

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: P1060294

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060294
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-S1020D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

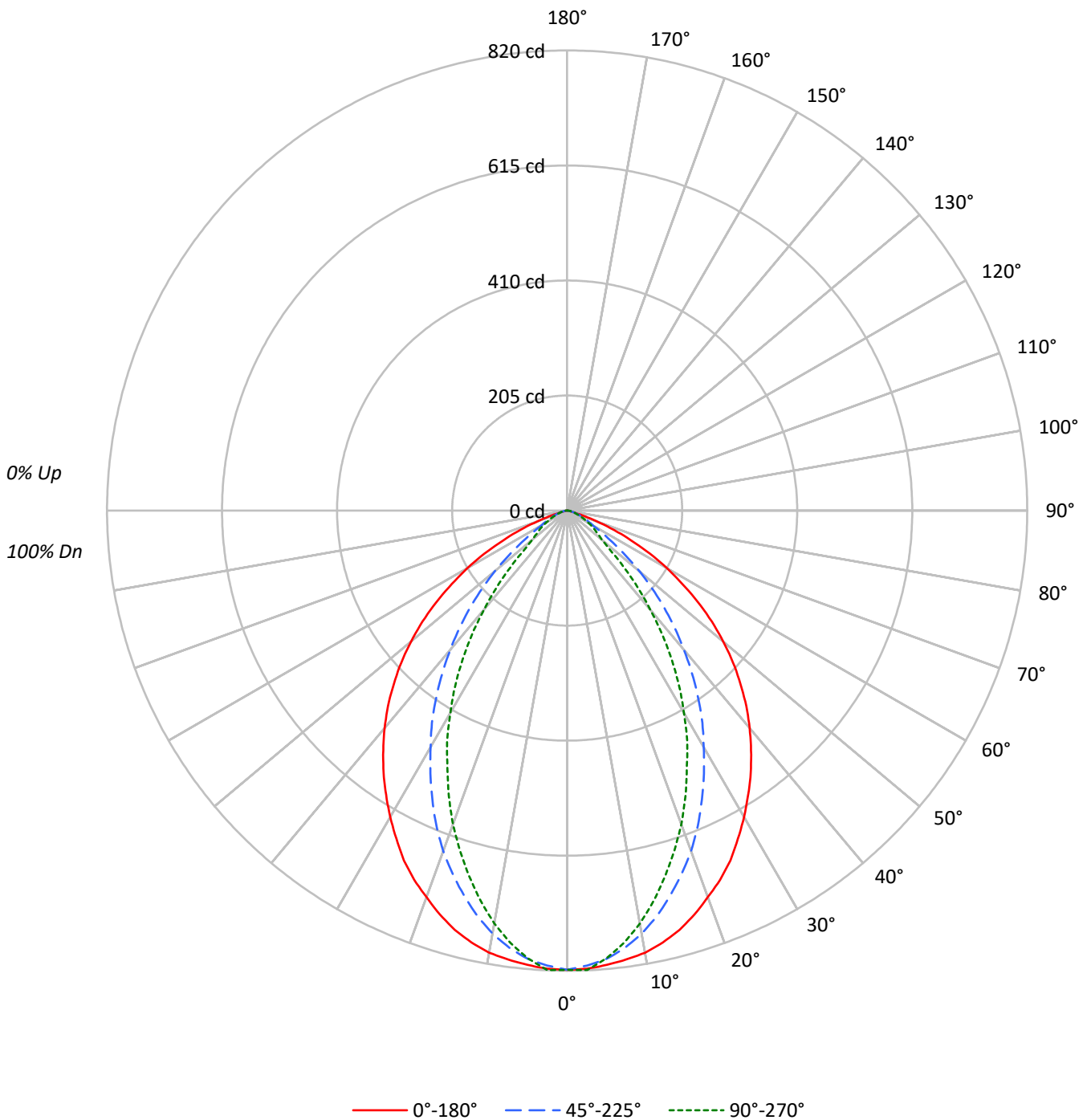
Lumens per Lamp: N/A
Luminaire Lumens: 1206.6 lumens
Efficiency: N/A
Efficacy: 34.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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	63	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°	7046	7046	7046
5°	7024	6934	6924
10°	6994	6692	6531
15°	6895	6330	6011
20°	6717	5914	5450
25°	6538	5399	4796
30°	6269	4836	4137
35°	5997	4277	3416
40°	5688	3641	2591
45°	5319	2975	1740
50°	4864	2255	1081
55°	4274	1488	917
60°	3534	913	754
65°	2559	705	611
70°	1392	521	463
75°	306	383	423
80°	228	288	342
85°	227	227	346

