

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: P1057855

Luminaire Tested: S122RDRP-S1005D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1057855  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S1005D940-X4F0-XX-UDD-SVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

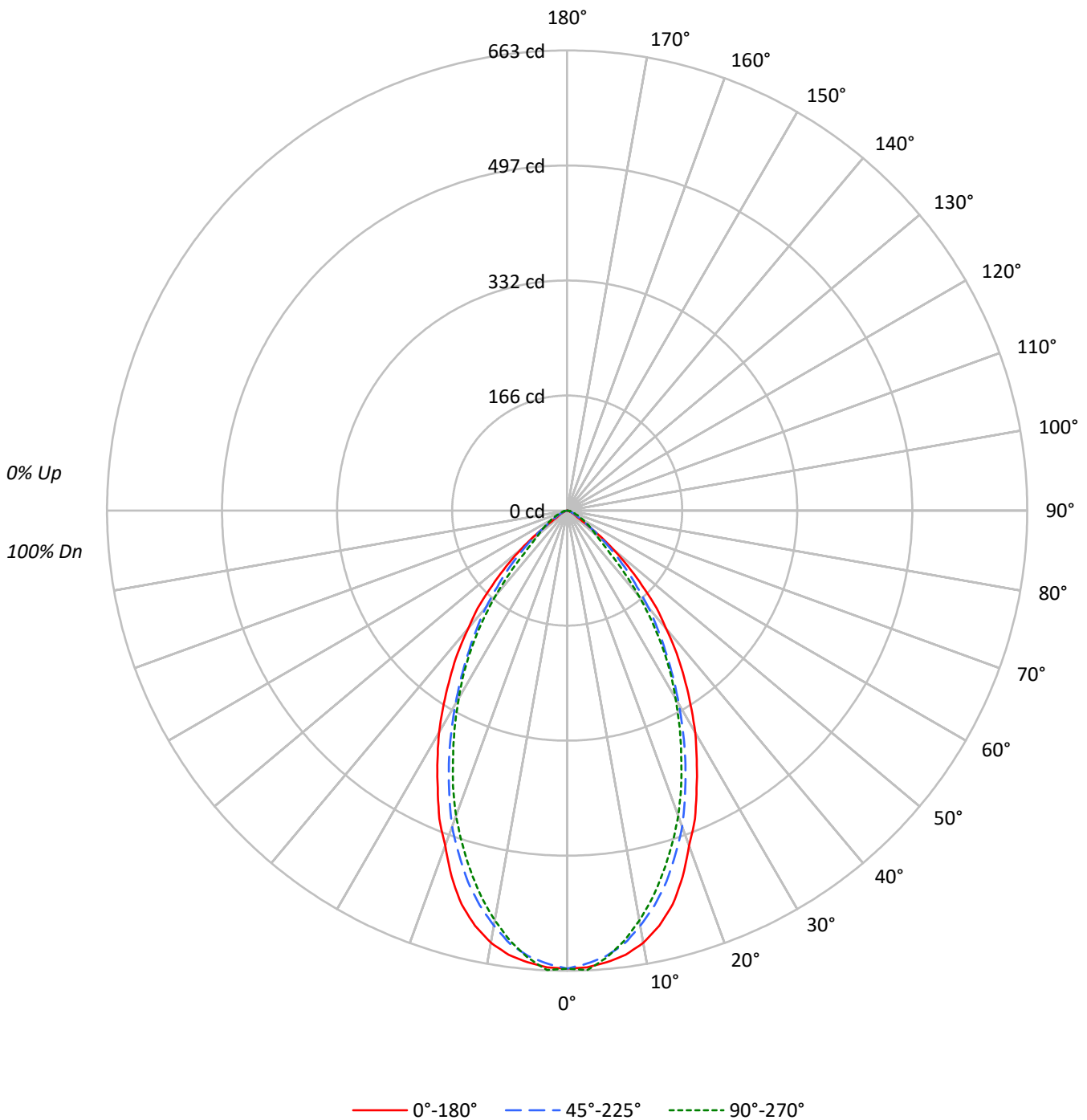
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 709.8 lumens  
Efficiency: N/A  
Efficacy: 17.0 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.8  
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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

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

	0°	45°	90°
0°	12179	12179	12179
5°	12103	11932	11981
10°	11847	11379	11231
15°	11223	10570	10268
20°	10089	9520	9184
25°	8985	8207	7912
30°	7860	6848	6652
35°	6618	5548	5370
40°	5331	4379	3871
45°	3987	3163	2304
50°	2495	2041	1513
55°	846	1103	1229
60°	487	679	971
65°	345	458	747
70°	286	356	566
75°	185	285	471
80°	138	276	425
85°	0	0	275

