

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: P1059329

Luminaire Tested: S123RDRP-S775D830-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059329
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D830-X4F0-XX-UDD-BVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

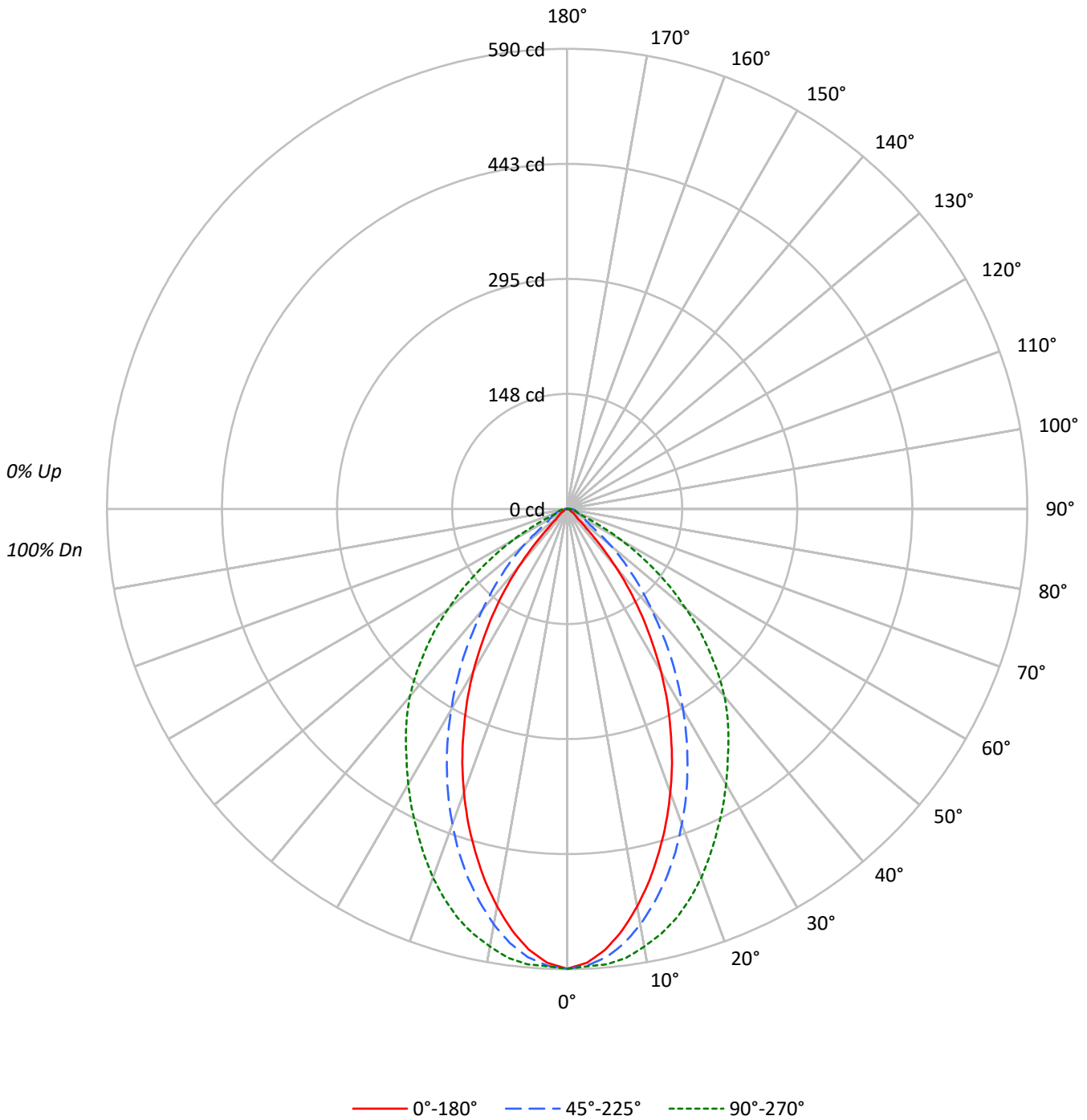
Lumens per Lamp: N/A
Luminaire Lumens: 708.0 lumens
Efficiency: N/A
Efficacy: 27.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6922	6922	6922
5°	6682	6800	6906
10°	6169	6448	6792
15°	5534	5960	6596
20°	4832	5372	6284
25°	4064	4729	5898
30°	3264	4032	5524
35°	2390	3320	5168
40°	1478	2584	4809
45°	570	1946	4281
50°	280	1334	3623
55°	221	739	2842
60°	148	613	1905
65°	125	550	850
70°	124	494	494
75°	163	531	490
80°	243	669	548
85°	364	1091	728

