

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: P1060473

Luminaire Tested: S124RDR-S575D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060473
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-S575D835-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

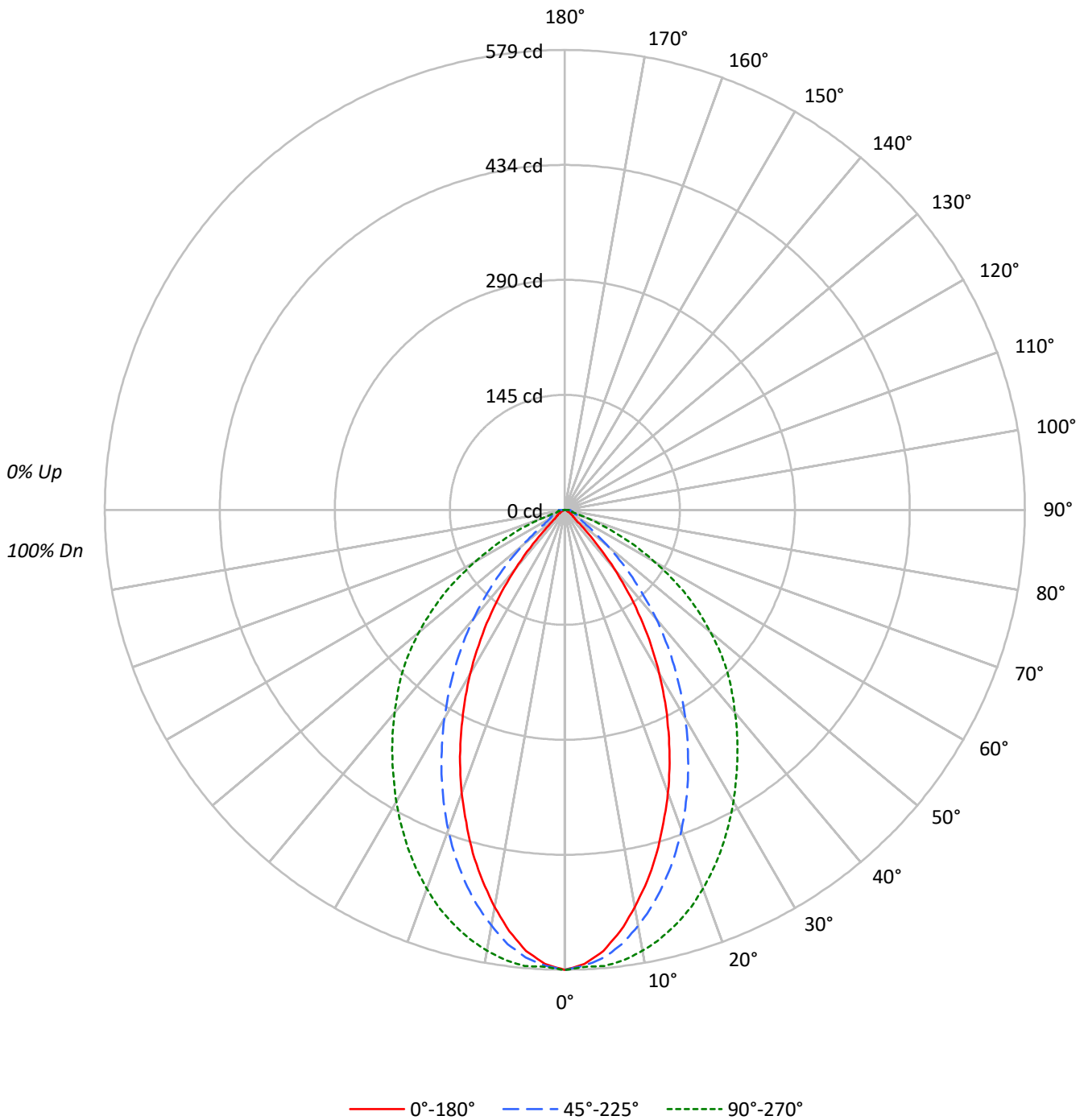
Lumens per Lamp: N/A
Luminaire Lumens: 730.0 lumens
Efficiency: N/A
Efficacy: 37.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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°	4988	4988	4988
5°	4818	4889	4983
10°	4440	4648	4928
15°	3988	4321	4819
20°	3476	3931	4653
25°	2932	3488	4450
30°	2366	3015	4218
35°	1751	2523	3981
40°	1085	2010	3744
45°	431	1465	3527
50°	192	920	3206
55°	153	480	2806
60°	105	363	2235
65°	69	361	1538
70°	68	325	720
75°	90	316	316
80°	134	372	372
85°	267	741	534

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3527 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.1	7.3
10°-20°	137.1	18.8
20°-30°	173.1	23.7
30°-40°	158.8	21.8
40°-50°	108.1	14.8
50°-60°	58.9	8.1
60°-70°	25.5	3.5
70°-80°	9.3	1.3
80°-90°	6.0	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°	363.3	49.8
0°-40°	522.1	71.5
0°-60°	689.2	94.4
0°-90°	730.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	730.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	579	579	579	579	579	
5°	557	565	566	572	576	52
15°	447	463	485	519	540	124
25°	309	330	367	426	468	141
35°	167	191	240	316	379	103
45°	35	59	120	214	290	33
55°	10	11	32	118	187	9
65°	3	5	18	37	76	4
75°	3	9	10	10	10	3
85°	3	6	8	8	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	579.2	579.2	579.2	579.2	579.2
2.5°	572.4	579.2	574.4	575.8	575.8
5°	557.4	564.9	565.6	571.7	576.5
7.5°	535.0	545.9	551.3	563.6	571.7
10°	507.8	520.7	531.6	552.7	563.6
12.5°	478.6	493.5	509.9	537.7	553.4
15°	447.3	463.0	484.7	519.4	540.5
17.5°	412.6	431.7	458.2	499.7	525.5
20°	379.3	398.4	429.0	475.9	507.8
22.5°	344.7	364.4	398.4	450.7	488.8
25°	308.6	330.4	367.1	425.6	468.4
27.5°	273.3	296.4	335.1	399.0	446.6
30°	237.9	261.0	303.2	371.9	424.2
32.5°	201.9	225.7	271.2	343.3	401.1
35°	166.6	191.0	240.0	316.1	378.7
37.5°	130.5	156.4	208.7	289.6	356.2
40°	96.5	122.4	178.8	263.1	333.1
42.5°	64.6	90.4	148.2	237.3	311.4
45°	35.4	59.1	120.3	213.5	289.6
47.5°	19.0	32.6	93.1	190.3	265.1
50°	14.3	17.7	68.7	165.9	239.3
52.5°	12.2	13.6	47.6	140.0	213.5
55°	10.2	10.9	32.0	117.6	186.9
57.5°	8.2	8.8	23.8	95.2	158.4
60°	6.1	7.5	21.1	73.4	129.8
62.5°	4.8	6.1	19.7	53.7	102.7
65°	3.4	4.8	17.7	36.7	75.5
67.5°	3.4	5.4	15.0	23.8	51.0
70°	2.7	7.5	12.9	15.6	28.6
72.5°	2.7	8.2	10.9	10.9	10.9
75°	2.7	8.8	9.5	9.5	9.5
77.5°	2.7	8.2	8.8	8.2	8.2
80°	2.7	7.5	7.5	7.5	7.5
82.5°	2.7	6.8	7.5	7.5	6.1
85°	2.7	6.1	7.5	7.5	5.4
87.5°	2.0	6.1	6.8	6.8	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)