

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: P1058476

Luminaire Tested: S122RDRP-H675D927-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058476  
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-H675D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

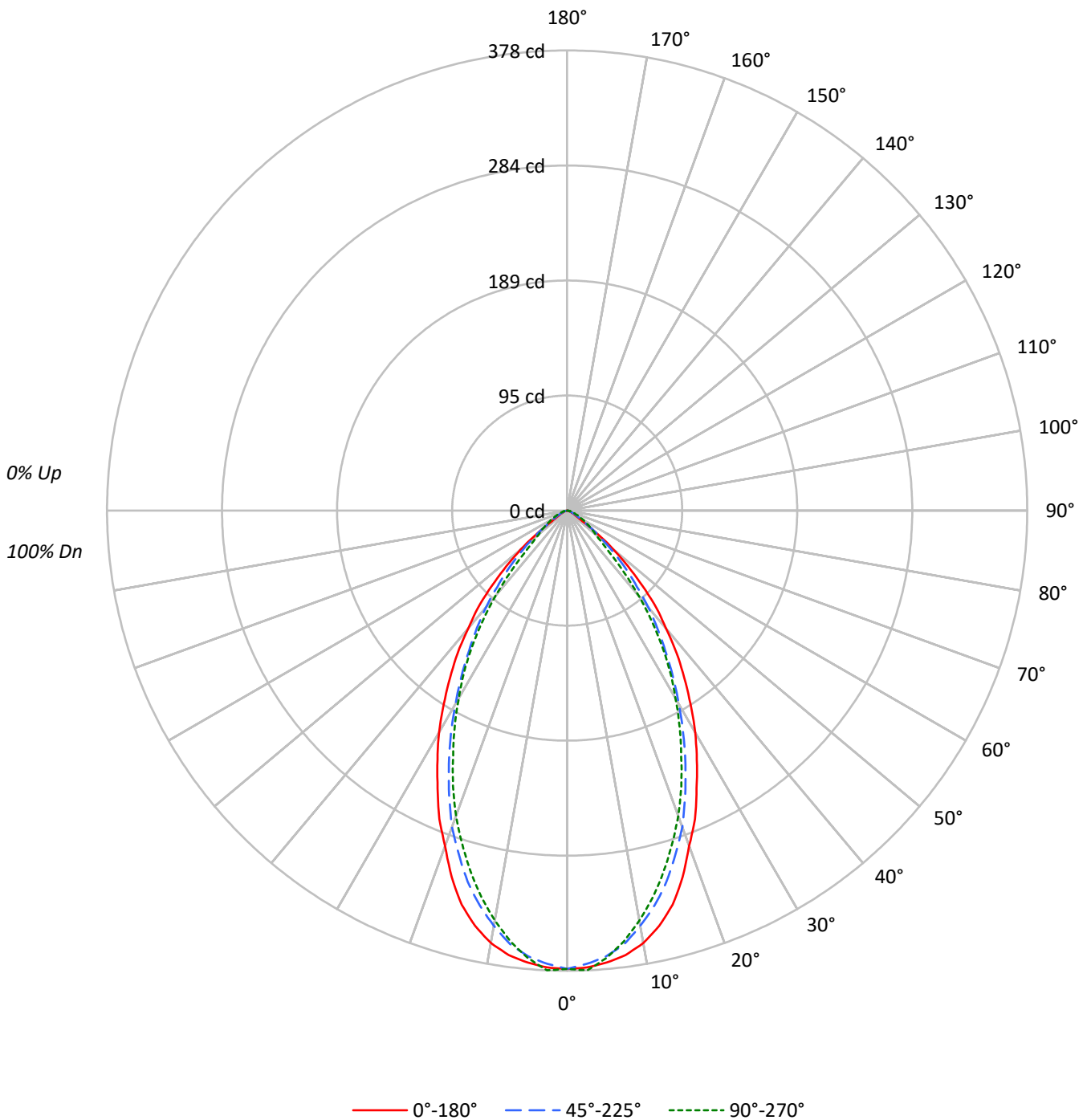
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 404.9 lumens  
Efficiency: N/A  
Efficacy: 17.2 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): 23.5  
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	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					100			
1	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92					92			
2	106	101	96	92	104	99	95	91	96	92	89	92	90	87	90	87	85	84					84			
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76					76			
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70					70			
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64					64			
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59					59			
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54					54			
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50					50			
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47					47			
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44					44			

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

	0°	45°	90°
0°	6947	6947	6947
5°	6904	6807	6835
10°	6758	6491	6406
15°	6402	6029	5857
20°	5756	5430	5239
25°	5125	4681	4514
30°	4483	3908	3795
35°	3775	3165	3064
40°	3040	2498	2209
45°	2276	1803	1313
50°	1424	1166	864
55°	483	627	701
60°	277	388	554
65°	196	262	428
70°	162	205	324
75°	107	164	271
80°	85	159	244
85°	0	0	169

