

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: P1059350

Luminaire Tested: S123RDRP-S775D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059350
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D840-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

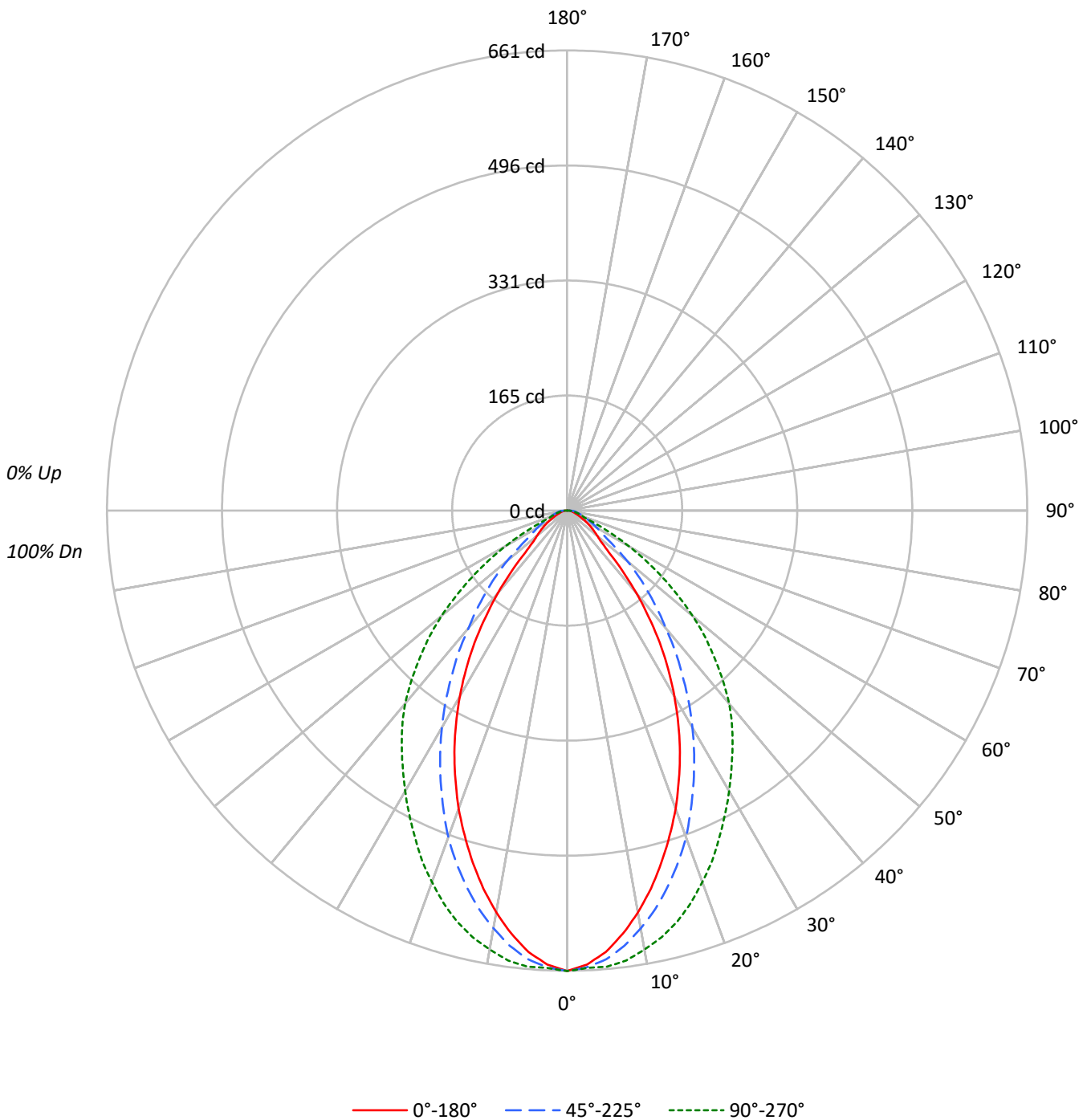
Lumens per Lamp: N/A
Luminaire Lumens: 885.8 lumens
Efficiency: N/A
Efficacy: 34.3 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (A_{in}): 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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89					89			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71					71			
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64					64			
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58					58			
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52					52			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48					48			
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44					44			
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40					40			
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7766	7766	7766
5°	7500	7625	7750
10°	6988	7264	7632
15°	6362	6796	7430
20°	5694	6238	7094
25°	4966	5567	6705
30°	4176	4883	6310
35°	3321	4138	5938
40°	2368	3374	5551
45°	1412	2710	4970
50°	1041	2064	4304
55°	870	1404	3419
60°	702	1155	2403
65°	564	992	1286
70°	463	862	797
75°	440	830	744
80°	460	913	717
85°	647	1307	916

