

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058234

Luminaire Tested: S122RDR-H1005D927-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058234  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-H1005D927-X4F0-XX-UDD-SVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

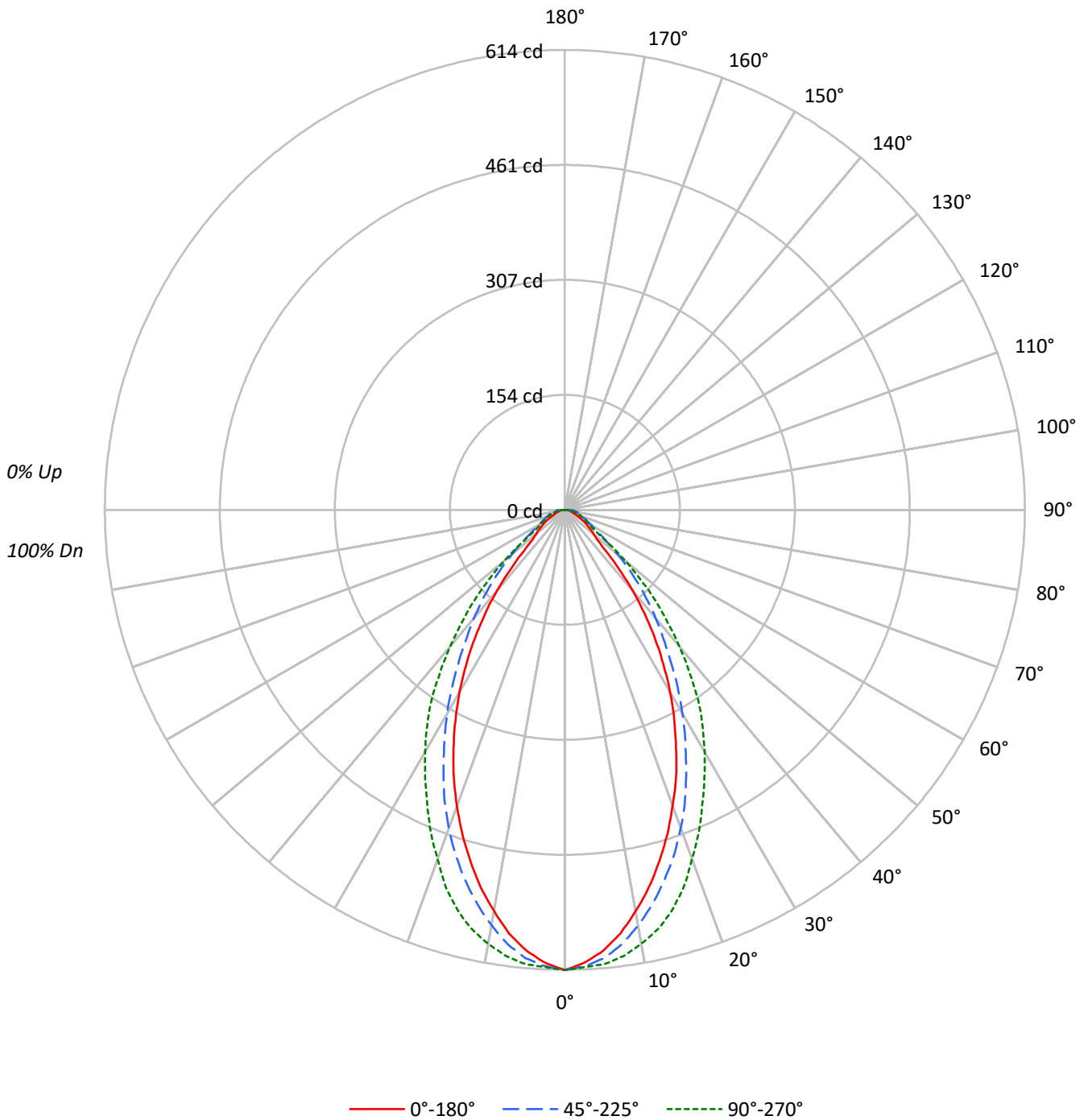
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 741.2 lumens  
Efficiency: N/A  
Efficacy: 20.3 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94  
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 (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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

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

	0°	45°	90°
0°	11337	11337	11337
5°	10940	11129	11275
10°	10195	10556	11023
15°	9290	9789	10568
20°	8259	8882	9750
25°	7155	7800	8840
30°	5989	6690	7945
35°	4724	5541	6997
40°	3387	4533	5735
45°	1981	3580	4436
50°	1432	2604	2994
55°	1203	1859	1567
60°	963	1506	1340
65°	790	1336	1236
70°	674	1284	1160
75°	649	1376	1134
80°	723	1690	1201
85°	1207	2646	1673

