

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: P1060540

Luminaire Tested: S124RDRP-S575D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060540
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S575D950-X4F0-XX-UDD-WVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

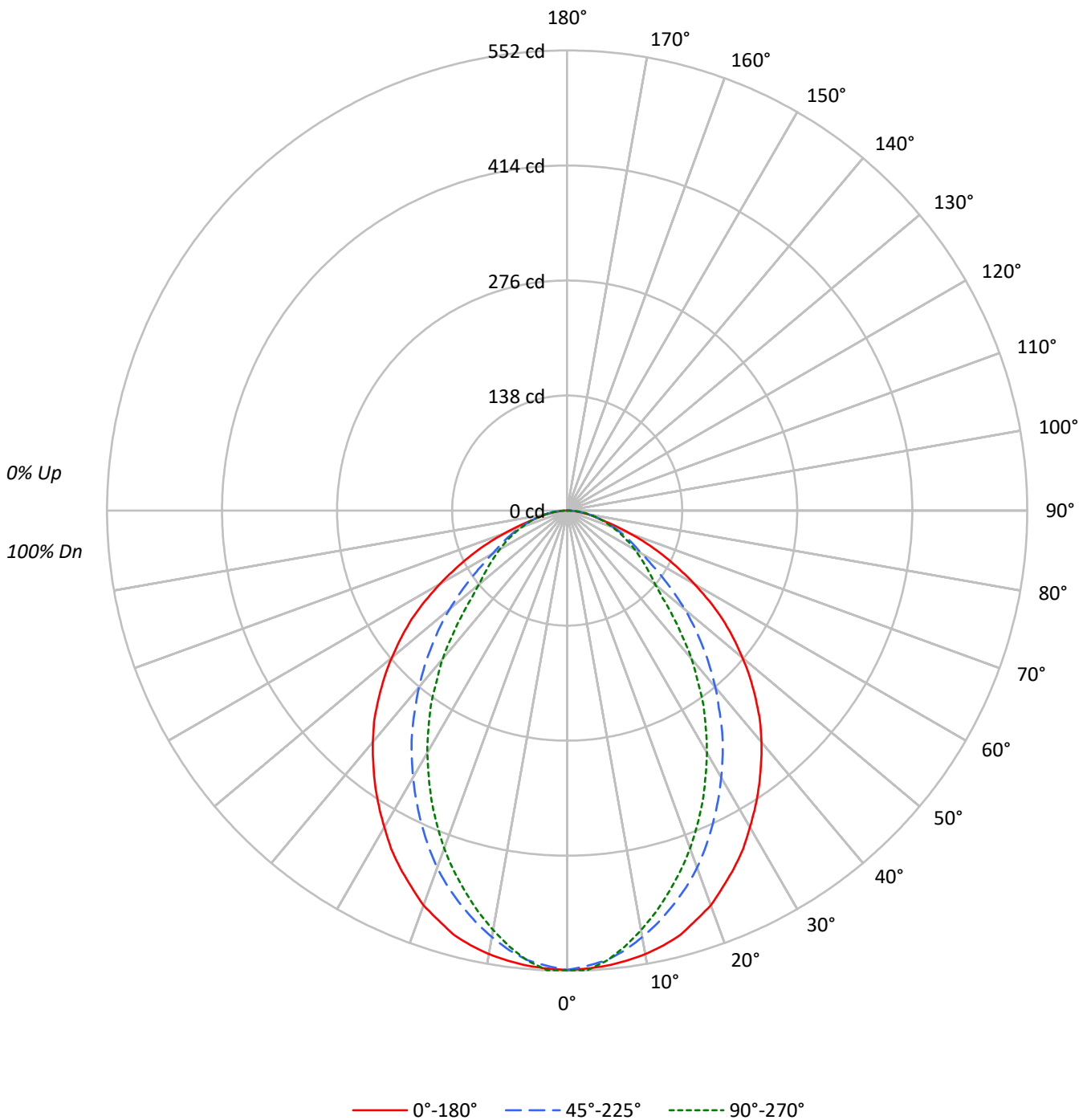
Lumens per Lamp: N/A
Luminaire Lumens: 1062.8 lumens
Efficiency: N/A
Efficacy: 54.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4746	4746	4746
5°	4737	4681	4686
10°	4723	4542	4468
15°	4695	4371	4215
20°	4618	4179	3953
25°	4499	3933	3655
30°	4360	3677	3336
35°	4222	3411	2996
40°	4077	3109	2614
45°	3897	2792	2185
50°	3679	2464	1849
55°	3423	2091	1711
60°	3035	1774	1617
65°	2586	1636	1530
70°	2022	1516	1450
75°	1381	1401	1401
80°	1190	1319	1349
85°	1028	1284	1403

