

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: P1060453

Luminaire Tested: S124RDRP-S350D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060453
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S350D950-X4F0-XX-UDD-BVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

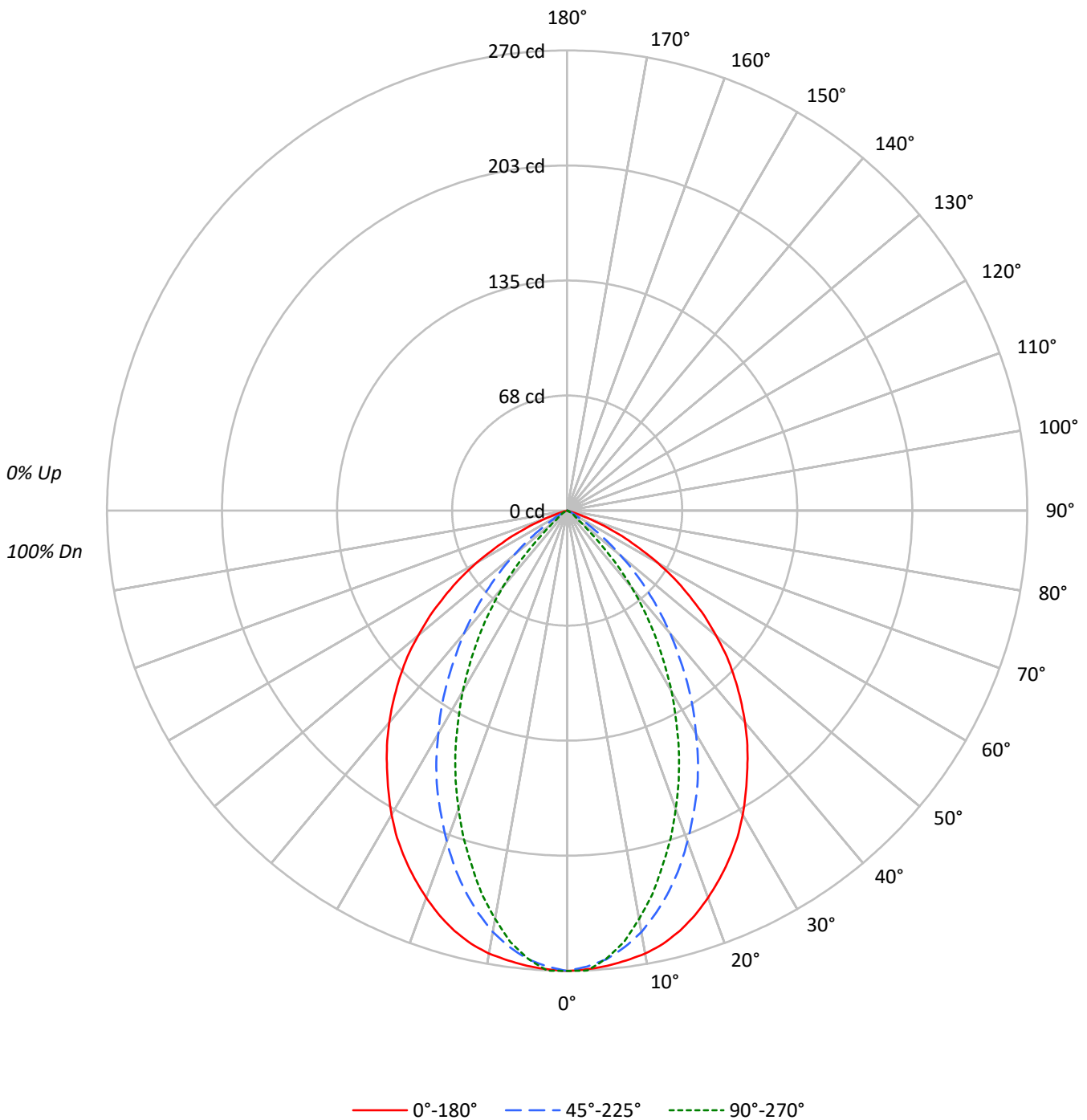
Lumens per Lamp: N/A
Luminaire Lumens: 352.8 lumens
Efficiency: N/A
Efficacy: 28.2 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2326	2326	2326
5°	2318	2285	2281
10°	2308	2195	2127
15°	2276	2060	1925
20°	2215	1892	1706
25°	2141	1714	1473
30°	2049	1502	1219
35°	1937	1289	948
40°	1826	1058	662
45°	1693	813	328
50°	1527	549	110
55°	1318	281	77
60°	1056	102	53
65°	723	55	24
70°	325	30	20
75°	0	13	13
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1693 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.0	7.1
10°-20°	65.4	18.5
20°-30°	84.7	24.0
30°-40°	80.4	22.8
40°-50°	57.0	16.1
50°-60°	29.2	8.3
60°-70°	10.2	2.9
70°-80°	0.9	0.3
80°-90°	0.0	0.0
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°	175.0	49.6
0°-40°	255.4	72.4
0°-60°	341.7	96.8
0°-90°	352.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	352.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	270	270	270	270	270	
5°	268	269	264	264	264	25
15°	255	248	231	220	216	72
25°	225	208	180	161	155	104
35°	184	157	123	99	90	115
45°	139	107	67	38	27	107
55°	88	58	19	6	5	78
65°	36	17	3	2	1	35
75°	0	0	0	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	270.1	270.1	270.1	270.1	270.1
2.5°	269.4	270.1	267.8	269.8	270.1
5°	268.2	268.6	264.3	264.3	263.9
7.5°	266.2	265.5	258.4	255.7	255.3
10°	263.9	261.2	251.0	245.2	243.2
12.5°	260.4	255.3	241.7	233.1	230.7
15°	255.3	247.5	231.1	220.2	215.9
17.5°	249.1	238.9	219.4	206.1	201.8
20°	241.7	228.8	206.5	191.7	186.2
22.5°	233.8	219.0	193.2	176.5	171.0
