

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: P1059083

Luminaire Tested: S123RDR-S1000D950-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059083
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1000D950-X4F0-XX-UDD-WVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

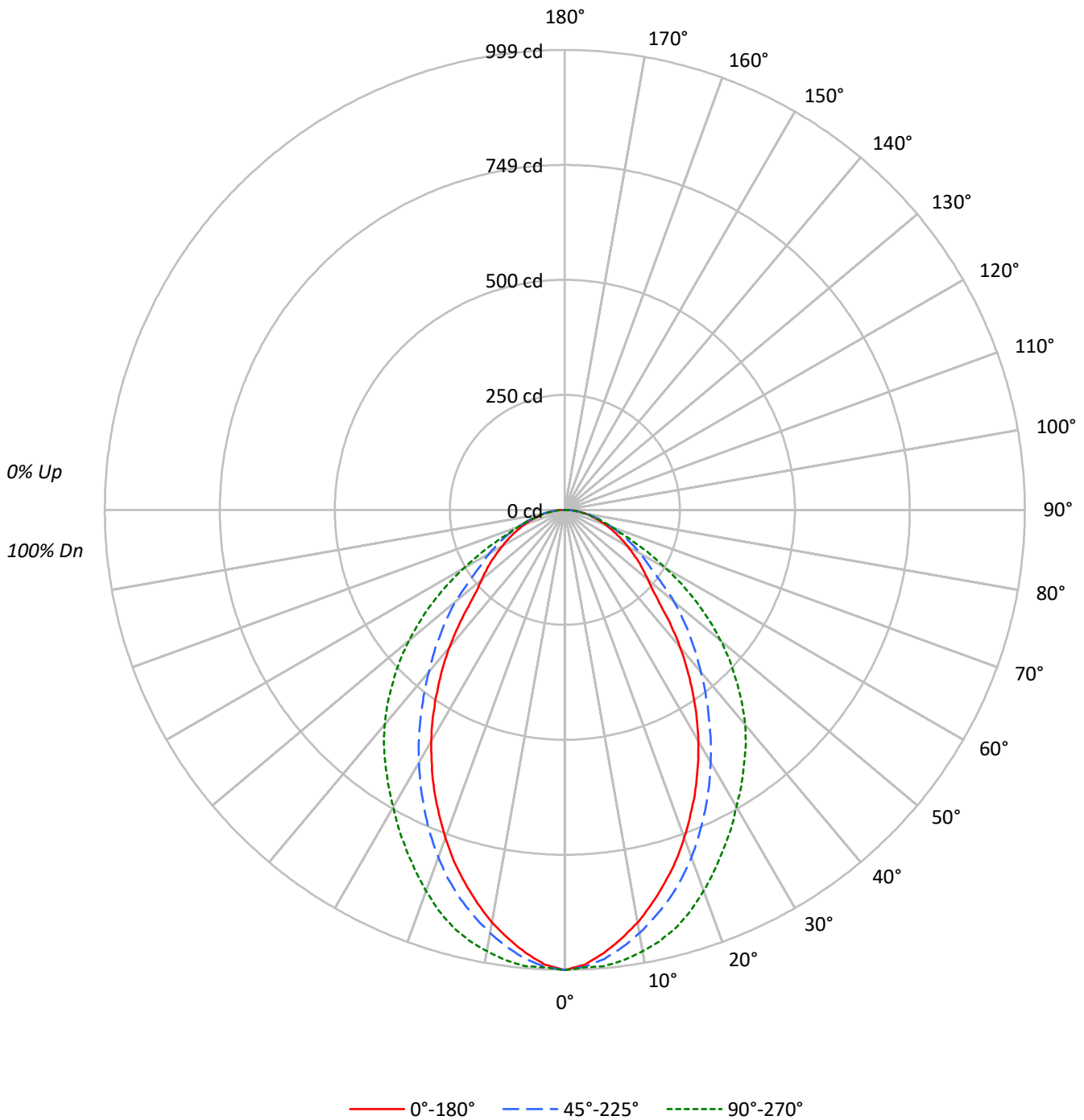
Lumens per Lamp: N/A
Luminaire Lumens: 1805.2 lumens
Efficiency: N/A
Efficacy: 51.6 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57				
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51				
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45				
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41				
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11734	11734	11734
5°	11392	11544	11725
10°	10854	11133	11609
15°	10197	10640	11408
20°	9472	10043	11009
25°	8698	9335	10549
30°	7863	8594	10103
35°	6937	7810	9723
40°	5963	7040	9338
45°	4902	6342	8755
50°	4302	5650	8069
55°	3982	4821	7147
60°	3659	4429	5916
65°	3418	4068	4654
70°	3217	3701	3701
75°	3031	3403	3189
80°	2854	3090	2691
85°	2681	3004	2048

