

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: P1059070

Luminaire Tested: S123RDRP-S1000D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059070
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1000D940-X4F0-XX-UDD-SVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

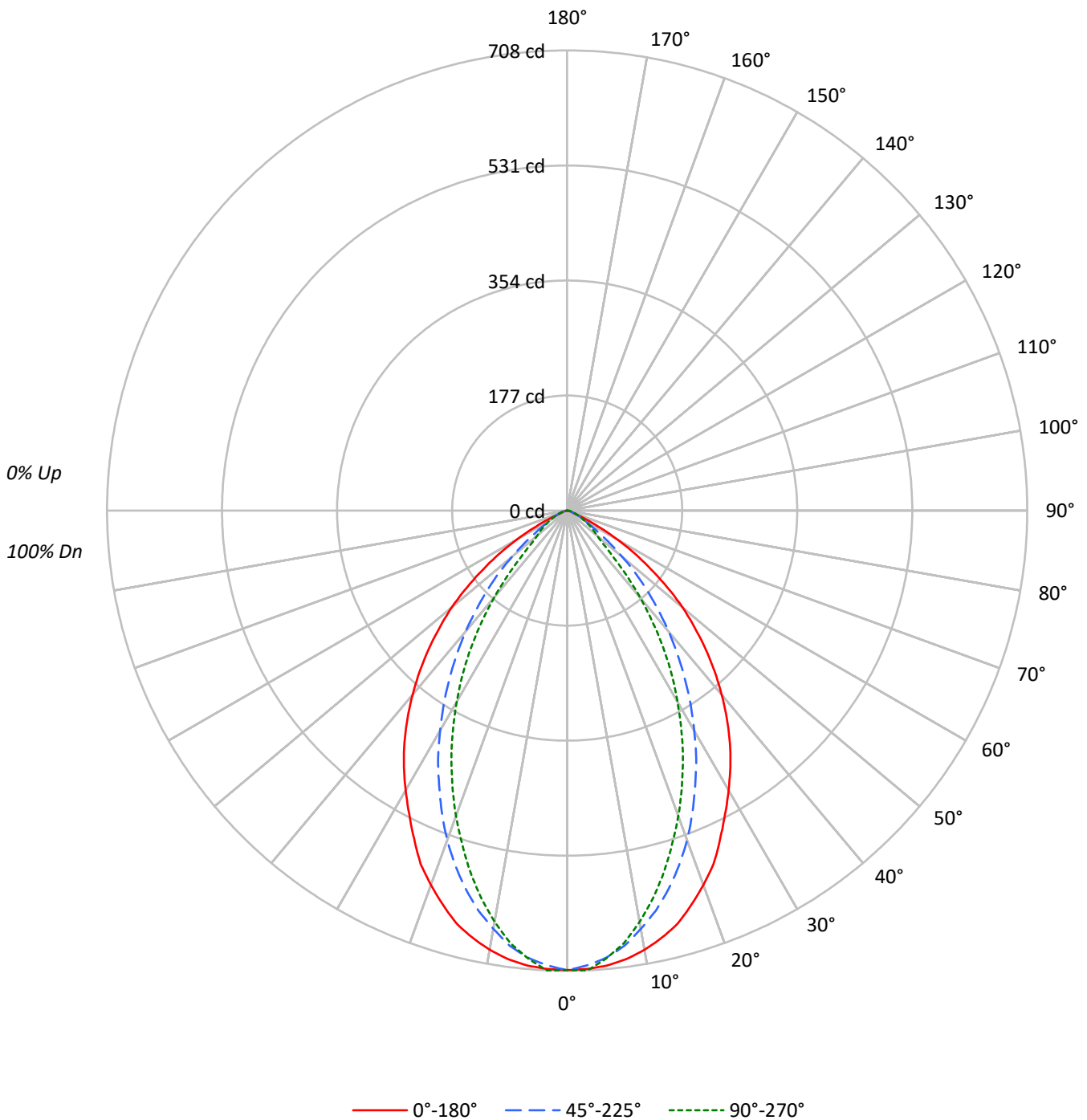
Lumens per Lamp: N/A
Luminaire Lumens: 912.7 lumens
Efficiency: N/A
Efficacy: 26.1 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91				91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82				82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73				73
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66				66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60				60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55				55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50				50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46				46
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42				42
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8302	8302	8302
5°	8282	8140	8153
10°	8182	7791	7660
15°	7997	7330	6999
20°	7659	6743	6251
25°	7218	6040	5460
30°	6737	5298	4601
35°	6260	4518	3703
40°	5670	3725	2684
45°	4998	2889	1617
50°	4238	2019	1100
55°	3226	1210	919
60°	2107	770	719
65°	881	578	578
70°	302	412	450
75°	250	299	349
80°	149	223	298
85°	148	148	296

