

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: P1060997

Luminaire Tested: S124RDR-H795D930-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060997
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-H795D930-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

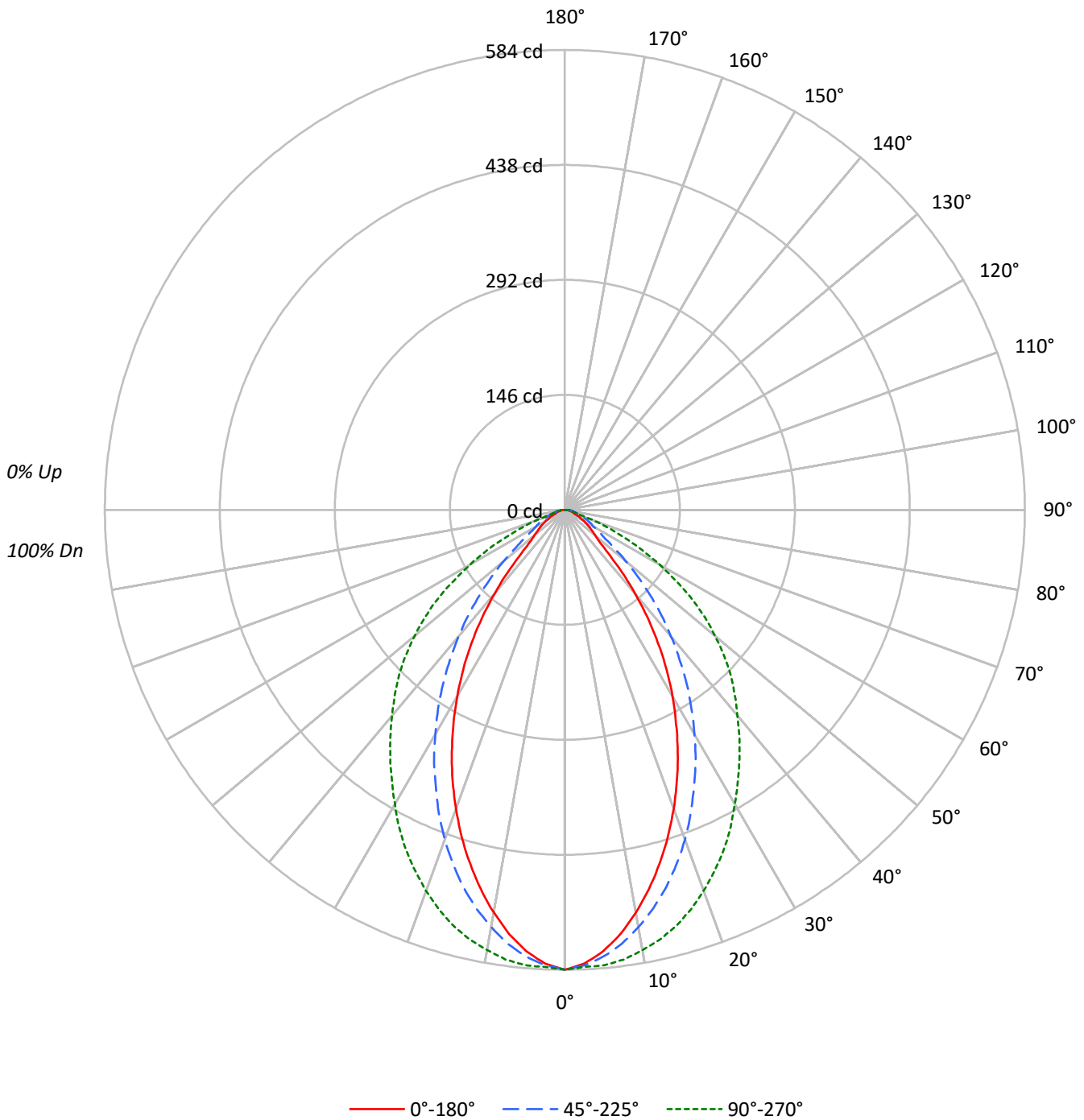
Lumens per Lamp: N/A
Luminaire Lumens: 821.1 lumens
Efficiency: N/A
Efficacy: 34.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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				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°	5028	5028	5028
5°	4861	4919	5015
10°	4541	4703	4963
15°	4146	4424	4875
20°	3703	4085	4718
25°	3226	3685	4532
30°	2718	3272	4292
35°	2171	2835	4061
40°	1561	2355	3833
45°	941	1855	3628
50°	677	1344	3334
55°	569	904	2956
60°	460	716	2380
65°	363	650	1710
70°	317	541	916
75°	296	496	446
80°	293	516	407
85°	445	731	514

