

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: P1060558

Luminaire Tested: S124RDRP-S795D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060558
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S795D835-X4F0-XX-UDD-WVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

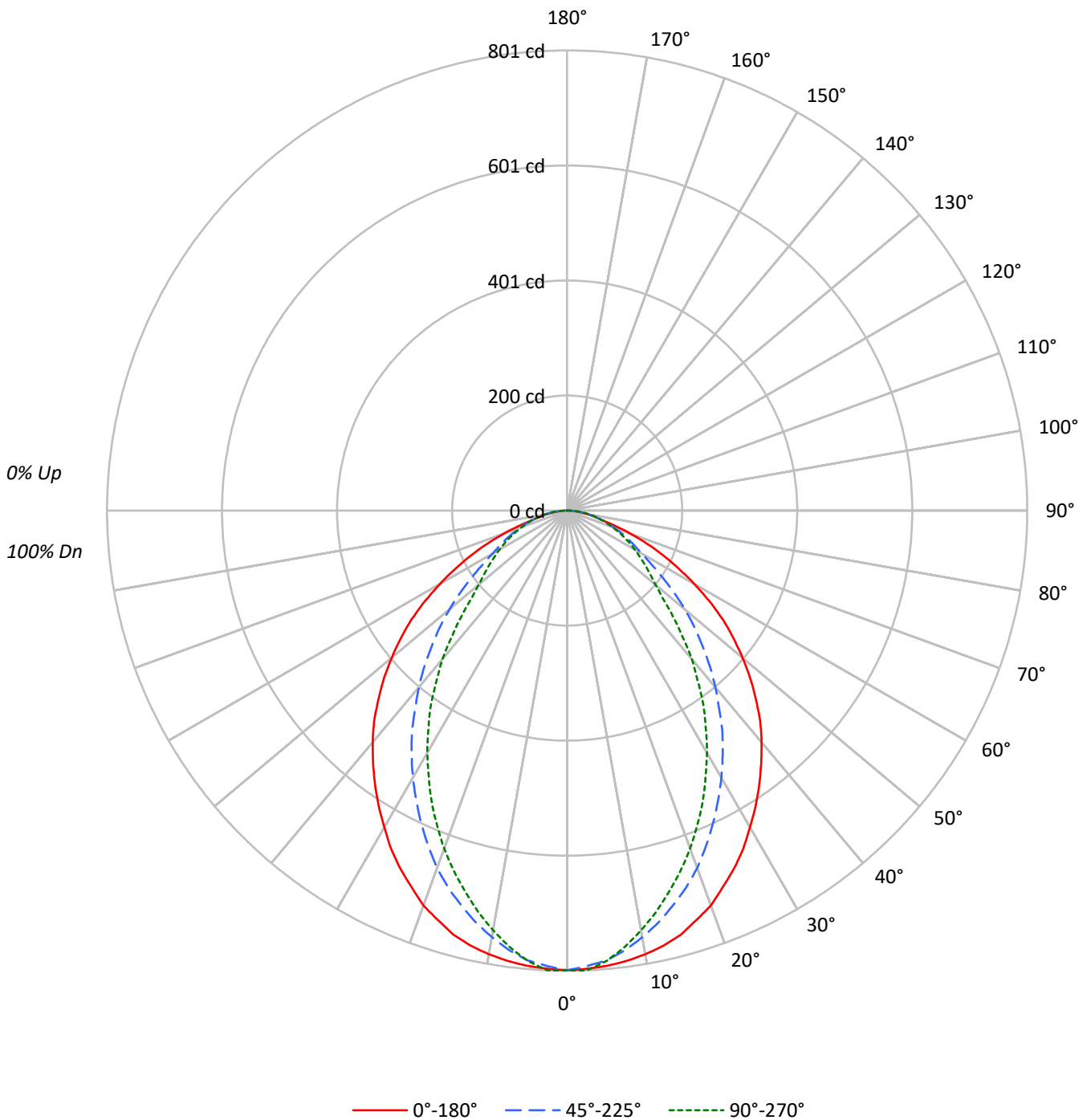
Lumens per Lamp: N/A
Luminaire Lumens: 1542.7 lumens
Efficiency: N/A
Efficacy: 59.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (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	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6890	6890	6890
5°	6875	6794	6802
10°	6856	6593	6486
15°	6814	6345	6118
20°	6702	6066	5737
25°	6530	5708	5306
30°	6329	5338	4842
35°	6128	4951	4349
40°	5918	4512	3794
45°	5655	4053	3171
50°	5340	3577	2683
55°	4968	3034	2485
60°	4404	2575	2347
65°	3755	2376	2223
70°	2936	2200	2107
75°	2003	2033	2033
80°	1726	1909	1959
85°	1482	1857	2045

