

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: P1059340

Luminaire Tested: S123RDRP-S775D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059340
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-S775D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

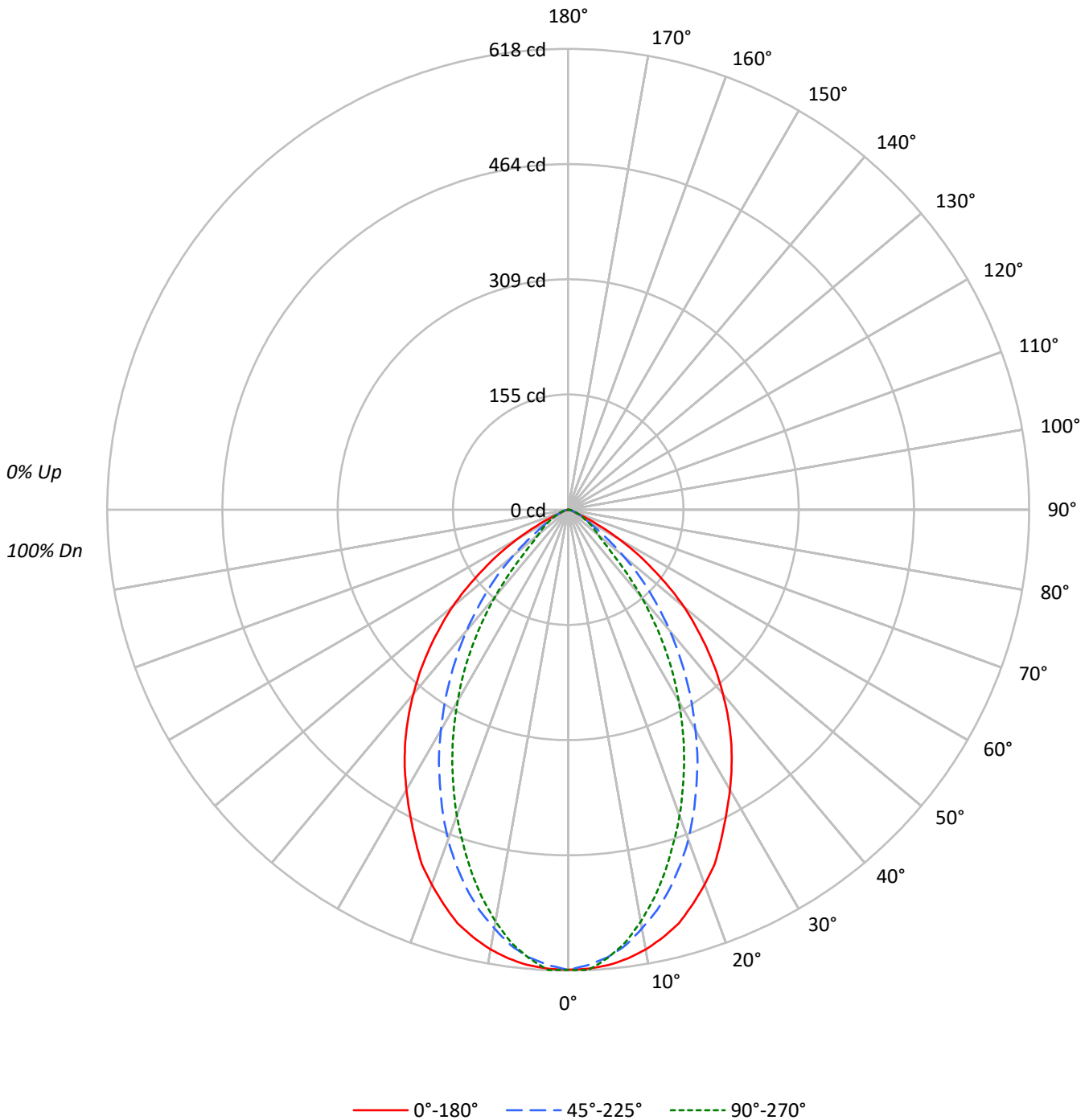
Lumens per Lamp: N/A
Luminaire Lumens: 796.5 lumens
Efficiency: N/A
Efficacy: 30.9 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1059340

CATALOG NUMBER: S123RDRP-S775D835-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1059340

CATALOG NUMBER: S123RDRP-S775D835-X4F0-XX-UDD-SVL-B

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°	7245	7245	7245
5°	7228	7104	7115
10°	7140	6799	6684
15°	6978	6397	6108
20°	6683	5884	5455
25°	6298	5272	4764
30°	5879	4624	4015
35°	5463	3944	3231
40°	4948	3250	2342
45°	4361	2522	1412
50°	3699	1763	959
55°	2815	1056	803
60°	1839	674	627
65°	770	503	503
70°	261	360	395
75°	218	259	304
80°	128	196	257
85°	135	135	256

