

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: P1060392

Luminaire Tested: S124RDR-S350D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060392
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D835-X4F0-XX-UDD-BVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

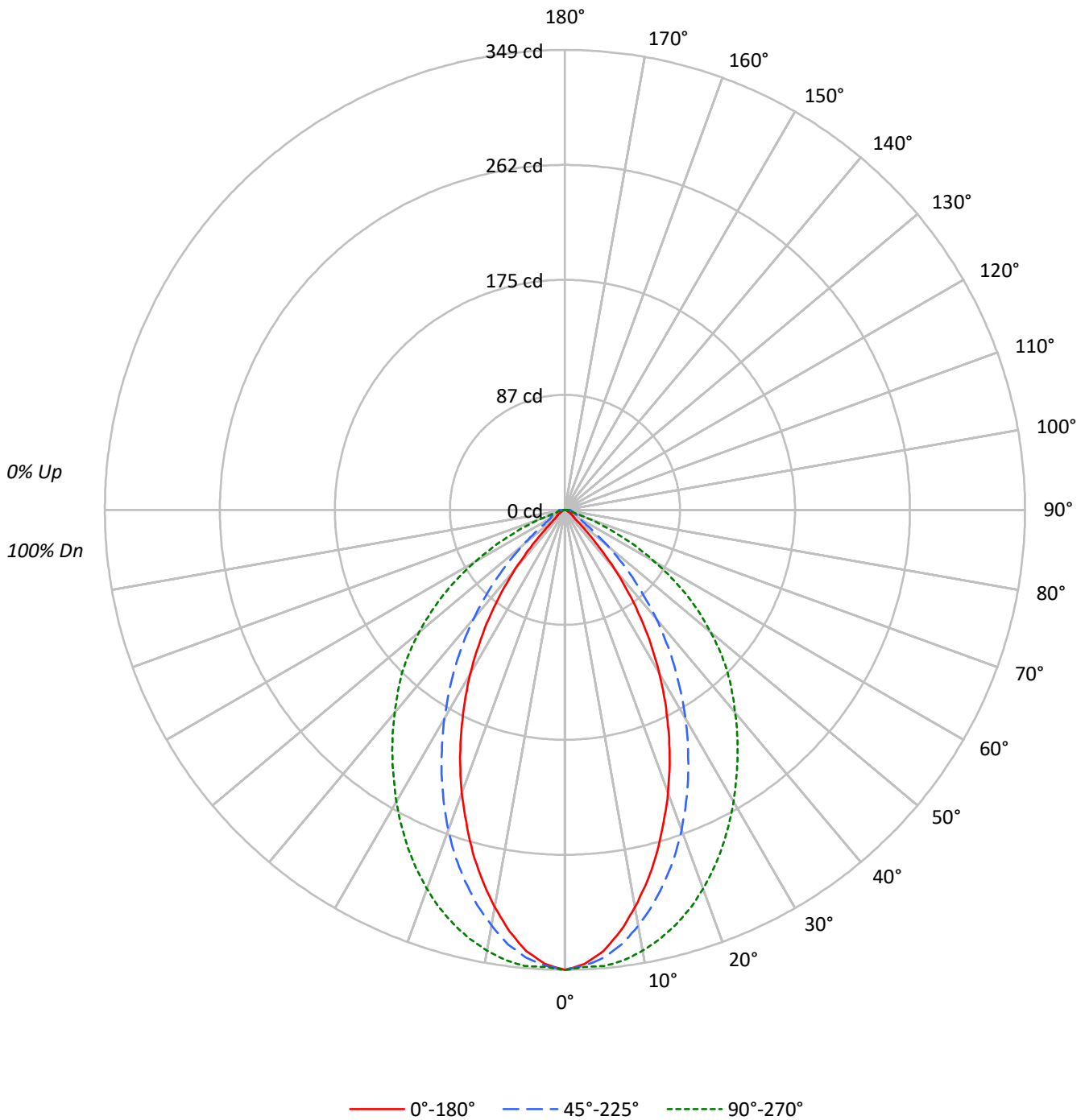
Lumens per Lamp: N/A
Luminaire Lumens: 440.0 lumens
Efficiency: N/A
Efficacy: 35.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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	98	98	96	95	95	93	92	90				
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72				
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65				
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59				
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54				
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49				
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45				
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3006	3006	3006
5°	2904	2947	3004
10°	2677	2802	2970
15°	2403	2604	2904
20°	2095	2369	2805
25°	1767	2103	2682
30°	1426	1817	2542
35°	1055	1520	2399
40°	654	1212	2257
45°	259	883	2126
50°	115	555	1932
55°	92	290	1692
60°	64	219	1349
65°	41	218	927
70°	40	196	433
75°	53	190	190
80°	79	223	223
85°	158	445	326