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4970 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.8	6.9
10°-20°	157.8	17.8
20°-30°	201.3	22.7
30°-40°	189.4	21.4
40°-50°	136.1	15.4
50°-60°	78.0	8.8
60°-70°	35.7	4.0
70°-80°	17.9	2.0
80°-90°	8.8	1.0
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°	419.9	47.4
0°-40°	609.3	68.8
0°-60°	823.4	93.0
0°-90°	885.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	885.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	661	661	661	661	661	
5°	636	649	647	652	658	59
15°	523	542	559	589	611	146
25°	383	401	430	476	518	175
35°	232	248	289	354	414	143
45°	85	103	163	240	299	71
55°	42	43	69	126	167	38
65°	20	28	36	40	46	20
75°	10	19	18	16	16	11
85°	5	10	10	9	7	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	661.4	661.4	661.4	661.4	661.4
2.5°	652.7	662.3	656.6	656.6	657.5
5°	636.3	648.8	646.9	651.7	657.5
7.5°	613.1	626.6	630.5	642.1	651.7
10°	586.1	601.5	609.2	627.6	640.1
12.5°	556.1	573.5	586.1	609.2	627.6
15°	523.3	541.7	559.0	589.0	611.2
17.5°	489.5	507.9	530.1	564.8	590.9
20°	455.7	474.1	499.2	535.9	567.7
22.5°	419.0	437.4	464.4	505.9	544.6
25°	383.3	400.7	429.7	476.0	517.5
27.5°	345.7	363.0	394.9	445.1	491.5
30°	308.0	325.4	360.1	414.2	465.4
32.5°	270.3	286.8	324.4	384.3	439.3
35°	231.7	248.1	288.7	354.3	414.2
37.5°	192.1	208.6	255.9	327.3	389.1
40°	154.5	172.8	220.1	300.3	362.1
42.5°	117.8	137.1	191.2	271.3	331.2
45°	85.0	103.3	163.2	240.4	299.3
47.5°	64.7	74.3	138.1	209.5	268.4
50°	57.0	57.9	113.0	181.5	235.6
52.5°	49.2	50.2	87.9	154.5	200.8
55°	42.5	43.4	68.6	126.5	167.0
57.5°	35.7	37.7	56.0	100.4	134.2
60°	29.9	33.8	49.2	76.3	102.3
62.5°	24.1	30.9	42.5	56.0	73.4
65°	20.3	28.0	35.7	39.6	46.3
67.5°	16.4	26.1	29.9	28.0	28.0
70°	13.5	23.2	25.1	23.2	23.2
72.5°	11.6	22.2	21.2	19.3	19.3
75°	9.7	19.3	18.3	16.4	16.4
77.5°	8.7	16.4	15.4	14.5	13.5
80°	6.8	13.5	13.5	12.6	10.6
82.5°	5.8	11.6	11.6	10.6	8.7
85°	4.8	9.7	9.7	8.7	6.8
87.5°	3.9	8.7	8.7	7.7	4.8
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	7.11	8.43	7.48	8.74	9.06	14.33	15.65	14.69	15.96	16.27
	3H	8.51	9.68	8.89	10.01	10.37	14.56	15.73	14.94	16.06	16.43
	4H	9.07	10.16	9.48	10.51	10.90	14.67	15.76	15.07	16.11	16.50
	6H	9.53	10.54	9.95	10.91	11.30	14.78	15.78	15.19	16.15	16.54
	8H	9.72	10.67	10.15	11.06	11.46	14.83	15.78	15.26	16.17	16.57
	12H	9.91	10.82	10.34	11.20	11.63	14.88	15.79	15.31	16.17	16.60
4H	2H	8.18	9.27	8.59	9.62	10.01	14.29	15.38	14.69	15.73	16.11
	3H	9.87	10.76	10.28	11.17	11.57	14.66	15.55	15.07	15.95	16.36
	4H	10.70	11.50	11.14	11.92	12.37	14.84	15.64	15.28	16.06	16.50
	6H	11.36	12.05	11.83	12.50	12.97	15.06	15.76	15.53	16.20	16.67
	8H	11.62	12.26	12.09	12.71	13.18	15.16	15.81	15.63	16.26	16.73
	12H	11.87	12.45	12.36	12.93	13.40	15.28	15.85	15.77	16.34	16.81
8H	4H	11.14	11.78	11.61	12.23	12.70	14.89	15.53	15.35	15.98	16.45
	6H	12.09	12.62	12.59	13.12	13.60	15.22	15.75	15.72	16.25	16.73
	8H	12.56	13.03	13.08	13.55	14.04	15.41	15.89	15.93	16.40	16.89
	12H	13.04	13.46	13.55	13.95	14.52	15.64	16.07	16.16	16.56	17.13
12H	4H	11.20	11.77	11.68	12.25	12.73	14.88	15.45	15.36	15.93	16.41
	6H	12.24	12.71	12.76	13.23	13.72	15.25	15.72	15.77	16.24	16.73
	8H	12.83	13.25	13.35	13.75	14.32	15.51	15.93	16.02	16.42	16.99