

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: P1058423

Luminaire Tested: S122RDRP-H485D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058423  
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: S122RDRP-H485D940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

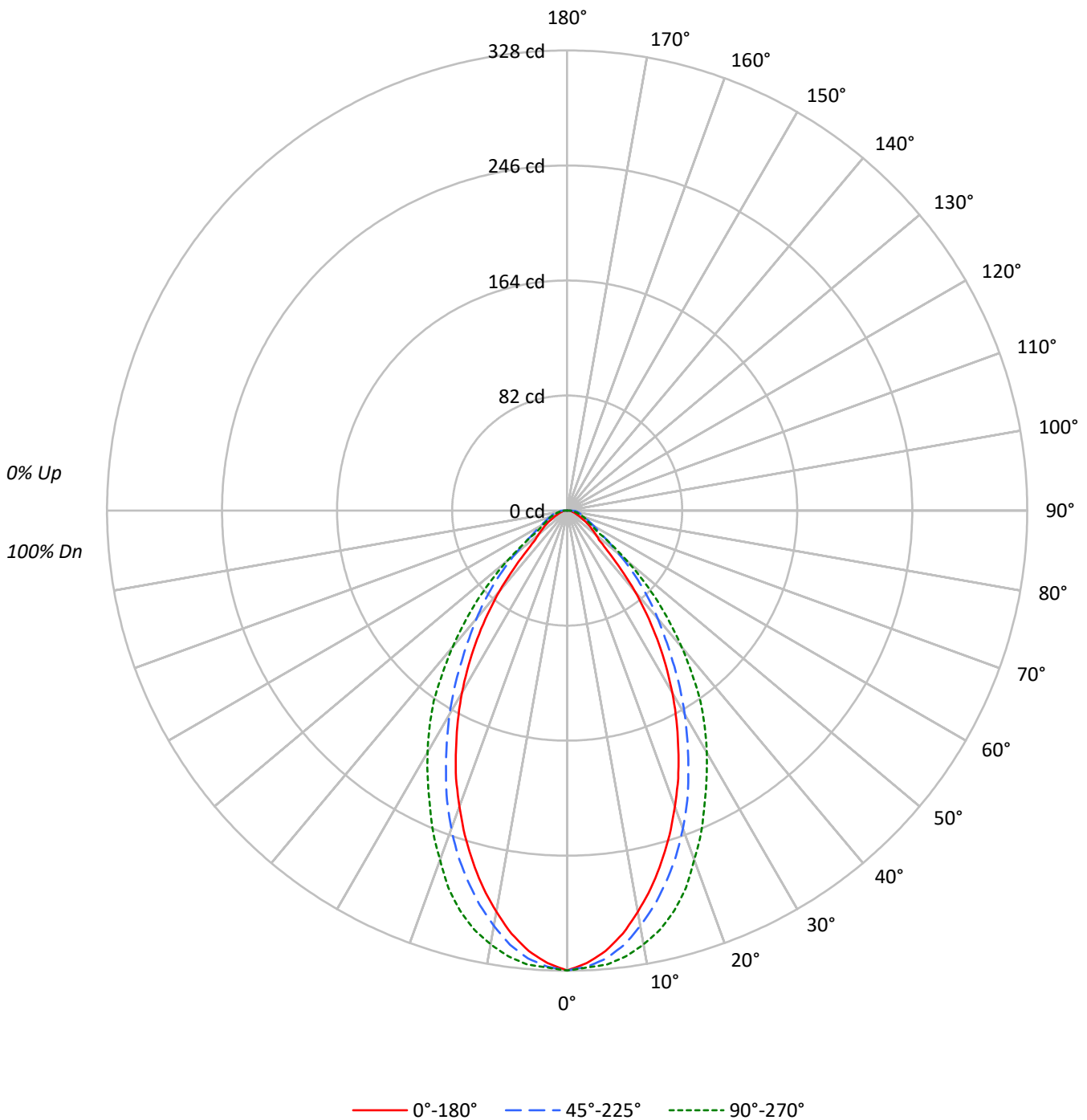
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 395.4 lumens  
Efficiency: N/A  
Efficacy: 22.7 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): 17.4  
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	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°	6049	6049	6049
5°	5837	5937	6016
10°	5439	5632	5882
15°	4955	5223	5637
20°	4406	4738	5202
25°	3818	4162	4715
30°	3196	3569	4240
35°	2521	2955	3733
40°	1807	2418	3059
45°	1057	1910	2367
50°	764	1389	1596
55°	643	991	836
60°	513	805	716
65°	424	712	659
70°	361	685	620
75°	342	734	606
80°	383	903	638
85°	635	1419	889

