

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: P1060835

Luminaire Tested: S124RDR-H350D930-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060835
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-H350D930-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

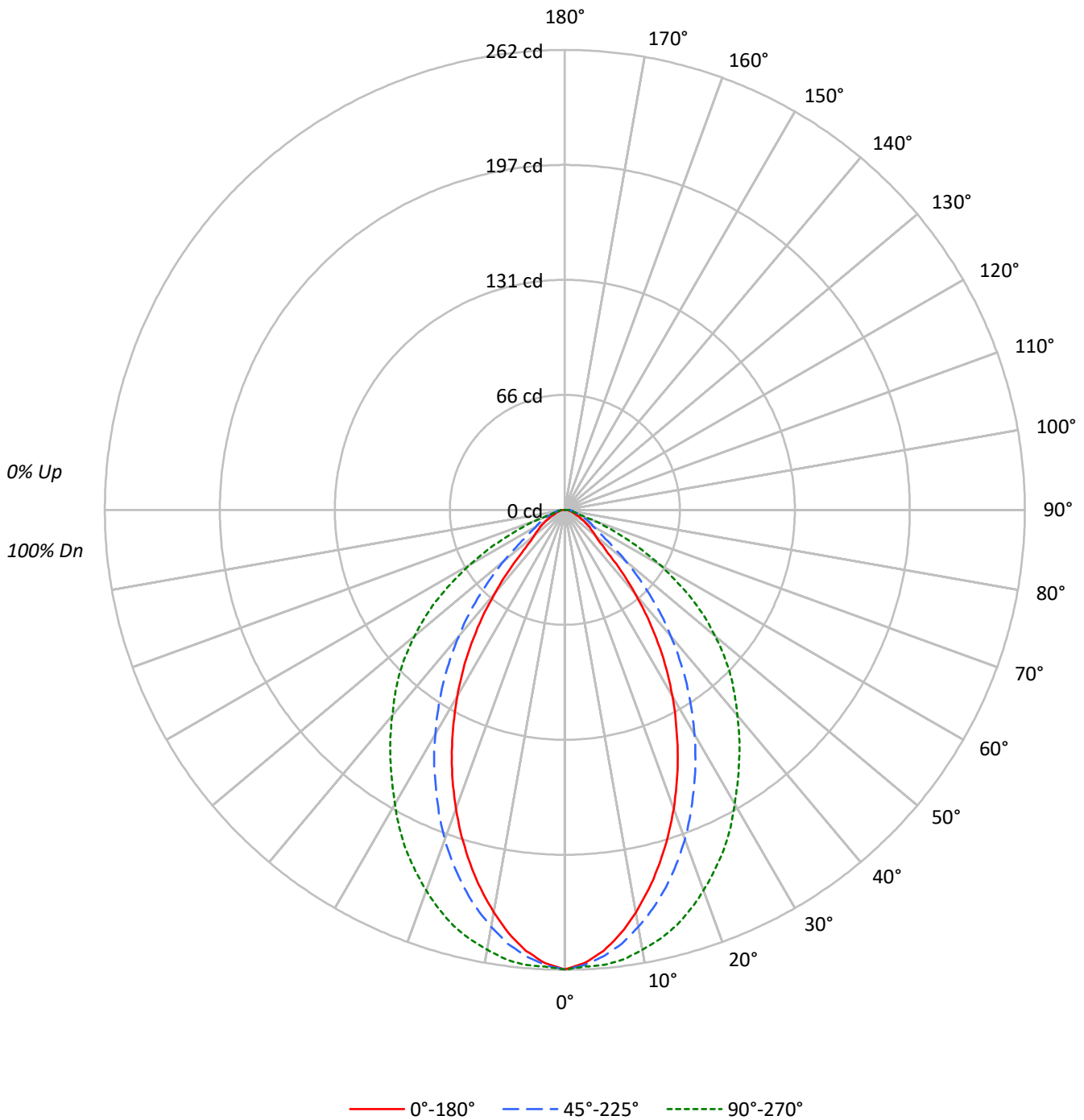
Lumens per Lamp: N/A
Luminaire Lumens: 368.2 lumens
Efficiency: N/A
Efficacy: 31.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	111	108	105	102	109	106	103	100	101	99	97		98	96	94		94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85		89	86	83		86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75		81	77	73		79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	67		75	70	66		73	68	65	63
5	84	73	66	61	82	72	65	60	70	64	60		69	63	59		67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54		63	58	54		62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49		59	53	49		58	52	49	47
8	69	58	50	45	68	57	50	45	56	49	45		55	49	45		54	48	45	43
9	65	54	46	42	64	53	46	42	52	46	41		51	45	41		50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38		48	42	38		47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2254	2254	2254
5°	2180	2206	2249
10°	2036	2109	2225
15°	1859	1984	2186
20°	1660	1832	2115
25°	1446	1652	2032
30°	1219	1468	1924
35°	973	1271	1821
40°	700	1056	1719
45°	421	832	1627
50°	304	603	1495
55°	255	405	1326
60°	207	322	1068
65°	163	291	766
70°	144	244	410
75°	133	223	200
80°	134	233	183
85°	198	326	227

