

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: P1058069

Luminaire Tested: S122RDRP-S675D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058069  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S675D927-X4F0-XX-UDD-BVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

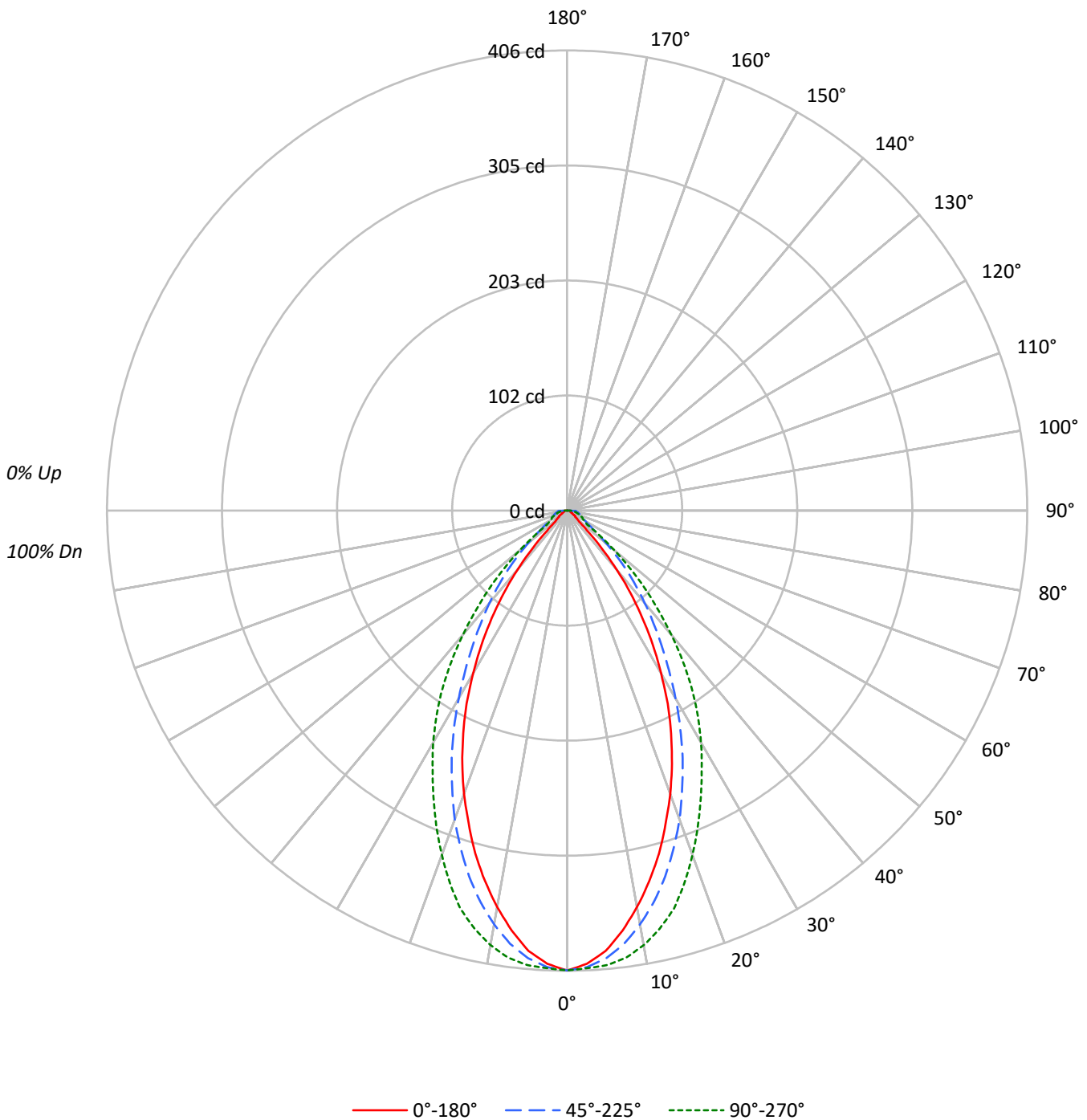
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 437.3 lumens  
Efficiency: N/A  
Efficacy: 16.9 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 25.8  
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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92					90				
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83					81				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75					74				
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69					67				
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63					61				
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58					57				
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54					52				
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50					48				
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47					45				
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44					42				

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

	0°	45°	90°
0°	7486	7486	7486
5°	7226	7341	7457
10°	6654	6946	7294
15°	5983	6384	6948
20°	5219	5693	6349
25°	4414	4905	5680
30°	3526	4074	5033
35°	2609	3273	4325
40°	1648	2565	3445
45°	650	1926	2534
50°	336	1295	1562
55°	273	849	701
60°	199	690	631
65°	170	646	646
70°	167	669	631
75°	221	777	663
80°	329	988	744
85°	487	1651	995

