

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: P1060302

Luminaire Tested: S124RDRP-S1195D830-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060302
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S1195D830-X4F0-XX-UDD-BVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

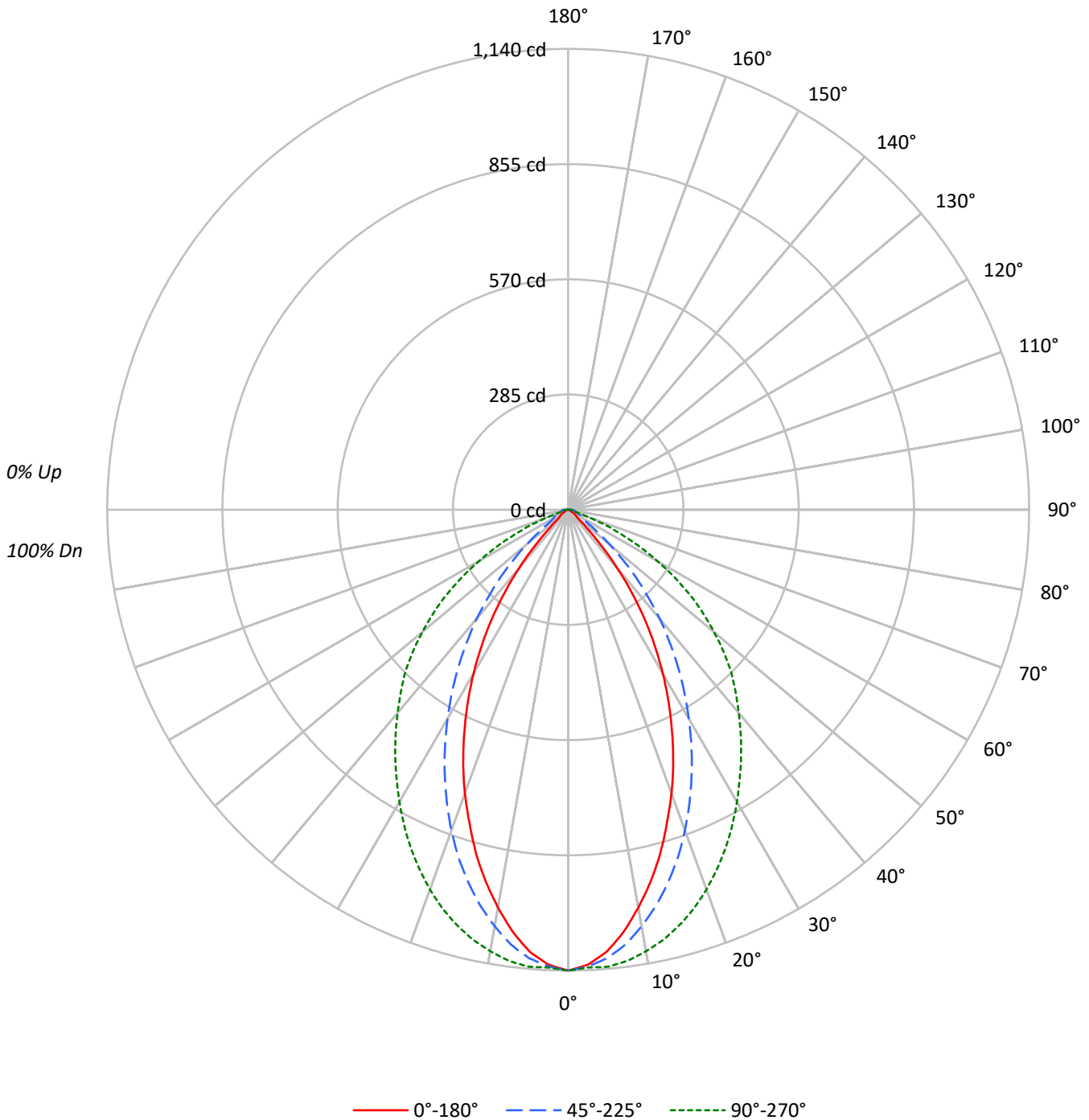
Lumens per Lamp: N/A
Luminaire Lumens: 1436.9 lumens
Efficiency: N/A
Efficacy: 34.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9818	9818	9818
5°	9485	9624	9809
10°	8740	9150	9700
15°	7850	8506	9484
20°	6843	7738	9160
25°	5772	6866	8760
30°	4657	5934	8303
35°	3447	4966	7836
40°	2136	3956	7371
45°	848	2885	6943
50°	376	1811	6310
55°	302	944	5525
60°	207	715	4402
65°	137	709	3026
70°	136	640	1415
75°	180	622	622
80°	268	729	729
85°	534	1452	1057

