

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: P1059174

Luminaire Tested: S123RDR-S340D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059174  
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-S340D830-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, 80 CRI LEDS  
Ballast/Driver: -

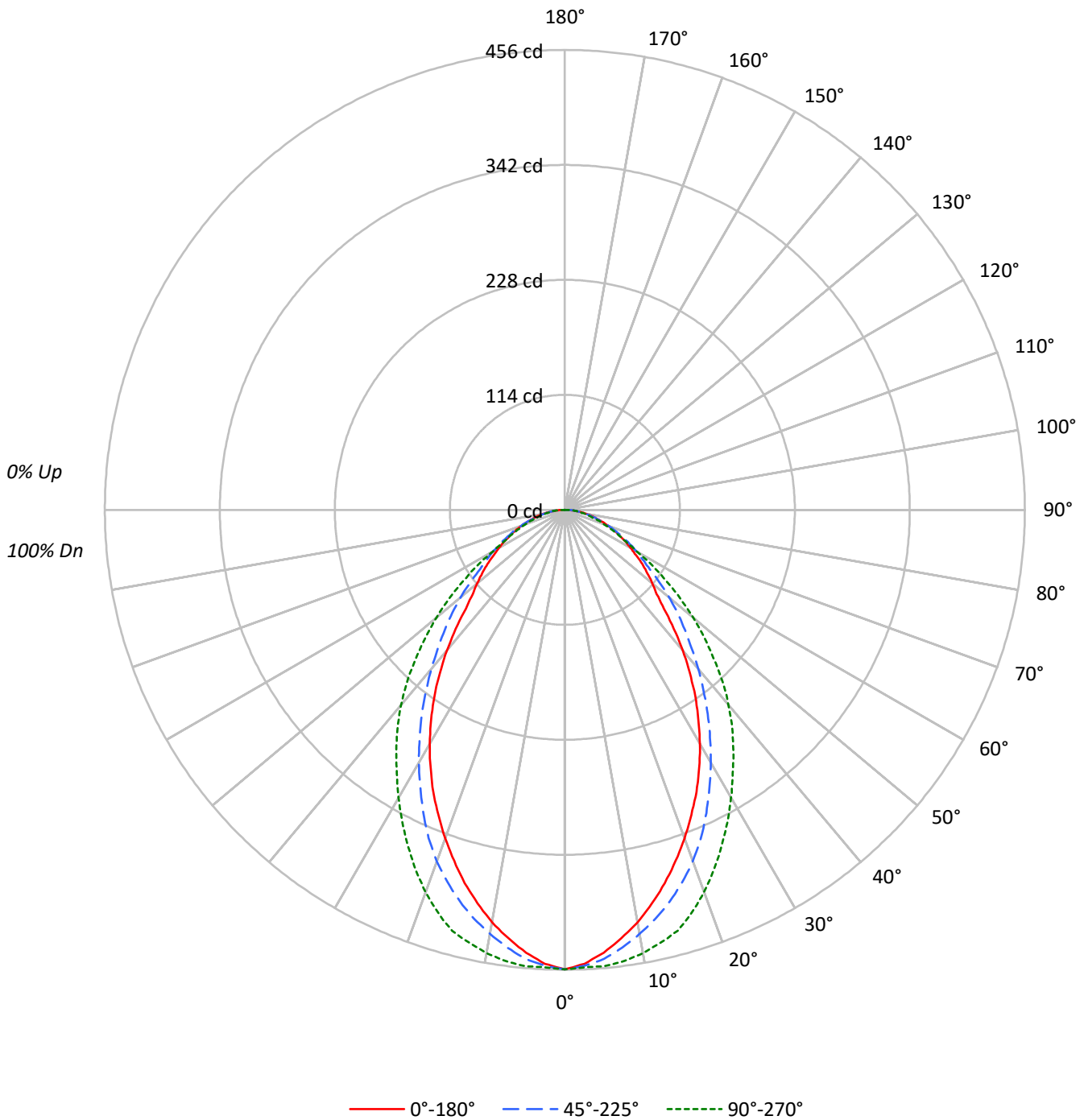
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 800.5 lumens  
Efficiency: N/A  
Efficacy: 64.0 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									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	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°	5350	5350	5350
5°	5195	5269	5351
10°	4951	5091	5320
15°	4657	4886	5253
20°	4331	4635	5042
25°	3998	4298	4765
30°	3631	3924	4470
35°	3231	3541	4176
40°	2788	3155	3870
45°	2305	2793	3471
50°	2070	2464	3031
55°	1918	2103	2512
60°	1768	1916	1923
65°	1645	1731	1612
70°	1548	1576	1415
75°	1461	1406	1243
80°	1379	1271	1170
85°	1320	1428	1320

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3471 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.2	5.3
10°-20°	113.7	14.2
20°-30°	153.8	19.2
30°-40°	158.0	19.7
40°-50°	132.7	16.6
50°-60°	95.2	11.9
60°-70°	60.6	7.6
70°-80°	33.3	4.2
80°-90°	11.1	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°	309.7	38.7
0°-40°	467.7	58.4
0°-60°	695.6	86.9
0°-90°	800.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	800.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	456	456	456	456	456	
5°	441	448	447	450	454	41
15°	383	394	402	419	432	107
25°	309	320	332	350	368	141
35°	225	238	247	269	291	140
45°	139	151	168	192	209	110
55°	94	96	103	116	123	84
65°	59	63	62	59	58	59
75°	32	35	31	29	27	34
85°	10	10	11	11	10	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	455.6	455.6	455.6	455.6	455.6
2.5°	450.5	456.8	452.5	452.9	454.0
5°	440.7	448.5	447.0	450.1	454.0
7.5°	428.5	437.2	437.6	445.0	451.3
10°	415.2	424.2	427.0	438.3	446.2
12.5°	399.5	409.3	415.2	429.3	439.5
15°	383.1	393.6	401.9	419.1	432.1
17.5°	365.0	376.4	387.0	405.4	418.7
20°	346.6	358.8	370.9	388.2	403.5
22.5°	327.4	339.9	352.5	369.3	386.2
25°	308.6	320.3	331.7	349.7	367.8
27.5°	288.2	300.3	310.1	330.1	349.0
30°	267.8	279.9	289.4	310.1	329.7
32.5°	246.6	259.2	267.8	289.4	309.7
35°	225.4	237.6	247.0	269.0	291.3
37.5°	203.1	216.4	225.8	250.5	272.5
40°	181.9	194.5	205.8	231.7	252.5
42.5°	160.0	172.9	185.8	212.5	231.7
45°	138.8	151.0	168.2	192.5	209.0
47.5°	123.5	131.3	151.3	171.7	187.4
50°	113.3	116.4	134.9	152.9	165.9
52.5°	103.1	105.5	118.0	134.5	144.3
55°	93.7	95.7	102.7	116.4	122.7
57.5°	83.5	85.5	91.4	99.2	102.7
60°	75.3	76.8	81.6	82.7	81.9
62.5°	67.0	69.4	71.8	69.0	67.8
65°	59.2	62.7	62.3	58.8	58.0
67.5°	52.1	55.7	53.7	50.2	49.0
70°	45.1	48.6	45.9	42.3	41.2
72.5°	38.4	42.3	38.0	34.9	34.1
75°	32.2	35.3	31.0	28.6	27.4
77.5°	26.3	28.6	24.7	22.7	22.0
80°	20.4	22.0	18.8	17.6	17.3
82.5°	14.9	15.7	13.7	14.5	14.1
85°	9.8	10.2	10.6	11.0	9.8
87.5°	4.7	6.7	6.7	6.3	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)