

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: P1059069

Luminaire Tested: S123RDRP-S1000D940-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059069
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-S1000D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

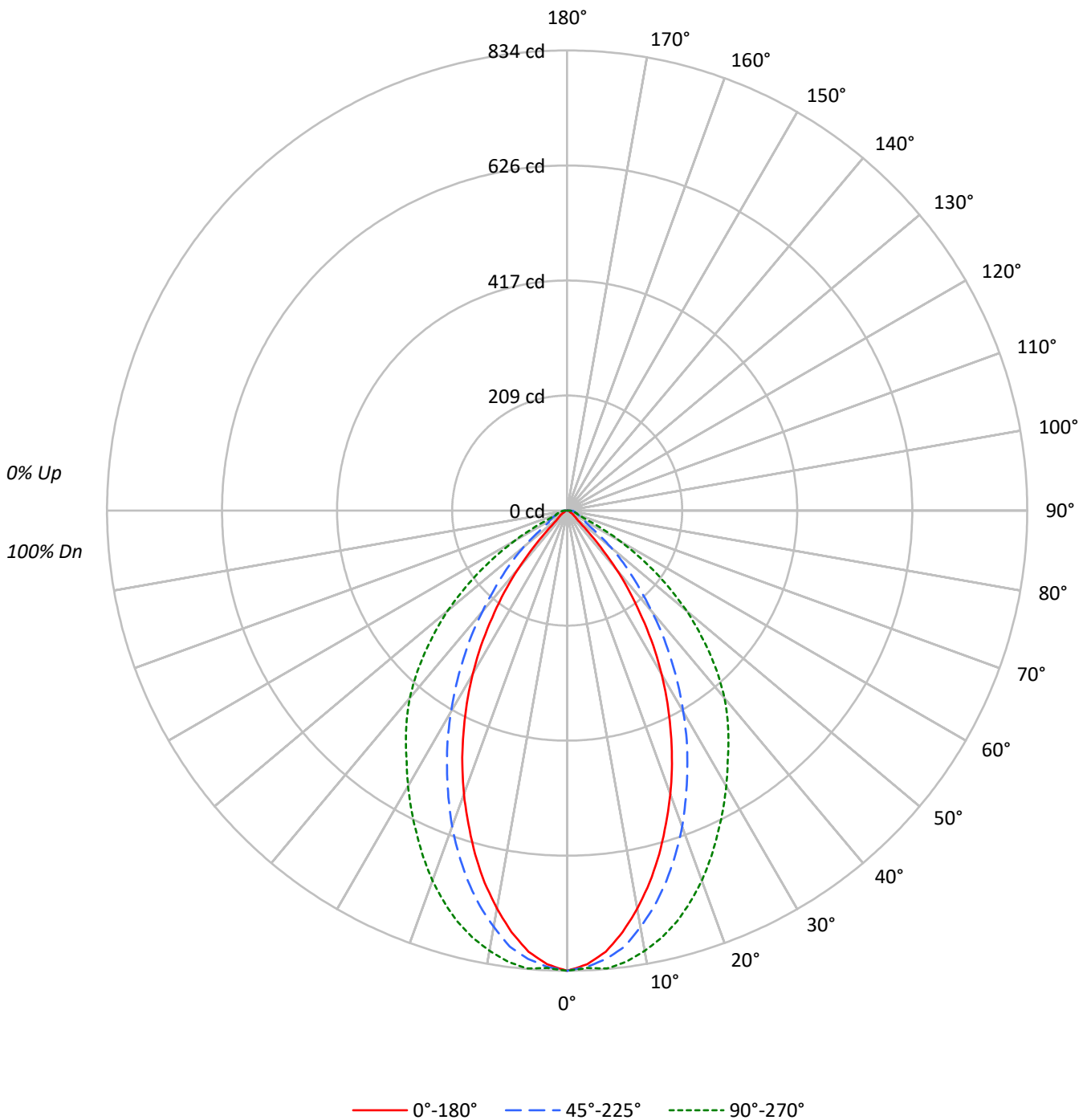
Lumens per Lamp: N/A
Luminaire Lumens: 1001.5 lumens
Efficiency: N/A
Efficacy: 28.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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°	9794	9794	9794
5°	9458	9613	9819
10°	8730	9136	9658
15°	7835	8448	9368
20°	6835	7615	8917
25°	5766	6675	8365
30°	4637	5707	7818
35°	3394	4698	7306
40°	2117	3664	6804
45°	800	2730	6061
50°	380	1882	5166
55°	291	1032	3994
60°	207	876	2626
65°	153	761	1098
70°	151	714	714
75°	200	744	744
80°	298	893	818
85°	593	1482	1186

