

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: P1057835

Luminaire Tested: S122RDRP-S1005D930-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1057835  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S1005D930-X4F0-XX-UDD-BVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

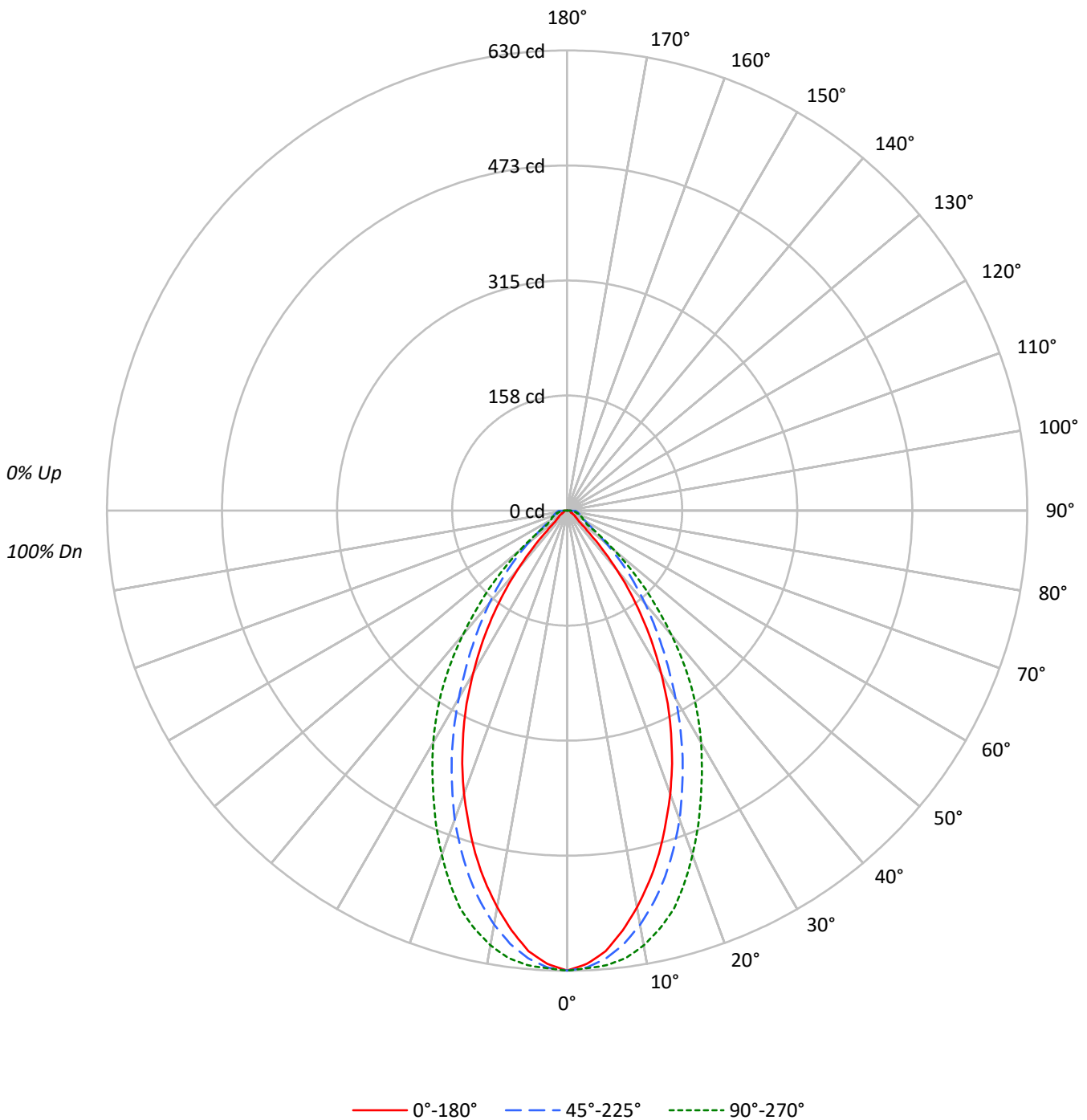
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 678.7 lumens  
Efficiency: N/A  
Efficacy: 16.2 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9  
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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42

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

	0°	45°	90°
0°	11620	11620	11620
5°	11216	11395	11573
10°	10328	10781	11323
15°	9286	9909	10784
20°	8100	8835	9854
25°	6851	7613	8816
30°	5474	6322	7813
35°	4048	5082	6711
40°	2556	3982	5345
45°	1007	2991	3935
50°	520	2009	2423
55°	428	1319	1087
60°	310	1067	978
65°	262	1000	1000
70°	259	1041	977
75°	342	1205	1034
80°	510	1541	1158
85°	762	2562	1524