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2367 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.0	7.6
10°-20°	76.9	19.5
20°-30°	94.6	23.9
30°-40°	83.6	21.1
40°-50°	53.4	13.5
50°-60°	26.0	6.6
60°-70°	15.5	3.9
70°-80°	9.9	2.5
80°-90°	5.5	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°	201.6	51.0
0°-40°	285.2	72.1
0°-60°	364.6	92.2
0°-90°	395.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	395.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	328	328	328	328	328	
5°	315	322	320	322	325	29
15°	259	267	273	286	295	72
25°	188	194	204	217	232	86
35°	112	118	131	149	166	69
45°	40	52	73	82	91	34
55°	20	27	31	29	26	18
65°	10	18	16	15	15	10
75°	5	11	10	9	8	5
85°	3	6	7	6	4	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	327.8	327.8	327.8	327.8	327.8
2.5°	322.9	329.0	325.4	325.4	326.0
5°	315.1	321.7	320.5	321.7	324.8
7.5°	304.2	310.9	312.1	316.9	320.5
10°	290.3	296.9	300.6	308.4	313.9
12.5°	275.8	282.4	287.9	298.2	306.0
15°	259.4	266.7	273.4	285.5	295.1
17.5°	242.5	249.8	258.2	270.3	281.8
20°	224.4	231.0	241.3	252.8	264.9
22.5°	206.8	212.9	223.8	234.7	249.2
25°	187.5	194.1	204.4	217.1	231.6
27.5°	168.7	175.4	185.7	200.2	215.3
30°	150.0	156.0	167.5	182.6	199.0
32.5°	130.6	136.7	149.4	165.7	182.6
35°	111.9	117.9	131.2	149.4	165.7
37.5°	93.1	99.8	114.9	131.8	145.7
40°	75.0	82.9	100.4	114.9	127.0
42.5°	56.8	67.7	86.5	98.6	108.3
45°	40.5	52.0	73.2	82.2	90.7
47.5°	30.8	39.9	60.5	67.1	72.6
50°	26.6	32.7	48.4	53.2	55.6
52.5°	23.0	29.0	38.7	40.5	39.3
55°	20.0	26.6	30.8	29.0	26.0
57.5°	16.9	24.8	25.4	21.8	22.4
60°	13.9	22.4	21.8	18.7	19.4
62.5°	11.5	20.6	18.7	16.9	16.9
65°	9.7	18.1	16.3	15.1	15.1
67.5°	7.9	16.3	14.5	13.3	13.3
70°	6.7	14.5	12.7	11.5	11.5
72.5°	6.0	12.7	11.5	10.3	10.3
75°	4.8	10.9	10.3	9.1	8.5
77.5°	4.2	9.1	9.1	8.5	7.3
80°	3.6	7.9	8.5	7.3	6.0
82.5°	3.6	7.3	7.3	6.7	4.8
85°	3.0	6.0	6.7	6.0	4.2
87.5°	1.8	5.4	5.4	4.8	3.0
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	8.28	9.56	8.65	9.87	10.19	7.81	9.09	8.18	9.41	9.72
	3H	9.46	10.60	9.84	10.93	11.29	9.37	10.51	9.75	10.84	11.21
	4H	9.89	10.95	10.29	11.30	11.68	10.06	11.12	10.46	11.47	11.86
	6H	10.23	11.21	10.64	11.58	11.97	10.71	11.69	11.12	12.06	12.45
	8H	10.42	11.35	10.85	11.74	12.15	10.99	11.92	11.42	12.31	12.72
	12H	10.64	11.52	11.07	11.91	12.34	11.31	12.19	11.74	12.57	13.00
4H	2H	8.78	9.84	9.18	10.19	10.58	8.41	9.47	8.81	9.82	10.21
	3H	10.43	11.30	10.84	11.71	12.11	10.21	11.08	10.62	11.49	11.89
	4H	11.19	11.98	11.63	12.40	12.84	11.05	11.84	11.49	12.26	12.70
	6H	11.79	12.47	12.26	12.92	13.39	11.91	12.59	12.38	13.04	13.51
	8H	12.09	12.73	12.56	13.18	13.65	12.30	12.94	12.77	13.38	13.86
	12H	12.40	12.97	12.89	13.45	13.92	12.73	13.29	13.22	13.78	14.25
8H	4H	11.61	12.25	12.08	12.70	13.17	11.51	12.15	11.98	12.60	13.07
	6H	12.56	13.09	13.07	13.58	14.06	12.63	13.15	13.13	13.65	14.13
	8H	13.11	13.58	13.64	14.10	14.59	13.21	13.67	13.73	14.19	14.68
	12H	13.67	14.09	14.19	14.58	15.15	13.87	14.28	14.38	14.78	15.35
12H	4H	11.68	12.25	12.17	12.73	13.20	11.60	12.16	12.08	12.64	13.12
	6H	12.75	13.22	13.27	13.74	14.23	12.81	13.28	13.34	13.80	14.29
	8H	13.45	13.86	13.96	14.36	14.93	13.53	13.94	14.04	14.43	15.01