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5319 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.8	6.3
10°-20°	201.4	16.7
20°-30°	266.8	22.1
30°-40°	264.8	21.9
40°-50°	203.7	16.9
50°-60°	121.4	10.1
60°-70°	55.2	4.6
70°-80°	14.3	1.2
80°-90°	3.2	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°	543.9	45.1
0°-40°	808.7	67.0
0°-60°	1133.9	94.0
0°-90°	1206.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1206.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	813	814	802	802	801	77
15°	773	754	710	686	674	218
25°	688	638	568	521	505	316
35°	570	499	407	345	325	356
45°	437	352	244	171	143	336
55°	285	203	99	62	61	254
65°	126	75	35	30	30	126
75°	9	12	12	13	13	19
85°	2	2	2	4	4	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	818.3	818.3	818.3	818.3	818.3
2.5°	817.2	818.3	811.4	817.2	819.5
5°	812.6	813.7	802.2	802.2	801.0
7.5°	806.8	804.5	786.1	779.1	776.8
10°	799.9	791.8	765.3	751.5	746.9
12.5°	788.4	775.7	740.0	720.4	712.3
15°	773.4	753.8	710.0	685.8	674.3
17.5°	754.9	730.7	678.9	647.7	635.1
20°	733.0	700.8	645.4	606.3	594.7
22.5°	712.3	672.0	608.6	563.6	550.9
25°	688.1	638.5	568.2	521.0	504.8
27.5°	659.3	606.3	527.9	479.5	463.3
30°	630.5	571.7	486.4	435.7	416.1
32.5°	600.5	535.9	448.4	390.7	372.3
35°	570.5	499.1	406.9	344.6	325.0
37.5°	538.3	462.2	365.4	300.8	278.9
40°	506.0	426.5	323.9	258.2	230.5
42.5°	472.6	389.6	283.5	214.4	186.7
45°	436.8	351.5	244.3	170.6	142.9
47.5°	401.1	315.8	205.2	127.9	102.6
50°	363.1	277.8	168.3	93.4	80.7
52.5°	325.0	240.9	131.4	72.6	69.2
55°	284.7	202.9	99.1	62.2	61.1
57.5°	243.2	168.3	71.5	54.2	51.9
60°	205.2	136.0	53.0	46.1	43.8
62.5°	166.0	102.6	43.8	38.0	35.7
65°	125.6	74.9	34.6	30.0	30.0
67.5°	91.1	50.7	27.7	24.2	23.1
70°	55.3	31.1	20.7	19.6	18.4
72.5°	27.7	18.4	16.1	15.0	15.0
75°	9.2	11.5	11.5	12.7	12.7
77.5°	6.9	8.1	8.1	9.2	9.2
80°	4.6	5.8	5.8	6.9	6.9
82.5°	3.5	3.5	4.6	4.6	5.8
85°	2.3	2.3	2.3	3.5	3.5
87.5°	1.2	1.2	1.2	2.3	2.3
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	15.90	17.24	16.27	17.55	17.87	7.46	8.79	7.82	9.10	9.42
	3H	16.41	17.59	16.79	17.92	18.29	8.27	9.45	8.65	9.78	10.15
	4H	16.38	17.48	16.78	17.83	18.21	8.56	9.65	8.96	10.00	10.39
	6H	16.31	17.32	16.73	17.69	18.09	8.73	9.73	9.14	10.10	10.50
	8H	16.28	17.23	16.71	17.62	18.03	8.79	9.75	9.22	10.14	10.54
	12H	16.24	17.15	16.67	17.53	17.96	8.84	9.75	9.27	10.13	10.56
4H	2H	15.75	16.84	16.15	17.19	17.58	7.90	9.00	8.30	9.35	9.73
	3H	16.30	17.19	16.71	17.60	18.00	8.86	9.75	9.27	10.16	10.56
	4H	16.27	17.06	16.70	17.48	17.93	9.22	10.02	9.66	10.44	10.88
	6H	16.22	16.90	16.68	17.35	17.81	9.47	10.16	9.94	10.61	11.07
	8H	16.17	16.81	16.64	17.26	17.73	9.56	10.20	10.03	10.65	11.12
	12H	16.13	16.70	16.62	17.18	17.65	9.64	10.21	10.13	10.69	11.16
8H	4H	16.16	16.80	16.63	17.24	17.72	9.31	9.95	9.78	10.40	10.87
	6H	16.10	16.62	16.60	17.11	17.60	9.62	10.14	10.12	10.64	11.12
	8H	16.05	16.52	16.57	17.03	17.53	9.75	10.22	10.28	10.74	11.23
	12H	16.02	16.43	16.53	16.93	17.50	9.89	10.31	10.41	10.80	11.37
12H	4H	16.11	16.68	16.60	17.16	17.64	9.29	9.85	9.77	10.33	10.81
	6H	16.04	16.51	16.56	17.02	17.52	9.60	10.07	10.12	10.59	11.08
	8H	16.01	16.43	16.53	16.92	17.49	9.77	10.19	10.29	10.68	11.25