

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: P1059123

Luminaire Tested: S123RDRP-S1165D927-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059123
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1165D927-X4F0-XX-UDD-BVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

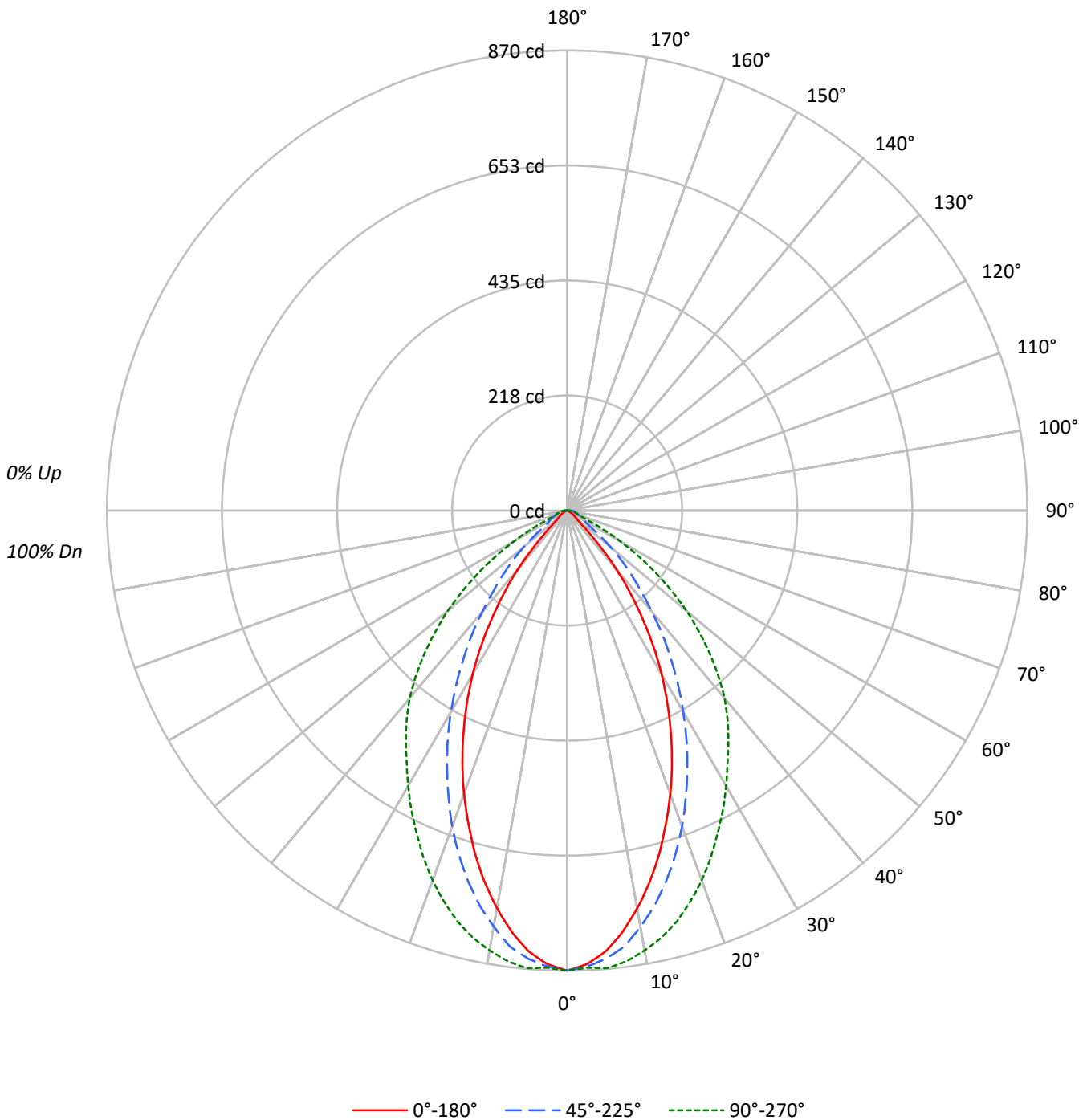
Lumens per Lamp: N/A
Luminaire Lumens: 1044.1 lumens
Efficiency: N/A
Efficacy: 25.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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: P1059123

CATALOG NUMBER: S123RDRP-S1165D927-X4F0-XX-UDD-BVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1059123

CATALOG NUMBER: S123RDRP-S1165D927-X4F0-XX-UDD-BVL-W

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	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	69	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	65	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47
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	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10212	10212	10212
5°	9860	10023	10237
10°	9102	9525	10069
15°	8169	8808	9767
20°	7126	7940	9297
25°	6012	6959	8721
30°	4835	5950	8150
35°	3538	4898	7618
40°	2207	3818	7094
45°	835	2846	6320
50°	396	1962	5385
55°	305	1077	4164
60°	214	914	2738
65°	158	795	1142
70°	158	745	745
75°	209	776	776
80°	311	926	852
85°	620	1536	1226

