

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060479

Luminaire Tested: S124RDRP-S575D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060479
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S575D835-X4F0-XX-UDD-WVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

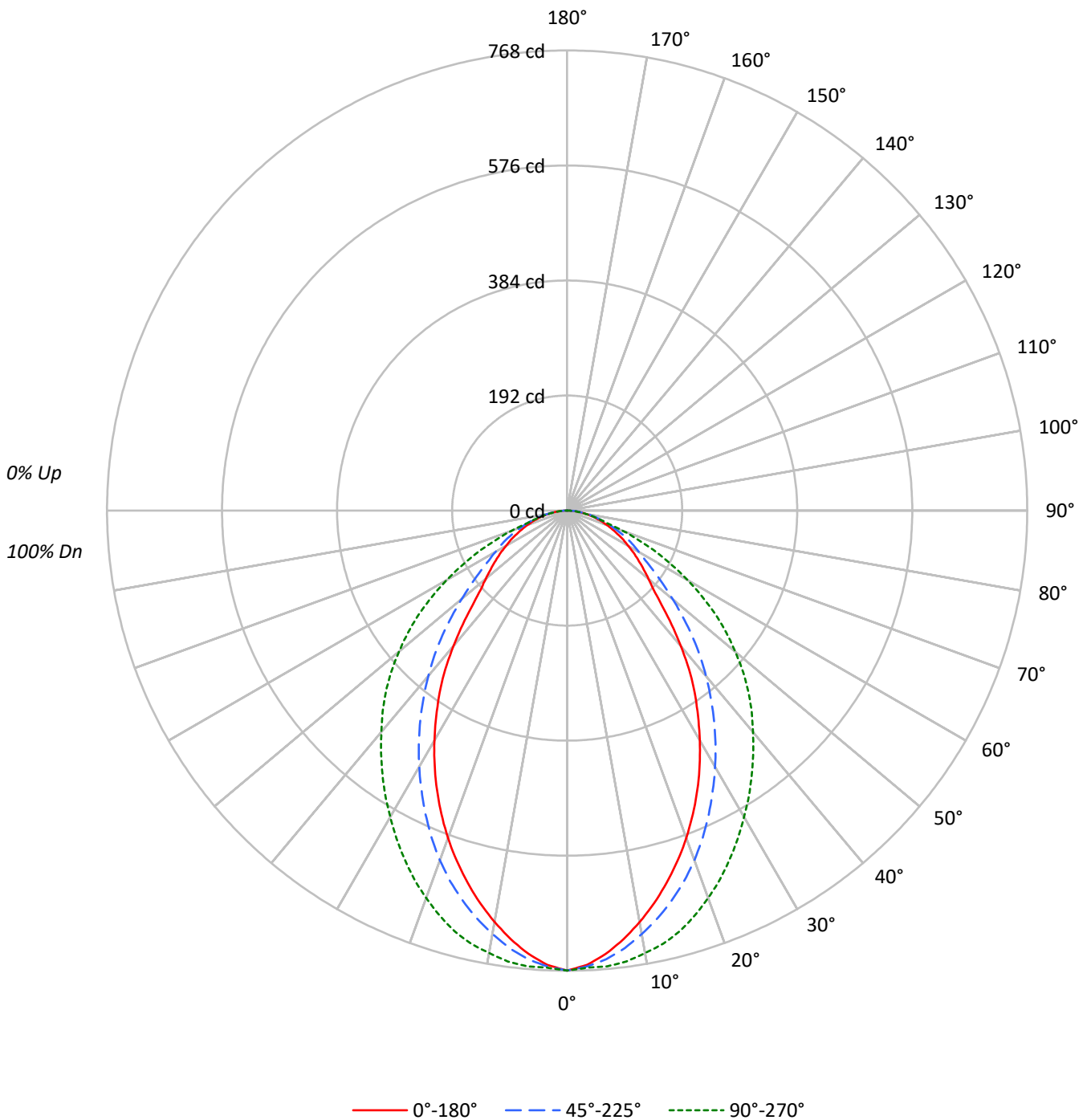
Lumens per Lamp: N/A
Luminaire Lumens: 1408.7 lumens
Efficiency: N/A
Efficacy: 71.9 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (A_{in}): 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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6611	6611	6611
5°	6419	6495	6601
10°	6095	6273	6558
15°	5730	6009	6480
20°	5330	5691	6307
25°	4887	5312	6100
30°	4405	4911	5871
35°	3899	4492	5649
40°	3315	4056	5423
45°	2713	3583	5212
50°	2375	3076	4906
55°	2183	2651	4538
60°	2024	2387	4002
65°	1897	2243	3350
70°	1780	2052	2515
75°	1674	1876	1830
80°	1552	1716	1552
85°	1413	1680	1344

