

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: P1058253

Luminaire Tested: S122RDRP-H1005D935-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058253  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-H1005D935-X4F0-XX-UDD-SVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

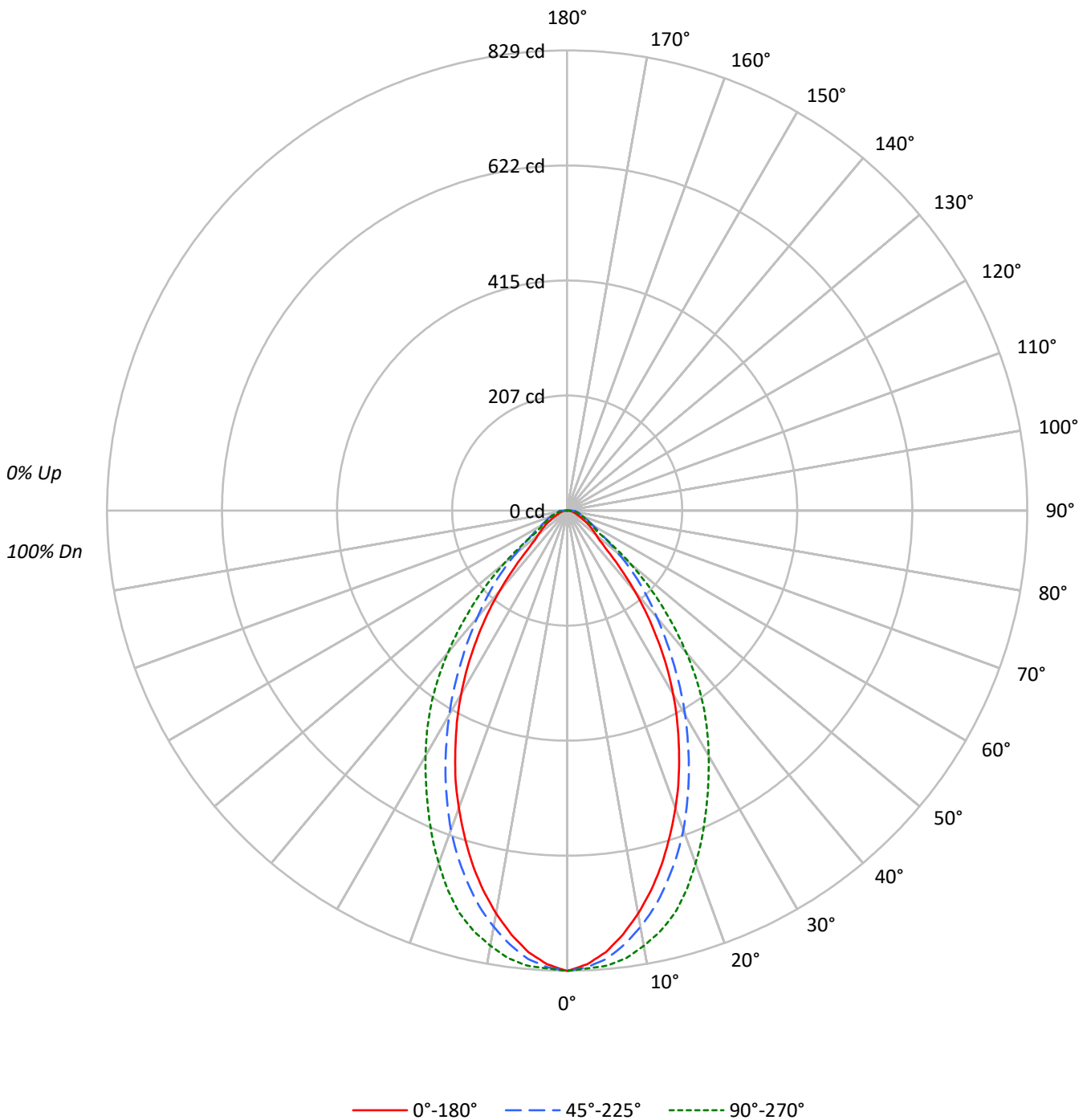
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1005.9 lumens  
Efficiency: N/A  
Efficacy: 27.6 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95  
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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	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	67	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	45	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°	15303	15303	15303
5°	14791	15018	15246
10°	13807	14268	14915
15°	12593	13252	14335
20°	11203	12026	13284
25°	9710	10563	12067
30°	8139	9058	10869
35°	6411	7495	9632
40°	4572	6056	8043
45°	2701	4791	6239
50°	1946	3468	4246
55°	1625	2496	2139
60°	1318	2000	1819
65°	1074	1777	1668
70°	933	1726	1597
75°	877	1754	1583
80°	914	2093	1700
85°	1313	3387	2096

