

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: P1060552

Luminaire Tested: S124RDR-S795D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060552
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S795D835-X4F0-XX-UDD-BVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

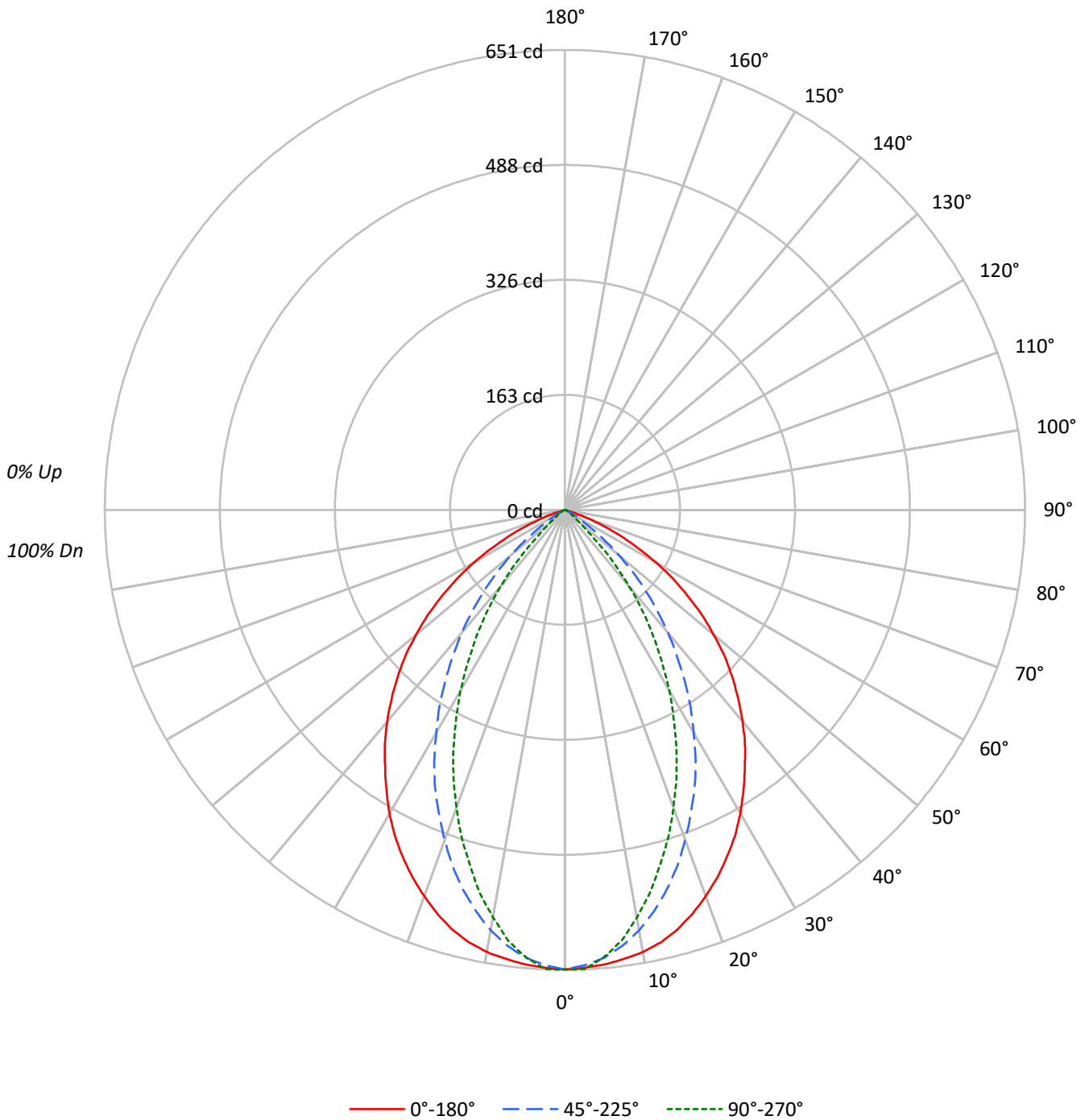
Lumens per Lamp: N/A
Luminaire Lumens: 849.5 lumens
Efficiency: N/A
Efficacy: 32.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5602	5602	5602
5°	5583	5502	5493
10°	5557	5286	5121
15°	5482	4962	4635
20°	5333	4557	4110
25°	5154	4127	3546
30°	4936	3617	2935
35°	4665	3103	2283
40°	4396	2547	1596
45°	4076	1958	790
50°	3677	1322	264
55°	3175	677	183
60°	2542	243	129
65°	1744	134	57
70°	780	70	48
75°	0	30	30
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4076 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.1	7.1
10°-20°	157.5	18.5
20°-30°	203.9	24.0
30°-40°	193.7	22.8
40°-50°	137.2	16.1
50°-60°	70.4	8.3
60°-70°	24.6	2.9
70°-80°	2.1	0.2
80°-90°	0.0	0.0
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°	421.5	49.6
0°-40°	615.2	72.4
0°-60°	822.8	96.8
0°-90°	849.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	849.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	651	651	651	651	651	
5°	646	647	636	636	636	61
15°	615	596	557	530	520	173
25°	542	500	434	388	373	249
35°	444	379	295	238	217	278
45°	335	258	161	92	65	258
55°	212	139	45	13	12	189
65°	86	41	7	4	3	85
75°	0	1	1	1	1	7
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	650.6	650.6	650.6	650.6	650.6
2.5°	648.7	650.6	644.9	649.6	650.6
5°	645.9	646.8	636.5	636.5	635.5
7.5°	641.2	639.3	622.4	615.8	614.9
10°	635.5	629.0	604.5	590.4	585.7
12.5°	627.1	614.9	582.0	561.3	555.6
15°	614.9	596.1	556.6	530.2	519.9
17.5°	599.8	575.4	528.4	496.4	486.1
20°	582.0	550.9	497.3	461.6	448.5
22.5°	563.2	527.4	465.4	425.0	411.8
25°	542.5	500.2	434.4	388.3	373.2
27.5°	520.8	471.0	400.5	352.6	332.8
30°	496.4	441.9	363.8	314.0	295.2
32.5°	470.1	409.9	330.9	277.3	254.8
35°	443.8	378.9	295.2	237.9	217.2
37.5°	418.4	349.7	259.5	199.3	179.6
40°	391.1	317.8	226.6	164.5	142.0
42.5°	362.9	286.7	192.7	128.8	104.4
45°	334.7	257.6	160.8	92.1	64.9
47.5°	306.5	226.6	129.7	58.3	34.8
50°	274.5	196.5	98.7	31.0	19.7
52.5°	244.4	168.3	70.5	17.9	15.0
55°	211.5	139.1	45.1	13.2	12.2
57.5°	180.5	110.9	25.4	10.3	9.4
60°	147.6	85.6	14.1	8.5	7.5
62.5°	114.7	62.1	9.4	5.6	4.7
65°	85.6	41.4	6.6	3.8	2.8
67.5°	56.4	23.5	4.7	1.9	1.9
70°	31.0	11.3	2.8	1.9	1.9
72.5°	11.3	3.8	1.9	0.9	0.9
75°	0.0	0.9	0.9	0.9	0.9
77.5°	0.0	0.0	0.0	0.0	0.9
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)