

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



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: P1060753

Luminaire Tested: S124RDR-H1195D930-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060753
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-H1195D930-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

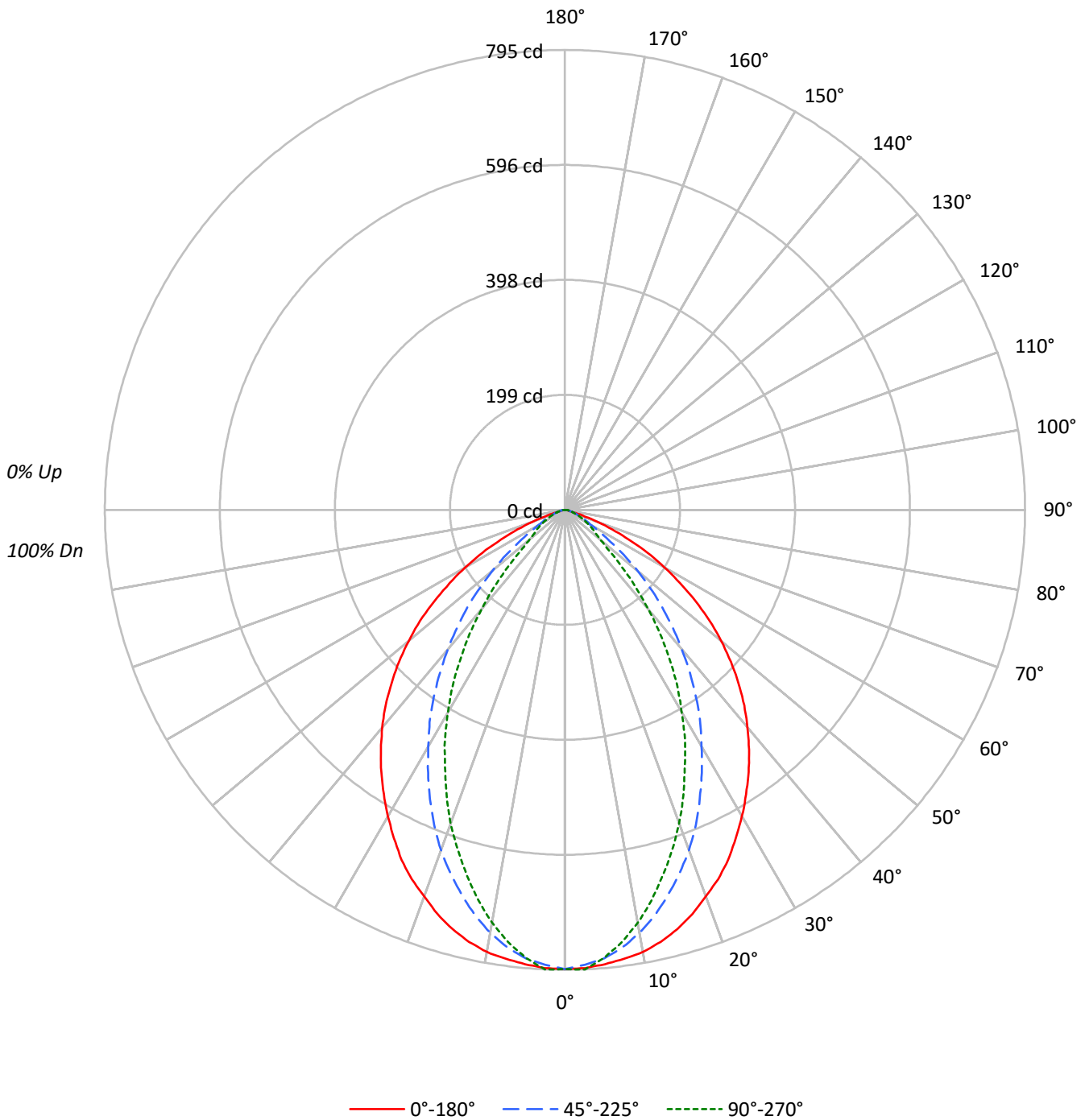
Lumens per Lamp: N/A
Luminaire Lumens: 1170.6 lumens
Efficiency: N/A
Efficacy: 32.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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			100	
1	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90			90	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80			80	
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71			71	
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63			63	
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57			57	
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51			51	
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47			47	
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43			43	
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39			39	
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36			36	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6836	6836	6836
5°	6815	6728	6718
10°	6786	6492	6336
15°	6689	6141	5832
20°	6517	5738	5287
25°	6343	5238	4654
30°	6082	4692	4014
35°	5819	4149	3315
40°	5518	3532	2513
45°	5161	2887	1689
50°	4718	2188	1049
55°	4147	1444	890
60°	3427	885	732
65°	2484	683	593
70°	1352	506	451
75°	296	373	409
80°	223	278	332
85°	217	217	336