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3897 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.3	4.8
10°-20°	139.3	13.1
20°-30°	193.3	18.2
30°-40°	207.3	19.5
40°-50°	183.6	17.3
50°-60°	138.4	13.0
60°-70°	89.6	8.4
70°-80°	46.0	4.3
80°-90°	14.1	1.3
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°	383.9	36.1
0°-40°	591.1	55.6
0°-60°	913.1	85.9
0°-90°	1062.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1062.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	551	551	551	551	551	
5°	548	549	542	542	542	52
15°	527	515	490	478	473	148
25°	474	448	414	392	385	218
35°	402	365	324	295	285	251
45°	320	278	229	194	179	247
55°	228	190	139	117	114	203
65°	127	102	80	76	75	126
75°	42	43	42	42	42	49
85°	10	11	13	14	14	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	551.2	551.2	551.2	551.2	551.2
2.5°	549.9	551.8	546.7	550.5	551.8
5°	548.0	548.6	541.5	542.1	542.1
7.5°	544.7	543.4	531.8	528.5	527.9
10°	540.2	536.3	519.5	513.0	511.0
12.5°	534.3	527.2	505.8	496.8	492.9
15°	526.6	514.9	490.3	478.0	472.8
17.5°	514.9	500.0	474.1	458.6	452.7
20°	503.9	483.8	456.0	436.5	431.4
22.5°	488.4	467.0	435.3	414.5	408.0
25°	473.5	448.2	413.9	391.9	384.7
27.5°	457.3	428.8	391.9	368.5	359.5
30°	438.5	408.0	369.8	345.2	335.5
32.5°	420.4	388.0	347.2	320.0	309.6
35°	401.6	365.3	324.5	295.3	285.0
37.5°	382.1	343.9	299.2	270.7	257.1
40°	362.7	322.6	276.6	244.2	232.5
42.5°	342.6	300.5	253.2	219.6	204.7
45°	320.0	278.5	229.3	193.7	179.4
47.5°	297.9	257.1	207.3	168.4	155.4
50°	274.6	234.5	183.9	146.4	138.0
52.5°	251.3	211.1	161.3	129.5	125.7
55°	228.0	189.8	139.3	117.2	114.0
57.5°	202.1	167.8	119.8	106.2	103.6
60°	176.2	143.8	103.0	95.9	93.9
62.5°	150.9	123.1	91.3	85.5	84.2
65°	126.9	102.3	80.3	75.8	75.1
67.5°	103.6	84.2	70.0	67.4	66.1
70°	80.3	67.4	60.2	58.9	57.6
72.5°	59.6	54.4	51.2	50.5	49.9
75°	41.5	43.4	42.1	42.1	42.1
77.5°	33.0	33.7	34.3	35.0	34.3
80°	24.0	25.9	26.6	27.9	27.2
82.5°	16.8	18.1	20.1	20.7	21.4
85°	10.4	11.0	13.0	14.2	14.2
87.5°	4.5	5.2	6.5	7.8	8.4
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	15.85	17.35	16.22	17.66	17.98	12.41	13.91	12.78	14.23	14.54
	3H	17.06	18.40	17.43	18.73	19.09	14.11	15.45	14.49	15.78	16.14
	4H	17.36	18.62	17.76	18.97	19.35	14.79	16.05	15.19	16.40	16.78
	6H	17.57	18.73	17.98	19.10	19.49	15.34	16.50	15.75	16.87	17.26
	8H	17.62	18.73	18.05	19.12	19.52	15.55	16.66	15.98	17.05	17.45
	12H	17.66	18.72	18.09	19.10	19.53	15.73	16.79	16.16	17.17	17.60
4H	2H	15.99	17.25	16.39	17.60	17.98	13.07	14.33	13.47	14.68	15.06
	3H	17.39	18.44	17.81	18.84	19.24	14.98	16.03	15.39	16.43	16.83
	4H	17.82	18.76	18.25	19.18	19.62	15.79	16.73	16.22	17.14	17.58
	6H	18.15	18.96	18.60	19.41	19.87	16.47	17.29	16.93	17.73	18.20
	8H	18.24	19.01	18.71	19.45	19.92	16.75	17.51	17.21	17.96	18.42
	12H	18.31	19.00	18.80	19.47	19.95	16.98	17.66	17.46	18.14	18.61
8H	4H	17.95	18.71	18.41	19.16	19.62	16.10	16.87	16.57	17.31	17.78
	6H	18.37	19.00	18.87	19.49	19.97	16.93	17.56	17.43	18.06	18.53
	8H	18.53	19.09	19.04	19.60	20.09	17.30	17.86	17.81	18.38	18.86
	12H	18.65	19.16	19.16	19.65	20.21	17.63	18.13	18.14	18.62	19.19
12H	4H	17.95	18.64	18.44	19.12	19.59	16.13	16.81	16.61	17.29	17.76
	6H	18.39	18.96	18.91	19.47	19.96	16.99	17.56	17.51	18.07	18.56
	8H	18.60	19.10	19.11	19.60	20.16	17.42	17.93	17.93	18.42	18.98