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4998 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	7.2
10°-20°	170.9	18.7
20°-30°	219.1	24.0
30°-40°	205.6	22.5
40°-50°	143.5	15.7
50°-60°	74.2	8.1
60°-70°	25.4	2.8
70°-80°	7.3	0.8
80°-90°	1.5	0.2
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°	455.3	49.9
0°-40°	661.0	72.4
0°-60°	878.6	96.3
0°-90°	912.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	912.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	707	707	707	707	707	
5°	703	702	691	694	692	67
15°	658	641	603	583	576	184
25°	557	522	466	434	421	256
35°	437	383	315	275	258	272
45°	301	246	174	120	97	232
55°	158	118	59	46	45	142
65°	32	27	21	20	21	37
75°	6	6	7	8	8	6
85°	1	1	1	1	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	707.0	707.0	707.0	707.0	707.0
2.5°	705.9	707.0	700.4	707.0	708.1
5°	702.6	701.5	690.6	693.9	691.7
7.5°	696.1	692.8	675.3	670.9	670.9
10°	686.2	679.6	653.4	645.7	642.4
12.5°	673.1	664.3	630.4	616.2	610.7
15°	657.8	641.3	603.0	583.3	575.7
17.5°	635.9	614.0	572.4	549.4	537.4
20°	612.9	585.5	539.6	512.2	500.2
22.5°	588.8	556.0	503.4	473.9	460.8
25°	557.1	522.0	466.2	434.5	421.4
27.5°	526.4	489.2	430.1	394.0	380.9
30°	496.9	453.1	390.7	355.7	339.3
32.5°	467.3	418.1	353.5	315.2	299.9
35°	436.7	383.1	315.2	274.7	258.3
37.5°	403.8	349.1	279.1	235.3	215.6
40°	369.9	313.0	243.0	193.7	175.1
42.5°	336.0	280.2	206.8	156.5	134.6
45°	301.0	246.2	174.0	120.4	97.4
47.5°	265.9	212.3	142.3	87.6	73.3
50°	232.0	180.6	110.5	64.6	60.2
52.5°	194.8	149.9	83.2	53.6	52.5
55°	157.6	118.2	59.1	46.0	44.9
57.5°	124.8	91.9	42.7	38.3	37.2
60°	89.7	65.7	32.8	31.7	30.6
62.5°	59.1	44.9	26.3	25.2	25.2
65°	31.7	27.4	20.8	19.7	20.8
67.5°	13.1	15.3	15.3	16.4	16.4
70°	8.8	9.8	12.0	13.1	13.1
72.5°	6.6	7.7	8.8	9.8	9.8
75°	5.5	5.5	6.6	7.7	7.7
77.5°	3.3	4.4	4.4	5.5	6.6
80°	2.2	3.3	3.3	4.4	4.4
82.5°	1.1	2.2	2.2	3.3	3.3
85°	1.1	1.1	1.1	1.1	2.2
87.5°	0.0	0.0	0.0	0.0	1.1
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	13.68	14.94	14.05	15.26	15.57	7.19	8.45	7.56	8.76	9.08
	3H	13.64	14.75	14.02	15.08	15.44	7.96	9.07	8.34	9.40	9.77
	4H	13.59	14.61	13.99	14.97	15.35	8.17	9.20	8.57	9.55	9.93
	6H	13.51	14.46	13.93	14.83	15.22	8.31	9.25	8.73	9.63	10.02
	8H	13.47	14.36	13.90	14.76	15.16	8.35	9.24	8.78	9.63	10.04
	12H	13.43	14.28	13.86	14.66	15.09	8.37	9.22	8.80	9.60	10.03
4H	2H	13.53	14.56	13.93	14.91	15.30	7.45	8.48	7.85	8.83	9.21
	3H	13.52	14.35	13.93	14.76	15.16	8.35	9.19	8.77	9.59	10.00
	4H	13.46	14.21	13.90	14.63	15.07	8.63	9.37	9.06	9.79	10.23
	6H	13.41	14.05	13.87	14.49	14.96	8.85	9.48	9.31	9.93	10.40
	8H	13.36	13.95	13.83	14.40	14.87	8.91	9.50	9.38	9.95	10.42
	12H	13.31	13.83	13.80	14.32	14.79	8.95	9.47	9.44	9.96	10.43
8H	4H	13.35	13.95	13.82	14.40	14.87	8.61	9.21	9.08	9.65	10.13
	6H	13.29	13.77	13.79	14.27	14.75	8.88	9.37	9.39	9.87	10.35
	8H	13.24	13.67	13.76	14.19	14.68	8.99	9.43	9.52	9.95	10.44
	12H	13.20	13.59	13.72	14.08	14.66	9.07	9.45	9.58	9.95	10.52
12H	4H	13.31	13.83	13.79	14.31	14.79	8.57	9.10	9.06	9.58	10.06
	6H	13.23	13.67	13.76	14.18	14.68	8.85	9.28	9.37	9.80	10.29
	8H	13.20	13.59	13.72	14.08	14.66	8.99	9.37	9.50	9.87	10.44