

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: P1059380

Luminaire Tested: S123RDRP-S775D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1059380  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67 )  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDRP-S775D930-X4F0-XX-UDD-WVL-S  
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

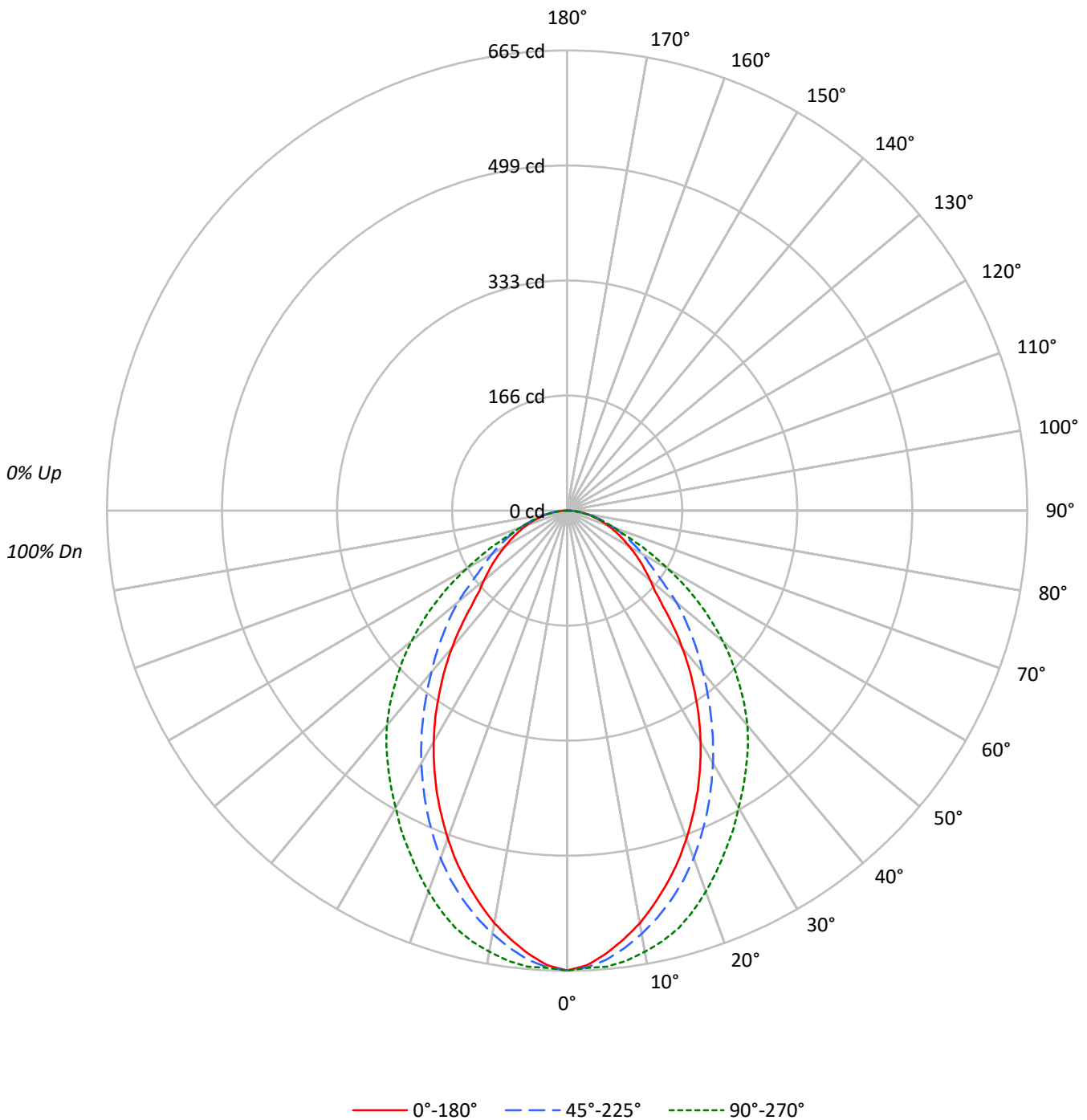
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1200.5 lumens  
Efficiency: N/A  
Efficacy: 46.5 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 25.8  
Input Voltage (V): 120  
Input Current (Ain): 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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87					87			
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75					75			
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65					65			
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57					57			
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51					51			
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45					45			
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41					41			
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37					37			
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34					34			
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31					31			

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

	0°	45°	90°
0°	7804	7804	7804
5°	7577	7678	7797
10°	7219	7405	7721
15°	6782	7075	7587
20°	6299	6679	7321
25°	5784	6209	7016
30°	5230	5715	6718
35°	4613	5194	6466
40°	3966	4681	6210
45°	3260	4218	5822
50°	2861	3758	5365
55°	2647	3206	4754
60°	2433	2945	3934
65°	2273	2706	3095
70°	2139	2462	2462
75°	2014	2264	2119
80°	1893	2056	1792
85°	1778	1994	1361

