

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: P1060916

Luminaire Tested: S124RDR-H575D930-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060916
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-H575D930-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER 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

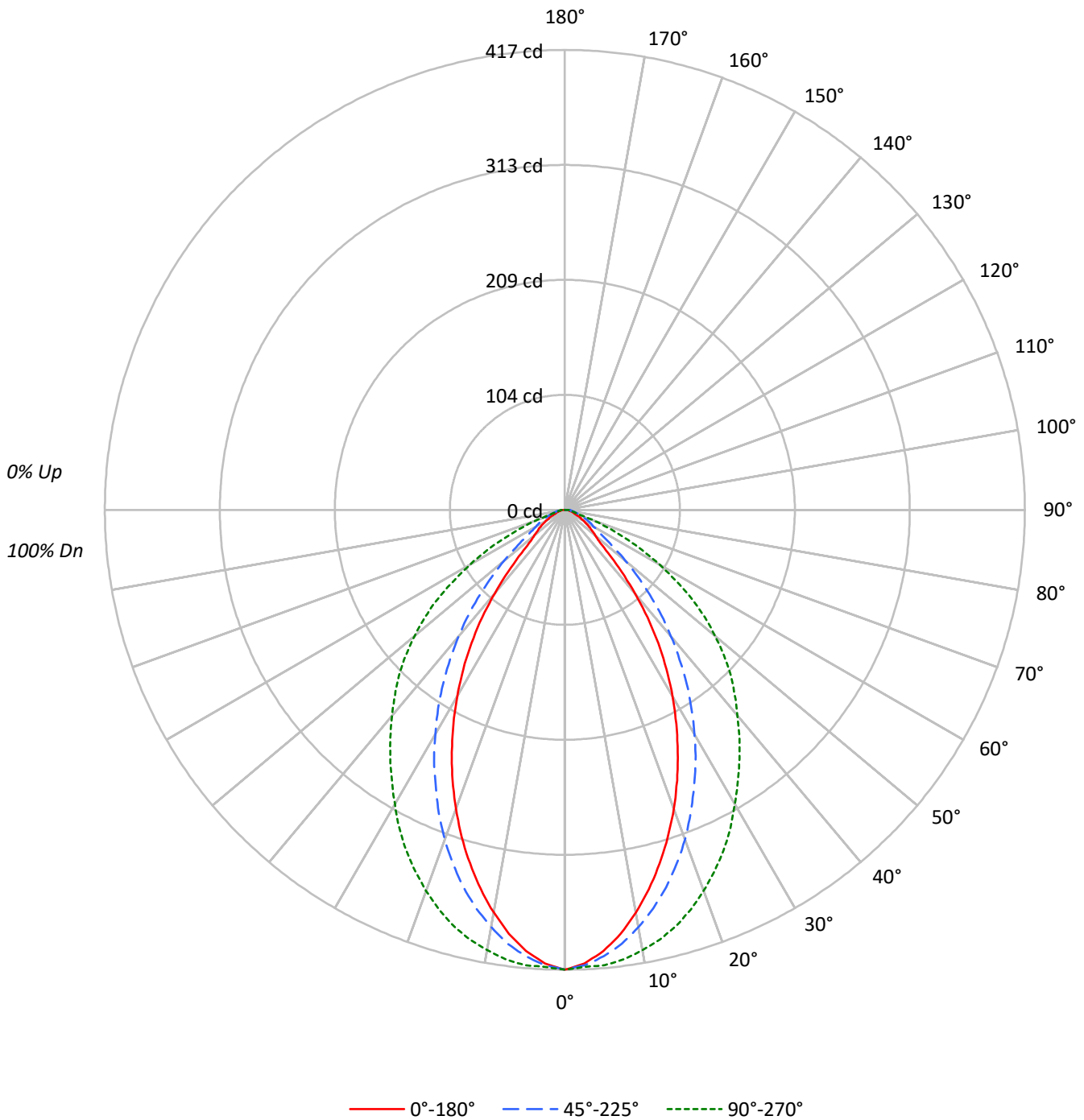
Lumens per Lamp: N/A
Luminaire Lumens: 586.3 lumens
Efficiency: N/A
Efficacy: 33.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79				79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70				70
4	90	80	73	68	88	79	73	67	77	71	67	75	70	66	73	68	65	63				63
5	84	73	66	61	82	72	65	60	70	64	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	49	47				47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43				43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3590	3590	3590
5°	3471	3512	3581
10°	3242	3359	3544
15°	2961	3159	3480
20°	2645	2917	3369
25°	2303	2631	3236
30°	1941	2337	3065
35°	1551	2025	2899
40°	1115	1682	2737
45°	672	1324	2590
50°	484	959	2381
55°	407	646	2111
60°	329	512	1700
65°	259	465	1221
70°	227	388	655
75°	213	353	316
80°	208	367	288
85°	316	524	366

