

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: P1060825

Luminaire Tested: S124RDR-H350D927-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060825
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-H350D927-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

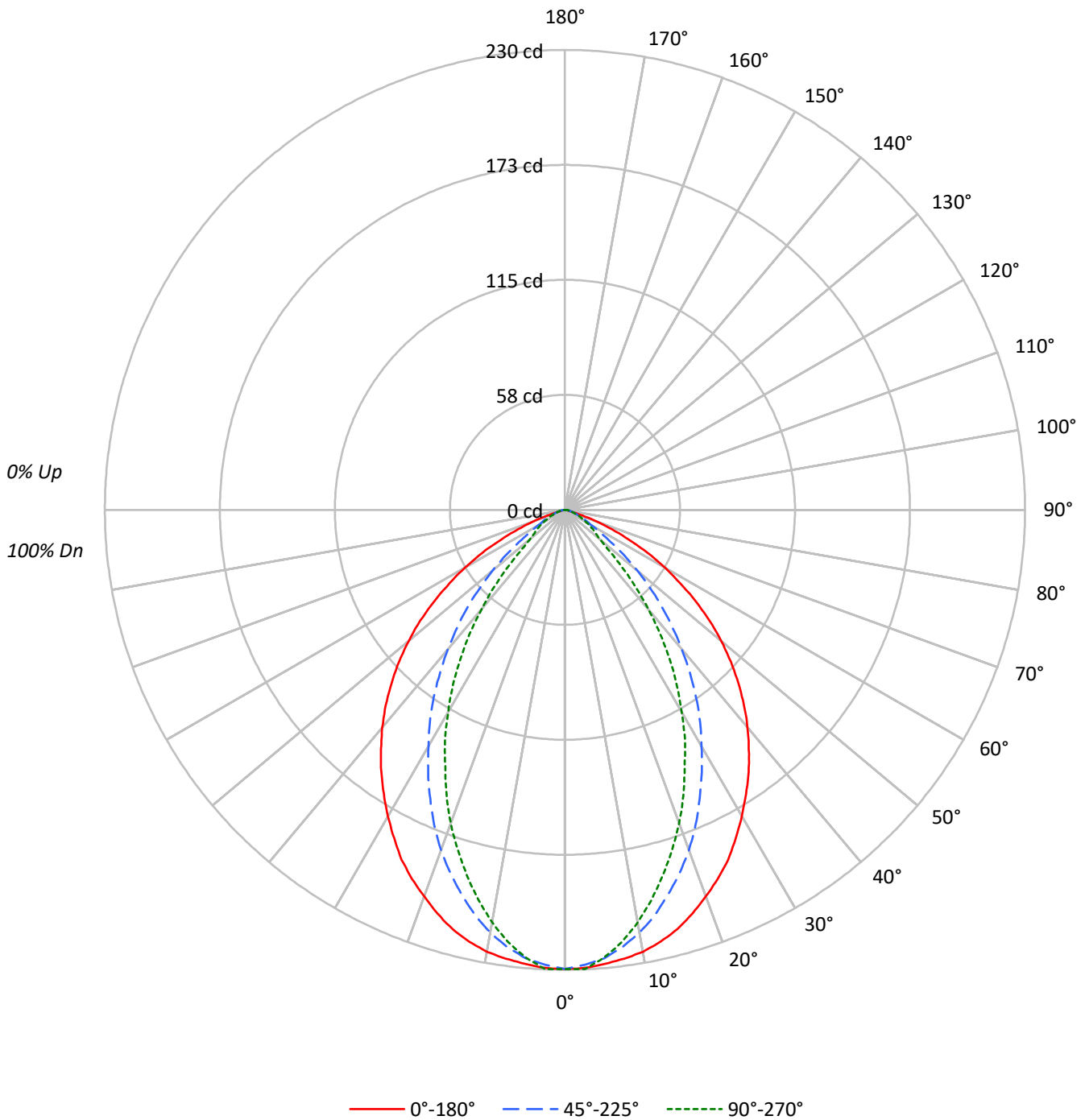
Lumens per Lamp: N/A
Luminaire Lumens: 338.5 lumens
Efficiency: N/A
Efficacy: 28.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1060825

CATALOG NUMBER: S124RDR-H350D927-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1060825

CATALOG NUMBER: S124RDR-H350D927-X4F0-XX-UDD-SVL-B

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	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	65	60	69	64	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	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1977	1977	1977
5°	1971	1946	1942
10°	1962	1877	1832
15°	1935	1776	1687
20°	1885	1660	1529
25°	1835	1515	1345
30°	1759	1357	1160
35°	1683	1200	959
40°	1596	1022	727
45°	1493	835	488
50°	1365	632	303
55°	1200	417	257
60°	992	257	212
65°	717	198	171
70°	390	146	131
75°	87	106	120
80°	64	79	94
85°	59	59	99

