

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060438

Luminaire Tested: S124RDRP-S350D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060438
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: S124RDRP-S350D935-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

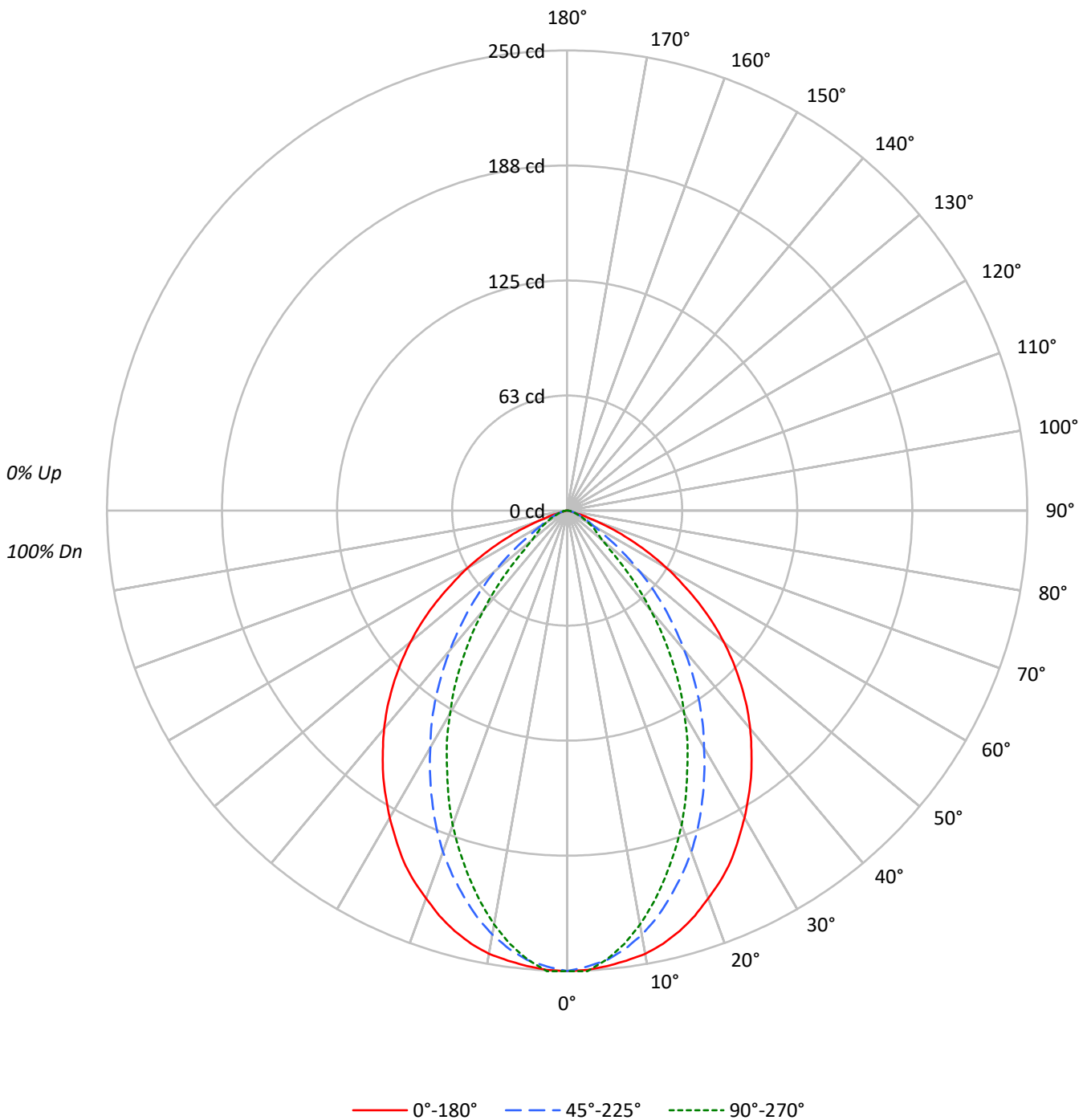
Lumens per Lamp: N/A
Luminaire Lumens: 368.8 lumens
Efficiency: N/A
Efficacy: 29.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (A_{in}): 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	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	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90					90			
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80					80			
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71					71			
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63					63			
5	84	74	66	61	82	73	66	60	71	65	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	48	47					47			
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43					43			
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39					39			
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2155	2155	2155
5°	2147	2120	2117
10°	2138	2045	1996
15°	2107	1935	1837
20°	2054	1808	1666
25°	1998	1650	1466
30°	1916	1479	1265
35°	1833	1308	1045
40°	1739	1113	792
45°	1626	910	532
50°	1487	689	331
55°	1306	455	281
60°	1080	279	231
65°	782	216	187
70°	425	159	141
75°	93	116	130
80°	69	89	104
85°	69	69	109