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6239 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.1	7.6
10°-20°	195.4	19.4
20°-30°	241.1	24.0
30°-40°	214.4	21.3
40°-50°	136.9	13.6
50°-60°	65.7	6.5
60°-70°	38.6	3.8
70°-80°	24.6	2.4
80°-90°	13.2	1.3
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°	512.5	51.0
0°-40°	727.0	72.3
0°-60°	929.5	92.4
0°-90°	1005.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1005.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	829	829	829	829	829	
5°	798	813	811	816	823	74
15°	659	675	694	726	750	184
25°	477	495	519	556	593	218
35°	285	307	333	383	428	177
45°	104	134	184	213	239	87
55°	50	65	78	75	66	46
65°	25	44	41	37	38	25
75°	12	27	25	23	22	13
85°	6	15	16	14	10	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	829.3	829.3	829.3	829.3	829.3
2.5°	818.2	831.7	823.1	823.1	825.6
5°	798.5	813.3	810.8	815.7	823.1
7.5°	770.1	786.2	788.6	802.2	813.3
10°	736.9	754.1	761.5	781.2	796.0
12.5°	699.9	717.2	730.7	755.4	776.3
15°	659.2	675.3	693.7	725.8	750.4
17.5°	614.9	635.8	654.3	687.6	715.9
20°	570.5	590.2	612.4	644.5	676.5
22.5°	524.9	543.4	565.6	598.9	635.8
25°	476.9	495.4	518.8	555.7	592.7
27.5°	430.0	448.5	470.7	511.4	550.8
30°	382.0	400.5	425.1	467.0	510.1
32.5°	333.9	353.6	378.3	423.9	469.5
35°	284.6	306.8	332.7	383.2	427.6
37.5°	236.6	258.8	290.8	340.1	382.0
40°	189.8	215.6	251.4	295.7	333.9
42.5°	144.2	172.5	216.9	252.6	285.9
45°	103.5	134.3	183.6	213.2	239.1
47.5°	78.9	101.0	151.6	175.0	193.5
50°	67.8	81.3	120.8	138.0	147.9
52.5°	59.1	71.5	96.1	104.7	104.7
55°	50.5	65.3	77.6	75.2	66.5
57.5°	43.1	59.1	64.1	54.2	56.7
60°	35.7	54.2	54.2	48.1	49.3
62.5°	29.6	50.5	46.8	41.9	43.1
65°	24.6	44.4	40.7	37.0	38.2
67.5°	19.7	39.4	35.7	33.3	33.3
70°	17.3	35.7	32.0	29.6	29.6
72.5°	14.8	30.8	28.3	25.9	25.9
75°	12.3	27.1	24.6	23.4	22.2
77.5°	11.1	23.4	22.2	19.7	18.5
80°	8.6	19.7	19.7	18.5	16.0
82.5°	7.4	17.3	17.3	16.0	13.6
85°	6.2	14.8	16.0	13.6	9.9
87.5°	4.9	13.6	13.6	11.1	7.4
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	11.14	12.42	11.51	12.73	13.05	10.94	12.22	11.30	12.53	12.84
	3H	12.38	13.51	12.76	13.84	14.21	12.53	13.67	12.91	14.00	14.36
	4H	12.83	13.89	13.23	14.24	14.62	13.25	14.31	13.65	14.66	15.04
	6H	13.21	14.18	13.62	14.55	14.95	13.90	14.88	14.32	15.25	15.64
	8H	13.36	14.29	13.80	14.68	15.08	14.23	15.15	14.66	15.55	15.95
	12H	13.52	14.41	13.96	14.79	15.22	14.53	15.42	14.97	15.80	16.23
4H	2H	11.70	12.75	12.10	13.11	13.49	11.53	12.59	11.94	12.94	13.33
	3H	13.39	14.26	13.80	14.67	15.07	13.37	14.24	13.78	14.65	15.05
	4H	14.19	14.97	14.62	15.39	15.83	14.24	15.03	14.68	15.45	15.89
	6H	14.83	15.51	15.29	15.95	16.42	15.09	15.77	15.55	16.21	16.68
	8H	15.08	15.71	15.55	16.16	16.63	15.51	16.15	15.98	16.59	17.07
	12H	15.33	15.89	15.81	16.37	16.84	15.92	16.48	16.41	16.96	17.44
8H	4H	14.60	15.24	15.07	15.68	16.16	14.66	15.29	15.13	15.74	16.21
	6H	15.58	16.10	16.08	16.60	17.08	15.75	16.27	16.25	16.76	17.24
	8H	16.07	16.54	16.60	17.06	17.55	16.34	16.81	16.86	17.32	17.81
	12H	16.58	16.99	17.09	17.49	18.06	16.94	17.36	17.46	17.85	18.42
12H	4H	14.67	15.23	15.16	15.71	16.19	14.74	15.30	15.22	15.78	16.25
	6H	15.75	16.22	16.27	16.73	17.22	15.91	16.38	16.43	16.89	17.39
	8H	16.39	16.80	16.90	17.30	17.87	16.62	17.04	17.14	17.53	18.10