

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: P1060384

Luminaire Tested: S124RDR-S350D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060384
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-S350D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

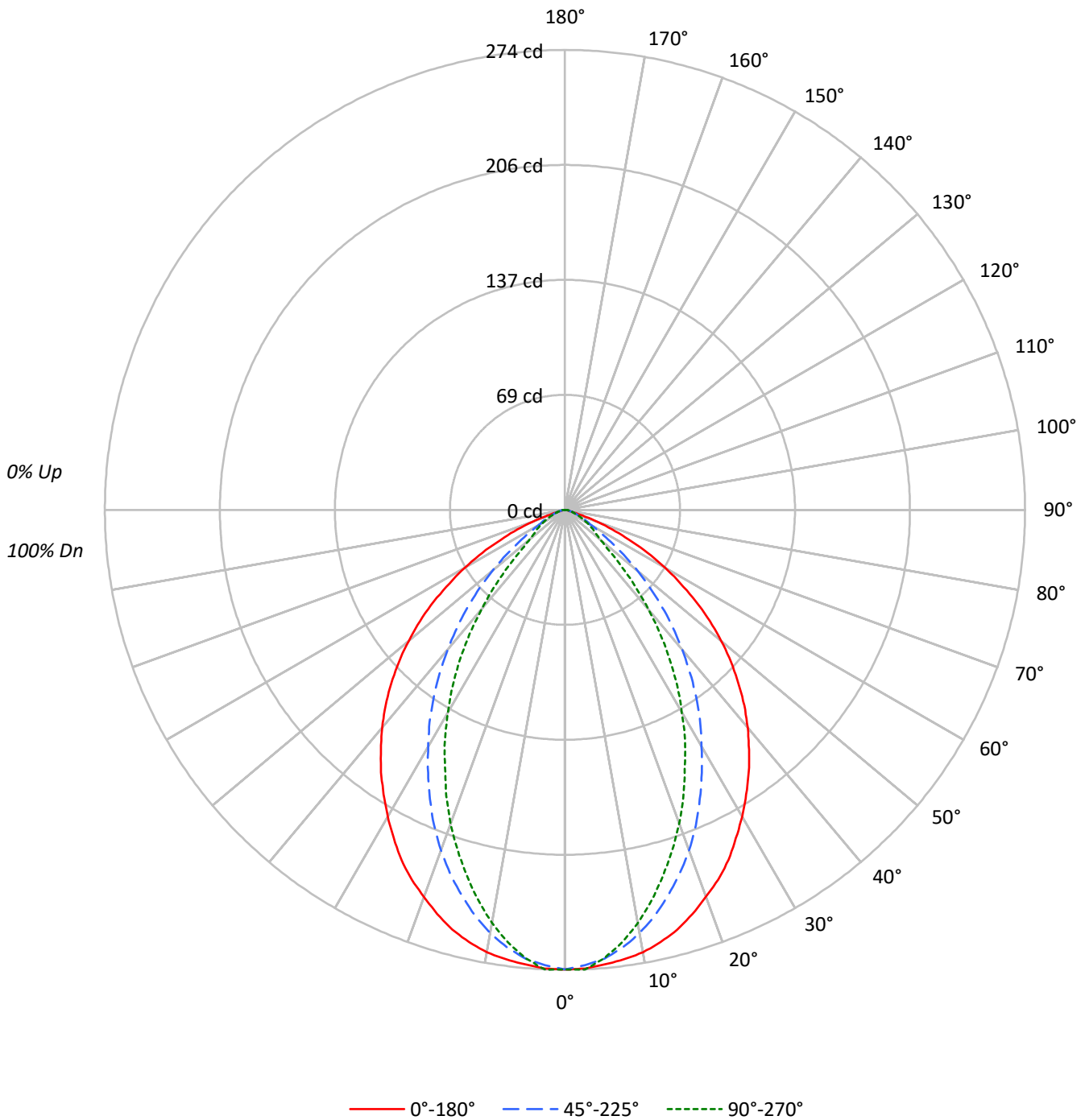
Lumens per Lamp: N/A
Luminaire Lumens: 403.8 lumens
Efficiency: N/A
Efficacy: 32.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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	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	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°	2358	2358	2358
5°	2350	2320	2317
10°	2341	2239	2185
15°	2307	2118	2011
20°	2248	1979	1824
25°	2188	1806	1605
30°	2098	1619	1384
35°	2007	1432	1144
40°	1903	1219	867
45°	1780	996	582
50°	1628	754	362
55°	1431	498	306
60°	1183	305	253
65°	856	236	204
70°	466	174	156
75°	103	130	140
80°	74	94	114
85°	79	79	119

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1780 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.4	6.3
10°-20°	67.4	16.7
20°-30°	89.3	22.1
30°-40°	88.6	21.9
40°-50°	68.2	16.9
50°-60°	40.6	10.1
60°-70°	18.5	4.6
70°-80°	4.8	1.2
80°-90°	1.1	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°	182.0	45.1
0°-40°	270.6	67.0
0°-60°	379.4	94.0
0°-90°	403.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	403.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	274	274	274	274	274	
5°	272	272	268	268	268	26
15°	259	252	238	230	226	73
25°	230	214	190	174	169	106
35°	191	167	136	115	109	119
45°	146	118	82	57	48	113
55°	95	68	33	21	20	85
65°	42	25	12	10	10	42
75°	3	4	4	4	4	6
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	273.8	273.8	273.8	273.8	273.8
2.5°	273.5	273.8	271.5	273.5	274.2
5°	271.9	272.3	268.4	268.4	268.1
7.5°	270.0	269.2	263.0	260.7	260.0
10°	267.7	265.0	256.1	251.5	249.9
12.5°	263.8	259.6	247.6	241.1	238.4
15°	258.8	252.2	237.6	229.5	225.6
17.5°	252.6	244.5	227.2	216.8	212.5
20°	245.3	234.5	216.0	202.9	199.0
22.5°	238.4	224.9	203.6	188.6	184.4
25°	230.3	213.7	190.1	174.3	168.9
27.5°	220.6	202.9	176.6	160.4	155.0
30°	211.0	191.3	162.8	145.8	139.2
32.5°	200.9	179.3	150.0	130.8	124.6
35°	190.9	167.0	136.2	115.3	108.8
37.5°	180.1	154.7	122.3	100.7	93.3
40°	169.3	142.7	108.4	86.4	77.1
42.5°	158.1	130.4	94.9	71.7	62.5
45°	146.2	117.6	81.8	57.1	47.8
47.5°	134.2	105.7	68.7	42.8	34.3
50°	121.5	93.0	56.3	31.2	27.0
52.5°	108.8	80.6	44.0	24.3	23.1
55°	95.3	67.9	33.2	20.8	20.4
57.5°	81.4	56.3	23.9	18.1	17.4
60°	68.7	45.5	17.7	15.4	14.7
62.5°	55.5	34.3	14.7	12.7	12.0
65°	42.0	25.1	11.6	10.0	10.0
67.5°	30.5	17.0	9.3	8.1	7.7
70°	18.5	10.4	6.9	6.6	6.2
72.5°	9.3	6.2	5.4	5.0	5.0
75°	3.1	3.9	3.9	4.2	4.2
77.5°	2.3	2.7	2.7	3.1	3.1
80°	1.5	1.9	1.9	2.3	2.3
82.5°	1.2	1.2	1.5	1.5	1.9
85°	0.8	0.8	0.8	1.2	1.2
87.5°	0.4	0.4	0.4	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)