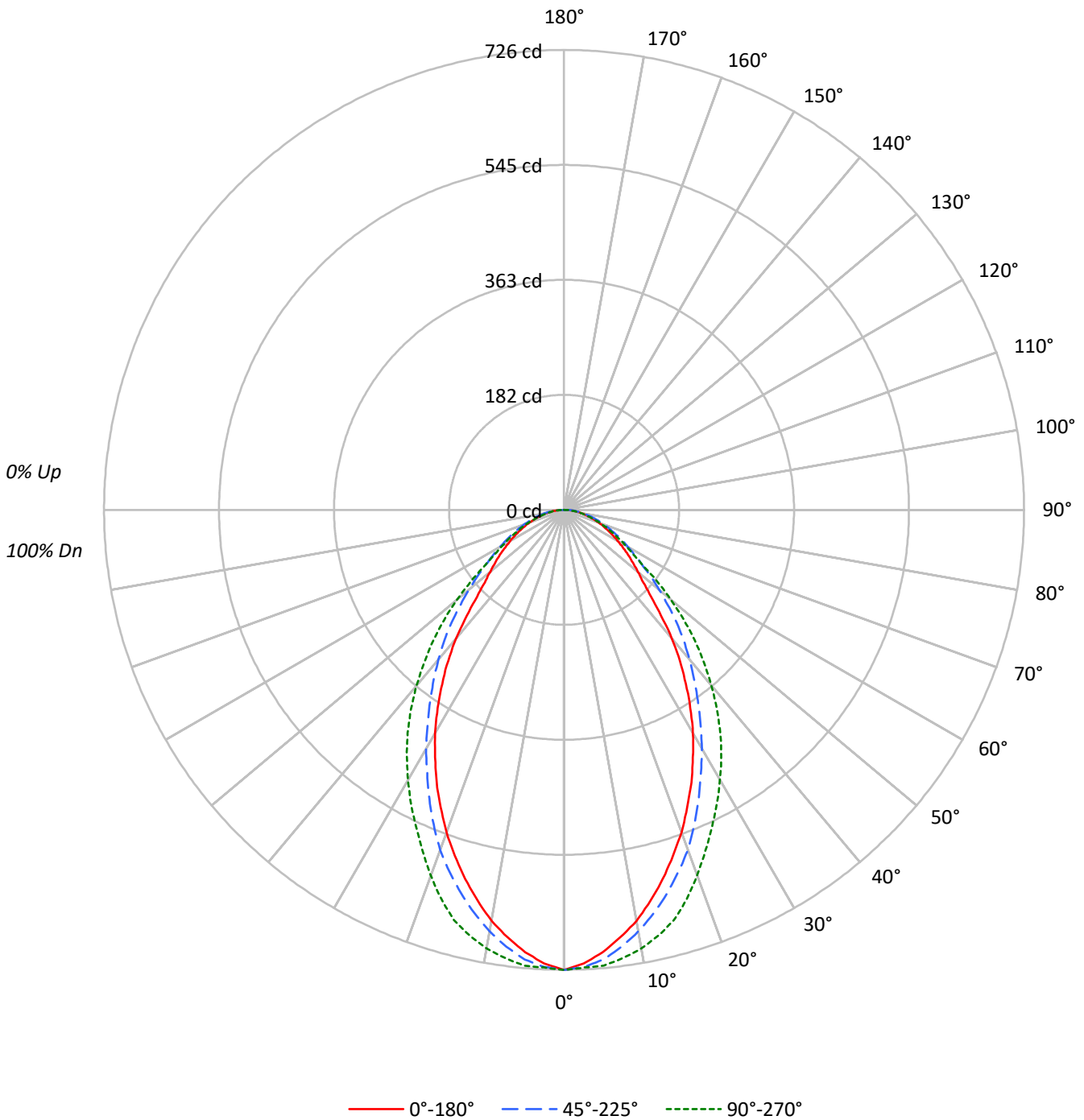
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1182.6 lumens  
Efficiency: N/A  
Efficacy: 37.9 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): 31.2  
Input Voltage (V): 120  
Input Current (Ain): 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				
RC	80					70					50					30				
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°	13402	13402	13402
5°	12985	13199	13375
10°	12344	12661	13174
15°	11517	11982	12807
20°	10639	11218	12067
25°	9679	10237	11245
30°	8670	9275	10489
35°	7551	8287	9689
40°	6374	7414	8710
45°	5063	6547	7620
50°	4358	5629	6324
55°	3967	4816	4848
60°	3617	4281	4122
65°	3314	3864	3637
70°	3070	3582	3242
75°	2859	3379	2859
80°	2688	3252	2572
85°	2668	3345	2223

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7620 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.0	5.7
10°-20°	177.2	15.0
20°-30°	233.2	19.7
30°-40°	234.5	19.8
40°-50°	190.1	16.1
50°-60°	130.9	11.1
60°-70°	85.7	7.2
70°-80°	47.7	4.0
80°-90°	16.2	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°	477.5	40.4
0°-40°	712.0	60.2
0°-60°	1033.0	87.4
0°-90°	1182.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1182.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	726	726	726	726	726	
5°	701	715	713	716	722	66
15°	603	618	627	650	670	169
25°	475	488	503	525	552	218
35°	335	351	368	401	430	209
45°	194	216	251	273	292	153
55°	123	137	150	153	151	111
65°	76	91	88	84	83	76
75°	40	50	47	42	40	43
85°	13	17	16	14	10	14
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	726.3	726.3	726.3	726.3	726.3
2.5°	716.8	729.4	722.1	722.1	723.1
5°	701.0	714.7	712.6	715.7	722.1
7.5°	680.9	695.7	695.7	705.2	713.6
10°	658.8	673.6	675.7	690.4	703.1
12.5°	631.4	646.2	652.5	671.5	688.3
15°	602.9	617.7	627.2	650.4	670.4
17.5°	572.4	587.1	599.8	624.0	644.1
20°	541.8	555.5	571.3	592.4	614.5
22.5°	508.1	522.8	537.6	557.6	582.9
25°	475.4	488.0	502.8	524.9	552.3
27.5°	440.6	454.3	468.0	494.4	522.8
30°	406.9	420.6	435.3	462.7	492.3
