

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: P1060844

Luminaire Tested: S124RDR-H350D935-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060844
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-H350D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

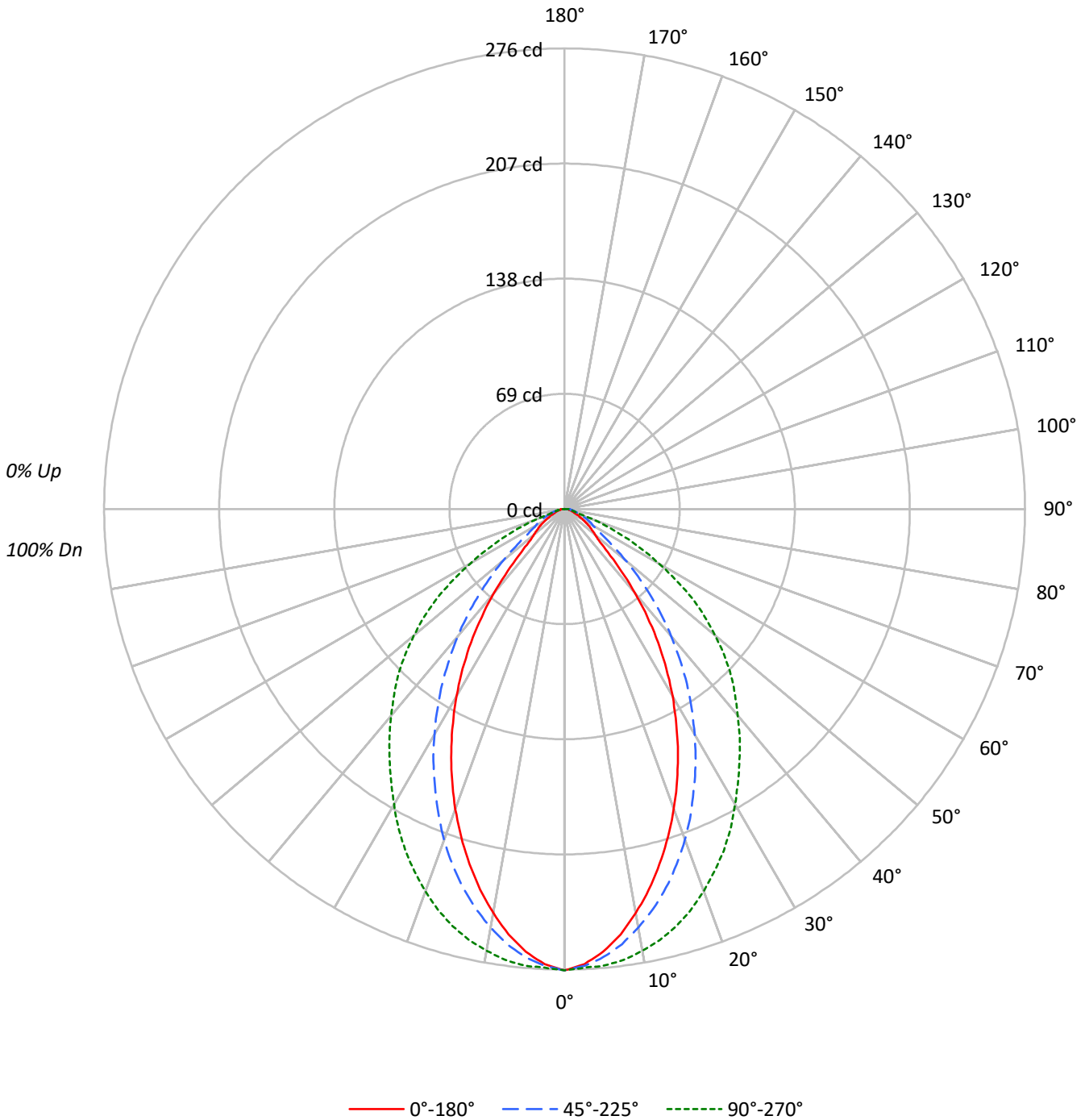
Lumens per Lamp: N/A
Luminaire Lumens: 388.8 lumens
Efficiency: N/A
Efficacy: 33.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	73	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	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2381	2381	2381
5°	2302	2330	2375
10°	2150	2227	2350
15°	1963	2095	2308
20°	1754	1934	2234
25°	1528	1744	2145
30°	1288	1549	2032
35°	1028	1342	1923
40°	740	1115	1815
45°	446	878	1718
50°	320	636	1578
55°	269	428	1399
60°	219	339	1126
65°	171	308	811
70°	151	257	433
75°	140	233	210
80°	139	243	193
85°	207	346	247

