

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: P1059361

Luminaire Tested: S123RDRP-S775D850-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059361
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D850-X4F0-XX-UDD-WVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

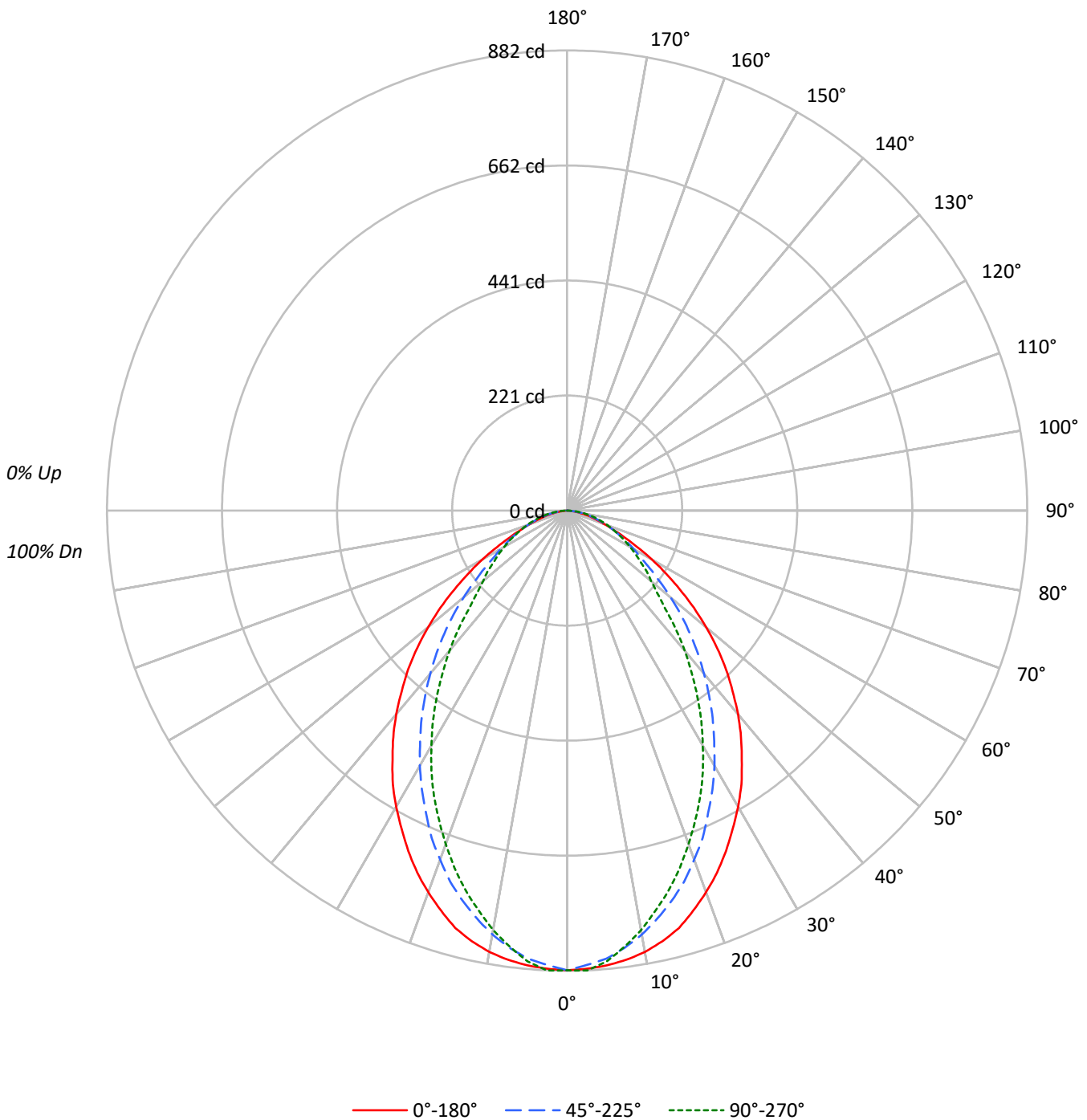
Lumens per Lamp: N/A
Luminaire Lumens: 1541.3 lumens
Efficiency: N/A
Efficacy: 59.7 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10347	10347	10347
5°	10313	10163	10225
10°	10242	9838	9737
15°	10069	9412	9155
20°	9728	8895	8497
25°	9331	8288	7822
30°	8889	7654	7051
35°	8366	6970	6240
40°	7810	6251	5374
45°	7159	5523	4414
50°	6346	4741	3831
55°	5399	3968	3513
60°	4403	3457	3260
65°	3354	3062	3031
70°	2620	2726	2836
75°	2114	2450	2645
80°	1576	2008	2434
85°	862	1280	2142

