

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: P1059528

Luminaire Tested: S123RDRP-H1165D927-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059528
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-H1165D927-X4F0-XX-UDD-BVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

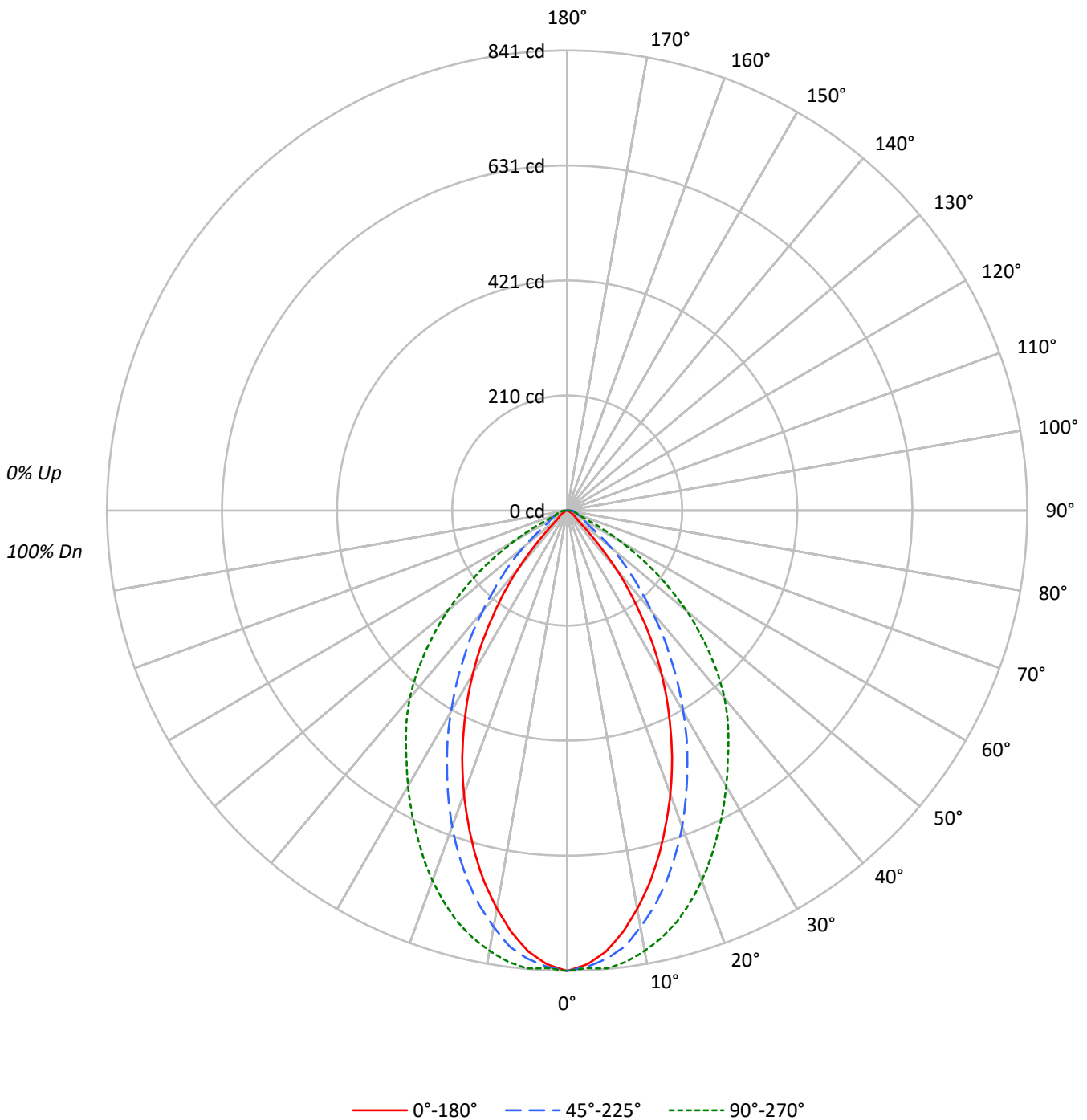
Lumens per Lamp: N/A
Luminaire Lumens: 1010.1 lumens
Efficiency: N/A
Efficacy: 27.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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	90	102	97	92	88	94	90	86	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°	9879	9879	9879
5°	9538	9695	9904
10°	8806	9213	9742
15°	7902	8521	9448
20°	6893	7680	8993
25°	5815	6732	8436
30°	4676	5756	7885
35°	3423	4738	7370
40°	2135	3694	6863
45°	807	2753	6113
50°	384	1898	5210
55°	295	1042	4029
60°	207	883	2649
65°	153	767	1106
70°	151	721	721
75°	200	753	753
80°	298	899	825
85°	593	1495	1186

