

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: P1059131

Luminaire Tested: S123RDRP-S1165D930-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059131
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-S1165D930-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, 90 CRI LEDS
Ballast/Driver: -

Summary

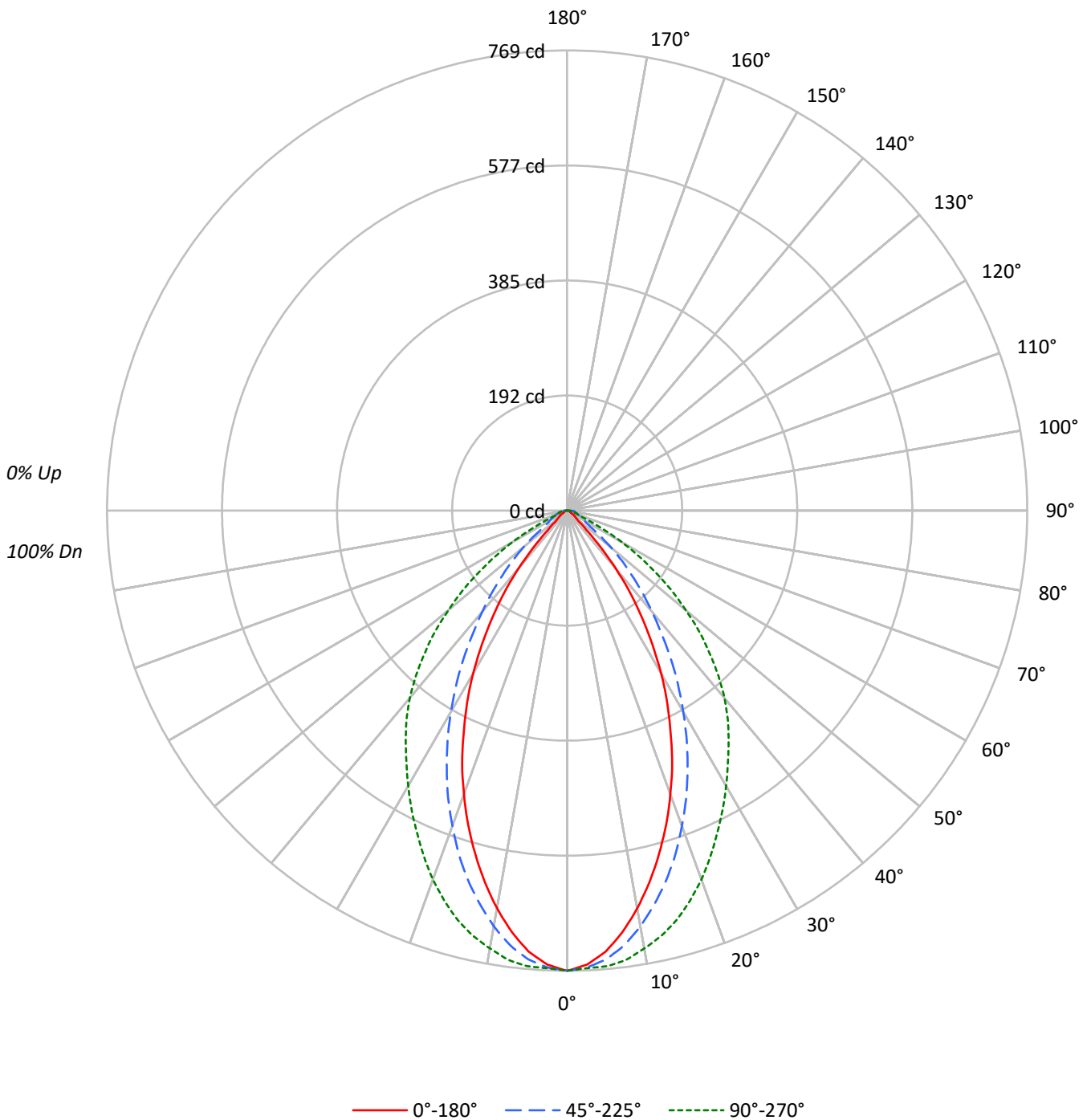
Lumens per Lamp: N/A
Luminaire Lumens: 923.7 lumens
Efficiency: N/A
Efficacy: 22.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

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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°	9030	9030	9030
5°	8718	8870	9009
10°	8047	8412	8860
15°	7219	7777	8606
20°	6303	7009	8199
25°	5302	6170	7693
30°	4256	5261	7207
35°	3118	4332	6742
40°	1928	3371	6272
45°	742	2539	5585
50°	365	1739	4726
55°	289	962	3708
60°	193	801	2485
65°	164	720	1111
70°	161	645	645
75°	213	694	640
80°	318	872	717
85°	472	1428	957

