

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: P1058574

Luminaire Tested: S122RDRP-H865D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058574  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-H865D935-X4F0-XX-UDD-BVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

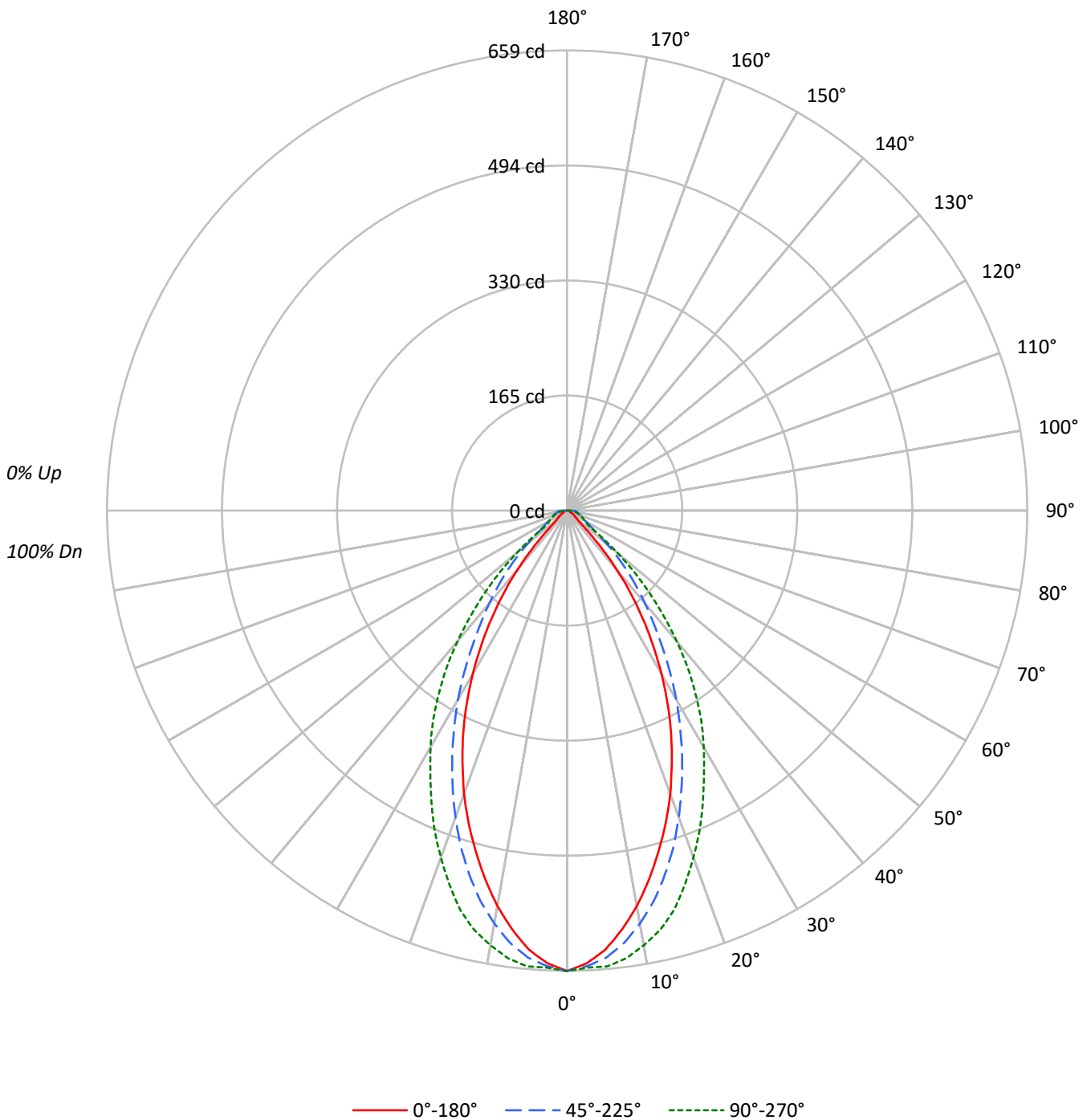
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 717.7 lumens  
Efficiency: N/A  
Efficacy: 23.0 lumens/watt  
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91  
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 (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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81				81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74				74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67				67
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61				61
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56				56
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52				52
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48				48
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45				45
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42				42

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

	0°	45°	90°
0°	12168	12168	12168
5°	11686	11901	12136
10°	10774	11248	11842
15°	9655	10320	11307
20°	8473	9178	10380
25°	7175	7926	9366
30°	5755	6654	8340
35°	4255	5323	7224
40°	2669	4167	5870
45°	1046	3139	4350
50°	514	2121	2664
55°	409	1393	1187
60°	310	1129	1089
65°	231	1061	1061
70°	286	1079	1079
75°	299	1205	1126
80°	446	1573	1233
85°	889	2689	1778

