

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: P1059389

Luminaire Tested: S123RDRP-S775D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1059389  
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-S775D935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

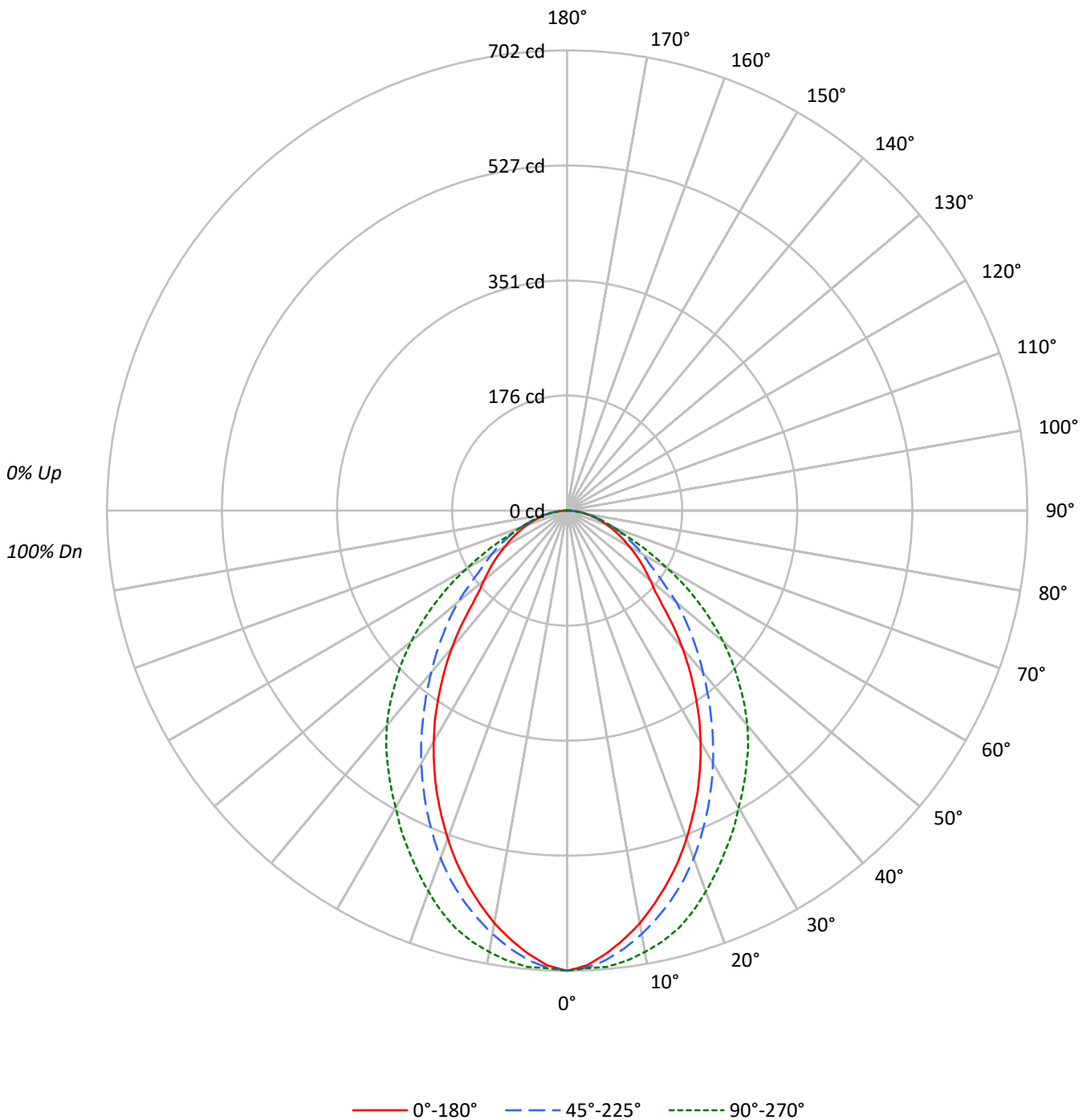
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1267.8 lumens  
Efficiency: N/A  
Efficacy: 49.1 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 (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	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31

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

	0°	45°	90°
0°	8242	8242	8242
5°	8001	8108	8235
10°	7623	7819	8153
15°	7161	7471	8012
20°	6653	7053	7731
25°	6109	6556	7408
30°	5523	6035	7095
35°	4871	5485	6829
40°	4188	4943	6559
45°	3442	4454	6149
50°	3022	3968	5667
55°	2797	3386	5020
60°	2569	3112	4154
65°	2401	2859	3270
70°	2259	2599	2599
75°	2128	2391	2241
80°	2002	2171	1893
85°	1886	2102	1442