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2276 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.7	8.6
10°-20°	88.8	21.9
20°-30°	107.0	26.4
30°-40°	91.4	22.6
40°-50°	53.5	13.2
50°-60°	19.4	4.8
60°-70°	6.9	1.7
70°-80°	2.8	0.7
80°-90°	0.5	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°	230.5	56.9
0°-40°	321.9	79.5
0°-60°	394.8	97.5
0°-90°	404.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	404.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	376	376	376	376	376	
5°	373	374	368	369	369	35
15°	335	330	316	310	307	93
25°	252	241	230	226	222	116
35°	168	155	140	139	136	105
45°	87	78	69	58	50	67
55°	15	21	20	20	22	19
65°	4	5	6	8	10	5
75°	2	2	2	3	4	2
85°	0	0	0	1	1	0
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	376.5	376.5	376.5	376.5	376.5
2.5°	375.7	376.5	372.7	376.5	378.0
5°	372.7	373.5	367.5	369.0	369.0
7.5°	368.2	367.5	359.2	357.7	356.9
10°	360.7	358.4	346.4	344.2	341.9
12.5°	349.4	344.9	332.1	328.4	325.4
15°	335.1	329.9	315.6	309.6	306.6
17.5°	315.6	309.6	296.1	290.1	287.0
20°	293.1	287.0	276.5	269.8	266.8
22.5°	274.3	264.5	253.2	248.7	245.0
25°	251.7	241.2	229.9	226.2	221.7
27.5°	230.7	217.9	206.6	203.6	199.9
30°	210.4	196.9	183.4	183.4	178.1
32.5°	188.6	175.8	161.6	160.8	157.8
35°	167.6	154.8	140.5	139.0	136.0
37.5°	148.0	135.3	121.7	117.2	113.5
40°	126.2	115.0	103.7	96.2	91.7
42.5°	109.0	96.2	84.9	75.9	69.9
45°	87.2	78.1	69.1	57.9	50.3
47.5°	67.6	61.6	54.1	41.3	37.6
50°	49.6	46.6	40.6	30.8	30.1
52.5°	31.6	33.1	29.3	24.0	26.3
55°	15.0	21.0	19.5	20.3	21.8
57.5°	9.8	10.5	14.3	16.5	18.0
60°	7.5	7.5	10.5	13.5	15.0
62.5°	6.0	6.0	8.3	11.3	12.0
65°	4.5	5.3	6.0	8.3	9.8
67.5°	3.8	3.8	4.5	6.8	7.5
70°	3.0	3.0	3.8	5.3	6.0
72.5°	2.3	2.3	3.0	4.5	4.5
75°	1.5	2.3	2.3	3.0	3.8
77.5°	1.5	1.5	1.5	2.3	3.0
80°	0.8	0.8	1.5	1.5	2.3
82.5°	0.8	0.8	0.8	0.8	1.5
85°	0.0	0.0	0.0	0.8	0.8
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	2.61	3.77	2.97	4.08	4.40	6.00	7.16	6.37	7.48	7.79
	3H	3.14	4.16	3.52	4.49	4.86	6.74	7.76	7.12	8.09	8.46
	4H	3.28	4.23	3.68	4.58	4.97	6.95	7.90	7.36	8.25	8.64
	6H	3.36	4.22	3.77	4.60	4.99	7.11	7.98	7.53	8.35	8.74
	8H	3.37	4.19	3.80	4.58	4.99	7.14	7.96	7.58	8.35	8.76
	12H	3.34	4.12	3.77	4.50	4.93	7.15	7.93	7.58	8.31	8.74
4H	2H	2.92	3.87	3.32	4.22	4.61	5.97	6.92	6.37	7.27	7.65
	3H	3.59	4.36	4.00	4.76	5.17	6.85	7.62	7.27	8.03	8.43
	4H	3.84	4.52	4.28	4.94	5.39	7.13	7.82	7.57	8.24	8.69
	6H	3.96	4.55	4.43	5.00	5.47	7.37	7.95	7.83	8.40	8.87
	8H	3.99	4.54	4.46	4.99	5.46	7.41	7.96	7.89	8.41	8.88
	12H	3.96	4.44	4.45	4.92	5.40	7.44	7.92	7.93	8.40	8.88
8H	4H	3.95	4.49	4.42	4.94	5.42	7.07	7.61	7.54	8.06	8.54
	6H	4.12	4.57	4.63	5.07	5.55	7.33	7.77	7.84	8.27	8.76
	8H	4.18	4.58	4.71	5.10	5.59	7.40	7.79	7.93	8.31	8.81
	12H	4.16	4.51	4.68	5.01	5.58	7.47	7.82	7.99	8.31	8.89
12H	4H	3.93	4.41	4.42	4.90	5.37	7.02	7.50	7.51	7.98	8.46
	6H	4.12	4.52	4.65	5.04	5.53	7.28	7.68	7.81	8.20	8.69
	8H	4.21	4.56	4.73	5.06	5.63	7.38	7.72	7.89	8.22	8.80