

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: P1061009

Luminaire Tested: S124RDR-H795D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061009
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-H795D935-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

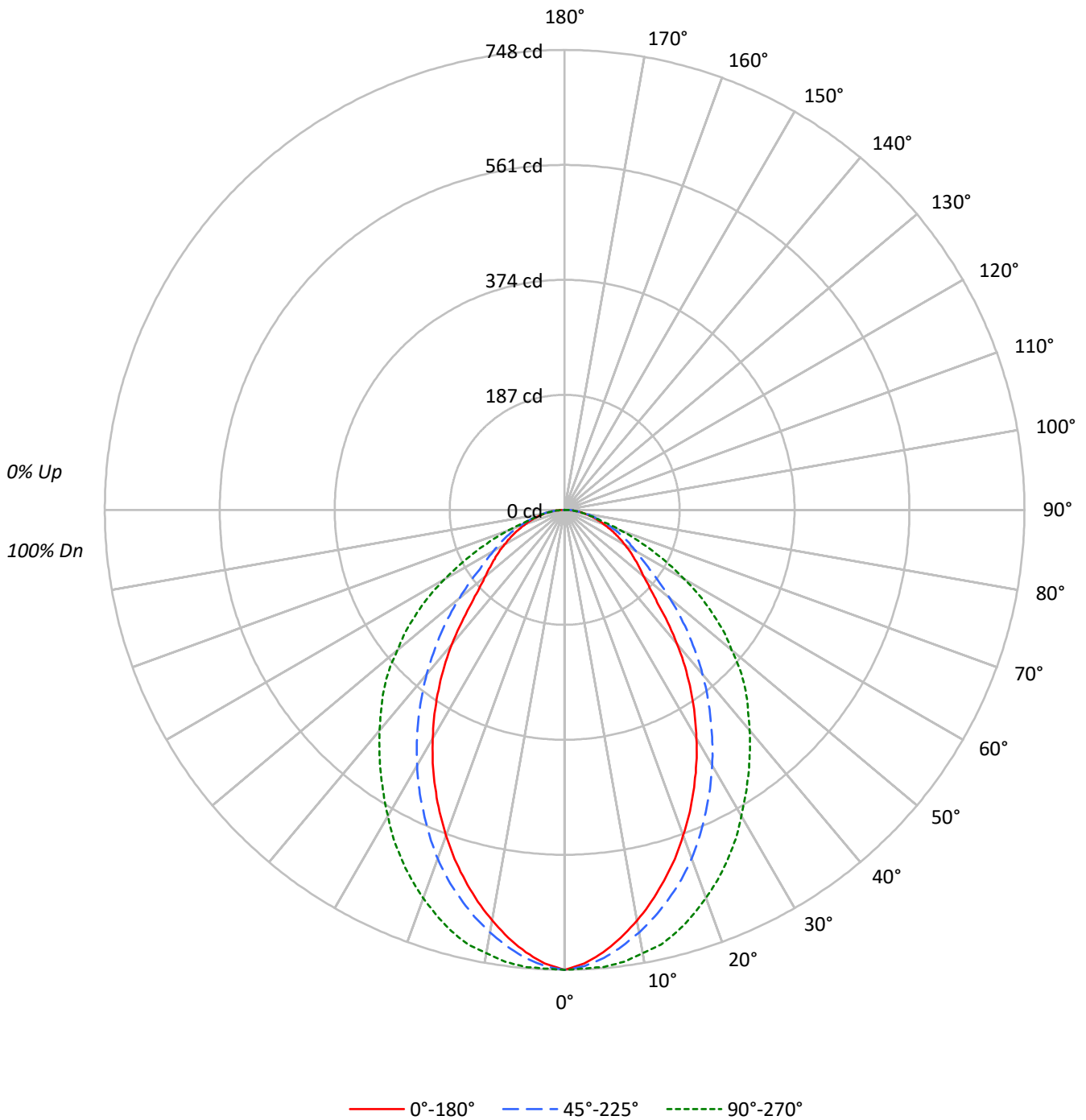
Lumens per Lamp: N/A
Luminaire Lumens: 1362.2 lumens
Efficiency: N/A
Efficacy: 58.0 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57				
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50				
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45				
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41				
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6443	6443	6443
5°	6244	6326	6448
10°	5932	6103	6405
15°	5566	5838	6328
20°	5167	5534	6159
25°	4732	5156	5961
30°	4266	4773	5716
35°	3759	4353	5483
40°	3200	3923	5263
45°	2598	3467	5072
50°	2248	2983	4749
55°	2084	2531	4403
60°	1944	2282	3863
65°	1822	2141	3211
70°	1699	1974	2430
75°	1617	1827	1747
80°	1517	1671	1478
85°	1393	1551	1166

