

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: P1060742

Luminaire Tested: S124RDR-H1195D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060742
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-H1195D927-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

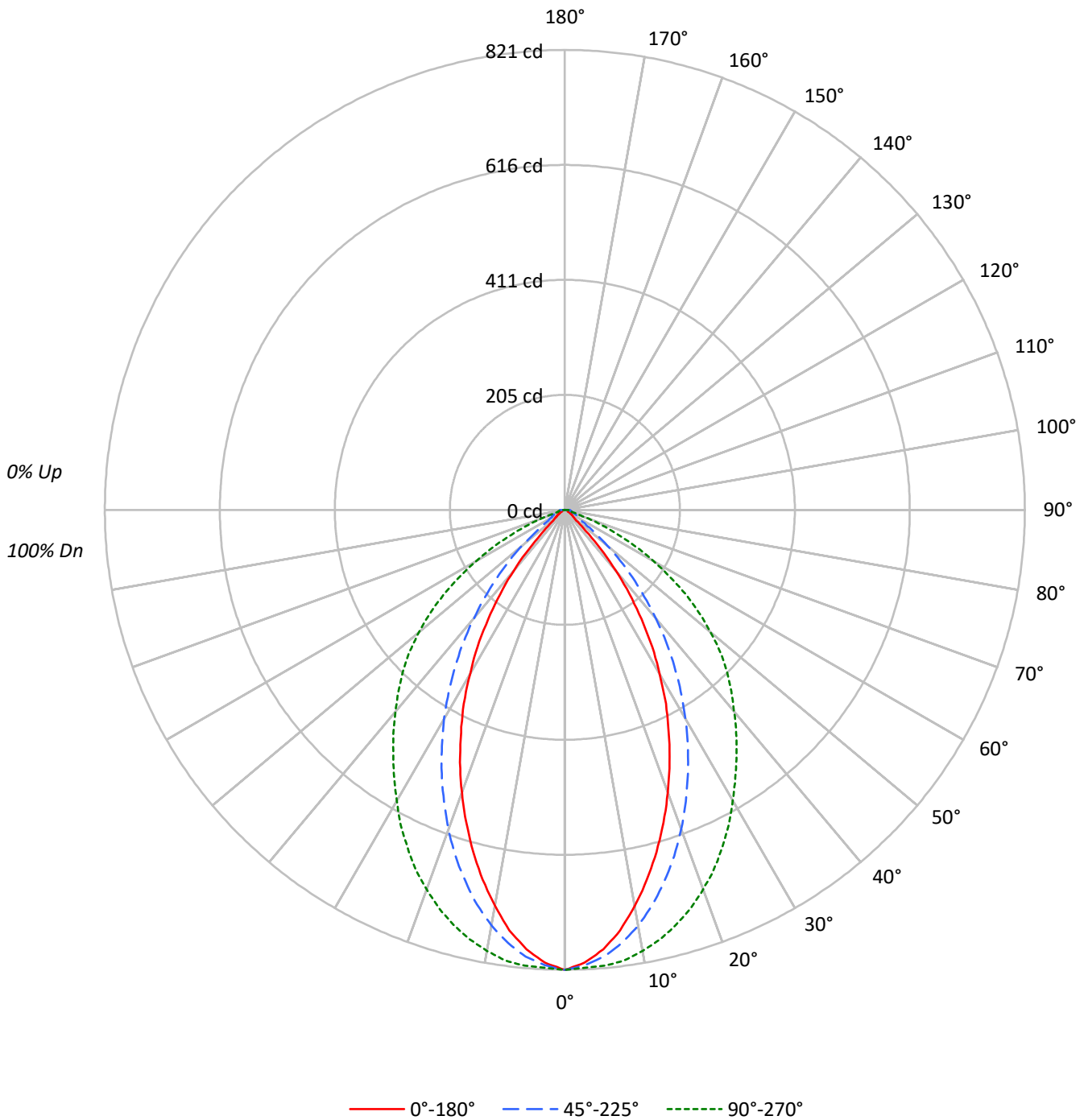
Lumens per Lamp: N/A
Luminaire Lumens: 1030.7 lumens
Efficiency: N/A
Efficacy: 28.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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				
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81				
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73				
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65				
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59				
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50				
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46				
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7071	7071	7071
5°	6807	6920	7061
10°	6277	6591	6991
15°	5634	6119	6836
20°	4924	5562	6609
25°	4165	4940	6315
30°	3364	4283	5959
35°	2504	3579	5615
40°	1589	2837	5282
45°	636	2080	4981
50°	277	1326	4547
55°	212	686	3968
60°	150	468	3147
65°	110	465	2150
70°	111	410	987
75°	146	436	399
80°	218	486	431
85°	435	860	642

