

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: P1060329

Luminaire Tested: S124RDRP-S1195D850-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060329
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-S1195D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

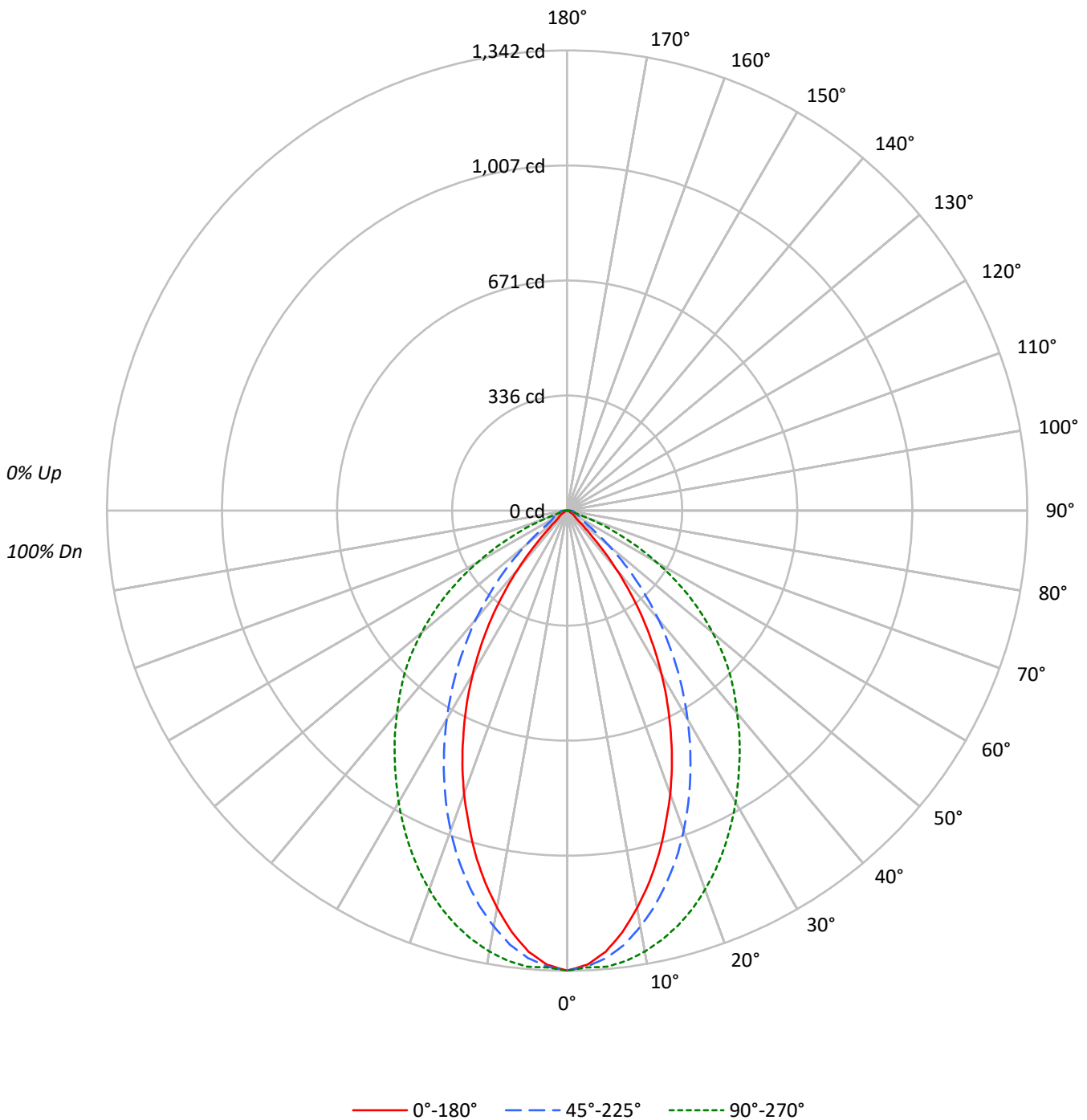
Lumens per Lamp: N/A
Luminaire Lumens: 1690.7 lumens
Efficiency: N/A
Efficacy: 40.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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°	11552	11552	11552
5°	11160	11324	11542
10°	10285	10766	11414
15°	9236	10008	11159
20°	8051	9104	10778
25°	6792	8078	10307
30°	5480	6982	9769
35°	4056	5843	9219
40°	2513	4655	8672
45°	997	3394	8168
50°	443	2130	7424
55°	354	1111	6501
60°	245	840	5179
65°	161	833	3562
70°	159	753	1664
75°	210	732	732
80°	312	858	858
85°	622	1709	1245

