

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: P1060291

Luminaire Tested: S124RDRP-S1020D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060291
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-S1020D950-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

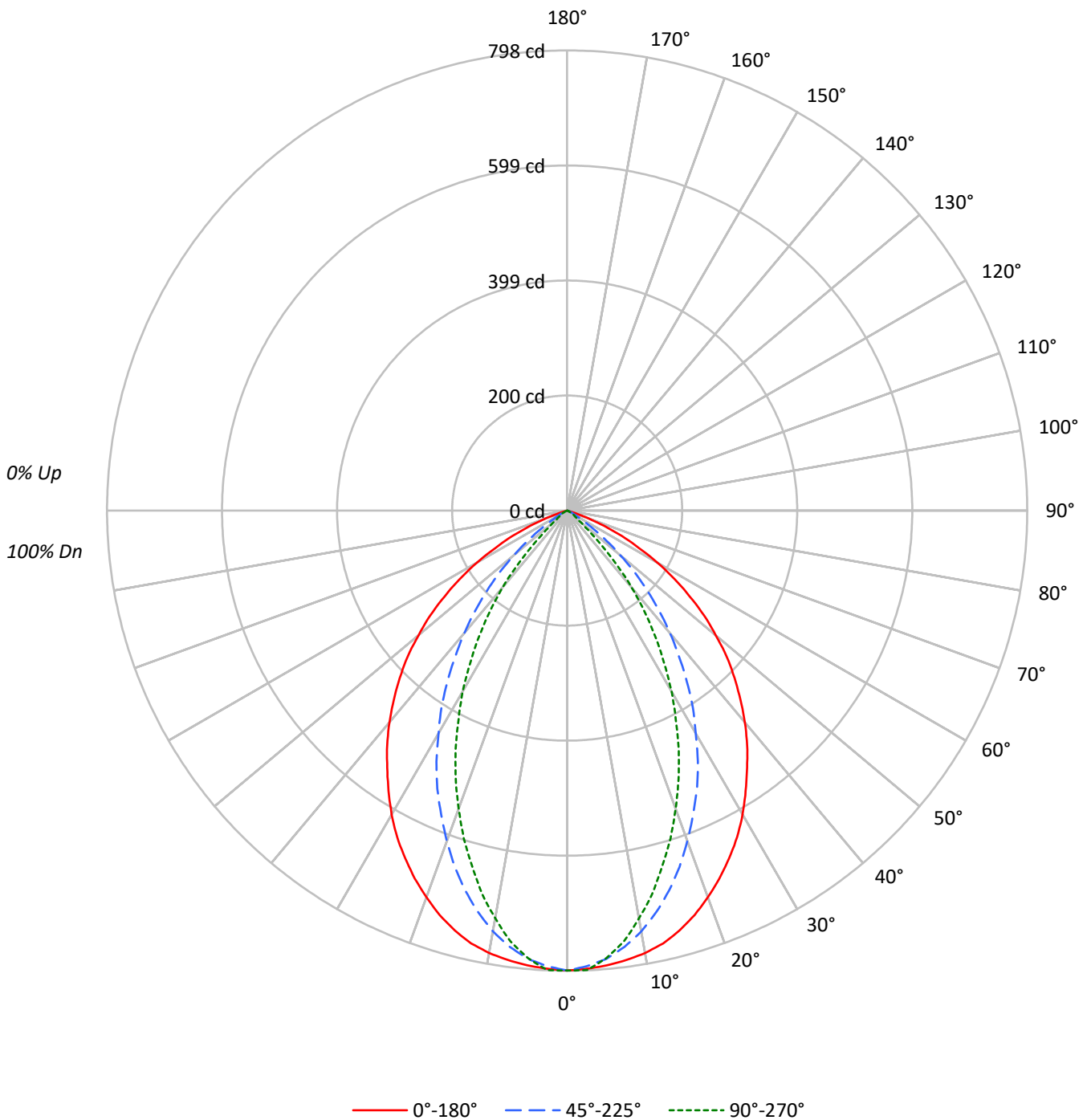
Lumens per Lamp: N/A
Luminaire Lumens: 1041.5 lumens
Efficiency: N/A
Efficacy: 29.8 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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°	6868	6868	6868
5°	6844	6745	6735
10°	6812	6480	6279
15°	6720	6083	5682
20°	6538	5587	5038
25°	6318	5059	4348
30°	6051	4436	3598
35°	5719	3804	2798
40°	5390	3123	1956
45°	4997	2400	968
50°	4509	1621	324
55°	3893	830	225
60°	3117	298	158
65°	2137	165	71
70°	957	88	58
75°	0	40	40
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4997 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.7	7.1
10°-20°	193.1	18.5
20°-30°	249.9	24.0
30°-40°	237.5	22.8
40°-50°	168.2	16.1
50°-60°	86.3	8.3
60°-70°	30.2	2.9
70°-80°	2.6	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°	516.7	49.6
0°-40°	754.2	72.4
0°-60°	1008.7	96.8
0°-90°	1041.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1041.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	798	798	798	798	798	
5°	792	793	780	780	779	75
15°	754	731	682	650	637	212
25°	665	613	532	476	458	306
35°	544	464	362	292	266	340
45°	410	316	197	113	80	316
55°	259	171	55	16	15	232
65°	105	51	8	5	4	104
75°	0	1	1	1	1	9
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	797.6	797.6	797.6	797.6	797.6
2.5°	795.3	797.6	790.7	796.4	797.6
5°	791.8	793.0	780.3	780.3	779.1
7.5°	786.1	783.8	763.0	754.9	753.8
10°	779.1	771.1	741.1	723.8	718.1
12.5°	768.8	753.8	713.5	688.1	681.2
15°	753.8	730.7	682.3	650.1	637.4
17.5°	735.4	705.4	647.8	608.6	595.9
20°	713.5	675.4	609.7	565.9	549.8
22.5°	690.4	646.6	570.5	521.0	504.8