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5161 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.5	6.3
10°-20°	195.4	16.7
20°-30°	258.8	22.1
30°-40°	256.9	21.9
40°-50°	197.7	16.9
50°-60°	117.8	10.1
60°-70°	53.5	4.6
70°-80°	13.9	1.2
80°-90°	3.1	0.3
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°	527.7	45.1
0°-40°	784.6	67.0
0°-60°	1100.1	94.0
0°-90°	1170.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1170.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	794	794	794	794	794	
5°	788	790	778	778	777	75
15°	750	731	689	665	654	211
25°	668	620	551	505	490	306
35°	554	484	395	334	315	346
45°	424	341	237	166	139	326
55°	276	197	96	60	59	246
65°	122	73	34	29	29	123
75°	9	11	11	12	12	19
85°	2	2	2	3	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	793.9	793.9	793.9	793.9	793.9
2.5°	792.8	793.9	787.2	792.8	795.1
5°	788.4	789.5	778.3	778.3	777.2
7.5°	782.8	780.5	762.6	755.9	753.7
10°	776.1	768.2	742.5	729.1	724.6
12.5°	764.9	752.6	717.9	698.9	691.1
15°	750.3	731.3	688.8	665.3	654.2
17.5°	732.4	709.0	658.6	628.4	616.1
20°	711.2	679.9	626.2	588.2	577.0
22.5°	691.1	651.9	590.4	546.8	534.5
25°	667.6	619.5	551.3	505.4	489.8
27.5°	639.6	588.2	512.2	465.2	449.5
30°	611.7	554.6	471.9	422.7	403.7
32.5°	582.6	520.0	435.0	379.1	361.2
35°	553.5	484.2	394.7	334.4	315.3
37.5°	522.2	448.4	354.5	291.9	270.6
40°	490.9	413.7	314.2	250.5	223.6
42.5°	458.5	378.0	275.1	208.0	181.2
45°	423.8	341.1	237.1	165.5	138.7
47.5°	389.1	306.4	199.0	124.1	99.5
50°	352.2	269.5	163.3	90.6	78.3
52.5°	315.3	233.7	127.5	70.4	67.1
55°	276.2	196.8	96.2	60.4	59.3
57.5°	235.9	163.3	69.3	52.6	50.3
60°	199.0	132.0	51.4	44.7	42.5
62.5°	161.0	99.5	42.5	36.9	34.7
65°	121.9	72.7	33.5	29.1	29.1
67.5°	88.3	49.2	26.8	23.5	22.4
70°	53.7	30.2	20.1	19.0	17.9
72.5°	26.8	17.9	15.7	14.5	14.5
75°	8.9	11.2	11.2	12.3	12.3
77.5°	6.7	7.8	7.8	8.9	8.9
80°	4.5	5.6	5.6	6.7	6.7
82.5°	3.4	3.4	4.5	4.5	5.6
85°	2.2	2.2	2.2	3.4	3.4
87.5°	1.1	1.1	1.1	2.2	2.2
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	15.80	17.13	16.16	17.45	17.76	7.35	8.69	7.72	9.00	9.31
	3H	16.31	17.49	16.69	17.82	18.18	8.17	9.35	8.55	9.68	10.04
	4H	16.27	17.37	16.68	17.72	18.11	8.45	9.55	8.85	9.90	10.28
	6H	16.21	17.22	16.62	17.59	17.98	8.62	9.63	9.03	10.00	10.39
	8H	16.17	17.12	16.60	17.52	17.92	8.68	9.64	9.11	10.03	10.43
	12H	16.13	17.04	16.56	17.43	17.86	8.73	9.64	9.16	10.02	10.45
4H	2H	15.64	16.74	16.04	17.09	17.47	7.79	8.89	8.19	9.24	9.62
	3H	16.19	17.09	16.61	17.49	17.90	8.75	9.65	9.17	10.05	10.46
	4H	16.16	16.96	16.60	17.38	17.82	9.12	9.91	9.55	10.33	10.78
	6H	16.11	16.80	16.57	17.24	17.71	9.37	10.05	9.83	10.50	10.96
	8H	16.06	16.70	16.53	17.15	17.62	9.46	10.09	9.92	10.54	11.01
	12H	16.03	16.59	16.51	17.07	17.55	9.53	10.10	10.02	10.58	11.05
8H	4H	16.05	16.69	16.52	17.14	17.61	9.21	9.85	9.67	10.29	10.76
	6H	15.99	16.51	16.49	17.01	17.49	9.51	10.04	10.02	10.53	11.01
	8H	15.94	16.41	16.47	16.93	17.42	9.65	10.11	10.17	10.63	11.12
	12H	15.91	16.33	16.43	16.82	17.39	9.79	10.20	10.30	10.69	11.27
12H	4H	16.01	16.57	16.50	17.06	17.53	9.18	9.74	9.67	10.23	10.70
	6H	15.94	16.40	16.46	16.92	17.41	9.49	9.96	10.02	10.48	10.97
	8H	15.91	16.32	16.42	16.82	17.39	9.67	10.08	10.18	10.57	11.15