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8168 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.1	7.3
10°-20°	317.6	18.8
20°-30°	400.9	23.7
30°-40°	367.8	21.8
40°-50°	250.5	14.8
50°-60°	136.4	8.1
60°-70°	59.0	3.5
70°-80°	21.5	1.3
80°-90°	13.9	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°	841.5	49.8
0°-40°	1209.3	71.5
0°-60°	1596.2	94.4
0°-90°	1690.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1690.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1342	1342	1342	1342	1342	
5°	1291	1308	1310	1324	1335	120
15°	1036	1072	1123	1203	1252	288
25°	715	765	850	986	1085	327
35°	386	442	556	732	877	238
45°	82	137	279	494	671	76
55°	24	25	74	272	433	21
65°	8	11	41	85	175	9
75°	6	20	22	22	22	7
85°	6	14	17	17	13	6
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1341.5	1341.5	1341.5	1341.5	1341.5
2.5°	1325.7	1341.5	1330.5	1333.6	1333.6
5°	1291.1	1308.4	1310.0	1324.2	1335.2
7.5°	1239.1	1264.3	1276.9	1305.3	1324.2
10°	1176.2	1206.1	1231.3	1280.1	1305.3
12.5°	1108.4	1143.1	1180.9	1245.4	1281.6
15°	1036.0	1072.2	1122.6	1202.9	1251.7
17.5°	955.7	999.8	1061.2	1157.3	1217.1
20°	878.6	922.7	993.5	1102.1	1176.2
22.5°	798.3	843.9	922.7	1043.9	1132.1
25°	714.8	765.2	850.2	985.6	1084.8
27.5°	632.9	686.5	776.2	924.2	1034.4
30°	551.1	604.6	702.2	861.3	982.5
32.5°	467.6	522.7	628.2	795.1	929.0
35°	385.8	442.4	555.8	732.1	877.0
37.5°	302.3	362.1	483.4	670.7	825.0
40°	223.6	283.4	414.1	609.3	771.5
42.5°	149.6	209.4	343.2	549.5	721.1
45°	81.9	137.0	278.7	494.4	670.7
47.5°	44.1	75.6	215.7	440.9	614.1
50°	33.1	40.9	159.0	384.2	554.2
52.5°	28.3	31.5	110.2	324.3	494.4
55°	23.6	25.2	74.0	272.4	433.0
57.5°	18.9	20.5	55.1	220.4	366.9
60°	14.2	17.3	48.8	170.0	300.7
62.5°	11.0	14.2	45.7	124.4	237.7
65°	7.9	11.0	40.9	85.0	174.8
67.5°	7.9	12.6	34.6	55.1	118.1
70°	6.3	17.3	29.9	36.2	66.1
72.5°	6.3	18.9	25.2	25.2	25.2
75°	6.3	20.5	22.0	22.0	22.0
77.5°	6.3	18.9	20.5	18.9	18.9
80°	6.3	17.3	17.3	17.3	17.3
82.5°	6.3	15.7	17.3	17.3	14.2
85°	6.3	14.2	17.3	17.3	12.6
87.5°	4.7	14.2	15.7	15.7	9.4
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	0.00	0.82	0.00	1.13	1.45	16.91	18.19	17.27	18.50	18.82
	3H	0.97	2.10	1.35	2.43	2.80	17.29	18.42	17.67	18.75	19.11
	4H	2.19	3.24	2.59	3.59	3.98	17.26	18.32	17.67	18.67	19.05
	6H	3.37	4.34	3.79	4.71	5.10	17.25	18.22	17.67	18.59	18.98
	8H	3.96	4.88	4.39	5.27	5.67	17.25	18.17	17.68	18.56	18.96
	12H	4.63	5.50	5.06	5.89	6.32	17.26	18.14	17.70	18.52	18.95
4H	2H	3.15	4.21	3.56	4.56	4.94	16.72	17.77	17.12	18.12	18.51
	3H	4.74	5.60	5.15	6.00	6.41	17.14	18.00	17.55	18.40	18.81
	4H	6.03	6.80	6.47	7.22	7.67	17.14	17.91	17.57	18.33	18.77
	6H	7.16	7.82	7.63	8.27	8.74	17.18	17.84	17.64	18.29	18.75
	8H	7.67	8.29	8.14	8.74	9.21	17.21	17.82	17.68	18.27	18.74
	12H	8.22	8.77	8.71	9.25	9.72	17.27	17.82	17.76	18.30	18.77
8H	4H	7.12	7.74	7.59	8.18	8.66	17.05	17.67	17.52	18.11	18.58
	6H	8.66	9.16	9.16	9.66	10.14	17.13	17.63	17.63	18.13	18.61
	8H	9.46	9.92	9.99	10.44	10.93	17.21	17.66	17.73	18.18	18.67
	12H	10.30	10.70	10.81	11.20	11.77	17.38	17.78	17.90	18.28	18.85
12H	4H	7.31	7.85	7.79	8.34	8.81	17.01	17.56	17.50	18.04	18.52
	6H	9.01	9.47	9.54	9.99	10.48	17.10	17.55	17.62	18.07	18.56
	8H	10.02	10.43	10.54	10.92	11.49	17.24	17.64	17.75	18.13	18.71