

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: P1060311

Luminaire Tested: S124RDRP-S1195D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060311
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-S1195D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

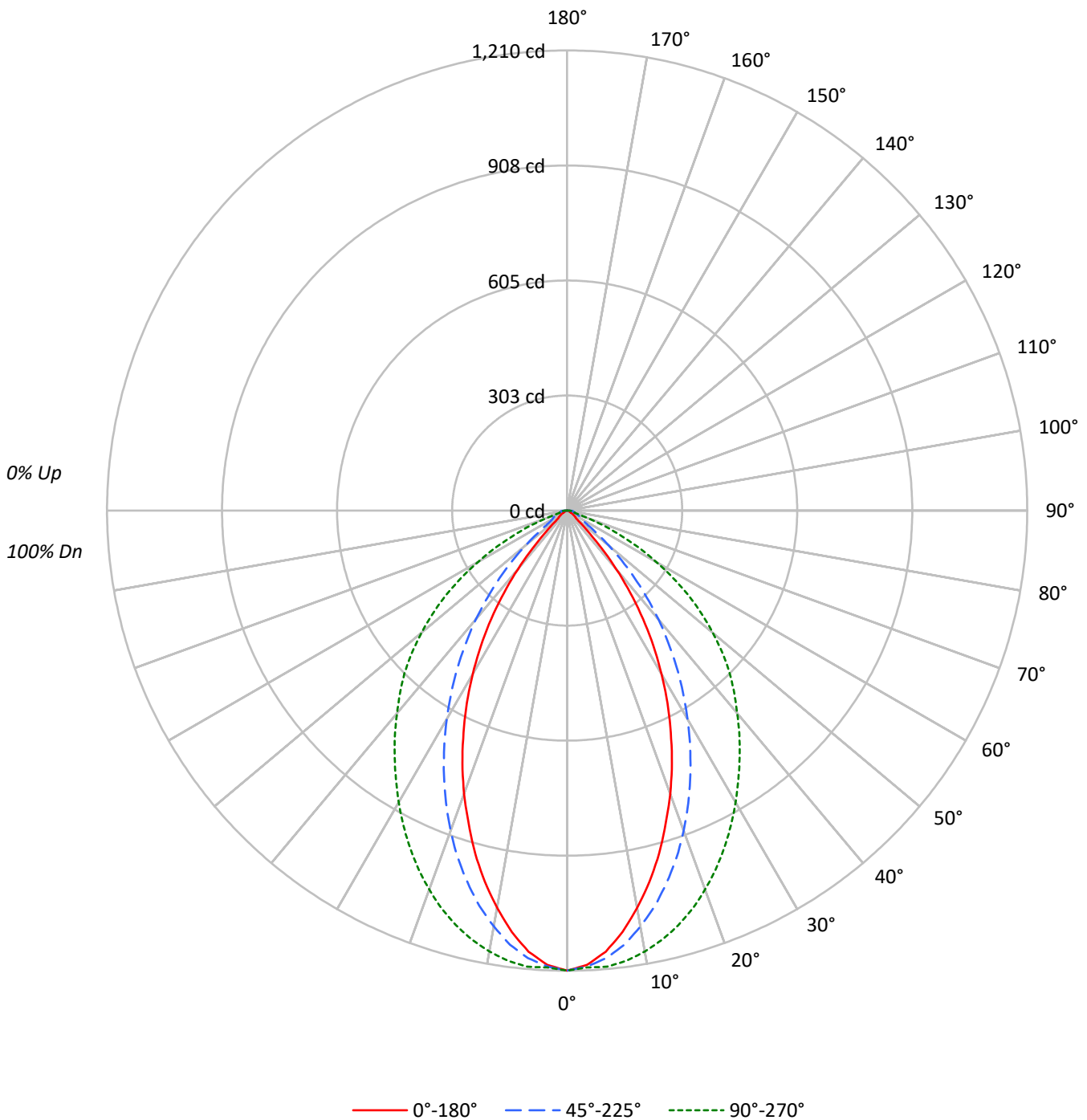
Lumens per Lamp: N/A
Luminaire Lumens: 1524.5 lumens
Efficiency: N/A
Efficacy: 36.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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°	10416	10416	10416
5°	10063	10210	10407
10°	9274	9708	10292
15°	8328	9025	10062
20°	7260	8210	9719
25°	6125	7285	9294
30°	4941	6296	8809
35°	3656	5269	8313
40°	2266	4197	7820
45°	899	3060	7365
50°	399	1921	6696
55°	320	1001	5861
60°	220	758	4671
65°	145	752	3211
70°	144	680	1501
75°	190	662	662
80°	283	774	774
85°	563	1541	1126