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5585 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.5	7.6
10°-20°	180.5	19.5
20°-30°	224.0	24.3
30°-40°	200.7	21.7
40°-50°	131.9	14.3
50°-60°	66.1	7.2
60°-70°	26.1	2.8
70°-80°	14.6	1.6
80°-90°	9.2	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°	475.1	51.4
0°-40°	675.8	73.2
0°-60°	873.8	94.6
0°-90°	923.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	923.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	769	769	769	769	769	
5°	740	751	752	757	764	69
15°	594	613	640	683	708	165
25°	409	435	476	543	594	187
35°	218	247	302	395	470	135
45°	45	74	153	258	336	42
55°	14	16	47	127	181	13
65°	6	16	26	33	40	6
75°	5	15	15	14	14	5
85°	4	11	11	11	7	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	769.0	769.0	769.0	769.0	769.0
2.5°	759.6	770.2	764.3	764.3	765.5
5°	739.6	751.4	752.5	757.2	764.3
7.5°	710.2	725.5	732.5	746.7	757.2
10°	674.9	691.4	705.5	730.2	743.1
12.5°	636.1	652.6	673.8	707.9	727.8
15°	593.8	612.6	639.7	683.2	707.9
17.5°	550.3	569.1	602.0	651.4	683.2
20°	504.4	525.6	560.9	617.3	656.1
22.5°	458.6	482.1	519.7	580.9	625.5
25°	409.2	435.1	476.2	543.2	593.8
27.5°	362.2	389.2	432.7	505.6	563.2
30°	313.9	341.0	388.0	466.8	531.5
32.5°	264.6	295.1	344.5	430.4	499.7
35°	217.5	246.9	302.2	395.1	470.3
37.5°	171.7	201.1	258.7	361.0	440.9
40°	125.8	156.4	219.9	328.1	409.2
42.5°	82.3	114.1	185.8	295.1	373.9
45°	44.7	74.1	152.9	257.5	336.3
47.5°	24.7	40.0	123.5	222.2	299.8
50°	20.0	22.3	95.2	189.3	258.7
52.5°	16.5	18.8	68.2	157.6	221.1
55°	14.1	16.5	47.0	127.0	181.1
57.5°	11.8	14.1	37.6	97.6	142.3
60°	8.2	14.1	34.1	71.7	105.8
62.5°	7.1	14.1	29.4	49.4	70.6
65°	5.9	16.5	25.9	32.9	40.0
67.5°	4.7	16.5	22.3	21.2	21.2
70°	4.7	16.5	18.8	17.6	18.8
72.5°	4.7	17.6	17.6	16.5	16.5
75°	4.7	15.3	15.3	14.1	14.1
77.5°	4.7	14.1	14.1	12.9	12.9
80°	4.7	12.9	12.9	11.8	10.6
82.5°	4.7	11.8	11.8	10.6	9.4
85°	3.5	10.6	10.6	10.6	7.1
87.5°	3.5	9.4	10.6	9.4	5.9
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	0.10	1.36	0.47	1.67	1.99	14.19	15.45	14.56	15.76	16.08
	3H	2.63	3.75	3.01	4.08	4.44	14.27	15.38	14.65	15.71	16.08
	4H	3.80	4.83	4.20	5.18	5.57	14.33	15.37	14.74	15.72	16.11
	6H	4.85	5.80	5.26	6.17	6.56	14.43	15.38	14.85	15.75	16.15
	8H	5.39	6.28	5.82	6.68	7.08	14.49	15.39	14.92	15.78	16.19
	12H	5.86	6.72	6.30	7.11	7.54	14.56	15.42	15.00	15.81	16.24
4H	2H	3.37	4.40	3.77	4.76	5.14	14.05	15.09	14.46	15.44	15.82
	3H	5.83	6.68	6.24	7.08	7.49	14.23	15.07	14.64	15.48	15.88
	4H	7.18	7.93	7.61	8.35	8.80	14.35	15.11	14.79	15.53	15.98
	6H	8.30	8.96	8.77	9.40	9.87	14.57	15.22	15.03	15.67	16.14
	8H	8.81	9.43	9.28	9.87	10.35	14.69	15.31	15.16	15.75	16.23
	12H	9.27	9.81	9.76	10.29	10.77	14.86	15.40	15.34	15.88	16.35
8H	4H	8.09	8.70	8.56	9.15	9.62	14.36	14.97	14.83	15.42	15.89
	6H	9.69	10.19	10.19	10.68	11.17	14.69	15.19	15.19	15.69	16.17
	8H	10.52	10.97	11.04	11.48	11.98	14.92	15.37	15.44	15.88	16.38
	12H	11.30	11.69	11.81	12.19	12.76	15.24	15.64	15.76	16.14	16.71
12H	4H	8.26	8.80	8.75	9.28	9.76	14.35	14.89	14.83	15.37	15.84
	6H	10.00	10.45	10.53	10.97	11.46	14.72	15.17	15.24	15.69	16.18
	8H	11.02	11.41	11.53	11.91	12.48	15.03	15.43	15.54	15.92	16.50