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6113 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.2	7.6
10°-20°	198.0	19.6
20°-30°	245.1	24.3
30°-40°	219.7	21.8
40°-50°	144.1	14.3
50°-60°	72.1	7.1
60°-70°	28.1	2.8
70°-80°	15.9	1.6
80°-90°	9.8	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°	520.4	51.5
0°-40°	740.1	73.3
0°-60°	956.3	94.7
0°-90°	1010.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1010.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	841	841	841	841	841	
5°	809	822	822	831	840	75
15°	650	677	701	747	777	181
25°	449	476	520	594	651	205
35°	239	271	330	430	514	149
45°	49	78	166	284	368	46
55°	14	18	51	139	197	13
65°	6	17	28	36	40	6
75°	4	17	17	17	17	5
85°	4	11	11	11	9	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	841.3	841.3	841.3	841.3	841.3
2.5°	830.2	842.4	834.6	835.7	836.9
5°	809.2	822.5	822.5	831.3	840.2
7.5°	777.2	792.6	803.7	819.2	831.3
10°	738.5	757.3	772.7	800.4	817.0
12.5°	696.5	719.7	739.6	776.1	799.3
15°	650.0	676.6	700.9	747.3	777.2
17.5°	600.3	626.8	658.9	713.0	749.5
20°	551.6	578.2	614.6	675.5	719.7
22.5°	500.8	528.4	567.1	634.5	686.5
25°	448.8	476.5	519.6	593.6	651.1
27.5°	396.9	424.5	473.1	553.8	616.9
30°	344.9	372.5	424.5	510.7	581.5
32.5°	293.0	322.8	377.0	470.9	546.1
35°	238.8	270.8	330.5	430.0	514.1
37.5°	189.0	218.9	286.3	394.7	482.0
40°	139.3	171.4	241.0	360.4	447.7
42.5°	90.6	124.9	200.1	322.8	409.0
45°	48.6	78.5	165.8	284.1	368.1
47.5°	26.5	43.1	133.8	243.2	326.1
50°	21.0	24.3	103.9	207.8	285.2
52.5°	17.7	19.9	74.1	174.7	239.9
55°	14.4	17.7	50.9	139.3	196.8
57.5°	12.2	15.5	39.8	108.3	153.7
60°	8.8	13.3	37.6	79.6	112.8
62.5°	6.6	14.4	33.2	55.3	74.1
65°	5.5	16.6	27.6	36.5	39.8
67.5°	4.4	17.7	24.3	23.2	23.2
70°	4.4	16.6	21.0	19.9	21.0
72.5°	4.4	17.7	18.8	17.7	18.8
75°	4.4	16.6	16.6	16.6	16.6
77.5°	4.4	15.5	15.5	14.4	14.4
80°	4.4	13.3	13.3	13.3	12.2
82.5°	4.4	12.2	12.2	12.2	9.9
85°	4.4	11.1	11.1	11.1	8.8
87.5°	3.3	9.9	11.1	9.9	6.6
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	0.33	1.58	0.69	1.89	2.21	14.56	15.82	14.93	16.13	16.44
	3H	2.65	3.76	3.03	4.09	4.46	14.64	15.75	15.02	16.08	16.45
	4H	3.75	4.78	4.15	5.14	5.52	14.72	15.75	15.12	16.10	16.49
	6H	4.74	5.69	5.15	6.06	6.45	14.82	15.77	15.24	16.14	16.54
	8H	5.22	6.12	5.65	6.51	6.91	14.88	15.78	15.31	16.17	16.58
	12H	5.77	6.63	6.21	7.02	7.45	14.96	15.82	15.39	16.20	16.63
4H	2H	3.56	4.60	3.97	4.95	5.33	14.42	15.45	14.82	15.80	16.18
	3H	5.88	6.73	6.30	7.13	7.54	14.59	15.44	15.00	15.84	16.24
	4H	7.25	8.01	7.69	8.43	8.87	14.74	15.50	15.18	15.92	16.36
	6H	8.34	8.99	8.81	9.44	9.91	14.97	15.62	15.43	16.07	16.54
	8H	8.80	9.41	9.27	9.86	10.33	15.09	15.70	15.56	16.15	16.62
	12H	9.29	9.83	9.78	10.31	10.79	15.27	15.80	15.75	16.29	16.76
8H	4H	8.23	8.84	8.70	9.29	9.76	14.74	15.35	15.21	15.80	16.27
	6H	9.75	10.25	10.26	10.75	11.23	15.08	15.58	15.58	16.08	16.56
	8H	10.53	10.98	11.05	11.50	11.99	15.31	15.76	15.84	16.28	16.77
	12H	11.33	11.73	11.85	12.23	12.80	15.65	16.05	16.16	16.54	17.11
12H	4H	8.41	8.95	8.89	9.43	9.90	14.72	15.26	15.21	15.75	16.22
	6H	10.07	10.52	10.59	11.04	11.53	15.10	15.55	15.62	16.07	16.56
	8H	11.03	11.43	11.54	11.92	12.49	15.41	15.81	15.93	16.30	16.88