

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: P1059219

Luminaire Tested: S123RDRP-S340D930-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059219
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S340D930-X4F0-XX-UDD-WVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

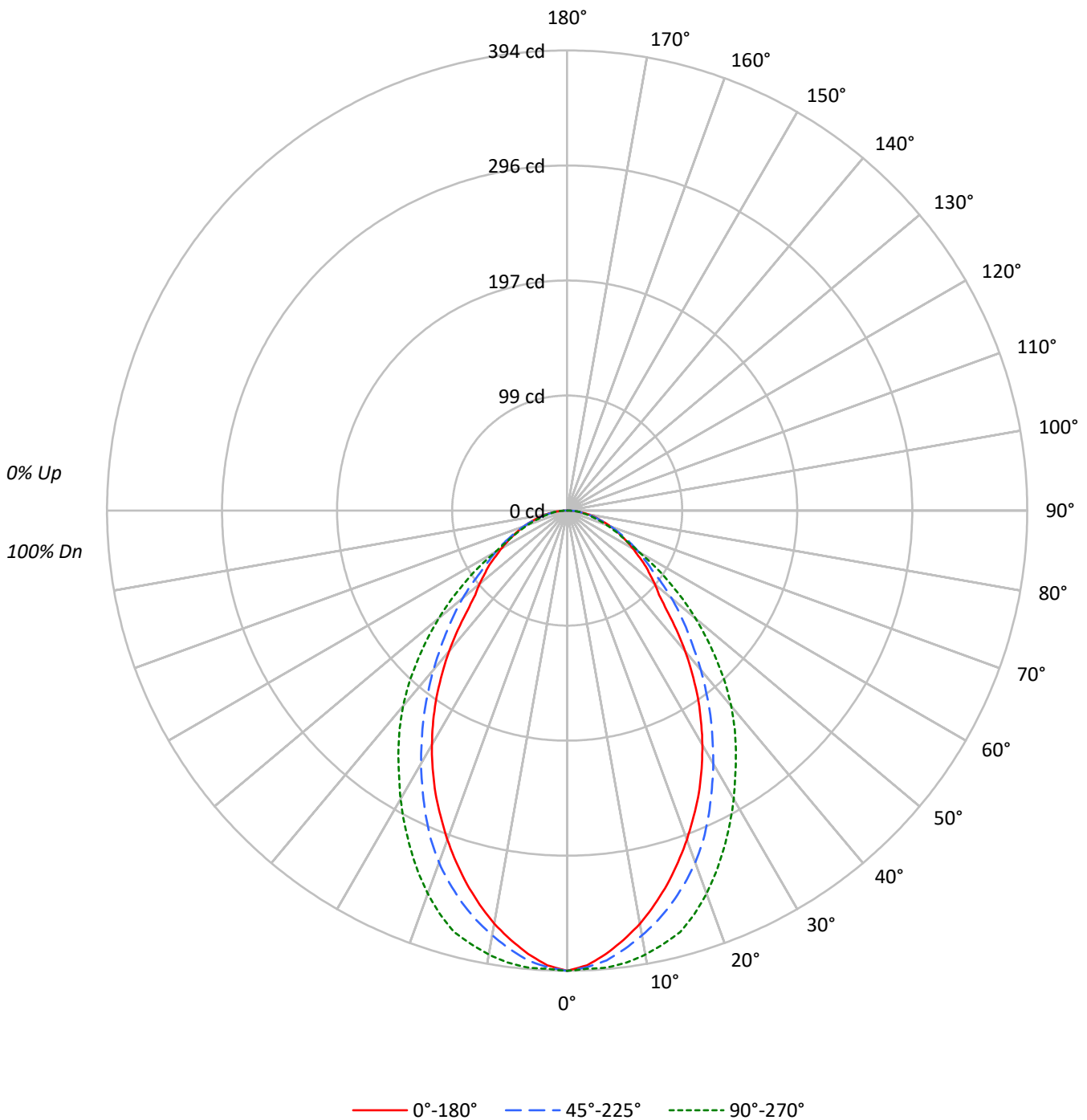
Lumens per Lamp: N/A
Luminaire Lumens: 692.5 lumens
Efficiency: N/A
Efficacy: 55.4 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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

TEST NUMBER: P1059219

CATALOG NUMBER: S123RDRP-S340D930-X4F0-XX-UDD-WVL-W

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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4628	4628	4628
5°	4493	4557	4629
10°	4283	4403	4603
15°	4028	4226	4543
20°	3746	4009	4361
25°	3458	3717	4121
30°	3140	3394	3867
35°	2795	3063	3612
40°	2413	2730	3348
45°	1994	2416	3002
50°	1790	2132	2621
55°	1660	1820	2174
60°	1529	1656	1665
65°	1423	1498	1395
70°	1339	1363	1222
75°	1261	1216	1075
80°	1190	1102	1008
85°	1145	1240	1145