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1626 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.2	6.3
10°-20°	61.6	16.7
20°-30°	81.5	22.1
30°-40°	80.9	21.9
40°-50°	62.3	16.9
50°-60°	37.1	10.1
60°-70°	16.9	4.6
70°-80°	4.4	1.2
80°-90°	1.0	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°	166.3	45.1
0°-40°	247.2	67.0
0°-60°	346.6	94.0
0°-90°	368.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	368.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	250	250	250	250	250	
5°	248	249	245	245	245	24
15°	236	230	217	210	206	66
25°	210	195	174	159	154	97
35°	174	153	124	105	99	109
45°	134	108	75	52	44	103
55°	87	62	30	19	19	78
65°	38	23	11	9	9	39
75°	3	4	4	4	4	6
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	250.2	250.2	250.2	250.2	250.2
2.5°	249.8	250.2	248.0	249.8	250.5
5°	248.4	248.7	245.2	245.2	244.9
7.5°	246.6	245.9	240.3	238.2	237.5
10°	244.5	242.0	233.9	229.7	228.3
12.5°	241.0	237.1	226.2	220.2	217.7
15°	236.4	230.4	217.0	209.6	206.1
17.5°	230.8	223.4	207.5	198.0	194.1
20°	224.1	214.2	197.3	185.3	181.8
22.5°	217.7	205.4	186.0	172.3	168.4
25°	210.3	195.2	173.7	159.3	154.3
27.5°	201.5	185.3	161.4	146.6	141.6
30°	192.7	174.8	148.7	133.2	127.2
32.5°	183.6	163.8	137.1	119.4	113.8
35°	174.4	152.6	124.4	105.3	99.4
37.5°	164.5	141.3	111.7	92.0	85.3
40°	154.7	130.4	99.0	78.9	70.5
42.5°	144.5	119.1	86.7	65.5	57.1
45°	133.5	107.5	74.7	52.1	43.7
47.5°	122.6	96.5	62.7	39.1	31.4
50°	111.0	84.9	51.4	28.5	24.7
52.5°	99.4	73.6	40.2	22.2	21.1
55°	87.0	62.0	30.3	19.0	18.7
57.5°	74.3	51.4	21.8	16.6	15.9
60°	62.7	41.6	16.2	14.1	13.4
62.5°	50.7	31.4	13.4	11.6	10.9
65°	38.4	22.9	10.6	9.2	9.2
67.5°	27.8	15.5	8.5	7.4	7.0
70°	16.9	9.5	6.3	6.0	5.6
72.5°	8.5	5.6	4.9	4.6	4.6
75°	2.8	3.5	3.5	3.9	3.9
77.5°	2.1	2.5	2.5	2.8	2.8
80°	1.4	1.8	1.8	2.1	2.1
82.5°	1.1	1.1	1.4	1.4	1.8
85°	0.7	0.7	0.7	1.1	1.1
87.5°	0.4	0.4	0.4	0.7	0.7
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	11.78	13.11	12.15	13.43	13.74	3.35	4.69	3.72	5.00	5.31
	3H	12.29	13.47	12.67	13.80	14.16	4.16	5.34	4.54	5.67	6.03
	4H	12.26	13.35	12.66	13.70	14.09	4.44	5.54	4.85	5.89	6.28
	6H	12.19	13.20	12.61	13.57	13.96	4.61	5.62	5.03	5.99	6.38
	8H	12.15	13.11	12.58	13.50	13.90	4.68	5.63	5.11	6.02	6.43
	12H	12.11	13.03	12.55	13.41	13.84	4.73	5.64	5.16	6.02	6.45
4H	2H	11.62	12.72	12.03	13.07	13.45	3.79	4.89	4.20	5.24	5.62
	3H	12.18	13.07	12.59	13.47	13.88	4.75	5.64	5.16	6.05	6.45
	4H	12.14	12.94	12.58	13.36	13.80	5.11	5.91	5.55	6.33	6.77
	6H	12.09	12.78	12.56	13.22	13.69	5.36	6.05	5.82	6.49	6.96
	8H	12.05	12.69	12.52	13.13	13.60	5.45	6.09	5.92	6.54	7.01
	12H	12.01	12.57	12.49	13.06	13.53	5.53	6.10	6.02	6.58	7.06
8H	4H	12.03	12.67	12.50	13.12	13.59	5.20	5.84	5.67	6.29	6.76
	6H	11.97	12.50	12.48	12.99	13.47	5.51	6.03	6.01	6.53	7.01
	8H	11.93	12.40	12.45	12.91	13.40	5.64	6.11	6.16	6.62	7.12
	12H	11.90	12.31	12.41	12.80	13.38	5.79	6.20	6.30	6.70	7.27
12H	4H	11.99	12.56	12.48	13.04	13.51	5.18	5.74	5.66	6.22	6.70
	6H	11.92	12.39	12.44	12.90	13.39	5.49	5.96	6.01	6.47	6.97
	8H	11.89	12.31	12.41	12.80	13.37	5.66	6.07	6.18	6.57	7.14