25°	225.3	207.7	180.4	161.2	155.0
27.5°	216.3	195.6	166.3	146.4	138.2
30°	206.1	183.5	151.1	130.4	122.6
32.5°	195.2	170.2	137.4	115.2	105.8
35°	184.3	157.3	122.6	98.8	90.2
37.5°	173.7	145.2	107.7	82.8	74.6
40°	162.4	132.0	94.1	68.3	58.9
42.5°	150.7	119.1	80.0	53.5	43.3
45°	139.0	107.0	66.8	38.3	26.9
47.5°	127.3	94.1	53.9	24.2	14.4
50°	114.0	81.6	41.0	12.9	8.2
52.5°	101.5	69.9	29.3	7.4	6.2
55°	87.8	57.8	18.7	5.5	5.1
57.5°	75.0	46.1	10.5	4.3	3.9
60°	61.3	35.5	5.9	3.5	3.1
62.5°	47.6	25.8	3.9	2.3	2.0
65°	35.5	17.2	2.7	1.6	1.2
67.5°	23.4	9.8	2.0	0.8	0.8
70°	12.9	4.7	1.2	0.8	0.8
72.5°	4.7	1.6	0.8	0.4	0.4
75°	0.0	0.4	0.4	0.4	0.4
77.5°	0.0	0.0	0.0	0.0	0.4
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	11.47	12.72	11.83	13.03	13.35	0.00	0.00	0.00	0.00	0.00
	3H	11.74	12.85	12.12	13.18	13.55	0.00	0.00	0.00	0.00	0.00
	4H	11.67	12.69	12.07	13.04	13.43	0.00	0.00	0.00	0.00	0.00
	6H	11.58	12.52	12.00	12.89	13.29	0.00	0.00	0.00	0.00	0.00
	8H	11.53	12.42	11.97	12.81	13.22	0.00	0.00	0.00	0.00	0.00
	12H	11.49	12.33	11.92	12.72	13.15	0.00	0.00	0.00	0.00	0.00
4H	2H	11.24	12.26	11.64	12.62	13.00	0.00	0.00	0.00	0.00	0.00
	3H	11.52	12.35	11.94	12.76	13.16	0.00	0.00	0.00	0.00	0.00
	4H	11.43	12.17	11.87	12.59	13.03	0.00	0.00	0.00	0.00	0.00
	6H	11.34	11.97	11.81	12.42	12.89	0.00	0.00	0.00	0.00	0.00
	8H	11.28	11.87	11.75	12.32	12.79	0.00	0.00	0.00	0.00	0.00
	12H	11.23	11.75	11.72	12.23	12.71	0.00	0.00	0.00	0.00	0.00
8H	4H	11.28	11.87	11.75	12.32	12.79	0.00	0.00	0.00	0.00	0.00
	6H	11.17	11.65	11.68	12.15	12.63	0.00	0.00	0.00	0.00	0.00
	8H	11.11	11.53	11.63	12.05	12.55	0.00	0.00	0.00	0.00	0.00
	12H	11.06	11.43	11.57	11.93	12.50	0.00	0.00	0.00	0.00	0.00
12H	4H	11.23	11.75	11.72	12.23	12.71	0.00	0.00	0.00	0.00	0.00
	6H	11.11	11.53	11.63	12.05	12.55	0.00	0.00	0.00	0.00	0.00
	8H	11.06	11.43	11.57	11.93	12.50	0.00	0.00	0.00	0.00	0.00