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4361 cd/sqm

TEST NUMBER: P1059340

CATALOG NUMBER: S123RDRP-S775D835-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.0	7.2
10°-20°	149.1	18.7
20°-30°	191.2	24.0
30°-40°	179.5	22.5
40°-50°	125.2	15.7
50°-60°	64.7	8.1
60°-70°	22.1	2.8
70°-80°	6.3	0.8
80°-90°	1.3	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°	397.3	49.9
0°-40°	576.8	72.4
0°-60°	766.7	96.3
0°-90°	796.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	796.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	617	617	617	617	617	
5°	613	612	603	606	604	58
15°	574	560	526	509	502	161
25°	486	456	407	379	368	223
35°	381	334	275	240	225	237
45°	263	215	152	105	85	202
55°	138	103	52	40	39	124
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	



TEST NUMBER: P1059340

CATALOG NUMBER: S123RDRP-S775D835-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	617.0	617.0	617.0	617.0	617.0
2.5°	616.0	617.0	611.2	617.0	617.9
5°	613.2	612.2	602.7	605.5	603.6
7.5°	607.4	604.6	589.3	585.5	585.5
10°	598.8	593.1	570.2	563.5	560.6
12.5°	587.4	579.7	550.1	537.7	532.9
15°	574.0	559.7	526.2	509.1	502.4
17.5°	554.9	535.8	499.5	479.4	468.9
20°	534.8	511.0	470.9	447.0	436.5
22.5°	513.8	485.2	439.3	413.5	402.1
25°	486.1	455.6	406.9	379.2	367.7
27.5°	459.4	426.9	375.3	343.8	332.4
30°	433.6	395.4	341.0	310.4	296.1
32.5°	407.8	364.8	308.5	275.1	261.7
35°	381.1	334.3	275.1	239.7	225.4
37.5°	352.4	304.7	243.5	205.3	188.2
40°	322.8	273.2	212.0	169.0	152.8
42.5°	293.2	244.5	180.5	136.6	117.5
45°	262.6	214.9	151.9	105.1	85.0
47.5°	232.1	185.3	124.2	76.4	64.0
50°	202.5	157.6	96.5	56.3	52.5
52.5°	170.0	130.8	72.6	46.8	45.8
55°	137.5	103.1	51.6	40.1	39.2
57.5°	108.9	80.2	37.2	33.4	32.5
60°	78.3	57.3	28.7	27.7	26.7
62.5°	51.6	39.2	22.9	22.0	22.0
65°	27.7	23.9	18.1	17.2	18.1
67.5°	11.5	13.4	13.4	14.3	14.3
70°	7.6	8.6	10.5	11.5	11.5
72.5°	5.7	6.7	7.6	8.6	8.6
75°	4.8	4.8	5.7	6.7	6.7
77.5°	2.9	3.8	3.8	4.8	5.7
80°	1.9	2.9	2.9	3.8	3.8
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



TEST NUMBER: P1059340
 CATALOG NUMBER: S123RDRP-S775D835-X4F0-XX-UDD-SVL-B

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	13.21	14.47	13.58	14.78	15.10	6.72	7.97	7.08	8.29	8.60
	3H	13.16	14.27	13.54	14.60	14.97	7.49	8.60	7.87	8.93	9.30
	4H	13.11	14.14	13.52	14.49	14.88	7.69	8.72	8.10	9.08	9.46
	6H	13.04	13.99	13.46	14.36	14.75	7.84	8.78	8.25	9.15	9.55
	8H	13.00	13.89	13.43	14.28	14.69	7.87	8.76	8.30	9.16	9.56
	12H	12.96	13.81	13.39	14.19	14.62	7.89	8.74	8.32	9.13	9.56
4H	2H	13.06	14.09	13.46	14.44	14.82	6.97	8.00	7.37	8.35	8.74
	3H	13.04	13.88	13.46	14.28	14.69	7.88	8.71	8.29	9.12	9.52
	4H	12.99	13.73	13.43	14.15	14.60	8.15	8.90	8.59	9.32	9.76
	6H	12.93	13.57	13.40	14.02	14.49	8.37	9.01	8.83	9.45	9.92
	8H	12.88	13.48	13.35	13.93	14.40	8.43	9.03	8.90	9.47	9.95
	12H	12.84	13.36	13.33	13.85	14.32	8.47	8.99	8.96	9.48	9.95
8H	4H	12.88	13.47	13.35	13.92	14.39	8.14	8.73	8.61	9.18	9.65
	6H	12.82	13.30	13.32	13.80	14.28	8.40	8.89	8.91	9.39	9.87
	8H	12.77	13.20	13.29	13.72	14.21	8.51	8.95	9.04	9.47	9.96
	12H	12.73	13.11	13.25	13.61	14.18	8.59	8.98	9.11	9.47	10.04
12H	4H	12.83	13.36	13.32	13.84	14.32	8.10	8.62	8.59	9.11	9.58
	6H	12.76	13.19	13.28	13.71	14.20	8.37	8.80	8.89	9.32	9.81
	8H	12.73	13.11	13.25	13.61	14.18	8.51	8.89	9.02	9.39	9.96