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1493 cd/sqm



TEST NUMBER: P1060825

CATALOG NUMBER: S124RDR-H350D927-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.3	6.3
10°-20°	56.5	16.7
20°-30°	74.8	22.1
30°-40°	74.3	21.9
40°-50°	57.2	16.9
50°-60°	34.1	10.1
60°-70°	15.5	4.6
70°-80°	4.0	1.2
80°-90°	0.9	0.3
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°	152.6	45.1
0°-40°	226.9	67.0
0°-60°	318.1	94.0
0°-90°	338.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	338.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	230	230	230	230	230	
5°	228	228	225	225	225	22
15°	217	212	199	192	189	61
25°	193	179	159	146	142	89
35°	160	140	114	97	91	100
45°	123	99	69	48	40	94
55°	80	57	28	18	17	71
65°	35	21	10	8	8	35
75°	3	3	3	4	4	5
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



TEST NUMBER: P1060825

CATALOG NUMBER: S124RDR-H350D927-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	229.6	229.6	229.6	229.6	229.6
2.5°	229.3	229.6	227.7	229.3	229.9
5°	228.0	228.3	225.1	225.1	224.7
7.5°	226.4	225.7	220.5	218.6	218.0
10°	224.4	222.2	214.7	210.8	209.5
12.5°	221.2	217.6	207.6	202.1	199.8
15°	217.0	211.5	199.2	192.4	189.2
17.5°	211.8	205.0	190.5	181.7	178.2
20°	205.7	196.6	181.1	170.1	166.9
22.5°	199.8	188.5	170.7	158.1	154.6
25°	193.1	179.1	159.4	146.2	141.6
27.5°	185.0	170.1	148.1	134.5	130.0
30°	176.9	160.4	136.5	122.2	116.7
32.5°	168.5	150.4	125.8	109.6	104.4
35°	160.1	140.0	114.2	96.7	91.2
37.5°	151.0	129.7	102.5	84.4	78.3
40°	142.0	119.6	90.9	72.4	64.7
42.5°	132.6	109.3	79.5	60.1	52.4
45°	122.6	98.6	68.6	47.9	40.1
47.5°	112.5	88.6	57.6	35.9	28.8
50°	101.9	77.9	47.2	26.2	22.6
52.5°	91.2	67.6	36.9	20.4	19.4
55°	79.9	56.9	27.8	17.5	17.1
57.5°	68.2	47.2	20.0	15.2	14.6
60°	57.6	38.2	14.9	12.9	12.3
62.5°	46.6	28.8	12.3	10.7	10.0
65°	35.2	21.0	9.7	8.4	8.4
67.5°	25.5	14.2	7.8	6.8	6.5
70°	15.5	8.7	5.8	5.5	5.2
72.5°	7.8	5.2	4.5	4.2	4.2
75°	2.6	3.2	3.2	3.6	3.6
77.5°	1.9	2.3	2.3	2.6	2.6
80°	1.3	1.6	1.6	1.9	1.9
82.5°	1.0	1.0	1.3	1.3	1.6
85°	0.6	0.6	0.6	1.0	1.0
87.5°	0.3	0.3	0.3	0.6	0.6
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1060825
 CATALOG NUMBER: S124RDR-H350D927-X4F0-XX-UDD-SVL-B

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	11.49	12.82	11.85	13.13	13.45	3.04	4.37	3.41	4.69	5.00
	3H	11.99	13.17	12.37	13.50	13.87	3.86	5.04	4.24	5.37	5.74
	4H	11.96	13.06	12.36	13.41	13.79	4.15	5.25	4.55	5.60	5.98
	6H	11.89	12.90	12.31	13.27	13.67	4.32	5.32	4.73	5.69	6.09
	8H	11.86	12.81	12.29	13.20	13.61	4.38	5.33	4.81	5.72	6.13
	12H	11.82	12.73	12.25	13.11	13.54	4.43	5.34	4.86	5.72	6.15
4H	2H	11.33	12.43	11.73	12.78	13.16	3.48	4.58	3.88	4.93	5.31
	3H	11.88	12.77	12.29	13.18	13.58	4.45	5.34	4.86	5.74	6.15
	4H	11.85	12.64	12.28	13.06	13.51	4.82	5.61	5.25	6.03	6.48
	6H	11.80	12.48	12.26	12.93	13.39	5.06	5.75	5.53	6.20	6.66
	8H	11.75	12.39	12.22	12.84	13.31	5.15	5.79	5.62	6.24	6.71
	12H	11.71	12.27	12.20	12.76	13.23	5.23	5.79	5.71	6.28	6.75
8H	4H	11.74	12.38	12.21	12.82	13.30	4.91	5.54	5.37	5.99	6.46
	6H	11.68	12.20	12.18	12.69	13.18	5.21	5.73	5.71	6.23	6.71
	8H	11.63	12.10	12.15	12.61	13.11	5.34	5.81	5.86	6.32	6.81
	12H	11.60	12.01	12.11	12.51	13.08	5.48	5.89	6.00	6.39	6.96
12H	4H	11.70	12.26	12.18	12.74	13.22	4.88	5.44	5.37	5.93	6.40
	6H	11.62	12.09	12.14	12.60	13.10	5.19	5.66	5.71	6.17	6.67
	8H	11.59	12.01	12.11	12.50	13.07	5.36	5.77	5.87	6.27	6.84