

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: P1059349

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059349
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)
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-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

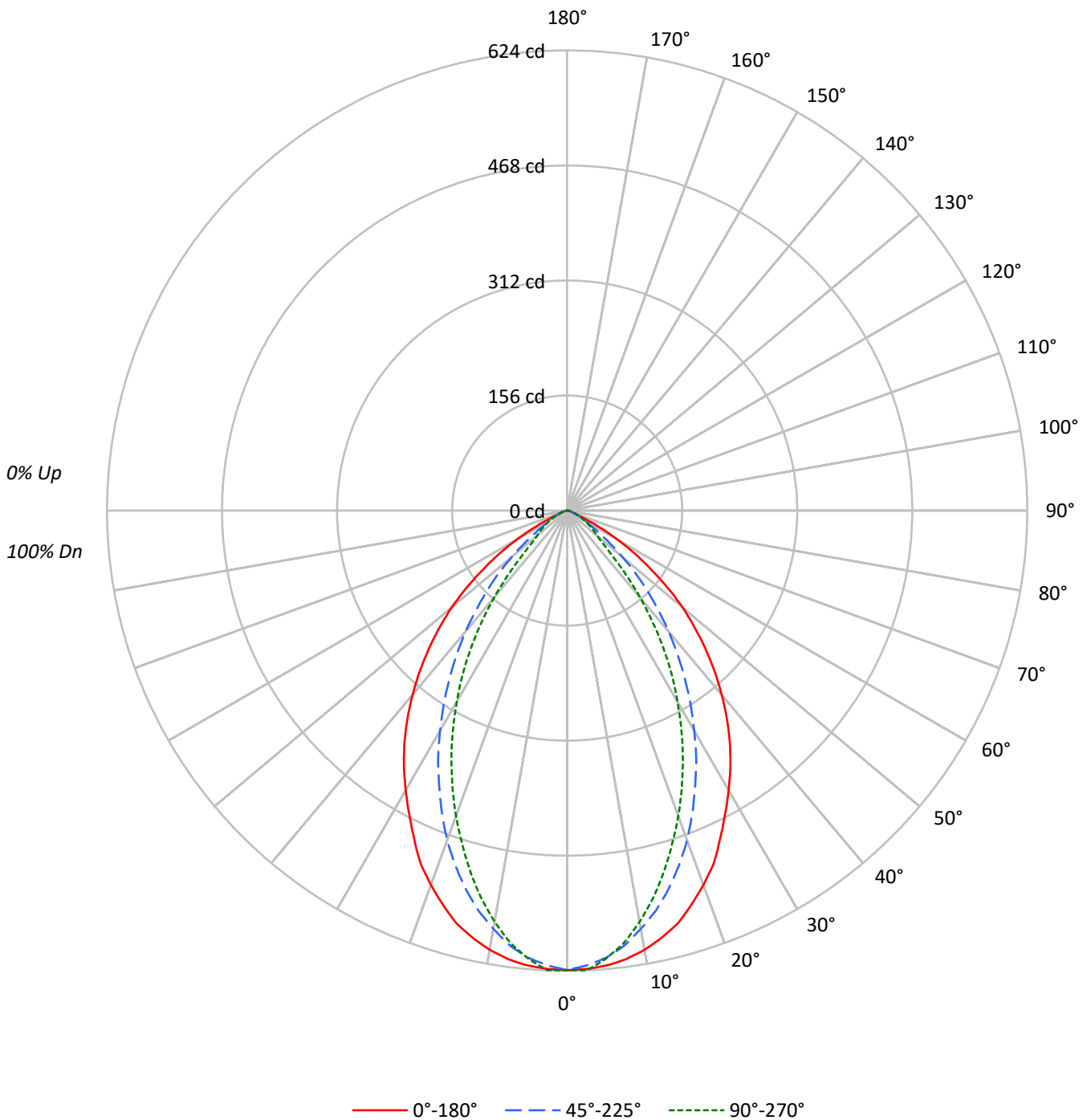
Lumens per Lamp: N/A
Luminaire Lumens: 804.4 lumens
Efficiency: N/A
Efficacy: 31.2 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7317	7317	7317
5°	7299	7174	7186
10°	7210	6866	6751
15°	7047	6460	6167
20°	6749	5942	5508
25°	6360	5324	4811
30°	5937	4668	4054
35°	5516	3982	3263
40°	4997	3282	2365
45°	4404	2547	1425
50°	3736	1779	968
55°	2844	1067	809
60°	1858	679	634
65°	778	508	508
70°	264	364	398
75°	218	263	309
80°	128	196	264
85°	135	135	256