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5655 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.4	4.8
10°-20°	202.2	13.1
20°-30°	280.7	18.2
30°-40°	300.8	19.5
40°-50°	266.5	17.3
50°-60°	200.8	13.0
60°-70°	130.1	8.4
70°-80°	66.7	4.3
80°-90°	20.5	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°	557.2	36.1
0°-40°	858.1	55.6
0°-60°	1325.4	85.9
0°-90°	1542.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1542.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	800	800	800	800	800	
5°	795	796	786	787	787	76
15°	764	747	712	694	686	215
25°	687	651	601	569	558	316
35°	583	530	471	429	414	364
45°	464	404	333	281	260	358
55°	331	276	202	170	166	294
65°	184	148	117	110	109	183
75°	60	63	61	61	61	71
85°	15	16	19	21	21	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	800.1	800.1	800.1	800.1	800.1
2.5°	798.2	801.0	793.5	799.1	801.0
5°	795.4	796.3	786.0	786.9	786.9
7.5°	790.7	788.8	771.9	767.2	766.2
10°	784.1	778.4	754.0	744.6	741.8
12.5°	775.6	765.3	734.3	721.1	715.5
15°	764.3	747.4	711.7	693.8	686.3
17.5°	747.4	725.8	688.2	665.6	657.2
20°	731.4	702.3	661.9	633.7	626.1
22.5°	708.9	677.9	631.8	601.7	592.3
25°	687.3	650.6	600.8	568.8	558.5
27.5°	663.7	622.4	568.8	534.9	521.8
30°	636.5	592.3	536.8	501.1	487.0
32.5°	610.2	563.2	503.9	464.4	449.4
35°	582.9	530.2	471.0	428.7	413.7
37.5°	554.7	499.2	434.4	393.0	373.2
40°	526.5	468.2	401.4	354.4	337.5
42.5°	497.3	436.2	367.6	318.7	297.1
45°	464.4	404.3	332.8	281.1	260.4
47.5°	432.5	373.2	300.8	244.4	225.6
50°	398.6	340.3	267.0	212.5	200.3
52.5°	364.8	306.5	234.1	188.0	182.4
55°	330.9	275.5	202.1	170.2	165.5
57.5°	293.3	243.5	173.9	154.2	150.4
60°	255.7	208.7	149.5	139.1	136.3
62.5°	219.1	178.6	132.6	124.1	122.2
65°	184.3	148.5	116.6	110.0	109.1
67.5°	150.4	122.2	101.5	97.8	95.9
70°	116.6	97.8	87.4	85.6	83.7
72.5°	86.5	79.0	74.3	73.3	72.4
75°	60.2	63.0	61.1	61.1	61.1
77.5°	47.9	48.9	49.8	50.8	49.8
80°	34.8	37.6	38.5	40.4	39.5
82.5°	24.4	26.3	29.1	30.1	31.0
85°	15.0	16.0	18.8	20.7	20.7
87.5°	6.6	7.5	9.4	11.3	12.2
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	17.14	18.64	17.51	18.96	19.27	13.71	15.21	14.07	15.52	15.84
	3H	18.35	19.69	18.73	20.02	20.38	15.41	16.75	15.78	17.08	17.44
	4H	18.66	19.92	19.06	20.26	20.64	16.08	17.34	16.48	17.69	18.07
	6H	18.86	20.02	19.27	20.39	20.78	16.63	17.79	17.04	18.16	18.55
	8H	18.92	20.02	19.34	20.41	20.81	16.85	17.96	17.28	18.35	18.75
	12H	18.95	20.01	19.38	20.39	20.82	17.02	18.08	17.45	18.46	18.89
4H	2H	17.29	18.55	17.69	18.89	19.27	14.37	15.63	14.77	15.98	16.36
	3H	18.69	19.73	19.10	20.13	20.54	16.28	17.33	16.69	17.73	18.13
	4H	19.12	20.06	19.55	20.47	20.91	17.08	18.02	17.51	18.44	18.88
	6H	19.44	20.26	19.90	20.70	21.16	17.77	18.59	18.23	19.03	19.49
	8H	19.54	20.30	20.00	20.75	21.21	18.04	18.81	18.51	19.25	19.72
	12H	19.61	20.29	20.09	20.77	21.24	18.27	18.96	18.76	19.43	19.91
8H	4H	19.24	20.01	19.71	20.45	20.92	17.40	18.16	17.86	18.61	19.07
	6H	19.66	20.29	20.16	20.79	21.26	18.23	18.86	18.72	19.35	19.83
	8H	19.82	20.39	20.33	20.90	21.39	18.59	19.16	19.11	19.67	20.16
	12H	19.95	20.45	20.46	20.94	21.51	18.93	19.43	19.44	19.92	20.49
12H	4H	19.25	19.93	19.73	20.41	20.88	17.43	18.11	17.91	18.59	19.06
	6H	19.69	20.26	20.20	20.77	21.25	18.29	18.85	18.80	19.36	19.85
	8H	19.90	20.40	20.41	20.89	21.46	18.72	19.22	19.23	19.71	20.28