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1627 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.0	6.5
10°-20°	63.0	17.1
20°-30°	81.7	22.2
30°-40°	78.5	21.3
40°-50°	58.3	15.8
50°-60°	35.7	9.7
60°-70°	17.4	4.7
70°-80°	6.6	1.8
80°-90°	3.0	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°	168.7	45.8
0°-40°	247.3	67.2
0°-60°	341.3	92.7
0°-90°	368.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	368.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	262	262	262	262	262	
5°	252	256	255	258	260	23
15°	208	214	222	236	245	58
25°	152	160	174	196	214	70
35°	93	101	121	150	173	57
45°	35	43	68	104	134	29
55°	17	18	27	61	88	15
65°	8	9	14	23	38	8
75°	4	6	7	6	6	4
85°	2	3	3	3	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	261.8	261.8	261.8	261.8	261.8
2.5°	258.5	261.5	259.5	260.2	260.5
5°	252.2	255.8	255.2	257.5	260.2
7.5°	243.5	247.8	249.2	253.8	258.2
10°	232.8	238.2	241.2	248.8	254.5
12.5°	221.2	226.8	232.5	242.8	250.5
15°	208.5	214.5	222.5	235.8	245.2
17.5°	195.2	201.9	211.5	227.5	238.5
20°	181.2	188.2	199.9	217.5	230.8
22.5°	166.9	174.2	187.2	206.9	222.5
25°	152.2	159.9	173.9	196.2	213.9
27.5°	137.2	145.2	161.2	184.9	204.2
30°	122.6	130.2	147.6	173.2	193.5
32.5°	107.6	115.6	134.2	161.2	183.2
35°	92.6	100.9	120.9	149.6	173.2
37.5°	77.3	86.3	107.3	138.2	163.2
40°	62.3	71.0	93.9	126.6	152.9
42.5°	47.6	57.0	81.3	114.9	143.2
45°	34.6	43.3	68.3	104.3	133.6
47.5°	26.0	31.3	56.3	94.3	122.9
50°	22.7	23.7	45.0	83.3	111.6
52.5°	19.7	20.3	35.0	71.3	100.3
55°	17.0	17.7	27.0	61.0	88.3
57.5°	14.3	15.0	21.7	51.0	74.6
60°	12.0	12.7	18.7	40.6	62.0
62.5°	10.0	10.3	16.7	31.0	49.6
65°	8.0	8.7	14.3	22.7	37.6
67.5°	6.7	7.3	11.7	15.7	26.3
70°	5.7	7.3	9.7	11.0	16.3
72.5°	4.7	6.7	8.0	7.7	7.7
75°	4.0	6.3	6.7	6.0	6.0
77.5°	3.3	5.7	5.3	5.0	4.7
80°	2.7	4.7	4.7	4.0	3.7
82.5°	2.3	3.7	3.7	3.7	3.0
85°	2.0	3.3	3.3	3.0	2.3
87.5°	1.3	2.7	3.0	2.7	1.7
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	2.64	3.98	3.00	4.29	4.61	11.74	13.08	12.10	13.39	13.71
	3H	3.69	4.87	4.06	5.20	5.57	12.24	13.43	12.62	13.76	14.12
	4H	4.20	5.31	4.60	5.66	6.04	12.25	13.36	12.66	13.71	14.10
	6H	4.65	5.67	5.07	6.04	6.43	12.25	13.27	12.67	13.64	14.04
	8H	4.84	5.81	5.27	6.20	6.60	12.25	13.22	12.68	13.61	14.01
	12H	5.05	5.97	5.49	6.36	6.79	12.25	13.17	12.68	13.55	13.98
4H	2H	3.73	4.84	4.13	5.19	5.57	11.63	12.73	12.03	13.09	13.47
	3H	5.00	5.91	5.42	6.31	6.72	12.21	13.11	12.62	13.52	13.92
	4H	5.71	6.52	6.14	6.94	7.38	12.25	13.06	12.69	13.48	13.93
	6H	6.34	7.04	6.81	7.49	7.96	12.31	13.01	12.77	13.45	13.92
	8H	6.59	7.24	7.06	7.69	8.16	12.32	12.98	12.79	13.43	13.90
	12H	6.86	7.44	7.35	7.92	8.40	12.36	12.94	12.84	13.42	13.89
8H	4H	6.14	6.79	6.60	7.24	7.71	12.20	12.86	12.67	13.30	13.77
	6H	7.02	7.56	7.52	8.05	8.53	12.30	12.83	12.80	13.33	13.81
	8H	7.43	7.91	7.95	8.43	8.92	12.36	12.84	12.88	13.36	13.85
	12H	7.90	8.33	8.42	8.82	9.39	12.46	12.88	12.97	13.38	13.95
12H	4H	6.18	6.76	6.67	7.24	7.71	12.18	12.75	12.66	13.24	13.71
	6H	7.14	7.62	7.66	8.13	8.62	12.28	12.76	12.80	13.27	13.77
	8H	7.66	8.08	8.17	8.58	9.15	12.38	12.81	12.90	13.30	13.88