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4404 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.5	7.2
10°-20°	150.6	18.7
20°-30°	193.1	24.0
30°-40°	181.2	22.5
40°-50°	126.4	15.7
50°-60°	65.4	8.1
60°-70°	22.4	2.8
70°-80°	6.4	0.8
80°-90°	1.4	0.2
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°	401.3	49.9
0°-40°	582.5	72.4
0°-60°	774.3	96.3
0°-90°	804.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	804.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	623	623	623	623	623	
5°	619	618	609	612	610	59
15°	580	565	531	514	507	162
25°	491	460	411	383	371	226
35°	385	338	278	242	228	240
45°	265	217	153	106	86	204
55°	139	104	52	40	40	125
65°	28	24	18	17	18	33
75°	5	5	6	7	7	5
85°	1	1	1	1	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	623.1	623.1	623.1	623.1	623.1
2.5°	622.1	623.1	617.3	623.1	624.0
5°	619.2	618.2	608.6	611.5	609.6
7.5°	613.4	610.5	595.1	591.2	591.2
10°	604.7	599.0	575.8	569.1	566.2
12.5°	593.2	585.5	555.6	543.0	538.2
15°	579.7	565.2	531.4	514.1	507.3
17.5°	560.4	541.1	504.4	484.2	473.6
20°	540.1	516.0	475.5	451.4	440.8
22.5°	518.9	490.0	443.7	417.6	406.1
25°	490.9	460.1	410.9	382.9	371.3
27.5°	463.9	431.1	379.0	347.2	335.6
30°	437.9	399.3	344.3	313.5	299.0
32.5°	411.8	368.4	311.5	277.8	264.3
35°	384.8	337.6	277.8	242.1	227.6
37.5°	355.9	307.7	245.9	207.4	190.0
40°	326.0	275.8	214.1	170.7	154.3
42.5°	296.1	246.9	182.3	137.9	118.6
45°	265.2	217.0	153.4	106.1	85.8
47.5°	234.4	187.1	125.4	77.2	64.6
50°	204.5	159.1	97.4	56.9	53.0
52.5°	171.7	132.1	73.3	47.3	46.3
55°	138.9	104.2	52.1	40.5	39.5
57.5°	110.0	81.0	37.6	33.8	32.8
60°	79.1	57.9	28.9	28.0	27.0
62.5°	52.1	39.5	23.1	22.2	22.2
65°	28.0	24.1	18.3	17.4	18.3
67.5°	11.6	13.5	13.5	14.5	14.5
70°	7.7	8.7	10.6	11.6	11.6
72.5°	5.8	6.8	7.7	8.7	8.7
75°	4.8	4.8	5.8	6.8	6.8
77.5°	2.9	3.9	3.9	4.8	5.8
80°	1.9	2.9	2.9	3.9	3.9
82.5°	1.0	1.9	1.9	2.9	2.9
85°	1.0	1.0	1.0	1.0	1.9
87.5°	0.0	0.0	0.0	0.0	1.0
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	13.25	14.51	13.61	14.82	15.13	6.76	8.02	7.13	8.33	8.65
	3H	13.20	14.31	13.58	14.64	15.00	7.54	8.65	7.92	8.98	9.34
	4H	13.15	14.18	13.55	14.53	14.91	7.74	8.77	8.14	9.12	9.51
	6H	13.08	14.02	13.49	14.39	14.79	7.89	8.83	8.30	9.20	9.59
	8H	13.03	13.93	13.47	14.32	14.72	7.92	8.81	8.35	9.20	9.61
	12H	12.99	13.84	13.42	14.23	14.66	7.94	8.79	8.37	9.17	9.60
4H	2H	13.09	14.12	13.50	14.47	14.86	7.01	8.04	7.42	8.40	8.78
	3H	13.08	13.91	13.49	14.32	14.72	7.92	8.76	8.34	9.16	9.57
	4H	13.03	13.77	13.46	14.19	14.63	8.20	8.94	8.64	9.36	9.81
	6H	12.97	13.61	13.43	14.05	14.52	8.42	9.06	8.88	9.50	9.97
	8H	12.92	13.51	13.39	13.96	14.43	8.48	9.07	8.95	9.52	9.99
	12H	12.87	13.40	13.36	13.88	14.36	8.52	9.04	9.00	9.52	10.00
8H	4H	12.91	13.51	13.38	13.96	14.43	8.18	8.78	8.65	9.23	9.70
	6H	12.85	13.33	13.36	13.83	14.32	8.45	8.94	8.96	9.44	9.92
	8H	12.80	13.24	13.32	13.75	14.25	8.56	9.00	9.09	9.52	10.01
	12H	12.76	13.15	13.28	13.64	14.22	8.64	9.02	9.15	9.52	10.09
12H	4H	12.87	13.39	13.36	13.88	14.35	8.15	8.67	8.63	9.15	9.63
	6H	12.79	13.23	13.32	13.75	14.24	8.42	8.85	8.94	9.37	9.86
	8H	12.76	13.15	13.28	13.64	14.22	8.56	8.94	9.07	9.44	10.01