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7365 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.0	7.3
10°-20°	286.4	18.8
20°-30°	361.5	23.7
30°-40°	331.6	21.8
40°-50°	225.9	14.8
50°-60°	123.0	8.1
60°-70°	53.2	3.5
70°-80°	19.4	1.3
80°-90°	12.5	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°	758.8	49.8
0°-40°	1090.5	71.5
0°-60°	1439.4	94.4
0°-90°	1524.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1524.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1210	1210	1210	1210	1210	
5°	1164	1180	1181	1194	1204	108
15°	934	967	1012	1085	1129	260
25°	645	690	767	889	978	294
35°	348	399	501	660	791	215
45°	74	124	251	446	605	69
55°	21	23	67	246	390	19
65°	7	10	37	77	158	8
75°	6	18	20	20	20	6
85°	6	13	16	16	11	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1209.6	1209.6	1209.6	1209.6	1209.6
2.5°	1195.4	1209.6	1199.7	1202.5	1202.5
5°	1164.2	1179.8	1181.2	1194.0	1203.9
7.5°	1117.3	1140.1	1151.4	1177.0	1194.0
10°	1060.6	1087.5	1110.2	1154.3	1177.0
12.5°	999.5	1030.7	1064.8	1123.0	1155.7
15°	934.2	966.8	1012.3	1084.7	1128.7
17.5°	861.8	901.5	956.9	1043.5	1097.5
20°	792.2	832.0	895.9	993.8	1060.6
22.5°	719.8	761.0	832.0	941.3	1020.8
25°	644.6	690.0	766.7	888.8	978.2
27.5°	570.7	619.0	699.9	833.4	932.8
30°	496.9	545.2	633.2	776.6	885.9
32.5°	421.7	471.4	566.5	717.0	837.7
35°	347.8	398.9	501.2	660.2	790.8
37.5°	272.6	326.5	435.9	604.8	743.9
40°	201.6	255.6	373.4	549.4	695.7
42.5°	134.9	188.8	309.5	495.5	650.2
45°	73.8	123.5	251.3	445.8	604.8
47.5°	39.8	68.1	194.5	397.5	553.7
50°	29.8	36.9	143.4	346.4	499.8
52.5°	25.6	28.4	99.4	292.5	445.8
55°	21.3	22.7	66.7	245.6	390.4
57.5°	17.0	18.5	49.7	198.8	330.8
60°	12.8	15.6	44.0	153.3	271.2
62.5°	9.9	12.8	41.2	112.2	214.4
65°	7.1	9.9	36.9	76.7	157.6
67.5°	7.1	11.4	31.2	49.7	106.5
70°	5.7	15.6	27.0	32.7	59.6
72.5°	5.7	17.0	22.7	22.7	22.7
75°	5.7	18.5	19.9	19.9	19.9
77.5°	5.7	17.0	18.5	17.0	17.0
80°	5.7	15.6	15.6	15.6	15.6
82.5°	5.7	14.2	15.6	15.6	12.8
85°	5.7	12.8	15.6	15.6	11.4
87.5°	4.3	12.8	14.2	14.2	8.5
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	0.46	0.00	0.77	1.09	16.55	17.83	16.92	18.14	18.46
	3H	0.62	1.75	1.00	2.08	2.44	16.93	18.06	17.31	18.39	18.75
	4H	1.84	2.89	2.24	3.24	3.62	16.91	17.96	17.31	18.31	18.69
	6H	3.02	3.98	3.43	4.35	4.75	16.89	17.86	17.31	18.23	18.62
	8H	3.61	4.52	4.04	4.91	5.32	16.89	17.81	17.32	18.20	18.60
	12H	4.28	5.16	4.71	5.54	5.97	16.91	17.78	17.34	18.16	18.59
4H	2H	2.80	3.85	3.20	4.20	4.58	16.36	17.41	16.77	17.77	18.15
	3H	4.38	5.24	4.79	5.64	6.05	16.78	17.64	17.19	18.04	18.45
	4H	5.68	6.45	6.11	6.87	7.31	16.78	17.55	17.22	17.97	18.41
	6H	6.80	7.47	7.27	7.91	8.38	16.82	17.48	17.28	17.93	18.40
	8H	7.31	7.93	7.78	8.38	8.85	16.85	17.47	17.32	17.91	18.38
	12H	7.87	8.41	8.35	8.90	9.37	16.91	17.46	17.40	17.94	18.42
8H	4H	6.76	7.38	7.23	7.83	8.30	16.69	17.31	17.16	17.76	18.23
	6H	8.30	8.81	8.81	9.30	9.79	16.77	17.27	17.27	17.77	18.25
	8H	9.11	9.57	9.63	10.08	10.57	16.85	17.31	17.37	17.82	18.31
	12H	9.95	10.35	10.46	10.84	11.42	17.02	17.42	17.54	17.92	18.49
12H	4H	6.95	7.50	7.44	7.98	8.46	16.65	17.20	17.14	17.68	18.16
	6H	8.66	9.11	9.18	9.63	10.12	16.74	17.20	17.26	17.71	18.20
	8H	9.67	10.07	10.18	10.57	11.14	16.88	17.28	17.39	17.78	18.35