

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: P1058111

Luminaire Tested: S122RDRP-S675D950-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058111  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S675D950-X4F0-XX-UDD-WVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

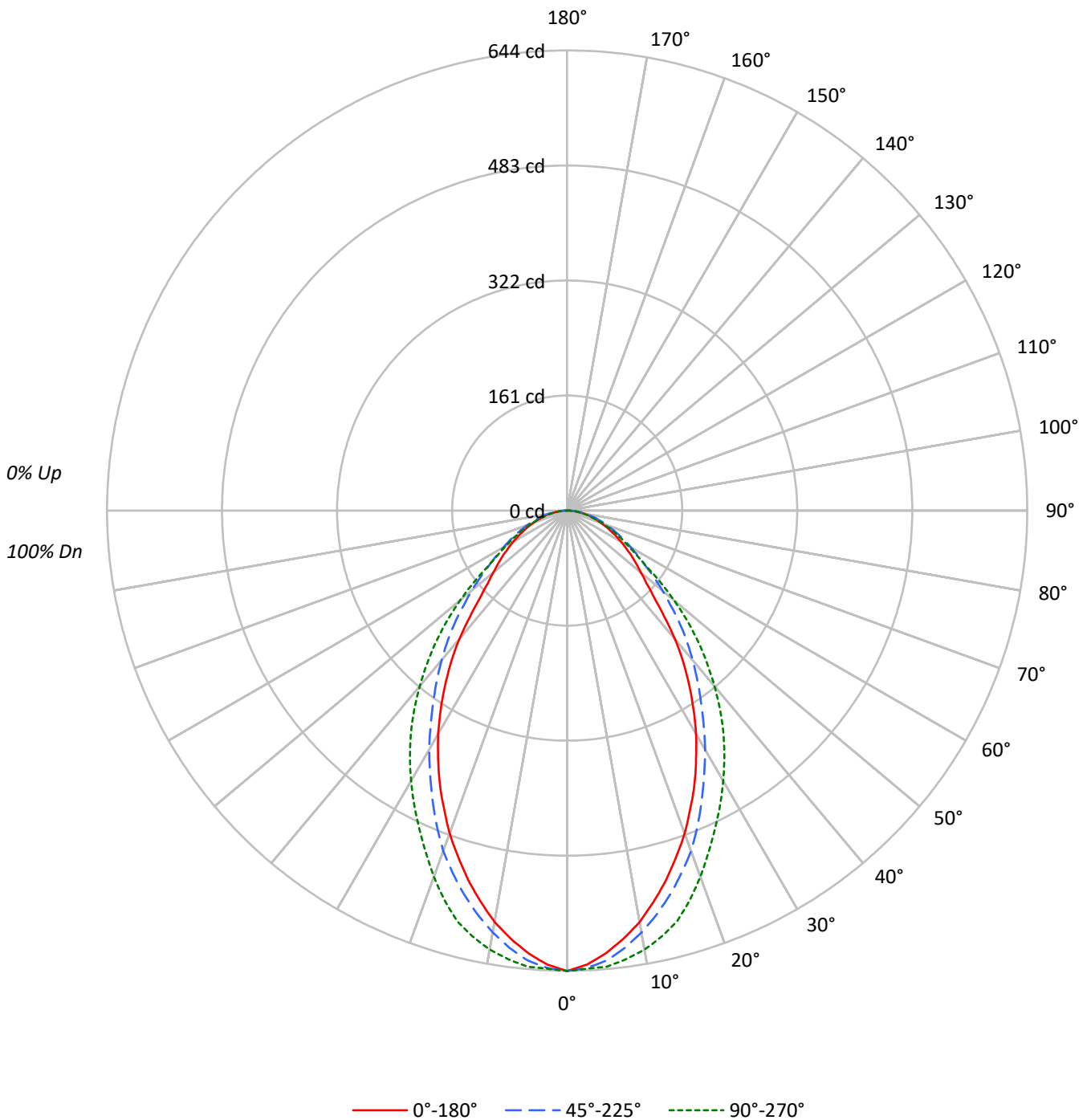
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1049.3 lumens  
Efficiency: N/A  
Efficacy: 40.7 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33

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

	0°	45°	90°
0°	11891	11891	11891
5°	11519	11710	11866
10°	10952	11233	11688
15°	10220	10631	11363
20°	9439	9954	10706
25°	8588	9083	9978
30°	7692	8229	9307
35°	6699	7353	8596
40°	5653	6578	7727
45°	4491	5809	6761
50°	3867	4995	5612
55°	3519	4272	4301
60°	3211	3798	3657
65°	2938	3432	3227
70°	2725	3178	2876
75°	2531	3002	2531
80°	2380	2880	2285
85°	2371	2964	1990