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2590 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.3	6.5
10°-20°	100.3	17.1
20°-30°	130.1	22.2
30°-40°	125.1	21.3
40°-50°	92.8	15.8
50°-60°	56.9	9.7
60°-70°	27.6	4.7
70°-80°	10.5	1.8
80°-90°	4.7	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°	268.7	45.8
0°-40°	393.8	67.2
0°-60°	543.4	92.7
0°-90°	586.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	586.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	417	417	417	417	417	
5°	402	407	406	410	414	37
15°	332	342	354	376	390	93
25°	242	255	277	312	341	111
35°	148	161	193	238	276	91
45°	55	69	109	166	213	46
55°	27	28	43	97	141	24
65°	13	14	23	36	60	13
75°	6	10	11	10	10	7
85°	3	5	5	5	4	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	416.9	416.9	416.9	416.9	416.9
2.5°	411.6	416.4	413.2	414.3	414.8
5°	401.6	407.4	406.3	410.1	414.3
7.5°	387.8	394.7	396.8	404.2	411.1
10°	370.8	379.3	384.1	396.3	405.3
12.5°	352.2	361.3	370.3	386.7	398.9
15°	332.1	341.6	354.4	375.6	390.4
17.5°	310.9	321.5	336.8	362.3	379.8
20°	288.6	299.7	318.3	346.4	367.6
22.5°	265.8	277.4	298.1	329.4	354.4
25°	242.4	254.6	276.9	312.4	340.6
27.5°	218.6	231.3	256.7	294.4	325.2
30°	195.2	207.4	235.0	275.8	308.2
32.5°	171.3	184.1	213.8	256.7	291.8
35°	147.5	160.7	192.6	238.2	275.8
37.5°	123.1	137.4	170.8	220.1	259.9
40°	99.2	113.0	149.6	201.6	243.5
42.5°	75.9	90.7	129.4	183.0	228.1
45°	55.2	69.0	108.7	166.0	212.7
47.5°	41.4	49.9	89.6	150.1	195.7
50°	36.1	37.7	71.6	132.6	177.7
52.5°	31.3	32.4	55.7	113.5	159.7
55°	27.1	28.1	43.0	97.1	140.6
57.5°	22.8	23.9	34.5	81.2	118.8
60°	19.1	20.2	29.7	64.7	98.7
62.5°	15.9	16.4	26.5	49.3	79.0
65°	12.7	13.8	22.8	36.1	59.9
67.5°	10.6	11.7	18.6	24.9	41.9
70°	9.0	11.7	15.4	17.5	26.0
72.5°	7.4	10.6	12.7	12.2	12.2
75°	6.4	10.1	10.6	9.5	9.5
77.5°	5.3	9.0	8.5	8.0	7.4
80°	4.2	7.4	7.4	6.4	5.8
82.5°	3.7	5.8	5.8	5.8	4.8
85°	3.2	5.3	5.3	4.8	3.7
87.5°	2.1	4.2	4.8	4.2	2.7
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	4.26	5.60	4.63	5.91	6.23	13.36	14.69	13.72	15.01	15.32
	3H	5.31	6.49	5.69	6.82	7.19	13.86	15.04	14.24	15.37	15.74
	4H	5.82	6.93	6.22	7.28	7.66	13.87	14.98	14.27	15.33	15.71
	6H	6.27	7.28	6.68	7.65	8.05	13.87	14.89	14.28	15.26	15.65
	8H	6.45	7.42	6.88	7.81	8.21	13.86	14.83	14.29	15.22	15.62
	12H	6.67	7.59	7.10	7.97	8.40	13.86	14.79	14.30	15.17	15.60
4H	2H	5.35	6.46	5.75	6.81	7.19	13.24	14.35	13.65	14.70	15.08
	3H	6.62	7.53	7.04	7.93	8.34	13.82	14.73	14.23	15.13	15.53
	4H	7.33	8.14	7.76	8.56	9.00	13.87	14.68	14.30	15.10	15.54
	6H	7.96	8.65	8.42	9.10	9.57	13.92	14.62	14.38	15.07	15.53
	8H	8.20	8.85	8.67	9.30	9.77	13.94	14.59	14.41	15.04	15.51
	12H	8.47	9.05	8.96	9.53	10.01	13.97	14.55	14.46	15.03	15.51
8H	4H	7.76	8.41	8.22	8.86	9.33	13.82	14.47	14.29	14.92	15.39
	6H	8.63	9.16	9.13	9.66	10.14	13.91	14.45	14.41	14.94	15.42
	8H	9.03	9.51	9.55	10.02	10.52	13.97	14.45	14.49	14.97	15.46
	12H	9.51	9.93	10.02	10.43	11.00	14.07	14.50	14.59	14.99	15.56
12H	4H	7.80	8.38	8.28	8.86	9.33	13.79	14.37	14.28	14.85	15.32
	6H	8.74	9.22	9.26	9.73	10.22	13.89	14.37	14.41	14.89	15.38
	8H	9.25	9.68	9.76	10.17	10.74	13.99	14.42	14.51	14.91	15.49