

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: P1058269

Luminaire Tested: S122RDRP-H1005D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058269  
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-H1005D950-X4F0-XX-UDD-SVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

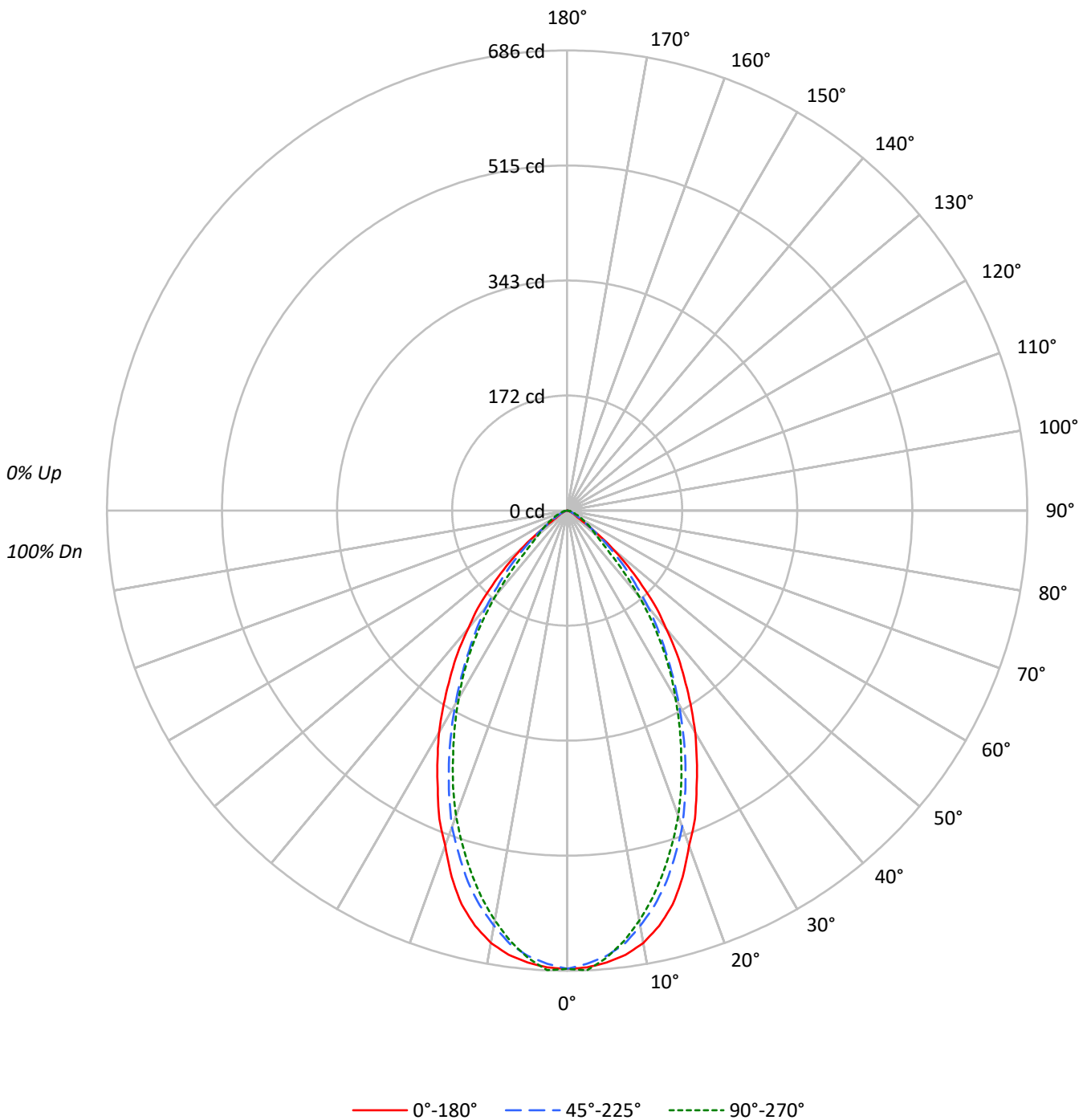
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 734.6 lumens  
Efficiency: N/A  
Efficacy: 20.1 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): 36.5  
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°	12603	12603	12603
5°	12525	12349	12399
10°	12262	11776	11623
15°	11615	10939	10625
20°	10441	9852	9504
25°	9298	8494	8189
30°	8133	7087	6884
35°	6848	5742	5559
40°	5516	4531	4006
45°	4126	3272	2383
50°	2584	2113	1565
55°	878	1139	1271
60°	502	705	1008
65°	358	476	773
70°	297	367	588
75°	192	292	485
80°	149	287	436
85°	0	0	296