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 87.5°  
 Luminance: 4907 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.2	8.4
10°-20°	152.3	21.2
20°-30°	182.2	25.4
30°-40°	153.3	21.4
40°-50°	87.3	12.2
50°-60°	34.4	4.8
60°-70°	21.7	3.0
70°-80°	16.1	2.2
80°-90°	10.3	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°	394.6	55.0
0°-40°	547.9	76.3
0°-60°	669.7	93.3
0°-90°	717.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	717.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	659	659	659	659	659	
5°	631	645	642	650	655	58
15°	505	523	540	572	592	141
25°	352	368	389	429	460	160
35°	189	206	236	287	321	117
45°	40	71	120	151	167	38
55°	13	27	43	44	37	11
65°	5	24	24	23	24	6
75°	4	17	17	16	16	5
85°	4	12	13	12	8	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	659.4	659.4	659.4	659.4	659.4
2.5°	648.9	660.5	653.1	654.1	655.2
5°	630.9	644.6	642.5	649.9	655.2
7.5°	604.5	619.3	624.6	637.2	646.7
10°	575.0	591.9	600.3	620.4	632.0
12.5°	541.2	560.2	572.9	598.2	615.1
15°	505.4	523.3	540.2	571.8	591.9
17.5°	469.5	487.4	505.4	540.2	561.3
20°	431.5	448.4	467.4	504.3	528.6
22.5°	391.4	409.4	428.3	466.3	495.9
25°	352.4	368.2	389.3	429.4	460.0
27.5°	311.2	327.1	350.3	391.4	424.1
30°	270.1	285.9	312.3	354.5	391.4
32.5°	228.9	245.8	274.3	320.7	357.7
35°	188.9	205.7	236.3	287.0	320.7
37.5°	149.8	168.8	202.6	252.2	283.8
40°	110.8	132.9	173.0	217.3	243.7
42.5°	73.9	101.3	145.6	182.5	204.7
45°	40.1	70.7	120.3	150.9	166.7
47.5°	22.2	45.4	96.0	120.3	129.8
50°	17.9	31.7	73.9	91.8	92.8
52.5°	14.8	28.5	54.9	65.4	60.1
55°	12.7	27.4	43.3	44.3	36.9
57.5°	10.6	26.4	35.9	31.7	31.7
60°	8.4	26.4	30.6	28.5	29.5
62.5°	6.3	26.4	27.4	25.3	26.4
65°	5.3	24.3	24.3	23.2	24.3
67.5°	5.3	22.2	22.2	21.1	22.2
70°	5.3	21.1	20.0	20.0	20.0
72.5°	4.2	19.0	19.0	17.9	17.9
75°	4.2	16.9	16.9	15.8	15.8
77.5°	4.2	15.8	15.8	14.8	13.7
80°	4.2	13.7	14.8	13.7	11.6
82.5°	4.2	12.7	13.7	12.7	9.5
85°	4.2	11.6	12.7	11.6	8.4
87.5°	3.2	11.6	11.6	9.5	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	6.38	7.60	6.75	7.91	8.23	8.41	9.63	8.77	9.94	10.26
	3H	7.93	9.01	8.31	9.34	9.71	10.37	11.46	10.76	11.79	12.16
	4H	8.48	9.49	8.88	9.84	10.23	11.29	12.30	11.69	12.65	13.03
	6H	9.03	9.96	9.45	10.33	10.73	12.17	13.10	12.58	13.47	13.86
	8H	9.32	10.20	9.76	10.60	11.00	12.57	13.45	13.00	13.84	14.25
	12H	9.68	10.52	10.11	10.91	11.34	13.01	13.85	13.45	14.24	14.67
4H	2H	7.57	8.58	7.97	8.93	9.32	9.03	10.04	9.43	10.39	10.77
	3H	9.77	10.60	10.18	11.00	11.41	11.26	12.10	11.68	12.50	12.91
	4H	10.82	11.57	11.25	11.99	12.43	12.33	13.08	12.77	13.50	13.94
	6H	11.71	12.36	12.17	12.80	13.27	13.44	14.09	13.91	14.54	15.01
	8H	12.09	12.70	12.56	13.15	13.62	13.97	14.57	14.44	15.02	15.49
	12H	12.51	13.05	13.00	13.53	14.01	14.54	15.08	15.03	15.56	16.03
8H	4H	11.62	12.22	12.09	12.67	13.14	12.82	13.43	13.29	13.88	14.35
	6H	13.00	13.49	13.50	13.99	14.47	14.22	14.72	14.73	15.22	15.70
	8H	13.72	14.16	14.24	14.68	15.17	14.96	15.41	15.49	15.93	16.42
	12H	14.47	14.86	14.98	15.36	15.93	15.79	16.19	16.31	16.68	17.26
12H	4H	11.78	12.31	12.27	12.80	13.27	12.92	13.46	13.41	13.94	14.42
	6H	13.33	13.77	13.85	14.29	14.78	14.44	14.89	14.96	15.40	15.90
	8H	14.24	14.64	14.76	15.13	15.71	15.33	15.72	15.84	16.22	16.79