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8755 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.4	5.1
10°-20°	247.7	13.7
20°-30°	335.9	18.6
30°-40°	351.2	19.5
40°-50°	304.6	16.9
50°-60°	226.6	12.6
60°-70°	145.4	8.1
70°-80°	78.0	4.3
80°-90°	23.5	1.3
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°	676.0	37.4
0°-40°	1027.2	56.9
0°-60°	1558.3	86.3
0°-90°	1805.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1805.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	999	999	999	999	999	
5°	966	983	979	986	995	90
15°	839	859	875	910	938	235
25°	671	692	720	768	814	308
35°	484	507	545	614	678	302
45°	295	318	382	464	527	232
55°	194	199	236	302	349	174
65°	123	134	146	156	168	122
75°	67	77	75	72	70	71
85°	20	25	22	19	15	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	999.3	999.3	999.3	999.3	999.3
2.5°	988.8	1002.9	993.5	993.5	994.7
5°	966.5	982.9	979.4	986.5	994.7
7.5°	939.6	957.2	958.3	974.7	986.5
10°	910.3	927.9	933.7	957.2	973.6
12.5°	875.2	895.1	905.6	934.9	958.3
15°	838.8	858.8	875.2	910.3	938.4
17.5°	800.2	820.1	841.2	881.0	911.5
20°	758.0	779.1	803.7	843.5	881.0
22.5°	714.7	736.9	762.7	806.0	848.2
25°	671.3	692.4	720.5	768.5	814.2
27.5°	625.6	647.9	677.2	729.9	781.4
30°	579.9	602.2	633.8	690.1	745.1
32.5°	533.1	555.3	589.3	652.6	712.3
35°	483.9	507.3	544.8	613.9	678.3
37.5°	437.0	459.3	501.4	577.6	645.5
40°	389.0	412.4	459.3	541.3	609.2
42.5°	342.1	365.5	420.6	502.6	569.4
45°	295.2	317.5	381.9	463.9	527.2
47.5°	258.9	275.3	345.6	422.9	486.2
50°	235.5	241.3	309.3	383.1	441.7
52.5°	214.4	219.1	269.5	343.3	396.0
55°	194.5	199.2	235.5	302.3	349.1
57.5°	174.6	180.4	209.7	260.1	302.3
60°	155.8	162.8	188.6	222.6	251.9
62.5°	139.4	147.6	167.5	188.6	208.5
65°	123.0	133.6	146.4	155.8	167.5
67.5°	107.8	119.5	126.5	128.9	130.0
70°	93.7	105.4	107.8	107.8	107.8
72.5°	79.7	92.6	90.2	89.0	87.9
75°	66.8	77.3	75.0	71.5	70.3
77.5°	53.9	63.3	59.8	57.4	53.9
80°	42.2	49.2	45.7	43.3	39.8
82.5°	31.6	36.3	32.8	30.5	26.9
85°	19.9	24.6	22.3	18.7	15.2
87.5°	10.5	14.1	11.7	10.5	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)