

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: P1058175

Luminaire Tested: S122RDRP-S865D935-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058175  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55 )  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S865D935-X4F0-XX-UDD-WVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

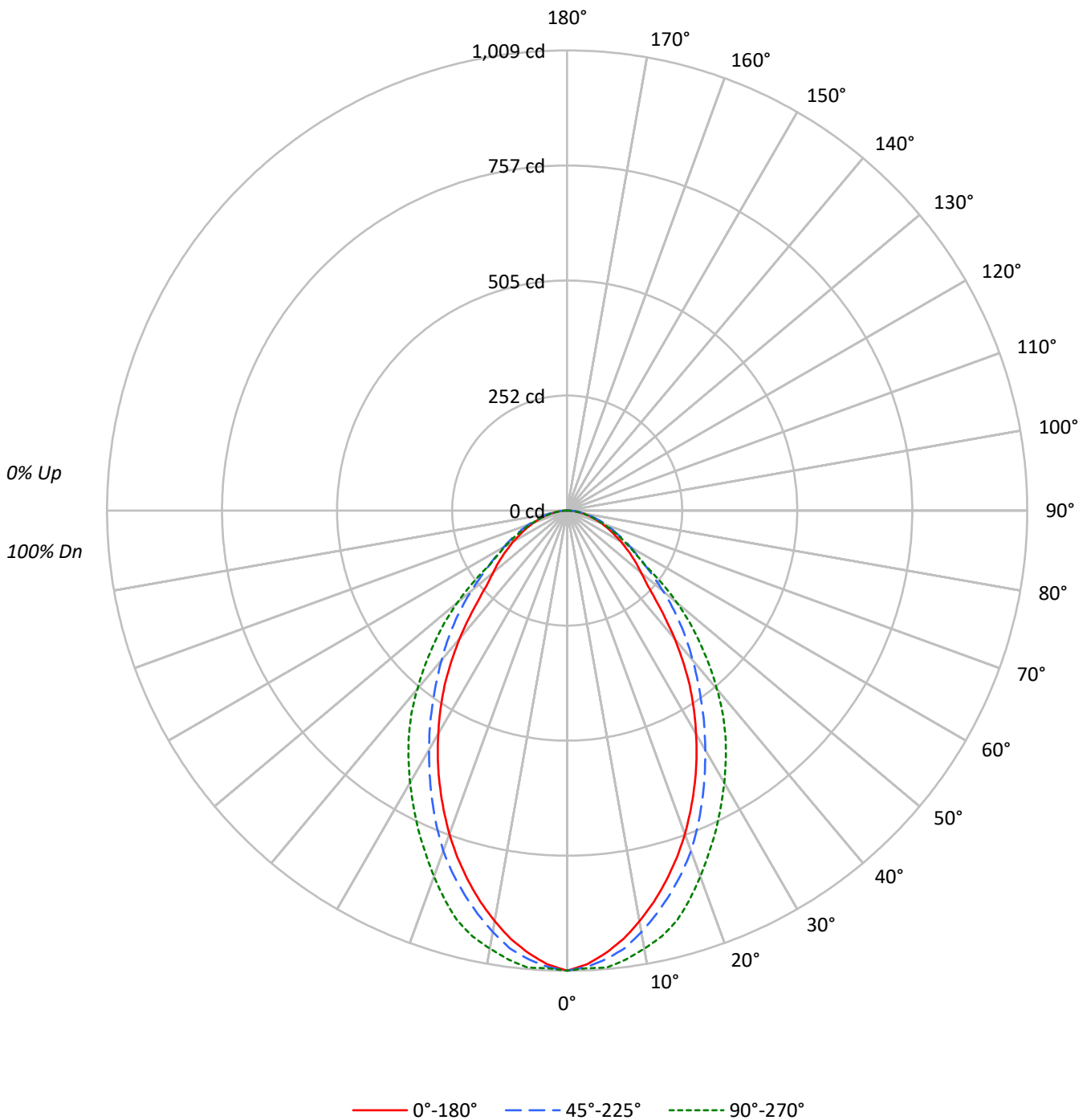
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1644.6 lumens  
Efficiency: N/A  
Efficacy: 47.0 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 (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					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	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	110	106	103	100	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	80	84	81	78					76				
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68					67				
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61					59				
5	81	70	62	56	80	69	62	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	46	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	40	35	46	39	35	45	39	35	44	38	34					33				

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

	0°	45°	90°
0°	18615	18615	18615
5°	18043	18284	18625
10°	17133	17581	18272
15°	16039	16639	17780
20°	14826	15592	16764
25°	13472	14266	15724
30°	12041	12897	14676
35°	10556	11558	13635
40°	8831	10322	12307
45°	7077	9144	10757
50°	6072	7877	9031
55°	5549	6701	6666
60°	5045	5923	5805
65°	4593	5305	5069
70°	4214	4856	4505
75°	3943	4484	3943
80°	3687	4155	3454
85°	3684	4361	2985