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6320 cd/sqm



TEST NUMBER: P1059123

CATALOG NUMBER: S123RDRP-S1165D927-X4F0-XX-UDD-BVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.8	7.6
10°-20°	204.7	19.6
20°-30°	253.4	24.3
30°-40°	227.2	21.8
40°-50°	148.9	14.3
50°-60°	74.6	7.1
60°-70°	29.1	2.8
70°-80°	16.4	1.6
80°-90°	10.1	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°	537.9	51.5
0°-40°	765.1	73.3
0°-60°	988.6	94.7
0°-90°	1044.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1044.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	870	870	870	870	870	
5°	836	850	850	859	868	78
15°	672	699	724	772	803	187
25°	464	493	537	614	673	212
35°	247	280	342	445	531	154
45°	50	81	171	294	381	48
55°	15	18	53	144	203	14
65°	6	17	29	38	41	6
75°	5	17	17	17	17	5
85°	5	11	11	11	9	4
90°	0	0	0	0	0	



TEST NUMBER: P1059123

CATALOG NUMBER: S123RDRP-S1165D927-X4F0-XX-UDD-BVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	869.7	869.7	869.7	869.7	869.7
2.5°	858.3	870.8	862.8	864.0	865.1
5°	836.5	850.3	850.3	859.4	868.5
7.5°	803.4	819.4	830.8	846.8	859.4
10°	763.4	782.8	798.8	827.4	844.5
12.5°	720.0	744.0	764.5	802.3	826.3
15°	672.0	699.4	724.5	772.5	803.4
17.5°	620.6	648.0	681.1	737.1	774.8
20°	570.3	597.7	635.4	698.3	744.0
22.5°	517.7	546.3	586.3	656.0	709.7
25°	464.0	492.6	537.1	613.7	673.1
27.5°	410.3	438.8	489.1	572.6	637.7
30°	356.6	385.1	438.8	528.0	601.1
32.5°	302.8	333.7	389.7	486.8	564.6
35°	246.8	280.0	341.7	444.6	531.4
37.5°	195.4	226.3	296.0	408.0	498.3
40°	144.0	177.1	249.1	372.6	462.8
42.5°	93.7	129.1	206.9	333.7	422.8
45°	50.3	81.1	171.4	293.7	380.6
47.5°	27.4	44.6	138.3	251.4	337.1
50°	21.7	25.1	107.4	214.9	294.8
52.5°	18.3	20.6	76.6	180.6	248.0
55°	14.9	18.3	52.6	144.0	203.4
57.5°	12.6	16.0	41.1	112.0	158.9
60°	9.1	13.7	38.9	82.3	116.6
62.5°	6.9	14.9	34.3	57.1	76.6
65°	5.7	17.1	28.6	37.7	41.1
67.5°	4.6	18.3	25.1	24.0	24.0
70°	4.6	17.1	21.7	20.6	21.7
72.5°	4.6	18.3	19.4	18.3	19.4
75°	4.6	17.1	17.1	17.1	17.1
77.5°	4.6	16.0	16.0	14.9	14.9
80°	4.6	13.7	13.7	13.7	12.6
82.5°	4.6	12.6	12.6	12.6	10.3
85°	4.6	11.4	11.4	11.4	9.1
87.5°	3.4	10.3	11.4	10.3	6.9
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1059123
 CATALOG NUMBER: S123RDRP-S1165D927-X4F0-XX-UDD-BVL-W

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	0.43	1.69	0.80	2.00	2.31	14.68	15.93	15.04	16.25	16.56
	3H	2.77	3.88	3.15	4.21	4.57	14.76	15.87	15.14	16.20	16.57
	4H	3.87	4.90	4.27	5.26	5.64	14.84	15.87	15.24	16.22	16.60
	6H	4.86	5.81	5.28	6.18	6.58	14.94	15.89	15.36	16.26	16.66
	8H	5.35	6.25	5.78	6.64	7.04	15.00	15.90	15.43	16.29	16.69
	12H	5.91	6.77	6.34	7.15	7.58	15.08	15.94	15.51	16.32	16.75
4H	2H	3.68	4.72	4.09	5.07	5.45	14.53	15.57	14.94	15.92	16.30
	3H	6.00	6.84	6.41	7.25	7.65	14.71	15.55	15.12	15.96	16.36
	4H	7.37	8.12	7.80	8.54	8.99	14.86	15.61	15.30	16.03	16.48
	6H	8.45	9.11	8.92	9.55	10.02	15.09	15.74	15.55	16.18	16.65
	8H	8.91	9.52	9.39	9.97	10.44	15.21	15.82	15.68	16.27	16.74
	12H	9.41	9.95	9.90	10.43	10.91	15.38	15.92	15.87	16.41	16.88
8H	4H	8.34	8.95	8.81	9.40	9.87	14.86	15.47	15.33	15.91	16.39
	6H	9.86	10.36	10.37	10.86	11.34	15.19	15.69	15.70	16.19	16.67
	8H	10.64	11.09	11.16	11.61	12.10	15.43	15.88	15.95	16.39	16.89
	12H	11.44	11.84	11.96	12.34	12.91	15.76	16.16	16.28	16.65	17.23
12H	4H	8.52	9.05	9.00	9.54	10.01	14.84	15.38	15.33	15.86	16.34
	6H	10.18	10.63	10.70	11.14	11.64	15.21	15.66	15.74	16.18	16.67
	8H	11.14	11.54	11.65	12.03	12.60	15.52	15.92	16.04	16.42	16.99