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 87.5°  
 Luminance: 5119 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.6	8.5
10°-20°	145.5	21.4
20°-30°	172.9	25.5
30°-40°	143.8	21.2
40°-50°	80.3	11.8
50°-60°	32.4	4.8
60°-70°	20.7	3.1
70°-80°	15.6	2.3
80°-90°	9.9	1.5
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°	375.9	55.4
0°-40°	519.7	76.6
0°-60°	632.5	93.2
0°-90°	678.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	678.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	630	630	630	630	630	
5°	606	616	615	620	625	56
15°	486	501	519	545	564	135
25°	336	350	374	403	433	153
35°	180	197	226	263	298	112
45°	39	65	115	134	151	36
55°	13	28	41	40	34	12
65°	6	24	23	22	23	6
75°	5	17	17	16	14	5
85°	4	11	12	11	7	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	629.7	629.7	629.7	629.7	629.7
2.5°	621.2	630.9	626.0	626.0	627.2
5°	605.5	616.4	615.2	620.0	624.8
7.5°	580.2	592.3	598.3	609.1	617.6
10°	551.2	564.5	575.4	592.3	604.3
12.5°	519.9	533.2	548.8	570.5	586.2
15°	486.1	500.6	518.7	545.2	564.5
17.5°	448.7	464.4	484.9	513.9	534.4
20°	412.5	428.2	449.9	478.9	501.8
22.5°	375.1	388.4	411.3	440.3	468.0
25°	336.5	349.8	373.9	402.9	433.0
27.5°	297.9	311.2	335.3	365.5	399.3
30°	256.9	271.4	296.7	330.5	366.7
32.5°	218.3	232.8	259.3	296.7	332.9
35°	179.7	196.6	225.6	263.0	297.9
37.5°	142.3	161.6	194.2	229.2	260.5
40°	106.1	126.7	165.3	195.4	221.9
42.5°	70.0	94.1	138.7	164.0	184.6
45°	38.6	65.1	114.6	133.9	150.8
47.5°	21.7	42.2	90.5	106.1	115.8
50°	18.1	31.4	70.0	80.8	84.4
52.5°	14.5	28.9	53.1	59.1	56.7
55°	13.3	27.7	41.0	39.8	33.8
57.5°	10.9	27.7	32.6	28.9	28.9
60°	8.4	26.5	28.9	25.3	26.5
62.5°	7.2	25.3	26.5	24.1	24.1
65°	6.0	24.1	22.9	21.7	22.9
67.5°	4.8	21.7	21.7	20.5	20.5
70°	4.8	20.5	19.3	18.1	18.1
72.5°	4.8	18.1	18.1	16.9	16.9
75°	4.8	16.9	16.9	15.7	14.5
77.5°	4.8	14.5	15.7	14.5	13.3
80°	4.8	13.3	14.5	13.3	10.9
82.5°	4.8	12.1	13.3	12.1	9.6
85°	3.6	10.9	12.1	10.9	7.2
87.5°	3.6	10.9	12.1	9.6	6.0
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	6.88	8.10	7.24	8.41	8.73	7.95	9.17	8.31	9.48	9.80
	3H	8.21	9.29	8.59	9.63	9.99	9.99	11.07	10.37	11.40	11.77
	4H	8.78	9.80	9.19	10.15	10.53	10.94	11.95	11.35	12.31	12.69
	6H	9.35	10.28	9.77	10.65	11.05	11.90	12.83	12.31	13.20	13.59
	8H	9.68	10.55	10.11	10.95	11.35	12.34	13.22	12.78	13.61	14.02
	12H	9.98	10.82	10.41	11.21	11.64	12.76	13.60	13.20	13.99	14.42
4H	2H	7.84	8.85	8.25	9.20	9.59	8.63	9.64	9.03	9.99	10.38
	3H	9.87	10.70	10.29	11.11	11.51	10.92	11.75	11.33	12.15	12.56
	4H	10.95	11.70	11.39	12.12	12.57	12.07	12.82	12.51	13.24	13.68
	6H	11.83	12.48	12.29	12.92	13.39	13.25	13.89	13.71	14.34	14.81
	8H	12.24	12.84	12.71	13.29	13.76	13.81	14.41	14.28	14.86	15.33
	12H	12.62	13.15	13.11	13.64	14.11	14.35	14.88	14.83	15.37	15.84
8H	4H	11.73	12.33	12.20	12.78	13.25	12.62	13.23	13.09	13.68	14.15
	6H	13.07	13.57	13.58	14.07	14.55	14.08	14.58	14.59	15.08	15.56
	8H	13.79	14.24	14.31	14.75	15.25	14.85	15.29	15.37	15.81	16.30
	12H	14.48	14.88	15.00	15.37	15.94	15.63	16.02	16.15	16.52	17.09
12H	4H	11.88	12.42	12.37	12.90	13.38	12.73	13.26	13.22	13.75	14.22
	6H	13.39	13.84	13.92	14.36	14.85	14.31	14.76	14.83	15.27	15.77
	8H	14.30	14.69	14.82	15.19	15.76	15.22	15.61	15.73	16.11	16.68