

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: P1060270

Luminaire Tested: S124RDRP-S1020D930-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060270
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-S1020D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

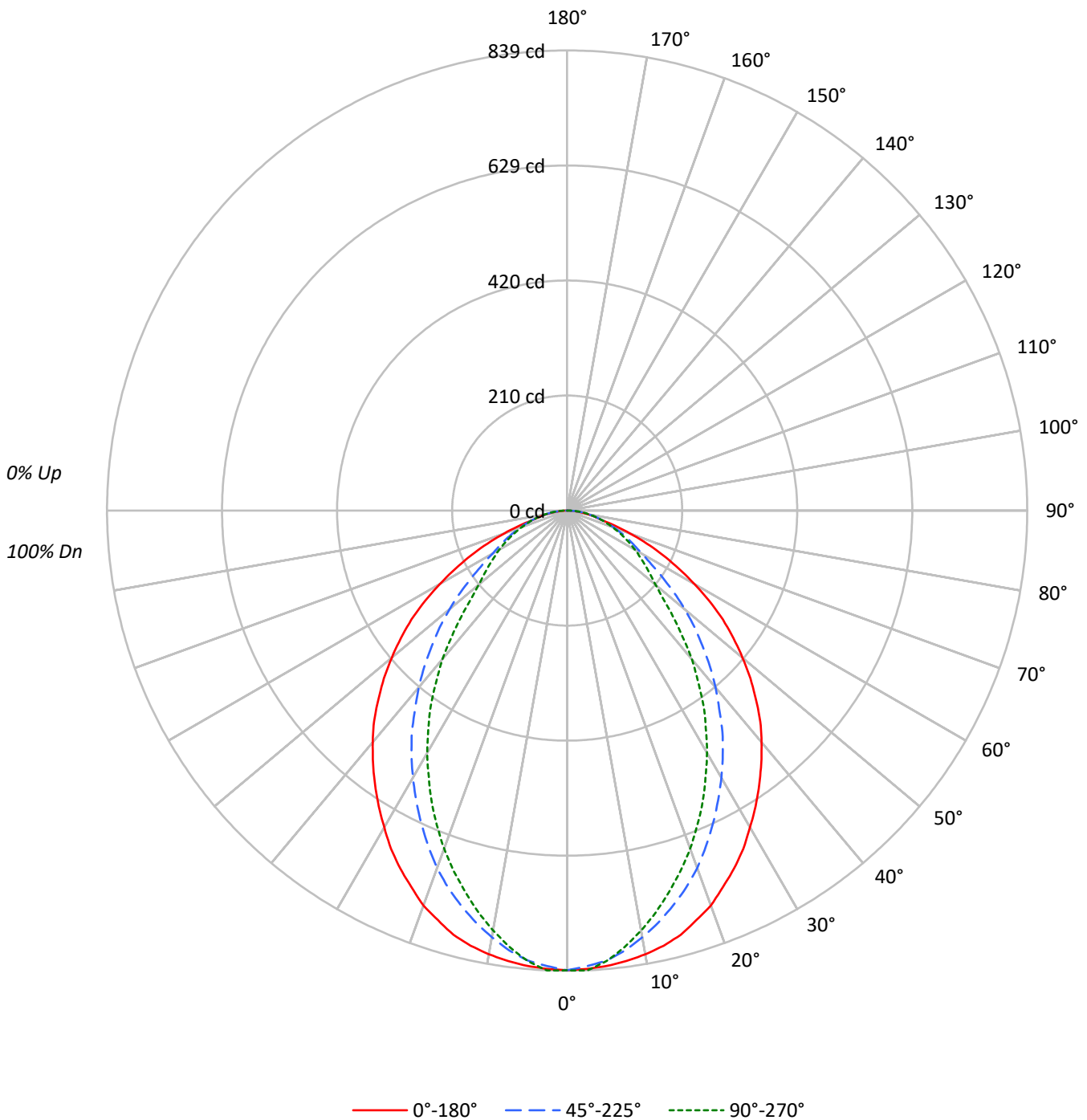
Lumens per Lamp: N/A
Luminaire Lumens: 1616.3 lumens
Efficiency: N/A
Efficacy: 46.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	7218	7218	7218
5°	7203	7118	7127
10°	7183	6908	6796
15°	7139	6648	6411
20°	7022	6354	6011
25°	6841	5980	5559
30°	6631	5592	5073
35°	6420	5188	4556
40°	6201	4728	3975
45°	5926	4246	3322
50°	5594	3747	2811
55°	5205	3180	2603
60°	4614	2697	2459
65°	3935	2488	2329
70°	3074	2306	2208
75°	2096	2129	2129
80°	1805	2003	2053
85°	1561	1946	2144

