

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: P1060265

Luminaire Tested: S124RDRP-S1020D930-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060265
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: S124RDRP-S1020D930-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

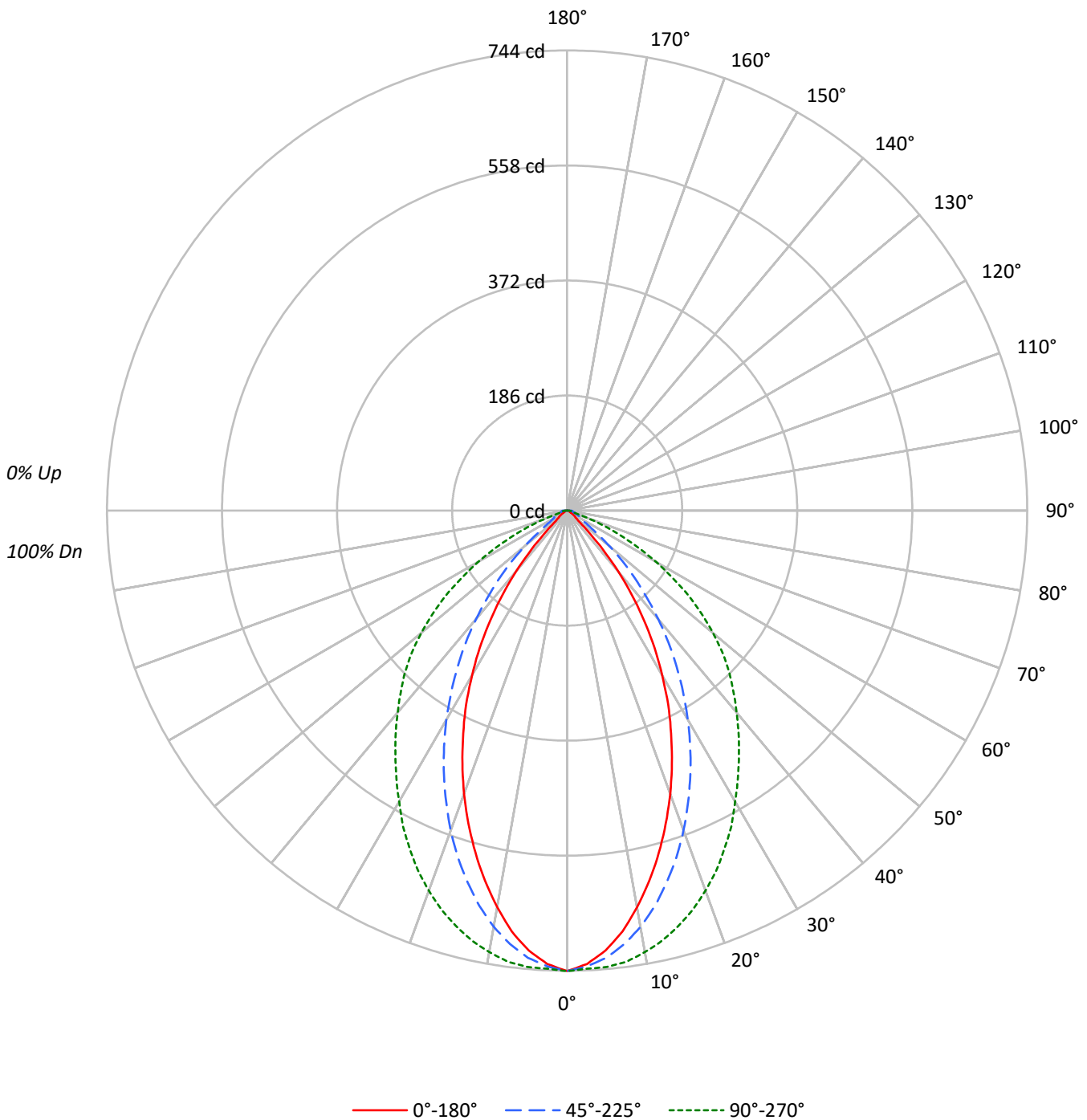
Lumens per Lamp: N/A
Luminaire Lumens: 934.4 lumens
Efficiency: N/A
Efficacy: 26.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	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°	6411	6411	6411
5°	6171	6274	6402
10°	5691	5976	6338
15°	5107	5547	6198
20°	4464	5042	5991
25°	3776	4479	5725
30°	3050	3883	5402
35°	2271	3244	5090
40°	1441	2572	4789
45°	576	1885	4516
50°	251	1202	4122
55°	192	622	3597
60°	136	425	2854
65°	100	422	1950
70°	98	373	894
75°	130	393	359
80°	193	441	392
85°	385	781	583