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5822 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.5	5.1
10°-20°	164.7	13.7
20°-30°	223.4	18.6
30°-40°	233.5	19.5
40°-50°	202.5	16.9
50°-60°	150.7	12.6
60°-70°	96.7	8.1
70°-80°	51.8	4.3
80°-90°	15.7	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°	449.6	37.4
0°-40°	683.1	56.9
0°-60°	1036.3	86.3
0°-90°	1200.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1200.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	665	665	665	665	665	
5°	643	654	651	656	662	60
15°	558	571	582	605	624	156
25°	446	460	479	511	542	205
35°	322	337	362	408	451	201
45°	196	211	254	308	351	154
55°	129	132	157	201	232	116
65°	82	89	97	104	111	81
75°	44	51	50	48	47	47
85°	13	16	15	12	10	15
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	664.6	664.6	664.6	664.6	664.6
2.5°	657.6	666.9	660.7	660.7	661.5
5°	642.8	653.7	651.4	656.0	661.5
7.5°	624.9	636.6	637.3	648.2	656.0
10°	605.4	617.1	621.0	636.6	647.5
12.5°	582.0	595.3	602.3	621.7	637.3
15°	557.9	571.1	582.0	605.4	624.1
17.5°	532.1	545.4	559.4	585.9	606.2
20°	504.1	518.1	534.5	561.0	585.9
22.5°	475.3	490.1	507.2	536.0	564.1
25°	446.4	460.5	479.2	511.1	541.5
27.5°	416.1	430.9	450.3	485.4	519.7
30°	385.7	400.5	421.5	458.9	495.5
32.5°	354.5	369.3	391.9	434.0	473.7
35°	321.8	337.4	362.3	408.3	451.1
37.5°	290.6	305.4	333.5	384.1	429.3
40°	258.7	274.3	305.4	360.0	405.1
42.5°	227.5	243.1	279.7	334.2	378.7
45°	196.3	211.1	254.0	308.5	350.6
47.5°	172.2	183.1	229.8	281.3	323.3
50°	156.6	160.5	205.7	254.8	293.7
52.5°	142.6	145.7	179.2	228.3	263.3
55°	129.3	132.5	156.6	201.0	232.2
57.5°	116.1	120.0	139.5	173.0	201.0
60°	103.6	108.3	125.4	148.0	167.5
62.5°	92.7	98.2	111.4	125.4	138.7
65°	81.8	88.8	97.4	103.6	111.4
67.5°	71.7	79.5	84.1	85.7	86.5
70°	62.3	70.1	71.7	71.7	71.7
72.5°	53.0	61.6	60.0	59.2	58.4
75°	44.4	51.4	49.9	47.5	46.7
77.5°	35.8	42.1	39.7	38.2	35.8
80°	28.0	32.7	30.4	28.8	26.5
82.5°	21.0	24.2	21.8	20.3	17.9
85°	13.2	16.4	14.8	12.5	10.1
87.5°	7.0	9.3	7.8	7.0	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	13.93	15.41	14.29	15.72	16.04	16.68	18.16	17.05	18.48	18.79
	3H	15.64	16.96	16.01	17.29	17.65	17.70	19.03	18.08	19.36	19.72
	4H	16.30	17.54	16.70	17.89	18.27	18.07	19.31	18.47	19.66	20.04
	6H	16.79	17.94	17.21	18.31	18.70	18.32	19.47	18.73	19.84	20.23
	8H	16.97	18.07	17.40	18.46	18.86	18.39	19.49	18.82	19.88	20.28
	12H	17.10	18.15	17.53	18.53	18.96	18.43	19.47	18.86	19.86	20.29
4H	2H	14.70	15.95	15.10	16.30	16.67	16.95	18.20	17.35	18.55	18.93
	3H	16.63	17.66	17.04	18.06	18.46	18.21	19.24	18.62	19.64	20.04
	4H	17.44	18.37	17.87	18.78	19.22	18.69	19.62	19.13	20.04	20.48
	6H	18.08	18.88	18.53	19.33	19.79	19.07	19.88	19.53	20.32	20.79
	8H	18.30	19.06	18.77	19.50	19.97	19.19	19.94	19.65	20.39	20.85
	12H	18.48	19.15	18.96	19.63	20.10	19.26	19.93	19.74	20.41	20.88
8H	4H	17.76	18.51	18.22	18.96	19.42	18.88	19.64	19.35	20.08	20.55
	6H	18.55	19.17	19.05	19.66	20.14	19.37	20.00	19.87	20.49	20.97
	8H	18.88	19.44	19.39	19.95	20.43	19.55	20.11	20.06	20.62	21.11
	12H	19.15	19.65	19.66	20.14	20.71	19.68	20.18	20.19	20.67	21.23
12H	4H	17.78	18.45	18.26	18.93	19.40	18.90	19.57	19.38	20.05	20.52
	6H	18.60	19.16	19.12	19.67	20.16	19.41	19.97	19.92	20.48	20.97
	8H	19.00	19.49	19.51	19.98	20.55	19.64	20.13	20.15	20.63	21.19