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5926 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.0	4.8
10°-20°	211.8	13.1
20°-30°	294.0	18.2
30°-40°	315.2	19.5
40°-50°	279.2	17.3
50°-60°	210.4	13.0
60°-70°	136.3	8.4
70°-80°	69.9	4.3
80°-90°	21.5	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°	583.8	36.1
0°-40°	899.0	55.6
0°-60°	1388.6	85.9
0°-90°	1616.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1616.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	838	838	838	838	838	
5°	833	834	824	824	824	79
15°	801	783	746	727	719	225
25°	720	682	629	596	585	331
35°	611	556	494	449	433	382
45°	487	424	349	294	273	375
55°	347	289	212	178	173	308
65°	193	156	122	115	114	191
75°	63	66	64	64	64	75
85°	16	17	20	22	22	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	838.2	838.2	838.2	838.2	838.2
2.5°	836.3	839.2	831.3	837.3	839.2
5°	833.3	834.3	823.5	824.5	824.5
7.5°	828.4	826.4	808.7	803.8	802.8
10°	821.5	815.6	790.0	780.1	777.2
12.5°	812.6	801.8	769.3	755.5	749.6
15°	800.8	783.1	745.7	726.9	719.1
17.5°	783.1	760.4	721.0	697.4	688.5
20°	766.3	735.8	693.4	663.9	656.0
22.5°	742.7	710.2	661.9	630.4	620.6
25°	720.0	681.6	629.4	595.9	585.1
27.5°	695.4	652.1	595.9	560.5	546.7
30°	666.9	620.6	562.4	525.0	510.2
32.5°	639.3	590.0	528.0	486.6	470.8
35°	610.7	555.5	493.5	449.2	433.4
37.5°	581.2	523.0	455.1	411.7	391.0
40°	551.6	490.5	420.6	371.3	353.6
42.5°	521.1	457.0	385.1	333.9	311.3
45°	486.6	423.6	348.7	294.5	272.8
47.5°	453.1	391.0	315.2	256.1	236.4
50°	417.6	356.6	279.7	222.6	209.8
52.5°	382.2	321.1	245.3	197.0	191.1
55°	346.7	288.6	211.8	178.3	173.4
57.5°	307.3	255.1	182.2	161.5	157.6
60°	267.9	218.7	156.6	145.8	142.8
62.5°	229.5	187.2	138.9	130.0	128.1
65°	193.1	155.6	122.1	115.2	114.3
67.5°	157.6	128.1	106.4	102.4	100.5
70°	122.1	102.4	91.6	89.6	87.7
72.5°	90.6	82.7	77.8	76.8	75.8
75°	63.0	66.0	64.0	64.0	64.0
77.5°	50.2	51.2	52.2	53.2	52.2
80°	36.4	39.4	40.4	42.4	41.4
82.5°	25.6	27.6	30.5	31.5	32.5
85°	15.8	16.7	19.7	21.7	21.7
87.5°	6.9	7.9	9.9	11.8	12.8
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	17.31	18.80	17.67	19.12	19.43	13.87	15.37	14.23	15.68	16.00
	3H	18.51	19.85	18.89	20.18	20.54	15.57	16.91	15.94	17.24	17.60
	4H	18.82	20.08	19.22	20.43	20.80	16.24	17.50	16.64	17.85	18.23
	6H	19.02	20.18	19.43	20.55	20.94	16.79	17.96	17.20	18.32	18.71
	8H	19.08	20.18	19.50	20.57	20.98	17.01	18.12	17.44	18.51	18.91
	12H	19.11	20.17	19.54	20.55	20.98	17.18	18.24	17.61	18.63	19.05
4H	2H	17.45	18.71	17.85	19.06	19.44	14.53	15.79	14.93	16.14	16.52
	3H	18.85	19.89	19.26	20.30	20.70	16.44	17.48	16.85	17.89	18.29
	4H	19.28	20.22	19.71	20.63	21.07	17.24	18.18	17.67	18.60	19.04
	6H	19.60	20.42	20.06	20.86	21.32	17.93	18.75	18.39	19.19	19.65
	8H	19.70	20.46	20.16	20.91	21.37	18.20	18.97	18.67	19.41	19.88
	12H	19.77	20.45	20.25	20.93	21.40	18.43	19.12	18.92	19.60	20.07
8H	4H	19.40	20.17	19.87	20.61	21.08	17.56	18.32	18.02	18.77	19.23
	6H	19.82	20.46	20.32	20.95	21.43	18.39	19.02	18.89	19.51	19.99
	8H	19.98	20.55	20.50	21.06	21.55	18.75	19.32	19.27	19.83	20.32
	12H	20.11	20.61	20.62	21.10	21.67	19.09	19.59	19.60	20.08	20.65
12H	4H	19.41	20.09	19.89	20.57	21.04	17.59	18.27	18.07	18.75	19.22
	6H	19.85	20.42	20.36	20.93	21.42	18.45	19.02	18.96	19.53	20.01
	8H	20.06	20.56	20.57	21.05	21.62	18.88	19.38	19.39	19.87	20.44