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6061 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.6	7.6
10°-20°	196.3	19.6
20°-30°	243.1	24.3
30°-40°	217.9	21.8
40°-50°	142.8	14.3
50°-60°	71.5	7.1
60°-70°	27.9	2.8
70°-80°	15.7	1.6
80°-90°	9.7	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°	516.0	51.5
0°-40°	733.8	73.3
0°-60°	948.2	94.7
0°-90°	1001.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1001.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	834	834	834	834	834	
5°	802	816	816	824	833	74
15°	644	671	695	741	771	179
25°	445	472	515	589	646	203
35°	237	268	328	426	510	147
45°	48	78	164	282	365	46
55°	14	18	50	138	195	13
65°	6	16	27	36	40	6
75°	4	16	16	16	16	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°	834.1	834.1	834.1	834.1	834.1
2.5°	823.2	835.2	827.6	828.7	829.8
5°	802.4	815.5	815.5	824.3	833.0
7.5°	770.6	785.9	796.9	812.2	824.3
10°	732.2	750.8	766.2	793.6	810.0
12.5°	690.6	713.6	733.3	769.5	792.5
15°	644.5	670.8	694.9	741.0	770.6
17.5°	595.2	621.5	653.3	707.0	743.2
20°	547.0	573.3	609.4	669.7	713.6
22.5°	496.5	523.9	562.3	629.2	680.7
25°	445.0	472.4	515.2	588.6	645.6
27.5°	393.5	420.9	469.1	549.2	611.6
30°	342.0	369.4	420.9	506.4	576.6
32.5°	290.5	320.1	373.8	466.9	541.5
35°	236.8	268.5	327.7	426.4	509.7
37.5°	187.4	217.0	283.9	391.3	477.9
40°	138.1	169.9	239.0	357.3	443.9
42.5°	89.9	123.9	198.4	320.1	405.6
45°	48.2	77.8	164.4	281.7	365.0
47.5°	26.3	42.7	132.6	241.1	323.4
50°	20.8	24.1	103.0	206.1	282.8
52.5°	17.5	19.7	73.4	173.2	237.9
55°	14.2	17.5	50.4	138.1	195.1
57.5°	12.1	15.3	39.5	107.4	152.4
60°	8.8	13.2	37.3	78.9	111.8
62.5°	6.6	14.2	32.9	54.8	73.4
65°	5.5	16.4	27.4	36.2	39.5
67.5°	4.4	17.5	24.1	23.0	23.0
70°	4.4	16.4	20.8	19.7	20.8
72.5°	4.4	17.5	18.6	17.5	18.6
75°	4.4	16.4	16.4	16.4	16.4
77.5°	4.4	15.3	15.3	14.2	14.2
80°	4.4	13.2	13.2	13.2	12.1
82.5°	4.4	12.1	12.1	12.1	9.9
85°	4.4	11.0	11.0	11.0	8.8
87.5°	3.3	9.9	11.0	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	0.27	1.53	0.64	1.84	2.16	14.53	15.79	14.90	16.10	16.42
	3H	2.61	3.72	2.99	4.05	4.41	14.61	15.72	14.99	16.05	16.42
	4H	3.71	4.75	4.12	5.10	5.48	14.69	15.72	15.09	16.07	16.46
	6H	4.71	5.66	5.12	6.03	6.42	14.79	15.74	15.21	16.11	16.51
	8H	5.19	6.09	5.62	6.48	6.89	14.85	15.75	15.28	16.14	16.55
	12H	5.75	6.61	6.19	7.00	7.43	14.93	15.79	15.37	16.17	16.61
4H	2H	3.53	4.56	3.93	4.92	5.30	14.39	15.42	14.79	15.77	16.16
	3H	5.84	6.69	6.26	7.09	7.50	14.56	15.41	14.98	15.81	16.22
	4H	7.21	7.97	7.65	8.39	8.83	14.71	15.47	15.15	15.89	16.33
	6H	8.30	8.96	8.77	9.40	9.87	14.94	15.59	15.40	16.04	16.50
	8H	8.77	9.38	9.24	9.82	10.29	15.06	15.67	15.53	16.12	16.59
	12H	9.26	9.80	9.75	10.28	10.76	15.24	15.78	15.73	16.26	16.74
8H	4H	8.19	8.80	8.66	9.24	9.72	14.71	15.32	15.18	15.77	16.24
	6H	9.72	10.21	10.22	10.71	11.19	15.05	15.55	15.55	16.04	16.53
	8H	10.49	10.94	11.02	11.46	11.95	15.28	15.73	15.80	16.25	16.74
	12H	11.30	11.70	11.82	12.20	12.77	15.62	16.02	16.13	16.51	17.08
12H	4H	8.36	8.90	8.85	9.39	9.86	14.69	15.23	15.18	15.72	16.19
	6H	10.03	10.48	10.56	11.00	11.49	15.07	15.52	15.59	16.03	16.53
	8H	11.00	11.39	11.51	11.89	12.46	15.38	15.78	15.90	16.27	16.85