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6761 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.5	5.7
10°-20°	157.2	15.0
20°-30°	206.9	19.7
30°-40°	208.1	19.8
40°-50°	168.6	16.1
50°-60°	116.2	11.1
60°-70°	76.0	7.2
70°-80°	42.4	4.0
80°-90°	14.3	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°	423.7	40.4
0°-40°	631.8	60.2
0°-60°	916.6	87.4
0°-90°	1049.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1049.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	644	644	644	644	644	
5°	622	634	632	635	641	58
15°	535	548	556	577	595	150
25°	422	433	446	466	490	193
35°	297	311	326	355	382	185
45°	172	192	223	242	259	136
55°	109	122	133	136	134	98
65°	67	80	79	75	74	67
75°	36	44	42	37	36	38
85°	11	15	14	12	9	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	644.4	644.4	644.4	644.4	644.4
2.5°	636.0	647.2	640.6	640.6	641.6
5°	621.9	634.1	632.2	635.0	640.6
7.5°	604.2	617.3	617.3	625.7	633.1
10°	584.5	597.6	599.5	612.6	623.8
12.5°	560.2	573.3	578.9	595.7	610.7
15°	535.0	548.0	556.5	577.0	594.8
17.5°	507.8	520.9	532.1	553.7	571.4
20°	480.7	492.9	506.9	525.6	545.2
22.5°	450.8	463.9	477.0	494.7	517.2
25°	421.8	433.0	446.1	465.7	490.1
27.5°	390.9	403.1	415.2	438.6	463.9
30°	361.0	373.2	386.2	410.6	436.8
32.5°	329.2	342.3	355.4	382.5	409.6
35°	297.4	311.4	326.4	355.4	381.6
37.5°	266.5	281.5	299.3	329.2	351.6
40°	234.7	250.6	273.1	299.3	320.8
42.5°	201.1	220.7	247.8	270.3	289.9
45°	172.1	191.7	222.6	242.2	259.1
47.5°	150.6	166.5	196.4	213.2	227.3
50°	134.7	146.8	174.0	186.1	195.5
52.5°	121.6	133.7	152.4	160.9	163.7
55°	109.4	121.6	132.8	135.6	133.7
57.5°	97.3	110.4	116.9	114.1	114.1
60°	87.0	101.0	102.9	99.1	99.1
62.5°	76.7	90.7	90.7	86.0	86.0
65°	67.3	80.4	78.6	74.8	73.9
67.5°	58.9	71.1	68.3	64.5	63.6
70°	50.5	61.7	58.9	54.2	53.3
72.5°	43.0	53.3	49.6	45.8	44.0
75°	35.5	44.0	42.1	37.4	35.5
77.5°	29.0	35.5	33.7	29.9	28.1
80°	22.4	28.1	27.1	23.4	21.5
82.5°	16.8	21.5	20.6	17.8	15.0
85°	11.2	15.0	14.0	12.2	9.4
87.5°	5.6	10.3	9.4	8.4	4.7
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	15.33	16.77	15.70	17.09	17.40	15.69	17.13	16.06	17.44	17.76
	3H	16.88	18.17	17.26	18.49	18.86	17.04	18.33	17.41	18.65	19.02
	4H	17.45	18.65	17.85	19.00	19.38	17.52	18.73	17.92	19.08	19.46
	6H	17.88	18.99	18.29	19.36	19.75	17.87	18.99	18.29	19.36	19.75
	8H	18.03	19.09	18.46	19.48	19.88	17.99	19.05	18.42	19.44	19.84
	12H	18.14	19.16	18.58	19.54	19.97	18.07	19.08	18.50	19.46	19.89
4H	2H	15.92	17.13	16.32	17.48	17.86	16.21	17.41	16.61	17.76	18.14
	3H	17.74	18.74	18.15	19.14	19.54	17.78	18.78	18.19	19.18	19.58
	4H	18.49	19.39	18.92	19.81	20.25	18.38	19.28	18.81	19.70	20.14
	6H	19.07	19.86	19.53	20.30	20.76	18.86	19.65	19.32	20.09	20.55
	8H	19.28	20.01	19.75	20.46	20.93	19.03	19.76	19.49	20.20	20.67
	12H	19.45	20.10	19.93	20.58	21.05	19.15	19.80	19.63	20.28	20.75
8H	4H	18.77	19.50	19.24	19.95	20.42	18.68	19.41	19.15	19.86	20.33
	6H	19.53	20.13	20.03	20.62	21.10	19.30	19.90	19.80	20.40	20.88
	8H	19.85	20.39	20.37	20.90	21.39	19.55	20.09	20.07	20.60	21.09
	12H	20.14	20.62	20.65	21.11	21.68	19.76	20.24	20.27	20.74	21.30
12H	4H	18.79	19.44	19.27	19.92	20.40	18.72	19.37	19.20	19.85	20.32
	6H	19.59	20.13	20.10	20.64	21.13	19.38	19.92	19.89	20.43	20.92
	8H	19.99	20.47	20.50	20.96	21.52	19.70	20.18	20.21	20.67	21.24