32.5°	371.0	385.8	400.6	431.1	461.7
35°	335.2	351.0	367.9	400.6	430.1
37.5°	300.4	317.3	337.3	371.0	396.3
40°	264.6	282.5	307.8	337.3	361.6
42.5°	226.6	248.8	279.3	304.6	326.8
45°	194.0	216.1	250.9	273.0	292.0
47.5°	169.7	187.6	221.4	240.3	256.1
50°	151.8	165.5	196.1	209.8	220.3
52.5°	137.0	150.7	171.8	181.3	184.5
55°	123.3	137.0	149.7	152.8	150.7
57.5°	109.6	124.4	131.8	128.6	128.6
60°	98.0	113.8	116.0	111.7	111.7
62.5°	86.4	102.2	102.2	97.0	97.0
65°	75.9	90.7	88.5	84.3	83.3
67.5°	66.4	80.1	76.9	72.7	71.7
70°	56.9	69.6	66.4	61.1	60.1
72.5°	48.5	60.1	55.9	51.7	49.5
75°	40.1	49.5	47.4	42.2	40.1
77.5°	32.7	40.1	37.9	33.7	31.6
80°	25.3	31.6	30.6	26.4	24.2
82.5°	19.0	24.2	23.2	20.0	16.9
85°	12.6	16.9	15.8	13.7	10.5
87.5°	6.3	11.6	10.5	9.5	5.3
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	15.75	17.19	16.11	17.50	17.82	16.11	17.55	16.47	17.86	18.17
	3H	17.29	18.58	17.67	18.91	19.27	17.45	18.74	17.83	19.07	19.43
	4H	17.86	19.07	18.26	19.42	19.80	17.94	19.14	18.34	19.49	19.87
	6H	18.29	19.41	18.71	19.78	20.17	18.29	19.40	18.70	19.77	20.16
	8H	18.45	19.51	18.88	19.90	20.30	18.41	19.47	18.83	19.86	20.26
	12H	18.56	19.58	18.99	19.96	20.39	18.48	19.49	18.91	19.88	20.31
4H	2H	16.33	17.54	16.73	17.89	18.27	16.62	17.83	17.02	18.18	18.56
	3H	18.15	19.16	18.57	19.56	19.96	18.19	19.19	18.60	19.60	20.00
	4H	18.90	19.80	19.34	20.22	20.66	18.80	19.70	19.23	20.12	20.56
	6H	19.49	20.27	19.95	20.72	21.18	19.28	20.06	19.74	20.51	20.97
	8H	19.70	20.43	20.16	20.88	21.34	19.44	20.18	19.91	20.62	21.09
	12H	19.87	20.52	20.35	21.00	21.47	19.56	20.22	20.05	20.70	21.17
8H	4H	19.19	19.92	19.65	20.36	20.83	19.10	19.83	19.56	20.28	20.74
	6H	19.94	20.55	20.44	21.04	21.52	19.72	20.32	20.22	20.81	21.29
	8H	20.27	20.81	20.78	21.32	21.81	19.97	20.51	20.48	21.02	21.51
	12H	20.55	21.03	21.06	21.52	22.09	20.18	20.66	20.69	21.15	21.72
12H	4H	19.21	19.86	19.69	20.34	20.81	19.13	19.79	19.62	20.27	20.74
	6H	20.00	20.55	20.52	21.06	21.55	19.79	20.34	20.31	20.85	21.34
	8H	20.40	20.88	20.91	21.37	21.94	20.11	20.59	20.62	21.09	21.65