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7159 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.8	5.3
10°-20°	220.1	14.3
20°-30°	299.2	19.4
30°-40°	310.2	20.1
40°-50°	261.6	17.0
50°-60°	185.7	12.0
60°-70°	113.5	7.4
70°-80°	56.5	3.7
80°-90°	12.8	0.8
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°	601.1	39.0
0°-40°	911.2	59.1
0°-60°	1358.5	88.1
0°-90°	1541.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1541.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	881	881	881	881	881	
5°	875	875	862	868	868	83
15°	828	812	774	760	753	232
25°	720	688	640	616	604	331
35°	584	539	486	452	435	365
45°	431	386	333	287	266	331
55°	264	236	194	177	172	237
65°	121	116	110	110	109	123
75°	47	50	54	56	58	50
85°	6	7	10	14	16	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	881.2	881.2	881.2	881.2	881.2
2.5°	879.1	880.2	871.7	881.2	882.3
5°	874.9	874.9	862.2	867.5	867.5
7.5°	868.5	866.4	845.2	845.2	843.1
10°	859.0	852.6	825.1	819.8	816.6
12.5°	845.2	834.6	800.7	791.2	784.8
15°	828.3	812.4	774.2	760.5	753.1
17.5°	803.9	788.0	745.7	726.6	718.1
20°	778.5	755.2	711.8	692.7	680.0
22.5°	750.9	721.3	678.9	655.6	641.9
25°	720.2	688.5	639.7	616.4	603.7
27.5°	687.4	652.4	602.7	576.2	563.5
30°	655.6	615.4	564.5	534.9	520.0
32.5°	621.7	576.2	524.3	493.6	478.7
35°	583.6	539.1	486.2	452.3	435.3
37.5°	547.6	502.0	447.0	411.0	391.9
40°	509.5	463.9	407.8	370.7	350.6
42.5°	469.2	425.8	370.7	327.3	308.2
45°	431.1	385.5	332.6	287.0	265.8
47.5°	389.8	347.4	295.5	248.9	234.1
50°	347.4	308.2	259.5	217.1	209.7
52.5°	306.1	273.3	223.5	195.9	192.8
55°	263.7	236.2	193.8	176.9	171.6
57.5°	224.5	204.4	166.3	157.8	155.7
60°	187.5	170.5	147.2	141.9	138.8
62.5°	151.5	141.9	128.2	126.0	123.9
65°	120.7	116.5	110.2	110.2	109.1
67.5°	95.3	95.3	94.3	96.4	95.3
70°	76.3	77.3	79.4	81.6	82.6
72.5°	60.4	63.5	65.7	68.8	69.9
75°	46.6	49.8	54.0	56.1	58.3
77.5°	33.9	37.1	41.3	44.5	46.6
80°	23.3	25.4	29.7	33.9	36.0
82.5°	14.8	15.9	19.1	23.3	25.4
85°	6.4	7.4	9.5	13.8	15.9
87.5°	0.0	0.0	1.1	4.2	7.4
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	16.93	18.38	17.29	18.69	19.01	15.02	16.47	15.39	16.79	17.10
	3H	17.82	19.12	18.20	19.45	19.81	16.60	17.89	16.98	18.22	18.58
	4H	18.11	19.32	18.51	19.67	20.05	17.19	18.41	17.59	18.75	19.14
	6H	18.26	19.37	18.67	19.74	20.13	17.64	18.76	18.06	19.13	19.52
	8H	18.28	19.34	18.71	19.73	20.13	17.79	18.86	18.22	19.25	19.65
	12H	18.27	19.29	18.70	19.67	20.10	17.89	18.91	18.32	19.29	19.72
4H	2H	17.17	18.38	17.57	18.73	19.11	15.57	16.78	15.97	17.13	17.51
	3H	18.28	19.29	18.70	19.69	20.09	17.34	18.34	17.75	18.74	19.14
	4H	18.67	19.57	19.11	19.99	20.43	18.05	18.95	18.48	19.37	19.81
	6H	18.92	19.70	19.38	20.14	20.60	18.62	19.40	19.08	19.85	20.31
	8H	18.96	19.69	19.42	20.13	20.60	18.81	19.54	19.28	19.99	20.46
	12H	18.97	19.62	19.45	20.10	20.57	18.95	19.60	19.44	20.08	20.55
8H	4H	18.83	19.56	19.30	20.01	20.47	18.26	18.99	18.73	19.43	19.90
	6H	19.15	19.74	19.64	20.24	20.72	18.94	19.54	19.44	20.03	20.51
	8H	19.22	19.76	19.74	20.27	20.76	19.19	19.73	19.71	20.24	20.73
	12H	19.26	19.73	19.77	20.22	20.79	19.40	19.88	19.91	20.37	20.94
12H	4H	18.84	19.48	19.32	19.96	20.44	18.26	18.91	18.74	19.39	19.86
	6H	19.16	19.70	19.68	20.21	20.70	18.95	19.48	19.46	20.00	20.48
	8H	19.27	19.75	19.79	20.24	20.81	19.25	19.72	19.76	20.22	20.78