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4436 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.3	7.6
10°-20°	144.2	19.5
20°-30°	177.3	23.9
30°-40°	156.7	21.1
40°-50°	100.0	13.5
50°-60°	48.8	6.6
60°-70°	29.0	3.9
70°-80°	18.6	2.5
80°-90°	10.2	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°	377.8	51.0
0°-40°	534.5	72.1
0°-60°	683.3	92.2
0°-90°	741.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	741.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	591	603	601	603	609	55
15°	486	500	512	535	553	136
25°	351	364	383	407	434	161
35°	210	221	246	280	311	130
45°	76	98	137	154	170	64
55°	37	50	58	54	49	33
65°	18	34	31	28	28	18
75°	9	20	19	17	16	10
85°	6	11	12	11	8	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	614.4	614.4	614.4	614.4	614.4
2.5°	605.3	616.7	609.9	609.9	611.0
5°	590.6	603.1	600.8	603.1	608.7
7.5°	570.2	582.7	584.9	594.0	600.8
10°	544.1	556.6	563.4	578.1	588.3
12.5°	516.9	529.4	539.6	558.9	573.6
15°	486.3	499.9	512.4	535.0	553.2
17.5°	454.6	468.2	484.0	506.7	528.2
20°	420.6	433.0	452.3	473.8	496.5
22.5°	387.7	399.0	419.4	439.8	467.0
25°	351.4	363.9	383.1	407.0	434.2
27.5°	316.3	328.7	348.0	375.2	403.6
30°	281.1	292.5	314.0	342.3	372.9
32.5°	244.9	256.2	280.0	310.6	342.3
35°	209.7	221.0	246.0	280.0	310.6
37.5°	174.6	187.0	215.4	247.1	273.2
40°	140.6	155.3	188.2	215.4	238.1
42.5°	106.6	127.0	162.1	184.8	202.9
45°	75.9	97.5	137.2	154.2	170.0
47.5°	57.8	74.8	113.4	125.8	136.0
50°	49.9	61.2	90.7	99.8	104.3
52.5°	43.1	54.4	72.5	75.9	73.7
55°	37.4	49.9	57.8	54.4	48.7
57.5°	31.7	46.5	47.6	40.8	41.9
60°	26.1	41.9	40.8	35.1	36.3
62.5°	21.5	38.5	35.1	31.7	31.7
65°	18.1	34.0	30.6	28.3	28.3
67.5°	14.7	30.6	27.2	24.9	24.9
70°	12.5	27.2	23.8	21.5	21.5
72.5°	11.3	23.8	21.5	19.3	19.3
75°	9.1	20.4	19.3	17.0	15.9
77.5°	7.9	17.0	17.0	15.9	13.6
80°	6.8	14.7	15.9	13.6	11.3
82.5°	6.8	13.6	13.6	12.5	9.1
85°	5.7	11.3	12.5	11.3	7.9
87.5°	3.4	10.2	10.2	9.1	5.7
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	10.47	11.74	10.83	12.06	12.37	9.99	11.27	10.35	11.58	11.89
	3H	11.64	12.78	12.02	13.11	13.47	11.55	12.68	11.93	13.01	13.38
	4H	12.07	13.13	12.47	13.48	13.87	12.23	13.29	12.63	13.64	14.03
	6H	12.41	13.39	12.83	13.76	14.16	12.88	13.86	13.29	14.23	14.62
	8H	12.61	13.54	13.04	13.93	14.33	13.17	14.09	13.60	14.49	14.89
	12H	12.83	13.72	13.26	14.10	14.53	13.49	14.37	13.92	14.75	15.18
4H	2H	10.97	12.03	11.37	12.38	12.76	10.59	11.65	10.99	12.00	12.38
	3H	12.61	13.49	13.02	13.89	14.29	12.38	13.26	12.80	13.66	14.07
	4H	13.38	14.16	13.81	14.58	15.02	13.23	14.01	13.66	14.43	14.88
	6H	13.98	14.66	14.44	15.10	15.57	14.08	14.76	14.55	15.21	15.68
	8H	14.27	14.91	14.74	15.36	15.83	14.48	15.11	14.95	15.56	16.03
	12H	14.59	15.15	15.08	15.63	16.11	14.91	15.47	15.40	15.96	16.43
8H	4H	13.79	14.43	14.26	14.88	15.35	13.69	14.32	14.16	14.77	15.24
	6H	14.74	15.26	15.24	15.76	16.24	14.80	15.32	15.30	15.81	16.30
	8H	15.29	15.76	15.81	16.27	16.76	15.38	15.85	15.90	16.36	16.85
	12H	15.85	16.27	16.37	16.76	17.33	16.04	16.46	16.56	16.95	17.53
12H	4H	13.86	14.43	14.35	14.91	15.38	13.77	14.33	14.26	14.82	15.29
	6H	14.92	15.39	15.45	15.91	16.40	14.98	15.45	15.50	15.97	16.46
	8H	15.62	16.03	16.13	16.53	17.10	15.69	16.11	16.21	16.60	17.18