

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: P1060393

Luminaire Tested: S124RDR-S350D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060393
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-S350D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

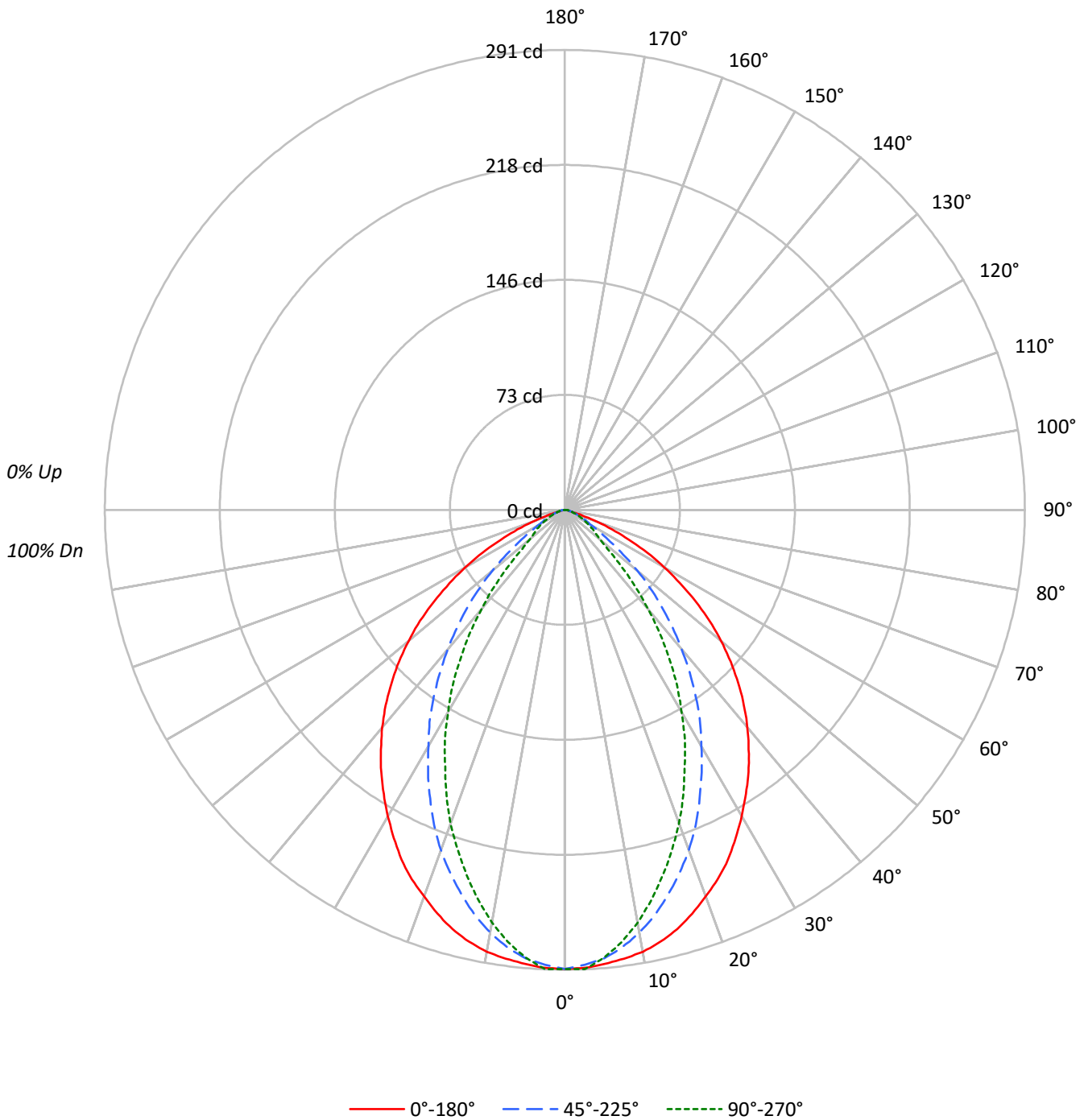
Lumens per Lamp: N/A
Luminaire Lumens: 428.3 lumens
Efficiency: N/A
Efficacy: 34.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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°	2502	2502	2502
5°	2494	2462	2458
10°	2483	2376	2319
15°	2448	2247	2134
20°	2385	2100	1935
25°	2321	1916	1703
30°	2225	1717	1469
35°	2130	1519	1213
40°	2019	1293	920
45°	1889	1057	617
50°	1727	800	383
55°	1518	528	326
60°	1254	324	267
65°	909	251	216
70°	493	186	164
75°	110	136	150
80°	79	99	124
85°	79	79	119

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1889 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.9	6.3
10°-20°	71.5	16.7
20°-30°	94.7	22.1
30°-40°	94.0	21.9
40°-50°	72.3	16.9
50°-60°	43.1	10.1
60°-70°	19.6	4.6
70°-80°	5.1	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°	193.1	45.1
0°-40°	287.1	67.0
0°-60°	402.6	94.0
0°-90°	428.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	428.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	290	290	290	290	290	
5°	288	289	285	285	284	27
15°	275	268	252	244	239	77
25°	244	227	202	185	179	112
35°	203	177	144	122	115	126
45°	155	125	87	61	51	119
55°	101	72	35	22	22	90
65°	45	27	12	11	11	45
75°	3	4	4	4	4	7
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°	290.5	290.5	290.5	290.5	290.5
2.5°	290.1	290.5	288.1	290.1	290.9
5°	288.5	288.9	284.8	284.8	284.4
7.5°	286.4	285.6	279.1	276.6	275.8
10°	284.0	281.1	271.7	266.8	265.2
12.5°	279.9	275.4	262.7	255.8	252.9
15°	274.6	267.6	252.1	243.5	239.4
17.5°	268.0	259.4	241.0	230.0	225.5
20°	260.3	248.8	229.2	215.2	211.2
22.5°	252.9	238.6	216.1	200.1	195.6
25°	244.3	226.7	201.7	185.0	179.2
27.5°	234.1	215.2	187.4	170.2	164.5
30°	223.8	203.0	172.7	154.7	147.7
32.5°	213.2	190.3	159.2	138.7	132.2
35°	202.6	177.2	144.5	122.4	115.4
37.5°	191.1	164.1	129.7	106.8	99.0
40°	179.6	151.4	115.0	91.7	81.8
42.5°	167.8	138.3	100.7	76.1	66.3
45°	155.1	124.8	86.8	60.6	50.7
47.5°	142.4	112.1	72.8	45.4	36.4
50°	128.9	98.6	59.7	33.1	28.6
52.5°	115.4	85.5	46.6	25.8	24.6
55°	101.1	72.0	35.2	22.1	21.7
57.5°	86.3	59.7	25.4	19.2	18.4
60°	72.8	48.3	18.8	16.4	15.5
62.5°	58.9	36.4	15.5	13.5	12.7
65°	44.6	26.6	12.3	10.6	10.6
67.5°	32.3	18.0	9.8	8.6	8.2
70°	19.6	11.0	7.4	7.0	6.5
72.5°	9.8	6.5	5.7	5.3	5.3
75°	3.3	4.1	4.1	4.5	4.5
77.5°	2.5	2.9	2.9	3.3	3.3
80°	1.6	2.0	2.0	2.5	2.5
82.5°	1.2	1.2	1.6	1.6	2.0
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)