

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: P1060528

Luminaire Tested: S124RDR-S575D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060528
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S575D940-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

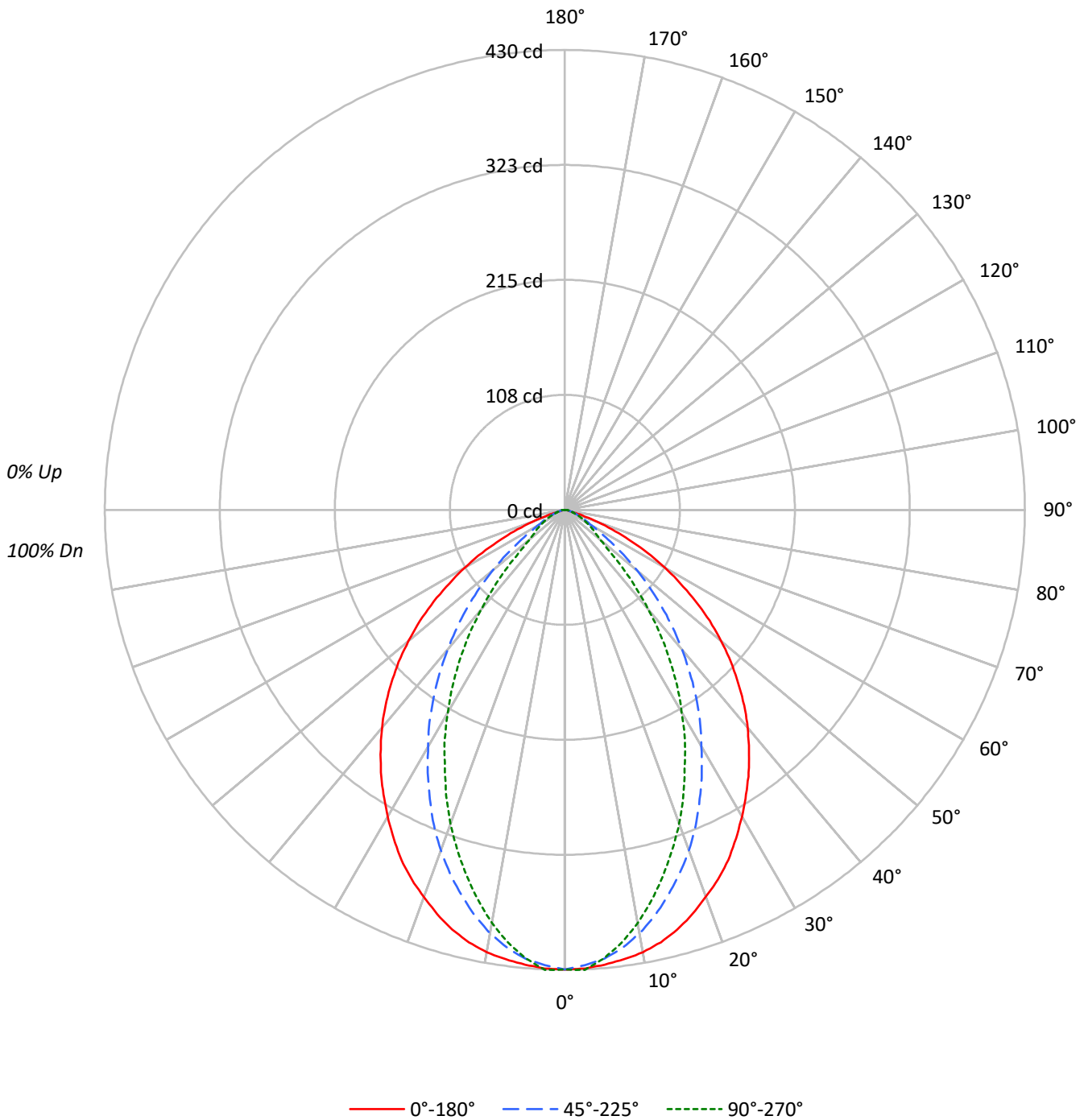
Lumens per Lamp: N/A
Luminaire Lumens: 633.7 lumens
Efficiency: N/A
Efficacy: 32.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1060528