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4516 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.1	7.3
10°-20°	175.8	18.8
20°-30°	222.0	23.8
30°-40°	203.9	21.8
40°-50°	139.0	14.9
50°-60°	75.4	8.1
60°-70°	32.0	3.4
70°-80°	11.1	1.2
80°-90°	7.0	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°	465.9	49.9
0°-40°	669.9	71.7
0°-60°	884.3	94.6
0°-90°	934.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	934.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	744	744	744	744	744	
5°	714	725	726	732	741	66
15°	573	592	622	667	695	160
25°	397	423	471	544	602	182
35°	216	245	309	405	484	134
45°	47	76	155	274	371	44
55°	13	14	41	151	240	12
65°	5	6	21	47	96	5
75°	4	11	12	11	11	4
85°	4	8	8	8	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	744.5	744.5	744.5	744.5	744.5
2.5°	733.7	742.5	737.6	739.6	741.5
5°	713.9	724.8	725.8	731.7	740.6
7.5°	686.3	699.1	707.0	721.8	735.6
10°	650.8	666.6	683.4	707.0	724.8
12.5°	613.3	630.1	654.8	688.3	712.0
15°	572.9	591.7	622.2	666.6	695.2
17.5°	530.5	551.2	587.7	640.0	676.5
20°	487.1	509.8	550.2	609.4	653.8
22.5°	442.8	466.4	510.8	577.8	630.1
25°	397.4	423.0	471.4	544.3	602.5
27.5°	354.0	377.7	430.9	510.8	574.9
30°	306.7	333.3	390.5	476.3	543.3
32.5°	263.3	288.9	349.1	440.8	513.8
35°	216.0	244.6	308.6	405.3	484.2
37.5°	171.6	199.2	269.2	371.8	455.6
40°	128.2	156.8	228.8	338.2	426.0
42.5°	85.8	116.4	190.3	303.7	398.4
45°	47.3	75.9	154.8	274.1	370.8
47.5°	24.7	41.4	121.3	244.6	341.2
50°	18.7	22.7	89.7	212.0	307.7
52.5°	15.8	16.8	61.1	179.5	274.1
55°	12.8	13.8	41.4	150.9	239.6
57.5°	9.9	10.8	29.6	123.3	201.2
60°	7.9	8.9	24.7	94.7	165.7
62.5°	5.9	6.9	23.7	70.0	130.2
65°	4.9	5.9	20.7	47.3	95.7
67.5°	3.9	5.9	17.7	30.6	64.1
70°	3.9	7.9	14.8	19.7	35.5
72.5°	3.9	8.9	12.8	12.8	12.8
75°	3.9	10.8	11.8	10.8	10.8
77.5°	3.9	9.9	9.9	9.9	9.9
80°	3.9	8.9	8.9	8.9	7.9
82.5°	3.9	7.9	8.9	8.9	6.9
85°	3.9	7.9	7.9	7.9	5.9
87.5°	3.0	7.9	7.9	7.9	3.9
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	14.90	16.18	15.26	16.49	16.80
	3H	0.00	0.00	0.00	0.00	0.21	15.25	16.38	15.64	16.71	17.08
	4H	0.00	0.82	0.17	1.17	1.55	15.22	16.27	15.62	16.62	17.01
	6H	1.13	2.10	1.55	2.47	2.86	15.20	16.16	15.61	16.53	16.92
	8H	1.81	2.72	2.24	3.11	3.52	15.19	16.10	15.62	16.49	16.89
	12H	2.61	3.48	3.04	3.86	4.29	15.18	16.05	15.62	16.44	16.87
4H	2H	0.59	1.64	0.99	1.99	2.37	14.70	15.75	15.11	16.10	16.49
	3H	2.01	2.87	2.42	3.27	3.67	15.10	15.95	15.51	16.36	16.76
	4H	3.45	4.22	3.89	4.64	5.08	15.08	15.84	15.51	16.26	16.70
	6H	4.70	5.36	5.17	5.81	6.27	15.10	15.75	15.56	16.20	16.67
	8H	5.27	5.88	5.74	6.33	6.80	15.11	15.72	15.58	16.17	16.64
	12H	5.94	6.48	6.42	6.96	7.44	15.14	15.68	15.63	16.17	16.64
8H	4H	4.53	5.15	5.00	5.60	6.07	14.98	15.59	15.45	16.04	16.51
	6H	6.15	6.65	6.65	7.15	7.63	15.03	15.53	15.53	16.03	16.51
	8H	6.98	7.43	7.51	7.95	8.44	15.09	15.54	15.61	16.05	16.55
	12H	7.95	8.35	8.46	8.84	9.41	15.20	15.60	15.72	16.10	16.67
12H	4H	4.72	5.27	5.21	5.75	6.22	14.94	15.48	15.43	15.96	16.44
	6H	6.50	6.95	7.02	7.47	7.96	15.00	15.45	15.52	15.96	16.46
	8H	7.52	7.92	8.04	8.41	8.99	15.10	15.50	15.62	16.00	16.57