

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: P1060538

Luminaire Tested: S124RDR-S575D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060538
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S575D950-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

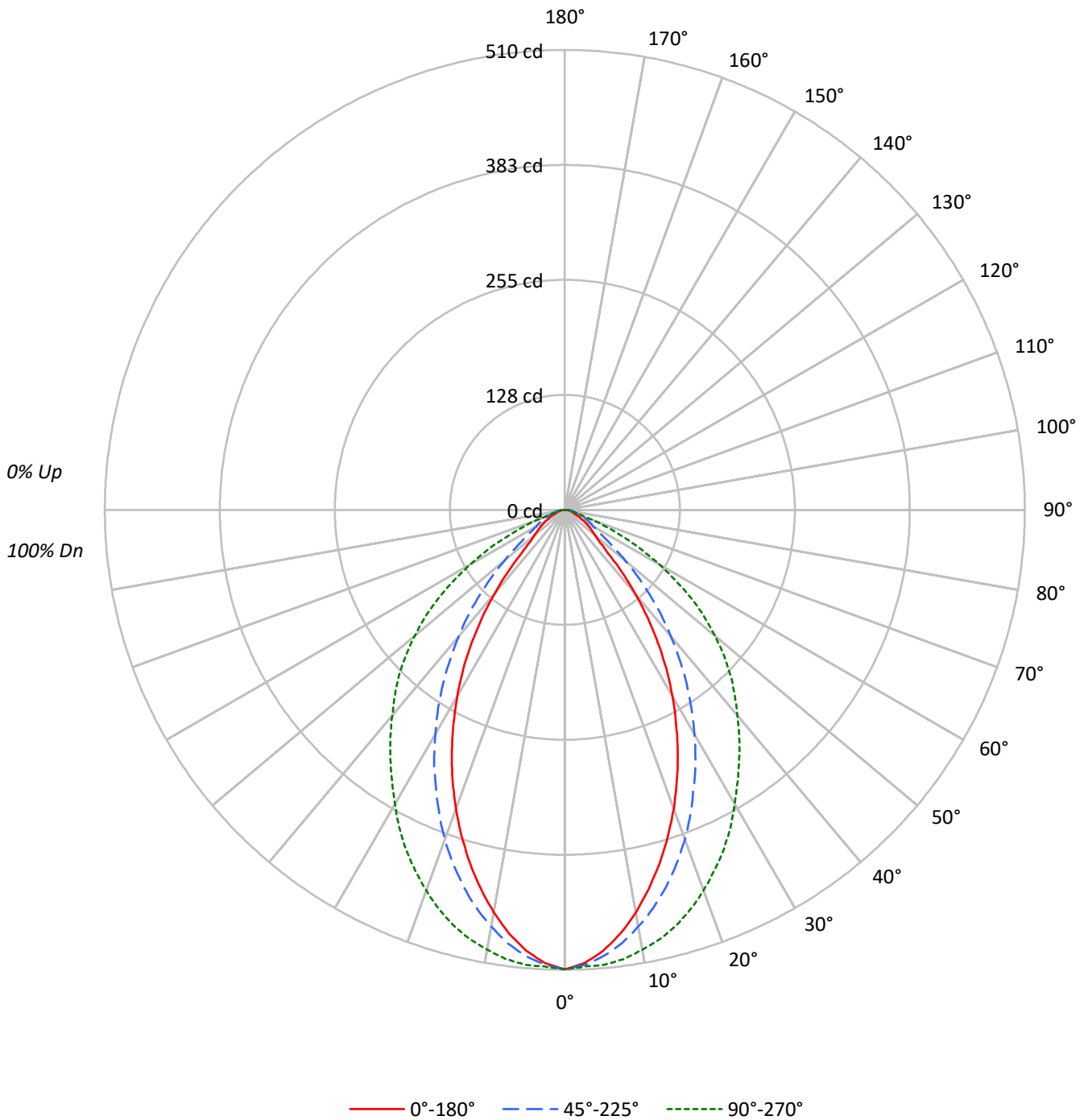
Lumens per Lamp: N/A
Luminaire Lumens: 716.5 lumens
Efficiency: N/A
Efficacy: 36.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	67	75	70	66	73	68	65	63
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43
9	65	54	46	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4387	4387	4387
5°	4242	4293	4376
10°	3962	4104	4331
15°	3618	3860	4253
20°	3232	3565	4117
25°	2815	3215	3954
30°	2372	2856	3745
35°	1894	2474	3544
40°	1362	2055	3345
45°	821	1618	3166
50°	591	1172	2910
55°	497	788	2579
60°	401	625	2077
65°	318	568	1494
70°	277	473	801
75°	260	433	389
80°	258	451	352
85°	385	642	445

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3166 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.8	6.5
10°-20°	122.6	17.1
20°-30°	159.0	22.2
30°-40°	152.9	21.3
40°-50°	113.4	15.8
50°-60°	69.5	9.7
60°-70°	33.8	4.7
70°-80°	12.9	1.8
80°-90°	5.8	0.8
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°	328.4	45.8
0°-40°	481.2	67.2
0°-60°	664.1	92.7
0°-90°	716.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	716.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	510	510	510	510	510	
5°	491	498	497	501	506	46
15°	406	418	433	459	477	113
25°	296	311	338	382	416	135
35°	180	196	235	291	337	112
45°	67	84	133	203	260	56
55°	33	34	52	119	172	30
65°	16	17	28	44	73	16
75°	8	12	13	12	12	8
85°	4	6	6	6	4	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	509.5	509.5	509.5	509.5	509.5
2.5°	503.1	508.9	505.0	506.3	506.9
5°	490.7	497.9	496.6	501.1	506.3
7.5°	473.9	482.3	484.9	494.0	502.4
10°	453.1	463.5	469.3	484.3	495.3
12.5°	430.5	441.5	452.5	472.6	487.5
15°	405.8	417.5	433.0	459.0	477.1
17.5°	379.9	392.9	411.7	442.8	464.2
20°	352.7	366.3	389.0	423.3	449.3
22.5°	324.8	339.0	364.3	402.6	433.0
25°	296.3	311.2	338.4	381.8	416.2
27.5°	267.1	282.6	313.8	359.8	397.4
30°	238.6	253.5	287.2	337.1	376.6
32.5°	209.4	224.9	261.3	313.8	356.5
35°	180.2	196.4	235.3	291.1	337.1
37.5°	150.4	167.9	208.7	269.0	317.7
40°	121.2	138.1	182.8	246.3	297.6
42.5°	92.7	110.9	158.2	223.7	278.8
45°	67.4	84.3	132.9	202.9	260.0
47.5°	50.6	60.9	109.6	183.5	239.2
50°	44.1	46.0	87.5	162.1	217.2
52.5°	38.2	39.5	68.1	138.7	195.1
55°	33.1	34.4	52.5	118.6	171.8
57.5°	27.9	29.2	42.1	99.2	145.2
60°	23.3	24.6	36.3	79.1	120.6
62.5°	19.4	20.1	32.4	60.3	96.6
65°	15.6	16.9	27.9	44.1	73.3
67.5°	13.0	14.3	22.7	30.5	51.2
70°	11.0	14.3	18.8	21.4	31.8
72.5°	9.1	13.0	15.6	14.9	14.9
75°	7.8	12.3	13.0	11.7	11.7
77.5°	6.5	11.0	10.4	9.7	9.1
80°	5.2	9.1	9.1	7.8	7.1
82.5°	4.5	7.1	7.1	7.1	5.8
85°	3.9	6.5	6.5	5.8	4.5
87.5°	2.6	5.2	5.8	5.2	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)