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1718 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.4	6.5
10°-20°	66.5	17.1
20°-30°	86.3	22.2
30°-40°	83.0	21.3
40°-50°	61.5	15.8
50°-60°	37.7	9.7
60°-70°	18.3	4.7
70°-80°	7.0	1.8
80°-90°	3.1	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°	178.2	45.8
0°-40°	261.1	67.2
0°-60°	360.4	92.7
0°-90°	388.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	388.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	276	276	276	276	276	
5°	266	270	270	272	275	25
15°	220	226	235	249	259	61
25°	161	169	184	207	226	73
35°	98	107	128	158	183	61
45°	37	46	72	110	141	30
55°	18	19	28	64	93	16
65°	8	9	15	24	40	9
75°	4	7	7	6	6	4
85°	2	4	4	3	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	276.5	276.5	276.5	276.5	276.5
2.5°	273.0	276.1	274.0	274.7	275.1
5°	266.3	270.2	269.5	271.9	274.7
7.5°	257.1	261.7	263.1	268.1	272.6
10°	245.9	251.5	254.7	262.8	268.8
12.5°	233.6	239.6	245.5	256.4	264.5
15°	220.2	226.5	235.0	249.1	258.9
17.5°	206.1	213.2	223.4	240.3	251.9
20°	191.4	198.8	211.1	229.7	243.8
22.5°	176.2	184.0	197.7	218.5	235.0
25°	160.8	168.9	183.6	207.2	225.8
27.5°	144.9	153.4	170.3	195.2	215.6
30°	129.5	137.5	155.8	182.9	204.4
32.5°	113.6	122.1	141.8	170.3	193.5
35°	97.8	106.6	127.7	157.9	182.9
37.5°	81.6	91.1	113.3	146.0	172.4
40°	65.8	74.9	99.2	133.7	161.5
42.5°	50.3	60.2	85.8	121.4	151.3
45°	36.6	45.7	72.1	110.1	141.1
47.5°	27.4	33.1	59.5	99.6	129.8
50°	23.9	25.0	47.5	87.9	117.8
52.5°	20.8	21.5	36.9	75.3	105.9
55°	17.9	18.6	28.5	64.4	93.2
57.5°	15.1	15.8	22.9	53.8	78.8
60°	12.7	13.4	19.7	42.9	65.4
62.5°	10.6	10.9	17.6	32.7	52.4
65°	8.4	9.1	15.1	23.9	39.8
67.5°	7.0	7.7	12.3	16.5	27.8
70°	6.0	7.7	10.2	11.6	17.2
72.5°	4.9	7.0	8.4	8.1	8.1
75°	4.2	6.7	7.0	6.3	6.3
77.5°	3.5	6.0	5.6	5.3	4.9
80°	2.8	4.9	4.9	4.2	3.9
82.5°	2.5	3.9	3.9	3.9	3.2
85°	2.1	3.5	3.5	3.2	2.5
87.5°	1.4	2.8	3.2	2.8	1.8
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	2.82	4.15	3.18	4.47	4.78	11.92	13.26	12.29	13.58	13.89
	3H	3.86	5.04	4.24	5.37	5.74	12.43	13.61	12.81	13.94	14.31
	4H	4.37	5.48	4.77	5.83	6.21	12.44	13.55	12.84	13.90	14.28
	6H	4.82	5.84	5.24	6.21	6.60	12.44	13.45	12.85	13.82	14.22
	8H	5.02	5.98	5.45	6.37	6.78	12.43	13.40	12.86	13.79	14.19
	12H	5.23	6.15	5.66	6.54	6.97	12.44	13.36	12.87	13.74	14.17
4H	2H	3.91	5.02	4.31	5.37	5.75	11.81	12.92	12.22	13.27	13.65
	3H	5.18	6.08	5.59	6.49	6.89	12.39	13.30	12.80	13.70	14.10
	4H	5.88	6.69	6.32	7.11	7.56	12.44	13.25	12.87	13.67	14.11
	6H	6.52	7.22	6.98	7.66	8.13	12.49	13.19	12.95	13.64	14.10
	8H	6.77	7.42	7.23	7.87	8.34	12.51	13.16	12.98	13.61	14.08
	12H	7.04	7.62	7.53	8.10	8.58	12.54	13.12	13.03	13.60	14.08
8H	4H	6.31	6.96	6.78	7.41	7.88	12.39	13.04	12.85	13.49	13.96
	6H	7.19	7.72	7.69	8.22	8.70	12.48	13.01	12.98	13.51	13.99
	8H	7.60	8.08	8.12	8.60	9.09	12.54	13.02	13.06	13.54	14.03
	12H	8.08	8.51	8.59	9.00	9.57	12.64	13.07	13.16	13.57	14.14
12H	4H	6.35	6.93	6.84	7.41	7.89	12.36	12.94	12.84	13.42	13.89
	6H	7.30	7.78	7.82	8.30	8.79	12.46	12.94	12.98	13.45	13.95
	8H	7.83	8.25	8.34	8.75	9.32	12.57	12.99	13.08	13.49	14.06