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4126 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.0	8.6
10°-20°	161.2	21.9
20°-30°	194.0	26.4
30°-40°	165.8	22.6
40°-50°	97.1	13.2
50°-60°	35.2	4.8
60°-70°	12.5	1.7
70°-80°	5.0	0.7
80°-90°	0.9	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°	418.2	56.9
0°-40°	583.9	79.5
0°-60°	716.2	97.5
0°-90°	734.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	734.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	683	683	683	683	683	
5°	676	678	667	669	669	64
15°	608	598	573	562	556	169
25°	457	438	417	410	402	210
35°	304	281	255	252	247	190
45°	158	142	125	105	91	122
55°	27	38	35	37	40	34
65°	8	10	11	15	18	9
75°	3	4	4	6	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°	683.0	683.0	683.0	683.0	683.0
2.5°	681.7	683.0	676.2	683.0	685.7
5°	676.2	677.6	666.7	669.4	669.4
7.5°	668.0	666.7	651.7	648.9	647.6
10°	654.4	650.3	628.5	624.4	620.3
12.5°	633.9	625.8	602.6	595.8	590.3
15°	608.0	598.5	572.6	561.7	556.2
17.5°	572.6	561.7	537.1	526.2	520.8
20°	531.7	520.8	501.7	489.4	484.0
22.5°	497.6	479.9	459.4	451.3	444.4
25°	456.7	437.6	417.2	410.4	402.2
27.5°	418.5	395.4	374.9	369.5	362.6
30°	381.7	357.2	332.6	332.6	323.1
32.5°	342.2	319.0	293.1	291.7	286.3
35°	304.0	280.8	254.9	252.2	246.8
37.5°	268.6	245.4	220.9	212.7	205.9
40°	229.0	208.6	188.1	174.5	166.3
42.5°	197.7	174.5	154.1	137.7	126.8
45°	158.1	141.8	125.4	105.0	91.3
47.5°	122.7	111.8	98.2	75.0	68.2
50°	90.0	84.5	73.6	55.9	54.5
52.5°	57.3	60.0	53.2	43.6	47.7
55°	27.3	38.2	35.4	36.8	39.5
57.5°	17.7	19.1	25.9	30.0	32.7
60°	13.6	13.6	19.1	24.5	27.3
62.5°	10.9	10.9	15.0	20.4	21.8
65°	8.2	9.5	10.9	15.0	17.7
67.5°	6.8	6.8	8.2	12.3	13.6
70°	5.5	5.5	6.8	9.5	10.9
72.5°	4.1	4.1	5.5	8.2	8.2
75°	2.7	4.1	4.1	5.5	6.8
77.5°	2.7	2.7	2.7	4.1	5.5
80°	1.4	1.4	2.7	2.7	4.1
82.5°	1.4	1.4	1.4	1.4	2.7
85°	0.0	0.0	0.0	1.4	1.4
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	4.69	5.85	5.05	6.16	6.48	8.08	9.25	8.45	9.56	9.87
	3H	5.21	6.23	5.59	6.56	6.93	8.81	9.83	9.19	10.16	10.53
	4H	5.34	6.29	5.75	6.64	7.03	9.03	9.98	9.43	10.33	10.72
	6H	5.42	6.28	5.83	6.66	7.05	9.18	10.05	9.60	10.42	10.82
	8H	5.43	6.24	5.86	6.63	7.04	9.21	10.03	9.65	10.42	10.83
	12H	5.39	6.17	5.82	6.55	6.99	9.21	9.99	9.65	10.38	10.81
4H	2H	5.00	5.94	5.40	6.30	6.68	8.05	9.00	8.46	9.35	9.74
	3H	5.66	6.43	6.07	6.83	7.24	8.92	9.69	9.34	10.10	10.50
	4H	5.90	6.58	6.34	7.01	7.45	9.21	9.89	9.65	10.31	10.76
	6H	6.02	6.60	6.49	7.05	7.52	9.43	10.02	9.90	10.47	10.94
	8H	6.04	6.58	6.51	7.03	7.51	9.48	10.03	9.95	10.47	10.95
	12H	6.01	6.48	6.49	6.97	7.45	9.50	9.98	9.99	10.47	10.94
8H	4H	6.01	6.55	6.48	7.00	7.47	9.14	9.68	9.61	10.13	10.61
	6H	6.17	6.61	6.68	7.11	7.60	9.40	9.84	9.91	10.34	10.82
	8H	6.22	6.62	6.75	7.14	7.63	9.46	9.86	9.99	10.38	10.87
	12H	6.20	6.55	6.72	7.05	7.62	9.53	9.87	10.04	10.37	10.95
12H	4H	5.99	6.47	6.48	6.96	7.43	9.09	9.57	9.58	10.05	10.53
	6H	6.17	6.57	6.70	7.09	7.58	9.35	9.75	9.88	10.26	10.76
	8H	6.25	6.60	6.77	7.10	7.67	9.44	9.78	9.95	10.28	10.86