

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: P1059335

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059335
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D830-X4F0-XX-UDD-WVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

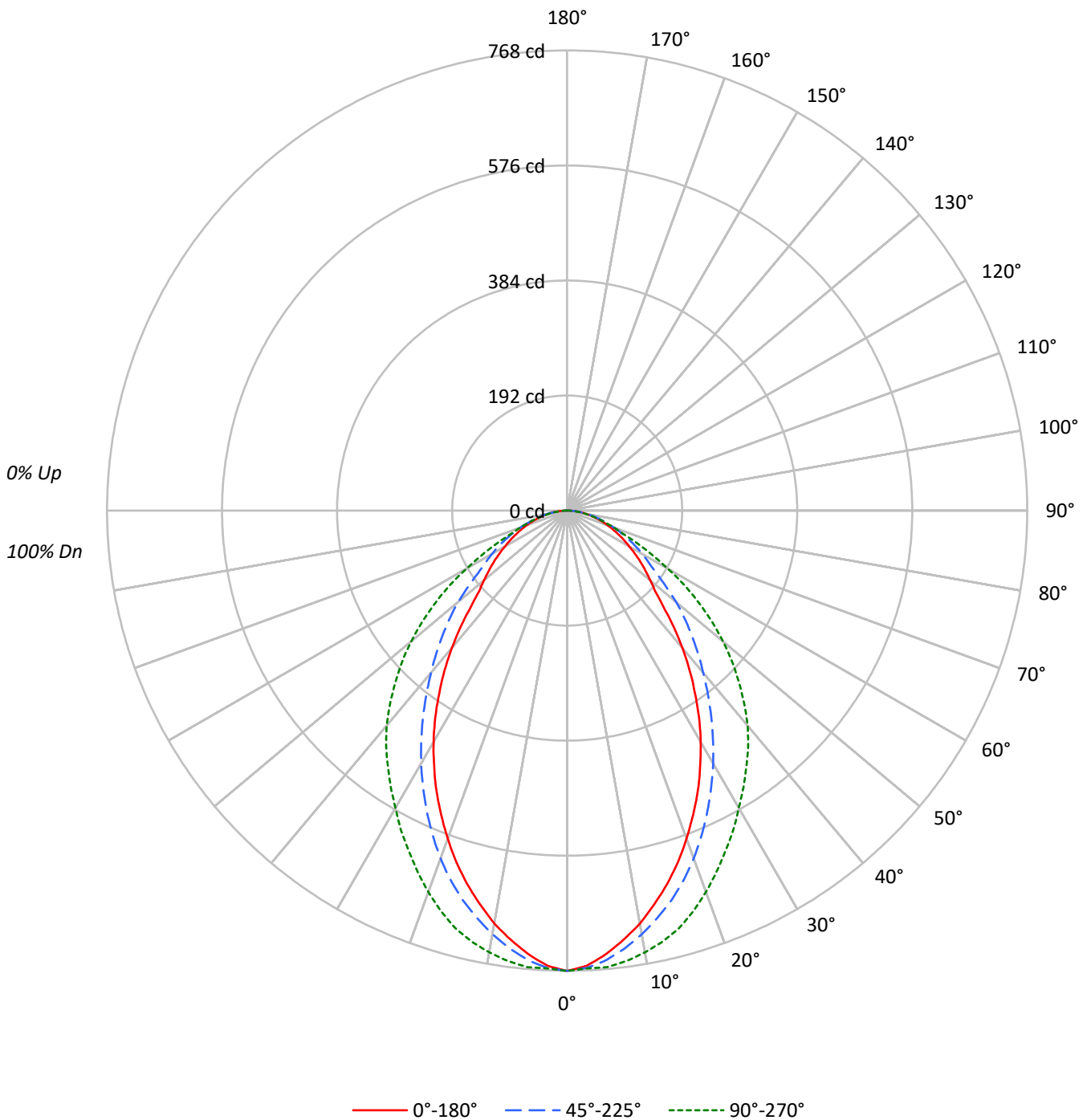
Lumens per Lamp: N/A
Luminaire Lumens: 1387.9 lumens
Efficiency: N/A
Efficacy: 53.8 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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: P1059335

CATALOG NUMBER: S123RDRP-S775D830-X4F0-XX-UDD-WVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1059335

CATALOG NUMBER: S123RDRP-S775D830-X4F0-XX-UDD-WVL-S

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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89				87	
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77				75	
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67				65	
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59				57	
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53				51	
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47				45	
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43				41	
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39				37	
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35				34	
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33				31	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9022	9022	9022
5°	8759	8876	9014
10°	8345	8560	8925
15°	7840	8179	8771
20°	7283	7721	8465
25°	6687	7178	8111
30°	6046	6607	7768
35°	5333	6003	7476
40°	4583	5413	7180
45°	3770	4876	6731
50°	3307	4344	6204
55°	3061	3705	5495
60°	2813	3405	4549
65°	2628	3129	3579
70°	2475	2846	2846
75°	2327	2613	2450
80°	2191	2374	2069
85°	2061	2304	1576