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3987 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.8	8.6
10°-20°	155.7	21.9
20°-30°	187.5	26.4
30°-40°	160.2	22.6
40°-50°	93.9	13.2
50°-60°	34.0	4.8
60°-70°	12.1	1.7
70°-80°	4.8	0.7
80°-90°	0.8	0.1
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°	404.0	56.9
0°-40°	564.2	79.5
0°-60°	692.1	97.5
0°-90°	709.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	709.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	660	660	660	660	660	
5°	653	655	644	647	647	62
15°	588	578	553	543	538	163
25°	441	423	403	396	389	203
35°	294	271	246	244	238	183
45°	153	137	121	101	88	118
55°	26	37	34	36	38	33
65°	8	9	10	14	17	8
75°	3	4	4	5	7	3
85°	0	0	0	1	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	660.0	660.0	660.0	660.0	660.0
2.5°	658.7	660.0	653.4	660.0	662.6
5°	653.4	654.7	644.2	646.8	646.8
7.5°	645.5	644.2	629.7	627.1	625.7
10°	632.3	628.4	607.3	603.3	599.4
12.5°	612.6	604.7	582.3	575.7	570.4
15°	587.5	578.3	553.3	542.7	537.5
17.5°	553.3	542.7	519.0	508.5	503.2
20°	513.8	503.2	484.8	472.9	467.7
22.5°	480.8	463.7	443.9	436.0	429.5
25°	441.3	422.9	403.1	396.5	388.6
27.5°	404.4	382.0	362.3	357.0	350.4
30°	368.9	345.1	321.4	321.4	312.2
32.5°	330.7	308.3	283.2	281.9	276.6
35°	293.8	271.4	246.3	243.7	238.4
37.5°	259.5	237.1	213.4	205.5	198.9
40°	221.3	201.6	181.8	168.6	160.7
42.5°	191.0	168.6	148.9	133.1	122.5
45°	152.8	137.0	121.2	101.4	88.3
47.5°	118.6	108.0	94.8	72.5	65.9
50°	86.9	81.7	71.1	54.0	52.7
52.5°	55.3	58.0	51.4	42.2	46.1
55°	26.3	36.9	34.3	35.6	38.2
57.5°	17.1	18.4	25.0	29.0	31.6
60°	13.2	13.2	18.4	23.7	26.3
62.5°	10.5	10.5	14.5	19.8	21.1
65°	7.9	9.2	10.5	14.5	17.1
67.5°	6.6	6.6	7.9	11.9	13.2
70°	5.3	5.3	6.6	9.2	10.5
72.5°	4.0	4.0	5.3	7.9	7.9
75°	2.6	4.0	4.0	5.3	6.6
77.5°	2.6	2.6	2.6	4.0	5.3
80°	1.3	1.3	2.6	2.6	4.0
82.5°	1.3	1.3	1.3	1.3	2.6
85°	0.0	0.0	0.0	1.3	1.3
87.5°	0.0	0.0	0.0	0.0	0.0
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	4.55	5.72	4.92	6.03	6.34	7.97	9.13	8.33	9.44	9.76
	3H	5.08	6.10	5.46	6.44	6.80	8.70	9.72	9.08	10.05	10.42
	4H	5.22	6.17	5.62	6.52	6.90	8.91	9.86	9.32	10.21	10.60
	6H	5.29	6.15	5.70	6.53	6.92	9.07	9.93	9.48	10.31	10.70
	8H	5.29	6.11	5.72	6.50	6.91	9.10	9.92	9.53	10.31	10.72
	12H	5.26	6.04	5.69	6.42	6.85	9.10	9.88	9.53	10.26	10.69
4H	2H	4.86	5.81	5.27	6.16	6.55	7.93	8.88	8.34	9.23	9.62
	3H	5.53	6.30	5.95	6.71	7.11	8.81	9.58	9.22	9.98	10.39
	4H	5.78	6.46	6.21	6.88	7.33	9.09	9.77	9.53	10.20	10.64
	6H	5.89	6.48	6.36	6.92	7.40	9.32	9.91	9.79	10.35	10.83
	8H	5.90	6.45	6.38	6.90	7.37	9.36	9.91	9.84	10.36	10.83
	12H	5.87	6.35	6.36	6.83	7.31	9.38	9.86	9.87	10.35	10.82
8H	4H	5.88	6.43	6.36	6.88	7.35	9.02	9.57	9.50	10.02	10.49
	6H	6.04	6.48	6.55	6.99	7.47	9.28	9.73	9.79	10.23	10.71
	8H	6.09	6.48	6.61	7.00	7.50	9.34	9.74	9.87	10.26	10.75
	12H	6.06	6.41	6.58	6.91	7.48	9.40	9.75	9.92	10.25	10.82
12H	4H	5.87	6.35	6.36	6.83	7.31	8.97	9.45	9.46	9.94	10.41
	6H	6.04	6.44	6.57	6.96	7.45	9.23	9.63	9.76	10.15	10.64
	8H	6.11	6.46	6.63	6.96	7.53	9.32	9.66	9.84	10.16	10.74