CATALOG NUMBER: S124RDR-S575D940-X4F0-XX-UDD-SVL-B

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	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	65	60	69	64	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	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3701	3701	3701
5°	3689	3643	3637
10°	3673	3515	3430
15°	3621	3324	3158
20°	3528	3107	2863
25°	3434	2836	2520
30°	3293	2541	2173
35°	3151	2246	1794
40°	2988	1912	1361
45°	2794	1562	915
50°	2555	1184	568
55°	2244	782	482
60°	1857	479	396
65°	1345	371	320
70°	733	274	244
75°	160	203	223
80°	119	149	179
85°	119	119	178

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2794 cd/sqm



TEST NUMBER: P1060528

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.8	6.3
10°-20°	105.8	16.7
20°-30°	140.1	22.1
30°-40°	139.1	21.9
40°-50°	107.0	16.9
50°-60°	63.8	10.1
60°-70°	29.0	4.6
70°-80°	7.5	1.2
80°-90°	1.7	0.3
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°	285.7	45.1
0°-40°	424.8	67.0
0°-60°	595.6	94.0
0°-90°	633.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	633.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	430	430	430	430	430	
5°	427	427	421	421	421	41
15°	406	396	373	360	354	114
25°	361	335	298	274	265	166
35°	300	262	214	181	171	187
45°	229	185	128	90	75	177
55°	150	107	52	33	32	133
65°	66	39	18	16	16	66
75°	5	6	6	7	7	10
85°	1	1	1	2	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	429.8	429.8	429.8	429.8	429.8
2.5°	429.2	429.8	426.2	429.2	430.4
5°	426.8	427.4	421.4	421.4	420.8
7.5°	423.8	422.6	412.9	409.3	408.0
10°	420.1	415.9	402.0	394.7	392.3
12.5°	414.1	407.4	388.7	378.4	374.1
15°	406.2	395.9	372.9	360.2	354.2
17.5°	396.5	383.8	356.6	340.2	333.6
20°	385.0	368.1	339.0	318.4	312.4
22.5°	374.1	352.9	319.7	296.0	289.4
25°	361.4	335.4	298.5	273.6	265.2
27.5°	346.3	318.4	277.3	251.8	243.4
30°	331.2	300.3	255.5	228.8	218.5
32.5°	315.4	281.5	235.5	205.2	195.5
35°	299.7	262.1	213.7	181.0	170.7
37.5°	282.7	242.8	191.9	158.0	146.5
40°	265.8	224.0	170.1	135.6	121.1
42.5°	248.2	204.6	148.9	112.6	98.1
45°	229.4	184.6	128.3	89.6	75.1
47.5°	210.7	165.9	107.8	67.2	53.9
50°	190.7	145.9	88.4	49.0	42.4
52.5°	170.7	126.5	69.0	38.1	36.3
55°	149.5	106.6	52.1	32.7	32.1
57.5°	127.7	88.4	37.5	28.5	27.2
60°	107.8	71.4	27.8	24.2	23.0
62.5°	87.2	53.9	23.0	20.0	18.8
65°	66.0	39.4	18.2	15.7	15.7
67.5°	47.8	26.6	14.5	12.7	12.1
70°	29.1	16.3	10.9	10.3	9.7
72.5°	14.5	9.7	8.5	7.9	7.9
75°	4.8	6.1	6.1	6.7	6.7
77.5°	3.6	4.2	4.2	4.8	4.8
80°	2.4	3.0	3.0	3.6	3.6
82.5°	1.8	1.8	2.4	2.4	3.0
85°	1.2	1.2	1.2	1.8	1.8
87.5°	0.6	0.6	0.6	1.2	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)