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6943 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.6	7.3
10°-20°	269.9	18.8
20°-30°	340.7	23.7
30°-40°	312.6	21.8
40°-50°	212.9	14.8
50°-60°	116.0	8.1
60°-70°	50.2	3.5
70°-80°	18.3	1.3
80°-90°	11.8	0.8
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°	715.2	49.8
0°-40°	1027.8	71.5
0°-60°	1356.7	94.4
0°-90°	1436.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1436.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1140	1140	1140	1140	1140	
5°	1097	1112	1113	1125	1135	102
15°	880	911	954	1022	1064	245
25°	608	650	723	838	922	278
35°	328	376	472	622	745	203
45°	70	116	237	420	570	65
55°	20	21	63	232	368	18
65°	7	9	35	72	148	8
75°	5	17	19	19	19	6
85°	5	12	15	15	11	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1140.1	1140.1	1140.1	1140.1	1140.1
2.5°	1126.7	1140.1	1130.8	1133.4	1133.4
5°	1097.3	1112.0	1113.4	1125.4	1134.8
7.5°	1053.1	1074.6	1085.3	1109.3	1125.4
10°	999.6	1025.0	1046.4	1087.9	1109.3
12.5°	942.1	971.5	1003.6	1058.5	1089.3
15°	880.5	911.3	954.1	1022.4	1063.8
17.5°	812.3	849.7	901.9	983.6	1034.4
20°	746.7	784.2	844.4	936.7	999.6
22.5°	678.5	717.3	784.2	887.2	962.1
25°	607.5	650.4	722.6	837.7	922.0
27.5°	537.9	583.4	659.7	785.5	879.2
30°	468.4	513.9	596.8	732.0	835.0
32.5°	397.4	444.3	533.9	675.8	789.5
35°	327.9	376.0	472.4	622.2	745.4
37.5°	256.9	307.8	410.8	570.1	701.2
40°	190.0	240.9	351.9	517.9	655.7
42.5°	127.1	178.0	291.7	467.0	612.9
45°	69.6	116.4	236.9	420.2	570.1
47.5°	37.5	64.2	183.3	374.7	521.9
50°	28.1	34.8	135.2	326.5	471.0
52.5°	24.1	26.8	93.7	275.7	420.2
55°	20.1	21.4	62.9	231.5	368.0
57.5°	16.1	17.4	46.8	187.3	311.8
60°	12.0	14.7	41.5	144.5	255.6
62.5°	9.4	12.0	38.8	105.7	202.1
65°	6.7	9.4	34.8	72.3	148.5
67.5°	6.7	10.7	29.4	46.8	100.4
70°	5.4	14.7	25.4	30.8	56.2
72.5°	5.4	16.1	21.4	21.4	21.4
75°	5.4	17.4	18.7	18.7	18.7
77.5°	5.4	16.1	17.4	16.1	16.1
80°	5.4	14.7	14.7	14.7	14.7
82.5°	5.4	13.4	14.7	14.7	12.0
85°	5.4	12.0	14.7	14.7	10.7
87.5°	4.0	12.0	13.4	13.4	8.0
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	0.00	0.25	0.00	0.56	0.88	16.34	17.62	16.71	17.93	18.25
	3H	0.40	1.54	0.78	1.87	2.23	16.72	17.85	17.10	18.18	18.55
	4H	1.63	2.68	2.03	3.03	3.42	16.70	17.75	17.10	18.10	18.49
	6H	2.82	3.79	3.24	4.16	4.55	16.69	17.65	17.10	18.02	18.42
	8H	3.41	4.33	3.85	4.72	5.13	16.69	17.60	17.12	17.99	18.40
	12H	4.09	4.96	4.52	5.35	5.78	16.70	17.57	17.13	17.96	18.39
4H	2H	2.59	3.64	2.99	3.99	4.38	16.15	17.21	16.56	17.56	17.94
	3H	4.18	5.03	4.59	5.44	5.84	16.57	17.43	16.99	17.84	18.24
	4H	5.47	6.24	5.91	6.66	7.10	16.57	17.34	17.01	17.76	18.20
	6H	6.60	7.27	7.07	7.71	8.18	16.61	17.27	17.08	17.72	18.19
	8H	7.12	7.73	7.59	8.18	8.65	16.64	17.26	17.11	17.71	18.18
	12H	7.67	8.21	8.16	8.70	9.17	16.70	17.25	17.19	17.73	18.21
8H	4H	6.55	7.17	7.03	7.62	8.09	16.48	17.10	16.95	17.55	18.02
	6H	8.10	8.60	8.60	9.10	9.58	16.56	17.07	17.06	17.56	18.05
	8H	8.91	9.36	9.43	9.88	10.37	16.64	17.10	17.17	17.61	18.11
	12H	9.74	10.14	10.26	10.64	11.21	16.81	17.22	17.33	17.71	18.28
12H	4H	6.74	7.29	7.23	7.77	8.25	16.45	16.99	16.93	17.48	17.95
	6H	8.45	8.91	8.98	9.42	9.92	16.53	16.99	17.06	17.51	18.00
	8H	9.47	9.87	9.98	10.36	10.94	16.67	17.07	17.19	17.57	18.14