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6149 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.9	5.1
10°-20°	174.0	13.7
20°-30°	235.9	18.6
30°-40°	246.6	19.5
40°-50°	213.9	16.9
50°-60°	159.1	12.6
60°-70°	102.1	8.1
70°-80°	54.8	4.3
80°-90°	16.5	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°	474.8	37.4
0°-40°	721.4	56.9
0°-60°	1094.4	86.3
0°-90°	1267.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1267.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	702	702	702	702	702	
5°	679	690	688	693	699	64
15°	589	603	615	639	659	165
25°	472	486	506	540	572	216
35°	340	356	383	431	476	212
45°	207	223	268	326	370	163
55°	137	140	165	212	245	122
65°	86	94	103	109	118	86
75°	47	54	53	50	49	50
85°	14	17	16	13	11	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	701.9	701.9	701.9	701.9	701.9
2.5°	694.4	704.3	697.7	697.7	698.6
5°	678.8	690.3	687.9	692.8	698.6
7.5°	659.9	672.2	673.1	684.6	692.8
10°	639.3	651.7	655.8	672.2	683.8
12.5°	614.6	628.6	636.0	656.6	673.1
15°	589.1	603.1	614.6	639.3	659.1
17.5°	562.0	576.0	590.8	618.7	640.1
20°	532.4	547.2	564.4	592.4	618.7
22.5°	501.9	517.5	535.6	566.1	595.7
25°	471.5	486.3	506.0	539.8	571.8
27.5°	439.4	455.0	475.6	512.6	548.8
30°	407.3	422.9	445.1	484.6	523.3
32.5°	374.4	390.0	413.9	458.3	500.3
35°	339.8	356.3	382.6	431.1	476.4
37.5°	306.9	322.5	352.2	405.6	453.4
40°	273.2	289.6	322.5	380.1	427.9
42.5°	240.3	256.7	295.4	353.0	399.9
45°	207.3	223.0	268.2	325.8	370.3
47.5°	181.8	193.4	242.7	297.0	341.5
50°	165.4	169.5	217.2	269.1	310.2
52.5°	150.6	153.9	189.2	241.1	278.1
55°	136.6	139.9	165.4	212.3	245.2
57.5°	122.6	126.7	147.3	182.7	212.3
60°	109.4	114.4	132.5	156.3	176.9
62.5°	97.9	103.7	117.7	132.5	146.5
65°	86.4	93.8	102.9	109.4	117.7
67.5°	75.7	83.9	88.9	90.5	91.3
70°	65.8	74.1	75.7	75.7	75.7
72.5°	56.0	65.0	63.4	62.5	61.7
75°	46.9	54.3	52.7	50.2	49.4
77.5°	37.8	44.4	42.0	40.3	37.8
80°	29.6	34.6	32.1	30.4	28.0
82.5°	22.2	25.5	23.0	21.4	18.9
85°	14.0	17.3	15.6	13.2	10.7
87.5°	7.4	9.9	8.2	7.4	4.1
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	14.11	15.60	14.48	15.91	16.22	16.87	18.35	17.24	18.67	18.98
	3H	15.82	17.15	16.20	17.48	17.84	17.89	19.22	18.27	19.55	19.91
	4H	16.48	17.73	16.88	18.08	18.46	18.26	19.50	18.66	19.85	20.23
	6H	16.98	18.13	17.40	18.50	18.89	18.51	19.66	18.92	20.03	20.42
	8H	17.16	18.26	17.59	18.65	19.05	18.58	19.68	19.01	20.07	20.47
	12H	17.29	18.34	17.72	18.72	19.15	18.62	19.66	19.05	20.05	20.48
4H	2H	14.89	16.14	15.29	16.48	16.86	17.14	18.39	17.54	18.74	19.12
	3H	16.82	17.85	17.23	18.25	18.65	18.40	19.43	18.81	19.83	20.23
	4H	17.63	18.55	18.06	18.97	19.41	18.88	19.81	19.32	20.23	20.67
	6H	18.27	19.07	18.72	19.52	19.98	19.26	20.07	19.72	20.51	20.98
	8H	18.49	19.25	18.96	19.69	20.16	19.37	20.13	19.84	20.57	21.04
	12H	18.67	19.34	19.15	19.82	20.29	19.45	20.12	19.93	20.60	21.07
8H	4H	17.95	18.70	18.41	19.15	19.61	19.07	19.83	19.54	20.27	20.74
	6H	18.74	19.36	19.24	19.85	20.33	19.56	20.19	20.06	20.68	21.16
	8H	19.07	19.63	19.58	20.14	20.62	19.74	20.30	20.25	20.81	21.30
	12H	19.34	19.84	19.85	20.33	20.90	19.87	20.37	20.38	20.86	21.42
12H	4H	17.97	18.64	18.45	19.12	19.59	19.09	19.76	19.57	20.24	20.71
	6H	18.79	19.35	19.31	19.86	20.35	19.60	20.16	20.11	20.67	21.16
	8H	19.19	19.68	19.70	20.17	20.74	19.83	20.32	20.34	20.82	21.38