

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: P1060386

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060386
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)
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-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

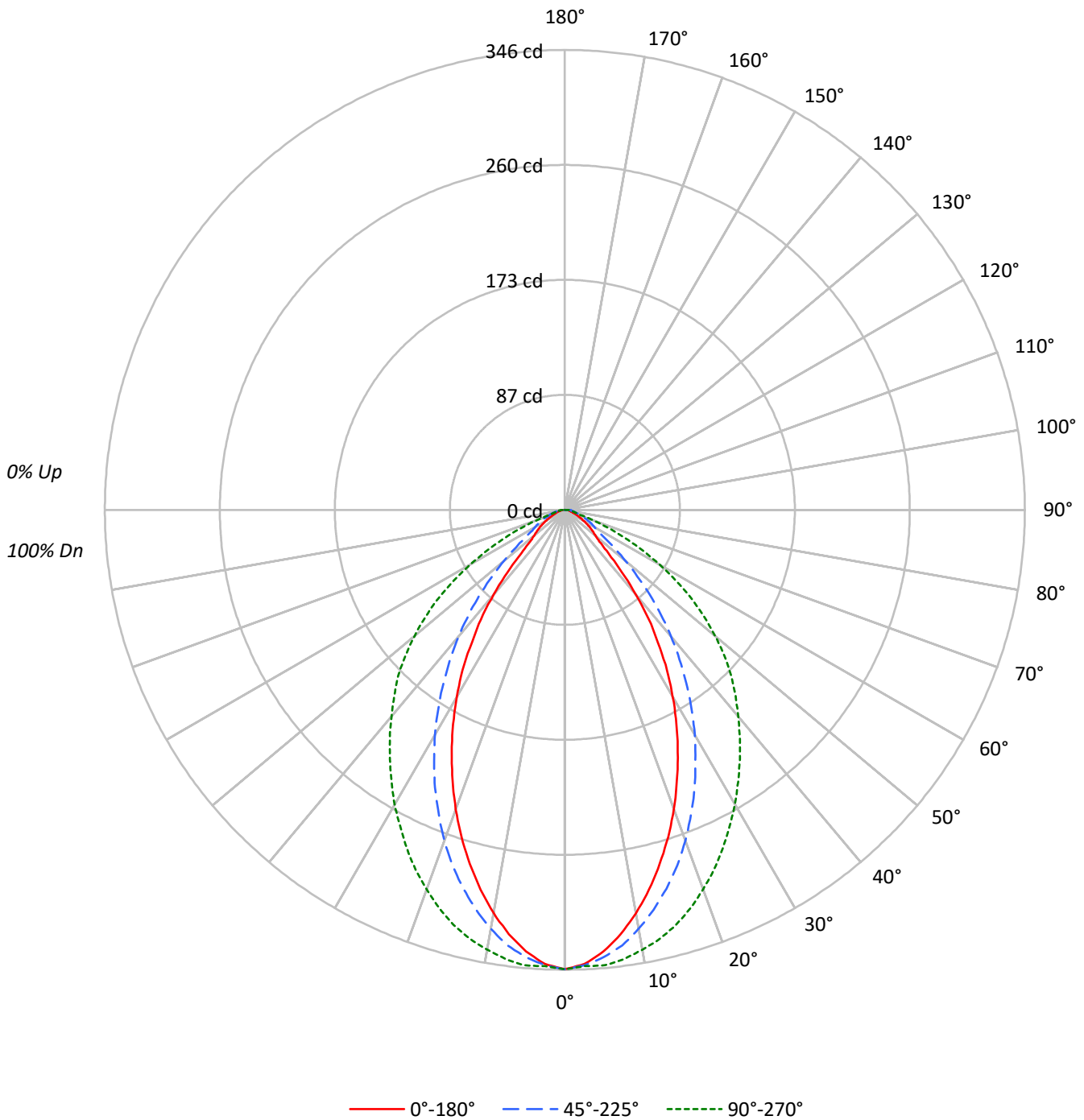
Lumens per Lamp: N/A
Luminaire Lumens: 489.1 lumens
Efficiency: N/A
Efficacy: 39.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	111	108	104	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	66	75	70	66	73	68	65	63
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2976	2976	2976
5°	2884	2920	2974
10°	2694	2799	2937
15°	2458	2630	2881
20°	2197	2427	2785
25°	1912	2194	2671
30°	1613	1943	2545
35°	1282	1672	2412
40°	933	1393	2279
45°	564	1101	2158
50°	403	797	1976
55°	342	539	1745
60°	279	439	1411
65°	220	393	1015
70°	184	330	534
75°	166	309	269
80°	174	307	268
85°	227	454	306

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2158 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.8	6.5
10°-20°	83.4	17.0
20°-30°	108.1	22.1
30°-40°	104.1	21.3
40°-50°	77.4	15.8
50°-60°	47.6	9.7
60°-70°	23.4	4.8
70°-80°	9.1	1.9
80°-90°	4.2	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°	223.3	45.7
0°-40°	327.4	66.9
0°-60°	452.5	92.5
0°-90°	489.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	489.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	346	346	346	346	346	
5°	334	339	338	341	344	31
15°	276	285	295	313	323	77
25°	201	212	231	260	281	92
35°	122	134	159	199	229	76
45°	46	58	90	139	177	38
55°	23	24	36	82	116	20
65°	11	12	19	31	50	11
75°	5	9	9	8	8	5
85°	2	4	5	5	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	345.6	345.6	345.6	345.6	345.6
2.5°	342.1	346.0	342.9	343.3	343.6
5°	333.6	338.6	337.8	340.9	344.0
7.5°	322.0	327.8	330.5	336.7	340.9
10°	308.1	314.7	320.1	330.1	335.9
12.5°	292.7	300.4	308.1	321.6	330.5
15°	275.7	284.6	295.0	312.8	323.2
17.5°	258.3	267.2	280.7	301.2	314.3
20°	239.8	249.4	264.9	287.7	303.9
22.5°	220.5	230.9	247.9	273.8	293.1
25°	201.2	212.0	230.9	259.9	281.1
27.5°	181.9	192.3	212.7	245.2	268.3
30°	162.2	173.0	195.4	229.4	256.0
32.5°	143.2	153.3	177.2	214.3	242.5
35°	122.0	133.6	159.1	198.8	229.4
37.5°	103.9	114.3	141.7	183.4	216.2
40°	83.0	94.6	123.9	168.3	202.7
42.5°	63.7	75.3	107.0	153.3	190.0
45°	46.3	57.5	90.4	139.4	177.2
47.5°	35.1	41.7	74.1	125.9	162.9
50°	30.1	32.0	59.5	111.2	147.5
52.5°	26.6	27.4	46.3	96.5	132.1
55°	22.8	23.6	35.9	81.9	116.2
57.5°	19.3	19.7	29.0	68.0	99.2
60°	16.2	16.6	25.5	54.4	81.9
62.5°	13.5	13.9	22.8	42.1	65.3
65°	10.8	11.6	19.3	30.9	49.8
67.5°	8.9	10.4	16.2	21.6	34.8
70°	7.3	10.0	13.1	15.1	21.2
72.5°	6.2	9.3	11.2	10.8	10.4
75°	5.0	8.9	9.3	8.5	8.1
77.5°	4.2	7.7	7.7	7.0	6.6
80°	3.5	6.2	6.2	6.2	5.4
82.5°	3.1	5.0	5.4	5.4	4.2
85°	2.3	4.2	4.6	4.6	3.1
87.5°	1.5	3.9	4.2	3.9	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)