25°	665.0	613.2	532.5	476.0	457.6
27.5°	638.5	577.4	491.0	432.2	408.0
30°	608.6	541.7	446.1	385.0	361.9
32.5°	576.3	502.5	405.7	340.0	312.4
35°	544.0	464.5	361.9	291.6	266.2
37.5°	512.9	428.8	318.1	244.3	220.1
40°	479.5	389.6	277.8	201.7	174.0
42.5°	444.9	351.5	236.3	157.9	127.9
45°	410.3	315.8	197.1	113.0	79.5
47.5°	375.7	277.8	159.1	71.5	42.6
50°	336.6	240.9	121.0	38.0	24.2
52.5°	299.7	206.3	86.4	21.9	18.4
55°	259.3	170.6	55.3	16.1	15.0
57.5°	221.3	136.0	31.1	12.7	11.5
60°	181.0	104.9	17.3	10.4	9.2
62.5°	140.6	76.1	11.5	6.9	5.8
65°	104.9	50.7	8.1	4.6	3.5
67.5°	69.2	28.8	5.8	2.3	2.3
70°	38.0	13.8	3.5	2.3	2.3
72.5°	13.8	4.6	2.3	1.2	1.2
75°	0.0	1.2	1.2	1.2	1.2
77.5°	0.0	0.0	0.0	0.0	1.2
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	15.22	16.48	15.59	16.79	17.11	0.00	0.00	0.00	0.00	0.00
	3H	15.50	16.61	15.88	16.94	17.30	0.00	0.00	0.00	0.00	0.00
	4H	15.42	16.45	15.83	16.80	17.19	0.00	0.00	0.00	0.00	0.00
	6H	15.34	16.28	15.75	16.65	17.04	0.00	0.00	0.00	0.00	0.00
	8H	15.29	16.18	15.72	16.57	16.98	0.00	0.00	0.00	0.00	0.00
	12H	15.25	16.09	15.68	16.47	16.91	0.00	0.00	0.00	0.00	0.00
4H	2H	15.00	16.02	15.40	16.37	16.76	0.00	0.00	0.00	0.00	0.12
	3H	15.28	16.11	15.69	16.51	16.92	0.00	0.00	0.00	0.00	0.14
	4H	15.19	15.92	15.62	16.34	16.79	0.00	0.00	0.00	0.00	0.09
	6H	15.10	15.73	15.56	16.18	16.65	0.00	0.00	0.00	0.00	0.00
	8H	15.04	15.63	15.51	16.07	16.55	0.00	0.00	0.00	0.00	0.00
	12H	14.99	15.50	15.47	15.99	16.46	0.00	0.00	0.00	0.00	0.00
8H	4H	15.04	15.63	15.51	16.08	16.55	0.00	0.00	0.00	0.00	0.06
	6H	14.93	15.41	15.43	15.91	16.39	0.00	0.00	0.00	0.00	0.00
	8H	14.86	15.29	15.39	15.81	16.30	0.00	0.00	0.00	0.00	0.00
	12H	14.81	15.19	15.33	15.69	16.26	0.00	0.00	0.00	0.00	0.00
12H	4H	14.99	15.50	15.48	15.99	16.46	0.00	0.00	0.00	0.00	0.00
	6H	14.86	15.29	15.39	15.81	16.30	0.00	0.00	0.00	0.00	0.00
	8H	14.81	15.19	15.33	15.69	16.26	0.00	0.00	0.00	0.00	0.00