

Scaled data based on original data using
LM-79-2019 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: S123RDR-S340D930-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
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: S123RDR-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

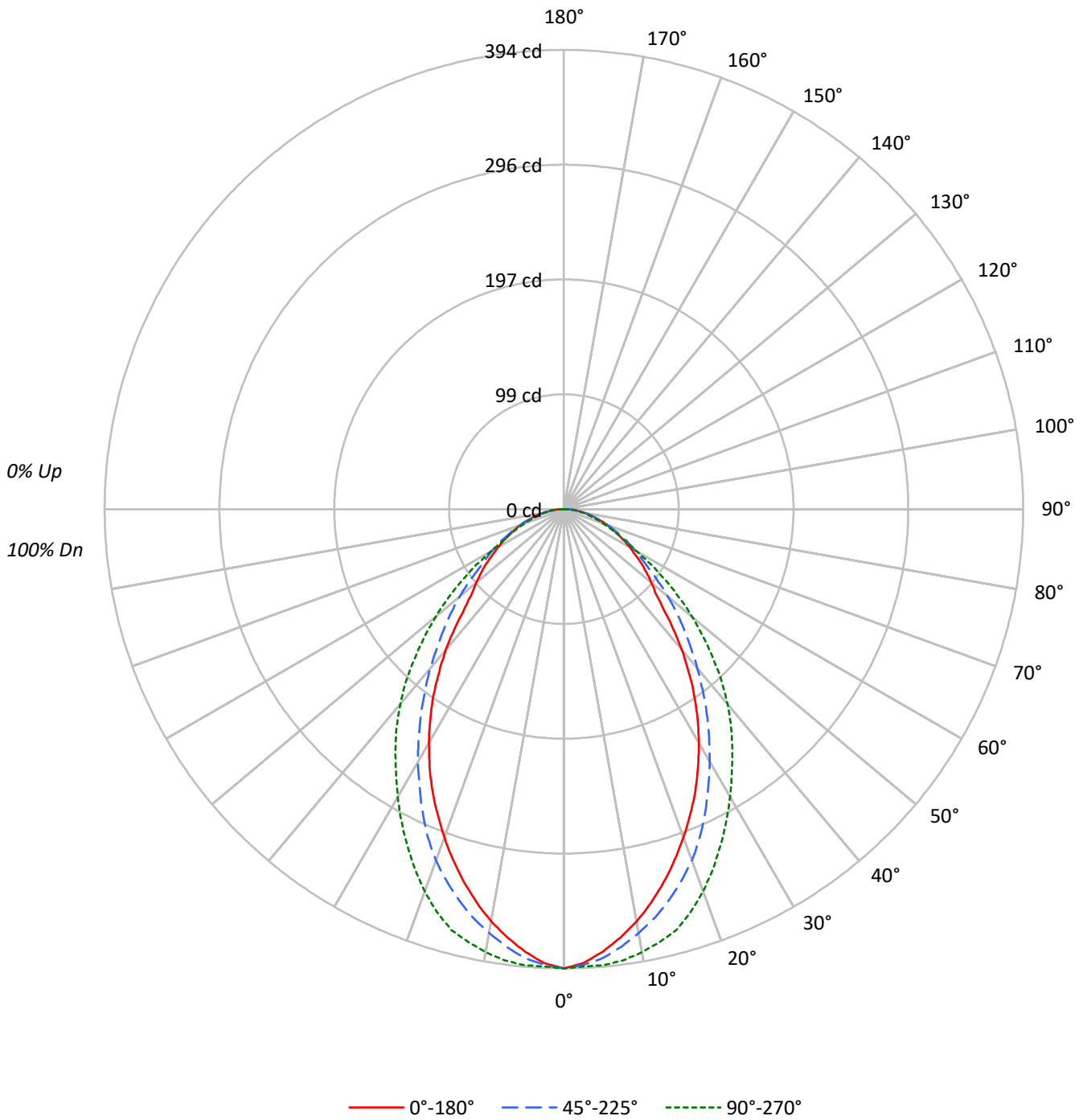
Lumens per Lamp: N/A
Luminaire Lumens: 692.5 lumens
Efficiency: N/A
Efficacy: 55.4 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (Ain): 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										
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																				
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

(END OF REPORT)