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6731 cd/sqm



TEST NUMBER: P1059335

CATALOG NUMBER: S123RDRP-S775D830-X4F0-XX-UDD-WVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.1	5.1
10°-20°	190.5	13.7
20°-30°	258.2	18.6
30°-40°	270.0	19.5
40°-50°	234.2	16.9
50°-60°	174.2	12.6
60°-70°	111.8	8.1
70°-80°	59.9	4.3
80°-90°	18.1	1.3
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°	519.7	37.4
0°-40°	789.7	56.9
0°-60°	1198.1	86.3
0°-90°	1387.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1387.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	768	768	768	768	768	
5°	743	756	753	758	765	70
15°	645	660	673	700	722	181
25°	516	532	554	591	626	237
35°	372	390	419	472	522	232
45°	227	244	294	357	405	179
55°	150	153	181	232	268	134
65°	95	103	113	120	129	94
75°	51	59	58	55	54	54
85°	15	19	17	14	12	17
90°	0	0	0	0	0	



TEST NUMBER: P1059335

CATALOG NUMBER: S123RDRP-S775D830-X4F0-XX-UDD-WVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	768.3	768.3	768.3	768.3	768.3
2.5°	760.2	771.0	763.8	763.8	764.7
5°	743.1	755.7	753.0	758.4	764.7
7.5°	722.4	735.9	736.8	749.4	758.4
10°	699.9	713.4	717.9	735.9	748.5
12.5°	672.8	688.2	696.3	718.8	736.8
15°	644.9	660.2	672.8	699.9	721.5
17.5°	615.2	630.5	646.7	677.4	700.8
20°	582.8	599.0	617.9	648.5	677.4
22.5°	549.4	566.6	586.4	619.7	652.1
25°	516.1	532.3	554.0	590.9	626.0
27.5°	481.0	498.1	520.6	561.2	600.8
30°	445.9	463.0	487.3	530.5	572.9
32.5°	409.8	426.9	453.1	501.7	547.6
35°	372.0	390.0	418.8	472.0	521.5
37.5°	336.0	353.1	385.5	444.1	496.3
40°	299.0	317.1	353.1	416.1	468.4
42.5°	263.0	281.0	323.4	386.4	437.8
45°	227.0	244.1	293.6	356.7	405.3
47.5°	199.1	211.7	265.7	325.2	373.8
50°	181.0	185.6	237.8	294.5	339.6
52.5°	164.8	168.4	207.2	263.9	304.4
55°	149.5	153.1	181.0	232.4	268.4
57.5°	134.2	138.7	161.2	200.0	232.4
60°	119.8	125.2	145.0	171.1	193.7
62.5°	107.2	113.5	128.8	145.0	160.3
65°	94.6	102.7	112.6	119.8	128.8
67.5°	82.9	91.9	97.3	99.1	100.0
70°	72.1	81.1	82.9	82.9	82.9
72.5°	61.2	71.2	69.4	68.5	67.6
75°	51.3	59.4	57.6	54.9	54.0
77.5°	41.4	48.6	45.9	44.1	41.4
80°	32.4	37.8	35.1	33.3	30.6
82.5°	24.3	27.9	25.2	23.4	20.7
85°	15.3	18.9	17.1	14.4	11.7
87.5°	8.1	10.8	9.0	8.1	4.5
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1059335
 CATALOG NUMBER: S123RDRP-S775D830-X4F0-XX-UDD-WVL-S

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	14.43	15.91	14.79	16.22	16.54	17.19	18.67	17.55	18.98	19.30
	3H	16.14	17.47	16.52	17.80	18.16	18.21	19.54	18.58	19.86	20.23
	4H	16.80	18.04	17.20	18.39	18.77	18.57	19.82	18.97	20.17	20.55
	6H	17.30	18.45	17.71	18.82	19.21	18.83	19.98	19.24	20.34	20.73
	8H	17.48	18.57	17.90	18.96	19.36	18.90	19.99	19.32	20.38	20.78
	12H	17.60	18.65	18.03	19.03	19.46	18.93	19.98	19.36	20.36	20.79
4H	2H	15.20	16.45	15.60	16.80	17.18	17.46	18.70	17.86	19.05	19.43
	3H	17.13	18.16	17.54	18.56	18.97	18.71	19.74	19.12	20.14	20.55
	4H	17.94	18.87	18.37	19.28	19.72	19.20	20.13	19.63	20.54	20.98
	6H	18.58	19.39	19.04	19.83	20.29	19.58	20.39	20.04	20.83	21.29
	8H	18.81	19.56	19.27	20.01	20.47	19.69	20.44	20.15	20.89	21.36
	12H	18.98	19.65	19.46	20.13	20.60	19.76	20.43	20.24	20.91	21.38
8H	4H	18.26	19.01	18.72	19.46	19.93	19.39	20.14	19.85	20.59	21.06
	6H	19.05	19.67	19.55	20.17	20.64	19.88	20.50	20.37	20.99	21.47
	8H	19.38	19.94	19.89	20.45	20.94	20.05	20.61	20.57	21.12	21.61
	12H	19.65	20.15	20.17	20.64	21.21	20.18	20.68	20.69	21.17	21.74
12H	4H	18.28	18.96	18.77	19.44	19.91	19.40	20.08	19.89	20.56	21.03
	6H	19.10	19.67	19.62	20.18	20.66	19.91	20.47	20.43	20.98	21.47
	8H	19.50	19.99	20.01	20.49	21.05	20.14	20.64	20.65	21.13	21.70