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3002 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.5	5.3
10°-20°	98.3	14.2
20°-30°	133.0	19.2
30°-40°	136.7	19.7
40°-50°	114.8	16.6
50°-60°	82.3	11.9
60°-70°	52.4	7.6
70°-80°	28.8	4.2
80°-90°	9.6	1.4
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°	267.9	38.7
0°-40°	404.6	58.4
0°-60°	601.7	86.9
0°-90°	692.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	692.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	394	394	394	394	394	
5°	381	388	387	389	393	36
15°	331	340	348	363	374	93
25°	267	277	287	302	318	122
35°	195	206	214	233	252	121
45°	120	131	146	166	181	95
55°	81	83	89	101	106	72
65°	51	54	54	51	50	51
75°	28	30	27	25	24	30
85°	8	9	9	10	8	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	394.1	394.1	394.1	394.1	394.1
2.5°	389.7	395.1	391.4	391.7	392.7
5°	381.2	388.0	386.6	389.3	392.7
7.5°	370.7	378.2	378.5	384.9	390.4
10°	359.2	367.0	369.3	379.2	386.0
12.5°	345.6	354.1	359.2	371.4	380.2
15°	331.3	340.5	347.6	362.6	373.7
17.5°	315.7	325.6	334.7	350.7	362.2
20°	299.8	310.3	320.8	335.8	349.0
22.5°	283.2	294.0	304.9	319.5	334.1
25°	266.9	277.1	286.9	302.5	318.1
27.5°	249.3	259.8	268.3	285.6	301.8
30°	231.6	242.2	250.3	268.3	285.2
32.5°	213.3	224.2	231.6	250.3	267.9
35°	195.0	205.5	213.7	232.7	252.0
37.5°	175.7	187.2	195.4	216.7	235.7
40°	157.4	168.2	178.1	200.4	218.4
42.5°	138.4	149.6	160.8	183.8	200.4
45°	120.1	130.6	145.5	166.5	180.8
47.5°	106.8	113.6	130.9	148.5	162.1
50°	98.0	100.7	116.7	132.3	143.5
52.5°	89.2	91.2	102.1	116.3	124.8
55°	81.1	82.8	88.9	100.7	106.2
57.5°	72.2	73.9	79.0	85.8	88.9
60°	65.1	66.5	70.5	71.6	70.9
62.5°	58.0	60.0	62.1	59.7	58.7
65°	51.2	54.3	53.9	50.9	50.2
67.5°	45.1	48.2	46.5	43.4	42.4
70°	39.0	42.1	39.7	36.6	35.6
72.5°	33.2	36.6	32.9	30.2	29.5
75°	27.8	30.5	26.8	24.8	23.7
77.5°	22.7	24.8	21.4	19.7	19.0
80°	17.6	19.0	16.3	15.3	14.9
82.5°	12.9	13.6	11.9	12.5	12.2
85°	8.5	8.8	9.2	9.5	8.5
87.5°	4.1	5.8	5.8	5.4	4.4
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	12.50	13.97	12.87	14.28	14.60	13.58	15.04	13.94	15.35	15.67
	3H	14.20	15.51	14.58	15.84	16.21	14.66	15.97	15.04	16.30	16.66
	4H	14.86	16.09	15.26	16.43	16.81	15.06	16.29	15.46	16.64	17.02
	6H	15.36	16.49	15.77	16.86	17.25	15.37	16.51	15.79	16.87	17.27
	8H	15.53	16.61	15.96	17.00	17.40	15.51	16.59	15.93	16.98	17.38
	12H	15.66	16.69	16.09	17.07	17.50	15.63	16.66	16.06	17.04	17.47
4H	2H	13.11	14.33	13.51	14.68	15.06	13.98	15.21	14.38	15.56	15.94
	3H	15.04	16.05	15.45	16.46	16.86	15.30	16.32	15.71	16.72	17.12
	4H	15.85	16.76	16.28	17.18	17.62	15.82	16.73	16.25	17.15	17.59
	6H	16.49	17.29	16.95	17.73	18.20	16.25	17.05	16.71	17.49	17.95
	8H	16.72	17.46	17.18	17.91	18.37	16.44	17.18	16.90	17.63	18.10
	12H	16.89	17.55	17.37	18.03	18.51	16.62	17.29	17.11	17.77	18.24
8H	4H	16.08	16.83	16.55	17.27	17.74	16.06	16.81	16.53	17.25	17.72
	6H	16.87	17.49	17.37	17.98	18.46	16.61	17.23	17.11	17.72	18.20
	8H	17.19	17.74	17.70	18.25	18.74	16.89	17.44	17.40	17.95	18.44
	12H	17.46	17.95	17.97	18.44	19.00	17.18	17.67	17.69	18.16	18.73
12H	4H	16.10	16.76	16.58	17.24	17.71	16.09	16.75	16.57	17.23	17.71
	6H	16.91	17.46	17.42	17.97	18.46	16.67	17.22	17.18	17.73	18.22
	8H	17.28	17.77	17.79	18.27	18.83	17.00	17.49	17.52	17.99	18.55