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3628 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.6	6.5
10°-20°	140.5	17.1
20°-30°	182.2	22.2
30°-40°	175.2	21.3
40°-50°	130.0	15.8
50°-60°	79.6	9.7
60°-70°	38.7	4.7
70°-80°	14.7	1.8
80°-90°	6.6	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°	376.3	45.8
0°-40°	551.5	67.2
0°-60°	761.1	92.7
0°-90°	821.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	821.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	562	571	569	574	580	52
15°	465	478	496	526	547	130
25°	340	357	388	438	477	155
35°	206	225	270	334	386	128
45°	77	97	152	232	298	64
55°	38	39	60	136	197	34
65°	18	19	32	50	84	18
75°	9	14	15	13	13	9
85°	4	7	7	7	5	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	583.9	583.9	583.9	583.9	583.9
2.5°	576.5	583.2	578.7	580.2	581.0
5°	562.4	570.6	569.1	574.3	580.2
7.5°	543.1	552.7	555.7	566.1	575.8
10°	519.3	531.2	537.9	555.0	567.6
12.5°	493.3	505.9	518.6	541.6	558.7
15°	465.1	478.4	496.3	526.0	546.8
17.5°	435.4	450.2	471.8	507.4	531.9
20°	404.1	419.7	445.8	485.1	514.8
22.5°	372.2	388.5	417.5	461.4	496.3
25°	339.5	356.6	387.8	437.6	477.0
27.5°	306.1	323.9	359.6	412.3	455.4
30°	273.4	290.5	329.1	386.3	431.6
32.5°	240.0	257.8	299.4	359.6	408.6
35°	206.5	225.1	269.7	333.6	386.3
37.5°	172.4	192.4	239.2	308.3	364.0
40°	138.9	158.2	209.5	282.3	341.0
42.5°	106.2	127.0	181.3	256.3	319.5
45°	77.3	96.6	152.3	232.5	297.9
47.5°	57.9	69.8	125.6	210.2	274.1
50°	50.5	52.7	100.3	185.7	248.9
52.5°	43.8	45.3	78.0	159.0	223.6
55°	37.9	39.4	60.2	136.0	196.9
57.5°	31.9	33.4	48.3	113.7	166.4
60°	26.7	28.2	41.6	90.6	138.2
62.5°	22.3	23.0	37.1	69.1	110.7
65°	17.8	19.3	31.9	50.5	83.9
67.5°	14.9	16.3	26.0	34.9	58.7
70°	12.6	16.3	21.5	24.5	36.4
72.5°	10.4	14.9	17.8	17.1	17.1
75°	8.9	14.1	14.9	13.4	13.4
77.5°	7.4	12.6	11.9	11.1	10.4
80°	5.9	10.4	10.4	8.9	8.2
82.5°	5.2	8.2	8.2	8.2	6.7
85°	4.5	7.4	7.4	6.7	5.2
87.5°	3.0	5.9	6.7	5.9	3.7
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	5.42	6.76	5.78	7.07	7.38	14.53	15.86	14.89	16.18	16.49
	3H	6.46	7.65	6.84	7.98	8.34	15.03	16.21	15.41	16.54	16.91
	4H	6.98	8.08	7.38	8.43	8.82	15.04	16.15	15.44	16.50	16.88
	6H	7.43	8.44	7.84	8.81	9.21	15.04	16.06	15.45	16.43	16.82
	8H	7.62	8.58	8.05	8.97	9.38	15.04	16.00	15.47	16.39	16.80
	12H	7.83	8.75	8.26	9.14	9.57	15.04	15.96	15.47	16.34	16.77
4H	2H	6.51	7.62	6.91	7.97	8.35	14.41	15.52	14.82	15.87	16.25
	3H	7.78	8.69	8.19	9.09	9.49	14.99	15.90	15.40	16.30	16.70
	4H	8.49	9.30	8.92	9.72	10.16	15.04	15.85	15.47	16.27	16.71
	6H	9.12	9.82	9.58	10.26	10.73	15.09	15.79	15.55	16.24	16.70
	8H	9.36	10.02	9.83	10.46	10.93	15.11	15.76	15.58	16.21	16.68
	12H	9.64	10.22	10.13	10.70	11.18	15.14	15.72	15.63	16.20	16.68
8H	4H	8.92	9.57	9.38	10.02	10.49	14.99	15.64	15.46	16.09	16.56
	6H	9.79	10.33	10.29	10.82	11.30	15.08	15.62	15.58	16.11	16.59
	8H	10.20	10.68	10.72	11.20	11.69	15.14	15.62	15.66	16.14	16.63
	12H	10.68	11.11	11.19	11.60	12.17	15.24	15.67	15.76	16.16	16.73
12H	4H	8.96	9.54	9.44	10.02	10.49	14.96	15.54	15.45	16.02	16.50
	6H	9.90	10.39	10.43	10.90	11.39	15.06	15.54	15.58	16.06	16.55
	8H	10.42	10.85	10.94	11.34	11.91	15.17	15.59	15.68	16.09	16.66