

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: P1059078

Luminaire Tested: S123RDR-S1000D950-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059078
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: S123RDR-S1000D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

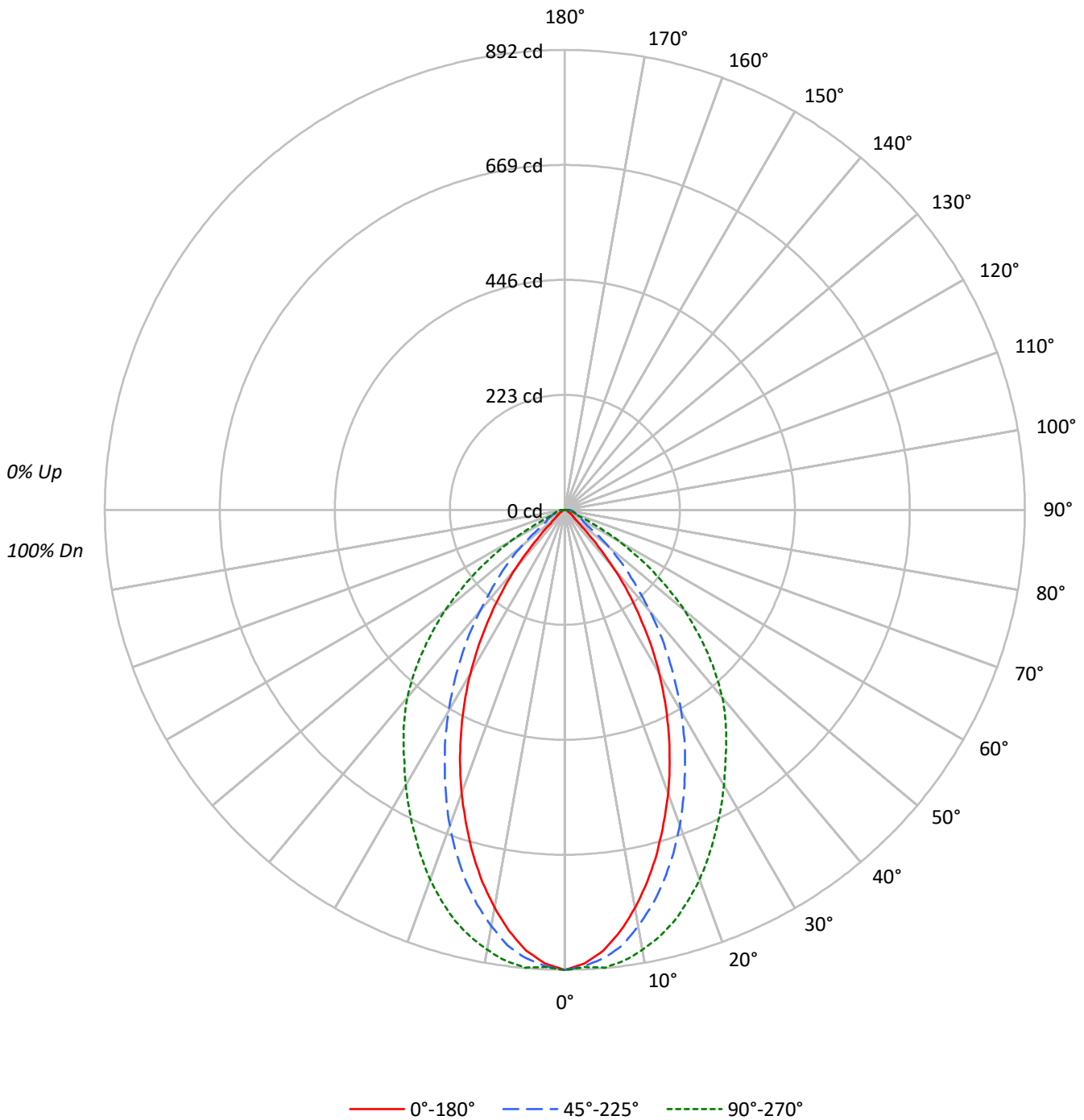
Lumens per Lamp: N/A
Luminaire Lumens: 1071.4 lumens
Efficiency: N/A
Efficacy: 30.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (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	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	87	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°	10479	10479	10479
5°	10118	10284	10505
10°	9341	9774	10333
15°	8382	9038	10022
20°	7313	8147	9539
25°	6169	7142	8949
30°	4961	6106	8363
35°	3631	5026	7817
40°	2266	3918	7280
45°	857	2921	6485
50°	407	2013	5528
55°	311	1103	4273
60°	221	937	2809
65°	164	814	1173
70°	161	766	766
75°	213	798	798
80°	318	953	872
85°	633	1576	1266

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6485 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.9	7.6
10°-20°	210.1	19.6
20°-30°	260.0	24.3
30°-40°	233.1	21.8
40°-50°	152.8	14.3
50°-60°	76.5	7.1
60°-70°	29.8	2.8
70°-80°	16.8	1.6
80°-90°	10.4	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°	552.0	51.5
0°-40°	785.1	73.3
0°-60°	1014.4	94.7
0°-90°	1071.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1071.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	892	892	892	892	892	
5°	858	872	872	882	891	80
15°	690	718	744	793	824	192
25°	476	505	551	630	691	217
35°	253	287	351	456	545	158
45°	52	83	176	301	390	49
55°	15	19	54	148	209	14
65°	6	18	29	39	42	6
75°	5	18	18	18	18	5
85°	5	12	12	12	9	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	892.4	892.4	892.4	892.4	892.4
2.5°	880.7	893.6	885.4	886.5	887.7
5°	858.4	872.5	872.5	881.9	891.2
7.5°	824.4	840.8	852.5	869.0	881.9
10°	783.4	803.3	819.7	849.0	866.6
12.5°	738.8	763.4	784.5	823.2	847.9
15°	689.5	717.7	743.5	792.7	824.4
17.5°	636.8	664.9	698.9	756.4	795.1
20°	585.2	613.3	652.0	716.5	763.4
22.5°	531.2	560.5	601.6	673.1	728.2
25°	476.1	505.4	551.2	629.7	690.7
27.5°	421.0	450.3	501.9	587.5	654.4
30°	365.9	395.2	450.3	541.8	616.8
32.5°	310.8	342.4	399.9	499.6	579.3
35°	253.3	287.3	350.6	456.2	545.3
37.5°	200.5	232.2	303.7	418.6	511.3
40°	147.8	181.8	255.6	382.3	474.9
42.5°	96.2	132.5	212.3	342.4	433.9
45°	51.6	83.3	175.9	301.4	390.5
47.5°	28.1	45.7	141.9	258.0	345.9
50°	22.3	25.8	110.2	220.5	302.6
52.5°	18.8	21.1	78.6	185.3	254.5
55°	15.2	18.8	53.9	147.8	208.7
57.5°	12.9	16.4	42.2	114.9	163.0
60°	9.4	14.1	39.9	84.4	119.6
62.5°	7.0	15.2	35.2	58.6	78.6
65°	5.9	17.6	29.3	38.7	42.2
67.5°	4.7	18.8	25.8	24.6	24.6
70°	4.7	17.6	22.3	21.1	22.3
72.5°	4.7	18.8	19.9	18.8	19.9
75°	4.7	17.6	17.6	17.6	17.6
77.5°	4.7	16.4	16.4	15.2	15.2
80°	4.7	14.1	14.1	14.1	12.9
82.5°	4.7	12.9	12.9	12.9	10.6
85°	4.7	11.7	11.7	11.7	9.4
87.5°	3.5	10.6	11.7	10.6	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)