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2126 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.0	7.3
10°-20°	82.6	18.8
20°-30°	104.3	23.7
30°-40°	95.7	21.8
40°-50°	65.2	14.8
50°-60°	35.5	8.1
60°-70°	15.4	3.5
70°-80°	5.6	1.3
80°-90°	3.6	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°	219.0	49.8
0°-40°	314.7	71.5
0°-60°	415.4	94.4
0°-90°	440.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	440.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	349	349	349	349	349	
5°	336	340	341	345	348	31
15°	270	279	292	313	326	75
25°	186	199	221	256	282	85
35°	100	115	145	190	228	62
45°	21	36	72	129	175	20
55°	6	7	19	71	113	5
65°	2	3	11	22	46	2
75°	2	5	6	6	6	2
85°	2	4	4	4	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	349.1	349.1	349.1	349.1	349.1
2.5°	345.0	349.1	346.2	347.1	347.1
5°	336.0	340.5	340.9	344.6	347.5
7.5°	322.5	329.0	332.3	339.7	344.6
10°	306.1	313.9	320.4	333.1	339.7
12.5°	288.5	297.5	307.3	324.1	333.5
15°	269.6	279.0	292.1	313.0	325.7
17.5°	248.7	260.2	276.2	301.2	316.7
20°	228.6	240.1	258.5	286.8	306.1
22.5°	207.7	219.6	240.1	271.7	294.6
25°	186.0	199.1	221.3	256.5	282.3
27.5°	164.7	178.6	202.0	240.5	269.2
30°	143.4	157.3	182.7	224.1	255.7
32.5°	121.7	136.0	163.5	206.9	241.7
35°	100.4	115.1	144.6	190.5	228.2
37.5°	78.7	94.2	125.8	174.6	214.7
40°	58.2	73.8	107.8	158.6	200.8
42.5°	38.9	54.5	89.3	143.0	187.7
45°	21.3	35.6	72.5	128.7	174.6
47.5°	11.5	19.7	56.1	114.7	159.8
50°	8.6	10.7	41.4	100.0	144.2
52.5°	7.4	8.2	28.7	84.4	128.7
55°	6.1	6.6	19.3	70.9	112.7
57.5°	4.9	5.3	14.3	57.4	95.5
60°	3.7	4.5	12.7	44.3	78.3
62.5°	2.9	3.7	11.9	32.4	61.9
65°	2.0	2.9	10.7	22.1	45.5
67.5°	2.0	3.3	9.0	14.3	30.7
70°	1.6	4.5	7.8	9.4	17.2
72.5°	1.6	4.9	6.6	6.6	6.6
75°	1.6	5.3	5.7	5.7	5.7
77.5°	1.6	4.9	5.3	4.9	4.9
80°	1.6	4.5	4.5	4.5	4.5
82.5°	1.6	4.1	4.5	4.5	3.7
85°	1.6	3.7	4.5	4.5	3.3
87.5°	1.2	3.7	4.1	4.1	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)