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5072 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	5.1
10°-20°	185.7	13.6
20°-30°	253.5	18.6
30°-40°	265.6	19.5
40°-50°	229.9	16.9
50°-60°	172.8	12.7
60°-70°	111.4	8.2
70°-80°	57.1	4.2
80°-90°	17.1	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°	508.3	37.3
0°-40°	773.9	56.8
0°-60°	1176.6	86.4
0°-90°	1362.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1362.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	748	748	748	748	748	
5°	722	733	732	737	746	68
15°	624	640	655	685	710	175
25°	498	517	543	585	627	229
35°	358	378	414	469	522	223
45°	213	235	285	354	416	168
55°	139	144	169	241	293	125
65°	89	91	105	127	158	89
75°	49	54	55	54	52	51
85°	14	16	16	15	12	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	748.2	748.2	748.2	748.2	748.2
2.5°	738.8	748.2	742.7	744.3	746.7
5°	722.3	733.3	731.8	737.2	745.9
7.5°	702.0	713.7	716.1	728.6	741.2
10°	678.4	691.8	698.0	716.9	732.5
12.5°	652.5	666.7	677.6	701.2	723.9
15°	624.3	640.0	654.9	684.7	709.8
17.5°	595.3	611.0	630.6	663.5	691.8
20°	563.9	581.2	603.9	638.4	672.1
22.5°	531.8	549.8	574.1	611.8	651.0
25°	498.0	516.9	542.7	585.1	627.4
27.5°	464.3	483.1	512.2	556.9	603.1
30°	429.0	448.6	480.0	528.6	574.9
32.5°	393.7	414.9	447.1	498.8	548.2
35°	357.6	378.0	414.1	469.0	521.6
37.5°	321.6	342.7	381.2	440.0	494.9
40°	284.7	306.7	349.0	411.0	468.2
42.5°	247.8	271.4	316.1	381.2	441.6
45°	213.3	235.3	284.7	354.5	416.5
47.5°	187.4	202.4	253.3	328.6	388.2
50°	167.8	175.7	222.7	300.4	354.5
52.5°	152.9	158.4	194.5	269.8	327.1
55°	138.8	143.5	168.6	240.8	293.3
57.5°	126.3	128.6	149.0	212.5	261.2
60°	112.9	115.3	132.5	182.0	224.3
62.5°	101.2	102.7	119.2	152.9	190.6
65°	89.4	91.0	105.1	127.1	157.6
67.5°	78.4	80.8	91.8	103.5	125.5
70°	67.5	72.2	78.4	83.9	96.5
72.5°	58.0	62.7	65.9	67.5	68.2
75°	48.6	54.1	54.9	54.1	52.5
77.5°	39.2	43.9	43.9	42.4	40.8
80°	30.6	34.5	33.7	32.2	29.8
82.5°	22.7	25.1	24.3	22.7	20.4
85°	14.1	16.5	15.7	14.9	11.8
87.5°	7.1	9.4	8.6	7.8	4.7
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	12.90	14.39	13.27	14.70	15.02	16.68	18.16	17.04	18.47	18.79
	3H	14.56	15.89	14.94	16.22	16.58	17.79	19.12	18.17	19.45	19.81
	4H	15.23	16.48	15.63	16.82	17.20	18.08	19.33	18.48	19.68	20.06
	6H	15.74	16.89	16.16	17.26	17.65	18.28	19.43	18.69	19.80	20.19
	8H	15.92	17.02	16.35	17.41	17.81	18.33	19.43	18.76	19.82	20.22
	12H	16.05	17.10	16.48	17.48	17.91	18.36	19.41	18.79	19.79	20.22
4H	2H	13.69	14.93	14.09	15.28	15.66	16.84	18.08	17.24	18.43	18.81
	3H	15.55	16.58	15.96	16.98	17.38	18.15	19.18	18.56	19.58	19.98
	4H	16.36	17.29	16.79	17.70	18.14	18.56	19.49	18.99	19.90	20.34
	6H	17.00	17.81	17.46	18.25	18.72	18.87	19.68	19.33	20.12	20.58
	8H	17.23	17.99	17.70	18.43	18.90	18.97	19.72	19.43	20.16	20.63
	12H	17.40	18.08	17.89	18.56	19.03	19.03	19.70	19.51	20.18	20.65
8H	4H	16.71	17.46	17.17	17.91	18.37	18.69	19.44	19.15	19.89	20.36
	6H	17.50	18.12	18.00	18.61	19.09	19.10	19.73	19.60	20.22	20.70
	8H	17.82	18.38	18.34	18.89	19.38	19.25	19.81	19.77	20.32	20.81
	12H	18.08	18.58	18.60	19.07	19.64	19.38	19.87	19.89	20.36	20.93
12H	4H	16.74	17.41	17.22	17.89	18.36	18.69	19.37	19.18	19.85	20.32
	6H	17.56	18.12	18.08	18.63	19.12	19.12	19.68	19.64	20.19	20.68
	8H	17.95	18.44	18.46	18.93	19.50	19.33	19.82	19.84	20.31	20.88