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5212 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.9	5.0
10°-20°	190.9	13.6
20°-30°	260.9	18.5
30°-40°	274.2	19.5
40°-50°	238.0	16.9
50°-60°	179.5	12.7
60°-70°	116.4	8.3
70°-80°	59.7	4.2
80°-90°	18.1	1.3
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°	522.8	37.1
0°-40°	797.0	56.6
0°-60°	1214.5	86.2
0°-90°	1408.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1408.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	768	768	768	768	768	
5°	743	753	751	758	764	69
15°	643	658	674	704	727	180
25°	514	533	559	602	642	236
35°	371	391	427	484	537	231
45°	223	244	294	368	428	175
55°	145	150	177	251	302	131
65°	93	95	110	133	164	93
75°	50	56	56	57	55	53
85°	14	18	17	16	14	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	767.7	767.7	767.7	767.7	767.7
2.5°	758.9	768.4	761.6	763.0	763.6
5°	742.6	752.8	751.4	757.5	763.6
7.5°	721.5	733.7	736.5	748.7	758.9
10°	697.1	710.6	717.4	737.1	750.0
12.5°	671.2	684.8	697.1	722.2	740.5
15°	642.7	658.3	674.0	704.5	726.9
17.5°	612.8	629.1	648.8	682.1	708.6
20°	581.6	597.9	621.0	657.0	688.2
22.5°	548.3	566.6	591.1	629.8	666.5
25°	514.3	532.6	559.1	601.9	642.0
27.5°	479.0	498.0	526.5	574.1	616.9
30°	443.0	463.3	493.9	544.2	590.4
32.5°	406.3	428.0	460.6	514.3	564.6
35°	370.9	391.3	427.3	484.4	537.4
37.5°	334.3	354.6	393.4	455.2	510.2
40°	294.9	317.3	360.8	424.6	482.4
42.5°	258.2	280.6	327.5	395.4	455.9
45°	222.8	243.9	294.2	367.5	428.0
47.5°	195.7	210.6	260.9	340.4	398.1
50°	177.3	184.1	229.6	310.5	366.2
52.5°	161.0	166.5	201.1	280.6	334.9
55°	145.4	149.5	176.6	250.7	302.3
57.5°	131.8	133.8	154.9	220.8	267.0
60°	117.5	120.3	138.6	190.2	232.4
62.5°	106.0	107.3	124.3	161.0	197.7
65°	93.1	95.1	110.1	133.2	164.4
67.5°	81.5	84.9	95.1	108.7	129.8
70°	70.7	75.4	81.5	88.3	99.9
72.5°	60.5	65.9	69.3	72.0	70.0
75°	50.3	56.4	56.4	57.1	55.0
77.5°	40.8	46.2	45.5	44.8	42.1
80°	31.3	36.0	34.6	34.0	31.3
82.5°	23.1	26.5	25.1	24.5	21.1
85°	14.3	17.7	17.0	16.3	13.6
87.5°	6.8	10.2	9.5	8.8	6.1
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	13.06	14.55	13.43	14.86	15.18	16.80	18.29	17.17	18.60	18.92
	3H	14.73	16.06	15.11	16.39	16.75	17.93	19.26	18.31	19.59	19.95
	4H	15.40	16.65	15.80	17.00	17.38	18.22	19.47	18.63	19.82	20.20
	6H	15.91	17.06	16.32	17.43	17.82	18.43	19.58	18.84	19.95	20.34
	8H	16.08	17.18	16.51	17.57	17.97	18.48	19.58	18.91	19.97	20.37
	12H	16.20	17.25	16.63	17.63	18.06	18.51	19.56	18.94	19.95	20.37
4H	2H	13.86	15.11	14.26	15.45	15.83	16.97	18.22	17.37	18.57	18.95
	3H	15.73	16.76	16.14	17.16	17.57	18.30	19.33	18.71	19.74	20.14
	4H	16.53	17.46	16.97	17.88	18.32	18.72	19.65	19.15	20.06	20.50
	6H	17.18	17.99	17.63	18.43	18.89	19.04	19.85	19.50	20.29	20.75
	8H	17.40	18.16	17.86	18.60	19.07	19.13	19.89	19.60	20.33	20.80
	12H	17.57	18.24	18.05	18.72	19.19	19.20	19.88	19.69	20.36	20.83
8H	4H	16.88	17.64	17.35	18.08	18.55	18.85	19.61	19.31	20.05	20.52
	6H	17.67	18.30	18.17	18.79	19.27	19.27	19.89	19.77	20.39	20.86
	8H	17.99	18.55	18.50	19.06	19.55	19.43	19.99	19.94	20.50	20.99
	12H	18.25	18.75	18.76	19.24	19.81	19.57	20.06	20.08	20.55	21.12
12H	4H	16.91	17.59	17.39	18.07	18.54	18.85	19.53	19.34	20.01	20.48
	6H	17.73	18.29	18.25	18.80	19.29	19.29	19.85	19.80	20.36	20.85
	8H	18.12	18.61	18.63	19.11	19.67	19.50	20.00	20.01	20.49	21.05