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10757 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.1	5.7
10°-20°	246.6	15.0
20°-30°	325.2	19.8
30°-40°	327.5	19.9
40°-50°	266.5	16.2
50°-60°	181.7	11.0
60°-70°	117.9	7.2
70°-80°	64.9	3.9
80°-90°	21.2	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°	664.9	40.4
0°-40°	992.3	60.3
0°-60°	1440.5	87.6
0°-90°	1644.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1644.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1009	1009	1009	1009	1009	
5°	974	992	987	996	1006	91
15°	840	861	871	907	931	235
25°	662	683	701	732	772	303
35°	469	492	513	558	605	291
45°	271	305	350	381	412	214
55°	172	190	208	209	207	154
65°	105	125	122	115	116	105
75°	55	68	63	56	55	59
85°	17	23	21	16	14	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1008.8	1008.8	1008.8	1008.8	1008.8
2.5°	995.8	1012.1	1001.2	1002.3	1004.5
5°	974.1	992.5	987.1	995.8	1005.5
7.5°	947.0	965.4	967.6	980.6	992.5
10°	914.4	935.0	938.3	957.8	975.2
12.5°	878.6	901.4	905.8	934.0	956.7
15°	839.6	861.3	871.0	906.8	930.7
17.5°	798.4	819.0	834.2	866.7	893.8
20°	755.0	774.5	794.0	823.3	853.7
22.5°	708.3	730.0	748.5	777.8	812.5
25°	661.7	683.4	700.7	732.2	772.3
27.5°	614.0	635.7	653.0	686.6	730.0
30°	565.1	587.9	605.3	643.2	688.8
32.5°	517.4	540.2	559.7	599.9	647.6
35°	468.6	492.5	513.1	557.6	605.3
37.5°	416.5	443.7	469.7	514.2	560.8
40°	366.6	397.0	428.5	469.7	510.9
42.5°	316.7	350.4	389.4	424.1	462.1
45°	271.2	304.8	350.4	380.7	412.2
47.5°	235.4	263.6	312.4	337.4	365.6
50°	211.5	231.0	274.4	294.0	314.6
52.5°	192.0	208.3	238.6	251.7	262.5
55°	172.5	189.8	208.3	209.4	207.2
57.5°	152.9	172.5	182.2	174.6	179.0
60°	136.7	156.2	160.5	152.9	157.3
62.5°	119.3	141.0	141.0	133.4	135.6
65°	105.2	124.7	121.5	115.0	116.1
67.5°	91.1	110.6	105.2	98.7	98.7
70°	78.1	96.5	90.0	83.5	83.5
72.5°	66.2	81.4	77.0	69.4	68.3
75°	55.3	68.3	62.9	56.4	55.3
77.5°	44.5	55.3	51.0	45.6	43.4
80°	34.7	44.5	39.1	34.7	32.5
82.5°	26.0	33.6	29.3	24.9	22.8
85°	17.4	22.8	20.6	16.3	14.1
87.5°	8.7	15.2	13.0	10.8	8.7
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	16.88	18.32	17.24	18.63	18.94	17.12	18.56	17.49	18.88	19.19
	3H	18.41	19.69	18.78	20.02	20.38	18.48	19.77	18.86	20.10	20.46
	4H	18.97	20.17	19.37	20.52	20.90	18.96	20.17	19.36	20.52	20.90
	6H	19.39	20.50	19.80	20.87	21.26	19.31	20.42	19.72	20.79	21.18
	8H	19.54	20.60	19.97	20.99	21.39	19.42	20.48	19.85	20.87	21.27
	12H	19.66	20.67	20.09	21.05	21.48	19.49	20.50	19.92	20.88	21.31
4H	2H	17.45	18.66	17.85	19.00	19.39	17.65	18.85	18.05	19.20	19.58
	3H	19.25	20.25	19.66	20.65	21.05	19.22	20.22	19.63	20.62	21.02
	4H	19.99	20.89	20.43	21.31	21.75	19.82	20.71	20.25	21.13	21.57
	6H	20.58	21.36	21.04	21.81	22.27	20.29	21.06	20.74	21.51	21.97
	8H	20.79	21.52	21.26	21.97	22.43	20.43	21.16	20.90	21.61	22.08
	12H	20.96	21.61	21.44	22.09	22.56	20.54	21.19	21.03	21.67	22.15
8H	4H	20.26	20.99	20.73	21.43	21.90	20.11	20.84	20.57	21.28	21.75
	6H	21.02	21.62	21.51	22.11	22.59	20.70	21.30	21.20	21.79	22.27
	8H	21.34	21.88	21.86	22.39	22.88	20.92	21.46	21.44	21.97	22.46
	12H	21.62	22.10	22.13	22.59	23.16	21.10	21.58	21.61	22.07	22.64
12H	4H	20.27	20.92	20.76	21.40	21.88	20.14	20.79	20.62	21.27	21.74
	6H	21.06	21.60	21.58	22.11	22.60	20.77	21.31	21.28	21.82	22.31
	8H	21.46	21.94	21.97	22.43	23.00	21.05	21.53	21.56	22.02	22.59