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4281 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.0	7.6
10°-20°	138.4	19.5
20°-30°	171.7	24.3
30°-40°	153.8	21.7
40°-50°	101.1	14.3
50°-60°	50.7	7.2
60°-70°	20.0	2.8
70°-80°	11.2	1.6
80°-90°	7.0	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°	364.1	51.4
0°-40°	518.0	73.2
0°-60°	669.8	94.6
0°-90°	708.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	708.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	590	590	590	590	590	
5°	567	576	577	580	586	53
15°	455	470	490	524	543	127
25°	314	334	365	416	455	143
35°	167	189	232	303	360	103
45°	34	57	117	197	258	32
55°	11	13	36	97	139	10
65°	4	13	20	25	31	5
75°	4	12	12	11	11	4
85°	3	8	8	8	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	589.5	589.5	589.5	589.5	589.5
2.5°	582.3	590.4	585.9	585.9	586.8
5°	566.9	576.0	576.9	580.5	585.9
7.5°	544.4	556.1	561.5	572.3	580.5
10°	517.4	530.0	540.8	559.7	569.6
12.5°	487.6	500.2	516.5	542.6	557.9
15°	455.2	469.6	490.3	523.7	542.6
17.5°	421.8	436.2	461.5	499.3	523.7
20°	386.7	402.9	429.9	473.2	502.9
22.5°	351.5	369.5	398.4	445.3	479.5
25°	313.7	333.5	365.0	416.4	455.2
27.5°	277.6	298.3	331.7	387.6	431.7
30°	240.7	261.4	297.4	357.8	407.4
32.5°	202.8	226.2	264.1	329.9	383.1
35°	166.7	189.3	231.6	302.8	360.5
37.5°	131.6	154.1	198.3	276.7	338.0
40°	96.4	119.9	168.6	251.5	313.7
42.5°	63.1	87.4	142.4	226.2	286.6
45°	34.3	56.8	117.2	197.4	257.8
47.5°	18.9	30.6	94.6	170.4	229.8
50°	15.3	17.1	73.0	145.1	198.3
52.5°	12.6	14.4	52.3	120.8	169.5
55°	10.8	12.6	36.1	97.3	138.8
57.5°	9.0	10.8	28.8	74.8	109.1
60°	6.3	10.8	26.1	55.0	81.1
62.5°	5.4	10.8	22.5	37.9	54.1
65°	4.5	12.6	19.8	25.2	30.6
67.5°	3.6	12.6	17.1	16.2	16.2
70°	3.6	12.6	14.4	13.5	14.4
72.5°	3.6	13.5	13.5	12.6	12.6
75°	3.6	11.7	11.7	10.8	10.8
77.5°	3.6	10.8	10.8	9.9	9.9
80°	3.6	9.9	9.9	9.0	8.1
82.5°	3.6	9.0	9.0	8.1	7.2
85°	2.7	8.1	8.1	8.1	5.4
87.5°	2.7	7.2	8.1	7.2	4.5
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	0.00	0.43	0.00	0.74	1.05	13.27	14.53	13.63	14.84	15.15
	3H	1.69	2.81	2.07	3.14	3.50	13.35	14.46	13.73	14.79	15.16
	4H	2.86	3.90	3.26	4.25	4.63	13.41	14.44	13.81	14.80	15.18
	6H	3.91	4.86	4.33	5.23	5.63	13.51	14.46	13.92	14.83	15.22
	8H	4.45	5.35	4.88	5.74	6.15	13.57	14.47	14.00	14.86	15.26
	12H	4.93	5.79	5.36	6.17	6.61	13.64	14.50	14.07	14.88	15.31
4H	2H	2.43	3.47	2.83	3.82	4.20	13.13	14.16	13.53	14.51	14.90
	3H	4.89	5.74	5.31	6.14	6.55	13.30	14.15	13.71	14.55	14.96
	4H	6.24	7.00	6.67	7.42	7.86	13.43	14.19	13.86	14.61	15.05
	6H	7.37	8.02	7.83	8.47	8.94	13.64	14.30	14.11	14.74	15.21
	8H	7.88	8.49	8.35	8.94	9.41	13.77	14.38	14.24	14.83	15.30
	12H	8.34	8.88	8.82	9.36	9.83	13.93	14.47	14.41	14.95	15.43
8H	4H	7.15	7.77	7.63	8.21	8.69	13.43	14.04	13.90	14.49	14.96
	6H	8.75	9.26	9.26	9.75	10.23	13.76	14.26	14.26	14.76	15.24
	8H	9.58	10.03	10.10	10.55	11.04	13.99	14.44	14.51	14.96	15.45
	12H	10.36	10.76	10.88	11.26	11.83	14.31	14.71	14.83	15.21	15.78
12H	4H	7.32	7.86	7.81	8.35	8.82	13.42	13.96	13.91	14.44	14.92
	6H	9.07	9.52	9.59	10.04	10.53	13.79	14.24	14.31	14.76	15.25
	8H	10.08	10.48	10.59	10.97	11.55	14.10	14.50	14.62	14.99	15.57