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 87.5°  
 Luminance: 3300 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.1	8.5
10°-20°	93.7	21.4
20°-30°	111.4	25.5
30°-40°	92.6	21.2
40°-50°	51.7	11.8
50°-60°	20.9	4.8
60°-70°	13.4	3.1
70°-80°	10.0	2.3
80°-90°	6.4	1.5
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°	242.2	55.4
0°-40°	334.8	76.6
0°-60°	407.5	93.2
0°-90°	437.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	437.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	406	406	406	406	406	
5°	390	397	396	399	403	36
15°	313	322	334	351	364	87
25°	217	225	241	260	279	99
35°	116	127	145	169	192	72
45°	25	42	74	86	97	23
55°	8	18	26	26	22	7
65°	4	16	15	14	15	4
75°	3	11	11	10	9	3
85°	2	7	8	7	5	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	405.7	405.7	405.7	405.7	405.7
2.5°	400.2	406.4	403.3	403.3	404.1
5°	390.1	397.1	396.3	399.4	402.6
7.5°	373.8	381.6	385.5	392.5	397.9
10°	355.1	363.7	370.7	381.6	389.3
12.5°	334.9	343.5	353.6	367.6	377.7
15°	313.2	322.5	334.2	351.3	363.7
17.5°	289.1	299.2	312.4	331.1	344.3
20°	265.8	275.9	289.9	308.5	323.3
22.5°	241.7	250.2	265.0	283.7	301.5
25°	216.8	225.4	240.9	259.6	279.0
27.5°	192.0	200.5	216.0	235.5	257.2
30°	165.5	174.9	191.2	212.9	236.2
32.5°	140.7	150.0	167.1	191.2	214.5
35°	115.8	126.7	145.3	169.4	192.0
37.5°	91.7	104.1	125.1	147.7	167.9
40°	68.4	81.6	106.5	125.9	143.0
42.5°	45.1	60.6	89.4	105.7	118.9
45°	24.9	42.0	73.8	86.3	97.1
47.5°	14.0	27.2	58.3	68.4	74.6
50°	11.7	20.2	45.1	52.1	54.4
52.5°	9.3	18.7	34.2	38.1	36.5
55°	8.5	17.9	26.4	25.6	21.8
57.5°	7.0	17.9	21.0	18.7	18.7
60°	5.4	17.1	18.7	16.3	17.1
62.5°	4.7	16.3	17.1	15.5	15.5
65°	3.9	15.5	14.8	14.0	14.8
67.5°	3.1	14.0	14.0	13.2	13.2
70°	3.1	13.2	12.4	11.7	11.7
72.5°	3.1	11.7	11.7	10.9	10.9
75°	3.1	10.9	10.9	10.1	9.3
77.5°	3.1	9.3	10.1	9.3	8.5
80°	3.1	8.5	9.3	8.5	7.0
82.5°	3.1	7.8	8.5	7.8	6.2
85°	2.3	7.0	7.8	7.0	4.7
87.5°	2.3	7.0	7.8	6.2	3.9
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	5.37	6.59	5.73	6.90	7.21	6.45	7.67	6.82	7.98	8.30
	3H	6.70	7.78	7.08	8.11	8.48	8.48	9.56	8.86	9.89	10.26
	4H	7.27	8.28	7.67	8.63	9.02	9.43	10.44	9.83	10.79	11.17
	6H	7.83	8.76	8.25	9.13	9.53	10.37	11.29	10.78	11.67	12.06
	8H	8.16	9.04	8.59	9.43	9.83	10.81	11.69	11.25	12.08	12.49
	12H	8.46	9.30	8.89	9.68	10.11	11.24	12.08	11.67	12.46	12.89
4H	2H	6.33	7.34	6.74	7.69	8.08	7.13	8.14	7.53	8.49	8.87
	3H	8.36	9.19	8.77	9.59	10.00	9.41	10.24	9.82	10.64	11.05
	4H	9.44	10.18	9.87	10.61	11.05	10.55	11.30	10.99	11.72	12.16
	6H	10.30	10.95	10.77	11.40	11.86	11.71	12.36	12.17	12.81	13.27
	8H	10.71	11.32	11.18	11.77	12.24	12.27	12.88	12.74	13.33	13.80
	12H	11.09	11.62	11.58	12.11	12.58	12.82	13.35	13.31	13.84	14.31
8H	4H	10.21	10.81	10.68	11.26	11.73	11.10	11.71	11.57	12.15	12.63
	6H	11.54	12.03	12.04	12.53	13.01	12.54	13.04	13.05	13.54	14.02
	8H	12.25	12.70	12.78	13.22	13.71	13.31	13.75	13.83	14.27	14.76
	12H	12.95	13.34	13.46	13.84	14.41	14.10	14.49	14.62	14.99	15.56
12H	4H	10.36	10.90	10.85	11.38	11.85	11.21	11.74	11.69	12.22	12.70
	6H	11.86	12.30	12.38	12.82	13.31	12.77	13.21	13.29	13.73	14.22
	8H	12.76	13.15	13.28	13.65	14.22	13.68	14.07	14.19	14.57	15.14