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4981 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.2	7.3
10°-20°	193.9	18.8
20°-30°	244.9	23.8
30°-40°	224.9	21.8
40°-50°	153.4	14.9
50°-60°	83.2	8.1
60°-70°	35.3	3.4
70°-80°	12.2	1.2
80°-90°	7.8	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°	514.0	49.9
0°-40°	738.9	71.7
0°-60°	975.5	94.6
0°-90°	1030.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1030.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	821	821	821	821	821	
5°	788	800	801	807	817	73
15°	632	653	686	735	767	176
25°	438	467	520	600	665	200
35°	238	270	340	447	534	148
45°	52	84	171	302	409	48
55°	14	15	46	166	264	13
65°	5	6	23	52	106	6
75°	4	12	13	12	12	5
85°	4	9	9	9	6	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	821.2	821.2	821.2	821.2	821.2
2.5°	809.3	819.1	813.6	815.8	818.0
5°	787.5	799.5	800.6	807.1	816.9
7.5°	757.1	771.2	779.9	796.2	811.4
10°	717.9	735.3	753.8	779.9	799.5
12.5°	676.6	695.1	722.3	759.2	785.3
15°	632.0	652.6	686.4	735.3	766.8
17.5°	585.2	608.0	648.3	705.9	746.2
20°	537.3	562.4	607.0	672.2	721.2
22.5°	488.4	514.5	563.4	637.4	695.1
25°	438.4	466.6	519.9	600.4	664.6
27.5°	390.5	416.6	475.3	563.4	634.1
30°	338.3	367.7	430.7	525.4	599.3
32.5°	290.4	318.7	385.1	486.2	566.7
35°	238.2	269.8	340.5	447.1	534.1
37.5°	189.3	219.7	296.9	410.1	502.5
40°	141.4	172.9	252.4	373.1	469.9
42.5°	94.6	128.4	209.9	335.0	439.4
45°	52.2	83.8	170.8	302.4	409.0
47.5°	27.2	45.7	133.8	269.8	376.4
50°	20.7	25.0	99.0	233.9	339.4
52.5°	17.4	18.5	67.4	198.0	302.4
55°	14.1	15.2	45.7	166.4	264.3
57.5°	10.9	12.0	32.6	136.0	221.9
60°	8.7	9.8	27.2	104.4	182.7
62.5°	6.5	7.6	26.1	77.2	143.6
65°	5.4	6.5	22.8	52.2	105.5
67.5°	4.4	6.5	19.6	33.7	70.7
70°	4.4	8.7	16.3	21.8	39.2
72.5°	4.4	9.8	14.1	14.1	14.1
75°	4.4	12.0	13.1	12.0	12.0
77.5°	4.4	10.9	10.9	10.9	10.9
80°	4.4	9.8	9.8	9.8	8.7
82.5°	4.4	8.7	9.8	9.8	7.6
85°	4.4	8.7	8.7	8.7	6.5
87.5°	3.3	8.7	8.7	8.7	4.4
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	0.00	0.00	0.00	0.00	0.00	15.24	16.52	15.60	16.83	17.14
	3H	0.00	0.00	0.00	0.23	0.60	15.60	16.72	15.98	17.05	17.42
	4H	0.16	1.21	0.57	1.56	1.95	15.56	16.61	15.97	16.96	17.35
	6H	1.54	2.50	1.95	2.87	3.27	15.54	16.50	15.95	16.87	17.26
	8H	2.22	3.13	2.65	3.52	3.93	15.53	16.44	15.96	16.83	17.23
	12H	3.03	3.90	3.46	4.28	4.71	15.52	16.39	15.96	16.78	17.21
4H	2H	0.94	1.98	1.34	2.34	2.72	15.04	16.09	15.45	16.44	16.83
	3H	2.36	3.21	2.77	3.62	4.02	15.44	16.29	15.85	16.70	17.10
	4H	3.82	4.58	4.25	5.00	5.45	15.42	16.18	15.85	16.60	17.04
	6H	5.07	5.73	5.53	6.17	6.64	15.44	16.09	15.90	16.54	17.01
	8H	5.64	6.26	6.11	6.70	7.18	15.45	16.06	15.92	16.51	16.98
	12H	6.32	6.86	6.81	7.35	7.82	15.48	16.02	15.97	16.51	16.98
8H	4H	4.89	5.51	5.36	5.96	6.43	15.32	15.93	15.79	16.38	16.85
	6H	6.51	7.01	7.01	7.51	7.99	15.37	15.87	15.87	16.37	16.85
	8H	7.34	7.79	7.87	8.31	8.80	15.43	15.88	15.95	16.39	16.89
	12H	8.31	8.71	8.83	9.21	9.78	15.54	15.94	16.06	16.44	17.01
12H	4H	5.08	5.62	5.57	6.11	6.58	15.28	15.82	15.77	16.31	16.78
	6H	6.85	7.31	7.38	7.82	8.31	15.34	15.79	15.86	16.30	16.80
	8H	7.87	8.27	8.39	8.77	9.34	15.44	15.84	15.96	16.34	16.91